

**[Report 1953] / Medical Officer of Health, Birmingham.**

**Contributors**

Birmingham (England). Council.

**Publication/Creation**

1953

**Persistent URL**

<https://wellcomecollection.org/works/gw9nthey>

**License and attribution**

You have permission to make copies of this work under a Creative Commons, Attribution license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>



CITY OF BIRMINGHAM

---

REPORT OF THE  
MEDICAL OFFICER  
OF HEALTH

FOR THE YEAR

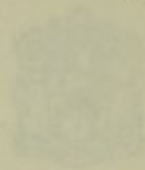
1953



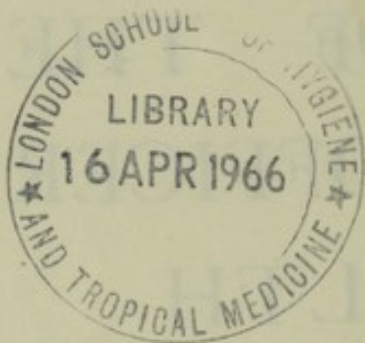
MEDICAL OFFICERS LIBRARY  
PUBLIC HEALTH DEPARTMENT



3461



CITY OF BIRMINGHAM



REPORT

MEDICAL

OF HEALTH

FOR THE YEAR

1953

## CONTENTS

---

1. Members of the Health Committee
2. Staff of the Public Health Department
3. Introduction by Medical Officer of Health
4. Qualifications and Duties of Senior Public Health Officers
5. Birmingham—general—climatology
6. Vital Statistics
7. General Epidemiology
8. Laboratory Services
  - (a) Analytical Laboratory
  - (b) Public Health Laboratory Service
9. Tuberculosis
10. Personal Health Services
  - (a) Maternity and Child Welfare
  - (b) Midwifery
  - (c) Health Visiting
  - (d) Home Nursing
  - (e) Ambulance Service
  - (f) Prevention of Illness, Care and After Care
  - (g) Domestic Help
  - (h) Mental Health
11. National Assistance Acts
  - (a) Compulsory removal
  - (b) Cerebral palsy
  - (c) Epilepsy
  - (d) Blindness
12. Food and Drugs
13. Environmental Conditions
  - (a) Housing
  - (b) Sanitary Inspection
  - (c) Supervision of Industrial Premises

# MEMBERS OF THE HEALTH COMMITTEE

## Municipal Year, 1953-54

---

*Chairman* ALDERMAN G. C. BARROW.

(Chairman of Health Education Sub-Committee, Staff Sub-Committee and Staff Discipline Sub-Committee).

THE LORD MAYOR. (ALDERMAN G. H. W. GRIFFITH, J.P.)

ALDERMAN W. T. BOWEN, J.P.

ALDERMAN E. J. DENTON, J.P.

ALDERMAN MRS. A. M. HOWES, M.B.E., J.P.

(Chairman of Mental Health Sub-Committee).

ALDERMAN MRS. N. HYDE, O.B.E., J.P.

(Chairman of Maternity and Child Welfare Sub-Committee).

ALDERMAN MRS. A. LONGDEN, J.P.

COUNCILLOR G. P. ACHURCH, M.B.E.

(Chairman of Tuberculosis (Domiciliary and After-Care) Sub-Committee).

COUNCILLOR P. H. H. BAKER.

COUNCILLOR MRS. A. BILLINGTON.

COUNCILLOR L. CHAFFEY, J.P.

COUNCILLOR MRS. M. A. M. COOKE.

COUNCILLOR F. F. GRIFFIN.

COUNCILLOR F. G WILLIAMS, J.P.

COUNCILLOR D. H. HOWELL.

(Chairman of Finance and General Purposes Sub-Committee).

COUNCILLOR D. S. H. JONES.

COUNCILLOR W. A. N. JONES.

COUNCILLOR MISS E. M. PITT, O.B.E., M.P.

COUNCILLOR MRS. H. L. RADFORD.

COUNCILLOR J. SIMS.

COUNCILLOR W. F. SMITH.

COUNCILLOR H. V. WOLLASTON.

COUNCILLOR MRS. A. F. WOOD, J.P.



# CONTRIBUTORS TO THE REPORT

	<i>Pages</i>
Birmingham—Climatology.	
By MR. A. L. KELLEY, Observer, Meteorological Observatory, Edgbaston .....	24
Vital Statistics.	
By DR. E. L. M. MILLAR .....	27
General Epidemiology.	
By DR. E. L. M. MILLAR .....	37
Laboratory Services :—	
(a) Analytical Laboratory	
By MR. H. H. BAGNALL .....	55
(b) Public Health Laboratory Service	
By DR. B. R. SANDIFORD, Director, Public Health Laboratory, Birmingham .....	64
Tuberculosis.	
By DR. J. E. GEDDES .....	67
Personal Health Services :—	
Maternity and Child Welfare	
Midwifery	
Health Visiting	
Home Nursing	
Domestic Help	
By DR. JEAN M. MACKINTOSH .....	94
Vaccination and Immunisation ( <i>see</i> General Epidemiology).	
Ambulance Service.	
By MR. H. W. COLEMAN, Chief Officer, Fire and Ambulance Service .....	165
Prevention of Illness, Care and After Care.	
By Various Authors .....	175
Mental Health.	
By DR. W. NICOL .....	197
National Assistance Acts.	
By DR. E. L. M. MILLAR .....	216

Food and Drugs.		Pages
By DR. W. R. MARTINE.	.....	} 6
MR. E. N. WAKELIN	.....	
MR. C. G. ALLEN, Chief Veterinary Officer	.....	

#### Environmental Conditions :—

##### Housing

By MR. D. J. E. LAMB	.....	248
----------------------	-------	-----

##### Sanitary Inspection.

By MR. E. N. WAKELIN	.....	262
----------------------	-------	-----

##### Supervision of Industrial Premises.

By DR. W. R. MARTINE	.....	305
----------------------	-------	-----

# STAFF OF THE PUBLIC HEALTH DEPARTMENT AS AT 31st DECEMBER, 1953

## *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 General Purposes :*

G. DISON, M.C., L.R.C.P., L.R.C.S. (Edin.), L.R.C.P. & S. (Glasgow), D.P.H.,  
D.R.C.O.G.

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

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

## *Chief Sanitary Inspector :*

E. N. WAKELIN, F.R.San.I., M.S.I.A.

## *Chief Housing Inspector :*

D. J. E. LAMB, M.C., T.D., Cert. R.S.I.

## *City Analyst :*

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

## *Manager of Works :*

C. K. SMITH.

## SECRETARIAL AND ACCOUNTANCY

### *Secretary-Accountant :*

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

### *Assistant-Secretary :*

E. S. EYRE.

### *Secretary to the Medical Officer of Health :*

W. G. DEELEY.

### *Deputy Accountant :*

J. F. THOMPSON.



*Assistant Accountant :*

L. H. FERRER.

*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	.....	12
------------------------------------	-------	----

Bacchus Road Laundry—

Laundry Assistants	.....	34
--------------------	-------	----

Engineering Staff	.....	3
-------------------	-------	---

Central Stores—

Storekeeper	.....	1
-------------	-------	---

Stores Assistants	.....	5
-------------------	-------	---

Caretakers

.....	4
-------	---

Cleaners (Full and Part-time)

.....	19
-------	----

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 Officer for Maternity and Child Welfare :*

E. M. RING, M.D., B.Ch., B.A.O., D.P.H.

*Assistant Medical Officers for Maternity and Child Welfare :*

E. BADENOCH, M.D., Ch.B.  
 B. G. BAILEY, M.B., Ch.B.  
 J. DOMENET, M.B., Ch.B., L.R.C.P., M.R.C.S.  
 U. COX, M.R.C.S., L.R.C.P., D.P.H.  
 M. C. MACKIE, M.B.E., M.B., Ch.B.  
 M. MCINTOSH, M.B., B.Ch., B.A.O.  
 M. MCKINLAY, M.B., Ch.B., D.P.H.  
 J. E. PRESTON, M.B., Ch.B.  
 M. E. RICHARDS, B.Sc., M.B., B.Ch., D.Obst. R.C.O.G., and M.R.C.O.G.  
 M. F. THORNTON, M.B., B.Ch., B.A.O.  
 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. B. 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.  
 M. A. O. MOFFATT, M.B., B.Ch. (BELFAST).

Part-time Assistant Medical Officers : ..... 30

*Senior Dental Officer :*

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

*Dentists :*

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).

*Health Visitors :*

*Superintendent of Health Visitors :*

MISS I. H. SINNETT, S.R.N., S.C.M., H.V.Cert., Diploma in Nursing.

*Deputy Superintendent of Health Visitors :*

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

*Assistant Superintendent of Health Visitors and Home Help Organiser :*

MISS J. M. PEARSON, 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 .....	34
Senior Health Visitors .....	4
Health Visitors .....	46
Health Visitors (Part-time) .....	14
Pupil Health Visitors .....	18
Clinic Nurse .....	1
Clinic Nurses (Part-time) .....	12
Dental Nurse .....	1
Physiotherapists (Part-time) .....	2
Chiropodist (Part-time) .....	1
Nurse—Care of the Aged (part-time) .....	1
District Organisers—Home Help Service .....	5



*Human Milk Bureau :*

Nurses	.....	2
--------	-------	---

*Midwives :*

*Supervisors of Midwives :*

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

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	.....	113
--------------------	-------	-----

Maternity Nurses	.....	15
------------------	-------	----

*Health Education :*

*Organiser and Lecturer for Male Health Education :*

G. G. TAYLOR.

*Organiser and Lecturer for Female Health Education :*

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

Assistant Lecturers for Health Education	.....	3
--	-------	---

*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	.....	30
---------	-------	----

Deputy Matrons	.....	24
----------------	-------	----

Superintendents of Wards	.....	2
--------------------------	-------	---

Wardens	.....	34
---------	-------	----

Staff Nursery Nurses	.....	99
----------------------	-------	----

State Enrolled Assistant Nurses	.....	1
---------------------------------	-------	---

Nursery Assistants	.....	74
--------------------	-------	----

Student Nurses	.....	118
----------------	-------	-----

*Home Nursing Service :*

*Chief Nursing Superintendent :*

MISS E. G. GOUDGE, S.R.N., S.C.M., H.V.Cert , Queen's Nurse

Superintendents of District Nurses' Homes	.....	10
---	-------	----

Nursing Staff	.....	93
---------------	-------	----

Nursing Staff, part-time	.....	36
--------------------------	-------	----

Student District Nurses	.....	15
-------------------------	-------	----

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

*Matron :*

MISS F. SMITH, S.R.N., S.C.M.

Other Nursing Staff	.....	2
---------------------	-------	---

Clerical Staff	.....	31
----------------	-------	----

*Miscellaneous Staff :*

Clinic Assistants .....	55
Domestic Helps .....	89
Domestic Helps (Part-time) .....	600
Care of the Aged—Night Watchers .....	24
Home Nursing Domestic Staff (Full and Part-time) .....	23
Home Nursing Attendants .....	13
Caretakers .....	34
Curator .....	1
Cleaners (Full and Part-time) .....	168
Cooks, Cook-housekeepers and Assistants .....	43
Gardeners (Full and Part-time) .....	8
Porters .....	3
Seamstresses .....	3
Storekeepers .....	2
Van drivers .....	3
Nursing Orderlies .....	2

*Harborough Hall Convalescent Home for Mothers and Babies :*

*Matron :*

MRS. M. K. SMYTHE, S.R.N.

Other Nursing Staff .....	5
Domestic Staff (Full and Part-time) .....	14
Curator .....	1
Gardener .....	1

DIPHTHERIA IMMUNISATION

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

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

Nursing Staff (1 shared with B.C.G. Clinic) .....	2
Nursing Staff (Part-time) .....	10
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 .....	5

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 .....	4
Clerical Staff .....	2



## LUNACY AND MENTAL TREATMENT.

### *Chief Authorised Officer :*

E. J. DICKINSON.

### *Deputy Chief Authorised Officer :*

J. W. GREEN.

Duly Authorised Officers	.....	.....	.....	.....	.....	.....	.....	.....	3
Clerical Staff	.....	.....	.....	.....	.....	.....	.....	.....	1

## TUBERCULOSIS.

### *(Prevention and After Care).*

### *Senior Tuberculosis Officer (Part-time) :*

J. E. GEDDES, M.D., Ch.B.

### *Medical Officers (Part-time) :*

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

J. MORRISON-SMITH, M.D., 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	.....	.....	.....	.....	.....	.....	.....	.....	14
Domiciliary Diversional Therapists	.....	.....	.....	.....	.....	.....	.....	.....	2
Clerical Staff	.....	.....	.....	.....	.....	.....	.....	.....	11

### *B.C.G. Clinic*

W. L. GORDON, B.M., B.Ch. (Part-time).

Nursing Staff (Shared with Diphtheria Immunisation)	.....	.....	.....	.....	.....	.....	.....	.....	1
Clerical Staff	.....	.....	.....	.....	.....	.....	.....	.....	3

### *Residential Nursery for Child Contacts of Tuberculosis—Skills*

#### *Matron :*

MISS K. W. JAMES

Other Nursing Staff	.....	.....	.....	.....	.....	.....	.....	.....	14
Warden	.....	.....	.....	.....	.....	.....	.....	.....	1
Domestic Staff (Full and Part-time)	.....	.....	.....	.....	.....	.....	.....	.....	17
Gardener-Handyman	.....	.....	.....	.....	.....	.....	.....	.....	1
Porter	.....	.....	.....	.....	.....	.....	.....	.....	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	.....	.....	.....	.....	.....	.....	.....	.....	2
---------------	-------	-------	-------	-------	-------	-------	-------	-------	---

## SANITARY INSPECTORS

### *Chief Sanitary Inspector :*

E. N. WAKELIN, F.R.San.I., M.S.I.A.

*Deputy Chief Sanitary Inspector :*

F. C. SCHONBECK, M.R.San.I., M.S.I.A.

Divisional Sanitary Inspectors .....	2
Enforcement Officer .....	1
Assistant Enforcement Officer .....	1
District Sanitary Inspectors .....	10
Sanitary Inspectors .....	37
Pupil Sanitary Inspectors .....	16
Smoke and Factories Inspectors .....	6
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 .....	4
Clerical Staff .....	22

*Miscellaneous Staff :*

Disinfecting Staff .....	11
Court Cleansing Staff .....	3
Rodent Control Staff .....	27
Bath Attendants (Part-time) .....	2
Summer Lane Mortuary—Caretakers .....	2

Inspection of Cow Sheds 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.I.

HOUSING INSPECTORS

*Chief Housing Inspector :*

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

*Deputy Chief Housing Inspector :*

W. G. BARLOW, Cert. R.S.I.

Divisional Housing Inspectors .....	2
District Housing Inspectors .....	5
Housing Inspectors .....	6
Housing Assistants .....	5
Clerical Staff .....	16

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.

Assistant Analysts	.....	.....	.....	.....	.....	.....	.....	.....	6
Laboratory Assistants	.....	.....	.....	.....	.....	.....	.....	.....	4
Clerical Staff	.....	.....	.....	.....	.....	.....	.....	.....	2

WORKS DEPARTMENT.

*Manager :*

C. K. SMITH.

Administrative Assistant	.....	.....	.....	.....	.....	.....	.....	.....	1
Clerks of Works	.....	.....	.....	.....	.....	.....	.....	.....	1
General Foreman	.....	.....	.....	.....	.....	.....	.....	.....	1
Clerical Staff	.....	.....	.....	.....	.....	.....	.....	.....	6
Tradesmen	.....	.....	.....	.....	.....	.....	.....	.....	44

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

July, 1954.

*To the Chairman and Members,  
Health Committee.*

I have pleasure in presenting my report on the health of the City for the year 1953.

Tables covering vital statistics for the year are shown on pages 33-36

The Registrar General estimates the civilian population of the City at 1,118,500, a decrease of 500 on the figure supplied for 1952. The natural increase in the population (*i.e.* excess of births over deaths) was 6,672 compared with 6,842 for 1952.

The number of marriages registered during the year was 9,440 compared with 9,610 for 1952. The marriage rate per 1,000 of the population was 16.9 against 17.2 in the previous year.

The crude birth rate for the year was 16.6 per 1,000 of the population compared with 16.4 for 1952 and 16.5 for 1951. The birth rate for England and Wales for 1953 was 15.5.

Of the 18,566 live births, 17,626 or 94.9% were legitimate and 940 or 5.1% were illegitimate. The percentage of illegitimate births for 1952 was 4.82% of the total live births.

The crude death rate was 10.6 and 10.6 was also the average for the previous 5 years. The table on page 36 sets out the deaths according to age groups and cause.

An examination of some of the principal causes of death reveals that the number of deaths classified under the heading "Heart Disease," *viz.*, 3,379, was 24 less than the figure for 1952 and was equivalent to a death rate of 3.02 per 1,000 of the population. The percentage of persons aged 65 and over who died from heart disease was 21.3.

Deaths from cancer (all forms) accounted for 2,237 or 18.8% of the total deaths from all causes.

Deaths from cancer of the lung amounted to 507, an increase of 84 as compared with 1952. The rapid increase in deaths attributed to this disease is a major problem and is being energetically investigated.



The number of deaths due to vascular lesions affecting the central nervous system was 1,567 and showed a rise of 63 over the figure for 1952. This condition is one which principally affects older people as is revealed by the fact that 78.7% of the deaths were persons of 65 years of age and over.

The deaths registered during 1953 as due to tuberculosis of the respiratory system numbered 264 or 16 less than in the previous year, equivalent to a death rate of 0.24 per 1,000 of the population *which is the lowest ever recorded in the City* (0.25 for 1952 and 0.35 for 1951).

A comprehensive table showing the incidence of and deaths from tuberculosis (pulmonary and non-pulmonary) this century can be seen on pages 69 and 70.

The infant mortality rate was 26 per 1,000 live births and is the lowest ever recorded. Last year it was 27 and the rate for England and Wales was 27 for 1953 and 28 for 1952.

The maternal death rate was 0.58 per 1,000 total births compared with 0.80 for the previous year.

The total number of cases of infectious disease (excluding tuberculosis) notified during the year was 25,906 as compared with 20,384 for 1952. Of these, 15,584 were suffering from measles as compared with 9,684 measles cases in 1952.

A summary of all cases of infectious disease notified to the Department will be found on page 53.

Diphtheria accounted for only one mild case.

For many hundreds of citizens the housing situation is bad, and the alleviation of hardship caused by wretched housing conditions will for many years be a formidable task for the Department, which takes all action within its powers but, of course, is hindered by the controlling factor, *i.e.*, the grave shortage of new houses. The health, happiness and integrity of family life can only be achieved and maintained if housing is good and I consider the outstanding problem of our age is the unsatisfactory housing of our people.

#### VISITORS

It is pleasing to record the ever increasing desire of visitors to this country to see something of the work performed in the Department, despite the fact that difficulties arise in making suitable arrangements owing to the pressure of work on the available staff. Notwithstanding this obstacle, it is quite apparent from the expressions of appreciation which have so often been received that we have been able to arrange a programme which has been both enjoyable and useful to the many visitors from all over the world. The requests for programmes to be arranged

have been received through the Ministry of Health, the British Council and various professional organisations. The visitors have come from widely dispersed countries and continents and it may be interesting to set out a selection of these :—

America	Israel	Canada	Nigeria
Finland	Sweden	Greece	Denmark
Indonesia	Austria	Jordan	India
South Africa	Germany	Turkey	Norway
Australia	Japan	Ceylon	and
France	Trinidad	Holland	Yugoslavia

The annual report gives a full account of the many and varied activities of the Health Department and I am grateful to my Deputy, Dr. E. L. M. Millar, and to all other colleagues for their assistance in its compilation and to all members of my staff for their continued endeavours in maintaining the high standards and happy atmosphere of the Department. My very grateful acknowledgment is again expressed to all members of the medical profession in the City for their continued warm and friendly assistance and co-operation given to me throughout the year in question. I would desire to express my thanks to the Chairman and Members of the Health Committee for their support and ready help given to me. I also desire to thank the chiefs of other departments for their kindness in so willingly providing other information contained in this report.

MATTHEW BURN.



## QUALIFICATIONS AND DUTIES OF SENIOR PUBLIC HEALTH OFFICERS OF THE PUBLIC HEALTH DEPARTMENT.

In response to the request contained in Ministry of Health Circular 1/54 the following information with regard to the qualifications and duties of Senior Public Health Officers is set out :—

<i>Officer concerned</i>	<i>Duties for which responsible</i>
<i>Deputy Medical Officer of Health.</i>	<i>National Health Service Acts</i> —Section 21 (Health Centres); Section 26 (Vaccination and Immunisation) ; Section 27 (Ambulance Services) in liaison with the Chief Fire and Ambulance Officer ; Section 28 (part), (Prevention of Illness, Care and After-Care) particularly in relation to convalescent care, tuberculosis and rehousing on account of illness.
E. L. M. MILLAR, M.Sc., M.D., Ch.B., D.P.H.	<i>National Assistance Acts</i> —Medical Adviser to the Welfare Committee in connection with the care of aged and handicapped persons.
	<i>Housing Act, 1936</i> —Responsible to the Medical Officer of Health for the assessment of fitness in relation to houses falling within the provisions of Sections 11 or 25 of the Housing Act, 1936.
	<i>Public Health Act</i> —The medical supervision of matters related to the City's water supply and bathing establishments and the control of infectious disease.
	<i>Other Services</i> —Health control at the City Airport. Is a member of the Selly Oak Hospital Management Committee and represents the Medical Officer of Health on the Family Service Unit which operates in this City. Supervises the arrangements made through the Medical Officer for Staff Welfare, and the signing of cremation certificates.
<i>Administrative Medical Officer of Health for Maternity and Child Welfare.</i>	<i>National Health Service Acts</i> —Section 22 (Care of Mothers and Young Children) ; Section 23 (Midwifery) ; Section 24 (Health Visiting) ; Section 25 (Home Nursing) ; Section 28 (part of) (Prevention of Illness, Care and After-Care, Care of the Aged, Health Education) and Section 29 (Domestic Help).
JEAN M. MACKINTOSH, M.B., Ch.B., D.P.H., D.P.A.	<i>Children Act, 1948</i> —Acts as Medical Adviser to the Children's Committee on behalf of the Medical Officer of Health.

*Training Duties*—Supervision of training health visitors and district nurse candidates; medical students in maternity and child welfare, and, in association with others, the training of student nurses in Public Health.

*Other Services*—The Nurseries and Child Minders Regulation Act, 1948—supervision of Nurseries and Child Minders. Midwives Act, 1951 and Inspection of Nursing Homes and Nursing Agencies.

Is a member of the Maternity Services Committee of the Regional Advisory Committee on Obstetric and Gynaecological Services of the Birmingham Regional Hospital Board, and of the Area Nurse Training Committee of the Birmingham Region.

A Reader in the Department of Paediatrics and Child Health at the University of Birmingham.

Is responsible for effecting close liaison between the Local Authority and the other agencies concerned with the social services, particularly between the General Practitioner and Domiciliary Midwifery, Health Visiting and the Home Nursing Services; also between the Local Health Authority and the Hospitals in the domiciliary care of mothers and young children on discharge from maternity and other hospitals, and for the day-to-day administrative arrangements relating to Health Visitors and their work in conjunction with the Almoners of hospitals within the city.

*Administrative Medical  
Officer of Health for  
General Purposes.*

*National Health Service Acts*—Section 28 (Prevention of Illness, Care and After-Care), Health Education, Clean Air and Clean Food campaigns.

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

*Milk and Dairies Acts and Regulations, and Ice Cream Regulations*—Is responsible for the day-to-day administration and supervision.

*Public Health Acts*—Is responsible (See also Deputy Medical Officer of Health) for medical matters arising in connection with infectious diseases, disinfection and disinfestation, and also the medical advisory work in relation to smoke and atmospheric pollution.

Member of Ministry of Health Smallpox Diagnosis Panel.

*Food and Drugs Act, 1938, and local enactments on this subject*—Is responsible for medical supervision, Medical Adviser to Markets and Fairs Committee.



<i>Officer concerned</i>	<i>Duties for which responsible</i>
	<i>Housing Acts</i> —Is the Medical Officer responsible ( <i>see also</i> Deputy Medical Officer of Health) for the day-to-day administration of the arrangements for priority rehousing on account of illness.
<i>Administrative Medical Officer of Health for Mental Health.</i>	<i>National Health Service Acts</i> —Is responsible for Section 28 (part of) Prevention of Illness, Care and After-Care as related to mental ill-health, and for Section 51 (Mental Health).
W. NICOL, M.B., Ch.B., D.P.H.	<i>National Assistance Acts</i> —Responsible for the removal of those persons falling within the provisions of Section 47.
	<i>Other Services</i> —Is a member of the Personal Service Committee of the Birmingham Council for Social Service and also of the Hospital Medical Committee of Monyhull Hospital.
<i>Senior Tuberculosis Officer (2/11ths Local Health Authority).</i>	(This is a dual appointment—the Senior Tuberculosis Officer is also the Chest Physician of the Regional Hospital Board for 9/11ths of his time.)
J. E. GEDDES, M.D., Ch.B.	<i>National Health Service Acts</i> —Is responsible for Section 28 (part of) (Prevention of Illness, Care and After-Care as related to Tuberculosis). This includes the supervision of a Housing Section which deals with the housing needs of persons suffering from tuberculosis who live under conditions which may prove inimical to progress or likely to facilitate the spread of infection.  Is responsible also for the day-to-day administration of B.C.G. Clinic.
<i>City Analyst.</i> H. H. BAGNALL, B.Sc., F.R.I.C.	Is in control of the City Analytical Laboratory.
<i>Chief Sanitary Inspector.</i> E. N. WAKELIN, F.R.San.I., M.S.I.A.	<i>Public Health Act</i> —Carries into effect the duties delegated to the Health Committee in relation to nuisances, smoke and noise nuisances, offensive trades, the provision and inspection of drains, water closets, cess-pools, and abatement of nuisances arising therefrom. The paving of court yards and passages, provision of piped water supply to dwellinghouses, sampling of water from wells and other sources, inspection of canal boats, routine enquiries in connection with infectious disease, and duties in relation to common lodging houses.
	<i>Housing Act</i> —Sections 9 and 10 of the Housing Act, 1936 requiring repairs to insanitary houses, houses let in lodgings and for implementing the bye-laws made under Section 6 of the Housing Act.



*Rent Restrictions Acts*—For certain duties under these Acts relating to the issue of Rent Act Certificates and the maintenance of registers under the Furnished Houses (Rent Control) Act, 1946 and the Landlord and Tenant (Rent Control) Act, 1949.

*Food and Drugs Act, 1938 and local enactments on this subject*—Inspection of food preparation premises and premises where food is sold, under Section 13, and the application of the provisions of byelaws made under Section 15 of the Act (including factory canteens), registration and supervision of eating house premises and of mobile canteens, under local enactment, together with the inspection and registration of milk shops.

*Prevention of Damage by Pests Act, 1949*—Duties imposed on the Council for the destruction of rats and mice.

*Rag Flock and Other Filling Materials Act, 1951.*

*Heating Appliances (Fireguards) Act, 1952*—Enforcement of the provisions and duties as relate to safety from fire.

*Other Services*—Enforcement of certain local Act provisions, including byelaws made in relation to tips, prohibition on sale of verminous articles, depths of graves and byelaws as to meat for feeding animals.

Duties in connection with exhumations and recovery of human remains from disused burial grounds.

*Chief Housing Inspector.*  
D. J. E. LAMB, M.C.,  
T.D., F.S.I.A.

Responsible for advice on and action under the Housing Acts, with the exception of the operation of Section 9 (repairs etc.). These duties include establishment and application of standards of fitness; surveys to ascertain extent of slum problem; preparation and pursuance of cases for clearance of houses individually or in clearance areas; follow up action in County Court or Ministry Local Inquiries; supervision of repairs undertaken by owners of houses represented as unfit; and the enforcement of restrictive undertakings or closing orders.

Also responsible for survey, record, and enforcement of overcrowding provisions of Housing Acts; for the exercise of public health functions relating to Redevelopment Schemes including preparation of plans for use by City Engineer and Surveyor in determining extent of areas, and by liaison with the Housing Management and Estates Departments the maintenance of proper standards of repair in houses acquired by the Corporation, and generally for advice when issues of opinion on fitness are involved, as, for instance, in awarding points to applicants on the Housing Register, or in assessing potential life of houses proposed to be improved.



The above information is intended to convey the very close integration of the duties of the various Senior Public Health Officers in the Department and although they undertake in their own specific spheres, separate responsibilities under the various sections of the numerous enactments, by this close integration it has been possible to achieve the maximum amount of benefit to the community from the provisions made available by the various enactments concerned with the social services. The relationship between the officers has proved most adequate, and administratively the arrangements are such that there is no overlapping of duties even where two or perhaps three officers may be concerned with the same section of a particular enactment.

The term " matters of Public Health " in Circular 1/54 has been accepted in its broadest sense. This being the case a large number of Committees of the City Council are concerned in some way or other with " Public Health." These may be briefly cited as follows :—

- 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, watering 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).

## Health Committee

Details of the Sub-Committees of the Health Committee and the responsibilities of each Sub-Committee are set out below :—

- Finance and General Purposes Sub-Committee :—Public Health Acts, Prevention of Damage by Pests Act, Milk and Dairies Act and Regulations, Food and Drugs Acts, together with Ice Cream Regulations; Housing Acts, 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, and other miscellaneous enactments not within the scope of personal services.

**Maternity and Child Welfare Sub-Committee:**—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 Helps and all matters relating to Maternity and Child Welfare contained in other enactments.

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

**Tuberculosis (Domiciliary and After-Care) Sub-Committee:**—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).

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



# BIRMINGHAM

## General

The City of Birmingham, with a census population recorded as 1,112,340 in 1951 and an estimated population of 1,118,500 in 1953, has an area of 51,147 acres, *i.e.*, 80 square miles. It is a 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 as it is in the heart of the Midlands, it is served by the main services of the 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

Thanks are expressed once more to A. L. Kelly, Esq., F.R.Met. Soc., Director of the Meteorological Observatory (at Edgbaston) of the Birmingham and Midland Institute, for the following interesting details he has supplied of the weather recorded during the year under review. 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.

## Summary of the Weather at Edgbaston, Birmingham, during the year 1953

The main features of the weather were :—

- (a) The long dry spells of the first three months with a record period of "absolute drought." Year's rainfall below normal, sunshine above normal.
- (b) The cool spell of early June.
- (c) The mediocre summer, except for August week.
- (d) The amazingly mild spell of late autumn and early winter.

The persistently cold, though not extreme, weather which marked the closing months of 1952, was continued throughout January and the first half of February.



**January** was exceptionally dry with a record low rainfall up to the 30th when sufficient rain fell to double the total, which, however, was still well below normal. It was rather cold up to the last week when a mild spell raised the mean temperature appreciably. It was also rather dull.

**February** was cold and dull up to the 16th, when conditions changed to mild and sunny, ending a cold period which had lasted from the previous September. It was generally dry and a state of "absolute drought" commenced on the 19th and lasted for a record period of 34 days to March 25th.

The dry weather of **March** was accompanied by sunny days but with frequent thick fog and frost, night and morning. Rainfall was again deficient but sunshine and mean temperature were well above average.

**April** lived up to its showery tradition. It was cool but on the whole, sunny. Rainfall was well above normal though confined to three main periods at the beginning, middle and end of the month.

**May** was noteworthy for the very warm Whitsuntide period which ended in thunderstorms on Whit Monday. It was dry at first but later some rather heavy rainfalls gave a total in excess of normal. Sunshine and temperature were also above average.

Winter temperatures ushered in **June** and Coronation week. On the third the day temperature did not rise above 46°, the lowest ever recorded at Edgbaston for a June day. Subsequently, more normal temperatures were experienced and the mean was equal to average. It remained rather dull throughout and sunshine was well below normal whilst rainfall was also a little below.

Cool, rather wet but nevertheless sunny conditions were experienced in **July**. Temperatures of 70° or more were only recorded on five days, the least for July since 1940.

Sunny warm days marked the first part of **August**, including the Bank Holiday week, but the latter half was cooler. The mean temperature and sunshine were above normal and the rainfall a little below.

A complete reversal of the previous **September** weather (the coldest on record), was experienced in 1953. It was fairly warm and sunny, although rather wet during the middle part of the month.

Mainly dry but not very sunny conditions lasted from the 22nd September to the 22nd **October**. The mean temperature of October was about normal, whilst sunshine and rainfall were below.



A mild spell of weather set in with **November** which lasted, with but little interruption, till the end of the year. The mean temperature of November was the second highest on record. It was a dry month and also very sunny for the first ten days, after which it was rather dull.

There were many days of **December** when the day temperatures were higher than that of Coronation day in June and the first nineteen days passed without even a ground frost, a feature of December only equalled once before (in December, 1934). It was the third mildest December on record, very dry, but dull for the first 22 days. The Christmas period was bright and, on the whole, mild. The combined mean temperature of November and December (45.7°F), was the highest on record at Edgbaston.

COMPARISON OF SUNSHINE, RAINFALL AND MEAN TEMPERATURE  
OF 1953 WITH THE AVERAGES FOR 65 YEARS

Month	Temperature °F.		Rainfall Ins.		Sunshine Hrs.	
	Monthly	Means	Monthly	Means	Monthly	Means
	Averages	over	Totals	over	Totals	over
	1953	65 years	1953	65 years	1953	65 years
January ...	38.2	38.8	0.97	2.565	32.2	42.3
February...	39.7	39.2	1.225	2.02	50.6	59.2
March ...	46.7	42.0	1.66	1.93	117.6	94.7
April ...	44.7	46.3	2.765	2.03	151.8	132.6
May ...	55.0	52.2	2.965	2.313	190.1	173.0
June ...	57.4	57.5	1.925	2.03	132.2	178.8
July ...	59.4	60.8	3.58	2.54	192.6	170.4
August ...	61.3	60.2	2.45	2.65	195.5	160.0
September	57.1	56.2	2.33	2.02	133.4	121.3
October ...	49.9	49.7	2.205	2.82	78.5	86.3
November	47.1	43.1	1.365	2.65	49.7	49.1
December	44.3	39.8	1.185	2.815	32.6	34.6
Year ...	50.1	48.8	24.625	28.383	1356.8	1302.3

## VITAL STATISTICS

### Summary of Statistics for the Year 1953

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

Population (Provisional)—Census 1951—1,112,340.

Home Population, estimated by Registrar General (Civilians plus H.M. Forces stationed in the area).

as at 30th June, 1952 .....	1,119,000
-----------------------------	-----------

as at 30th June, 1953 .....	1,118,500
-----------------------------	-----------

It is interesting to note that a slight reduction in population is estimated to have taken place and speculations as to its cause might be that newcomers now experience great difficulty in securing accommodation within the City and that the pre-war drift of population to the urban and rural areas beyond the City boundary has started again.

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.

<b>Live Births.</b>	(a) Born in the City .....	17,957			
	(b) Born outside the City.....	609			
	Total (1953) .....	18,566			
	Total (1952) .....	18,301			

Legitimate—17,626. Illegitimate—940. (5.07% of total live births).

Live Birth rate 16.6 per 1,000 population.

### Stillbirths

Total 446, 52.0% were premature.

Stillbirth rate per 1,000 total live and stillbirths 23.5.

### Maternal Mortality

Rate per 1,000 live and stillbirths 0.58 (Total deaths 11).

There was no death as a result of abortion.



## Infant Mortality Rate

	<i>Total deaths under 1 year</i>	<i>Deaths under 1 year per 1,000 live births</i>
Legitimate ... ..	448	26
Illegitimate ... ..	37	39
Legitimate and Illegitimate ...	485	26

Neonatal death rate 18.0 per 1,000 live births (17.9 legitimate, 21.3 illegitimate).

## Deaths

1953 crude death rate per 1,000 population—10.63 (11,894 deaths).

Lower rates have twice been recorded. In 1948 the crude death rate was 9.8 and in 1952 it was 10.2.

Area Comparability Factors.

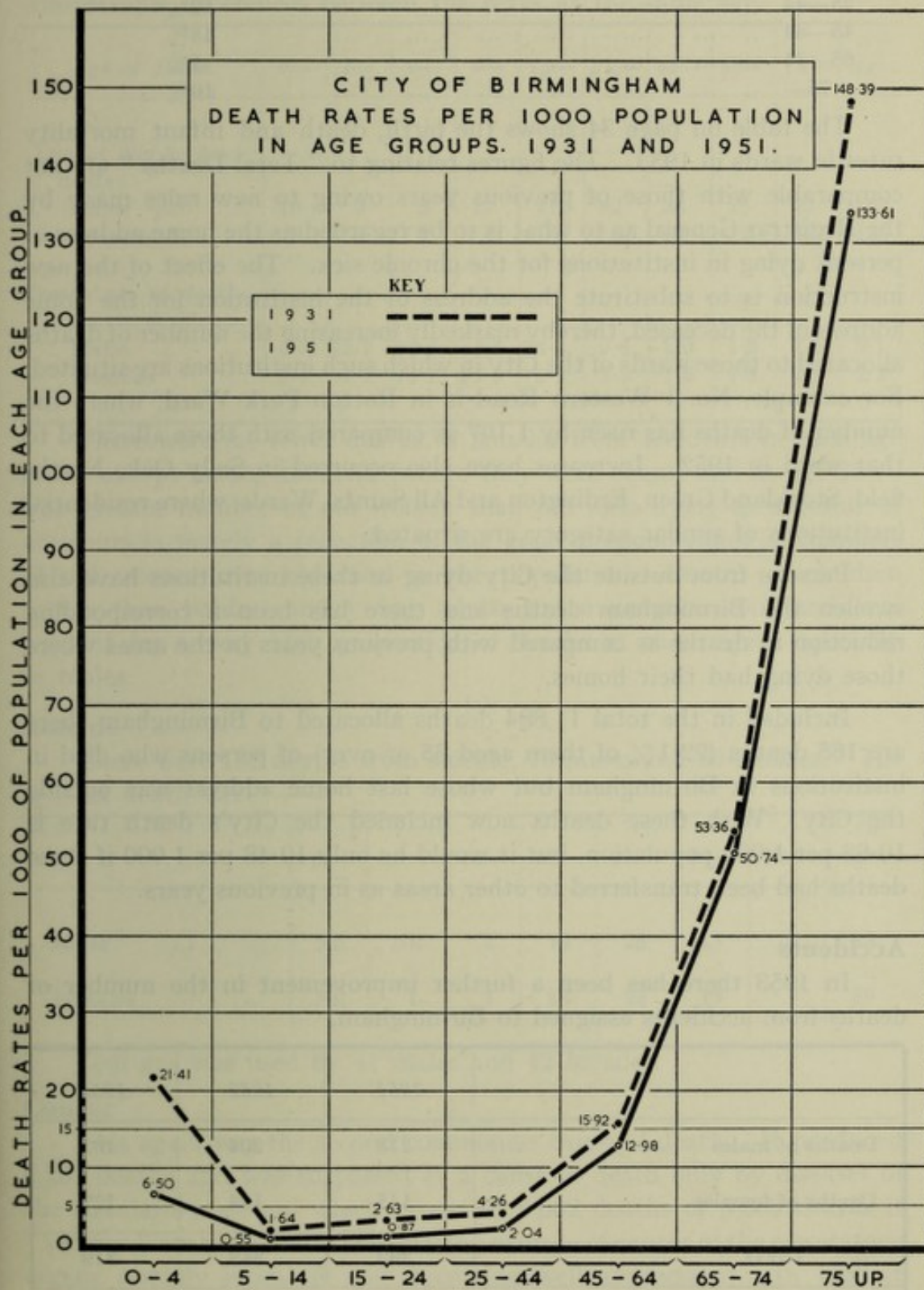
Births ..... 0.96      Deaths ..... 1.12

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 1.12, 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 purposes of comparison the Adjusted Birth Rate is 15.94 and the Adjusted Death Rate is 11.91.

The comparability factors should be borne in mind when studying the table of Crude Rates on page 33.

The wide differences in death rates at various age periods throughout life are shown graphically on page 29. The census years 1931 and 1951 have been chosen so that the population in each age group might be more accurately known. These enumerated populations for 1951 however are not yet published and the figures of populations from which the death rates have been calculated are based upon a 1% sample analysis, and may not be very accurate. In both 1931 and 1951 the lowest death rate was in the ages 5—14 years and thereafter a steady rise occurred, the elderly suffering heavy death rates. The two curves show the extent of the improvement in death rates which has benefited every age group but to unequal degrees. The improvement has been greatest in the ages 0—4 years (69%) and least in the group 65—74 years (5%).





<i>Age Group</i>							<i>Percentage reduction in death rate, 1931—1951</i>
0—4 years	...	...	...	...	...	...	69%
5—14 „	...	...	...	...	...	...	66%
15—24 „	...	...	...	...	...	...	67%
25—44 „	...	...	...	...	...	...	52%
45—64 „	...	...	...	...	...	...	18%
65—74 „	...	...	...	...	...	...	5%
75— „	...	...	...	...	...	...	10%

The table on page 34 shows the birth, death and infant mortality rates in wards in 1953. The figures relating to "Total Deaths" are not comparable with those of previous years owing to new rules made by the Registrar General as to what is to be regarded as the home address of persons dying in institutions for the chronic sick. The effect of the new instruction is to substitute the address of the institution for the home address of the deceased, thereby markedly increasing the number of deaths allocated to those wards of the City in which such institutions are situated. For example, No. 1 Western Road is in Rotton Park Ward, where the number of deaths has risen by 1,107 as compared with those allocated to that ward in 1952. Increases have also occurred in Selly Oak, Northfield, Stockland Green, Erdington and All Saints' Wards, where residential institutions of similar category are situated.

Persons from outside the City dying in these institutions have also swollen the Birmingham deaths and there has been a corresponding reduction in deaths as compared with previous years in the areas where those dying had their homes.

Included in the total 11,894 deaths allocated to Birmingham there are 165 deaths (72.1% of them aged 65 or over) of persons who died in institutions in Birmingham but whose last home address was outside the City. With these deaths now included the City's death rate is 10.63 per 1,000 population, but it would be only 10.48 per 1,000 if these deaths had been transferred to other areas as in previous years.

### Accidents

In 1953 there has been a further improvement in the number of deaths from accidents assigned to Birmingham.

	<i>1951</i>	<i>1952</i>	<i>1953</i>
Deaths of males ... ..	218	204	192
Deaths of females ... ..	145	144	127
TOTAL ... ..	363	348	319
Accidents as a percentage of all causes of death ... ..	2.9%	3.0%	2.7%



Accidents cause just less than 3% of all deaths, the exact percentage depending of course upon the total deaths as well as upon the number of accidents. The relative importance of accidents as a cause of death varies very much from one age group to another and there are also considerable differences between the sexes at the same age.

<i>Age at Death</i>	<i>0—</i>	<i>1—</i>	<i>2—</i>	<i>5—</i>	<i>15—</i>	<i>25—</i>	<i>45—</i>	<i>65—</i>	<i>75—</i>	<i>All Ages</i>
Deaths due to Accidents:										
Males ... ..	10	3	5	17	21	32	36	26	42	192
Females ... ..	5	1	5	4	3	10	18	22	59	127
Percentage of deaths due to accidents-										
Males ... ..	3.7	18.7	20.0	43.6	33.9	9.6	2.0	1.5	2.3	3.1
Females ... ..	2.3	7.7	16.7	13.8	8.1	3.5	1.6	1.5	2.3	2.2

There were far fewer deaths of females from accidents in each age group except among toddlers (where they were equal) and at age 75+. The greater number of old women than old men dying as a result of accidents is merely a reflection of the great preponderance in numbers of old women over old men in the population. Deaths of children (other than babies) and young adults are uncommon, but accidents account for a very high proportion of deaths at these ages, especially in males.

### Suicide

There were 132 deaths from suicide, 73 males and 59 females. The ages at death were:—

	<i>0—</i>	<i>5—</i>	<i>15—</i>	<i>25—</i>	<i>45—</i>	<i>65—</i>	<i>75—</i>	<i>All ages</i>
Males ... ..	Nil	Nil	2	19	25	15	12	73
Females ... ..	Nil	1	1	13	24	13	7	59

Coal gas was used by 41 males and 42 females.

### Cancer

This again was the second commonest cause of death. It produced 2,237 deaths and was surpassed as a cause of death only by diseases of the circulatory system which produced 3,802 deaths or 5,369 deaths if "strokes" are included. The growing menace of cancer of the respiratory organs (mainly lungs) is now becoming well appreciated. In 1953 it killed 433 men and 74 women, thus accounting for 7.02% of all deaths of males and only 1.29% of all deaths of females. Respiratory tuberculosis by comparison, killed only 177 males and 87 females in 1953.



The rapid increase in deaths from lung cancer has been likened to the occurrence of an epidemic. In this respect Birmingham's position is :—

		1953	1952	1951	1950	1949	1948	1947
Deaths	Males	433	361	371	371	301	286	255
	Females	74	62	47	79	60	73	65

It has been argued that steadily improving precision in diagnosis is partly responsible for this increase which is therefore alleged to be more apparent than real. A supporter of this view might well quote the report of the Medical Director of the Birmingham Mass Radiography Centre who states that his unit diagnosed 100 new cases of lung cancer in 1953, 81 of which were in men. In addition the Mobile Mass Radiography Unit discovered a further 12 cases, 10 in men and 2 in women. It is generally recognised, however, that the increase in deaths of males quoted as due to lung cancer does largely represent a true and rapid increase in this fatal disease. In 1953 among Birmingham men it had risen so much as to cause 36.3% of all male deaths from cancer, as the accompanying table shows. In England and Wales in 1900 the crude annual death rate attributed to lung cancer was 8 per million persons, in 1950 it was 278 per million. Less than half this increase is attributed to better diagnosis.

An increase of such a size within so short a time points strongly to an environmental factor as the cause. The first papers published in 1950 and citing smoking as a very likely cause were not at first readily accepted, but other researches have produced the same conclusion and this view now has wide acceptance. Tar from burning cigarettes can induce cancer of the skin of mice, though this does not prove that it contains something which causes human lung cancer.

The recorded mortality from lung cancer has consistently been higher in urban than in rural areas. Various industries, including the gas industry, have been blamed and serious suspicion has fallen upon pollution of the atmosphere by domestic and industrial smoke. It appears that standardised mortality rates from lung cancer are closely related to the number of inhabited dwellings in the area, i.e., the larger the town the greater the incidence of lung cancer. On the other hand there is said to be a tendency for more tobacco to be smoked in the larger towns.

Research is quite rapidly producing the pieces of the jig-saw puzzle and there are good prospects that soon the pieces can be put together and the true picture be revealed.



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— 1910</i>	—	—	—	176		151	17.5		16.9
1911	26.1		24.4	—	—	—	150		130	15.0		14.6
1921	24.1		22.4	35			83		83	11.3		12.1
1931	16.9		15.8	39		41	71		66	11.7		12.3
1936	15.8		14.8	35		40	62		59	11.3		12.1
1941	16.8	14.7	13.9	29		35	69	71	60	13.2	14.9	13.5
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	13.0
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	12.6
1946	22.5	22.2	19.2	25		27	40	46	43	11.3	12.7	12.0
1947	22.2	23.3	20.5	24		24	41	47	41	11.1	13.0	12.3
1948	19.5	20.0	17.9	22		23	32	39	34	9.8	11.6	11.0
1949	18.1	18.7	16.9	22		23	31	37	32	10.7	12.5	11.8
1950	16.8	17.6	15.8	23		23	30	34	30	10.9	12.3	11.6
1951	16.5	17.3	15.5	22		23	30	34	30	11.4	13.4	12.5
1952	16.4	16.9	15.3	20	25	23	27	31	28	10.2	12.1	11.3
1953	16.6	17.0	15.5	23	25	22	26	31	27	†10.6	12.2	11.4

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

† Adjusted death rate 11.91



**BIRTH, DEATH AND INFANT MORTALITY RATES IN WARDS, 1953**

	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
CENTRAL	St. Paul's .....	26,300	557	21.2	223	8.5	17	30.5
	Duddeston .....	28,000	668	23.9	263	9.4	16	24.0
	Deritend .....	24,700	608	24.6	224	9.1	20	32.9
	Market Hall .....	22,500	547	24.3	207	9.2	12	21.9
	Ladywood .....	23,300	526	22.6	197	8.5	20	38.0
	Totals and Average Rates of Central Wards .....	124,800	2,906	23.3	1,114	8.9	85	29.2
MIDDLE RING	Lozells .....	31,600	661	20.9	294	9.3	18	27.2
	Aston .....	28,400	520	18.3	270	9.5	12	23.1
	Gravelly Hill .....	29,100	516	17.7	295	10.1	11	21.3
	Washwood Heath .....	32,300	470	14.6	276	8.5	12	25.5
	Saltley .....	31,200	500	16.0	294	9.4	16	32.0
	Small Heath .....	30,500	543	17.8	268	8.8	12	22.1
	Sparkbrook .....	25,300	519	20.5	213	8.4	14	27.0
	Balsall Heath .....	25,400	445	17.5	243	9.6	13	29.2
	Edgbaston .....	25,500	333	13.1	277	10.9	4	12.0
	Rotton Park .....	23,300	386	16.6	1,388	59.6	10	25.9
	All Saints .....	25,400	438	17.2	320	12.6	16	36.5
	Soho .....	25,400	403	15.9	285	11.2	14	34.7
	Totals and Average Rates of Middle Ring Wards .....	333,400	5,734	17.2	4,423	13.3	152	26.5
OUTER RING	Stechford .....	51,300	937	18.3	353	6.9	31	33.1
	Sheldon .....	43,900	899	20.5	184	4.2	22	24.5
	Yardley .....	25,300	372	14.7	229	9.1	13	34.9
	Acocks Green .....	22,000	321	14.6	176	8.0	8	24.9
	Fox Hollies .....	23,100	318	13.8	181	7.8	7	22.0
	Sparkhill .....	26,000	423	16.3	282	10.8	16	37.8
	Hall Green .....	26,200	309	11.8	227	8.7	1	3.2
	Springfield .....	26,500	351	13.2	202	7.6	4	11.4
	Brandwood .....	36,400	531	14.6	238	6.5	15	28.2
	Moseley and King's Heath .....	29,400	475	16.1	342	11.6	8	16.8
	Selly Oak .....	31,800	423	13.3	1,091	34.3	9	21.3
	King's Norton .....	25,400	341	13.4	218	8.6	5	14.7
	Northfield .....	36,600	491	13.4	386	10.5	9	18.3
	Weoley .....	31,300	516	16.5	179	5.7	14	27.1
	Harborne .....	34,200	423	12.4	317	9.3	8	18.9
	Sandwell .....	24,900	331	13.3	203	8.2	5	15.1
	Handsworth .....	26,600	475	17.9	307	11.5	13	27.4
	Perry Barr .....	38,600	465	12.0	183	4.7	10	21.5
	Kingstanding .....	38,400	628	16.3	246	6.4	24	38.2
	Stockland Green .....	31,100	475	15.3	418	13.4	12	25.3
	Erdington .....	31,300	422	13.5	375	12.0	12	28.4
	Totals and Average Rates of Outer Ring Wards .....	660,300	9,926	15.0	6,337	9.6	246	24.8
	Ward of Domicile not known .....				20		2	
	Totals and Average Rates for Whole City .....	1,118,500	18,566	16.60	11,894	10.6	485	26.1



# VITAL STATISTICS DURING 1953 AND PREVIOUS YEARS

YEAR	Population Estimated to middle of each year	Birth-rate	Death-rate	Infant Mortality rate per 1,000 Births	DEATH-RATES PER 1,000 OF POPULATION FROM												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, Premature Birth, Malformations, etc. (under 1)	Diarrhoea and Enteritis (under 2)	Puerperal Fever	Other Accidents of Childbirth
1910	691,234	23.8	14.4	118	.01	—	.47	.07	.14	.15	.16	1.28	.27	1.00	1.36	1.82	2.82	1.31	.48	.05	.45	42.6	27.3	1.65	1.79
1916	895,678	25.9	13.5	126	.03	.00	.48	.14	.25	.18	.13	1.22	.29	.94	1.36	1.60	2.64	1.36	.51	.09	.44	46.6	25.3	1.56	1.96
1917	900,000	23.1	12.6	101	.01	—	.37	.01	.14	.13	.11	1.30	.26	1.00	1.29	1.88	2.60	1.07	.45	.05	.40	39.5	18.4	1.50	1.94
1918	870,000	19.4	15.2	99	.01	—	.08	.01	.32	.18	2.50	1.35	.25	1.02	1.18	1.76	2.85	.88	.44	.06	.38	43.8	15.0	1.47	1.13
1919	910,000	20.9	13.0	84	.01	—	.20	.05	.05	.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	—	—	.16	.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	.01	—	.17	.04	.38	.10	.13	.97	.16	1.12	0.98	1.64	2.02	.93	.33	.10	.26	36.6	16.6	1.17	1.67
1922	927,844	21.5	12.1	86	.00	—	.09	.04	.05	.10	.48	.97	.16	1.18	1.04	1.85	2.38	.66	.37	.12	.26	37.4	8.5	1.26	1.76
1923	936,079	20.4	11.0	72	.00	—	.20	.04	.05	.15	.28	.92	.16	1.17	1.00	1.71	1.98	.70	.39	.14	.35	31.3	10.9	1.78	1.73
1924	944,386	19.2	11.6	83	.01	—	.08	.02	.19	.10	.39	.97	.13	1.30	1.00	1.91	2.15	.70	.37	.10	.31	37.2	9.2	2.01	1.90
1925	952,766	18.8	11.7	78	.00	—	.11	.02	.23	.10	.39	.98	.16	1.27	0.98	2.12	1.97	.73	.37	.11	.33	34.0	11.3	1.96	2.19
1926	961,222	18.7	11.3	73	.00	—	.13	.03	.19	.12	.34	.96	.15	1.21	1.00	1.85	2.10	.74	.38	.11	.30	35.3	11.3	1.84	1.85
1927	969,752	17.8	11.8	75	.00	—	.13	.01	.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	.00	—	.04	.01	.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	—	.20	.01	.13	.09	1.09	.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	.01	—	.06	.02	.11	.09	.13	.90	.13	1.43	0.88	2.57	1.32	.60	.44	.15	.40	30.6	7.6	1.55	1.84
1931	1,011,300	16.9	11.6	70	.00	—	.10	.01	.12	.09	.41	.91	.13	1.35	0.96	2.43	1.78	.69	.45	.15	.38	33.0	10.7	1.74	2.05
1932	1,017,500	16.3	11.3	71	.00	—	.18	.01	.09	.06	.27	.92	.14	1.46	0.77	2.90	1.61	.62	.45	.15	.38	34.6	8.7	1.64	2.17
1933	1,023,500	16.3	11.3	67	.00	—	.05	.01	.13	.03	.36	.83	.10	1.45	0.87	2.73	1.47	.59	.45	.15	.35	33.6	7.7	1.68	2.05
1934	1,028,000	14.7	11.0	68	.00	—	.08	.02	.03	.03	.44	.85	.11	1.43	0.70	2.94	1.32	.61	.40	.17	.39	33.7	7.8	1.66	2.06
1935	1,033,000	15.4	10.9	64	.00	—	.05	.01	.06	.08	.15	.71	.08	1.52	0.72	3.14	1.09	.62	.46	.13	.40	36.3	7.7	1.45	2.07
1936	1,038,000	15.8	11.3	62	.00	—	.08	.01	.10	.06	.13	.71	.07	1.57	0.69	3.43	1.22	.62	.44	.16	.38	34.6	8.1	1.66	2.07
1937	1,042,000	16.3	11.7	60	.00	—	.07	.01	.03	.08	.40	.72	.08	1.62	0.73	3.40	1.40	.56	.45	.15	.39	33.1	5.1	0.77	2.30
1938	1,048,000	16.6	10.9	61	.00	—	.01	.01	.07	.07	.15	.70	.08	1.59	0.61	3.45	1.18	.61	.43	.16	.34	28.5	12.5	0.63	2.17
1939	1,055,000	16.6	11.4	60	.00	—	.02	.00	.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	—	.01	.01	.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	16.4	11.9	63	.00	—	.03	.01	.06	.06	.21	.73	.07	1.59	0.80	3.45	1.43	.58	.44	.14	.44	26.4	9.3	0.87	1.99
1942	965,000	16.8	13.2	69	.01	—	.00	.00	.12	.09	.15	.81	.09	1.70	1.30	3.10	1.94	.72	.44	.12	.44	26.4	11.3	0.82	1.75
1943	965,000	19.3	11.8	56	.00	—	.02	.00	.05	.05	.10	.77	.09	1.77	1.28	2.87	1.51	.64	.43	.11	.37	29.4	9.8	1.13	1.29
1944	990,000	20.9	12.1	55	.00	—	.01	.00	.06	.04	.34	.71	.07	1.83	1.34	3.02	1.73	.46	.45	.11	.31	25.4	9.1	0.79	0.94
1945	990,000	22.8	11.3	42	.00	—	.00	.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
1946	1,017,100	19.9	11.2	50	.00	—	.03	.00	.06	.04	.15	.73	.08	1.84	1.33	3.14	1.44	.44	.41	.10	.27	22.3	7.8	0.51	0.96
1947	1,076,304	22.5	11.3	40	.00	—	.01	.00	.03	.01	.11	.61	.07	1.90	1.32	3.36	1.37	.44	.36	.12	.30	20.9	6.1	0.13	0.74
1948	1,096,100	22.2	11.1	41	.00	—	.02	.00	.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	1,106,800	19.5	9.8	32	.00	—	.01	.00	.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	1,117,900	18.1	10.7	31	.00	—	.01	.00	.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	1,119,000	16.8	10.8	30	.00	—	.01	.00	.03	.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	1,110,900	16.5	10.2	27	.00	—	.01	.00	.01	.00	.26	.35	.03	1.84	1.28	3.38	1.52	.36	.32	.12	.30	19.3	4.4	0.19	0.56
1953	1,118,500	16.4	10.4	27	.00	—	.00	.00	.01	.00	.03	.25	.02	1.90	1.46	3.46	1.12	.39	.22	.11	.31	17.5	1.6	0.27	0.49
		16.6	10.6	26	.00	—	.02	.00	.01	.00	.15	.24	.01	2.00	1.51	3.40	1.29	.36	.24	.12	.28	18.0	1.1	0.11	0.48

•Exclusive of General Paralysis †Registrar General's Estimate.



## CITY OF BIRMINGHAM

## CAUSES OF DEATH AT DIFFERENT AGE PERIODS DURING 1953

AGES AT DEATH											
No.	Causes of Death	Sex	0-	1-	2-	5-	15-	25-	45-	65-	75-
1	Typhoid & Paratyphoid Fever...	M.	—	—	—	—	—	—	1	1	—
1A	Smallpox	F.	—	—	—	—	—	—	5	—	—
2	Measles	F.	—	—	—	—	—	—	2	1	3
3	Scarlet Fever	M.	2	2	4	1	—	11	146	226	279
4	Whooping Cough	F.	1	—	6	—	2	15	156	275	454
5	Diphtheria	M.	—	—	—	—	1	13	18	13	11
6	Influenza	F.	—	—	—	—	—	12	14	9	12
6A	Poliovirus inc. Polio Encephalitis	M.	5	1	—	—	1	54	496	538	616
7	Acute Infectious encephalitis incl. Encephalitis Lethargica	F.	2	2	1	—	7	45	232	500	885
8	Meningococcal Infections inc. Cerebrospinal Fever	M.	—	—	—	—	—	1	3	6	—
9	Tuberculosis of Respiratory System	F.	1	1	—	—	—	2	6	4	6
10A	Tubercular Meningitis	M.	—	—	—	—	—	6	42	68	92
10B	Tuberculosis of the Abdomen	F.	—	—	—	—	—	1	2	33	59
10C	Tuberculosis of Spinal Column	M.	—	—	—	—	—	1	6	178	206
10D	Tuberculosis of Joints	F.	—	—	—	—	—	4	41	85	152
10E	Disseminated Tuberculosis	M.	—	—	—	—	—	1	8	55	61
10F	Tuberculosis of Glands and other parts	F.	—	—	—	—	—	1	9	32	62
11	Syphilis	M.	—	—	—	—	—	5	22	11	13
12	General Paralysis of Insane, Tabes Dorsalis	F.	—	—	—	—	—	3	9	7	7
12A	Cancer of Buccal Cavity & Pharynx	M.	—	—	—	—	—	10	53	31	23
13A	Digestive Organs	F.	—	—	—	—	—	4	13	11	16
13B	Peritoneum	M.	—	—	—	—	—	—	1	15	15
13C	Respiratory Organs	F.	—	—	—	—	—	2	4	4	6
13D	Genital Organs	M.	—	—	—	—	—	6	5	10	12
13E	Breast	F.	—	—	—	—	—	1	6	17	34
13F	Urinary Organs	M.	—	—	—	—	—	4	13	29	28
13G	Skin	F.	—	—	—	—	—	11	19	16	18
13H	Other Organs	M.	—	—	—	—	—	9	15	16	16
14	Diabetes	F.	—	—	—	—	—	1	15	34	56
								2	12	7	8
								—	—	—	—
								2	—	—	—
								7	—	—	—
								2	1	—	—
								2	4	—	—
								1	—	—	—
								3	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—	—	—	—
								—			



## GENERAL EPIDEMIOLOGY

The arrangements have continued whereby general practitioners call upon the Department's medical officers for consultation in suspected cases of infectious disease. There have also been many discussions on the action to be taken to prevent spread of infection.

The fullest collaboration is also enjoyed with the staff of Little Bromwich Hospital, who assist in every possible way in seeking the origin and preventing the spread of infection. The Deputy Medical Officer of Health became a member of the Hospital House Committee during the year. The after-care of patients discharged from this hospital is receiving greater attention than hitherto, and a special effort is being made to help those young children who hitherto have had frequent admissions to hospital.

### Diphtheria

It is very rarely that the success of preventive medicine can be accurately expressed in figures, but the incidence of cases of diphtheria is regarded as a reliable measure of the success achieved by immunisation. Birmingham was a pioneer in this field, having started diphtheria immunisation in 1924.

In the early days the new idea made slow headway, but since 1941 there has been a steady fall in incidence and deaths from this disease. Whereas in 1950 there were 105 cases and one death, in 1951 27 cases and one death, in 1952 13 cases and two deaths; in 1953 there was only one single mild case of diphtheria. This was a girl aged 11 years who had never been immunised. Diphtheria has in fact become a rare disease and will remain so only as long as the resistance of the community is maintained by immunisation. There was a total of 128 tentative notifications of diphtheria received during the year. All but one of these were eventually found to be diseases such as severe tonsillitis, glandular fever, etc.

### Diphtheria Immunisation

Although the almost complete disappearance of diphtheria is most satisfactory, the numbers of children being immunised of recent years are showing a decline.

<i>Year</i>				<i>No. of Primary Immunisations</i>	<i>No. of Live Births in the year</i>
1949	...	...	...	19,791	20,054
*1950	...	...	...	10,799	18,833
1951	...	...	...	19,573	18,355
1952	...	...	...	17,532	18,301
1953	...	...	...	16,641	18,566

\* Immunisation was suspended from 29th June to 17th November, 1950.



Moreover there is a steady rise in the proportion of children who are not immunised until they receive treatment at school. There were 3,032 children in this category in 1953, i.e., 18% of all children receiving primary immunisation did so at school instead of during the first year of life, as advised. General practitioners carried out 45% of all primary immunisations. In the previous five years they did 16%, 29%, 37%, 37% and 39% of this work. The 6% increase is partly accounted for by 1,246 children receiving the combined diphtheria and whooping cough protection from their private doctors as compared with only 778 in 1952. It is also gratifying to record that 56% of children born in 1953, 1952 and 1951 and immunised during 1953 received their injections from general practitioners. The corresponding number in 1952 was only 49%.

The Health Department Staff held 1,504 immunising sessions during 1953, 1,471 in 1952 and 1,369 in 1951.

An immunisation publicity campaign was held in the spring. Leaflets<sup>s</sup> were posted in Corporation omnibuses and similar notices mounted on card were displayed in many public buildings.

Public and private libraries distributed 50,000 book marks and large coloured posters mounted on hardboard were used for propaganda through Welfare Centres. The campaign appeared to stimulate parents to apply for immunisation for their children.

DIPHtheria IMMUNISATION  
PERCENTAGES OF IMMUNISED CHILDREN 1-5 YEARS  
(BASED ON HEALTH VISITORS' RECORDS)  
IN WELFARE CENTRE DISTRICTS

<i>Welfare Centre District</i>	<i>% age immunised 1952</i>	<i>% age immunised 1953</i>
Acocks Green ... ..	78	79
Berrowside Road, Shard End ...	—	50
Bromford ... ..	76	74
Carnegie ... ..	64	64
Erdington ... ..	77	73
Farm Road ... ..	60	62
Greet ... ..	76	69
Handsworth ... ..	84	86
Hay Mills ... ..	71	75
Heath Mill Lane ... ..	64	69
Hope Street ... ..	53	52
Horrell Road ... ..	70	69
Irving Street ... ..	67	61
Kettlehouse ... ..	80	77
King's Heath ... ..	76	77
Kingstanding ... ..	75	76
Lancaster Street ... ..	58	65
Lansdowne Street ... ..	74	74
Lea Hall ... ..	70	67
Maypole ... ..	86	89
Monument Road ... ..	62	61
Northfield and West Heath... ..	73	70
Selly Oak ... ..	79	81
Small Heath ... ..	75	73
Stirchley ... ..	76	71
Sutton Street ... ..	60	62
Tennal Road ... ..	83	81
Tower Hill ... ..	91	83
Treaford Lane ... ..	73	72
Trinity Road ... ..	65	71
Washwood Heath ... ..	67	65
Wentworth Road ... ..	88	85
Weoley Castle ... ..	77	74
Yardley Wood ... ..	80	75
Total visited children aged 1-5 years	73,511	70,492
Percentage of immunised children	71.2%	69.8%



DIPHTHERIA IMMUNISATION CARRIED OUT IN 1953

Year of Birth	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	Total	Adults	No. of session
Maternity and Child Welfare Centres	Primary 498 Reinforcing	3,896	443	219	176 446	98 1,525	37 187	13 43	9 25	— 2	— 1	2	1 4			5,392 2,234	1 1	435
Schools, Nursery Schools and Classes	P. 1 R.	1	8	60	134 313	878 5,048	1,102 4,420	542 1,359	247 602	21 57	8 17	11 16	10 7	7 11	3 11	3,032 11,861	8 12	744
Day Nurseries	P. 17 R.	125	50	36	20 40	4 91	2									252 133	1	220
Institutions	P. 2 R.	32	22	6	12	14 22	18 12	15 5	11 12	6 17	17 12	14 19	12 6	13 10	15 6	209 121	5 4	56
Council House	P. 41 R.	196	23	10	7 17	5 68	2 14	— 3	1 1	1	3	4	2	1	2	285 116	7	49
General A.P.T. Practitioners	P. 611 R.	4,553	602	173 2	148 320	83 1,632	22 384	12 82	6 46	4 13	2 11	3 4	2 1	3 6	1	6,225 2,501	27 5	
*D.P.P.	P. 89 R.	912	147	43 1	25 20	18 75	5 28	5 7			2	1		1		1,246 133		
Total Primary	1,258	9,715	1,295	547	522	1,100	1,186	587	274	31	27	31	25	24	19	16,641	42	1504
Total Reinforcing				3	1,156	8,461	5,047	1,499	686	90	46	43	20	28	20	17,099	29	

\* (D.P.P. is a combined Diphtheria and Whooping Cough immunisation).

# IMMUNISATION IN RELATION TO CHILD POPULATION

Number of Children at 31st December, 1953, who had completed a course of immunisation at any time before that date (*i.e.*, at any time since 1st January, 1939).

<i>Age at 31.12.53, i.e., Born in Year</i>	<i>Under 1 1953</i>	<i>1—4 1952—1949</i>	<i>5—9 1948—1944</i>	<i>10—14 1943—1939</i>	<i>Under 15 Total</i>
Last complete course of injections (whether primary or booster).					
A. 1949—1953	1,264	50,483	93,616	14,052	159,415
B. 1948 or earlier	—	—	5,803	66,494	72,297
C. Estimated mid-year child population	18,220	72,880	174,100		265,200
Immunity Index 100A/C	6.94%	69.27%	61.84%		60.11%

The Immunity Index is the proportion of children in the age group who have had a course of immunisation (whether primary or boosting) in the last five years. It is supposed to be an index of the immunity to diphtheria in a local population.

## Dysentery

During the year 375 cases of dysentery were notified. After revision 359 were accepted as being dysentery and of these 199 were confirmed bacteriologically as being *Shigella Sonnei* and three were confirmed as *Shigella Flexner* infections.

Some diagnoses could not be confirmed bacteriologically as treatment had already started before stool specimens were obtained. Other patients were regarded as dysentery cases without bacteriological examination because their illnesses coincided with the illness of contacts who were proved cases.

Provisional diagnosis of paratyphoid (1 case), poliomyelitis (1 case), food poisoning (15 cases) and gastro enteritis (17 cases) were all changed finally to dysentery. Among cases provisionally regarded as dysentery six were found to be suffering from food poisoning.



## AGE DISTRIBUTION OF CONFIRMED CASES

The age incidence in accepted cases of dysentery, male and female, is shown below :—

Age	0-1	1-2	3-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65+	Total
Males	11	43	49	41	13	1	1	10	9	5	1	2	186
Females	8	48	29	32	8	11	11	15	7	2	1	1	173
TOTAL	19	91	78	73	21	12	12	25	16	7	2	3	359

It will be seen that 188 or 52·4 % of the cases occurred in children under five years old.

### DYSENTERY IN DAY AND RESIDENTIAL NURSERIES

Fifty-seven cases of loose stools were reported amongst the children and staff in the day and residential nurseries in the City. Of these 39 were confirmed as sonnei dysentery infections. Twenty-two cases were in one day nursery and one of the kitchen staff was found to be a carrier. In one residential nursery there were 10 cases confirmed as dysentery. Six of these cases were amongst the staff and one member was found to be a symptomless carrier. After treatment her carrier state cleared up and no further cases were reported from that nursery.

On numerous occasions it was considered advisable to obtain stool specimens from all members of the family even if only one individual had symptoms of the disease. It was frequently found that several individuals were infected but only the young children were affected. The bacteriological reports were valuable for demonstrating to the household the great importance of hand washing. Several stool specimens were obtained from family pets and on one occasion the dog in the household was proved to have a symptomless infection with *Shigella sonnei* while the two children of the household were ill through that infection.

### Encephalitis

There were 21 confirmed cases, with 12 deaths. This was the largest number of such cases since 1936 when 23 were confirmed.

In the following 10 “infective” cases, encephalitis was regarded as the primary disease.

#### MALES

Age	3 yrs.	5 yrs.	36 yrs.	46 yrs.	54 yrs.
Outcome	died	died	recovered	recovered	died

# FEMALES

Age	4 mths.	4 yrs.	5 yrs.	9 yrs.	11 yrs.
Outcome	died	died	recovered	died	died

Eleven cases were "post-infectious" i.e. secondary to some infectious illness.

# MALES

Age	3 yrs.	5 yrs.	6 yrs.	6 yrs.	50 yrs.	52 yrs.
Initial Infection	measles	measles	measles	measles	pneumonia	pneumonia
Outcome	died	recovered	recovered	recovered	died	died

# FEMALES

Age	4 mths.	16 mths.	3 yrs.	4½ yrs.	6 yrs.
Initial Infection	measles	pneumonia	measles	measles	mumps
Outcome	recovered	died	died	recovered	recovered

The measles epidemic which began at the end of 1952 continued during the early months of 1953.

Seven of the post infectious cases followed measles and two died.

## Food Poisoning

Our experience in 1953 can be summarised as follows :—

Corrected notifications totalled 282 distributed :—

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
66	75	52	89

There were two deaths. Both patients were already frail.

### (i) Outbreaks due to identified agents.

Total Outbreaks	Total Cases
23	196

Outbreaks due to :—

Chemical Poisons	...	...	...	Nil
Salmonella organisms	...	...	...	12
Staphylococci (including toxin)	...	...	...	4
Probably toxin of some type	...	...	...	6
Cl. Botulinum	...	...	...	Nil
Other bacteria	...	...	...	1

### ii) Outbreaks of undiscovered cause.

Total Outbreaks	Total Cases
9	29

Total Outbreaks (i) and (ii)	32	Total cases (i) and (ii)	225
------------------------------	----	--------------------------	-----

### (iii) Single Cases,

Agent Identified	Unknown Cause	Total Cases
15	42	57



Of the 32 outbreaks of food poisoning, nine involved 3, 3, 2, 4, 4, 5, 4, 2, and 2 cases respectively—a total of 29 cases—and their causes remained completely undiscovered. Difficulties in finding the cause arose partly from late notification and partly from treatment by antibiotics having been started before specimens could be obtained. There were other occasions when no pathogens were found in stool specimens obtained at the height of an untreated illness. This suggested a virus, a toxin or large doses of dead bacteria as the cause. In a further six separate outbreaks involving respectively 15, 3, 18, 3, 2, and 48 patients, the histories strongly suggested that on each occasion the victims had been infected simultaneously and the illnesses were of "toxin" type. No pathogenic organisms were detected, however, because of the food having been served hot. Reheated gravy from the previous day was involved in one of these outbreaks. Four outbreaks involving 30, 2, 2 and 31 patients were considered as due to staphylococci and their toxins. Thirty persons owed their illness to a cook who carried staph. pyogenes in the nose. She cut up cold boiled ham, placed it on plates and these were kept on a hot plate until consumed. Staphylococci of the same phage type as those in her nose were found in the remains of the ham.

Staphylococcal toxin poisoning can also occur when meat is cooked, then handled (e.g. skinned or boned) and later sold embedded in gelatine. Two victims had eaten this type of food and there is no doubt that scrupulous precautions ought to be observed in preparing such dishes. One would prefer to see the meat reheated immediately after boning, but manufacturers say that such a procedure causes disintegration of the pieces of meat.

The twelve outbreaks due to salmonella organisms involved 3, 2, 5, 3, 2, 2, 2, 6, 4, 2, 3, 3 (total 37) patients respectively.

Illness associated with salmonella bovis morbificans infection occurred at about the same time in four patients belonging to three Birmingham families. They had all consumed a well known make of sausage which suggested that an animal with this infection might have been used for the sausage meat.

In eight outbreaks 22 individuals were infected with salmonella typhimurium and it was impossible to discover how the infection had been introduced into the household. Of particular interest, however, was the case of a father and son. The son had mild symptoms two days before his father and, in investigating the whole family, stools from their two Alsatian dogs were also examined and found to be infected. A few days before the boy's symptoms one of the Alsatians had suffered from diarrhoea. In fact it had been failing to gain weight for some time and its diarrhoea had started after it had been treated with oral procaine penicillin in the hope of increasing its weight.



Fifty-seven single cases of food poisoning were officially recorded, but an infecting agent was found only in 15. There was no proof that the remaining 42 patients were or were not suffering from food poisoning.

Whilst trying to discover the origin of a child's infection with *sonnei* dysentery a sample of droppings from a budgerigar were examined. These were found to be infected with *salmonella typhimurium*.

### **Infantile Gastro Enteritis**

There is a growing body of opinion that many cases of this disease are due to infection by certain specific serological types of *Bact. Coli*. The organisms are extremely infectious to children under 18 months and are said to be a cause of outbreaks of infantile gastro enteritis in institutions. When infection is introduced among a group of babies, the great majority become infected and a proportion develop symptoms of vomiting and diarrhoea. Debility and a change in diet seem to predispose to the occurrence of illness which may vary from minor disease to death.

An unaffected infant carrier of the infection may be transferred from an infected community to an uninfected group of infants, e.g., by discharge from hospital and admission to a children's home, or by admission to another hospital soon after discharge from the first. Some days later an outbreak of gastro enteritis suddenly flares up in the second infant community.

This phenomenon occurred in Birmingham on several occasions during the year and, by collaboration between the Regional Hospital Board, the Board of Governors of the Teaching Hospitals and their pædiatricians and pathologists, an experimental scheme of notification came into operation on the 30th November. Each week the hospitals send to the Medical Officer of Health a statement of the wards infected and the strain of infection in each ward. A composite statement is then prepared and circulated to those responsible for admitting infants to hospitals, nurseries, etc., in Birmingham. This enables appropriate precautions to be taken when an infant recently discharged from an infected environment is presented for admission.

The very favourable trend in death rates (per 1,000 live births) from diarrhoea and enteritis under two years of age is shown in the table on page 35. The five yearly average fell rapidly from 25.3 deaths per 1,000 live births per year in 1911 to 1915 to 8.1 deaths per 1,000 live births in 1931-1935. During the next ten years there was slight deterioration but, since the war, further remarkable improvement in the death rate has occurred.

The five yearly average for 1946-1950 was 4.4 and in 1951, 1952 and 1953 the rate per 1,000 live births has been 1.6, 1.3 and 1.08 respectively.



The remarkable improvement of recent years is thought to have been due very largely to the more universal application of a method of treatment involving the intravenous replacement of the fluid lost by diarrhoea and vomiting.

### **Influenza**

Similar arrangements to those introduced last year were again put into operation with a view to obtaining early information as to the occurrence of an influenza epidemic.

Although an epidemic of true influenza affected the whole of Europe and the Mediterranean seaboard, and influenza was confirmed in the north and south of England, a great deal of illness in Birmingham which gave rise to extremely heavy applications for National Insurance Benefit, was not true influenza but consisted of severe colds. There was, in fact, only one case in Birmingham in which the laboratory could partially confirm the diagnosis of influenza. This was a boy aged 12 years whose serum showed a rising titre of complement fixation in regard to Virus A.

### **Malaria**

There were ten notifications, nine males and one female. All infections were contracted abroad, the majority in Korea.

### **Measles**

A large epidemic of measles which began at the end of October, 1952 and rose to its peak in the week ending 3rd January, 1953, when 1,535 notifications were received, produced a total of 20,503 cases between 19th October, 1952 and 23rd May, 1953. The notifications for the whole of 1953 were 15,584 and 90 of these referred to patients under six months of age. There were fifteen deaths during the year at the following ages :—

8 mths., 11 mths. (2 cases) ; 16 mths., 23 mths., 2 years (4 cases) ;

3 years (5 cases) ; 4 years.

In addition one Birmingham child died elsewhere from measles.

Two previously healthy children, both aged three years, died of post infectious encephalitis and one previously healthy child aged 16 months who died had convulsions. The twelve others who died had respiratory infections complicating measles and only four of these had been robust children. Two were mongols, one had been backward, bronchitic and epileptic, one had congenitally cystic lungs, two were already "chesty," one had convulsions before the measles, and one was a child who had suffered through parental neglect.



## **Meningococcal Infection**

There were 89 confirmed cases of meningococcal infection distributed throughout the year as follows :—

1st Quarter, 27 ; 2nd Quarter, 24 ; 3rd Quarter, 13 ; 4th Quarter, 25.

Eleven of the patients died.

The yearly average number of cases over the five-year period ending 1950 was 69.

## **Paratyphoid Fever**

There were four confirmed cases, one of whom died.

A man, aged 62, arrived from India by air on 20th July and his symptoms began on 26th July. It is therefore believed that he was infected abroad.

A woman aged 25 years was suffering from ulcerated colitis and whilst in hospital became infected with paratyphoid and died. There was another paratyphoid patient who could have been the source of infection in the same ward.

A nurse aged 21, at a general hospital, became infected from an unknown source. There had been no hospital patient recognised as suffering from paratyphoid or as being a carrier.

A nurse aged 22 at an isolation hospital might have been infected by a patient.

## **Pneumonia**

There were 1,186 notifications of pneumonia and the deaths from this disease were 533.

Pneumonia became notifiable in 1919 and in only two years since then have fewer notifications been received. In 1952 there were 1,109 and in 1950 there were 1,176.

## **Poliomyelitis**

Of 109 original notifications of poliomyelitis in only 32 patients was this disease finally confirmed. There were, however, in addition a further eight cases whose original diagnosis had been meningitis.

Of the total of 40 confirmed cases of poliomyelitis 13 were non-paralytic and 27 paralytic. Three aged 2 years, 7 years and 19 years had polioencephalitis and all died. These 3 were the only deaths. Not included in these figures was a Birmingham woman, aged 30, who died of polioencephalitis in Winchester.



The following is a summary of the age incidence.

Age	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35+
MALE :								
Paralytic cases	9 (1 died)	3 (1 died)	1	Nil	Nil	1	Nil	2
MALE :								
Non-paralytic cases	2	1	2	Nil	1	Nil	1	Nil
FEMALE :								
Paralytic cases	4	2	1	1 (1 died)	1	2	Nil	Nil
FEMALE :								
Non-paralytic cases	1	2	Nil	1	Nil	Nil	Nil	2

Of the 27 paralytic cases 21 had paralysis of only one site, five had paralysis of two sites, and one had paralysis of four sites.

The 40 cases appeared to be spread fairly evenly throughout the City roughly in proportion to the density of the population. The homes of the patients fell roughly into the following types :—

	Institu- tion	Clean Slum House	Artisan	Good Artisan	Superior
Patients under 5 years	1	5	7	2	1
Patients over 5 years	Nil	1	12	7	4

It is quite usual in an urban area for there to be no apparent direct connection between one case and another, but outbreaks have occurred where the association between cases could be clearly demonstrated. Among the Birmingham cases an association could be demonstrated between two pairs of cases. Two girls each aged three years, one with paralysis and one without, lived in the same road and were playmates. The dates of onset of their illnesses were 11th September and 18th September.

Two cousins aged 2 months and 2 years each had paralysis of the right leg. Their homes were in different localities and they did not meet. They had, however, both been visited by their grandmother and their onsets were on 9th November and 17th November.

### Scabies

During the year 423 persons reported to the Cleansing Centres for treatment as compared with 17,115 in 1942 and 7,432 in 1947. This fall in attendance demonstrates the fact that Scabies is now becoming uncommon, particularly when compared with its prevalence under war-time conditions.

## Scarlet Fever

During the year there were 1,425 patients notified as suffering from this disease. No epidemic occurred, the highest weekly number of notifications being 59 (end of March) and the lowest six. 553 of the cases occurred in the first quarter of the year.

There were no deaths.

## Smallpox

There were no cases of smallpox in Birmingham.

Surveillance was, however, carried out on persons from the Rochdale area where there was an outbreak of smallpox (*variola minor*) and also on two merchant navy officers because an unvaccinated member of the crew of their ship contracted smallpox and died.

## Typhoid

There were four cases of typhoid fever in Birmingham during 1953. Two of these died.

One male aged 65, who died, had no doubt been infected by his wife. She was a chronic carrier following an ambulant attack in 1944 when she was infected whilst nursing a case of typhoid.

One woman, aged 44, died. Although intensive investigations were made to discover the source of her infection, no conclusive evidence was obtained.

Two women were patients in a mental hospital, and their infection was associated with three known typhoid carriers in the same ward.

## Vaccination

The 8,238 persons vaccinated for the first time in 1953 and the 2,495 persons who were revaccinated were of the following ages.

<i>Age at date of vaccination</i>	<i>Under 1 year</i>	<i>1 year</i>	<i>2 to 4 years</i>	<i>5 to 14 years</i>	<i>15 years and over</i>	<i>Total</i>
Number vaccinated	6,896	277	266	201	598	8,238
Number re-vaccinated	—	4	27	127	2,337	2,495

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

	<i>1949</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>
<i>Primary Vaccinations</i>					
Under 1 year	6,993	6,797	7,241	6,707	6,896
1 year and over	396	1,143	1,667	1,190	1,342
<i>Ré-vaccinations ...</i>	865	1,725	3,268	2,147	2,495



Primary vaccinations under 1 year expressed as a percentage of live births occurring during the year :—

1949, 34.9% ; 1950, 36.1% ; 1951, 39.4% ; 1952, 36.6% ; 1953, 37.1%

### Venereal Disease

#### NUMBER OF CASES UNDER TREATMENT ON 1st JANUARY, 1953

	<i>Syphilis</i>	<i>Soft Chancre</i>	<i>Gonorrhoea</i>	<i>Other Conditions</i>
General Hospital ...	1,015	—	378	560
Children's Hospital ...	4	—	—	4
Lancaster Street Clinic	63	—	3	142
Summerfield Hospital	34	—	—	2
TOTALS ...	1,116	—	381	708

#### NEW CASES COMING UNDER TREATMENT DURING 1953

	<i>Syphilis</i>	<i>Soft Chancre</i>	<i>Gonorrhoea</i>	<i>Other Conditions</i>
General Hospital ...	191	—	647	2,130
Children's Hospital ...	—	—	—	24
Lancaster Street Clinic	14	—	13	655
Summerfield Hospital	9	—	3	5
TOTALS ...	214	—	663	2,814

#### TOTAL ATTENDANCES DURING 1953

	<i>Syphilis</i>	<i>Soft Chancre</i>	<i>Gonorrhoea</i>	<i>Other Conditions</i>
General Hospital ...	27,787	—	4,929	10,019
Children's Hospital ...	95	—	—	—
Lancaster Street Clinic	2,090	—	73	2,764
Summerfield Hospital	1,237	—	38	101
GRAND TOTAL OF ATTENDANCES ...	31,209	—	5,040	12,884

#### NUMBER DISCHARGED AFTER COMPLETION OF TREATMENT AND OBSERVATION

	<i>Syphilis</i>	<i>Soft Chancre</i>	<i>Gonorrhoea</i>	<i>Other Conditions</i>
General Hospital ...	86	—	280	2,092
Children's Hospital ...	2	—	—	12
Lancaster Street Clinic	4	—	5	699
Summerfield Hospital	—	—	2	6
TOTALS ...	92	—	287	2,809

# NUMBER TRANSFERRED TO OTHER CENTRES

	<i>Syphilis</i>	<i>Soft Chancre</i>	<i>Gonorrhoea</i>	<i>Other Conditions</i>
General Hospital ...	62	—	55	19
Children's Hospital ...	—	—	—	12
Lancaster Street Clinic	6	—	7	—
Summerfield Hospital	3	—	—	—
TOTALS ...	71	—	62	31

# NUMBER WHO CEASED TO ATTEND BEFORE COMPLETION OF TREATMENT

	<i>Syphilis</i>	<i>Soft Chancre</i>	<i>Gonorrhoea</i>	<i>Other Conditions</i>
General Hospital ...	116	—	1	—
Children's Hospital ...	—	—	—	—
Lancaster Street Clinic	15	—	—	—
Summerfield Hospital	5	—	—	—
TOTALS ...	136	—	1	—

# NUMBER WHO CEASED TO ATTEND AFTER COMPLETION OF TREATMENT, BUT BEFORE FINAL TESTS AS TO CURE

	<i>Syphilis</i>	<i>Soft Chancre</i>	<i>Gonorrhoea</i>	<i>Other Conditions</i>
General Hospital ...	32	—	337	—
Children's Hospital ...	—	—	—	—
Lancaster Street Clinic	—	—	—	—
Summerfield Hospital	—	—	1	1
TOTALS ...	32	—	338	1

# NEW CASES OF CONGENITAL SYPHILIS IN 1953

	<i>Under 1 year</i>	<i>1—5 years</i>	<i>5 years and under 15</i>	<i>15 yrs and upwards</i>	<i>Totals</i>
General Hospital ...	1	2	3	17	23
Children's Hospital	—	—	—	—	—
Lancaster Street Clinic ...	—	—	—	2	2
Summerfield Hospital	—	—	—	—	—
TOTALS ...	1	2	3	19	25



## Whooping Cough

6,049 notifications were received and there were 11 deaths at ages 1 month, 2 months, 4 months, 7 months (2 cases) ; 10 months (2 cases) ; 12 months, 13 months, 16 months and 3 years. During the four months June to September, 3,323 notifications were received, but the greatest number of cases in any one week was only 228. Thirty-seven notifications were the fewest received in any week of the year.

Nine of the children who died developed broncho pneumonia as a complication of whooping cough. Four of the deceased were already debilitated before becoming infected.

## Whooping Cough—Immunisation

Parents and general practitioners are becoming increasingly interested in protective inoculation against whooping cough as shown by the enquiries made at the Health Department and by the steadily increasing numbers of record cards received year by year relating to courses of immunisation carried out by general practitioners.

1948	1949	1950	1951	1952	1953
50	417	349	713	778	1,246

546 of the cases of whooping cough notified during the year were under one year old and 7 of the 11 deaths occurred in this group. Clearly then, in order to obtain the maximum benefit from immunisation, it must be given as early in life as is practicable and certainly earlier than eight months which is the time when diphtheria immunisation is started. If whooping cough immunisation is later followed by diphtheria immunisation, and then reinforcing injections are subsequently given, children would be subjected to so many injections that it is doubtful whether the full series would always be completed. Combined injections are therefore desirable and research is proceeding to ascertain whether, if diphtheria combined with whooping cough immunisation is administered early in life, the protection against diphtheria will be as good as it now is when the injections are begun at about eight months of age.



**Cases of Infectious Disease notified and verified during 1953.**  
**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
Typhoid Fever	M. F.	— —	— —	— —	— —	— —	— —	— —	— —	— 2	— —	— 1	1 —	— —	1 3
Para-Typhoid Fever	M. F.	— —	— —	— —	— —	— —	— —	— 2	— 1	— —	— —	1 —	— —	— —	1 3
Scarlet Fever	M. F.	1 2	43 45	134 138	392 402	87 92	21 19	2 11	10 13	2 5	3 —	1 —	1 —	— 1	697 728
Diphtheria	M. F.	— —	— —	— —	— —	— 1	— —	— —	— —	— —	— —	— —	— —	— —	— 1
Erysipelas	M. F.	— —	— —	— 2	1 —	— 1	2 2	4 4	3 7	14 11	22 26	22 31	15 14	— 10	83 108
Poliomyelitis Paralytic	M. F.	2 —	4 3	3 1	3 2	1 1	— 1	— 1	1 2	2 —	— —	— —	— —	— —	16 11
Poliomyelitis Non-Paralytic	M. F.	— —	1 —	1 1	1 2	2 —	— 1	1 —	1 —	— 2	— —	— —	— —	— —	7 6
Encephalitis Infective	M. F.	— 1	— —	1 1	1 2	— 1	— —	— —	— —	1 —	2 —	— —	— —	— —	5 5
Encephalitis Post-Infectious	M. F.	— 1	— 1	1 2	3 1	— —	— —	— —	— —	— —	2 —	— —	— —	— —	6 5
Meningococcal Infection	M. F.	11 10	8 8	3 7	11 2	4 2	2 4	1 3	3 2	1 3	1 —	2 1	— —	— —	47 42
Malaria	M. F.	— —	— —	— —	— —	— —	— —	2 —	5 —	1 —	1 1	— —	— —	— —	9 1
Dysentery	M. F.	11 8	43 48	49 29	41 32	13 8	1 11	1 11	10 15	9 7	5 2	1 1	1 1	1 —	186 173
Smallpox	M. F.	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —
Pneumonia	M. F.	32 30	37 29	47 44	48 45	15 13	18 9	17 9	37 43	78 52	132 56	103 67	71 65	40 49	675 511
Ophthalmia Neonatorum	M. F.	325 296	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	325 296
Puerperal Pyrexia	M. F.	— —	— —	— —	— —	— —	20 95	95 143	— 63	— —	— 1	— —	— —	— —	— 322
Measles	M. F.	334 352	1996 1900	2440 2383	2969 2891	80 95	19 30	13 25	12 23	7 11	1 2	— —	— —	— 1	7871 7713
Whooping Cough	M. F.	282 264	741 810	943 943	937 1026	26 30	— 10	— 5	— 14	1 8	2 1	— 5	— 1	— —	2932 3117
Undulant Fever	M. F.	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —



## Elmdon Airport

Normally no health control procedure is required when an aircraft from Ireland, France, Belgium, Holland, or Luxembourg lands in this country. During 1953 fourteen aircraft brought 66 passengers and 36 crew from beyond this "excepted area" and health control procedure was applied and passed satisfactorily.

## PUBLIC HEALTH (IMPORTED FOOD) REGULATIONS, 1937 AND 1948

Imported food arriving at Elmdon Airport is inspected under these Regulations by the Meriden Health Department, in whose area nearly the whole of the Airport lies.

## International Certificates of Vaccination, etc.

Under the International Sanitary Regulations 1952 certificates of vaccination and inoculation issued to travellers by doctors are checked, stamped and countersigned by the Medical Officer of Health in whose area the treatment was given. During 1953, 2,756 such certificates were dealt with relating to vaccination against smallpox, typhoid, cholera, tetanus, typhus, yellow fever and plague.



## LABORATORY SERVICES

### (a) Analytical Laboratory

During the year ending on December 31st, 1953, the Analytical Laboratory carried out a total of 9,176 analyses. This number is 32 less than the previous year's total. The scientific staff responsible for the work comprised 12 members, 8 of whom have professional qualifications ranging from a University degree to the Fellowship of the Royal Institute of Chemistry.

About sixty per cent. of the total samples, i.e., 5,503, were examined from the point of view of the Food and Drugs Act, 1938, and were submitted by the Chief Sampling Officer and his staff. Each succeeding year, however, a larger proportion of the total is received by the City Analyst from Corporation Departments and from private sources. Last year 3,673 specimens were submitted in this way; the Public Health Department was the chief contributor, but substantial numbers came from the Water, Transport, Agricultural and Small Holdings, Central Purchasing, Food Inspection, Public Works, Housing and Fire Brigade Departments. Other local authorities, hospitals, public companies, private firms and a trade union, together with private individuals, were also able to avail themselves of the services of the laboratory.

Samples of milk taken on the premises of dairy companies from consignments delivered by farmers, or purchased from registered milk shops or from vans or carts in the streets, accounted for over 50% of the total number of food and drug samples. The actual number taken was 2,885, of which 323 or 11.3% were of sub-standard quality by reason either of natural causes or of actual adulteration. The former of these, as usual, predominated; rarely was there evidence of tampering with milk supplies by the addition of water, although three such cases were taken to court. A very disturbing feature of the analytical results obtained for the composition of milk over the years 1950-1952 was the startling increase in the number of samples which contained 8.3% or less of solids-not-fat and yet were not adulterated with water; the reasons for this phenomenon were probably connected with the tendency of producers to breed cows giving large quantities of milk of poor quality rather than somewhat smaller amounts of milk of average or good quality, and also connected perhaps with feeding problems. In 1950, 130 samples out of 2,813, or 4.6%, were thus lacking in non-fatty solids for physiological reasons; in 1951, 182 samples out of 2,812 (6.5%) were similarly deficient; and in 1952 the percentage rose to 13.7%, i.e., 386 out of 2,825 samples. It is encouraging, therefore, to be able to record that a very considerable improvement took place in this respect during 1953.



Of 2,885 samples, 166 or 5·8% contained 8·3% or less of solids-not-fat for reasons other than external adulteration. While there is no room for complacency, these figures do indicate that Birmingham milk consumers are able to buy substantially better quality milk than for a number of years; the average solids-not-fat of 8·75% is better than that for any year since 1946 and the average total solids of 12·38% is the highest since 1944. The average butter fat percentage of 3·63 has remained remarkably constant for several years past.

A Working Party was appointed in 1951 by the Minister of Agriculture to examine the problem of the decrease in quality of milk in recent years and to report on any modifications in the method of payment considered, in the light of their investigation, to be necessary. A report was issued in June, 1953, which suggested that improvement in quality could best be achieved by closer co-operation between producers, distributors, the advisory services and the research institutes, and recommended a scheme designed to produce this effect. The report also stressed the need for more research into the factors affecting poor composition and particularly the causes of low solids-not-fat content. It was considered that much of the decline in compositional quality was due to feeding difficulties caused by the war.

Three farmers were prosecuted for selling adulterated milk during the year. In one case the milk in two churns out of six arriving at a dairy was heavily watered on three successive days; the other four contained genuine milk. No adequate defence was advanced and a total fine of £12 was imposed. It was shown in evidence that, of the 63 gallons of milk represented by the six samples in respect of which proceedings were taken, over 9 gallons consisted of added water. In a second case it was shown that over four days six gallons of water had been mixed with 67 gallons of milk. Samples taken at the farm were of such poor quality in respect of non-fatty solids that the Chief Sampling Officer requested permission to revisit the farm and take samples from nine individual cows at both the morning and afternoon milkings. This programme was carried out and some deplorable specimens of milk were obtained. Six evening samples contained from 7·7% to 8·2% solids-not-fat, while only one contained more than the presumptive minimum for genuine milk, of 8·5%. Some of the morning samples were of even worse quality; six of them contained 7·3% to 8·2% non-fatty solids, while two of the fat contents descended to 2·2%. The final conclusion arrived at was that an originally poor milk had been still further impoverished by the addition of water, and that in addition about 5 lbs. of butterfat had been removed from the 67 gallons of milk. The farmer, who pleaded guilty, was fined a total of £16.

The third case was concerned with four samples out of a total of eleven taken over a period of four days. These all contained about 10% extraneous water, the remaining seven being genuine or nearly genuine.



Farm samples taken on this occasion were of excellent quality and prosecution resulted in the farmer concerned paying a fine of £4. One of the arguments used by the defence during the hearing of the case, although quite irrelevant, was of interest because of its bearing on the analysis of samples taken later in the year from another farmer's churns. The argument had been used in connection with two cases recently considered by a neighbouring local authority in which two herds of cows were regularly giving evening milk with freezing point depressions of less than  $0.530^{\circ}\text{C}$ ., the generally accepted minimum figure for genuine milk. The corresponding morning milks had depressions considerably higher than usual and differences of up to  $0.040^{\circ}$  were found between the figures for the two milkings instead of the usual approximation to equality. Two similar cases had already been reported upon in the technical press during 1950, and it was found that a common feature in all the four cases was that the herds were allowed no drinking water during the night; when released from the sheds they were permitted to drink copiously and seldom drank again before their return to the sheds. Experiments conducted in all these four cases proved that when water was made freely available during both day and night, the freezing point depressions of morning and afternoon samples of milk became within a week practically identical and were all greater than  $0.530^{\circ}\text{C}$ . The explanation appeared to be that the abnormal intake of water during the short period when it was available led to an excessive secretion of water in the evening milk and that the long period (up to 24 hours in some cases) of deprivation of water caused a degree of dehydration in the cattle with a consequent increase in the freezing point depression of the morning milk. In a letter published in a journal it was maintained that to treat cattle in this way was nothing less than cruelty, and that the fluid produced under such conditions was not entitled to the description "genuine milk," defined by the U.S.A. Federal Government and by the Deputy Government Analyst of this country as "the ..... secretion obtained by the complete milking of healthy cows, **properly fed and kept.**" This being so, it still remains true that the lowest figure obtainable for the freezing point depression of **genuine** milk is  $0.530^{\circ}\text{C}$ . It is relevant to remark that so far as Birmingham is concerned, a phenomenon such as this, if it occurred, would be immediately noticed, since no trouble has ever been spared, either by the sampling officers or by the analytical staff, in examining from every point of view each case as it arises. Samples both of evening and morning milk from every farmer's supply under suspicion are invariably taken and analysed over a considerable period, before a decision to prosecute is made, and there is not the slightest chance that samples with the characteristics described above would be mistaken for milk to which water had been deliberately added.

This matter has been treated at some length because it is likely, in view of the wide publicity given to these cases and the obvious handle



that it furnishes to the defence in prosecutions for milk adulteration in which the minimum freezing point depression of milk is quoted, that attempts will be made to use the results quoted above as representing values which might be obtained at any moment for genuine milk.

Curiously enough, after 20 years during which 50,000 samples of milk had been examined in Birmingham without meeting a single example of the type described, a case presenting exactly the same characteristics was encountered in December, but with the added complication that water in amounts up to 15% had been mixed with the evening milk. The farm samples taken in connection with this case were of very poor quality; the evening milk contained only 8.1% solids-not-fat and the morning sample 8.5%. The freezing point depression of the evening sample was  $0.526^{\circ}$  and that of the morning sample  $0.556^{\circ}$ , i.e., there was a difference of  $0.030^{\circ}$  between them, instead of the normal approximate equality. The other features of the case were in agreement with those mentioned above. The cows were housed from 4 p.m. to 9 a.m. and during that time no drinking water was available. When turned out during the morning they were able to drink all they wanted from a pit in a field fed by spring water. The abnormal freezing point depressions and the poor quality of many of the samples taken direct from the cows were undoubtedly due to the unbalanced water intake of the cows. The Ministry of Agriculture was informed of the whole of the facts and agreed with our view. Arrangements were then made for one of the Ministry's Livestock Officers to visit the farm in question and investigate the methods used.

Official cautions were given to farmers in the few cases, apart from those already mentioned as the subjects of prosecution, in which small amounts of extraneous water were present in the samples. These were usually effective in ensuring that further supplies were of better quality. In other cases where the milk was naturally deficient in non-fatty solids the farmers concerned were recommended to seek guidance from their local Agricultural Advisers. Many cases of fat deficiency were the result of unequal intervals between the two milkings, it being well known that an exceptionally long interval between an afternoon's and the next morning's milking results in re-absorption of fat by the udders, so causing an abnormally low figure to be obtained for the fat content of the morning milk, and correspondingly high ones for the evening milk. Farmers responsible for such samples were advised to make the two intervals more nearly equal.

Samples, other than milk, taken under the Food and Drugs Act, 1938, were 2,618 in number, 2,092 of these being foods and the remainder drugs. Thirty-two foods of 21 different kinds were for various reasons sold "to the prejudice of the purchaser." Coffee, cream, dripping, marmalade, mineral waters and margarine, sugar, stuffing and suet were some of the varieties reported as not being of the quality normally associated with them, and as in previous years it may be of interest to



mention one or two of the preparations referred to as illustrations of the types of irregularity in composition met with. Four different foods, for example, were found to be infested with insects. A carton of a proprietary food beverage contained a number of mites together with the familiar accompanying "web," and the sample itself had shrunk considerably in volume and had caked hard in the process. The carton was of war-time manufacture and the specimen was probably about ten years old. A proprietary brand of pea flour contained small beetles and was unfit for consumption, and a sample of pearl barley, which included an unusual amount of barley dust, contained many dead mites, indicating that at some stage considerable contamination had taken place. A packet of parsley and thyme stuffing was infested with the larvae of a moth. All these cases were brought to the attention of the Food Inspection Department, the premises concerned were visited and the contaminated material condemned.

A specimen of chocolate cigarettes had what may be described as a "soapy" taste. These sweets were enclosed in a thin cardboard carton of very poor quality and the unpleasant taste was probably caused by some constituent of this material. The makers stated that the manufacture of the article had been discontinued about a year before on account of similar complaints from customers. Retailers were instructed to return their stocks and were credited with their value.

Two samples of "double" cream, which is required by a current Food Standard Order to contain at least 48% butterfat, were discovered by the makers to have been taken from the same case of cream. Enquiry showed that, during the pasteurising process, some leakage of fat had occurred through loose caps on bottles which were covered with water. A different method of processing which would not allow of a recurrence of this trouble was thereupon adopted by the firm.

The label of a tin of dry coffee extract alleged it to be made from "100% pure coffee." Some of the analytical figures obtained were, however, very curious, both the caffeine content and the mineral matter being about half the normal amount and, furthermore, prolonged heat treatment with dilute acid resulted in the formation of over twice as much reducing sugar as is normally produced in this way. The most likely source of such sugars would be dextrinous material, but the presence of this would conflict with the label statement. Another public analyst who had visited the makers' premises and had taken a number of samples and reported favourably upon them, was good enough to send a copy of his figures. These were beyond reproach and would have been accepted by any analyst as evidence of genuineness. The firm was informed of the violent fluctuations in composition and, in reply, they stated that the process was a new one and was still in the experimental stage and that, in any case, the composition of the product had never been checked chemically, but only from the point of view of its flavour and "cup



strength." It was pointed out to the firm that it was unfair to consumers to sell such an article without first ensuring that its composition was constant, and finally, at an interview with a representative of the firm, it was agreed that in future regular chemical checks would be made, particularly of the caffeine content. A second sample supplied by the management was examined and found to be of much better chemical quality. This sample was taken from the product of a modified process.

Two samples of the same brand of quinine tonic water bought from the same retail premises contained respectively 0.15 grain and 0.55 grain of quinine sulphate per pint. The first sample did not comply with the minimum of 0.50 grain required by the Soft Drinks Order, and the second one, although satisfactory from the point of view of quinine content, was contaminated with a quantity of insoluble flocculent material which appeared to be part of the filtering medium normally used for straining the liquid. In this case a cautionary letter addressed to the firm whose name appeared on the bottle was answered by the representative of another firm, who explained that the business had recently been acquired by them and that the sample was apparently old stock for which the new owners could not be held responsible.

A sample of preserved pork sausage meat contained only 48% meat. The old Meat Products Order, which was rescinded in March, required this article to contain at least 65% meat, and it is not unreasonable to retain this standard and to use it as a comparative figure to judge the quality of the pork sausage meat now on sale. The makers of this supply stated that they had not in fact reduced the meat content since the revocation of the Order, and could only suggest two possible explanations of the deficiency. If containers, filled at 6 a.m. and chilled prior to dispatch, were damaged by overfilling or rough handling, van salesmen, anxious to present an attractive article to their customers, obtained from the fillermen replacements which, after 8 a.m., would be beef sausage meat, although this article was not normally offered for sale. The other explanation might be that the checker had called for a replacement container of sausage meat when a lower grade mixture used in sausage rolls was being run out of the filler for use in the bakehouse. The firm admitted that, in any case, the deficiency was due to lack of supervision, and steps were taken to prevent any further occurrences of the same kind. The above samples give some little idea of what may happen to a particular foodstuff before it reaches the consumer's dining room.

Specimens of drugs found to be of poor quality or misdescribed numbered 40 and included 17 different articles, among them being aspirin tablets, influenza and cough mixtures, eye lotion, oral penicillin tablets, quinine sulphate tablets, rose hip syrup, seidlitz powders and throat pastilles. A rather technical but interesting complaint was made regarding the lack of uniformity of weight of aspirin tablets. The B.P. requires that not more than two tablets out of 20 should deviate from the average



weight by more than 5% either way. In fact, seven out of 20 exhibited excessive deviations. The packers eventually discovered that occasionally different batches of tablets, both of which had individually passed the tolerance tests, were packed into the same containers. Since the average weights of the two batches might be different, although in both cases the variation of individual tablets from the average was less than 5%, the act of mixing two such different batches could mean that the weight of a number of tablets would exceed the overall average by more than 5%. The firm at once adopted the obvious remedy.

A "cold and influenza" mixture should, according to the attached label, have contained 3.5% nitrohydrochloric acid, and 5% each of strong solution of ammonium acetate and syrup. The respective amounts of these ingredients were in fact only 2.6%, 3.9% and 3.0%. The responsible pharmacists were unable to explain these discrepancies, withdrew all their stocks and replaced them with fresh supplies of the correct composition.

Two samples of cream of tartar bought at two different shops on successive days contained most unusual adulterants. In one case 2% of maize starch and in the other about 1% of wheat starch and a trace of maize were present. In both cases the packers advanced the explanation that the machines used for packing the cream of tartar might previously have been used for prepacking some custard product, and had not subsequently been cleaned out. Standing orders were in force to the effect that careful cleaning of the machines should be carried out when changing from one product to another, but on these occasions at least it was evident that there had been some slackness.

Two specimens of rose hip syrup, a preparation given mainly to children to ensure a sufficient intake of vitamin C, were both advertised on the labels as containing approximately 200 milligrams of vitamin C per 100 mls. In one case the actual content was only 156 milligrams per 100 mls. The retailer stated that this particular pack was originally sent to him in error for another one which was in constant demand in his district, and that he had no means of telling what time had elapsed between the bottling and the placing in stock of these products. In any event, the remaining stock was withdrawn and an undertaking was given that in future it would be purchased only against a special order. Another sample of rose hip syrup of a different brand contained 189 milligrams of vitamin C per 100 mls, and a repeat sample taken a fortnight later, 185 milligrams per 100 mls. As it seemed likely that general deterioration of the retailer's stock had occurred, comments were invited from the firm concerned. In reply, it was stated that the two samples purchased might have been in stock as long as 10 months and that the loss of activity was probably due to long storage. New supplies of full potency were at once put into stock.



Iodised throat tablets, according to the printed label, should have contained 1/5 minim of tincture of iodine per tablet. This is equivalent to 0.52 milligram of total iodine, assuming the correct amounts of potassium iodide and iodine to be present in the tincture. The actual total iodine, however, was only 0.165 milligram per tablet. The manufacturers declared that there was no possible doubt that the tablets when made contained the correct amount, and could only account for the deficiency by assuming that iodine had volatilised during storage. They had not previously supposed that such loss was serious. They, however, made an important admission to the effect that, in spite of the declaration on the label, B.P. tincture of iodine had not been used in the manufacture of these tablets, but an alcoholic solution of iodine. The total iodine in 1/5 minim of such a solution is in fact only 0.29 milligram, so that in their view the deficiency was less serious than would otherwise appear. They admitted having made a technical misdescription by the use of the words "tincture of iodine 1/5 minim," and proposed to remedy this by incorporating the necessary amount of potassium iodide; they also agreed to give attention to the question of minimising possible loss of iodine during storage.

The most interesting work so far as drugs were concerned was the examination of 82 samples of oral penicillin tablets purchased on prescription from Birmingham pharmacies. The official monograph in the B.P. requires the average number of units of penicillin per tablet to be not less than 90% of the prescribed number, and 19 samples did not comply with this standard. As a practical working standard, however, a limit of not less than 80% of the prescribed number of units may be accepted and, on this basis, 12 samples were deficient in potency. Four of these were deficient of from 22-27%, four of from 33-62% and four of 90-100%, i.e., they were completely useless. The chief factor causing deterioration appeared to be moisture, and the probable reason for the presence of moisture was the practice of "breaking bulk." This suggests that oral penicillin tablets should be dispensed only in manufacturers' sealed unit containers, so rendering it unnecessary for a pharmacist to split a bulk package or to dispense, as was frequently observed during the survey, in a cardboard box. The whole of the ascertained facts regarding deficiencies of penicillin, including the dispensing practices employed, were reported both to the Ministry of Health and Local Executive Council and vigorous action was taken by both authorities to remedy the existing situation.

Of the total number of 3,673 miscellaneous samples submitted in 1953, 2,030 consisted of pasteurised milk. Of these, 1,709 came from Birmingham Public Health Department, 213 from Sutton Coldfield and 108 from Smethwick Public Health Department. These samples were examined by the phosphatase test, which determines the efficiency of treatment; six of the Birmingham samples, five of the Sutton samples



and 2 of the Smethwick samples showed evidence of some slight irregularity, while only 3 Birmingham and 3 Smethwick samples gave indications of gross mistakes or of the admission of raw milk. This, it will be admitted, is an exceedingly good record. One hundred and ninety seven specimens of sterilised milk from Birmingham were examined by the official turbidity test and were all found to be efficiently treated, and the same applies to 12 samples from Sutton and 36 from Smethwick.

Ice-cream samples numbered 295, the fat, sugar and skimmed milk solids being determined in order to detect any infringements of the Ice-Cream Order, which lays down standards of composition. For the Department's Milk Bureau 90 samples of breast milk were analysed with a view to detecting the possible addition of cow's milk or water.

For the Public Health and Water Departments 516 samples of water taken from the Corporation water undertakings, from private wells, from Corporation Institutions, and from local rivers and streams were responsible for the expenditure of very considerable time.

The Central Purchasing Department submitted a total of 112 samples, consisting mainly of soaps and soap powders and articles of dry-saltery. The City Transport Department sent in 56 samples of water and 4 of tea and coffee to be examined for evidence of the presence of copper and lead. The Food Inspection Department was responsible for 11 specimens, other local authorities for 27, mostly the third portions of official samples taken under the provisions of the Food and Drugs Act, while local hospitals submitted 9 samples.

In addition to the above largely routine samples, a considerable variety of articles was analysed both for private persons and for this and other Corporation Departments. Many of these consisted of foodstuffs suspected of contamination or adulteration, either accidental or deliberate. Drugs as diverse in character as slimming preparations and toothpaste, vitamin K tablets and eyelash grower, a "cure" for heart disease and a hair lotion, together with miscellaneous articles such as building bricks and industrial dusts, all formed part of an array of samples as unusual and interesting as the laboratory has ever dealt with.

During the year a considerable amount of new legislation affecting the work of the City Analyst came into force. This included four Food Standards Orders regulating the compositions of preserves, saccharin tablets, soft drinks and ice-cream; the last of these restored the standards temporarily reduced by the Food Standards (Ice-cream) (Amendment) Order, 1952. A new version of the Labelling of Food Order came into operation on April 5th; this incorporated some minor amendments.

The Canned Corned Meat (Prices) Order finally relinquished the control of the Ministry of Food over sausage and sausage meat. The Oils and Fats (No. 2) Order re-defined cooking fats so as to exclude all oils and fats other than mixtures of oils given in a schedule, and amended



the definition of lard to exclude the fat obtained by ordinary cooking of pork. The Mineral Oil in Food (Amendment) Order reduced the amount of mineral oil permitted in dried fruit from 1.0 to 0.5 part per 100 parts of fruit.

Cream was released from control by the Cream and Use of Milk (Revocation) Order, and the same enactment removed the prohibition on the use of milk in the manufacture of many articles of food, including bread, cakes, ice-cream and sweets. The Flour Order re-defined National Flour as wheat flour of 80% extraction, and required additions to flour of less than 80% extraction of specified amounts of iron, vitamin B1 and nicotinic acid. The addition of 14 ozs. of prepared chalk per 280 lbs. was made compulsory for all flour. The Bread Order revised the definition of national bread and introduced a definition of national brown bread.

An amendment to the Condensed Milk Regulations permitted for a limited period the sale of full cream unsweetened condensed milk, imported by the Ministry of Food, containing not less than 7.8% milk fat and not less than 25.5% total milk solids. An amendment to the Preservatives Regulations provided for the sale and importation of specified dehydrated vegetables containing limited amounts of sulphur dioxide, increased the permitted maximum sulphur dioxide content of jam from 40 to 100 parts per million, and allowed the addition of not more than 0.25% borax to margarine.

Finally, the Artificial Sweeteners in Food Order prohibited the use of artificial sweeteners, other than saccharin, in the composition or preparation of food.

#### **(b) Public Health Laboratory**

The importance of viruses in epidemic diseases is being increasingly recognised. Quite a number of the "P.U.O.s" and "atypical pneumonias" met with in medical practice are probably due to virus infection. Until fairly recently, investigation of such cases constituted a research problem. Certain of the virus diseases, however, are now coming more within the scope of routine investigation of a specialised character. In the New Year the Birmingham Public Health Laboratory will be able to undertake some of these tests. These will be complement fixation tests for Influenza, "Q" Fever, and the Psittacosis Lympho-granuloma group of viruses.

Arrangements are also being made for the laboratory to undertake in the near future the typing of Salmonella organisms from the Birmingham area which, hitherto, has been done by the Central Public Health Laboratory, Colindale. In the last report reference was made to the vast expansion of the grouping of organisms which modern methods of antigenic analysis has brought about. This, in effect, is a sorting out and labelling, by means of pure specific agglutinating sera, of the bits and



pieces in the jig-saw puzzle of protein mosaic which makes up the body and flagella of a *Salmonella* organism. By this means, an antigenic formula analagous to the constitutional formula of a chemical compound may be arrived at. The organism is thus characterised as fitting in with an already known strain or as a new, hitherto undescribed one, and it is then given the name of the locality whence it was isolated. Up till now, the Birmingham label, so well known in many industrial fields, has been missing from this aspect of the epidemiological field. Is it anti-social to hope that this omission will one day be rectified?

Advance in knowledge of the ætiology and epidemiology of many infectious diseases depends, in the first instance, upon their recognition by the General Practitioner. A succinct case in point is the investigation into the strains of influenza virus prevalent in this country, which has been going on during the past year or two, in which the Public Health Laboratory Service has been co-operating with Medical Officers of Health, Medical Officers of Services and Hospitals and with General Practitioner "spotters." A main object of the investigation is the early detection of an influenza epidemic and the preparation of a vaccine against the prevalent strain for the control of its spread.

The recent formation by the College of General Practitioners of local Research Panels of its members should prove of great assistance in such investigations and will be a step welcome to workers in preventive medicine both in the field and in the laboratory.

SPECIMENS EXAMINED FOR THE CITY OF BIRMINGHAM  
FROM MAY TO DECEMBER, 1953

<i>Type of Specimen</i>	<i>Totals</i>
Swabs, for diphtheria bacilli ... ..	556
Swabs, various ... ..	86
Sputum for tubercle bacilli ... ..	430
Faeces for pathogenic organisms ... ..	1,025
Blood for agglutinins ... ..	16
Blood for culture ... ..	6
Urine for pathogenic organisms ... ..	19
Milk for hygienic assay ... ..	1,203
Milk for tubercle bacilli ... ..	1,551
Ice cream for hygienic assay ... ..	399
Synthetic cream for hygienic assay ... ..	142
Creams for hygienic assay ... ..	85
Water for hygienic assay ... ..	890
Food for pathogenic organisms ... ..	116
Shell fish for pathogenic organisms ... ..	87
Human milk specimens for bacteriological examination ... ..	843
Miscellaneous specimens ... ..	124
Blood for leptospirosis ... ..	2
	<hr/> 7,580 <hr/>

Prior to May, 1953 separate records were not kept of that portion of the work specifically relating to Birmingham.



# VENEREAL DISEASES EXAMINATIONS FOR BIRMINGHAM

FOR YEAR ENDING DECEMBER 31ST, 1953

<i>Specimens</i>					<i>Examinations</i>		
Blood	...	...	...	27,410	For Wasserman Test	...	27,340
					For Gonococcal Fixation Test		3,991
					For Kahn Test	...	14,370
					For Laughlen Test	...	14,269
Cerebrospinal fluid	...	...		1,089	For Wasserman Test	...	1,089
					For cell count	...	434
Films of discharges	...	...		9,740	For Gonorrhoea (films)	...	9,740
Cultures	...	...		8,006	For Gonorrhoea (cultures)	...	8,006
Urine	...	...	...	46	For Chemical Test	...	43
					For Microscopical Test	...	3
For vaccines	...	...	...	8	Vaccines supplied	...	8
				<hr/> 46,299 <hr/>	<hr/> 79,293 <hr/>		

## TUBERCULOSIS

### Co-ordination

The introduction of the National Health Service Act in 1948 caused a disruption of the previously unified tuberculosis service. Many fears were expressed that the dichotomy would seriously impede progress. There were grounds for anxiety and it has been essential to review constantly the arrangements to secure an easy integration of the service. It has been possible in Birmingham to overcome many of the difficulties. Co-ordination is good and is secured by the close association of the Birmingham (Sanatoria) Group Hospital Management Committee and the Tuberculosis (Domiciliary and After-Care) Sub-Committee of the Health Committee of the City Council.

The Medical Sub-Committee of the Hospital Management Committee, to which medical and socio-medical problems are referred has, in addition to medical members of the Management Committee, representatives from the medical staff of the Regional Hospital Board and the Local Health Authority.

The association is further advanced by an arrangement whereby the tuberculosis visitors are engaged exclusively on that work, and have their headquarters in the Birmingham Chest Clinic and, consequently, are readily available for consultation with the chest physician of their particular City area. This link has evident advantages and, indeed, ensures co-ordination at the most vital " Personal " level of the service.

The deployment of the Mass Radiography Service is considered by a committee, whose members include the Medical Director of Mass Radiography, the Deputy Medical Officer of Health, a Consultant Chest Physician and the Senior Tuberculosis Officer.

The rehabilitation of the tuberculous patient is secured by the direction of a Medical Interviewing Committee whose members are recruited from the Chest Service, the Industrial Medical Service and the Disablement Resettlement Department of the Ministry of Labour.

The general integration of prevention and treatment throughout the City has also been made pliable by the division of the City into six segments, each with its chest physicians, complement of health visitors and other ancillary workers.

It is essentially unsound, of course, that the control of a community service should depend on so many authorities but the Birmingham service has the advantage of the co-ordination briefly described in this statement.



## Notifications, 1953

### ALL FORMS OF TUBERCULOSIS

Rate : 1.24 per 1,000 of the population

(an increase in comparison with 1952 of 2 cases or 0.002 per 1,000 of the population)

### PULMONARY TUBERCULOSIS

Rate : 1.11 per 1,000 of the population

(a decrease in comparison with 1952 of 1 case or 0.001 per 1,000 of the population)

### NON-PULMONARY TUBERCULOSIS

Rate : 0.13 per 1,000 of the population

(an increase of 3 cases in comparison with 1952 or 0.003 per 1,000 of the population)

## Deaths, 1953

### ALL FORMS OF TUBERCULOSIS

Rate : 0.25 per 1,000 of the population

(a decrease in comparison with 1952 of 24 deaths or 0.02 per 1,000 of the population)

### PULMONARY TUBERCULOSIS

Rate : 0.24 per 1,000 of the population

(a decrease in comparison with 1952 of 16 deaths or 0.01 per 1,000 of the population)

### NON-PULMONARY TUBERCULOSIS

Rate : 0.01 per 1,000 of the population

(a decrease in comparison with 1952 of 8 deaths or 0.007 per 1,000 of the population)

The number of cases and deaths occurring in past years is shown in the following tables.

#### TUBERCULOSIS (ALL FORMS)

	<i>New cases</i>	<i>Rate per 1,000 population</i>	<i>Deaths</i>	<i>Rate per 1,000 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—1935 ( „ )	1,459	1.43	928	0.91
1936	1,136	1.10	805	0.78
1937	1,119	1.07	836	0.80
1938	1,209	1.15	813	0.78
1939	1,036	0.98	885	0.84
1940	1,049	1.03	855	0.84
1941	1,073	1.13	850	0.90
1942	1,257	1.30	833	0.86
1943	1,239	1.28	750	0.78
1944	1,371	1.38	782	0.79
1945	1,348	1.36	749	0.76
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
<b>1953</b>	<b>1,386</b>	<b>1.24</b>	<b>279</b>	<b>0.25</b>

The relative prevalence and mortality from pulmonary and other forms of tuberculosis are shown in the two subsequent tables.

#### PULMONARY TUBERCULOSIS

	<i>New cases</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—1935 ( „ )	1,225	1.20	824	0.80
1936	962	0.93	734	0.71
1937	965	0.93	756	0.72
1938	1,011	0.96	732	0.70
1939	863	0.82	808	0.77
1940	899	0.88	786	0.77
1941	922	0.97	768	0.81
1942	1,069	1.11	745	0.77
1943	1,106	1.14	681	0.71
1944	1,190	1.20	696	0.70
1945	1,193	1.21	671	0.68
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
<b>1953</b>	<b>1,241</b>	<b>1.11</b>	<b>264</b>	<b>0.24</b>



# NON-PULMONARY TUBERCULOSIS

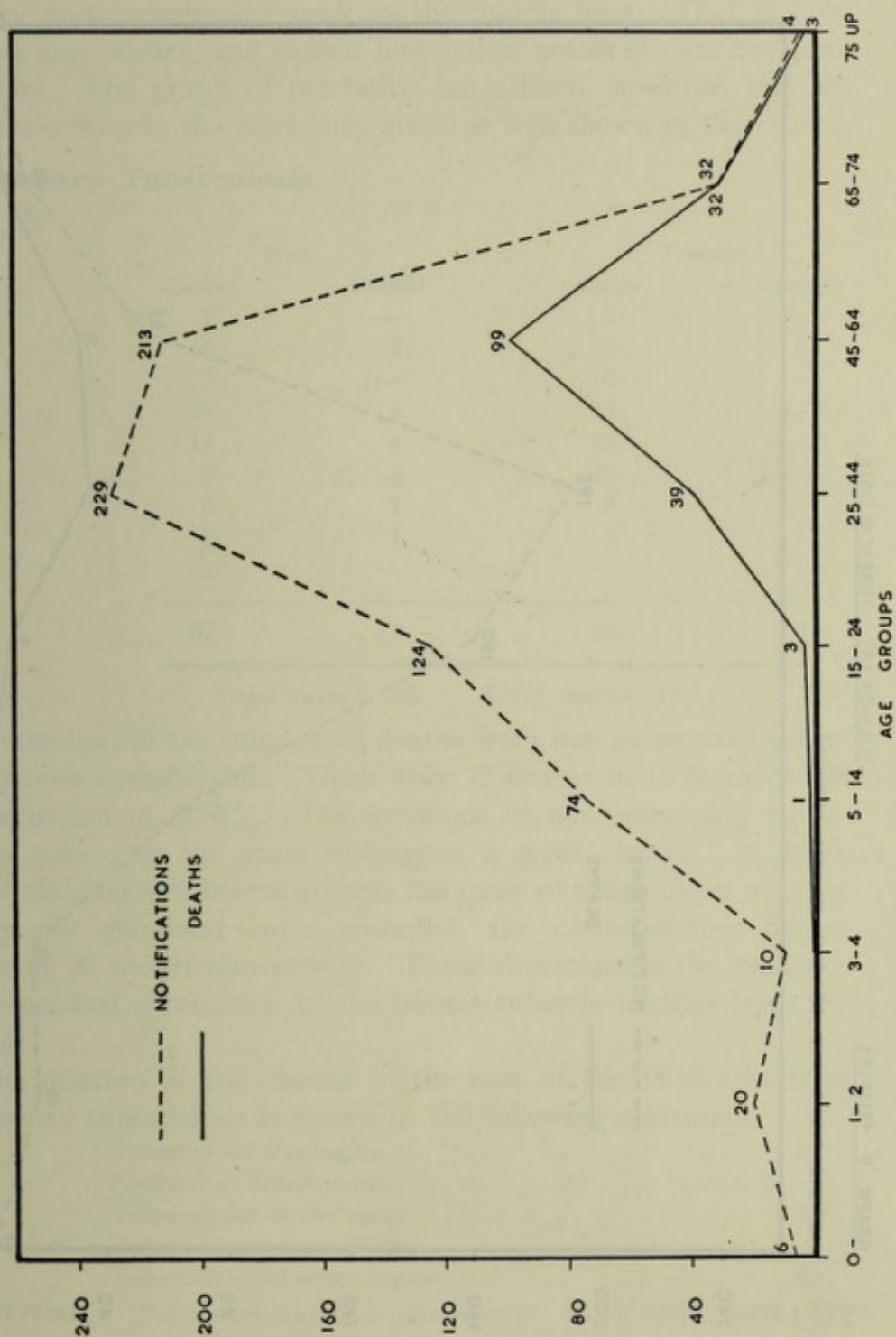
	<i>New cases</i>	<i>Rate per 1,000 population</i>	<i>Deaths</i>	<i>Rate per 1,000 population</i>
1901—1910 (average)	—	—	317	0.40
1911—1920 ( „ )	—	—	224	0.26
1921—1930 ( „ )	290	0.31	139	0.14
1931—1935 ( „ )	234	0.23	104	0.10
1936	174	0.17	71	0.07
1937	154	0.15	80	0.08
1938	198	0.19	81	0.08
1939	173	0.16	77	0.07
1940	150	0.15	69	0.07
1941	151	0.16	82	0.09
1942	188	0.19	88	0.09
1943	133	0.14	69	0.07
1944	181	0.18	86	0.09
1945	155	0.16	78	0.08
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
<b>1953</b>	<b>145</b>	<b>0.13</b>	<b>15</b>	<b>0.01</b>

The trend of the pulmonary notifications and deaths is displayed in the graphs, and an analysis according to sex and age of the non-pulmonary notifications is shown in statement A on page 73.

GRAPH 'A' MALES

PULMONARY TUBERCULOSIS

NOTIFICATIONS AND DEATHS IN AGE GROUPS.

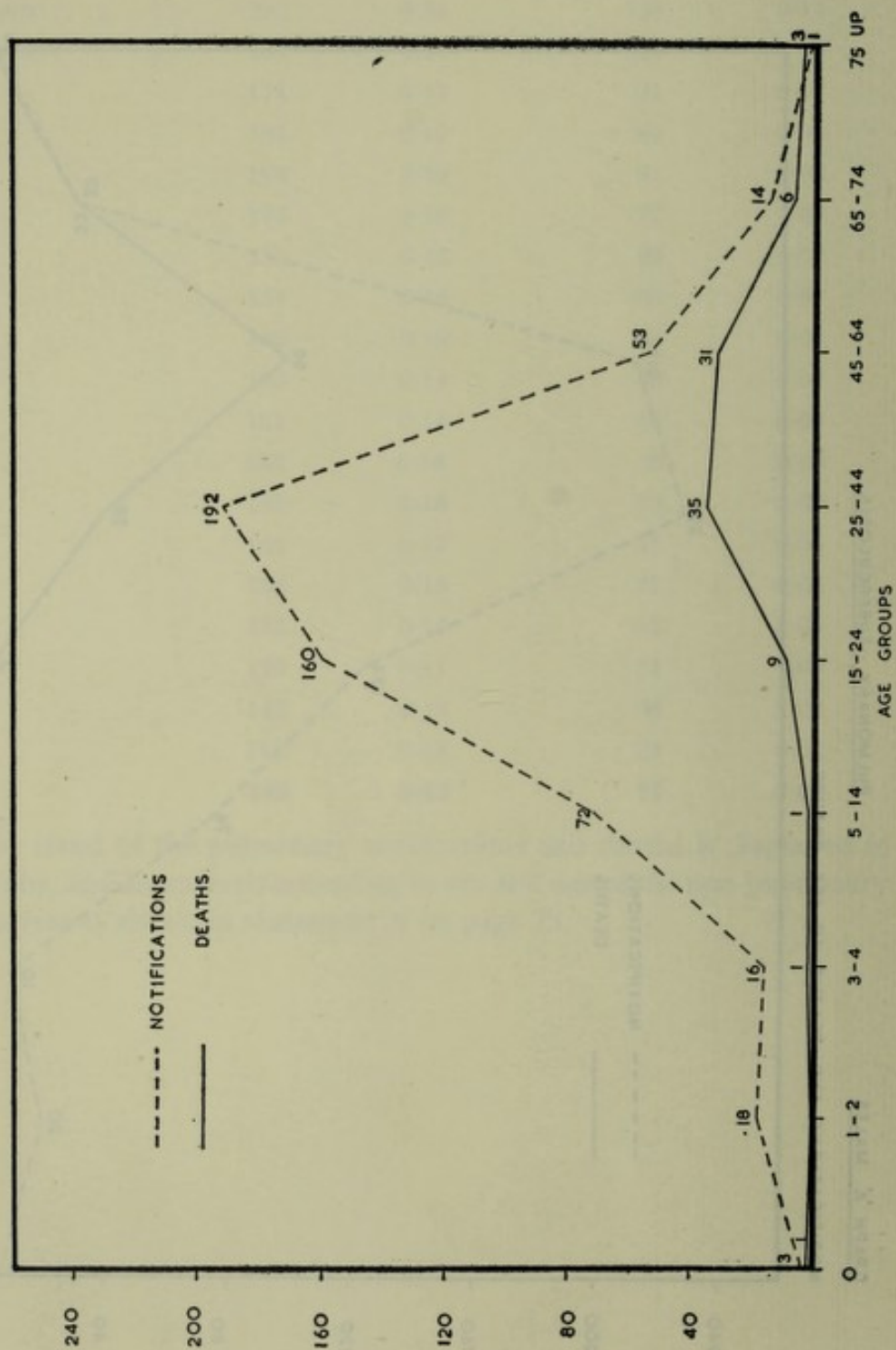




GRAPH 'B' FEMALES

PULMONARY TUBERCULOSIS

NOTIFICATIONS AND DEATHS IN AGE GROUPS.



## Pulmonary Tuberculosis

Total cases 1,241, total deaths 264

The graphs show the distribution of cases of, and deaths from, pulmonary tuberculosis which occurred in Birmingham during 1953. They show the annual toll taken by the bacillus, the high peak of incidence in the young adult both in the male and in the female with, in the male, a secondary and considerable peak in the middle ages. That is how tuberculosis now occurs, and indeed how it has occurred over the past twenty years. The graph of mortality has altered, however, and its present relationship to the morbidity graph is well shown in the charts.

## Non-Pulmonary Tuberculosis

Statement A.

Age	Male		Female	
	Cases	Deaths	Cases	Deaths
0—	1	—	1	—
1—2	6	2	1	1
3—4	7	—	10	—
5—14	21	1	17	—
15—24	14	4	22	—
25—44	8	3	21	—
45—64	8	1	5	—
65—74	1	1	1	1
75 and over	1	—	—	1
	67	12	78	3

Total cases : 145. Total deaths, 15.

The reduction in the number of deaths from non-pulmonary tuberculosis has been considerable. There were 77 deaths in 1939 and 15 in 1953, a reduction of 80·6%. The incidence of non-pulmonary tuberculosis has also over the years undergone a great change. In 1916, 99 cases of abdominal tuberculosis and 229 cases of tuberculosis of other organs—mainly glandular—were recorded, the corresponding figures for 1953 being 20 and 61 respectively. These alterations in the incidence reflect the gradual elimination of the bovine tubercle bacillus from the milk supply.

The localisation of the disease in the case of the 15 deaths from non-pulmonary tuberculosis is shown in the following statement.

Tuberculous meningitis	...	...	...	...	9
Abdominal tuberculosis	...	...	...	...	—
Tuberculosis of the spine	...	...	...	...	2
Tuberculosis of the joints	...	...	...	...	—
Tuberculosis of other organs	...	...	...	...	4

**GRAND TOTAL.** (Pulmonary and non-pulmonary). Cases 1,386, deaths 279

## Mortality (Pulmonary Tuberculosis)

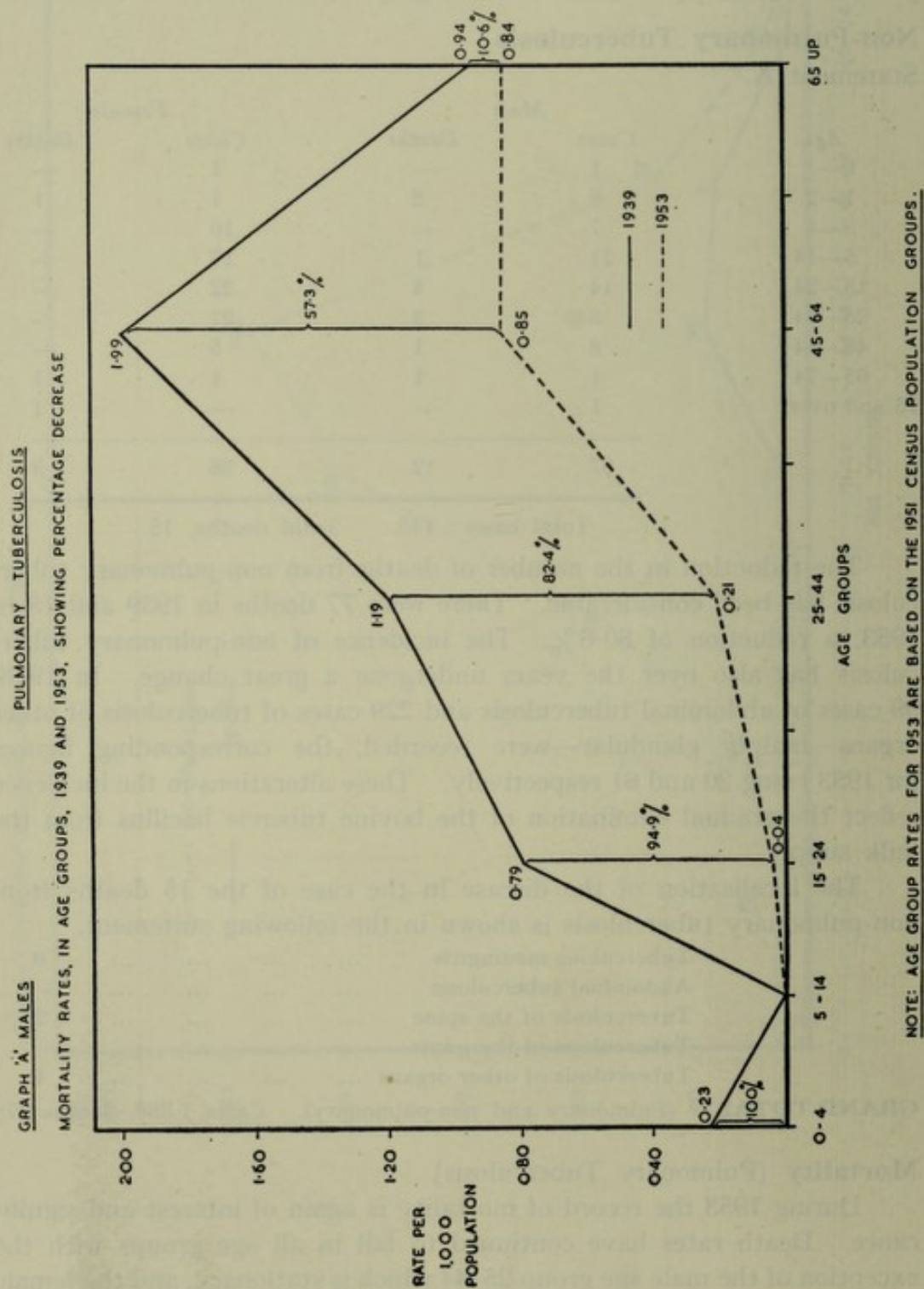
During 1953 the record of mortality is again of interest and significance. Death rates have continued to fall in all age groups with the exception of the male age group 25—44 which is stationary, and the female



age groups 25-44 and 45-64 in which there has been a small increase in mortality.

It should also be noted that the precipitous fall in mortality which has occurred each year since 1948 has been halted. There were 16 fewer deaths in 1953 than in 1952, but the average annual reduction in the previous five years was 82. This may be only a temporary halt, but its occurrence warrants the closest scrutiny.

It is again of interest to relate this reduction in mortality to sex and age groups. These rates are shown in the following graphs.



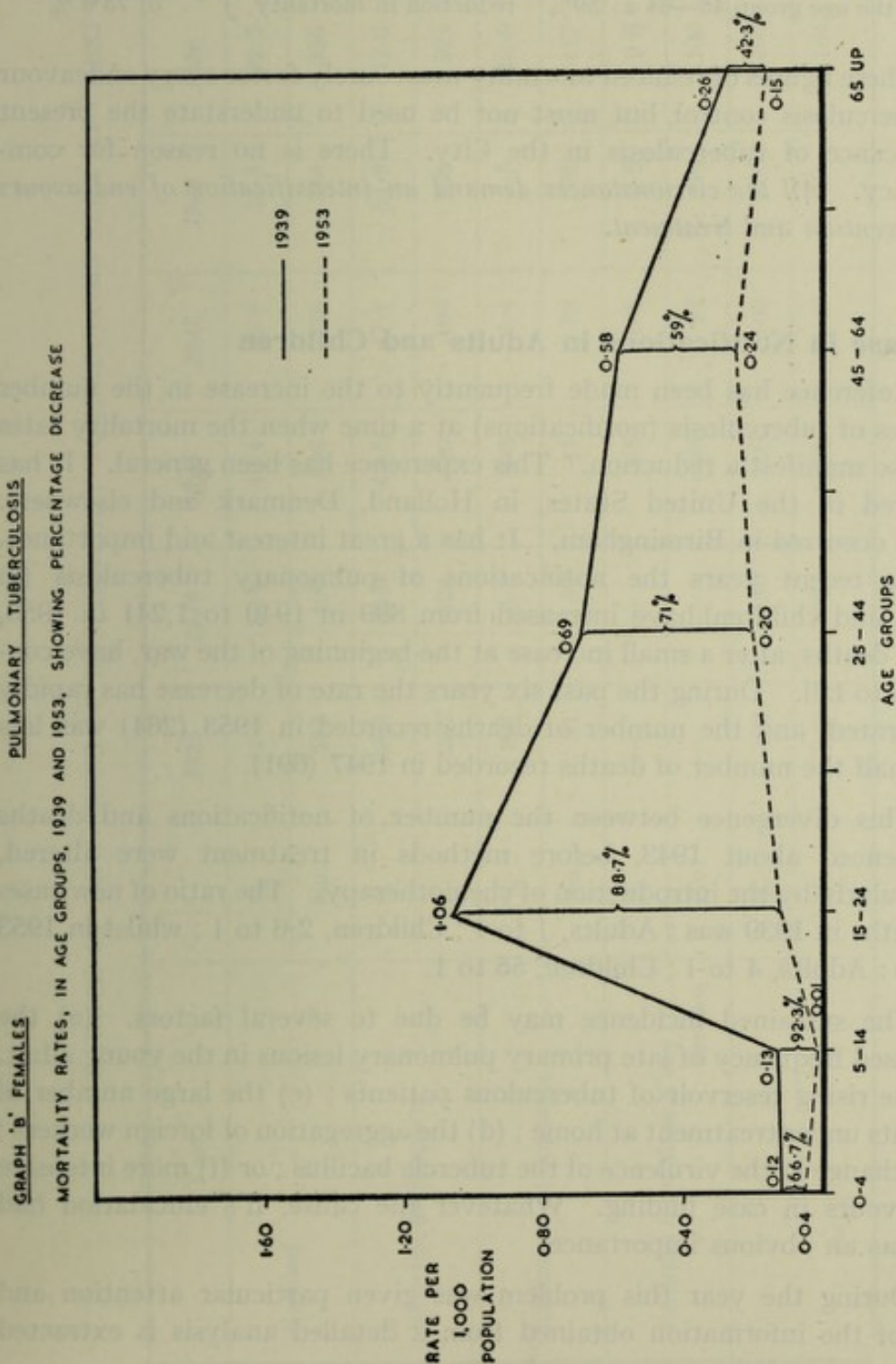
There is no material alteration in the general trend of the graph but the elimination of the peak of mortality in the young adult age period has persisted and has a great importance.

Comparative reductions are shown in the following statement.

As a comparison between 1939 and 1953 there has been :—

*For Males*

in the age group 15—24 a 94.9% reduction in mortality	} with an overall reduction of 70.9 %
in the age group 25—44 an 82.4% reduction in mortality	
in the age group 45—64 a 57.3% reduction in mortality	





The alteration in the general trend of the graph with the elimination of the peak of mortality in the age period 15-24 has much significance and encouragement.

Comparative reductions are shown in the following statement.

As a comparison between 1939 and 1953 there has been :—

*For Females*

in the age group 15—24 an 88·7% reduction in mortality	} with an overall reduction of 73·0 %
in the age group 25—44 a 71% reduction in mortality	
in the age group 45—64 a 59% reduction in mortality	

These figures of reduced mortality must surely foster every endeavour in tuberculosis control, but must not be used to understate the present significance of tuberculosis in the City. There is no reason for complacency. *All the circumstances demand an intensification of endeavours in prevention and treatment.*

### **Increase in Notifications in Adults and Children**

Reference has been made frequently to the increase in the number of cases of tuberculosis (notifications) at a time when the mortality rates show so manifest a reduction. This experience has been general. It has occurred in the United States, in Holland, Denmark and elsewhere. It has occurred in Birmingham. It has a great interest and importance. During recent years the notifications of pulmonary tuberculosis (in adults and children) have increased from 899 in 1940 to 1,241 in 1953, whilst deaths, after a small increase at the beginning of the war, have continued to fall. During the past six years the rate of decrease has rapidly accelerated, and the number of deaths recorded in 1953 (264) was less than half the number of deaths recorded in 1947 (691).

This divergence between the number of notifications and deaths commenced about 1943, before methods in treatment were altered, particularly by the introduction of chemotherapy. The ratio of new cases to deaths in 1939 was : Adults, 1 to 1 ; Children, 2·6 to 1 ; whilst in 1953 it was : Adults, 4 to 1 ; Children, 55 to 1.

The sustained incidence may be due to several factors. (a) the increased frequency of late primary pulmonary lesions in the young adult. (b) the rising reservoir of tuberculous patients ; (c) the large number of patients under treatment at home ; (d) the aggregation of foreign workers ; (e) a change in the virulence of the tubercle bacillus ; or (f) more intensive endeavours in case finding. Whatever the cause, its elucidation had and has an obvious importance.

During the year this problem was given particular attention and part of the information obtained from a detailed analysis is extracted

and shown in the following tables :

SOURCE OF NEW CASES OF RESPIRATORY TUBERCULOSIS SEEN AT CHEST CLINIC

Year		1935	1940	1945	1947	1949	1950	1951	1952
Notified	...	%	56.6	49.4	40.8	34.5	32.2	23.5	19.1
	...	No.	496	556	426	359	356	254	216
Referred as Suspects	...	%	36.9	43.5	47.4	54.6	47.6	47.5	46.6
	...	No.	324	490	496	568	525	512	527
Examined as Contacts	...	%	6.5	3.6	8.4	7.5	10.6	10.8	9.6
	...	No.	57	41	88	78	117	117	109
Referred from Mass X-ray Service	...	%	—	3.5	3.5	3.5	9.6	18.2	24.7
	...	No.	—	39	37	36	106	196	280
TOTAL	...	%	100	100	100	100	100	100	100
	...	No.	877	1,126	1,047	1,041	1,104	1,079	1,132



PERCENTAGE OF ALL NEW PATIENTS EXAMINED AT CHEST CLINIC WHO WERE FOUND TO HAVE RESPIRATORY  
TUBERCULOSIS

Year		1935	1940	1945	1947	1949	1950	1951	1952
Notified ... ..	%	67.3	71.9	70.3	66.9	66.1	69.9	63.8	69.5
	No.	881	690	791	637	543	509	398	311
Referred as Suspects ...	%	18.3	16.8	11.3	9.8	8.4	8.7	8.6	9.4
	No.	1,559	1,928	4,354	5,064	6,796	6,027	5,964	5,618
Examined as Contacts ...	%	7.2	5.5	4.2	3.9	3.0	3.3	3.8	2.0
	No.	1,131	1,041	966	2,255	2,585	3,523	3,085	5,577
Referred from Mass X-Ray Service	%	—	—	22.9	26.2	48.6	54.9	58.5	53.1
	No.	—	—	170	141	74	193	335	527
TOTAL ... ..	%	26.9	24.0	17.9	12.9	10.5	10.8	11.0	9.4
	No.	3,571	3,659	6,281	8,097	9,998	10,252	9,782	12,033

The conclusions reached are indicated in the following summary :

- (1) During recent years in Birmingham, as in England and Wales, the number of notifications of respiratory tuberculosis has increased whilst the number of deaths has fallen. Data collected from the Birmingham Chest Clinic (where more than 90% of all Birmingham notified cases are examined) are used to enquire whether the high rate of notification is due to a raised incidence of the disease or to improved case finding.
- (2) It is shown that between 1940 and 1952 the number of new cases notified before examination at the Clinic fell from 496 to 216. The increase in the number of notifications from all sources (from 877 to 1,132) is due about equally to :
  - (a) cases discovered by mass radiography (280 in 1952)
  - (b) an increase in cases identified among suspects and contacts (from 381 to 636)
- (3) In the same period, the proportion of patients with notifiable lesions discovered among suspects and contacts examined at the clinic fell from 17% to 9% and from 6% to 2% respectively. The fact that the number of new cases from these two sources was almost doubled is explained by the fact that four times as many persons were examined.
- (4) These observations strongly support the accepted view that the raised incidence of notification is due to more effective case finding. Extracted from :

" An investigation of the recent increase in the rate of notification of respiratory tuberculosis," by Lowe, C. R. and Geddes, J. E. Reprinted from British Journal of Preventive and Social Medicine, Vol. 7, No. 4, October, 1953.

## Hostels and Beds

The eradication of tuberculosis in Birmingham must mean a further intensification of the search for the early case and the source of his infection, together with the identification of all cases of chronic pulmonary tuberculosis and their reasonable segregation.

### ADDITIONAL TREATMENT BEDS

Efforts in case finding must be made purposeful by the provision of liberal treatment facilities, and by arrangements for the segregation and welfare of the patient with chronic infectious lung tuberculosis.

The number of beds at present available for treatment in Birmingham is inadequate (1 per 1,364 of the population) and of these beds 50 are closed because of shortage of staff and it is likely that this figure will be doubled in the near future—a disastrous position when the opportunities



are so great. Patients are, at home, poorly supervised and partly treated. Patients are, in the large wards of the General Hospitals, a danger to other patients and retarded in their own clinical progress and patients whose real need is a place of residence are occupying treatment beds. All these defects destroy the efficiency of the service and tend to make case finding futile.

Physicians are advised to view the occurrence of tuberculosis as they would the occurrence of typhoid or smallpox, with all that means in the dramatic search for contacts and the immediate treatment of all cases, but they are without the necessary facilities to implement the instruction properly.

There is a great need to provide additional beds either in separate wards of General Hospitals or by the use of beds in Switzerland where they are now available, or by the secondment of staff from the General Hospitals to open beds now closed in the Sanatoria. The opportunities are now so good—and may very well not be repeated—that it would indeed be a disaster if, by a catastrophe of omission, the opportunity to remove tuberculosis from the causes of mortality within the City was lost.

#### HOSTELS (Chronic pulmonary tuberculosis)

There is also a great need to provide residential and welfare facilities for the patient with chronic pulmonary tuberculosis. There seems little doubt that with the present change in the pattern of pulmonary tuberculosis, with the considerable morbidity in the age groups 45-74 (34% of the male cases notified during 1953 occurred in this age group and the majority were cases of chronic lung disease) and with the massive alteration in the survival factors, there must inevitably be an increase in the number of cases of chronic pulmonary tuberculosis. The care, social and industrial, of these patients has always been a problem of great complexity, but in the present phase of tuberculosis it assumes an even greater importance and plans for their supervision must be carefully constructed.

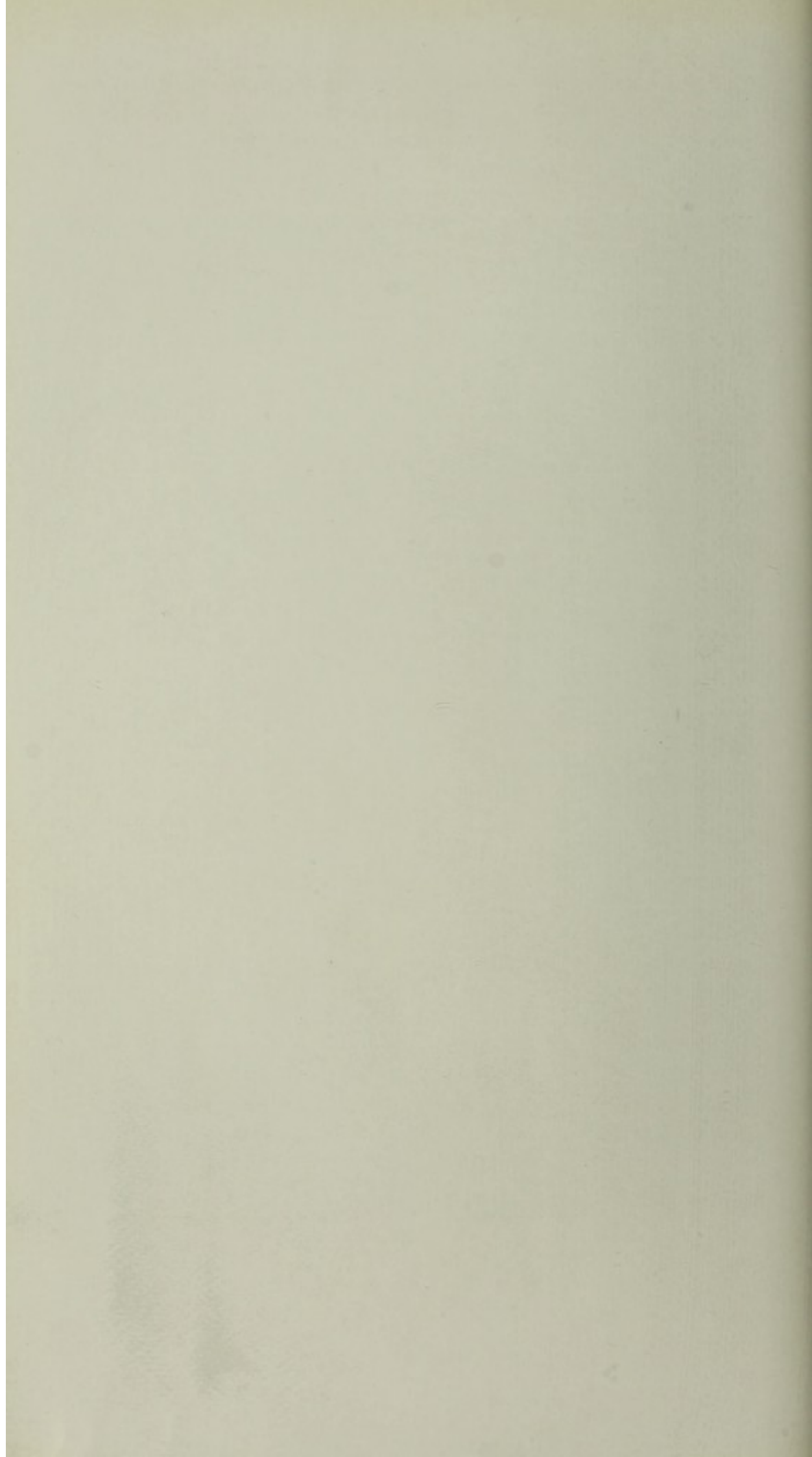
The Remploi Factory (Sheldon) can provide employment for 300 tuberculous patients and it has been in production for three years. Its efficiency and value are established. The scheme for the care of the patients with chronic pulmonary tuberculosis must develop with the factory as an integral part of the service and it is the intention that the Hostel (44 beds), the erection of which is now under consideration, should have as its industrial counterpart this factory for sheltered employment; there these patients would work and, in their own homes or in the hostel (if the home circumstances were unsatisfactory) obtain conditions of employment and residence which would conserve their health and minimise the risks of the dissemination of infection.

The photograph opposite shows part of the workshop at the Remploi Factory.









Corbett in 1917 expressed the opinion about tuberculosis that it seems probable that we are actually witnessing the rapid extinction of one of the greatest diseases which afflict mankind.

That hope, of course, has not been realised but the extinction of tuberculosis from the City clearly is again a reasonable hope if environmental conditions continue to improve and if the number of carriers known and unknown is consistently reduced and their capacity to do harm diminished, but no conclusion must be reached that the disease has entered its old age and that the time is not far off when it will cease to propagate itself, unless all of the measures in prevention and treatment are applied with the utmost priority and vigour.

### Non-Notification

During 1953 the number of deaths from pulmonary tuberculosis which were not notified was 31 or 11.7% and from non-pulmonary tuberculosis 4 or 26.7%.

The percentage of these deaths from all forms of tuberculosis was 12.5% but in 15 cases the diagnosis was established following an autopsy and the corrected figure was 7.2% of the total deaths from tuberculosis. It should be observed that during the past few years there has been a tendency for this figure to increase.

1944	...	23 (2.9%)	1950	...	28 (5.4%)	1952	...	21 (6.9%)
1949	...	37 (5.7%)	1951	...	31 (7.4%)	1953	...	20 (7.2%)

Laxity in notification is greatly to be deplored when all of the circumstances in tuberculosis control demand more vigorous, purposeful and immediate action. It is well to recall that notification converts the patient from a "focus of infection" into a "focus of prevention."

Every effort is made to reduce the extent of this problem and in each case the fact of non-notification is referred to the practitioner concerned. The most common explanation of the failure to notify comes from the impression that the patient has already been notified. It should be recalled that it is the duty of the medical practitioner, whether in hospital or in general practice, to determine whether notification has been undertaken and where there is doubt, this can easily be removed by reference to the Chest Clinic (Central 1141).

The penalty exacted by carelessness in the notification of cases of "open" pulmonary tuberculosis can indeed be a heavy one.

### Contacts of Patients notified during 1953

These contacts have been examined during the year at the Chest Clinic and the Carnegie Institute in accordance with the scheme described on page 93 of the report for 1951.



The results were :

<i>Age and Condition of Contacts</i>	<i>Total Cases</i>	<i>Contacts to patients with sputum containing tubercle bacilli</i>	<i>Contacts to patients with negative sputum</i>
<i>0—5 years</i>			
Tuberculous ...	39 (5.8%)	27 (69.2%)	12 (30.8%)
Non-tuberculous ...	629 (94.2%)	317 (50.4%)	312 (49.6%)
	668	344	324
<i>6—15 years</i>			
Tuberculous ...	22 (3%)	14 (63.6%)	8 (36.4%)
Non-tuberculous ...	717 (97%)	374 (52.2%)	343 (47.8%)
	739	388	351
<i>16 years and over</i>			
Tuberculous ...	41 (4.2%)	28 (68.3%)	13 (31.7%)
Non-tuberculous ...	930 (95.8%)	492 (52.9%)	438 (47.1%)
	971	520	451
<i>Grand Total. All Ages</i>			
Tuberculous ...	102 (4.3%)	69 (67.6%)	33 (32.4%)
Non-tuberculous ...	2,276 (95.7%)	1,183 (52%)	1,093 (48%)
	2,378	1,252	1,126

The staff of the Mass Radiography Department (Medical Director—Dr. L. A. McDowell whose assistance is greatly appreciated) examined 777 adult contacts, in addition to the contacts shown in the previous table. The overall morbidity in these cases was 0.64% and for all of the 1953 contacts 3.4%.

The number of contacts of patients notified during the year was 3,123, or 2.25 per notified case. This is a slight improvement on previous years but is still unsatisfactory.

The Committee concerned with the deployment of the Mass Radiography Units have considered in particular its use in relation to the examination of all household and industrial contacts. It is hoped during 1954 to make the mass radiography field service more freely available for this work and particularly in connection with the B.C.G. Vaccination Scheme in schools and with industrial contact work.



During the year a case of tuberculous disease occurred in a secondary modern school and the assistance of the Medical Director of the Mass Radiography Service was obtained to examine the other children and members of the school staff. The results of this investigation are shown in the following table.

				<i>Active Cases</i> <i>(Pulmonary</i> <i>Tuberculosis)</i>	<i>Inactive</i> <i>Cases</i>
<i>Total</i> <i>Examinations</i>					
Children	...	...	501	2 (0.4%)	2 (0.4%)
Staff	...	...	17	Nil	Nil

This is a good example of case finding and general contact examination. The work was of the greatest advantage to the individual and to the community. It was undertaken by Dr. L. A. McDowell and Dr. John Sumner (Consultant Chest Physician) who are to be congratulated on its efficiency. It defines what indeed should be common practice in community contact examination.

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

This Nursery, which provides accommodation for 36 children aged between 2 weeks and 15 years, has developed with high efficiency. It has in all respects had a satisfactory year. It is used for the vaccination of children—including infants, whose home conditions are unsatisfactory, and this has meant for each child an initial tuberculin test (intradermal or percutaneous), immediate vaccination and, because of the domestic environment, further residence of six weeks to ensure assessment of conversion before discharge.

The following table shows the work undertaken during the year:—

Number of children in residence on January 1st, 1953	...	...	25
Total admissions during the year	...	...	132
Total discharges during the year	...	...	122
Number of children in residence on December 31st, 1953	...	...	35
<i>Analysis of admissions in age groups:</i>			
0—1 year	...	...	75
2—4 years	...	...	25
5—9 years	...	...	24
10—15 years	...	...	8
TOTAL	...	...	132
(68 girls and 64 Boys)			



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

Direct from their homes	...	...	...	...	...	83
Sorrento Maternity Hospital	...	...	...	...	...	21
Loveday Street Maternity Hospital	...	...	...	...	...	4
Heathfield Road Maternity Hospital	...	...	...	...	...	7
Dudley Road Hospital	...	...	...	...	...	4
Somerset Road Nursery	...	...	...	...	...	1
Harborough Hall Convalescent Home	...	...	...	...	...	1
Little Bromwich Hospital	...	...	...	...	...	1
Marston Green Maternity Hospital	...	...	...	...	...	10

All children have a tuberculin skin test and pulmonary radiograph before admission except the newly born babies who are admitted from maternity hospitals. Only tuberculin negative children are admitted to the Home.

Arrangements are made for the staff to be x-rayed twice a year and Mantoux tests and B.C.G. vaccination are offered to the staff but these are not compulsory.

Part-time educational facilities have been provided for children over 5 years of age.

Originally the Home was planned for 12 babies, 13 toddlers and 11 school children, but experience has revealed that the greatest demand now is for the admission of very young babies from the maternity hospitals. The Home was therefore re-adapted in September, 1953, to meet this need by providing 20 cots for small babies under 1 year. The rest of the accommodation is so arranged that it is possible to admit children of any age between 1 and 15 years.

### Work of the Tuberculosis Visitors

There has been considerable discussion in recent years about the training and deployment of health visitors. The tuberculosis scheme in Birmingham is sustained by the work of sixteen tuberculosis visitors who are concerned exclusively with this service (1 visitor to 69,900 population). It has been suggested that the all-purpose health visitor, with supervision of a small population area (say 20,000) would most adequately discharge the socio-medical duties of the domiciliary service. This is clearly a problem which must be resolved by an exact overall knowledge of the Health Visitor Service, but it is appropriate to say that this arrangement whereby visitors have been allocated specially to tuberculosis work has worked well and has distinct advantages.

The sixteen visitors are concerned with the domiciliary welfare of the patient. The range and character of the work is very varied. It is their concern to make enquiry into every case of tuberculosis and maintain by regular visits close contact with the patient in his or her home.



An indication of certain of the after-care activities of the Department is shown in the following statement.

	1951	1952	1953
Beds issued ... ..	664	789	731
Chalets provided ... ..	12	18	12
Grants of clothing and nursing appliances ... ..	534	549	593
Grants of food ... ..	878	541	505
Home helps provided ... ..	45	79	84

It is an encouragement to record the increase in the number of home helps provided. The health visitors have also assisted with the B.C.G. Vaccination Service.

### Disinfection

The disinfection of 965 homes of tuberculous patients was undertaken during the year.

### Housing of the Tuberculous

Constant co-operation is maintained with the Housing Management Department so that every assistance may be given to the tuberculous families whose rehousing is desirable.

The number of houses allocated to tuberculous families from 1946 to 1953 is shown below :

1946	...	...	...	...	...	...	...	79 houses
1947	...	...	...	...	...	...	...	215 „
1948	...	...	...	...	...	...	...	234 „
1949	...	...	...	...	...	...	...	148 „
1950	...	...	...	...	...	...	...	196 „
1951	...	...	...	...	...	...	...	349 „
1952	...	...	...	...	...	...	...	402 „
1953	...	...	...	...	...	...	...	367 „
TOTAL								1,990 „

A separate bedroom for all patients with active pulmonary tuberculosis is the objective, and for the other members of the household no violation of the conditions (overcrowding) detailed in Section 58 of the Housing Act, 1936.

A new points allocation scheme was introduced during 1952 (November). During the year 1953 the claims were reviewed of all the 2,675 applicants on the Housing Register who requested special consideration on account of tuberculosis. The table above shows that of these applicants only 367 were re-housed—and of these 177 were re-housed on a 'points' basis and 190 from the special quota of houses made available by the Housing Management Department for urgent re-housing on grounds of tuberculosis and irrespective of the points scheme.



Progress during the year with the re-housing of the tuberculous patient has been relatively satisfactory, although the big number of applicants and the small number of houses available made the problem most difficult. The number of houses is not only limited, but in certain cases the rent has been beyond the resources of the patient. It will be of interest to observe the effect of the Rent Rebate Scheme in the reduction of this latter difficulty.

The rehousing of the tuberculous population is a measure of the greatest importance. It not only preserves the health of the patient and his family, and reduces the dissemination of infection, but also sustains the sense and quality of their citizenship.

It enables the tuberculous family, often in circumstances of great material and mental difficulty, to make a full contribution to the welfare of their community. So often a poor morale, re-activation of the tuberculous disease, ineptitude in household economy and carelessness in the control of infection, arise from the dissatisfaction caused by material defects and overcrowding in the home. Their correction is necessary whatever the circumstances of the family, but becomes all the more vital when tuberculous disease has disrupted the confidence and economy of the family. It has been said that endeavours in case-finding should have the advantage of immediate and efficient treatment, so indeed should they also have the advantages which derive from a well housed tuberculous population.

## Rehabilitation

The following table shows both the number of patients whose re-employment was considered by the Medical Interviewing Committee during 1953 and the total recommendations made since the work was commenced in 1949.

<i>Recommendations :</i>	<i>1953</i>	<i>Total</i>
Sheltered Factory (Remploi) ... ..	99	404
Industrial Rehabilitation Unit ... ..	81	171
Government Training Centre ... ..	54	180
Rehabilitation with employer ... ..	7	20
Open industry ... ..	176	618
Training after Remploi ... ..	3	17
Home-work ... ..	3	5
Placed in Sanatorium employment ... ..	—	7
Deferred ... ..	20	111
	<hr/>	<hr/>
	443	1,533
	<hr/>	<hr/>



There is little alteration in the recommendations made during 1953 and in previous years, with the important exception of the large number of patients (patient-employees), who in the last two years were considered able to return immediately to open industry. During 1950 the number so recommended was 59 ; in 1951 it was 107 ; in 1952, 198 ; and in 1953, 176.

The Committee meets each week, and its members are as follows :

Consultant Chest Physician.

Industrial Medical Officer.

Disablement Resettlement Officer, Ministry of Labour.

This work was inaugurated during 1949 and arrangements have been made to review the industrial experience of these patients and the results of the survey will be available during 1954. It has been an integral part of the policy of this Committee not to recommend patients whose sputum remains positive for tubercle bacilli for employment in open industry.

During April, 1952, Circular 7/52 was issued by the Ministry of Health. It referred to the " Placing in suitable ordinary employment of persons whose condition may be infectious " and advised that " there need be no general bar against this provided that the placing of the individual in the particular employment concerned is subject to medical guidance and approval."

The conditions which, in the opinion of the Ministry make such employment satisfactory are defined : " so long as the work undertaken, is in medical opinion, suited to the individual's physical capacities and unlikely to prejudice his own health or involve risk to the health of others, and so long as he can be relied upon to exercise that personal care which tuberculosis patients are trained to take." These are difficult conditions, all of which are inordinately complex in application and, indeed, that which connotes absence of risk to the health of others, where the circumstances are so important, might have been given more emphasis and a greater practical definition.

The present favourable position in the control of tuberculous infection and disease demands a critical analysis of all of our present methods in prevention and treatment. The present trend of infection rates, with the postponement of the age of infection means an increasing number of tuberculin negative susceptible adolescents and young adults in industry. That is only one of the many factors which should demand an even greater control of the " open case " in industry.

Endeavours are being made by mass radiography surveys and other efforts in case-finding to identify and remove the patient with open pulmonary tuberculosis from industry and this circular seems to sponsor their return to industry—education may have reduced their capacity to disseminate bacilli but the risks are considerable, and should not be incurred.



The Ministry of Education in their Circular No. 418 have on the one hand identified the measures in control which must apply before the teacher with pulmonary tuberculosis can return to work. The disease must be quiescent and regular examinations, including radiology, must be adopted ; there must be no tubercle bacilli about ; and on the other hand the Ministry of Health have condoned the return of the open case to industry. This hardly seems logical despite the difference in the individuals at risk ; it is surely a travesty of principle and of practice. As a measure to sustain the sputum-positive worker the circular has its value but it may easily prejudice the health of other workers. A far better course would have been to emphasise the need and support the endeavours to provide sheltered workshops with night sanatoria and, if necessary, the designation of special and selected work for these patient-employees in open industry.

### **Vaccination, B.C.G.**

Measures of prevention are now supported by B.C.G. vaccination which was introduced during 1950, since when 4,680 contact children have attended the B.C.G. Clinics established at the Carnegie Institute and 1,917 have been vaccinated. The routine introduced during 1952 was continued and is as follows :

A	B	C
Tuberculin Test Intradermal tuberculin (0.1 mg. or 10 units)	An interval of 72 hours	If negative vaccination

The scheme for the vaccination of contacts has developed successfully. The routine previously described whereby children negative to 10 units (0.1 mg.) of tuberculin are vaccinated immediately has continued. It has proved to be satisfactory and no untoward incidents have occurred. During the year 1,650 children attended the special vaccination clinic and 497 were vaccinated. The arrangements in this clinic have continued to be maintained at a very high level of efficiency.

The records of 1,390 children have been examined to determine the incidence of complications and to gain some impression of the persistence of tuberculin allergy.

The following table shows the incidence of complications :

Age Groups	Number of children vaccinated	Complications			
		Abscess at site of injection	Glands		
			Axillary	Cervical	Combined axillary and Cervical
0-4 years	872	10 (1.1%)	57 (6.5%)	6 (0.7%)	Nil
5-9 years	357	1 (0.3%)	20 (5.6%)	3 (0.8%)	2 (0.6%)
10-14 years	161	Nil	7 (4.3%)	2 (1.2%)	Nil
All age groups	1,390	11 (0.8%)	84 (6.0%)	11 (0.8%)	2 (0.1%)

This table shows the relative infrequency of abscess formation at the site of injection. Its overall occurrence was 0.8% and of the eleven abscesses, ten occurred in infants. This complication is related to a poor technique with subcutaneous injection of the vaccine. It is not easy to administer accurately an intradermal injection in an infant of several days, and this particular complication of vaccination in infancy will require attention when arrangements for the general vaccination of infants are under consideration.

An adenopathy, either axillary or cervical, occurred in 97 individuals with a main frequency in the axillary glands. It is of interest to note that the incidence was scattered fairly evenly over all of the age groups from 0—14 years. These adenopathies were insignificant in the majority of cases. They produced no general reaction and were usually spontaneously regressive. Caseation occurred in 13 cases and required incision with evacuation of the caseous debris. Aspiration is impracticable and should not be attempted. If the resolution is sluggish, general carbon arc irradiation or local ultra violet irradiation provide the necessary stimulus to resolution. There were no other complications of importance, but



an erythema nodosum developed in two children. Its course was similar to that of the erythema nodosum which occurs with a natural infection; collateral papules (? tubercles), whose etiology was a little difficult to define, occurred in four children.

Certain observers have recorded a pulmonary reaction following vaccination; all of these children had a pulmonary radiograph at the time of "conversion" tuberculin test—6 weeks from vaccination—and in no case was there any evidence of a tracheo-bronchial adenopathy or of a miliary response in the lung fields.

**ALLERGY:** The measure of successful vaccination is a positive tuberculin test, and the index of acquired immunity is the continuance of the tuberculin allergy. The relationship of allergy and immunity in tuberculosis remains obscure, and it may well be that the one—particularly as measured by present tuberculin tests—is no certain assessment of the other, but there is at present no other available yardstick. It is useful, therefore, and indeed necessary to have these factors under review so that immunisation may develop on a rational foundation.

Tuberculin conversion rates both immediate and later are, consequently, of the greatest interest and importance and whilst the number of children who have so far been vaccinated for any length of time is relatively small, an endeavour has been made to assess the state of post-vaccination allergy. The records of the 1,390 children referred to above were examined in the following age groups: 0-4 years, 5-9 years, and 10-14 years. The results are shown in the table.

## B.C.G. VACCINATION SURVEY

## CONVERSION AND REVERSION RATES

<i>0-4 years</i>									
A total of 872 children received initial vaccination, of which 862 (98.9%) were successfully converted.									
Of this 862, 466 were re-tested after ONE year, the number maintaining their conversion being 433 (92.9%) and the reversion rate 7.1%									
"	"	433, 115	"	"	"	"	"	96 (83.5%)	"
"	"	"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"	"	"
<i>5-9 years</i>									
A total of 357 children received initial vaccination, of which 350 (98.0%) were successfully converted.									
Of this 350, 230 were re-tested after ONE year the number maintaining their conversion being 199 (86.5%) and the reversion rate 13.5%									
"	"	199, 56	"	"	"	"	"	45 (80.4%)	"
"	"	"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"	"	"
<i>10-14 years</i>									
A total of 161 children received initial vaccination, of which 159 (98.8%) were successfully converted.									
Of this 159, 119 were re-tested after ONE year, the number maintaining their conversion being 106 (89.1%) and the reversion rate 10.9%									
"	"	106, 31	"	"	"	"	"	28 (90.3%)	"
"	"	"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"	"	"
<i>All Age Groups</i>									
A total of 1,390 children received initial vaccination, of which 1,371 (98.6%) were successfully converted.									
Of this 1,371, 815 were re-tested after ONE year, the number maintaining their conversion being 738 (90.5%) and the reversion rate 9.5%									
"	"	738, 202	"	"	"	"	"	169 (83.6%)	"
"	"	"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"	"	"



These figures have importance. The reversion rate is high and a little disturbing. During recent years a great deal of work on these factors has been undertaken by the Tuberculosis Research Office of the World Health Organisation.

Certain impressions have been corrected. It was demonstrated on the one hand, for example, that the vaccine can be kept for ten weeks at 2.4°C without significant reduction in its capacity to produce allergy ; that storage at 20°C for a month causes only a slight reduction in the level of the tuberculin allergic response ; and, on the other, that light had a most harmful effect on the vaccine ; for example, exposure of the vaccine to ordinary daylight through double glass laboratory windows caused a great reduction in the number of viable organisms. Light exposure during production of the vaccine is now avoided and during the past year the vaccine has been issued in protective coloured phials.

All of the children who reverted have, of course, been re-vaccinated. It is impossible, unfortunately, to isolate the factor responsible for the considerable reversion rate but it may well have been due to this factor of exposure to light. It is clear that the technique and character of the reaction will require constant attention so that any technical factor which might affect adversely the potency of the vaccine can be rapidly corrected.

#### SCHOOL LEAVERS

Towards the end of the year, arrangements were in progress for the extension of vaccination to school-leavers (13-14 years), and a special B.C.G. Clinic was established. In the light of the experience gained from the Contact Vaccination Clinic, the technique of vaccination will be as shown in the table on page 88 of this report.

Every tenth child will be recalled for a conversion tuberculin test, to control the efficiency of the vaccination procedure.

It will be of absorbing interest to note the effect of vaccination on these children as they proceed through adolescence to adult life.

#### Domiciliary Treatment

Domiciliary treatment of patients with pulmonary tuberculosis continued throughout the year. It is at best an expedient and a most indifferent substitute for all of the educational, environmental and therapeutical facilities of the good sanatorium.

During the year 1,080 patients received chemotherapy at home. The injections were given by district nurses under the direction of the medical practitioners. Numerous visits were made by these nurses and their work and happy co-operation with the health visitors are greatly appreciated, as is also the constant co-operation of medical practitioners.



## Domiciliary Diversional and Occupational Therapy

A domiciliary occupational therapy centre has provided assistance in the form of handicrafts, a library service and a social centre for many patients undergoing care at home.

The centre has facilities for :

Weaving	Pewter and copper work
Leather work	Jewellery
Stool seating	Dressmaking
Marketry	Straw basket making

Additional staff have been appointed and it is intended to extend this work during 1954.

## The Domiciliary Library Service

This service organised by the Joint Committee of the Order of St. John of Jerusalem and the British Red Cross Society (Hon. County Organiser—Mrs. H. M. Anderson), has had a good year and has made a very great contribution to the welfare of those patients under domiciliary treatment. Four districts are now served by cars and the work is sustained by 22 to 30 librarians. During 1953 7,700 books were issued.

It is a very great pleasure to acknowledge the work of Mrs. Anderson and her librarians.

## Dental Work

The following statement shows the work undertaken in the Dental Clinic during the year. Every endeavour is made to arrange for tuberculous patients requiring dental treatment to attend at this Clinic.

Fillings ...	...	...	...	...	...	...	...	...	38
Extractions ...	...	...	...	...	...	...	...	...	408
Scalings ...	...	...	...	...	...	...	...	...	31
Complete dentures ...	...	...	...	...	...	...	...	...	48
Partial dentures ...	...	...	...	...	...	...	...	...	29
Repairs to dentures ...	...	...	...	...	...	...	...	...	20

Patients attending the Dental Clinic are referred both from the Chest Clinic and from the Out-patient Departments of the general hospitals.



## PERSONAL HEALTH SERVICES

Since the advent of the National Health Service Act there has been steady development of these personal health services for which the already well established Maternity and Child Welfare Service has formed an excellent nucleus. In fact, as shown elsewhere in this Report, numerous facilities, which for years have been available for the use of mothers and babies, have now become available to the public in general. The title of "Personal Health Services" expresses this development.

### GENERAL COMMENTS

The most outstanding feature of 1953 has been the great increase in co-operation by the health visiting service with the general practitioners on the one hand and the hospitals on the other. The general practitioners are showing a still greater readiness to avail themselves of the help which health visitors can give them in all aspects of their work. The closer integration between the general practitioners and the local authority services will be materially helped by the decision of the City Council to allocate over the next three years, twenty-one houses on Corporation housing estates for use as temporary welfare centres, until such time as it becomes clear what final form such centres should take. An innovation was a request by a group of general practitioners for discussion with welfare centre staff on infant feeding. By the end of the year health visitors were attached to five hospitals—in four instances to children's units and in one instance to a cancer unit. In every case they work in close co-operation with the hospital almoners.

There was an increase in the proportion of women having their first baby. Although there was no increase in the mortality rates of babies born to these women, yet the increase in their actual number, together with the fact that infants born to older women and to women who already had had several children had a higher mortality rate, accounted for the fact that there was a rise in the total perinatal death rate. There was an increase in the proportion of babies born weighing 2,500 grammes ( $5\frac{1}{2}$  lbs.) or less and also of those born illegitimate. Having survived the fourth week of life, however, it is satisfactory to note that the deaths of infants from 4 weeks to 1 year reached a new low record. None the less, the death rates of infants in some of the new housing estates remain higher than one would expect.

On the whole the maternity services worked smoothly but it must be emphasised once again that both the woman having her fifth or more



child and her infant run much greater hazards than other child-bearing women, and therefore must be assisted and encouraged in every way to enable her to have her baby in hospital.

A Senior Dental Officer was appointed at the end of March. It is hoped that this may be the beginning of a much needed expansion of this service.

Thanks are due to Dr. V. M. Crosse, Paediatrician, Birmingham Regional Hospital Board, and to Dr. Padley and the Central Statistical Office for the help received in investigating the mortality among infants and analysing the records.

The high cost of hospital care and the fact that psychologically it is best, wherever possible, for a patient to be nursed at home, has thrown an increasing burden on the district nursing and domestic help services, who have worked cheerfully under great pressure throughout the year.

## MATERNITY AND CHILD WELFARE

### Total Births

For the purpose of this Report the population given 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.

There were 18,566 live births and 446 stillbirths among Birmingham residents, making a total of 19,012 births during the year. These figures compare with 18,301 live births and 366 stillbirths in 1952. Of the total of 19,012 births, 8.4 per cent. were prematurely born. In 1952 the proportion was 7.9 per cent. The illegitimate birth rate per 1,000 live births was 50.7 compared with 48.2 in 1952.

The proportion of women having their first child showed a further increase. The influence of this on the infant death rate is discussed later.

					<i>Live births</i>	<i>Stillbirths</i>
Single births	...	...	...	...	18,098	405
Twins : both living (218 pairs)	...	...	...	...	436	—
one living, one dead (26 pairs)	...	...	...	...	26	25*
both dead ( 8 pairs)	...	...	...	...	—	16
Triplets : all living (2 sets)	...	...	...	...	6	—
					<hr/> 18,566	<hr/> 446

\* In one case only the live born child was registered, while the other twin was classified as a miscarriage (under 27 weeks' gestation).

### LIVE BIRTH RATES

1946	...	...	...	22.5	1950	...	...	...	16.8
1947	...	...	...	22.2	1951	...	...	...	16.5
1948	...	...	...	19.5	1952	...	...	...	16.4
1949	...	...	...	18.1	1953	...	...	...	16.6



<i>Illegitimate births per 1,000 live births</i>				<i>Illegitimate births per 1,000 live births</i>			
1946	...	...	67.6	1950	...	...	51.5
1947	...	...	54.7	1951	...	...	47.3
1948	...	...	54.1	1952	...	...	48.2
1949	...	...	50.1	1953	...	...	50.7

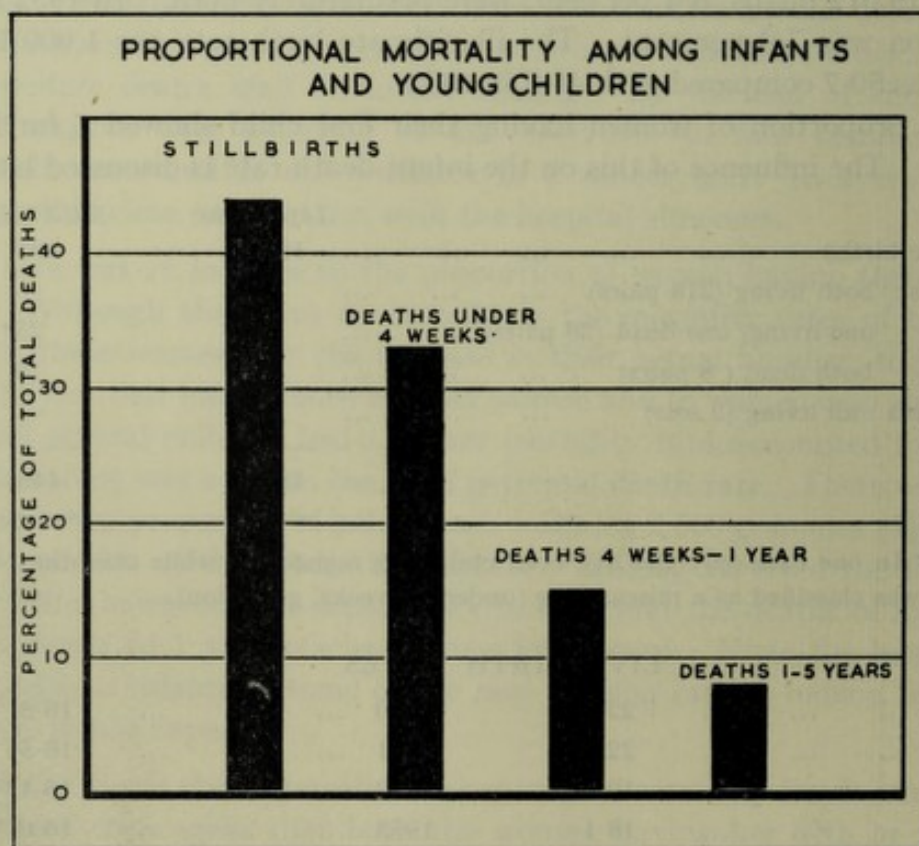
#### CONFINEMENT BY PARITY

				<i>Percentage of Confinements</i>		
				<i>1951</i>	<i>1952</i>	<i>1953</i>
Primigravidae	...	...	...	35.0	36.3	37.9
2nd—4th	...	...	...	54.6	52.6	51.6
5th and over	...	...	...	10.4	11.1	10.5
				100.0	100.0	100.0

#### MORTALITY AMONG INFANTS

In 1953 there were 569 deaths among children between birth and five years of age and 446 stillbirths, making a total of 1,015 deaths. No less than 44 per cent. of these deaths occurred as stillbirths and 33 per cent. occurred before the infant, born alive, had reached the age of four weeks. The proportion of deaths in each of these age groups is shown in the chart below. As stillbirths and deaths during the first

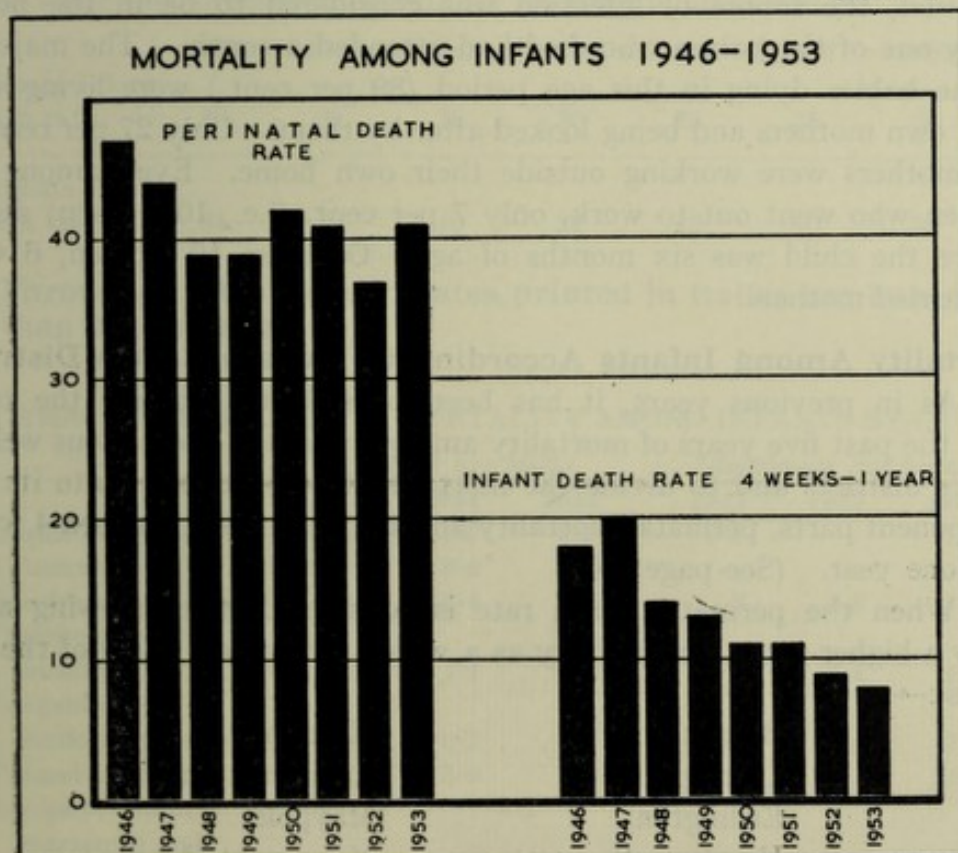
CHART I.



four weeks of life are influenced mainly by the health of the mother during the antenatal and intranatal period, the supreme importance of good maternity care in the preservation of infant life becomes apparent. Sir John Charles remarked in his 1952 report, that while infant deaths as a whole in England and Wales continue to show a decline in numbers with a correspondingly satisfactory diminution of the infantile mortality rate, the same cannot be said of stillbirths or of deaths occurring in the first four weeks of life. He asks whether we have not progressed as far as our existing knowledge of causes and contributory circumstances can take us in relation to stillbirths and neonatal deaths, i.e., the group of perinatal deaths, and whether the way to further improvement lies through research rather than through the continued exploitation or modification of established methods.

Birmingham's experience has been much the same as that of England and Wales. Indeed, the stillbirth rate rose sharply in 1953 from 19.6 in 1952 to 23.5 in 1953 and the neonatal death rate slightly from 17.6 to 18.0 whereas the death rate between four weeks and one year has fallen still further to 8.1 (1952—9.2) and established a new low record. This is shown in the chart below.

CHART 2





## **Perinatal Death Rate**

The perinatal death rate is the number of stillbirths and deaths under 4 weeks of age per 1,000 live and stillbirths. It has risen from 36.8 in 1952 to 41.1 in 1953. This death rate tends to be higher among first births and births following the fifth or higher confinements. The age of the mother also has an influence. Very young mothers or women nearing the end of their reproductive life run a greater risk of having stillborn children or of their live born babies dying before the 4th week of life. When the experience of 1953 is examined from this point of view it is found that, compared with 1952, a higher proportion of women being delivered were having their first child (37.9 per cent. compared with 36.3) and that 10.0 per cent. of them were under the age of 20 compared with 9.7 in 1952. On the other hand, the proportion of women having their fifth or more child in 1953 was rather less than in 1952 and in both years approximately one fifth of them were 40 years of age and over. A more detailed discussion of the factors influencing the rise in the perinatal death rate will be found in the section dealing with the maternity services. (See page 116).

## **Death Rate—4 weeks to 1 year**

The death rate in this age period was 8.1 per 1,000 live births, which is a new low record. This was mainly due to a still further fall in the death rate from infection. In 86 per cent. of the 118 deaths due to infection, the source of infection was considered to be in the home. Forty-one of the babies who died had attended a centre. The majority of the babies dying in this age period (89 per cent.) were living with their own mothers and being looked after by them. Only 27 per cent. of the mothers were working outside their own home. Even among the women who went out to work, only 7 per cent. (i.e., 10 women) did so before the child was six months of age. Of these 10 women, 6 were unmarried mothers.

## **Mortality Among Infants According to Welfare Centre Districts**

As in previous years, it has been possible to examine the trend over the past five years of mortality among infants in the various welfare centre districts and to divide the mortality in each district into its two component parts, perinatal mortality and the death rate between 4 weeks and one year. (See page 104).

When the perinatal death rate is considered, the following areas show a higher rate than the City as a whole for at least three of the five years :—

Bromford.	Kettlehouse.
Carnegie.	Lancaster Street.
Erdington.	Maypole
Handsworth.	Monument Road.
Heath Mill Lane.	Washwood Heath.
Hope Street.	



As regards the death rate for the period 4 weeks to 12 months, the following welfare centre areas showed a higher rate than the City as a whole for at least three of the five years, 1949-1953.

Carnegie.	Lea Hall.
Farm Road.	Maypole.
Heath Mill Lane.	Monument Road.
Hope Street.	Sutton Street.
Kettlehouse.	Trinity Road.
Lancaster Street.	

Carnegie, Heath Mill Lane, Hope Street, Kettlehouse, Lancaster Street, Maypole and Monument Road appear in both lists. All these areas require concentrated attention. While this might be anticipated as far as the six areas in the centre of the City are concerned, it is not what one would expect in housing estates such as Kettlehouse and Maypole. It is unsatisfactory, too, that Lea Hall, another housing estate, should continue to have a higher death rate for infants between 4 weeks and one year—an age period influenced mainly by environmental conditions.

### Legitimacy in relation to Mortality among Infants

The illegitimate infant mortality rate per 1,000 illegitimate births was 39 while the corresponding rate for legitimate births was 26.

	<i>1947</i>	<i>1948</i>	<i>1949</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>
Legitimate Infant							
Death rate ...	39	31	30	30	29	26	26
Illegitimate Infant							
Death rate ...	64	44	40	37	43	40	39

Throughout this Report, rates printed in italics are based on less than 20 instances.

### LEGITIMACY IN RELATION TO MORTALITY AMONG INFANTS BY CAUSE

	<i>Legitimate live births</i>			<i>Illegitimate live births</i>		
	<i>1951</i>	<i>1952</i>	<i>1953</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>
Infectious disease...	<i>0.6</i>	<i>0.5</i>	<i>0.5</i>	<i>1.1</i>	—	<i>1.1</i>
Tuberculosis ...	<i>0.3</i>	<i>0.0</i>	<i>0.1</i>	—	—	—
Respiratory disease	6.0	4.4	3.6	11.6	6.8	6.3
Diarrhoea and enteritis ...	1.4	1.1	1.0	1.1	3.4	2.1
Congenital malformations ...	4.1	6.2	4.7	6.9	8.0	7.5
Premature birth ...	7.0	5.9	7.8	9.2	6.8	12.7
Atrophy, debility, marasmus and atelectasis ...	1.1	0.9	0.7	—	1.1	1.1
Injury at birth ...	4.5	3.8	3.1	5.8	4.5	1.1
Other causes ...	4.1	3.3	4.0	6.9	9.1	7.5



# Mortality Rates

## STILLBIRTH RATE

<i>Rate per 1,000 total births</i>				<i>Rate per 1,000 total births</i>			
1946 ...	...	...	25	1950 ...	...	...	23
1947 ...	...	...	24	1951 ...	...	...	22
1948 ...	...	...	22	1952 ...	...	...	20
1949 ...	...	...	22	1953 ...	...	...	23

## NEONATAL DEATH RATE

<i>Rate per 1,000 live births</i>				<i>Rate per 1,000 live births</i>			
1946 ...	...	...	22.1	1950 ...	...	...	19.2
1947 ...	...	...	20.9	1951 ...	...	...	19.2
1948 ...	...	...	18.0	1952 ...	...	...	17.6
1949 ...	...	...	17.7	1953 ...	...	...	18.0

## PERINATAL DEATH RATE

<i>Rate per 1,000 total births</i>				<i>Rate per 1,000 total births</i>			
1946 ...	...	...	47.0	1950 ...	...	...	41.8
1947 ...	...	...	43.9	1951 ...	...	...	40.9
1948 ...	...	...	39.4	1952 ...	...	...	36.8
1949 ...	...	...	39.0	1953 ...	...	...	41.1

## PERINATAL DEATH RATE BY PRIMARY FACTOR

(See page 122)

## DEATH RATE 4 WEEKS—1 YEAR

<i>Death rate per 1,000 live births</i>				<i>Death rate per 1,000 live births</i>			
1946 ...	...	...	17.9	1950 ...	...	...	10.9
1947 ...	...	...	19.5	1951 ...	...	...	10.5
1948 ...	...	...	13.6	1952 ...	...	...	9.2
1949 ...	...	...	13.1	1953 ...	...	...	8.1

## DEATH RATE 4 WEEKS TO 1 YEAR BY CAUSE

	1951	1952	Total	1953	
				<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	4.8	3.5	3.0	4.4	2.9
Digestive infection	1.5	0.9	0.6	—	0.7
Other infection ...	1.9	1.7	1.6	4.4	1.4
Foetal deformity ...	1.1	1.7	1.7	5.1	1.5
Other causes (including tuberculosis) ...	1.2	1.4	1.1	2.2	0.9
Total death rate 4 weeks—1 year	10.5	9.2	8.0	16.1	7.4

# INFANT MORTALITY RATE

<i>Birmingham</i>				<i>Birmingham</i>			
		<i>England and Wales</i>				<i>England and Wales</i>	
1946	...	40	43	1950	...	30	30
1947	...	41	41	1951	...	30	30
1948	...	42	34	1952	...	27	28
1949	...	31	32	1953	...	26	27

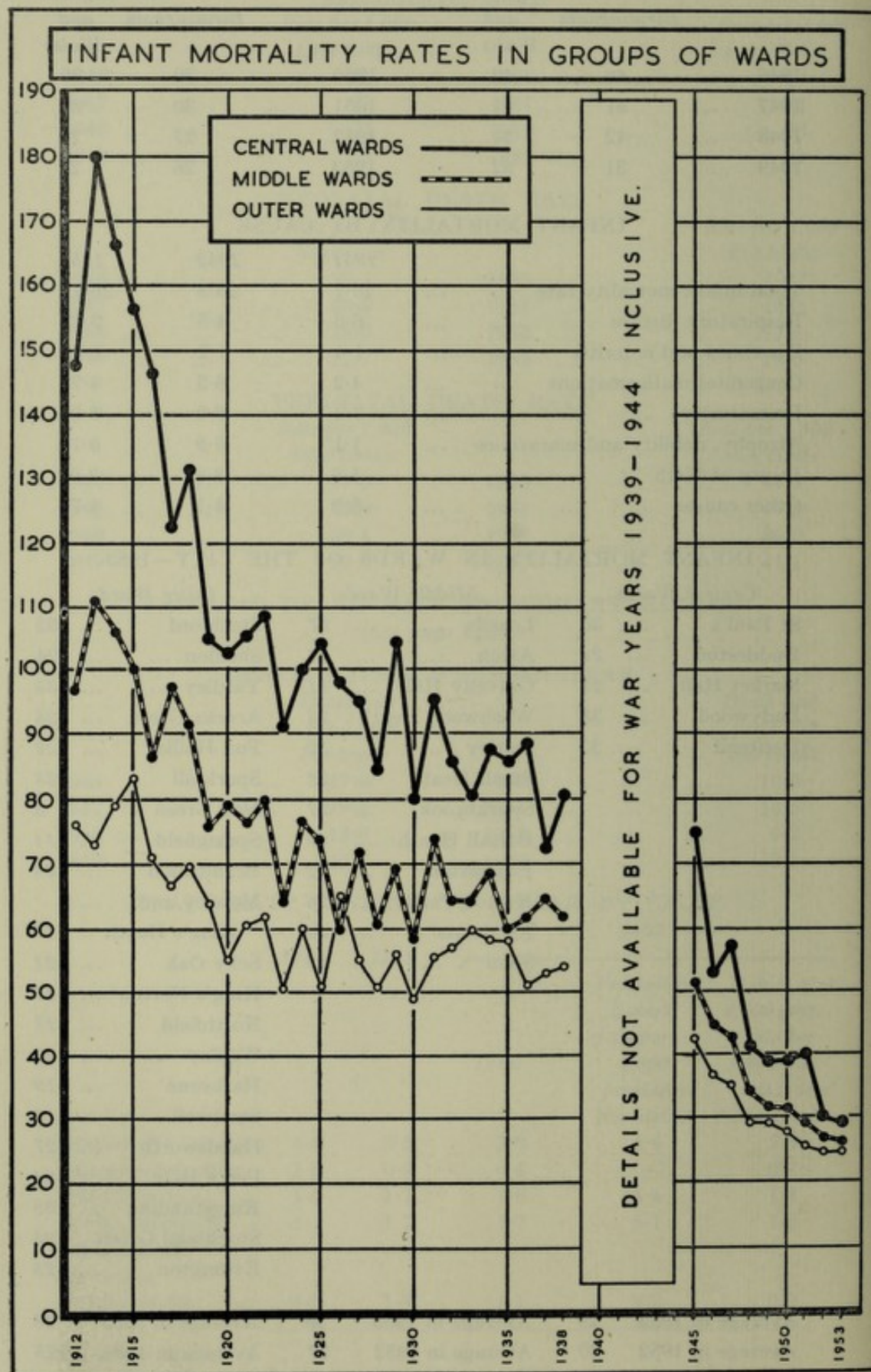
## INFANT MORTALITY BY CAUSE

				1951	1952	1953
Total infant mortality rate	...	...	...	29.7	26.8	26.12
Respiratory disease	...	...	...	6.3	4.5	3.72
Diarrhoea and enteritis	...	...	...	1.4	1.2	1.08
Congenital malformations	...	...	...	4.2	6.2	4.79
Prematurity	...	...	...	7.1	6.0	8.08
Atrophy, debility and marasmus	...	...	...	1.1	0.9	0.70
Injury at birth	...	...	...	4.6	3.8	3.01
Other causes	...	...	...	5.0	4.1	4.74

## INFANT MORTALITY IN WARDS OF THE CITY—1953

<i>Central Wards</i>		<i>Middle Wards</i>		<i>Outer Wards</i>	
St Paul's	... 30	Lozells	... 27	Stechford	... 33
Duddeston	... 24	Aston	... 23	Sheldon	... 24
Market Hall	... 22	Gravelly Hill	... 21	Yardley	... 35
Ladywood	... 38	Washwood Heath	25	Acocks Green	... 25
Deritend	... 33	Saltley	... 32	Fox Hollies	... 22
		Small Heath	... 22	Sparkhill	... 38
		Sparkbrook	... 27	Hall Green	... 3
		Balsall Heath	... 29	Springfield	... 11
		Edgbaston	... 12	Brandwood	... 28
		Rotton Park	... 26	Moseley and	...
		All Saints'	... 36	King's Heath	17
		Soho	... 35	Selly Oak	... 21
				King's Norton	... 15
				Northfield	... 18
				Weoley	... 27
				Harborne	... 19
				Sandwell	... 15
				Handsworth	... 27
				Perry Barr	... 21
				Kingstanding	... 38
				Stockland Green	25
				Erdington	... 28
Average in 1953	29	Average in 1953	26	Average in 1953	25
Average in 1952	30	Average in 1952	27	Average in 1952	25
Average in 1951	40	Average in 1951	29	Average in 1951	26





INFANTILE MORTALITY DURING YEAR 1953

DEATHS FROM STATED CAUSES IN DAYS, WEEKS AND MONTHS UNDER ONE YEAR OF AGE

CAUSE OF DEATH	DAYS										Total under 28 days	MONTHS											Total under 1 year
	under 1	1	2	3	4	5	6	7-13	14-20	21-27		28 days and under 2	2	3	4	5	6	7	8	9	10	11	
Measles ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	2	3
Scarlet Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	7
Diphtheria and Croup ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Influenza ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculous Meningitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Abdominal Tuberculosis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Tuberculous Diseases...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rickets ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Syphilis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-Spinal Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningitis (not Tuberculous)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convulsions ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bronchitis ...	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia (all forms)	2	—	1	—	—	1	2	3	4	3	16	10	6	10	6	—	4	4	3	—	2	1	63
Gastritis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhoea, Enteritis, etc.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congenital Malformations ...	22	5	6	4	1	1	2	11	6	5	63	7	10	2	5	—	4	1	3	1	1	—	20
Premature Birth ...	77	25	12	8	7	5	6	7	1	2	150	1	—	—	—	—	—	—	—	—	—	—	89
Atrophy, Debility & Marasmus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	150
Atelectasis ...	6	4	1	1	—	—	—	—	—	—	12	—	—	—	—	—	—	—	—	—	—	—	1
Injury at Birth ...	30	9	7	4	1	1	2	1	1	—	56	—	—	—	—	—	—	—	—	—	—	—	12
Suffocation (Overlying)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	56
Other Causes ...	11	3	2	2	4	2	2	1	2	1	30	5	2	2	2	1	2	4	—	2	1	3	2
Otitis Media ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
Unknown Cause ...	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
All Causes ...	148	47	30	19	13	10	14	26	16	12	335	28	27	18	15	13	8	15	5	6	6	9	485



PERINATAL AND INFANT MORTALITY RATE (1-12 MONTHS) IN  
WELFARE CENTRE AREAS, 1953  
(CITY RESIDENTS)

	<i>Perinatal mortality</i>					<i>Death rate 1-12 months</i>				
<i>Centre Areas</i>	<i>1949</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>	<i>1949</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>
Whole City	39.0	41.8	40.9	33.3	39.9	13.1	10.9	10.2	8.7	7.6
Acocks Green	33.1	45.7	53.6	27.0	33.1	8.5	9.1	8.9	3.2	3.6
Bromford	37.9	43.8	49.2	49.1	58.2	18.5	4.3	4.4	4.8	4.7
Carnegie	37.3	42.1	31.2	42.1	48.6	14.5	13.8	11.9	7.4	5.6
Erdington	35.2	42.8	52.5	51.2	36.9	9.1	3.2	8.7	8.8	6.8
Farm Road	35.0	29.6	41.4	29.9	37.1	14.5	12.3	19.0	4.4	9.1
Greet	31.6	40.2	35.7	25.6	43.0	9.0	7.7	12.2	5.5	7.1
Handsworth	28.3	52.9	44.3	42.7	36.1	10.2	14.6	6.8	—	6.5
Hay Mills	18.9	27.8	32.7	34.5	42.1	11.1	1.6	5.3	3.7	10.8
Heath Mill										
Lane	81.7	28.6	43.3	31.6	46.1	17.4	11.6	27.1	22.4	8.5
Hope Street	42.2	45.0	43.1	22.7	44.0	20.5	12.7	13.4	13.1	9.0
Horrell Road	37.9	27.4	35.3	30.4	24.6	5.3	4.7	4.5	9.9	2.4
Irving Street	36.3	34.9	46.2	26.1	41.5	6.1	14.2	19.0	6.6	4.5
Kettlehouse	61.1	40.6	47.8	21.4	55.7	15.0	24.5	9.9	7.2	12.4
King's Heath	50.8	34.2	45.1	20.4	27.8	12.3	—	6.0	5.6	5.7
Kingstanding	35.4	40.4	39.9	48.4	42.2	3.6	—	10.2	3.8	5.9
Lancaster St.	39.4	39.7	42.1	42.0	47.6	22.0	27.1	24.5	12.3	12.2
Lansdowne St.	38.8	49.6	38.7	28.6	52.9	5.4	9.1	9.0	5.4	7.5
Lea Hall	41.1	33.6	24.6	28.3	33.9	14.1	9.5	17.2	14.4	12.1
Maypole	42.6	52.2	43.3	11.4	57.4	7.2	—	11.0	11.5	15.8
Monument Rd.	36.3	40.8	41.9	37.9	48.9	13.6	17.9	17.0	14.0	11.0
Northfield	44.0	40.4	46.2	29.1	37.0	4.8	12.1	4.4	12.1	6.8
Selly Oak	32.7	40.0	32.1	37.7	42.1	15.3	5.4	5.9	7.8	6.6
Small Heath	32.7	34.9	33.9	20.5	40.1	10.3	8.0	7.0	6.9	12.7
Stirchley	32.1	31.8	30.1	42.7	29.5	15.7	4.4	4.2	17.0	4.3
Sutton St.	34.0	43.5	39.5	30.6	38.7	24.4	15.8	10.8	14.7	9.2
Tennal Road	38.5	20.5	40.5	49.3	32.6	7.9	4.2	4.1	—	3.0
Tower Hill	26.7	35.6	43.0	39.7	32.9	15.4	4.3	—	—	2.4
Treaford Lane	27.5	40.4	34.6	30.9	44.2	5.9	8.3	5.6	8.8	6.6
Trinity Road	38.7	54.7	35.5	38.8	27.9	10.6	12.1	7.9	13.2	8.9
Washwood										
Heath	39.8	49.7	36.9	37.7	39.3	9.9	16.2	8.1	7.7	12.9
Wentworth										
Road	32.1	29.3	15.1	29.0	34.5	7.2	—	3.8	—	—
Weoley Castle	32.8	30.7	20.3	38.8	35.5	9.2	3.5	3.4	2.8	7.8
Yardley Wood	41.9	32.7	23.6	18.5	25.0	14.9	7.7	5.3	10.7	2.8



## MATERNAL MORTALITY

There were 11 deaths due to pregnancy and childbearing in 1953. This gave a maternal mortality rate of 0·58 per 1,000 live and stillbirths, or 0·59 per 1,000 live births. Only one case had no antenatal care of any kind. In another, the antenatal care was inadequate because the patient moved from one area to another. There was no death as a result of abortion. There were 7 deaths due to associated conditions which gave a mortality rate of 0·37 per 1,000 live and stillbirths.

### A. Deaths due to Pregnancy and Childbirth

1. **Deaths not associated with a notifiable birth.** There was one death not associated with a notifiable birth. This was due to cerebral hæmorrhage and acute yellow atrophy of the liver. The pregnancy was concealed and no antenatal care was received. A practitioner summoned to the patient's home found her dead on arrival. She was approximately 34 weeks pregnant and in the second stage of labour.

2. **Deaths associated with a notifiable birth.** There were ten cases associated with a notifiable birth. Both cases of pulmonary embolism were hospital bookings. In one instance the patient developed femoral thrombosis on the eighth day of the puerperium which did not respond to anti-coagulant and supportive therapy. The other case died suddenly at home eighteen days after Cæsarian Section which was performed because of toxæmia of pregnancy. She had been discharged from hospital on the previous day.

There was one death as a result of *Cl. welchii* infection. The patient was sent to hospital by her general practitioner at the 32nd week because of ante partum hæmorrhage. She went into labour three weeks later and jaundice was noted soon after delivery. *Cl. welchii* infection was confirmed bacteriologically but the mode of entry of the organism was not found. Despite treatment deterioration set in with death on the seventh day of the puerperium.

One case, where the cause of death was peritonitis, was booked for hospital delivery early in pregnancy. Diabetes was diagnosed at the 34th week. Labour was induced at the 36th week and Cæsarian Section was performed because of maternal and foetal distress. The operation was complicated by paralytic ileus and fatal peritonitis.

Obstetric shock was responsible for two deaths. Both occurred in hospital following forceps delivery. In one case hospital delivery was arranged at the 34th week because of disproportion. Spontaneous delivery began at the 39th week necessitating forceps delivery and repair of perineum under anæsthesia. The patient died from shock before she had completely recovered from the anæsthetic. The post mortem report revealed evidence of toxæmia in liver, spleen and kidneys. The



second case had forceps delivery because of foetal distress. She became shocked after the third stage and did not respond to resuscitative measures. Post mortem examination showed air embolism in the right ventricle.

Of the three deaths from toxæmia, two were hospital emergencies with accidental hæmorrhage. One was sent to hospital at the 29th week by the general practitioner who had hitherto undertaken the antenatal care. She was delivered of a macerated stillborn baby on the same day and died within 24 hours. The second case returned to Birmingham after a stay of some months in another area, and was first seen by the general practitioner at 30 weeks. Her blood pressure was normal but the urine examination was omitted. She was asked to return for re-examination in 14 days. In the meantime, she was admitted to hospital with pre-eclamptic toxæmia, œdema and shock. She died on the day of admission following the delivery of a macerated foetus. The third case was booked for hospital confinement because of her previous history and also attended her private doctor. She was admitted to hospital for rest and observation at 32 weeks but took her own discharge against advice after five days. She had two eclamptic fits soon after re-admission 19 days later. Labour was normal but the patient collapsed and died after the third stage. Post mortem examination revealed gross kidney damage.

There was one death due to asphyxia. This resulted from the aspiration of gastric contents while under general anæsthesia for surgical delivery of the child. The administration of the anæsthetic was a factor in the death.

## **B. Deaths due to Associated Conditions**

There were seven deaths due to associated conditions. Heart disease was responsible for six deaths. Stenosis of the mitral valve was present in five instances and the sixth case died from the toxic effect of an underlying bronchiectasis on a weak cardiac musculature. The antenatal care was entirely satisfactory and adequate in three of these cases. One—a primigravida—showed no evidence of cardiac insufficiency at any time during the antenatal period. She collapsed and went into acute heart failure after the third stage of a normal labour. Another developed acute cardiac failure during the administration of a general anæsthetic for the evacuation of the uterus which was carried out 18 days after the delivery. The third case attended hospital and the local authority's antenatal clinic regularly. She collapsed suddenly and died undelivered almost at term.

In three cases, antenatal care was not entirely satisfactory because of the lack of co-operation of the patient. One, who had been advised against further pregnancies after her second confinement, refused hospital



in-patient treatment two weeks before her death. A patient seen by a cardiologist at 12 weeks of pregnancy was considered to be a reasonably good risk. She was admitted to hospital for observation at 28 weeks but took her own discharge against medical advice after 3 days. She died two days later in the ambulance on the way to hospital. Another case attended a hospital because of right ventricular failure due to mitral stenosis. Termination of pregnancy was refused and the patient left hospital against medical advice. She was re-admitted following the abortion of a five months' foetus and died from heart failure some hours later.

Death occurred as a result of cerebral hæmorrhage in one case. This was due to hypertension and chronic nephritis. The patient died in a medical ward at 33 weeks pregnant.

#### MATERNAL MORTALITY RATE

<i>Rate per 1,000 live and stillbirths (excluding abortions)</i>				<i>Rate per 1,000 live and stillbirths (excluding abortions)</i>			
	<i>Birmingham</i>	<i>England and Wales</i>			<i>Birmingham</i>	<i>England and Wales</i>	
1946	...	0.64	1.24	1950	...	0.73	0.72
1947	...	0.73	1.01	1951	...	0.64	0.65
1948	...	0.50	0.86	1952	...	0.59	0.59
1949	...	0.39	0.82	1953	...	0.58	0.65

A. Deaths due to pregnancy and childbirth ... 11

1. Not associated with a notifiable birth ... 1  
(Cerebral hæmorrhage—acute yellow atrophy of the liver)

2. Associated with a notifiable birth ... 10

Pulmonary embolism	...	...	2
Sepsis (Cl. welchii infection)	...	...	1
Peritonitis	...	...	1
Obstetric shock	...	...	2
Toxaemia	...	...	3
Asphyxia (collapse under anaesthesia)	...	...	1

B. Deaths due to associated conditions ... 7

1. Not associated with a notifiable birth ... 5

Heart disease	...	...	4
Cerebral hæmorrhage	...	...	1

2. Associated with a notifiable birth ... 2

Heart disease	...	...	2
---------------	-----	-----	---



Responsibility for antenatal care				Amount of antenatal care			Place of Death		
				None	Inade- quate	Ade- quate	Home	Booked	Emer- gency
Hospital	...	...	...	—	—	3	*1	2	—
Hospital and General Practitioner	...	...	...	—	—	4	—	4	—
Hospital, General Practi- tioner and Midwife	...	...	...	—	—	1	—	1	—
General Practitioner and Midwife	...	...	...	—	—	1	—	—	1
General Practitioner	...	...	...	—	1	—	—	—	1
Clinic	...	...	...	—	—	—	—	—	—
No-one responsible	...	...	...	1	—	—	1	—	—
TOTAL	...	...	...	1	1	9	2	7	2

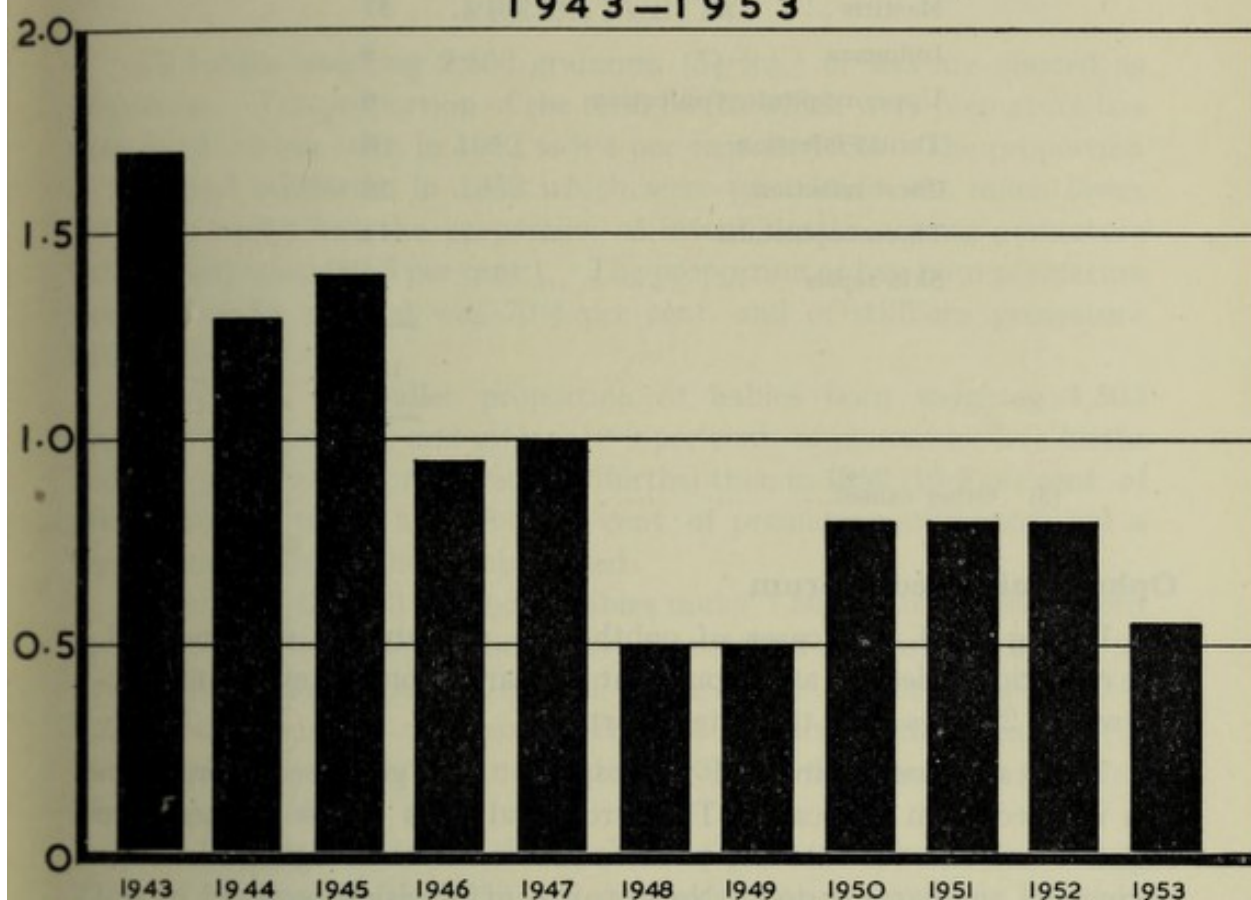
\* Patient died at home 24 hours after discharge from hospital.

A comparison of the maternal death rate figures in the principal groups with those of previous years is shown hereunder :—

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

Year	Abortion	Sepsis	Toxaemia	Haem- orrhage	Other puer- peral causes	Total due to puer- peral causes	Maternal deaths due to " associated conditions "
1944	0.39	0.30	0.26	0.13	0.26	1.34	0.69
1945	0.29	0.29	0.49	0.05	0.29	1.41	0.44
1946	0.17	0.04	0.30	0.13	0.21	0.85	0.47
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

# MATERNAL DEATH RATE PER 1,000 LIVE AND STILLBIRTHS INCLUDING ABORTIONS 1943-1953



## Puerperal Pyrexia and Puerperal Sepsis

There has been a decrease in the number of notifications during 1953 compared with 1952.

Out of City residents confined in City	...	...	...	...	41
Cancellation of notification	...	...	...	...	44
Birmingham City cases	...	...	...	...	281

1. Due to infection of genital tract ... 68

Uterine infection	...	...	...	63
Subinvolution	...	...	...	2
Septic abortion	...	...	...	—
Retained products	...	...	...	1
Perineal infection	...	...	...	2
Puerperal sepsis	...	...	...	—
Septicaemia	...	...	...	—
				68



(2). Due to extra-genital infection	...	...	...	...	166
-------------------------------------	-----	-----	-----	-----	-----

Urinary infection	...	...	...	55
Mastitis ...	...	...	...	57
Influenza	...	...	...	8
Upper respiratory infection	...	...	6	
Throat infection	...	...	6	
Chest infection	...	...	18	
Thrombophlebitis	...	...	14	
Skin sepsis	...	...	2	

---

166

---

(3) Other causes...	...	...	...	...	...	47
---------------------	-----	-----	-----	-----	-----	----

### Ophthalmia Neonatorum

During 1953, 621 cases of ophthalmia neonatorum were notified. The condition is defined as "a purulent discharge from the eyes commencing within 21 days from the date of birth."

Two cases were admitted to hospital. The gonococcus organism was isolated from one case. The serological tests of the mother were negative and she was said not to have suffered from a vaginal discharge during the antenatal period. No impairment of vision occurred in any case notified to the Department.

### Pemphigus Neonatorum

No. of cases occurring on District during 1953	...	...	...	1
--	-----	-----	-----	---

No. of cases admitted to hospital	...	...	...	—
-----------------------------------	-----	-----	-----	---

Nursed at home :

(a) by district nurse	...	...	...	1
-----------------------	-----	-----	-----	---

(b) by relative	...	...	...	—
-----------------	-----	-----	-----	---

No. of cases occurring in Institutions during 1953...	...	...	—
---	-----	-----	---

## PREMATURITY

All babies weighing 2,500 grammes ( $5\frac{1}{2}$  lbs.) or less are classed as premature. The proportion of the total births which were premature has risen from 7.9 per cent. in 1952 to 8.4 per cent. in 1953. The proportion of the total stillbirths in 1953 which were premature was much lower (52.0 per cent.) but the proportion of infant deaths among premature babies was higher (50.5 per cent.). The proportion of live born premature babies born in hospital was 70.4 per cent. and of stillborn premature babies 78.7 per cent.

There was a smaller proportion of babies born weighing 1,500 grammes (3 lbs. 4 ozs.) and under (10.0 per cent. of premature live births and 43.1 per cent. of premature stillbirths) than in 1952 (10.5 per cent. of premature live births and 48.0 per cent. of premature stillbirths) but a higher proportion of these babies died.

Twenty of the 133 live born babies under 1,500 grammes were born at home. All but one of these were transferred to hospital within 24 hours. A higher proportion also of babies in the weight group 2,000—2,250 grammes died. Approximately one quarter of these babies (73 babies) were born at home and of these, 43 were transferred to hospital. (Table, page 115).

Although the perinatal death rate for premature babies rose from 277.2 in 1952 to 284.6 in 1953, yet the rise was proportionately less than that for babies over 2,500 grammes, which was 18.6 for 1953 compared with 16.6 in 1952. In rather more than one-third of these deaths of prematures the primary factors leading to death were unknown factors and foetal deformity and prematurity only, about which little is known at the present time. Another third of the deaths were associated with toxæmia and separation of the placenta. (Table, page 122).

The death rate under 4 weeks of live born premature babies born at home, wherever treated, was 115.0 per 1,000 compared with 90.4 in 1952. (Table, page 115).

Of the 150 deaths between 4 weeks and one year, 22 were prematurely born—a smaller proportion than in 1952. The chief causes of death were infections and foetal deformities. (Table, page 100).

### Domiciliary Care of the Premature Infant

During 1953, 9 specially trained midwives worked in the City. They looked after a total of 767 infants, as follows:—

Home confinement and baby after-care at home ...	...	180
Home confinement and baby admitted to hospital later ...	...	32
Hospital confinement—baby nursed at home later ...	...	555
(512— $5\frac{1}{2}$ lbs. or under on discharge from hospital)		
(43 over $5\frac{1}{2}$ lbs. on discharge from hospital)		



Among the 212 babies born at home and attended by the specially trained midwives, there were 9 sets of twins. The following is the weight distribution of these premature babies :—

<i>Birth weight</i>									<i>Number</i>
3½—4 lbs.	...	...	...	...	...	...	...	...	2
4—5 lbs.	...	...	...	...	...	...	...	...	97
5—5½ lbs.	...	...	...	...	...	...	...	...	113
									<u>212</u>

Of these 212 premature babies, 180 were born and nursed at home by the premature baby midwives. There was 1 neonatal death among them, a death rate of 5·5 per 1,000. The remaining 32 premature babies were removed to hospital. Of these, 8 died in hospital, a death rate of 250·0 per 1,000. This was similar to the death rate (250·2) among those babies removed to hospital before they had received specialised nursing care. Of the 24 babies who survived, 5 were again nursed by the specially trained midwives after discharge. These 32 babies were admitted to hospital for the following reasons :—

<i>Birth weight</i>	<i>Age on admission to hospital</i>	<i>Cause</i>	<i>Result</i>
3 lbs. 14½ ozs.	1st 24 hours	Poor condition	Recovered
4 lbs. 0 ozs.	Over 24 hours	Poor condition	Recovered
4 lbs. 0 ozs.	1st 24 hours	Poor condition	Recovered
4 lbs. 2 ozs.	Over 24 hours	Meningitis	Died
4 lbs. 2 ozs.	Over 24 hours	Poor condition	Recovered
4 lbs. 5 ozs.	Over 24 hours	Poor condition	Recovered
4 lbs. 5 ozs.	1st 24 hours	Poor condition	Recovered
4 lbs. 6 ozs.	Over 24 hours	Atelectasis	Died
4 lbs. 6½ ozs.	1st 24 hours	Poor condition	Recovered
4 lbs. 7 ozs.	Over 24 hours	Pyloric stenosis	Recovered
4 lbs. 7 ozs.	1st 24 hours	Poor condition	Recovered
4 lbs. 8 ozs.	Over 24 hours	Asphyxia	Died
4 lbs. 8 ozs.	Over 24 hours	Poor condition	Died
4 lbs. 9 ozs.	1st 24 hours	Poor condition	Recovered
4 lbs. 10 ozs.	Over 24 hours	Poor condition	Recovered
4 lbs. 10½ ozs.	Over 24 hours	Cyanotic attacks	Died
4 lbs. 11½ ozs.	Over 24 hours	? Pemphigus	Recovered
4 lbs. 12 ozs.	Over 24 hours	Poor condition	Recovered
4 lbs. 12 ozs.	Over 24 hours	{ Operation for obstruction. Cerebral haemorrhage	Died
4 lbs. 13½ ozs.	Over 24 hours		Recovered
4 lbs. 15¾ ozs.	Over 24 hours	Poor condition	Recovered
5 lbs. 0 ozs.	Over 24 hours	Jaundice (severe)	Recovered
5 lbs. 2 ozs.	Over 24 hours	Oedema	Recovered
5 lbs. 2 ozs.	Over 24 hours	Poor condition	Recovered
5 lbs. 2¼ ozs.	Over 24 hours	Poor condition	Recovered
5 lbs. 3¾ ozs.	Over 24 hours	Poor condition	Recovered
5 lbs. 5 ozs.	1st 24 hours	Cyanotic attacks	Recovered
5 lbs. 5 ozs.	Over 24 hours	Gastro enteritis	Died
5 lbs. 7 ozs.	1st 24 hours	Poor condition	Recovered
5 lbs. 7½ ozs.	Over 24 hours	Poor condition	Recovered
Not weighed	1st 24 hours	Poor condition	Recovered
Not weighed	1st 24 hours	Poor condition	Died

The following table supplied by Dr. Crosse, shows the history of 1,224 premature babies born in 1952 :—

FOLLOW-UP TO 1 YEAR—1,224 PREMATURE BABIES BORN IN 1952

<i>Birth weight Group</i>	<i>Up to 2 lbs. 3 ozs.</i>	<i>Over 2 lbs. 3 ozs. up to 3 lbs. 4 ozs.</i>	<i>Over 3 lbs. 4 ozs. up to 4 lbs. 6 ozs.</i>	<i>Over 4 lbs. 6 ozs. up to 4 lbs. 15 ozs.</i>	<i>Over 4 lbs. 15 ozs. up to 5 lbs. 8 ozs.</i>
Original number in each group	54	74	218	293	585
Neonatal deaths	50	40	56	19	24
Alive at 4 weeks	4	34	162	274	561
Died after 4 weeks and before 1 yr.	—	4	6	2	10
Left City or untraced	1	2	10	28	49
Followed to age of 1 yr.	3	28	146	244	502
Abnormalities found at 1 year	1 (33·3%)	7 (25·0%)	14 (9·6%)	14 (5·7%)	19 (3·8%)
	Inguinal hernia	Inguinal hernia 1 Squint 1 Cataract 1 Retrolental fibroplasia 3 Corneal defect 1	Hydrocephalic 2 Congenital heart 1 Squint 2 Cataract 2 Short leg 1 Achondroplasia 1 Talipes 1 Facial palsy 1 Spastic arm 1 Spastic and mentally deficient 1 Mentally deficient 1	Inguinal hernia 7 Talipes 2 Squint 2 Deaf 1 Mongol 1 Mentally deficient 1	Inguinal hernia 5 Cleft Lip and palate 4 Short limb 2 Congenital heart 1 Squint 1 Ptosis eyelid 1 Microcephalic 1 Mongol 3 Mentally deficient 1



PERCENTAGE INCIDENCE OF PREMATURE BIRTHS AMONG :

	1948	1949	1950	1951	1952	1953
Total births ...	7.6	8.2	9.0	8.2	7.9	8.4
Stillbirths ...	47.0	45.6	51.8	51.0	57.1	52.0
Live births ...	6.7	7.3	8.0	7.2	6.9	7.4
Neonatal deaths ...	59.6	60.9	59.5	61.6	61.8	66.6
Deaths (4 weeks—						
1 year) ...	21.2	16.7	20.6	19.2	17.9	14.7
Total infant mortality...	42.9	42.2	45.5	46.6	46.7	50.5

WEIGHT DISTRIBUTION AMONG PREMATURE BIRTHS

Weight Class	Live births		Stillbirths	
	No.	%	No.	%
1,000 grammes or less ...	53	3.2	31	13.5
1,000 grammes—1,500 grammes	83	6.2	68	29.6
1,500 grammes—2,000 grammes	276	20.4	61	26.5
2,000 grammes—2,250 grammes	278	20.6	27	11.7
2,250 grammes—2,500 grammes	661	48.9	39	17.0
Unknown weight, but under				
2,500 grammes ...	—	—	4	1.7
	1,351	100.0	230	100.0

NEONATAL DEATHS (PER CENT.) IN VARIOUS BIRTH WEIGHT GROUPS

Birth Weight	1952		1953	
	1,224 babies		1,351 babies	
Up to 1,000 grammes ...	...	92.6	...	94.3
1,000 grammes—1,500 grammes	...	54.1	...	68.7
1,500 grammes—2,000 grammes	...	25.7	...	22.5
2,000 grammes—2,250 grammes	...	6.5	...	9.7
2,250 grammes—2,500 grammes	...	4.1	...	3.6
All weights to 2,500 grammes ...	...	15.4	...	16.3

AGE AT DEATH OF PREMATURE BABIES AND OF BABIES OVER 2,500 GRAMMES (5½ lbs.)

Age at death	Premature Babies		Babies over 5½ lbs.	
	per cent. of deaths	per cent. of live births	per cent. of deaths	per cent. of live births
Less than 24 hours ...	50.0	8.1	30.3	0.19
24 hours, less than 48 hours ...	14.5	2.4	10.1	0.06
48 hours, less than 1 week ...	25.5	4.1	30.3	0.19
1 week, less than 2 weeks ...	5.0	0.8	15.6	0.10
2 weeks, less than 3 weeks ...	4.5	0.7	5.5	0.04
3 weeks, less than 4 weeks ...	0.5	0.1	7.3	0.05
1 Unknown ...	—	—	0.9	0.01
All ages to 4 weeks ...	100.0	16.2	100.0...	0.64

PERINATAL MORTALITY RATE OF PREMATURE BABIES AND BABIES OVER 2,500 GRAMMES (5½ lbs.)

(See Table, page 122)

DEATH RATE OVER 4 WEEKS AND UNDER 1 YEAR

(See Table, page 100).

# PREMATURE BIRTHS BY PLACE OF CARE, BIRTH WEIGHT AND SURVIVAL

	1,000 grammes or less (2 lbs. 3 ozs.)			1,000 grammes— 1,500 grammes (3 lbs. 4 ozs.)			1,500 grammes— 2,000 grammes (4 lbs. 6 ozs.)			2,000 grammes— 2,500 grammes (4 lbs. 15 ozs.)			2,500 grammes— 2,500 grammes (5 lbs. 8 ozs.)			Total 2,500 grammes or less (5 lbs. 8 ozs.)			
	Live Births	Neonatal Deaths	Neonatal Mortality Rate per 100 live births	Live Births	Neonatal Deaths	Neonatal Mortality Rate per 100 live births	Live Births	Neonatal Deaths	Neonatal Mortality Rate per 100 live births	Live Births	Neonatal Deaths	Neonatal Mortality Rate per 100 live births	Live Births	Neonatal Deaths	Neonatal Mortality Rate per 100 live births	Live Births	Neonatal Deaths	Neonatal Mortality Rate per 100 live births	
(1) Born and nursed at home	1	1	100.0	—	—	—	8	4	50.0	30	—	—	196	2	1.0	235	7	3.0	—
(2) Born and nursed at home and transferred to hospital in 1st 24 hours ...	6	5	83.3	14	9	64.3	58	13	22.4	30	5	16.7	13	—	2.3	121	32	26.4	11.5
(3) Born and nursed at home and transferred to hospital after 24 hours ...	—	—	—	—	—	—	1	—	—	13	2	15.4	12	3	25.0	26	5	19.2	—
(4) Born and nursed in one hospital ...	44	42	95.5	62	44	71.0	191	42	22.0	199	20	10.1	436	19	4.4	932	167	17.9	18.3
(5) Born in one hospital and transferred to another for nursing ...	2	2	100.0	7	4	57.1	18	3	16.7	3	—	—	—	—	—	30	9	30.0	—
(6) Born and nursed in Nurs- ing Home ...	—	—	—	—	—	—	—	—	—	3	—	—	4	—	—	7	—	—	—
ALL CASES ...	53	50	94.3	83	57	68.7	276	62	22.5	278	27	9.7	661	24	3.6	1351	220	16.3	—



## THE MATERNITY SERVICES

The trend towards hospital confinement has continued. Hospitals were responsible for the antenatal care of 50·8 per cent. of the women delivered compared with 48·0 per cent. in 1952. General practitioners were responsible for the antenatal care of 35·4 per cent. of the women (34·6 per cent. in 1952). The proportion of patients for which the midwife and centre were solely responsible declined still further from 16·3 per cent. in 1952 to 13·1 per cent. in 1953. (Table, page 122). There was a further fall in the proportion of women admitted as hospital emergencies from 6 per cent. to 4 per cent.

In June, another meeting was held at the Maternity Hospital, Loveday Street, to which all consultant obstetricians were invited. An interesting and useful discussion took place on all aspects of the maternity services, including the domiciliary services.

In 1953, 5,130 applications for admission to hospital for social reasons were made to the bed bureau, of which 4,083 were granted. The number of women discharged from hospital before the tenth day was 2,778, a decrease of 302 compared with 1952.

There were 405 general practitioners on the list of general practitioner obstetricians. This is two less than in 1952. Two hundred and seventy-three general practitioners, 211 of whom were general practitioner obstetricians, received medical aid calls on behalf of the mother from midwives who were solely responsible for the antenatal and postnatal care of their patients. In cases where the general practitioners were responsible for the antenatal care of their patients, 209 practitioners, of whom 183 were general practitioner obstetricians, received calls from the midwives on behalf of the mother.

<i>No. of calls received</i>	<i>No. of practitioners who received</i>	
	<i>Midwives' calls</i>	<i>Maternity Service calls</i>
21—30 ... ..	1	—
11—20 ... ..	10	3
10 and under ... ..	262	206
	<hr/>	<hr/>
Total number of practitioners ...	273	209
	<hr/>	<hr/>



A number of general practitioners held special sessions for the antenatal examination of their patients as follows :—

<i>Where held</i>					<i>No. of sessions</i>
Maternity and Child Welfare Centre	...	...	...	...	19
Practitioner's surgery—with midwife and health visitor	...				9
—with midwife only	...	...	...	...	42
—with health visitor only	...	...	...	...	5
—without midwife or health visitor	...				49
TOTAL	...	...	...	...	124

This is a substantial increase on the number in 1952.

The Emergency Maternity Service is a special service, popularly known as the "flying squad" which is available to patients in their own homes for the urgent treatment of obstetric shock and haemorrhage. The service is operated by a team consisting of a consultant obstetrician and/or resident doctor and nurse who are members of the staff of the Birmingham Maternity Hospital. They are transported by ambulance and carry special blood transfusion apparatus and other equipment. In cases of great urgency the midwife may call the emergency service but requests, as a rule, come from the patient's private practitioner.

There was an increased demand for the service within the City last year, the number of calls being 109 compared with 73 in 1952. The number of calls to patients outside the City was 30 compared with 39 in 1952, making a total of 139 compared with 112 the previous year.

The reasons for being summoned to the 109 Birmingham cases are classified below. Ten of these cases were transferred to hospital and blood transfusion was given at home in 78 instances.

	1951	1952	1953
Post partum haemorrhage and retained placenta	49	34	44
Post partum haemorrhage and placenta delivered	35	25	34
Antepartum haemorrhage ... ..	1	4	5
Eclampsia ... ..	2	1	1
Retained placenta ... ..	3	4	11
Obstetric shock ... ..	1	—	3
Haemorrhage and abortion ... ..	7	1	7
Perineal tear ... ..	—	1	1
Other causes ... ..	1	3	3
	99	73	109

The standard of antenatal care has been well maintained—86·5 per cent. of the women delivered having had at least 6 antenatal consultations with medical practitioner or midwife. (Table, page 123). The influence of frequent consultation on the chances of survival of the infant is strikingly brought out in the table on page 123.



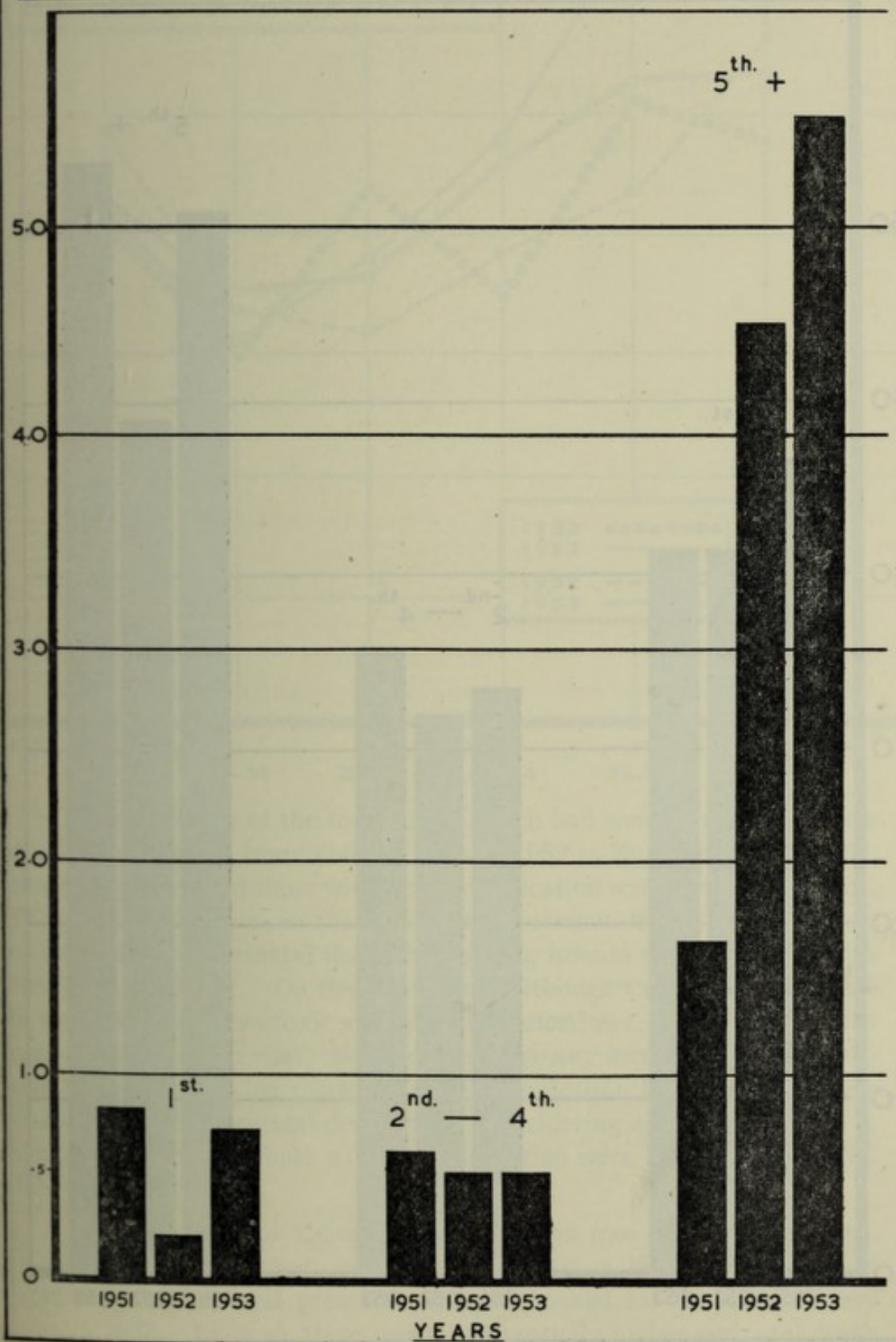
For the first time it has been possible to analyse our records in sufficient detail to ascertain the number of women confined who had a normal pregnancy and delivery. Detailed analysis of the figures is still proceeding but it is of interest to know that in 1953 fifty-six per cent. of women bearing a single child were delivered of a mature baby after a pregnancy which had no complication, a labour which was spontaneous in onset, and a spontaneous delivery, and where the child presented as a normal vertex (L.O.A. or R.O.A.).

Although childbirth is a natural process, in certain circumstances there are hazards attached to it. Over the years these hazards have been greatly diminished as the graph on page 109 shows. Women having their first child are usually anxious and willing to have adequate antenatal care, and often wish to have their baby in hospital. In 1953, 79.9 per cent. of the women having their first baby were booked for hospital delivery. Women having their fifth or more child, however, preoccupied with their household cares, tend to pay less attention to themselves, yet the hazards they and their infants run are greater than those experienced by women having their first baby. In 1953, only 33.8 per cent. of the women in this group were booked for delivery in hospital, yet their maternal death rate over the past three years has been eight times higher than in the group of women having their first child and the perinatal death rate among their infants was higher by 35 per cent. The risks run by women having their second, third and fourth child are less than for women having their first or fifth or more child. This is shown in the chart on page 119. Women having their fifth or more child therefore should be given the highest priority for admission to hospital and should receive every assistance by way of home helps, etc., to encourage them to accept a hospital bed.

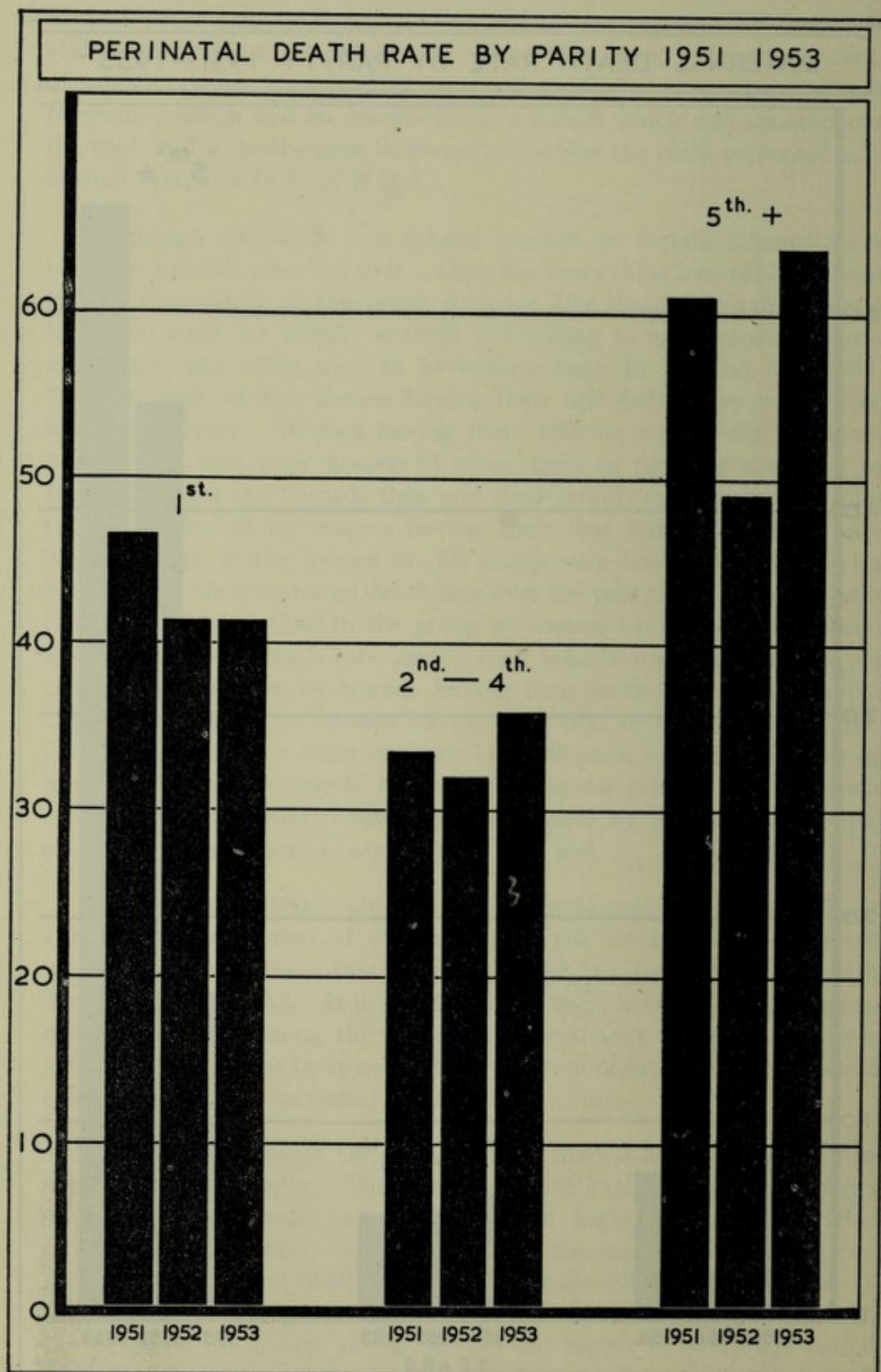
The perinatal death rate among all infants rose in 1953 by 4.3 per 1,000. The proportion of women among the total number delivered who were having their first child was 37.9 per cent. compared with 36.3 per cent. in 1952. It is satisfactory to note, however, that the perinatal death rate among the first born showed very little increase over 1952 although by the increase in the proportion of first born they made a contribution to the increased perinatal death rate.

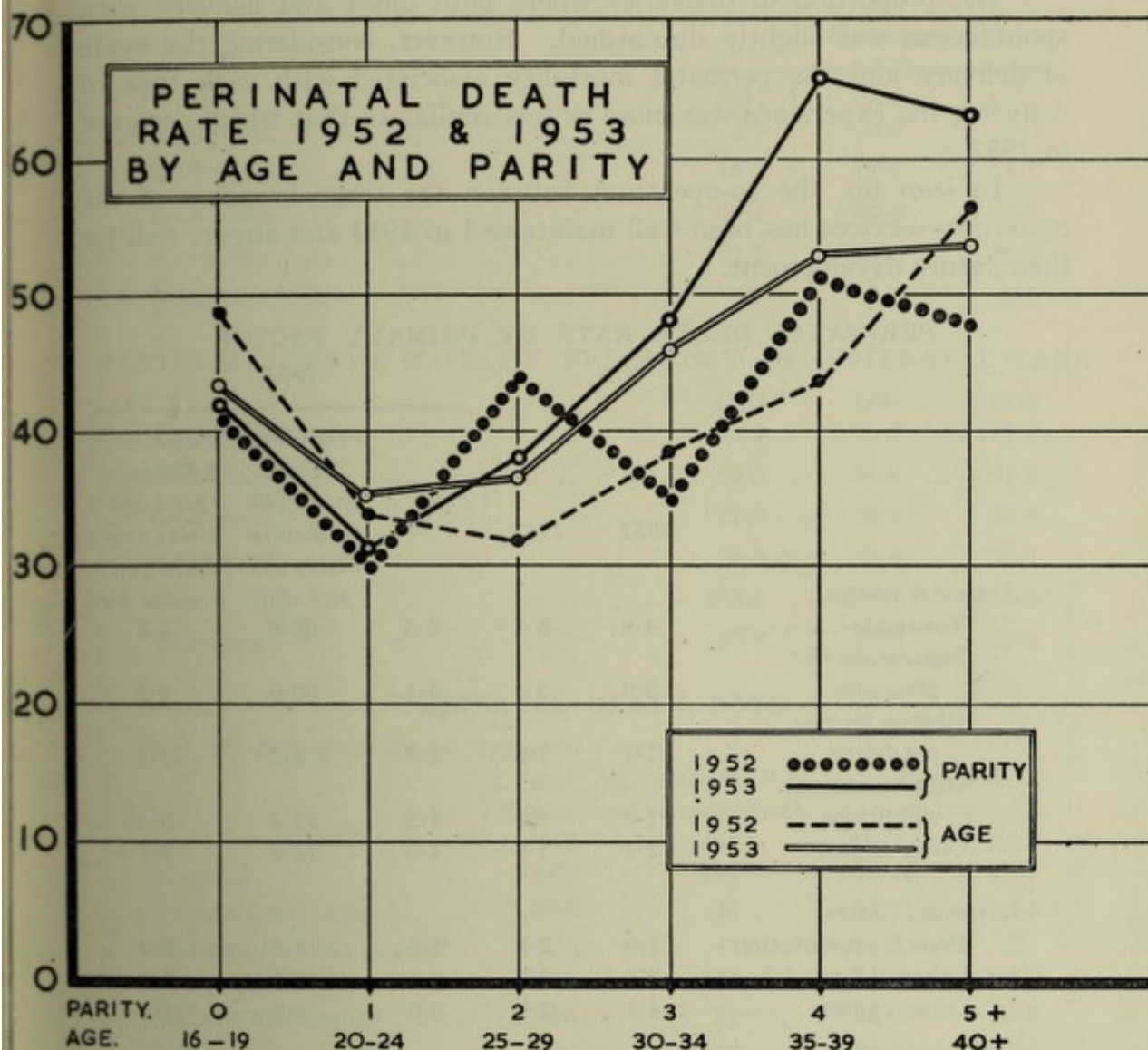
On the other hand, the proportion of women having their fifth or more child fell slightly. The perinatal death rate among their infants showed a sharp increase and was 50 per cent. higher than among women having their first child. This increase was the main reason for the rise in the total perinatal death rate. (Chart, page 120). When the age of the mother is considered in comparison with the experience in 1952, the perinatal death rate among infants was higher at every age period after 20 years of age. (Chart, page 121).

MATERNAL DEATH RATE BY PARITY 1951-1953









The proportion of the total births which had some antenatal disease or complication fell from 30.6 per cent. in 1952 to 28.6 per cent. in 1953. Nineteen per cent. of those with some complication were confined at home. There was an increase in the incidence of toxæmia but it is satisfactory to note that the perinatal death rate among infants associated with this condition was lower. On the other hand, although there was no increase in the incidence of nontoxic antepartum hæmorrhage, the perinatal death rate showed a sharp rise. Neither was there any increase in the proportion of patients having more than one complication but here, too, there was a rise in the perinatal death rate. Considering antenatal diseases or complications as a whole a higher proportion were booked for hospital delivery than in 1952.

The proportion of abnormal presentations rose from 9.0 per cent. in 1952 to 13.2 per cent. in 1953. Here, too, a higher proportion of women with abnormal presentation were booked for hospital delivery than in 1952. Even so, there was a substantially higher perinatal death rate associated with occipito posterior and transverse lie.



The proportion of deliveries where both onset and delivery were spontaneous was slightly diminished. However, considering the mode of delivery and the perinatal mortality associated with each type of delivery, the experience was more or less similar to that which occurred in 1952.

To sum up, the co-operation between the three branches of the maternity services has been well maintained in 1953 and augurs well for their future development.

#### PERINATAL DEATH RATE BY PRIMARY FACTOR

					1953	
					Premature Babies (per 1,000 premature births live and still)	Babies over 2,500 gms. (per 1,000 births over 2,500 gms. live and still)
					Total	
					1951	1952
<i>Antenatal causes</i>						
Toxaemia ...	...	...	...	...	4.9	5.5
Separation of placenta ...	...	...	...	...	3.9	3.1
Rhesus incompatibility ...	...	...	...	...	1.1	1.5
Other maternal conditions ...	...	...	...	...	1.6	1.1
Other causes ...	...	...	...	...	2.1	1.5
<i>Intranatal causes</i>						
Breech presentation					1.9	2.1
Other difficult labour					3.5	2.3
Other causes ...	...	...	...	...	4.1	2.9
<i>Postnatal causes</i>						
Infection only ...	...	...	...	...	2.0	1.6
Other ...	...	...	...	...	0.9	0.5
<i>Foetal deformity</i> ...	...	...	...	...	6.4	7.9
<i>Prematurity only</i> ...	...	...	...	...	3.1	2.7
<i>Unknown causes</i> ...	...	...	...	...	5.4	4.1
<i>All causes</i> ...	...	...	...	...	40.9	36.8

#### RESPONSIBILITY FOR ANTENATAL CARE

					Percentage		
					1951	1952	1953
Hospital ...	...	...	...	...	44.2	48.0	50.8
Private doctor ...	...	...	...	...	2.9	3.0	3.5
Maternity service general practitioner ...	...	...	...	...	31.6	31.6	31.9
Midwife and centre ...	...	...	...	...	20.4	16.3	13.1
None or unknown ...	...	...	...	...	0.8	1.1	0.7

# FREQUENCY OF KNOWN ANTENATAL CARE

						Percentage		
						1951	1952	1953
1—2 visits	...	...	...	...	...	3.5	3.0	1.9
3—5 visits	...	...	...	...	...	14.2	13.8	11.1
6—8 visits	...	...	...	...	...	30.1	32.0	30.3
9 and over	...	...	...	...	...	51.7	50.6	56.2
None	...	...	...	...	...	0.5	0.6	0.5

## PERINATAL DEATH RATE BY FREQUENCY OF ANTENATAL CARE

						1951	1952	1953
1—2 visits	...	...	...	...	...	98.0	89.2	174.2
3—5 visits	...	...	...	...	...	56.6	81.9	91.5
6—8 visits	...	...	...	...	...	31.9	28.5	34.6
9 and over	...	...	...	...	...	28.4	28.8	33.2
None	...	...	...	...	...	315.1	241.4	200.0
Unknown	...	...	...	...	...	60.9	29.4	29.8

## PERINATAL DEATH RATE

### (a) By Responsibility for Antenatal Care

						Total No. of stillbirths Births and neonatal deaths	Perinatal death rate
						1953	1952
Hospital	...	...	...	...	...	9,569	46.4
Private practitioner	...	...	...	...	...	658	53.2
Maternity service general practitioner	...	...	...	...	...	5,963	34.2
Midwife and Centre	...	...	...	...	...	2,450	29.0
None	...	...	...	...	...	80	200.0
Unknown	...	...	...	...	...	135	14.8

### (b) By Parity of Mother

						Perinatal Death Rate	
						1953	1952
Primigravidae	...	...	...	...	...	41.4	41.3
Parities 2, 3 and 4	...	...	...	...	...	35.7	32.1
Multigravidae 5 and over	...	...	...	...	...	64.9	48.9

### (c) By Age of Mother

						Perinatal Death Rate	
						1953	1952
16—19 years	...	...	...	...	...	42.8	49.1
20—24 years	...	...	...	...	...	34.7	34.2
25—29 years	...	...	...	...	...	36.1	32.2
30—34 years	...	...	...	...	...	45.4	38.5
35—39 years	...	...	...	...	...	52.4	43.9
40+	...	...	...	...	...	63.2	57.3



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

				1952		1953	
				<i>Incidence per cent.</i>	<i>Perinatal Death rate</i>	<i>Incidence per cent.</i>	<i>Perinatal Death rate</i>
<i>Antenatal</i>							
Toxaemia	...	...	...	7.1	84.0	8.0	77.8
W.R. +	...	...	...	0.2	179.5	0.1	47.6
Rubella	...	...	...	0.01	—	0.04	142.9
Nontoxic antepartum haemorrhage				1.5	230.8	1.6	299.7
Pyelitis	...	...	...	0.7	31.7	0.6	27.0
Anaemia	...	...	...	2.8	15.7	2.6	30.9
Varicose veins	...	...	...	4.2	18.4	3.8	27.7
Other disease or complication				8.3	66.8	7.7	64.2
Combination of above	...			4.5	63.3	4.2	113.6
No antenatal disease or complication	...	...	...	65.3	26.1	67.6	26.2
Unknown	...	...	...	5.4	11.3	3.7	7.2
<i>Presentation</i>							
Normal vertex (L.O.A. and R.O.A.)				85.3	27.1	86.8	30.3
Occipito posterior	...	...		4.4	37.7	4.8	50.7
Brow	...	...	...	0.1	444.4	0.1	263.2
Face	...	...	...	0.3	355.9	0.3	295.1
Breech	...	...	...	3.1	242.0	3.0	244.2
Transverse	...	...	...	0.2	250.0	0.3	352.9
Other	...	...	...	0.3	70.2	0.2	166.7
Unknown	...	...	...	6.2	40.4	4.5	40.9
<i>Type of Labour</i>							
Spontaneous onset, spontaneous delivery	...	...	...	82.3	30.4	82.6	34.2
Spontaneous onset, instrumental delivery	...			2.9	62.3	3.4	67.5
Medical induction, spontaneous delivery	...			2.4	61.8	2.5	44.4
Medical induction, instrumental delivery	...			0.3	159.1	0.2	133.3
Surgical induction, spontaneous delivery	...			4.0	97.5	4.1	106.4
Surgical induction, instrumental delivery	...			0.4	74.1	0.4	189.9
Medical and surgical induction, spontaneous delivery	...			0.9	113.1	1.4	56.8
Medical and surgical induction, instrumental delivery	...			0.1	187.5	0.2	135.1
Caesarean section	...	...		2.3	90.9	2.1	81.4
Other	...	...	...	0.3	296.3	0.4	281.7
Unknown	...	...	...	4.0	2.7	2.8	3.8

# ABNORMALITY IN PREGNANCY OR LABOUR BY PLACE OF CONFINEMENT

					<i>Percentage Distribution of Confinements</i>			
					<i>Domiciliary</i>	<i>Hospital booked</i>	<i>Hospital emergency</i>	<i>Nursing Home</i>
<i>Antenatal</i>								
Toxaemia	...	1952	...	11.2	78.8	9.8	0.2	
		1953	...	10.2	82.2	7.5	0.1	
W.R. +	...	1952	...	25.7	71.4	2.9	—	
		1953	...	23.8	76.2	—	—	
Rubella ...	...	1952	...	—	50.0	50.0	—	
		1953	...	14.3	71.4	14.3	—	
Non toxic ante- partum haemorrhage		1952	...	14.5	55.4	29.7	0.4	
		1953	...	13.6	56.6	29.8	—	
Pyelitis ...	...	1952	...	22.4	72.0	5.6	—	
		1953	...	20.0	76.4	3.6	—	
Anaemia	...	1952	...	25.0	72.8	1.6	0.6	
		1953	...	24.1	73.2	2.5	0.2	
Varicose veins ...	...	1952	...	62.0	35.7	2.0	0.3	
		1953	...	53.3	43.6	2.9	0.2	
Other conditions		1952	...	16.4	79.6	3.7	0.3	
		1953	...	15.8	80.0	4.0	0.2	
Combination of above	...	1952	...	11.9	84.6	3.5	—	
		1953	...	11.4	82.2	6.4	—	
No antenatal disease or complication		1952	...	45.7	51.9	1.9	0.5	
		1953	...	43.0	54.3	2.3	0.4	
<i>Presentation</i>								
Normal vertex		1952	...	40.0	56.9	2.9	0.2	
(L.O.A. and R.O.A.)		1953	...	37.4	59.6	2.9	0.1	
Occipito posterior	...	1952	...	37.3	57.2	5.5	—	
		1953	...	31.9	60.6	7.5	—	
Brow ...	...	1952	...	16.7	66.6	16.7	—	
		1953	...	21.1	63.2	15.8	—	
Face ...	...	1952	...	27.1	61.0	11.9	—	
		1953	...	31.1	54.1	14.8	—	
Breech ...	...	1952	...	20.9	64.7	13.6	0.8	
		1953	...	14.6	69.0	16.2	0.2	
Transverse	...	1952	...	—	63.6	36.4	—	
		1953	...	5.9	70.6	23.5	—	
Other ...	...	1952	...	22.8	64.9	12.3	—	
		1953	...	14.3	76.2	9.5	—	



<i>Type of Delivery</i>				<i>Percentage Distribution of Confinements</i>			
				<i>Hospital</i>		<i>Hospital</i>	<i>Nursing</i>
				<i>Domiciliary</i>	<i>booked</i>	<i>emergency</i>	<i>Home</i>
Spontaneous onset,							
spontaneous	1952	...	...	44.6	52.8	2.5	0.1
delivery	...	1953	...	41.9	55.3	2.8	0.04
Spontaneous onset,							
instrumental	1952	...	...	15.9	73.6	10.3	0.2
delivery	...	1953	...	12.2	75.2	12.4	0.2
Medical induction,							
spontaneous	1952	...	...	19.6	76.5	3.7	0.2
delivery	...	1953	...	17.6	79.4	2.8	0.2
Medical induction,							
instrumental	1952	...	...	6.8	79.5	13.7	—
delivery	...	1953	...	9.1	88.6	2.3	—
Surgical induction							
spontaneous	1952	...	...	2.0	86.6	11.3	0.1
delivery	...	1953	...	2.1	85.6	12.1	0.1
Surgical induction,							
instrumental	1952	...	...	3.5	90.0	6.5	—
delivery	...	1953	...	9.4	82.8	7.8	—
Medical and surgical							
induction,							
spontaneous	1952	...	...	0.6	93.9	5.5	—
delivery	...	1953	...	—	95.0	5.0	—
Medical and surgical							
induction,							
instrumental	1952	...	...	—	100.0	—	—
delivery	...	1953	...	2.9	97.1	—	—
Caesarian section							
	1952	...	...	—	85.4	14.6	—
	1953	...	...	—	87.3	12.7	—
Other							
...	...	1952	...	8.2	61.2	30.6	—
	...	1953	...	3.0	72.7	24.2	—

## CARE OF MOTHERS AND YOUNG CHILDREN

(SECTION 22—NATIONAL HEALTH SERVICE ACT, 1946)

### MATERNITY AND CHILD WELFARE CENTRES

During the year the Health Committee gave consideration to the lack of reasonably convenient clinic facilities on the new housing estates where many of the young children now live. As a result of their recommendations, the City Council decided to allocate over the next three years 21 houses on Corporation housing estates for use as temporary welfare centres until such time as it becomes more clear what form these centres should take. In November, the first of these houses became available at Berrowside Road, Shard End. In the meantime, however, temporary clinic premises were obtained on a sessional basis at Timberley Lane School, Tile Cross School, Bartley Green Church School, West Heath Community Centre and St. Stephen's Church Hall, Rednal. When 56, Berrowside Road became available, the sessions at Timberley Lane School were discontinued. The courtesy of the Education Committee in making these premises available was much appreciated.

As a result of these measures the number of centres provided by the Council at the end of the year was 38—an increase of 4 over the previous year. This increase in facilities was reflected by an increase in the proportion of children attending the centres at each age period under five years, with the exception of the age period 3—4 years when there was a slight fall. (Chart, page 128).

The frequency of attendance by these children at welfare centres has been well maintained and is shown in the chart on page 129.

In addition, eleven general practitioners hold sessions for infants and young children at local authority centres and eleven practitioners hold similar sessions at their own surgeries, in each case assisted by a health visitor. The general practitioners undertake, in addition, diphtheria and whooping cough immunisation and vaccination. At these sessions there were 915 attendances by children under one year and 389 attendances by children over one year.

When the new house at 56, Berrowside Road, Shard End, was opened, the general practitioners working in the area were invited to come and inspect the new premises. Nine practitioners took advantage of this invitation.

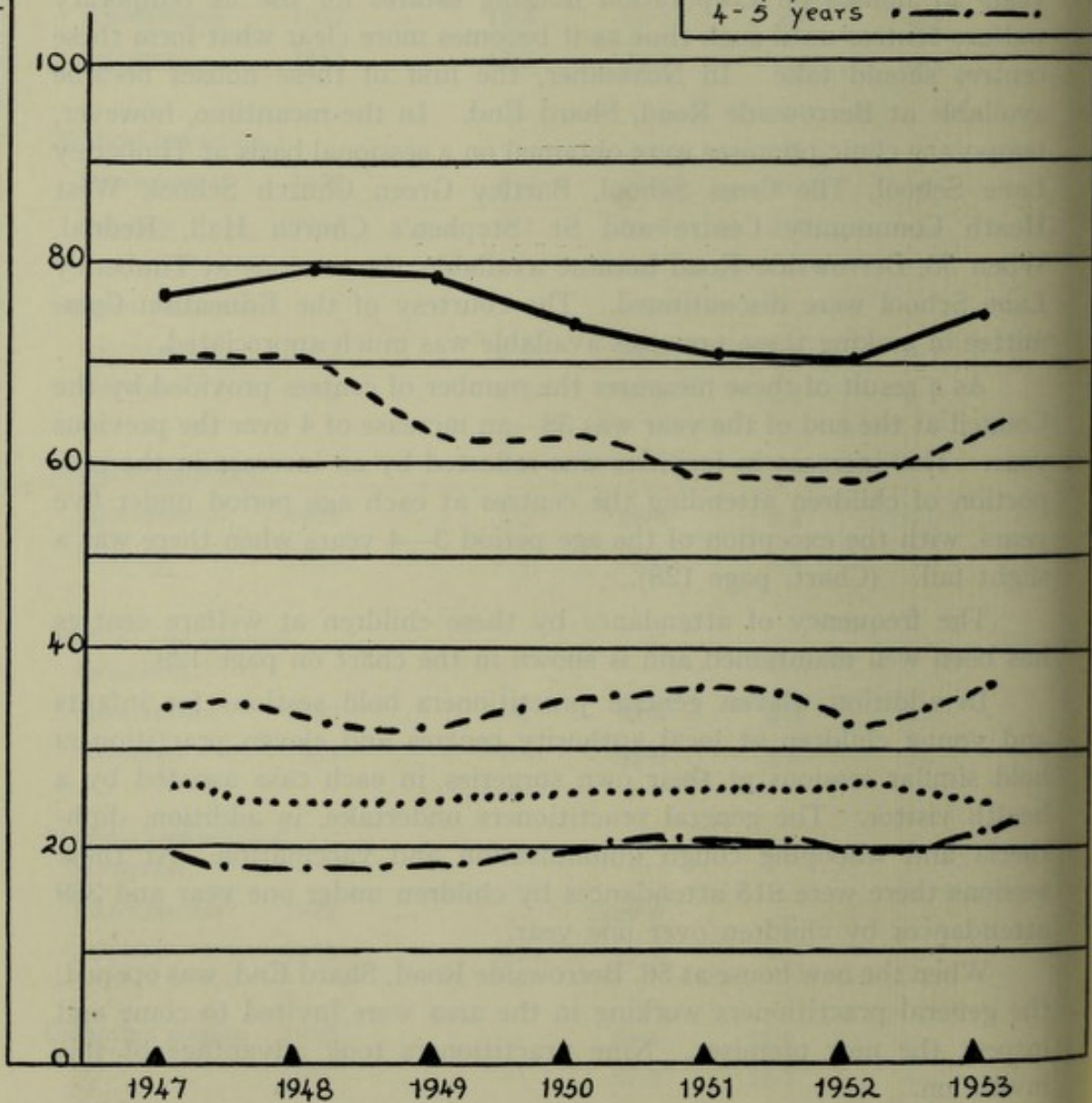
At the suggestion of general practitioners working in the area of Small Heath Centre, a discussion on " Infant Feeding " took place one Sunday evening in November at the Centre between general practitioners and welfare centre staff.



# PERCENTAGE ATTENDANCE AT CHILD WELFARE CLINICS

Percentage of visited children attending

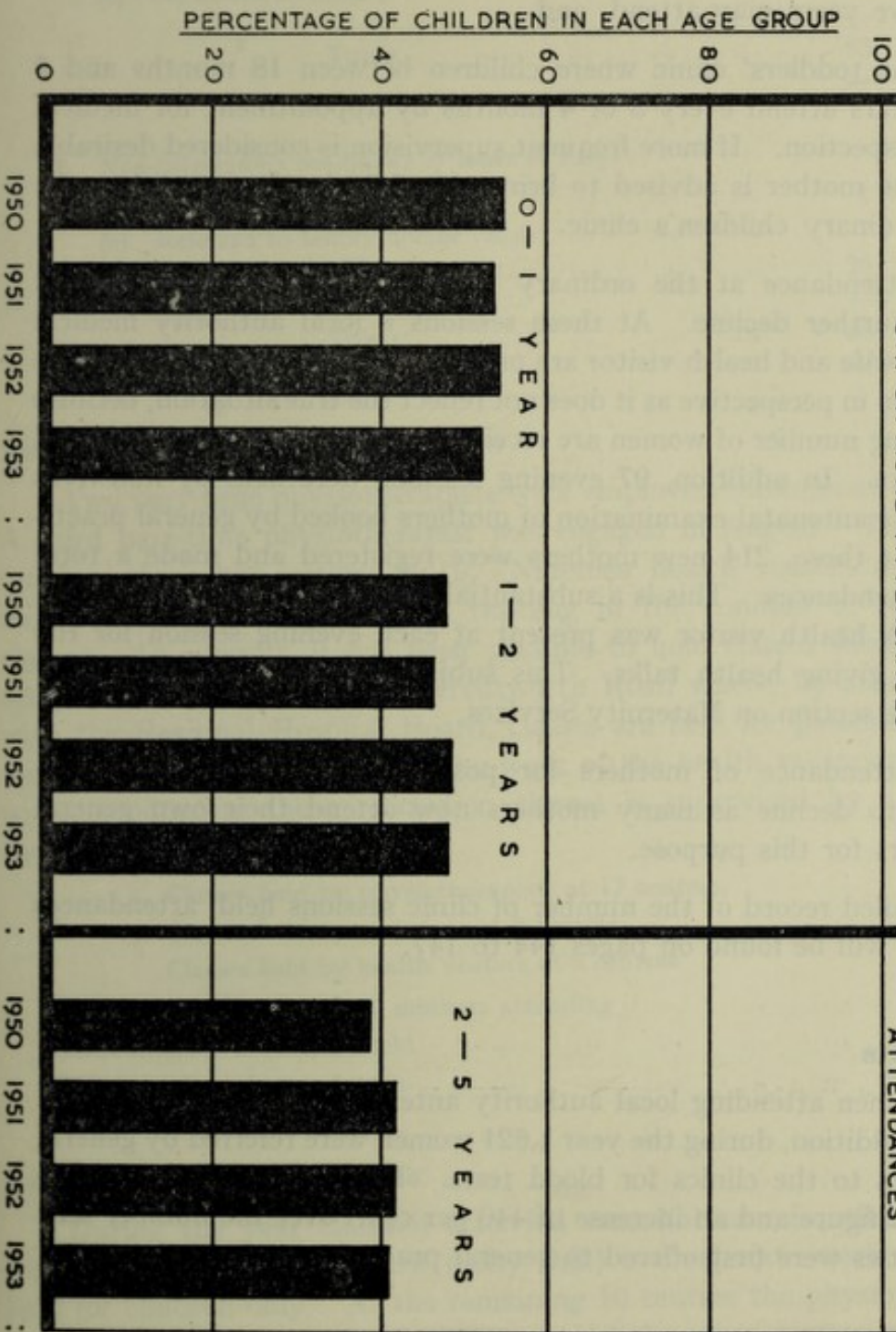
KEY	
0-1 year	—————
1-2 years	- - - - -
2-3 years	.....
3-4 years	.....
4-5 years	.....



FREQUENCY OF ATTENDANCE AT CLINICS  
PER ANNUM

SIX OR MORE ATTENDANCES

**THREE OR MORE ATTENDANCES**





Three types of children's clinics are held :

- (1) the postnatal clinic where the mother may bring her young infant until he is three months old for examination and advice at the same time as she receives her own examination.
- (2) the ordinary children's clinic, where children of any age up to five years may attend, and
- (3) the toddlers' clinic where children between 18 months and 5 years attend every 3 or 4 months by appointment for medical inspection. If more frequent supervision is considered desirable the mother is advised to bring the child in the interim to the ordinary children's clinic.

The attendance at the ordinary local authority antenatal clinics showed a further decline. At these sessions a local authority medical officer, midwife and health visitor are present. The decline in attendance must be seen in perspective as it does not reflect the true situation, because an increasing number of women are receiving antenatal care from general practitioners. In addition, 97 evening sessions were held by midwives only, for the antenatal examination of mothers booked by general practitioners. At these, 214 new mothers were registered and made a total of 1,056 attendances. This is a substantial increase in the numbers seen in 1952. A health visitor was present at each evening session for the purpose of giving health talks. This subject is referred to in greater detail in the section on Maternity Services.

The attendance of mothers for postnatal examination has also continued to decline as many mothers now attend their own general practitioners for this purpose.

A detailed record of the number of clinic sessions held, attendances made, etc., will be found on pages 144 to 147.

### Blood Tests

All women attending local authority antenatal clinics receive blood tests. In addition, during the year 1,621 women were referred by general practitioners to the clinics for blood tests. This is an increase of 197 on the 1952 figure and an increase of 440 per cent. over the number sent when facilities were first offered to general practitioners in 1949.

### Mass Radiography of Expectant Mothers

Number examined by miniature film	...	...	...	6,355
Analysis of the results :				
1. Normal cases	...	...	...	6,256



## 2. *Pulmonary Tuberculosis*

### (a) Referred to Chest Clinic :

Active, requiring treatment ... ..	11	(1.7 per thousand)
Inactive, but observation necessary ... ..	25	
(b) Referred to family doctor only, inactive ... ..	8	
(c) No action necessary ... ..	19	
TOTAL ... ..	63	

## 3. *Non-tuberculous conditions of heart or lungs*

(a) Referred to hospital or clinic ... ..	1	
(b) Referred to family doctor only ... ..	7	
(c) No action necessary ... ..	28	
TOTAL ... ..	36	

## Relaxation Classes for Mothers

Two part-time physiotherapists were employed throughout the year. A third part-time physiotherapist was engaged in August. Their total number of weekly sessions is 19. Nineteen health visitors and seven midwives attended a course of training in the conduct of relaxation classes. As a result, it has been possible to hold classes weekly at all centres with the exception of Wentworth Road where, by arrangement with the Regional Hospital Board, classes are held for patients booked for admission to Lordswood. The work of the health visitors and midwives conducting these relaxation classes is supervised by a physiotherapist.

Classes held by physiotherapists at 17 centres.

Classes held by midwives at 6 centres.

Classes held by health visitors at 9 centres.

Total number of individual mothers attending ... ..	1,717
Total number of sessions held ... ..	1,236
Total number of attendances ... ..	10,386

## Remedial Exercise Classes

During the year children attended remedial exercise clinics at 11 centres. At only one centre (Selly Oak) is a separate weekly session held for children only. At the remaining 10 centres the physiotherapist devotes part of each session to children and the other part to relaxation for mothers.

Number of individual children attending ... ..	286
Number of sessions held ... ..	273
Total number of attendances ... ..	2,568



## Sewing Classes

Sewing classes have been held at 28 centres with a total attendance during the year of 10,163.

## Consultation Clinics

						<i>No. of sessions</i>	<i>No. of attendances</i>
Dr. Braid's clinic	...	...	...	...	...	28	102
Dr. Crosse's clinic	...	...	...	...	...	24	162
X-ray clinic	...	...	...	...	...	47	369

Dr. Crosse's consultation clinic at Carnegie was closed after 4th June when it was transferred to Little Bromwich Hospital.

## Chiropody Clinic

The chiropody clinic continued to be held for four sessions weekly.

Total number of sessions held	...	...	...	...	...	178
Total number of attendances	...	...	...	...	...	1,440
Average number of patients per session	...	...	...	...	...	8
Average number called per session	...	...	...	...	...	10

## Voluntary Workers

Two meetings of the Voluntary Executive Committee of the Voluntary Workers were held during the year, one in February at Stirchley Centre and the other in April at Carnegie Institute. In April, Dr. Mackintosh spoke to a large gathering of voluntary workers on her recent visit to Australia. This meeting was held at Lancaster Street Centre. On the 9th October, by arrangement with the Voluntary Committee of the Carnegie Institute, a large group of Voluntary Workers were invited to a film show of the Elan Valley and the Opening of the Claerwen Dam. Both meetings were well attended and much enjoyed by all who were able to be present.

## Clinic Assistants

Fifty-six clinic assistants continued to assist at the welfare centres for a total of 245 sessions a week.

## School Clinics

Owing to the opening of a new school clinic, the minor ailments clinic at Kingstanding Centre was last held on Tuesday, June 9th.

## Dental Treatment

A Maternity and Child Welfare Dental Service is concerned with expectant and nursing mothers and young children under 5 years. Its aim is to retain, in a healthy state, as many teeth as possible. Particularly does this apply to the temporary teeth in children under 5.



It is not adequately realised by the general public how important these teeth really are. They provide the stimuli which help the jaws to grow to their appropriate size in proportion to the permanent teeth and to the skull as a whole. They also act as space retainers for the permanent teeth and any premature loss is usually reflected in the mal-position of the permanent teeth when they erupt. It is therefore of vital importance to preserve the temporary teeth. Instruction in oral hygiene to mothers is most important. Teeth, however, can have a reasonable chance of survival only if they are regularly inspected by a dental surgeon at intervals in the region of three to four months and filling or otherwise treating any teeth which require it. This must be the ultimate aim of the service even if its realisation lies far in the future. In addition, it is the duty of the service to make available treatment for the relief of pain for both mothers and children and to provide expectant and nursing mothers with mouths free from sepsis and as efficient as circumstances permit.

In Birmingham the service was commenced in the 1920's on a part-time basis. In 1929 a whole-time dental surgeon was appointed and clinics were situated at Carnegie Institute and 76, Stratford Road. In those days treatment consisted mainly of extractions. After 1929, dentures were supplied, where necessary, at a cost to the patient equal to that paid to the mechanic for making them. This fee was reduced and sometimes waived altogether in necessitous cases. The situation was improved with the opening of Lancaster Street dental clinic about 1934. There was a small amount of assistance by part-time dental surgeons, not usually exceeding three sessions a week, and treatment was confined to mothers and children who attended the welfare centres. In 1946, a considerable step forward was taken, certain items of new equipment being provided, probably the most important being modern anæsthetic sets incorporating up-to-date aids for the production of suitable anæsthesia for dental operations. More important still, was the decision taken at this time on account of the special problems associated with the anæsthesia of children under five and to a lesser degree of expectant mothers, to employ, as anæsthetists only, doctors who had had special training and experience in these matters. Two part-time anæsthetists of consultant status were therefore appointed.

Under Section 22 of the National Health Service Act, the duty is laid on local authorities to provide a scheme for the dental care of expectant and nursing mothers and children under five as part of the Maternity and Child Welfare Service. This meant that the Dental Service of the Maternity and Child Welfare Department was available to all women and children in the City in these groups. In 1949, the whole-time dental surgeon resigned and it was not possible to replace him. For a time the service was restricted to one session a week, although this was shortly afterwards increased to three. Treatment was restricted mainly to



extractions of an emergency type. No dentures at all were supplied but arrangements were made for the School Dental Clinics to devote seven sessions a week to conservative treatment for selected expectant mothers. This represented the lowest point reached by the Maternity and Child Welfare Dental Service and since then additional part-time dental surgeons have been appointed. In December, 1951, the School Dental Service, instead of devoting seven sessions weekly to conservative treatment, undertook to provide dentures at four of their clinics on Saturday mornings. Early in 1952 the supply of dentures was resumed at Maternity and Child Welfare Centres and a beginning was also made in the provision of conservative treatment. By the end of 1952 there were being worked by part-time dental surgeons seventeen sessions a week ; five extractions, seven conservative, five denture, and in addition four denture sessions by the School Dental Service. Stratford Road Clinic was closed at the end of 1952 due to circumstances beyond our control. A new clinic was opened at Treafoord Lane Welfare Centre.

During 1953, there were in operation three dental clinics at Carnegie Institute, Hockley, 90, Lancaster Street, in the centre of the City, and 73, Treafoord Lane, Alum Rock. X-ray facilities were available at Lancaster Street and dentures continued to be supplied by a private dental laboratory. This lay-out serves the north side of the City fairly well but it is very far from satisfactory for providing treatment for those living in the whole area to the south.

A total of seventeen sessions per week was being worked by five part-time dental surgeons. At the end of March a Senior Dental Officer, with administrative responsibilities for the service as a whole, was appointed. It is hoped that this appointment may lead to the extension and increased efficiency of the service, but it must be borne in mind that the difficulties of obtaining dental staff and finding suitable accommodation for more dental clinics are still the limiting factors. Certain results, however, are already in evidence. Arrangements have been made for treatment to be available for the relief of pain more expeditiously than in the past and there is an increase in the number of sessions to twenty-six per week. There has been a considerable increase in the number of mothers receiving dental treatment both as regards extractions and dentures and also as regards fillings, the increase in the latter over 1952 being 36 per cent. As regards children under five, there is a small increase in the number treated, with a slight fall in the number of teeth extracted, but with an increase in the number of temporary teeth conserved of 133 per cent. compared with 1952. As, in 1952, the School Dental Service has rendered valuable help in the provision of dentures for expectant and nursing mothers.

There are one or two aspects regarding the opening of Treafoord Lane dental clinic that are worthy of comment. This centre is situated three or four miles from the centre of the City and it is near new housing estates,



the first dental clinic to be so situated. It has been found that the reception by the mothers of conservative treatment is very much better here than at the other two centres. Many mothers are anxious to retain their teeth and are prepared to go to considerable trouble to do so. Many also welcome the opportunity of bringing their children to consult the dental surgeon before any trouble is apparent and with a view to taking proper care of their teeth. The percentage attendance for all types of treatment have also been higher here than at the other centres. These encouraging results may be due in part to the higher standards in the new housing areas compared with the older areas in the centre of the City. The fact that the dental clinic is a local one and easily accessible, however, is probably a big factor. Conservative dental treatment for instance frequently involves quite a number of visits and a long 'bus journey on each occasion is bound to exercise a discouraging influence. It is felt that these aspects must be borne in mind when planning further extensions of the service.

At the end of the year approval was given for the establishment of a dental clinic at Northfield Welfare Centre. This will improve the geographical distribution of clinics to a certain extent, but it is hoped that further steps in this direction may be taken in the near future. Approval has also been given for the employment of two additional full-time officers if they can be obtained or, if not, to augment the dental staff by recruiting additional part-time officers. It is also hoped to introduce as an experiment the use of dental hygienists. These are young women who have been trained in the scaling and polishing of teeth and in giving instruction in oral hygiene, and they must work under the close supervision of a dental surgeon. It is felt that there is considerable scope for this type of work and that they should be a valuable addition to the service.

(a) *Numbers provided with dental care :*

		<i>Examined</i>	<i>Needing treatment</i>	<i>Treated</i>	<i>Made Dentally fit</i>
Expectant and nursing					
mothers ...	...	2,315	2,278	2,278	1,455
Children under five	...	1,892	1,827	1,827	1,467

(b) *Forms of dental treatment provided :*

	<i>Extrac- tions</i>	<i>Anaesthetics</i>		<i>Fillings</i>	<i>Scalings or Scaling and gum treatment</i>	<i>Silver Nitrate treatment</i>	<i>Dress- ings</i>	<i>Radio- graphs</i>
		<i>Local</i>	<i>General</i>					
Expectant and nursing mothers.	8,288	198	1,775	1,258	465	4	44	65
270 supplied with full upper and lower dentures ; 543 with dentures other than full upper and lower. A total of 1,345 dentures was supplied.								
Children under five	3,345	—	1,360	711	—	104	36	2



## HARBOROUGH HALL CONVALESCENT HOME FOR MOTHERS AND BABIES

This Home, which is now in its third year, is giving much needed convalescent care to Birmingham mothers and babies. There were 357 mothers (with 371 babies) admitted during 1953, an increase of 21·4% on the previous year.

The recommended length of stay is two weeks, but in some cases it was considered advisable to extend this period to three, and in a few cases to four, weeks. With the help and co-operation of the Children's Department, it has again been possible this year for some mothers with children under school age to arrange for them to be looked after in a residential nursery during the period of convalescence.

### REVIEW OF THE HUMAN MILK BUREAU—1951-1953

The Human Milk Bureau has now been in operation for over three years and it is interesting to note that, whereas the amount of milk collected has consistently risen, the demand for this milk has also steadily increased. Although over 8,000 more ounces of milk were collected in 1953 than in 1952, the demands from hospitals could not be met. It would appear that even though the amount of milk collected has nearly doubled since 1951, there is still room for more improvement.

During 1953, 54,304 ounces of milk were collected. The majority of the milk was supplied to hospitals in the City.

A reference to Table I will show that, whereas the bulk of the milk was collected from individual donors, out-of-City hospitals supplied us with far more milk than City hospitals (for the purpose of all these statistics Marston Green Maternity Hospital is regarded as in the City).

A further reference to Table 2 will show that by far the greatest proportion of milk has gone to hospitals in the City with a small amount to hospitals outside the City and a still smaller amount to domiciliary cases.

TABLE I  
AMOUNT OF MILK COLLECTED (IN OUNCES) 1951-1953  
*Collected from*

<i>Year</i>	<i>Total collected</i>	<i>Domiciliary Donors</i>	<i>Hospitals in City</i>	<i>Hospitals out of City</i>
1951	29,501	28,684	45	772
1952	46,565	45,109	211	1,245
1953	54,304	51,914	126	2,264

TABLE 2.  
AMOUNT OF MILK DESPATCHED (IN OUNCES) 1951-1953  
*Despatched to*

<i>Year</i>	<i>Total despatched</i>	<i>Hospitals in City</i>	<i>Hospitals out of City</i>	<i>Domiciliary cases</i>
1951	28,563	23,906	4,557	100
1952	47,125	42,168	3,830	1,127
1953	54,865	50,231	4,536	98



## DAY NURSERIES

On the 1st January, 1953, there were 1,744 places for children in the 39 day nurseries and one 24 hour nursery maintained by the Health Committee.

In view of the high costs generally and the fall in attendance in several nurseries, it was decided to close 9 nurseries on the dates shown :—

131, Frankley Beeches Road	30th April, 1953
671, Yardley Wood Road	30th April, 1953
697, Coventry Road	31st March, 1953
461, Gospel Lane	31st March, 1953
73, Jerrys Lane	31st March, 1953
189, Shirley Road	31st March, 1953
1/5, Springfield Road	31st March, 1953
298, Warren Farm Road	31st March, 1953
27, Quinton Lane	31st March, 1953

The priority children from these nurseries were transferred to other nurseries. Vacancies in the remaining nurseries were found for 38 members of staff, 16 left to take other posts and 14 were made redundant.

This reduced the number of day nurseries to 30 and one 24-hour nursery and the number of places to 1,356.

## Admission of Outside City Cases

There were only 6 out of City cases attending the nurseries during 1953. One child only remained on the register on the 31st December, 1953.

## Cooking Arrangements

All nurseries now cook all meals on the premises. The arrangement is much more satisfactory than when dinners were supplied by central kitchens. There is more opportunity for varying the diet and waste has been cut to a minimum.

## Laundry

The arrangements whereby Bacchus Road Laundry collects and delivers goods twice a week at each nursery have continued.

## Somerset Road 24-hour and Day Nursery. (Accommodation 30)

There is a great demand for resident accommodation in this nursery which has places for 30 children. The daily average attendance for the year was 28. Ninety children were admitted in 1953 during their mothers' illness.

## Mass Radiography

During the year, 70 new staff (35 nursing staff and 35 domestic staff) attended the Mass Radiography Centre prior to appointment. One domestic worker was found to be unsuitable for nursery work owing to a heart condition shown by x-ray. During the year, 325 of the existing nursery and domestic staff received a repeat yearly mass radiograph.



## Training Nurseries

Inspectors of the Ministries of Health and Education visited nurseries during the year for the purpose of deciding whether the required facilities were provided for training students in the care of well children 0—5 years.

Their recommendations were as follows :—

(a) Approved for training :—

245, Birchfield Road.	362, Soho Road.
1, Bournbrook Road.	73, Trinity Road.
1, Soho Road.	

(b) Nurseries recommended for re-visit. No further students to be taken at present :—

90/92, Islington Row.	26, Kingston Road.
-----------------------	--------------------

## Nursery Students

The two year training course for the National Nursery Examination Board Certificate continues. The students attend Garrison Lane Training Centre for 1 day a week, for vocational training, and Bournville Day Continuation College 1 day a week, for further education.

In the past year, 54 candidates came up for selection for training, of whom 32 were accepted and 12 were given a trial pending a decision. For 8, training was postponed for six months and 2 were considered unsuitable.

At the two examinations conducted in Birmingham for the National Nursery Examination Board Certificate, the following results were obtained by candidates from the day nurseries :—

April, 1953	8 passed
	6 failed

October, 1953	21 passed
	9 failed

## Training Courses for Nursery Staff

### 1. SENIOR CHILD CARE RESERVE COURSE

One course lasting four weeks was held during the year, from 15th June to 10th July. Six candidates attended, of whom 4 obtained certificates—2 were unsuccessful.

### 2. SUPPLEMENTARY CHILD CARE RESERVE COURSE

One course lasting four weeks was held during the year, from 29th January to 25th February. Four candidates attended. Two were successful in obtaining a certificate and two were unsuccessful.

### 3. REFRESHER COURSES

Refresher courses were arranged by the Education Committee and were held at the William White Memorial Hall, Nechells, during the year for the following staff :—

Staff Nursery Nurses : Two courses were held, one in January and one in May. Each course lasted two weeks. Twenty-three staff nursery nurses attended from the Health Department.

#### Number of Children on Day Nursery Registers, 1953

	0—1 years	1—2 years	2—5 years	Total	Average daily attendances for 1953
1st January	142	291	1,007	1,440	989
31st December	165	261	816	1,242	

#### Analysis of Children in the Nurseries on 31st December, 1953.

Group I	1953	1952
(a) Children of unmarried mothers ... ..	360	365
(b) Children of women separated from husbands ...	327	384
(c) Children of women with sick or disabled husbands	143	231
(d) Children of widows ... ..	86	95
(e) Children of women with husbands in prison ...	27	17
(f) Others (contacts of tuberculosis, children deserted by mothers, etc.) ... ..	48	40

#### Group 2 :

Children whose mothers were unable to look after them through illness, etc. ... ..	221	234
--	-----	-----

#### Group 3 :

Non-priority cases ... ..	30	158
---------------------------	----	-----

#### Number of priority children on the waiting list :

	0—1 years	1—2 years	2—5 years	Total
31st December, 1952 ...	35	84	204	323
31st December, 1953 ...	47	45	64	156

#### Daily Guardian Scheme

This scheme still continues for the registration of women (maximum number 50) who receive not more than two children into their care by day. Twenty-six guardians resigned and 29 new persons were registered during 1953.

	1st January, 1953	31st December, 1953
Number of persons on register ... ..	46	49
Places available ... ..	70	82
Number of children accommodated ... 1952—107		1953—117

Persons who receive into their care by day more than two children and from different families must register under the Nurseries and Child-Minders Regulation Act, 1948. (See page 193).



## INVESTIGATIONS

### Study of the growth of Infants

This investigation, organised by the Ministry of Health in co-operation with the Ministry of Education and the British Pædiatric Association, has now reached the end of its fourth year.

Four hundred and sixty children remain on the register, out of an original number of 2,000. This is a decrease of 166 on the number at the end of the previous year.

### Virus Infection during Pregnancy

This investigation was started by the Ministry of Health in 1950 with the object of comparing the risk of congenital defects among children born of women who suffered from rubella, measles, mumps, chickenpox or poliomyelitis during pregnancy, with those born of other women. The enquiry was conducted by following up the children of mothers who had been registered as having had a virus infection during pregnancy, and the children of mothers whose date of birth was stated to be the 31st of any month who, unless they had already qualified as virus infection cases, were taken as controls. All children are examined for evidence of congenital defects at birth, on their first birthday and again when they reach the age of two years. The hospital authorities and general practitioners, as well as local health authorities' officers are co-operating in the investigation.

The Ministry stated that the total of 192 pregnant women from both categories who were registered in Birmingham by the end of 1952 were sufficient for their present requirements. The follow up of all of these should be complete by the end of 1954.

The Ministry, however, requested that registration of rubella cases be continued and four cases of this infection in pregnant women were notified in 1953.

During the year, 37 children of women who suffered from a virus infection during pregnancy and 72 children in the control group were examined for evidence of congenital defects.

### CARE OF THE UNMARRIED MOTHER

There has been a slight fall in the number of women who sought the help of the Department for the first time during the year, i.e., 852 in 1953 compared with 868 in 1952. Unfortunately, however, there was a sharp increase in the number of single women having their first pregnancy.

Thirty-four married women with legitimate pregnancies applied to the Department for help with regard to accommodation. Sixteen unmarried mothers living outside the City were also helped.



There were five cases of venereal disease. Three of these were admitted to Dudley Road Infirmary for treatment and two remained at home and attended the General Hospital for treatment. Money grants made for lodgings amounted to £37 6s. 6d. None of this was refunded.

Because of structural defects, it was necessary to give up the remaining beds available for use by this Department in Dudley Road Infirmary in February, 1953.

On the 1st January, 1953 there were 14 mothers and 10 babies in Beechcroft Mother and Baby Home. Seventy-eight mothers and 72 babies were admitted during the year and 77 mothers and 75 babies were discharged during the year. Two of the mothers were discharged from the Home before their confinement and 1 mother absconded from the Home leaving her baby, who was later transferred to a Catholic Home.

In one case a child was stillborn, reason not known, and there were 8 premature babies, including two sets of twins.

Four children were transferred to hospital, one with bronchitis, one with sprue, one with cervical meningocele and one with diarrhoea. The latter baby was admitted to hospital on the 31st July, 1953 with symptoms of diarrhoea and loss of weight, and he died on the 15th October, 1953 from pneumonia. Following investigation at the hospital it was found that this baby was suffering from an infective diarrhoea, and further investigations revealed that 5 other babies developed the infection. One of these babies, unfortunately, had been transferred to Skilts Residential Nursery for child contacts of tuberculosis, and he, in turn, infected 3 other babies there. It was two months later before the infection was definitely stamped out.

Of the 75 babies discharged throughout the year, 22 went home with their mothers, 4 went to lodgings with their mothers, 12 accompanied their mothers who were able to obtain domestic posts, 5 were admitted to foster homes, 1 to a residential nursery, and 30 were placed for adoption. One baby, as mentioned above, was admitted to a Catholic Home after his mother had absconded from Beechcroft.



The figures in the following table refer exclusively to women who were first seen in the Department in 1953 :—

	<i>First cases</i>	<i>Multiple cases</i>	<i>Married women</i>
<i>Disposal of new cases in 1953 :</i>			
Lyncroft House ... ..	19	5	—
Woodville ... ..	29	—	—
Francis Way ... ..	18	2	1
Beechcroft ... ..	48	4	4
Park Hill ... ..	7	—	—
Homes out of City ... ..	7	3	—
Own home except for confinement ...	282	117	146
Own home entirely ... ..	38	25	19
Returned to Ireland ... ..	14	2	3
Left City ... ..	34	11	6
Born out of City ... ..	3	2	—
Miscarriages ... ..	3	—	—
	<hr/> 502	<hr/> 171	<hr/> 179

<i>Situation at end of year :</i>	<i>No. of cases</i>	<i>%</i>
Mothers and babies still in Homes ... ..	38	4.8
Babies having died, and stillbirths ... ..	24	2.8
Babies having been adopted ... ..	51	5.9
Babies with foster mothers ... ..	9	1.1
Mothers having married babies' fathers ... ..	45	5.3
Mothers and babies having left the City ... ..	60	7.0
Babies in Homes without the mother ... ..	14	1.6
Mothers at home with their babies ... ..	608	71.4
Miscarriages ... ..	3	0.1
	<hr/> 852	<hr/> 100.0

Home visits paid re unmarried mothers ... ..	1,412
Special visits paid re unmarried mothers ... ..	260
Cases visited in hospital ... ..	506
Homes inspected re suitable lodgings with babies ... ..	33
Special visits re V.D. ... ..	—
Office interviews, applications ... ..	653
Office interviews, other than applications ... ..	3,101
Office interviews re V.D. ... ..	41

*Girls under the age of consent :*

14 years old ... ..	2
15 years old ... ..	10
16 years old ... ..	8
	<hr/> 20

Parity	Number of cases		
	1951	1952	1953
1st ... ..	453	399	681
2nd ... ..	97	164	101
3rd ... ..	35	54	36
4th ... ..	9	15	17
5th ... ..	5	11	6
6th ... ..	2	—	5
7th ... ..	—	2	1
8th ... ..	—	—	3
9th ... ..	—	1	2

### Multiple Cases

Of the 171 multiple cases among unmarried women dealt with in 1953, 91 were living with the putative father and 111 had sought the help of the Department on previous occasions. The fate of the previous children was as follows :—

10—first child died.

8—first child in residential nursery.

21—first child adopted.

2—first child adopted by grandparents

7—first child care of relatives, apart from mother.

123—have other children in care of mother (32 of these mothers have more than one child).

### Married Women

The following table gives details of the cases among married women with illegitimate children :—

141 separated from husband.

13 divorced.

21 widows.

2 husbands in Forces.

2 married to putative father

---

179

---

Of these 179—

33 living with putative father.

9 left City.

4 in Beechcroft House.

2 in residential nursery.

11 had baby adopted.

120 own home with baby.



# ANTENATAL AND POSTNATAL CLINICS

	(1)	(2)	(3)	(4)	(5)
<i>Year</i>	<i>Total live and stillbirths notified</i>	<i>Total No. of individual women attending Antenatal clinics</i>	<i>(2) as percentage of (1)</i>	<i>Total No. of mothers attending for Postnatal examination</i>	<i>(4) as percentage of (1)</i>
1947	24,512	20,671	84	4,922	20
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

# CHILD WELFARE CLINICS

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

<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>
1948	76.6	67.1	33.9	24.2	18.8
1949	76.5	63.0	32.0	22.6	18.3
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

# ANTENATAL CLINICS

	1951	1952	1953	<i>Decrease on 1952</i>
Number of antenatal clinics held ... ..	† 3,724	‡ 3,403	* 2,919	484
New expectant mothers booked during year ... ..	7,558	6,299	5,408	891
Total individual women attending ... ..	8,868	7,419	6,490	929
Total antenatal attendances ...	49,618	42,455	36,075	6,380
† including 705 attended by midwife				
* including 612 attended by midwife				
‡ including 653 attended by midwife				

# POSTNATAL CLINICS FOR MOTHERS

Number of postnatal clinics held ... ..	1,324
Number of primary postnatal cases examined at clinics ... ..	1,670
Total number of examinations ... ..	1,800
Number of cases showing no abnormality ... ..	930
Number of cases showing abnormality ... ..	740
Percentage of cases showing abnormality ... ..	44.3

*Conditions found*

Breasts—mastitis	...	...	...	...	...	...	11
Abnormalities in genital tract :							
Subinvolution	...	...	...	...	...	...	36
Retroversion	...	...	...	...	...	...	116
Deeply torn cervix	...	...	...	...	...	...	50
Parametritis	...	...	...	...	...	...	1
Cystocele, rectocele or prolapse (repair)	...	...	...	...	...	...	104
Poor perineum (result of no repair or of ineffective repair)	...	...	...	...	...	...	59
Fistula (urinary or faecal)	...	...	...	...	...	...	10
Vaginal discharge	...	...	...	...	...	...	200
Persistent loss	...	...	...	...	...	...	16
Abnormalities in urinary tract :							
Albumin present	...	...	...	...	...	...	22
Pus present	...	...	...	...	...	...	—
Sugar present	...	...	...	...	...	...	10
Precipitancy of micturition	...	...	...	...	...	...	8
White leg	...	...	...	...	...	...	2
General conditions :							
Raised blood pressure	...	...	...	...	...	...	17
Debility	...	...	...	...	...	...	59
Anaemia (a) following haemorrhage	...	...	...	...	...	...	19
(b) of pregnancy	...	...	...	...	...	...	37
(c) nutritional	...	...	...	...	...	...	46
Backache	...	...	...	...	...	...	65
Abdominal muscles (lax, divarication of recti)	...	...	...	...	...	...	169
Other conditions	...	...	...	...	...	...	132

(More than one abnormality may be found in the same mother).

# 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>1951</i>	<i>1952</i>	<i>1953</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>
1—2 attendances	24.3	23.8	25.5	30.2	28.8	30.2	58.1	58.0	59.2
3—5 attendances	21.7	22.3	22.2	22.8	22.4	22.3	33.2	35.7	36.3
6—11 attendances	27.5	28.0	26.8	24.2	25.0	26.0	6.6	5.4	4.0
12 and over attendances	26.5	25.9	25.5	22.8	23.8	21.5	2.1	0.9	0.5



# POSTNATAL CLINICS FOR CHILDREN

	1952	1953
Number of clinics held ... ..	1,335	*1,324
Number of new infants attending ... ..	8,630	8,524
Total number of infant attendances ... ..	54,033	54,235
Total examined by doctor ... ..	21,782	21,094
Average attendance of infants per consultation ... ..	40.5	40.9
Average number of infants seen by doctor per consultation ... ..	16.3	16.2

\* No doctor attended 4 of these clinics.

## CHILDREN'S CLINICS

Number of clinics held :	1952	1953
(1) With doctor attending ... ..	3,019	3,001
(2) Without doctor attending ... ..	147	210
	<hr/>	<hr/>
	3,166	3,211
	<hr/>	<hr/>

	1952	1953
New children attending ... ..	7,346	8,243
Total attendances ... ..	142,783	140,659
Average attendance per clinic ... ..	45	44
Total seen by doctor ... ..	49,766	48,141
Average seen by doctor per clinic ... ..	16.5	16

## TODDLERS' CLINICS

	1952	1953
Number of clinics... ..	1,938	2,120
Total attendances ... ..	30,572	31,542
Total number of individual children examined ... ..	14,313	14,781
Number of these children attending toddlers' clinic for the first time... ..	5,778	7,781

(Of these, 1,898 children were making their first attendance at the Centre).

The proportion of defects found at the routine medical inspection of children between the ages of 18 months and 5 years at toddlers' clinics is shown in the following table:—

PROPORTION OF DEFECTS AMONG PRE-SCHOOL CHILDREN  
(18/12—5 YEARS)

	1953 (14,781 children)		1952 (14,313 children)	
	No.	%	No.	%
Clothing unsuitable or inadequate ... ..	56	0.4	33	0.2
Rest. Bed-time later than 7 p.m. ... ..	3,004	20.3	3,190	22.3
No day-time rest ... ..	4,650	31.5	5,573	38.9
Defects :				
Eyes :				
Squint ... ..	257	1.7	278	1.9
Inflammatory conditions	87	0.6	82	0.6
Other eye conditions ...	4	0.03	32	0.2
Skin :				
Eczema ... ..	173	1.2	202	1.4
Purulent conditions ...	55	0.4	24	0.2
Ear, Nose and Throat :				
Otorrhoea ... ..	96	0.6	67	0.5
Deafness ... ..	22	0.1	16	0.1
Enlarged or diseased tonsils and/or adenoids	2,129	14.4	2,226	15.6
Nasal obstruction and/or mouth breathing ...	206	1.4	232	1.6
Teeth :				
Carious or defective ...	2,259	15.3	2,421	16.9
Glands : Enlarged ... ..	1,316	8.9	1,306	9.1
Heart :				
Congenital ... ..	108	0.7	115	0.8
Rheumatic heart conditions ... ..	21	0.1	40	0.3
Anaemia ... ..	17	0.1	23	0.2
Lung conditions ... ..	66	0.4	89	0.6
Rickets :				
Active ... ..	9	0.06	15	0.1
Rachitic deformities ...	89	0.6	94	0.7
Knock-knee ... ..	1,464	9.9	1,648	11.5
Flat Foot ... ..	640	4.3	679	4.7
Other deformities ... ..	615	4.2	624	4.4
Mentality (backward) ...	43	0.3	44	0.3
Speech (backward or defective)	115	0.8	137	1.0
Enuresis ... ..	879	5.9	1,023	7.1

Some children were found to have more than one defect.



## MIDWIFERY

(SECTION 23—NATIONAL HEALTH SERVICE ACT, 1946)

### Domiciliary Midwifery

An account of the operation of the Maternity Services as a whole will be found on page 116.

The following table gives details of the number of domiciliary midwives in practice during the year :—

	No. in practice 1.1.53	Number retired during year	Number resigned during year	Deaths	New appoint- ments	No. in practice 1.1.54
<i>Employed by local authority :</i>						
(1) Midwives	119	1	8	—	8	118
(2) Maternity Nurses ...	16	—	2	—	1	15
(3) Ambulance Midwives	13	—	4	—	2	11
<i>In private practice :</i>						
(1) Living in City	11	—	—	—	—	11
(2) Living outside City ...	4	—	4	—	—	—

Of 6,775 domiciliary confinements, 6,704 were delivered by City midwives and 71 by private midwives. In addition there were 127 attended in patients' homes or in ambulances by the ambulance midwives.

The approximate average number of deliveries per month per midwife, was 5. This makes no allowance for 228 weeks lost by sick leave. In addition, owing to the great pressure on the hospital bed accommodation, 2,778 women had to be discharged to their own homes before the 14th day of puerperium. This shows a decrease of 302 compared with 1952. In these cases, the City midwives continued in attendance as long as was necessary.

Domiciliary midwives also assisted at local authority antenatal clinics and at antenatal clinics held by general practitioners at welfare centres or in their own surgeries. Specially trained midwives undertook the domiciliary care of premature babies. (Page 111).

The following table gives details of the 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 ... ..	1,951	1
	(b) No. of cases in 1 (a) where for some reason it was necessary to seek a doctor's assistance during labour ... .. (Of these, the doctor was present at the actual delivery in 58 cases and of these, 19 were instrumental deliveries).	213	—
2.	(a) No. of cases where the doctor was booked for ante-natal and postnatal care under the National Health Service and where the doctor had not expressed a wish to be present at the birth ...	4,175	19
	(b) No. of cases in 2 (a) where for some reason it was necessary to seek doctor's assistance during labour. (Of these, the doctor was present at the actual delivery in 169 cases and of these, 53 were instrumental deliveries).	414	1
3.	No. of cases where the doctor, having undertaken ante-natal 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, 12 were instrumental deliveries)	552	15
4.	No. of cases where the doctor was privately booked to deliver the patient ... .. (Of these, 1 was an instrumental delivery)	26	36
5.	No. of cases delivered by ambulance midwives ... ..	127	—

Of the 127 patients delivered by ambulance midwives, 117 were booked hospital confinements and ten were unbooked emergencies.



## Midwives Act, 1951

### NOTIFICATION OF INTENTION TO PRACTISE

During the year 1953, 449 midwives notified their intention to practise in the City.

No. of City domiciliary midwives	...	...	...	...	...	125
No. of independent domiciliary midwives	...	...	...	...	...	13
No. of midwives in institutions	...	...	...	...	...	259
No. of midwives in Birmingham Fire and Ambulance Service	...	...	...	...	...	13
No. of midwives in private nursing homes	...	...	...	...	...	11
No. of City domiciliary maternity nurses	...	...	...	...	...	17
No. of independent maternity nurses	...	...	...	...	...	11
						<hr/>
						449
						<hr/>

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

No. of domiciliary midwives and maternity nurses who left the City in 1953	...	...	...	...	...	...	9
No. of domiciliary midwives ceasing to practise	...	...	...	...	...	...	2
No. of Birmingham Fire and Ambulance Service midwives ceasing to practise	...	...	...	...	...	...	4
No. of hospital midwives ceasing to practise	...	...	...	...	...	...	110
No. of midwives in nursing homes ceasing to practise	...	...	...	...	...	...	4
							<hr/>
							129
							<hr/>

## Supervision of Midwives

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

Routine visits to midwives	...	...	...	...	...	...	854
Special visits to midwives	...	...	...	...	...	...	251
Visits to stillbirths	...	...	...	...	...	...	38
Visits after neonatal deaths	...	...	...	...	...	...	46
Nursing and deliveries supervised	...	...	...	...	...	...	142
Visits to ophthalmia neonatorum cases	...	...	...	...	...	...	620
Visits to puerperal sepsis cases	...	...	...	...	...	...	36
Unsuccessful visits	...	...	...	...	...	...	386
Number of interviews with midwives	...	...	...	...	...	...	1,119
Interviews at Bed Bureau	...	...	...	...	...	...	5,130

## Medical Aid Calls

Midwives sent for medical aid in 1,784 cases, for the mother in 1,412 instances, and for the child in 372. This shows a rise compared with 1952.

### REASONS FOR SENDING FOR MEDICAL AID

MOTHERS					<i>Midwife booked and solely responsible</i>	<i>Doctor booked for antenatal and postnatal care</i>
A. Excessive sickness...	...	...	...	...	—	1
Albuminuria	...	...	...	...	14	7
B. Delayed or difficult labour	...	...	...	...	113	97
Haemorrhage	...	...	...	...	66	42
Adherent placenta	...	...	...	...	30	16
Placenta praevia	...	...	...	...	4	3
Abnormal presentation	...	...	...	...	21	29
Unable to make out presentation	...	...	...	...	5	2
Abortion and miscarriage	...	...	...	...	17	4
C. Laceration of perineum	...	...	...	...	317	215
D. Rise of temperature	...	...	...	...	49	38
Phlegmasia alba dolens	...	...	...	...	2	—
Inflamed breast	...	...	...	...	26	10
Retention of urine	...	...	...	...	2	—
E. Varicose veins	...	...	...	...	47	13
Unsatisfactory progress	...	...	...	...	13	2
F. Other causes	...	...	...	...	139	68
					<u>865</u>	<u>547</u>

CHILDREN						
Ophthalmia neonatorum	...	...	...	...	93	91
Premature birth and debility	...	...	...	...	12	4
Convulsions	...	...	...	...	2	—
Deformity or malformation	...	...	...	...	14	8
Umbilical inflammation	...	...	...	...	1	2
Skin eruption	...	...	...	...	11	4
Unsatisfactory condition	...	...	...	...	44	14
Other causes	...	...	...	...	52	20
					<u>229</u>	<u>143</u>

An analysis of the number of medical aid calls for the mother received by individual general practitioners is included in the Section on Maternity Services. (Page 116).



## Gas and Air Analgesia

All the City midwives have their gas and air certificate, and 115 sets of apparatus are available. During 1953, 3,275 patients were given gas and air anæsthesia by the City midwives in the domiciliary service, in 2,912 cases as midwife and in 363 cases where the midwife was acting as maternity nurse.

The following is the number of midwives in hospitals qualified to administer gas and air :—

Dudley Road Hospital	...	...	...	...	...	18
Heathfield Road Maternity Hospital	...	...	...	...	...	42
Lordswood Maternity Hospital	...	...	...	...	...	29
Marston Green Maternity Hospital	...	...	...	...	...	60
Maternity Hospital	...	...	...	...	...	37
Queen Elizabeth Hospital	...	...	...	...	...	9
St. Chad's Hospital	...	...	...	...	...	8
Selly Oak Hospital	...	...	...	...	...	13
Sorrento Maternity Hospital	...	...	...	...	...	39

## Pethedine

During 1953, 2,827 domiciliary cases received this drug. In 118 cases, the drug was supplied by the doctors and in 2,709 cases by the midwives.

## Relaxation Exercises

Details of these classes are given on page 131.

## District Training

During the year 1953, 29 teacher midwives were taking pupils on the district. No further midwives have been approved as teachers during the year. Three teachers have resigned.

				<i>Pupils trained for the</i>		<i>Obtained</i>
				<i>Central Midwives' Board</i>		<i>Gas and Air</i>
				<i>Certificate</i>		<i>Certificate</i>
				<i>Part I</i>	<i>Part II</i>	
Dudley Road Hospital	...	...	...	34	—	—
Heathfield Road Maternity Hospital	...	...	...	—	22	16
Lordswood Maternity Hospital	...	...	...	—	12	1
Marston Green Maternity Hospital	...	...	...	—	52	48
Maternity Hospital	...	...	...	43	—	—
Queen Elizabeth Hospital	...	...	...	—	—	—
St. Chad's Hospital	...	...	...	—	20	16
Selly Oak Hospital	...	...	...	4	—	—
Sorrento Maternity Hospital	...	...	...	32	—	—

## Emergency Maternity Service

This is referred to in the Section on Maternity Services (page 117).



## HEALTH VISITING

(SECTION 24—NATIONAL HEALTH SERVICE ACT, 1946)

Although the number of live births notified in 1953 shows an increase, the visited child population under five years shows a decrease of 2,906 on that of 1952. This is because children who were born in the years when the post-war birth rate was at its peak have now passed into school. Even so, the average case load of children under five years of age per health visitor is 1,022. Ninety-nine per cent. of live births were visited by health visitors (Graph, page 154), in spite of the fact that the number of health visitors employed whole time or part time on the district was less than in 1952 by the equivalent of 4 whole time health visitors. As was to be expected, the total number of visits paid showed a fall. Even so, the proportion of visited children attending child welfare centres showed an increase and the death rate of infants between the ages of 4 weeks and 1 year reached a new low record.

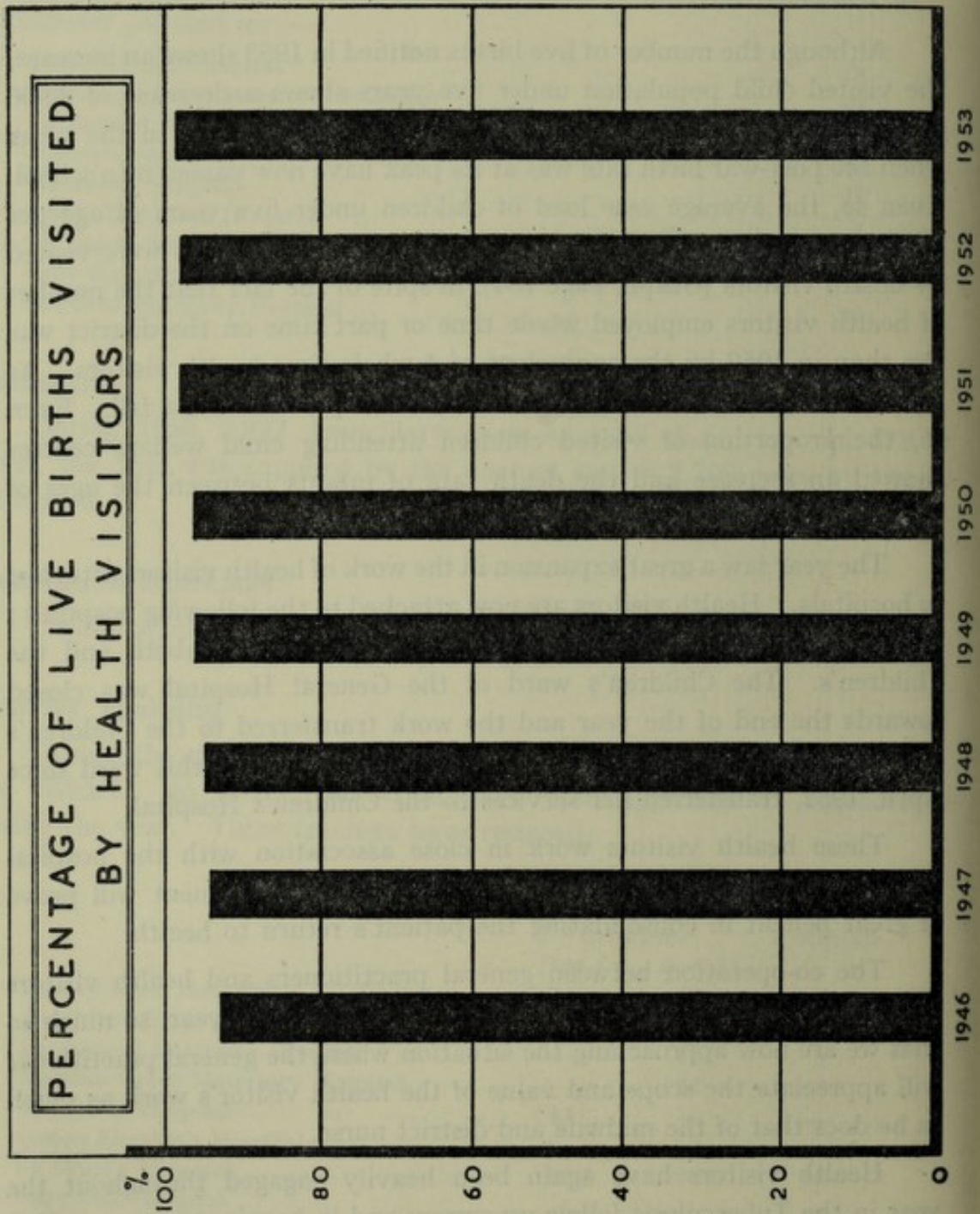
The year saw a great expansion in the work of health visitors attached to hospitals. Health visitors are now attached to the following hospitals: Dudley Road, Selly Oak, Little Bromwich, Queen Elizabeth and the Children's. The Children's ward of the General Hospital was closed towards the end of the year and the work transferred to the Children's Hospital. The health visitor who had been attached to this ward since April, 1952, transferred her services to the Children's Hospital.

These health visitors work in close association with the hospital almoners and there is no doubt that this new development will prove of great benefit in consolidating the patient's return to health.

The co-operation between general practitioners and health visitors has been maintained and, indeed, expanded during the year, so much so that we are now approaching the situation where the general practitioner will appreciate the scope and value of the health visitor's work as much as he does that of the midwife and district nurse.

Health visitors have again been heavily engaged throughout the year in the Tuberculosis follow-up survey and in housing surveys, which has meant a good deal of evening work. Their work in general health visiting has shown a further increase and is still further evidence that their position as the key social workers in the home is becoming firmly established.





The following is a resumé of the health visitors' work in 1953 :—

TOTAL NUMBER OF ROUTINE VISITS PAID TO CHILDREN UNDER  
5 YEARS

Primary visits	...	...	...	...	19,407	} Total
Routine visits—children 0 to 1	...	...	...	...	36,963	
Routine visits—children 1 to 2	...	...	...	...	33,313	
Routine visits—children 2 to 5	...	...	...	...	63,100	

TOTAL NUMBER OF SPECIAL VISITS PAID TO CHILDREN UNDER  
5 YEARS

Children 0 to 1	...	...	...	...	7,822	} Total
Children 1 to 2	...	...	...	...	2,321	
Children 2 to 5	...	...	...	...	4,020	
Ophthalmia neonatorum...	...	...	...	...	1,102	

TOTAL NUMBER OF VISITS TO EXPECTANT MOTHERS

Antenatal first visits	...	...	...	...	2,546	} Total
Antenatal re-visits	...	...	...	...	3,349	

TOTAL NUMBER OF VISITS POSTNATALLY

(a) Postnatal visits	...	...	...	...	85	} Total
(b) Neonatal deaths	...	...	...	...	53	
(c) Stillbirths	...	...	...	...	96	

GENERAL HEALTH VISITING

(a) Scabies	...	...	...	...	89	} Total
(b) Home helps	...	...	...	...	241	
(c) Children of school age	...	...	...	...	366	
(d) Adults (other than antenatal and postnatal visits)	...	...	...	...	331	
(e) Old people (Women 60+, Men 65+)	...	...	...	...	364	
(f) To general practitioners	...	...	...	...	75	
(g) Insanitary conditions	...	...	...	...	134	
(h) Housing survey (see page 184)	...	...	...	...	4,015	
(i) Tuberculosis Follow-up Survey	...	...	...	...	9,200	

Total number of useless calls	...	...	...	...	37,402	
						Total 188,992

HOSPITAL FOLLOW-UP

Number of hospital sessions	...	...	...	...	...	342
Number of visiting sessions	...	...	...	...	...	382
Number of primary home visits	...	...	...	...	...	820
Number of revisits to home	...	...	...	...	...	629
Number of other visits	...	...	...	...	...	112
Total number of district visits	...	...	...	...	...	1,561



## **THE HEALTH VISITORS' TRAINING CENTRE**

### **1. Health Visitors' Training Course, 1953-1954**

The thirty-first course of training for the Health Visitors' Certificate commenced on September 1st, 1953.

The response to the advertisements for Birmingham assisted students again showed a decrease on previous years. Sixty enquiries were received and of these thirty-four failed to return their application forms. Of the twenty-six completed applications received, three candidates failed the entrance examination, one candidate failed to attend for the entrance examination, three candidates withdrew before the Committee interview, and one candidate failed the Committee interview. Eighteen students were accepted for training. This is an increase of four over the number accepted in 1952.

Eleven local health and education authorities submitted twenty-seven candidates for training and the Birmingham Education Department sent two candidates to the course, making a total of forty-seven students.

Among the group are two students from Australia, one student from the West Indies and one student from France.

There has been a further development in the mental health aspect of the curriculum and the number of lectures on Child Psychology has been increased. Mr. W. J. Bannon, Senior Psychologist to the Child Guidance Service of the Education Department was invited this year to undertake the lecturing.

The County Boroughs of the West Midland Region continue to receive students for practical experience, and it is hoped that the Counties of Shropshire, Staffordshire, Warwickshire and Worcestershire will again be able to accept the students for a week's residential experience during the Summer term.

Forty-two students of the 1952-1953 Course entered for the Health Visitors' Examination in June, 1953. Thirty-six students were successful. The other students re-entered for the examination and, with one exception, have now obtained the Health Visitors' Certificate.

### **2. Training of Health Visitor Tutors**

The Royal College of Nursing, London, sent four health visitor tutor students and two district nurse tutor students to Birmingham in December for three weeks of their Course. Their programme included lectures, practical experience and visits of observation to places of interest within the City. The two district nurse tutors spent one week of their stay in Summerfield Hospital and the General Hospital.

### 3. Training of Student Nurses in Public Health

The Training Centre has undertaken the organising of lectures on Public Health, in relation to the new syllabus of the General Nursing Council for England and Wales, to nurses in training in the hospitals throughout Birmingham for the Certificate of General Nursing and the Certificate of Mental Nursing. These lectures, which cover a wide aspect of Communal and Personal Health and the Personal Services of the Local Health Authority, are to be undertaken by the Administrative Medical Officers, the senior Sanitary and Housing Inspectors, and the women organisers in the Health Education Department. In addition, student nurses will visit on the district with health visitors and district nurses.



## HOME NURSING SERVICE

### SECTION 25.—NATIONAL HEALTH SERVICE ACT, 1946

#### History and Development

The present system of Home Nursing owes its origin to the philanthropist, William Rathbone, who in 1859 employed a nurse named Mary Robinson to work in the homes of the sick poor of Liverpool. During his wife's fatal illness he had come to appreciate deeply the dependence of sick people on nursing. He decided to use his wealth to make nursing care available in the homes of those who needed it but lacked means to pay for it.

Imbued with the same ideals, a group of people formed the Birmingham District Nursing Society in 1870. The first district nurse took up duty in the Ladywood area of the City in the same year. She attended 98 cases in the first twelve months and a report speaks of her good influence in the district where "unfortunately she meets with much ignorance and prejudice."

An important impetus was given to District Nursing in 1887 when Queen Victoria devoted £70,000 of her jubilee gift to further District Nursing on a national scale. The Queen Victoria Jubilee Institute for Nurses, later known as the Queen's Institute of District Nurses, was founded and was granted a Royal Charter in 1899. This body introduced new methods, standardized district training and laid down that the work should be carried out under the direction of a medical practitioner. The Birmingham District Nurses became affiliated to the Institute in 1895.

From small beginnings—one nurse with a room in Ladywood—the work grew. In 1894, ten nurses were employed and a branch was started in Saltley. Financial support came entirely from voluntary donations and it is of interest that the first contribution from a public authority was made in 1892. The Board of Guardians recognized the valuable work of the voluntary organisation and contributed £10. As time went on, the rise in population and the extensions of the boundary of the City resulted in an increasing demand for the services of the District Nurse. Separate District Nursing Societies were established to provide a service in the outlying areas. These were amalgamated with the Central Society in 1929 to form the Birmingham District Nursing Association. Free nursing was given to all necessitous cases and to those who subscribed to a special provident fund, other people being charged according to their means. In 1934 the Association employed 77 nurses who attended 10,330 cases and paid 345,451 visits.



Under the National Health Service Act, 1946, it became the duty of the Local Health Authority to provide a Home Nursing Service free of cost to all patients who require nursing at home. In 1948, by agreement with the Birmingham District Nursing Association, the City Council took over the work of that body and formed the Birmingham Home Nursing Service.

As a result, nursing staff and other personnel are now City Council employees and District Nurses' Homes are the property of the Council. Membership of the Queen's Institute of District Nursing is maintained for which a fee of £3 15 0 is paid yearly in respect of each Queen's Nurse employed by the Authority. The Institute furnishes, amongst other things, a syllabus of training for District Nurse Candidates and conducts the examination for admission to the Queen's Roll.

In addition to Queen's Nurses, the Council also employs State Registered Nurses and State Enrolled Assistant Nurses, who work either part-time or full-time. A large Loans Department has developed as part of the Service. Through this nursing requisites and sickroom equipment are loaned at a nominal charge for the use of patients nursed at home. The Domiciliary Laundry Service was added in 1951 and is available where the medical condition of the individual necessitates the supply of linen and laundry facilities. Laundering is restricted to the linen supplied on loan and cannot include the patient's own property. The articles of bedding may include blankets, sheets, pillow cases, and draw sheets and the loan charge for each bundle varies from 3d. to 2/-, according to the patient's means. All are very appreciative of the service.

Bathing Attendants were employed for the first time two years ago. It was felt that a contribution could be made towards the comfort of certain selected patients who do not require skilled nursing, by the services of a bathing attendant. The aged and infirm come into this category and the attendants, usually housewives, are taught to give blanket baths and do simple toilet under the supervision of the trained staff. This ancillary service is free to those who need it. The attendants are paid at the rate of 2/1½d. per hour and are provided with green overalls and carry toilet requisites which may include a hair drier. They must pass a medical examination and have a satisfactory x-ray of the chest before starting employment.

For administrative purposes Birmingham is divided into eleven areas. Each area has a District Nurses' Home and two of these are Key Training Homes for District Nurse Candidates. There is a resident full-time Superintendent at each Home which is an administrative centre and has an office and district room. The Superintendent supervises the work in her area, keeps records, and is responsible to the Senior Superintendent. The Senior Superintendent works under the direction of the Medical Officer of Health and has her office in the Public Health Department. She co-ordinates the work of the Service, is responsible for recruit-



ment, organisation of training courses, maintains liaison with other services, and carries out periodic inspection of the work of the nurses in the homes of the patients.

The Home Nursing Steward has his office at 48, Summerhill Road, and under the direction of the Medical Officer of Health is responsible for the administration of the Loans Department, the Laundry Service, for the furnishing and fittings of the Homes, and the supply of bicycles, and other equipment for use of the staff.

Recruitment of nurses is continually being carried out in order to meet the increasing demand. Every effort is made to maintain a high standard of work and to provide the best possible service.

Birmingham is a recognised training centre for District Nurse Candidates. All State Registered Nurses joining the full-time service are encouraged to take the training for admission to the Queen's Roll. The period of training is six months for State Registered Nurses and four months for State Registered Nurses with additional qualifications. There are three training courses each year. Instruction is given on practical techniques of District Nursing and the management of cases in their own homes, Geriatrics, Diabetes, Nutrition and Simple Budgeting. The district trained nurse is also aware of the many other social services which may be of help to her patients.

She is convinced of the importance of the preventative aspect of disease and is conscious of being a member of a team working for the welfare of the patient. In fact, she is equipped for the role of adviser and "friend of the family" as well as that of a skilled nurse. Attendance at refresher courses is arranged from time to time. These are of value in stimulating interest and keeping abreast of modern developments.

Nursing staff may be resident or non-resident.

For some time there has been a tendency for the nurse to seek private accommodation rather than reside in the more communal atmosphere of a nurses' home. Appreciating this trend, the City Council undertook the experiment of having the District Nurses' Home at Yardley converted into six self-contained flats for home nurses, which are let furnished or unfurnished. In addition one flat is provided for a caretaker and existing district room and office accommodation is retained. Because of the success of this project other Nurses' Homes are already being converted on similar lines. It is apparent that the nurse likes to spend her off duty in a place of her own, and to have her own front door. Two or more nurses also have the opportunity of sharing a small modern house. These are provided in the outlying areas of the City, in order to meet the needs of the people on the new estates.

Nurses are encouraged to use their own cars in connection with their work.



The Home Nurse works in all sorts of conditions from the back-to-back house in the central congested ring to the pleasant detached residence in the outer residential zone. Her work demands tact, resourcefulness, a high standard of efficiency and a sympathetic attitude towards the problems of her patients. She must appreciate the psychology of illness and remain on good terms with the patient and his household. The introspective tuberculous patient, the tragic case of inoperable carcinoma, the aged and the hopelessness of the chronic sick, all require her individual consideration. Her visit should be one of encouragement and hope as well as for the relief of suffering. At all times the dignity and the great tradition of the nursing profession must be upheld. The Home Nurse must be prepared to deal with all sorts of problems.

Mrs. X, aged 73, was a patient who lived in a humble residence in a mean street off the industrial centre of the City. She was referred to the home nurse by a general practitioner, because of a neglected condition of the foot which became septic. The nurse arrived to find the old lady in an uncomfortable—not too clean bed—and saw at once that this was a case requiring more than a daily dry dressing. It transpired that the old lady's husband lay dying in hospital from a painful disease. She had a dread of going to hospital. She lived alone in the house and refused to allow neighbours to do anything for her. She kept her rationed goods under the bed. The nurse knew how to deal with Mrs. X. In a short time she persuaded her to accept the laundry service and toilet necessities from the loans department. The health visitor responsible for the care of the aged was asked to visit and the services of a home help were provided. A few days later in the words of the home nurse herself "the old lady was sitting up in bed like a duchess," accepting life as it came and anxious to get back on her feet again.

The Home Nurse maintains close contact with other members of the local authority's services such as Health Visitors, Care of the Aged Section, Cancer after Care, Mental Health Services, Sanitary Inspectors, etc. She works in liaison with the Hospital Almoner, the General Practitioner and the Consultant. She receives her instructions from the family doctor and has often been referred to as the "General Practitioner of Nursing."

The increasing demand for the services of trained nurses in the home is likely to persist. The advance in medical science and the efficiency of modern therapeutic preparations has made it possible for many more people to be treated at home. Approximately 52% of the persons attended by the home nurses in Birmingham are over 60 years of age. This percentage will undoubtedly rise when one remembers that in 1977 three in every fifteen people are likely to be of pensionable age. Further, in order to reduce hospital waiting lists and to conserve hospital beds, it is possible that home care and nursing schemes will become more widespread whereby patients can be discharged from hospital at an earlier



stage than hitherto, and treatment be continued at home. A scheme of this kind enables a selected patient to be nursed back to health in the familiar and beneficial surroundings of his own home and the cost to the taxpayer is very much less compared with maintaining him in hospital.

### **Work of the Service during 1953**

There has been an increase in the number of new cases attended and in the total visits paid by the home nurses in 1953. The case load of the individual nurse remains high because recruitment, though encouraging, has not kept pace with the growing demand for nursing in the home.

The care of the older members of the community has continued to make substantial demands on the Service. An analysis of the age groups of cases attended during the year shows that 37.31 % were 65 years and over.

The home nurse continues to play an important part in the domiciliary care of the tuberculous patient. Altogether 1,237 tuberculous cases were attended in 1953 which represents an increase of 170.6 % over the 1950 figure.

**Staff.** There are now 111 full time and 36 part time nurses employed in addition to one senior superintendent, nine superintendents and two assistants. Four-fifths of the staff are non-resident and over half are married women.

**Training.** During the year 12 candidates were trained at the Bordesley Training Home and 9 at the King's Heath Training Home. All were successful in the examination for the Queen's Roll.

**Refresher Courses.** Two senior staff attended a course for administrative officers held at Roffey Park, and two members of the nursing staff were sent to a refresher course held at Bangor.

**Student Nurses' Visits.** The Senior Superintendent has again given several talks on the work of the Home Nursing Service, illustrated by films, to the student nurses in Birmingham hospitals.

Two hundred and twenty-six student nurses have spent a day with the district nurses, accompanying them on their rounds.

**X-ray of District Nursing Staff.** Fifty initial examinations were made during the year of new entrants and two hundred and nineteen six-monthly re-examinations of present staff. Four nurses received B.C.G. vaccination.

**Bathing Attendants.** There has been an increasing demand for the services of the bathing attendants to attend the elderly and infirm who do not require skilled nursing attention. There are now 13 bathing attendants working in the Home Nursing Service.

# STATISTICS

	1951	1952	1953
Resident staff ... ..	20%	21%	20%

## Non-resident—whole time :

Married ... ..	26%	30%	30%
Unmarried... ..	26%	20%	27%

## Non-resident—part-time :

Married ... ..	27%	27%	22%
Unmarried... ..	1%	2%	1%

Particulars of absence of nurses due to sickness with comparable figures for 1952 are shown in the following table :—

Category	Resident or non- resident	No. of days absent		No. of nurses sick		Average total days' absence per nurse	
		1952	1953	1952	1953	1952	1953
Full time married	Non-resident	860	682	21	24	40.95	28.4
Full time single	Non-resident	312	335	16	13	19.5	25.0
Full time single	Resident	188	132	6	10	31.33	13.2
Part time married	Non-resident	957	1,057	30	32	31.9	33.0
Part time single	Non-resident	20	54	1	3	20.0	18.0
TOTAL		2,337	2,260	74	82	31.58	27.56

## Analysis of Cases attended :

	1951	1952	1953
Cases on books, 1st January	2,135	2,258	2,561
New cases attended ...	15,678	18,411	20,192
Total cases attended ...	17,813	20,669	22,753
Total visits paid ... ..	409,126	471,913	545,140

## Referred by :

Doctors ... ..	12,741	15,342	17,549
Hospitals ... ..	2,465	2,588	2,169
Health Department ...	182	139	260
Transferred from other areas	88	250	214
Other sources ... ..	202	92	—



*Clinical Classification :*

<i>Medical :</i>	1951	1952	1953
Cardiac ... ..	1,333	1,516	1,624
Pneumonia (lobar and in- fluenzal) ... ..	822	809	1,144
Bronchitis ... ..	1,012	1,577	2,533
Diabetes ... ..	465	558	574
Arthritis ... ..	210	264	237
Carcinoma ... ..	829	832	879
Senility ... ..	757	713	789
Strokes ... ..	} 5,720	} 6,953	930
Enemas ... ..			1,583
Ulceration of leg ... ..			256
Other medical ... ..			4,873

*Infectious disease :*

Tuberculosis ... ..	659	996	1,237
Whooping cough ... ..	28	17	19
Measles ... ..	44	30	47
Pemphigus ... ..	5	1	3
Other notifiable diseases ... ..	47	46	55

*Midwifery and Gynaecology :*

Puerperal fever ... ..	68	62	94
Antenatal complications ... ..	49	36	33
Postnatal complications ... ..	94	98	91
Abortion ... ..	76	62	56
Pessary renewals ... ..	—	—	105
Uncomplicated puerperium	2	—	—

*Surgical :*

Post operation ... ..	803	1,439	1,216
Operations, other than hospital ... ..	} 2,655	} 2,402	15
Other dressings ... ..			1,799

*Age groups of new cases—1953 :*

Under 5 years ... ..	1,736
5-14 years ... ..	1,559
15-64 years ... ..	9,794
65 years and over ... ..	7,103

*Age groups of cases on books on 1.1.53 :*

Under 5 years ... ..	87
5-14 years ... ..	31
15-64 years ... ..	1,057
65 years and over ... ..	1,386

## AMBULANCE SERVICE

(SECTION 27.—NATIONAL HEALTH SERVICE ACT, 1946)

The year 1953 has been one of continual increase in the number of patients conveyed by the City Ambulance Service. In almost every monthly analysis of the figures for each section of the service it has been noted that the number of cases has surpassed anything previously recorded in at least one of the classifications. The general upward trend has been even more pronounced than in recent years, the grand total of all patients conveyed by the Ambulance Service (excluding the Hospital Car Service) having risen to 317,686, an increase of over 26,000 compared with the corresponding figures for 1952.

### Hospital Removal Service

The main burden of the increase has been borne by the Hospital Removal Section, which includes the out-posted ambulances of the infectious diseases unit. The number of patients conveyed by this section of the Service has progressively increased over the past four years as is shown by the following :—

<i>Patients conveyed by Hospital</i>						
<i>Year</i>					<i>Removal Service</i>	<i>Increase</i>
1950	...	...	...	...	239,261	—
1951	...	...	...	...	254,370	15,109
1952	...	...	...	...	277,900	23,530
1953	...	...	...	...	303,451	25,551

It will be noted that the average increase during 1953 was considerably in excess of 2,000 patients per month.

One special feature which had a bearing on these figures was in relation to the arrangements made with Marston Green Maternity Hospital, which is the subject of a later paragraph; apart from this, the greatest increases occurred in the classifications :—

- (a) Clinic cases (mainly physiotherapy and remedial treatment)
- (b) Tuberculosis out-patient treatment cases, and
- (c) Hospital admission and discharge cases.

In the last category the increases were especially marked during the early part of the year.



The monthly comparative figures showing the number of patients carried during the last two years are as follows :—

		1952	1953	Increase	Decrease
January	...	24,096	25,660	1,564	
February	...	22,640	23,262	622	
March	...	23,401	25,887	2,486	
April	...	22,306	22,788	482	
*May	...	24,553	23,146		1,407
*June	...	20,959	24,724	3,765	
July	...	23,938	26,625	2,687	
August	...	20,932	24,439	3,507	
September	...	22,827	26,313	3,486	
October	...	24,722	26,816	2,094	
November	...	23,654	26,826	3,172	
December	...	23,872	26,965	3,093	
		<hr/>	<hr/>		
		277,900	303,451		
		<hr/>	<hr/>		

\* In 1952 the Whitsuntide holiday period occurred in June, as against May in 1953.

The following analysis of the cases reveals a rise for 1953 as compared with 1952 in every category except the Little Bromwich Hospital Infectious Diseases cases.

#### ANALYSIS OF CASES

		1949	1950	1951	1952	1953
Clinic cases	...	137,902	167,029	173,773	185,703	203,434
Admissions	...	19,693	22,414	23,594	24,823	25,980
Discharges	...	26,114	28,871	32,821	33,833	35,366
Transfers	...	5,674	5,289	5,585	7,009	8,169
Emergency Maternity Service	...	135	111	140	113	140
Maternity cases	...	7,313	7,378	7,436	8,249	8,428
Miscellaneous	...	1,336	1,006	926	1,189	1,546
Monyhull—Mental	...	652	658	754	738	939
Little Bromwich—Infectious	...	2,791	3,173	2,481	2,610	2,165
Yardley Green—Tuberculosis	...	1,709	3,332	6,860	13,633	17,284
		<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
		203,319	239,261	254,370	277,900	303,451
		<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

# DIVISION INTO STRETCHER AND SITTING CASES

		1949	1950	1951	1952	1953
Sitting cases ...	...	153,100	188,129	199,857	214,635	237,530
Stretcher cases	...	50,219	51,132	54,513	63,265	65,921
		203,319	239,261	254,370	277,900	303,451

## Out-Posted Ambulances

The ambulance units at Little Bromwich, Yardley Green and Monyhull Hall Hospitals continued to operate in close association with the Hospitals concerned, any overflow of work being taken up by the main Hospital Removal Section. The total number of patients carried by the out-posted ambulances during the year was 20,388 as against 16,981 during 1952.

## Accident Ambulances

The policy of operating eight ambulances, manned by firemen, for providing an immediate response to accident and emergency calls from Fire Stations in the City was satisfactorily continued in 1953. The total number of calls was 15,056 and the number of casualties conveyed was 14,235 as compared with 14,380 calls and 13,681 casualties in the previous year.

An analysis of the location of calls, types of injury, hospitals to which patients were conveyed, and fatalities is shown below :—

## EMERGENCY AMBULANCE CALLS

LOCATION OF CALLS						1952	1953
Street Accidents involving vehicles	...	...	...	...	...	2,304	2,772
Factory accidents	...	...	...	...	...	1,034	984
Private houses	...	...	...	...	...	4,827	5,072
Offices	...	...	...	...	...	73	78
Shops and restaurants	...	...	...	...	...	264	343
Outdoor (other than street accidents)	...	...	...	...	...	3,950	3,728
Licensed premises	...	...	...	...	...	226	241
Schools	...	...	...	...	...	350	317
Cinemas and theatres	...	...	...	...	...	136	142
Other premises	...	...	...	...	...	1,195	1,322
False alarms (malicious)	...	...	...	...	...	21	57
						14,380	15,056



# CLASSIFICATION OF INJURIES TO PATIENTS CARRIED IN AMBULANCES

	1952	1953
Fractures ... ..	2,118	2,068
Wounds ... ..	2,868	2,995
Collapse, fits, strokes ... ..	2,880	2,964
Abrasions and bruises ... ..	464	616
Gas poisoning ... ..	110	116
Drowning ... ..	20	7
Eye injuries ... ..	89	100
Dislocations and sprains ... ..	333	419
Hanging ... ..	3	2
Concussion, shock ... ..	881	622
Haemorrhage ... ..	497	502
Scalds and burns ... ..	559	506
Poisoning ... ..	314	264
Not classified ... ..	2,545	3,054
	<hr/>	<hr/>
	13,681	14,235
	<hr/>	<hr/>

## DESTINATION OF CASUALTIES

	1952	1953
Accident Hospital ... ..	4,955	4,689
General Hospital ... ..	5,690	6,100
Other Hospitals ... ..	2,851	3,365
Casualties actually carried in ambulances but not taken to hospital ... ..	185	81
	<hr/>	<hr/>
	13,681	14,235
	<hr/>	<hr/>

## FATALITIES

	1952	1953
Number of persons found dead on arrival of ambulances ... ..	178	180

# Injured Persons

The table below shows the incidence of accident calls during the hours of the day and in relation to the age groups of the patients :—

TABLE SHOWING NUMBER OF PERSONS OF VARIOUS AGE GROUPS CARRIED IN EMERGENCY AMBULANCES DURING EACH HOUR OF THE DAY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Age Group	HOURS OF DAY																																				Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	Mid.		0100		0200		0300		0400		0500		0600		0700		0800		0900		1000		1100		1200		1300		1400		1500		1600		1700			1800		1900		2000		2100		2200		2300		2400																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—



The majority of accident calls continue to be received via the G.P.O. "999" telephone system. The full analysis of how the Service was notified is shown in the following table :—

METHOD OF TRANSMISSION OF CALLS									
" 999 "	...	...	...	...	...	...	...	...	8,857
Exchange	...	...	...	...	...	...	...	...	3,031
Police Exchange	...	...	...	...	...	...	...	...	2,331
Street Alarm	...	...	...	...	...	...	...	...	52
Observed	...	...	...	...	...	...	...	...	11
Messenger	...	...	...	...	...	...	...	...	445
Radio	...	...	...	...	...	...	...	...	26
Direct line	...	...	...	...	...	...	...	...	303
									<hr/> 15,056 <hr/>

### Mutual Assistance

There was a satisfactory continuation of arrangements with other Local Health Authorities for providing mutual assistance in 1953. In the Accident Section, these journeys are performed on a non-chargeable basis and Birmingham Ambulances responded to "Over-the-Border" incidents on 56 occasions. The Hospital Removal Section co-operates with other Ambulance Authorities to ensure the most economical use of ambulance transport for cases conveyed between Birmingham and neighbouring areas, these operations being carried out at rates agreed between the Local Health Authorities concerned.

The number of cases transported over the City boundary again showed an increase over the previous year as is evidenced by the following figures :—

	1952	1953
Patients conveyed from outside to inside the City boundary ... ..	5,182	13,503
Patients conveyed from inside to outside the City boundary ... ..	6,106	12,845

Of the above patients conveyed during 1953, 381 were dealt with at the request of other Health Authorities on a chargeable basis.

## Mileage Statistics

The following table shows the monthly analysis of mileage performed by ambulances, divided into the three sections of the Service :—

1953						
<i>Month</i>			<i>Removal</i>	<i>Accident</i>	<i>Out-posted</i>	<i>Mileage Total</i>
January	...	...	135,803	5,788	11,958	153,549
February	...	...	118,233	8,235	10,197	136,665
March...	...	...	127,467	8,715	12,492	148,674
April	...	...	124,499	7,457	9,558	141,514
May	...	...	121,495	10,067	7,862	139,424
June	...	...	115,813	10,970	10,266	137,049
July	...	...	127,870	9,387	10,836	148,093
August	...	...	121,628	7,953	9,382	138,963
September	...	...	130,184	8,130	7,366	145,680
October	...	...	131,568	8,085	10,625	150,278
November	...	...	136,647	7,135	10,493	154,275
December	...	...	129,630	13,871	10,075	153,576
			1,520,837	105,793	121,110	1,747,740

## Patients conveyed by rail

It was possible to make arrangements for the conveyance by Ambulance/Rail/Ambulance of 764 patients compared with 653 in the previous year. British Railways' facilities are making this aspect of Ambulance Service operations very well appreciated by Doctors and Hospitals for long distance journeys.

## Maternity Service (including Emergency Maternity Service)

There was a further slight rise in the number of maternity cases conveyed by ambulances to the Maternity Hospitals during 1953 (8,428), compared with 8,249 in 1952. The Ambulance midwives accompanying these cases rendered professional services in 129 cases, as follows :—

Delivery at home prior to removal by ambulance	...	...	26
Delivery in ambulance en route to hospital	...	...	24
Attention given to mother and baby when delivery occurred prior to ambulance call or arrival	...	...	79



The arrangements made with the Board of Governors of the United Birmingham Hospitals in connection with their Emergency Maternity Service procedure from Loveday Street Maternity Hospital were continued on the agreed chargeable basis, and an ambulance was provided at the request of the hospital on 140 occasions compared with 113 in 1952.

### **Marston Green Maternity Hospital (Out-patients)**

Negotiations were completed during the year for the Ambulance Service to take over, and be responsible for, a service which had hitherto been provided by the Dudley Road Group Hospital Management Committee, to facilitate the attendance of patients at the hospital Ante and Post natal Clinics.

This responsibility was taken over as from 1st June, 1953, and a total of 12,914 patients were conveyed during the seven months ended 31st December, 1953.

### **Ambulance Fleet**

Except for the addition of one 20-seater ambulance coach for the conveyance of Marston Green patients, there was no alteration in the established strength of the ambulance fleet during the year.

Under the replacement scheme, four of the dual-purpose commercial chassis ambulances were disposed of and replaced by four new dual-purpose ambulances. At the end of the year the fleet consisted of:—

Dual purpose ambulances	...	...	...	...	...	...	78
Sitting case ambulances	...	...	...	...	...	...	21
Sitting case cars	...	...	...	...	...	...	3
Ambulance coach (20-seater)	...	...	...	...	...	...	1
							<hr/>
							103
							<hr/>

### **Staff**

Throughout the year the established strength of the Service was never attained and, in general, resignations offset any improvement in

recruitment. Details of the establishment approved in 1952 and the strength at the end of 1953 are as follows :—

				<i>Strength at 31.12.53</i>		
<i>Operational and Depot Staff</i>		<i>Establishment</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
Garage Foremen ...	...	6		6		6
Clerks ...	...	4		2	2	4
Storekeeper ...	...	1		1		1
Depot Drivers ...	...	3		3		3
Depot Assistants ...	...	4		4		4
Depot Vehicle Cleaners ...	...	12		13*		13*
Depot Cooks and Cleaners ...	...	5			6†	6†
Leading Drivers ...	...	11		10		10
Drivers and Attendants ...	...	171		134	21	155
Midwives ...	...	12			12**	12**
<i>Ambulance Control :</i>						
Ambulance Control Officer ...	...	1		1		1
Senior Control Operatives ...	...	8		4	3	7
Control Operatives ...	...	20		1	18	19
		<hr/>		<hr/>	<hr/>	<hr/>
		262		183	62	245
		<hr/>		<hr/>	<hr/>	<hr/>

\* 1 held in excess of establishment due to prolonged sickness.

† Includes 4 part-time.

\*\* Includes 6 part-time.

## Premises

The first complete year of operations from the new Ambulance Depot in Henrietta Street has confirmed the many advantages which were anticipated. These have been of considerable importance in the maintenance and operation of the Service without any expansion in the establishment of personnel and vehicles despite the substantial increase in the number of patients carried.

## Voluntary Services

### ST. JOHN AMBULANCE BRIGADE

A further year of satisfactory duties was performed by volunteers of the St. John Ambulance Brigade in manning ambulances of the City Ambulance Service during the evening and week-end periods ; this materially assisted in the successful operations of the Birmingham Fire and Ambulance Service.



Their work in making it possible for the manning of additional accident ambulances during some of the important parades, celebrations and functions during this Coronation year was especially appreciated.

#### HOSPITAL CAR SERVICE

Voluntary drivers of the British Red Cross Society's Hospital Car Service again provided valuable assistance to the Ambulance Service operations. The number of patients conveyed by these drivers in their private cars during the year was 13,324, approximately 4,000 more than any previous year's figures. This figure is not included in the total of patients conveyed by the Ambulance Service, referred to earlier.

An important point in regard to the greater number of patients conveyed is that the mileage figure of the Hospital Car Service increased by less than 10,000 miles over the year (143,013 miles in 1953 compared with 133,929 miles in 1952). This result was achieved by closer integration of the work of Service ambulances with the use of the Hospital Car Service.

#### Bed Bureau

During 1953 the Ambulance Service continued to operate the Bed Bureau from the Central Ambulance Control on behalf of the Birmingham Regional Hospital Board. The Bureau again gave valuable assistance and service to General Practitioners and Hospitals, and received 12,641 requests for hospital beds ; in 11,704 cases, admissions were satisfactorily obtained. Both these figures are higher than any previously recorded since the inauguration of the National Health Service and compare with 12,224 requests and 11,297 cases satisfactorily resolved during the previous year.



## PREVENTION OF ILLNESS, CARE AND AFTER CARE

(SECTION 28.—NATIONAL HEALTH SERVICE ACT, 1946)

### HEALTH EDUCATION

"Did men take every effort to avoid disease, they would seldom need the physician. . . ." These words were spoken two hundred years ago by an Edinburgh doctor and to-day they are as true as when they were first spoken.

It has been maintained that the sanitary revolution is over or at least drawing to a close, and that the further improvement in the health of the community will depend largely on the knowledge and application of the individual. Health education, working towards this objective, can be the spearhead of progress in preventive medicine of the future.

The simple rules of hygiene should be part and parcel of the individual and should be inculcated from infancy. To attain this objective we are faced with the problem of educating all ages and grades of intelligence of the community. The most fruitful and easiest soil to cultivate would appear to be the school child and it seems that the school teacher, if enthusiastic and well versed, can be the best teacher, for it is perfectly simple to impart knowledge of hygiene during the ordinary routine teaching. It follows, therefore, that the school teacher must have a good grounding in health education.

Of great importance in the teaching programme must be the mother. She should be made health conscious. It is here that the health visitor, with her endless opportunities for imparting knowledge, both in the homes and in the clinics, can do a tremendous amount of good. By imparting knowledge to the mother the child is also indirectly benefited.

Through youth clubs and continuation classes it is possible to reach the adolescent boys and girls and through guilds, political organisations, old persons' clubs, etc., it is possible to reach quite a large proportion of the adult population.

There seems, however, to be one group who need to be reached in greater numbers—the young fathers and fathers-to-be. This group needs to be shown more clearly and forcibly just what is their responsibility in the question of health in the home.

In Birmingham an attempt is made through health education to reach all sections of the community. Lectures and health talks are given in the schools, remand homes, approved schools, youth organisations, and to teachers in training, and adult groups, including H.M. Prison, Winson



Green. The lectures are given by specially appointed health education lecturers assisted by medical officers, health visitors, sanitary inspectors, midwives, and various other lecturers. The health education in the welfare centres is carried out by the health visitors attached to the particular centres and is not directly controlled by the health education section although considerable assistance is given to the health visitors, especially as regards visual aids. Most of the visual aids used throughout the health education programme are prepared within the section by two members of the staff with considerable artistic ability.

During the year under review the health education activities followed much the same pattern as in previous years although there were some new ventures.

The total number of lectures given in 1953 was 3,514, which shows a slight drop on the figures for 1952. Of these lectures, 2,881 were given in "duty" hours and 623 in "out of duty" hours. The table below shows the increase in lectures given for the period 1948/1953. It will be seen that the majority of the work is being carried out in the schools, but that there is an encouraging increase in the number of lectures given to adult groups.

#### HEALTH EDUCATION LECTURES, 1948—1953

<i>Year</i>	<i>Total lectures</i>	<i>Lectures given to</i>		
		<i>Schools</i>	<i>Youth organisations</i>	<i>Adult organisations</i>
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

Apart from these lectures, talks by health visitors are being continually given in the welfare centres.

**Group Discussion Courses.** Three one-day courses in the technique of group discussion were arranged by the Central Council for Health Education during October. In the three days 74 members of the staff, including health visitors, midwives, nursery supervisors, school nurses and health education staff attended. The courses were excellently conducted and proved to be of great value to all.

**Foot Health Week.** The Central Council for Health Education arranged a foot health week in the City from Monday, the 26th to Friday, the 30th October. Courses of instruction were arranged for health visitors, school nurses and shoe fitting assistants. Talks and discussions for the general public were well attended. An essay competition was also arranged for shoe fitting assistants.

On the whole the exhibition was well patronised and served as a useful experiment for the Central Council for Health Education and ourselves.



## The Clean Food Campaign

This essential feature in the general health education programme continues as in previous years, taking three forms, e.g.,

(1) Short talks are given to individual staffs of catering and other food premises by the sanitary inspector (see section on Food and Drugs).

(2) Single lectures, or a series of lectures, are given by administrative medical officers and senior sanitary inspectors to managements, supervisors and staffs, including trade classes at the College of Technology.

(3) Lectures to women's organisations, parent-teachers' associations, classes of older girls attending senior schools, etc., are given by administrative medical officers and senior sanitary inspectors.

An informed public opinion is held to be an essential requisite in the raising of standards of food preparation and distribution above what constitutes the basic requirements of the Food and Drugs Act and the Food Handling Byelaws made thereunder. A large proportion of these lectures are given outside normal working hours and their popularity can be assessed by the fact that meetings are usually of at least 1½ hours' duration if a film or film strip is shown.

A summary of the lectures given under (2) and (3) above is as follows (1952 figures in brackets).

	<i>No. of Lectures</i>	<i>Total Attendances</i>
Food trades ... ..	31 (32)	623 (1,126)
General Public ... ..	12 (4)	648 (138)
	<hr/> 43	<hr/> 1,271

The long projected Clean Food Guild was eventually launched in September with the support of, but not under the administration of, the Local Authority. The catering, bakery and butchery trades associations have not, for reasons of policy best known to themselves, associated themselves with this movement, although their response to other aspects of the Clean Food Campaign has been both encouraging and productive of improvement in food handling. Clearly, however, such a Guild must embrace members of all the Food Trade Associations and, in particular, the Catering Trade, if it is to be of any significant value in improving standards of Food Hygiene.

From the point of view of the Local Authority, however, such a Guild is likely to attract only those managements who are already converted or are prepared to be, and it is likely, therefore, that in the end, the most profitable work in this field is done by the district sanitary inspector in his day-to-day routine. He has the opportunity to draw attention to faults, explain why they are faults and prescribe the remedy, and much of the improvement noted in the past few years may be placed to his credit.



## **Clean Air**

Reference to this matter is made in the item on smoke abatement.

**Lunch-time health films.** On September 17th a new venture was begun. Lunch-time health films, followed by a short talk, were given weekly in the Public Health Department on Thursdays, from 1.15 p.m. to 1.45 p.m. Fourteen of these sessions were held before the end of the year. Audiences were restricted to a maximum of 40 and the average number attending was 30. There is no doubt that this development has proved to be popular and it is hoped to continue with it and expand to larger audiences.

**Special Course on Child Care at Winson Green Prison. After Care.** Arrangements have been completed for a follow-up of the women who attend the above course. With the prisoners' permission the names and addresses are sent, in confidence, to the Medical Officers of Health of the area in which they live, with a request that arrangements should be made for them to be visited by health visitors after their return home, and for confidential reports to be sent back. As yet it is too early to assess the value of the course.

**Film Strips.** The film strips "Clean Food" and "Home Safety" were completely revised during the year and a new film strip entitled "Child Development" was completed.

**Out of City lectures.** One of the health education staff addressed the members of the Women Public Health Officers' Association in London on March 13th. The subject was "Special Training and After-care for Women convicted of Child Neglect." This same member of the staff on October 4th addressed the Maternity and Child Welfare Group of the Society of Medical Officers of Health in London. The subject of the talk was "Visual Aids and their Presentation."

**Royal College of Nursing.** The College held a refresher course, in Birmingham, for health visitors from all over the country. On the 17th May, 1953, a member of the health education staff gave a lecture and demonstration at this course. The subject was "Modern Methods in Health Education." Later the Royal College of Nursing arranged a course for hospital sister tutors and on the 1st December a lecture was given to the course by a member of the health education staff. The subject was "Visual Aids."

**Youth Leaders' Course.** The work of the health education section with regard to the training of teachers and youth leaders in a Birmingham training college has continued to expand. A course on the



theme "Health Education and the Adolescent" was organised in conjunction with the Westhill and Y.W.C.A. Joint Youth Leaders' Training Course. A series of eight lectures was given by members of the staff covering various aspects of health education and the place of youth leaders in the field of health education. The theoretical part of the course was followed by a lecture-demonstration to students and tutors from the training college, in the demonstration room of the Public Health Department. It was felt that this provided excellent means of consolidating the aspects of the ground covered. An examination was taken by all students at the completion of their training and the results indicated that the health education had been a success and that there is a definite place for health education in the programme of training undertaken by persons entering the field of youth leadership and general social work.

### **Prevention of Tuberculosis**

Tuberculosis visitors during the year gave a number of lectures on "The Prevention of Tuberculosis," on "Diversional Therapy for the Tuberculous," and "After-care in Tuberculosis," to various organisations in the City and also in Winson Green Prison. Additionally, talks to Home Helps have been given at three-monthly intervals on the Prevention of Tuberculosis.

### **Medical Students.**

By arrangement with the University of Birmingham Institute of Child Health, medical students, as part of their course of training, have, for a number of years, received lectures and demonstrations on the various activities of the Health Department as they relate to children. They have also received lectures on the Prevention of Tuberculosis and the place of the Chest Clinic in the Domiciliary Service, and, for the first time, have visited the health education section for a talk on the organisation of the section, followed by a demonstration of visual aids.

**Visitors.** Dr. Mayhew Derryberry, who is the head of the health education section of the United States Public Health Services, and one of the advisers on health education to the World Health Organisation, whilst on a three day visit to this country, spent half a day in Birmingham seeing the work carried out by the health education section.

Many other persons interested in health education, both from this country and from overseas, have visited the section to see the work that is being done, and a number have been given instruction on the making of visual aids.

### **CARE OF THE AGED**

The amount of work in connection with the care of the aged continues to be heavy. One of the major problems is that of the elderly



infirm person living alone, not ill enough to be admitted to hospital but with no available relative to give any assistance. Facilities provided by the Health Department, although of considerable help, cannot always meet all the requirements, and the time is eventually reached when home care becomes impossible. It is found that in this type of case, home conditions can deteriorate very rapidly, and it is very important therefore that such cases should be visited at regular intervals.

The total visits paid by the two whole-time health visitors employed in the care of the aged and infirm was 3,002 during 1953. This figure included visits to 1,024 new cases.

The Laundry Service continues to serve a useful purpose, enabling many cases to be nursed at home who would otherwise have required hospital admission.

Number of cases on register on 1st January, 1953...	...	...	682
Number of new cases added during year	...	...	1,024
Number of cases remaining on register at end of year	...	...	836
Number of new cases requiring Home Helps	...	...	116
Number of Home Helps supplied	...	...	60
Number of cases refusing Home Helps	...	...	13
Number of cases still awaiting Home Helps	...	...	43
Number of cases requiring Night Watchers	...	...	16
Number of Night Watchers supplied	...	...	9
Number of cases supplied with nursing equipment	...	...	59
Number of cases provided with Bath Attendant	...	...	32
Number of cases provided with laundry service at request of H.V.	...	...	54
Number of cases admitted to hospital	...	...	569
Deaths	...	...	366
Number of cases referred to Welfare Department	...	...	20
Number of cases referred for voluntary visiting	...	...	20
Total number of visits paid by special health visitors	...	...	3,002
Total number of visits paid by health visitors on general duties...	...	...	364

## LOAN OF NURSING EQUIPMENT

There has been a further substantial expansion in this section of the service during 1953, the number of items loaned being 5,165 as compared with 4,011 for the previous year, showing an increase of 28·77%. With two exceptions the increase is general throughout the whole range of equipment, but it is especially notable in the case of :—

Commodes which at 194 shows an increase of 115·5%.

Lifting equipment which at 50 shows an increase of 127%.

Bedsteads which at 104 shows an increase of 39%.

Invalid chairs and carriages, which at 665 shows an increase of 48%.

These figures serve to emphasise the continued development in the care of the aged and infirm, to whom this type of equipment is very largely loaned.



Whilst the number of patients nursed by the District Nurses has increased by 10%, the loan of items of sick room equipment has increased by 28.8% and this is attributable to the increasing applications for loan of such equipment for patients being nursed by their own families.

With the exception of wheel chairs and commodes, it has been possible to supply all equipment immediately on demand, but the rapid increase in these two cases could not be foreseen and several times delay occurred whilst fresh supplies were obtained from the manufacturers.

In the case of wheel chairs there is always a steep rise in applications in the spring and during the month of May alone 100 applications were received, which is nearly double those received in the same month of the previous year. About the same time our normal suppliers went out of business and whilst arrangements were being made for supplies from other sources, a waiting list was created which was not overtaken for several months. The difficulty was enhanced by the need for making new arrangements for the repair and overhaul of returned chairs, which had been in continuous use for several years.

When the new store being provided at Aston is available, it will be possible to carry increased stocks of chairs and other equipment, and it is hoped to avoid the repetition of a waiting list.

Breakages in crock commode pans and bedpans were considerable and these are now being replaced as required with aluminium pans which have proved very satisfactory.

During the year gifts have been received of 10 chairs from private individuals who no longer have use for them and these have been gratefully accepted.

A problem which causes some concern is that of young children with congenital dislocation of the hips. Where the child has a full abduction in a plaster case, it has so far not been possible to evolve a suitable carriage which could be used on the public footpath, owing to the excessive width required, and in consequence such children are usually confined to the house for many months with resulting disadvantage to the child and considerable inconvenience to the mother.

The amount collected during the year from small hire charges was £601 as compared with £433 during 1952. The system continues to work very satisfactorily and in the vast majority of cases the charge is paid willingly and promptly.

Regular periodic visits at intervals of three to six months are now being paid to all cases where equipment is on loan and where the District Nurse is not attending, to ensure the satisfactory condition of the equipment and that it is returned when no longer required.



Many expressions of appreciation of this service are regularly received, of which the following is typical :

The patient is a married man in middle life, suffering from ankylosing spondilitis. About 10 months after his discharge from hospital we received a report that " he wears a support by day but the surgeon would prefer he discards this at night and sleeps on a bed board. If you could loan him this we shall be very grateful. At the moment he has been using a cupboard door on a double bed, but this has meant no sleep for him or his wife, also the landlord insists on the door being replaced."

Arrangements were immediately made for the loan of a bedstead and bedding, and a fracture board. A year later the patient's condition had improved and enabled him to resume work in a sedentary occupation when he wrote :

" I realise the needs of others for bedding, so I will endeavour to equip myself one way or another. My most ardent wish is some-day I shall be able to repay you and other kind people who came to my aid in time of need."

#### AMOUNTS OF EQUIPMENT LOANED DURING EACH OF THE PAST THREE YEARS

				1951	1952	1953
Wheel chairs	...	...	...	261	371	538
Merlin chairs	...	...	...	38	61	100
Stairway chairs	...	...	...	13	12	21
Spinal carriages	...	...	...	10	5	6
Bedsteads	...	...	...	19	75	104
Special mattresses	...	...	...	34	95	64
Fracture boards	...	...	...	3	—	6
Lifting poles and chains	...	...	...	5	22	50
Self-operating tilting beds	...	...	...	1	2	2
Crutches, pairs	...	...	...	22	25	33
Walking sticks	...	...	...	3	5	22
Walking machines	...	...	...	2	1	2

The above are additional to the normal items of " sick-room equipment " the loans of which are shown below.

				1951	1952	1953
Air beds	...	...	...	98	75	69
Air rings and sorbo cushions	...	...	...	835	788	954
Back rests	...	...	...	318	302	410
Bedpans...	...	...	...	923	811	1,076
Leg cradles	...	...	...	82	111	135
Mackintosh sheets	...	...	...	708	715	908
Urinals	...	...	...	319	343	367
Sick feeders	...	...	...	42	44	73
Commodore	...	...	...	54	90	194
Miscellaneous items	...	...	...	41	58	31

## Domiciliary Laundry Service

Since this service was started in August, 1951, there has been a progressive increase in the number of applications and during 1953 the number of cases dealt with rose to 423 as compared with 217 in the previous year. The great majority are aged people but the service is given to younger patients where the circumstances justify this.

The system of collection of charges at the time of delivery of the laundered linen continues to work satisfactorily. The amount collected during the year was £441 against £165 in the previous year. Bad debts were incurred in only seven cases amounting in all to £1 0 9, and these were attributable to the patients having died, left the district or being removed to hospital. From the same causes difficulty is sometimes experienced in recovering all the linen loaned, but the losses on this account have been negligible compared with the 3,800 articles of linen in continuous circulation.

There has been only one case of negligent and irreparable damage to a blanket and in this case the patient was required to pay the cost of replacement.

The following shows the comparison of cases dealt with in the past two years :—

				1952	1953
No. of cases on books, 1st January ...	...	...	...	29	89
New applications during year ...	...	...	...	188	334
				<hr/> 217	<hr/> 423
Cases removed from books during year ...	...	...	...	128	276
Cases still on books at 31st December ...	...	...	...	<hr/> 89	<hr/> 147

### ANALYSIS OF CASES FOR 1953

Qtr.	No. of approved applications	Service discontinued			Service not started			Total
		Died	Hospital	Other reasons	Died	Hospital	Improved	
1st	97	25	24	7	11	3	—	70
2nd	63	33	24	5	3	2	—	67
3rd	72	24	25	10	3	—	1	63
4th	102	45	18	6	7	—	—	76
	<hr/> 334	<hr/> 127	<hr/> 91	<hr/> 28	<hr/> 24	<hr/> 5	<hr/> 1	<hr/> 276



## RECUPERATIVE CONVALESCENT CARE

The almoners of the various hospitals in Birmingham received applications from 919 patients but 54 of these, for various reasons, did not go to a convalescent home and, of the 865 who did, 193, had their expenses paid through membership of Works Convalescent schemes, etc., or decided from the outset to meet the full cost themselves.

During 1953 there were, therefore, 667 patients who availed themselves of the Health Committee's facilities whereby the cost was initially met by the Health Department and repayment was later made by the patients in accordance with their means. Corresponding numbers for previous years were 625 (1952), 686 (1951), 603 (1950) and 609 (1949).

45% of the total applicants were recommended for convalescence by their General Practitioners and 55% by doctors working in hospitals.

The following reasons were given for the 54 applicants not taking the convalescence which had been recommended :—

Patient decided against convalescence, preferring to stay at home	...	...	...	...	...	...	...	29
Patient became medically unfit for convalescence	...	...						14
Preferred to make private arrangements	...	...	...					2
Suitable facilities for convalescence could not be found	...							5
Refused on account of a charge being made by the Health Department in accordance with means	...	...	...					2
Mother could not be induced to co operate	...	...	...					1
Medical recommendation for convalescence reversed...	...							1
							—	54

A yearly grant of £550 is made by the Health Committee to the Birmingham Hospital Saturday Fund whose Secretary states that during the year they made arrangements which enabled 6,795 of their members to receive convalescence. The Fund's own homes received 6,463 of these patients and the remainder took their convalescence elsewhere.

## PRIORITY IN REHOUSING ON MEDICAL GROUNDS (OTHER THAN TUBERCULOSIS)

The City Council's revised points scheme for the allocation of tenancies of houses came into operation on the 1st January, 1953. Under the new arrangements points are awarded to applicants on account of lack of accommodation and domestic facilities as well as in recognition of length of time on the waiting list. In addition, up to a maximum of thirty points may be awarded on health grounds in cases where a medical condition in the applicant's family, taken in conjunction with housing conditions, warrants some degree of priority in rehousing.



Occasionally the health grounds are of such an urgent nature that a special allocation of houses was set aside at the beginning of the year for these very special cases :—

1 Bedroom			2 Bedrooms			3 Bedrooms			4 Bedrooms		
New	Pre-War	Central Areas	New	Pre-War	Central Areas	New	Pre-War	Central Areas	New	Pre-War	Central Areas
10	Nil	Nil	11	4	12	34	3	Nil	1	Nil	Nil

There was, however, an unexpectedly high proportion of small families who needed rehousing urgently and the 75 houses allocated for this purpose had to be redistributed as follows :—

1 Bedroom			2 Bedrooms			3 Bedrooms			4 Bedrooms		
New	Pre-War	Central Areas	New	Pre-War	Central Areas	New	Pre-War	Central Areas	New	Pre-War	Central Areas
25	Nil	Nil	11	4	12	19	3	Nil	1	Nil	Nil

The introduction of the new points scheme led to the re-registration of all applicants who still required a Corporation house. There were approximately 55,000 of these and by the end of the year 8,970 referrals had been made to the Health Department, either directly or indirectly, for assessment of priority in rehousing on grounds of ill health. There were in addition 2,675 applicants considered on account of tuberculosis. These are mentioned on page 85. This unexpectedly high proportion of applicants requesting special consideration taxed the resources of the Department severely.

Most of the applicants have been visited in their own homes by health visitors. Others have been interviewed at welfare centres and at the central offices and subsequently home visits were paid whenever these were necessary to obtain first hand knowledge of the conditions to which the applicants drew attention. General practitioners and specialists were approached on behalf of hundreds of applicants (with their permission) in order to obtain sufficient information to be scrupulously fair in dealing with all applications.

Thousands of dwellings have been examined in order that due weight may be given to any inherent unfitness which would be reflected in the points allocation. This arrangement has revealed dwellings previously not known to the Department and some of these were so



grossly unfit that official representations had to be made. Medical Officers of Health elsewhere have also given valuable information as to the ill health and housing conditions of applicants living outside the City.

In many hundreds of instances our investigations disclosed the presence of statutory nuisances, particularly dampness, and appropriate action has been taken by the Chief Sanitary Inspector.

By far the most difficult assessments to make were those in regard to mental ill health and these applicants have been dealt with by Dr. Nicol and the Psychiatric Social Service, whose work has been invaluable. A great many of the 8,625 families interviewed have revealed varying degrees of mental distress and this is equally true of applicants suffering from all kinds of physical conditions. It has in fact become quite clear that the underlying reason why many sufferers from asthma, rheumatism, heart diseases, etc., have asked for special consideration on health grounds is not entirely because of the detrimental effect of their environment upon the condition to which they officially draw attention, but because of their marked unhappiness in their present living conditions. By far the most usual cause of mental distress is quarrelling with other occupants of the house and this is very common indeed when the families are related. Points have, however, only been awarded when the relationships have become so bad or the individual has been so sensitive that definite ill health is present. In one or two cases attempts at suicide have been met.

Asthma and bronchitis were found to be exceedingly common as grounds for some priority in rehousing. In a very few instances the living conditions were almost certainly the specific cause of the illness and high priority was accordingly advised. The vast majority, however, were cases which would benefit in a general way by better surroundings, although one would not expect the improvement to be dramatic.

Wounds, arthritis, paralysis, and heart disease were of great importance in families living upstairs and conditions were particularly bad for the mothers of young families using upstairs bed-sittingrooms but cooking downstairs. With elderly arthritic patients the w.c. being upstairs or down the garden presented serious hardship.

Various intestinal conditions warranted priority through their unusual needs for w.c. and washing facilities, and some patients suffering from ulcers were having difficulty in the preparation of diets and in obtaining sufficient physical or mental rest. These were factors upon which the assessment of points was based.

Special care was taken in carrying out investigations leading to a recommendation for immediate rehousing irrespective of the points scheme. All details were checked personally by a medical officer. There



was consultation with the patient's medical attendants and even then the decision was only made in some cases after keeping the patient under observation for a time.

Of the 8,970 referrals for consideration of some priority on medical grounds, 345 applications were not dealt with because the problem had already resolved itself since the application was made under the new points scheme. After investigating all the other applications the following recommendations were made to the Housing Management Department, with whose officers there has been the utmost collaboration.

<i>Type of medical condition to which applicant has drawn attention</i>	<i>Points awarded</i>				<i>Immediate rehousing</i>	<i>Totals</i>	<i>Percentage of grand total</i>
	<i>Nil</i>	<i>10</i>	<i>20</i>	<i>30</i>			
Nervous conditions ...	698	473	145	58	21	1,395	16.3
General debility ...	167	121	31	nil	1	320	3.7
Asthma and bronchitis	970	1,350	329	19	7	2,675	31.0
Wounds ...	120	42	9	1	nil	172	2.0
Blindness ...	55	14	7	3	2	81	0.9
Arthritis and rheumatism ...	438	173	64	8	7	690	8.0
Orthopaedic conditions and paralysis ...	422	152	66	12	12	664	7.7
Heart and circulatory disease ...	444	226	140	26	10	846	9.8
Other physical conditions, including fits	983	248	81	16	4	1,332	15.4
Gastric and intestinal conditions ...	300	116	24	9	1	450	5.2
<b>TOTALS ...</b>	<b>4,597</b>	<b>2,915</b>	<b>896</b>	<b>152</b>	<b>65</b>	<b>Grand Total 8,625</b>	<b>100%</b>

Those families for whom immediate rehousing is recommended are followed up with a view to ensuring that they are rehoused in accommodation suited to their needs, e.g., with facilities for wheel chairs, motor tricycles, bath, etc.

The effort in carrying out this work is very well worth while. Not only does it give applicants the satisfaction of knowing that their place in the queue is related to their housing needs but it has enabled us to discover and alleviate many problems by means other than rehousing.



## DOMESTIC HELP

(SECTION 29—NATIONAL HEALTH SERVICE ACT, 1946)

It is very often assumed that the domestic help service was a new service initiated to meet certain needs which became apparent during World War II. Indeed, there seems to be an impression that the coming into force of the National Health Service Act in 1946 was the first legislative sanction that was given to schemes of this kind. In fact, however, local authorities had power to provide Home Helps for expectant and nursing mothers and young children under the Maternity and Child Welfare Act, 1918.

The Birmingham scheme for supplying Home Helps to families during confinement of the mother came into operation in October, 1920 and is first referred to in the report of the Medical Officer of Health for the year 1921. There it was explained that the Home Helps were engaged to do the cleaning, cooking and general supervision of the house and did not undertake the duties of a nurse. In 1921 the number of cases dealt with was 123. From the beginning great care has been taken in choosing suitable women. Even at that early date the younger applicants were given a brief useful course of training in cookery, laundry and housewifery. In 1922, Sir John Robertson remarked that "Fifteen women are now engaged in fairly regular employment ; they are keen on their work and adapt themselves very well to the different households to which they are sent, and to the large (sometimes unruly and difficult) families with whom they have to cope." The great educational value, especially to the thriftless and careless type of mother, of the work of the Home Help was recognised as early as 1927. In that year, Messrs. Cadbury arranged with the Public Health Department that Home Helps might be sent to the homes of their workpeople during a confinement or the non-infectious illness of the mother. The full fee was guaranteed by the firm in every case. A somewhat similar arrangement still continues.

Apparently in 1929 there was no difficulty in procuring suitable and capable women for this work and, indeed, there was a waiting list of women anxious to secure these posts. In 1931 the Public Health Committee extended the scheme to supply Home Helps during a non-infectious illness of the mother or while she was away in hospital, provided the family included young children under five years of age. In addition, arrangements were made to allow them to take charge of the household of **any** mother suffering from tuberculosis, who could not otherwise leave her family to go to a sanatorium.



In 1935 reference was made to the very varied types of household attended by the Home Helps. They included :—

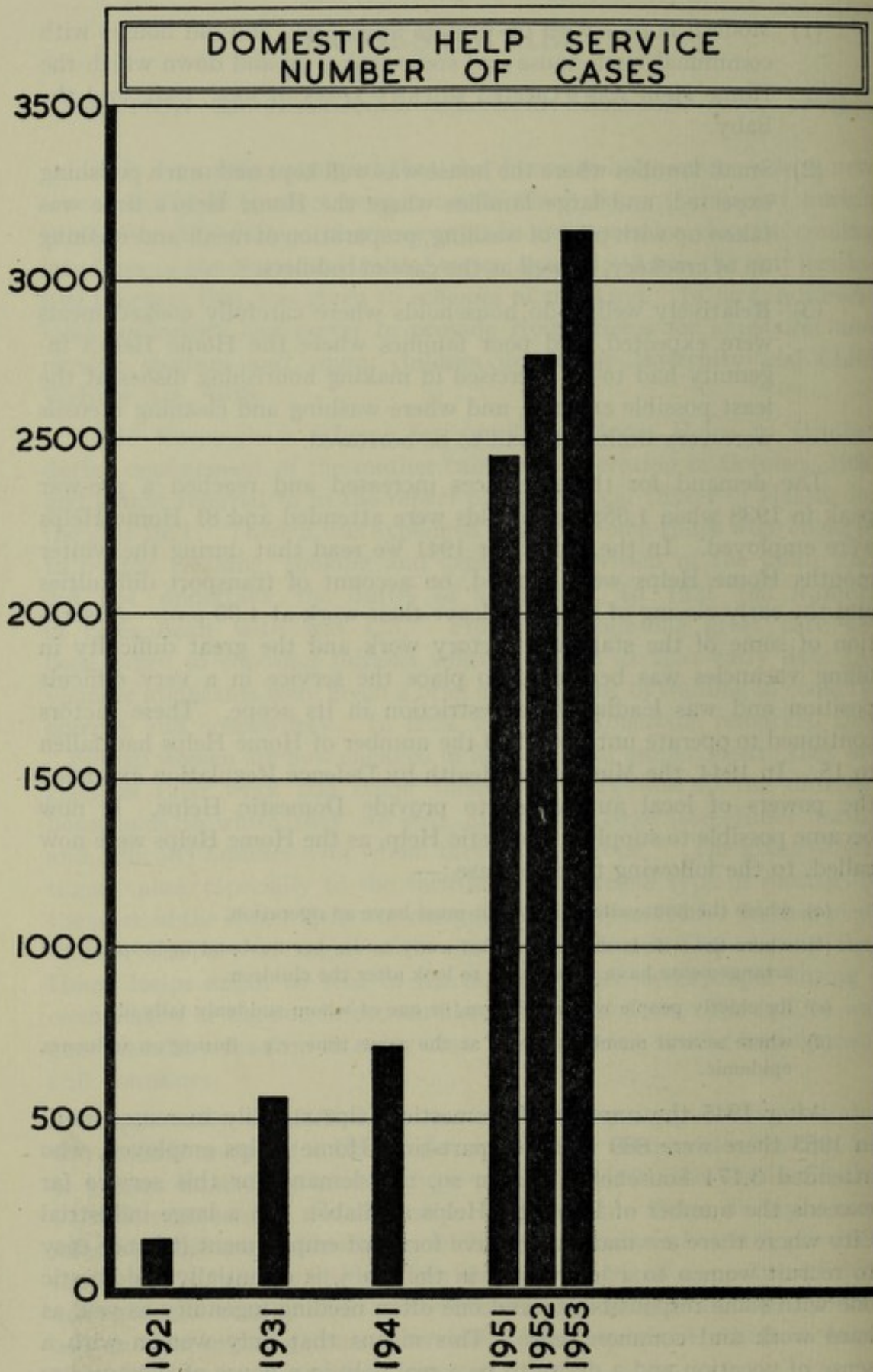
- (1) Modern houses with up-to-date apparatus, and old houses with communal wash-house and steep stairs, up and down which the Home Help was expected to carry trays of food, coal, and the baby.
- (2) Small families where the house was well kept and much polishing expected, and large families where the Home Help's time was taken up with piles of washing, preparation of meals and washing up of crockery, as well as the care of toddlers.
- (3) Relatively well-to-do households where carefully cooked meals were expected, and poor families where the Home Help's ingenuity had to be exercised in making nourishing dishes at the least possible expense, and where washing and cleaning utensils were very limited or had to be borrowed.

The demand for these services increased and reached a pre-war peak in 1938 when 1,358 households were attended and 81 Home Helps were employed. In the report for 1941 we read that during the winter months Home Helps were allowed, on account of transport difficulties and the early closing of shops, to leave their work at 4.30 p.m. Absorption of some of the staff into factory work and the great difficulty in filling vacancies was beginning to place the service in a very difficult position and was leading to a restriction in its scope. These factors continued to operate until by 1943 the number of Home Helps had fallen to 15. In 1944, the Minister of Health by Defence Regulation extended the powers of local authorities to provide Domestic Helps. It now became possible to supply a Domestic Help, as the Home Helps were now called, to the following types of case :—

- (a) where the housewife falls sick or must have an operation.
- (b) where the wife is suddenly called away to see her husband in hospital and arrangements have to be made to look after the children.
- (c) for elderly people who are infirm, or one of whom suddenly falls ill.
- (d) where several members are ill at the same time, *e.g.*, during an influenza epidemic.

After 1945 the number of Domestic Helps steadily increased until in 1953 there were 689 whole or part-time Home Helps employed, who attended 3,174 households. Even so, the demand for this service far exceeds the number of Domestic Helps available. In a large industrial City where there are many attractive forms of employment it is not easy to recruit women to a job which, in the main, is essentially a domestic one with some responsibility, and one often needing ingenuity as well as hard work and common sense. This means that only women with a sense of vocation and a desire to be a real help in a house of sickness are likely to apply.





Personal applications, letters and telephone calls to the office for the services of Domestic Helps are numerous. These are from relations anxious to return to employment, general practitioners wishing to ensure peace of mind for their patients, hospital almoners concerned with after-care, health visitors, social workers and clergy, who, in the course of their visits, meet people in need of care and attention. All requests receive sympathetic consideration, but priority must go to the more urgent. Every endeavour is made to fit the Home Help to the case and this requires good knowledge of the Help's personality and capabilities. Dealing as we do with the more serious case, and cases where perhaps the housewife is temporarily absent from home, it is often necessary to ask a Home Help to take week-end or evening duty, and for this a rota of volunteers has been prepared. Some of the Domestic Helps are also available for temporary resident work, and are particularly useful where the husband is on night duty and leaves behind a sick wife, or in allowing a family to take an annual holiday which would not otherwise be possible because of aged parents. A number of Domestic Helps have also volunteered to work in a home where there is a tuberculous patient. In these circumstances, special arrangements are made to safeguard the well being of the Domestic Help. Night Watchers, male and female, are available to relieve a relative of the necessity of sitting up.

That the careful selection of women for this work has paid good dividends is shown by the frequent expression of appreciation we have received from the general public, as well as general practitioners, social workers and others.

With the co-operation of the City Education Department, the training has now been developed so that, not only is the Domestic Help instructed in cookery and housewifery, simple first aid, home nursing, infant feeding and the care of the aged, but is given for example, the reasons why such things as breast feeding and immunisation against diphtheria are to be encouraged and is also made to feel that she is a member of the Health Department's staff with an important contribution to make.

It is our hope, within the next twelve months, to increase still further the number of Domestic Helps employed. With that end in view, and to improve still further the efficiency of the service, the Health Committee decided to decentralise the work by instituting Area Offices from which District Organisers could work under the supervision of the Central Office. The first three of these offices were opened in September.

The recipients of this service make a payment towards the cost according to their means. We are grateful to organisations, e.g., the Blind Institution, National Assistance Board, and others, for their co-operation and help in contributing the whole or part of the cost in certain cases, a tremendous help, both financially and psychologically, especially to pensioners.



Each week in Birmingham there must be over a thousand persons cared for in their own homes (two or three persons ill in one household sometimes) by the District Nurse and Home Help, a thousand persons, some of whom, if it were not for domiciliary services, would have to be accommodated in either hospitals, institutions, or children's homes. The cost as compared with hospital or institutional maintenance is small, the loss to industry is eliminated and family life often prevented from total disruption. This is a satisfactory position but much still remains to be done. The demand for assistance is still much greater than the supply and can only be met by a further increase in the number of Domestic Helps employed.

A. *Number of Home Helps employed :—*

Full time (50 hours weekly) ... ..	89
Part time (30 hours and more but under 50 hours) ... ..	207
Part time (under 30 hours) ... ..	393
Night watchers (female) ... ..	23
Night watchers (male) ... ..	2
	<hr/>
	714
	<hr/>

B. *Number of \*households dealt with :—*

Maternity (home confinements) ... ..	994
Maternity (hospital confinements) ... ..	37
Ill housewife ... ..	510
Housewife ill away from home ... ..	65
Lung tuberculosis ... ..	84
Old persons ... ..	1,484
	<hr/>
	3,174
	<hr/>

C. *Number of households visited by organisers :—*

Maternity cases ... ..	279
Ill housewives ... ..	331
Old persons ... ..	1,201
	<hr/>
	1,811
	<hr/>

\* N.B.—Often two or three ill in one household at the same time.

## NURSERIES AND CHILD-MINDERS REGULATION ACT, 1948

Eight persons and nine premises are now registered under the Nurseries and Child-Minders Regulation Act, 1948. This gives a total of 113 places available for children 0—5 years.

				<i>Persons</i>		<i>Premises</i>	
				<i>Number Registered</i>	<i>Places for children</i>	<i>Number Registered</i>	<i>Places for Children</i>
On 1st January, 1953	...	...	...	6	20	5	54
Applications during 1953	...	...	...	6	20	7	45
Resignations during 1953	...	...	...	3	10	2	16
On 31st December, 1953	...	...	...	9	30	10	83

One applicant, already registered to take 7 children, made a successful application to be allowed to take another 2 children, making 9 in all.

## INSPECTION AND REGISTRATION OF NURSING HOMES AND NURSES AGENCIES

### Nursing Homes (Public Health Act, 1936)

At the end of 1953 there were twenty-two Nursing Homes on the Register. Six homes closed during the year—two maternity homes for nine beds and eight beds respectively; two homes for chronic medical cases with one bed and seven beds respectively; one home with six maternity beds and five beds for chronic medical cases, and one home with one medical and four maternity beds. A new home for twenty-two chronic medical cases was opened at the beginning of the year. One home for combined maternity and chronic medical cases discontinued its maternity work, and its total accommodation was increased from eleven to sixteen beds.

The total number of visits paid to Nursing Homes was seventy-four (sixty-two by Medical Officers and twelve by Supervisors of Midwives).

Total number of beds in homes	...	...	...	...	...	331
Number of homes which are equipped for surgical work	...	...	...	...	...	3
Number of homes which take chronic or senile cases only	...	...	...	...	...	14
Number of homes which take maternity work only	...	...	...	...	...	4†
Number of homes which keep some beds for maternity work	...	...	...	...	...	2*

† with 34 beds.

\* with 5 beds.



## Nurses Agencies (Nurses Act, 1943)

In accordance with the Nurses Act of 1943 and the Nurses Agencies Regulations, 1945, applications were received from four Agencies, and renewals of licences were granted in each case. The total number of visits of inspection paid during the year was eight.

### FAMILY SERVICE UNIT

Three fresh cases were referred to the Family Service Unit during the year. A review of the cases referred by the Health Department to the Family Service Unit during 1951, 1952 and 1953 shows :—

Number of active cases still receiving attention by the Unit	...	11
Quiescent cases...	... ..	1
Closed cases	... ..	3
Not accepted	... ..	4

Referrals had to be restricted owing to the Unit's small size, but it is understood that, owing to the recruitment of additional workers, the Family Service Unit may be able to extend the field of their activities during 1954.

## MEDICAL CARE OF DEPRIVED CHILDREN

### CHILDREN ACT, 1948

Deprived children may be a source of social infection as real and serious as are carriers of diphtheria and typhoid. This is evident when one talks to mothers committed to prison for neglect of their children. Just as preventive measures have reduced these diseases to negligible proportions, so can determined action greatly reduce the number of deprived children in our midst and prevent their development into adults who, in their turn, may neglect their children.

When one analyses the statistics published by the Home Office one finds that the problems associated with homeless children are more serious and more varied than might appear on first reading. Of long term cases, the Home Office investigations indicate that the average length of stay in the country as a whole is 3—4 years, and the number of children in care in Birmingham was 4·7 per 1,000 of the population under eighteen years, as against 5·6 of all authorities as a whole. This means that a considerable number of children are, at some time or another, deprived of a normal home life for a significant period of their schooling, under circumstances which might well have a disturbing influence on the development of their personalities and their educational progress. Placing a deprived child in a foster home rather than in a residential institution brings his situation nearer to normality but here, too, difficulties can arise. One cannot assume that a child is permanently placed in the one



foster home until he is able to return to his parents. Experience shows that it is occasionally necessary to move a child from several homes before suitable foster parents are found. The movement of these children also necessitates a change of school, with the result that there is a tendency for some of them to develop personality problems and to become educationally retarded.

To try to combat this social evil and still further reduce the number of children being admitted into care, thus being deprived of parental care, arrangements have been completed for joint meetings between health visitors and children's visitors from the staffs of the Medical Officer of Health and the Children's Officer. These meetings will take place in the welfare centres of the City at regular intervals, and will provide an opportunity for discussion of the problems of families where the home is in danger of being broken up. It is hoped that, as a result, effective measures might be devised to prevent disturbance of the natural home group by a closer liaison between the various services provided by the City Council. Where the home group is still in existence but not functioning effectively is where skilled help may be invaluable in preventing a breakdown. While physical neglect is most often due to economic factors or to ill-health of the mother, ignorance and emotional neglect may be the result of personality disturbances and psychological factors in the mothers. It is apparent that close association with the mental health services will be essential as the ultimate aims of child care workers and mental health workers are identical. Psychiatric knowledge is indispensable if many of the problems discovered are to be understood. Preventive mental hygiene demands early and effective aid to families who have already got into difficulties, including measures to avoid removal of children from home.

The decision which results in the separation of a child from his family is very serious; it sets in motion events which to a greater or lesser degree affect the whole of his future life. It must, of course, be recognised that on occasion children have to be cared for outside their own homes—but such arrangements should be regarded as a last resort—to be undertaken only when it is absolutely impossible for the home to be made fit for the child.

It is hoped that by effecting a still closer liaison between the staffs of the Health Department and the Children's Department, the number of occasions when it becomes necessary to separate a child from his family will become fewer and fewer.

The medical and dental arrangements for all deprived children in the care of the local authority remain the same as in previous years.

The following table gives details of the illnesses from which the children in care suffered during the year, as well as of the number of children who had preventive inoculations.



<i>Condition</i>							<i>No. of cases</i>
Eyes :	Correction of squint	...	...	...	...	...	8
	Other conditions	...	...	...	...	...	12
Ear, nose and throat :							
	Earache	...	...	...	...	...	26
	Mastoidectomy	...	...	...	...	...	2
	Tonsillitis	...	...	...	...	...	99
	Tonsillectomies	...	...	...	...	...	28
Respiratory :							
	Upper respiratory infection	...	...	...	...	...	249
	Bronchitis	...	...	...	...	...	4
	Pneumonia	...	...	...	...	...	10
Influenza	...	...	...	...	...	...	119
Alimentary :							
	Vomiting	...	...	...	...	...	32
	Diarrhoea	...	...	...	...	...	3
	Bact. Coli infection	...	...	...	...	...	10
	Appendicectomy	...	...	...	...	...	5
Skin :	Eczema	...	...	...	...	...	8
	Impetigo	...	...	...	...	...	4
	Other infections	...	...	...	...	...	28
Enlarged glands	...	...	...	...	...	...	3
Orthopaedic deformities corrected	...	...	...	...	...	...	4
Mentally subnormal :							
	Attending special schools	...	...	...	...	...	62
	Unfit for special schools	...	...	...	...	...	7
Rheumatism	...	...	...	...	...	...	3
Infectious Disease :							
	Measles	...	...	...	...	...	106
	Scarlet fever	...	...	...	...	...	11
	Rubella	...	...	...	...	...	32
	Mumps	...	...	...	...	...	17
	Chickenpox	...	...	...	...	...	27
	Whooping cough	...	...	...	...	...	27
Teeth :							
	Inspections and treatment	...	...	...	...	...	1,506
	X-ray examination	...	...	...	...	...	132
	Diphtheria immunisation	...	...	...	...	...	291
	Smallpox vaccination	...	...	...	...	...	24
	B.C.G. vaccination	...	...	...	...	...	34

At one time or another during 1953 there were in the care of the Children's Committee 3,179 children. There were 1,503 in care on 30.11.52 and 1,485 on 30.11.53.



## MENTAL HEALTH

(SECTION 51—NATIONAL HEALTH SERVICE ACT, 1946).

### Development

Although prevention has always been the prime function of Health Departments, it was not until the National Health Service Act came into operation in 1948 that serious attention was widely paid to the prevention of mental illness.

Before considering the steps taken by the Health Committee since the National Health Service Act of 1946 and the possibilities presented by that Act, it is interesting to make a brief reference to the past. This is not only valuable in itself but illustrates the gradually changing outlook on mental health which has resulted in the present day broad and dynamic conception of it.

As recently as a hundred years ago people of unsound mind were treated most cruelly by society. They were regarded like criminals, subjected to the most barbarous forms of treatment and restraint and in at least one hospital were exhibited to the public like menagerie animals. Nothing could be more calculated to accentuate any mental illness. It was only in 1792 that William Tuke, a Quaker philanthropist, founded the Retreat at York and initiated the humane approach without restraint for the treatment of these unfortunate individuals. Not that such methods were quickly accepted, many years had to elapse before treatment was carried out generally on a humane and scientific basis, but it marked the beginning of the end of an age that is best forgotten.

Although the change and development in psychiatric thought has been of comparatively recent date, there has been in existence some form of statutory control over mentally ill people for a long time. Indeed such measures go back as far as the fourteenth century, but were then principally concerned with the preservation of the patient's property or the protection of society. By the eighteenth century regulations had been made concerning madhouses, as they were then called, and a century later the Lunacy Act of 1890 brought together and consolidated the whole Lunacy Code.

At this time patients were still classified as private and pauper lunatics, the latter forming by far the larger number. Their care in hospital was the responsibility of the local authorities but they were a charge on the Poor Law Authorities. The responsibility for certification and removal to hospital was placed on the Relieving Officer, a Poor Law Official. Although the outlook on lunacy was changing and although it



was becoming realised that mental illness required medical treatment, the basis for removal was essentially pauperism. This preoccupation with the patient's poverty and inability to earn is further illustrated in the Act of 1890, in which power was given to transfer chronic lunatics from the Asylum to the Workhouse.

The end of the last century marked the beginning of a rapid development in social conscience and since then progress has been steadily maintained. The Mental Deficiency Act of 1913 made better provisions for the "mentally defective" as distinct from "lunatics," and the Mental Treatment Act of 1930 made arrangements for voluntary and temporary patients. "Asylums" became known as "Mental Hospitals" and "Paupers" as "Rate-aided" persons.

These changes in the law were the natural, although the delayed result of changes in medical thought. Psychiatry as a speciality was making rapid advances, mental illness was being regarded in an altogether different light and the influence of Psychiatry was spreading into other branches of medicine. Workers in hitherto unrelated fields were changing their ideas as to the nature and causation of many illnesses.

This development in medical thought and broader conception of mental illness indicated the need for additional psychiatric services. This need was made increasingly apparent by war and the large number of servicemen who were suffering from some form of psychiatric disturbance. It was to meet this latter need that a Psychiatric Social Service was established throughout the country in 1943, having headquarters in fifteen regional centres.

After the National Health Service Act of 1946 came into force local health authorities were obliged to make certain provisions for mentally deficient and mentally ill persons. In addition they were expected to provide a service for the after-care of mentally ill people and for the prevention of such illnesses. This was the first Act that had recognised the contribution the Public Health Service could make to the prevention of mental illness. Not only did it give recognition, but full powers to make a really useful contribution.

Although recognition was somewhat belated, it has come in large measure in a very short time. Perhaps the failure to recognise the usefulness of local health authorities was largely the fault of psychiatrists themselves, who in the past have been inclined to regard their speciality as a very personal one and have not given sufficient thought to the significant role that Public Health can play. However, it is now generally realised that the prevention of mental illness is something that cannot be achieved by psychiatrists alone and requires the aid of workers in many different fields. This is clearly illustrated by the Expert Committee in their report on the First Session on Mental Health when they state :



"The most important single long-term principle for the future work of the World Health Organisation in the fostering of mental health, is the encouragement of the incorporation into Public Health work of the responsibility for promoting the mental as well as the physical health of the community."

Full recognition seems to have come at last and with the recently acquired statutory powers it would appear that the Public Health Service is on the threshold of a new venture, presenting new opportunity and hopes. Such feelings are expressed also by the same Expert Committee in their second report when they state :

"The Expert Committee consider that some of the most important opportunities for improving the Mental Health of the community now lie with workers in the Public Health field."

The realisation of these hopes calls for an extension of the existing mental health services provided by most health authorities.

On the 5th July, 1948, the "Appointed Day" when the National Health Service Act of 1946 came into force, the Birmingham Health Committee took over the care of mentally deficient persons from the old Mental Deficiency Acts Committee, and the duties under the Lunacy and Mental Treatment Acts from the Public Assistance Committee. The Relieving Officer was superseded by the Duly Authorised Officer of the Local Health Authority. The work of after-care and prevention of illness was carried out on behalf of the Committee by the Psychiatric Social Service, already mentioned; this service working under the auspices of the National Association of Mental Health. In 1950 this arrangement was terminated amicably when the entire service was taken over by the Health Committee. In 1952 an Administrative Medical Officer was appointed to co-ordinate the three sections and develop a comprehensive Mental Health Service.

Since that appointment co-ordination has been smoothly effected and the Health Committee are fully conscious of the need to expand the service. Outlined below are some of the measures that have been taken to achieve this, together with some thoughts as to how such an extension might proceed in the future.

### **Future Possibilities**

It is felt that before the Health Department generally can increase its contribution to Mental Hygiene it must increase the awareness of workers within the Department to factors harmful to mental health and of opportunities open to them to promote healthy psychological development. This means really, from the long-term point of view, that preventive psychiatry must play a greater part in medical and nursing education at all levels, but it also sets the Health Committee the immediate task of making available such teaching to the present members of its staff.



It is with this object in mind that a five-day Mental Health Refresher Course has been arranged by the Health Committee in Birmingham, to take place in February, 1954. Naturally, this Course is meant for the health visitors and other workers on the staff, but it has attracted workers from all the surrounding areas. It will include, among other topics, the social aspects of mental illness, the place of the Public Health worker in prevention, and the emotional development of children. Such courses, if successful, should mean more workers better qualified to recognise problems, better able to give advice and, in the long run, a more effective service.

Of all the Sections within the Mental Health Service in Birmingham the one that has developed its influence the most is the Psychiatric Social Service. The number of referrals have increased by over 30% in the last year. There has been an increase in the liaison with hospitals and other agencies in the City, together with a considerable increase in the general Health Education activities. Nevertheless, it is felt that greater use could be made of this Service.

In Birmingham relatively few cases are referred to the Psychiatric Social Service by General Practitioners, yet almost all the out-patient departments have long waiting lists. A large proportion of patients are not really in need of advice at Consultant level. It seems that there is a *prima facie* case for developing the co-operation between the Psychiatric Social Worker and the General Practitioner. In Birmingham a small pilot study is shortly to be put in operation to investigate the possibilities of the General Practitioner and the Psychiatric Social Worker working in direct contact with each other. It is hoped that not only will useful preventive work be done but much useful information on mental health within the community will result.

One expects that among the useful information that will be gained from this experiment will be more detailed knowledge of the senile patient. The high and increasing number of certified elderly patients is most disconcerting and demands attention. It is thought that from such knowledge the needs of the elderly can be more accurately assessed and that the Psychiatric Social Service will have a useful contribution to make in this field, even if it means specialising within its own speciality or co-operating with other workers within the Department, or organising therapy clubs and forms of sheltered workshops.

Finally, it is hoped that the Psychiatric Social Service will further develop its co-operation with other statutory and voluntary agencies. This has already achieved excellent results with the Children's Department and is a truly prophylactic service. It has helped to keep many children out of residential care and to re-unite broken families. Co-operation with the National Assistance Board and Ministry of Labour is developing.



In mentioning these present and possibly future extensions of the Service, passing reference must be made to two special Clinics now in operation in the City. These are the Parent Guidance Clinic and the Health Advice Bureau. The former caters for the emotional problems of the pre-school child and the young parent. The latter is of unusual interest in that it is probably the only clinic of its type run by a Health Committee in the country. Its object is to prevent the minor frustrations of life becoming a more acute or chronic form of mental illness. This is attempted by members of the medical and clerical professions treating the patient together. It is believed that work of this nature has something to give to preventive medicine.

In this general extension of duties the needs of the mentally deficient have not been overlooked. Indeed, they cannot be overlooked, because they present substantial problems. The high-grade patient causes so many difficulties and there are so few facilities available to him within the community.

One feels that in Birmingham there are at least two immediate needs the provision of hostel accommodation and the provision of greater training facilities. The Health Committee are always reluctant to recommend certification and institutional care because the defective has no home or a very bad one, has shown anti-social tendencies and is a border-line case of mental deficiency. Nevertheless, this often has to be done and it must be the experience of many other local health authorities. It seems that such cases could well be retained within the community by placing under guardianship in a hostel run by the local health authority. Most Medical Officers of Health agree to the need for such hostels; unfortunately, as yet, their Councils have no permission to provide them.

In the immediate past there has been little difficulty in placing mental defectives, especially those of high-grade, in employment. Should the labour market change, an entirely different situation may arise. This may well be anticipated and calls for additional industrial centres, occupational centres for senior girls and for training methods that will fit them for the type of work they can get and do in industry.

In the case of low-grade defectives the pressing problem is finding hospital accommodation but the Health Department help here by making the laundry service available to the incontinent cases. In this and other ways the situation at home is made easier.

At the beginning of this article it was noted with dismay how little was expected of the Public Health Service before the National Health Service Act of 1946. Things have changed. Psychiatrists now realise its potentialities and look to the Service for help in the prevention of mental illness and the production of a mentally sound community. The future is full of opportunity and hope.



## The Work in 1953

In the Annual Report for 1952, the need for co-ordination prior to expansion of the Mental Health Service was noted. This then, was the initial task of 1953 and has been carried out effectively. The officers of the three principal sections have had opportunities of studying each other's work and there is now complete understanding among them of the different aspects of the service and its full potentialities, together with a more harmonious relationship generally.

The expansion in the activities of the Psychiatric Social Service anticipated in the last Annual Report has been fully realised. The number of referrals has increased considerably, there has been an extension of the after-care service to Highcroft Hall Hospital, the liaison with other departments within the Corporation service has become more effective and has developed. This expansive trend has also occurred in relation to other statutory and voluntary social agencies in the City.

These increased demands have required the provision of additional staff and it is pleasing to report that there are now three fully qualified Psychiatric Social Workers and three Social Workers on the staff of the Psychiatric Social Service. This is a very fortunate state of affairs considering how very difficult it is to find the former type of social worker, but there are some very good reasons why they should wish to approach their work from the Public Health aspect. The very nature of the work gives them opportunities for using the comprehensive training they have received. They have the satisfaction of doing preventive and remedial work and are not restricted to preparing social histories.

This relative ease of obtaining psychiatric social workers is important and worthy of consideration by hospital authorities who find it so difficult to provide a staff of fully qualified after-care workers. If there was greater integration with the Psychiatric Social Service of the Health Department they would be relieved of one difficult task at least. Furthermore, the local authority worker is often more easily able to manipulate the environmental pressures which may play an important part in delaying hospital discharge. It is possible that with greater liaison more beds may become available. It is hoped that this co-operation which has already begun will develop.

Although expansion has been particularly marked in one section of the Mental Health Service, a similar trend can be reported in its other activities. The Parent Guidance Clinic has been re-equipped and facilities now exist for work of a less superficial nature. This last year has seen the establishment of the Health Advice Bureau, which is proving an interesting experiment in a new approach to the solution of human problems. The Service has also taken a greater part in the Health Education programme. In general, 1953 has been a year of co-ordination, consolidation and progress. It has also brought with it the knowledge that there is a marked need for the Service and a great future.



The following particulars of the Service are set out in compliance with the request of the Minister of Health.

## 1. ADMINISTRATION

- (a) **Mental Health Sub-Committee** of the Health Committee, composed of the Chairman and eleven 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.M.

1 Senior Psychiatric Social Worker—holds degree in Psychology (London) and Philosophy and Economics (Oxford).

1 Psychiatric Social Worker.

3 Social Workers—2 hold Social Science Diploma and 1 holds a Social Science Degree.

Clerical staff—2 shorthand-typists.

### **Parent Guidance Clinic**

1 Consultant Psychiatrist, M.B., Ch.B., D.P.M.—two sessions per week.

1 Psychiatric Social Worker.

### **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.

1 Deputy Chief Inspector.

3 Inspectors.

No academic qualifications but all possessing long experience.  
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 Female Supervisors (Occupation Centres).

(1 holds Diploma of National Association for Mental Health).

2 Male Supervisors (Industrial Centres).



- 10 Assistant Supervisors (1 is taking a course for the N.A.M.H. Diploma).
- 8 Welfare Attendants.
- 7 Kitchen Attendants (part-time).
- 1 Senior After-Care Officer—National Froebel Certificate. Social Science Certificate.
- 4 After-Care Visitors—1 is an M.A., Social Science Diploma ; 1 is a State Registered Nurse, Domestic Science Diploma ; the others have no specific qualifications, but have relevant experience.
- 3 Home Teachers (2 full time, one part time)

### **Lunacy Section**

- 12 Certifying Medical Practitioners (part-time).
- M.D., 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.
- L.R.C.P., L.R.C.S.
- M.B., Ch.B.

\* 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 Authorised Officer—Certificate of Poor Law Examinations.
- 1 Deputy Chief Authorised Officer—Certificate of Poor Law Examinations.
- 3 Duly Authorised Officers—1 holds Certificate of Poor Law Examinations, 1 holds S.R.N. Certificate.
- Clerical Staff—1 shorthand-typist.

### **(c) Co-ordination**

- (i) With the Regional Hospital Board, by regular consultation 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 Circular 5/52 of the Ministry of Health.



- (ii) With 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 has extended its after-care services for Highcroft Hall Hospital to one full-time social worker. The Mental Deficiency Section furnishes reports on the home circumstances of patients detained in institutions, for whom application has been made for holiday leave and also reports upon those patients who are considered suitable for licence. Information for the visiting Justices to assist them in carrying out their duties in accordance with Section 11 of the Mental Deficiency Act, 1913, is also made available. It also undertakes the after-care and rehabilitation of patients on licence from mental deficiency institutions who are resident in this area, and periodic reports upon their progress are supplied to the Medical Superintendents. In addition, the Administrative Medical Officer of Health for Mental Health advises the Medical Superintendents on cases on licence and due for consideration with a view to discharge from the Mental Deficiency Acts.
- (d) Duties delegated to Voluntary Associations—Nil.
- (e) Training of Mental Health Workers—although there has been no specific course of training arranged, three students have spent some time with the Psychiatric Social Service as part of their studies.

## 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 such 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 1953 : \**

	<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 ... ..	106	80	14	5	205
Reported by Police or Courts ... ..	—	—	3	—	3
Reported by other sources ... ..	3	5	9	16	33
	109	85	26	21	241

*Admissions :*

Number of cases admitted to Institutions during 1953 ... ..	15	8	31	17	71
---	----	---	----	----	----

*Total cases on Authority's registers as at 31.12.1953 :*

Under Statutory Supervision ... ..	275	172	1,220	968	2,635
In Institutions ... ..	164	122	988	922	2,196
Under Guardianship ... ..	—	—	17	15	32
In " Places of Safety " ... ..	—	1	—	2	3
Awaiting admission to Institutions ... ..	71	45	20	17	153

(ii) *Guardianship*

There are 32 patients under guardianship, 22 of them are in receipt of maintenance grants paid by the Health Committee, but arrangements have now been made whereby the grants will be paid by the National Assistance Board as from the 4th January, 1954. 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. Many of them will eventually be admitted to institutions on the death of their elderly parents or relatives. 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 ... ..	275	172	1,220	968	2,635
Number of females gainfully employed ... ..	...	...	...	...	452
Number of males gainfully employed ... ..	...	...	...	...	931

The visiting of cases under statutory supervision and the provision of training in occupation and industrial centres is 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 7 occupation centres and 2 industrial centres, 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 :—

	<i>Under 16</i>		<i>Over 16</i>		<i>Total</i>
	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	
<i>Occupation Centres</i>					
Burlington Hall, Aston ... ..	16	11	—	4	31
Glebe Farm ... ..	13	14	—	4	31
Kingstanding ... ..	14	11	—	5	30
St. Oswald's, Small Heath ...	13	13	1	6	33
St. Paul's, Balsall Heath ...	23	14	2	4	43
Weoley Castle ... ..	16	12	—	7	35
Wretham Road, Handsworth ...	19	7	1	5	32

*Industrial Centres :*

Burlington Hall, Aston ... ..	9	—	28	—	37
Moseley Road, Highgate... ..	11	—	21	—	32

The teaching given at the occupation centres takes the usual forms, handicrafts, eurhythmics and general sense training, etc., whilst more advanced training in handicrafts is given at the industrial centres. In their recreational time the children were taken on outings and visited pantomimes, some of the older boys going to football matches in the company of the Supervisor. Each centre had its Christmas Party, the children providing the entertainment.

Travel to the centres is mostly by public transport, the fares being paid by the Health Committee. Guides are provided where necessary. A number of physically disabled mentally defective children are taken to the centres by taxi.

Forty-nine children who are unable to attend occupation centres are provided with home teachers.

In 1953 it was again possible to arrange a week's holiday, free of cost, for a hundred of the children attending the centres. This holiday was spent in a large house which is situated in the country not far from the City and, as usual, proved beneficial to the children and gave the parents a much-needed rest.

Last year 81 cases were discharged from statutory supervision.

(iv) *Licence*

On 31.12.1953, there were 209 patients (101 males and 108 females) on licence from various mental deficiency institutions resident in this area and supervised by the Local Health Authority's officers. Of these, 172 have been found suitable employment, are successfully earning their own living and generally proving stable members of the community; the remainder are 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 and three patients are living together. Examples of employment followed by these patients are as follows :—

						<i>Males</i>	<i>Females</i>
Domestic service	...	...	...	...	...	3	35
Hotel service	...	...	...	...	...	14	—
Resident hospital domestic staff	...	...	...	...	...	—	34
Non-resident hospital domestic staff	...	...	...	...	...	—	7
Factory workers	...	...	...	...	...	32	11
Corporation Salvage Department	...	...	...	...	...	10	—
Corporation Parks Department	...	...	...	...	...	10	—
Corporation Public Works Department	...	...	...	...	...	7	—
Building trade	...	...	...	...	...	2	—
Miscellaneous	...	...	...	...	...	6	1

As on previous occasions, arrangements were made during the summer for quite a number of patients to have holidays under the auspices of the National Association for Mental Health, Y.M.C.A., Y.W.C.A., and at boarding-houses at Brighton and Hastings, supervised by the Guardianship Society, Hove. The expenses of the holiday were borne by the patients.

During the year, 30 patients (20 males and 10 females) were discharged from Orders under the Mental Deficiency Acts while on licence, having proved satisfactory and capable of managing their own affairs. Friendly supervision is provided and the services of the Department are always available when required.

#### (b) Under the Lunacy and Mental Treatment Acts, 1890-1930

The number of cases seen by the Duly Authorised Officers increased in 1953 over previous years. The number of certified patients has risen but so too has the number of voluntary patients. Every effort is made by the officers to encourage voluntary admission, as this avoids the stigma of certification and is considered more advisable. The percentage of such admissions is usually regarded to be in direct proportion to the ability and understanding of mental illness of the officer concerned.

There is quite a considerable increase in the number of cases investigated which could not be classified as under. These were principally elderly patients. The increasing size of this problem and the need for further provision has already been noted.

# CASES DEALT WITH IN 1953

<i>Classification</i>	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	1952
Certified ...	61	54	60	55	76	70	66	58	60	52	56	49	717	649
Voluntary ...	68	68	70	105	89	69	74	71	78	94	62	64	912	841
Temporary ...	1	—	—	—	2	—	2	2	1	1	1	—	10	15
Section 20, Lunacy Act ...	12	9	11	18	27	12	17	21	17	13	13	23	193	112
Section 21, Lunacy Act ...	14	9	13	9	12	13	14	7	13	11	10	15	140	132
Urgency Orders	6	2	1	6	4	4	7	7	1	4	2	3	47	74
Not Certified ...	18	15	13	13	8	8	8	8	16	7	8	11	133	154
Withdrawn ...	1	3	—	—	1	—	1	—	—	—	2	—	8	18
Criminal Justice Act ...	—	—	2	2	—	2	1	—	2	1	—	1	11	11
Cases investigated (not included in above categories)	7	7	9	—	—	8	13	7	23	13	19	6	112	20
Total cases dealt with in 1953 ...	188	167	179	208	219	186	203	181	211	196	173	172	2283	2026



(c) **Psychiatric Social Service (Prevention, Care and After-Care)**

Reference has already been made to the expansion in activities of this service. The following table shows the total referrals, which were 425 compared with 310 in 1952.

Source of Referral	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Public Health Department	14	17	28	13	13	12	15	10	11	13	9	7	162
Hospitals	7	9	6	16	4	4	5	4	3	—	5	6	69
General Practitioners	2	1	—	4	1	1	1	—	1	2	3	3	19
Ministry of Labour	2	—	1	1	—	1	—	1	1	2	1	1	11
Children's Department	4	5	3	5	2	5	2	2	5	5	4	1	43
Probation Officer	—	2	2	3	—	—	2	—	3	—	—	1	13
Friend, Relative or Self	2	4	2	3	5	2	8	—	6	4	2	1	39
Voluntary Social Agencies	3	6	1	2	1	2	3	3	2	3	2	4	32
National Assistance Board	—	—	—	1	—	—	2	1	—	2	3	1	10
Miscellaneous	1	—	—	—	1	3	4	2	1	1	1	—	14
Parent Guidance Clinic	1	3	1	1	—	4	1	2	—	—	—	—	13
Total	36	47	44	49	27	34	43	25	33	32	30	25	425

The sources of referral remain the same, the principal increases have come via the Health and the Children's Departments and follow the co-ordination of the service.



## HOUSING MANAGEMENT DEPARTMENT

During the year the Psychiatric Social Service has, in addition to normal duties, visited 537 homes in connection with assessment of points on health grounds, when it had been stated by the applicant that nervous or mental illness was caused or aggravated by housing difficulties. Though it was felt that in about 50% of cases there was some aggravation, it was only a small minority that appeared to warrant high priority, while in about half the cases visited it was felt that no priority should be given.

## HIGHCROFT HALL HOSPITAL

Since April, 1953, the amount of social work for Highcroft Hall Hospital has been increased to the equivalent of one full-time worker. This valuable additional time has enabled work to be done for which previously there has been no time. In addition to the taking of social histories and making pre-discharge visits, it has been possible for a social worker to attend at three out-patient clinics a week to interview relatives and any out-patients who needed help with employment or other advice. It has also been possible to undertake an after-care scheme for patients on leaving hospital, or being transferred to the out-patient department; help has been given with accommodation, employment and domestic difficulties, general reassurance and advice in settling down on leaving hospital. Work with patients in the hospital has also been increased—thus if a patient is worried about his family, his home, or even his pets, it has been possible to visit and to help if all was not well. For patients with no close relatives or friends it is very important that there should be someone who can act as a link between them and their homes, particularly if lodgers are left in charge.

As an instance of this type of work, there is the case of Mrs. X, whose husband died while she was in hospital leaving a child still at school to be cared for. The social worker was able to help the nearest relative through the legal difficulties, covering in such a situation rent, insurances, death benefits, etc., and also was able to ensure that the child was cared for adequately. The relative, who had been looking after her during the week for the father, now took her permanently and the Children's Department undertook regular visiting and help with maintenance. Thus, in the unhappy event of the mother remaining a patient for a number of years, the future of the child had been secured. The case is an example of long-term social work, as Mr. X was contacted and helped with his domestic problems when his wife first went into hospital. He, like many other parents, had heard of Children's Homes and he asked the social worker to arrange admittance. However, he was shown that it was important for the child's happiness that she should be kept if at all possible in the family environment and with familiar people. After this advice he arranged for a relative to care for the child, and it is this relative who will now be permanently responsible for her until the mother recovers.



Work done for the year ending 31st December, 1953, at Highcroft Hall Hospital.

Social Histories	...	...	...	...	...	...	...	423
Pre-discharge reports	...	...	...	...	...	...	...	21
Miscellaneous cases investigated	...	...	...	...	...	...	...	52
Patients referred for after-care	...	...	...	...	...	...	...	80

These figures represent the number of patients or homes on which social work was carried out and the number of visits is therefore considerably greater than the total given.

#### PARENT GUIDANCE CLINIC

Following the resignation of Miss Anderson, Psychiatric Social Worker to the Parent Guidance Clinic, this Clinic was closed from February to Mid-October. In consequence any figures relate only to a period of 3½ months. During this period of closure the Clinic was extended and re-equipped. With the re-opening, provision was made for the special needs of the young parent and for children under five. The difficulties which manifest themselves either as anxiety, or lack of confidence in the parent, or as behaviour disorders in the child, can in this particular age group be readily linked by the parents with their own experience in childhood. The heightened emotional awareness during a time of child-bearing, whilst often precipitating the difficulties for the mother, also provides a good foundation on which to build a better understanding of how she can meet her child's emotional needs. In recognising her own pattern of behaviour she learns to modify it and break the chain of neurotic reaction. Thus, future generations are given a better chance and sound preventive work is done.

The present staff consists of one Consultant Psychiatrist engaged on a sessional basis, one full-time Psychiatric Social Worker and part-time-secretarial help. Only those cases needing the special skill of the Psychiatrist are seen by her, the others being carried by the Psychiatric Social Worker in discussion with the Psychiatrist. This makes the best possible use of the Psychiatrist's valuable time. Also this method of selecting only those cases which are ready to be seen, results in a fairly quick turnover.

When the Clinic closed 33 cases were handed over to the Psychiatric Social Service, whilst 16 were received back from them in October. These, together with 30 further referrals make a total of 79 cases. Of those dealt with since the Clinic re-opened, 13 were seen at the Clinic and 33 in their own homes. The Psychiatrist saw 8 of the cases and the Psychiatric Social Worker saw 38.



Patients were referred by the following :—

Staff of Infant Welfare Centres	...	...	...	...	...	29
General Practitioners	...	...	...	...	...	8
Social Workers	...	...	...	...	...	3
Children's Department	...	...	...	...	...	2
Day Nurseries	...	...	...	...	...	1
Nursery Schools	...	...	...	...	...	1
Marriage Guidance Council	...	...	...	...	...	1
Direct request of Parent	...	...	...	...	...	1

There were 30 boys and 16 girls referred, the difficulties being given below. In some cases the mothers realised the problem was their own, and it was not necessary to see the child, especially when under one year.

In addition, the Psychiatric Social Worker has continued educational work especially with the group of neglectful mothers serving sentences at Winson Green Prison.

*Reasons for referral :*

					<i>Boys</i>	<i>Girls</i>
Excessive nervousness...	...	...	...	...	4	4
Temper tantrums	...	...	...	...	2	1
Unmanageable	...	...	...	...	2	1
Jealousy of sibling	...	...	...	...	2	1
Night fears	...	...	...	...	5	2
Bed wetting	...	...	...	...	3	3
Encopresis	...	...	...	...	1	—
Poor appetite	...	...	...	...	2	2
Pilfering...	...	...	...	...	1	—
Backwardness	...	...	...	...	2	1
Parental rejection	...	...	...	...	3	1
Parental anxiety	...	...	...	...	3	—

In 13 of the above cases, the mother was extremely anxious or disturbed or depressed, whilst in 2 cases there was marital disharmony ; housing difficulties were a contributory factor in 6 of them.

### Health Advice Bureau

This Clinic has now been established for several months and sufficient time has elapsed to present a report on the work done and on the success achieved. The idea of this Clinic is to prevent mental illness at its very early stage from developing into its more serious forms where hospital or out-patient treatment is necessary. Further, that this preventive work should be a combined effort made by the medical profession and the clergy in the belief that the physical aspects of this type of illness could not be dissociated from spiritual factors.



Work was commenced in March, 1953, at the Civic Centre. All religious denominations are represented. The cases are referred from doctors, and many of the social agencies in the City, and are first seen by the Administrative Medical Officer of Health, when initial histories are taken and arrangements made for further interviews. At the second interview the clergyman of the appropriate religious denomination is present. Occasionally, the cases have been of such severity that mental hospital treatment has been a matter of urgency. In such cases the necessary arrangements are made immediately.

Outlined below are the number of cases seen so far and the end results :—

Total number of cases	...	...	...	...	...	...	16
Cured	...	...	...	...	...	...	3
Improved	...	...	...	...	...	...	9
Discontinued treatment	...	...	...	...	...	...	1
Referred for more intensive Psychiatric treatment	...	...	...	...	...	...	3

The number of cases seen may seem small, but no attempt has been made to attract more patients for very obvious reasons. The Clinic is as yet in its very early experimental stages. Each case needs intensive investigation and very personal care. This would not have been possible with large numbers, and it would have been extremely difficult to evaluate the success achieved.

Below are examples of two cases successfully treated :—

#### **Case I. Mrs. A.**

This is a young woman, married with two children, she was referred to the Clinic by her General Practitioner. She had been well and lived contentedly with her husband in a small house until the birth of her second child. After the birth of the child she became depressed, completely incompetent, unable to look after the home and had no feeling for the new baby. If she did have any feeling, it was one of complete rejection. This condition became so acute that she returned to her mother and left the baby to be cared for by her husband and by her mother-in-law, to whose home the husband had gone.

This woman received intensive treatment. She has been helped with the children and now she is re-united with her husband and family. They are not yet in their own home, but it will not be long until they are, and not long before this woman is completely rehabilitated.

## Case II. Mrs. B.

Mrs. B. was referred to the Clinic by a member of the City Council. She is a married woman with a family, who complained of severe abdominal pain and discomfort, which she related to a recent operation. When first seen she presented a pathetic figure of a middle-aged woman suffering acutely from the change of life. She was convinced that she suffered from serious abdominal illness which was partially, if not wholly, related to the operative treatment she had received. She was difficult to help, so much so that her general practitioner was only too pleased for her to be seen at the Clinic.

It was extremely difficult to persuade this woman to accept the necessary treatment, but eventually it was done. This treatment was satisfactory and she has since re-visited the Clinic and has been discharged as well.

These two cases give some indication of how difficult the cases are and how prolonged and intensive the treatment. It is accurate to write that success has been achieved and work of this nature has a definite contribution to make to preventive medicine. Should the successes continue then an increase in referrals can be expected.

The services of the clergymen are on a voluntary basis and no additional expense has been incurred by the work of this Clinic.



## NATIONAL ASSISTANCE ACT, 1948

### NATIONAL ASSISTANCE (AMENDMENT) ACT, 1951

The number of cases referred for possible removal under these Acts was less than in 1952, but it was found necessary to remove more cases compulsorily. The referral rate seems to pursue a seasonal variation being in proportion to the severity of the weather. The unusual mildness of the weather in the autumn and early winter months may have been responsible for this small decline in cases investigated. Although more patients were removed compulsorily, this in no way indicates a changing approach to the problem of caring for the aged and infirm, for whom every possible effort is made to arrange for adequate care in their own homes by supplying home helps, home nursing, nursing requisites, loan and laundering of bed linen, etc. Relatives, friends and neighbours are encouraged to rally round the patients and are given whatever assistance the Domiciliary Services can provide.

	<i>1952</i>	<i>1953</i>
Cases investigated ... ..	94	83
Cases removed under the National Assistance Act, Section 47 ... ..	2	2
Cases removed under National Assistance (Amend- ment) Act ... ..	1	2
Other arrangements ... ..	40	26
No action ... ..	38	30
Died before going to hospital... ..	4	—
Admitted to hospital voluntarily ... ..	9	17
Certified under Lunacy Acts ... ..	—	6

#### **Cases removed under the rapid procedure of the National Assistance (Amendment) Act, 1951**

**Case 1.** This man was referred by a Sanitary Inspector who found him in a room devoid of heating or furniture in a house let in lodgings. He was seriously ill, confused, lying on a mattress on the floor with neither sheets nor blankets and was receiving no food or medical attention. He was not certifiable and refused hospital care. In view of the urgency of the situation application was made for his removal under the National Assistance (Amendment) Act, 1951.

An extension of the Order was subsequently made under the National Assistance Act, 1948.



**Case 2.** The attention of the Department was drawn to this case by the Police and the general practitioner. This man lived alone without food, was bedridden and extremely under-nourished. In view of his weak condition and the extremely cold weather then prevailing, his admission to hospital was considered to be one of urgency. Following hospital treatment he was discharged to a welfare home.

**Cases removed under the less urgent procedure of the National Assistance Act, 1948, Section 47.**

**Case 3.** An old woman, aged 83, lived in one room in a house let in lodgings, in extremely squalid conditions, made worse by the presence of stray cats. She had been known to the Department for some time but became bedridden and conditions then so deteriorated that her removal, both for her own good and for that of the community, became essential.

During the many visits paid to her in her house she had expressed a wish to enter a Convent home ; when given the opportunity, however, she refused.

A short time after her admission to hospital the Mother Superior at the Convent concerned indicated that the patient now definitely wished to be admitted there. In view of this an approach was made to the Magistrates, and the Order was revoked. The transfer was then carried out.

**Case 4.** This woman, aged about 70 years, had been known to the Department and other agencies for several years. She lived with her son in conditions of extreme squalor, being paralysed, incontinent and without the power of speech. Conditions became so intolerable that an Order had to be obtained for her removal.

This patient subsequently died in hospital.

### CEREBRAL PALSY

Owing to the excellent work of the Midland Spastic Association and its close co-operation with the School Health Service and the Welfare Department of the City Council, the following statistical information is available.

On 31st January, 1953 there was a total of 429 spastics known to the Association in Birmingham and on the 11th July, 1953 the total was 436.

The provision made for these patients was as follows :—

<i>Age under 5 years</i>					<i>31.1.53</i>	<i>11.7.53</i>
Attending Nursery School	...	...	...	...	1	1
Attending for Out-Patient treatment	...	...	...	...	43	6
Residing in Mental Deficiency Institution	...	...	...	...		0
At home but on Mental Deficiency Institution list	...	...	...	...		4
At home awaiting admission to School	...	...	...	...		7
No special provision	...	...	...	...		33
TOTAL					44	51



*Age 5—15 years*

<i>Day Schools</i>					<i>31.1.53</i>	<i>11.7.53</i>
Cerebral Palsy School	...	...	...	...	24	23
Physically Handicapped School	...	...	...	...	52	49
Educationally Sub-Normal School	...	...	...	...	2	3
Open Air School	...	...	...	...	1	0
Deaf School	...	...	...	...	5	1
Partially Sighted School	...	...	...	...	1	1
Ordinary School	...	...	...	...	48	55
Occupation Centre	...	...	...	...	5	5
Home Tuition	...	...	...	...	10	12
At Home but on School or Institution lists					19	11
At home, no provision made	...	...	...	...	28	27

*Residential Schools and Institutions :*

Cerebral Palsy School	...	...	...	...	0	3
Physically Handicapped School	...	...	...	...	5	1
Educationally Sub-Normal School	...	...	...	...	2	2
Open Air School	...	...	...	...	0	2
Hospital...	...	...	...	...	3	2
Institution for Mentally Defective	...	...	...	...	19	16
TOTAL					224	213

*Age over 15 years :*

At School	...	...	...	...	...	13	7
Home Tuition	...	...	...	...	...	0	1
Occupation Centre	...	...	...	...	...	12	14
At Work	...	...	...	...	...	50	53
Piecework at home	...	...	...	...	...	10	10
Training...	...	...	...	...	...	2	3
Sheltered Workshop	...	...	...	...	...	8	7
Institution for Mentally Defectives	...	...	...	...	...	15	19
Other Institutions	...	...	...	...	...	3	2
At home—Unemployed	...	...	...	...	...	48	55*
Housewife	...	...	...	...	...	0	1
						<hr/>	<hr/>
TOTAL	...	...	...	...	...	161	172

*	Totally incapable of work		...	18	TOTAL	55
	Capable of work		...	11		
	Capable of handicrafts		...	26		

The age and degree of handicap of 417 spastic patients is given below.

<i>Ages 1—4</i>			<i>5—9</i>			<i>10—14</i>		
A	B	C	A	B	C	A	B	C
17	16	14	54	48	23	23	35	25
<i>Ages 15—20</i>			<i>21—35</i>			<i>36—73</i>		
A	B	C	A	B	C	A	B	C
22	38	12	20	35	20	1	9	5



where A signifies mildly handicapped—usually able to work or attend normal school and take part in normal life.

B signifies moderately handicapped—may attend special school or be employed in a sheltered workshop. Many are not employable and are homebound.

C signifies severely handicapped—cannot go out except in invalid chair and many cannot use their hands.

It is believed that the above figures relating to children of school age fairly accurately reflect the incidence of spasticity in this age group and corresponds to 1.2 spastics per 1,000 children. The corresponding figure in the 0—5 group is 0.6 per 1,000.

The relatively few known adult spastics suggests that many individuals in this age group may not even yet be in touch with the Midland Spastic Association.

There is close collaboration between the School Health Service, the Midland Spastic Association, and the Welfare Department. The City Council has recently made a grant of £500 to the Midland Spastic Association for their welfare service, and the facilities provided have undergone expansion.

Home visiting of spastics began in 1950. All spastics are occasionally visited and special attention is paid to those attaining school age and school leaving age in order to ensure that they receive whatever facilities are available. Help of some sort has been given to about 35% of those visited and included advice on every sort of problem, the loan of helpful literature and material help in special cases. Some spastic patients are put in touch with statutory or voluntary organisations which can help them. Holidays have been arranged in a few cases and children and adults have been introduced to clubs or voluntary visitors have been found for them. Eighteen spastics, all homebound and sometimes lonely, with little to interest them, are visited fortnightly, and some of them are attending a club. Home tuition in handicrafts is being developed for those who are homebound and craft classes, a reading class and a youth club are also being developed. The City Council's Welfare Department assists by arranging transport facilities wherever possible. At one time a special clinic was held for spastics at the Children's Hospital, but this has been discontinued.

The Royal Orthopaedic Hospital, Birmingham, has numerous spastic patients, and for these and other seriously handicapped persons has maintained a welfare service which is now being transferred gradually to become part of the City Council's Welfare arrangements for handicapped persons and integration has begun by the association of two of the Council's Welfare Officers with this hospital. Similarly the work of the Hospital and of the Local Health Services is being integrated by attaching a health visitor part time to the hospital to ensure the adequacy of pro-



vision of facilities and assistance in the home. There is a further link in this direction with the City Council's Housing Management Department which will allow of rehousing when accommodation at home is grossly unsuitable. Whenever applicable, therefore, the whole of the Local Health Authority's services are readily available to spastics and the same applies to the City Council's more recently acquired powers to provide welfare services for handicapped persons and the flow of information and requests proceeds smoothly in all directions.

## EPILEPSY

Statistics relating to the numbers of those suffering from epilepsy are recognised as being very incomplete. The main source of information is the Birmingham Branch of the British Epilepsy Association whose Secretary, some two years ago, invited epileptics in the City to get into touch with him. His register now comprises almost 500 names of epileptics whose ages were recorded, fall into the following groups.

<i>Ages (years)</i>		<i>Males</i>	<i>Females</i>	<i>Total</i>
11 to 15	... ..	12	19	31
16 to 20	... ..	24	16	40
21 to 30	... ..	65	42	107
31 to 40	... ..	65	23	88
41 to 50	... ..	29	24	53
51 to 60	... ..	15	9	24
Over 60 ...	... ..	3	6	9
		213	139	352

There is a suggestion that males are more likely to register than females and young adults more likely than older people.

Based, however, upon Ministry of Health Circular 26/53 which suggested an incidence of 2 epileptics per 1,000 population, one would expect at least 2,000 cases in Birmingham.

In 1952, with the acquisition of powers to provide welfare services for handicapped persons, other than the blind and the deaf, a survey of the difficulties and needs of 200 Birmingham epileptics was made. There are 17 adult epileptics under the care of the Welfare Committee in Colonies or Homes.

The Register of Disabled Persons, which is maintained by the Ministry of Labour and National Service, includes epileptics under the general heading of "nervous disorders" so their number is not available but, of the total 97 registered disabled persons of all types who are known to require work under sheltered conditions, 26 are epileptics.

Every effort is made to discover and investigate school children suspected of suffering from epilepsy, many being referred to specialists.



The following special facilities are being provided for epileptic school children.

Residential schools ... ..	42 children
Special schools ... ..	3 children with epilepsy only
	8 children with epilepsy plus other handicaps
Day schools for the educationally subnormal ... ..	14 children
Occupation centres ... ..	2 children
Home teaching ... ..	2 children
	—
TOTAL ... ..	71 epileptic children

The following epileptic children have infrequent fits, and attend ordinary schools.

58 Boys. Ages : 5—7 years, 18 ; 7—12 years, 25 ; 12—15 years, 15

Grand mal, 37 ; Petit mal, 15 ; Both types, 2

Diagnosis uncertain, 4

Occurrence of fits : Day-time only 23

Night time only 7

Day or night 22

Very variable 6

53 Girls. Ages : 5—7 years, 13 ; 7—12 years, 28 ; 12—15 years, 12

Grand mal, 37 ; Petit mal, 16

Occurrence of fits : Day time only 22

Night time only 5

Day or night 17

Very variable 9

An attempt has been made to obtain some information as to the burden upon Birmingham hospitals produced by epilepsy. It appears that the number of admissions is small. At Selly Oak Hospital (1,059 beds), there were 54 epileptics admitted in 1953. Three of these were suffering from petit mal and six had status epilepticus. Admissions to the General Hospital (413 beds), were of a similar order. Many more epileptics, however, attend these hospitals as out-patients. At the Casualty Department of the General Hospital for instance, which is situated near the centre of the City, 539 epileptic patients were treated in the three years 1951, 1952 and 1953. In 1953, 150 patients made 523 attendances and there were 56 admissions to hospital beds.

There is an impression that the condition of some of these patients is prejudiced by their unsatisfactory domestic life and that some would be benefited by being looked after sympathetically in a hostel. A joint



enquiry has been made into the extent of this need, but the information at present available has shown that the need is small and would not warrant the provision of a hostel solely for epileptics at present. This is mentioned here to demonstrate the manner in which the following arrangements for co-ordination enable welfare problems of the handicapped to be considered from many aspects.

In Birmingham a Co-ordinating Committee has been set up to integrate the work of all statutory and voluntary bodies in connection with handicapped persons other than the blind and deaf. The Deputy Medical Officer of Health is a member of this Committee and the Birmingham Almoners and General Practitioners are also represented in the co-ordinating arrangements. The Committee hopes to stimulate and direct voluntary assistance of all kinds for promoting the welfare of the handicapped. Voluntary workers are being trained to visit and ensure that the handicapped receive whatever voluntary or statutory services may benefit them. All the Local Health Services mentioned elsewhere in this Report are available, and, in addition, the City Council now has acquired powers for promoting the welfare of the handicapped, and is using these powers.

It is usual for a Local Authority representative to serve upon the Committee of a voluntary organisation to which it gives financial support and for the Deputy Medical Officer of Health to attend the meetings of the City Council's Welfare Committee and appropriate Sub-Committees. Further integration is achieved by the Deputy Medical Officer of Health being a member of the Hospital Management Committee which controls the Royal Orthopaedic Hospital and by his membership of the Institute of Almoners where problems applicable to the welfare of spastics, and epileptics, are from time to time met. Most important, however, is the excellent personal relationship between officers of all statutory and voluntary bodies in Birmingham which is ensuring that the needs of the handicapped are being met without delay from whichever is the appropriate quarter.

## INCIDENCE OF BLINDNESS

At the beginning of 1953 the blind persons in Birmingham numbered 1,469—674 being men, 741 women and 54 children.

During the course of the year there were 193 additions to the Register (161 newly certified blind and 32 blind persons who had come to reside in the City). Deletions from the Register were 140 deaths and 21 blind persons who left the City.

At the end of 1953 there were, therefore, on the Blind Register 1,501 persons, 672 being men, 766 women and 63 children.



Arrangements for their care, education and employment were as follows :—

<i>1st January, 1953</i>				<i>31st December, 1953</i>			
				<i>Men</i>	<i>Women</i>	<i>Children</i>	<i>Total</i>
2	Babies in Sunshine Homes	...	...	—	—	4	4
1	Baby in Condoover Hall	...	...	—	—	1	1
15	Babies at Home	...	...	—	—	14	14
—	Baby in Regional Board Hospital	...	...	—	—	1	1
23	Children at School—Resident	...	...	—	—	27	27
6	Children at School—Day	...	...	—	—	7	7
4	Children School Age at Home...	...	...	—	—	6	6
3	Children School Age in Regional Board Hospitals	...	...	—	—	3	3
6	Adults in training—Resident	...	...	2	2	—	4
8	Adults in training—Day	...	...	10	4	—	14
2	Adults awaiting training for Open Employment	...	...	—	—	—	—
2	Adults in training for Open Employment	...	...	3	1	—	4
1	Adult trained for Open Employment, but unemployed	...	...	1	—	—	1
—	Adults trained for Sheltered Employment, but unemployed	...	...	—	—	—	—
105	Workers in Open Employment	...	...	81	15	—	96
188	Workshop Workers	...	...	136	55	—	191
3	Adults employed in Occupation Centre	...	...	2	—	—	2
24	Other blind employees	...	...	14	10	—	24
34	Home Workers	...	...	18	16	—	34
890	Unemployables at Home	...	...	349	569	—	918
104	Unemployables in Regional Board Hospitals	...	...	45	62	—	107
36	Unemployables in Welfare Department Homes...	...	...	11	15	—	26
12	Unemployables in Cowley Home	...	...	—	17	—	17
<hr/> 1,469				<hr/> 672	<hr/> 766	<hr/> 63	<hr/> 1501

The Partially-Sighted Register at the beginning of the year contained the names of 101 persons, 36 men, 62 women and 3 children, and the year ended with a total of 113 persons on this Register, 44 men, 66 women and 3 children.

The number of registered blind persons who were also deaf was 133 at the beginning of 1953, and 131 at the 31st December, 1953 residing :—

	<i>Men</i>	<i>Women</i>	<i>Total</i>
In their own homes	36	53	89
In other homes and institutions	9	33	42
	<hr/> 45	<hr/> 86	<hr/> 131



During the year 198 forms B.D.8 were received. The ages of these patients were :—

<i>Under</i> 5	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65-69	70-74	75-84	85-94	95+
6	5	1	3	5	10	10	22	26	30	55	24	1

In 68 of these patients the cause of their disability was cataract and in 25 it was glaucoma.

Prior to registration as blind or partially sighted the 25 glaucoma patients received treatment as follows :—

<i>Surgical Successful</i>	<i>Surgical Unsuccessful</i>	<i>Medical Successful</i>	<i>Medical Unsuccessful</i>	<i>No treatment</i>	<i>Medical Uncompleted Surgical Successful</i>	<i>Medical Uncompleted Surgical Unsuccessful</i>	<i>Medical and Surgical Unsuccessful</i>	<i>Medical Unsuccessful Surgical Successful</i>	<i>Total</i>
*2	11	†1	3	1	3	1	2	1	25

\* Both cases were complicated by cataract. One patient was blind and one partially sighted.

† 1 eye unsuccessful.

From the following table it is apparent that, although most of the patients suffering from glaucoma and requiring treatment had received it by the end of the year, only 9 of the 46 cataract cases had received the treatment which had been recommended.

#### FOLLOW-UP OF REGISTERED BLIND AND PARTIALLY-SIGHTED PERSONS

	<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 para. 7 (c) of Forms B.D.8 recommends :—				
(a) No treatment ...	22	15	—	53
(b) Treatment (Medical, Surgical or Optical) ...	46	10	—	52
(ii) Number of cases at (i) (b) above which on follow-up action have received treatment ...	9	7	—	35

## BLINDNESS IN YOUNG CHILDREN

The following figures illustrate the downward trend of incidence for which antenatal and neonatal supervision and the efficiency of modern antibiotics have been responsible. The rise in numbers after about 1948 is accounted for by the oxygen tent technique of saving premature babies which initially led to the development of retrolental fibroplasia in certain cases.

<i>Year</i>	<i>No. of blind children born in year</i>	<i>No. of blind children up to 5 years of age on the register at 31st March</i>	<i>No. of children up to 5 years of age registered as blind during the year ended 31st March</i>
1931	4	12	
1932	9	15	
1933	7	15	
1934	3	17	
1935	7	16	8
1936	6	14	2
1937	6	12	1
1938	6	10	—
1939	3	9	10
1940	4	7	1
1941	3	9	3
1942	2	8	—
1943	3	5	1
1944	4	2	3
1945	2	4	3
1946	2	4	—
1947	4	4	1
1948	5	4	1
1949	5	11	6
1950	1	11	6
1951	—	15	6
1952	3	16	2
1953	2	17	4

No case of blindness due to retrolental fibroplasia has occurred since 1950 when there was one case. For some time now it has been the practice to avoid carefully any unnecessarily high concentrations of oxygen in the care of premature infants. In consequence of this the incidence of blindness in babies is now again falling.

## OPHTHALMIA NEONATORUM

(i) Total number of cases notified during the year	621
(ii) Number of cases in which :	
(a) Vision lost	—
(b) Vision impaired	—
(c) Treatment continuing at end of year	29



## FOOD AND DRUGS

The need for purity and quality of all foodstuffs demands constant vigilance on the part of the authorised officer of the Food and Drugs Authority. It also requires a tenacity of purpose, and sometimes exceptional powers of persuasion, if he is to turn his wide practical knowledge to account.

In these days when a Food and Drugs Amendment Bill is in its final stages and even the Regulations to follow are under consideration, the sanitary inspector may be justified in going slow where requirement of structural alteration is concerned, but a period of waiting such as we have experienced during the latter part of 1953 has presented him with a great opportunity for discussion with managements upon the implications of the new proposed legislation and upon the reactions of the various food trades to it. It has also presented him with the incentive to talk to staffs, get to know them and instill into them some of his own enthusiasm for clean safe food.

There can be no doubt that the education of the individual food handler is most effectively promoted by short talks in front of the equipment he operates and in the kitchen in which he works. There can also be no doubt that the best person to give such talks should be the man who is known to the management personally, and to the individual food handler by sight at least, as the man who drops in at all odd times to criticise, to advise, and, where he is permitted, also to assist towards the perfection so long required.

It is, therefore, with that target of perfection that the sanitary inspector, the milk and dairies inspector and the food inspector approach their work in connection with food premises and in safeguarding the health of the customer by ensuring that all food sold for human consumption is of the highest purity.

Quality, on the other hand, is ensured by the frequent sampling of all types of food by the senior sampling officer and the authorised officers who comprise his team, working under the general direction of the Administrative Medical Officer of Health for General Purposes, and in close co-operation with the City Analyst whose observations elsewhere in this report indicate the magnitude and diversity of the activities of this section of the Department.

The supervision of all types of catering premises rests with the district sanitary inspector under the direction of Mr. E. N. Wakelin, Chief Sanitary Inspector, who submits the following report upon catering establishments, mobile canteens, the majority of the City bakeries and certain other types of premises. The inspection of meat and retail food premises forms a special report submitted by the Chief Veterinary Officer who is in charge of the Veterinary and Food Inspection Department.



## Eating Houses and Premises where Food is Prepared or Stored for Sale

Considerable signs of improvement in nearly all food premises have been observed which must to a degree reflect the value of the department's supervision, and also the co-operation of the managements involved. There is still a long way to go, however, especially so far as the individual food handler is concerned, and here the sanitary inspector's role has become that of a propagandist and educator in the fundamentals of hygiene and clean food handling. Immediate or spectacular results are not to be expected, but there has been noted a marked improvement in the "hygiene awareness" of the individual food handler.

The normal practice of the inspector requesting the occupier of food premises to effect improvement, has been adhered to, and where necessary, letters of confirmation have been sent enclosing schedules of work involved.

In only one instance was it found necessary to institute legal proceedings and this concerned a café and involved fourteen charges for contraventions of Section 13 of the Food and Drugs Act, 1938, and one charge under the Byelaws made under Section 15 of that Act. The offences related to the dirty condition of the walls, ceilings and floors of various food preparation rooms, an accumulation of refuse, lack of cleanliness of utensils, etc., lack of ventilation, absence of soap, clean towels and hot water, and (under Byelaws) the failure to protect food against contamination. After an adjournment of the Court hearing for six weeks the defendant was fined £5 on one charge and was found guilty but discharged conditionally on the other charges. Before the resumed hearing the defendant had effected considerable improvement which fact the Justices took into consideration when assessing the penalty.

As part of the routine duties of the sanitary inspector the inspection of various types of food premises has proceeded apace, and 10,079 visits have been made during the year to the following premises :—

Visits to cafes, hotels, restaurants, eating houses, etc.	...	...	7,416
Visits to factory canteens	...	...	1,760
Visits to bakeries	...	...	604
Visits to licensed premises where food is sold	...	...	299
			<hr/>
			10,079
			<hr/>

This figure compares with a total of 10,602 for the year 1952.

## Registration of Premises—Birmingham Corporation Act, 1935

Before a proposed eating house can be opened it must be registered under Section 54 of the Birmingham Corporation Act, 1935, and registration is only effected after the requirements of current legislation are met.

At the end of 1953 there were 1,207 Eating Houses registered with the Corporation compared with 1,152 at the end of 1952.



### **Mobile Canteens**

The proprietor and any premises used for food preparation in connection with a mobile canteen are required to be registered under the provisions of the Birmingham Corporation Act, 1948, Section 42. During the year eight fresh registrations were effected and two proprietors ceased to operate, bringing the total on the register for the City to 25.

Legal proceedings were taken against one proprietor for contraventions of the Byelaws made under Section 15 of the Food and Drugs Act, 1938. The offences related to the failure to protect food against contamination; the non-removal of filth; the disrepair of the canteen vehicle; the failure to cause all surfaces to be of such materials as to prevent the absorption of food, etc., spilled or deposited thereon; and the failure to exhibit the name and address of the proprietor on the vehicle. The vehicle was in use at a sports field at week-ends and inspectors had been pressing the proprietor to effect improvements for some time without result. The Magistrates found the defendant guilty and a fine of £2 was imposed on each of the five charges. Subsequently the use of the vehicle was discontinued.

### **Bakehouses**

There were 161 bakehouses in the City at the end of the year, 140 of which were inspected by the sanitary inspectors engaged on district duties and the remaining 21, primarily concerned with the manufacture of confectionery, were visited by the Milk and Dairies Staff. No serious contraventions of the Food and Drugs Act and its Byelaws were observed, and at all times the co-operation of the managements was readily obtainable, and any necessary improvements were carried out.

With the easing of rationing restrictions the manufacture of confectionery and the use of synthetic cream and cream cake filling increased further during the year, and it was estimated that of the 161 bakehouses 49 were solely engaged in the manufacture of confectionery; at 54 bakehouses confectionery manufacture was the major business carried on, while only 11 bakehouses were solely engaged in bread baking.

### **Other Food Premises inspected included :—**

- Biscuit Factories
- Mineral Water Factories
- Breweries
- Sweet Manufacturers
- School and Factory Canteens

Factory and school canteens were given special attention, and conditions were found to be generally of a high order. One mineral water factory, which had been the subject of adverse criticism by this department was acquired by a larger firm at the beginning of the year, and in view of the conditions the new owners discontinued its operation and used the premises for storage purposes.



## Catering Licences

The number of applications made to the department in connection with the issuing of catering licences was 97, showing a marked decline from the 167 in 1952. Figures for the past four years show clearly the trend :—

								<i>Applications for Licences.</i>
1950	...	...	...	...	...	...	...	528
1951	...	...	...	...	...	...	...	267
1952	...	...	...	...	...	...	...	167
1953	...	...	...	...	...	...	...	97

The types of new applications dealt with in 1953 are shown below :—

1. Public Houses								
(a) full catering	...	...	...	...	...	...	1	
(b) snacks only	...	...	...	...	...	...	7	
							—	8
2. Cafes								
(a) full catering	...	...	...	...	...	...	24	
(b) snacks only	...	...	...	...	...	...	24	
							—	48
3. Fish friers providing meals on premises	...	...						2
4. Factory canteens	...	...	...	...	...			12
5. Mobile canteens, with premises at which food is stored and prepared	...	...	...	...				1
6. Clubs, full-time (licensed)								
(a) full catering	...	...	...	...	...	...	1	
(b) snacks only	...	...	...	...	...	...	1	
							—	2
7. Clubs, part-time (unlicensed)								
(a) full catering	...	...	...	...	...	...	4	
(b) snacks only	...	...	...	...	...	...	13	
							—	17
8. Clubs, part-time (licensed)								
(a) full catering	...	...	...	...	...	...	—	
(b) snacks only	...	...	...	...	...	...	1	
							—	1
9. Residential establishments								
(a) private hotels	...	...	...	...	...	...	3	
(b) boarding houses	...	...	...	...	...	...	1	
							—	4
10. Premises proposed, but found unsuitable by Public Works (Town Planning) Department, or this Department, or licence refused by Food Office ...								2
								—
								97



## MILK AND DAIRIES, ICE CREAM AND SYNTHETIC CREAM

### Milk and Dairies

The staff remains as last year.

The following licences were issued during the year :—

Pasteurising Plants—H.T.S.T.	...	...	...	...	...	8
Holder...	...	...	...	...	...	2
Other (in Bottle)	...	...	...	...	...	1
Sterilising plants	...	...	...	...	...	11
Wholesale and retail milk distributors	...	...	...	...	...	83*
Dealers' licences (shop retail trade)	...	...	...	...	...	2,646
Tuberculin Tested licences issued to producers of pasteurised and sterilised milk for the production of Tuberculin Tested (Pasteurised) and Tuberculin Tested (Sterilised) milk						10

\* 9 Wholesale and retail purveyors went out of business during the year and were removed from the register.

The new processing dairy referred to in last years report is still in the planning stage but the extension of this firm's existing premises to house additional sterilising, bottle-filling and bottle-washing plant is in progress, and it is anticipated that this extension will be fully operating early in 1954.

Plans have also been submitted and approved for extensions to provide more adequate accommodation for sterilisation at another dairy, while similar extensions at yet another dairy have been put in hand and were nearing completion at the end of the year.

Two premises, formerly occupied for both pasteurisation and sterilisation, have been absorbed by large firms and the premises are no longer used for the processing of milk.

There is now only one retail purveyor in the City who purchases pasteurised milk in bulk, and bottles on his own registered premises.

During the month of July, the Medical Officer of Health of a neighbouring County Authority intimated the discovery of brucella abortus infection in a sample of " farm-bottled " milk, supplied to a City dairy for sale by retail within the City. Arrangements were made forthwith whereby this milk was sent to the dairy in bulk for pasteurisation ; this procedure was still being followed at the end of the year.

The methylene blue test has been carried out by the Public Health Laboratory Service on all samples of pasteurised milk, irrespective of " outside atmospheric shade temperature " ; the samples have been kept in a basement where the temperature rarely, if ever, exceeds the stipulated 65°, and, therefore, no " voids " have been reported during the year. Such a policy now falls into line with that which has been in force in adjacent laboratories, but the change of policy has been held by the trade to be unfair, in that when the occasional failure to pass the test was subjected to special investigations at the dairy, it was shown that the external atmospheric shade temperature was in excess of the stipulated 65°F.



It should be noted that observance of temperature requirements in connection with such tests rests with the laboratory, and not the local authority.

The following complaints were referred to the Department during the year by members of the public :—

Dirty bottles and foreign matter in bottles	...	...	17
Insect infestation ( <i>drosophila busckii</i> )	...	...	1
Faulty capping	...	...	1
Watery sterilised (due to crack in neck)	...	...	1

Bearing in mind the millions of bottles supplied daily, these few complaints are significant of the care taken by dairies, even although individual dairies may have been notified of many more ; for the attention of the " viewer " located between bottle washer and filler may so easily be diverted momentarily from the bottles on the line, and many bottles are still returned to dairies in such a dirty state as to require very special cleansing.

An unusual complaint was also received from a neighbouring county authority to the effect that hypochlorite had been discovered in a sample of milk bottled and sold by one of the City dairies.

Investigation showed that this firm did not employ hypochlorites for purposes of sterilisation, and that the presence of this oxidising agent could only be attributable to its presence in the farmer's supply. It was further established that at no City dairy are hypochlorites used for sterilisation purposes, steam sterilisation being in all instances available.

#### MILK SAMPLING

The following table shows the results of examination of 3,696 samples of designated milks for methylene blue, phosphatase or turbidity tests.

<i>Designation of milk sampled</i>	<i>Total No. of Samples</i>	<i>Failed Methylene Blue Test</i>	<i>Total No. of Samples</i>	<i>Failed Turbidity Test</i>	<i>Failed Phosphatase Test</i>
Tuberculin Tested	143	10 (6.99%)	—	—	—
Accredited	38	3 (7.89%)	—	—	—
Pasteurised (incl. T.T. Past.) (Inside City)					
Roundsmen	951	9 (0.95%)	949	—	2 (0.21*)
Schools	373	13 (3.49%)	373	—	Nil
(Outside city)	337	7 (2.08%)	336	—	5 (1.49*)
Sterilised (incl. T.T. Ster.)					
(Inside city)	—	—	136	Nil	—
(Outside city)	—	—	60	Nil	—

\*Biological tests carried out on samples of pasteurised milk failing the phosphatase test gave negative results in each instance.



## CHURN AND BOTTLE WASHING

As a check upon the efficiency of churn and bottle washing apparatus at pasteurising establishments a small number of samples were again taken, with results as follows :—

No. of Samples	Estimated Bacterial Content per Bottle or Churn					B.Coli present
	1—1,000	1,001—10,000	10,001—100,000	100,001—500,000	Over 500,000	
13 Bottles	7	6	0	0	0	0
17 Churns	0	2	7	6	2	2

## CREAM

The Cream and Use of Milk (Revocation) Order, 1953 came into operation on 1st April and supplies of cream have been watched closely since that time, samples being taken as follows :—

Twenty-six samples of Fresh Cream (raw) were submitted to the methylene blue test, and six failed. These failures were subsequently submitted also to a plate count and coliform estimation, with results as follows :—

Est. No. of Colonies per 1 c.c. after 48 hrs. incubation at 37°C	Number of Samples	No. of Coliform bacilli in 1 c.c.	Number of Samples
1—10	1	Nil	6
11—300	5		
	—		
	6		
	—		

Ten samples of Clotted Cream were submitted to the plate count and coliform estimation, with results as follows :—

Est. No. of Colonies per 1 c.c. after 48 hrs. incubation at 37°C	Number of Samples	No. of Coliform bacilli in 1 c.c.	Number of Samples
0—1,000	1	Nil	7
1,001—10,000	1	1—10	1
10,001—100,000	0	11—300	2
100,001—500,000	2		—
Over 500,000	6		10
	—		—
	10		
	—		



It is satisfactory to record that no instance of milk-borne infection was ascertained during the year. After a few minor teething troubles noted in the last report, the Specified Area Order has operated smoothly in the City, and it would be most remiss if attention was not drawn to the continued co-operation of the dairy industry with the Milk and Dairies Inspectors, and to the cordial relations and mutual respect which exist between them.

### **Iced Lollipops**

An increase in the manufacture and sale of iced lollipops has led to difficulties of supervision in that "water ices" are not included within the definition of "ice-cream" contained in Section 54, Birmingham Corporation Act, 1935. Registration, as with ice-cream, is not required in the case of such frozen confections and the premises at which they are manufactured or sold are not invariably known to the Department.

Where such premises are ascertained, however, supervision is carried out under Regulation 5 of the Ice Cream (Heat Treatment, etc.), Regulations, 1947-52.

In simplest form, the iced lollipop is made from fruit-flavoured liquids of varying quality, and it is not unknown for milk flavoured with fruit juices to be used. The usual method is to dilute the liquid with tap water, pour into moulds by jug and then freeze in an ice-cream conservator or in a special brine tank run in conjunction with a compressor unit. The sticks are usually inserted half-way through the hardening, or freezing, process. When the lollipops are frozen, the moulds are removed from the conservator or brine tank and placed in warm water so as to release the lollipops from the moulds. They are then ready for storage and sale.

Ice-cream is sometimes included as an ingredient, a liquid ice-cream mix being incorporated with the fruit juice, while in other instances a portion of frozen ice-cream is attached to the end of the lollipop.

Moulds of varying material are used, some of these being so narrow towards the point as to be most difficult to cleanse. Improvised wooden sticks have on occasion also been employed, and the type of premises used is commonly the private house, greengrocer's and huckster's shops.

Not only has experience shown such premises to be unsuited for sale in a number of instances, but the methods of manufacture in the domestic scullery, and the cleansing of moulds in the sink already used for a variety of domestic operations, without facilities for sterilisation, are entirely unsatisfactory.

Steps have been taken in such circumstances to persuade the manufacturer to give up production, but it is realised that, without the requirement of registration, manufacture may have been carried on unknown to the local authority for some considerable time.



It is for these reasons that the Corporation are now seeking powers to amend the definition of Ice-Cream in Section 54, Birmingham Corporation Act, 1935, to include the "water-ice," as in the Regulations, so as to be able to require registration of all premises used in the manufacture and sale of the iced lollipop.

Samples of iced lollipops have been submitted for bacteriological examination during the year, with the following results:—

1. *Methylene Blue Test*

<i>Provisional grade</i>	<i>Number of Samples</i>
1	10
2	1
3	1
4	2
	—
	14
	—

2. *Plate Count*

<i>Colonies per 1 ml. after 48 hours at 37°C.</i>	<i>Number of Samples</i>
0—1,000	1
1,001—10,000	2
10,001 —100,000 (one sample contained also 1 B.Coli Type I per 1 ml.)	8
over 500,000	1
	—
	30
	—

## Ice Cream

In last year's report reference was made to a continuing trend whereby manufacture of ice-cream is becoming more and more the province of the larger producer, while the number of premises at which ice-cream is sold is at the same time steadily increasing. This trend has continued during 1953, three manufacturers having given up business and nine having reverted to sale only, while only one new registration has been effected, leaving a total of 121 manufacturers on the register, as against 132 at the end of 1952. Only two of these may be classed as large-scale manufacturers. The number of premises registered for sale only, however, was 2,905, against 2,613 for 1952. Three temporary registrations were also approved, for the sale of ice-cream at one open-air fete and during two trade exhibitions held at Bingley Hall.

Nine persons made unsuccessful application for the registration of premises for the sale of ice-cream, the premises being found, on inspection, to be unsuitable by reason of either sanitary defect, or the nature of existing trade carried on. In each instance the applicant was advised of his right of appeal, but the applications were withdrawn.

Manufacturers located outside the City, who retail ice-cream within the City boundary, are registered for sale only, a satisfactory report having first been received from the area in which manufacture takes place.



No difficulties have been experienced in relation to the operation of mobile ice-cream vehicles except in one instance. A firm outside the City was found to be operating 6 tricycles on new housing estates, the vehicles being stored in the open on waste ground adjoining the operators' dwellings, and without facilities for cleansing. When located and interviewed, however, the firm agreed to discontinue operation pending the provision of suitable garage facilities. The type of vehicle employed and the standard of maintenance adopted have, in general, continued to be satisfactory.

The H.T.S.T. process, for which provision is made under the Ice Cream (Heat Treatment, etc.), Amendment Regulations, 1952, has been brought into general use by the firm who made application towards the end of 1952. This firm has also installed new equipment for the wholly mechanical packaging of ice-cream brickettes, the ice-cream being packed into heat-sealed paper wrapping direct from the freezer.

As with the H.T.S.T. plant, however, it is unlikely that other manufacturers will follow this lead, as none have an output which would justify the capital outlay involved.

The proportion of prepacked ice-cream on sale has increased, as against the amount of loose ice-cream, which is supplied, in the main, to catering establishments.

Sampling both as a routine and in following up unsatisfactory results has been continued as formerly, 537 samples submitted to the methylene blue test\* being reported upon 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>Total Samples 1953</i>	<i>Results 1952</i>
1	340 (91.89%)	139 (83.23%)	479 (89.20%)	431 (76.28%)
2	15 (4.05%)	20 (11.96%)	35 (6.52%)	82 (14.51%)
3	7 (1.89%)	4 (2.40%)	11 (2.05%)	30 (5.31%)
4	8 (2.16%)	4 (2.40%)	12 (2.23%)	22 (3.89%)
	<u>370</u>	<u>167</u>	<u>537</u>	<u>565</u>

\*Two of these were taken in consequence of a food poisoning incident where ice cream was suspected as being the source of infection. Both proved to be grade 1, however, and the suspicion was not sustained.

The Food Standards (Ice-Cream) Order, 1953, came into operation on 1st June, 1953, reinstating the original standard content of 5% fat and 7½% milk solids-not-fat, which had been temporarily lowered by the Amendment Order, 1952, to 4% fat and 5% milk solids-not-fat. Informal sampling during the year gave the following results:—

	<i>Number of samples</i>	<i>Number falling below standard</i>
Manufactured inside City ...	233	*9 (3.86%)
Manufactured outside City ...	59	3 (5.08%)

\*One of these failed in both fat and milk solids-not-fat.



From these results it is apparent that the satisfactory standards of purity and quality maintained in 1952 have been improved upon, and it is pleasing to record that no infection was traced during the year to this popular food.

### Synthetic Cream and Cake Fillings

Supervision of consignments of synthetic cream reaching confectionery bakeries in the City has been continued. Attention has been paid both to storage arrangements and to the technique adopted in handling, with special emphasis on the sterilisation of the equipment used and on the personal hygiene of the individual handler. Opportunities are also taken, with the co-operation of managements, to speak to their staffs on the dangers of faulty handling of this commodity.

Routine sampling both from the unopened container as soon after delivery as possible, and from the mixing bowl after handling, have been carried out at the following premises, while samples of the finished product have also been taken in a number of instances :—

(a) The larger confectionery bakeries supervised by the Milk and Dairies Staff.

(b) The smaller bakehouses supervised by the staff of the Chief Sanitary Inspector, where the use of synthetic cream is becoming increasingly more common.

The results of sampling are detailed below :—

Source of Samples	Colony Count per 1 ml. of cream after 48 hrs. incubation at 37°C.	No. of Samples	Coliform Bacilli present in 1 c.c.	No. of Samples
<i>(a) Confectionery Bakeries</i>				
Unopened Container	Nil	31	Nil	91
	0—1,000	36		
	1,001—10,000	12		
	10,001—100,000	6		
	100,001—500,000	2		
	Over 500,000	4		
	TOTAL	91	TOTAL	91
Mixing Bowl	Nil	12	Nil	88
	0—1,000	51	1—10	1
	1,001—10,000	17	101—300	1
	10,001—100,000	5		
	100,001—500,000	1		
	Over 500,000	4		
	TOTAL	90	TOTAL	90

In one instance, a sample of water taken from a tank used for sterilising mixing equipment, and not subject to thermometer control, gave a colony count of 5, with no coliforms present.

<i>Source of Samples</i>	<i>Colony Count per 1 ml. of cream after 48 hrs. incubation at 37°C.</i>	<i>No. of Samples</i>	<i>Coliform Bacilli present in 1 c.c. Sample</i>	<i>No. of</i>
<i>(b) Smaller Bakehouses</i>				
Unopened Container	Nil	8	Nil	32
	0—1,000	16		
	1,001—10,000	1		
	10,001—100,000	1		
	100,001—500,000	2		
	Over 500,000	4		
		—		—
	TOTAL	32	TOTAL	32
		==		==
Mixing Bowl	Nil	3	Nil	28
	0—1,000	18		
	1,001—10,000	1		
	10,001—100,000	3		
	100,001—500,000	2		
	Over 500,000	1		
		—		—
	TOTAL	28	TOTAL	28
		==		==
<i>(c) The finished product as found on sale</i>				
	Nil	Nil	Nil	18
	0—1,000	5		
	1,001—10,000	4		
	10,001—100,000	3		
	100,001—500,000	3		
	Over 500,000	3		
		—		—
	TOTAL	18	TOTAL	18
		==		==

These results are again satisfactory although the high count in certain samples taken from the unopened container shows the need for constant vigilance, and the presence of coliform organisms in two samples after mixing serves to underline the need for a careful watch upon the technique of handling in all premises where synthetic cream is used. The high colony count continues to be a reflection upon methods of distribution from the factory, and it says much for the technique of manufacture that no coliforms were found in 123 samples taken from the unopened containers. Were coliforms present in the container at the time of despatch, the occasional high colony count suggests that a considerable increase in the number of coliforms would also occur, with attendant risk to the consumer.



During the year various samples of cake fillings were also taken, some of these purchased ready-made by the confectioner, and others made up from ingredients available to him.

<i>Source of Samples</i>	<i>Colony Count per 1 ml. of filling after 48 hrs. incubation at 37°C.</i>	<i>No. of Samples</i>	<i>Coliform Bacteria present in 1 c.c.</i>	<i>No. of Samples</i>
Unopened Container	Nil	2	Nil	12
	0—1,000	8		
	1,001—10,000	1		
	10,001—100,000	1		
	TOTAL	12		
Mixing Bowl	Nil	1	Nil	14
	0—1,000	10		
	1,001—10,000	3		
	TOTAL	14		

### Shell Fish

Two samples of oysters and 130 samples of mussels were taken by the Veterinary and Food Inspection Department for bacteriological examination during 1953.

These were reported upon as follows :—

<i>B.Coli type I per 1 ml. of fish</i>	<i>Number of Samples</i>
Nil	97
1—5	25
6—10	3
Over 10	7

While there still is no fixed standard of purity, shell fish found to contain not more than 5 B. coli type I per 1 ml. of fish have been accepted as satisfactory. Unsatisfactory supplies are prohibited from being sold.

During the first three weeks of October, a number of unsatisfactory reports were received in respect of purified mussels from a main source of supply. This was investigated and appeared to have occurred through a number of shells being filled with contaminated mud. Such a condition may not be noticed on gathering from the purification beds, but it is suggested that, during transit, shaking may lead to the opening of such shells with the result that the mud is released within the mussel bags. Such mud has been shown to contain large numbers of B. coli. A change of fishing ground by the two fishermen concerned, and the issue of special instructions to the purification staff have had the desired effect.



Danish mussels imported via Boston again proved to be highly satisfactory, 47 showing no faecal coliforms and 3 showing only one per 1 ml. of fish. Danish mussels from an alternative source, and reaching the City via the London market, showed improvement upon the previous year, in that 5 samples showed no faecal coliforms, while 3 gave counts of from 1—5 per 1 ml. of fish.

No infection was traced, during the year, to the consumption of contaminated shell fish.

## INSPECTION OF MEAT AND OTHER FOODS

(Report by **C. G. Allen, M.R.C.V.S., D.V.S.M., F.R.San.I.**, Chief Veterinary Officer and Chief Inspector of Meat and Other Foods).

The Food and Drugs Act, 1938 and the byelaws made by the City Council thereunder, enable the Food Inspection Staff to maintain a close supervision of the City's supplies of meat and other foods. The Act also deals with slaughterhouses and knackers' yards, which must be licensed annually as from 1st February. In addition to the public abattoir, licences have been issued in respect of sixteen slaughterhouses connected with bacon factories and also in respect of one knacker's yard. In the case of the knacker's yard, the owner is also required to hold a licence issued by the Ministry of Food.

**Meat Supplies.** Since 1940 slaughtering in the City has been concentrated at the City abattoir (except in the case of pigs) from which central point almost all the home-killed meat consumed in Birmingham and much of the surrounding district is distributed. There are also large refrigerated stores at the abattoir where imported meat is stored until allocated to the various retail shops.

The supervision of meat supplies commences at the abattoir and is maintained throughout the various supply channels to the retail shops and food preparation premises.

**Slaughter of Animals and Inspection of Meat, etc.** The meat inspection staff at the abattoir comprises qualified veterinary and food inspectors, who examine all animals before and after slaughter, to ascertain their fitness for human consumption. These inspectors also supervise the humane and scientific methods of slaughter carried out by licensed slaughtermen, there being 265 slaughtermen's licences in force at 31st December, 1953.

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.** Veterinary inspectors are constantly engaged examining the carcasses of pigs slaughtered at the sixteen 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 these purposes 3,232 visits were made.

RETURN OF ANIMALS SLAUGHTERED					
	<i>Beasts</i>	<i>Calves</i>	<i>Sheep</i>	<i>Pigs</i>	<i>Total</i>
Public Abattoir	64,058	58,075	210,162	78,737	411,032
Pigs slaughtered in Bacon Factories	—	—	—	319,881	319,881
<b>TOTAL, 1953</b>	<b>64,058</b>	<b>58,075</b>	<b>210,162</b>	<b>398,618</b>	<b>730,913</b>
<b>TOTAL, 1952</b>	<b>69,356</b>	<b>57,649</b>	<b>211,762</b>	<b>328,174</b>	<b>666,941</b>

NOTE.—402 cases of *cysticercus bovis* (measly beef) were found at the abattoir during the year.

Of the 64,058 cattle slaughtered at the public abattoir, 8,396 or 13·1 per cent. were low grade cattle of manufacturing quality. The percentage of the total number of cattle killed during 1953, affected with tuberculosis, was 19·2 per cent., whereas the corresponding percentage for the year 1939 was 24·0.

**Meat from Outside Sources.** Home-killed dressed meat coming from outside sources to the abattoir is all inspected before being passed on to the consumer.

During the year 368 sides of beef were received for cold storage treatment for *cysticercus bovis*.

**Fish, Poultry, Fruit and Vegetable Supplies.** The wholesale supplies of fish, poultry, fruit and vegetables in the markets are subjected to regular daily inspection.

The fish market supplies an area within a radius of approximately twenty miles from the City centre.

**Hawkers.** Bull Ring hawkers 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, 1953, registration had been effected in 291 cases. During the year street hawkers were visited 29,779 times.

**Byelaws made under Sec. 15—Food and Drugs Act.** The district inspectors also ensure compliance with the provisions of the byelaws made under Section 15 of the Food and Drugs Act, 1938, for the purpose of securing sanitary and cleanly conditions and practices in connection with the handling, wrapping and delivery of food sold or intended for sale for human consumption, and in connection with the sale and exposure for sale in the open air of food intended for human consumption.

**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 eight districts.

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 food shops were visited :—

	<i>Number</i>	<i>Visits during 1953</i>
Beef and Pork Butchers ... ..	1,023	21,485
Grocers ... ..	1,568	6,921
Greengrocers ... ..	1,321	8,528
Hucksters ... ..	4,170	679
Fish Friers ... ..	439	1,152
Fishmongers ... ..	660	6,445
Horseflesh ... ..	5	71
	<hr/> 9,186	<hr/> 45,281

The following food premises, registered under Section 14 of the Food and Drugs Act, were visited :—

	<i>Number</i>	<i>Visits during 1953</i>
Sausages, cooked meat and pork pie manufacturers	320	8,963
Jam manufacturers ... ..	2	18
	<hr/> 322	<hr/> 8,981

### **Inspection of Meat, Fish and Other Foods at Birmingham Civic Restaurants, School Meal Centres, etc.**

The premises visited included :—

	<i>Number</i>	<i>Visits during 1953</i>
Institutions and Residential Homes ... ..	53	547
School Meal Centres ... ..	191	2,095
Birmingham Civic Restaurants ... ..	34	572
Factory Canteens ... ..	29	292
	<hr/> 307	<hr/> 3,506



In cases where food supplies and storage conditions are found to be unsatisfactory at school meal centres, reports are sent to the Education Department, and reports relating to food inspected at Birmingham Civic Restaurants are sent to the Birmingham Restaurants Department.

Supervision is also maintained of meat supplied to institutions, schools, restaurants and canteens, and a check is made for quality and prices according to the conditions of contract.

**Complaints and Request Inspections.** During the year, complaints and request inspections numbered 4,304.

**Foods Judged as Unfit.** Condemned meat and offal are utilised by the Corporation Salvage Department and manufactured into fertilisers, meat and bone meal, etc., and other suitable condemned foodstuffs are salvaged for animal feeding.

In view of statements which have been made in the press, it is emphasised that condemned meat is not sold or used for human consumption in any form.

#### RETURN OF FOODS JUDGED AS UNFIT

<i>Number of Surrenders</i>	<i>Class of Foodstuff</i>					T.	C.	Q.
13,694	Meat and Offal	...	...	...	...	771	5	2
896	Fish	...	...	...	...	74	14	1
359	Poultry, Rabbits, etc.	...	...	...	...	8	16	1
301	Fruit and Vegetables	...	...	...	...	306	11	1
2,894	Miscellaneous	...	...	...	...	175	15	0
<hr/>						<hr/>		
18,144			1953	...	...	1,337	2	1
<hr/>						<hr/>		
19,030			1952	...	...	1,278	15	2
<hr/>						<hr/>		

#### Byelaws requiring the Sterilisation of Animal Feeding Meat.

Byelaws made under Section 43 of the Birmingham Corporation Act, 1948, requiring the sterilisation of animal feeding meat have been in operation since 1st December, 1950.

#### Prosecutions

	<i>Fine</i>	<i>Costs</i>
Byelaws made under Section 15 of the Food and Drugs Act, 1938 :		
Failing to display name and address on barrow ...	10/-	—
Unclean condition of premises (3 summonses—fine £2 each) ...	£6	—
Food and Drugs Act, 1938 (Section 9) :		
Deposited for sale coconuts unfit for human consumption ...	£10	—
Sausage sold containing adhesive tape ...	£5	10/-
Exposing for sale foodstuffs intended for but unfit for human consumption ...	£2	—

# CARCASSES INSPECTED AND CONDEMNED

	CITY MEAT MARKET				BACON FACTORIES
	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed .....	42,245	21,813	58,075	210,162	319,881
Number inspected .....	42,245	21,813	58,075	210,162	30%
<i>All diseases except Tuberculosis:</i>					
Whole carcasses condemned .....		60	640	130	309
Carcasses of which some part or organ was condemned .....		1,083	319	4,620	3,766
Percentage of the number killed affected with disease other than tuberculosis .....	1.78%		1.65%	2.26%	1.27%
<i>Tuberculosis only:</i>					
Whole carcasses condemned .....	474		23	—	165
Carcasses of which some part or organ was condemned .....	11,833		8	—	18,787
Percentage of the number killed affected with tuberculosis .....	19.21%		0.05%	—	5.92%
Total diseased, 1953 .....	20.99%		1.70%	2.26%	7.19%
Total diseased, 1952 .....	22.89%		1.34%	2.89%	5.80%

For analysis of diseases no distinction made between cows and other cattle.



## THE MILK SUPPLY

(Report by C. G. Allen, M.R.C.V.S., D.V.S.M., F.R.San.I., Chief  
Veterinary Officer)

### City Dairies

Regular monthly veterinary inspections are made of all City dairy herds. 792 visits were made during the year ended 31st December, 1953.

At the end of 1953 there were 24 dairy farms housing 538 milch cows in 66 sheds, viz. :—

Attested herds	...	...	...	...	...	...	...	...	8
Accredited herds	...	...	...	...	...	...	...	...	6
Non-designated herds	...	...	...	...	...	...	...	...	10

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.

During the year 10 cows were found to be affected with acute catarrhal mastitis, and the milk produced by these cows was prohibited from sale.

In addition to the clinical examination of dairy cows, 57 bulk samples of milk were collected from City dairy herds for biological testing. None were found to be infected.

Individual samples of milk and sputum samples are also taken and examined in our own laboratory by the veterinary inspector dealing with the investigations.

INSPECTIONS—MILK AND DAIRIES REGULATIONS, 1949 (Part IV).  
Inspections were made on behalf of the Ministry of Agriculture and Fisheries and certificates of freedom from disease were issued in respect of

<i>Accredited herds</i>	<i>Cows examined</i>
19	442
<i>Non-designated herds</i>	
15	259

In connection with the Ministry's voluntary scheme for vaccination of heifer calves against contagious abortion, 50 calves have been vaccinated.

THE MILK (SPECIAL DESIGNATIONS) (RAW MILK) REGULATIONS, 1949  
The special designations authorised by these regulations which may be used in relation to milk are "Tuberculin Tested" and "Accredited" and licences (Producer's licence) are granted to persons owning or having control of such herds.

There are 8 Attested herds and 6 Accredited herds in the City.



## COWSHEDS

Any conditions relating to the building 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. 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.

## 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 bulk 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 1953 :—

			<i>Samples taken at Depots, etc.</i>	<i>Samples infected</i>	<i>No. of tuberculous cows traced</i>
Derbyshire ...	...	...	21	1	2
Gloucestershire	...	...	25	—	—
Herefordshire	...	...	31	1	—
Leicestershire	...	...	128	5	2
Shropshire ...	...	...	314	8	10
Staffordshire	...	...	798	29	29
Warwickshire	...	...	605	15	13
Worcestershire	...	...	397	13	7
			<hr/>	<hr/>	<hr/>
			2,319	72	63
City Dairies ...	...	...	57	—	—
			<hr/>	<hr/>	<hr/>
			2,376	72	63
			<hr/>	<hr/>	<hr/>

(The samples taken at depots included 110 samples of "Tuberculin Tested" milk, one of which proved "positive.").



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 (Animal Health Division) who arrange veterinary examinations of the herds concerned in order to find and eliminate the infected cows.

As a direct result of sampling milk for the presence of tubercle bacilli, 63 tuberculous cows are known to have been dealt with under the Tuberculosis Order, and eliminated during 1953 from dairy herds supplying milk to Birmingham.

At eleven farms the investigations had not been completed at the end of the year.

COMPARATIVE RETURN. The following table shows the number of milk samples 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>
1944 ... ..					2,434	138	5.7
1945 ... ..					2,396	122	5.1
1946 ... ..					2,232	128	5.7
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
Average for period							4.6
Average for period, 1934—1943 :							8.4

From the figures given it will be seen that there has been considerable improvement since 1949. It is interesting to note that the Ministry of Agriculture and Fisheries introduced the area plan for the eradication of bovine tuberculosis on 1st October, 1950, and at 31st December, 1950 the percentage of Attested (certified as free from tuberculosis) cattle to total cattle for Great Britain was 22.1, whereas the corresponding percentage at 30th September, 1953 had risen to 43.5.

The main instrument in the eradication of bovine tuberculosis remains the voluntary Tuberculosis (Attested Herds) Scheme.

TUBERCULOSIS ORDER. Post-mortem examinations were made on 4 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 in each case.

## TUBERCULOSIS (ATTESTED HERDS) SCHEME

The position as at 30th September, 1953, in the counties with which we are 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 ... ..	183,577	40,240	21·9
Gloucester ... ..	195,604	78,850	40·3
Hereford ... ..	133,654	49,350	36·9
Leicester ... ..	168,250	34,820	20·7
Salop ... ..	276,262	90,200	32·7
Stafford ... ..	232,043	45,710	19·7
Warwick ... ..	149,494	44,350	29·7
Worcester ... ..	98,843	28,070	28·4
<hr/>			
England ... ..	6,769,056	2,385,996	35·2
Great Britain ... ..	9,303,133	4,045,558	43·5
Great Britain ... ..		at 31/12/52	39·8
Great Britain ... ..		at 31/12/50	22·1

NOTE.—From the figures given it will be seen that considerable progress has been made since the introduction of the Area Eradication Plan for Tuberculosis on 1st October, 1950.

## TUBERCULIN TESTING OF HERDS

The number of animals tested by the Department during 1953 was :—

Rubery Hospital Farm	119 animals tested and passed
Chelmsley Hospital Farm	85 animals tested and passed
Monyhull Hall Hospital Farms	262 animals tested, 1 failed



## ENVIRONMENTAL HEALTH SERVICES

### HOUSING

During the year 1953 house building continued at a rate slightly less than in 1952, but spectacular progress was made in the central Redevelopment Areas where, for the first time in the history of the City, 12-storey blocks of flats are nearing completion, whilst other central building units of lesser height give visible indication of the intention of the Corporation to replace the demolished slum houses by a carefully balanced admixture of all types of modern dwelling. Some of the bigger units will be let to tenants early in 1954 and are therefore not accounted for in the figures for this year quoted below, but their effect is already being felt, as this visible and encouraging progress gives more certain hope of relief to the occupants of existing bad houses on these areas.

New dwellings constructed in 1953 totalled 4,882, which figure includes 4,006 new houses erected by the Corporation, 781 by private enterprise, 1 war damaged house rebuilt and 94 additional units provided by conversion of existing structures. Within the Central Redevelopment Scheme 927 houses were thrown out of occupation. Outside these areas there was a known permanent loss of 225 dwellings by demolition or otherwise.

Because of the variety of trades and the relative industrial prosperity of Birmingham, workers are constantly attracted from elsewhere, even from other Continents. In the years immediately past this industrial immigration has been in numbers sufficient to counteract in part the improvement in the general position which would otherwise have accrued from the erection of new houses in substantial numbers. During the year under review this influx appears to have diminished. The Registrar-General's estimated mid-year population for 1953 is given as 1,118,500—an actual reduction of 500 on the figure of 1,119,000 for mid-1952.

It is of interest to note that the Redevelopment Plan for the City envisages an ultimate potential population of 1,081,000. Unfortunately it is not possible, merely by comparison of quoted gains or losses in either houses or persons, to arrive at a figure which accurately indicates the gain or loss in the housing position over any specified period, one important difficulty being that existing houses gradually deteriorate as they age unless they are extremely well maintained. Unhappily, this degree of good maintenance is not as common as it should be, with the result that houses in large numbers gradually reach a state of unfitness that defies rectification at a reasonable cost, and weighs heavily upon the occupying tenants. It must also be borne in mind that, apart from



the 4,625 frankly temporary bungalows, there are other types of emergency accommodation which will merit extinction in the relatively near future ; these include various tents, vans, and sheds, and a number of small hutted camps in various parts of the City.

Dr. R. Padley, the Statistical Officer of the Corporation, has examined and assessed the sample results of the 1951 census as published to date, and his report is of particular value to all Committees concerned with Housing. Certain items of that report are directly helpful to a just appreciation of the figures given above, and thanks are expressed to him for permission to quote these items :

The intercensal increase in numbers of houses and population has been accompanied by a change in the distribution of dwellings of different sizes, resulting in a decrease in average size of dwelling.

#### NUMBERS OF OCCUPIED DWELLINGS BY SIZE 1931 AND 1951

<i>Number of Rooms</i>	<i>1931</i>		<i>1951</i>		<i>Increase or decrease</i>
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	
1—2	2,965	1·3	5,800	2·0	+ 2,835
3	40,491	17·1	36,300	12·6	— 4,191
4—5	118,940	50·3	184,400	63·8	+ 65,460
6 and over	74,265	31·4	62,400	21·6	— 11,865
All Sizes	236,661	100·0	288,900	100·0	+ 52,239

The trend towards a more standard size of dwelling is dramatic. How far the reduction in the number of large dwellings is due to demolition, by enemy action or otherwise, and how far to their conversion into flats remains problematical.

In fact the figures for actual dwellings under rather than overstate the trend towards smaller units of accommodation, for many of the larger ones are occupied by more than one household.

#### PROPORTIONS OF OCCUPIED DWELLINGS, BY SIZE, CONTAINING MORE THAN ONE HOUSEHOLD, 1931 AND 1951

<i>Number of Rooms</i>	<i>1931 %</i>	<i>1951 %</i>
1—2	0·8	—
3	1·4	1·1
4—5	4·1	5·9
6 and over	8·7	19·8
All Sizes	4·8	7·5



NUMBER AND % OF SHARED DWELLINGS BY SIZE

<i>Number of Rooms</i>	<i>1931</i>		<i>1951</i>	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
1—2	25	0.2	—	—
3	557	4.9	400	1.9
4	1,331	11.7	2,900	13.4
5	3,553	31.2	8,000	37.0
6 and over	5,930	52.0	10,300	47.7
All Sizes	11,396	100.0	21,600	100.0

The conclusion is inescapable. Of the 21,600 houses which at the Census date were shared by more than one household, nearly 85% were of 5 or more rooms; this means that many of the apparently larger units of accommodation shown in the first table are sub-divided in occupancy, if not in structure.

NUMBER OF HOUSEHOLDS BY HOUSING CONDITION

1951

	<i>Over 1 person per room</i>	<i>1 or fewer persons per room</i>	<i>Total</i>
Sharing a dwelling ...	15,300	34,500	49,800
Not sharing a dwelling	39,900	226,300	266,200
TOTAL ...	55,200	260,800	316,000

AVERAGE NUMBER OF PERSONS PER HOUSEHOLD BY  
HOUSING CONDITION

	<i>Over 1 person per room</i>	<i>1 or fewer persons per room</i>	<i>Total</i>
Sharing a dwelling ...	3.53	1.96	2.44
Not sharing a dwelling	5.52	3.12	3.48
TOTAL ...	4.97	2.97	3.32

In fact out of nearly 50,000 households sharing dwellings, under 3,000 contained over four persons, that is to say, under 6% as compared with over 22% of households not sharing dwellings.



The arrangements under which sharing takes place are, of course, various and not such as to appear in the Census tables. There is, however, information which suggests that in most cases they are temporary and involve little structural adjustment of the dwellings. Among the information which heads of households had to supply was whether their households had exclusive use, shared use, or no use at all of certain household arrangements. Lumping the two latter categories together the results show :

PROPORTION PER 100 HOUSEHOLDS WITHOUT EXCLUSIVE USE OF  
CERTAIN HOUSEHOLD ARRANGEMENTS

	<i>Piped Water</i>	<i>Cooking Stove</i>	<i>Kitchen Sink</i>	<i>Water Closet</i>	<i>Fixed Bath</i>	<i>Both Stove and Sink</i>
Sharing a dwelling	83	73	78	83	88	78
Not sharing a dwelling	4	1	2	13	39	2

The above tables emphasize Birmingham's continuing need for small dwellings. To recapitulate thus far: we have seen that the majority of sharing households are small and that they are living in relatively large houses which in most cases have not had even the minimal reconstruction needed to make them suitable for sharing. In so far as the goal for housing policy is to ensure that the City's dwellings are sufficient in number and of such sizes that each household can have its own dwelling and not be overcrowded, the guidance offered by the Census results is obvious. The need is for more small dwellings into which all sharing families might move, thus freeing the larger homes for the larger households, many of whom are undoubtedly overcrowded. How far such a train of events is a practical possibility raises problems on which present Census material throws little light. We may suppose that in most dwellings where there are two households there exists either an owner-tenant or a tenant-lodger relationship between the groups, but we have no knowledge of the relative frequencies of different possible relationships of this kind, and it is clear that the possible course of re-settlement is much affected by such issues.

The report is exhaustive and contains much important information which it is not practicable to include in this report, but a conclusion which emerges from Dr. Padley's report as a whole is quoted in full.

"It is evident from the above, where the familiar face of the landlady is plainly visible through the statistics, that many of the composite households represent a more or less permanent supply of lodgings, whose owners, for social and economic reasons, wish to



continue to let rooms. As such they may be regarded as competing with the landlords of separate dwellings in the supply of accommodation. How elastic this supply is must remain an open question, but it is worthy of note that there exists in Birmingham a higher proportion of composite households than for any other area in England for which the Census gives details (unfortunately this comparison includes only Regions, Conurbations and Large Areas, among which Birmingham is the only City). Over England and Wales as a whole 13·8% of all households were composite; in Birmingham, the comparable figure was 16·0% which is exceeded only by Wales with 16·5% and approached most nearly by the Merseyside Conurbation with 15·4%."

The report for 1952 emphasized difficulties affecting property maintenance, with particular reference to the relationship between cost of repair and rent yield. Stress was also laid upon the importance of making full allowance for house deterioration in any assessment of the housing position. Towards the end of the year the Government gave a first reading to the Housing Repairs and Rents Bill, in which certain proposals are made which may allow rents to be increased conditional upon a certain standard of maintenance and in which a new definition of a standard of fitness for habitation is outlined. Provision is also made for a revised slum clearance procedure including deferred demolition in certain cases, but requiring the Local Authority if the Bill duly passes into law, to submit overall slum clearance proposals in the same manner as had to be done shortly after the passing of the Housing Act, 1930. Because of the inevitability of considerable change in the text of the Bill in its passage through Parliament it is not possible to judge how far the Housing situation will be affected by its enactment, but it already seems clear that it will be necessary for the appropriate Committees of the Council to confer and to prepare proposals in due form. To this end appropriate steps are being taken to prepare this Department to meet its responsibility with efficiency and speed.

### **Disrepair**

Despite constant and systematic action by the Chief Sanitary Inspector great masses of houses are affected by serious disrepair, this largely because action under the Public Health Acts is necessarily confined to the abatement of nuisances as distinct from proper works of maintenance which would remedy and arrest deterioration. Many applications are made by owners for Demolition Orders on the grounds that the houses concerned are not economically repairable, but it is only possible to apply the radical remedy of demolition in a very limited number of cases. Action affecting houses of this class is indeed fraught with difficulty, as, often, considerable expenditure on repair will not



effect a permanent cure for a nuisance or condition of danger. It is true to say that this situation can only be met properly by an extension of slum clearance operations.

Conditions in the areas covered by the Birmingham (Central Re-development) Compulsory Purchase Order 1946 are visibly improving. Even though some of the repairs viewed externally may not be entirely pleasing from an æsthetic point of view, the improvement in living conditions achieved by the systematic repair scheme has been fully appreciated by the occupying tenants. Practically the whole of the dwellings affected by the scheme have now been acquired ; only 157 dwellings of all classes remained in private ownership at the year end.

The following figures show the number of inspections carried out by the staff of Housing Inspectors as distinct from the staff of general Sanitary Inspectors.

Number of initial inspections in response to complaints on vested properties ...	...	...	...	...	...	...	...	10,169
Number of re-visits ...	...	...	...	...	...	...	...	22,715
Number of inspections on duties under Sections 11 and 12 of the Housing Act, 1936 ...	...	...	...	...	...	...	...	683
Miscellaneous visits including liaison with other Departments ...								5,343
								<hr/>
TOTAL ...	...	...	...	...	...	...	...	38,910
								<hr/>

No figure can be quoted as properly representing the number of houses inspected or surveyed on duties under the Housing Acts. A continuous examination of substantial areas of doubtful property is constantly in progress and during the year approximately 70,000 houses were thus involved in surveys which varied from detailed individual inspection to cursory external examination.

### New Houses

During the year 4,787 houses were built, 4,006 (or 83·7%) by the Corporation and 781 (or 16·3%) by private enterprise. Of these 1,765 erected by the Corporation were non-traditional in type. In addition one war damaged house was rebuilt and 94 additional dwellings were provided by conversions into flats, 7 by the Corporation and 87 by private enterprise.

The gross yield of new dwellings was, therefore, 4,882 houses or flats, 4,013 (or 82·2%) being constructed by the Corporation and 869 (or 17·8%) by private enterprise.



Thanks are once more expressed to the City Engineer and Surveyor for these figures and also for the fuller information set out below, covering the period since the end of the 1914-1918 war :

#### NUMBER OF HOUSES ERECTED

Year	<i>By Private</i>		<i>By Corporation</i>		<i>Government</i>	<i>Total</i>
	<i>Enterprise</i>	<i>Traditional</i>	<i>Non-Traditional</i>	<i>Bungalows</i>	<i>Temporary</i>	
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
	<hr/> 66,130 <hr/>	<hr/> 63,587 <hr/>	<hr/> 6,611 <hr/>	<hr/> 4,625 <hr/>		<hr/> 140,953 <hr/>

\*Programme Completed.

The above figures 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.

No applications under Section 4 of the Housing Act, 1949 were dealt with by the City Engineer and Surveyor during the year, but four applications for Improvement Grant under Sections 20-30 of the Act were approved by the House Building Committee, subject to the approval of the Ministry of Housing and Local Government.



## **Housing Act, 1936—Slum Clearance**

The provision of 4,882 new dwellings during the year must be regarded as a substantial contribution to easement of the housing situation, but even though the Registrar General's estimates do not show an increase in population there is still no dearth of applications for houses from persons living under conditions which, on investigation, prove to be as grave as any previously encountered.

The points scheme now being actively and effectively operated by the Housing Management Department reflects these conditions with as high a degree of accuracy as is possible in any such scheme, and the Housing Management Committee has attempted to balance the needs of those cases with the needs of families living in slums, and make a fair allocation of homes to replace those condemned. After due allowance has been made for various special classes of case, and for a substantial allocation of houses to replace those lost as a result of the operation of the Redevelopment Scheme, the number available for slum clearance purposes is relatively small, so small that it has not been possible to deal with any but the worst cases, usually involving some condition of crisis, e.g., pending collapse or danger, or grave nuisances impossible of remedy under the Public Health Acts. During 1953 the number of official representations made with a view to the making of Demolition or Closing Orders was 173, bringing the total number of such representations to 1,127 during the period September, 1939 to December, 1953.

The number of houses outside the Redevelopment Areas in respect of which clearance action would be appropriate in circumstances normal before September, 1939 is of the order of 25,000 and these form the hard core meriting demolition at the earliest practicable opportunity.

The White Paper issued with the Housing Bill foreshadows a grant of powers to local authorities to defer the demolition of represented houses until new accommodation is available, provided that sufficient repairs are carried out to bring the houses up to a suitable standard for temporary retention. The difficulties of this proposed course of action are obvious. In many of the houses the disrepair is extensive, and the great majority of the houses which should be condemned are unfit for reasons other than mere disrepair or lack of paint. Most of them are thoroughly worn out so that even minor repairs will prove costly. The experience of the Corporation on the central Redevelopment Areas is indicative of this; the average cost per house of systematic repair in 1953 was £194, and the number so dealt with was 1,470. It seems, therefore, that even if the suggested powers are enacted, the real need is still for new accommodation to replace the houses which should be condemned and demolished. Intense efforts towards the provision of new houses and on repairs in the central Redevelopment Areas have shown that, under prevailing conditions, there is a limit to house



building capacity and to the number of houses which can be effectively dealt with in any one year by any practicable repair scheme. These limitations yield the sorry conclusion that many thousands of tenants in slum houses will continue under very bad conditions for some years, with no relief except that which can be afforded by nuisance action under the Public Health Acts.

At the onset of war, slum clearance operations were actively in progress; the sudden halt to these left many represented Areas in abeyance. In the years since the war it has been possible in some of the Areas to pursue the original action and to accommodate the displaced tenants, but some Areas still remain to be dealt with.

On Areas affected by Orders which are fully operable, all but one of the 90 occupied houses are in Corporation ownership. In any resumed programme of slum clearance it will be necessary to follow up the original representations of areas where Orders are not now operable, by making new Orders, which will, of course, be subject to Ministry approval. These are as follows:—

#### PRE-WAR ORDERS NOT NOW OPERABLE

<i>Date Council Authorised making of Order</i>	<i>Title of Order or Area</i>	<i>Houses Standing</i>	<i>Houses Occupied</i>
6.12.38	MacDonald St. C.O. '39	2	2
6.12.38	Cheapside C.O. '39	28	2
6.12.38	Price St. C.O. (1) '39	33	32 18 Corp. Owned
6.12.38	Loveday St. C.O. '39	3	3 Corp. Owned
6.12.38	Hooper St. C.O. (1) '39	12	12
6.12.38	Hooper St. C.O. (2) '39	16	16
10.1.39	Floodgate St. C.O. '39	28	28
14.3.39	New John St. C.P.O. (1) '39	12	12
14.3.39	New John St. C.P.O. (2) '39	8	8 2 Corp. Owned
2.5.39	Whitehouse St. C.A. (2) '39	6	6
2.5.39	Wainwright St. C.A. '39	17	17 Corp. Owned
2.5.39	* { Vyse St., Aston, C.A. '39	26	26 Corp. Owned
4.7.39	{ Henley St. C.A. '39	7	7
4.7.39	{ Camden Drive C.A. '39	5	—
		<hr/> 203	<hr/> 171

\* The Orders authorised were not made in these cases.

These figures do not include represented areas taken over by the Corporation under the Central Redevelopment Scheme, but the condition of the houses is no better and is in many cases worse than those now owned and managed by the Corporation.



The following table gives particulars of individual action taken under the Housing Act, 1936, 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	...	...	...	...	...	...	...	166
2. Number of dwellinghouses in respect of which Undertakings under Section 11 (3) were accepted :								
(a) Not to use for human habitation	...	...	...					30
(b) To carry out works to render fit for human habitation								Nil
3. Number of dwellinghouses in respect of which Demolition Orders were made	...	...	...	...	...	...	...	128
4. Number of houses demolished :								
(a) In pursuance of Demolition Orders	...	...	...					122
(b) After the making of Closing Orders	...	...	...					3
(c) After an Undertaking not to use for human habitation had been accepted	...	...	...	...	...	...	...	12
(d) After representation and prior to the making of Demolition Orders	...	...	...	...	...	...	...	4
5. Number of dwellinghouses Rendered Fit for human habitation in pursuance of Undertakings under Section 11 (3)	...							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	...	...	...	...	...	...	...	7
2. Number of parts of buildings or underground rooms in respect of which Closing Orders were made	...	...	...					5

#### TOTAL NUMBER OF HOUSES DEALT WITH UNDER SECTIONS 11 AND 12 OF THE HOUSING ACT, 1936 :

(a) During 1953	...	...	...	...	...	...	...	173
(b) From September, 1939 to December 31st, 1952	...	...						954
								<hr/> 1,127 <hr/>

Once a house has actually been demolished in pursuance of a Demolition Order, and all financial charges cleared, the land is treated as vacant land without any residual restriction, although bye-law and planning consents are necessary before the owner may again develop the land.



Closing orders have a different result, as no physical change is necessarily made to the parts of buildings to which they relate, but they impose a restriction preventing future use for human habitation unless and until owners render the former dwellings fit for human habitation to a standard approved by the Local Authority. Undertakings under Sec. 11 (3) of the Housing Act, 1936, accepted by the Local Authority in lieu of Demolition Orders, similarly restrict whole buildings which were formerly dwelling-houses. At the close of the year 230 houses represented in the past were restricted by non-user undertakings or by Closing Orders. These houses are visited periodically to ensure that they are not re-occupied in contravention of the statutory restriction.

### **Central Redevelopment**

Although the number of properties acquired during the year was materially less than last year, the original intention to acquire all dwelling-houses on the areas covered by the Birmingham (Central Redevelopment) Compulsory Purchase Order, 1946, has almost been achieved. The acquisition of 1,099 dwellings of various types brings the totals now vested to 27,858 dwellinghouses, 2,115 shops and dwellings and 144 business premises and dwellings, leaving 64 dwellinghouses, 66 shops and dwellings, and 27 business premises and dwellings not yet in the ownership of the Corporation.

The work of maintenance has proceeded continuously, and, because of the low standard of most of the houses acquired, day to day attention has been necessary in addition to, or in anticipation of, block renovation. Arising from complaints, or as a result of other information, the Chief Housing Inspector during the year passed 7,484 notifications of disrepair (many involving serious and urgent nuisances) to the Housing Management and Estates Departments. Each of these notifications was in respect of items which, had the houses been in private ownership, would have properly been the subject of a Notice served upon the owner; 7,286 such notifications were complied with during 1953, leaving 3,765 outstanding at the end of the year.

Each complaint made or report received is investigated immediately and examined as to merit, and intimations of work necessary are only sent after due consideration has been given to all relevant factors, such as short potential life, or imminent block repair, and to facilitate this operation constant liaison at all levels is maintained with the Housing Management and Estates Departments. An indication of the extent of work necessary in relation to the whole scheme is afforded by quoting the totals from the date of operation of the Order to the end of the year; 33,816 notifications have been forwarded, 30,051 cleared, and 3,765 will be carried forward to 1954.



Mr. Allerton, the Housing Manager, has kindly supplied the following figures :—

The number of houses renovated during 1953	...	...	...	1,470
The total number of houses renovated up to December 31st, 1953				7,650
The number of houses at which renovation was in progress at December 31st, 1953	...	...	...	359
The number of houses in respect of which repair schedules or contracts were prepared or were in course of preparation at December 31st, 1953	...	...	...	272
The average cost of renovation per house during 1953				£194
The average number of initial tenant's complaints per week during 1953	...	...	...	1,400 approx.

The actual redevelopment programme is now effectively in progress and demolitions designed to clear sites for new buildings are carefully synchronised so as to keep in use all houses for as long as possible. In addition to these demolitions there are other houses so badly deteriorated as to be beyond practicable remedy even on a minimal scale. The tenants are rehoused by the Corporation and the houses are kept unoccupied until demolition is practicable. During the year the number of dwellings thus inevitably vacated, plus those lost to use by site clearance was 927. Including some houses vacated in earlier years, 755 houses were actually demolished whilst, at the year end, 723 were standing void pending demolition. Under the scheme 2,948 houses in all have been thrown out of occupation by the Corporation for one or other of the above reasons.

In the course of the work of repair and maintenance 558 houses in the areas were provided with separate internal water supplies, leaving 463 without that service. Of this latter figure 62 lie on areas earmarked for early demolition, 201 tenants have refused permission, and 200 were awaiting installation at 31st December. In seven cases new w.c.s have been provided towards the attainment of a standard of not more than 2 houses to 1 w.c.

Many of the houses still standing were included in Clearance Areas before the war, but action under the Housing Acts was superseded by the Redevelopment Order. As these areas were too extensive for full scale demolition on grounds of unfitness, and as they were not so conveniently situated as to justify early demolition under the Redevelopment Scheme, the houses have been vested in the Corporation and are being dealt with



in the same manner as other houses in the scheme. The following figures show the position at December 31st, 1953 :—

HOUSES (NOW STANDING) FORMERLY INCLUDED IN DECLARED  
CLEARANCE AREAS

<i>Redevelopment Area</i>						<i>Standing</i>	<i>Occupied</i>
Duddeston and Nechells	...	...	...	...	...	989	888
Summer Lane	...	...	...	...	...	114	91
Ladywood	...	...	...	...	...	244	191
Bath Row	...	...	...	...	...	—	—
Gooch Street	...	...	...	...	...	891	850
						2,238	2,020

### Overcrowding

Applications for special consideration continued to flow into the Department, this despite the institution of the new Points Scheme by the Housing Management Committee, but it is hoped that these will fall off as it becomes known that it is abnormal for a house to be allocated unless the applicant has been awarded a sufficient number of points under the scheme. That scheme is so devised that points are awarded for almost any circumstance that has a bearing on relative housing need, and it is now established practice for the Housing Manager to refer to the Public Health Department for advice on factors relating to health, so that the final allocation of points includes due allowances for medical or insanitary circumstances.

The Housing Management Department referred to the Public Health Department particulars of 375 families rehoused from overcrowded or undesirably sub-let houses ; of these 281 families had been overcrowded according to the limited standards of Part IV of the Housing Act, 1936. All cases submitted were sub-tenant families, 75 being from Housing Management Department property and 300 from privately owned houses. These involved 818 adults and 659 children under 10, a total of 1,477 persons at an average of 3.9 persons per family rehoused.

Of the 281 overcrowded houses, 81 were found still to be overcrowded after the rehousing of the sub-tenants, in some cases by the tenant family, in others by remaining sub-tenants. All cases were followed up in order to prevent re-crowding. Immediately a transfer was arranged a formal warning letter was sent to the present occupier, and, later, visits were made periodically to prevent re-crowding.



It is not possible, owing to the lack of accurate and complete overall information, to say whether or not there is any diminution in overcrowding. Individual cases, as grave as any recorded in the past, continue to be brought to notice, and sub-letting is as serious as ever, particularly because an increase in sub-letting within a house is seldom accompanied by proper additions to necessary amenities such as w.c., washing, cooking and food storage accommodation. The building of 4,882 new houses must have contributed towards some easement of the position but a better indication may perhaps be obtained from the figures below, kindly supplied by Mr. Allerton, the Housing Manager, although the loss of 1,152 houses, also mentioned above, must be borne in mind.

(1) Total number of dwellings available for letting from 1st

January—31st December, 1953 :

New properties	...	...	...	...	...	3,722
Various properties acquired	...	...	...	...	...	6
Re-lets	...	...	...	...	...	922
Redevelopment Areas re-lets	...	...	...	...	...	417

5,067

(2) Total number of families rehoused during 1953 ... .. 5,739

(3) Number of properties at weekly rent on 31st December, 1953

(excluding Redevelopment Areas) ... .. 74,437

As required by the Housing Acts, certificates giving "permitted numbers" were supplied—996 to owners of private houses, 1,567 to the City Estates Officer, and 3,687 to the Housing Manager, a total of 6,250. These certificates involved a measurement of rooms, or a check of existing records in each case.



## SANITARY INSPECTION

### Staff

For the purpose of administration the City is divided into two divisions, each with a Divisional Sanitary Inspector being responsible to the Chief Sanitary Inspector and his Deputy. The divisions are subdivided making a total of ten districts in the City, each supervised by a District Inspector, there being an establishment of five sanitary inspectors to work with each district inspector.

Owing to the difficulty in the recruitment and retention of suitably qualified staff, no district was up to strength during the year. At the close of the year :—

5 districts were 1 inspector below establishment,

4 districts were 2 inspectors below establishment, and

1 district was 3 inspectors below establishment,

making a total of 16 vacancies and a staff on district duties of 10 District Inspectors and 34 Inspectors. In addition, seven pupils were receiving practical training on the districts, and a further eleven had been appointed and were undergoing training in the office and receiving part-time theoretical instruction at the College of Technology.

Certain duties, such as inspections under the Prevention of Damage by Pests Act, 1949, the Shops Act, 1950 and the Factories Act, 1937, and smoke abatement, are undertaken by inspectors who specialise in such work. The staffs of these specialists have, in the main, been retained at establishment strength.

Following the great flood disaster on the east coast at the end of January two volunteers were called for from the staff of sanitary inspectors. Mr. Basil Hill and Mr. Dennis Clixby at once answered the call and proceeded to Mablethorpe to give valuable assistance. Mr. Reginald Bowen, another sanitary inspector, relieved Mr. Clixby for a time and all had returned to resume duty in Birmingham by the end of August. Miss L. Hinton also went to Mablethorpe to assist with the clerical work for a short while. The services of these volunteers so readily given were greatly appreciated by the people of Mablethorpe and district in their time of need.

### Inspections

In spite of the depleted staff the work of the sanitary inspector on general duties has continued with vigour and the total number of visits



made during the year was 159,945, compared with a total of 162,151 in 1952. The figures for visits are :—

						%
House inspection	...	...	...	...	126,789	79.27
Inspections of food premises	...	...	...	...	10,079	6.30
Visits <i>re</i> infectious diseases	...	...	...	...	1,591	1.00
Other successful visits	...	...	...	...	14,130	8.84
Inspections of milk shops	...	...	...	...	3,296	2.06
Visits to school premises	...	...	...	...	93	0.06
Visits to second-hand dealers...	...	...	...	...	31	0.02
Inspections of outworkers' premises	...	...	...	...	819	0.50
Inspections of tents, vans and sheds	...	...	...	...	128	0.08
Inspections of stables and pigsties	...	...	...	...	1,233	0.77
Inspections of tips	...	...	...	...	589	0.37
Visits to burials, exhumations, etc.	...	...	...	...	50	0.03
Inspections of pleasure fairs and circuses	...	...	...	...	46	0.03
Visits <i>re</i> water sampling	...	...	...	...	706	0.44
Visits <i>re</i> taking of rag flock samples	...	...	...	...	259	0.16
Inspections of offensive trade premises	...	...	...	...	106	0.07
						<hr/> 100.00 <hr/>

Out of this total 20,219 were unsuccessful visits.

To this number must be added the visits made by those inspectors engaged on special duties, making a grand total of 201,532 visits made up as follows :—

Visits by Sanitary Inspectors on district	...	...	...	...	159,945
Rodent Control Inspectors	...	...	...	...	12,504
Smoke and Factories Inspectors	...	...	...	...	11,016
Shops Act Inspectors :—					
Conditions in Shops	...	...	...	...	9,909
Hours of Trading	...	...	...	...	8,158
<b>TOTAL</b>	...	...	...	...	<hr/> 201,532 <hr/>

From the figures given of the work performed by the inspectors on district duties, it will be seen that nearly 80% of the visits made were in connection with housing conditions.

The number of complaints of bad housing conditions which are received in the department, heavy though they are, continue to fall and it is clear that owners of tenanted house property are giving instructions to builders for works of maintenance and repair to be carried out without waiting for the local authority to take action. This trend has been increasingly obvious as the supply of building labour and materials has eased.



## **Infectious Disease**

1,591 visits were made by inspectors during the year in connection with enquiries into cases of food poisoning and certain infectious diseases. In a number of cases specimens were obtained for bacteriological examination in order to assist the Medical Officer of Health in his investigations.

## **House to house inspection**

The policy of routine inspection of the older houses has continued, and where defects were found which were considered to constitute nuisances under the Public Health Act, 1936, then statutory notices were served.

During 1953, the number of houses so inspected totalled 5,062 resulting in the service of 4,089 notices. During the same period 4,152 notices were complied with, some of which were served during the year 1952.

Since the institution of house to house inspection in June, 1951 a total of 11,364 notices had been served up to the end of December, 1953.

It must not be assumed that the work required to abate a statutory nuisance necessarily involves putting the house concerned into a good state of repair. On the contrary it is merely the remedying of a defect or series of defects which are causing nuisance, usually to the occupiers of the premises. Some owners complain, that having complied with a statutory notice but a short time ago, a further notice should not have been served for additional work. It has to be emphasised that if works of maintenance had been carried out at the same time as the work was done to remedy obvious defects which were already existing, then the subsequent notice would probably not have been necessary. On the other hand defects are likely to arise in old property, it being common for sashcords of windows to break, for slates to be dislodged or a fault to develop in the fittings.

## **Abatement of Nuisances**

A total of 16,038 statutory notices was served during the year, the majority being served on owners of dwellinghouses in private as opposed to Corporation ownership. Of that total 13,531 were served under Section 93 of the Public Health Act, 1936 for nuisances, and this figure includes the 4,089 notices mentioned earlier which were served as a result of routine house to house inspection, and not as a result of complaints received from tenants. 30.2% of statutory notices served for nuisances under Section 93 of the Public Health Act, 1936 resulted from house to house inspection.



The total of 16,038 statutory notices served is made up as follows :—

Nuisances—mainly leaking roofs, spoutings, fallen plaster, sash-cords, floor-boards—dealt with under Section 93 of the Public Health Act, 1936	13,531
Stopped up drains, soil pipes, w.c.'s, etc.—dealt with under Birmingham Corporation Act, 1946	1,187
Urgent nuisances—badly leaking roofs, broken w.c. pedestals, etc.—dealt with under Birmingham Corporation Act, 1948	501
Provision or improvement of piped water supply—Section 138, Public Health Act, 1936, as amended by Section 30, Water Act, 1945	268
Yard paving and drainage—Section 56, Public Health Act, 1936	200
Byelaw infringements	27
Unsatisfactory drainage—Section 39, Public Health Act, 1936	146
Verminous or filthy premises—Section 83, Public Health Act, 1936	109
Additional water closets—Section 44, Public Health Act, 1936	59
Conversion of closets—Section 47, Public Health Act, 1936	10
<b>TOTAL</b>	<b>16,038</b>

Defects found which were required to be remedied included :—

Roofs causing dampness	7,361
Rooms with defective wall and/or ceiling plaster	13,211
Leaking eaves gutters or spoutings	5,997
Windows or sashcords broken	9,685

Over 95% of all notices served are complied with, the remainder having to be cancelled for such reasons as change of ownership of properties or because premises become void or are to be demolished.

The average time taken to comply with statutory notices remained about the same as last year, being two months twenty-one days.

To enforce the requirements of these notices it was necessary to serve 752 summonses during the year. In most instances the work was in hand or had been completed before the case was heard, but in 204 cases it was necessary to obtain Magistrates' Orders and these were granted. Of these Orders, 39 were executed by the Department at the default of the owners, the costs being recovered.

The statistics concerning summonses taken out during 1953 are :—

General nuisances	752
Houses let-in-lodgings	4
Contraventions of Shops Act	20
Dogs fouling footpath	4
Food and Drugs Act, 1938	15
Food Handling Byelaws	5
Filthy premises	1
Disobeying of Magistrates' Order	1
	<b>802</b>
Number of Magistrates' Orders	<b>204</b>



### Total amount of fines imposed :—

	£	s.	d.
Contraventions of Houses let in Lodgings Byelaws (2) ...	10	0	0
Contraventions of Shops Act (20) ...	8	0	0
Dogs fouling footpath (4) ...	2	0	0
Food and Drugs Act, 1938 (1) ...	5	0	0
Food Handling Byelaws (5) ...	10	0	0
Filthy premises (1) ...	2	10	0
Disobeying of Magistrates' Order (1) ...	1	0	0
	<u>£38</u>	<u>10</u>	<u>0</u>

### Rent Restrictions Acts :—

Number of summonses taken out under the Landlord and Tenant (Rent Control) Act, 1949 ...	Nil
Number of summonses taken out under the Furnished Houses (Rent Control) Act, 1946 (4 penalties) ...	7
Total fines imposed ...	£9 0 0

### Enforcement Section

This section of the Department was set up in 1947 and was originally formed to carry out works at the default of owners following the expiry of Magistrates' Orders. As the position with respect to labour and materials deteriorated so more owners requested the department to arrange for work to be done on their behalf. From these dealings confidence grew in the service provided by the Corporation at reasonable charge. In spite of the improved position with regard to labour and materials, owners to-day are increasingly seeking the aid of the department. In 1953 only 23% of houses dealt with by this Section were affected by works done at the default of owners.

The type of works carried out varied from minor repairs to roofs, plastering, replacement of sashcords, etc., to the taking down and complete rebuilding of the gable and front walls of a three-storey house, the stripping, complete retimbering, lathing and reslating of roofs in two instances, the connection of a farm to a sewer involving the laying of a 6" drain beneath the bed of a stream, which necessitated the building of coffer dams and the diversion of the stream, and the levelling up and paving of an avenue serving nine houses.

During 1953, 182 specifications, involving 613 houses were prepared and the total cost of the works carried out was £8,882 7 7. Of these, 148 specifications were prepared to abate nuisances at 373 houses at a total cost of £6,572 12 6.

Repairs to 287 houses were done at request of the owners, 109 of these involving specifications at a cost of £5,509 15 8 and in 39 cases works were carried out at the default of owners to comply with Nuisance Orders made by the City Justices at Victoria Law Courts requiring the execution of essential repairs for the abatement of nuisances. The cost of this work totalled £1,062 16 10 and the number of houses involved was 86.



Work was carried out to secure abatement of nuisances as follows :—

<i>Year</i>	<i>Number of Houses affected</i>	<i>Cost</i>		
	<i>At default</i>	£	s.	d.
1952	61	583	17	8
1953	86	1,062	16	10

	<i>Number of Houses affected</i>			
	<i>At request</i>			
1952	210	4,746	9	10
1953	287	5,509	15	8

The works executed in accordance with the specifications have been carried out on a daywork basis of labour and materials, plus costs in accordance with the National Schedules of Daywork Charges for General Building Work in 179 cases and in 3 cases by competitive tender.

The execution of works on a daywork basis has again proved satisfactory, and has ensured that essential and urgent repairs to properties are carried out without those delays which necessarily occur where tenders are invited, and in arranging for the preparation of the required legal documents and the affixing of the Corporation seal.

In accordance with the City Council's Standing Orders and Instructions to Committees, competitive tenders have been invited from building contractors on the Department's approved list in respect of works where the estimated cost exceeded £250 0 0. This procedure has enabled the Department to place contracts for such works at keen and fair prices. In exceptional circumstances, works of an urgent nature exceeding the cost of £250 have been carried out on a daywork basis, the building contractor concerned being required to enter into formal contract with the Corporation.

Local authorities are permitted by the provisions of Section 275 of the Public Health Act, 1936, to execute work on behalf of owners and, during the year, many large and small property owners have availed themselves of this provision. Section 291 of the same Act allows for the recovery of the expenses incurred by instalments spread over a period of years to be agreed by the Health Committee.

The normal policy of the Health Committee is to require such payments to be spread over a period of not more than three years but, in special cases of financial hardship, the period of repayment has been extended; each case has been considered on its merits. An interest charge of 3% is made where repayments are spread over a period of one to five years, and a charge of 4% is made where the repayments are spread over a longer period but not exceeding fifteen years.

In requesting the Department to carry out works on their behalf, 81 owners have indicated that they desired to make repayment of the expenses incurred by instalments.



During the year, 48 sealed instalment orders for the recovery of expenses were made by the Town Clerk, agreements for recovery of expenses were made in twelve cases, collection of rents in recovering expenses was undertaken in one case, receivers appointed in one case and the County Court ordered repayment of expenses by instalments in one instance.

An appeal was made against a Nuisance Order made by the City Justices to cease the keeping of poultry and to remove all waste food and other refuse and rubbish from the premises and to thoroughly cleanse and maintain the premises in a clean condition at all times. The appeal was heard by the Recorder of Birmingham at the Quarter Sessions and the Recorder, Mr. P. Sandilands, after hearing the evidence of the plaintiffs, Birmingham Corporation, and the defendant, upheld the decision of the Magistrates and the appeal was accordingly dismissed.

This year seven prosecutions were taken out under the Furnished Houses (Rent Control) Act, 1946, for the charging of excess rents above the amount fixed by the West Midlands Rent Tribunal, and penalties were made in four cases. In one case an appeal was made against the decision of the City Justices and was heard accordingly at Birmingham Quarter Sessions. In this case the decision of the City Justices was upheld but a reduction in the amount of the penalties imposed was made.

The general supply of building materials has now reached a level of practically pre-war standards with the exception, in the early part of the year, of cement. Bricks, too, were somewhat scarce.

Timber is now de-controlled and is in ample supply.

The labour force for jobbing building has remained constant and no difficulty has been experienced in placing orders for the execution of work.

The prices of certain building materials, lead, zinc and soft woods, have been slightly reduced but an increase in the prices of bricks, cement and certain plasters has taken place.

Labour costs have risen by a wage award to all building tradesmen. This increase has more or less offset any decrease in the price of any materials and has maintained costs to approximately the same level as 1952.

The following analysis indicates the works undertaken by the Enforcement Section during the year.

	<i>Jobs</i>	<i>Houses</i>	<i>Cost</i>		
			£	s.	d.
<i>Section 93, Public Health Act, 1936.</i>					
<i>General Nuisances: Works to defective Houses:</i>					
At default of owners ...	39	86	1,062	16	10
At request of owners ...	109	287	5,509	15	8



	<i>Jobs</i>	<i>Houses</i>	<i>Cost</i> £ s. d.		
<i>Section 56, Public Health Act, 1936.</i>					
<i>Paving of Courts, Yards and Passages:</i>					
At default of owners ... ..	6	56	76	10	2
At request of owners ... ..	3	16	109	19	6
<i>Section 39, Public Health Act, 1936.</i>					
<i>Provision of satisfactory drainage:</i>					
At default of owner ... ..	6	53	315	18	7
At request of owners ... ..	3	17	455	13	6
<i>Section 47, Public Health Act, 1936.</i>					
<i>Replacement of existing privy midden by water closet:</i>					
At request of owners ... ..	1	1	38	1	4
<i>Section 58, Public Health Act, 1936.</i>					
<i>Dangerous building to comply with Magistrates' Order:</i>					
At request of owner ... ..	1	1	200	0	0
<i>Section 32, Birmingham Corporation Act, 1948. Abatement of urgent nuisances:</i>					
At request of owners ... ..	1	5	3	6	9
<i>Section 138, Public Health Act, 1936.</i>					
<i>(as amended by Section 30, Water Act, 1945). Houses provided with internal water supply:</i>					
At default of owners ... ..	1	2	60	9	6
At request of owners ... ..	1	1	29	18	0
<i>Houses already having internal water supply but where supply was insufficient—improvement effected:</i>					
At default of owners ... ..	6	58	627	7	5
At request of owners ... ..	4	29	316	10	4
<i>Provisions of Houses-let-in-Lodgings Bye-laws:</i>					
On behalf of owners ... ..	1	1	76	0	0

## Urgent Nuisances

The Birmingham Corporation Acts of 1946 and 1948 give special powers for securing the abatement of urgent 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.



Section 59 of the Birmingham Corporation Act, 1946 gives to the Corporation authority to notify all owners of premises on which obstructions of drains, water closets or soil pipes occur, and provides them with an opportunity to carry out the work within 24 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 dealing 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.

During the past year work under these two Acts could be classified as follows :—

*Birmingham Corporation Act, 1946—Section 59*

Total number of notices served during 1953	...	...	...	1,187
Work carried out by owners in the specified time	...	...	...	719
Orders given by the Department in default of owners' compliance	...	...	...	412
The cost of work given to the Department's contractors totalled	£761	18	7	
giving an average per job of	...	...	...	£1 17 0
The maximum charge was £35 1 3 and the minimum was 7/6.				

*Birmingham Corporation Act, 1948—Section 32*

Total number of notices served during 1953	...	...	...	501
Work done by owners within the specified time...	...	...	...	285
Orders given in default of owners	...	...	...	88
Total cost of work given to contractors	...	...	...	£1,088 14 3
Average cost per job	...	...	...	£12 7 5
Maximum cost	...	...	...	87 12 11
Minimum cost	...	...	...	1 13 3

## Rent Restrictions Acts

The Chief Sanitary Inspector acts as the Local Registrar for the purposes of the above 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 Chief Sanitary Inspector notifications of any decisions made by them concerning rents of properties. During 1953, a total of 345 official notifications was received in comparison with 415 for 1952, representing



a decrease of approximately 16·87%. These notifications resulted in 323 entries being recorded in the 1946 Register and 22 in the 1949 Register. The registers were produced on 9 occasions for inspection by members of the public and resulted in the issue of 9 certified Copies of Entry, the requisite fee of one shilling being paid in each case.

The provisions of the above-mentioned Acts make the Local Authority responsible for the issue of Certificates of Disrepair and Clearance Certificates, on payment of the statutory fee of one shilling, which must accompany each application. In each case an inspection is made by the sanitary inspector to determine whether conditions prevailing warrant the issue of a certificate.

During the year 99 applications were received by the Department in comparison with 91 for the previous year. These applications were accounted for in accordance with the information detailed below and it will be observed that not every application warrants the issue of a certificate.

Number of applications and subsequent inspections	...	...	99
Number of Certificates of Disrepair issued	...	...	61
Number of Clearance Certificates issued	...	...	24
Number of Disrepair Certificates " not warranted "	...	...	8
Number of Clearance Certificates " not warranted "	...	...	6

Throughout the year several enquiries were made by tenants seeking advice in connection with the Acts. The number of enquiries on this subject has been steadily decreasing during recent years.

A careful study has been made of the Housing Repairs and Rents Bill, published in November, to determine to what extent the Department will be affected in enforcing the provisions of the Bill when it becomes law.

The Bill aims to confer additional powers on local authorities in relation to unfit houses under the Housing Act, 1936, and to entitle house owners, who bring their property into good general repair and keep it in that condition, to obtain a repairs increase of rent.

The Bill would permit the tenant the right to contest the landlord's notice to increase the rent on these grounds, one of which is that the house is not in good repair, nor reasonably suitable for occupation.

It has been necessary to attempt to assess the number of applications likely to be made by tenants for such a certificate of disrepair. Should these amount to thousands within a short period, then the limited resources of the inspectorial staff would be seriously overtaxed. It is considered, however, that owners will not serve notices of increase until reasonably certain that the tenant is agreeable to pay the increase. This should result in a steady flow of applications over a longer period.



## Houses Let in Lodgings

The Department is responsible for the enforcement of Byelaws, which are made under the provisions of Section 6 of the Housing Act, 1936, with respect to this category of dwelling.

Such houses are those in which rooms are let off to accommodate two or more families in the same building.

There were 271 houses registered with the Department in 1953, containing a total of 2,048 rooms let off and housing 3,131 persons. These rooms comprised 844 single lets and 485 lets of two rooms or more.

Whilst a strong demand for this type of accommodation remains, there has been a reduction of 25 registered houses in 1953 representing a decrease of approximately 8·45% in comparison with the previous year. This is an encouraging trend, as the number of registered houses in 1952 also showed a decrease of approximately 5·73% and this gradual decline may in some way be due to the steady improvement in the provision of new housing accommodation.

Byelaws are in force to ensure that adequate facilities for cooking, washing, food storage, etc., are provided and maintained. In this respect, Sanitary Inspectors made a total of 1,294 visits, resulting in the service of 48 notices.

In 4 cases it was necessary for the Department to institute legal proceedings in order to achieve satisfactory conditions.

In two of the cases the Summonses were eventually withdrawn on satisfactory completion of the work required.

In the other two cases, penalties of £5 were secured in each instance and the work was carried out by the Department at default.

### SUMMARY, 1953

Number of houses registered ...	...	...	...	...	...	271
Number of rooms for letting	...	...	...	...	...	2,048
Number of lets—single rooms	...	...	...	...	...	844
Number of lets—two rooms or more	...	...	...	...	...	485
Total accommodation	...	...	...	...	...	3,131
Number of visits made during the year	...	...	...	...	...	487
Number of re-visits made during the year	...	...	...	...	...	807

The end of the year finds the Department viewing with some mis-giving the implications of the Housing Repairs and Rents Bill, published in November, in connection with these lodging-houses.

Clause 9 of the new Bill rescinds the Byelaws for houses let-in-lodgings and also gives the owner of such a house the alternative of either complying with notices based on the standards laid down in Clause 7 or evicting his tenants or sub-tenants. This means, therefore, that a sub-tenant of such a house loses his protection under the Rent Acts.



This clause would appear to be unsatisfactory from the Health Committee's point of view. They would obviously be reluctant in authorising the service of a notice requiring works to be done on this type of property, when realising that such an order might result in the subsequent eviction of the families housed therein.

Past experience has proved the value of the Byelaws when Sanitary Inspectors have endeavoured to secure adequate facilities to provide a reasonable standard of accommodation in such houses.

### **Common Lodging Houses**

A register of all established common lodging houses in the City is maintained in the Department in accordance with the provisions of Section 237 of the Public Health Act, 1936. This record contains detailed information as to the full names and addresses of all persons registered as "Keepers" and "Deputy Keepers" together with the situation of all such lodging houses. The register also specifies the permitted number of persons each may accommodate.

At the beginning of the year there were 11 male lodging-houses and one for women registered with the Department, providing accommodation for 746 males and 46 females.

In July a male lodging house housing only 20 persons was closed down, reducing the male accommodation in the City to 726. The premises were vested in the Corporation and were in need of substantial works to bring them up to byelaw standard. The keeper and his wife were rehoused by the Corporation and vacant possession of the property was given. The premises were subsequently used for industrial purposes.

Sanitary inspectors carry out routine visits of inspection, both by day and night, to ensure the observance of the byelaws made under the Public Health Act, 1936. These byelaws are framed to secure proper management and control of such hostels and during the year inspectors effected a total of 287 visits, comprising 68 by day, 199 by night-time and 20 special visits.

These inspections brought to light minor contraventions of the byelaws only, and the attention of the keeper was drawn to them at the time of visit. A letter of confirmation was sent to the registered keeper in each instance, and the relevant contraventions received satisfactory attention. In no case was it necessary for the Department to resort to statutory action.

### **Uncommon Nuisances**

Many thousands of complaints, dealing with all aspects of environmental hygiene, are received by the Department throughout the course of the year. With the addition of routine statutory duties, the everyday



life of the sanitary inspector is obviously a very full one. A great deal of his time is taken up with the investigation and abatement of nuisances for which, in most cases, correct procedure is to be found on the statute book. The general public are becoming more and more aware of the value of his services and often seek his guidance and assistance in matters over which he has no statutory jurisdiction.

One particular incident which occurred at the beginning of the year was worthy of special mention. It also illustrates how, what appears to be a vague and somewhat casual complaint at first sight, can reveal, in fact, a situation of dire urgency and one calling for immediate and energetic investigation.

One afternoon, a telephone complaint was received from a doctor as to a smell nuisance pervading the house of a patient he was treating. As the complaint was so vague it was decided that the District Inspector should visit as soon as he returned to the office.

Together with another inspector, the house and adjoining houses were entered by the District Inspector and a strong smell of coal gas was at once detected. The presence of petroleum vapour was also suspected. Several tenants were found to be in a distressed condition and suffering from sickness, including a young baby obviously very ill. Further investigation revealed two dead cats in a cellar and instructions were given for all doors and windows to be immediately opened and all fires and naked lights to be extinguished. One inspector then 'phoned the Department, requesting notification to the Gas Board and Petroleum Officer for immediate investigation. The other inspector made an emergency "999" call from a nearby kiosk and arranged for affected occupiers to shelter in other houses in the area.

The emergency call produced a unit from the Central Fire Station, quickly followed by an ambulance. The Petroleum Officer's inspection proved negative but Gas Board officials, after testing mains, branch services and meters, eventually traced a fractured main in the carriageway fronting the property. Escaping gas had apparently for some days been travelling along the supply pipe trench into the cellars of the houses. In the meantime, the baby, together with its mother and one other female, had been removed to the General Hospital for treatment. All other occupants were offered temporary accommodation in hostels but arranged to spend the night with relatives. Senior inspectors visited the property during the evening until 9 p.m., when it was obvious that no further assistance was necessary.

It is apparent that if a prompt investigation had not been carried out by the Department, followed by decisive and energetic action on the part of the inspectors, the incident might have closed with tragic results.



## **Pollution of Rotton Park Reservoir**

This reservoir covers 61 acres and is situate only two miles from the City centre in an area bounded on most of its perimeter by residential property and for the remainder by industrial premises. It was constructed in the nineteenth century as a feeder for the canal system of the Midlands.

During an investigation of the reservoir as the breeding ground of enormous numbers of gnats giving rise to complaints from surrounding streets, observations revealed numbers of dead and dying fish in the reservoir.

A complete survey of the reservoir was made for sources of pollution and suspicion finally centred on the following two points :—

Source " A " : The discharge from a canal feeder (the main source of water supply entering the reservoir).

Source " B " : The discharge from a storm water sewer and from industrial premises near its outfall.

Source " A " was also the cause of occasional complaints of offensive smell from nearby residents, and this feeder course was surveyed back to the City boundary. No pollution was found to be entering the feeder in its course within the City, but a sample of water taken at the City boundary showed the presence of industrial waste products of an injurious nature, which from time to time caused the water to turn cloudy and produce froth, and give off an unpleasant acrid odour.

Representations to the Canal Authority resulted in cleansing and flushing of the feeder course, which brought temporary improvement of conditions, but later observations and sampling showed that industrial waste products were continuing to reach the reservoir via the feeder course in increased quantity and fish mortality was greatly increased. At this point direct action was taken by the District Inspector with the Sanitary Inspectors of adjoining local authority areas traversed by the feeder course.

The feeder course, including its culverted sections, was surveyed through No. 1 Local Authority Area adjoining the City boundary, and that area was completely eliminated as a source of pollution. The survey of the feeder course and the canal system connecting therewith was then carried on through No. 2 Local Authority Area, again with the co-operation of the local sanitary inspector, and suspicion became centred on three industrial premises in that area which discharged wastes direct to the feeder course or to a canal level from which water was from time to time pumped or discharged to the feeder. Samples taken at the outfalls from these premises revealed the origin of some of the polluting trade wastes.



A conference was arranged by the Chief Sanitary Inspector of No. 2 Local Authority with representatives of the Canal Authority, the Birmingham District Sanitary Inspector being present, and vigorous action was decided upon to eliminate these sources of pollution. Detailed investigation of the drainage system of one factory revealed the hitherto unknown by-pass of trade waste to the feeder course, which has now been completely eliminated.

Samples show that the action taken at another premises has so far prevented pollution reaching the reservoir from that source, and one remaining source of intermittent pollution is still being investigated.

**Source " B "**—The nature of this pollution was a mixture containing waste oil produced in the stripping of 'bus bodies. Thorough investigation of the drainage system of the premises resulted in modifications and refinements in dealing with wastes which, so far, appear to have prevented polluting matter reaching the reservoir via the storm water sewer discharging from this site.

The reservoir, besides being a feeder for canal systems in the City, has amenities worthy of preservation and supports a variety of wild fowl, and it is hoped will again improve in quality sufficiently to fully support fish life. It is also the headquarters of various recreational activities.

### **Tents, Vans and Sheds**

At the close of the year 35 sites were known to the Department to be occupied by either caravans, van bodies or tents, used for human habitation. Some of these sites were occupied by merely one or two caravans, whereas the largest site had 24 caravans of the modern type, for which use Town and Country Planning permission had been granted for a limited period. The actual number of dwellings of this type fluctuated considerably during the year.

The main difficulty experienced was the number of applications made to the Housing Management Department by occupiers of this type of dwelling for rehousing into permanent dwellings, on the grounds of the unsuitability and detriment to health of the temporary dwellings, particularly where the family unit included children. In some cases families have qualified for rehousing and have been rehoused, but the temporary accommodation has been relet. The ingoing family have again complained of conditions in the winter and requested priority rehousing. During the last year this and other aspects of the caravan problem have been receiving the consideration of the Public Works Committee, to whom are delegated powers under Section 43 of the Birmingham Corporation Act, 1935, which enables the Corporation, with certain exceptions, to control the use of sites in the City. So far as the control of nuisance arising from the use of such sites is concerned, 128 visits were made by sanitary inspectors during the year and recommendations were made and acted upon without recourse to legal action.



## **Offensive Trades**

Visits of inspection of offensive trades premises are made periodically as a matter of routine, in addition to those on receipt of complaint.

It is worthy of note that, while one might reasonably anticipate a degree of trouble with such premises, the indisputable fact is that in this City complaints are very few and conditions in the various establishments housing such trades are such that little cause for complaint can be found.

An offensive trade, as its name suggests, inevitably possesses some unpleasant features. Byelaws exist and are designed to reduce to a minimum any nuisances from the public health point of view. It must be realised that unsightliness and offensive smells are inevitable features of certain trades and that, provided all reasonable measures are adopted to prevent such unpleasant factors from constituting danger to public health, it would be unreasonable to expect conditions foreign to the trade in question.

One complaint during the past year referred to premises at which vast quantities of organic matter are treated prior to conversion into various products. While admitting the trade to be "offensive," inspection revealed it as more offensive than it should have been. Alterations were proceeding in the modernisation of the plant and equipment and this resulted in a reduction of the rate of treatment and consequently an undue accumulation of offensive material. Consideration was given to the matter in its entirety and the Department's recommendations were submitted for the general improvement of the establishment. It is considered that the adoption of the suggested remedies would avoid grounds for complaint.

No formal or legal action has been necessary in respect of offensive trades during the past year.

## **Pig Keeping**

The keeping of pigs within the City may be classified under a double heading :—

1. On the outskirts or in open areas distant from dwellings and giving rise to no complaints due to the fact that nobody is affected by nuisances arising therefrom.
2. Within confined spaces, such as in sties in gardens and yards, or generally near to dwellings.

With regard to the former, it is well to emphasise that, in spite of a lack of complaints, routine inspection is carried out and the requirements of the Byelaws are enforced as far as practicable, having regard to all the circumstances of each case.

The second category is naturally the chief source of complaint and requires considerable attention by the Department.



It will be appreciated most readily that unless pigs are well kept the occurrence of nuisances is inevitable. The Byelaws are specifically framed to ensure that compliance with them virtually excludes the possibility of nuisances arising. Many people dislike pigs and it is found that some complaints are based upon this fact, without any suggestion of a nuisance. On the other hand, it is an indisputable fact that the utmost care and attention are necessary in keeping pigs near to dwellings without causing some nuisance. Flies, smells, rats and mice are early results of careless methods of keeping and frequent squealing at or near feeding times is unpleasant in areas surrounded by dwellings.

It is, however, worthy of note that although informal or formal action has been necessary in several cases to secure compliance with the Byelaws, no case has required recourse to legal procedure during the year.

A total of 1,233 visits was made to stables and pigsties during the year.

### **Tips**

Part of the work of the sanitary inspector involves the routine visiting of tips to ensure that the City Byelaws made under the Birmingham Corporation Act, 1948 are observed and no nuisances created. 589 visits were made to the fourteen established tips in the City, and the co-operation of the operators was readily obtained.

The nuisance from "fly tipping" on discarded and war-damaged sites still arises, but in a lessening degree as these sites are redeveloped and put to useful purposes.

Considerable alarm was felt by the residents of over fifty houses near one tip when they were invaded by cockroaches. It was discovered that following a fire in the City two years before, some burnt timber and barley maltings had been tipped by builders engaged on reconstruction. The cockroaches must have been present in the material and had continued to live and breed there. Finally, two years later, with their numbers greatly increased, they moved in search of fresh food and their presence was discovered.

A large area of the tip was bulldozed and sprayed with liquid insecticide together with all the approaches to nearby houses, garden paths, motorways, etc. Ten per cent. D.D.T. was dusted down after spraying and envelopes of the powder were issued to householders. The initial "kill" was satisfactory and the invasion arrested. As the weather became warm, however, fresh outbreaks were reported at other points in the locality and renewed outbreaks occurred in the treated areas. A second major treatment was carried out and D.D.T. (plus Lindane) powder was also used.

The exceptionally mild weather at the end of the year maintained the insects' activity and affected householders have been given insecticides and their co-operation sought. It is proposed to carry out further preventative treatments in the Spring of 1954.



## Pleasure Fairs

New Byelaws for the control and supervision of pleasure fairs have been approved by the City Council. The person having control of a pleasure fair is required to give three days prior notice of his intention to hold such a fair to the Town Clerk and the Chief Constable.

No land may be used unless it is sufficiently level and clear of obstructions and excavations to ensure the safety of those attending the fair. Specific times for fairs to be open are stated for Christmas Day, Good Friday, Bank Holidays and Saturdays, and limits are placed upon opening and closing times on any day.

Entrances and exits, gangways and seating, scenery, properties and hangings, dangerous animals, electrical wirings and fittings, heating appliances and lights having a flame, are all considered from the viewpoint of public safety.

Sanitary requirements include the provision of conveniences which must be sufficient and suitable, labelled for the sexes and illuminated during the hours of darkness, both for persons employed at the fair and also for the public.

A sufficient supply of wholesome water must be provided and satisfactory methods of storage and disposal of refuse must be adopted and, finally, on vacation, the premises must be left in a clean and tidy condition.

These byelaws give force of law to what have been normal requirements for proposed fair sites in the City and will also lead to improved standards in certain directions.

Thirteen applications for music licenses were made to the City Magistrates during the year. Each application involved a report on requirements being submitted to the Justices' Surveyor, and a total of 46 visits was made to fair and circus sites during the year.

## Canal Boats

During the year 1953 the number of boats inspected on the canals within the City area was 1,124, and the number of inspections during each quarter is shown as follows :—

First quarter	...	...	...	...	...	...	...	356
Second quarter	...	...	...	...	...	...	...	263
Third quarter	...	...	...	...	...	...	...	188
Fourth quarter	...	...	...	...	...	...	...	317

---

1,124

---

The 1,124 boats inspected were registered for the accommodation of 3,133½ persons and when inspected were found to be carrying 749 men, 643 women and 685 children, a total of 2,077 persons—represented in terms of adults as 1,734½.



Of the 1,124 boats inspected during the year, it was found that 1,097 or 97·6% were in good condition, and conforming with the Public Health Act and Regulations, while in 27 or 2·4% of the total, various contraventions were found. These are classified thus:—

Boats with 1 contravention each	7	making total contraventions	7
Boats with 2 contraventions each	15	making total contraventions	30
Boats with 3 contraventions each	4	making total contraventions	12
Boats with 4 contraventions each	1	making total contraventions	4
	<hr/>		<hr/>
	27		53
	<hr/>		<hr/>

Complaint Notes were duly served on the owners in all cases. Twenty-seven Complaint Notes were issued during 1953 and 59 were brought forward from 1952. Fifty-two Complaint Notes were complied with during the year, leaving an outstanding balance of 34.

During the year Certificates were returned by owners, signed by the various Canal Boat Inspectors, showing that 125 contraventions had been remedied. It has not been necessary during the year to take any Court proceedings under the Public Health Act 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.

The register of canal boats has been reviewed and owners circulated to ensure that boats on the register are still in commission. Registrations cancelled totalled 101. The total number of boats registered in Birmingham is 485, classified as follows:—

Ordinary boats	...	...	...	...	...	...	...	374
Motor boats	...	...	...	...	...	...	...	111
Steam boats	...	...	...	...	...	...	...	<hr/>
								485
								<hr/>

### Prevention of Damage by Pests Act, 1949

Section 3 of the Prevention of Damage by Pests Act, 1949, requires the occupier of any land to give notice to the local authority if it comes to his knowledge that rats or mice are living or resorting to the land in substantial numbers. For the purposes of the Act, land includes buildings on the land. These notifications are known in the Department as complaints and, as in previous years, there has been an increase in notifications during 1953:—

	1953	1952	1951	1950	1949
Complaints	5,690	5,387	4,901	4,843	3,536

An interesting comparison with these figures is that of 1945, when the total complaints received by the Section totalled 2,038.



The increase can be accounted for in various ways, the main ones being that the efficiency of the Section in dealing with infestations is becoming more widely known both amongst the households and the business premises of the City. A successful treatment leads to reports of infestations in other premises—this is particularly so in the case of business premises when, at the meetings of the various trade associations, mention is made by one member of the successful treatment that has been carried out in his premises. When it is realised that at each inspection of premises the tenants and/or owners are advised to carry out certain rat-proofing measures to minimise the risk of future infestations, and that no difficulties are encountered in getting these works carried out, it will be appreciated that the increase in the number of complaints does not cast any doubts on the efficiency of the work of the Section, but emphasises the value which the public generally put on their work.

For administrative purposes the City is divided into five areas, each of which is covered by a rodent inspector, with the exception of the Central area which has two inspectors.

The investigation of one complaint received by the Section leads to the inspection of several properties in the vicinity, and the number of inspections shows an increase over those of the preceding year.

	1953		1952	
	<i>Domestic</i>	<i>Industrial</i>	<i>Domestic</i>	<i>Industrial</i>
Inspections :				
Original visits ...	5,971	2,406	5,979	2,332
Re-visits ...	1,790	1,637	1,552	1,557
<b>TOTAL VISITS ...</b>	<b>11,804</b>		<b>11,420</b>	

The various types of properties have been “ coded ” into many categories and a breakdown of the figures gives the following analysis of the inspections carried out during 1953 :—

	<i>Inspections</i>		<i>Re-inspections</i>	
Domestic and bombed sites ...	...	5,971	...	1,790
Local Authority properties :—				
Schools ...	183		56	
Civic restaurants, etc. ...	50		35	
Corporation tips ...	36		53	
Allotments and parks ...	23		8	
Welfare centres and nurseries ...	47		49	
Destructors ...	21		286	
Offices, stores, etc. ...	50		19	



					<i>Inspections</i>	<i>Re-inspections</i>
<b>Industrial :</b>						
Private schools	...	...	...	...	13	5
Private tips	...	...	...	...	8	5
Hospitals, nursing homes, etc.	...	...	...	...	67	25
Cafes, restaurants, hotels	...	...	...	...	175	116
Other food premises	...	...	...	...	670	531
Cinemas and theatres	...	...	...	...	40	27
Canal and railway banks	...	...	...	...	16	37
Non-food shops	...	...	...	...	312	166
Non-food factories, offices, etc.	...	...	...	...	676	218
<b>Agricultural :</b>						
Farms, piggeries, etc.	...	...	...	...	19	1

Routine visits are paid from time to time to premises which are likely to harbour rats :—

						<i>Inspections</i>	<i>Re-inspections</i>
Day visits	...	...	...	...	...	165	10
Night visits	...	...	...	...	...	136	72
Smoke tests	...	...	...	...	322		
Notices served for proofing	...	...	...	...	53		
Notices served for treatment	...	...	...	...	—		
Notices completed	...	...	...	...	51		
Reminder letters sent	...	...	...	...	4		
Letters sent <i>re</i> proofing	...	...	...	...	1		

## TREATMENTS

Administratively, all domestic treatments are done free of cost to the occupier—this is the result of a Ministry of Agriculture and Fisheries' Circular—and rank for grant aid from the Treasury, whilst all business premises are charged for the treatments. Business premises are usually held to be premises where a business of any description is carried on for profit.

The discovery of heavy rat populations in properties is the exception rather than the rule nowadays. This state of affairs is a tremendous advance on the conditions encountered some years ago, when heavy infestations were met with over many areas of the City.

The treatments found to be necessary at infested premises again showed an increase over those of the previous year :—

				<i>1953</i>		<i>1952</i>	
				<i>Rat</i>	<i>Mice</i>	<i>Rat</i>	<i>Mice</i>
<b>Treatments :</b>							
Domestic	...	...	...	2,541	1,391	2,257	1,268
Industrial	...	...	...	1,188	864	1,083	759
				<hr/>		<hr/>	
				5,984		5,367	
				<hr/>		<hr/>	



An examination of the previous years' figures gives the following comparison :—

		1953	1952	1951	1950	1949
Domestic ...	...	3,932	3,525	3,837	3,614	2,458
Industrial ...	...	2,052	1,842	1,675	1,615	1,240
		5,984	5,367	5,512	5,229	3,698

A breakdown of the treatment figures into the various types of premises dealt with gives the following result :—

						<i>Rats</i>	<i>Mice</i>
Domestic and bombed sites	...	...	...	...	...	2,541	1,391
Local Authority Property :							
Schools	...	...	...	...	...	78	100
Civic restaurants and bakehouses	...	...	...	...	...	30	29
Corporation tips	...	...	...	...	...	2	—
Allotments, parks, etc.	...	...	...	...	...	12	3
Welfare centres and nurseries	...	...	...	...	...	20	23
Destructors	...	...	...	...	...	—	—
Offices, stores and depots	...	...	...	...	...	38	29
Industrial :							
Private schools	...	...	...	...	...	10	1
Private tips	...	...	...	...	...	—	—
Hospitals, nursing homes, etc.	...	...	...	...	...	46	46
Cafes, restaurants, hotels	...	...	...	...	...	80	68
Other food premises	...	...	...	...	...	287	227
Cinemas and theatres	...	...	...	...	...	6	27
Canal and railway banks	...	...	...	...	...	—	—
Non-food shops	...	...	...	...	...	170	98
Non-food factories, offices, etc.	...	...	...	...	...	395	213
Agricultural :							
Farms, piggeries, etc.	...	...	...	...	...	14	—

There has been an increase in the number of business premises in the City from which requests have been made to the Section to carry out inspection at regular intervals, with the subsequent treatments if found to be necessary.

#### RAT-PROOFING

Mention was made in the 1952 Report of the infestations experienced in new houses belonging to the Corporation—the infestations being caused by defective footings. Further examples of this have come to light during the year, but with the co-operation of the Housing Management Department, no difficulties have been encountered in having the necessary proofing measures carried out.



Drainage systems continue to be sources of infestation of many properties and yards in the City, particularly within a three mile radius of the City centre. Smoke tests are applied to all suspected drainage systems as a matter of course, and the exposing and repair of these defective drains, which cause rat infestations, is becoming an urgent necessity, which is limited by the technical staff available for this very important side of the Section's work.

During the year under review 111 drainage systems have been exposed, repaired and made ratproof. It has been possible to have over 50% of this very essential work carried out without the serving of notices under Section 4 of the Act, and in all cases further visits at later dates to the properties showed no evidence of further infestation.

In one particular infestation which was cleared up the property had been experiencing intermittent rat infestation over a period of twenty years. The investigation, testing and subsequent exposure of the drainage system showed that the root cause of the trouble was a junction on the drain which had been stoppered with a piece of slate—the rats had gnawed through the slate and had thus gained access to the cellars of the premises. In another case a piece of slate was used in sealing a disused junction and before it was found 43 rats had been caught in twelve days in the house in question.

It is frequently found that when a defective drain is exposed the general condition of the system is in such a state that only a wholesale reconstruction will prove an effective ratproofing measure. Account is taken of the possible "life" of the property, and its general structural condition, and whilst a complete reconstruction of the defective drainage system is feasible, it is not an economic proposition. It should be understood that, apart from the fact that rats are leaving the system, the drain is "sound" insofar that it effectively carries waste matter, etc., from the property to the sewer. Experience has proved that the provision of an interceptor trap in such circumstances, will usually make an effective barrier against rats entering the system from the sewer.

Further thought must be given to the provision of interceptor traps to new drainage systems, particularly where new property of all types is being built either on bombed sites or redevelopment areas and drained into old sewerage systems. In the case of bombed sites or the site of any demolished property, then the first building operation should be the finding and effective sealing at the sewer of all the old drainage systems that are contained in the site.

#### SEWER TREATMENTS

An essential part of the work of the Section is the treatment of the sewerage system of the City. There are some 1,500 miles of sewers provided with approximately 18,000 manholes. These manholes provide



a convenient place for baiting and poisoning of the rat population in the sewers. The treatment of the sewers commenced in 1944, and has been continued ever since that time. Two squads of men are now engaged in poisoning those portions of the sewer system known to be infested or liable to be infested.

Doubts are sometimes expressed as to the efficiency of the sewer baiting scheme generally, and whether it has any effect on the rat populations in the sewers. It has been possible to entirely eliminate the rat from some sewer lengths, with the consequent reduction in the number of manholes to be treated, and a comparison of the figures of the first treatment and that of the fourteenth maintenance treatment, which was completed during the year, will show that although this side of the Section's work is not spectacular, it has led to a considerable reduction in the "takes" and an increase in the "no takes," thus showing that there is a positive reduction in the rat population in the sewers.

		<i>Takes</i>				<i>No Takes</i>
		<i>All bait Cleared</i>	<i>Good</i>	<i>Small</i>	<i>Total</i>	
Initial treatment ...	...	246	2,227	2,368	4,841	4,734
14th maintenance	...	25	407	281	713	6,548

At the close of the year the 15th maintenance treatment was proceeding.

#### SALVAGE DEPARTMENT DESTRUCTORS

The five refuse disposal plants operated by the Salvage Department are the sites of the heaviest rat infestations in the City. Due to the continual operations carried out against rats in the past few years, it has been possible to accomplish a tremendous reduction in the rat populations, which were originally widespread over the whole of the plants, and in some instances "overflowed" into the surrounding properties. Regular night inspections are carried out at all the plants; only the Central Montague Street plant was found to be in regular need of treatment at isolated points.

<i>Destructor</i>	<i>Date</i>	<i>Portion of Premises treated</i>
Montague Street	April 4th, 5th, 6th and 12th	} No. 1 Deck
Montague Street	Oct. 3rd and 4th,	
Montague Street	Nov. 21st	
Brookvale	April 4th and 5th	} New Deck
	Oct. 13th	
Rotton Park Street	April 4th and 5th	}
Lifford	Nov. 25th	



Every opportunity is taken to destroy rats by all methods available to the Section. During certain night inspections rats are shot by air gun and the Senior Rodent Officer himself has been responsible for a kill of not less than 4,954 rats by this method. Hand catching and killing has accounted for a further 1,533 rats.

The Ministry of Agriculture and Fisheries has continued to request the Section to supply live rats for purposes of experiment in feeding habits, and approximately 400 have been forwarded to the Ministry.

Live rats were also supplied to the Birmingham University Medical School and to the Ministry of Supply, Reading.

#### EXHIBITION

The Health Committee, in conjunction with the Ministry of Agriculture and Fisheries, gave an exhibition of modern methods of dealing with the rodent problem, at the Birmingham Show in September. Considerable public interest was shown in the live exhibits, films and displays ; approximately 14,000 people passed through the marquee during the two days of the Show.

#### STAFF

The position during the year was much the same as that of 1952, the total staff at the 31st December being 34. There is need for more technical staff to carry out the important work of rat-proofing of premises, and the existing staff of the Section has been fully extended during the year in all branches of the work. Difficulty has been experienced in recruiting and retaining operatives for this class of work. Throughout the year the Section has enjoyed the closest co-operation and support of the many Corporation Departments, servicing firms and the Ministry of Agriculture and Fisheries.

#### The Rag Flock and Other Filling Materials Act, 1951

Premises where rag flock is manufactured or stored prior to sale to registered upholsterers, have to be licensed under the Act. Premises where upholstery of new furniture, furnishings, bedding and toys, is carried on have to be registered with the Corporation.

At the end of 1953 there were :—

Licensed Premises	...	...	...	...	...	...	...	6
Registered Premises	...	...	...	...	...	...	...	60

The policy has been continued of sampling all sources of supply of materials likely to be used in these premises and already the good effect of the Act passed in 1951 can be observed. There has been a substantial improvement in the standard of cleanliness of cotton felt.



<i>Material</i>				<i>Satisfactory</i>	<i>Unsatisfactory</i>	<i>Total</i>
1.	Rag Flock	...	...	60	5	65
2.	Cotton Felt	...	...	29	1	30
	Cotton Linters	...	...	2	—	2
	Cotton Millpuff	...	...	6	—	6
	Cotton Wadding	...	...	1	—	1
3.	Woollen Felt	...	...	15	5	20
	Woollen Flock	...	...	1	—	1
4.	Jute	...	...	4	1	5
5.	Synthetic Fibres	...	...	—	—	—
6.	Hair	...	...	7	—	7
7.	Feathers or Down	...	...	6	—	6
8.	Kapok...	...	...	—	—	—
9.	Coir Fibre	...	...	29	—	29
	Algerian Fibre	...	...	11	—	11
10.	Sisal and Cotton Felt Pads			1	—	1
TOTAL				172	12	184

In 1952, 16.3% of all samples taken were below the prescribed standard. In 1953, 6.5% of the samples taken were sub-standard.

It will be seen that twelve unsatisfactory samples were taken. So far as nine of these were concerned the samples were only slightly below the standard of cleanliness required by the Regulations and a warning letter was sent to the firm in each case. Details of the results of some of these samples are as follows :—

<i>Sample</i>	<i>Tests</i>	<i>Results</i>
Rag Flock	Soluble Impurities	1.6%
	Chlorine in the form of soluble chlorides	8 p.p. 100,000
	Oil and Soap	5.3% (5% max.)
Woollen Felt	Soluble Impurities	1.5%
	Chlorine in the form of soluble chlorides	11 p.p. 100,000
	Oil and Soap	3.3%
	Animal fibre	78% (85% min.)
Jute Felt	Soluble Impurities	1.5%
	Chlorine in the form of soluble chlorides	10 p.p. 100,000
	Oil and Soap	5.6% (5% max.)
Woollen Mixture Felt	Soluble Impurities	1.7% (1.5% max.)
	Chlorine in the form of soluble chlorides	8 p.p. 100,000
	Oil and Soap	4.8%
	Animal fibre	70%
Woollen Mixture Felt	Soluble Impurities	1.8% (1.5% max.)
	Chlorine in the form of soluble chlorides	14 p.p. 100,000
	Oil and Soap	3.5%
	Animal fibre	63%
Rag flock	Soluble Impurities	1.9% (1.8% max.)
	Chlorine in the form of soluble chlorides	8 p.p. 100,000
	Oil and soap	2.2%

The figure in parenthesis is the standard laid down by the Regulations.



In the remaining three cases formal samples were taken, two of which proved to be satisfactory and one unsatisfactory. In the case of the unsatisfactory sample the firm was approached and on hearing of the result they immediately communicated with their suppliers who asked them to return the complete stock of this material which would be replaced with a new stock. A further informal sample was taken as soon as delivery of the new stock was effected and this proved to be satisfactory.

### Supervision of Shops

At the commencement of the year, four whole-time Shops Act Inspectors were available to carry out the systematic inspections and duties as required under the provisions of the Shops Act, 1950. The duties performed by Shops Act Inspectors in this City include :—

#### *Hours of Closing :*

- Early closing days
- General closing hours

#### *Conditions of Employment :*

- Statutory weekly half-holidays
- Meal times
- Sunday employment
- Hours of employment of young persons employed in shops and cinemas

#### *Arrangements for Health and Comfort of Shop Workers :*

- Sanitary and washing facilities
- Heating, ventilation and lighting
- Seats for female assistants
- Staff accommodation and facilities for meals

#### *Sunday Trading*

- General trading exemptions
- Special provisions for Jewish traders
- City of Birmingham (Rednal) Sunday Trading Order, 1939

The work of the Shops Act Inspectors for the year is summarised as follows :—

GENERAL INSPECTIONS									
Visits	...	...	...	...	...	...	...	...	7,989
Re-visits	...	...	...	...	...	...	...	...	1,920
TOTAL GENERAL INSPECTIONS									9,909

SPECIAL VISITS									
Half-day closing	...	...	...	...	...	...	...	...	4,493
Night closing	...	...	...	...	...	...	...	...	813
Sunday trading	...	...	...	...	...	...	...	...	1,813
Appointments, etc.	...	...	...	...	...	...	...	...	826
Complaints and inquiries	...	...	...	...	...	...	...	...	77
Jewish traders	...	...	...	...	...	...	...	...	136
TOTAL SPECIAL VISITS									8,158



### STREETS PATROLLED

Half-day closing	...	...	...	...	...	...	...	4,706
Night closing	...	...	...	...	...	...	...	1,268
Sunday trading	...	...	...	...	...	...	...	1,935
								7,909

### \* NOTICES AND STAFF ACCOMMODATION

Shops Act forms provided	...	...	...	...	...	...	1,132
Staff accommodation remedied	...	...	...	...	...	...	264

### OFFENCES REPORTED

Half-day closing :							
Not closing to time	...	...	...	...	...	...	60
Sales after closing time	...	...	...	...	...	...	13
Employment of staff on weekly half-holiday	...	...	...	...	...	...	4
Night closing :							
Not closing to time	...	...	...	...	...	...	4
Sales after closing time	...	...	...	...	...	...	3
Sunday trading :							
Illegal sales	...	...	...	...	...	...	58
Warning letters sent <i>re</i> above-mentioned contraventions	...	...	...	...	...	...	62
Prosecutions	...	...	...	...	...	...	12

During the year it was found necessary to institute legal proceedings against twelve shopkeepers for contraventions of the Act. Nine hairdressers were summoned for failing to close their shops for the statutory weekly half-holiday during the week commencing 20th July. In addition to the summonses for illegal trading, seven further summonses were issued against four of the hairdressers for failing to give their assistants the statutory weekly half-holiday during that week.

The remaining three prosecution cases were taken against shopkeepers who had continued to trade illegally on Sundays after having been sent official warning letters for previous similar offences.

In each of the above mentioned cases the charge was proved and a fine was imposed by the Magistrates.

### DISINFESTATION OF VERMINOUS PREMISES, ARTICLES AND PERSONS

The majority of disinfestation duties are executed by the staff of the Disinfecting Station under the supervision of the Depot Superintendent, and this section has been kept working at full pressure throughout the year. The station is situated in Bacchus Road which is reasonably central. The Depot Superintendent reports daily to the Chief Sanitary Inspector, this arrangement ensuring a prompt and efficient control of all disinfestation measures.



The Department receives almost daily from occupiers of domestic premises complaints of infestations of bugs, fleas, flies, cockroaches, black-beetles, crickets, etc., which in all instances are promptly investigated by the sanitary inspector. When he has determined the nature and extent of the infestation, instructions as to necessary treatment are given to the Depot Superintendent, and occasionally the inspector supervises operations, particularly in cases of heavy infestations. No charge is made for work of this nature.

During the year, 1,246 houses were treated as compared with 903 in 1952, representing an increase of 37.98% over the year.

During recent years there has been a steady downward trend in this type of work which the Department has considered due to the ever increasing use of modern insecticides. The sudden increase in 1953 is no doubt due to the early summer weather experienced in May, when 205 premises were treated, to be followed later by very warm weather in the autumn months.

Similar work is carried out in Corporation houses by arrangement with the Housing Management Department, especially in those cases where families are rehoused in Municipal accommodation, treatment being carried out prior to removal. 130 houses were treated during the year, as compared with 622 in 1952 and 830 in 1951. This represents a most encouraging drop of approximately 79.1% when compared with last year.

In addition to the above work, many treatments have been effected in business premises, particularly in the case of food preparation rooms and kitchens where mainly infestations of steam flies and cockroaches have occurred. Several treatments resulted from routine inspections of these premises by the inspectorate and appropriate charges were rendered by the Department in relation to labour and materials used.

The "On Call" Service which the Department introduced at the beginning of 1952 has been satisfactorily maintained throughout the year. This service is designed to assist hospitals, nursing homes and similar institutions in the disinfection of their buildings and treatments effected have mainly concerned wards and kitchen premises. Steam flies, cockroaches and black-beetles are the main source of infestation, although ants have been particularly troublesome during the year. Charges based on time and materials are rendered in all cases, but time spent in investigation prior to treatment is not charged for. It has been observed generally that infestations were not so heavy as experienced in 1952, and in many cases secondary treatments were unnecessary.

**Services to Chest Clinic.** Many other services are also operated by the Depot Staff. By arrangement with the Chest Clinic, complete bedding units are delivered and collected from houses occupied by tuberculous



patients. During the year 711 units were delivered and 316 were collected and disinfected prior to re-issue.

Similarly, assistance is given to families with a tuberculosis history and in poor financial circumstances, who require the removal of their furniture and household effects into new Municipal houses. Eleven families were assisted in this manner.

**Disinfection.** The cleansing of homes and removal of refuse is undertaken free of charge in cases where aged people are incapable of maintaining a reasonable standard of cleanliness. Twenty-five houses were so cleansed and 81 beds together with bedding were removed for destruction.

The sterilisation of straw and sacks is carried out on behalf of certain export manufacturers in the City and for which an appropriate charge is made. The steam disinfector dealt with approximately 11·7 tons of straw involving 117 stoves and 925 sacks, requiring 7 stoves.

Hospital bedding and blankets are also disinfected and charges for this service are rendered to the relevant Management Committees at the rate of 15/- per complete stove.

No less than 264 stoves were effected in respect of nine hospitals and in addition 1,523 blankets were treated, free of charge, as follows :—

Free Night Shelter	...	...	1,150 blankets, 23 stoves
Blood Transfusion Service	...	...	373 blankets, 8 stoves

The above work has been considerably extended by a recent arrangement with the Birmingham Workshops for the Blind, which are now engaged on contract work for the Armed Forces in the re-conditioning of mattresses, pillows, biscuits and pallets. This bedding is disinfected before return and although work did not commence until 23rd September, a tremendous amount has been undertaken in the last quarter of the year, viz. :—

<i>Month</i>	<i>Mattresses</i>	<i>Pillows</i>	<i>Biscuits</i>	<i>Pallets</i>	<i>Stoves</i>
September	136	2,160	—	—	23
October	332	—	579	—	34
November	256	559	1,740	42	70
December	449	635	1,081	130	68
	1,173	3,354	3,400	172	195

The 195 stoves were charged at 15/- per stove and all loads of bedding to and from the Cleansing Station were carried in vehicles provided by the Services.

**Clinic Treatments.** The Cleansing Station provides separate bathing accommodation for both sexes for the cleansing of scabies cases and verminous persons. Two part-time clinics are also operated for scabies treatment, one male and one female, but these are little used and will therefore be closed early in 1954.



All services can then be centralised and operated more economically without loss of efficiency. When this has been arranged, the main clinic will remain open until 8 p.m. on Mondays to Fridays inclusive and until 5 p.m. on Saturdays.

Details of treatments carried out at all clinics for 1953 are as follows :

<i>Clinic</i>					<i>Scabies</i>	<i>Body Lice</i>	<i>Pubic Lice</i>
<i>Bacchus Road (Men)</i>							
Men	...	...	...	...	57	321	26
Boys	...	...	...	...	5	1	—
					62	322	26

*Bacchus Road (Women) :*

	<i>Scabies</i>	<i>Head Lice</i>	<i>Body Lice</i>	<i>Pubic Lice</i>
Women	67	37	13	4
Girls	43	43	29	2
Boys	37			
Second treatments	16	—	—	—
Third treatments	6	—	—	—

*Part-time Clinics—Scabies only :*

*Floodgate Street (Men) :*

Men	...	...	...	...	...	95 treatments
Boys	...	...	...	...	...	8 „
Second treatments	...	...	...	...	...	5 „
Third treatments	...	...	...	...	...	5 „
TOTAL	...	...	...	...	...	113 „

*Sheep Street Clinic (Women) :*

Women	...	...	...	...	...	61 treatments
Girls	...	...	...	...	...	26 „
Boys	...	...	...	...	...	24 „
Second treatments	...	...	...	...	...	7 „
Third treatments	...	...	...	...	...	4 „
TOTAL	...	...	...	...	...	122 „

Children represented in the above statistics have received treatment at the same time as their parents.

## DRAINAGE AND SEWERAGE

The following are details of works undertaken by the Public Works Department during 1953 and, in this connection, thanks are expressed to Sir Herbert Manzoni.



The extension of the Rea Valley Main Sewer from the existing Callow Brook sewer to Tessall Lane has now been completed.

An ejector station and sewerage works for a small area north of the canal at Chester Road, Tyburn, previously unsewered, has been completed.

The reconstruction of foul and surface water sewers in High Street, King's Heath, has now been completed.

Sewerage works are now in progress in connection with the Digbeth and Deritend Improvement.

A scheme is also in progress for the construction of a pumping station, rising main and sewers (including two river crossings), to drain the Light Industrial Centre and the Firs Housing Estate, together with a large area of Castle Bromwich in the Meriden Rural District Council area, at present drained to an inefficient sewerage works which will be abandoned.

The reconstruction of the Cole Valley Eastern Outfall Sewer has now commenced. This scheme, at first designed in 1939, has been postponed, first owing to the war and later to the economic state of the country. It will prevent the daily pollution of the River Cole by sewage discharges.

During the year sewerage works have been completed on the following Housing Estates :—

BY CONTRACT

Brandwood Road Estate.	Highfield Estate, Quinton.
Bunbury Road Estate.	Ley Hill Farm Estate.
Egghill Lane Estate.	Welsh House Farm Estate—
Fern Bank Estate.	Part I.
Heathy Farm Estate.	Ward End Hall Estate.

BY DIRECT LABOUR

Aldridge Road foul water— sewer extension for Housing.	Hobmoor Road Extension for Housing.
Hamstead Hall Estate and Friary Estate.	Shard End Estate.

Work on the following Corporation Housing Estates is in hand :—

BY CONTRACT

Blakesley Estate.	Leach Green Lane Estate.
The Firs Estate, Castle Bromwich.	Pool Farm Estate—Part I.
Holifast Estate.	Wychall Farm Estate.

In addition to the above Corporation Estates, approximately 3.60 miles of sewers have been laid by private enterprise.



Taking into account the sewers which have been completed up to the end of December last, the total length of sewers now laid in the City is 1,579·18 miles, of which 532·28 miles are surface water sewers and 1,046·90 miles are foul water sewers, a total increase during the year of 17·43 miles.

During the year 1953, twelve dumbwells have been demolished and filled in, and an ineffective private sewage disposal plant demolished. The properties formerly draining to them have been connected to the main drainage system.

### **REFUSE COLLECTION AND DISPOSAL**

Mr. W. H. Andrews, General Manager of the Salvage Department, has kindly supplied the following details on this subject.

The Salvage Department of the Corporation is responsible for the following cleansing services in the City :—

- (a) the collection, utilisation and disposal of domestic refuse and certain trade refuse,
- (b) the provision of dustbins for the temporary storage of domestic refuse.
- (c) the cleansing of cesspools, privy pans and privy middens,
- (d) the removal of condemned meat, offals and other wastes from the City Markets and Abattoirs and the production of sterilised feeding meals, fertilisers and animal fat.

#### **Refuse Collection**

The collection of the City's refuse necessitates regular calls at over 320,000 premises and the total quantity of refuse of all classes dealt with during 1953 was 335,355 tons, or approximately 1,100 tons every working day of the year.

The quantity of refuse produced at domestic premises varies within wide limits in different parts of the City ; in some districts it is about 16 cwts. per house per annum, whilst in other districts it is as high as 29 cwts.

The collection of refuse is carried out by a fleet of 228 mechanical vehicles, which includes some of the most modern types of dustless loading vehicles for removing refuse by special containers from large blocks of flats.

The collection of refuse in the City is organised in such a way that the seasonal variations in refuse output are allowed for and new premises can readily be allocated to the appropriate collection rounds.



## **Refuse Disposal**

The main method adopted in Birmingham for the disposal of refuse is that known as separation and incineration. This entails a preliminary sorting of the refuse by mechanical and manual methods prior to its incineration.

In addition to the value of the materials salvaged, reference to which is made later, the Department performs an important role in reclaiming excavated marlholes and other sites in the City and the surrounding district, by tipping screened dust and clinker.

Land has been raised and levelled to provide excellent playing fields when dressed with soil and seed, whilst the dust screened from house refuse is also in demand by contractors undertaking the construction of sports fields in various parts of the country.

## **Refuse Utilisation**

The Department has always been noted for its salvage activities and intensive efforts are made to recover all materials which have any residual value and which are of further use to industry.

In this connection large quantities of ferrous and non-ferrous scrap, paper, textiles, glass and bones are recovered and put to various uses; ferrous scrap to the foundries and blast furnaces, paper mostly to the board mills, textiles for the manufacture of roofing felt and linoleum and bones for the production of fertilisers, animal feeding stuffs, fat and glue.

The gross income of the Department from all sources for 1953 amounted to £166,138.

## **Provision of Dustbins**

The Department has continued the provision of dustbins under the rate-borne scheme and during the year under review 32,108 bins were supplied.

The total number of dustbins provided under this scheme since it came into operation in April, 1950 is 123,466 which represents about 41% of the refuse receptacles in the City.

## **Cesspools, Privy Middens and Pans**

At the end of 1953 there were 147 cesspools, serving 202 premises, being regularly emptied by the Salvage Department. During the year 6 cesspools were abolished, the premises being connected to the sewers, and 2 new cesspools were constructed. There are still 172 pans and 9 middens situated in the outlying parts of the City which necessitate regular attention.



## CITY'S WATER SUPPLY

Mr. A. E. Fordham, General Manager and Secretary of the Water Department, has very kindly prepared the following information concerning the Works and Distribution System.

### Head Works

To meet the continually increasing demand for water, work has been commenced on an extensive and long term scheme for increasing the output of the filtration plant at the Elan Valley by converting each of eleven of the existing slow sand filters into two rapid gravity type filters similar to those in use, and under construction, at the Frankley Works. The conversion of one filter into two prototype beds was completed during the latter part of the year, with satisfactory results, and the conversion of a second bed into a pair of rapid filters has been authorised.

### Aqueduct

The laying of instalments of 60" concrete lined steel pipes on the siphons of the Elan Aqueduct has proceeded. A total length of 6.9 miles from the Inlet of the Severn Siphon to Seckley Wood is now completed and in commission, and work is well advanced on another section of 2.3 miles on this Siphon from Littlegains to Wolverley. On Downton Siphon a length of 2.2 miles from the Inlet to Stanage is already in commission and good progress has been made with the laying of the next section of 1.5 miles from Stanage to Heartsease. Pipelaying on the half-mile-long Wye Siphon was completed and the main taken into commission in the early part of the year.

Reconditioning of the second of the two original 42" diameter cast iron mains on the Teme Siphon was completed at the beginning of the year and resulted in a satisfactory increase in its carrying capacity.

### Frankley

Work on the construction of a battery of eight new rapid gravity filters with a combined maximum capacity of 16 million gallons per day was nearing completion at the end of the year.

### Area of Supply

For the improvement of supplies in the Department's Statutory Area of Supply the programme of laying new Trunk Mains in concrete



lined cast iron and steel pipes has continued during the year as follows :—

<i>Diameter</i>	<i>Zone</i>	<i>Locality</i>	<i>Length Miles</i>	<i>Remarks</i>
15"	Northfield	Union Road, Shirley	0·8	Completed and taken into commission August, 1953
24"	Warley	Scotland Lane to Woodgate Lane, Bartley Green	1·0	Completed and taken into commission October, 1953
42"	Middle and Low	Bristol Road to Warwards Lane	0·9	0·6 mile completed and taken into commission November, 1953
18"	Middle and Low	Stratford Road to Coventry Road	2·3	Further 0·1 mile completed and taken into commission September, 1953, making a total length completed of 1·8 miles.

#### **Local Works—Whitacre**

Progress has been made with the scheme referred to in the previous report for the reconstruction of the Whitacre Works. An 18-inch diameter main to Nuneaton was commenced in September and reconditioning of the River Blythe intake and reconstruction of the weir are practically complete.

#### **General**

All water distributed has been treated with chlorine, generally at a rate of 0·3 parts per million.

Seagulls, sometimes in very considerable numbers, visited Bartley Reservoir on frequent occasions during the winter months of 1952/53 and were undoubtedly responsible for the high degree of contamination revealed in the reservoir water samples from the beginning of December, 1952 until the end of February, 1953. As in previous years, the contamination was effectively dealt with by filtration and chlorination.

The water distributed in the area of supply was entirely the soft moorland water of the Elan Supply.

At all times throughout the year water supplies have been satisfactory in quality and generally adequate in quantity, although, because of the continued increase in consumption, the pressure of water in some localities was very low at periods of peak demand. The programme of trunk main extensions already referred to, and other projected measures, are designed to improve the pressure in those localities.



## ROUTINE SAMPLING OF CORPORATION WATER

### Bacteriological Examination

#### ELAN VALLEY SUPPLY

At approximately monthly intervals a sample was taken from the River Claerwen above Rhiwnant and only in samples between June and October were more than 10 B.Coli per 100 m.l. found. A deterioration in quality, when more than 240 B.Coli per 100 m.l. was found, was investigated by sampling the stilling pool immediately below the Claerwen Dam and taking 7 samples also from several points along the course of the River Arban which joins the Claerwen just below the stilling pool. The results showed that the pollution of the Claerwen was from the Arban. No cause for this could be found, but it was noted that the poor results were obtained after a rainy period.

The impounded water, before passing along the aqueduct, is treated with lime in the proportion of 6 parts per million, to neutralise its natural acidity derived from the peaty nature of the gathering grounds. It is also subjected to rapid filtration to remove suspended particles which would otherwise be precipitated in the aqueduct, and the addition of 5 p.p.m. of chlorine started during the construction of the Claerwen Dam is being continued for the time being.

Of 22 samples from the aqueduct (usually from a point half way along its length) B.Coli. was just detectable on only two occasions.

Weekly samples from the aqueduct outlet at Frankley had a very slight contamination of B.Coli on ten occasions. At the end of March, however, after a period of very heavy rain 240 B.Coli Type I per 100 m.l. were reported in the sample. Three weeks later the Frankley tunnel section was emptied and inspected. By this time the weather had become dry and water which was dripping into the tunnel at various points was found to be very pure.

After storage in Frankley and Bartley Reservoirs, the water from the latter passes into the purification works through No. 1 Valve Chamber where it is sampled weekly. B.Coli was detected in 19 of the samples but in only 5 of these was it present to the extent of more than 5 per 100 m.l.

In only 5 out of 56 samples of water after slow sand filtration was B.Coli detected. Immediately before passing into the distribution system a small amount of chlorine is added to the water and samples taken weekly never contained B.Coli and the 3 highest results for total organisms per 1 m.l. were 6, 18 and 185.

There are seven covered pure water storage reservoirs throughout the City. One hundred and twenty-four samples were obtained from these and only two (from the same reservoir) showed any suspicion of contamination.



Of 79 samples drawn from taps throughout the City on the various levels of supply none contained B.Coli and the highest number of organisms recorded per 1 m.l. was 15.

#### WHITACRE SUPPLY

In view of the project to use the River Blythe as a source of supply, weekly samples were taken from it. They were all heavily contaminated, but the pollution of the River Bourne, which is now, and for many years has been, in use as a source of supply, was again found to be worse than the River Blythe.

Storage of River Bourne water in Shustoke lower reservoir greatly improved its bacteriological quality. On only six occasions were as many as 240 B.Coli Type I present in 100 m.l.s. of the weekly samples. These occasions were all during the winter time. The purity of the stored water seemed to be at its maximum during the spring and early summer.

Slow sand filtration eliminated the coliform organisms and the total organisms present were reduced to between 118 and 1 per 1 m.l. with an average of 21 per 1 m.l.

The chlorinated water as it flowed from the works contained between .05 and .35 parts per million of chlorine. One of the weekly samples contained 2 B.Coli Type I per 100 m.l. The average organisms per 1 m.l. were 12, the highest number recorded being 48.

THE WELLS were sampled fortnightly although they were not used for supply during the year.

SHORT HEATH WELL. Half the samples of raw water contained fewer than 3 organisms per 1 m.l. The two highest counts for "total organisms" were 127 and 62 and B.Coli Type I was found on one occasion (2 per 100 m.l.).

LONGBRIDGE WELL. Four samples of raw water gave total counts of 6, 23, 3 and 7 organisms per 1 m.l. but one of these samples contained 240 B.Coli Type I per 100 m.l. This phenomenon did not recur and its cause remained undiscovered. All other samples were of chlorinated water and were almost sterile.

#### Chemical Examination

Average results of chemical analysis of water samples taken during the year are set out in the table. The figures in brackets are the highest and lowest readings obtained during the year. It is interesting to note the fall in pH (i.e. increased acidity) as the water stands in Bartley Reservoir. This is due to the uptake of carbon dioxide from the air by the alkaline water. The hardness remains constant and is largely due to the lime which is added in the Elan Valley.



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 inch 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.

Periodic samples are taken at two residential schools, one Children's Committee Nursery and at the Health Committee's establishments of Skilts and Harborough Hall.

### Private Wells

There has been a further reduction in the number of dwellings in the City which have to rely on wells and springs for their drinking water. Several old cottages have been demolished and their tenants re-housed. This mainly accounts for the change.

Figures for the end of the years 1952 and 1953 are as follows :—

Year	Type of Premises				Number	Source of Supply	
						Wells	Springs
1952	Houses	...	...	...	36	19	1
	Temporary dwellings			...	4	1	1
	TOTAL				40	20	2
1953	Houses	...	...	...	23	17	—
	Temporary dwellings			...	2	1	1
	TOTAL				25	18	1

It is anticipated that the numbers will be further reduced in 1954 as alternative accommodation has already been offered in some cases and mains are to be brought nearer to several existing dwellings.



PARTS PER MILLION (Extreme values in brackets)

A.

No. of samples taken	Description	Ph.	Total Solid Matter	Free Ammonia	Albuminoid or Organic Ammonia	Nitrogen in Nitrates	Oxygen consumed in 3 hours at 27°C. (80°F)	Chlorine in Chlorides	Hardness (as CaCO <sub>3</sub> )	Total Alkalinity (as CaCO <sub>3</sub> )	Silica (SiO <sub>2</sub> )	Plumbo-Solubility	Erosion 1 day
12	Welsh Water Aqueduct Outlet	8.9 (9.2- (8.7)	43 (45- (39)	.003 (.010- (.000)	.050 (.072- (.030)	.05 (.10- (.00)	1.70 (2.40- (1.14)	10.3 (11.0- (9.5)	21 (22- (20)	7.7 (8.5- (7.0)		0.9 (1.2- (0.7)	
12	After storage in Bartley Reservoir ... ..	7.5 (8.6- (7.1)	43 (45- (40)	.001 (.008- (.000)	.047 (.072- (.022)	.05 (.10- (.00)	1.52 (2.20- (1.11)	10.3 (11.0- (10.0)	21 (22- (20)	9.2 (10.0- (8.0)			
12	After filtration and chlorination	7.0 (7.2- (6.8)	43 (45- (40)	.000 (.000- (.000)	.039 (.064- (.022)	.05 (.07- (.00)	1.33 (2.00- (.69)	10.5 (11.0- (9.5)	21 (22- (20)	8.8 (10.0- (7.5)		0.8 (1.5- (0.7)	87 (110- (70)
45	Samples taken from taps throughout the distribution system gave results differing insignificantly from these.												
12	Whitacre, River Blythe ...	8.0 (8.6- (7.5)	350 (586- (420)	.063 (.380- (.000)	.302 (.400- (.210)	2.68 (4.25- (1.24)	2.97 (4.58- (1.61)	31 (34- (29)	312 (420- (258)	158 (216- (134)			
12	River Bourne ... ..	7.7 (7.8- (7.4)	501 (526- (482)	.100 (.520- (.020)	.150 (.400- (.060)	3.89 (5.16- (2.62)	1.18 (2.26- (0.43)	47 (57- (38)	337 (396- (292)				
12	After storage in Shustoke Reservoir ... ..	8.3 (8.6- (8.1)	437 (464- (414)	.059 (.180- (.000)	.225 (.304- (.140)	1.58 (2.96- (0.88)	1.17 (1.47- (0.92)	50 (55- (46)	282 (328- (260)				
12	After filtration and chlorination	7.7 (7.9- (7.4)	390 (466- (118)	.005 (.048- (.000)	.072 (.240- (.024)	1.63 (3.95- (.08)	0.6 (.93- (.41)	45 (55- (20)	248 (300- (68)				
4	WELLS: Longbridge ... ..	6.6 (6.7- (6.5)	280 (283- (246)	.000 (.000- (.000)	.014 (.030- (.004)	3.00 (3.95- (2.31)	.06 (.08- (.04)	17.4 (18.5- (17.0)	179 (188- (176)	99 (100- (96)	HARDNESS PERM. 98 (104- (92)	81 (84- (76)	
4	Short Heath ... ..	7.4 (7.5- (7.3)	464 (472- (456)	.000 (.000- (.000)	.019 (.036- (.012)	9.3 (9.9- (8.9)	.20 (.81- (.08)	31.3 (32.0- (30.0)	289 (304- (276)	103 (124- (94)	186 (200- (172)	103 (132- (88)	



## Piped Water Supplies within Dwellinghouses

The provision of water supply within dwellings lacking this amenity is still governed by economic factors. Houses without internal supplies are usually also without sinks and the necessary drainage for the conveyance of sink waste. It will be appreciated very readily that the question of costs must necessarily be one of the deciding factors as to whether a house should be provided with an internal supply or not.

It may be stated that the decision is based upon the estimated future life of the property in question and, normally, no house with a life of less than five years would be considered as a suitable proposition.

At the close of 1953 there were 1,270 houses, known to the Department, lacking an internal water supply. Although this figure represents a decrease of 667 on the 1952 total of 1,937 such houses, which constitutes a considerable improvement, it may be felt that far too many houses are still sub-standard in this particular respect.

The following table of analysis shows clearly that, even if it must be conceded that the figure of 1,270 houses without internal water supply is high, of the 807 mentioned in the first category no less than 662 were left because the tenants did not desire the installation of a piped supply, many of the houses already having a separate supply over a sink in a small detached wash-house.

1. Houses having a suitable life for which notices have not yet been served ... ..	8
2. Houses in respect of which there are notices outstanding	12
3. Houses whose life did not justify expense ... ..	82
4. Houses supplied by wells—usually distant from the nearest main supply... ..	25
5. Houses in which space limitation, or other reasons, made provision impracticable ... ..	10
6. Houses whose occupants did not desire an internal supply	662
7. Houses whose lack of drainage made provision impracticable ... ..	2
8. Houses, for whose acquisition by the Corporation negotiations were proceeding ... ..	6
	<hr/> 807 <hr/>

This figure does not include houses situated in the Redevelopment Areas. These houses are classified as follows :—

1. Houses with an insufficient life ... ..	62
2. Houses whose tenants refused a supply ... ..	201
3. Houses awaiting installation ... ..	200
	<hr/> 463 <hr/>



During 1953 water supplies were installed :—

1. By owners ... .. in 35 houses
2. In vested properties :—
  - (a) By the Corporation ... .. in 531 houses
  - (b) By tenants ... .. in 27 houses

593

### SAMPLING OF SWIMMING BATH WATER

The water from each swimming bath in use was examined chemically and bacteriologically once a month and the relationship between the concentration of free chlorine and the bacteriological reports is shown in the following table :—

<i>Concentration of free chlorine (parts per million)</i>	<i>Number of samples containing no B.Coli and not more than 11 organisms per 1 ml. developing in agar after 2 days at 37°C.</i>	<i>Total Samples</i>	<i>Percentage of excellent results</i>	
Nil	0	—	—	Average 68%
0.1	0	4	0.0	
0.2	3	11	27.3	
0.3	9	10	90.0	
0.4	13	17	76.5	
0.5	11	11	100.0	
0.6	13	15	86.6	Average 94%
0.7	15	19	78.9	
0.8	17	20	85.0	
0.9	1	1	100.0	
1.0	50	52	96.2	
1.1	0	0	—	
1.2	8	8	100.0	
1.3	8	8	100.0	
1.4	6	6	100.0	
1.5	7	8	87.5	
More than 1.5	68	69	98.6	
	229	259		



The standard of purity "no B Coli and not more than 11 organisms per 1 ml." is quite a high one but the need to maintain a high standard is obvious when one realises that during a single week in 1953 over 92,000 people used the Birmingham swimming baths and very many of these were children. During the whole year thirty samples (12%) fell short of our standard of bacterial purity and many of these were only unsatisfactory to a minor degree. B.Coli is quite readily killed by chlorine and was detected only on four occasions.

On reviewing the bacteriological reports in previous years it has been noted that when the concentration of free chlorine has been maintained above 0.5 parts per million, there is likely to be a high degree of bacteriological purity. In 1953, when the concentration of free chlorine was 0.5 parts per million and less, only 64% of the samples gave excellent bacteriological results. Above 0.5 parts per million 94% of the samples were excellent.

During the past two years an effort has been made to improve the concentration of free chlorine and maintain it at a higher level. The percentages of samples having a free chlorine content greater than 0.5 parts per million have been 26% (1951), 45% (1952) and 80% (1953).

Thanks are expressed to Mr. J. Moth, General Manager of the Baths Department for the following statement:—

"Some two years ago the Baths Committee commenced to implement its policy of installing equipment capable of ensuring and maintaining higher concentrations of free chlorine. This type of plant is being gradually introduced throughout the various establishments with a view to achieving the highest possible standards in the best interests of all who attend the City's swimming baths."



## SUPERVISION OF INDUSTRIAL PREMISES

The Senior Smoke and Factories Inspector, with a Deputy and three inspectors, working under the general supervision of the Administrative Medical Officer of Health for General Purposes and the Chief Sanitary Inspector, carry out all duties relating to the control of smoke and fume emission, and of noise and dust nuisance emanating from industrial premises, and they are also responsible for securing implementation of certain of the provisions of the Factories Act, 1937. Two additional inspectors were appointed towards the end of 1952, as it had become apparent that district inspection could not be carried out on an adequate scale by a staff of five officers.

Satisfactory liaison has continued with the Public Works Department in connection with the operation of the Town and Country Planning Act.

In addition to his statutory duties, the smoke inspector spends much of his time in the education of the boiler and furnace operative as part of the City's Clean Air Campaign.

### Smoke Abatement

Advice and practical demonstration in different methods of hand-firing, to suit the type of solid fuel in use, has been given to stokers and furnace-men at various industrial premises during the year. This procedure has, in most cases, resulted in a decrease of the smoke emitted, and has afforded an opportunity of discussing with managements and personnel concerned the courses of instruction available to the boiler and furnace operative through the Regional Fuel Technology Advisory Committee. The response to the efforts of this Committee is, however, still most disappointing, the regional enrolment figures during 1952/53 being only 191, with a decrease to 133 in 1953/54. The number who completed the course in 1953 was only 96. The value of the Stoker's Certificate awarded to candidates successful in the examination promoted by the City and Guilds of London Institute is not as yet appreciated.

In three instances industrial managements have effected the conversion from hand-firing to mechanical burning of coal during the year, following advice by technical officers of the department, and in another instance oil firing was introduced, with the result that the chimneys serving these installations are comparatively smokeless. Three grit arrestors of the modern type have also been installed with excellent results.

The use of unsuitable fuel on apparatus designed for slow combustion gives rise to many of the complaints received, the apparatus being generally used for hot-water production or low-pressure steam process work. The firegrate and combustion space are incapable by design of



burning the volatiles given off by bituminous coal, and when these installations are also used for the incineration of trade refuse the gases resulting from combustion become most objectionable. In seven such cases the occupiers were persuaded to burn smokeless fuel, or to consider the application of mechanical firing.

Early in March many complaints were received of deposits of black dust and smuts affecting residents in the Erdington area. A rapid survey of the area was carried out and samples of the deposit obtained. Observations were made on various local fuel-burning premises with no tangible results, but from the many enquiries made, it seemed that the fine dust was air-borne and had travelled a considerable distance. Three days later complaints were received from the Aston area ; an immediate survey was again carried out and the dust was examined. All the samples were of the same nature and the dust particles similar in size. These complaints were plotted on a map, the wind direction on the dates in question was checked, and the time of the deposit noted. It was apparent that the dust was pulverised fuel partly unconsumed, and in both instances had been deposited between the hours of 7.0 a.m. and 9.0 a.m. The dust having been air-borne for a considerable distance, high chimney stacks were clearly involved. With this knowledge the source of the emissions was established and appropriate remedial measures were taken.

Co-operation with the Regional Fuel Efficiency Branch of the Ministry of Fuel and Power continues, and in several cases where it has been desirable to upgrade a type of fuel in order to overcome the possibility of heavy smoke emissions, the opinion of the Regional Fuel Engineer has been sought with beneficial results.

Methods by which industrial smoke can be reduced have long been known to those engaged on this work, but although these methods tend also to reduce fuel consumption, they have been adopted only in certain progressive industrial establishments. The hand-fired vertical and shell-type boilers are regular offenders, and certain process-furnaces, especially in the metal industry, must be operated with the greatest care and skill, where bituminous coal is used, if smoke emission is to be kept within legal limits.

During the year 3,605 smoke observations were made and instruction was given to stokers in 47 cases.

The education of the general public as to the advantages of an atmosphere which is free of pollution by the products of inefficient combustion of solid fuel is held to be of the greatest importance, and an informed public opinion is believed to be an essential step in the direction of Clean Air. The domestic problem, moreover, must be tackled as well as the industrial and every opportunity is taken, therefore, to include " The Case against Smoke " in the general programme of Health Education undertaken in the Department.



Attention is drawn to the problem in the course of general health talks to women's and other organisations and there has been a small increase in demand for lectures on "The Smoke Menace," "The Smokeless Zone," etc., both from lay and professional associations.

A display panel has also been prepared in the Department, showing all aspects of the problem—industrial and domestic. This is being used for short periods at selected indoor sites and has created quite considerable comment.

Discussions have taken place with the Central Council for Health Education as to the early availability of a suitable film strip—uncomplicated by trade interests—and it is satisfactory to record that the provision of a visual aid such as this is now in hand.

#### DEPOSIT GAUGES

Two deposit gauges are maintained, one near the centre of the City, on the roof above the Chest Clinic in Great Charles Street and one, for comparison, in the grounds of West Heath Sanatorium.

Over the past five years these have shown typical variations as follows :—

#### GREAT CHARLES STREET MONTHLY DEPOSIT OF TOTAL SOLIDS IN TONS PER SQUARE MILE

	1949	1950	1951	1952	1953	Average for month
January	24.69	32.41	75.07	Bottle cracked	24.85	39.25
February	9.50	39.44	75.70	22.93	21.48	33.81
March	30.37	38.04	66.14	69.00	23.50	45.41
April	19.90	41.39	52.80	54.43	71.29	47.96
May	30.26	41.00	60.55	27.89	49.37	41.81
June	4.50	19.45	30.84	23.44	27.66	21.17
July	38.86	18.45	15.27	18.00	14.92	21.10
August	19.60	16.46	16.64	24.45	17.26	18.88
September	10.80	16.51	27.15	26.34	16.92	19.54
October	37.97	18.43	32.39	42.12	28.26	31.83
November	28.50	54.37	51.55	Bottle cracked	17.70	38.03
December	27.60	19.09	27.19	34.09	33.00	28.19
Total recorded for year	282.55	355.04	531.29	342.69 (10 months)	346.21	
Monthly Average for each year	23.55	29.59	44.27	34.27	28.85	Monthly Average for 5 years 32.03



WEST HEATH  
MONTHLY DEPOSIT OF TOTAL SOLIDS IN TONS PER SQUARE MILE

	1949	1950	1951	1952	1953	<i>Average per month</i>
January	5.76	8.55	14.58	Bottle cracked	7.25	9.03
February	4.50	14.01	9.37	5.07	8.76	8.33
March	9.84	7.07	9.03	11.89	10.87	9.74
April	9.50	15.82	14.44	7.88	11.70	11.86
May	14.43	14.79	18.82	13.23	Bottle cracked	15.31
June	2.00	16.74	17.59	13.70	18.45	13.69
July	15.88	16.43	10.30	18.88	14.29	15.15
August	8.90	10.27	11.42	11.15	14.45	11.23
September	7.14	8.58	8.05	13.26	10.70	9.54
October	11.19	10.47	8.46	9.53	11.90	10.31
November	16.20	19.59	15.33	9.59	9.70	14.08
December	9.00	6.10	10.43	17.42	13.50	11.29
Total recorded for year	114.34	148.42	147.82	131.6 (11 months)	131.57 (11 months)	
Monthly Average for each year	9.52	12.36	12.32	11.96	11.96	Monthly Average for 5 years 11.62

The anticipated variation in results includes the following:—

1. In the case of Great Charles Street, the monthly figures have varied between 75.70 (max.) and 4.5 (min.).

2. In the case of West Heath, the monthly figures have varied between 19.59 (max.) and 2.0 (min.).

3. In February, 1951 the Great Charles Street figure (75.70) exceeded the West Heath figure (9.37) by 66.33 tons.

4. In July, 1952 the West Heath figure (18.88) actually exceeded the Great Charles Street figure (18.00) by 0.88 tons.



## Noise Abatement

Under the Birmingham Corporation Act, 1935, Section 58, limited powers are available in relation to noise abatement.

Amongst the matters dealt with under this Section have been complaints from tenants of houses affected by noise caused through the working of fume extractor plant, polishing machinery, diesel electricity generating plant, air compressors and ventilating fans.

The work of the Local Authority is mainly advisory, each case having to be considered individually. Very few industrial establishments are constructed with sufficient insulation to restrict noise emanating from the machinery, and the siting and layout of noisy machinery should always be considered in relation both to the type of work involved, and to the proximity of occupied dwellings, especially when there is any possibility that the process work may be continued by night as well as by day. The majority of complaints received have arisen from the working of such plant by night.

The first line of attack on noise, and in general much the most effective and economical, is to tackle an objectionable noise at the source and find the best means of reducing the volume as much as possible. If this is not practicable, the next step is to consider a feasible method of confining, or smothering the noise in the place where it is generated by suitable means of insulation. This calls for consultation and co-operation with the management of the industrial premises, and it is pleasing to note that in most cases when representations are made, together with suitable advice on how to overcome or minimise the noise complained of, the matter receives consideration, and remedial measures are introduced.

## Fumes

Industrial fumes, sometimes accompanied by effluvia and dust, have again given rise to complaints. Most industrial processes have their own peculiar fumes and odours associated with the treatment of the materials in use. Paint spraying, stove enamelling, and varnish distilling are typical examples. The reclaiming of scrap non-ferrous metals gives rise to considerable fume-emission during the stages of melting, fluxing and pouring. The usual practice is to exhaust the fumes through cowls and ducting into the outer air, or through the louvres in the roof of the casting shop. These fumes, which are mainly zinc oxide, sublime into a dust and cause serious local atmospheric pollution.

Investigations into complaints of a "blue snow" being deposited in the area adjacent to a large works was traced to the use of a cupola furnace for the reclaiming of copper from various copper-bearing residues from industrial trade-processes. The "blue snow" proved to be zinc oxide flakes. Through the co-operation of the management the plant



was shut down for examination and a chemical analysis of the various residues for treatment was carried out, two of which indicated a large zinc content. The cupola was restarted and trials conducted without the suspected zinc-bearing residues. This proved satisfactory, and no further complaints have been received.

### **Factories Act, 1937**

Part 1 of the Act—Health (General Provisions)—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 2,565. This figure included visits paid under Section 9 of the Act, and also routine and advisory visits paid in respect of work in progress following the service of notices.

Co-operation and liaison with the City Engineer and Surveyor's Department in regard to plans of new industrial buildings, when deposited for inspection under the Building Byelaws, has been maintained, with the result that infringements under the Sanitary Accommodation Regulations, 1938 have been remedied at the planning stage.

Several advisory visits have been paid jointly with H.M. Factory Inspectors of the Ministry of Labour and National Service mainly in regard to the alteration and provision of intervening ventilated spaces to sanitary accommodation.

### **Outworkers**

Outworkers' premises are normally the houses of persons wherein light tasks are performed in connection with the making, ornamenting or finishing of certain classes of goods.

Section 110 of the Factories Act, 1937, requires the employers of such persons to supply the local authority with lists of their addresses during the months of February and August in each year.

During 1953, the names of 440 workers engaged in the various trades as detailed below were notified. During the year sanitary inspectors made 819 visits of inspection to premises wherein outwork is executed. The total number of outworkers notified in 1952 was 580, and the figure for the year under review shows a reduction of 140, representing a decrease of 24.14%.



This reduction has occurred principally in the following three classes of work, viz. :—

<i>Trade</i>						<i>Reduction in workers</i>
(a)	Wearing apparel ...	...	...	...	...	62
(b)	Brass and brass articles	...	...	...	...	59
(c)	Box making	...	...	...	...	10
(d)	Various trades	...	...	...	...	9
TOTAL						140

#### LIST OF OUTWORKERS—1953

<i>Nature of Work</i>						<i>Number of Outworkers in August</i>
Wearing apparel	...	...	...	...	...	68
Cabinet and furniture manufacturing	...	...	...	...	...	1
Electro-plating	...	...	...	...	...	31
Brass and brass articles	...	...	...	...	...	167
Fur pulling	...	...	...	...	...	1
Box making	...	...	...	...	...	26
Feather sorting...	...	...	...	...	...	1
Buttons, hair pins, etc.	...	...	...	...	...	139
Stuffed toys	...	...	...	...	...	2
Textile fabrics	...	...	...	...	...	4
TOTAL						440



# **FACTORIES ACTS, 1937 and 1948**

1.—INSPECTIONS FOR PURPOSES OF PROVISIONS AS TO HEALTH (including inspections made by Sanitary 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 .....	739	86	6	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority .....	6,082	2,611	199	—
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises) .....	712	87	—	—
<b>TOTAL .....</b>	<b>7,533</b>	<b>2,784</b>	<b>205</b>	<b>—</b>



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)	To H.M. Inspector (4)	Referred By H.M. Inspector (5)	
Want of cleanliness (S.1)	4	1	—	4	—
Overcrowding (S.2)	—	1	—	—	—
Unreasonable temperature (S.3)	3	4	—	1	—
Inadequate ventilation (S.4)	—	—	—	—	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary conveniences (S.7)	26	29	—	26	—
(a) Insufficient	442	422	—	140	—
(b) Unsuitable or defective	7	5	—	6	—
(c) Not separate for sexes	5	5	5	—	—
Other offences against the Act (not including offences relating to outwork)					
TOTAL	487	467	5	177	—



## TOWN AND COUNTRY PLANNING ACT, 1947

### Supervision of Plans

The continued liaison between this department and the City Engineer and Surveyor has resulted in the maximum use being made of the Town and Country Planning Act, 1947, 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 Sanitary Inspector, and after preliminary examination, are referred to specialist officers in the department where necessary. During the year 1,011 planning applications, together with appropriate plans, were referred to the department and the following officers made comments as indicated :—

	<i>Number of Applications Referred</i>
Sanitary Inspectors ... ..	762
Smoke and Factory Inspectors ... ..	513
Housing Inspectors ... ..	15
Milk and Dairies Inspectors ... ..	6
Shop Inspectors ... ..	11
Maternity and Child Welfare Section ... ..	5

These officers' opinions were collated, and replies prepared by the Chief Sanitary Inspector. In 289 cases it was found necessary to make comment, which was, as far as possible, offered in constructive form. By timely adjustment and adoption of suggestions at the planning stage, much unnecessary alteration of structures and equipment is saved, with beneficial results to the health and comfort of the community in the future.

### Heating Appliances (Fireguards) Act, 1952, and the Heating Appliances (Fireguards) Regulations, 1953

These Regulations which came into operation on the 1st October, 1953, require fireguards to be fitted to gas fires, electric fires and oil heaters which are so designed that they are suitable for use in residential premises, and are of such a type that without a guard there is a likelihood of injury by burning. The standards of construction and fitting for guards, and the tests to be employed in ascertaining whether the guards comply with the standards, are also set out in the Schedule of the Regulations. The equipment necessary for carrying out these prescribed tests has been purchased, and 429 appliances have been examined by the authorised officers.



# INDEX

## A

Accidents, 30  
 Accident ambulances, 167  
 Aged and chronic sick, 179  
 Airport—health control, 54  
 Ambulance service, 165  
 Analytical Laboratory, 55  
 Animal feeding meat, 242  
 Ante natal care—responsibility for, 116, 122  
 Ante natal clinics, 127, 144  
 Area comparability factors, 28  
 Area of City, 27  
 Atmospheric pollution, 305  
 Attendances—maternity and child welfare clinics, 127

## B

Bacon factories, 240  
 Bacteriological laboratory, 64  
 Bakehouses, 228  
 Bathing attendants, 159, 162  
 B.C.G. vaccination, 88  
 Bed bureau, 174  
 Birmingham general, 24  
 Births—incidence and rates, 27, 33, 34, 95  
 Blindness, 222  
 Blindness in young children, 225  
 Blood tests, expectant mothers, 130  
 Breast milk bank, 136

## C

Canal boats, 279  
 Cancer, 31  
 Canteens—mobile, 228  
 Care of deprived children, 194  
 Care of mothers and young children, 127  
 Care of the aged and chronic sick, 179  
 Care of the unmarried mother, 140  
 Catering licences, 229  
 Causes of death, 36

Central redevelopment, 258  
 Cerebral palsy, 217  
 Cesspools, 295  
 Child minders, 193  
 Child population—Immunised, 41  
 Children Act, 1948, 194  
 Children's clinics, 145  
 Child welfare centres, 127  
 Child welfare clinics, 127, 144  
 Chiropody clinic, 132  
 Clean air, 178  
 Clean food campaign, 177  
 Climatology—Birmingham, 24  
 Clinic assistants, 132  
 Clinics—percentage attendance at, 128  
 Common lodging houses, 273  
 Comparability factors, 28  
 Consultation clinics, 132  
 Contacts—tuberculosis, 81  
 Contents, 3  
 Contributors to report, 5  
 Convalescent care, 184  
 Convalescent home for mothers and young babies, 136  
 Cowsheds, 245  
 Cream, 230, 232, 236  
 Crude rates, 33

## D

Daily guardian scheme, 139  
 Dairies, 230, 244  
 Day nurseries, 137  
 Deaths—incidence and rates, 28, 33, 34, 36  
 Death rate, 4 weeks—1 year, 98, 100  
 Dental clinics for the tuberculous, 93  
 Dental service, 132  
 Deposit gauges, 307  
 Deprived children—medical care of, 194  
 Diphtheria, 37  
 Diphtheria immunisation, 37, 39  
 Disinfection after tuberculosis, 85, 290  
 Disinfecting station, 289, 291



## D—continued

- Disinfestation of verminous premises, articles and persons, 289
- District nursing service, 158
- Diversional and occupational therapy, 93
- Domestic help service, 188
- Domiciliary care of the premature infant, 111
- Domiciliary diversional and occupational therapy, 93
- Domiciliary laundry service, 159, 180, 183
- Domiciliary treatment of the tuberculous, 92
- Drainage and sewerage, 292
- Dustbins—provision of, 295
- Dysentery, 41

## E

- Eating houses, 227
- Elmdon airport—health control, 54
- Emergency maternity service, 117, 171
- Employment of the tuberculous, 87
- Encephalitis, 42
- Enforcement section, 266
- Environmental health services, 248
- Epidemiology—general, 37
- Epilepsy, 220
- Expectant mothers—blood tests, 130
- Expectant mothers—mass radiography, 130
- Expectant mothers—relaxation classes, 131

## F

- Factories Act, 1937, 310, 312
- Fairgrounds, 279
- Family service unit, 194
- Fireguards, 314
- Fish, poultry, fruit and vegetable supplies, 240
- Food and drugs, 226
- Food poisoning, 43
- Food preparation premises, 227
- Food shops—retail, 241
- Food—unfit, 242
- Foot health week, 176
- Fumes, 309

## G

- Gas and air analgesia, 152
- Gastro enteritis, 45
- General epidemiology, 37
- Growth of infants, 140

## H

- Harborough Hall—convalescent home for mothers and babies, 136
- Hawkers—registration of, 240
- Health advice bureau, 201, 213
- Health Committee members, 4
- Health education, 175
- Health visiting, 153
- Health visitors' training course, 156
- Health visitors—tuberculosis, 85
- Heating Appliances (Fireguards) Act, 1952, 314
- Home help service, 188
- Home nursing service, 158
- Home population, 27
- Hospital car service, 174
- Hostel accommodation for the tuberculous, 79, 80
- Houses let in lodgings, 272
- House to house inspection, 264
- Housing, 248
- Housing of the tuberculous, 85
- Housing—points scheme, 184, 211
- Human milk bureau, 136

## I

- Ice cream, 230, 234
- Ice lollipops, 233
- Illegitimacy, 27
- Immunisation—diphtheria, 37, 39
- Immunisation—whooping cough, 38
- Industrial premises—supervision of, 305
- Infant mortality, 28, 33, 34, 101
- Infants—mortality among, 96, 98
- Infants, study of the growth of, 140
- Infantile gastro enteritis, 45
- Infectious diseases, 37, 53
- Infectious diseases—follow-up visits, 264
- Influenza, 46
- Internal water supplies within dwelling houses, 302
- International certificates, 54
- Investigations, 140



## K

Kitchen and cooking arrangements—  
nurseries, 137

## L

Laboratory services, 55  
Laundry arrangements—nurseries, 137  
Laundry service, 159, 180, 183  
Legitimacy in relation to mortality  
among infants, 99  
Library service, 93  
Loan of nursing equipment, 180  
Lodging houses—common, 273  
Lollipops, iced, 233

## M

Malaria, 46  
Mass radiography—expectant mothers,  
130  
Mass radiography—nursing staff, 137,  
162  
Maternal mortality, 27, 105  
Maternity and child welfare, 94, 95  
Maternity and child welfare centres,  
127  
Maternity and child welfare clinics—  
percentage attendance at, 128  
Maternity service—emergency, 117,  
171  
Maternity services, 116  
Measles, 46  
Meat and other foods—inspection of,  
239  
Medical care of deprived children, 194  
Meningococcal infection, 47  
Mental Health, 197  
Meteorological observatory, 24  
Middens, 295  
Midwifery—domiciliary, 148  
Midwives Act, 1951, 150  
Midwives—district training, 152  
Milk and dairies, 230, 244  
Milk sampling, 231  
Milk supply, 244  
Milk—tuberculous, 245  
Mobile canteens, 228  
Mortality among infants, 96, 98  
Mortality—infant rates, 28  
Mortality rates, 100

## N

National Assistance Acts, 216  
National Health Service Act :—  
Section 22—Care of mothers and  
young children, 127  
Section 23—Midwifery, 148  
Section 24—Health Visiting, 153  
Section 25—Home nursing, 158  
Section 26—Immunisation and vac-  
cination, 37, 49  
Section 27—Ambulance service, 165  
Section 28—Prevention of illness,  
care and after care, 175  
Section 29—Domestic help, 188  
Section 51—Mental health, 197  
Neonatal death rate, 28, 100  
New houses, 253  
Night watchers' service, 191  
Noise abatement, 309  
Non-notification of tuberculosis, 81  
Nuisances—abatement of, 264  
Nuisances—uncommon, 273  
Nuisances—urgent, 269  
Nurseries and Child Minders' Regula-  
tion Act, 1948, 193  
Nurseries—day, 137  
Nurseries—private, 193  
Nurseries—training, 138  
Nursery staffs—training courses, 138  
Nursery students, 138  
Nurses' agencies, 194  
Nurses—student—training in public  
health, 157  
Nursing attendants, 159  
Nursing equipment—loan of, 180  
Nursing homes, 193  
Nursing staff—mass radiography, 137

## O

Obstructed drains, 270  
Occupational therapy, 93  
Offensive trades, 277  
Ophthalmia neonatorum, 110, 225  
Outworkers, 310  
Overcrowding, 260



## P

Paratyphoid fever, 47  
 Parent guidance clinic, 201, 212  
 Pemphigus neonatorum, 110  
 Perinatal mortality rate, 98, 100, 118  
 Personal health services, 94  
 Pethedine, 152  
 Pig keeping, 277  
 Pleasure fairs, 279  
 Pneumonia, 47  
 Poliomyelitis, 47  
 Pollution of Rotton Park reservoir, 275  
 Population, 27  
 Population, by wards, 34  
 Post natal clinics, 146  
 Pregnancy—virus infections during, 140  
 Premature infants—domiciliary care of, 111  
 Prematurity, 111  
 Prevention of Damage by Pests Act, 1949, 280  
 Prevention of illness, care and after-care, 175  
 Priority rehousing, 184, 211  
 Privy pans and middens, 295  
 Provision of internal water supplies within dwellinghouses, 302  
 Psychiatric social service, 200, 202, 203, 210  
 Public Health (Imported Food) Regulations, 54  
 Public health laboratory service, 64  
 Public health officers—senior—duties of, 18  
 Puerperal pyrexia and puerperal sepsis, 109

## R

Rag Flock and Other Filling Materials Act, 1951, 286  
 Rainfall details, 26  
 Recuperative convalescent care, 184  
 Redevelopment areas, 258

Refuse collection and disposal, 294  
 Rehabilitation of the tuberculous, 86  
 Relaxation classes—expectant mothers 131  
 Remedial exercise classes, 131  
 Remploi factory, 80  
 Rent Restrictions Acts, 270  
 Residential nursery for child contacts of tuberculosis, 83  
 Responsibility for ante natal care, 116, 122  
 Rodent control, 280  
 Rotton Park reservoir—pollution of, 275

## S

Salvage and refuse collection, 294  
 Sampling of Corporation water, 298  
 Sampling of swimming bath water, 303  
 Sanitary inspection, 262  
 Scabies, 48, 291  
 Scarlet fever, 49  
 Sewerage, 292  
 Sewing classes, 132  
 Shell fish, 238  
 Shops, supervision of, 288  
 Skilts—nursery for child contacts of tuberculosis, 283  
 Slaughterhouses, 239  
 Slum clearance, 255  
 Smallpox, 49  
 Smoke abatement, 305  
 Spastics, 217  
 Staff, 7  
 Staff—senior—qualifications and duties, 18  
 Statistics—vital, 27, 35  
 Stillbirths, 27, 33, 100  
 Suicide, 31  
 Sunshine details, 26  
 Supervision of industrial premises, 305  
 Swimming bath water—sampling of, 303  
 Synthetic cream, 230, 236



## T

- Temperature details, 26
- Tents, vans and sheds, 276
- Tips, 278
- Toddlers' clinics, 146
- Town and Country Planning Act, 1947, 314
- Training courses for nursery staff, 138
- Training of health visitors, 156
- Training nurseries, 138
- Tuberculosis, 67
- Tuberculosis and the milk supply, 245
- Tuberculosis—B.C.G. vaccination, 88
- Tuberculosis—contacts, 81
- Tuberculosis—disinfection after, 85, 290
- Tuberculosis—domiciliary diversional and occupational therapy, 93
- Tuberculosis—domiciliary treatment of, 92
- Tuberculosis—health visitors, 85
- Tuberculosis—non-notification of, 81
- Tuberculosis—residential nursery for child contacts, 83
- Tuberculous—dental clinic, 93
- Tuberculous—domiciliary library service, 93
- Tuberculous—employment of, 87
- Tuberculous—hostels for, 79, 80
- Tuberculous—housing of, 85
- Tuberculous—rehabilitation of, 80, 86
- Typhoid fever, 49

## U

- Uncommon nuisances, 273
- Unmarried mothers—care of, 140
- Urgent nuisances, 269

## V

- Vaccination, 49
- Vaccination, B.C.G., 88
- Vaccination certificates, 54
- Venereal diseases, 50, 66
- Verminous premises, articles and persons, 289
- Veterinary and food inspection, 239
- Virus infections during pregnancy, 140
- Visitors to Department, 16, 179
- Vital statistics, 27, 35
- Voluntary workers, 132

## W

- Ward populations, 34
- Water—sampling of, 298
- Water—sampling of swimming bath water, 303
- Water supplies—provision of internal, 302
- Water supply, 296
- Weather details, 24
- Welfare centres, 127
- Welfare centres, voluntary workers, 132
- Wells, 300
- Welfare of the aged, 179
- Whooping cough, 52
- Whooping cough immunisation, 38, 52
- Winson Green Prison—after care, 178



