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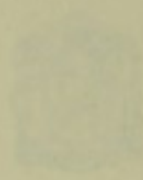
CITY OF BIRMINGHAM

REPORT OF THE
MEDICAL OFFICER
OF HEALTH

FOR THE YEAR

1952





CITY OF BIRMINGHAM

REPORT OF THE
MEDICAL OFFICER
OF HEALTH

FOR THE YEAR

1922

CONTENTS

1. Members of the Health Committee
2. Staff of the Public Health Department
3. Medical Officer of Health's Introduction and Special Survey of Local Health Services provided under the National Health Service Acts.
4. Birmingham—general—climatology
5. Vital Statistics
6. General Epidemiology
7. Laboratory Services
 - (a) Analytical Laboratory
 - (b) Public Health Laboratory Service
8. Tuberculosis
9. Maternity and Child Welfare
10. National Health Service Acts
11. National Assistance Acts
12. Food and Drugs
13. Environmental Conditions
 - (a) Housing
 - (b) Sanitary Inspection
 - (c) Supervision of Industrial Premises

MEMBERS OF THE HEALTH COMMITTEE

Municipal Year, 1952-53

Chairman ALDERMAN G. C. BARROW.

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

THE LORD MAYOR. (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.

ALDERMAN MRS. F. B. K. SIMMONS. (Resigned 8th July, 1952)

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

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

COUNCILLOR MRS. A. BILLINGTON. (Appointed 29th July, 1952)

COUNCILLOR L. CHAFFEY, J.P.

COUNCILLOR MRS. J. COLE.

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. (Appointed 2nd December, 1952)

COUNCILLOR W. A. N. JONES.

COUNCILLOR J. M. MORRIN. (Resigned 3rd October, 1952)

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

COUNCILLOR MRS. H. L. RADFORD.

COUNCILLOR J. SIMS.

COUNCILLOR W. F. SMITH.

COUNCILLOR F. B. WILLMOTT.

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	63
Vital Statistics.	
By DR. E. L. M. MILLAR	66
General Epidemiology.	
By DR. E. L. M. MILLAR	77
Laboratory Services :—	
(a) Analytical Laboratory.	
By MR. H. H. BAGNALL	95
(b) Public Health Laboratory Service.	
By DR. B. R. SANDIFORD,	
Director, Public Health Laboratory, Birmingham	102
Tuberculosis.	
By DR. J. E. GEDDES	105
Maternity and Child Welfare.	
By DR. JEAN M. MACKINTOSH	123
National Health Service Acts	196
Care of Mothers and Young Children—Section 22.	} <i>See</i> Maternity and Child Welfare.
Midwifery—Section 23.	
Health Visiting—Section 24.	
Home Nursing—Section 25.	
Vaccination and Immunisation—Section 26.	
(<i>See</i> General Epidemiology)	77
Ambulance Service—Section 27.	
By MR. H. W. COLEMAN,	
Chief Officer, Fire and Ambulance Service	196
Prevention of Illness, Care and After-Care—Section 28.	
By Various Authors	205
Domestic Help—Section 29	
(<i>See</i> Maternity and Child Welfare)	191
Mental Health Services—Section 51.	
By DR. W. NICOL	211

National Assistance Acts.								
By DR. W. NICOL	.....	.....	.....	.....	.....	.....	.....	224
Food and Drugs.								
By DR. W. R. MARTINE <i>and</i>								
MR. E. N. WAKELIN	.....	.....	.....	.....	.....	.....	.....	226
Environmental Conditions								
Housing								
By MR. D. J. E. LAMB	.....	.....	.....	.....	.....	.....	.....	250
Sanitary Inspection								
By MR. E. N. WAKELIN	.....	.....	.....	.....	.....	.....	.....	265
Supervision of Industrial Premises								
By DR. W. R. MARTINE	.....	.....	.....	.....	.....	.....	.....	300

STAFF OF THE PUBLIC HEALTH DEPARTMENT AS AT 31st DECEMBER, 1952

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, M.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	103
----------------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-----

Miscellaneous Staff :

Architectural Staff	1
---------------------	-------	-------	-------	-------	-------	-------	-------	-------	-------	---

Bacchus Road Garage—

Chauffeurs, Drivers, and Mechanics	12
------------------------------------	-------	-------	-------	-------	-------	-------	-------	-------	-------	----

Bacchus Road Laundry—

Laundry Assistants	31
--------------------	-------	-------	-------	-------	-------	-------	-------	-------	-------	----

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 Officers for Maternity and Child Welfare :

F. M. EARLE, M.D., Ch.B., D.C.H., D.P.H.

V. J. M. STARK, M.D., Ch.B., 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.

E. LUCEY, M.B., B.Ch., B.A.O., D.C.H., L.M., D.P.H.

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

Part-time Assistant Medical Officers : 28

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	33
Senior Health Visitors	4
Health Visitors	49
Health Visitors (Part-time)	10
Pupil Health Visitors	13
Psychiatric Social Worker	1
Clinic Nurse	1
Clinic Nurses (Part-time)	8
Dental Nurse	1
Physiotherapists (Part-time)	2
Chiropodist (Part-time)	1
Nurse—Care of the Aged (part-time)	1

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 E. E. JONES, S.R.N., S.C.M., H.V.Cert., M.T.D., Queen's Nurse.

Municipal Midwives	.....	.....	.....	.....	.....	.....	.....	.....	120
Maternity Nurses	.....	.....	.....	.....	.....	.....	.....	.....	16

Dentists :

MR. F. J. HASTILOW, L.D.S. (Part-time).

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

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

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

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

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
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Day and 24-hour Nurseries' Staff :

Matrons	37
Deputy Matrons	35
Superintendents of Wardens	2
Wardens	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
Staff Nursery Nurses	.....	.....	.....	.....	.....	.....	.....	.....	.....	112
State Enrolled Assistant Nurses	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Nursery Assistants	.....	.....	.....	.....	.....	.....	.....	.....	.....	178
Student Nurses	.....	.....	.....	.....	.....	.....	.....	.....	.....	143

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	.....	.....	.....	.....	.....	.....	.....	.....	.....	9
Nursing Staff	.....	.....	.....	.....	.....	.....	.....	.....	.....	88
Nursing Staff, part-time	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
Student District Nurses	.....	.....	.....	.....	.....	.....	.....	.....	.....	9

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

Matron :

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

Other Nursing Staff	1
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Clerical Staff	28
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Miscellaneous Staff :

Clinic Assistants	49
Domestic Helps	93
Domestic Helps (Part-time)	394
Care of the Aged—Night Watchers	20
Home Nursing Domestic Staff (Full and Part-time)	20
Home Nursing Attendants	15
Caretakers	34
Curator	1
Cleaners (Full and Part-time)	160
Cooks, Cook-housekeepers and Assistants	53
Gardeners (Full and Part-time)	10
Porters	3
Seamstresses	3
Storekeepers	2
Van drivers	3

Harborough Hall Convalescent Home for Mothers and Babies :

Matron :

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

Other Nursing Staff	3
Domestic Staff (Full and Part-time)	15
Curator	1
Gardener	1

DIPHTHERIA IMMUNISATION DEPARTMENT

Assistant Administrative Medical Officer of Health for Diphtheria Immunisation :

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

Nursing Staff	2
Nursing Staff (Part-time)	6
Clerical Staff	7

MENTAL HEALTH DEPARTMENT

Administrative Medical Officer of Health for Mental Health :

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

Chief Inspector :

T. H. MIDDLETON.

Senior Inspector and Petitioning Officer:

F. R. C. BATEMAN.

Inspector (Male)	1
Inspectors (Female)	2
Clerical Staff	5

Senior Psychiatric Social Worker :

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

Social Workers	3
Clerical Staff	1

Chief Authorised Officer :

E. J. DICKINSON.

Deputy Chief Authorised Officer :

J. W. GREEN.

Duly Authorised Officers

3

Clerical Staff

1

CHEST CLINIC.

After-Care Department.

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).

J. M. TAYLOR, M.D.

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

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

Tuberculosis Visitors

12

Domiciliary Diversional Therapists

2

Clerical Staff

11

Residential Nursery for Child Contacts of Tuberculosis—Skills

Matron :

MISS K. W. JAMES

Other Nursing Staff

11

Warden

1

Domestic Staff (Full and Part-time)

12

Gardener-Handyman

1

Porter

1

STAFF WELFARE SURGERIES.

Medical Officer for Staff Welfare :

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

Staff

3

SANITARY INSPECTORS' DEPARTMENT.

Chief Sanitary Inspector :

E. N. WAKELIN, M.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

39

Pupil Sanitary Inspectors

4

Smoke and Factories Inspectors

5

Milk and Dairies Inspectors

5

Milk Samplers	2
Rodent Officers	3
Water and Canal Boats Inspector	1
Shops Act Inspectors	4
Food and Drugs Inspectors	4
Clerical Staff	32
<i>Miscellaneous Staff :</i>	
Disinfecting Staff	11
Court Cleansing Staff	3
Rodent Control Staff	28
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 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' DEPARTMENT.

Chief Housing Inspector :

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

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	19

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	1

WORKS DEPARTMENT.

Manager :

C. K. SMITH.

Administrative Assistant	1
Clerks of Works	2
General Foreman	1
Clerical Staff	6
Tradesmen	53

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

June, 1953.

*To the Chairman and Members,
Health Committee.*

I have pleasure in presenting my report on the health of the City for the year 1952, which includes a special Survey of the Services as requested by the Ministry of Health. As in previous reports, my colleagues have been given the opportunity to freely express their views and with these I concur while retaining responsibility for the whole of the report.

The Registrar-General estimated that the home population of the City was 1,119,000, an increase of 8,100 on the figure for 1951.

The natural increase of the population (that is, the excess of births over deaths) during the year was 6,842. The total number of births in 1952 was 18,301 comprising 9,326 males and 8,975 females, giving a birth-rate per thousand of the population of 16·4 as contrasted with a figure of 16·5 for 1951. Of the total births 882 were illegitimate or 4·82% as compared with 869 or 4·73% in 1951.

The five principal killing diseases continue to be diseases of the circulatory system 33·8%, cancer 18·6%, nervous system 14·3%, respiratory system 11·0% and diseases of the digestive system 3·8%. The respective comparable figures for 1951 were 33·1%, 15·9%, 13·1%, 13·5% and 3·9%.

The total number of deaths in 1952 was 11,459 giving a general death-rate of 10·24 compared with an 11·4 death-rate for 1951. In England and Wales in 1952 the death-rate was 11·3.

MATERNAL AND CHILD HEALTH

During the past years a great improvement has been effected in the environmental conditions of the population through improvements in sanitation quite apart from the efforts made by the individual. Now the time is upon us when further improvements will depend very largely upon the citizen himself who must actively participate in the campaign for better health in order that further progress can be made. We have

left the era of sanitary engineering and have entered into one of personal hygiene. These remarks are particularly relevant in relation to Maternal and Child Health, for surely the only way in which we can succeed in laying a sound foundation for good health for our citizens is by enabling mothers and fathers to take an active part in attaining good health for themselves and their children ; in other words, helping them to help themselves.

The City Council have over many years taken a great interest and pride in the development of their health services for mothers and young children and the results which have been achieved are a great cause for satisfaction and are, no doubt, one of the reasons why every year visitors from all over the world come to see our work. Forty years ago in Birmingham the death rate among infants between the ages of four weeks and one year was thirteen times higher than it was in 1952. The death rate among babies in this age period is greatly influenced by the environment. All the workers in the Public Health field have played their part in improving the conditions in which people live, but as far as mothers and young babies are concerned, the domiciliary visiting of the health visitor has made a major contribution. Some of the difficulties they have overcome as the years passed are referred to in the section on Health Visiting prepared by Dr. Mackintosh.

On the other hand, among the very young babies under four weeks, whose well-being is so much influenced by the health of the mother before and during birth, the death rate has only been reduced to one third of what it was forty years ago. The reasons for slower progress in this age group are various. Medical knowledge as to why these babies die is increasing yearly but cannot be used with full effect unless we have the active co-operation of the parents.

Sixty-two per cent. of the babies who die under four weeks of age are prematurely born. The City Council quickly recognised the importance of specialised care for premature infants and as early as 1930 established a special unit for the care of premature infants at Sorrento Maternity Hospital. The work done for premature infants in this City has become world renowned and although the care of these infants in hospital is no longer the responsibility of the Council, the closest links still continue between the work done there and in the special domiciliary service for the care of the premature babies administered by this Department.

Much anxiety was expressed at the beginning of the National Health Service as to the harm which might be done to the health and well-being of mothers and young children by the division of responsibility for services for their welfare between local authority, executive council and regional hospital board. I am glad to be able to record that here, as elsewhere in the Department, the liaison between all concerned has been close and

cordial and that 1952 has seen the lowest mortality rate for infants ever recorded in this City, viz. 27 per 1,000 live births as compared with 30 in 1951.

That these services are fully appreciated is evidenced by the fact that the health visitors, with rare exceptions, are welcomed in every home in the City and that in spite of the long distances which, for the time being until additional provision is made, some mothers have to travel, three-quarters of the babies born in the City are brought to the welfare centres.

Encouraging as this progress is, we have still some way to go before we achieve the low mortality records reached by some other cities in this country and abroad. I am confident however, that if all concerned continue to put into the work the same energy and enthusiasm as has been done in the past, this gap will be narrowed and in time closed. Clearly success, however, is dependent on the active interest and co-operation of every citizen.

DIPHTHERIA IMMUNISATION has continued throughout the year and some 36,662 children were immunised or given booster doses of diphtheria prophylactic.

We are now reaping the full benefits of the diphtheria immunisation campaign and during 1952 only 13 cases of diphtheria occurred in the City with 2 deaths, both unimmunised. To appreciate this we may compare these figures with those 11 years ago, when 1,415 cases occurred with 85 deaths.

POLIOMYELITIS

Throughout the world this condition is slowly but very surely assuming a significance as a major infectious disease against which it is hoped there will eventually be available not only a serum for treatment but a preventive inoculation to immunise the population. Europe was involved during 1952, the incidence particularly striking Denmark, Western Germany and Belgium, while England and Wales shewed an increase of notified cases as compared with 1951. In the United States twice as many cases were notified as compared with those notified in 1951. I am pleased to record that only 48 cases occurred in the City during the year with 4 deaths. During 1951 there were 52 cases with 2 deaths.

FOOD POISONING

There was a decrease in the incidence of recorded cases of this disease which reflects the most valuable work on the prevention of the disease which is carried out by the staff under Dr. Martine's direction :—

		1950	1951	1952
Notified and ascertained ...	...	163	116	89
Deaths ...	...	1	—	—

VISITORS

Many visitors from all parts of the world have been welcomed to see our day-to-day work and administration and the Health Committee can justly feel proud that their work is of international repute.

It again gives me pleasure to express my thanks to the Chairman and members of the Health Committee for the courtesy and kindness with which they have considered the various suggestions and recommendations made to them by me, and also my grateful appreciation, not only for the loyal and efficient work of the staff of the Health Department but also for the warm and friendly atmosphere existing throughout the Department. The volume of work described hereafter could not have reached its present standard were it not for the unstinted efforts of all members of the staff.

MATTHEW BURN.

SPECIAL SURVEY OF LOCAL HEALTH SERVICES PROVIDED UNDER THE NATIONAL HEALTH SERVICE ACTS.

GENERAL

1. ADMINISTRATION

The implementation of the proposals drawn up in accordance with the directives of the Ministry of Health in relation to the services to be provided by the Local Health Authority under the National Health Service Act, 1946 did not materially affect the administrative structure of the head office of the Health Department, despite the fact that the Act dispersed to a large extent the services provided by the Birmingham Local Health Authority possibly to a greater degree than it did elsewhere.

In Birmingham, prior to the inception of the National Health Service Act, the Health Committee were responsible for the administration of two large general hospitals (namely, Dudley Road Hospital and Selly Oak Hospital and Infirmary), Little Bromwich Infectious Diseases Hospital, four maternity homes, sanatoria at Yardley Green Road, West Heath, Romsley Hill and Salterley Grange, and the Central Mass Radiography Unit, together with a Babies' Hospital at Canwell. It will be observed, therefore, that there were no fewer than thirteen institutions actually transferred to the Regional Hospital Board on the inception of the National Health Service Act, together with proposals in relation to Marston Green Maternity Hospital (now in being), a general hospital on the north-west side of the City and the sanatorium at Kyre Park, near Tenbury, recently opened. The Anti-tuberculosis Centre is now utilised jointly by the Regional Hospital Board and the Local Health Authority.

Mention has been made of the fact that the proposals drawn up did not materially affect the administrative structure of the Department. The Deputy Medical Officer of Health as part of his appointment was Hospitals Officer and responsible to the Health Committee for the administration of the General Hospital Services of the Local Authority. The hospitals, however, were to a large degree self-contained administratively (matters of finance being dealt with at Head Office) and the only staff affected, other than hospital staffs, by the transfer of the hospitals was the Deputy Medical Officer of Health as Hospitals Officer and the Senior Assistant Medical Officer of Health for Maternity and Child Welfare who was responsible for the day to day administration and organisation of the maternity homes and Babies' Hospital. In the case of the Tuberculosis

Service, the Chief Clinical Tuberculosis Officer was redesignated Senior Tuberculosis Officer, 2/11ths of his service being apportioned to the Prevention and After-care Services provided for the tuberculous under Section 28 of the National Health Service Act. Some of the accounting staff of the Head Office were transferred to the Hospital Service.

It was possible with the staff available at the Head Office, and one or two additions, to implement the proposals submitted to the Minister under Section 20 of the National Health Service Act, and to cater for the additional services—Ambulance Service, Home Nursing Service, Convalescent Care, the Mental Health Service and the provision of Health Centres. The Ambulance Service, prior to the 5th July, 1948, was operated on a voluntary basis by the Birmingham Hospitals Contributory Association and the St. John Ambulance Brigade. The Home Nursing Service was undertaken by the City of Birmingham District Nursing Association; a large-scale scheme for convalescent care was operated by the Birmingham Hospital Saturday Fund; and the Mental Health Service, as it then existed, comprised a Department dealing with the Mental Deficiency Acts, the Lunacy and Mental Treatment Acts were delegated to the Public Assistance Committee, and after-care work was undertaken by a voluntary association—the National Association for Mental Health.

The policy which has been adopted in the administration and organisation of the Local Health Services provided by this Authority has, it is felt, proved successful. Complete co-ordination has been effected, and the staff concerned have been kept fully conversant with all the schemes which have been put into operation whether or not a scheme has been one of immediate concern to them. This procedure has enabled the vital interlocking organisation to be utilised to the full advantage not only of the staff but of the community. It has obviated a state of isolation which could quite easily occur where there are a number of separate schemes involving various sections of a large Department. I have retained the personal supervision in relation to policy, but at the same time have given to each section head within the Department a personal responsibility to me for the day to day administration and organisation of the services delegated to their control. This system operates in the following manner :

<i>Officer concerned</i>	<i>Responsible for Services under Sect. of N.H.S. Act</i>
Deputy Medical Officer of Health	Section 21 (Health Centres); Section 26 (Vaccination and Immunisation); Section 27 (Ambulance Services) in liaison with Chief Fire and Ambulance Officer; Section 28 (part), (Prevention of illness, care and after-care).
Administrative Medical Officer of Health for Maternity and Child Welfare	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) Section 29 (Domestic Help).

<i>Officer concerned</i>	<i>Responsible for Services under Sect. of N.H.S. Act</i>
Administrative Medical Officer of Health for Mental Health	Section 28 (part of), (Prevention of illness, care and after-care) ; Section 51 (Mental Health).
Senior Tuberculosis Officer (2/11ths Local Health Authority)	Section 28 (Prevention of illness, care and after-care) Tuberculosis.
(This is a dual appointment. The Senior Tuberculosis Officer is also Chest Physician, Regional Hospital Board, 9/11ths of his time)	

The above reveals the duties of the Senior Medical Staff of the Department concerned with the various sections of the National Health Service Act. They are responsible for ensuring that the services provide the maximum benefit to the community, at the same time bearing in mind the financial implications involved. The Secretary-Accountant of the Department is responsible for this latter side and works in close liaison with the Medical Officers concerned in the provision of the services—and on matters of policy, with me. By the above administrative arrangements and by an adequately organised cross reference system within the Department, plus the close relationship between the medical staff and the lay staff involved, it has been possible to put into being a system which draws together all the relative factors likely to be involved in dealing with specific cases.

The references so far have dealt specifically with those particular sections of the Department intimately concerned with the day to day administration of the services under the National Health Service Act. The organisation of the whole Department is such that personnel engaged in the environmental services under the Public Health and allied Acts are utilised as occasion arises in the investigation of cases in need. The sanitary inspector, for example, whilst undertaking his routine inspections in relation to housing defects, may observe during his visit a person who would benefit by the provision of assistance within the scope of the Local Authority's social service. Details are conveyed to the appropriate section of the Department. Similar action is taken also in reverse. These are examples of the close liaison which takes place in the provision of all services administered by the Department. It can be said without hesitation that there are no gaps in the administrative machinery whereby persons in need who have been referred to the Department are not adequately dealt with, and similarly so in cases which fall outside the services of the Health Department but within the scope of a social service provided by another Corporation department, statutory body or voluntary association. There are no joint arrangements with other Local Health Authorities, but there is the most intimate co-operation, as indeed there must be in such a conglomeration of urban areas as there is around Birmingham.

2. CO-ORDINATION AND CO-OPERATION WITH OTHER PARTS OF THE NATIONAL HEALTH SERVICE

In Birmingham we were fortunate in that a number of the Local Authority officers were appointed to senior administrative positions within the hospital or general practitioner services and were known personally to members of the Local Authority and officials alike. This applied in like manner to subordinate appointments. Great benefit has accrued from these appointments, resulting in maximum co-operation. Not only have officers been aware of the administrative arrangements within the Health Department prior to their new appointments but additionally they had knowledge of the appropriate person to contact within the Department. The liaison which ensued was often the means of overcoming at the inception of the service, what appeared to be great obstacles. By discussion and conjoint action the results have provided not only a tidy administration but have benefited the community.

(i) General Arrangements for Co-ordination between the Local Health Authority and the Hospital and Specialist Services

(a) **At Local Health Authority Level.** There are 27 members of the Local Health Authority who are also members of the Regional Hospital Board, Hospital Management Committees or of the Board of Governors of the United Birmingham Hospitals.

(b) **At Officer Level.** The Medical Officer of Health is a member of the Liaison Committee of the Regional Hospital Board, a member of the Birmingham (Sanatoria) Group Hospital Management Committee and also a member of the Medical Sub-Committee of that Committee. The Administrative Medical Officer of Health for Maternity and Child Welfare is a member of a Sub-Committee of the Regional Hospital Board concerned with maternity services. The Senior Tuberculosis Officer (part-time Local Health Authority and Regional Hospital Board) is a member of the Sanatoria Group Hospital Management Committee and also attends the Sub-Committee of the Health Committee dealing with the domiciliary and after care of the tuberculous.

The representation at Local Authority member level and at officer level is therefore the means of effecting the vital link between the Local Authority and the Hospital Services. This is reflected by the arrangements which are so often put into operation for joint discussion between the two Authorities on matters of policy prior to reference being made to the Ministry. These conferences have not only related to the Health Services but in a number of cases to matters of common concern namely Civil Defence and the closely allied Ambulance Service in time of war. There has been established mutual goodwill between the two bodies and their officers which has brought into effect conjoint action with advantages to the community.

Approach between officers in every field is so good that the existence of separate statutory bodies is hardly apparent.

Arrangements existing between Local Health Authority Medical Officers and those of the Hospital and Specialist Services

Medical Officers of the MATERNITY AND CHILD WELFARE section of the Health Department, under arrangements made in connection with the Institute of Child Health, attend children's clinics at the Children's Hospital. Medical Officers of the Children's Hospital undertake clinics at the Local Health Authority's Welfare Centres. The object of this arrangement is to maintain a balanced outlook on the one hand for physicians engaged in the curative aspect of child health as members of the staff of the Children's Hospital, and on the other for medical officers of the Local Health Authority specialising in the preventative aspect of child health. This is achieved by four Medical Officers of the Health Department attending in rotation for two sessions per week at the Children's Hospital over a period of a year and by registrars of the Children's Hospital acting as medical officers at child welfare clinics on one half day per week. The number of registrars so attending varies from time to time, at the present there are only two. Two specialist anaesthetists are employed on a weekly sessional basis for anaesthetising mothers and young children who are receiving dental treatment.

The utmost co-operation takes place on all matters of GENERAL EPIDEMIOLOGY between the appropriate medical staff of the Department and the medical staff of the Infectious Diseases Hospital. The medical officers of the Department are available where a diagnosis is doubtful. Cases admitted to hospital as diphtheria are the subject of investigation by the Department in relation to immunisation history. Outbreaks of paratyphoid, etc., are jointly investigated between the Department's medical officers, medical officers of the Hospital, the general practitioners and the medical staff of the Public Health Laboratory Service. The result of this co-operation is that immediate consultation takes place on any cases of doubt either in the hospital or in the home and all those likely to be concerned are rapidly notified when epidemiological problems arise.

In the field of MENTAL HEALTH proposals were put forward to the Health Committee for the setting up of a clinic in the City to deal with the class of person for whom little appears to be done at the present time. This class is the over wrought, the anxious and those who are finding that the stress of life is gradually becoming too great a burden, and eventually—maybe after years of shouldering alone this stress—they become so mentally upset as to necessitate referral to either a mental hospital clinic for psychiatric investigation or become voluntary or certified patients. When this stage has been reached we have failed in the work before us, namely, prevention. Considerable thought was given to the setting up of this clinic. In the first instance, the medical superintendents of the Mental Hospitals and representatives of the Local Medical Committee were consulted. All were enthusiastic and offered their active

support to the scheme. At the same time, being of the opinion that we cannot separate the physical, the mental and the spiritual in human personality, an approach to the Clerical profession was also made—the Church of England, Non-Conformist, Roman Catholic and Jewish faiths—and they were similarly enthusiastic and offered their support. This clinic, when set up, will be under the supervision of the Administrative Medical Officer of Health for Mental Health, in active association with members of the Clerical profession.

In the reference to the TUBERCULOSIS SERVICE earlier in this Survey mention was made of dual appointments which revealed the close link between the preventative and curative measures adopted in connection with this particular disease. The Local Health Authority undertakes the payment of 2/11ths of the salaries of no fewer than eight Chest Physicians, including the Senior Tuberculosis Officer. Thus, whilst the Local Health Authority do not employ any full-time medical officer in connection with the preventive work, effective co-ordination exists between the two aspects of the Tuberculosis Service. This arrangement enables the Chest Physician to have full knowledge not only of the clinical condition of the patient whilst under his immediate care but of the arrangements to be made for the patient's domiciliary welfare. Care and after care are thus intimately linked with treatment.

A further link with the treatment aspect of the National Health Service is the question of rehabilitation of the tuberculous. In conjunction with the Disablement Rehabilitation Officer of the Ministry of Labour and National Service, and Industrial Medical Officers, a Medical Interviewing Committee meets at the Chest Clinic each week, and all patients whose return to work is under consideration are referred to this Committee. The constitution of the Committee is :—

- One Chest Physician (also representing the Health Authority) ;
- One Industrial Medical Officer ; and
- Disablement Rehabilitation Officer.

Some indication of the scope of the work undertaken by this Committee is revealed by the number interviewed, *i.e.*, in 1950, 214 and during 1951, 346.

The domiciliary treatment of the tuberculous involves both the chest physician and the general practitioner. Mention of the action which is taken jointly by these two services is made later when dealing with nurses employed by the Local Health Authority under this particular item.

An arrangement between the Health Department, Hospital Authority, General Practitioner Service and Welfare Department of the Council exists for the CARE OF THE AGED ; this arrangement is to help as far as possible those old persons requiring hospital admission but who, owing to the lack of institutional accommodation, have to remain in their homes.

The Department's medical officers and special health visitors are involved to the extent that, at the request of the hospital medical staff who have previously investigated the circumstances, they visit the case and provide such help as is available through the Department for the period of time during which the aged person may have to remain at home whilst awaiting admission to hospital.

The HOUSING CONDITIONS of patients undergoing treatment in hospital are made known to the Department by the physician or surgeon in charge of the case where they are of the opinion that the patient's housing circumstances would be inimical to recovery. These cases are investigated by medical officers of the Department and help is afforded in furthering early re-housing of the case under the points allocation scheme.

(ii) General arrangements between Local Health Authority and General Practitioner Services

(a) **At Local Health Authority Level.** There are seven members of the Local Health Authority who are also members of the Executive Council and the Sub-Committees thereof.

(b) **At Officer Level.** The Medical Officer of Health is a member of the Executive Council, and also of the Local Medical Committee. The latter Committee is also attended by other medical officers of the Department's staff when specific matters appertaining to their work are to be discussed.

As with the hospital services, there is complete co-ordination and co-operation between the Local Authority members and members of the Executive Council, and between the officers of the two bodies. The policy of joint discussion and joint action is here again adopted with benefit to the service administratively and also to the community.

Arrangements existing between the Local Health Authority Medical Officers and the General Medical Practitioners

Arrangements have been in existence for a number of years as part of the MATERNITY AND CHILD WELFARE Section whereby facilities are offered to general practitioners to conduct ante-natal or infant clinics in welfare centres. Medical officers of this section, under arrangements made with general practitioners, provide facilities at welfare centres for expectant mothers attending for relaxation classes, blood tests, and to make arrangements for mass-radiography examination.

In connection with GENERAL EPIDEMIOLOGY medical officers at the request of general practitioners afford assistance in the diagnosis of doubtful cases.

The Administrative Medical Officer of Health for MENTAL HEALTH is responsible for the service and for making available to the general practitioner, not only his advice on any matter of doubt, but to bring into play the services of that section dealing with the Lunacy and Mental Treatment Acts, the Mental Deficiency Acts or the Psychiatric Social Service (a sub-section of the Mental Health Service). This latter service deals with cases where no statutory action is necessary but the person is thought to be in need of care.

Meetings are held by chest physicians to which general practitioners are invited where their TUBERCULOUS CASES are under discussion. During 1952 a general practitioners' refresher course in Tuberculosis was held at Yardley Green Hospital, the lecturers being members of the Tuberculosis Service. At the course special attention was given, not only to the treatment of tuberculosis, but in particular to methods of prevention and after-care. It is intended, in conjunction with the University, to repeat such courses at regular intervals.

Mention has been made under the heading dealing with arrangements in connection with the hospital services of the manner in which the Department's medical officers play their part in the services jointly provided for the WELFARE OF THE AGED. It will be noted that there is an arrangement between the Hospital Service, the Local Authority and the General Practitioner Service.

Many investigations into HOUSING CONDITIONS are undertaken at request of general practitioners by medical officers of the Department where the practitioner feels that advice and/or recommendations for alternative accommodation would be of value and assist in the treatment of a patient. Housing defects notified by the general practitioner are the subject of investigation by the Chief Sanitary Inspector's staff.

(iii) The arrangements existing between Local Health Authority Health Visitors, the Hospital Services and General Practitioner Services

For ease of reference details of the arrangements made in this respect are included in the subsequent item "Health Visiting." Mention can here however be made of the fact that during 1952 the Health Committee accepted proposals for the extension of the health visitors' duties in the light of the intentions of Sections 24 and 28 of the National Health Service Act. These proposals were drawn up after very careful consideration over a period of years. They included a recommendation that health visitors should attend hospitals in this City to work in the utmost co-operation with the Almoners.

Similarly reference is made in the item on "Health Visiting" to the proposals which were accepted by the Health Committee for the integration of the Local Health Authority Services with those of the

General Practitioner mainly in relation to the health visitors, again in the light of the intentions of Sections 24 and 28 of the National Health Service Act.

The services of health visitors are made available on request to general practitioners who conduct clinics at their own surgeries. As the number of expectant mothers examined at these practitioner clinics is relatively small, general practitioners arrange to do vaccinations and diphtheria immunisations at the same sessions and also, in conjunction with the health visitors, give advice to the mothers of young babies.

As far as the Department is aware there are only seven practices in the City where separate clinics are held for children and in fact many of the doctors say that they refer all the babies to the child welfare centres. This is borne out by the fact that the percentage of attendances at child welfare clinics has not dropped in the same way as those for ante-natal care, except possibly on new housing estates where some houses are long distances from the existing centres. From reports received from health visitors there seems an increasing tendency on the part of general practitioners to refer babies with feeding difficulties to the child welfare centres.

The care of the aged gives rise to much concern on the part of practitioners and there is an increasing demand on the Department's services in this connection. Special health visitors have been allocated for this social service.

With six exceptions, the proportion of practices in each of the 33 welfare centre areas which in the past three months have co-operated either by using the facilities offered at welfare centre premises, utilising the services of clinic staff at their own surgeries, or asking for patients to be followed up in their own homes, has reached 50%. In some areas the percentage is much higher. Some practitioners have asked that meetings should be arranged between themselves and centre medical officers and health visitors to discuss feeding problems.

Visitors engaged in connection with the Tuberculosis Service of the Local Health Authority are based upon the Anti-tuberculosis Centre, working in close relationship with the team of Chest Physicians. More precise details follow later.

(iv) The arrangements existing between the Local Health Authority Midwives, the Hospital Services and General Practitioner Services

Intermediate examinations of patients booked for admission to hospital are often undertaken by the domiciliary midwives or by their own doctors. These patients however receive their major ante-natal examinations at hospital clinics. Eleven midwives have received special training in the domiciliary care of the premature infant and eight midwives

are seconded for this work at present. They provide, in addition to domiciliary care of such infants, special care for premature babies discharged from hospital, where this is necessary.

Midwives assist at general practitioners' clinics held in their surgeries. The majority of general practitioners however do not have enough midwifery to justify them holding a separate ante-natal clinic and pregnant women are seen by the doctor during ordinary surgery hours.

(v) The arrangements existing between the Local Health Authority Home Nursing Service, the Hospital Services and General Practitioner Services

The Home Nursing Service works in the utmost co-operation with the General Practitioner Service and there is an excellent understanding. Mention is made in the item which follows later relating to the Home Nursing Service of the opportunity which has been given to the nurses for visiting hospitals to see any special treatment required for the patient before discharge.

Co-operation and Co-ordination—General

The above has given a brief outline of the liaison which prevails with other parts of the National Health Service commencing at Local Health Authority Member level, proceeding between the medical staffs of hospitals and with general practitioners and administratively between the lay members of the services concerned. The establishment of schemes calling for joint action and the ready cross reference between the services has created a position where co-operation and co-ordination is the rule. To establish a complete social service it is essential to enlist the aid of other national bodies—the National Assistance Board, the Ministry of National Insurance, etc. It has been found by experience that these two national bodies are very vital in providing for the needs of many individuals. Locally the Welfare Department—a separate Department in this Authority—affords valuable help to cases who have no settled accommodation, and in particular to the aged and infirm. The majority of such references in the latter cases are in respect of persons who, although provided with domiciliary services by this Department are in need of residential accommodation owing to their inability to care for themselves at all times of the day. Medical officers of this Department act as advisers to the Welfare Department. The Children's Department—another link in the social service—works closely in connection with the Health Department in that the medical staff of this Department undertake the medical supervision of all children accommodated in the homes in conjunction with local general practitioners who accept the children on their medical lists.

The integration of the three separate services can be fairly assessed as highly effective and although improvements are regularly taking place it would not be possible to pinpoint any particular sphere where the three services are at variance. It is by trial and error that day to day improvements take place.

Information as to the services available is conveyed to general practitioners by the circulation of a booklet "A Ready Reference to the Services of the Department," a copy of which is attached to this survey, and by means of personal circular letters from the Medical Officer of Health to all general practitioners, specialists and consultants in the City relating to topics of mutual interest as they arise. Additionally there are a number of books published in this City by the Information Department of the Corporation and a handbook circulated by the Housing Management Department to all municipal tenants. These, and the Birmingham Post and Mail Year Book contain a resumé of the services of the Health Department and supplement the Ready Reference mentioned above. One or two local trade organisations also publish similar information. The Ready Reference is also circulated to voluntary organisations and almoners of hospitals within the City, all Corporation Departments, the University and to other bodies whom it is felt would benefit from the information contained, and it is available to members of the public on application. This circulation together with talks on social services given in connection with the health education programme provides the public with the required knowledge of the services available.

3. JOINT USE OF STAFF

Item 2 has revealed to a large extent the joint use of staff which takes place between the three services. In addition two Consultants attend Consultation Clinics held at the Carnegie Welfare Centre to which cases are referred by Welfare Centre medical officers. In the MATERNITY AND CHILD WELFARE Service thirty part-time assistant medical officers are employed on a sessional basis at maternity and child welfare clinics. During 1952 they attended 3,289 sessions. Only five of the thirty doctors are however on the list of the Local Executive Council and these five between them attend eight sessions per week. The remaining twenty-five doctors are mostly married women who do not participate in general practice but attend clinics as required.

In the field of DIPHTHERIA IMMUNISATION four doctors are employed on a sessional basis and during 1952 they attended 302 immunisation sessions. Of the four doctors only one is in general practice and she attends two clinics per week.

In the diagnosis of SMALLPOX two members of the Department's medical staff are on the Ministry of Health Consultants' Panel.

In the MENTAL HEALTH Service a consultant psychiatrist attends for two sessions per week at the Parent Guidance Clinic dealing with behaviour problems among young children. Another psychiatrist holds one session per week dealing with cases referred by the Local Health Authority's Psychiatric Social Service. Additionally there are ten part-time certifying medical practitioners, of whom five are of consultant status ; the latter may be called upon for consultation in cases of lunacy. In relation to the hospital service a member of the Psychiatric Social Service undertakes after-care by attending a mental hospital at the request of the Hospital Management Committee. One general practitioner is called upon to examine and issue certificates in respect of mentally deficient persons whom it is thought should be certified.

The arrangements for joint use of staff in connection with the TUBERCULOSIS Service are set out in item 2, as it appeared more appropriate to stress the aspect of co-operation and co-ordination rather than the joint user of staff.

4. VOLUNTARY ORGANISATIONS

Whilst there is no contractual arrangement with any voluntary association for the latter to undertake, as an agent, any function on behalf of the Local Health Authority as laid down in the National Health Service Act, the aid of voluntary organisations has been enlisted to assist the Local Health Authority or to augment the Local Health Authority's services. Co-operation is effected with the undermentioned organisations in connection with the particular service as shown.

Services related to :

Care of Mothers and Young Children

<i>Organisation</i>	<i>Service Provided</i>	<i>Annual Grant made by the City Council</i>
Birmingham Catholic Maternity and Child Welfare Council	Bentley Heath and Woodville Homes for Unmarried Mothers. This organisation also has a Social Worker	£400 } Additional payments are also made on a per capita basis £150 }
Birmingham Diocesan Council for Moral Welfare	Social Workers	£50
Birmingham Family Planning Association	Services in relation to the care of expectant and nursing mothers	£250
Birmingham Family Service Unit	Social rehabilitation for problem families	£1,000 (under Local Government Act, 1948)
National Association for Maternity and Child Welfare	Assistance in relation to study, publicity and propaganda services	£10

<i>Organisation</i>	<i>Service Provided</i>	<i>Annual Grant made by the City Council</i>
National Baby Welfare Council	Assistance in relation to study, publicity and propaganda services	£10
National Council for the Unmarried Mother and her Child	Assistance in relation to study, publicity and propaganda services	£10
National Society for the Prevention of Cruelty to Children	Co-operation in cases of child neglect	—
Salvation Army	Lyncroft House—a Home for Unmarried Mothers and their Babies	£450 Additional payments are also made on a <i>per capita</i> basis
Voluntary Workers in City of Birmingham Maternity and Child Welfare Centres	Assistance at Maternity and child welfare centres in clerical work, weighing infants, sales of food, attending to mothers' comfort, etc.	—

Ambulance Service

British Red Cross Society	Hospital car service (carries out work on behalf of the ambulance service)	Flat rate of 7d. per mile
St. John Ambulance Association	Providing assistance to the ambulance service by means of a rota of volunteers who man ambulances during the evenings and week-ends	—

Prevention of Illness, Care and After-Care

Birmingham Accident Prevention Council	General co-operation in health education matters	—
Birmingham Clean Food Guild	General co-operation (<i>see</i> item 13)	Initial grant of £300 (under Local Government Act, 1948)
Birmingham Committee on Burning Accidents	General co-operation (<i>see</i> item 13)	—
Birmingham Council for Old People	General co-operation in the social services as related to the aged	—

<i>Organisation</i>	<i>Service Provided</i>	<i>Annual Grant made by the City Council</i>
Birmingham Council of Social Service	General co-operation in study and case work relating to social services	Grant for 1952: £2,500 plus £250 for the Citizens' Advice Bureau (Local Government Act)
Birmingham Hospital Saturday Fund	Provides convalescent facilities for its contributors and their families. There are reciprocal arrangements with the City Council's own scheme.	£550
Birmingham Marriage Guidance Council	General co-operation in cross reference of cases	£750 (under Local Government Act, 1948)
British Red Cross Society	Loan of sick room equipment is available in connection with the Local Authority's Home Nursing Service	—
Central Council for Health Education	Co-operation in relation to study, publicity and propaganda services	£200
National Association for the Prevention of Tuberculosis	Co-operation in relation to study, publicity and propaganda services	£25
Royal Society for the Prevention of Accidents (Home Safety Section)	Co-operation in relation to study, publicity and propaganda services	£2 2 0
St. John Ambulance Association	Co-operation in lecture courses arranged in connection with the clean food campaign	—
St. John and Red Cross Libraries Service	Domiciliary library service for tuberculosis cases	—
Women's Voluntary Service	Provide escorts for a few convalescent patients and a tea service for out-patient tuberculosis cases	—

We are fortunate in having so many active voluntary organisations and by reference to the grants made it will be observed that it is the City Council's policy to encourage voluntary effort in the field of health and welfare.

PARTICULAR SERVICES

5. CARE OF EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER SCHOOL AGE

Expectant and Nursing Mothers

Facilities for the examination of expectant mothers are available at hospital clinics, at clinics held on Local Authority premises and at general practitioners' surgeries. There are no specialist consultations at Local Authority ante-natal clinics.

HOSPITAL CLINICS. Patients booked for admission to hospital attend the hospital clinics for their major ante-natal examinations but may attend the Local Authority clinics or their general practitioners for intermediate examinations. The percentage of the women confined who attended Local Authority clinics has been halved since 1948. This is accounted for by an increase of hospital bookings and by the increased amount of responsibility for ante-natal care undertaken by the general practitioners.

LOCAL AUTHORITY CLINICS. Fifty-four ante-natal clinics are held each week staffed by medical officers and midwives employed by the Local Authority. In addition, two sessions are held each week where midwives are alone responsible for the examination of their patients. Facilities are also available for mothers to receive post-natal examinations.

Ante-natal clinics are staffed by a medical officer, midwives and a health visitor. The midwives assist the medical officer and undertake all other duties in the clinic apart from the booking in of patients and the health talks, which are the responsibility of the health visitor.

It has been the policy of the Department since the commencement of the National Health Service Act not to accept as patients at these clinics women who have booked general practitioners to give them ante-natal care and if need be attend them at the delivery, unless their practitioner makes a specific request that they should do so. Although the new arrangements for general practitioners' attendance in this way should go far to provide continuity of care, yet it has the disadvantage that these patients do not receive the kind of health education which is available at ante-natal clinics held at welfare centres. In an attempt to overcome this difficulty, at some of the clinic sessions two couches are available so that two patients can be examined simultaneously, one by the medical officer and the other by the midwife. Mothers who have booked their general practitioner may, with his consent, attend these sessions and be examined by the midwife. They are not examined by the centre medical officer. At one or two centres, ante-natal clinics have been

held by midwives only, without a Local Authority medical officer, for the patients of general practitioner obstetricians. A health visitor attends to give health education talks.

GENERAL PRACTITIONER CLINICS. Eighty-six ante-natal clinics are held weekly by general practitioners for their own patients, 70 sessions at their own surgeries and 16 sessions at maternity and child welfare centres. At 34 of the sessions held in surgeries, midwives attend to assist the general practitioners and in 11 of these cases health visitors also attend to give health talks. In 36 instances general practitioners run ante-natal clinics independently without the assistance of the staff of this Department.

BLOOD TESTING ARRANGEMENTS. All patients attending Local Authority ante-natal clinics have their blood examined. Many practitioners send their patients to the Local Authority clinics for samples of their blood to be taken for the Wassermann Reaction and the Rhesus test. The number of cases referred for this purpose has risen from 300 in 1949 to 1,424 in 1952. In addition, practitioners may make use of the centre arrangements for conveyance to the laboratory of blood samples taken in the surgery.

MASS RADIOGRAPHY. All mothers attending ante-natal clinics are offered mass radiography. Similar facilities are offered to the patients of general practitioners.

RELAXATION CLASSES. Relaxation classes for expectant mothers are being organised at every welfare centre. General practitioners' patients are given the opportunity to attend.

BED BUREAU. All cases requiring admission to hospital for social reasons are expected to make application through the Health Department. In 1950, 42.5% of the hospital confinements were booked through the Health Department. In 1951 the figure was 49.6%. In 1952 the figure was 71.2%.

UNMARRIED MOTHERS. Unmarried mothers are helped to secure adequate accommodation during the ante-natal period and for the lying-in. Places are available in homes for unmarried mothers, 19 places in Beechcroft Home, which belongs to the Local Authority and 57 places in voluntary homes.

MOTHERCRAFT TRAINING. Lectures in mothercraft are given at all ante-natal clinics held in Local Authority premises and at general practitioner surgeries where a health visitor is in attendance and, in addition, health visitors attend at three hospital clinics weekly for this purpose.

MATERNITY OUTFITS are issued at every welfare centre.

Child Welfare

One hundred and thirty-two child welfare sessions are held weekly in Local Authority premises. Three types of clinic are held :

(i) the post-natal 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.

(ii) the ordinary children's clinic where children of any age up to five years may attend.

(iii) 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 of individual children at these three types of clinics has been well maintained as the following table shows :

CHILDREN WHO ATTENDED CENTRES. PERCENTAGE ATTENDANCE

No. of attend- ances made	0—1 Year				1—2 Years				2—5 Years			
	1949	1950	1951	1952	1949	1950	1951	1952	1949	1950	1951	1952
1—2	24.2	23.4	24.3	23.8	30.5	30.1	30.2	28.8	63.9	61.1	58.1	58.0
3—5	22.2	22.3	21.7	22.3	22.5	22.0	22.8	22.4	29.3	32.4	33.2	35.7
6—11	27.8	28.5	27.5	28.0	23.9	25.7	24.2	25.0	5.6	5.1	6.6	5.4
12 and over	25.8	25.8	26.5	25.9	23.1	22.2	22.8	23.8	1.2	1.4	2.1	0.9

POST-NATAL CLINICS FOR INFANTS

	1950	1951	1952
Number of clinics held	1,490	1,448	1,335
Number of new infants attending	9,424	9,168	8,630
Total number of infant attendances	57,253	54,882	54,033
Total examined by doctor	23,135	22,201	21,784
Average attendance of infants per session	38.4	37.9	40.5
Average number of infants seen by doctor per session	15.3	15.4	16.3

CHILDREN'S CLINICS

	1950	1951	1952
Number of clinics held :			
(a) With doctor attending	3,183	2,994	3,019
(b) Without doctor attending	185	328	147
TOTAL	3,368	3,322	3,166
New children attending	7,101	7,071	7,346
Total attendances	156,839	144,506	142,783
Average attendance per clinic	46.6	43.5	45.0
Total seen by doctor	53,670	48,282	49,766
Average seen by doctor per clinic	16.9	16.1	16.4

TODDLERS' CLINICS

	1950	1951	1952
Number of clinics	1,727	1,793	1,938
Total attendances	29,418	30,880	30,572
Total number of individual children examined	14,427	14,375	14,313

Two specialist consultant clinics for children are held weekly at Carnegie Welfare Centre.

In addition, a few general practitioners hold child welfare sessions at their own surgeries and, in some instances, health visitors assist at these clinics. At many of the ante-natal clinics held by general practitioners, in addition to the ante-natal and post-natal examination of mothers, vaccination and immunisation against diphtheria is undertaken.

Clinic nurses and clerks are employed at the welfare centres.

Exercises for the correction of postural defects among young children are held at 14 welfare centres. During 1952, 549 children made a total of 5,094 attendances at 436 sessions.

Care of Premature Infants

The extent of co-operation and arrangements for domiciliary care are referred to in item 2—"Co-operation." The equipment for the care of premature babies is as follows, there being 60 cots and 120 linings for the City as a whole :—

Each Midwife has :

- 1 mucus catheter.
- 4 cot thermometers.
- 1 low reading rectal thermometer.
- Hypodermic syringes—2 (1 c.c. and 2 c.c.).
- 12 nurses' gowns, and masks as required.
- Scales—Avery, 1 set.
- 2 small bowls and 2 kidney dishes.
- 4 wet and dry bulb hygrometers.
- 4 feeding bottles and 4 teats.
- Pipettes—1 dozen.
- 1 breast pump.
- Glass measures (one 4 oz. and one minim).
- 1 enamel measure (20 oz.).
- 15" bowl or suitable container for keeping bottles and teats in solution of sodium hypochlorite.
- 1 large deep tray.
- 18 small white linen bags for protecting equipment.

For each cot there are also :

- 6 blankets and 3 extra for each premature baby nurse.
- 1 mackintosh mattress cover.
- 2 hot water bottles and 4 hot water bottle covers.
- 3 sets of clothing for infant (2nd type) and extra when requested.

The following are available as required :

- Cord dressings.
- Paper towels—packets of 500.
- Special temperature and weight charts.
- Feeding charts.

Supply of Dried Milks, etc.

Facilities are granted to the Ministry of Food for the distribution of welfare foods at all welfare centres in the City. Other dried milks and nutrients required for medical reasons are also obtainable at all welfare centres.

Dental Care

Five dentists are employed part-time for 17 sessions per week. In addition, the appointment of a whole-time dentist has been made, who will take up duty in March, 1953.

Other Provisions

Chiropody. A chiropodist is employed for 4 sessions per week.

A Recuperative Convalescent Home for mothers and young babies has been established at Harborough Hall, Blakedown, near Kidderminster, Worcestershire, where provision is made for the accommodation of 21 mothers and their babies.

Daily Guardians. The Daily Guardian Scheme was inaugurated in 1951. A maximum of 50 persons can be registered to receive not more than 2 children in their care by day, the home being first approved by a child welfare medical officer.

Guardians are appointed as far as possible to cover those areas where the need is greatest.

At the end of December, 1952, 46 guardians were registered and 70 places were available.

Day Nurseries. There are 39 day nurseries and one 24-hour nursery, which also takes day children. The total accommodation provided is 1,744 places.

Human Milk Bureau. The purpose of the human milk bureau is to supply pasteurised human milk for premature and seriously ill infants. The staff consists of two state registered nurses, who reside on the premises.

The milk, which is subjected to chemical and bacteriological tests and examined for adulteration with water or cow's milk, is collected daily from the donors' houses by the nurses, a van being provided for this purpose. Special zinc lined ice boxes are used for :

- (i) Storing the milk in the donor's home if the donor has no refrigerator ;
- (ii) Transporting the milk to the Bureau ; and
- (iii) Despatching the milk by rail.

Mothers are paid 2d. an ounce and the milk is at present being sold at 7d. per ounce. It is free to domiciliary cases within the City.

During 1951, 30,559 ounces were supplied to 20 hospitals, 8 of which were in the City, 11 in the adjacent counties and 1 on the south coast. The major portion of the milk (25,808 ounces) was supplied to the City hospitals.

A total of 106 ounces was supplied to two domiciliary cases in the City. This small figure is explained by the fact that the majority of acutely ill infants in this City are nursed in hospital.

During 1952 the Bureau was given the names of 298 donors.

Remedial exercise classes. Classes for young children with minor defects are held weekly, under the direction of trained physiotherapists.

Sewing classes. Classes are held weekly at 26 centres.

6. DOMICILIARY MIDWIFERY

There are 121 domiciliary midwives employed by the Local Authority. In addition there are 20 midwives engaged in private domiciliary practice. There are three non-medical supervisors who undertake the detailed work of supervision. One of the assistant administrative medical officers acts as medical supervisor. Domiciliary midwives not in the Authority's service are supervised by the non-medical supervisors and are seen on an average two or three times a year.

All Local Authority midwives are trained to give gas and air and pethedine. Midwives visit patients in their own homes to undertake ante-natal care in addition to attending ante-natal clinics at child welfare centres. They undertake 34 sessions each week in general practitioners' surgeries.

In conjunction with the Birmingham Regional Hospital Board there has been established a Bed Bureau in connection with applications for admission of women whose confinement in hospital is recommended on social grounds. A senior clerk deals with the applicants. In cases of doubt however a report is requested from the domiciliary midwife in whose area the woman lives. In 1949, 7,124 cases were dealt with, in 1950, 6,195, in 1951, 5,181, and in 1952 there were 5,389 applications of which 3,839 were granted.

Midwives are sent regularly to refresher courses.

There are 31 teaching midwives on the district. Pupil midwives live in the midwives' houses when they are receiving their district training.

An emergency maternity service is available for cases of difficulty on the district. This is staffed by personnel from the Birmingham Maternity Hospital.

7. HEALTH VISITING

In sub-paragraph (iii) of item 2, the two opening paragraphs made mention of proposals which have been placed before the Health Committee in connection with the extension of the health visitors' duties. It would seem appropriate to give details at this stage.

The duties of the health visitor prior to the inception of the National Health Service Act mainly consisted of the visiting of women and young children in their homes for the purpose of giving advice as to the nurture, care and management of young children and as to the health of expectant and nursing mothers, together with the visiting of homes of persons suffering from tuberculosis to give advice as to the care and hygiene of such persons and as to the measures necessary to prevent the spread of infection.

Section 24 of the National Health Service Act, 1946 now clearly indicates the enlarged scope of the health visitor's duties, to the extent that she is called upon to give advice as to the care of young children, persons suffering from illness, and expectant or nursing mothers, and as to the measures necessary to prevent the spread of infection. Her duties are further extended in applying section 28 of the National Health Service Act which calls upon Local Authorities to make arrangements for the purpose of the prevention of illness, the care of persons suffering from illness or mental defectiveness or the after-care of such persons.

For some years past the possible integration of the Local Health Authority's services with those of the general practitioner has been considered, and the sections quoted above of the National Health Service Act substantiated the view as to the possibilities of integration in that the practitioner, with the passing of the National Health Service Act, became more than ever the doctor to the unit—the family. With this in mind it appeared that if full achievement was to be obtained, the medico-social worker, the health visitor, should act in unison with and as an active partner to the general practitioner. Such integration is clearly an extension of the principle already in effect in relation to the Local Authority's midwives and home nurses. Further, such a scheme would bring up-to-date the present system, avoid duplication of the medical service and create a greater efficiency which would be reflected in an improved service to the family unit and the community as a whole.

At the time the proposals were placed before the Health Committee (December, 1951) the following information was submitted on the Maternity and Child Welfare Service as it existed then :—

“ In this City there are 189 clinic sessions held weekly, comprising 57 ante-natal, 29 post-natal, 67 child welfare and 36 toddlers. At certain of the ante-natal clinics Local Authority doctors and midwives are each responsible for the examination of patients. At post-natal clinics mothers attend for post-natal examination, and

in addition the medical officer sees young babies up to the age of three months. All children attending children's clinics are interviewed individually by a health visitor who selects the mothers for interview by the doctor, in company with their children. At toddlers' clinics all children are seen by the medical officer.

The total number of sessions required for clinics and day nurseries during the period Monday to Friday, i.e., 10 sessions weekly, is 207. This requires the services of 20 whole time medical officers with seven sessions to spare. There are 13 doctors available for this work on the whole time staff of the Department, the balance being made up by the employment of part time medical officers."

Having placed before the Committee details of the maternity and child welfare service then in operation, the opinion was expressed that the accepted policy required reconsideration, as Sections 24 and 28 of the National Health Service Act, 1946 called for the employment of health visitors to give medico-social advice to the family unit in the care, after-care and prevention of illness, and that this was clearly an extension of the duties of the health visitor and that new and important work fell to her lot, as mentioned earlier in this Survey. It was considered that the further provision of maternity and child welfare centres of the type previously built and in relation to present-day conditions was unnecessary, and it was suggested that the Committee should, as an experiment in regard to new housing areas, provide for the carrying out of the Local Authority's duties by arranging, if possible, for health visitors to work in conjunction with general practitioners in those areas. The proposals were placed before the Committee as it was considered that :—

- (i) the present system was outdated ;
- (ii) there was a duplication of medical service ; and
- (iii) a greater efficiency would accrue by the implementation of these proposals and which would be reflected in an improved service to the family unit.

Additionally the Committee were informed that a considerable financial saving (capital and revenue) would be effected if these proposals were accepted and ultimately carried out for the whole of the City. Such a scheme would also create a greater unity between the general practitioner service and the Local Authority service and would be a foundation upon which the Health Service with its necessary health centres could eventually be built. The Committee, in giving initial consideration to the proposals, suggested that an approach should be made to the Local Medical Committee to ascertain their views. The approach was made in January, 1952 and it is pleasing to add that the scheme was not only welcomed but received, in fact, enthusiastic support.

After further consideration the Committee agreed that the following action should be taken :—

- (i) Personal contact to be made with doctors in new housing areas with a view to carrying out the agreed policy.
- (ii) As soon as possible a similar procedure to be effected in relation to those areas where the Committee was employing part-time medical officers.
- (iii) Contact to be made with doctors in the City who are already holding ante-natal clinics, to offer to them the use of maternity and child welfare centres for such purpose with the help of appropriate health visitors.

In furtherance of item (i) the Secretary of the Local Medical Committee circulated in May, 1952 a letter drawing attention to the new proposals and included therein was reference to the fact that the Medical Officer of Health would be very happy indeed to arrange for his appropriate medical colleagues to explain the proposals to the general practitioner either in rota groups, ward meetings or individually. (Copy of the letter appears on page 62 of this Report).

During the months of June, July and August, 1952 social gatherings were held at all welfare centres to which were invited general practitioners, Local Authority medical officers, school nurses, tuberculosis visitors, school medical officers, tuberculosis medical officers, children's visitors, hospital almoners, day nursery matrons, district nurses and midwives. Such gatherings gave an excellent opportunity for enlarging on the information already conveyed to general practitioners by the Local Medical Committee on the proposed scope of the revised services. It was also an occasion to advise the members of other professions attending who had not been formally acquainted by letter.

There was a varying response from general practitioners throughout the City. In some cases as many as 16 or 17 attended, in others only 2 or 3. After each social gathering, a letter was sent to every general practitioner in the area, whether he had attended or not, saying that the health visitor in whose area his surgery lay, would take an early opportunity of contacting him with a view to making his acquaintance. After these visits had been paid each health visitor was seen individually. In the vast majority of cases they were very well received. In one or two cases, doctors refused to see them and in certain instances the reception was lukewarm, the practitioners in question sometimes feeling that their type of practice was such that they required no assistance from this Department. Since December, 1952 the Administrative Medical Officer of Health for Maternity and Child Welfare has attended local meetings of general practitioners in various parts of the City when these could be arranged.

Practitioners are informed that they can telephone or call at the local welfare centre before 10 a.m. or at any time during clinic hours to ask for information or for the assistance of a health visitor.

At the same time as this proposal of integration with the general practitioner's work was being actively considered it appeared a necessary adjunct, in order to effect a "complete" co-operation between the services, to extend the duties of the health visitor to the hospital. This function of the health visitor would entail a division of her duties between hospital attendances and home visiting, and the following information was placed before the Health Committee in July, 1951 :—

" Hospital Health Visitors

The duties of these health visitors are divided between hospital attendances and home visiting. When in hospital they are present at the teaching rounds with undergraduates and generally take part in the work of the department by giving information on medico-social histories of the children concerned. Thus, the medical student is introduced to the work of health visitors, and his interest stimulated in medico-social problems. During the child's hospital stay the health visitor learns his medical history and visits the child's home, bringing back useful and practical information. It is her practice to write a short account of her findings on the child's case notes. She thus makes herself known to the family and co-operates with them after the child's discharge. The child, too, knows her in hospital and welcomes an old friend. On the child's discharge from hospital, the health visitor, armed with all the necessary medical information, sees that the medical after-care is carried out, but as soon as she is satisfied that her attendance is no longer necessary the family are passed on to the health visitor of the district. Every encouragement is made to co-operate with the district health visitor and the home is visited together if possible. In addition, the hospital health visitors each have a small district of their own in which they act as routine health visitors.

The following list of duties summarises the type of work done :—

- (i) To pay an investigation visit to the home of the child while he is in hospital and to report on the suitability of the home and the parents to receive the child on his return, together with comments on the desirability of convalescence or special schooling, etc.
- (ii) To supervise, on discharge home, the medical treatment ordered—for example, feeding, breathing exercises, medicines, etc., and, if need be, to contact the general practitioner in charge of the case.
- (iii) To arrange for the child to attend the appropriate follow-up clinic, and if necessary to arrange for transport.

- (iv) To advise and help in getting other members of the family or household medically examined—for example, for tuberculous contacts and familial disease.
- (v) To bring to the notice of parents the many organisations through which help can be obtained and guide them in their use—for example, National Assistance Board, Women's Voluntary Services, Order of St. John Medical Department, Home Helps, Children's Officer, National Society for the Prevention of Cruelty to Children, etc.
- (vi) To give advice on when and how to obtain such benefits as free milk, vitamins and school milk.
- (vii) To report to the appropriate authorities any comments concerning housing or other social problems.

It is proposed to establish a rota among the health visitors of the City for this hospital work. In this way post graduate hospital experience will be gained by the health visitors in turn."

Favourable consideration was also given by the Health Committee to this proposal. An approach was made in the first instance to the Board of Governors of the United Birmingham Hospitals making an offer of the services of a health visitor to be attached to the children's ward of the General Hospital for a trial period of six months. The Board were agreeable to the suggestion and the arrangement commenced early in April, 1952 and is proving highly successful.

Briefly, the arrangement is that a health visitor attends for two half-days a week and this experiment has been so successful in enabling the hospital staff to have a clear picture of the background of their patients that a request has now been received that the health visitor should extend her activities to other groups of patients in the General Hospital.

The Health Committee were acquainted of the success of the arrangement and agreed that an extension of the scheme to other hospitals in the City would be mutually advantageous. In consequence an approach was made to the Birmingham Regional Hospital Board with a view to instituting a similar scheme in the hospitals falling within the jurisdiction of the Board. The suggestion was agreeable to the Board and four health visitors are now working in not only the children's wards but general wards of the major general hospitals within the City thus forming a bridge between the hospital and the community. Additionally the Sisters on the wards concerned have been invited to accompany the health visitors on their rounds.

The conception that the health visitor is the health visitor for the whole family is now fully established. As a result of the efforts to secure rapprochement with the general practitioners, detailed above, there has been a noticeable improvement in the relationship between the general practitioners and their health visitor colleagues.

There are 95 full-time and 11 part-time health visitors on the staff at the present time and all are fully qualified. The City is divided into 33 welfare centre districts, each with a welfare centre as its focal point. The number of families in a district varies from 2,490 to 9,000 and the number of children under the age of 5 years varies from 806 to 1,419.

Nurses on the staff of the Tuberculosis Service and the School Medical Service, who are suitably qualified are, from time to time, given an opportunity to take the Health Visitors' Certificate. Advertisements inserted in the local papers, medical and ancillary journals draw attention to the courses of training for the Health Visitor's Certificate. All arrangements are made jointly between the Department and the University. There are 50 places available in each course, 25 for Birmingham candidates and 25 for Regional candidates. A mention should be made, however, of the fact that the response to advertisements for Birmingham students over the last few years has shown a decrease. To date there have been thirty courses for health visitors. Prior to 1951 the period of the course was seven months. In 1951, however, after due consideration by the Medical Officers of Health in the Birmingham region, and concurrence by their respective Councils the course was extended. The first course of nine months' duration was held during 1951, and the Royal Sanitary Institute held an examination from the 19th to 21st June, 1952. This extension enabled lectures to be spread over a longer period, thus giving the students more opportunity for private study and reading. As an experiment six lectures on the basic principles of Elementary Psychology were included in the curriculum. Students have expressed their appreciation of this instruction. Experience was also given to students in practical work in a rural area.

For some years the Royal College of Nursing, London, have sent Health Visitor Tutor students to the City for practical experience including practice in teaching student health visitors.

There is a health visitor tutor and an assistant employed full-time in connection with this course.

8. HOME NURSING

At the time of writing there are 110 full-time and 43 part-time district nurses and 8 part-time bathing attendants in the Home Nursing Service. The work of this service has greatly increased in the past few years and has strained the capacity of the staff to the utmost. Only 30 of the staff are resident in district homes. Seventy-one are married. There are 11 male nurses, of whom 10 are married.

The co-operation with general practitioners has been excellent. There is a certain amount of liaison with hospitals in that district nurses have the opportunity of visiting hospitals to see any special treatment required for a patient before his discharge. No night nursing service

is provided but a service of night watchers is available, who can sit up with patients and so relieve the relatives. There is also a service of bathing attendants who attend to patients who do not require daily nursing. A laundry service is also provided.

Staff are sent at regular intervals to refresher courses. Local refresher courses have also been organised to meet particular needs. A training scheme for district nurses is in operation based on two of the district nurses' homes. There are two courses held each year, each course taking 14 candidates.

The following analysis of the nurses' work shows the type of case dealt with during a period of one month :—

			<i>Over 60 years of age</i>		<i>Under 60 years of age</i>	
			<i>Number of cases</i>	<i>Number of visits</i>	<i>Number of cases</i>	<i>Number of visits</i>
Cardiac	.....	.....	448	2,951	154	846
Pneumonia	.....	.....	26	230	68	438
Bronchitis	.....	.....	93	624	135	696
Diabetes	.....	.....	293	6,474	95	3,311
Arthritis	.....	.....	138	915	58	452
Carcinoma	.....	.....	159	2,121	61	1,023
Senility	.....	.....	238	1,385	6	323
Other Medical	.....	.....	458	3,530	792	3,971
Tuberculosis	.....	.....	22	389	234	3,929
Minor Surgical	.....	.....	167	1,634	262	1,843
Post Operative	.....	.....	83	857	139	1,019
Anæmia	.....	.....	32	110	—	—
Strokes	.....	.....	42	436	—	—
Measles	.....	.....	—	—	2	15
Other notifiable diseases	.....	.....	—	—	5	21
Ante-natal complications	.....	.....	—	—	9	53
Post-natal complications	.....	.....	—	—	5	71
Abortions	.....	.....	—	—	9	46
Puerperal pyrexia	.....	.....	—	—	6	62
			2,199	21,656	2,040	18,119

9. VACCINATION AND IMMUNISATION

The following organised effort is sustained to secure immunisation of the child population against diphtheria.

Primary Immunisation. The Food Office is supplied with leaflets which are handed to persons applying for the egg ration for children aged six months. A leaflet and consent card is sent by post from the Health Department to the parents of Birmingham born children on attaining the age of 7—8 months.

Birthday cards, obtained from the Central Council for Health Education, are sent by post from the Health Department for the first birthday of every Birmingham born child.

Health visitors carefully check the immunisation history of all children on their respective districts and endeavour to persuade parents to accept immunisation for their children. A reminder is sent by post to parents of children who have reached the age of two years without being immunised.

At all welfare centres there are blackboard announcements from time to time, and leaflets are available. Special immunisation sessions are held at welfare centres once or twice per month, and the dates and times are widely published.

Supplementary or Boosting Injections. A reminder is sent from the Health Department to the parents of all children known to the health visitors and aged $4\frac{1}{2}$ to 5 years who have been primarily immunised at least two years previously.

An approach is made to the parents of children attending day and residential nurseries, nursery schools and nursery classes.

Among parents of children of school age, teachers and school nurses strongly advocate immunisation and supplementary injections, and approach all parents once every nine months to ensure that the children are maintained adequately protected, any injections found necessary being given at school or, if desired, at welfare centres, or by private doctors. Propaganda through the schools often results in pre-school children also being treated.

Immunisation Campaigns. Approaches to the public in general were made in special campaigns long before the advent of the National Health Service, and also during 1948, 1949 and 1951. A further campaign will be launched early in 1953. Most of the material so far used has been of a type available on a national scale, but in 1953 nearly all the material will be produced locally. During the period of the campaigns cinema slides, newspaper advertisements, vehicle bills, book-marks distributed by libraries, and posters are used.

A large proportion of all letters despatched by Corporation Departments now carry a slogan advertising diphtheria immunisation.

Propaganda used in Birmingham makes it clear that immunisation is not only available free of charge at welfare centres, at the Health Department and at schools, but also from general practitioners.

The very active health education section of the Health Department strongly advocates immunisation whenever opportunity arises.

Whooping Cough Immunisation. Up to the present, no serious attempt has been made to press this. Some general practi-

tioners are carrying it out concurrently with diphtheria immunisation on a small scale as shown by the following annual totals of record cards received in the Health Department :—

1948	1949	1950	1951	1952
50	417	349	713	745

The age at immunisation is very rarely earlier than six months, and usually not later than 18 months, as the records for 1952 show.

<i>Age</i>	<i>Numbers immunised in age groups</i>				
0— 5 months	2
6—11 months	515
12—17 months	180
18—23 months	37
24—29 months	11
					<hr/> 745 <hr/>

Vaccination against Smallpox. Parents are advised by health visitors to obtain this protection for their children and leaflets on these lines are handed by the Registrar to persons registering births. The value of vaccination is also frequently explained in lectures to school children, and adult groups. Vaccination among Birmingham children is carried out by general practitioners.

10. AMBULANCE SERVICE

Volume of Work. During 1952 the Ambulance Service handled a total of 301,131 patients compared with 276,896 patients in 1951. The work of the Service falls into three main sections and the figures for the two years are divided between those three sections as follows :—

	1951	1952
Removal Service (Main Ambulance Service)	254,370	277,900
Hospital Car Service (operated by the British Red Cross Society and handling removal cases)	9,700	9,550
Accident Service (Ambulances operated from Fire Stations and manned by firemen)	12,826	13,681
	<hr/> 276,896 <hr/>	<hr/> 301,131 <hr/>

Removal Service. The work of the Ambulance Removal Service has continued to increase. The figures for 1951 gave promise of a tendency to arrest the steep upward trend which had been seen since the introduction of the National Health Service in July, 1948, but the 1952 figures show a high rate of increase again.

Appendix A which follows shows figures for the last four years divided according to the type of cases handled. It will be seen that the main, and constant, increase has been in Clinic cases and Infectious

Disease cases. Of the total increase of 74,581 from 1949 to 1952 the Clinic and Infectious Disease groups account for 59,517. This increase is due mainly to the increased capacity of hospitals to handle out-patients. This extension of out-patient treatment has been particularly noticeable in the case of tuberculosis patients at the Yardley Green Hospital. So long as the capacity and organisation of the hospitals continue to improve it is to be anticipated that the calls on the Ambulance Service will increase.

Hospital Car Service. The number of patients carried by the Hospital Car Service fell from 9,700 in 1951 to 9,550 in 1952. This followed a small decrease in the previous year also. The traffic carried by this Service increased substantially from 1949 to 1950 due to the general increase in the number of patients visiting hospitals, but since 1950 the numbers have decreased because the bulk of the requests for this type of transport have been routed through the Ambulance Service and it has been possible to combine many of the cases with others for whom sitting-case transport has been arranged in vehicles belonging to the Health Authority.

Figures for the Hospital Car Service are shown in Appendix A.

Accident Service. Eight accident ambulances are posted at seven Fire Stations in different parts of the City : two are at the Central Fire Station and one at each of six others. The number of emergency calls has steadily increased, the number in 1952 being 14,380 compared with 13,482 in 1951. The number of patients carried in 1952 was 13,681 as against 12,826 in 1951.

Appendix B shows details of the emergency calls from 1949 onwards. It will be seen that the number of calls for street accidents involving vehicles has fallen to the 1949 level and that the increase in 1952 was in calls to private houses and outdoor (other than street accidents involving vehicles). The increases in these classes reflect the tendency of the public to call more readily on the Service : quite a number of the calls are to very minor injuries and are not justified.

Control of the use of Ambulances. Requests for the provision of ambulance transport normally emanate from general practitioners and hospitals and it has been found that the most effective control of the use of ambulances is achieved by exercising control at those levels. This is a continuous process and is done by applying the circulars and instructions issued by the Ministry of Health, the Regional Hospital Board and the Birmingham Fire and Ambulance Service. Requests for transport which obviously do not fall within the responsibility of the Ambulance Service are now very infrequent and, generally, a doubtful case is recognised as such by the party making the request and is first made the subject of an enquiry. Such enquiry is usually settled by the Ambulance Control Room staff. The latter also may refer back to the doctor or hospital a case which has been accepted and on later examination appears doubtful.

The Ambulance Staff Officer and the Hospital Liaison Officer supplement the work of the Control Room in this respect by the investigation of doubtful cases before the transport is provided.

In addition to the check on the use of ambulances imposed at Control Room level, there is an arrangement for ambulance drivers to report any apparent misuse of the Service. Any case so reported is referred to the hospital concerned for review. In 1952 drivers reported 454 such cases and of these the hospitals had already arranged to remove 138 patients from ambulance transport prior to the receipt of the report ; they removed 101 patients from ambulance transport as a result of the report. The remaining 215 cases were reviewed and confirmed as ambulance cases.

As a supplement to the procedure whereby drivers report doubtful cases, arrangements have been made for spot checks to be made at the main hospitals. These are carried out by an Officer of the Service attending on certain days and observing the cases which are brought in or taken out. Details of any cases where ambulance transport does not appear to be justified are reported to the hospitals and generally the result has been that some patients have been removed from ambulance transport. The Regional Hospital Board and Hospital Management Committees have concurred in this procedure.

Abuses and Difficulties. The question of the abuse of the Ambulance Service is largely a question of a standard of need and it is felt that the standard applied by the majority of hospitals and doctors is very liberal. It is considered that ambulance transport is being ordered for some patients who could travel by public transport and who would certainly have done so before the introduction of free ambulance transport. To the extent that the standard of need is too generous the Ambulance Service is being misused.

If the present standards are accepted as correct then the extent of the abuse of the Ambulance Service is now considered to be negligible as is evidenced by the fact that of a total of 277,900 removal cases handled during the year drivers reported only 454 as doubtful, and of these only 101 were accepted by the hospitals as having been carried unnecessarily. There is a certain abuse of the Accident ambulances due to "panic" calls to trivial accidents. Such abuse cannot be controlled and it is considered that it would not be good policy to discourage the calling of ambulances to accident cases of all kinds.

Difficulties have been presented by the continued growth of the traffic which has affected the organisation of the Service and has also made inadequate the ambulance facilities at hospitals. In connection with the latter, mention must be made of the need for the proper provision of ambulance courtyards and parking facilities and also of centralised waiting rooms at the larger hospitals. Such improvements would speed up Ambulance Service operations considerably and it is considered that this is of sufficient importance to justify the authorising of immediate expenditure on such works.

Although the Ambulance Service has now been functioning under the provisions of the National Health Service Act for a period of 4½ years, difficulties still exist in the matter of determining a line of demarcation between the responsibilities of the Local Authority and the Regional Hospital Board. Such questions as transport within hospital grounds and inter-hospital transport are not dealt with explicitly in the Acts and it is felt that clear directions should be given by the Ministry on any such points rather than that settlements should be negotiated at local levels between the interested parties.

Voluntary Organisations. The Ambulance Service in Birmingham is directly provided except for the comparatively small amount of work performed by the British Red Cross Society's Hospital Car Service. The work performed by this Service represents about 3·3% of the total load. The number of cases passed to the Hospital Car Service is largely controlled by the Local Authority and may tend to decrease. The Hospital Car Service drivers give their services voluntarily and are paid a mileage allowance for the use of their cars on an agreed scale.

The St. John Ambulance Association renders assistance by providing volunteer crews who normally man removal ambulances operating from the main depot. There are usually two or three crews available from this source each evening and one or two crews at week-ends. This assistance is of considerable value to the Local Authority and the opportunity for practical work is much appreciated by the members of the Association.

Equipment. Other than a general improvement in standard, no specific new types of equipment have been brought into use during the period under review.

APPENDIX A

REMOVAL CASES				
	1949	1950	1951	1952
Clinic	137,902	167,029	173,773	185,703
Admissions	19,693	22,414	23,594	24,823
Discharges	26,114	28,871	32,821	33,833
Transfers	5,674	5,289	5,585	7,009
Emergency maternity	135	111	140	113
Maternity	7,313	7,378	7,436	8,249
Miscellaneous	1,336	1,006	926	1,189
Mental	625	658	754	738
Infectious	4,527	6,505	9,341	16,243
	<hr/>	<hr/>	<hr/>	<hr/>
	203,319	239,261	254,370	277,900
Hospital Car Service	8,602	9,840	9,700	9,550
	<hr/>	<hr/>	<hr/>	<hr/>
	211,921	249,101	264,070	287,450
Monthly average	17,660	20,758	22,006	23,954

(Monthly average for 1948 (July/December), 12,260).

APPENDIX B

ACCIDENT AMBULANCE CALLS

	1949	1950	1951	1952
Street accidents involving vehicles	2,342	2,620	2,663	2,304
Factory accidents	904	995	983	1,034
Private houses	3,800	4,511	4,405	4,827
Offices	120	77	81	73
Shops and restaurants	233	301	271	264
Outdoor (other than street accidents)	2,862	3,006	3,023	3,950
Licensed premises	171	213	191	226
Schools	273	350	308	350
Cinemas and theatres	128	155	165	136
Other premises	994	1,174	1,341	1,195
False alarms	67	55	51	21
	<u>11,894</u>	<u>13,457</u>	<u>13,482</u>	<u>14,380</u>

11. PREVENTION OF ILLNESS, CARE AND AFTER-CARE

(i) Tuberculosis

The manner in which the prevention of illness, care and after-care services are co-ordinated with the diagnostic and treatment services is covered in item 2 of this Survey. Similarly so it is continued in Item 7, "Health Visiting."

A B.C.G. Clinic has been established and has a staff consisting of :—

- (a) Part-time radiographer.
- (b) Part-time nurse.
- (c) Two clerical staff.

Closely related to this clinic is a residential nursery which has recently been opened at Skilts Estate, Mappleborough Green, near Studley, providing accommodation for 36 children. It is in use both as a nursery for the segregation of infants undergoing vaccination and for the segregation of children whose home circumstances are unsatisfactory.

In connection with the domiciliary treatment of pulmonary tuberculosis home nurses give injections, under the direction of medical practitioners, of streptomycin and P.A.S. There were 600 patients receiving such treatment during 1951 and in 1952 there were 650.

The introduction of treatment at home has required the development of a scheme of domiciliary diversional and occupational therapy. A centre has been established which makes provision for (a) Diversional Therapy in the home of the tuberculous patient undergoing domiciliary treatment and (b) general educational work with particular reference to the prevention of infection within the home. This centre, which is conveniently situated in the central area of the City, has the following staff :—

- Diversional Therapist in charge.
- Diversional Therapist.
- 1 Clerk.

There are 14 tuberculosis visitors who are accommodated in the same building as the chest physicians and who deal with patients both prior to admission and after discharge from sanatoria, in addition to patients under domiciliary treatment. Working in close relationship with the tuberculosis visitors is a section of the Local Authority's Department accommodated in the Anti-Tuberculosis Centre which is concerned with the important question of housing of the tuberculous. This section deals, in conjunction with the medical officers at the head office of the Department, with the general problems of unsatisfactory housing from the health standpoint.

Mention should also be made of the part played by the Home Help Service. A certain number of home helps, who are all volunteers and whose X-ray and tuberculin tests are satisfactory, are sent to homes where there are cases of lung tuberculosis. Despite the fact that recruitment has been difficult these helps are playing an increasingly important part in the work of the Department in connection with the tuberculous.

The subject of employment problems has already received consideration in item 2, mention there being made of the constitution of the Medical Interviewing Committee and the number of cases which were dealt with. The following statement indicates the recommendations made by the Medical Interviewing Committee during 1952 :—

Recommended for Sheltered Factory (Remploi)	.....	.....	.....	119
Training through Industrial Rehabilitation Unit	.....	.....	.....	90
Vocational training course	.....	.....	.....	51
Rehabilitation work with employers	.....	.....	.....	9
Placed in open industry	.....	.....	.....	198
Placed in open industry after period at Sheltered Factory	.....	.....	.....	28
Training after period at Sheltered Factory	.....	.....	.....	14
Self employed	.....	.....	.....	2
Recommendation deferred	.....	.....	.....	19
				<hr/> 530 <hr/>

Thus prospective patient employees who are selected for work in the Sheltered Factory by the Medical Interviewing Committee attend a special panel where recommendations are considered by the manager of the factory. 107 patients attended that panel during 1951 ; 95 of that number were accepted. During 1952, 89 attended and 78 were accepted. The work undertaken is light engineering in character and the period of employment is related to the physical condition of the patient-employee. The factory caters for approximately 300 patient employees ; at present 119 patients are employed. The home circumstances are known intimately by the tuberculosis visitors and they are actively concerned in the elimination of any domestic problems which might interfere with the beneficent operation of these employment facilities.

The supervision of contacts is undertaken by the Mass Radiography Service of the Birmingham Regional Hospital Board and the Chest Clinic (Hospital and Local Authority services).

The provision of hostels for those tubercular chronic cases who are homeless or whose retention in the sanatorium is necessitated by unsatisfactory home conditions has received consideration by the Health Committee. Most recently, consideration has been given to the possibility of providing accommodation for these cases under arrangements made by the Welfare Committee in accordance with the provisions of the National Assistance Act, namely Section 21. This latter Committee have considered the matter, but the position at present is that the Welfare Committee are to seek a discussion with the appropriate Department of the Ministry of Health.

The information given in the preceding paragraphs in this item, together with the material inserted in items 2 and 3 of this Survey, portrays the manner in which close integration is effected between the preventive and treatment services provided in this City. This results partially from an administrative re-organisation which has grouped the City area into six divisions each the responsibility of a Consultant Physician with his ancillary staff. All of the staff of the several teams are actively interested and engaged in the prevention and treatment of tuberculosis in all its forms.

(ii) **Illness Generally**

The preventive services under Section 28 of the National Health Service Act, other than those relating to Tuberculosis and Health Education (see item 13) are as follows :—

Convalescent Care. The City Council has a scheme for helping those patients who need a period of recuperative convalescence but no medical or surgical attention.

The Almoner of any Birmingham hospital will make the necessary arrangements for a patient whose doctor issues a certificate of recommendation. The Almoners endeavour to send patients to convalescent homes most suitable for their individual needs. The Local Health Authority relies, for this service, upon the availability of vacancies in convalescent homes run by voluntary bodies and by private individuals. It is usually possible without much difficulty to arrange convalescence at an early date for all those who apply. The full cost of the stay at a convalescent home is met in the first instance by the City of Birmingham Health Department, which then recovers the cost of the convalescence from the patient. A patient can apply for a reduction in the charges made to him and he may be assessed to repay only a portion of the charge in accordance with his means. The charge may be repaid by instalments.

The Birmingham Hospital Saturday Fund makes similar provisions for its contributors and their families in its own homes. Arrangements for mutual assistance between this and the Council's scheme are in operation so that patients do not need to wait long for 'vacancies'.

Provision of Nursing Equipment. The following are the principal items available on loan at a small rental assessed according to the patient's means :—

Air/water beds, air rings, sorbo cushions, back rests, bed pans, leg cradles, mackintosh sheets, urinals, sick feeders, commodes, wheel chairs, stairway chairs, spinal carriages, bedsteads, special mattresses, fracture boards, lifting poles and chains, crutches, walking sticks, walking machines.

Care of the Aged and Sick. Two senior health visitors are seconded for this work and there is intimate collaboration with hospitals in regard to admission and discharge of such patients.

Incontinence of faeces or urine is a serious problem in nursing the elderly sick at home and the laundering of bed linen was frequently a major factor in their relatives seeking hospital admission. A laundry service for the loan of bed linen, now provides for a maximum of 100 patients and is working to capacity. A charge is made according to means and the linen is laundered at the Health Department laundry.

A number of elderly sick need attention by both day and night and, when their care is in the hands of just one or two relatives, the problem of giving day and night attention for weeks on end becomes very great. In order to relieve the strain, a service of night watchers has been instituted and gives relatives some respite. A charge is made in accordance with means.

Housing. The importance of good housing as a factor in the health of the community is considered, not only in relation to tuberculosis, but to health in general. There is close co-operation and cross representation between the Health and Housing Management Committees of the City Council and a most intimate collaboration between officers of the two Committees. When therefore a re-arrangement of the waiting list of applicants for Corporation houses was recently made, it was considered that far less regard should be paid to length of time on the list and far more notice should be taken of adverse living conditions affecting or likely to affect health. This has resulted in almost 15% of the applicants for Corporation houses being visited by health visitors or medical officers in order to decide (often with the advice of private and hospital doctors) whether special priority should be given to particular applicants on account of their present living conditions being specially detrimental to their health.

Arrangements are also made whereby applicants living in sub-standard houses receive a measure of priority in re-housing.

The points allocated under these arrangements to applicants already suffering ill-health are shown in the following table :—

<i>Type of medical condition to which applicant has drawn attention</i>		<i>Nil</i>	<i>10</i>	<i>20</i>	<i>30</i>	<i>Immediate Re- housing</i>
A.	Nervous conditions	335	146	39	10	2
B.	General debility.....	68	27	6	—	1
C.	Asthma and bronchitis, respira- tory complaints	644	478	73	7	—
D.	Wounds	83	23	4	1	—
E.	Blind	37	6	3	1	1
F.	Rheumatism, arthritis	260	70	25	8	1
G.	Other orthopædic conditions, including paralysis	256	71	29	9	3
H.	Heart and circulatory trouble....	239	83	39	11	4
I.	Tuberculosis	124	73	148	428	62
J.	Other physical disabilities, in- cluding fits	575	93	36	6	1
K.	Gastric and intestinal	177	32	15	5	1
TOTALS		2,798	1,102	417	486	76

TOTAL : 4,879

Section 28 of the National Health Service Act, by its scope alone, enlists the aid of the majority of the services provided under the National Health Service Act. The organisation and administration within the Department in this respect caters adequately for the needs of the community and it can quite readily be said that from day to day such services as Health Visiting, Home Nursing and the Domestic Helps, together with ancillary services, are employed in the prevention, care and after-care work, enlarged as the need arises by the deployment of either medical or technical staffs, brief mention of which is made in item 2.

12. DOMESTIC HELP

There are 487 domestic helps employed, 93 of whom are whole-time and 394 part-time. (There are in addition twenty night watchers).

The demand for the services of part-time home helps is increasing to such an extent, particularly among the aged, that some part-time domestic helps are working for 30—35 hours weekly. By arrangement with the Education Department a six-day course of training is given.

13. HEALTH EDUCATION

There are five whole-time lecturers employed in this Section of the Department. In addition, many other members of the staff give lectures from time to time. The demonstration material, most of which has been prepared in the Department, consists of posters, models, flannelgraphs, film strips, etc. Lectures and demonstrations are given in schools, to youth organisations, adult education classes and various other groups. The work has continued to grow over a period of years.

Health talks are given by health visitors at ordinary ante-natal and infant welfare sessions, and form part of the programme at relaxation classes for expectant mothers. Health talks are also given at the ante-natal clinics held at maternity hospitals. Talks on the prevention of accidents in the home are given to all groups, as well as in the welfare centres. A close association is maintained with the Birmingham Accident Prevention Council in this connection and the Department provides an exhibit on "accidents in the home" at the Council's annual exhibition in the City. Formerly lectures had been given to parents' groups by health visitors only, but now the male health education lecturers have joined in the teaching with great success.

Six courses of lectures were delivered during the year at H.M. Prison, Winson Green—three to the Men's Section and three to the Women's Section. These are illustrated by various forms of visual aids. In January, 1952, the Home Office approached the Education Department and the Health Department to initiate a course of training for women convicted of child neglect, the training to be carried out in a hostel inside the prison, which had been equipped to accommodate twelve women, and the first course commenced in February, 1952. Five courses have now been completed, each of eight weeks' duration.

Practical training in the basic facts of cookery, laundry work and housewifery are taught during the day by domestic science teachers, who incorporate into the day to day routine of the hostel the lessons in house-craft. By carrying out this routine under supervision, an attempt is made to bring to the mothers a sense of order and rhythm in their daily lives. The women are also taught to renovate and mend, as well as make new garments. Health visitors undertake the teaching in child care and the psychiatric social worker of the Health Department discusses with the women the problems encountered with children and the behaviour patterns of the child. A male lecturer deals with the part the man should play in family life. One afternoon each week is devoted to home nursing instruction. Assessment of the course at the present time indicates that the response by the women has been good.

A model demonstration house has been constructed, which can be adapted for various types of demonstration such as "Care of the Aged," "Care of the Tuberculous Person" and "Accidents in the Home."

Demonstration glass cabinets are provided at each welfare centre, where the material shown is changed at regular intervals. Wall charts, flannelgraphs and blackboard drawings are also used.

A filmstrip showing the Birmingham Public Health Services has now been completed. It was produced from photographs showing the work of various sections of the Health Department and has been divided into two parts. Part I shows the general Public Health Services and Part II the Public Health Services for the family. In the course of lec-

tures to adult and youth groups, it is felt that this will assist considerably in giving some idea of the Public Health Services available in the City. It has already been used with success when lecturing to hospital staffs and other groups. A coloured film strip showing the demonstration material and visual aids used in the Department has also been completed.

The Food Handler and Clean Food Campaign

(i) Plans for the launching of an educational campaign throughout all sections of the food trade with a view to reducing incidence of infection from food and drink were prepared towards the end of 1947 and put into effect early in 1948.

Lectures by medical officers, supported by films until the wind-up of the Central Office of Information Service in 1952, and by film strips since that date, have been given to food trade organisations, staffs of catering establishments and interested associations, including women's organisations.

Prior to the availability in 1950 of "Another Case of Poisoning," and subsequently of "Behind the Menu," military training films were made available—"Cookhouse Inspection," "The Housefly" and "Hand to Mouth."

The discontinuance of the C.O.I. film projection service in 1952, however, has prevented the showing of these films except where facilities for projection are available, as in certain schools, and the College of Technology, where certain of the lectures are given.

Forty-five lectures were given in 1952, the total attendance being 1,272. These included a course for W.V.S. potential instructors of Civil Defence emergency cooks.

(ii) Towards the end of 1950, a proposal was put forward to establish a Clean Food Guild, but by the end of 1952, this organisation was not yet functioning.

(iii) Clean Food has also been the subject of a large number of talks to older school children and to women's guilds and other organisations, through the general Health Education Section of the Department.

Smoke Abatement

During the years 1951-52, six lectures have been given to women's organisations in the City, with particular emphasis on the need for, and means available to attain, a reduction in the emission of domestic smoke.

14. MENTAL HEALTH

Since the Annual Report for 1951 was prepared, the appointment of an Administrative Medical Officer of Health for Mental Health has been made and the very necessary co-ordinating work which has been in abeyance for so long has now been commenced. The appointment, however, was not made until the latter half of 1952, and the Medical Officer appointed has since then been actively engaged in correlating the three sub-sections of the Mental Health Service into a single unit.

Hereunder follows the information specifically requested in the circular on the Survey :—

(i) **Administration**

- (a) The Mental Health Sub-Committee is responsible to the Health Committee for the Service. Monthly meetings are held.
- (b) Qualifications and number 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).
- 3 Social Workers—2 hold Social Science Diploma and 1 holds a Social Science Degree.

Parent Guidance Clinic

- 1 Consultant Psychiatrist, M.D., 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, 2 shorthand-typists, 1 junior clerk, 1 clerk (part-time).

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).

- 7 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.
- 5 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

- 10 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.

*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.

(c) Co-ordination with Regional Hospital Boards

The only joint use of staff in Birmingham is an arrangement with Highcroft Hall Hospital, whereby one social worker from the Psychiatric Social Service carries out supervision on the Hospital's behalf of patients on trial. This Psychiatric Social Worker devotes half her time to the Hospital and half to the Health Department. In addition, the Mental Deficiency Section keeps in regular correspondence with the various Hospital Management Committees and furnishes reports on the home circumstances of patients detained in Institutions for whom applications have been made for holiday leave, also reports relating to those

patients who are considered suitable for licence and in addition supplying reports for the information of Visitors to assist them in carrying out their duties in accordance with Section XI of the Mental Deficiency Acts, 1913-1938.

The Local Health Authority undertake the after-care and rehabilitation of patients on licence from Mental Deficiency Institutions who are resident in this area and periodic reports on their progress are supplied to the Medical Superintendents of the Hospitals concerned.

(d) **Duties delegated to Voluntary Associations**

There are no duties delegated to voluntary organisations.

(e) As yet no arrangements have been made for the training of staff.

(ii) **Account of Work undertaken in the Community**

(a) **Under Section 28, National Health Service Act, 1946**

Psychiatric Social Service

Provides a community care service of patients referred by a number of medical and social agencies, both statutory and voluntary. In about one-third of these cases some kind of arrangement is made for the patient to have treatment, approximately one half of the cases are helped with some kind of social therapy, together with reassurance and support. This help is sometimes directed towards the patient, sometimes the family and sometimes the larger environment. The remaining one-sixth of the cases tend to be unco-operative. Of all the referrals which are coming at the present rate of approximately 400 to 500 a year, there are about 5% of cases referred by the hospitals for after-care.

Parent Guidance Clinic

This clinic deals with the emotional problems of mothers and children under five years of age. The number of cases dealt with is approximately 150 per annum.

After-care of the Mentally Ill and Defective

The after-care of mental defectives under statutory supervision is undertaken by the Education Committee on behalf of the Health Committee.

A most recent proposal in the prevention of mental illness namely the setting up of a clinic is referred to in item 2 of this Survey.

(b) **Under the Lunacy and Mental Treatment Acts, 1890-1930**

There is a 24-hourly service of Duly Authorised Officers throughout the year, each officer performing duty on a rota basis. During the twelve months ending 31st December, 1952, the number of cases dealt with is as follows :—

Certified	649
Voluntary	841
Temporary	15
3-Day Order	112
14-Day Order	132
Urgency Orders	74
Not certified	154
Withdrawn applications	18
Criminal Justice Act	11
Cases visited and investigated but not in above categories	68
	<hr/> 2,074 <hr/>

(c) **Under the Mental Deficiency Acts, 1913-1938**

(i) **Arrangements for ascertaining and supervising Mental Defectives**

The majority of cases ascertained are those notified by the Education Authority and other cases are notified by medical practitioners, relatives, hospitals, probation officers, Magistrates' Courts, and welfare officers. The ascertainment is carried out by the Administrative Medical Officer of Health for Mental Health. Cases under Statutory Supervision are supervised by the after-care visitors of the Birmingham Education Committee on behalf of the Health Committee.

No. under Statutory Supervision, 31.12.52	2,468
Reported during 1952	276
Admitted to Institutions during 1952	79
No. of cases awaiting admission to Institutions	142

(ii) **Guardianship**

No. under guardianship 31.12.52	35
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Maintenance grants are made by the Health Committee in respect of a number of the cases.

Cases are kept under supervision by Inspectors of the Mental Health Section.

(iii) Occupation and Training Facilities

Facilities for the training of mental defectives are provided at 7 Occupation Centres situated at Kingstanding, Handsworth, Aston, Glebe Farm, Balsall Heath, Small Heath and Weoley Castle, and 2 Industrial Centres at Aston and Balsall Heath. Most of the defectives travel to the Centres by public service vehicles. Fares are paid by the Committee and guides are provided where necessary.

Three home teachers undertake the teaching of defectives who are unable to attend the Occupation Centres owing to some disability.

MATTHEW BURN,

Medical Officer of Health,
City of Birmingham.

February, 1953.

(Copy of letter sent by Birmingham Local Medical Committee to all general practitioners in the City—referred to on page 40).

BIRMINGHAM LOCAL MEDICAL COMMITTEE

154, GREAT CHARLES STREET,
BIRMINGHAM, 3.

May, 1952.

DEAR SIR OR MADAM,

You will be very interested to learn that a great advance has recently been made towards improving the relationship between the Local Health Authority and the general practitioners of the City.

The Medical Officer of Health—Dr. Matthew Burn—has put forward certain propositions which have the full support of your Local Medical Committee.

The Local Health Committee is of the opinion that the further provision of Maternity and Child Welfare Centres of the type previously built, and in relation to present-day conditions, is unnecessary and it has been suggested that as an experiment, particularly with regard to the new housing areas, such work might be arranged in conjunction with doctors practising in these areas.

There can be no doubt that the work of the general practitioner and the health visitor are complementary, the health visitor being able to help the doctor in many ways. For instance, if you have set aside a special time for Ante-natal Clinics, you would probably welcome the assistance of a health visitor at your clinic, or if you find it more convenient you could use the facilities of the Maternity and Child Welfare Centres.

Your Local Medical Committee feel that this is an opportunity which should not be missed by the general practitioner for never before has there been such a chance of beginning the integration of preventive and general medical services.

The Medical Officer of Health will be very happy indeed to arrange for his appropriate medical colleagues to explain the proposals to you, either in rota groups, Ward meetings, or individually, and with that end in view he would be pleased if you would communicate your wishes direct to Dr. Jean Mackintosh, Administrative Medical Officer of Health for Maternity and Child Welfare, Public Health Department, The Council House, Birmingham, 3. (Tel. : CEN. 7000 : Ext. 227).

Yours faithfully,

F. E. GOULD,

Secretary.

BIRMINGHAM

General

The City of Birmingham, with a census population recorded as 1,112,340 in 1951 and an estimated population of 1,119,000 in 1952, 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

It is with pleasure that I once more acknowledge Mr. A. L. Kelley's kind co-operation in supplying, as Observer of the Meteorological Observatory at Edgbaston, the following information on the weather which was recorded at Edgbaston during the year 1952. 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 1952

The average temperature for the year and the total rainfall were nearly normal, but the sunshine total was 67 hours above normal.

The year opened with the breaking of two records—January 1st was the sunniest New Year's Day on record with a total of 6.5 hours, and the sunshine total for the month was also the highest on record for January, being almost double the normal amount (actual 76.8, normal 42.3). Apart from this the month was cool, particularly during the second half, and the rainfall was slightly above average. The lowest shade temperature of the year was recorded on January 27th, being 21 degrees.

February was also rather cool, but very dry and with sunshine a little above average. A period of absolute drought, 15 days, occurred in the latter half of February and the first days of March.

It was exceptionally warm during the first week of March when the mean temperature was equal to that normally recorded in late April or early May, but the closing days of the month were cold and wintry. The

mean temperature for the whole month was 2.3 degrees above average. It was rather wet with a rainfall total half an inch above normal, and sunshine was a little below normal.

April weather was the traditional mixture, being on averages warm and sunny but at the same time rather wet and thundery. Easter Monday was the warmest and wettest Easter Bank Holiday on record with a temperature of 68 degrees and a heavy thunderstorm in the afternoon. April's rainfall was nearly 1 inch above normal and thunder on five days during the month established a new record. Temperature exceeded 70 degrees on the 18th, and the total sunshine was above normal.

Dull and rainy weather in early May was followed by warm and sunny conditions, which lasted till nearly the end of the month when they were replaced by a cooler showery type which persisted until late June. Whilst sunshine was a little above average in May it was below in June. The mean temperature of May was 4 degrees above average and that of June was practically normal. Rainfall, which was a little in excess of the normal for May was $\frac{1}{2}$ inch below average in June.

July was dry and rather warm. Nearly half the rainfall occurred during the early evening of the 1st, when a short but very violent thunderstorm caused flooding, widespread damage and some casualties in the area. The electrical intensity of the storm was much greater than is usually experienced in the Midlands. The maximum temperature of 85 degrees recorded on 1st July was the highest of the year and the night minimum temperature recorded on the night of June 30th (66.4) was the highest on record at Edgbaston.

August was the sixth successive month with a mean temperature above average. The excessive rainfall, mostly during the first 19 days, and including the Bank Holiday week-end, largely balanced the deficiency of July. Sunshine total was a little above average.

The opening days of September ushered in a spell of cool weather which was to last with but little interruption until nearly Christmas. The mean temperature for September was the lowest on record. Rainfall and sunshine were below normal.

October was wet and cool but there were some good sunny intervals and sunshine was above average.

November was exceptionally cool with the lowest mean temperature for 27 years. The minimum temperature of 24 degrees registered on the 25th was the lowest for November since 1904. Rainfall was a little below average whilst sunshine was a little above, despite the fact that there were 16 sunless days. It was particularly wintry during the closing days and snow or sleet were registered on seven occasions, the most since 1919. The worst gale since March 16th, 1947 occurred during the night of the 6th—7th, when widespread damage was experienced over the Midlands area. Gusts up to 79 m.p.h. were recorded at Edgbaston. Snow lay to a depth of about 3 inches on the 30th.

The cool conditions carried on into December and until just before Christmas when a spell of south-westerly weather gave temperatures up to 51 degrees, but the year went out on a cold northerly wind current. December's main contributions to the winter were a snowfall on the 14th—15th which gave 5 to 12 inches of snow over the Midlands, and another gale recorded on the 17th which caused further damage in the area. Rainfall was nearly normal, temperature 2 degrees below and sunshine a little above average.

Note. The period September to December and into January, 1953 was the coldest since the same period in the years 1892-3. This does not mean that conditions were particularly severe but rather persistently cool.

Comparison of Means and Other Data

Month	Temperature °F.		Rainfall Ins.		Sunshine Hrs.	
	Monthly	Long	Monthly	Long	Monthly	Long
	Average	Period	Average	Period	Average	Period
	1952	Average	1952	Average	1952	Average
January ...	36.9	38.8	2.715	2.565	76.8	42.3
February ...	38.3	39.2	0.635	2.020	67.3	59.2
March ...	44.3	42.0	2.485	1.930	82.9	94.7
April ...	49.8	46.3	2.860	2.030	157.9	132.6
May ...	56.1	52.2	2.580	2.313	184.7	173.0
June ...	57.7	57.5	1.550	2.030	162.2	178.8
July ...	62.2	60.8	1.730	2.540	173.5	170.4
August ...	60.5	60.2	3.665	2.650	164.8	160.0
September...	51.5	56.2	1.745	2.020	103.0	120.9
October ...	48.3	49.7	4.190	2.820	99.1	86.3
November...	39.5	43.1	2.540	2.650	55.7	49.1
December ...	38.0	39.8	2.840	2.815	41.8	35.3
YEAR ...	48.6	48.8	29.535	28.383	1369.7	1302.6

VITAL STATISTICS

Summary of Statistics for the year 1952

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 Total 1,119,000

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 20 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.

Live Births	(a) Born in the City	.....	17,729
	(b) Born outside the City	.....	572
			Total 18,301

Legitimate—17,419. Illegitimate—882. (4.82 per cent. of total live births).

Live birth rate 16.4 per 1,000 population.

Stillbirths

Total 366, 57.1 per cent. were premature.

Stillbirth rate per 1,000 total live and stillbirths 19.6.

Maternal Mortality

Rate per 1,000 live and stillbirths :

excluding 4 maternal deaths after abortion 0.59 (Total deaths 11).

including 4 maternal deaths after abortion 0.80 (Total deaths 15)

Infant Mortality Rate

	<i>Total deaths under 1 year</i>	<i>Deaths under 1 year per 1,000 live births</i>
Legitimate 	455	26
Illegitimate 	35	40
Legitimate and Illegitimate ...	490	27

Neonatal death rate 17.6 per 1,000 live births (17.1 legitimate, 27.2 illegitimate).

Deaths

1952 crude death rate per 1,000 population—10·2 (11,459 deaths).

1951 crude death rate per 1,000 population—11·4 (12,699 deaths).

Area Comparability Factors :

Births	0·96	Deaths	1·12
Adjusted birth rate	15·70	Adjusted death rate	11·47

It should be noted that 9·8% fewer deaths occurred in 1952 than in 1951. A death rate of 10·2 per 1,000 is not, however, the lowest recorded. In 1948 there was the low rate of only 9·8.

The diseases causing most deaths were :—

Diseases of the circulatory system :

Excluding " strokes "	3,871
Including " strokes "	5,375
Cancer	2,130
Diseases of the respiratory system, excluding tuberculosis.....	1,255

These three groups of diseases accounted for 76% of all the deaths. Frequently death is preceded by a long illness and, when one takes into account also that older people are more prone to these types of disease, it becomes clear that they impose a heavy burden upon nursing services.

DEATHS FROM DISEASES OF THE RESPIRATORY SYSTEM were mainly attributed to the following conditions :—

467 males and 202 females who died of bronchitis.

189 males and 167 females who died of broncho-pneumonia.

58 males and 40 females who died of lobar pneumonia.

When these conditions are so severe as to cause death it is difficult to distinguish clearly between bronchitis and broncho-pneumonia supervening on chronic bronchitis, and similarly so between the various forms of pneumonia. These three very closely related diseases accounted for 1,123 deaths, i.e., very nearly 10% of the year's total. Although there has in the last 15 years been a rapid fall in the number of deaths from lobar pneumonia, the deaths from bronchitis and broncho-pneumonia have shown no such phenomenon. There are however wide variations from year to year in accordance with the severity of the weather, influenza epidemics, etc.

Deaths from bronchitis and broncho-pneumonia are relatively few after the first year of life (see Table A), until beyond the age of 44 when the numbers rise in both sexes, but far more rapidly in males than in females causing in 1952 450 deaths in males and 193 in females from bronchitis and 139 deaths in males and 129 in females from broncho-pneumonia. The higher incidence in males than in females is very marked between the ages of 45 and 74 years. 397 men of this age died of bronchitis or broncho-pneumonia, but there were only 131 deaths among females.

TABLE A

BRONCHITIS DEATHS, 1952, BY MONTH OF OCCURRENCE, AGE & SEX

<i>Month</i>	<i>Sex</i>	0-	1-	2-	5-	15-	25-	45-	65-	75-	<i>All ages</i>
January	M.	-	-	-	-	-	-	22	25	17	64
	F.	-	-	-	-	-	-	2	6	18	26
February	M.	-	-	-	-	-	3	22	23	15	63
	F.	-	-	-	-	-	1	2	7	17	27
March	M.	3	-	-	-	-	3	11	17	14	48
	F.	-	-	-	-	-	-	1	4	13	18
April	M.	-	-	-	-	-	1	10	13	12	36
	F.	-	-	-	-	-	-	2	1	6	9
May	M.	-	-	-	-	-	-	7	17	10	34
	F.	1	-	-	-	-	-	-	1	10	12
June	M.	-	-	-	-	-	-	4	3	3	10
	F.	-	-	-	-	-	-	1	-	5	6
July	M.	-	-	-	-	-	-	3	5	4	12
	F.	-	-	-	-	-	1	2	1	4	8
August	M.	-	-	-	-	-	-	5	4	6	15
	F.	-	-	-	-	-	-	1	1	6	8
September	M.	1	-	-	-	-	-	5	4	9	19
	F.	-	-	-	-	-	1	2	1	10	14
October	M.	-	-	-	-	-	1	14	14	11	40
	F.	-	-	-	-	-	1	1	1	8	11
November	M.	-	-	-	-	-	2	18	21	10	51
	F.	1	-	-	-	-	-	4	8	9	22
December	M.	1	-	-	-	-	2	23	29	20	75
	F.	1	1	-	-	-	1	9	11	18	41
Whole year	M.	5	-	-	-	-	12	144	175	131	467
	F.	3	1	-	-	-	5	27	42	124	202

BRONCHO-PNEUMONIA DEATHS, 1952, BY MONTH OF OCCURRENCE.
AGE AND SEX

<i>Month</i>	<i>Sex</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>
January	M.	7	-	-	1	-	1	1	6	14	30
	F.	3	1	-	-	-	-	8	5	11	28
February	M.	7	-	-	-	-	1	3	5	5	21
	F.	5	1	1	-	-	-	-	4	11	22
March	M.	4	1	-	-	-	1	4	2	2	14
	F.	1	-	-	-	-	-	2	4	12	19
April	M.	4	2	-	-	-	-	3	6	2	17
	F.	3	-	-	-	-	-	3	4	6	16
May	M.	1	1	-	-	-	-	2	1	8	13
	F.	2	-	-	-	1	-	1	1	4	9
June	M.	1	-	-	-	-	1	1	5	4	12
	F.	3	1	-	-	-	1	2	-	2	9
July	M.	-	-	-	-	-	1	-	2	3	6
	F.	-	-	-	-	-	-	2	1	-	3
August	M.	2	-	1	-	-	-	1	4	5	13
	F.	4	-	-	-	-	-	-	1	3	8
September	M.	-	-	-	1	-	-	2	5	4	12
	F.	2	-	-	-	-	-	-	3	-	5
October	M.	-	-	-	-	-	1	6	2	3	12
	F.	-	-	-	-	-	-	1	4	-	5
November	M.	2	1	-	-	-	-	1	3	5	12
	F.	1	-	-	-	-	-	3	3	8	15
December	M.	6	-	1	-	-	1	8	5	6	27
	F.	6	-	1	1	-	-	6	4	10	28
Whole year	M.	34	5	2	2	-	7	32	46	61	189
	F.	30	3	2	1	1	1	28	34	67	167

LOBAR-PNEUMONIA DEATHS, 1952, BY MONTH OF OCCURRENCE.
AGE AND SEX

<i>Month</i>	<i>Sex</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>
January	M.	1	-	-	-	-	-	2	5	2	10
	F.	-	-	-	-	-	-	-	1	2	3
February	M.	-	-	-	-	-	-	1	2	1	4
	F.	1	-	-	-	1	-	-	2	1	5
March	M.	-	-	-	-	-	-	1	2	4	7
	F.	-	-	-	-	-	1	-	-	2	3
April	M.	-	-	-	-	-	1	1	1	1	4
	F.	-	-	-	-	-	-	-	2	2	4
May	M.	-	-	-	-	-	-	1	-	1	2
	F.	1	-	-	-	-	-	1	1	1	4
June	M.	1	-	-	-	-	-	1	1	1	4
	F.	-	-	-	-	-	-	-	-	1	1
July	M.	-	-	-	-	-	-	2	-	1	3
	F.	-	-	-	-	-	-	1	-	1	2
August	M.	1	-	-	-	-	-	-	-	1	2
	F.	1	-	-	-	-	-	-	1	-	2
September	M.	-	-	-	-	-	-	2	-	2	4
	F.	-	-	-	-	-	-	-	1	2	3
October	M.	1	-	-	-	-	-	1	3	-	5
	F.	-	-	-	-	-	-	3	1	-	4
November	M.	-	-	-	-	1	-	1	1	2	5
	F.	-	-	-	-	-	-	-	1	7	8
December	M.	-	-	-	-	-	1	2	3	2	8
	F.	-	-	-	-	-	-	-	-	1	1
Whole year	M.	4	-	-	-	1	2	15	18	18	58
	F.	3	-	-	-	1	1	5	10	20	40

The monthly distribution of the Birmingham deaths from bronchitis and broncho-pneumonia was as follows, the seasonal distribution being typical of this disease.

	<i>Jan.</i>	<i>Feb.</i>	<i>Mar.</i>	<i>Apr.</i>	<i>May</i>	<i>June</i>	<i>July</i>	<i>Aug.</i>	<i>Sept.</i>	<i>Oct.</i>	<i>Nov.</i>	<i>Dec.</i>
Bronchitis	90	90	66	45	46	16	20	23	33	51	73	116
Broncho-pneumonia	58	43	33	33	22	21	9	21	17	17	27	55

High death rates are however not necessarily associated with cold climates. It appears in fact that overcrowding and living conditions are of considerable significance and possibly these and other factors associated with living in industrial towns predispose to death from bronchitis and pneumonia.

Accidents

In 1952 there was a slight improvement in the number of deaths from accidents assigned to the City, 204 deaths of males and 144 deaths of females as compared with 218 and 145 respectively in 1951. The year's total of 348 deaths comprised 3·0 % of all deaths in 1952.

Table B is designed to show the great importance of violence as a cause of death, particularly among children aged 2—15 years in which age group accidents now account for almost a third of all deaths. This proportion has steadily increased over the years, due to the decline in numbers of deaths from "natural causes" in this age group. With the possible exceptions of infancy and old age, there is a far higher proportion of deaths in males due to violence than there is in females. The difference is particularly marked in the age groups 15—24 and 25—44 years. In 1952 for instance at ages 15—24 violence caused 25·8 % of deaths in males and only 2·2 % of the deaths among females. Violence as a cause of death, especially in young men, is clearly increasing considerably in significance.

Suicide

There were 79 deaths of males and 41 of females occurring at the following ages :—

AGE AT DEATH											<i>All ages</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>		
Males	—	—	—	—	26	23	23	7	79
Females	—	—	—	1	12	18	6	4	41

TABLE B
DEATHS FROM VIOLENCE (EXCLUDING SUICIDE), IN AGE GROUPS,
SHEWING PERCENTAGE OF DEATHS FROM ALL CAUSES. 1930—1952

		0—	1—	2—	5—	15—	25—	45—	65—	75—	All ages
1930	M. F.	0·8 2·7	6·0 2·3	11·5 5·6	24·2 10·9	16·6 4·6	6·2 2·6	2·8 2·5	2·2 2·0	3·0 3·7	4·2 3·1
1931	M. F.	1·5 1·5	2·2 3·3	6·3 9·6	20·4 7·4	12·6 4·7	7·1 1·7	2·7 1·6	2·3 2·2	3·4 3·2	4·0 2·6
1932	M. F.	1·6 2·9	5·4 1·8	17·8 5·6	21·1 10·0	16·3 3·1	5·4 0·9	2·8 1·3	2·3 1·9	2·4 2·6	4·0 2·2
1933	M. F.	1·2 1·7	0·9 1·3	12·8 15·6	19·4 14·1	17·7 5·2	7·5 2·1	3·0 2·3	2·2 2·0	2·8 2·7	4·2 2·9
1934	M. F.	0·8 1·4	6·1 1·1	16·0 8·9	19·3 7·9	16·5 5·9	7·9 0·9	2·5 2·6	2·2 2·6	3·2 2·7	4·1 2·7
1935	M. F.	0·9 1·1	2·7 1·7	8·4 7·1	18·1 10·0	12·3 6·6	8·5 1·6	3·7 2·4	2·9 2·3	3·9 3·8	4·4 2·9
1936	M. F.	1·7 0·9	4·2 —	14·9 7·0	20·8 8·7	16·0 5·9	5·4 3·5	2·2 1·7	3·3 2·3	3·7 2·9	4·0 2·7
1937	M. F.	0·2 0·7	6·6 6·2	14·9 10·8	17·5 12·9	19·9 5·9	6·9 2·4	2·4 1·9	2·2 2·2	2·3 3·3	3·8 2·8
1938	M. F.	1·3 0·7	7·3 3·3	24·1 4·5	22·1 6·8	19·4 4·7	7·4 1·2	2·7 2·1	1·7 1·6	2·5 2·7	3·9 2·2
1939	M. F.	0·3 0·9	11·8 5·9	15·6 17·2	20·0 14·9	16·8 2·8	8·3 1·8	3·6 1·9	2·6 2·5	2·5 1·7	4·0 2·3
1940	M. F.	1·5 2·7	4·7 6·5	15·5 3·0	17·7 6·8	7·9 1·8	7·2 2·9	2·9 1·3	2·8 1·6	1·9 1·9	3·8 2·0
1941	M. F.	1·0 1·6	7·6 1·4	9·7 6·5	20·4 12·3	12·5 1·9	9·0 2·5	3·5 2·8	2·5 2·0	2·0 1·9	3·1 2·4
1942	M. F.	1·4 0·9	7·1 7·5	24·6 21·4	23·7 12·9	9·2 4·5	6·9 2·6	3·6 1·7	2·6 1·5	2·3 1·5	4·0 2·2
1943	M. F.	1·8 0·8	4·7 2·9	14·3 17·1	29·3 16·7	18·0 5·5	7·0 1·1	2·5 2·0	1·7 1·2	1·1 1·4	3·2 1·9
1944	M. F.	2·1 2·3	11·4 7·5	28·0 12·5	38·1 12·8	10·0 3·0	5·5 1·6	2·2 1·6	2·5 1·7	2·0 1·7	3·6 2·1
1945	M. F.	1·9 2·9	11·4 10·0	13·3 17·5	32·1 21·4	15·7 4·7	5·4 1·2	1·5 0·8	1·6 0·9	1·9 2·2	2·8 2·0
1946	M. F.	3·4 2·3	13·5 4·8	32·4 22·2	27·9 14·0	14·7 5·8	6·9 1·9	2·1 1·3	1·3 1·8	1·4 2·4	2·9 2·2
1947	M. F.	1·5 1·8	6·4 2·0	10·0 11·4	30·9 7·8	14·1 1·4	8·5 1·8	1·8 1·6	1·1 1·3	2·0 2·4	2·8 2·0
1948	M. F.	1·5 3·2	5·9 12·5	23·5 23·3	38·7 8·2	18·5 2·6	7·6 2·6	1·9 1·7	1·3 2·1	1·7 2·5	3·0 2·5
1949	M. F.	3·2 1·9	6·9 —	25·6 12·9	28·0 15·8	23·7 4·3	8·5 2·3	1·9 1·3	1·0 1·3	1·7 2·5	2·9 2·1
1950	M. F.	2·9 5·5	6·3 13·0	17·1 7·1	26·9 31·3	25·1 8·3	8·5 2·8	1·7 1·9	1·3 1·6	2·0 2·2	2·9 2·4
1951	M. F.	2·9 3·7	4·4 4·5	15·2 24·3	39·6 19·4	35·6 7·4	10·1 4·2	2·0 1·4	1·6 1·1	2·7 2·8	2·9 2·4
1952	M. F.	4·5 4·0	10·0 17·7	33·3 13·6	32·0 30·4	25·8 2·2	11·5 1·1	2·3 2·0	1·2 2·6	2·5 2·6	3·4 2·7

TABLE C.

BIRTH, DEATH AND INFANT MORTALITY RATES IN WARDS, 1952

	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	27,200	609	22.4	318	11.7	12	19.7
	Duddeston	30,200	657	21.8	334	11.1	27	41.1
	Deritend	24,600	625	25.4	285	11.6	16	25.6
	Market Hall	23,500	546	23.2	254	10.8	17	31.1
	Ladywood	25,100	552	22.0	284	11.3	18	32.6
	Totals and Average Rates of Central Wards	130,600	2,989	22.9	1,475	11.3	90	30.1
MIDDLE RING	Lozells	32,600	643	19.7	391	12.0	35	54.4
	Aston	29,200	552	18.9	336	11.5	15	27.2
	Gravelly Hill	30,000	476	15.9	336	11.2	20	42.0
	Washwood Heath	32,700	502	15.4	310	9.5	4	8.0
	Saltley	31,800	545	17.1	362	11.4	20	36.7
	Small Heath	31,200	591	18.9	326	10.4	12	20.3
	Sparkbrook	25,800	483	18.7	280	10.9	6	12.4
	Balsall Heath	26,200	487	18.6	303	11.6	8	16.4
	Edgbaston	26,000	275	10.6	347	13.3	8	29.1
	Rotton Park	24,000	366	15.3	281	11.7	8	21.9
	All Saints	25,900	447	17.3	307	11.9	10	22.4
	Soho	26,000	356	13.7	306	11.8	10	28.1
	Totals and Average Rates of Middle Ring Wards	341,400	5,723	16.8	3,885	11.4	156	27.3
OUTER RING	Stechford	45,000	804	17.9	361	8.0	19	23.6
	Sheldon	39,100	748	19.1	224	5.7	20	26.7
	Yardley	25,500	352	13.8	250	9.8	7	19.9
	Acocks Green	22,600	329	14.6	256	11.3	13	39.5
	Fox Hollies	23,900	354	14.8	228	9.5	6	16.9
	Sparkhill	26,800	425	15.9	330	12.3	9	21.2
	Hall Green	26,600	332	12.5	264	9.9	8	24.1
	Springfield	27,100	361	13.3	246	9.1	8	22.2
	Brandwood	36,000	530	14.7	315	8.7	15	28.3
	Moseley and King's Heath	29,800	475	15.9	348	11.7	11	23.2
	Selly Oak	32,300	403	12.5	351	10.9	10	24.8
	King's Norton	25,900	331	12.8	273	10.5	11	33.2
	Northfield	32,500	508	15.6	229	7.0	8	15.7
	Weoley	27,800	496	17.8	200	7.2	15	30.2
	Harborne	33,300	421	12.6	306	9.2	6	14.3
	Sandwell	25,000	318	12.7	271	10.8	5	15.7
	Handsworth	27,400	418	15.3	320	11.7	15	35.9
	Perry Barr	38,600	455	11.8	248	6.4	7	15.4
	Kingstanding	37,300	657	17.6	270	7.2	15	22.8
	Stockland Green	32,200	434	13.5	286	8.9	11	25.3
	Erdington	32,300	434	13.4	355	11.0	20	46.1
	Totals and Average Rates of Outer Ring Wards	647,000	9,585	14.8	5,931	9.2	239	24.9
	Ward of Domicile not known		4		168		5	
	Totals and Rates for Whole City	1,119,000	18,301	16.4	11,459	10.2	490	26.8

TABLE D.

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		23	27	31	28	10.2	12.1	11.3

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

YEAR	Population Estimated to middle of each year	Birth-rate	Death-rate	Infant Mortality rate per 1,000 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
												Respiratory	Other Forms												
1914	882,534	26.4	14.8	122	.02	—	.35	.17	.35	.30	.16	1.20	.27	.88	1.35	1.74	2.69	1.49	.51	.09	.43	47.2	27.6	1.42	1.77
1915	891,234	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	42.8	27.3	1.65	1.79
1916	895,678	25.9	13.6	126	.03	.00	.45	.14	.25	.18	.13	1.22	.29	.94	1.36	1.80	2.64	1.36	.51	.09	.44	46.6	25.3	1.58	1.88
1917	900,000	23.1	13.5	104	.01	—	.11	.03	.42	.13	.16	1.24	.24	1.00	1.29	1.88	2.60	.87	.45	.05	.40	39.5	18.4	1.50	1.94
1918	870,000	19.7	12.6	101	.01	—	.37	.01	.14	.13	.11	1.30	.26	1.02	1.23	1.87	2.10	.88	.44	.06	.38	43.8	15.0	1.47	1.13
1919	910,000	19.4	15.2	99	.01	—	.08	.01	.32	.18	2.50	1.35	.25	1.02	1.18	1.76	2.85	.96	.40	.07	.35	38.7	18.5	1.72	1.31
1920	910,000	20.9	13.0	84	.01	—	.20	.05	.06	.14	1.15	1.10	.18	1.01	1.07	1.73	2.67	.66	.35	.11	.34	40.0	9.9	1.19	1.45
1921	910,000	27.6	12.6	83	.01	—	.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
1922	919,683	22.1	13.4	84	.01	—	.18	.04	.23	.16	.88	1.18	.22	1.03	1.17	1.79	2.54	.88	.39	.08	.36	39.4	14.3	1.58	1.48
1923	927,844	24.1	11.3	83	.01	—	.17	.04	.10	.13	.15	.97	.16	1.12	1.08	1.64	2.02	.93	.38	.10	.26	36.6	16.6	1.17	1.67
1924	936,079	21.5	12.1	86	.01	—	.09	.04	.38	.10	.48	.97	.16	1.18	1.04	1.85	2.38	.66	.37	.12	.26	37.4	8.5	1.26	1.76
1925	944,386	20.4	11.0	72	.01	—	.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
1926	952,766	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
1927	961,222	18.8	11.7	78	.01	—	.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
1928	969,752	20.8	11.5	80	.00	—	.13	.03	.19	.12	.34	.96	.15	1.21	1.00	1.85	2.10	.74	.38	.11	.30	35.3	11.3	1.64	1.85
1929	981,000	17.1	13.5	79	.00	—	.08	.01	.13	.09	.13	.90	.13	1.35	0.96	2.43	1.78	.69	.45	.15	.38	33.0	10.7	1.74	2.05
1930	982,000	17.7	10.8	60	.01	.00	.06	.02	.11	.09	.13	.94	.13	1.35	0.96	2.43	1.78	.69	.45	.15	.38	33.0	10.7	1.74	2.05
1931	1,011,300	16.9	11.7	71	.00	.00	.18	.01	.09	.06	.27	.92	.14	1.46	0.87	2.90	1.61	.62	.45	.15	.38	34.6	8.7	1.64	2.17
1932	1,017,500	16.3	11.3	67	.00	.00	.15	.01	.13	.03	.36	.83	.10	1.45	0.77	2.73	1.47	.59	.45	.19	.35	33.6	7.7	1.68	2.05
1933	1,023,500	14.7	11.0	66	.00	.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
1934	1,028,000	15.3	11.0	68	.01	.00	.02	.01	.11	.08	.18	.71	.08	1.43	0.76	3.04	1.26	.67	.44	.16	.38	35.0	8.7	1.85	1.98
1935	1,033,000	15.4	10.9	64	.01	.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	15.7	11.2	67	.00	.00	.08	.01	.08	.06	.28	.80	.10	1.46	0.76	2.95	1.35	.62	.44	.16	.38	34.6	8.1	1.68	2.07
1937	1,042,000	15.8	11.3	62	.00	.00	.04	.01	.10	.06	.13	.71	.07	1.57	0.69	3.43	1.22	.62	.45	.12	.38	32.8	5.4	1.53	2.14
1938	1,045,000	16.3	11.7	60	.00	.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
1939	1,048,000	16.6	10.9	61	.00	.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
1940	1,055,000	16.6	11.4	60	.00	.00	.02	.00	.05	.05	.22	.77	.07	1.55	0.67	3.65	1.16	.45	.39	.15	.36	29.1	13.7	0.86	1.72
1941	1,058,000	16.9	11.3	60	.00	.00	.01	.01	.07	.05	.16	.77	.07	1.61	0.80	3.31	2.21	.55	.46	.14	.42	28.2	12.1	0.58	1.63
1942	1,060,000	16.4	11.9	63	.00	.00	.03	.01	.06	.06	.21	.73	.07	1.59	0.80	3.45	1.43	.56	.44	.14	.38	30.3	9.8	0.87	1.99
1943	1,065,000	16.8	13.2	69	.01	.00	.00	.00	.12	.09	.15	.81	.09	1.70	1.30	3.10	1.94	.72	.45	.12	.44	26.4	11.3	0.82	1.75
1944	1,076,000	19.3	11.8	56	.00	.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
1945	1,096,100	20.9	12.1	55	.00	.00	.01	.00	.06	.04	.34	.71	.07	1.83	1.31	3.02	1.73	.46	.45	.11	.31	25.4	9.1	0.79	0.94
1946	1,107,100	22.8	11.3	42	.00	.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
1947	1,117,900	22.5	11.3	40	.00	.00	.03	.00	.03	.04	.15	.73	.08	1.78	1.31	3.10	1.60	.54	.43	.10	.34	25.0	8.8	0.77	1.14
1948	1,106,800	22.2	11.1	41	.00	.00	.02	.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
1949	1,106,800	19.5	9.8	32	.00	.00	.01	.00	.03	.00	.03	.64	.05	1.83	1.34	3.34	1.48	.36	.34	.11	.27	20.6	7.1	0.29	0.71
1950	1,117,900	18.1	10.7	31	.00	.00	.01	.00	.02	.00	.19	.54	.05	1.75	1.25	3.52	1.10	.32	.33	.13	.27	17.8	3.2	0.09	0.42
1951	1,110,900	16.8	10.9	30	.00	.00	.01	.00	.02	.00	.07	.43	.03	1.88	1.40	3.67	1.30	.35	.28	.12	.30	18.9	2.2	0.37	0.48
1952	1,119,000	16.5	11.4	30	.00	.00	.01	.00	.03	.00	.10	.56	.05	1.84	1.28	3.38	1.52	.36	.32	.12	.28	19.3	4.4	0.19	0.56
1953	1,119,000	16.4	10.2	27	.00	.00	.01	.00	.01	.00	.26	.35	.03	1.82	1.49	3.79	1.54	.42	.25	.12	.33	18.2	1.6	0.27	0.49
1954	1,119,000	16.4	10.2	27	.00	.00	.01	.00	.01	.00	.03	.25	.02	1.90	1.46	3.46	1.12	.39	.22	.11	.31	17.5	1.3	0.38	0.44

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

CITY OF BIRMINGHAM

CAUSES OF DEATH AT DIFFERENT AGE PERIODS DURING 1952

			AGES AT DEATH											All Ages
No.	Causes of Death	Sex	0-	1-	2-	5-	15-	25-	45-	65-	75-			
1	Typhoid & Paratyphoid Fever...	M.	—	—	—	—	—	—	—	—	—			
1A	Smallpox	F.	—	—	—	—	—	—	—	—	—			
2	Measles	F.	—	—	—	—	—	—	—	—	—			
3	Scarlet Fever	M.	—	—	—	—	—	—	—	—	—			
4	Whooping Cough	M.	—	—	—	—	—	—	—	—	—			
5	Diphtheria	M.	2	6	1	4	—	—	—	—	—			
6	Influenza	F.	—	—	—	—	—	—	—	—	—			
6A	Poliovirus inc.	F.	—	—	—	—	—	—	—	—	—			
7	Polio Encephalitis	M.	—	—	—	—	—	—	—	—	—			
7	Acute Infectious encephalitis incl. Encephalitis Lethargica	M.	1	—	—	—	—	—	—	—	—			
8	Meningococcal Infections	M.	—	—	—	—	—	—	—	—	—			
9	inc. Cerebrospinal Fever	F.	4	1	—	—	—	—	—	—	—			
9	Tuberculosis of Respiratory System	F.	2	1	—	—	—	—	—	—	—			
10A	Tubercular Meningitis	M.	1	—	—	—	—	—	—	—	—			
10B	Tuberculosis of the Abdomen	F.	1	—	—	—	—	—	—	—	—			
10C	Tuberculosis of Spinal Column	M.	—	—	—	—	—	—	—	—	—			
10D	Tuberculosis of Joints	F.	—	—	—	—	—	—	—	—	—			
10E	Disseminated Tuberculosis	M.	—	—	—	—	—	—	—	—	—			
10F	Tuberculosis of Glands and other parts	F.	—	—	—	—	—	—	—	—	—			
11	Syphilis	M.	—	—	—	—	—	—	—	—	—			
12	General Paralysis of Insane, Tabes Dorsalis	F.	—	—	—	—	—	—	—	—	—			
13A	Cancer of Buccal Cavity & Pharynx	M.	—	—	—	—	—	—	—	—	—			
13B	Digestive Organs	F.	—	—	—	—	—	—	—	—	—			
13C	Peritoneum	M.	—	—	—	—	—	—	—	—	—			
13D	Respiratory Organs	F.	—	—	—	—	—	—	—	—	—			
13D	Genital Organs	M.	—	—	—	—	—	—	—	—	—			
13E	Breast	F.	—	—	—	—	—	—	—	—	—			
13F	Urinary Organs	M.	—	—	—	—	—	—	—	—	—			
13G	Skin	F.	—	—	—	—	—	—	—	—	—			
14	Diabetes	M.	—	—	—	—	—	—	—	—	—			
14A	Rheumatic Fever	M.	—	—	—	—	—	—	—	—	—			
14B	Chronic Rheumatism Osteo-Arthritis	F.	—	—	—	—	—	—	—	—	—			
15	Cerebral Haemorrhage, etc.	M.	—	—	—	—	—	—	—	—	—			
15A	Other Nervous Diseases and Diseases of Sense Organs	F.	—	—	—	—	—	—	—	—	—			
16	Heart Disease	M.	—	—	—	—	—	—	—	—	—			
17	Aneurysm	F.	—	—	—	—	—	—	—	—	—			
18	Arterio-Sclerosis and other Circulatory Dis.	M.	—	—	—	—	—	—	—	—	—			
19	Bronchitis	F.	—	—	—	—	—	—	—	—	—			
20	Pneumonia (all forms)	M.	—	—	—	—	—	—	—	—	—			
21	Other Respiratory Diseases	F.	—	—	—	—	—	—	—	—	—			
22	Peptic Ulcer	M.	—	—	—	—	—	—	—	—	—			
23	Diarrhoea and Enteritis	F.	—	—	—	—	—	—	—	—	—			
24	Appendicitis	M.	—	—	—	—	—	—	—	—	—			
25	Cirrhosis of Liver	F.	—	—	—	—	—	—	—	—	—			
26	Other Diseases of Liver, etc.	M.	—	—	—	—	—	—	—	—	—			
27	Other Digestive Diseases	F.	—	—	—	—	—	—	—	—	—			
28	Acute and Chronic Nephritis	M.	—	—	—	—	—	—	—	—	—			
28A	Other Genito-Urinary Diseases	F.	—	—	—	—	—	—	—	—	—			
29	Puerperal Sepsis	M.	—	—	—	—	—	—	—	—	—			
30	Other Puerperal Causes	F.	—	—	—	—	—	—	—	—	—			
31	Constitutional Debility, Premature Birth, Malformations, etc.	M.	—	—	—	—	—	—	—	—	—			
32	Senility	F.	—	—	—	—	—	—	—	—	—			
33	Suicide	M.	—	—	—	—	—	—	—	—	—			
34	Other Violence...	F.	—	—	—	—	—	—	—	—	—			
34A	War Operations	M.	—	—	—	—	—	—	—	—	—			
34B	Other Causes	F.	—	—	—	—	—	—	—	—	—			

GENERAL EPIDEMIOLOGY

Apart from a considerable epidemic of measles, which began in 1952 and reached its peak in January, 1953, no serious incidence of infectious disease was associated with the year 1952.

Medical Officers of the Department continued to be called upon in consultation with General Practitioners who had patients considered to be suffering from infectious diseases, and where there was some doubt as to the diagnosis or special difficulty as to the precautions which should be taken, at work and in the home, to prevent spread of infection. Many of these cases were found to be severe forms of chickenpox in which the doctor was anxious to ensure that the infection was actually not smallpox.

Diphtheria

Although during the year 200 notifications of this disease were received, in only 13 was the diagnosis confirmed. Two of the cases died—neither having been immunised. (There were 105 confirmed cases in 1950 and 27 in 1951).

The following table shows the immunisation history of the confirmed cases and demonstrates clearly, not only the importance of primary immunisation, but of the supplementary dose which is normally given about the time of entering school.

In no case did diphtheria arise in a person fully immunised in accordance with this standard.

Three of the cases belonged to one family. A girl of 16 was discharged from hospital whilst known to be a carrier of diphtheria organisms of intermedius strain. Some eight weeks after her return home her mother and sister were taken ill on the same day. The mother died and the sister was found to be infected by organisms of intermedius strain. The remaining 10 cases of diphtheria all occurred singly, were widely scattered over the City and had no relation to other known cases or carriers.

In addition, whilst bacteriologically investigating certain other diseases, particularly tonsillitis, 7 carriers of diphtheria were discovered.

AGE DISTRIBUTION AND IMMUNISATION HISTORY OF THE DIPHTHERIA CASES DURING 1952

<i>Age at time of illness</i>	0-1 year	1-2	3-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65up	Total
Non- Immunised Cases ...		2 (1 died)			1	1		2	1 (Died)				7
Primary Immunisation only ...				1 (in in- fancy)	3*	1 (at 6 years)		1 (at 8 years)					6
TOTALS ...		2		1	4	2		3	1				13

* 1 immunised at 2 years, 1 at 3 years, 1 at 5 years.

It is to be noted that no child fully protected by immunisation suffered from diphtheria in 1952, i.e., none of the cases under 5 years old had received the full primary course of injections, and no case over 5 years had in addition received the supplementary injection.

Diphtheria Immunisation

During 1952, 17,532 persons received a full course of primary immunisation, and in addition 19,130 persons received supplementary injections at ages shown in the following table.

<i>Age</i>	<i>Under 1</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5-9</i>	<i>10-14</i>	<i>Total</i>
Primary ...	9,007	3,413	775	599	560	3,030	148	17,532
Supplementary				9	4,752	14,136	233	19,130

1. IMMUNISATION IN RELATION TO CHILD POPULATION

It is most unsatisfactory that so many children do not receive their primary immunisation until they start to attend school.

The number of children who had completed a full course of primary immunisation at any time up to 31st December, 1952 is shown below

<i>Age at 31.12.52</i>	<i>Under 1</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5 to 9</i>	<i>10 to 14</i>	<i>Total</i>
<i>Born in year</i>	<i>1952</i>	<i>1951</i>	<i>1950</i>	<i>1949</i>	<i>1948</i>	<i>1943 1947</i>	<i>1938 1942</i>	<i>under 15</i>
	1,266	11,238	12,782	13,687	15,924	98,273	78,101	231,271
	54,897					176,374		
	<i>Children under five</i>					<i>Children 5-14 inclusive</i>		
Estimated Mid-year Child Population, 1952	94,500					171,100		

Based on the above, and similar figures for previous years, and making allowances for deaths and movement of children into and out of the City, the percentages of immunised children in the age groups are given below :—

		<i>1950</i>	<i>1951</i>	<i>1952</i>
0— 5 years of age	...	58%	59%	58%
5—15 years of age	...	98%	100% approx.	100% approx.
0—15 years of age	...	83%	85%	85%

RELATIVE AMOUNTS OF IMMUNISATION DONE BY GENERAL PRACTITIONERS AND BY PUBLIC HEALTH DEPARTMENT

	<i>1948</i>	<i>1949</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>
Primary Immunisation :					
By Health Department	19,281	14,085	6,781	12,320	10,658
By Gen. Practitioners	3,764	5,706	4,018	7,253	6,874
Total	23,045	19,791	10,799	19,573	17,532
Percentage of total done by Gen. Practitioners	16.33	28.83	37.21	37.06	39.21
Supplementary Injections :					
By Health Department	7,931	16,287	7,065	19,119	16,726
By Gen. Practitioners	465	879	621	75	2,404
Total	8,396	17,166	7,686	19,194	19,130
Percentage of total done by Gen. Practitioners	5.54	5.12	8.08	0.39	12.56

While the vast majority of the supplementary injections are given by the Health Department, General Practitioners are carrying out an increasing volume of primary immunisation which now amounts to almost 40% of the whole.

1952

DIPHTHERIA IMMUNISATION—COMPLETED CASES OF PRIMARY IMMUNISATION

Year of Birth	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	Total	Adults
Maternity and Child Welfare Centres	673	4,666	583	349	140	149	69	38	11	3	1	1	—	—	—	6,683	—
Schools, Nursery Schools and Classes	—	—	9	47	86	820	1,119	584	286	29	11	7	18	14	4	3,034	14
Day Nurseries	9	156	72	48	34	32	39	12	1	—	—	—	—	—	—	403	—
Institutions	4	52	31	11	8	14	5	9	8	5	7	9	17	11	5	196	4
Council House Clinic	42	214	35	22	10	13	4	1	—	1	—	—	—	—	—	342	—
A.P.T. General Practitioners	493	4,418	664	276	95	90	30	15	6	3	3	3	—	—	—	6,096	33
D.P.P.*	44	583	103	24	7	8	9	—	—	—	—	—	—	—	—	778	—
TOTAL	1,265	10,089	1,497	777	380	1,126	1,275	659	312	41	22	20	35	25	9	17,532	51
Cumulative total of immunised children at Dec. 31st, 1952†	1,266	11,238	12,782	13,687	15,924	18,763	18,686	19,141	23,843	17,840	15,544	14,857	16,390	15,809	15,501	231,271	—

*Diphtheria and Whooping Cough immunisation combined.

†Not accounting for deaths and movement of school children into and out of City.

1952

DIPHTHERIA IMMUNISATION—SUPPLEMENTARY DOSES

<i>Year of Birth</i>	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	Total	<i>Adults</i>
Maternity and Child Welfare Centres	—	—	—	—	571	2,245	312	102	46	9	—	3	1	2	—	3,291	—
Schools, Nursery Schools and classes	—	—	—	—	300	5,398	4,344	2,043	715	53	30	21	23	19	38	12,984	25
Day Nurseries	—	—	—	—	81	153	2	—	—	—	—	—	—	—	—	236	—
Institutions	—	—	—	—	1	15	14	22	9	13	8	9	4	9	2	106	7
Council House Clinic	—	—	—	—	20	52	7	1	3	2	4	4	4	6	6	109	2
A.P.T. General Practitioners	—	—	—	2	237	1,471	405	131	38	19	9	7	3	7	10	2,339	11
D.P.P.	—	—	—	—	9	41	8	5	—	1	—	1	—	—	—	65	—
Total	—	—	—	2	1,219	9,375	5,092	2,304	811	97	51	45	35	43	56	19,130	45

Dysentery

During the year there were 129 notified cases of dysentery. After revision of diagnosis 110 cases were accepted as being dysentery and of these 32 were confirmed by bacteriological examination and all were *shigella sonnei*. One case notified as food poisoning, 3 cases notified as gastro-enteritis and 1 as paratyphoid fever were found after bacteriological examination to be suffering from *shigella sonnei* dysentery. Twenty-three of the notified cases after admission to Little Bromwich Hospital were found not to have dysentery. One child aged one year, notified as a case of dysentery but not admitted to Little Bromwich, was found to be suffering from an infection due to *B. Proteus Mirabilis*, an organism which may be present in faeces of young children and which has been known to be the causative organism in cases of acute bacterial food poisoning.

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	6	12	5	14	2	1	—	6	1	2	—	—	49
Females	4	9	7	8	3	6	10	7	3	1	1	2	61
TOTAL	10	21	12	22	5	7	10	13	4	3	1	2	110

Of these 110 cases 63·6% occurred in children under 15 years old, i.e., in the pre-school and school child population.

It is of interest to note that in persons over 15 years old 30 cases occurred in females whereas there were only 10 cases amongst males. It is usually the woman's job to attend to the toilet of the small child, and it may be through this that women become infected.

The day nursery population was comparatively free from dysentery and, considering the susceptibility of children to infections of this nature, it speaks well for the staff of the nurseries that there were not more cases.

Encephalitis

During 1952 there were 8 confirmed cases of encephalitis as follows :—

	Sex	Age	Outcome
6 infective	3 males	11 years	recovered
		22 "	died
		36 "	died
	3 females	14 mths.	died
		31 years	died
		46 "	died

	<i>Sex</i>	<i>Age</i>	<i>Initial infection</i>	<i>Outcome</i>
2 post infectious	2 females	5 years	chickenpox	recovered
		5 "	measles	recovered

Food Poisoning

The following statement summarises the City's experience during 1952 :—

<i>1st quarter</i>	<i>2nd quarter</i>	<i>3rd quarter</i>	<i>4th quarter</i>	<i>Total</i>
7	41	4	37	89

Outbreaks due to identified agents :—4. Total cases 48.

Outbreaks due to :—

Salmonella organisms—1.

Staphylococci (including toxin)—2.

Other bacteria—1.

Outbreaks of undiscovered cause: 5. Total cases: 12.

Single cases :—

Agent identified—8. Unknown cause—21. Total cases : 29.

There were no deaths.

During the fourth quarter of the year a number of stool specimens were examined from notified cases in their acute phase and no pathogenic organisms could be identified. Both alpha and beta B. Coli were absent. This illness was characterised by diarrhoea and vomiting and seemed to pass from person to person. One suspected a virus as the cause, possibly by droplet spread.

One of the staphylococcal outbreaks occurred at a school where boiled ham had been served for lunch and had been eaten by all the 26 persons affected. The ham had been prepared three days previously, skinned and then stored in an overcrowded cupboard during a particularly hot week-end. Staphylococcus pyogenes were found in the remainder of the ham, in the stools of the victims and on a small septic lesion of the cook's left forearm. Although there was a high standard of cleanliness in this kitchen, the food handler did not realise that even a small septic focus could be responsible for such an outbreak. No refrigerator was available in which to store the ham during the hot week-end.

The other staphylococcal outbreak also occurred at a school and was found to be due to contamination of a fish salad by staphylococcus from the hands of the cook. Twelve persons were affected, after an average incubation period of one hour.

The outbreak of salmonella food poisoning occurred in a family in which the mother and her three children had consumed pressed beef for lunch. During the night and early morning they were attacked with diarrhoea and vomiting. The father and the baby, who had consumed none of the meat, were however, found to be infected later, possibly as secondary cases. In the remains of the meat no salmonella infection could be found.

Four workmen consumed for their lunch pork pies which were stale to the extent of being sour. Four hours later they developed abdominal pains and later diarrhoea; all were fit enough to return to work on the following day. One pie remained uneaten and from this a profuse growth of anthracoid bacilli and micrococci was obtained. Investigation revealed that the pies had been prepared and handled in a negligent manner and stored in an unsuitable situation; they were placed under the counter in a warm shop.

Influenza

As influenza is the most serious of the winter epidemics, the Ministry of Health sought collaboration in many areas of the country in order to ascertain the occurrence of outbreaks in their very early stages, when their onset may be somewhat insidious and the early cases infrequent, though usually occurring in groups.

Family doctors are generally the first to recognise the incidence of an outbreak. Influenza is not officially notifiable and it may be some time before an increase in the deaths from this disease is noticed on the information sheets furnished by the Registrar. Arrangements were, therefore, made with certain general practitioners practising in widely different parts of the City to inform the Department by telephone when they considered a case of influenza had occurred in their practice.

Garglings and a sample of blood were taken for laboratory examination—the garglings for examination as to the presence of virus and blood for the determination of the titre of agglutinins, which titre was compared with that of another sample of blood withdrawn 10 days later.

In addition a few Industrial Medical Officers very kindly consented to inform the Department when they noticed a number of employees absent through influenza.

Dr. H. M. Cohen, School Medical Officer, was also approached and agreed to watch carefully for the early signs of an outbreak amongst school children.

Close collaboration was maintained with the local office of the Ministry of National Insurance so that attention could be drawn to a rise of claims made on account of influenza.

Although during the early months of the year, a few practitioners stated that they had patients who were showing clinical signs of influenza, the laboratory reports upon samples taken showed they were entirely negative and there was no indication of any incidence of true influenza in Birmingham during the whole year.

Malaria

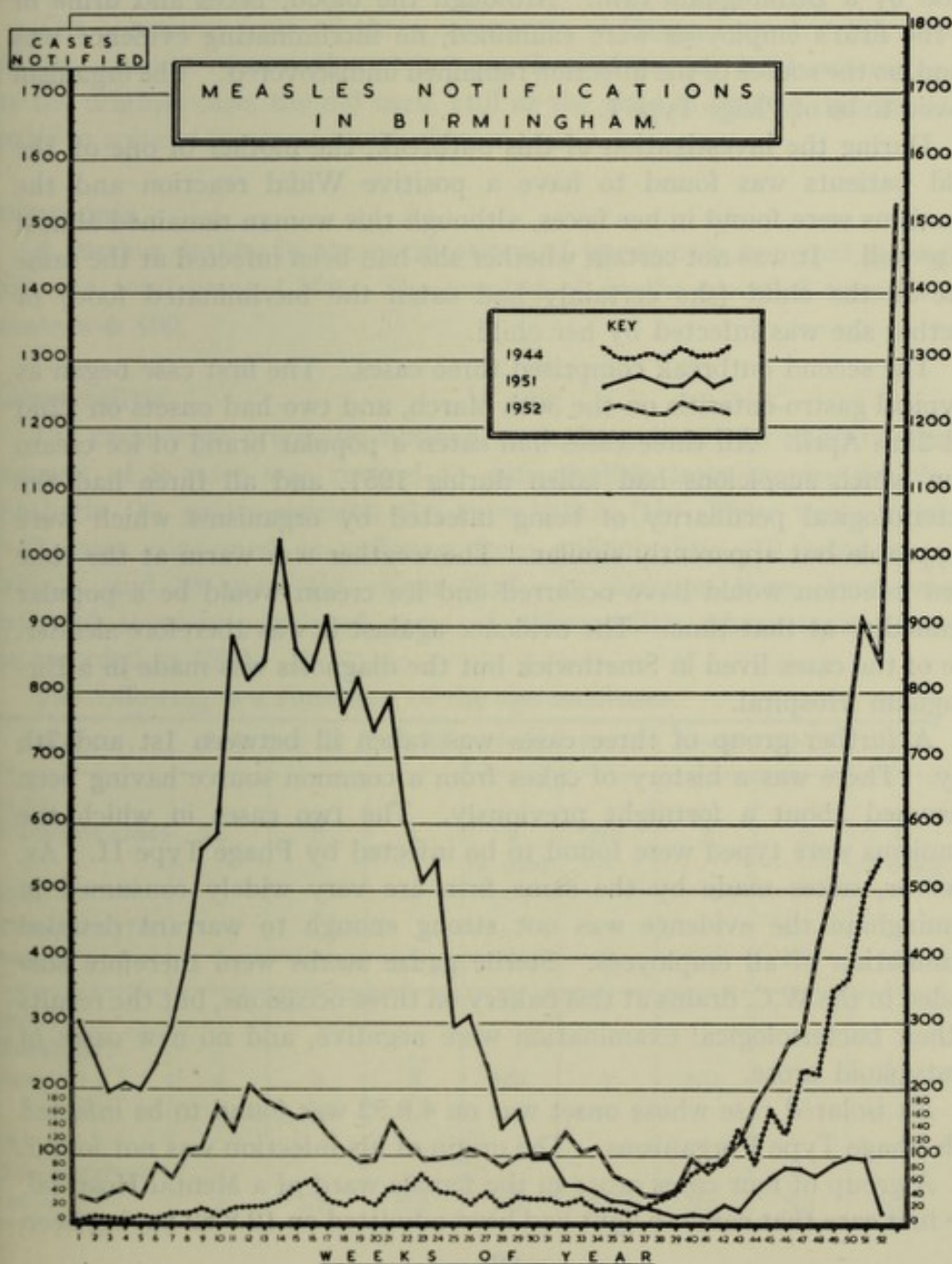
Not one of the 9 cases of malaria notified in 1952 was infected by natural means in this country.

Measles

Measles became generally notifiable in 1940 and since that date there has been no incidence so high in the latter part of the year as that experienced in 1952, when, from a low level of 37 notifications in the week ended 13th September, 1952, the incidence steadily rose to a maximum of 1,535 during the week ended 3rd January, 1953, since when the epidemic has slowly subsided. There were 9,684 notified cases during 1952.

The graph compares the years of highest and lowest incidence (1944 and 1951 respectively), with the conditions appertaining in 1952.

Two children aged 2 years and 4 years died of measles, the younger one having broncho-pneumonia as a complication. Both children had good homes and there was clearly no evidence of neglect.



Meningococcal Infection

There were 30 males and 26 females finally confirmed as suffering from this disease. The cases occurred singly.

Paratyphoid Fever

During 1952 there arose 18 confirmed cases of paratyphoid fever in Birmingham. There were 4 males, aged 11 weeks, 1 year, 12 years and 75 years. The 14 females were aged :—

Six cases of 3 years old and under, the ages of the others being : 8, 17, 27, 32, 59, 60, 72 and 77.

There were no deaths.

The first group comprised 3 cases of illness which arose between the 1st and 15th April, probably having consumed almond or similar tarts made by a Birmingham firm. Although the blood, faeces and urine of all the firm's employees were examined, no incriminating evidence was found, so the source of the infection remained undiscovered. The organism proved to be of Phage Type 1.

During the investigation of this outbreak, the mother of one of the child patients was found to have a positive Widal reaction and the organisms were found in her faeces, although this woman remained almost quite well. It was not certain whether she had been infected at the same time as the child (she certainly had eaten the incriminated food) or whether she was infected by her child.

The second outbreak comprised three cases. The first case began as a typical gastro-enteritis on the 30th March, and two had onsets on 22nd and 25th April. All three cases had eaten a popular brand of ice cream upon which suspicions had fallen during 1951, and all three had the bacteriological peculiarity of being infected by organisms which were untypeable but apparently similar. The weather was warm at the time when infection would have occurred and ice cream would be a popular commodity at that time. The evidence against it was therefore slender. One of the cases lived in Smethwick but the diagnosis was made in a Birmingham Hospital.

A further group of three cases was taken ill between 1st and 7th July. There was a history of cakes from a common source having been consumed about a fortnight previously. The two cases in which the organisms were typed were found to be infected by Phage Type II. As, however, cakes made by the same firm are very widely consumed in Birmingham the evidence was not strong enough to warrant detailed examination of all employees. Sterile gauze swabs were therefore suspended in the W.C. drains at this bakery on three occasions, but the results of their bacteriological examination were negative, and no new cases of paratyphoid arose.

An isolated case whose onset was on 4.9.52 was found to be infected with Phage Type I organisms. The origin of his infection was not found.

A group of four cases arose in the female ward of a Mental Hospital. The first case that came to light had been admitted on 12.8.52 having been

mentally ill for some long time. A month later she developed a pyrexia and after treatment with penicillin and chloromycetin she was belatedly diagnosed on the Widal reaction as a case of paratyphoid B. The patients and staff at this hospital were all investigated and three other patients were found to have been infected, the organism recovered from one being of Phage Type I. The origin of the infection in the first patient was unknown.

The last group of paratyphoid cases constituted a family outbreak in which an old man, who was probably infected outside Birmingham, was belatedly diagnosed as a case of paratyphoid. In the meantime, a child living in the house was taken ill and she too proved to be suffering from this disease. Stools from the rest of the family showed another child also to be positive.

The organisms from all three cases were of Phage Type I. The two children quickly recovered and became free of paratyphoid organisms, but the original case, the old man, still at the time of writing, remains a carrier in spite of treatment with chloromycetin.

Pneumonia

A further decline in the notifications of pneumonia occurred during 1952, the total being 1,109. The number of deaths recorded from this disease was 490.

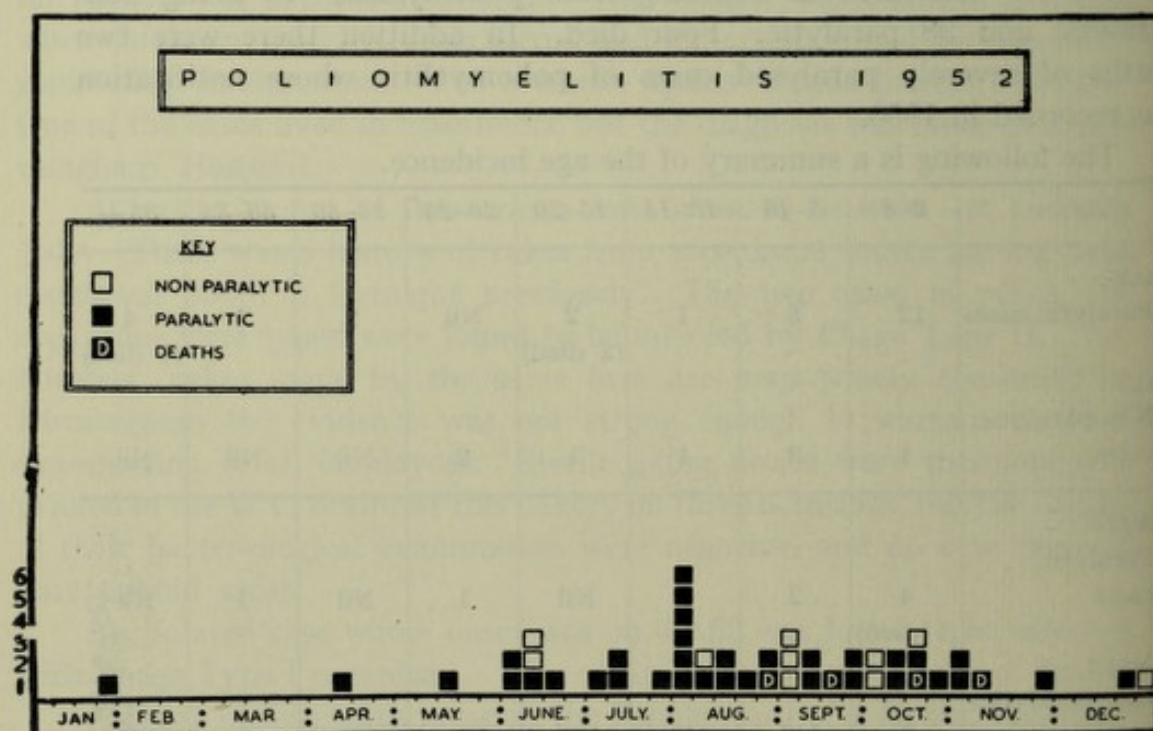
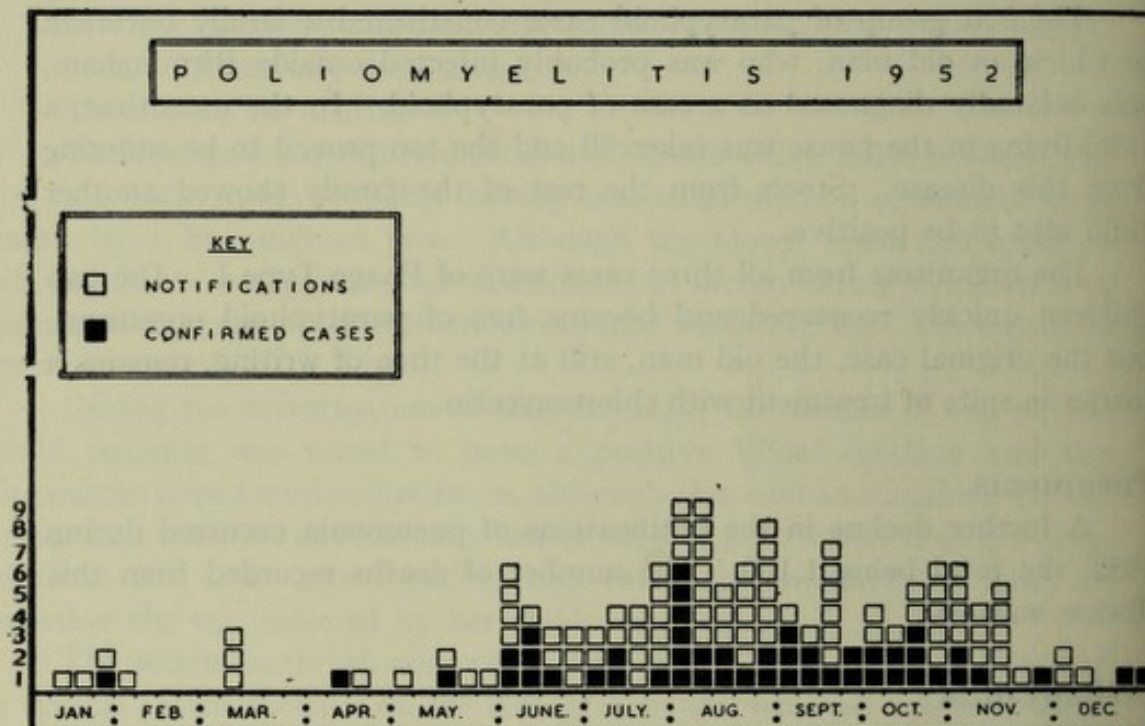
Poliomyelitis

132 cases were originally notified as poliomyelitis. In addition the diagnosis of 9 cases was revised to poliomyelitis from meningitis (6), diphtheria (1), gastro-enteritis (1), encephalitis (1). There was a total of 48 cases confirmed as suffering from poliomyelitis—10 being non-paralytic and 38 paralytic. Four died. In addition there were two deaths of severely paralysed cases of poliomyelitis whose notification was recorded in 1950.

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	12	5	1	2 (2 died)	Nil	2	1	4 (1 died)
MALE :								
Non-paralytic cases	1	3	1	1	2	Nil	Nil	Nil
FEMALE :								
Paralytic cases	4 (1 died)	2	3	Nil	1	Nil	1	Nil
FEMALE :								
Non-paralytic cases	2	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Included in the paralytic cases were four cases suffering from polio-encephalitis at ages 16 years, 14 years, 4 years and 5 months. Two died. Association between only two of the poliomyelitis cases was discovered. These were brothers aged 4 (paralytic) and 8 (non-paralytic), whose dates of onset were 26th May and 7th June respectively. The cases were distributed fairly evenly over the City.



Psittacosis

From time to time since 1880 and in various parts of the world, outbreaks of human illness have been described characterised by headache, malaise, rise of temperature and cough and progressing to pneumonia with delirium. About 40% of the patients died. There was almost always a history of association with birds of the parrot species which also suffered a high mortality although some birds could carry the infection and themselves remain unaffected by it.

In 1929-30 a widespread epidemic in America and Europe was traced to a consignment of diseased Amazon parrots originally imported into the Argentine from Brazil. There were cases of psittacosis in Birmingham at that time. The importation into this country of birds of the parrot family was stopped in 1930, and cases virtually ceased to arise. It was later discovered that other birds such as seagulls, pigeons and ducks could also carry the infection and in fact British poultry and wild birds were thought still to be suffering from the disease. The restrictions upon the importation of parrots were therefore revoked on the 8th January, 1952.

On the 10th November, 1952, a large consignment of birds of the parrot family destined for a Birmingham store arrived at London Airport and was met by the Manager of the Pets' Department. The journey by air from Australia had taken 14 days, including a ten day wait at Singapore. 58 of the birds (45% of the consignment) were either dead on arrival in Birmingham or died during the next few days. The Manager of the Pets' Department himself removed the right wing from each dead bird as evidence in claiming against the suppliers. On the 24th November, 14 days after his first contact with the newly imported birds, this manager became ill and died on the 4th December. There was an inquest, and after inoculation of mice with human and with avian material, the diagnosis was established as Psittacosis.

The Pets' Department was closed and all the birds destroyed. As a result of appeals several purchasers of birds returned them to the store.

The ban upon the importation of birds of the parrot species was re-imposed as from the 16th February, 1953.

Scabies

During the year 438 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 1,833 notifications of scarlet fever.

Scarlet fever incidence remained fairly steady throughout the year at between 25 and 50 cases per week with a slight rise above this figure in November.

There were no deaths.

Smallpox

One suspected smallpox case was brought into Birmingham for isolation and treatment from a hospital in Shropshire, but the final diagnosis was bacterial endocarditis.

Singularly little surveillance was required during the year. This was necessary for a few individuals who arrived in Birmingham from infected areas abroad and in respect of a few soldiers who were possibly remotely associated with a case in this country.

Typhoid Fever

During 1952 there were 5 cases of typhoid fever, the diagnosis of which was confirmed in Birmingham.

The two male cases were aged 13 years and 15 years and their onsets were 21st and 23rd July respectively. No association between the two could be discovered but this was hardly surprising as the infection in the younger boy was not brought to the notice of the Department until six months after his illness had occurred. Immediate notification would, no doubt, have greatly helped in discovering the source of infection in both cases.

One of the three females, a girl of 22, had arrived home from France 7 days before the onset of her illness in July and it was clear that infection must have occurred whilst she was abroad. Her home was beyond the City boundary, but the diagnosis was made at a Birmingham Hospital.

Another woman, aged 21, was infected with organisms of Type "A." The origin of her infection was quite unknown and fortunately, although she was a food handler, and so were her mother and friend with whom she had been living, this remained an isolated case. The onset of the illness was the 16th September.

On December 1st a woman aged 29, who had been a patient in a Birmingham Mental Hospital for at least a year, developed typhoid fever. There was a known typhoid carrier isolated on this ward and, in view of that, all the patients in the ward had received T.A.B. inoculation in February, 1952. No one else was affected.

There were no deaths.

Vaccination

The numbers vaccinated during the past three years were :—

Primary vaccinations :	1950	1951	1952
Under 1 year	6,797	7,241	6,707
1 year and over	1,143	1,667	1,190
Re-vaccinations	1,725	3,268	2,147

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%

Vaccination in Birmingham is carried out almost entirely by General Practitioners who also vaccinate children and adults going abroad. Members of the staffs of the hospitals and of the Public Health Department are also vaccinated from time to time.

Venereal Disease

NUMBER OF CASES UNDER TREATMENT ON 1ST JANUARY, 1952

	<i>Syphilis</i>	<i>Soft Chancre</i>	<i>Gonorrhoea</i>	<i>Other Conditions</i>
General Hospital ...	1,038	—	347	470
Children's Hospital ...	6	—	—	—
Lancaster Street Clinic...	74	—	3	108
Birmingham Infirmary...	35	—	2	5
TOTALS	1,153	—	352	583
Totals at 1st Jan., 1951	1,348	—	274	622

NEW CASES TREATED IN BIRMINGHAM IN 1952

	<i>Syphilis</i>	<i>Soft Chancre</i>	<i>Gonorrhoea</i>	<i>Other Conditions</i>
General Hospital ...	228	—	808	2,174
Children's Hospital ...	—	—	—	—
Lancaster Street Clinic...	20	—	5	648
Birmingham Infirmary...	17	—	5	56
TOTALS	265	—	818	2,878
Totals for 1951 ...	273	—	624	2,837

NEW CASES OF CONGENITAL SYPHILIS IN 1952

	<i>Under 1 yr.</i>	<i>1-5 yrs.</i>	<i>5-15 yrs.</i>	<i>15+ yrs.</i>	<i>Totals</i>
General Hospital ...	4	4	5	13	26
Children's Hospital ...	—	—	—	—	—
Lancaster Street Clinic	1	—	2	2	5
Birmingham Infirmary	1	—	—	—	1
TOTALS	6	4	7	15	32

Whooping Cough

There were 6,225 confirmed notifications of whooping cough during the year. This is the highest number of notifications in Birmingham since the disease became notifiable 12 years ago and there is evidence that since 1944, when only 2,928 cases were notified, there has been a steady rise in the number of cases.

There were 13 deaths in children aged :—

<i>0-5 mths.</i>	<i>6-11 mths.</i>	<i>1 yr.</i>	<i>2 yrs.</i>	<i>3 yrs.</i>	<i>Total</i>
5	3	1	2	2	13

The homes of four of the children who died were not entirely satisfactory and in addition it appeared that the illness of three of the children who died was regarded lightly until a sudden deterioration occurred before their death.

Ten fatal cases were complicated by pneumonia and 3 by convulsions.

Whooping Cough Immunisation

The numbers of children immunised against whooping cough (usually in conjunction with diphtheria immunisation) by General Practitioners is rising very slowly. During 1952 there were 778* children who received such treatment as compared with 713 in the previous year.

* This figure does not agree with that in the Special Survey, which was completed before all the records of immunisation in 1952 had been received.

Cases of Infectious Disease notified and verified during 1952.
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.	—	—	—	—	—	2	—	—	—	—	—	—	—	2
	F.	—	—	—	—	—	—	2	1	—	—	—	—	—	3
Para-Typhoid Fever	M.	1	1	—	—	1	—	—	—	—	—	—	—	1	4
	F.	—	4	2	1	—	1	—	2	—	—	2	1	1	14
Scarlet Fever	M.	—	54	163	503	99	12	6	3	11	3	—	1	—	855
	F.	1	57	165	582	119	22	6	12	11	3	—	—	—	978
Diphtheria	M.	—	1	—	1	1	—	—	1	—	—	—	—	—	4
	F.	—	1	—	—	3	2	—	2	1	—	—	—	—	9
Erysipelas	M.	—	1	1	2	3	3	2	9	17	28	15	14	2	97
	F.	—	1	1	1	1	1	4	3	15	24	29	16	3	99
Poliomyelitis Paralytic	M.	1	5	6	5	1	2	—	3	2	2	—	—	—	27
	F.	1	1	2	2	3	—	1	1	—	—	—	—	—	11
Poliomyelitis Non-Paralytic	M.	—	—	1	3	1	1	2	—	—	—	—	—	—	8
	F.	—	—	2	—	—	—	—	—	—	—	—	—	—	2
Encephalitis Infective	M.	—	—	—	—	1	—	1	—	1	—	—	—	—	3
	F.	—	1	—	—	—	—	—	1	—	1	—	—	—	3
Encephalitis Post-Infectious	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F.	—	—	—	2	—	—	—	—	—	—	—	—	—	2
Meningococcal Infection	M.	6	7	2	7	2	3	—	1	2	—	—	—	—	30
	F.	3	2	5	8	—	—	1	—	3	2	1	—	1	26
Malaria	M.	—	—	—	—	—	—	1	3	2	1	—	—	—	7
	F.	—	—	—	—	—	—	—	—	1	1 (induced)	—	—	—	2
Dysentery	M.	6	12	5	14	2	1	—	6	1	2	—	—	—	49
	F.	4	9	7	8	3	6	10	7	3	1	1	2	—	61
Smallpox	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	M.	49	57	41	51	15	8	15	40	82	101	93	60	28	640
	F.	24	36	29	42	12	4	15	46	52	56	56	51	46	469
Ophthalmia Neonatorum	M.	371	—	—	—	—	—	—	—	—	—	—	—	—	371
	F.	294	—	—	—	—	—	—	—	—	—	—	—	—	294
Puerperal Pyrexia	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F.	—	—	—	—	—	30	98	222	54	1	—	—	—	405
Measles	M.	165	1129	1361	2115	43	12	16	9	4	1	—	—	—	4855
	F.	180	994	1350	2167	70	24	10	29	5	—	—	—	—	4829
Whooping Cough	M.	256	851	907	896	28	2	1	6	4	—	1	—	—	2952
	F.	271	882	959	1091	33	8	4	12	4	3	5	1	—	3273
Undulant Fever	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F.	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Elmdon Airport

PUBLIC HEALTH (AIRCRAFT) REGULATIONS, 1952

As from the 1st October, 1952, the arrangements for the health control at airports were slightly altered by

- (a) the personal declaration of origin and health being no longer required, and
- (b) health control being applied at the destination of the aircraft instead of at the first stop in the "excepted area" en route for the final destination.

During 1952, 19 aeroplanes from Europe beyond the "excepted area" and one aeroplane from Algiers required health control which in every case was passed satisfactorily by the 20 aeroplanes, 109 passengers and 52 crew.

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 an international agreement, 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 1952, 1,419 such certificates were dealt with relating to vaccination against smallpox and inoculation against typhoid, yellow fever, cholera, tetanus, typhus and plague.

LABORATORY SERVICES

(a) Analytical Laboratory

The year 1952 provided yet another record as regards the number of samples examined in the Laboratory, the 1951 figure being exceeded by 137 to give a total of 9,208. In comparison with 1951 the staff dealing with the large amount of work involved increased by two members, and now includes seven members with professional qualifications and five juniors.

Samples taken under the provisions of the Food and Drugs Act, 1938, accounted for 60% of the total, while the remainder came from a variety of sources. Chief among these were the Departmental samples. The Water, Central Purchasing, Agricultural and Small Holdings, Food Inspection and other Corporation Departments also contributed their quota. In addition, complaints by members of the public regarding the quality of foodstuffs or drugs were investigated, and on a number of occasions the Department was called upon to carry out for retailers analyses of the third portions of official samples left with them by the Sampling Officers of other Authorities. The Pharmaceutical Society and other professional and public bodies, including the Management Committees of several hospitals, also availed themselves on several occasions of the facilities provided.

As always, the sampling of milk supplies occupied a great deal of the time both of the Sampling Officers and of the Analytical Staff. Specimens taken on delivery at City dairies, from shops and from vans and carts in the streets, and including supplies to schools and other institutions, accounted for 52% of the total number of food and drug samples. It is unfortunate that this important article of food was the subject of by far the greatest number of complaints of quality of any article examined, and still more disturbing was the fact that in comparison with 1951 such complaints increased considerably in number. In that year 317 out of 2,812 samples, or 11.3%, were of sub-standard quality, but in 1952 no fewer than 544 out of 2,825, or 19.2%, did not achieve the very modest compositional standard required by the Ministry of Agriculture, i.e., fat 3.0% and non-fatty solids 8.5%. These figures were not by any means due to adulteration with water, a practice which appears for the moment to have almost died out, but to the very high incidence of samples of naturally abnormal composition, due probably in very large measure to the tendency of farmers to breed for quantity rather than quality. It is noteworthy that the low quality is generally due not to a deficiency of fat, but to poor solids-not-fat, and in a number of the samples analysed some new low records for "genuine" milk were observed during the year;

three samples contained only 7·6%, a figure never previously reached by milk entering Birmingham. Three others contained 7·7%, nine 7·8%, fourteen 7·9%, and no fewer than forty-four 8·0%. It is indeed fortunate, and not least from the farmer's point of view, that the methods of analysis used in a modern analytical laboratory are capable of distinguishing between a rich milk diluted with water and a naturally poor milk containing the same amount of solids-not-fat.

It should be mentioned in passing that in June, 1951, a Working Party was appointed by the Minister of Agriculture to examine this problem of the lowering of the quality of milk during recent years (for this is no sudden phenomenon, but one which has been remarked upon for something like 20 years), and to report on the possibility of introducing modifications in the method of payment which it may be thought justifiable and feasible to adopt. No report has yet been issued, but it is hoped that when it is forthcoming some means will have been found to reverse this tendency.

The Health Committee found it necessary to prosecute two farmers during the year for selling milk adulterated with water. In one of these cases, four official samples contained respectively 9%, 6%, 5% and 7% of added water, and a further three samples taken on the following day were of still poorer composition. On the third day all the milk sent to the dairy was genuine. The farm was visited and specimens were taken from the bulked milk of the herd at both morning and afternoon milkings. These were of excellent quality, and proceedings were instituted against the farmer in respect of the four worst samples. An attempt was made during the hearing (at which a plea of "not guilty" was entered) to show that the poor quality of the milk was due to natural causes and to poor fodder, and to prove that the replacement of two cows suspected of giving poor milk by two others giving very rich milk, together with an alleged improvement in diet, were the factors responsible for a ten per cent. improvement in quality overnight. It was possible to counter this defence by emphasizing that the freezing point tests carried out on the samples were conclusive evidence of the presence of water in the first two days' supply and of its absence on the third day. A total fine of £8 and special costs of £4 10s. 0d. were paid by the farmer.

In the other case, four formal samples taken on two successive days contained amounts of extraneous water varying from 5% to 13%, and on the third day, although the morning milk was genuine, the evening sample contained 12% water. Samples taken from the cows proved to be of extremely good quality. Summonses were issued in respect of the four samples containing most water. The farmer pleaded "guilty" and was fined £10 together with special costs of £1 9s. 0d.

Apart from the twelve adulterated samples connected with the two above cases, 40 others contained small amounts of added water. The farmers concerned were cautioned. In some cases further samples were taken and were found to be genuine.

The number of samples of drugs and foods, other than milk, analysed during the year was 2,604, of which 509 were drugs. Forty-three foods were reported as having been sold, in the words of the Food and Drugs Act, "to the prejudice of the purchaser." These were of many kinds and included, among others, a food beverage, cereals, cheese, dripping, meringues, mineral waters, sausages, vinegar and wholemeal flour. Brief references to one or two of these sub-standard or incorrectly labelled articles may perhaps be permitted. A cereal food, for instance, advertised as containing 4.0 milligrams of iron per ounce, actually contained only just over half of this quantity. An investigation carried out by the makers showed that this was due to an error in formulation, hydrated ferrous sulphate having been used as the source of iron instead of the intended anhydrous salt. As the former contains only 55% of the amount of iron present in the latter, the cause of the deficiency in the food was fairly obvious.

Another proprietary cereal claimed the presence of 0.56% calcium and 1.93% potash, but the amounts found by analysis were roughly about 80% of these quantities. The cause of this error lay in the fact that the makers had prematurely fixed the quantities present by reference to experimental production batches made prior to full-scale production. This was followed by the unfortunate discovery that later consignments of raw materials used were not so rich in calcium and potash as the original ones. The claims were lowered to the correct figures.

An unusual meaning was attached to the word "selected" in the cases of a chocolate beverage and a Welsh rarebit. The declaration of the ingredients of the beverage included selected milk powder, sucrose, cocoa and dextrinised wheat, and the contents of the rarebit were given as selected cheese, milk solids and seasoning. Both the milk powder and the cheese proved to be of the skimmed variety.

Another illustration of the modern tendency to degrade the meanings of words was given in the cases of two so-called meringue mixtures. The word "meringue" in its old-fashioned way used to denote a product containing, among other things, white of egg, which has of course a definite food value.

In the mixtures in question the egg white was substituted by methyl cellulose, an artificial product made from cotton which has somewhat similar physical properties; it is, among other things, coagulable when heated, and "meringues" made with both these mixtures approximated very closely in appearance to the real things. Although the Ministry of Food had approved of these articles and although the names of the ingredients appeared on the labels, it seems to be most unfortunate that a name such as "meringue," having a time-honoured well-established meaning, should now be applied to an artificial product with a merely physical resemblance to the genuine article.

A further example was that of self-raising "wholewheat meal" contained in a bag covered with closely printed statements referring to its manifold virtues. The wheat germ contained in it, for instance, was said to contain 16% oil whose function was to "lubricate the body." This percentage is almost twice the usually accepted figure, and the suggestion about lubrication was interesting. Another statement suggested that owing to the wheat oil content in the germ, one could use about 20% less fat, presumably in baking processes. As the total fat content of the flour was only 1.9%, this assertion was somewhat difficult to follow.

Drugs found to be of poor quality and improperly labelled were 44 in number, and 24 different products were involved, including a number of the common B.P. drugs and several substances "recommended as medicines," the declared compositions of which were checked, and several samples of halibut liver oil and capsules and of other vitamin A preparations, the retailers of which were prosecuted. As examples of unsuspected deficiencies, we may take three samples of eye lotion, all labelled with lists of the ingredients present, as required by the Pharmacy and Medicines Act, 1941. One of the declarations was of 0.25% borax and 0.125% zinc sulphate. By inspection of the bottle, it was discovered that the sides and bottom were covered with an adherent layer of zinc oxyborate, and analysis of the clear fluid proved it to contain only 0.19% borax and only 0.045% zinc sulphate, the remainder of the two salts originally present having been precipitated as described. As the presence of solid particles in an eye lotion was obviously objectionable, the makers were approached, and they reported that no lotion made to this particular formula had been sent out within the last two years; the stock in question had deteriorated owing to the lapse of time since manufacture. The preparation was withdrawn from sale.

Another specimen of eye lotion was described on the label as containing, among other things, $1\frac{1}{2}$ grains of cocaine hydrochloride per 4 fluid ounces. The amount actually present was only 0.2 grain per 4 fluid ounces, representing a deficiency of 85%. In addition, the formula given ended with the words "water to 4 fluid ounces," but the contents of the bottle amounted to 3 ounces only. According to Section 11 of the Pharmacy and Medicines Act, it is necessary to state on the bottle of a preparation of this kind the approximate quantity of each of the constituents **contained in the article sold**, i.e., either the amounts of ingredients contained in 3 fluid ounces should have been given or the bottle should have had a capacity of 4 fluid ounces. Some difficulty was experienced in obtaining a further sample in order to check the analytical figures, but finally a specimen taken from stock newly delivered was purchased. The content of cocaine hydrochloride on this occasion was 0.44 grain per 4 fluid ounces, a deficiency of 67%. This was surprising and somewhat disturbing, in view of the fact that this was a completely new supply and was made by a firm of manufacturing chemists of high

reputation. The apparent disappearance of cocaine, a dangerous drug, made it particularly important that an explanation should be found. The makers, after examining part of the retailer's stock, confirmed the deficiency already reported to them, and their analytical staff, as a result of experimental work, discovered that a newly made lotion lost 12% of its cocaine in three weeks. This was due to simple decomposition, which steadily reduced the efficacy of the lotion. The firm immediately stopped production of this article and, as a result of experiments made by their analyst, hope to be able shortly to market a stable preparation. As regards the question of the declaration of the quantity of lotion contained in the bottle, it was agreed that it would be attended to when the new preparation was marketed.

A third brand of eye lotion, also declared to contain cocaine hydrochloride, was deficient of 50% of the stated amount of 0.092%, and this was undoubtedly, as in the previous case, due to the decomposition of the cocaine in solution.

As a further example of the way in which the manufacturers of a sub-standard article, once convinced of the truth of a complaint made about their goods, willingly co-operate with the Department in an effort to improve quality or rectify a mistake, may be mentioned a sample of Parrish's Chemical Food which was 14% deficient of the amount of iron phosphate which, according to the instructions of the British Pharmacopœia, it should have contained. It was found that the missing iron had been precipitated in the bottle in the form of insoluble ferric pyrophosphate which had no therapeutic value. According to the makers of the syrup, the retailers bought the preparation in half-gallon bottles and themselves filled the 8-oz. screw capped bottles with it. The article was made in 2-ton lots, and both the ingredients used and the finished syrup were analysed in the firm's laboratory and were only passed for sale if the requirements of the Pharmacopœia were complied with. The firm's chemist agreed that the retailer's syrup was deficient and that its condition was due to precipitation of the insoluble compound at some time after their own batch analysis had been made. They had, however, filled a very large number of 8-oz. bottles themselves without experiencing any trouble due to precipitation; this was doubtless due to the fact that a vacuum filling plant was used. They had in fact not seen a precipitate in their chemical food for 20 years and had had no other complaints about the batch in question. The oxidation, in their opinion, was caused by the failure completely to empty the bulk containers on opening and so leaving residues to be dealt with or, what was more likely, the bulk containers were shaken up and the contents passed in a thin stream into bottles; the occluded air then promoted subsequent oxidation. The Sales Department of the firm suggested to the retailer that, to avoid further trouble of this kind, they should be allowed to pack the syrup for him in 8-oz. bottles.

Help is given on occasion to firms to enable them to ensure that a good quality article is available to the retailer. Certain iodized throat lozenges, for instance, were found to be about 30% short of the declared amount of iodine. An interview was arranged with representatives of the firm, at which the question was discussed in all its bearings and an arrangement made for six cartons of newly made lozenges to be forwarded to the laboratory for experimental purposes. These were enclosed in airtight wrappings, and it was proposed to open one each month and to determine the iodine content in order to ascertain if there was any serious loss over the period of six months. At the end of this time, suggestions are to be made which will ensure a reasonably accurate iodine content and, meanwhile, the firm agreed to put in a certain initial "overage" of iodine to cover deterioration over a period, and to print a cautionary statement on the cartons regarding possible loss of activity together with advice as to proper storage conditions.

As a final example of deficiencies in the potency of drugs, must be mentioned the purchase of 26 specimens of halibut liver oil, halibut liver oil capsules, and other vitamin A preparations. It will be remembered that during 1951 a survey was made in the laboratory of preparations of this kind, with results very disturbing both to the makers, retailers and the general public. It was found in fact that nearly 60% of the 127 samples bought during that year were more or less seriously deficient in vitamin A content.

Thirty-six of these samples had deficiencies of over 20% and five of them actually contained no vitamin A at all. The cause of the disappearance of the vitamin was undoubtedly oxidation, accelerated in many cases by unsuitable storage conditions and injudicious methods of display. In addition, it was found in some instances that stocks of almost incredible age were still on sale to the public. Considerable publicity was given to these findings and, in one article published in the pharmaceutical press, a categorical warning was given that further samples would be taken by the Department in 1952 and that, if necessary, offenders would be prosecuted. In the event, 26 samples of vitamin A preparations were taken during the year and, somewhat to the astonishment of the Department, in view of the warnings which had been issued, nine of these were of quality sufficiently poor to warrant prosecution of the retailers. As a result of the Court proceedings, fines were inflicted in two cases, five cases were dismissed on payment of costs, and the remaining two were dismissed without costs. The Chairman of the Magistrates, during the hearing, stated that as these cases were the first of their kind to be taken in the country, they had exercised leniency, but that this attitude would not necessarily be adopted in any future proceedings. Of the two cases in which penalties were inflicted, one concerned halibut liver oil capsules on the label of which an extravagant claim was made to the effect that "each single drop" (of the oil) was "equal in vitamin A value to one

teaspoonful of finest cod liver oil." On this basis the oil was found to be deficient of nearly 50% of the amount of vitamin A declared. The manufacturing firm responsible for the label was fined £5. The other specimen was described as "vitamin A capsules" and a declaration of 2,000 international units of vitamin A per capsule was made. Upon opening the box, it was found that the capsules were covered with a surface growth of green mould and that, as was to be expected, the vitamin had completely disappeared. This useless material was at least 13 years old. The retailer was fined £10.

Of the 3,779 miscellaneous samples submitted for analysis during the year, 2,038 consisted of pasteurised milk. Of these 1,768 were taken within the City, while 270 originated with the Sutton Coldfield and Smethwick Health Departments. The phosphatase test, which is an index of the efficiency of the heat treatment, was carried out on all these samples; 15 of the Birmingham specimens showed evidence of some technical fault, while in 2 cases gross errors had been committed. The corresponding figures for the samples from the two neighbouring Authorities were 7 and 1. 218 samples of sterilised milk subjected to the official "turbidity" test, which indicates whether in fact the milk has been raised to the boiling point for a sufficiently long time, had all been efficiently treated, and the same remark applies to 40 specimens from the Authorities already mentioned.

The number of samples of heat-treated milk taken in Birmingham was thus 6% greater than in 1951, and outside Authorities submitted 17% more samples than in that year. Ice-cream accounted for 338 samples, and specimens of breast milk from the Human Milk Bureau for another 263.

The Department submitted 280 and the Water Department 284 samples of water. These came from Corporation Water Undertakings, from Corporation institutions, from private wells, from local streams and occasionally from flooded basements and cellars with a query regarding the probable source of the water.

The Central Purchasing Department, among other things, sent for examination 51 samples of soap and soap powder which had been received in connection with tenders for the supply of these articles to the Corporation.

The Food Inspection Department forwarded a number of samples, including tinned oranges, egg albumen, apples and tomato paste: hospitals submitted articles such as methylated spirit and marking ink, of which complaints had been made by users: and the Pharmaceutical Society asked for a check on a soothing syrup for babies; it was found that, using the recommended dose, enough morphine was present to produce alarming symptoms of poisoning.

Apart from samples such as the above from municipal and public bodies, a considerable variety of articles was analysed for private persons. These consisted mainly of articles of food, together with some drugs. Bread, flour, spirits, pepper, sausage, trifle, lemonade, tea infusion, cooking oil, were only some of the array of foods ; drugs were represented by articles as diverse as vitamin A and vitamin E tablets, prescriptions, dusting powders and face cream ; and other miscellaneous articles included dish-washing powder, a chair cover, wrapping paper and a shaving-stick.

During the year new legislation affecting the work of the Department came into force. This included five Food Standards Orders, prescribing the composition of edible gelatine, fish and meat pastes, shredded and block suet and coffee mixtures. The first three of these were already operative in 1951 so far as manufacture and wholesale sales were concerned, but are now equally in force as regards retail sales. A number of alterations took place in respect of meat products. The Meat Products Order, 1952, removed the restrictions on the use of soya meal, increased the meat content of many products, and introduced schedules specifying a minimum meat content for nearly all meat products, which were to become effective on September 14th. This order came into force on March 16th. On June 15th it was replaced by the Meat Products (No. 2) Order, which forbade the further use of skimmed milk powder and of fat of vegetable origin in the manufacture of sausages. It was proposed by the Ministry to supply the trade with animal fat and to increase the allocation of meat. On September 7th, however, the Meat Products (Amendment) Order postponed the operation of the Schedules providing for new and increased meat contents, and on January 1st, 1953, the Meat Products (No. 3) Order dropped the proposed standards entirely and abandoned control over all meat products except beef and pork sausage and sausage meat. The end of this somewhat confusing set of operations was reached on March 1st, 1953, when the Canned Corned Meat (Prices) Order released sausages and sausage meat from any form of control.

The Food Standards Committee recommended increases of fruit content in several kinds of jam, including blackcurrant and raspberry, and a decrease in the case of damson jam. They also agreed that the present standards for saccharin tablets should be maintained.

Finally, the standard for ice-cream specified by the Food Standards (Ice-cream) Order, 1951, was replaced from July 7th onwards, under an Amendment to the Order, and the minimum contents of fat, sugar, and non-fatty milk solids now required in this article are 4%, 10% and 5% respectively.

(b) Public Health Laboratory

Since the last report was compiled the laboratory has undertaken the examination of specimens from patients suspected of leptospiral

infection. The test used is a microscopical agglutination reaction of the patient's blood serum against the two infecting strains found in this country, *Lepto. icterohaemorrhagiae* and *Lepto. canicola*.

The laboratory has continued to collaborate in the Medical Research Council Trials of new drugs for the treatment of tuberculosis, namely, streptomycin, para-amino salicylic acid and isonicotinic-acid-hydrazide. The laboratory's share of the investigation has been the isolation and testing of the tubercle bacilli for drug sensitivity from each patient before treatment and at regular intervals during treatment.

As regards the usual routine work which, of course, forms the bulk of the laboratory work, it may be of interest to note some differences between a Public Health Laboratory to-day and one some twenty or thirty years ago.

Specimens for diphtheria provide a notable example. Whereas anything up to 100 specimens may formerly have been examined for diphtheria daily, there will nowadays be only perhaps half-a-dozen, if so many. A positive has become something of a rarity, found perhaps only once or twice a month. Formerly, the bacteriologist had only the microscopical appearance of the organism to rely on for diagnosis. With positives few and far between, it is not easy for the beginner to get the necessary experience and it is fortunate that we no longer have to rely solely on the microscope, but have the colonial appearance on tellurite-agar to help in the diagnosis.

Another difference one notices is in the number of specimens for food poisoning investigation. Not only is there an increase in the number of specimens, but there has been an increase in the number of organisms for which we look. Antigenic analysis has vastly expanded the Salmonella group, whilst the importance of other organisms such as staphylococci and, more recently, of certain types of anærobes as causes of food poisoning has become recognised.

Three specific agglutination sera were, at one time, sufficient for the classification of enteric organisms into "typhoid," "para A" and "para B." The recognition of rough and smooth cultures, flagellar, somatic, and Vi. antigens, and variation between group and specific phases, has complicated the work of identification of an enteric organism and necessitated the use of many more sera. Identification of organisms has been further narrowed by bacteriophage typing which is much used to-day.

"Big fleas have little fleas upon their backs to bite 'em,
And little fleas have lesser fleas and so *ad infinitum*."

Many of the microscopic disease germs which prey on man and animal have ultramicroscopic germs which, in turn, prey on them. These different races of "bacteriophages" as they are called, are very particular in

choosing their victims. A typhoid bacteriophage, for instance, will not attack *all* typhoid germs but only a certain strain. We can thus differentiate germs of the same species into different bacteriophage types according to which race of bacteriophage attacks them. This can be very useful in the epidemiological work of a Public Health Department. If, for instance, there are two cases of typhoid fever under investigation and they turn out to be infected with different bacteriophage types it means that these two cases are unrelated and that there are two different sources of infection to be investigated.

Another difference one may note is that, whereas bacillary dysentery used to be considered as practically non-existent in this country, and certainly not endemic outside of asylums, it is not uncommonly found nowadays. *Sonne* dysentery, indeed, may be said to be endemic. This change may be accounted for by various factors such as the wide dispersals of populations in the wars and, conversely, the grouping together of the more susceptible juvenile members of the community in institutions. Another factor is undoubtedly the improved diagnostic facilities afforded by the selective media now used in laboratories for examining specimens.

Such are a few of the more obvious differences which a Public Health bacteriologist may note when comparing the work of to-day with that of yesterday.

TUBERCULOSIS

The present position with regard to tuberculosis is shown in the following statement.

Notifications 1952

ALL FORMS OF TUBERCULOSIS

Rate : 1.24 per 1,000 of the population

(an increase in comparison with 1951 of 58 cases or 0.05 per 1,000 of the population).

PULMONARY TUBERCULOSIS

Rate : 1.11 per 1,000 of the population

(an increase in comparison with 1951 of 58 cases or 0.05 per 1,000 of the population).

NON-PULMONARY TUBERCULOSIS

Rate : 0.13 per 1,000 of the population

(no change in comparison with 1951).

Deaths 1952

ALL FORMS OF TUBERCULOSIS

Rate : 0.27 per 1,000 of the population

(a decrease in comparison with 1951 of 115 deaths or 0.10 per 1,000 of the population).

PULMONARY TUBERCULOSIS

Rate : 0.25 per 1,000 of the population

(a decrease in comparison with 1951 of 102 deaths or 0.09 per 1,000 of the population).

NON-PULMONARY TUBERCULOSIS

Rate : 0.02 per 1,000 of the population

(a decrease in comparison with 1951 of 13 deaths or 0.01 per 1,000 of the population).

The number of cases and deaths occurring in past years are shewn 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

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

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

Localisation of the disease in the case of the 23 deaths from non-pulmonary tuberculosis is shown in statement (a) below, and an analysis according to sex and age of all notifications and deaths is given in statement (b).

(a)	Tuberculous meningitis	...	...	...	...	10
	Abdominal tuberculosis	...	...	...	...	3
	Tuberculosis of the spine	...	...	...	...	5
	Tuberculosis of the joints	...	...	...	...	1
	Tuberculosis of other organs	...	...	...	...	4

(b)

PULMONARY TUBERCULOSIS

<i>Age</i>	<i>Male</i>		<i>Female</i>	
	<i>Cases</i>	<i>Deaths</i>	<i>Cases</i>	<i>Deaths</i>
0—	1	1	1	—
1—2	17	1	15	—
3—4	18	—	17	2
5—14	62	—	58	1
15—24	131	11	171	9
25—44	255	38	206	27
45—64	208	116	42	25
65—74	31	36	1	6
75 and over	4	3	4	4
	727	206	515	74

Total cases : 1,242. Total deaths, 280.

NON-PULMONARY TUBERCULOSIS

Age	Male		Female	
	Cases	Deaths	Cases	Deaths
0—	—	—	1	—
1—2	5	—	7	1
3—4	5	4	7	2
5—14	15	2	20	1
15—24	13	2	17	1
25—44	21	3	19	1
45—64	3	1	5	—
65—74	2	4	2	—
75 and over	—	1	—	—
	64	17	78	6

Total cases : 142. Total deaths : 23.

Grand Total : Cases, 1,384. Deaths, 303.

Mortality

During 1952 the record of mortality is again of significance. There has been since 1939 a steady reduction, which is shown by the following figures.

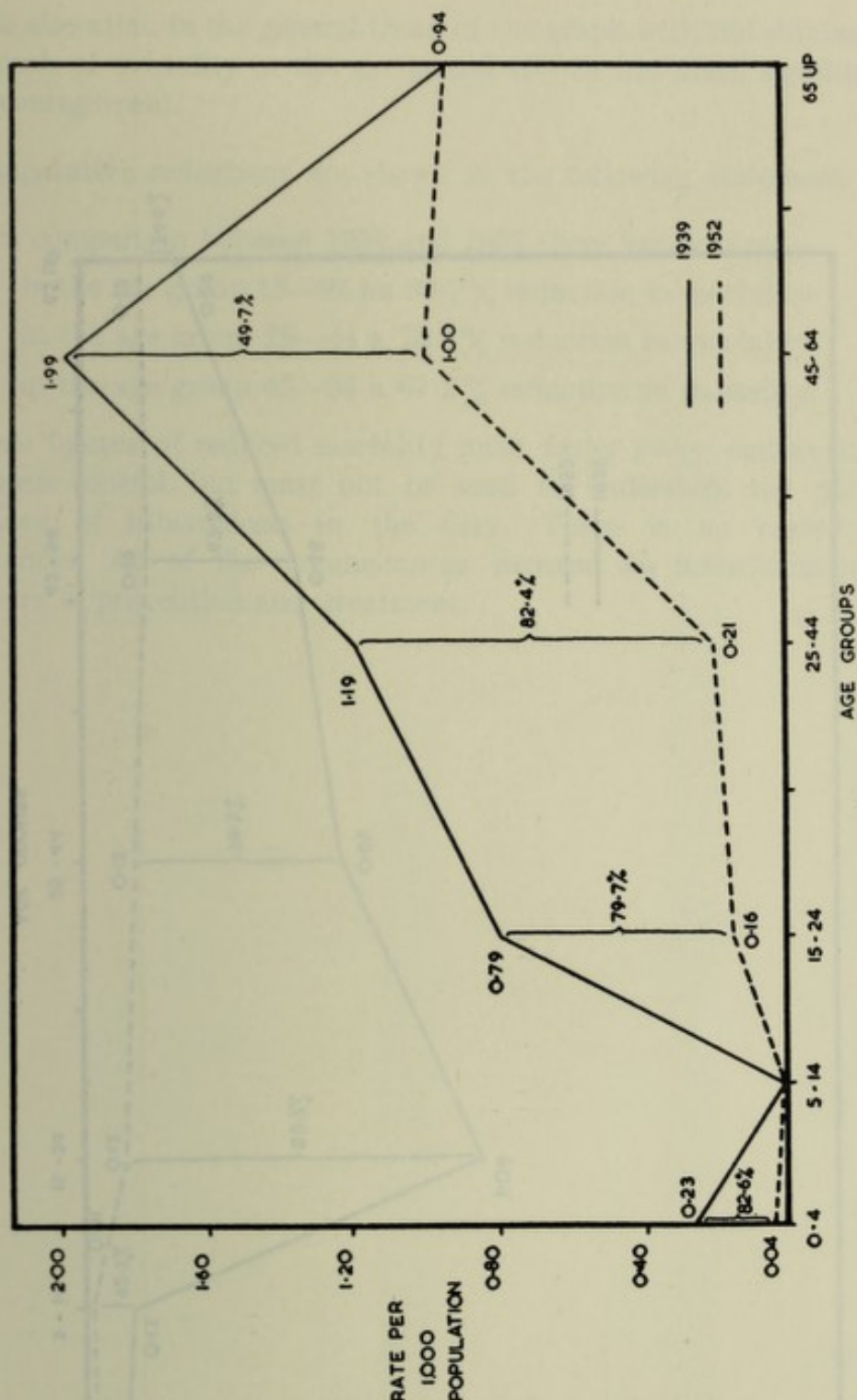
- there were 528 fewer deaths from pulmonary tuberculosis in 1952 than in 1939 ; a reduction of 65.3%.
- there were 315 fewer deaths from pulmonary tuberculosis in 1952 than in 1949 ; a reduction of 52.9%.
- there were 206 fewer deaths from pulmonary tuberculosis in 1952 than in 1950 ; a reduction of 42.4%.
- there were 102 fewer deaths from pulmonary tuberculosis in 1952 than in 1951 ; a further reduction of 26.7%.

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

GRAPH A. MALES.

RESPIRATORY TUBERCULOSIS

MORTALITY RATES IN AGE GROUPS, 1939 AND 1952, SHOWING PERCENTAGE DECREASE.



NOTE: AGE GROUP RATES FOR 1952 ARE BASED ON THE 1951 CENSUS POPULATION GROUPS

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 a great importance.

Comparative reductions are shown in the following statement.

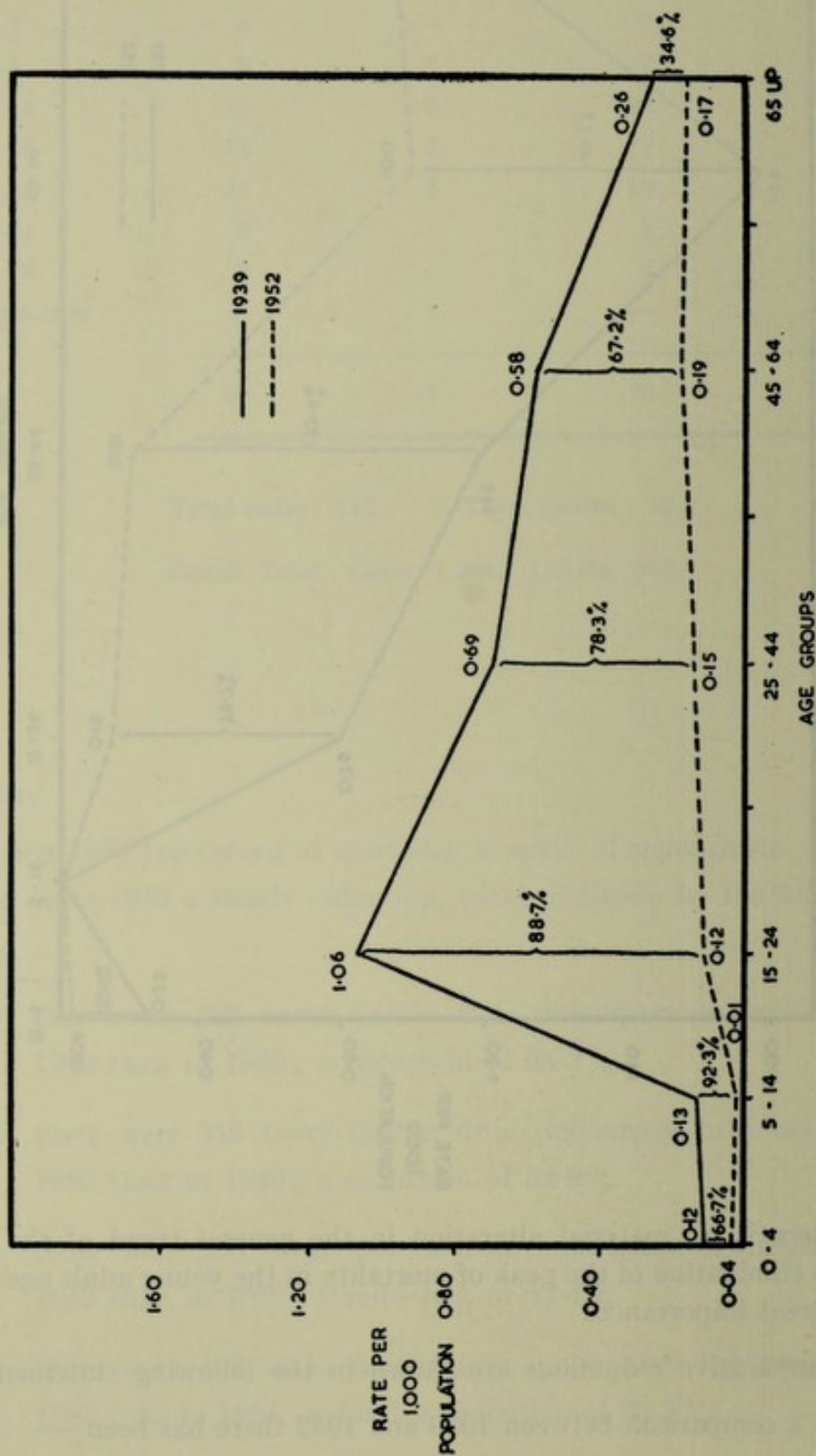
As a comparison between 1939 and 1952 there has been :—

- in the age group 15—24 a 79.7% reduction in mortality.
- in the age group 25—44 an 82.4% reduction in mortality.
- in the age group 45—64 a 49.7% reduction in mortality.

GRAPH 'B' FEMALES

RESPIRATORY TUBERCULOSIS

MORTALITY RATES, IN AGE GROUPS, 1939 AND 1952, SHOWING PERCENTAGE DECREASE.



NOTE: AGE GROUP RATES FOR 1952 ARE BASED ON THE 1951 CENSUS POPULATION GROUPS

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 1952 there has been :—

in the age group 15—24 an 88·7% reduction in mortality.

in the age group 25—44 a 78·3% reduction in mortality.

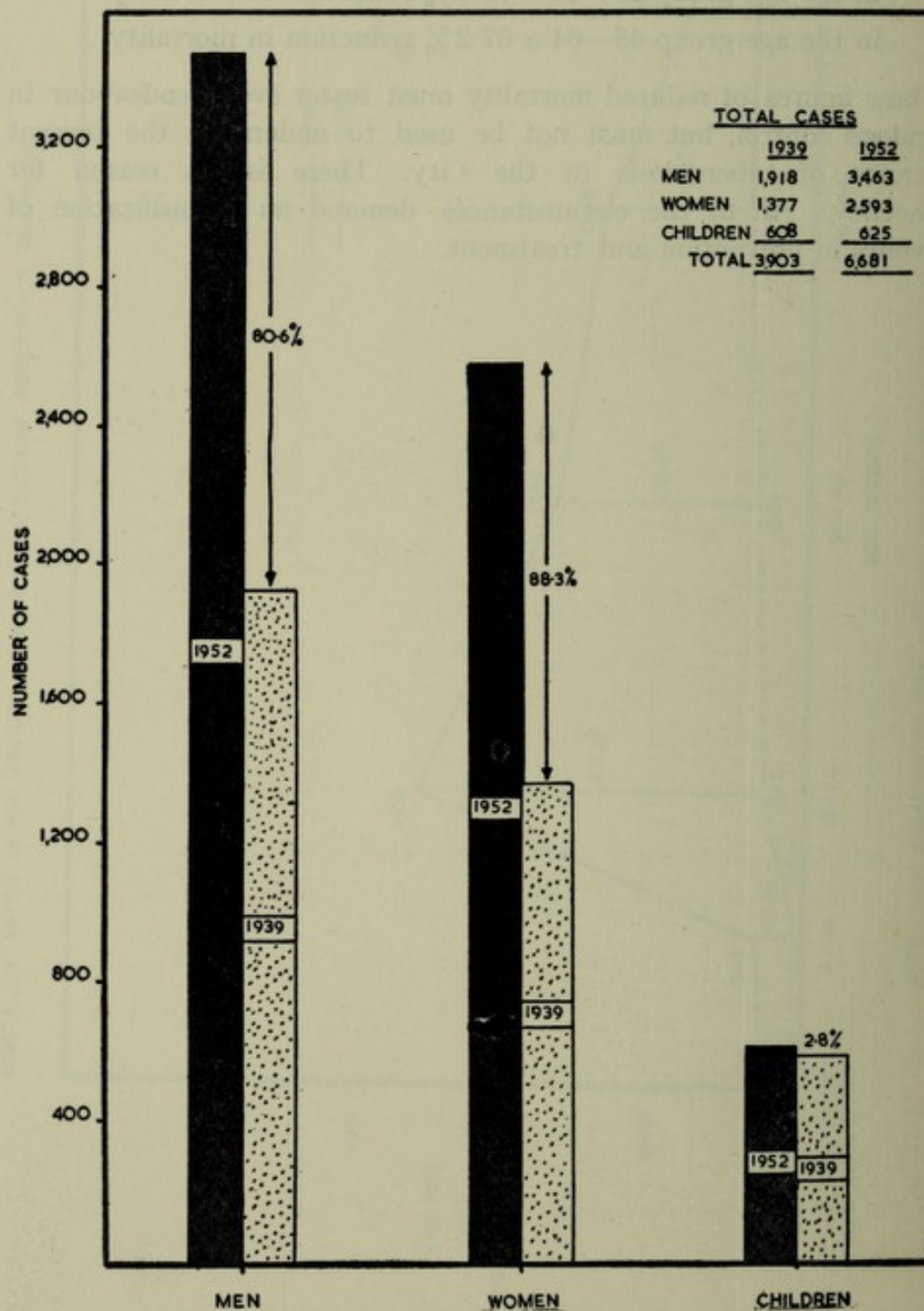
in the age group 45—64 a 67·2% reduction in mortality.

These figures of reduced mortality must 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 of the circumstances demand an intensification of endeavours in prevention and treatment.



The Present General Epidemiological Character of Tuberculosis in the City of Birmingham

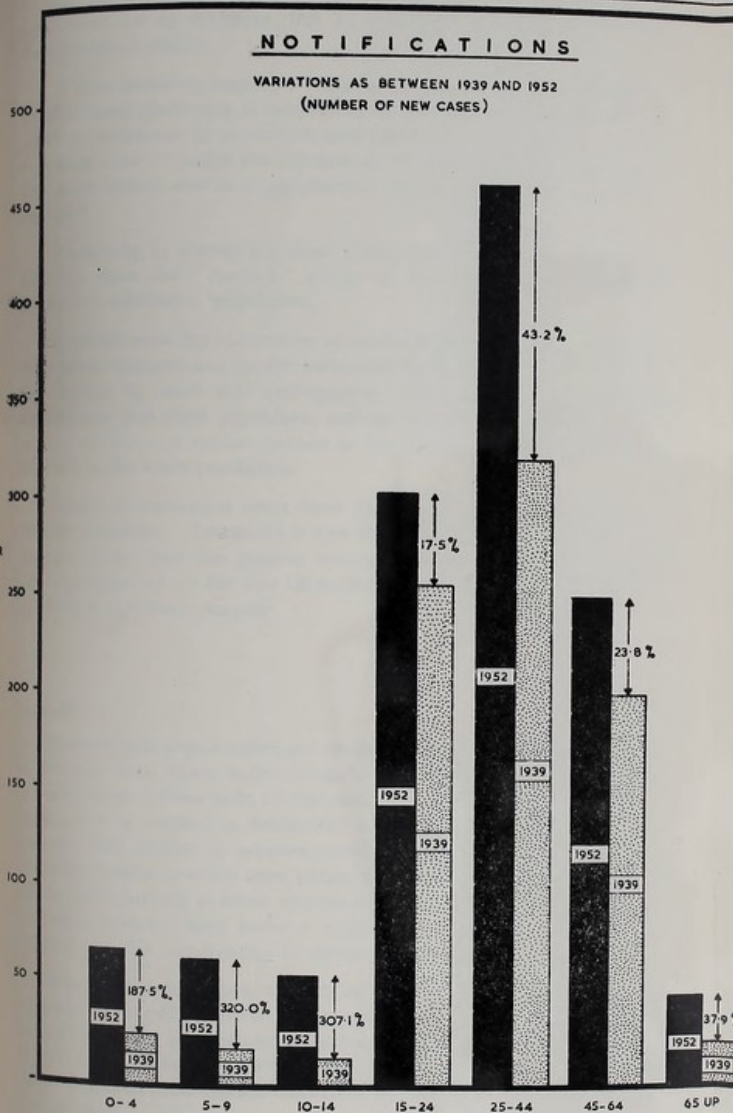
NUMBER OF CASES OF PULMONARY TUBERCULOSIS UNDER
THE CARE OF THE DEPARTMENT IN 1952 & 1939
(THE DISPENSARY REGISTER)
SHOWING THE BIG INCREASE IN THE BURDEN



PULMONARY TUBERCULOSIS

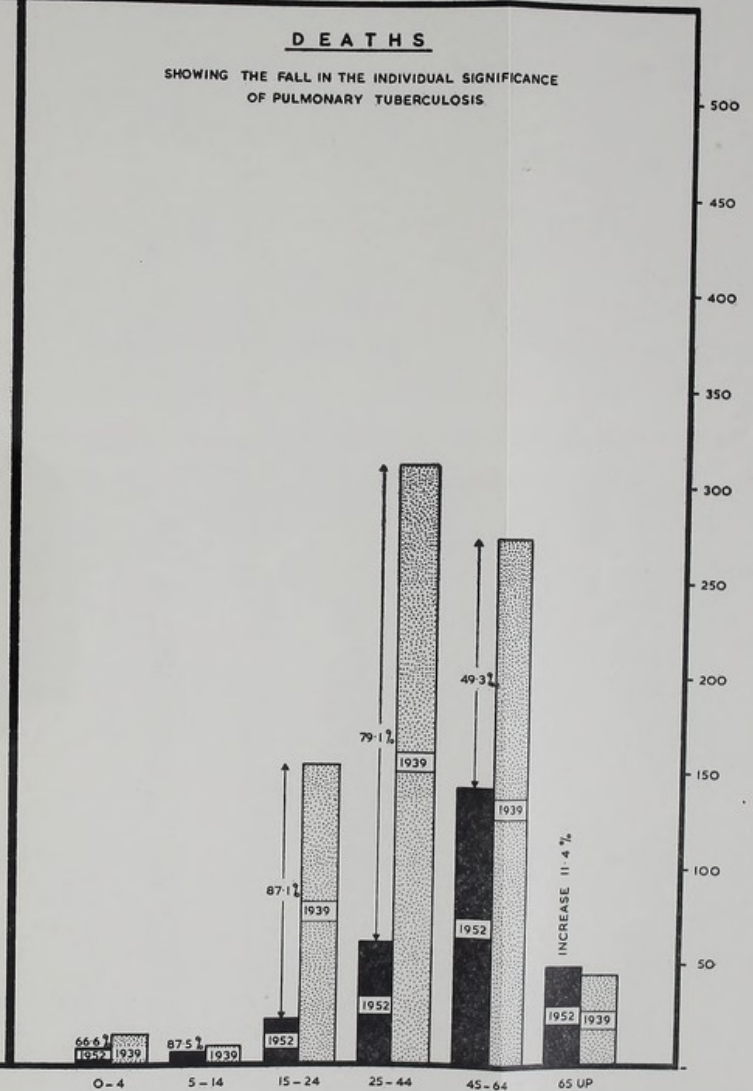
NOTIFICATIONS

VARIATIONS AS BETWEEN 1939 AND 1952
(NUMBER OF NEW CASES)



DEATHS

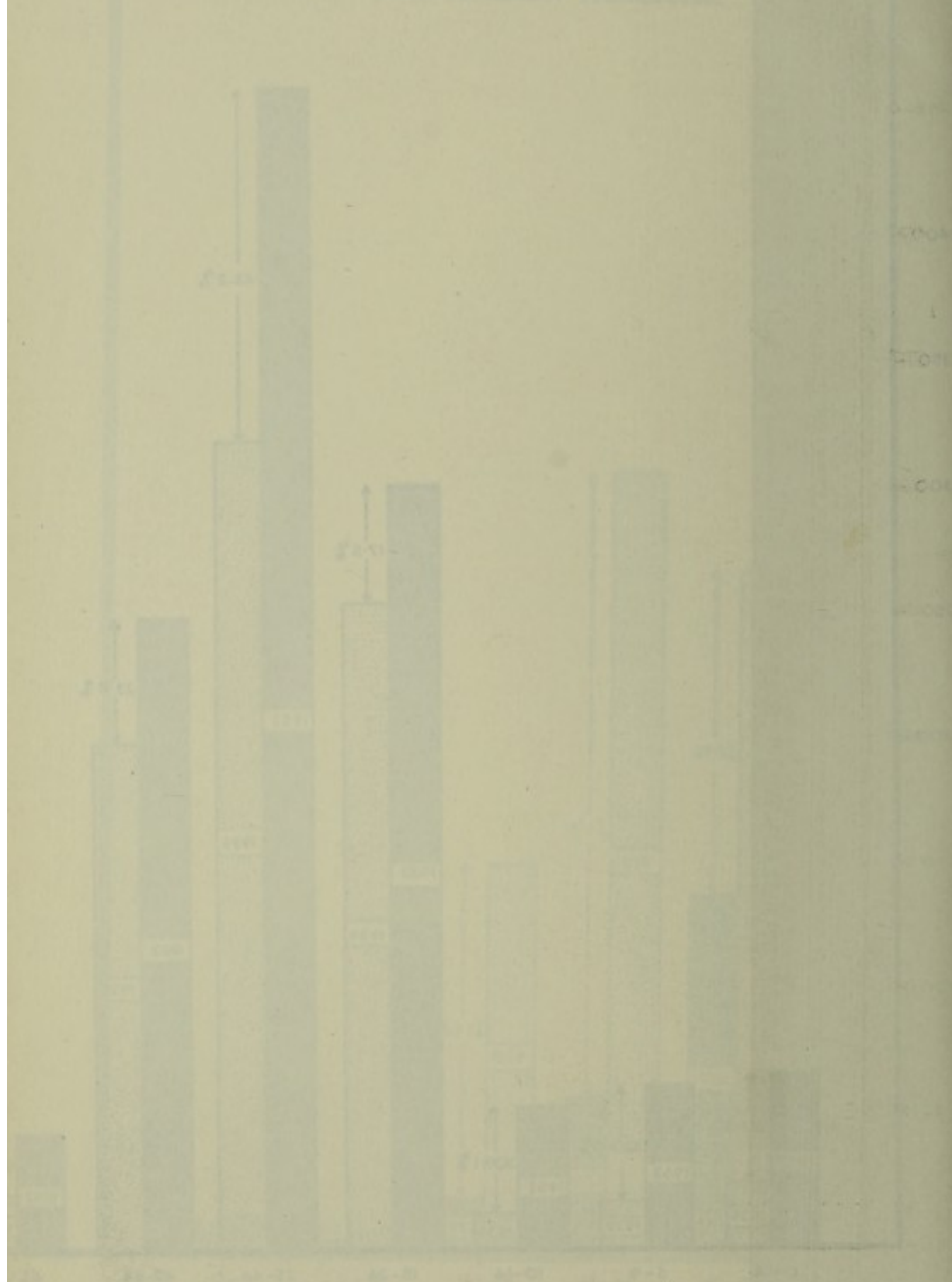
SHOWING THE FALL IN THE INDIVIDUAL SIGNIFICANCE
OF PULMONARY TUBERCULOSIS



AGE GROUPS

NOTIFICATIONS

VARIATIONS IN BETWEEN 1910 AND 1911
(NUMBER OF CASES)



These diagrams show in broad outline how matters stand with regard to tuberculosis and reveal particularly, in the figures of mortality, the justification for an optimism, but an optimism tempered by the very considerable morbidity.

It does, however, suggest a reduction in the individual significance of tuberculosis which may, if the present circumstances are supported by a concerted endeavour in prevention and treatment, mean within a " comparatively short " period the elimination of tuberculosis from the City. *The great danger now is a complacency which will stultify enthusiasm and effort.*

Endeavour in prevention must mean an extension of vaccination (B.C.G.), from the " contact " group to the non-contact susceptible infant and adolescent population.

It should mean the elimination of overcrowding in all of the homes of tuberculous patients and an intensification of all present endeavours in case finding by mass field radiography, diagnostic work by medical practitioners and chest physicians, and by the use of tuberculin in the nursery schools as a further method in the detection of the spreaders of infection in the adult population.

Efforts in prevention must have the complementary advantage of efficient treatment. Treatment is now the responsibility of the Regional Hospital Board and the general measures in sanatoria and hospitals are well supported by the new chemotherapeutic drugs and the broader application of thoracic surgery.

Hostels

Progress both in prevention and treatment is hindered by the shortage of treatment beds which makes altogether disastrous the present mis-use of a proportion of these beds, by the retention of patients whose residence in sanatoria or hospital is determined solely by their domestic circumstances. This barrier to progress could be removed by the provision of suitable hostels to which these patients in hospital could be discharged, and to which patients at home who are not in need of hospital treatment, but whose removal from home is necessary to prevent the spread of infection and the perpetuation of disease, could be transferred.

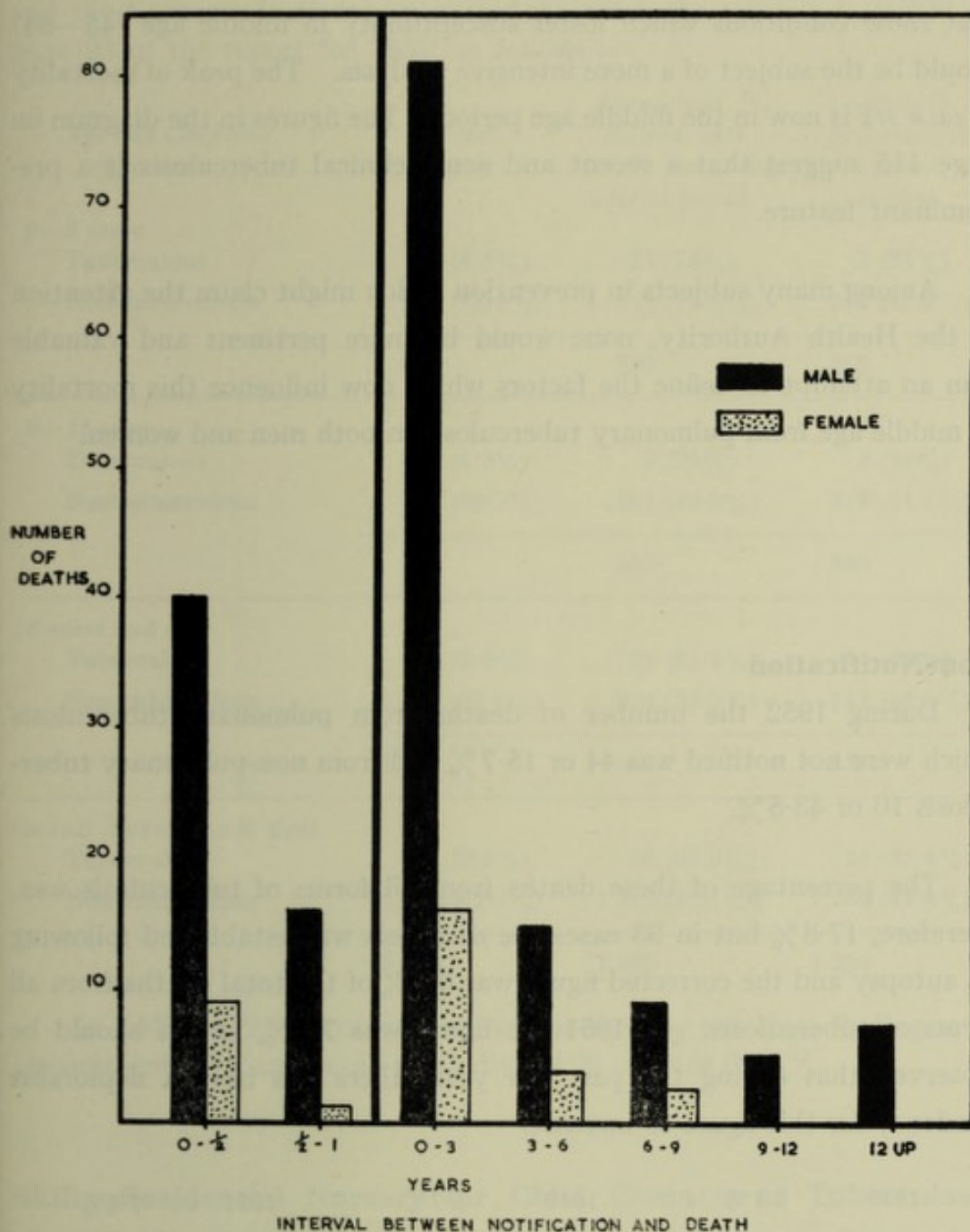
What is necessary now is: (a) an extension of vaccination; (b) adequate housing of the tuberculous population to prevent the spread of familial infection; (c) constant and intensive endeavours in case finding; (d) adequate treatment to fortify efforts in prevention and a " Half-way House " (a hostel), to sustain the efforts of the Health and the Hospital Authorities.

Comment on the Interval between Notification and Death in the Age Group 45-64

The present mortality rate shows a preponderance of deaths in the age group 45-64. In males 116 or 56.3% and in females 25 or 33.8% of the deaths from pulmonary tuberculosis occurred in this age period. The previous mortality in the young adult age groups was in the main due to the acute progression of a recently acquired disease. The concentration of mortality in the middle age groups, particularly with the recent introduction of chemotherapy and the more general adoption of thoracic surgery, raises the important question whether these deaths result in the main from a reactivation of a previous known or established clinical disease, or of disease recent in its origin or in its clinical evolution.

It is, of course, most difficult to determine the actual date of onset of a clinical tuberculosis but the following diagram shows the interval between notification and death of all the deaths which occurred in the age group 45-64 during 1952.

DEATHS FROM ALL FORMS OF TUBERCULOSIS, AGE GROUP 45-64, DURING 1952



This diagram expresses quite clearly that, in the middle age groups, the duration of the illness as measured from the date of notification is in a considerable majority of cases short, and the figures are sufficiently substantial and proportionate to indicate that in that age period the illness is due to a "fresh" clinical tuberculosis and not to the reactivation of a known clinical tuberculosis.

The considerable mortality from pulmonary tuberculosis in middle age, particularly in the male, has been a subject of frequent comment. The causal factors have been obscure and have been related to the particular stresses of that age period.

The present reduction, indeed almost the elimination of mortality in the young adult age period in each sex makes it all the more necessary that those conditions which foster susceptibility in middle age (45—64) should be the subject of a more intensive analysis. The peak of mortality *in each sex* is now in the middle age period. The figures in the diagram on page 115 suggest that a recent and acute clinical tuberculosis is a predominant feature.

Among many subjects in prevention which might claim the attention of the Health Authority, none would be more pertinent and valuable than an attempt to define the factors which now influence this mortality in middle age from pulmonary tuberculosis in both men and women.

Non-Notification

During 1952 the number of deaths from pulmonary tuberculosis which were not notified was 44 or 15·7% and from non-pulmonary tuberculosis 10 or 43·5%.

The percentage of these deaths from all forms of tuberculosis was, therefore, 17·8% but in 33 cases the diagnosis was established following an autopsy and the corrected figure was 6·9% of the total deaths from all forms of tuberculosis. In 1951 the figure was 7·4%, and it should be observed that during the past few years there has been a deplorable tendency for this figure to increase.

1939	...	2·1%	1949	...	5·7%	1951	...	7·4%
------	-----	------	------	-----	------	------	-----	------

1944	...	2·9%	1950	...	5·4%	1952	...	6·9%
------	-----	------	------	-----	------	------	-----	------

Laxity in notification is greatly to be deplored when all of the circumstances in tuberculosis control demand a 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."

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

Contacts

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, as follows:—

<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	28 (4.5%)	21 (75%)	7 (25%)
Non-tuberculous	600 (95.5%)	315 (52.5%)	285 (47.5%)
	628	336	292
<i>6—15 years</i>			
Tuberculous	10 (1.3%)	7 (70%)	3 (30%)
Non-tuberculous	738 (98.7%)	361 (48.9%)	377 (51.1%)
	748	368	380
<i>16 years and over</i>			
Tuberculous	36 (2.9%)	22 (61.1%)	14 (38.9%)
Non-tuberculous	1,176 (97.1%)	634 (53.9%)	542 (46.1%)
	1,212	656	556
<i>GRAND TOTAL. All Ages</i>			
Tuberculous	74 (2.9%)	50 (67.6%)	24 (32.4%)
Non-tuberculous	2,514 (97.1%)	1,310 (52.1%)	1,204 (47.9%)
	2,588	1,360	1,228

In addition, 2,992 contacts were examined by the Mass Radiography Department with an overall morbidity of 25 cases or 0.84 %.

Skilts Residential Nursery for Child Contacts of Tuberculosis

This Nursery was opened on the 22nd October, 1952, to accommodate 33 children (22 under 5 years and 11 over 5 years), who are contacts of tuberculous parents, whose home conditions are unsatisfactory. The children are tuberculin tested and those who are negative, and therefore have no naturally acquired immunity, are given B.C.G. vaccination and remain at Skilts for six weeks whilst their immunity is developing. At the end of that time they are tuberculin tested again. If the reaction is then positive the children have been protected against the disease and are allowed to go home if the home conditions are suitable. If the home conditions are not suitable and further care is required, they are admitted to the care of the Children's Committee.

The children also have an X-ray examination. If the children show a positive tuberculin test and the X-ray is clear they may remain at home if conditions are suitable, or alternatively they are admitted to the care of the Children's Committee if no alternative means of care is possible. If the tuberculin test is positive and the lungs are found to have a primary tuberculous lesion the child is admitted to Kyre Park.

Thirty children have been admitted this year :—

22 direct from their homes.

1 from Loveday Street Maternity Hospital.

4 from Sorrento Maternity Hospital.

1 from Marston Green Maternity Hospital.

1 from Oaklands Nursery, Droitwich.

1 from Erdington Cottage Homes.

The work of prevention of tuberculous infection and disease in infants and children will be enhanced by the availability of this Home.

Work of the Tuberculosis Visitors

After-care in all its aspects is within the purview of the visitor working under the direction of the chest physician, and an indication of the scope of the work is shown in the following statement.

VISITS PAID BY THE TUBERCULOSIS VISITORS DURING 1951 AND 1952

	1951	1952
Primary visits and new cases	1,461	1,524
Special visits and routine visits	36,003	39,507

There are 14 tuberculosis visitors who 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
Beds issued	664	789
Chalets provided	12	18
Grants of clothing and nursing appliances ...	534	549
Grants of food	878	541
Home helps provided	45	79

It is an encouragement to record the increase in the number of home helps provided.

Disinfection

The disinfection of 1,051 homes of tuberculous patients was undertaken during the year.

Housing of the Tuberculous

Close attention is given to this most important of problems and a special section of the Department gives it constant attention.

During 1952 the Housing Management Department provided accommodation for 402 families, an increase in comparison with 1951 of 53 houses.

The number of houses allocated to tuberculous families during the past seven years is shown below.

1946	...	...	...	...	69 houses
1947	...	...	...	...	215 "
1948	...	...	...	...	234 "
1949	...	...	...	...	148 "
1950	...	...	...	...	196 "
1951	...	...	...	...	349 "
1952	...	...	...	...	402 "
TOTAL					1,613

A separate bedroom for all patients with tuberculous disease is the objective, and for the other members of the household no violation of the conditions of housing relating to overcrowding, as set out in Section 58 of the Housing Act 1936.

Notwithstanding the admirable assistance given by the Housing Management Department in achieving the provision of 402 houses for tuberculosis cases, there remained at the end of 1952 1,513 cases still to be dealt with, many of an urgent nature.

It is hoped that the new points allocation scheme which now operates will alleviate difficulties in relation to the more urgent cases more speedily, but a great difficulty is the inability of many of these families to pay the rent of post war houses.

Rehabilitation

Further progress has been made during the year with the rehabilitation and the re-employment of the tuberculous patient. The number of patients interviewed by the Medical Interviewing Committee during 1952 was 530, and recommendations were made by the Medical Interviewing Committee as shown in the following statement.

Sheltered Factory (Remploy)	...	...	...	...	119
Industrial Rehabilitation Unit	...	...	...	...	90
Training Centre at Handsworth	...	...	...	...	51
Rehabilitation with employer	...	...	...	...	9
Placed in open industry	...	...	...	...	198
Training after Remploy	...	...	...	...	14
Home-work	...	...	...	...	2
Open industry after a period of work at Remploy	...	...	...	...	28
Deferred	...	...	...	...	19
					530

There is little alteration in the recommendations made during 1952 and in previous years, with the important exception of the increase in the number of patients (patient-employees) who were considered able to return immediately to open industry. During 1950 the number so recommended was 59 ; in 1951 it was 107, and in 1952, 198. This evidence of the complete restoration to normal physical competence has its importance in relation to the analysis of the present and increasing number of notifications of pulmonary tuberculosis.

Prospective patient-employees who are selected for work in the Sheltered Factory by the Medical Interviewing Committee attend a special "Panel," where the recommendations are again considered by the manager of the factory ; 89 patients have attended that "panel," and 78 have been accepted.

At the end of the year 117 patient-employees were at work and since the factory was opened in May, 1950, 52 patient-employees have ceased work for the following reasons.

Returned to open industry	...	...	...	...	...	30
Promoted to staff	...	...	...	...	...	7
Undertaken training course	...	...	...	...	...	6
Unfit for work	...	...	...	...	...	3
Died	...	...	...	...	...	2
Other reasons	...	...	...	...	...	4

Vaccination, B.C.G.

The introduction of B.C.G. vaccination has had a great importance in the control of tuberculosis. The vaccine (B.C.G.) was first used on the Continent during 1923. Since that date vaccination has been intensively developed throughout European countries and several million individuals, adults and children have now been vaccinated.

Its adoption in England was delayed but during 1950 vaccination was introduced but confined to those persons at greatest risk : children and other contacts in the homes of tuberculous patients, nurses and medical students.

Since 1950, 3,030 children "in contact" have attended the clinic established at the Carnegie Institute ; 6,148 tuberculin tests have been undertaken and 1,420 children vaccinated. The complication rate has been negligible and such complications as have occurred have been trivial in character. The immediate conversion rate has been good although the number of children reverting to a tuberculin negative state at the end of two years has been greater than in the general European experience. In Birmingham the reversion rate at the end of two years was approximately 20%. The importance of this reversion will require analysis in relation to the occurrence of morbidity in this group and in the group in which reversion has not occurred.

EXTENSION OF THE VACCINATION PROGRAMME

The preliminary phase of the vaccination programme is over and consideration must now be given to an extension of the scheme to selected groups of the non-contact population and in particular, the school leaver.

TECHNIQUE

It has been considered, during the year, that the routine of vaccination initially recommended requires simplification. That scheme was as follows :—

A first Tuberculin test (intradermal) (0.1 mg) or Jelly test in infants if NEGATIVE	An interval of six weeks No contact with known case of tuberculosis	A second Tuberculin test (intradermal) (0.1 mg.) if NEGATIVE B.C.G. VACCINA- TION	An interval of six weeks No contact with known case of tuberculosis	A third Tuberculin test (intradermal) (0.1 mg.) if POSITIVE VACCINA- TION SUCCESSFUL
---	--	---	--	--

The revised procedure, which was adopted in November, is :—

A. Tuberculin test (intradermal) (0.1 mg.) or Jelly test in infants	B. An interval of 72 hours	C. If negative B.C.G. vaccination
--	---	---

123 individuals in the following age groups had been vaccinated without any complications, between November and the end of the year :—

Age Groups					
0—1	1—5	5—10	10—15	15 and over	Total
<i>Males</i>					
29	12	16	7	2	66
<i>Females</i>					
8	20	17	9	3	57

Simplification of the technique will have obvious advantage as the vaccination programme is extended and made available to a wider group of children and adolescents.

Domiciliary Treatment

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

During the year 650 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 centre has provided appropriate assistance in the form of handicrafts, a library service and a social centre for the many patients undergoing care at home. The assistance so liberally given by the St. John and Red Cross Libraries service is much valued.

MATERNITY AND CHILD WELFARE

GENERAL COMMENTS

The year 1952 has been marked by new low records in the mortality rates among infants. The stillbirth rate, the neonatal death rate and the death rate between 4 weeks and 1 year have all fallen. This is all the more satisfactory, particularly in relation to the death rate between 4 weeks and 1 year, in that the proportion of babies born into overcrowded conditions has not shown any diminution. Although the birth rate has fallen slightly the number of women having their first child and of women bearing their fifth or more child has shown some increase. The fact that these two groups tend to have higher stillbirth and neonatal death rates than women having their second, third or fourth babies makes the fall in the stillbirth and neonatal death rates even more satisfactory.

The districts served by the centres of Carnegie, Hope Street, Lancaster Street, Trinity Road and Washwood Heath are areas in the City in which the mortality among infants is persistently high and which require concentrated attention.

The proportion of pregnant women gainfully employed outside their own home is greater than in 1951. The effect, if any, of this on the survival of their infants is difficult to gauge.

The illegitimacy rate has shown a tendency to rise but the death rate among these infants has fallen. It is still, however, fifty-six per cent. higher than that of legitimate infants.

Gratifying success has been achieved in the efforts to promote a closer understanding between all branches of the maternity service and this would appear to be reflected in the new low records of mortality among infants. In spite of an increase in the number of hospital beds available the number of women discharged before the tenth day has shown an increase from 2,822 to 3,080. The fact that women are admitted to hospital for social reasons, such as overcrowding, is all the more reason why they should be retained in hospital for the full period. This situation calls for renewed efforts among all concerned to see that the beds are put to the best use. On the other hand, a higher proportion of women with some complication were booked for hospital delivery, and this is a very satisfactory trend.

The maternal death rate of 0.59 was lower than last year but did not reach the low figure of 0.39 attained in 1949. A very unsatisfactory feature, however, was that 6 of the 15 women who died had no antenatal care of any kind, and three of the deaths followed criminal abortion.

The increased number of hospital bookings and increased amount of antenatal care given by general practitioners has resulted in a fall in the proportion of expectant mothers attending the antenatal clinics at welfare centres. On the other hand, the attendance at child welfare clinics has been well maintained and, in fact, in the older age groups has shown a tendency to increase.

The vitally important part which the health visitor plays in the health service is beginning to receive, somewhat belatedly, adequate recognition. An account of how this service has developed in the City since the beginning of the century is given on page 178.

The district nurses continue to carry cheerfully a heavy load of work. The increasing emphasis which is being laid on the domiciliary care of the sick has meant that still greater responsibilities have fallen on this service.

The close collaboration between officers of the Health Department and the Children's Department in relation to the medical care of deprived children has continued in a most satisfactory fashion to the evident benefit of the children in care.

Thanks are due to the Central Statistical Office for the help received in analysing the records.

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 18,301 live births and 366 stillbirths among Birmingham residents, making a total of 18,667 births during the year. These figures compare with 18,355 live births and 416 stillbirths in 1951. Of the total of 18,667 births, 7.9 per cent. were prematurely born. In 1951 the proportion was 8.3 per cent.

	<i>Live births</i>	<i>Stillbirths</i>
Single births	17,853	343
Twins : both living (214 pairs)	428	—
one living, one dead (17 pairs)	17	17
both dead (3 pairs)	—	6
Triplets : all living (1 set)	3	—
	<hr/> 18,301 <hr/>	<hr/> 366 <hr/>

Twenty-six per cent. of the Birmingham women confined in 1952 came from households with two or more persons living per room and 48 per cent. from households where there were 1.5 or more persons per room. Of the total number of confinements the percentage of women having their first child and of those who had already borne at least four children showed a slight increase.

The proportion of pregnant women gainfully employed outside their own home also showed a slight increase.

The illegitimate birth rate per 1,000 live births was 48·2 compared with 47·3 in 1951.

LIVE BIRTH RATES

1945	...	...	...	20·2	1949	...	...	...	18·1
1946	...	...	...	22·5	1950	...	...	...	16·8
1947	...	...	...	22·2	1951	...	...	...	16·5
1948	...	...	...	19·5	1952	...	...	...	16·4

<i>Illegitimate births per 1,000 live births</i>					<i>Illegitimate births per 1,000 live births</i>				
1945	...	...	...	92·0	1949	...	...	...	50·1
1946	...	...	...	67·6	1950	...	...	...	51·5
1947	...	...	...	54·7	1951	...	...	...	47·3
1948	...	...	...	54·1	1952	...	...	...	48·2

EMPLOYMENT OF PREGNANT WOMEN

					<i>Percentage of Total Births</i>		
					<i>1950</i>	<i>1951</i>	<i>1952</i>
Primigravidae	...	...	...	...	63·7	66·7	67·2
2nd—4th	...	...	...	...	18·1	16·7	18·1
5th and over	...	...	...	...	14·3	13·7	13·3
All parities	...	...	...	...	34·4	33·6	35·0

CONFINEMENT BY PARITY

					<i>Percentage of Confinements</i>		
					<i>1950</i>	<i>1951</i>	<i>1952</i>
Primigravidae	...	...	...	...	37·1	35·0	36·3
2nd—4th	...	...	...	...	52·7	54·6	52·6
5th and over	...	...	...	...	10·2	10·4	11·1
					100·0	100·0	100·0

MORTALITY AMONG INFANTS

The mortality among infants has shown a further fall this year and has reached a new low record both for stillbirths and deaths of infants under one year of age.

Perinatal Death Rate

It is now becoming customary to study the causes of the stillbirths and the infant deaths under four weeks of age together, as the Perinatal Death Rate. This is because it is considered that the incidence of stillbirths and of neonatal deaths under four weeks are both influenced greatly by the health of the mother during pregnancy and the normality or otherwise of her labour. In 1952 the perinatal death rate was 36·8, which is the lowest rate yet recorded. Even so, the portion of the death rate associated with toxæmia, breech delivery and foetal deformity showed an increase over 1951. This is shown in the comparative table on page 147, and is discussed in greater detail in the section of the report dealing with Maternity Services.

Death Rate—4 weeks to 1 year

The death rate in this period was 9.2 per 1,000 live births (168 deaths) which is 1.3 less than 1951 and again constitutes a new low record.

The portion of the death rate associated with infection showed a satisfactory fall. The death rate from foetal deformity showed a rise. In the present state of our knowledge little can be done to prevent foetal deformity.

Of the 168 deaths in this group, the breast feeding record was known in 122 cases. Of these, 46 (37.7%) were known to be breast fed until at least the month before death. In 61 cases (50.0%) breast feeding ceased at an earlier date, and in 15 cases (12.3%) it was not started. The reasons given why breast feeding was discontinued were as follows :—

Insufficient milk	...	...	...	...	...	...	64.4%
Condition of mother	...	...	...	...	...	...	2.6%
Condition of baby	...	...	...	...	...	...	17.1%
Other reasons...	...	...	...	...	...	...	5.3%
Unknown	...	...	...	...	...	...	10.6%

Only 43 (25.6%) of the 168 deaths were not associated with infection. In 113 (67.2%) cases the source of the infection was in the home, and in only 11 cases was the source of infection considered to be in the hospital. On the whole these babies were living in less overcrowded conditions than those who died last year although a rather smaller proportion were living with both their own parents (85.7% compared with 90.1%) in 1951.

In only 9 (5.4%) of the 168 cases was the mother working outside her own home. In only one of these 9 cases was the baby illegitimate. Of the babies who died, 36 per cent. had attended the welfare centre.

Mortality Among Infants According to Welfare Centre Districts

It is of value to examine the trend 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. As the numbers involved are comparatively small, the examination of the trend over a period of five years is likely to give a truer picture of what is happening.

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, 1948—1952.

Bromford.	Lancaster Street.
Carnegie.	Maypole.
Erdington.	Tower Hill.
Handsworth	Trinity Road.
Hope Street.	Washwood Heath.
Kettlehouse.	

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, 1948—1952.

Carnegie.	Monument Road.
Heath Mill Lane.	Stratford Road.
Hope Street.	Sutton Street.
Irving Street.	Trinity Road.
Lancaster Street.	Washwood Heath.
Lea Hall.	

It will be noticed that Carnegie, Hope Street, Lancaster Street, Trinity Road and Washwood Heath, are areas which figure in both lists and are therefore areas which require concentrated attention. (See page 131).

Employment of Expectant Mothers

The effect on the perinatal death rate of employment of the mother outside her own home is difficult to gauge. Whereas in 1951, babies of women gainfully employed seemed on the whole to do better, in 1952 this advantage was scarcely apparent.

<i>Perinatal Death Rate</i>					
<i>Mother gainfully employed</i>			<i>Mother not gainfully employed</i>		
<i>Parity</i>	<i>1951</i>	<i>1952</i>	<i>Parity</i>	<i>1951</i>	<i>1952</i>
0	29.4	29.9	0	52.9	43.0
1	24.5	30.2	1	27.7	26.8
2	33.5	46.2	2	32.0	25.7
3	37.9	23.1	3	30.9	35.1
4	59.8	70.8	4	48.6	41.7
5 and over	46.2	47.3	5 and over	58.6	44.3
All parities	30.2	32.0	All parities	37.0	32.8

Legitimacy in relation to Mortality among Infants

The illegitimate infant mortality rate per 1,000 illegitimate births was 40, while the corresponding rate for legitimate births was 26. The legitimacy of stillbirths is not recorded.

		<i>1945</i>	<i>1946</i>	<i>1947</i>	<i>1948</i>	<i>1949</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>
Legitimate Infant									
Death rate	...	49	39	39	31	30	30	29	26
Illegitimate Infant									
Death rate	...	56	54	64	44	40	37	43	40

LEGITIMACY IN RELATION TO MORTALITY AMONG INFANTS BY CAUSE

	<i>Legitimate live births</i>			<i>Illegitimate live births</i>		
	<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>
Infectious disease	0·8	0·6	0·5	—	1·1	—
Tuberculosis ...	0·2	0·3	0·0	—	—	—
Respiratory disease	4·8	6·0	4·4	6·2	11·6	6·8
Diarrhoea and enteritis ...	2·0	1·4	1·1	3·1	1·1	3·4
Foetal deformities	5·1	4·1	6·2	5·2	6·9	8·0
Premature birth	7·5	7·0	5·9	9·3	9·2	6·8
Atrophy, debility marasmus and atelectasis ...	0·9	1·1	0·9	—	—	1·1
Injury at birth ...	4·1	4·5	3·8	6·2	5·8	4·5
Other causes ...	4·4	4·1	3·3	7·2	6·9	9·1

Mortality Rates

STILLBIRTH RATE

<i>Rate per 1,000 total births</i>				<i>Rate per 1,000 total births</i>			
1945 ... ..	...	25		1949 ... ..	...	22	
1946 ... ..	...	25		1950 ... ..	...	23	
1947 ... ..	...	24		1951 ... ..	...	22	
1948 ... ..	...	22		1952 ... ..	...	20	

NEONATAL DEATH-RATE

<i>Rate per 1,000 live births</i>				<i>Rate per 1,000 live births</i>			
1945 ... ..	...	22·5		1949 ... ..	...	17·7	
1946 ... ..	...	22·1		1950 ... ..	...	19·2	
1947 ... ..	...	20·9		1951 ... ..	...	19·2	
1948 ... ..	...	18·0		1952 ... ..	...	17·6	

PERINATAL DEATH RATE

<i>Rate per 1,000 total births</i>				<i>Rate per 1,000 total births</i>			
1945 ... ..	...	46·7		1949 ... ..	...	39·0	
1946 ... ..	...	47·0		1950 ... ..	...	41·8	
1947 ... ..	...	43·9		1951 ... ..	...	40·9	
1948 ... ..	...	39·4		1952 ... ..	...	36·8	

PERINATAL DEATH RATE BY PRIMARY FACTOR

(See Page 147)

DEATH RATE 4 WEEKS—1 YEAR

				<i>Death rate per 1,000 live births</i>					<i>Death rate per 1,000 live births</i>
1945	...	...	...	26.5	1949	...	...	...	13.1
1946	...	...	...	17.9	1950	...	...	...	10.9
1947	...	...	...	19.5	1951	...	...	...	10.5
1948	...	...	...	13.6	1952	...	...	...	9.2

DEATH RATE 4 WEEKS—1 YEAR BY CAUSE

				<i>1949</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>
Respiratory infection	...			4.1	3.9	4.8	3.5
Digestive infection	...			2.9	1.8	1.5	0.9
Other infection	...			1.5	1.3	1.6	1.6
Tuberculosis	...	...		0.2	0.2	0.3	0.1
Foetal deformity	...			1.9	1.6	1.1	1.7
Other causes	...	...		2.5	2.1	1.2	1.4
TOTAL				13.1	10.9	10.5	9.2

INFANT MORTALITY RATE

				<i>Birmingham</i>	<i>England and Wales</i>					<i>Birmingham</i>	<i>England and Wales</i>
1945	...	49	46	1949	...	31	32				
1946	...	40	43	1950	...	30.1	30				
1947	...	41	41	1951	...	29.7	30				
1948	...	42	34	1952	...	26.8	27.6				

INFANT MORTALITY RATE BY CAUSE

				<i>1950</i>	<i>1951</i>	<i>1952</i>
Total infant mortality rate	...	...	...	30.1	29.7	26.8
Respiratory disease	...	...	...	4.9	6.3	4.5
Diarrhoea and enteritis	...	...	...	2.0	1.4	1.2
Congenital malformations	...	...	...	5.1	4.2	6.2
Prematurity	...	...	...	7.6	7.1	6.0
Atrophy, debility and marasmus	...	...	...	0.8	1.1	0.9
Injury at birth	...	...	...	4.2	4.6	3.8
Other causes	...	...	...	5.3	5.0	4.1

INFANT MORTALITY IN WARDS OF THE CITY—1952

<i>Central Wards</i>			<i>Middle Wards</i>			<i>Outer Wards</i>		
St. Paul's ...	...	20	Lozells ...	...	54	Stechford ...	...	24
Duddeston ...	...	41	Aston ...	...	27	Sheldon ...	...	27
Market Hall ...	...	31	Gravelly Hill ...	...	42	Yardley ...	...	20
Ladywood ...	...	33	Washwood Heath ...	...	8	Acocks Green ...	...	39
Deritend ...	...	26	Saltley ...	...	37	Fox Hollies ...	...	17
			Small Heath ...	...	20	Sparkhill ...	...	21
			Sparkbrook ...	...	12	Hall Green ...	...	24
			Balsall Heath ...	...	16	Springfield ...	...	22
			Edgbaston ...	...	29	Brandwood ...	...	28
			Rotton Park ...	...	22	Moseley and		
			All Saints ...	...	22	King's Heath ...	...	23
			Soho ...	...	28	Selly Oak ...	...	25
						King's Norton ...	...	33
						Northfield ...	...	16
						Weoley ...	...	30
						Harborne ...	...	14
						Sandwell ...	...	16
						Handsworth ...	...	36
						Perry Barr ...	...	15
						Kingstanding ...	...	23
						Stockland Green ...	...	25
						Erdington ...	...	46
Average in 1952 ...	...	30	Average in 1952 ...	...	27	Average in 1952 ...	...	25
Average in 1951 ...	...	40	Average in 1951 ...	...	29	Average in 1951 ...	...	26
Average in 1950 ...	...	39	Average in 1950 ...	...	31	Average in 1950 ...	...	27

MORTALITY AMONG INFANTS ACCORDING TO WELFARE CENTRE
DISTRICTS

	<i>Perinatal mortality</i>					<i>Death rate 1—12 months</i>				
	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952
Whole City	39.4	39.0	41.8	40.9	33.3	13.6	13.1	10.9	10.2	8.7
Acocks Green	35.6	33.1	45.7	53.6	27.0	13.4	8.5	9.1	8.9	3.2
Bromford	33.0	37.9	43.8	49.2	49.1	5.6	18.5	4.3	4.4	4.8
Carnegie	44.3	37.3	42.1	31.2	42.1	12.3	14.5	13.8	11.9	7.4
Erdington	43.8	35.2	42.8	52.5	51.2	10.9	9.1	3.2	8.7	8.8
Greet	31.3	31.6	40.2	35.7	25.6	9.5	9.0	7.7	12.2	5.5
Handsworth	45.5	28.3	52.9	44.3	42.7	14.3	10.2	14.6	6.8	—
Harborne	19.0	32.1	29.3	15.1	29.0	12.8	7.2	—	3.8	—
Hay Mills	30.8	18.9	27.8	32.7	34.5	15.7	11.1	1.6	5.3	3.7
Heath Mill										
Lane	38.8	81.7	28.6	43.3	31.6	16.5	17.4	11.6	27.1	22.4
Hope Street	39.2	42.2	45.0	43.1	22.7	19.0	20.5	12.7	13.4	13.1
Horrell Road	28.2	37.9	27.4	35.3	30.4	14.4	5.3	4.7	4.5	9.9
Irving Street	38.4	36.3	34.9	46.2	26.1	18.5	6.1	14.2	19.0	6.6
Kettlehouse	57.5	61.1	40.6	47.8	21.4	7.7	15.0	24.5	9.9	7.2
King's Heath	37.8	50.8	34.2	45.1	20.4	4.1	12.3	—	6.0	5.6
Kingstanding	36.4	35.4	40.4	39.9	48.4	10.2	3.6	—	10.2	3.8
Lancaster St.	62.9	39.4	39.7	42.1	42.0	21.3	22.0	27.1	24.5	12.3
Lansdowne St.	35.2	38.8	49.6	38.7	28.6	10.9	5.4	9.1	9.0	5.4
Lea Hall	35.1	41.1	33.6	24.6	28.3	15.4	14.1	9.5	17.2	14.4
Maypole	—	42.6	52.2	43.3	11.4	—	7.2	—	11.0	11.5
Monument Rd.	34.9	36.3	40.8	41.9	37.9	14.2	13.6	17.9	17.0	14.0
Northfield	33.7	44.0	40.4	46.2	29.1	8.3	4.8	12.1	4.4	12.1
Selly Oak	32.0	32.7	40.0	32.1	37.7	9.3	15.3	5.4	5.9	7.8
Small Heath	40.7	32.7	34.9	33.9	20.5	18.2	10.3	8.0	7.0	6.9
Stirchley	38.2	32.1	31.8	30.1	42.7	8.5	15.7	4.4	4.2	17.0
Stratford Rd.	39.1	35.0	29.6	41.4	29.9	15.1	14.5	12.3	19.0	4.4
Sutton Street	38.8	34.0	43.5	39.5	30.6	19.7	24.4	15.8	10.8	14.7
Tennal Road	46.2	38.5	20.5	40.5	49.3	4.3	7.9	4.2	4.1	—
Tower Hill	41.9	26.7	35.6	43.0	39.7	11.6	15.4	4.3	—	—
Treaford Lane	45.0	27.5	40.4	34.6	30.9	9.5	5.9	8.3	5.6	8.8
Trinity Road	40.8	38.7	54.7	35.5	38.8	23.4	10.6	12.1	7.9	13.2
Washwood										
Heath	39.8	39.8	49.7	36.9	37.7	15.5	9.9	16.2	8.1	7.7
Weoley Castle	32.1	32.8	30.7	20.3	38.8	14.8	9.2	3.5	3.4	2.8
Yardley Wood	27.2	41.9	32.7	23.6	18.5	4.6	14.9	7.7	5.3	10.7

MATERNAL MORTALITY

In 1952 there were 15 deaths of women due to pregnancy and child-bearing, which gave a maternal mortality rate, excluding 4 deaths following abortion, of 0.589 per 1,000 live and stillbirths, or 0.601 per 1,000 live births. There were 5 deaths due to associated conditions. This death rate shows a decrease on that of 1951 which was 0.64 per 1,000 live and stillbirths, excluding abortions. No less than 6 of the 15 women who died had no antenatal care of any kind. Of these, 3 died following criminal abortion. In three other cases the antenatal care was inadequate, in one of them because the mother was already ill before she sought advice.

A. Deaths due to Pregnancy and Childbirth

1. **Deaths not associated with a notifiable birth.** There were six cases which were not associated with a notifiable birth, five of whom had not received antenatal care of any kind. One case of abortion was consequent on a septicæmia associated with empyema of the maxillary antra. She died after admission as an emergency to hospital. Three criminal abortions were caused by attempts to interfere with pregnancy by injecting soap and water. In two of these cases death was due to obstetric shock, and in one to air embolism, a mixture of air, soap and water having been injected into the uterus. They all died at home. In a case of ruptured ectopic gestation, there had been a complaint of abdominal pain 9 days previously, but this had cleared up completely by the 6th day. Three days later, however, the patient collapsed without warning, and was in extremis when admitted to hospital where she died. This woman had denied the possibility of pregnancy.

The case of pulmonary embolism attended the clinic for the first time at about the 27th week of pregnancy, when she was found to be complaining of pain and swelling of the leg, and was admitted at once to hospital. She died 18 days later.

2. **Deaths associated with a notifiable birth.** There were 9 cases associated with a notifiable birth. One case of eclampsia received her antenatal care from her private doctor. The blood pressure and urine were said to be normal throughout pregnancy, though no details of the findings were available. This woman had a normal confinement at home and had her first fit 3½ hours afterwards. She was then sent to hospital.

Of three cases of sepsis, one died of a terminal bacterial endocarditis superimposed on an old mitral lesion. This woman had a toxic confusional state during the puerperium and died in a mental hospital 4 weeks after the confinement. She had adequate antenatal care from hospital and general practitioner. The second case was a hospital emergency, admitted on account of antepartum hæmorrhage. She received her antenatal care from her general practitioner. The third case was referred to hospital by the general practitioner early in pregnancy on account of contracted pelvis.

One case where the cause of death was obstetric shock, was an emergency admission to hospital because the general practitioner was not satisfied with her progress and thought her general condition was deteriorating. Following a surgical induction in hospital, she had a normal delivery and died 6 hours later.

Of the three cases of pulmonary embolism, 1 died 14 days after caesarean section, performed because of pre-eclampsia. This patient attended her general practitioner once only when about 25 weeks pregnant and was sent at once to hospital. The second case had thrombophlebitis 4 days after a normal home confinement and died at home on the 14th day. The third patient was admitted as a hospital emergency on account of antepartum hæmorrhage. This patient took her own discharge on the second day after delivery. She suddenly collapsed and died at home on the 6th day.

There was one case of post-partum hæmorrhage, where the placenta was retained. This woman did not make any arrangements for her confinement, and would not allow her husband to call the doctor after the delivery of the baby. She was dead when the doctor eventually attended.

B. Deaths due to associated conditions

There were 5 deaths due to associated conditions. Of the 3 heart cases, one consulted her doctor for the first time about the 32nd week of pregnancy. She was unaware of her pregnancy and was complaining of amenorrhœa and dyspnoea, which she attributed to the menopause. The doctor, however, diagnosed pregnancy, together with cardiac failure and had her admitted at once to hospital. The two remaining cases were referred to the cardiologist early in pregnancy and remained under his supervision, together with that of the obstetrician, throughout pregnancy.

Undiagnosed pneumococcal meningitis was superimposed on another case, delivered at home. She was admitted to hospital immediately after delivery acutely ill. She received her antenatal care from clinic and midwife.

A case of cerebral hæmorrhage had a normal home delivery and the puerperium was normal until the 12th day, when she complained of headache. She became unconscious 3 hours later and was admitted to hospital where she died 13 hours afterwards. She received her antenatal care from private doctor and midwife.

MATERNAL MORTALITY RATE

Rate per 1,000 live and stillbirths (excluding abortions)			Rate per 1,000 live and stillbirths (excluding abortions)		
Birmingham		England and Wales	Birmingham		England and Wales
1945 ...	1.21	1.46	1949 ...	0.39	0.82
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

A. Deaths due to pregnancy and childbirth	...	...	...	...	15
1. Not associated with a notifiable birth	...	...	...	...	6
Abortion (septicaemia)	...	...	...	...	1
Criminal abortion	...	...	...	...	3
Ruptured ectopic gestation	...	...	...	...	1
Pulmonary embolism (femoral thrombosis)	...	...	...	...	1
2. Associated with a notifiable birth	...	...	...	...	9
Eclampsia (postpartum)	...	...	...	...	1
Sepsis (one heart case)	...	...	...	...	3
Obstetric shock	...	...	...	...	1
Pulmonary embolism (one pre-eclampsia)	...	...	...	...	3
Postpartum haemorrhage	...	...	...	...	1
B. Deaths due to associated conditions	...	...	...	...	5
1. Not associated with a notifiable birth :	...	...	...	...
Heart	...	...	...	...	1
2. Associated with a notifiable birth :	...	...	...	...
Heart	...	...	...	...	2
Pneumococcal meningitis...	...	...	...	...	1
Cerebral haemorrhage	...	...	...	...	1

Responsibility for Antenatal Care	Amount of antenatal care			Hospital emer- gency	Place of death		
	None	Inade- quate	Ade- quate		Home	Hospital Booked	Emerg.
Hospital ...	...	...	1	—	—	1	—
Hospital and general practitioner ...	...	...	1	—	—	1	—
General practitioner and midwife ...	...	1	3	3	2	—	2
General practitioner ...	...	1	1	*2	—	—	2
Clinic ...	...	1	—	1	—	—	1
No-one responsible ...	6	—	—	2	4	—	2
TOTAL ...	6	3	6	8	6	2	7

* One of these cases took her own discharge on the second day and died at home.

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

<i>Year</i>	<i>Abortion</i>	<i>Sepsis</i>	<i>Toxaemia</i>	<i>Haemorrhage</i>	<i>Other puerperal causes</i>	<i>Total due to puerperal causes</i>	<i>Maternal deaths due to "associated conditions"</i>
1939	0.66	0.33	0.55	0.50	0.44	2.48	0.44
1940	0.56	0.39	0.62	0.23	0.34	2.14	0.45
1941	0.67	0.24	0.49	0.24	0.79	2.43	0.73
1942	0.57	0.47	0.57	0.26	0.57	2.45	0.78
1943	0.43	0.43	0.48	0.29	0.05	1.69	0.53
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

Rates in italics indicate here, as elsewhere, that they are calculated on less than 20 instances.

The following table gives the age grouping of maternal deaths since 1942 :—

MATERNAL DEATHS

<i>Year</i>	<i>Under 20 years</i>	<i>20—25 years</i>	<i>25—30 years</i>	<i>30—35 years</i>	<i>35—40 years</i>	<i>40 years and over</i>
1942	3	13	15	17	12	2
1943	2	9	8	13	7	7
1944	1	10	9	15	8	4
1945	—	6	9	10	11	2
1946	2	4	4	6	12	3
1947	1	6	7	7	12	5
1948	—	4	6	4	6	2
1949	—	3	6	8	5	2
1950	—	2	2	6	6	2
1951	—	2	3	2	5	2
1952	—	1	2	3	5	4
	9	60	71	91	89	35

Puerperal Pyrexia and Puerperal Sepsis

There has been a very considerable increase in the number of notifications. This is, of course, due to the new Regulations which have been in force since the 1st August, 1951.

Out of City cases ...	...	...	...	...	...	...	...	79
Cancellation of notification ...	...	...	...	...	...	...	...	12
Birmingham City cases ...	...	...	...	...	...	...	...	326
(1) Due to infection of the genital tract ...	...	...	...	...	...	...	...	95
Uterine infection ...	...	...	...	...	...	...	...	86
Subinvolution ...	...	...	...	...	...	...	...	5
Septic abortion ...	...	...	...	...	...	...	...	—
Retained products ...	...	...	...	...	...	...	...	3
Perineal infection ...	...	...	...	...	...	...	...	1
Puerperal sepsis ...	...	...	...	...	...	...	...	—
Septicaemia ...	...	...	...	...	...	...	...	—
							95	
(2) Due to extra-genital infection ...	...	...	...	...	...	...	...	176
Urinary infection ...	...	...	...	...	...	...	...	80
Mastitis ...	...	...	...	...	...	...	...	42
Influenza ...	...	...	...	...	...	...	...	4
Upper respiratory infection ...	...	...	...	...	...	...	...	10
Throat infection ...	...	...	...	...	...	...	...	4
Chest infection ...	...	...	...	...	...	...	...	23
Thrombophlebitis ...	...	...	...	...	...	...	...	10
Skin sepsis ...	...	...	...	...	...	...	...	3
							176	
(3) Other causes ...	...	...	...	...	...	...	...	55

Ophthalmia Neonatorum

During 1952, there were 665 cases of ophthalmia neonatorum (so called) notified, three of which were admitted to hospital.

No impairment of vision occurred in any case reported to the Department.

Pemphigus Neonatorum

No. of pemphigus cases which occurred on district during 1952 ...	...	...	...	...	9
Admitted to hospital ...	...	...	...	...	1
Nursed at home :					
(a) By district nurse ...	...	...	...	...	3
(b) By relative ...	...	...	...	...	5
No. of cases occurring in institutions during 1952 ...	...	...	...	...	1
					—
					10
					—

All cases of pemphigus which occurred during 1952 recovered.

PREMATURITY

We are indebted to Dr. V. M. Crosse, Pædiatrician, Birmingham Regional Hospital Board, for her co-operation in preparing this section of the report.

The proportion of the total births which were premature has shown a slight fall from 8.2 per cent. in 1951 to 7.9 per cent. in 1952. The proportion of premature births among the stillbirths and infant deaths is very much higher, however, being 57.1 per cent. of the stillbirths and 46.7 per cent. of the infant deaths. Among the stillborn premature babies, whose birth weight was known, 70.2 per cent. weighed four pounds or less compared with 60.4 per cent. in 1951. Further reduction in the stillbirth rate among premature infants can be achieved by improving still further the health and wellbeing of the mother. The cause of premature birth is, in many instances, unknown and much investigation is still required to increase our knowledge in this respect.

On the other hand, the percentage of live premature births weighing 4 lbs. and under showed some slight reduction, being 21.1 in 1952 compared with 22.9 in 1951. The neonatal death rate showed some improvement, being 154 in 1952 compared with 167 in 1951. This improvement was confined to the weight group over three pounds. Under three pounds the results were not so good as in 1951. Fifty per cent. of all the neonatal deaths among premature babies occurred within the first twenty-four hours, and this is a higher proportion than in 1951 when it was 43.7 per cent.

The table on page 142, which shows the primary factors influencing the perinatal mortality rate among babies, shows how frequently antenatal disease or complication results in premature birth and how, even although the baby is small, the labour may frequently result in stillbirth or be followed by neonatal death because of birth injury or asphyxia.

Of the 168 infant deaths between 4 weeks and 1 year, 30 infants were premature. This is a smaller proportion than in 1951. The death rate, too, was decreased, particularly in the group due to infection. The death rate associated with foetal deformity showed a sharp rise.

The proportion of live born premature babies who were born in hospital has risen from 67.1 per cent. in 1951 to 70.8 per cent. in 1952. The neonatal death rate among this group born in hospital was 181.1 compared with 180.6 in 1951.

The neonatal mortality of premature babies born at home, wherever treated, was 90.4 in 1952 compared with 140.8 in 1951.

Considered as a whole this group born at home have a lower neonatal mortality, wherever treated, because hospitals are dealing with a higher proportion of mothers showing abnormalities. Even so, among the heavier premature babies those born in hospital have a lower neonatal death rate than those born at home. (Table, p. 143).

Domiciliary Care of the Premature Infant

Midwives who have received a course of training at the Carnegie Premature Baby Unit look after premature infants born at home and those discharged from hospital who are in need of special care.

When a woman goes into labour prematurely, the midwife who has been booked for the confinement remains with the patient until the completion of labour. The midwife who has been specially trained in the care of the premature baby then takes charge of both mother and baby. Special cots, hot water bottles, scales, baby clothing, and other items are available. Vitamin preparations may be obtained as required.

During 1952, there were 8 of the specially trained midwives working in the City. They looked after a total of 465 infants, as follows:—

Home confinement and baby after-care at home	...	...	...	153
Home confinement and baby admitted to hospital later	...	...	...	24
Hospital confinement—baby nursed at home later	...	...	...	288
(23 over 5½ lbs. on discharge)				(265 5½ lbs. or under on discharge)

Among the 177 babies born at home and attended by the specially trained midwives, there were 15 sets of twins. The following is the weight distribution of these premature babies:—

Birth weight	No.
3½—4 lbs.	1
4½—5 lbs.	90
5 —5½ lbs.	86
	—
	177
	—

Of these 177 premature babies, 153 were born and nursed at home by the premature baby midwives. There was 1 neonatal death among them. The remaining 24 premature babies were removed to hospital. Of these, 9 died in hospital. Of the 15 babies who survived, 3 were again nursed by the specially trained midwives after their discharge from hospital. These 24 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>
4 lbs. 6 ozs.	24 hours	Respiratory infection	Died
4 lbs. 6 ozs.	1 day	Poor condition	Recovered
4 lbs. 6 ozs.	1 day	Poor condition	Recovered
4 lbs. 6 ozs.	1 day	Poor condition	Recovered
4 lbs. 6 ozs.	2 days	Prematurity	Died
4 lbs. 8 ozs.	24 hours	Vomiting	Recovered
4 lbs. 8 ozs.	Birth	Breech delivery— congenital heart	Died
4 lbs. 10 ozs.	4 days	Poor condition	Recovered
4 lbs. 11 ozs. (twin)	1 day	Tentorial tear	Died
4 lbs. 12 ozs.	2 hours	Poor condition	Recovered
4 lbs. 13 ozs.	14 days	Poor condition	Recovered
4 lbs. 13 ozs.	3 days	Poor condition	Recovered
4 lbs. 14 ozs.	4 days	Poor condition	Recovered
4 lbs. 14 ozs.	1 day	Pneumonia	Died
4 lbs. 15 ozs.	1st 24 hours	Poor condition	Recovered
5 lbs.	2 days	Poor condition	Recovered
5 lbs.	1 day	Poor condition	Recovered
5 lbs. 1 oz.	24 hours	Born before arrival at hospital—birth asphyxia	Died
5 lbs. 2 ozs.	2 days	Poor condition	Recovered
5 lbs. 4 ozs.	20 days	Poor condition	Recovered
5 lbs. 5 ozs.	24 hours	Cyanosis	Died
5 lbs. 7 ozs.	1st 24 hours	Respiratory infection	Died
5 lbs. 8 ozs.	6 days	Poor condition	Recovered
5 lbs. 8 ozs. (twin)	1st 24 hours	Respiratory infection— pyloric stenosis	Died

It is interesting to note that among these 24 cases, there were 4 deaths from respiratory infection, this being a particular hazard in domiciliary practice.

The following table shows the history of 1,288 premature babies born alive in Birmingham during 1951.

FOLLOW-UP TO 1 YEAR. 1,288 PREMATURE BABIES BORN IN 1951.

<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 numbers in each group	42	102	238	267	639
Neonatal deaths	39	65	62	26	23
Alive at 4 weeks	3	37	176	241	616
Died after 4 weeks and before 1 year	—	3	13	3	18
Left City or untraced	—	—	5	20	34
Followed to age of 1 year	3	34	158	218	564
Abnormalities found at age of 1 year	1 Hydrocephalic	*2 Blind 1 Squint	2 Inguinal hernia 1 Microcephalic 1 Cleft Palate and backward 2 Congenital heart 1 Mongol 1 Hemiplegia 1 Spastic and backward 1 Squint 2 Backward	3 Inguinal hernia 1 Cleft palate 1 Congenital heart 1 Mongol 1 Blind 3 Squint 1 Backward	4 Inguinal hernia 1 Congenital heart 4 Mongol 1 Microcephalic 1 Hydrocephalic 1 Deaf after Meningitis 1 Talipes 1 Spastic and backward 5 Squint 1 Backward

* One—Retrolental fibroplasia.

PERCENTAGE INCIDENCE OF PREMATURE BIRTHS AMONG :—

	1947	1948	1949	1950	1951	1952
Total births	7.9	7.6	8.2	9.0	8.2	7.9
Stillbirths	47.1	47.0	45.6	51.8	51.0	57.1
Live births	6.9	6.7	7.3	8.0	7.2	6.9
Neonatal deaths	56.9	59.6	60.9	59.5	61.6	61.8
Deaths (1—12 months) ...	16.5	21.2	16.7	20.6	19.2	17.9
Total infant mortality ...	34.4	42.9	42.2	45.5	46.6	46.7

WEIGHT DISTRIBUTION

	<i>Live births Number</i>	<i>% of all premature births</i>	<i>Still- births Number</i>	<i>% of all premature stillbirths of known weights</i>
Up to 2 lbs.	39	3.2	33	15.9
Over 2 lbs. and up to 3 lbs. ...	70	5.7	52	25.0
Over 3 lbs. and up to 4 lbs. ...	149	12.2	61	29.3
Over 4 lbs. and up to 5 lbs. ...	465	38.0	40	19.2
Over 5 lbs. and up to 5½ lbs. ...	501	40.9	22	10.6
All 5½ lbs. and under	1,224	100.0	208	100.0

PREMATURE BIRTHS

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

	1950 (1,468) (babies)	1951 (1,288) (babies)	1952 (1,224) (babies)
Up to 2 lbs.	100.0	100.0	100.0
2—3 lbs.	64.8	66.2	68.6
3—4 lbs.	24.2	35.7	25.5
4—5 lbs.	10.7	10.3	9.5
5—5½ lbs.	3.3	3.2	4.0
All weights to 5½ lbs.	14.6	16.7	15.4

DEATHS UNDER 4 WEEKS OF PREMATURE BABIES AND OF BABIES OVER 5½ LBS.

<i>Age at death</i>	<i>Premature babies per cent. of deaths</i>		<i>Babies over 5½ lbs. per cent. of deaths</i>	
	<i>per cent. of live births</i>		<i>per cent. of live births</i>	
Less than 24 hours	50.3	7.8	41.5	0.31
24 hours and less than 48 hours	15.3	2.4	8.1	0.06
48 hours and less than 1 week	25.4	3.9	18.7	0.14
1 week and less than 2 weeks	4.8	0.7	11.4	0.08
2 weeks and less than 3 weeks	3.7	0.6	12.2	0.09
3 weeks and less than 4 weeks	0.5	0.1	8.1	0.06
All ages to 4 weeks	100.0	15.4	100.0	0.75

PERINATAL MORTALITY RATE

Primary Factor	Number	Premature babies	Babies over 5½ lbs.
		Rate per 1,000 live and stillborn premature babies	Rate per 1,000 live and stillborn babies over 5½ lbs.
<i>Antenatal :</i>			
Toxaemia	78	54.5	23
Separation of placenta ...	44	30.7	13
Rhesus incompatibility ...	9	6.3	19
Other maternal conditions ...	15	10.5	3
Other causes	19	13.3	12
<i>Intranatal :</i>			
Breech presentation	18	12.6	20
Other difficult labour ...	8	5.6	34
Other causes	18	12.6	35
<i>Postnatal :</i>			
Infection	10	7.0	20
Other	2	1.4	8
Foetal deformity	84	58.7	62
Prematurity only	48	33.5	—
Unknown causes	44	30.7	28
All causes	397	277.2	277

DEATH RATE OVER 4 WEEKS AND UNDER 1 YEAR

Cause	Premature babies (Rate per 1,000 premature live births)		Babies over 5½ lbs. (Rate per 1,000 live births over 5½ lbs.)	
	1951	1952	1951	1952
<i>Infections :</i>				
Respiratory	12.9	12.7	4.2	2.8
Digestive	5.3	0.8	1.2	0.9
Other	3.8	1.6	1.5	1.6
Foetal deformity	2.3	5.5	1.0	1.4
Other causes (including tuberculosis)	3.8	3.2	1.3	1.3
Total death rate 4 weeks—1 year	28.1	23.8	9.2	8.0

PREMATURE BIRTHS BY PLACE OF CARE, BIRTH WEIGHT AND SURVIVAL

	1,000 grammes or less (2.2 lbs.)			1,000 grammes—1,500 grammes			1,500 grammes—2,000 grammes		
	Live births	Neonatal deaths	Neonatal death rate	Live births	Neonatal deaths	Neonatal death rate	Live births	Neonatal deaths	Neonatal death rate
Born and nursed at home	1	1	1000.0	1	—	—	7	—	—
Born at home and trans- ferred to hospital ...	4	3	750.0	16	7	437.5	28	6	214.3
Born and nursed in hospital	49	46	938.8	57	33	578.9	182	50	274.7
Born in nursing home ...	—	—	—	—	—	—	1	—	—
All cases ...	54	50	925.9	74	40	540.5	218	56	256.9
Total 2,500 grammes or less									
	2,000 grammes—2,250 grammes			2,250 grammes—2,500 grammes			Total 2,500 grammes or less		
	Live births	Neonatal deaths	Neonatal death rate	Live births	Neonatal deaths	Neonatal death rate	Live births	Neonatal deaths	Neonatal death rate
Born and nursed at home	43	1	23.3	190	2	10.5	242	4	16.5
Born at home and trans- ferred to hospital ...	33	4	121.2	31	8	258.1	112	28	250.0
Born and nursed in hospital	217	14	64.5	362	14	38.7	867	157	181.1
Born in nursing home ...	—	—	—	2	—	—	3	—	—
All cases ...	293	19	64.8	585	24	41.0	1,224	189	154.4

THE MATERNITY SERVICES

The trend towards hospital confinement continued in 1952, when 59 per cent. of the confinements took place in hospital compared with 54 per cent. in 1951. At the same time, the proportion of the total confinements which were emergency hospital admissions fell slightly from 7 per cent. in 1951 to 6 per cent. in 1952. In 1952, 5,389 applications for admission to hospital for social reasons were dealt with at the Bed Bureau, of which 3,839 were granted. The general housing conditions of pregnant women showed little improvement, but it is satisfactory to note that a smaller proportion were confined at home in grossly overcrowded conditions. The number of women discharged from hospital, however, before the tenth day showed an increase from 2,822 in 1951 to 3,080 in 1952. This is an unsatisfactory condition of affairs as many of these women were admitted for social reasons because their living conditions were such as to make a home confinement undesirable. It is disappointing, therefore, to find them returning home to similar conditions less than ten days after delivery. It is difficult for maternity hospitals to gauge what the pressure on their beds may be at any one time, but it is hoped that with the new efforts at co-operation and co-ordination between all concerned this situation will be improved.

In July, a meeting was held at the Maternity Hospital, Loveday Street, to which all the consultant obstetricians practising in Birmingham were invited, and at which a general discussion took place on all aspects of the maternity services, including the domiciliary service. Great interest was shown by the obstetricians in the information given to them and a request was made for a further meeting. It is hoped to have a similar meeting each year.

A further series of meetings were held at all welfare centres between general practitioners and health department staff, which had the effect of improving still further the understanding between all branches of the service.

There has been a substantial increase in the number of general practitioners who hold special sessions for the antenatal examination of their patients.

<i>Where held</i>				<i>No. of sessions</i>	
Maternity and Child Welfare Centre	16
Practitioner's surgery—with midwife and health visitor	9
—with midwife only	23
—with health visitor only	2
—without midwife or health visitor	36
					—
					86
					—

There was an all over improvement in the antenatal attendance of mothers. The proportion of cases where the hospital was responsible for antenatal care increased, in the case of the general practitioner it remained stationary, and in the case of the midwife acting on her own responsibility decreased. The effect of adequate antenatal care on the perinatal death rate was once again evident. (See table, p. 147).

The new low record which has been attained in the perinatal death rate is particularly satisfactory in view of the fact that the percentage of primigravidae has increased from 35.0 per cent. to 36.3 per cent. and that of 5th or more gravidæ has also increased from 10.4 per cent. to 11.1 per cent.

The infants born to these two groups of women tend to have higher stillbirth and neonatal death rates than infants born to women having their second, third or fourth confinement. Even although the proportion of women having their first or fifth or more confinements has increased, yet the total perinatal death rate has fallen and, in addition, the perinatal death rate among these two groups has fallen. (See table, p. 148).

The proportion of the total births which had some antenatal disease or complication, rose from 24.4 per cent. to 26.2 per cent., of which the number confined at home rose from 17.9 per cent. in 1951 to 20.3 per cent. in 1952 and the proportion admitted as hospital emergencies fell from 8.0 per cent. to 7.2 per cent.

The proportion of abnormal presentations among the total births fell from 9.3 per cent. in 1951 to 9.0 per cent. in 1952. The proportion of abnormal presentations confined at home fell from 32.6 per cent. in 1951 to 29.1 per cent. in 1952. The proportion of emergency hospital admissions with abnormal presentations also fell from 11.4 per cent. in 1951 to 10.0 per cent. in 1952.

The proportion of abnormal deliveries was 14.1 per cent. in 1952 and 12.8 in 1951. The proportion of abnormal deliveries occurring at home was 7.9 per cent. in 1952 compared with 10.1 per cent. in 1951. The proportion of abnormal deliveries which were admitted to hospital as emergencies was 10.1 in 1952 compared with 11.8 in 1951.

The proportion of women delivered by Cæsarean Section was 2.4 per cent. in 1952 compared with 2.3 per cent. in 1951.

In 1952 the perinatal death rate (i.e., the number of stillbirths and infant deaths under four weeks of age per 1,000 total births), was 36.8, which is the lowest rate yet recorded. Even so, the portion of the death rate associated with toxæmia, breech delivery and foetal deformity showed an increase over 1951. This is demonstrated in the comparative table at the end of this section.

The incidence of toxæmia among pregnant women showed some slight increase from 6.3 per cent. of the total confinements in 1951 to 7.4 per cent. in 1952. In only 5.9 per cent. of the total confinements was the antenatal record unknown. It is satisfactory to note that a greater proportion of women suffering from toxæmia were booked for hospital confinement and that only 11.2 per cent. compared with 15.9 per cent. in 1951 were confined at home and only 9.7 per cent. compared with 10.3 per cent. in 1951 were admitted as emergencies for hospital confinement. The perinatal death rate associated with toxæmia among the group of women for whose antenatal care the hospital was responsible was 80.6 per 1,000 cases compared with 68.2 in 1951. The perinatal death rate among babies born at home, whose mothers had toxæmia during pregnancy was 92.3 per 1,000 cases in 1952 compared with 125.4 in 1951. This is satisfactory but even so the domiciliary death rate is still higher than that achieved in booked hospital cases, whose condition is likely to be more severe.

The incidence of breech delivery did not vary to any appreciable extent. Here, too, the hospital was responsible for the antenatal care of a slightly higher proportion, i.e., 65.5 per cent. in 1952 compared with 64.8 in 1951. The proportion admitted to hospital as emergencies was 13.7 per cent., which was practically the same as for 1951 (13.9 per cent.). The perinatal death rate among patients with breech delivery, where the hospital was booked, was 63.0 (38.0 in 1951), which was lower than that for those booked for home confinement where the perinatal death rate associated with breech delivery was 71.8 compared with 105.0 in 1951.

The perinatal death rate associated with Cæsarean Section was 90.9 in 1952, compared with 82.1 in 1951.

The following is the number of midwives qualified to give gas and air analgesia :—

In hospital—Dudley Road	...	...	...	...	...	...	24
—Lordswood	...	...	...	...	...	...	22
—Selly Oak	...	...	...	...	...	...	12
—Heathfield Road	...	...	...	...	...	...	21
—Queen Elizabeth	...	...	...	...	...	...	8
—Marston Green	...	...	...	...	...	...	54
—Sorrento	...	...	...	...	...	...	58
—Maternity Hospital	...	...	...	...	...	...	31
—St. Chad's	...	...	...	...	...	...	8
							<hr/> 238 <hr/>
In domiciliary practice	...	...	...	...	...	...	117 <hr/>

In summing up it may be said that in 1952 the three branches of the maternity services have made further progress in integration.

PERINATAL DEATH RATE BY PRIMARY FACTOR

					1950	1951	1952
Total	...	...	...	...	41.8	40.9	36.8
<i>Antenatal</i>							
Toxaemia	...	...	...	...	5.3	4.9	5.5
Separation of placenta	...	...	...	...	3.1	3.9	3.1
Syphilis	...	...	...	...	—	0.1	0.1
Rhesus incompatibility	...	...	...	...	1.1	1.1	1.5
Other antenatal causes	...	...	...	...	3.8	3.6	2.5
<i>Intranatal</i>							
Breech	...	...	...	...	2.4	1.9	2.1
Other intranatal causes	...	...	...	...	7.8	7.6	5.2
<i>Postnatal</i>							
Infection only	...	...	...	...	1.2	2.0	1.6
Other postnatal causes	...	...	...	...	1.1	0.9	0.5
Foetal deformity	...	...	...	...	7.1	6.4	7.9
Prematurity only	...	...	...	...	3.5	3.1	2.7
Unknown	...	...	...	...	5.4	5.4	4.1

RESPONSIBILITY FOR ANTENATAL CARE

						<i>Percentage of all Births</i>		
						1950	1951	1952
Hospital	...	...	...	...	...	39.9	44.2	48.0
Private practitioner	...	...	...	...	...	5.5	2.9	3.0
Maternity service general practitioner	...	...	...	...	...	30.3	31.6	31.6
Centre	...	...	...	...	...	23.2	20.4	16.3
None	...	...	...	...	...	0.4	0.4	0.5
Unknown	...	...	...	...	...	0.5	0.4	0.6

PERINATAL MORTALITY RATE BY NUMBER OF ANTENATAL ATTENDANCES

					<i>No. of stillbirths</i>		<i>Perinatal death rate</i>	
					Total births	and neonatal deaths	1952	1951
					1952	1952	1952	1951
None	...	...	...	...	87	21	241.4	315.1
1—2 visits	...	...	...	...	413	36	87.2	97.9
3—5 visits	...	...	...	...	1,892	155	81.9	56.6
6—8 visits	...	...	...	...	4,385	125	28.5	40.6
9 or more visits	...	...	...	...	7,982	239	29.9	28.4
Unknown	...	...	...	...	3,329	98	29.4	60.9

PARTITION OF PERINATAL DEATH RATE BY RESPONSIBILITY FOR ANTENATAL CARE

					<i>Perinatal Death Rate</i>		
					1950	1951	1952
Midwife and centre	...	...	...	...	5.6	5.1	2.8
General practitioner	...	...	...	...	13.4	13.2	9.6
Hospital	...	...	...	...	20.6	19.8	22.6
None or unknown	...	...	...	...	2.2	2.8	1.8
					41.8	40.9	36.8

PERINATAL MORTALITY

(a) By Responsibility for Antenatal Care

	No. of Stillbirths		Perinatal death rate	
	Total births	and neonatal deaths	1952	1951
	1952	1952		
Hospital	8,685	414	47.7	46.2
Private practitioner ...	541	17	31.4	92.8
Maternity service general practitioner	5,713	161	28.2	33.8
Midwife and centre ...	2,948	53	18.0	24.8
None	87	21	241.4	315.1
Unknown	114	8	70.2	155.8

(b) By Parity

						Perinatal Death Rate	
						1951	1952
Primigravidae ... ..	...	...	...	...	...	46.4	41.3
Parities 2, 3 and 4 ...	...	...	...	...	...	33.4	32.1
Multiparae 5 and over ...	...	...	...	...	...	61.1	48.9

OVERCROWDING

		Percentage confined at home		
		1950	1951	1952
1½ and less than 2 persons per room ...	...	42.1	34.4	37.5
2 or more persons per room ... ..	...	37.7	36.1	32.4

INCIDENCE OF ABNORMALITY IN PREGNANCY OR LABOUR

						Percentage	
<i>Antenatal</i>						1951	1952
Toxaemia ... ..	...	...	...	...	...	6.3	7.4
W.R. + ... ..	...	...	...	...	...	0.3	0.2
Rubella ... ..	...	...	...	...	...	0.1	0.01
Nontoxic antepartum haemorrhage ... ..	...	...	...	...	...	1.5	1.6
Pyelitis ... ..	...	...	...	...	...	0.7	0.7
Anaemia ... ..	...	...	...	...	...	2.9	2.9
Varicose veins ... ..	...	...	...	...	...	4.3	4.4
Other conditions ... ..	...	...	...	...	...	8.5	8.7
Combination of above ... ..	...	...	...	...	...	4.2	4.6
No antenatal disease or complication ... ..	...	...	...	...	...	71.2	69.49
<i>Presentation</i>							
Normal vertex (L.O.A. and R.O.A.) ... ..	...	...	...	...	...	90.5	90.7
Occipito posterior ... ..	...	...	...	...	...	5.0	4.8
Brow ... ..	...	...	...	...	...	0.1	0.1
Face ... ..	...	...	...	...	...	0.4	0.4
Breech... ..	...	...	...	...	...	3.4	3.4
Transverse ... ..	...	...	...	...	...	0.3	0.3
Other ... ..	...	...	...	...	...	0.3	0.3

						<i>Percentage</i>	
						<i>1951</i>	<i>1952</i>
<i>Type of Labour</i>							
Spontaneous onset, spontaneous delivery	...					87.5	85.9
Spontaneous onset, instrumental delivery	...					2.9	3.0
Medical induction, spontaneous delivery	...	...				1.9	2.5
Medical induction, instrumental delivery	...					0.2	0.3
Surgical induction, spontaneous delivery	...	...				3.7	4.1
Surgical induction, instrumental delivery	...					0.4	0.5
Medical and surgical induction, spontaneous delivery	...	...	...	...	...	0.7	0.9
Medical and surgical induction, instrumental delivery	...	...	...	...	...	0.1	0.1
Caesarean section	...	...	...	...	...	2.3	2.4
Other	...	...	...	...	...	0.3	0.3

ABNORMALITY IN PREGNANCY OR LABOUR PLACE OF CONFINEMENT

					<i>Percentage distribution of cases</i>			
					<i>Domiciliary</i>	<i>Hospital booked</i>	<i>Hospital emergency</i>	<i>Nursing Home</i>
<i>Antenatal</i>								
Toxaemia	...	...	1951		15.9	73.2	10.3	0.6
			1952		11.2	78.8	9.8	0.2
W.R. +	...	...	1951		42.9	52.4	2.4	2.3
			1952		25.7	71.4	2.9	—
Rubella	...	...	1951		66.6	16.2	—	17.2
			1952		—	50.0	50.0	—
Nontoxic antepartum haemorrhage		...	1951		14.8	50.9	33.2	1.1
			1952		14.5	55.4	29.7	0.4
Pyelitis	...	...	1951		26.4	66.2	7.4	—
			1952		22.4	72.0	5.6	—
Anaemia	...	...	1951		20.6	77.6	1.7	0.1
			1952		25.0	72.8	1.6	0.6
Varicose veins	...		1951		59.8	37.2	2.0	1.0
			1952		62.0	35.7	2.0	0.3
Other conditions	...		1951		20.2	74.8	4.9	0.1
			1952		16.4	79.6	3.7	0.3
Combination of above			1951		13.6	79.2	7.2	—
			1952		11.9	84.6	3.5	—
No antenatal disease or complication		...	1951		50.2	46.5	2.4	0.9
			1952		45.7	51.9	1.9	0.5

CONTINUED OVERLEAF

				Percentage distribution of cases				
Presentation				Domiciliary	Hospital booked	Hospital emergency	Nursing Home	
Normal vertex				1951	44.7	52.2	2.9	0.2
(L.O.A. and R.O.A.)				1952	40.0	56.9	2.9	0.2
Occipito posterior ...				1951	43.8	49.3	6.7	0.2
				1952	37.3	57.2	5.5	—
Brow ...				1951	—	66.7	33.3	—
				1952	16.7	66.6	16.7	—
Face ...				1951	28.8	54.2	17.0	—
				1952	27.1	61.0	11.9	—
Breech...				1951	21.3	64.7	13.9	0.1
				1952	20.9	64.7	13.6	0.8
Transverse ...				1951	6.7	55.6	37.7	—
				1952	—	63.6	36.4	—
Other ...				1951	19.3	57.9	21.0	1.8
				1952	22.8	64.9	12.3	—
<hr/>								
Type of Delivery								
Spontaneous onset,				1951	48.8	48.3	2.8	0.1
spontaneous delivery				1952	44.6	52.8	2.5	0.1
Spontaneous onset,				1951	19.7	66.4	13.2	0.7
instrumental delivery				1952	15.9	73.6	10.3	0.2
Medical induction,				1951	25.9	66.9	6.9	0.3
spontaneous delivery				1952	19.6	76.5	3.7	0.2
Medical induction				1951	10.2	83.6	4.1	2.1
instrumental delivery				1952	6.8	79.5	13.7	—
Surgical induction				1951	3.2	85.2	11.6	—
spontaneous delivery				1952	2.0	86.6	11.3	0.1
Surgical induction,				1951	1.7	86.7	10.0	1.6
instrumental delivery				1952	3.5	90.0	6.5	—
Medical and surgical								
induction, spontaneous				1951	1.6	90.2	8.2	—
delivery ...				1952	0.6	93.9	5.5	—
Medical and surgical								
induction, instrumental				1951	—	94.7	5.3	—
delivery ...				1952	—	100.0	—	—
Caesarean section ...				1951	—	84.4	15.6	—
				1952	—	85.4	14.6	—
Other ...				1951	15.5	63.8	20.7	—
				1952	8.2	61.2	30.6	—

CARE OF MOTHERS AND YOUNG CHILDREN

(Section 22—National Health Service Act, 1946)

MATERNITY AND CHILD WELFARE CENTRES

The number of centres provided and maintained by the Council is 33. The proportion of expectant mothers attending the centres for their antenatal care continues to fall. This is accounted for by an increase of hospital bookings and by the increased amount of antenatal care undertaken by general practitioners. The proportion of mothers attending for postnatal examination has also shown a slight fall, but the number of mothers who attended for this examination has never been very high. Mothers understand and appreciate the value of antenatal examination, but once the child is born they too often feel that any further examination is unnecessary. (See Chart, p. 152).

On the other hand, the attendance at child welfare clinics has been well maintained and, in fact, in the older age groups has shown a slight tendency to increase. The slightly smaller proportion of children attending under the age of two years is accounted for by the lack of reasonably convenient clinic facilities on the new housing estates where many of the children live. (See Chart, p. 152).

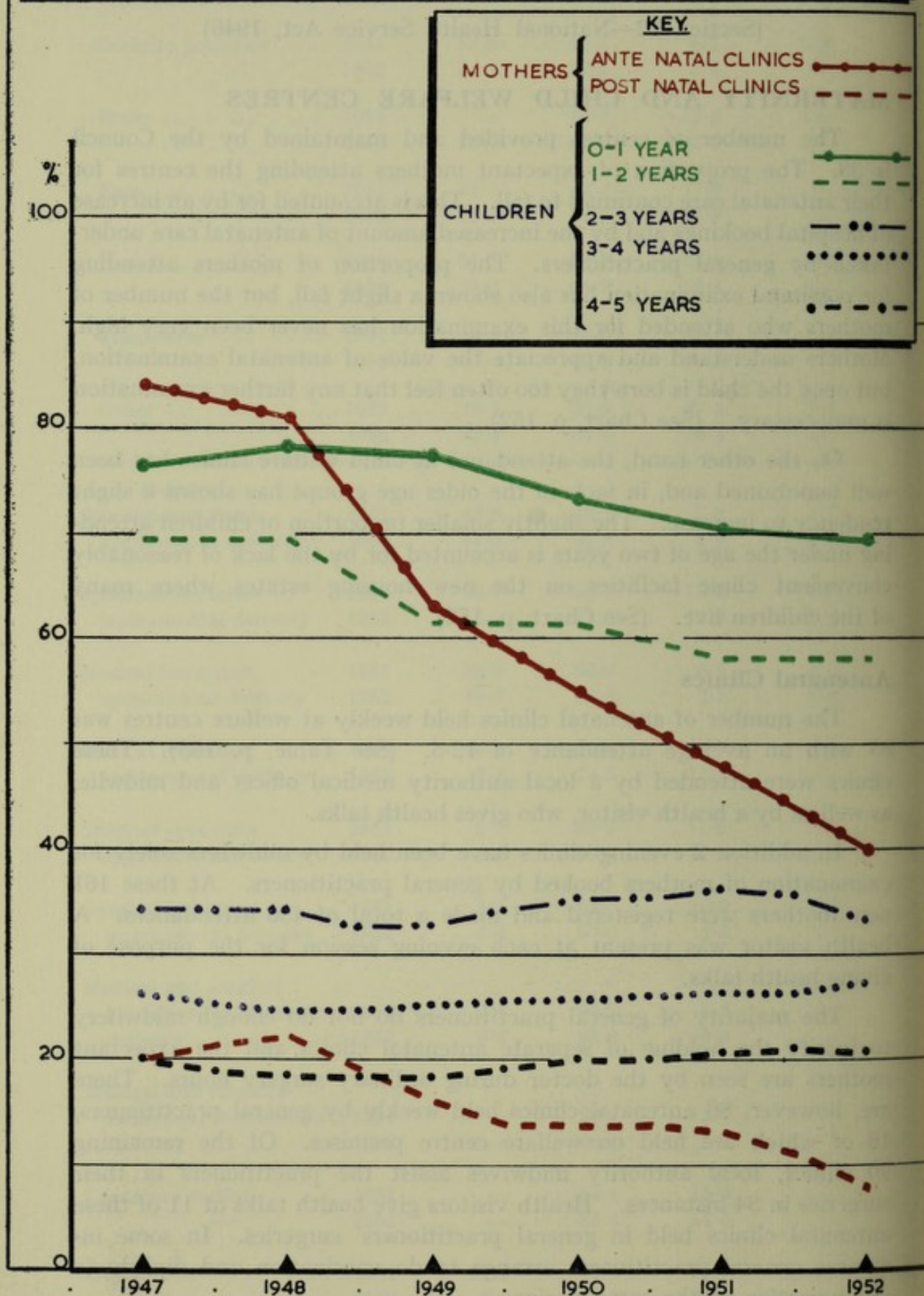
Antenatal Clinics

The number of antenatal clinics held weekly at welfare centres was 65 with an average attendance of 12.5. (See Table, p. 168). These clinics were attended by a local authority medical officer and midwife, as well as by a health visitor, who gives health talks.

In addition 2 evening clinics have been held by midwives solely for examination of mothers booked by general practitioners. At these 161 new mothers were registered and made a total of 456 attendances. A health visitor was present at each evening session for the purpose of giving health talks.

The majority of general practitioners do not do enough midwifery to justify the holding of separate antenatal clinics and the expectant mothers are seen by the doctor during ordinary surgery hours. There are, however, 86 antenatal clinics held weekly by general practitioners, 16 of which are held on welfare centre premises. Of the remaining 70 clinics, local authority midwives assist the practitioners in their surgeries in 34 instances. Health visitors give health talks at 11 of these antenatal clinics held in general practitioners' surgeries. In some instances general practitioners arrange to do vaccination and diphtheria immunisation at the same session.

PERCENTAGE ATTENDANCE AT CLINICS



Blood Tests

All women attending local authority antenatal clinics receive blood tests. In addition, during the year, 1,424 women were referred by general practitioners for blood tests. This is an increase of 259 on the 1951 figure.

Mass Radiography

All pregnant women who attend the antenatal clinics are given the opportunity of attending the mass radiography centre. A few cases are also sent to the welfare centres by general practitioners in the City in order that they can have this examination arranged for them.

Seventy-two per cent. of the 10,135 women invited, attended for a mass radiography examination. This is a substantial improvement on the 1951 figure. Of these, 145 were asked to attend for further investigation. The following analysis shows the findings:—

	1950	1951	1952
No. invited to attend	11,400	9,570	10,135
No. attended	6,925 (60.7%)	5,952 (62.2%)	7,297 (72.0%)
Abnormality shown—further examination requested	364	189	145
<i>Analysis of the results of the Survey</i>			
1. Normal cases	...	...	7,152
2. <i>Pulmonary tuberculosis</i>			
(a) Referred to Chest Clinic :			
Active, requiring treatment	...	17 (2.4 per 1,000)	
Inactive, but observation necessary	...	25	
(b) Referred to family doctor only, inactive	...	10	
(c) No action necessary	...	26	
		—	
TOTAL	...	...	78
3. <i>Non-tuberculous Conditions of Heart or Lungs</i>			
(a) Referred to hospital or clinic	...	9	
(b) Referred to family doctor only	...	27	
(c) No action necessary	...	25	
		—	
TOTAL	...	...	61
4. No. failed to attend for further investigation	...	...	6
		—	
GRAND TOTAL	...	...	7,297

Relaxation Classes for Mothers

At the commencement of the year 5 physiotherapists were employed on a part-time basis and conducted relaxation classes at the following centres:—Bromford, Erdington, Handsworth, King's Heath, Kingstanding, Lancaster Street, Monument Road, Selly Oak, Small Heath, Stirchley, Sutton Street, Tennal Road, Treafoord Lane, Trinity Road and Weoley Castle.

Three of the physiotherapists resigned during the year and certain children's remedial exercise classes were closed to enable work to continue at the relaxation classes. The two remaining physiotherapists are employed for 15 sessions weekly. Mothercraft classes are held in conjunction with the relaxation classes at a number of the centres.

Following the approval of the Committee for three courses of training in the conduct of relaxation classes, arrangements have been made for health visitors and midwives to take these classes. The first course commenced on the 17th November and was attended by 15 health visitors. This will enable classes for mothers to be opened in 15 additional centres in January, 1953. Following the next 2 courses of instruction, classes will be available to mothers at each of the 33 centres. Arrangements have been made for a trained physiotherapist to supervise these classes to ensure that the standard of teaching remains high.

Number of individual mothers attending	...	...	...	966
Number of sessions held	...	...	...	629
Total number of attendances	...	...	...	6,101

Postnatal Clinics

The number of postnatal clinics held during the year was 1,335 (2 of these without a doctor present). (See page 169). The postnatal clinics at Selly Oak and Tower Hill Centres have been cancelled. As has already been said, it is always difficult to convince mothers of the value of postnatal examinations. Many mothers now attend their own general practitioners for this purpose but here, too, the same difficulty has arisen and practitioners have sought the assistance of health visitors to persuade the mothers of its importance.

At the local authority clinic the mother is also given the opportunity of bringing her young infant for examination and advice at the same time as she receives her own examination at the postnatal clinic. This aspect of the work is referred to in greater detail below.

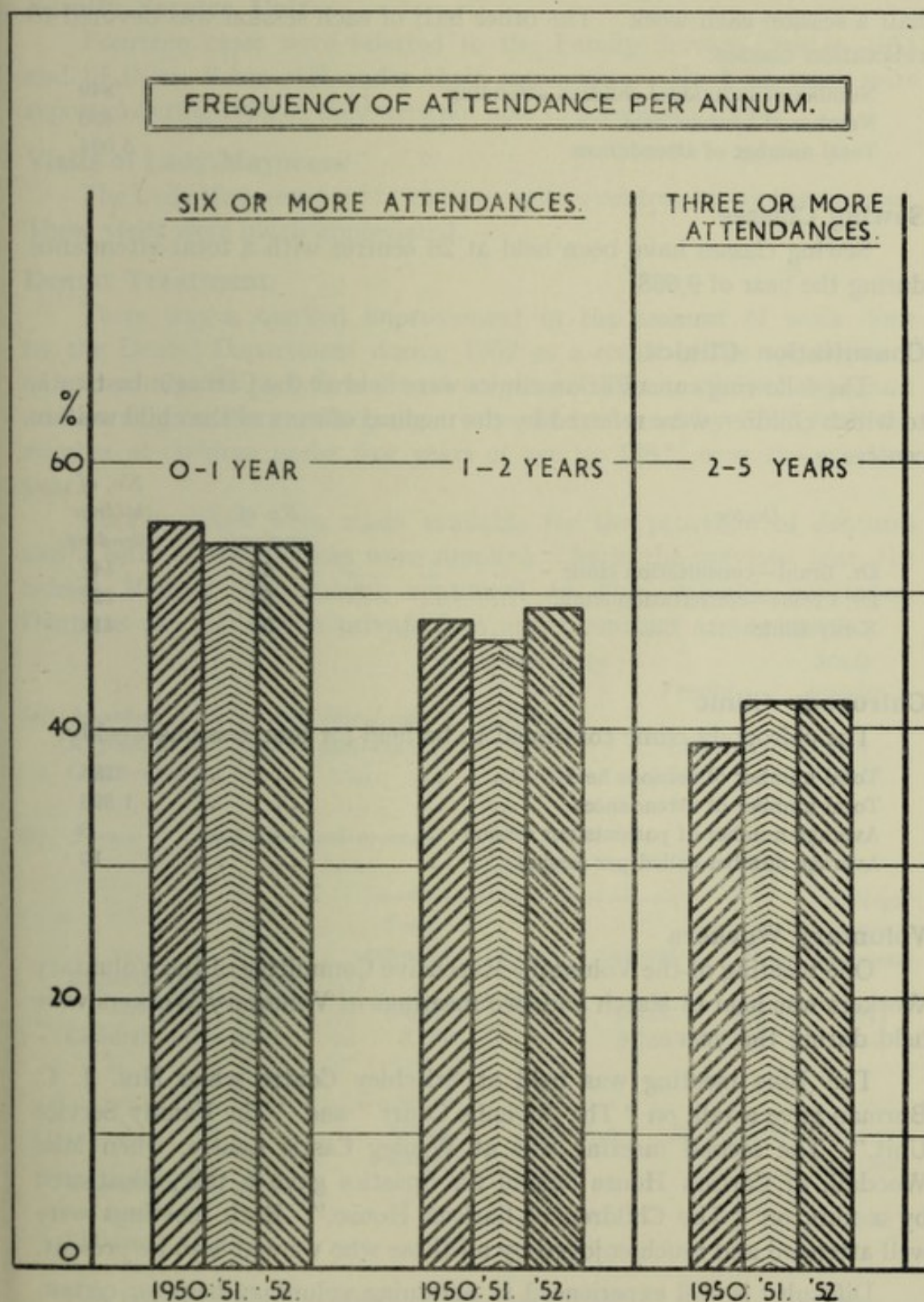
Child Welfare Clinics

Three types of 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 chart on page 155 shows that the percentage of individual children attending has been well maintained. Frequency of attendance of course diminishes as the child grows older. Rather more than half (54%) of the infants under one year attended at least six times and one

quarter attended at least twelve times. Between one and two years a slightly smaller proportion (49%) attended at least six times and one quarter at least twelve times. After the age of two years the need for frequent attendance is much less. Even so, forty-two per cent. of the children in this age group attended at least three times. The following chart shows how well these attendances have been maintained over the past three years :—



Remedial Exercise Classes

During the year remedial exercise classes were held at the following centres :—Bromford, Erdington, Kingstanding, Lancaster Street, Monument Road, Selly Oak, Small Heath, Stirchley, Tennal Road, Tower Hill, Treaford Lane, Trinity Road, Weoley Castle and Yardley Wood.

By the end of the year it was only possible to continue holding these classes at Erdington, Stirchley, Weoley Castle and Selly Oak for half a session each week. The other half of each session was devoted to relaxation classes.

Number of individual children attending	...	...	...	549
Number of sessions held	...	...	...	436
Total number of attendances	...	...	...	5,094

Sewing Classes

Sewing classes have been held at 26 centres with a total attendance during the year of 9,668.

Consultation Clinics

The following consultation clinics were held at the Carnegie Institute, to which children were referred by the medical officers of the child welfare centres :—

<i>Doctor</i>	<i>No. of sessions</i>	<i>No. of children attending</i>
Dr. Braid—consultation clinic	42	147
Dr. Crosse—consultation clinic	50	222
X-ray clinic	50	415

Chiropody Clinic

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

Total number of sessions held	...	...	...	186
Total number of attendances	...	...	...	1,593
Average number of patients per session	...	...	...	8
Average number called per session	...	...	...	10

Voluntary Workers

One meeting of the Voluntary Executive Committee of the Voluntary Workers was held in March and two meetings of Voluntary Workers were held during the year.

The June meeting was held at Stirchley Centre when Mrs. J. C. Burman gave a talk on "The Juvenile Court" and "The Family Service Unit." The second meeting was at Weoley Castle Centre, when Miss Woodall, of Carlson House School for Spastics gave a talk, illustrated by a film, on "The Children of Carlson House." Both meetings were well attended and much enjoyed by all those who were able to be present.

Difficulty is still experienced in obtaining voluntary help for certain centres.

Clinic Assistants

Fifty part-time clinic assistants assist at the welfare centres for a total of 209 sessions a week.

School Clinics

The Education Department are still holding a weekly minor ailment clinic at Kingstanding Centre.

Family Service Unit

Fourteen cases were referred to the Family Service Unit in 1951 and of these, 8 are still under their supervision. No fresh cases were reported during 1952 as they were not able to accept any more.

Visits of Lady Mayoress

The Lady Mayoress paid 14 visits to welfare centres during the summer. These visits were much appreciated.

Dental Treatment

There was a marked improvement in the amount of work done by the Dental Department during 1952 as a result of the appointment of two additional part-time dental surgeons. The number of expectant and nursing mothers undergoing treatment increased by 270% and the number of children under five years of age by 178% over the previous year.

More facilities were made available for the provision of dentures and a total of 503 mothers were supplied. As in the previous year, the School Medical Department continued to give valuable assistance. Dentures are made by a private firm under contract arrangements.

		<i>Examined by</i>		<i>Treated</i>	<i>Made</i>
		<i>Medical</i>			<i>dentally</i>
		<i>Officers</i>			<i>fit</i>
(a)	<i>Numbers provided with dental care</i>				
	Expectant and nursing mothers ...	7,419		1,881	1,063
	Children under five ...	41,248		1,771	1,492
(b)	<i>Forms of dental treatment provided</i>				
		<i>Anaesthetics</i>			<i>Scalings</i>
		<i>Teeth</i>	<i>Local</i>	<i>General</i>	<i>or gum</i>
		<i>extracted</i>			<i>Fillings treatments</i>
	Expectant and nursing mothers ...	6,865	114	6,751	927
	Children under five ...	3,759	3	3,756	305
		<i>Silver</i>			
		<i>nitrate</i>	<i>Dressings</i>	<i>Radiographs</i>	<i>Dentures</i>
		<i>treatment</i>			<i>provided</i>
	Expectant and nursing mothers ...	16	30	26	696
	Children under five ...	142	11	4	—
	New mothers booked at welfare centres during 1952 ...				7,419

Numbers inspected by dental surgeon. All new mothers are inspected by the medical officer.

	<i>Lancaster Street</i>	<i>Stratford Road</i>	<i>Carnegie</i>	<i>School Clinics</i>	<i>Total</i>
Numbers having dental treatment ...	1,147	451	88	195	1,881
Total number of individual children between 2 and 5 years who attended welfare centres during 1952...	—	—	—	—	15,358
Total number of children having dental treatment ...	1,133	580	58	—	1,771
Number of extraction clinics ...	143	70	—	—	213
Total attendances :					
Mothers ...	1,309	514	—	—	1,823
Children ...	1,176	602	—	—	1,778
Average attendance per session :					
Mothers ...	9	7.4	—	—	8.2
Children ...	8	8.6	—	—	8.3
Local anaesthetics ...	40	24	9	—	73
Extractions with local anaesthetics ...	67	33	17	—	117
General anaesthetics ...	2,144	920	—	—	3,064
Extractions with general anaesthetics ...	6,973	3,534	—	—	10,507
Other dental operations, including x-rays, gum treatment, etc. ...	1,106	215	451	—	1,772
Number of mothers provided with dentures ...	273	35	—	195	503
Number of dentures provided ...	443	41	—	212	696

HARBOROUGH HALL CONVALESCENT HOME FOR MOTHERS AND BABIES

This Home, which was opened in July, 1951, continues to serve a very useful purpose and to give much needed rest and help to mothers either immediately after confinement or during the early months when domestic worries are having an adverse effect on both mother and baby.

There were 294 mothers admitted in 1952, and for many of these it was the first time they had been given the opportunity of spending even a few days away from home. In quite a number of cases a mother has found it impossible to go to Harborough Hall because she has not been able to find anyone to look after her other children. With the help and co-operation of the Children's Department, it has been possible to make arrangements in such cases for the other children under school age to be accommodated during the period of the mother's convalescence in nearby residential nurseries. Between May and December, 16 mothers were assisted in this way.

THE HUMAN MILK BUREAU

The purpose of the above Bureau is to supply pasteurised human milk for premature and seriously ill infants. The staff comprises two state registered nurses, who reside on the premises. There is also a clerk who keeps the accounts and records of donors and their babies, and a cleaner. These two members of the staff live out.

The milk, which is subjected to chemical and bacteriological tests and examined for adulteration with water or cow's milk, is collected daily from the donors' houses by the Bureau nursing sisters. A van is provided for collecting the milk, and the sisters drive it themselves. Special zinc lined carbon dioxide ice boxes are used for :—

- (1) Storing the milk in the donor's home if the donor has no refrigerator.
- (2) Transporting the milk to the Bureau, and
- (3) Despatching the milk by rail.

Names of donors are received mainly from the City midwives ; others are recommended by the medical and nursing staff of various clinics and hospitals. The donors are drawn from all types and classes of people. Altogether 298 prospective donors were recommended to the Bureau during 1952. Those recommended by midwives and accepted 3—4 days following delivery, have proved to be the most productive and satisfactory donors generally, because, whilst in bed, they have had plenty of time to learn the technique of expression by hand and the importance of cleanliness. The daily visit of the Bureau sister has proved very helpful to young mothers, and has contributed to greater confidence in the handling of their infants and also to an increased supply of breast milk.

The donors are usually co-operative and eager to help once their interest has been aroused. Some of them are very disappointed when, for any reason, they are no longer able to contribute. The husbands are also interested, and frequently ask many questions about the scheme.

Mothers are paid 2d. an ounce and the milk is at present being sold at 7d. an ounce. It is free to domiciliary cases within the City. The money received by the donors appears to be very much appreciated by some mothers as it enables them to stay at home and breast-feed their own babies, instead of going out to work. The majority of donors who refuse payment are those who have only small quantities of milk.

The recommendation of donors able to supply large quantities of milk has increased during 1952, as the scheme has become more widely known, and accepted on the district. During 1952, 45,350 ounces were supplied to 15 hospitals, 9 of which were in the City and 6 in the adjacent counties. The major portion of the milk (37,254 ounces) was supplied to the City Hospitals. A total of 1,127 ounces was supplied to 2 domiciliary cases in the City. This small figure is explained by the fact that the majority of acutely ill infants in this City are nursed in hospital.

In 53 cases the staff of the Milk Bureau were asked to enrol mothers whose babies were in hospital, thus encouraging the mothers to maintain lactation during the absence of their infants.

DAY NURSERIES

On 1st January, 1952, there were 1,966 places for children in the 41 day nurseries and one 24 hour nursery maintained by the Health Committee. The numbers in several day nurseries were reduced in October to meet the Ministry requirements.

The demand for priority places varies in different parts of the City, and in certain areas it was felt that the number of day nurseries could be reduced; accordingly, Coleshill Road Nursery was closed on the 15th February, and 298, Birchfield Road and Selwyn Road Nurseries were both closed on the 31st May. The staff and the priority children from these nurseries were transferred to neighbouring nurseries.

The number of children by age group on the registers and the average daily attendances at the beginning and end of the year are given below:—

CHILDREN ON DAY NURSERY REGISTERS, 1952

		0-1 years	1-2 years	2-5 years	Total	Average daily attendances for 1952
1st January	...	130	327	1,239	1,696	1,334
31st December	...	132	301	1,091	1,524	

In keeping with the Health Committee's decision in 1949, only those children coming within the priority categories are admitted to the day nurseries. An analysis of children in the nurseries on December 31st is as follows:—

GROUP 1. Children whose mothers are wholly or mainly responsible for the maintenance of the family:

	1952	1951
(a) Children of unmarried mothers	365	390
(b) Children of women separated from husbands ...	384	408
(c) Children of women with sick or disabled husbands	231	261
(d) Children of widows	95	118
(e) Children of women with husbands in prison ...	17	21
(f) Others (T.B. contacts, children deserted by mothers, etc.)	40	—
	<hr/> 1,132	<hr/> 1,198

GROUP 2. Children whose mothers are unable to look after them through illness, confinements, etc. (This group also includes children whose mothers are dead).

	1952	1951
	234	202
	<hr/>	<hr/>
GROUP 3. Non-priority cases	158	410
	<hr/>	<hr/>

Priority cases only are entered on the waiting list and the numbers are as follows:

NUMBER OF CHILDREN ON PRIORITY WAITING LIST AT YEAR END

<i>Age Group</i>							<i>1952</i>	<i>1951</i>
0—1 years	...	...	...	...	...	...	35	79
1—2 years	...	...	...	...	...	...	84	175
2—5 years	...	...	...	...	...	...	204	291
							—	—
							323	545
							—	—

Admission of Outside City Cases

Twenty-seven children were admitted who lived outside the City boundary. They were all of the priority groups and full financial responsibility was accepted by the appropriate local authority.

Central Kitchen and Cooking Arrangements

On the 27th December, the Central Kitchen ceased to supply cooked mid-day dinners to any of the nurseries. Up to this date six nurseries had received such meals, but after being supplied with additional gas stoves and the arrangements being completed for providing them with supplies, they were able to follow the procedure which already existed in the other nurseries in the City.

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 is provided for 30 children who are resident from Monday to Saturday each week. In addition, 10 children attend daily. The mothers of the children are mainly employed on transport or shift work, but 51 short stay cases have been admitted during the year. These were admitted mainly because their mothers were ill.

Mass Radiography

During the year, 192 new staff (164 nursing staff and 28 domestic workers), attended the Mass Radiography Centre prior to appointment. Of this number, only 2 cases were found to be unsuitable for nursery work.

During the year, 479 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 :

Bloomsbury Street.	Park Road, Sparkhill.
Camden Street.	Quinton Lane.
Cartland Road.	92, Pershore Road.
Charles Road.	1, Soho Road.
City Road.	362, Soho Road.
697, Coventry Road.	Somerset Road.
1328, Coventry Road.	Springfield Road.
2186, Coventry Road.	Tyburn Road.
Crossfield Road.	Yardley Wood Road.
Grantham Road.	Highfield Road.
750, Kingstanding Road.	Moseley Road.
Monument Road.	Reddings Lane.
Park Road, Moseley.	

(b) Nurseries recommended for re-visit :

Gospel Lane.	Kingston Road.
Jerry's Lane.	Trinity 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, 70 candidates came up for selection for training, of whom 25 were accepted, 7 were refused as unsuitable, 34 were given a trial pending a decision, and 4 decided to postpone starting the course.

Training Courses for Nursery Staff

1. Senior Child Care Reserve Course

Three courses lasting four weeks each were held during the year. Attendances were as follows :—

January—February, 1952—15 candidates attended—all obtained certificate.

April—May, 1952—12 candidates attended—2 failed to obtain certificate.

November—December, 1952—15 candidates attended—4 failed to obtain certificate.

2. Supplementary Child Care Reserve Course (Warden)

Two courses lasting four weeks each were held during the year. The results were as follows :—

March, 1952—3 candidates attended and obtained certificates.

June—July, 1952—3 candidates attended and obtained certificates.

3. Refresher Courses

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

(a) Matrons—one course lasting two weeks was held in September—11 matrons attended.

(b) Deputy Matrons—one course lasting two weeks was held in October—15 deputy matrons attended.

(c) Wardens—a two weeks' course was held during October—8 wardens attended.

(d) Staff Nurses—a two weeks' course was held in February—18 staff nursery nurses attended.

Daily Guardian Scheme

The Daily Guardian Scheme allows for the registration of a maximum of 50 persons who receive not more than 2 children into their care by day. The Home is first approved by the Health Committee on the advice of a medical officer, and the health visitor visits the home at regular intervals.

At the end of December, 46 guardians were registered and 70 places were available. Twenty-three guardians resigned during the year and 22 new persons were registered to fill the vacancies. A total of 107 children have been accommodated during the year.

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 third year. The original intention was for the survey to extend over a limited period of two years, but it was later decided to continue it for five years as this longer period would make it possible for a more comprehensive growth curve to be obtained.

By the end of the year there were 626 children remaining in the survey out of an original number of 2,000. As in previous years, illness and removal from the district were the chief reasons for defaulting.

Virus Infection during Pregnancy

The investigation initiated by the Ministry of Health to ascertain the risk of congenital defects occurring among children born of women who have suffered from a virus infection during pregnancy, compared with those children whose mothers had no such infection, was continued during 1952. The hospital authorities, private practitioners and midwives co-operated in the investigation. During 1952, 17 virus infections in pregnant women were notified as shown in the following table :—

Chickenpox	...	...	...	...	...	...	...	...	5
Mumps	...	...	...	...	...	...	...	...	7
Rubella	...	...	...	...	...	...	...	...	4
Measles	...	...	...	...	...	...	...	...	1

The children of 64 women who were free from virus infections during their pregnancy are also being observed. The children are being examined on their first birthday and again when they are two years of age. During 1953 it is proposed to follow up cases of rubella only.

CARE OF THE UNMARRIED MOTHER

There has been an increase during the year of 100 in the number of women seeking help from this Department. Although there has been a decrease in the number of single girls having their first illegitimate child, this has been more than offset by a marked increase in the numbers pregnant for the second or more time, and by a moderate increase in the number of married women having illegitimate children.

	1951	1952
1. Total number of women, arrangements for whose confinement were supervised by the Department	768	868
2. Number in Item 1 who were :		
(a) Single women—1st pregnancy ...	453 (59.0%)	399 (46%)
(b) Single women—2nd pregnancy or more	148 (19.3%)	247 (28.4%)
(c) Married women	167 (21.7%)	222 (25.6%)
3. Number of single women requiring institutional care in :		
Item 2 (a)	119	117
Item 2 (b)	32	40
	} 164	
4. Number of married women in Item 2		
(c) requiring institutional care	13	12
	} 169	

In addition, 44 married women with legitimate pregnancies applied to this Department for help with regard to accommodation. Of these, 12 were admitted to the Birmingham Infirmary and one to Beechcroft Mother and Baby Home. Money grants made for lodgings amounted to £10 5s. 0d. ; none of this was refunded.

There were 4 cases of venereal disease and these were admitted to Birmingham Infirmary for treatment.

Thirty-one unmarried mothers resident out of the City were dealt with.

Owing to structural defects in Birmingham Infirmary, the number of beds available there for use by this Department was reduced to 12 in February, 1952 and to 4 six months later.

In July, 1952, the Salvation Army Home at Lyncroft House was transferred back to Birmingham from Lichfield where it had been evacuated during the war. The Home has accommodation for 21 girls.

On the 1st January there were 9 girls in Beechcroft Mother and Baby Home. Seventy-one girls were admitted during the year. Of these, 17 had applied to this Department for help in the latter part of 1951, but owing to the expected date of their confinement they were not admitted to the Home until 1952. Of the total of 80 girls dealt with in the Home, 2 were transferred to other homes before their confinement, 5 were transferred with their babies to other homes after their confinement and 14 were still in the Home at the end of the year. Of the remainder, 17 girls went home with their babies, 5 made arrangements to have their babies looked after by foster mothers, 7 girls were found domestic posts with their babies, and 2 babies were admitted to residential nurseries. Twenty-six babies were placed for adoption, including two sets of twins. One girl was discharged when her baby was admitted to hospital for treatment. In one case the baby was stillborn, and in two other instances the infants died within 72 hours of birth.

The figures given in the following table refer exclusively to girls who were first seen in this Department in 1952 :—

<i>Disposal of new cases in 1952</i>						<i>First cases</i>	<i>Multiple cases</i>	<i>Married women</i>
Lyncroft House	...	...	...	...	...	10	4	—
Woodville	...	...	...	...	...	19	2	—
Francis Way	...	...	...	...	...	19	4	1
Beechcroft	...	...	...	...	...	42	11	—
Park Hill	...	...	...	...	...	5	—	—
Birmingham Infirmary	...	...	...	...	...	13	17	11
Homes out of City	...	...	...	...	...	9	2	—
Own home, except for confinement	...	...	...	...	...	176	156	153
Own home entirely	...	...	...	...	...	61	35	41
Returned to Ireland	...	...	...	...	...	11	5	2
Left City	...	...	...	...	...	29	10	11
Born out of City	...	...	...	...	...	2	1	3
Miscarriages	...	...	...	...	...	3	—	—
						399	247	222

<i>Situation at end of year</i>						<i>1951</i>		<i>1952</i>	
						<i>No. of cases</i>	<i>%</i>	<i>No. of cases</i>	<i>%</i>
Mothers and babies still in the Homes	...	...	...	...	...	35	4.5	45	5.1
Babies died, including stillbirths	...	...	...	...	...	13	1.7	25	2.9
Babies have been adopted	...	...	...	...	...	71	9.2	52	6.0
Babies are with foster mothers	...	...	...	...	...	5	0.7	11	1.3
Mothers have married babies' fathers	...	...	...	...	...	50	6.5	55	6.3
Mothers and babies have left the City	...	...	...	...	...	42	5.5	50	5.8
Babies are in homes without the mother	...	...	...	...	...	15	2.0	12	1.4
Mothers at home with their babies	...	...	...	...	...	530	69.0	615	70.8
Miscarriages	...	...	...	...	...	7	0.9	3	0.4
						768	100.0	868	100.0

<i>Parity (excluding married women)</i>						<i>Number of cases</i>	
						<i>1951</i>	<i>1952</i>
1st	...	...	...	...	...	453	399
2nd	...	...	...	...	...	97	164
3rd	...	...	...	...	...	35	54
4th	...	...	...	...	...	9	15
5th	...	...	...	...	...	5	11
6th	...	...	...	...	...	2	0
7th	...	...	...	...	...	—	2
8th	...	...	...	...	...	—	0
9th	...	...	...	...	...	—	1

<i>Girls under the age of consent</i>						<i>Number of cases</i>	
						<i>1951</i>	<i>1952</i>
13 years old	...	...	...	...	...	—	1
14 years old	...	...	...	...	...	1	1
15 years old	...	...	...	...	...	6	5
16 years old	...	...	...	...	...	17	15
						24 (3.1%)	22 (2.5%)

Home visits paid <i>re</i> unmarried mothers	...	...	...	...	1,253
Special visits paid <i>re</i> unmarried mothers	...	...	...	...	315
Cases visited in hospital	...	...	...	...	597
Homes inspected <i>re</i> suitable lodgings with babies	...	...	...	...	16
Special visits <i>re</i> V.D.	...	...	...	...	—
Office interviews, applications	...	...	...	...	626
Office interviews, other than applications	...	...	...	...	2,873
Office interviews <i>re</i> V.D.	...	...	...	...	20

Multiple Cases (Unmarried Women)

Of the 164 women who were pregnant for the second time, 102 had their first child living with them and in 14 cases the first child had died. The other 48 children were cared for as follows :—

- 4—first child with foster mother.
- 7—first child in residential nursery.
- 20—first child adopted.
- 2—first child adopted by grandparents.
- 15—first child cared for by relatives, apart from mother.

Sixty-seven of the 83 women who had had at least two illegitimate pregnancies previously had other children in their care, and 37 of these have more than one child.

Of the total 247 multiple cases, 72 are living with the putative father.

Ninety-three women have sought the aid of this Department in previous pregnancies.

Married Women

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

- 187 separated from husband.
- 15 divorced.
- 16 widows.
- 1 husband in forces.
- 3 married to putative father.

222

Of these 222 :

- 48 live with putative father.
- 10 left City.
- 8 in Birmingham Infirmary.
- 3 had infants in residential nursery.
- 12 had baby adopted.
- 141 own home with baby.

ANTENATAL AND POST NATAL CLINICS
PERCENTAGE ATTENDANCE

<i>Year</i>	(1) <i>Total live and stillbirths notified</i>	(2) <i>Total No. of individual women attend- ing Antenatal clinics</i>	(3) <i>(2) as percentage of (1)</i>	(4) <i>Total No. of mothers attending for Postnatal examination</i>	(5) <i>(4) as percentage of (1)</i>
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

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>
1947	77.3	68.9	33.9	25.7	19.7
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

ANTENATAL CLINICS

	<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>Decrease on 1951</i>
Number of antenatal clinics held ...	3,965	†3,724	*3,403	321
New expectant mothers booked during year ...	8,555	7,558	6,299	1,259
Total individual women attending	10,732	8,868	7,419	1,449
Total antenatal attendances ...	56,387	49,618	42,455	7,163

† including 705 attended by midwife.

* including 653 attended by midwife.

POSTNATAL CLINICS FOR MOTHERS

Number of primary postnatal cases examined at clinics	2,089	(—308 on 1951)
Total number of examinations	2,283	(—304 on 1951)
Number of cases showing no abnormality ...	1,069	(— 43 on 1951)
Number of cases showing abnormality	1,020	(—265 on 1951)
Percentage of cases showing abnormality ...	48·8	(—4·8 on 1951)

Conditions found

Breasts—mastitis	28
-------------------------	----

Abnormalities in genital tract :

Subinvolution	43
Retroversion	163
Deeply torn cervix	55
Parametritis	7
Cystocele, rectocele or prolapse (repair)	111
Poor perineum (result of no repair or of ineffective repair)	68
Fistula (urinary or faecal)	4
Vaginal discharge	229
Persistent loss	40

Abnormalities in urinary tract :

Albumin present	32
Pus present	1
Sugar present... ..	4
Precipitancy of micturition	9

White leg	6
------------------	---

General conditions :

Raised blood pressure	28
Debility	120
Anaemia (a) following haemorrhage	40
(b) of pregnancy	63
(c) nutritional	91
Backache	160
Abdominal muscles (lax, divarication of recti)	285
Other conditions	202

(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>		
	1950	1951	1952	1950	1951	1952	1950	1951	1952
1-2 attendances	23	24	24	30	30	29	61	58	58
3-5 attendances	22	22	22	22	23	22	32	33	36
6-11 attendances	28	27	28	26	24	25	5	7	5
12 and over attendances	26	27	26	22	23	24	2	2	1

POSTNATAL CLINICS FOR CHILDREN

	1951	1952
Number of clinics held	1,448	*1,335
Number of new infants attending	9,168	8,630
Total number of infant attendances	54,882	54,033
Total examined by doctor	22,201	21,782
Average attendance of infants per clinic session	37.9	40.5
Average number of infants seen by doctor per clinic session	15.4	16.3

* No doctor attended 2 of these clinics.

CHILDREN'S CLINICS

Number of clinics held :	1951	1952
(1) With doctor attending	2,994	3,019
(2) Without doctor attending	328	147
TOTAL	3,322	3,166

	1951	1952
New children attending	7,071	7,346
Total attendances	144,506	142,783
Average attendance per clinic...	43.5	45.1
Total seen by doctor	48,282	49,766
Average seen by doctor per clinic	16.1	16.5

TODDLERS' CLINICS

Number of clinics	1,793	1,938
Total attendances	30,880	30,572
Total number of individual children examined	14,375	14,313
Number of these children attending pre-school clinic for the first time	5,644	5,778

(Of these, 1,914 children were making their first attendance at the centre).

The following table shows the results of these examinations:

<i>Environmental conditions unsatisfactory :</i>					1951	1952
No. of individual children	...	...	...	Not available		7,386
Clothing unsuitable or inadequate	...	...	...		53	33
Rest. Bed-time later than 7 p.m.	...	...	...		3,583	3,190
No day-time rest	...	...	...	...	5,907	5,573

Defects :

Number of individual children having a defect					7,434	8,633
Eyes.	Squint	...	...	...	274	278
	Inflammatory conditions	...	...	...	96	82
	Other eye conditions	...	...	...	36	32
Skin	Eczema	...	...	...	189	202
	Purulent conditions	...	...	...	42	24

Ear, Nose and Throat :

	Otorrhoea	...	...	...	138	67
	Deafness	...	...	...	28	16
	Enlarged or diseased T's and/or A's	...	...	...	2,321	2,226
	Nasal obstruction and/or mouth breathing	...	...	...	220	232
Teeth	Carious or defective	...	...	...	2,128	2,421
Glands	Enlarged	...	...	...	1,490	1,306
Heart	Congenital disease	...	...	...	74	115
	Rheumatic heart conditions	...	...	...	36	40
Anaemia	...	...	...	...	33	23
Lungs	...	...	...	...	74	89
Rickets	Active	...	...	...	14	15
	Rachitic deformities	...	...	...	113	94
	Knock knee	...	...	...	1,545	1,648
Flat foot	...	...	...	...	638	679
Other deformities	...	...	...	...	365	624
Mentality (backward)	...	...	...	...	49	44
Speech (backward or defective)	...	...	...	...	141	137
Enuresis	...	...	...	...	2,032	1,023

Some children were found to have more than one defect.

MIDWIFERY

DOMICILIARY MIDWIFERY

(SECTION 23—NATIONAL HEALTH SERVICE ACT)

A resumé of the operation of the maternity services as a whole will be found on page 144.

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

	<i>No. in practice 1.1.52</i>	<i>Number retired during year</i>	<i>Number resigned during year</i>	<i>Deaths</i>	<i>New appoint- ments</i>	<i>No. in practice 1.1.53</i>
<i>Employed by local Authority :</i>						
(1) Midwives	121	—	11	2	11	119
(2) Maternity Nurses	19	1	2	—	—	16
(3) Ambulance Midwives	8	—	2	—	7	13
<i>In private practice :</i>						
(1) Living in City	14	—	3	—	—	11
(2) Living outside City	7	—	3	—	—	4

Of 7,018 domiciliary confinements, 6,820 were delivered by City midwives and 55 by private midwives. In addition there were 143 attended in patients' homes or in ambulances by the ambulance midwives.

The approximate average number of deliveries per month per midwife, was 4. This makes no allowance for time lost by sick leave. In addition, owing to the great pressure on the hospital bed accommodation, 3,080 women had to be discharged to their own homes before the 14th day of the puerperium. This shows an increase of 258 compared with 1951. In these cases, the City midwives continued in attendance as long as was necessary. There has been an increase in the number of weeks lost by midwives in sickness from 276 to 364.

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	2,292	4
(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 79 cases and of these, 21 were instrumental deliveries).	227	1
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 ...	3,909	20
(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 150 cases and of these, 46 were instrumental deliveries).	336	2
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, 18 were instrumental deliveries).	537	2
4. No. of cases where the doctor was privately booked to deliver the patient (Of these, 5 were instrumental deliveries).	82	29
5. No. of cases delivered by ambulance midwives ...	143	

Of the 143 cases delivered by ambulance midwives, 128 were booked for hospital confinement and 15 were unbooked emergencies.

There were 407 general practitioners on the general practitioner obstetrician list. This is 24 more than in 1951. Only 245 of these general practitioner obstetricians received medical aid calls during the year.

An analysis which was made from domiciliary midwives' records of the number of medical aid calls for the mother received by individual general practitioners shows that 337 general practitioners received medical aid calls, of whom 245 were general practitioner obstetricians. Altogether 281 practitioners, of whom 179 were general practitioner obstetricians, received calls on behalf of the mother from the midwives who were responsible for the antenatal and postnatal care of their own patients. In cases where the general practitioners were responsible for antenatal care, 182 practitioners received calls, of whom 128 were general practitioner obstetricians.

<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	...	...	...	...	...	5	3
10 and under	...	...	...	...	...	275	179
Total number of practitioners						281	182

Midwives' Act, 1951

The number of midwives who notified their intention to practise fell by 27. There was a large increase in the number of midwives ceasing to practise in the City, i.e., 152 compared with 79. This was almost entirely due to midwives ceasing to practise in nursing homes and hospitals.

SUPERVISION OF MIDWIVES

During the year 1952, 416 midwives notified their intention to practise in the City.

No. of City domiciliary midwives	...	...	...	...	...	125
No. of independent domiciliary midwives	...	...	...	...	...	14
No. of midwives in institutions	...	...	...	...	...	215
No. of midwives in Birmingham Fire and Ambulance Service	...	...	...	...	...	14
No. of midwives in private nursing homes	...	...	...	...	...	25
No. of City domiciliary maternity nurses	...	...	...	...	...	20
No. of independent maternity nurses	...	...	...	...	...	3
						416

NUMBER OF MIDWIVES CEASING TO PRACTISE IN THE CITY

No. of domiciliary midwives and maternity nurses who left the City in 1952	...	...	...	...	...	14
No. of domiciliary midwives ceasing to practise	...	...	...	...	...	2
No. of Birmingham Fire and Ambulance Service midwives ceasing to practise	...	...	...	...	...	2
No. of hospital midwives ceasing to practise	...	...	...	...	...	110
No. of midwives in nursing homes ceasing to practise	...	...	...	...	...	24
						152

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

Routine visits to midwives	...	...	...	...	...	...	357
Special visits to midwives	...	...	...	...	...	...	733
Visits to stillbirths	...	...	...	...	...	...	80
Visits after neonatal deaths	...	...	...	...	...	...	93
Nursing and deliveries supervised	...	...	...	...	...	...	194
Visits to ophthalmia neonatorum cases	...	...	...	...	...	...	801
Visits to puerperal sepsis cases	...	...	...	...	...	...	56
Other visits	...	...	...	...	...	...	770
Unsuccessful visits	...	...	...	...	...	...	615
Number of interviews with midwives	...	...	...	...	...	...	1,050

Midwives sent for medical aid in 1,603 cases, for the mother in 1,244 instances and for the child in 359. This shows a substantial fall compared with 1951.

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	...	...	...	3	1
	Albuminuria	...	...	...	5	—
B.	Delayed or difficult labour	...	...	...	101	84
	Haemorrhage	...	...	...	79	37
	Adherent placenta	...	...	...	15	14
	Placenta praevia	...	...	...	1	—
	Abnormal presentation	...	...	...	29	20
	Unable to make out presentation	...	...	...	2	4
	Abortion and miscarriage	...	...	...	14	4
C.	Laceration of perineum	...	...	...	333	167
D.	Rise of temperature	...	...	...	45	27
	Phlegmasia alba dolens	...	...	...	—	1
	Inflamed breast	...	...	...	32	11
E.	Varicose veins	...	...	...	48	13
	Unsatisfactory progress	...	...	...	7	—
F.	Other causes	...	...	...	111	36
					825	419

CHILDREN

					<i>Midwife booked and solely responsible</i>	<i>Doctor booked for antenatal and postnatal care</i>
Ophthalmia neonatorum ...	...	...	...	...	86	83
Premature birth and debility ...	...	...	...	...	12	4
Convulsions ...	...	...	...	...	—	1
Deformity or malformation ...	...	...	...	...	26	3
Umbilical inflammation ...	...	...	...	...	1	—
Inflamed breasts, or abscess of ...	...	...	...	...	1	3
Skin eruption ...	...	...	...	...	20	11
Unsatisfactory condition ...	...	...	...	...	29	14
Other causes ...	...	...	...	...	49	16
					<hr/> 224	<hr/> 135

Gas and Air Analgesia

All the City midwives have their gas and air certificate, and 113 sets of apparatus are available. During 1952, 2,954 patients were given gas and air anæsthesia by the City midwife in the domiciliary service, in 2,641 cases as midwife and in 313 cases where the midwife was acting as maternity nurse.

Pethedine

During 1952, 2,894 cases received this drug. In 226 cases the drug was supplied by the doctors and in 2,668 cases by the midwives.

Relaxation Exercises

Details of the classes held are given on page 153.

District Training

During the year 1952, 24 teacher midwives were taking pupils on the district. Four further midwives have been approved as teachers during the year. No teachers have resigned. There has been a satisfactory increase in the number of pupils trained both for Part I and Part II of the Certificate.

<i>Pupils trained for the Central Midwives' Board Certificate</i>					<i>Obtained Gas and Air Certificate</i>
<i>Part I</i>					<i>Part II</i>
Selly Oak Hospital ...	...	...	10	—	—
Dudley Road Hospital	...	...	48	—	41
Maternity Hospital ...	...	...	35	—	—
Sorrento Maternity Hospital	...		21	—	18
Heathfield Road Maternity Hospital			—	25	8
Lordswood Maternity Hospital	...		—	22	6
Marston Green Maternity Hospital			31	61	48
St. Chad's Hospital ...	...	...	—	27	14
			145	135	135

Emergency Maternity Service

This is a service whereby an obstetric consultant and/or a resident doctor and nurse, attend the patient in her own home. They are conveyed by ambulance and carry special equipment, including blood transfusion equipment, for the treatment of obstetric shock or hæmorrhage.

The service is staffed by personnel from Birmingham Maternity Hospital who usually attend at the request of the general practitioner. In cases of great urgency and where a general practitioner is not available, a midwife may, herself, call the Emergency Service.

The City made fewer calls on the service this year, the number being 73 compared with 99 in 1951. The number of calls to patients outside the City was 39 compared with 41 last year, making a total of 112 compared with 140 for 1951.

The reasons for being summoned to the Birmingham cases are classified below. Seventeen of these cases were transferred to hospital and blood transfusion was given in 48 instances.

	1950	1951	1952
Post partum hæmorrhage and placenta retained	39	49	31
Post partum hæmorrhage, placenta retained and obstetric shock	—	—	3
Post partum hæmorrhage and placenta delivered	25	35	21
Post partum hæmorrhage, placenta delivered and obstetric shock	—	—	2
Secondary post partum hæmorrhage ...	—	—	2
Premature separation of placenta following birth of first twin	—	—	1
Antepartum hæmorrhage	1	1	4
Eclampsia	2	2	1
Retained placenta	4	3	4
Failed forceps	1	—	—
Embolism	—	1	—
Obstetric shock only	1	1	—
Hæmorrhage and abortion	3	7	1
Perineal tear—3rd degree	—	—	1
Anaemia	—	—	1
Epilepsy	—	—	1
TOTAL ...	76	99	73

HEALTH VISITING

(SECTION 24—NATIONAL HEALTH SERVICE ACT, 1946)

In view of the great expansion in the health visitors' duties and responsibilities envisaged in Section 24 of the National Health Service Act, 1946, a survey of the development of this service is of interest at the present time.

The infant death rate had risen steadily in the last few years of the 19th century in spite of the fact that a great deal of general sanitary work had been done which benefited both mother and infant. No visitation of the homes, however, was possible and little was done in the direction of instructing mothers in the feeding and rearing of their babies. In 1898, the Medical Officer of Health made enquiries in Manchester, Liverpool, Glasgow and Chesterfield, as a result of which he recommended that 4 health visitors should be appointed in Birmingham whose duties should consist of house to house visitation in the worst parts of the town, with the object of inculcating cleanliness in respect of the house, the sanitary conveniences and the yard ; pointing out the advantage of free ventilation and the danger of bad smells ; giving advice on the bringing up of children and the nursing of the sick ; distributing and explaining leaflets on infectious disease ; and helping in every way in their power to make the homes of the people they visit more comfortable and more healthy.

These visitors were appointed early in 1899 and their instructions were as follows :—

“ To visit from house to house in such localities as the Medical Officer of Health shall direct.

To carry with them disinfectant powder and use it where required.

To direct the attention of those they visited to the evils of bad smells, want of fresh air, and dirty conditions of all kinds.

To give hints to mothers on the feeding and clothing of their children, and use their influence to induce them to send their children regularly to school.

In cases of sickness, to assist in promoting the comfort of the invalid by advice and personal help.

To urge, on all possible occasions, the importance of cleanliness, thrift and temperance.

They must note :—

1. The general sanitary condition of the house.
 - (a) The number of rooms and of occupants.

- (b) The existence of bad smells, and whether they arise from deficient ventilation, from bad drainage, or from accumulations of filth.
- (c) The state of the walls and floors ; whether dirty, from the tenant's or the landlord's neglect, or in need of repair.
- 2. The general mode of living, particularly with regard to personal and general cleanliness.
- 3. The feeding and clothing of children, especially of those under two years old. Whether the baby is nursed by the mother or fed by hand ; if the latter, what it is fed upon.
- 4. Any cases of illness in the house :—
 - (a) Nature of the disease. If contagious, enquire when and how contracted.
 - (b) Whether there is a medical man in attendance.
 - (c) How far the necessary sanitary precautions are being carried out."

Reporting on their work three months after their appointment, the Medical Officer of Health made the following comments :—

" A large part of the visitors' time is devoted to getting tenants to improve the condition of their homes. In no less than 375 instances it was necessary to order the house to be cleaned. Particular attention is also paid to the state of the bedrooms and the sleeping accommodation. At nearly 200 houses the tenants were urged to open the bedroom windows, remove the slops, and attend to the beds. The visitors examine the bedding itself also and in 118 cases they had to ask for it to be cleansed. At 35 houses they had chimneys un-stopped, so as to improve the ventilation of the bedrooms.

Although many of the houses visited are so full of people as to be over-crowded from a hygienic, though not from a legal standpoint, yet it is not uncommon to find one of the bedrooms unoccupied, either because it needs repairing, or because it is less trouble to use one room only for the whole household. In 66 instances the visitors ordered the tenants to use all the sleeping space available, showing how this could best be done so as to meet the requirements of health and decency. In 40 cases they urged the provision of additional beds, and in 19 others the erection of screens to separate beds which had to be placed in the same room. At 51 houses the people were advised to move into a larger house.

A great deal of work has been done amongst the children. At 216 houses the visitors had them washed, and at 272 they gave advice as to their food. In a great many instances this advice related to children who were suffering from diarrhœa, and were being most improperly fed ; in others it had to do with infants who were being fed on farinaceous and other unsuitable foods instead of milk. Thirty-eight cases of gross neglect, amounting to cruelty, were discovered ; such cases are reported to the Society for the Prevention of Cruelty to Children."

These original health visitors were well received—so much so that 4 more were appointed in 1900. In 1902 the number had been increased to 12 and, for the purpose of their work, the City was divided into 12 districts. In that year, although there were 17,103 live births, giving a birth rate of 31·9 per 1,000, there is no record of the systematic visiting of young infants. The following is a resumé of the health visitors' work in 1902 :—

Rooms to be cleansed	3,679
Filth to be removed from cellar	3,027
Bedroom slops to be removed... ..	6,518
Windows to be opened	7,521
Chimneys to be cleared	1,986
Bedding to be cleansed	1,781
Rubbish to be burned	470
Additional bedroom to be used	552
Beds to be screened	144
Larger house to be obtained	344
Additional beds to be provided	245
Lodgers to be dismissed	57
Children to be washed	595
Children to be properly fed	563
Medical advice to be obtained	1,561
Yard to be cleansed	573

In 1908, Sir John Robertson commented on the fact that until that year the health visitor had to rely on the Registrar for information of the occurrence of a birth. Unfortunately, the information derived in this way was often belated. The adoption of the Notification of Births Act, 1907, meant that information as to the occurrence of a birth might be available within a few days of its taking place. The health visitors could then visit the houses where it was probable that their visit would be useful and, in fact, 10,000 such visits were made in 1908.

In 1909, reference was made to the fact that, in addition to their usual work, the health visitors spent a very considerable proportion of their time in making enquiries into the ailments of school children with a view either to excluding the children from school or getting them to resume attendance. They also dealt with the cleansing of dwelling houses and of the bodies and clothing of many school children who were sent to school in a verminous and dirty condition.

By 1910 there were 1 superintendent and 15 health visitors. The Medical Officer of Health remarked that much of the work was of a delicate nature, requiring prudence and tact in dealing with it, yet everywhere the health visitors were welcomed as the friendly advisers of the people.

In 1915 the number of health visitors had risen to 43 and it became necessary to differentiate between those who were engaged in general health visiting and those whose attentions were confined solely to infant welfare or to tuberculosis cases. Even at that early stage there is reference to the fact that health visitors are generally the ones called upon to make special and unusual enquiries instituted by the Public Health Department

or outside agencies as it is felt that their wide experience and intimate knowledge of the poorer homes make them valuable investigators. The superintendent health visitor observed that the health visitors always took a keen interest in such special enquiries in spite of these interfering somewhat with the daily routine visits which, in themselves, were more than abundant.

In 1915 the inspection of verminous children was taken over by school nurses. In that same year the question of the alleged increase of drinking amongst women was receiving careful consideration and special evening visits were being made to suspected homes by health visitors, and a report of their evidence was submitted to the Women's Advisory Committee of the Liquor Board of Control.

In 1916, Sir John Robertson remarked that "nature does not endow any mother with the necessary information as to how to shield her infant from the dangers which surround it in a civilised community. Among the rich, as well as among the poor, need of instruction is evident. The appointment of health visitors marked the first general recognition of the fact that ignorance is the chief cause of ill-health and mortality among the young."

He said that the best class of medical advice in hygiene was required in the clinics, around which there can be developed a very large amount of useful preventive work by non-medical people and a great deal of assistance can be given to the medical officer in ensuring that the medical instructions are properly carried out. For this purpose, capable trained infant welfare workers are needed at each centre. A summary of their work in that year shows a different picture from that in 1902.

" Primary visits :

Systematic	...	...	...	...	...	...	...	2,064
Births	...	...	...	...	...	...	...	16,951
Ophthalmia neonatorum	...	...	...	...	...	...	...	333
Diarrhoea deaths	...	...	...	...	...	...	...	260
Measles	...	...	...	...	...	...	...	8,252
German measles	...	...	...	...	...	...	...	4,145
Chickenpox	...	...	...	...	...	...	...	1,954
Whooping cough	...	...	...	...	...	...	...	3,533
Mumps	...	...	...	...	...	...	...	1,408
Vermin	...	...	...	...	...	...	...	235
Ringworm	...	...	...	...	...	...	...	20
Scabies	...	...	...	...	...	...	...	198
Impetigo	...	...	...	...	...	...	...	159
Blight	...	...	...	...	...	...	...	96
Unclassified school cases	...	...	...	...	...	...	...	3,717
Schools	...	...	...	...	...	...	...	474
Reported overcrowding	...	...	...	...	...	...	...	16
Country holiday inspections	...	...	...	...	...	...	...	12
Health talks	...	...	...	...	...	...	...	6
Other visits	...	...	...	...	...	...	...	12,528
Revisits	...	...	...	...	...	...	...	10,236
Useless visits (<i>i.e.</i> , out, removed, etc.)	...	...	...	...	...	...	...	8,102 "

During World War I the health visitors had to surmount many difficulties and undertake additional duties culminating in the influenza epidemic of 1918, when a dozen volunteers assisted the district nurses with their influenza and pneumonia cases. In 1919 reference was made to the ever present difficult cases of the lonely aged poor, the mentally weak and the chronic sufferers, and to the fact that much time must be spent and, in fact, well spent in seeing these cases through to a satisfactory finish. In 1920 some of the health visitors gave a joint paper to the Congress of the Royal Sanitary Institute on "The Lonely Incapacitated Aged Poor." In 1921 the Superintendent Health Visitor found it necessary to remark that the health of the health visitor is of no less importance than that of those whom she visits and that everything possible should be done to free her from overwork and worry, as well as from financial stress. In 1922 she observed that although the number of visitors remained fairly constant the actual workers changed frequently. She deplored this frequent change of visitors which is detrimental to good work, and regrettable on grounds of both efficiency and economy. Economy was the watchword in 1925 and the plea was made that this should not be at the expense of the health visitor's nerves and health—"it should be practised not on people but on things."

As the child welfare centres increased in number the work in the areas surrounding them was covered by the infant welfare visitors. The general health visitors continued to cover the areas where child welfare centres were not established. In 1929 the work of the health visitors was reorganised so that only 8 remained on general health visiting and 1 was specially detailed for work with diphtheria immunisation.

The general trend between the two wars was to concentrate more and more on the care of mothers and young children. By 1922 the proportion of visits devoted to general work was only 20 per cent. Ten years later it was 12 per cent. and in 1942, 7 per cent.

The training course for health visitors was instituted in January, 1928, in conjunction with Birmingham University. No woman appointed after March, 1928 could be a health visitor unless she was a trained nurse and had the Central Midwives' Board Certificate and the Health Visitors' Certificate. The standing of existing health visitors was not interfered with.

During World War II the health visitors were called on to undertake many additional duties. Dr. Newsholme commented in 1940 that "the much depleted staff of the Health Department had not only the by no means easy task of maintaining and consolidating within the limitations imposed by war the essential public health services of the City but also had to undertake new and extensive duties arising out of the war." The health visitors were particularly concerned with "the care of individuals and groups of the public whose life had been catastrophically altered, and whose urgent needs had been multiplied by enemy action." During

1940 ordinary home visiting was complicated by the difficulties in tracing removals and evacuations consequent on enemy action and the constant trickle back of children from the reception areas.

The end of the war saw a forward movement to improve social conditions in this country. As so often happens after times of upheaval, there was a great desire to be off with the old and on with the new. The health visitor and, in particular, her training, came in for a good deal of criticism, some of it justified but much more often based on inadequate and faulty knowledge. New trainings were devised to meet particular needs and for a time it seemed as if the health visitor was to be superseded in much of the work she had done previously by a variety of social workers trained to work in certain limited fields. The criticism, however, served a very useful purpose in that it stimulated health visitors and the authorities who were responsible for their training to re-examine the situation. The syllabus of training was revised and, in many instances, the period of training was lengthened. The recommendations of the Working Party on the Training of Nurses for a basic training to be followed by specialisation in various fields and the suggestion of Professor Fraser Brockington and Professor Davies that the training of the health visitor should be linked with that of the social worker and based on the University, opened out new lines of thought.

The National Health Service Act, 1946, also made its contribution introducing as it did the conception of the health visitor as the social worker for the whole family. In one sense the wheel would seem to have turned full circle. Whereas, however, the health visitor at the beginning of the century was mainly concerned with improving the physical environment in which the family lived, the health visitor of to-day is more concerned with the problems of individual members of the family and their relationship with each other and the community in which they live.

The health visitor is now coming to be regarded as the key social worker in the family providing continuity of interest and care in every situation. Other workers come in for special situations—the midwife when a baby is about to be born, the district nurse when bedside care is required, the children's visitor when children are boarded out in the family, and so on. At these times the health visitor continues her ordinary visiting to the family. In doing so she co-operates with the special visitor and assists in every way so as to ensure that her family receives full benefit from the service which is provided. To do her work effectively, the health visitor should know personally all the family doctors of her families. She should also be in close touch either herself, or through an intermediary, with all the hospitals which serve her area. By doing so she can do much to ensure that effective use is made of all the facilities provided. Substantial progress on these lines has already been made in Birmingham. Further development is conditioned by the number of health visitors available. It is important, therefore, that conditions of

service should be as attractive as in other branches of social work and that the remuneration which the health visitor receives should be commensurate with her training and responsibilities. It is important, too, that such a highly trained person should not be used for work which a less highly skilled person could do and that, for example, she should have adequate clerical assistance. She should also be mobile. This is obvious in rural areas but it is not always appreciated that in urban areas, especially in new housing estates, the provision of motorised transport is a great saving of time and fatigue.

There seems no doubt that after the period of discouragement which followed immediately after the war, the health visitor has not only recovered the standing she seemed in danger of losing but that indeed her standing has been enhanced and she is being called upon to undertake still more extensive and responsible duties.

The following is a resumé of the health visitors' work during 1952 :—

Total number of routine visits paid to children under 5 years :

Primary visits	18,455	} Total 197,551
Routine visits—children 0—1	...	...	...	...	52,040
Routine visits—children 1 to 5	...	...	...	...	127,056

Total number of special visits paid to children :

Children 0 to 1	10,316	} Total 17,454
Children 1 to 5	7,138	

Total number of visits to expectant mothers :

Antenatal first visits	3,630	} Total 8,259
Antenatal revisits	...	...	...	...	2,086
Antenatal special visits	...	...	...	...	2,543

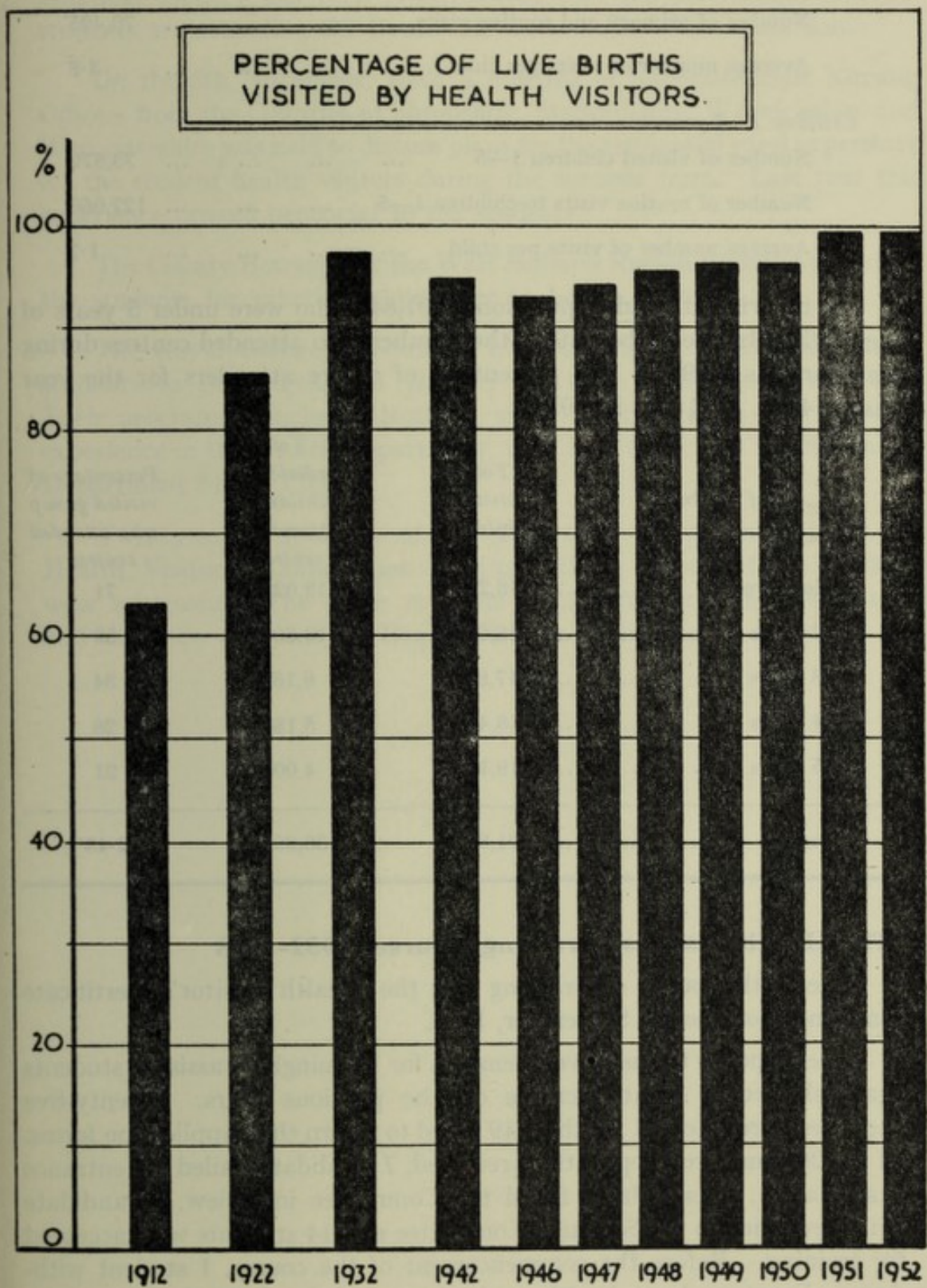
Total number of visits postnatally :

(a) Ophthalmia neonatorum	1,053	} Total 1,198
(b) Neonatal deaths	...	...	...	...	51
(c) Stillbirths	...	...	...	...	94

General health visiting :

(a) Neglect, insufficient clothing, etc.	17	} Total 12,407
(b) Scabies—primary visits	...	...	...	...	102
(c) Scabies—revisits	...	...	...	...	38
(d) Home helps	...	...	...	...	309
(e) School children	...	...	...	...	26
(f) Adults	...	...	...	...	154
(g) Old people	...	...	...	...	189
(h) To general practitioners	...	...	...	...	227
(i) Hospital follow-up	...	...	...	...	279
(j) Housing	...	...	...	...	5,665
(k) Tuberculosis follow-up	5,401	

Total number of useless calls	50,095	Total 236,869
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The following table shows the average number of visits paid to each child during the year :—

Children 0—1 year :

Number of visited children under 1 year	...	...	...	18,272
Number of primary and routine visits	...	...	...	70,495
Average number of visits per child	...	...	...	3.8

Children 1—5 years :

Number of visited children 1—5	...	...	...	73,570
Number of routine visits to children 1—5	...	...	...	127,056
Average number of visits per child	...	...	...	1.7

Of the visited child population of 91,842 who were under 5 years of age on the 31st December, 1952, the number who attended centres during the year was 38,991. The percentage of centre attenders for the year was 42.45%. (41.6% in 1951).

<i>Age of children</i>				<i>Total visited children</i>	<i>Total individual children attending centres</i>	<i>Percentage of visited group who attended centres</i>
Under 1 year	...	...	...	18,272	13,029	71
1—2 years	...	...	...	18,020	10,604	59
2—3 years	...	...	...	17,949	6,169	34
3—4 years	...	...	...	18,404	5,181	28
4—5 years	...	...	...	19,197	4,008	21
All ages	...	...	...	91,842	38,991	42.45%

The Health Visitors' Training Course, 1952-1953

The 30th course of training for the Health Visitor's Certificate commenced on the 1st September, 1952.

The response to the advertisements for Birmingham assisted students again showed a slight decrease on the previous years. Seventy-five enquiries were received ; of these 49 failed to return their application forms. Of the 26 completed applications received, 7 candidates failed the entrance examination, 4 candidates failed the Committee interview, 1 candidate withdrew prior to the Selection Committee and 14 students were accepted for training. Before the commencement of the course, 1 student withdrew. Fourteen local health authorities submitted 27 candidates for training and Birmingham Education Department sent 2 candidates to the course making a total of 42 students.

This year the lecture programme has been extended to include 3 lectures on the Evolution of the Social and Medical Services by Professor T. McKeown, of the Department of Social Medicine, the University, Birmingham. Following the request of the lecturer on Domestic Science, practical cookery has been re-introduced into the curriculum, and the students are attending the Bournville Institute for this instruction.

On the 5th November, 1952, a meeting of Superintendent Nursing Officers from the Counties of Shropshire, Staffordshire, Warwickshire and Worcestershire was held to discuss plans for the residential rural experience for the student health visitors during the summer term. Last year this experience proved beneficial to the students.

The County Boroughs of the West Midland Region continue to receive the students for practical experience in health visiting.

The Royal College of Nursing, London, sent 4 health visitor tutor students to Birmingham in January for three weeks of their course. Their programme included lectures, visits of observation and practical experience in the Health Department, the Chest Clinic and the Education Department of the City.

Twenty-seven students of the 1951-1952 course entered for the Health Visitors' Examination in June, 1952. Twenty-three students were successful. The other students re-entered for the examination and have now obtained the Health Visitor's Certificate.

HOME NURSING SERVICE

(SECTION 25—NATIONAL HEALTH SERVICE ACT, 1946)

In all areas of the City the number of requests for the services of the district nurse is high and continues to increase. There has been a slight improvement in the numbers of staff employed but this has not been sufficient to meet the very heavy demands in certain areas of the City, and the case load of the nurses remains high.

An analysis of the age groups of cases attended in an average month shows that 51·8% of the cases attended and 54·4% of the total visits made were to people who were over 60 years of age. The work of the district nurse and the nursing attendant is of material assistance in enabling the aged and infirm to be cared for in their own homes. Their work is supplemented by domestic helps and night watchers (page 191). The laundry service and the loan of equipment add materially to the patient's comfort (pages 207 and 209).

The district nurse is playing an increasingly important part in the domiciliary care of tuberculous patients. Many of these cases are acute and are receiving daily injections of streptomycin. Last year 996 tuberculosis cases were attended, which represents an increase of 117·9% over the 1950 figure.

Staff

The post of superintendent of the key training home at Bordesley was filled in April. An assistant superintendent was appointed to the King's Heath Training Home in July. The superintendent of the Aston Home resigned in November. Her successor has not yet been appointed. A new superintendent was appointed to Erdington in November following a vacancy due to retirement. There are now 98 full time and 40 part-time nurses employed, in addition to one senior superintendent, nine superintendents and two assistants. Four-fifths of the staff are non-resident and more than half are married women.

During the past year there has been an improvement in the sickness rate amongst the staff.

				1949	1951	1952
Resident staff	...	...	...	45%	20%	21%
Non-resident—whole time :						
Married	...	...	...	24%	26%	30%
Unmarried	...	...	...	10%	26%	20%
Non-resident—part-time :						
Married	...	...	...	19%	27%	27%
Unmarried	...	...	...	2%	1%	2%

Training

During the past year 8 candidates were trained at the Bordesley Training Home and 6 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 four 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 forty-seven nurses have spent a day with the district nurses accompanying them on their rounds.

X-ray of District Nursing Staff

One hundred and forty-five initial examinations were made during the year of new entrants and 60 six-monthly re-examinations of present staff. Seven nurses received B.C.G. vaccination.

Nursing Attendants

There has been an increasing demand for the services of the nursing attendants to attend the elderly and infirm who do not require skilled nursing attention. There are now 8 nursing attendants working in the Home Nursing Service, 1 full time and 7 part-time.

Analysis of Cases Attended :

			1950	1951	1952
Cases on books 1st January	...	...	1,675	2,135	2,258
New cases attended	...	...	14,409	15,678	18,411
Total cases attended	...	...	16,084	17,813	20,669
Total visits paid	...	...	387,965	409,126	471,913

Referred by :

Doctors	...	...	...	...	12,741	15,342
Hospitals	...	...	...	...	2,465	2,588
Health Department	...	...	...	...	182	139
Employers	...	...	...	...	5	—
Patients' friends	...	...	...	...	172	64
Transferred from other areas	...	...	...	...	88	250
Found by nurse	...	...	...	...	25	28

Clinical classification :

<i>Medical :</i>							1951	1952
Cardiac	...	...	...	...	...	...	1,333	1,516
Pneumonia (lobar and influenzal)	...	...	...	...	...	...	822	809
Bronchitis	...	...	...	...	...	...	1,012	1,577
Diabetes	...	...	...	...	...	...	465	558
Arthritis	...	...	...	...	...	...	210	264
Carcinoma	...	...	...	...	...	...	829	832
Senility	...	...	...	...	...	...	757	713
Other medical	...	...	...	...	...	...	5,720	6,953
<i>Infectious disease :</i>								
Tuberculosis	...	...	...	...	...	...	659	996
Whooping cough	...	...	...	...	...	...	28	17
Measles	...	...	...	...	...	...	44	30
Pemphigus	...	...	...	...	...	...	5	1
Other notifiable diseases	...	...	...	...	...	...	47	46
<i>Midwifery :</i>								
Puerperal fever	...	...	...	...	...	...	68	62
Antenatal complications	...	...	...	...	...	...	49	36
Postnatal complications	...	...	...	...	...	...	94	98
Abortion	...	...	...	...	...	...	76	62
Uncomplicated puerperium	...	...	...	...	...	...	2	—
<i>Surgical :</i>								
Post operation	...	...	...	...	...	...	803	1,439
Minor surgical	...	...	...	...	...	...	2,655	2,402

DOMESTIC HELP

(SECTION 29—NATIONAL HEALTH SERVICE ACT, 1946)

The demand for domestic help in time of difficulty is steadily increasing and from time to time exceeds the supply of staff available. The number of full time helps and of night watchers remains practically the same as in 1951. There has been a satisfactory increase of 117 in the number of part-time helps, however.

While 59 fewer maternity cases have been assisted this year, there has been an increase of 34 in the number of tubercular cases, of 378 among the aged and infirm, but a decrease of 73 among other sick persons.

There is no doubt this service is meeting a great need and its further expansion is only limited by the number of staff available.

<i>Individual cases dealt with :</i>						<i>1952</i>	<i>1951</i>
Maternity cases (including expectant mothers)	...	...	...	...	...	1,215	1,274
Lung tuberculosis	...	...	...	...	...	79	45
 Chronic sick, aged and infirm :							
By day	...	...	...	...	...	882	558
By night	...	...	...	...	...	125	71
 Others, <i>e.g.</i> , seriously ill housewives :							
By day	...	...	...	...	...	479	} 560
By night	...	...	...	...	...	8	
						2,788	2,508
						2,788	2,508

Number of Domestic Helps employed :

Full-time Domestic helps...	...	...	...	93	92
Part-time Domestic helps	...	...	...	394	277
Night watchers	...	...	...	20	18
				507	387
				507	387

PRIVATE NURSERIES AND CHILD MINDERS

NURSERIES AND CHILD-MINDERS REGULATION ACT, 1948

Eleven persons and premises are now registered under the Nurseries and Child Minders' Regulation Act, 1948. This gives a total of 74 places available for children 0—5 years.

	PERSONS		PREMISES	
	<i>No. registered</i>	<i>Places for children</i>	<i>No. registered</i>	<i>Places for children</i>
On 1st January, 1952	7	30	5	51
Applications during 1952	4	12	3	28
Resignations during 1952	5	22	3	25
On 31st December, 1952	6	20	5	54

During 1952, one person already registered as a minder for four children was allowed to register her premises and increase the number of children cared for to eight. All applications submitted were considered to be suitable.

INSPECTION AND REGISTRATION OF NURSING HOMES AND NURSES AGENCIES

Nursing Homes (Public Health Act, 1936)

At the end of 1952 there were 27 nursing homes on the register. Three homes closed during the year, a maternity home for 4 beds, a home for chronic medical cases with 11 beds, and a home with 4 surgical and 4 maternity beds. One new home for 7 chronic medical cases was opened. One home for 8 maternity beds changed over to medical work and the accommodation was increased to 11 beds. In 2 homes the accommodation was decreased, one maternity home from 6 to 4 beds and one medical home from 17 to 10 beds.

The total number of visits paid to nursing homes during the year was 85 (68 by medical officers and 17 by supervisors of midwives).

Total number of beds in homes	...	...	...	...	345
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	...	...	...	...	6*
Number of homes which keep some beds for maternity work	...	...	...	...	5†

* With 51 beds.

† With 21 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 8.

MEDICAL CARE OF DEPRIVED CHILDREN

CHILDREN ACT, 1948

On behalf of the Children's Committee, the staff of the Health Department control the medical supervision of these children, numbering some 3,000.

The following arrangements are in effect :—

A. By Local Authority Medical Officers

1. *General medical supervision* of (a) all residential homes, nurseries and hostels ; (b) Shawbury Approved School and the Remand Homes ; (c) children in foster homes ; (d) children prior to and after being placed for adoption who are in the care of custodians residing in the area of the Authority ; and (e) children licensed to their own parents or relations.
2. *Routine medical examinations and medical examinations within 24 hours of admission and on discharge of children* in residential homes and nurseries except in the case of one residential nursery situated 42 miles from Birmingham where the local general practitioner, by special arrangement, is responsible.
3. *Medical examinations of children prior to and within one month of boarding-out and routine medical examinations six monthly thereafter.*
4. *Medical examinations of children placed for adoption* (a) prior to placing for the probationary period, and (b) detailed examination for the Court before the hearing of the application for adoption.
5. *Medical examination of student nursery nurses*—now carried out by the Medical Officer for Staff Welfare.
6. *Diphtheria Immunisation* of the children in the residential nurseries and cottage homes, as soon as possible after the age of eight months, and a supplementary dose between 4½ and 5 years, before going to school. Diphtheria immunisation of nursery students on appointment or immediately afterwards, on the rare occasions when this is found necessary.

B. By General Practitioners

1. Medical services provided under the National Health Service Act, 1946, for all children in the care of the Children's Committee accommodated in residential homes, hostels and nurseries and the boys in Shawbury Approved School.
2. Children boarded-out are usually included on the medical lists of their foster parents' general practitioners.

3. Routine and medical examinations on admission and discharge of the children and adolescents in the Remand Homes, Shawbury Approved School and the residential nursery at Overbury.

Occasional examinations upon emergency discharges and admissions are carried out by the general practitioners responsible for the medical services to the children in Wassell Grove, Field House and Oaklands Nurseries which are situated outside Birmingham.

4. Medical reports on children in the remand homes requested by the Magistrates of the Juvenile Court and also prior to transfer to an Approved School.
5. Vaccination against smallpox, where requested by the parents.
6. Diphtheria immunisation of the children in the residential nursery at Overbury.
7. Medical reports on proposed adopting parents.

Mass Radiography

Practically all staff of the Children's Department, including the administrative staff, have undergone mass radiography. A satisfactory mass radiograph is now conditional to the acceptance of an entrant into the service of the Children's Committee, and is repeated annually.

Tuberculosis

B.C.G. Vaccination—Children who are in danger of infection from tuberculous parents are admitted into care where advisable, these children being x-rayed and examined prior to admission to ensure that they themselves are not in an infectious condition on admission.

B.C.G. vaccination has been carried out in the nurseries in appropriate cases. Sixty-three children were admitted to the nurseries throughout the year where one or other of the parents was suffering from the infection.

In October, 1952, however, Skilts, a residential home for the segregation of children from infection while undergoing B.C.G. vaccination, was opened by the Health Committee and it is expected that this Home should help to reduce the admission of this type of child into the care of the Children's Committee.

Ophthalmic Services

Children under the age of five years not attending maintained Schools :—

- (a) *Provision of Spectacles.* Facilities are available under the National Health Service Act, 1946, through the general practitioner who supplies the necessary medical certificate which must be taken to the ophthalmic practitioner.
- (b) *Repair of spectacles.* Children can be referred to the school clinic. The Education Committee are reimbursed either by the Executive Council or the Children's Committee for the cost of repair.

Dental Services

It has also been possible to arrange for all children in care to have routine dental examinations and treatment under the National Health Service Act Regulations. School children are also eligible for the school dental service. The supply of dentures to school children has become a necessary part of the school dental service, special priority for the fitting of dentures being given by the Dental Hospital.

Chiropody

Chiropody treatment facilities are provided at a Chiropody Clinic held at one of the welfare centres in the City.

Psychiatric Services

At present the following psychiatric services are available :—the part-time services of a psychiatrist and an educational psychologist for one session per week each for Forhill House Remand Home and in other Remand Homes when psychiatric reports are considered necessary by the superintendent and visiting psychologist. The part-time services of the psychiatrist at the Remand Homes are now provided by the Regional Hospital Board, who appointed a second full-time consultant child psychiatrist for the Birmingham Area as from the 1st March, 1952. The part-time services of an educational psychologist and a psychiatric social worker are available, when required, for all other children. A consultant psychiatrist has occasionally been engaged on a fee basis for the examination of certain children in care.

NATIONAL HEALTH SERVICE ACTS

General

It has in the past been the practice to make some reference under this heading to the co-operation which exists between the Services concerned with the provision of facilities under the National Health Service Act. This year, however, in accordance with the request of the Minister of Health contained in Circular 29/52, a special Survey was undertaken and the extent of co-operation, liaison, and joint use of staff which takes place is fully contained in that report which is reprinted in this Annual Report on pages 18 to 61, immediately following the introductory letter.

CARE OF MOTHERS AND YOUNG CHILDREN—Sec. 22	}	See Maternity and Child Welfare Section
MIDWIFERY —Sec. 23		
HEALTH VISITING —Sec. 24		
HOME NURSING —Sec. 25		
VACCINATION AND IMMUNISATION —Sec. 26	}	See General Epidemiology

AMBULANCE SERVICE

SECTION 27

The outstanding event of the year 1952 was the formal opening, by the Lord Mayor, Alderman W. T. Bowen, of the new Ambulance Depot in Henrietta Street. This took place on 16th October, in the presence of a company which included representatives of the City Council, Regional Hospital Board, Hospital Management Committees, and of neighbouring local health authorities, and brought to fruition the endeavours of the three years which have elapsed since the original scheme was first planned. Even after a comparatively short period of occupation, it is possible to see the considerable advantages which are accruing from the improvements offered by this new Depot, which has garage capacity for 65 ambulances under one roof, is equipped with its own service bay and provides adequate and vastly improved administrative, recreational and canteen facilities for the ambulance staff.

The service, in the performance of its operations during the past year, has maintained the efficiency, and continued the tradition, which has been built up since 5th July, 1948, when the local authority assumed the responsibility for providing and organising a composite Ambulance Service as required by Section 27 of the National Health Service Act, 1946.

There was a further increase in the total number of patients conveyed in 1952 as compared with the previous year, and it is significant that the increase was greater than that between 1951 and 1950. The actual figures show that 291,581 patients were conveyed by ambulances, an increase of 24,385 over the previous year. The number of accident calls was slightly more, 14,380 as against 13,482 in 1951, and patients conveyed by removal ambulances were 277,900 and 254,370 respectively. It will be seen from the " Analysis of Cases " that there are two main categories in which the increase is to be noted, viz. :—

(a) Clinic cases (including physiotherapy and out-patient treatment) and (b) tuberculous cases.

The latter is almost entirely due to the increased facilities available for the treatment of tuberculosis in out-patient clinics and hospitals especially engaged in this work.

Detailed statistics which follow give an indication of the many and varied commitments of the City Ambulance Service, and the comparison with figures for previous years provides a very clear indication of the extensive increase in the work performed by all sections of this Service.

Hospital Removal Service

An increase of 23,530 is recorded in the number of patients conveyed by this section of the Service during 1952 over 1951 ; this exceeds the previous year's increase by more than 8,500, and it is apparent that the trend towards a " levelling out " of the figures noted in last year's report was not continued during 1952.

Comparative figures of the monthly totals during both these years are as follows :—

		1951	1952	Increase	Decrease
January	...	21,016	24,096	3,080	
February	...	20,159	22,640	2,481	
March	...	20,127	23,401	3,274	
April	...	20,884	22,306	1,422	
*May	...	22,038	24,553	2,515	
*June	...	22,085	20,959		1,126
July	...	22,089	23,938	1,849	
August	...	20,668	20,932	264	
September	...	19,925	22,827	2,902	
October	...	22,368	24,722	2,354	
November	...	22,924	23,654	730	
December	...	20,087	23,872	3,785	
		<hr/> 254,370 <hr/>	<hr/> 277,900 <hr/>		

*In 1951 the Whitsun Holiday period occurred during May as against June in 1952.

Analysis of cases by categories shows that the main increases during the past four years have been in-patients attending hospitals for out-patient treatment, tuberculosis treatment and, to a lesser extent, discharge and transfer cases.

ANALYSIS OF CASES

				1949	1950	1951	1952
Clinic cases	...	...	...	137,902	167,029	173,773	185,703
Admissions	...	...	...	19,693	22,414	23,594	24,823
Discharges	...	...	...	26,114	28,871	32,821	33,833
Transfers	...	...	...	5,674	5,289	5,585	7,009
Emergency Maternity Service...				135	111	140	113
Maternity cases	...	...	...	7,313	7,378	7,436	8,249
Miscellaneous	...	...	...	1,336	1,006	926	1,189
Monyhull—Mental	...	...	...	652	658	754	738
Little Bromwich—Infectious	...	...	...	2,791	3,173	2,481	2,610
Yardley Green—Tuberculosis	...	...	...	1,709	3,332	6,860	13,633
				203,319	239,261	254,370	277,900

DIVISION INTO STRETCHER AND SITTING CASES

				1949	1950	1951	1952
Sitting cases	...	...	...	153,100	188,129	199,857	214,635
Stretcher cases	...	...	...	50,219	51,132	54,513	63,265
				203,319	239,261	254,370	277,900

A point of interest with regard to the above, is the ratio of sitting cases to stretcher cases during these four years. The actual figures show that for 1949 it was 3.04, 1950 3.67, 1951 3.66, and during last year 3.39.

Mutual Assistance

Arrangements with neighbouring authorities for responding to emergency incidents in "over-the-border" zones continued to work satisfactorily, such attendances being dealt with on a non-chargeable basis. Following a breakdown in the negotiations between the local authority organisations for an increase in the standard charges between local health authorities for the use of ambulance vehicles in normal removal cases, a local agreement was made with all neighbouring authorities for a general increase of charges as recommended by the Association of Municipal Corporations. This came into effect as from the 1st August, 1952.

The number of cases transported over the City Boundary showed an increase over the previous year, as will be seen from the following comparative figures.

	1951	1952
Patients conveyed from outside to inside the City Boundary	3,583	5,182
Patients conveyed from inside to outside the City Boundary	5,460	6,106

Of the above patients conveyed during 1952, 347 were dealt with at the request of other health authorities on a chargeable basis.

Outposted Ambulances

The policy of outposting a unit of ambulances for the exclusive handling of infectious disease, tubercular and mental patients, was continued during 1952. The total number of patients conveyed under these arrangements was 16,981 as compared with 10,095 in 1951, 7,162 in 1950, and 5,152 in 1949. This is primarily due to the increased number of patients conveyed for the Sanatoria Group of Hospitals.

Accident Ambulances

Eight emergency ambulances operating from seven fire stations in the City responded to 14,380 calls in 1952 compared with 13,482 during the previous year. The majority of the calls for this service were received over the "999" system. Casualties conveyed from these incidents numbered 13,681 as compared with 12,826 during 1951. The pre-determined plan for dealing with large scale accidents or public disasters under the title of the Catastrophe Scheme, was not required to operate during the year.

The following tables show the location of accidents, and types of injury in the accident cases for which calls were received.

EMERGENCY AMBULANCE CALLS

LOCATION OF CALLS						1951	1952
Street accidents involving vehicles	...	...	...	...	...	2,663	2,304
Factory accidents	...	...	...	...	...	983	1,034
Private houses	...	...	...	...	...	4,405	4,827
Offices	...	...	...	...	...	81	73
Shops and restaurants	...	...	...	...	...	271	264
Outdoor (other than street accidents)	...	...	...	...	...	3,023	3,950
Licensed premises	...	...	...	...	...	191	226
Schools	...	...	...	...	...	308	350
Cinemas and theatres	...	...	...	...	...	165	136
Other premises	...	...	...	...	...	1,341	1,195
False alarms (malicious)	...	...	...	...	...	51	21
TOTAL						13,482	14,380

CLASSIFICATION OF INJURIES TO PATIENTS CARRIED IN AMBULANCES

							1951	1952
Fractures	...	...	...	...	...	...	2,125	2,118
Wounds	...	...	...	...	...	...	2,809	2,868
Collapse, fits, strokes	...	...	...	...	...	...	2,545	2,880
Abrasions and bruises	...	...	...	...	...	...	504	464
Gas poisoning	...	...	...	...	...	...	120	110
Drowning	...	...	...	...	...	...	11	20
Eye injuries	...	...	...	...	...	...	174	89
Dislocations and sprains	...	...	...	...	...	...	385	333
Hanging	...	...	...	...	...	...	2	3
Concussions	...	...	...	...	...	...	674	881
Haemorrhage	...	...	...	...	...	...	414	497
Scalds and burns	...	...	...	...	...	...	480	559
Poisoning	...	...	...	...	...	...	270	314
Not classified	...	...	...	...	...	...	2,313	2,545
TOTAL							12,826	13,681

DESTINATION OF CASUALTIES

							1951	1952
Accident hospital	...	...	...	...	...	...	4,664	4,955
General hospital	...	...	...	...	...	...	5,426	5,690
Other hospitals	...	...	...	...	...	...	2,491	2,851
Casualties actually carried in ambulance but not taken to hospital	...	...	...	...	...	...	245	185
TOTAL							12,826	13,681

FATALITIES

							1951	1952
Number of persons found dead on the arrival of ambulances	...	...	...	...	...	...	210	178

EMERGENCY AMBULANCE CALLS, 1952

TABLE SHOWING NUMBER OF PERSONS OF VARIOUS AGE GROUPS CARRIED IN EMERGENCY AMBULANCES FOR 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	
Unknown	2	3	1	2	2	—	3	3	3	—	4	3	2	2	5	6	1	1	1	4	1	4	2	7	62
5 & under	19	7	9	4	2	3	3	13	19	39	66	74	101	97	86	95	114	106	93	93	58	45	41	27	1214
6—10	8	4	4	2	3	4	1	6	24	37	27	61	85	86	73	85	119	129	104	89	53	45	27	13	1089
11—15	5	3	—	2	2	2	1	8	30	41	49	83	79	90	71	100	87	74	51	49	65	76	40	18	1026
16—20	37	8	11	5	3	—	3	22	45	30	38	50	56	46	52	63	73	77	67	53	68	70	95	52	1024
21—25	60	22	13	8	9	7	9	28	73	51	46	55	54	58	63	60	82	83	59	54	48	41	101	111	1195
26—30	45	18	12	8	4	10	7	39	33	46	53	53	51	51	53	74	69	53	49	47	51	43	112	110	1091
31—35	43	16	13	17	8	6	7	21	33	38	49	55	47	43	43	56	41	44	46	37	29	31	75	80	878
36—40	33	20	17	13	5	10	5	19	38	55	36	53	56	46	56	61	54	57	39	39	33	36	72	75	928
41—45	32	19	3	6	5	7	13	19	26	34	40	51	52	36	51	48	41	43	37	30	23	30	74	51	771
46—50	23	13	8	7	4	2	2	25	31	39	53	44	44	41	61	54	43	45	28	35	31	30	65	56	784
51—55	17	12	11	5	3	4	7	24	27	33	33	37	42	31	45	44	40	42	46	38	28	32	60	49	710
56—60	14	13	8	3	2	1	4	19	29	28	39	63	54	42	40	43	32	37	34	36	29	29	40	41	680
61—65	13	6	9	4	6	4	7	12	22	28	24	34	59	37	41	31	35	25	30	33	19	37	35	24	575
66—70	13	8	8	3	2	5	2	11	23	29	31	41	60	43	33	38	24	40	30	20	31	29	36	22	582
Over 70	16	10	13	7	8	2	8	10	27	49	50	95	109	72	75	72	81	74	52	45	56	55	48	38	1072
TOTAL	380	182	140	96	68	67	82	279	483	577	638	852	951	821	848	930	936	930	766	702	623	633	923	774	13681

METHOD OF TRANSMISSION OF CALLS

" 999 " System ...	...	...	...	...	...	...	...	8,301
Exchange telephone ...	...	...	...	...	...	...	...	3,046
Police information room	...	...	...	...	...	...	...	2,284
Street fire alarms	...	...	...	...	...	...	...	47
Observed	...	...	...	...	...	...	...	14
Messenger	...	...	...	...	...	...	...	434
Wireless cars	...	...	...	...	...	...	...	16
Private wire telephone	...	...	...	...	...	...	...	238
TOTAL								14,380

Mileage Statistics

The following table shows the monthly analysis of mileage performed by ambulances, divided into the three sections of the Service.

	<i>Removal</i>	<i>Accident</i>	<i>Outposted</i>	<i>Mileage Total</i>
January ...	124,827	7,959	7,485	140,271
February ...	118,092	5,263	9,628	132,983
March ...	123,866	9,616	8,303	141,785
April ...	115,172	11,483	9,282	135,937
May ...	124,534	8,392	13,133	146,059
June ...	105,773	10,261	11,756	127,790
July ...	123,131	8,057	11,854	143,042
August ...	110,094	7,702	9,970	127,766
September ...	119,938	9,726	8,996	138,660
October ...	125,663	7,140	12,328	145,131
November ...	122,390	7,792	10,286	140,468
December ...	123,323	12,541	11,512	147,376
	1,436,803	105,932	124,533	1,667,268

Patients conveyed by Rail

A considerable increase occurred in the number of patients for whom it was possible to make arrangements with British Railways for their conveyance by ambulance/rail/ambulance. A total of 653 patients were conveyed during the year by this means, an increase of 373 over the figures for 1951. It is apparent that doctors and hospital staffs are accepting the recommendations of the Ministry of Health in this respect, and it is therefore possible to make greater use of these facilities for long distance cases.

Maternity Services (including Emergency Maternity Service)

Emergency calls received during the year totalled 8,249 as compared with 7,436 during 1951. The policy of employing midwives on ambulance duties for these cases resulted in their professional services being utilised in 148 cases. Of these, 33 were delivered in the patient's home, 39 were delivered in the ambulance en route to hospital, and in 76 cases, where the birth had occurred before the arrival of the ambulance, attention was given to the mother and child by the ambulance service midwife on her arrival.

The arrangements made with the Board of Governors of the United Birmingham Hospitals for the immediate provision of an ambulance under the Emergency Maternity Scheme operating from Birmingham Maternity Hospital, Loveday Street, were continued on the chargeable basis previously agreed. The number of these calls in 1952 was 113, compared with 140 in 1951.

Ambulance Fleet

To meet the increased demand on the removal ambulances a revision of the establishment was approved during the year. The strength of the fleet at the beginning of the year was :—

Dual purpose ambulances	...	...	...	...	...	...	72
Sitting case ambulances	...	...	...	...	...	...	23
Sitting case cars	...	...	...	...	...	...	3
							<hr/>
TOTAL	...	...	...	...	...	...	98
							<hr/>

The increase in the fleet was effected by retaining four of the six vehicles due for disposal under the replacement scheme and at the end of the year the fleet was :—

Dual purpose ambulances	...	...	...	...	...	...	78
Sitting case ambulances	...	...	...	...	...	...	21
Sitting case cars	...	...	...	...	...	...	3
							<hr/>
TOTAL	...	...	...	...	...	...	102
							<hr/>

Staff

The strength of the drivers and attendants was practically unaltered from the previous year but their availability was increased by the recruitment of additional personnel for the specific work of ferrying vehicles and preparing them for the road. Details of the establishment and strength are as follows :—

					Strength, 31.12.52		
					Men	Women	
					Establishment		
<i>Operational and Depot Staff :</i>							
Depot Superintendent	...	...	...	1	1		
Staff Officer	...	...	...	1	1		
Hospital Liaison Officer	...	...	...	1	1		
Deputy Depot Superintendent	...	...	...	1	1		
Garage Foremen	...	...	...	6	6		
Clerks	...	...	...	4	2	2	
Storekeeper	...	...	...	1	1		
Depot Drivers	...	...	...	3	3		
Depot Assistants	...	...	...	4	4		
Depot Vehicle Cleaners	...	...	...	12	12		
Depot Cooks and Cleaners	...	...	...	5	—	5	
Leading Drivers	...	...	...	11	4		
Drivers and Attendants	...	...	...	171	141	23	
Midwives	...	...	...	12		14*	
<i>Ambulance Control :</i>							
Control Duty Officer	...	...	...	1	1		
Senior Control Operatives	...	...	...	8	5	2	
Control Operatives	...	...	...	20	1	20	
TOTAL					262	184	66

* Includes 6 part-time.

Voluntary Service

During the year the St. John Ambulance Association continued their very valuable assistance to the City Ambulance Service by supplying a rota of personnel to man ambulances during the evenings and week-ends, which provides the volunteers with useful experience and enables the City Ambulance Service to make more ambulances available during these periods.

Hospital Car Service

This service, which is administered and operated by the British Red Cross Society, was again a valuable supplement to the City's Ambulance Service and during the year voluntary drivers of this organisation conveyed some 9,550 patients in their own cars on behalf of the Service.

The mileage involved in this work again showed a decrease as compared with previous years, the figures for 1952 being 133,929 miles as against 188,928 miles in 1951. This decrease is attributable to improvements made in co-ordinating their journeys with those of the Ambulance Service, and also to the increased use which is now being made of conveying patients over long distances by rail.

Bed Bureau

The Regional Hospital Board's Emergency Bed Bureau has continued to operate from the Central Ambulance Control during the year, and in response to the 12,224 requests for beds, it was possible to obtain beds in 11,297 of the cases. The corresponding figures for 1951 were 11,591 requests and 11,176 beds obtained.

PREVENTION OF ILLNESS, CARE AND AFTER CARE

SECTION 28

Convalescent Care

During the year under review, 1,865 applications under the City Council's scheme and 604 applications to the Birmingham Hospital Saturday Fund were received through the almoners of the Birmingham hospitals as follows:—

<i>Hospital</i>	<i>City Council's Scheme G.P. Patients</i>	<i>Hospital Patients</i>	<i>Members of B'ham Hosp. Sat. Fund who applied for convalescence at one of the Fund's own Homes</i>	<i>Suitable convalescence could not be arranged under the Council's Scheme</i>	<i>Cancellations</i>
Nerve ...	—	18	19	—	—
Dudley Road	122	374	107	—	1
Selly Oak ...	104	319	187	—	31
Queen Elizabeth	34	111	97	—	—
General ...	117	225	104	1	28
Orthopaedic ...	12	6	1	1 boy aged 12½ T.B. hip	—
Accident ...	7	56	9	1 Epileptic	1
Children's ...	52	179	38	2 aged 0—5 yrs.	9
Skin ...	1	9	—	—	—
Eye ...	—	38	13	—	1
Women's ...	10	35	29	—	1
Maternity ...	8	25	—	—	9
All Saints' Clinic	—	3	—	—	—
	467	1,398	604	5	81

1,865

The almoners were unable to arrange convalescent care for 0·3% of applicants. Eighty-one patients cancelled their convalescence. Of these 67 were applicants through the Council's scheme and cancellations were for the following reasons :—

Expense of convalescence	12
Loss of earnings through convalescence	3
Obtained work and wished to start immediately	1
Returned to work rather than wait a week for a vacancy at a Convalescent Home	1
Not wishing to leave own home	16
Preferring to make own arrangements	16
Cancelled for Medical Reasons—i.e., not fit for convalescence...	7
Reason not disclosed	8
Convalescence arranged at a later date	1
Returned to America as could not stand English climate ...	1
Prevented by other illness in family	1
	—
	67
	—

The following table shows the number of applications made for convalescence and the number of accounts received during 1949, 1950, 1951 and 1952.

	<i>Total No. of Applications</i>	<i>Total No. of accounts received</i>
1949	*1,917	609
1950	*1,802	603
1951	*1,891	686
1952	2,469	625
	(1,865 Council's Scheme 604 Hosp. Sat. Fund)	

* Includes Hospital Saturday Fund Figures.

The cost, or part cost, is met by the City Council in only a third of the cases, very nearly all the remainder being covered by subscribing to the Birmingham Hospital Saturday Fund, Works Convalescent Schemes, or the full costs being paid by the patients themselves.

Care of the Aged

The services of the Department concerned in providing care and attention for the aged are undertaking an ever-increasing amount of work, particularly in regard to health visiting, home nursing and domestic help. The problem of the aged which now confronts us has in no mean degree increased the scope of the work of these three sub-sections. In the Survey report which appears at the front of this volume, the home nursing service during a particular month (November) is stated to have made 3,537 more visits to persons of 60 years of age and over than to persons under that age. There were in fact 159 more persons over 60 years of age than there were persons under 60 being attended by the home nursing service.

In the case of the domestic help service there were 852 cases assisted by day, and 152 by night during 1952. Figures for 1951 were 558 by day and 71 by night. In addition to the services provided by the Health Committee which can assist the elderly there are also available valuable voluntary social services such as those provided by the Birmingham Council for Old People. There are also those services provided by the Welfare Department of the Corporation in relation to residential accommodation and special arrangements through voluntary organisations to help those old people who become blind or deaf. Institutional care in the geriatric units of the hospitals comes within the scope of the Birmingham Regional Hospital Board and assistance in money and in kind is available through the National Assistance Board. Every endeavour is made to ensure that the elderly receive whatever assistance they need from the appropriate quarter.

There are two health visitors whose whole time duty is the care of the aged and infirm. During 1952 they made no fewer than 3,166 visits, to which should be added 189 visits made by the health visitors in the course of their general duties.

Wherever possible follow-up visits are made at regular intervals.

The laundry service, which has been the subject of reference in previous annual reports, continues to perform a most useful function, often contributing very largely to the means by which it is possible to retain aged persons in their own homes.

Another valuable service to the elderly is the loan of nursing equipment, and here again there has been an increase. The demand for nursing equipment was heavier in the summer months. This can probably be accounted for by the demand for wheel chairs in the warmer weather.

Number of cases on register on 1st January, 1952 ...	...	...	770
Number of new cases added during year ...	...	...	972
Number of cases remaining on register at end of year ...	...	...	865
Number of new cases requiring Home Helps ...	...	...	218
Number of Home Helps supplied ...	...	113	
Number of cases refusing Home Helps ...	...	27	
Number of cases still awaiting Home Helps ...	...	78	
Number of cases requiring Night Watchers ...	...	...	31
Number of Night Watchers supplied ...	...	16	
Number of cases supplied with nursing equipment ...	...	...	160
Number of cases provided with Bath Attendant ...	...	...	31
Number of cases provided with laundry service ...	...	...	62
Number of cases admitted to hospital ...	...	...	424
Deaths ...	...	...	309
Number of cases referred to Welfare Department ...	...	...	11
Number of cases referred for voluntary visiting ...	...	...	65
Total number of visits paid by special health visitors ...	...	...	3,166
Total number of visits paid by health visitors on general duties ...	...	...	189

It is satisfactory to note that the percentage of demands for domestic help which were not met at the end of the year was 8% less than in 1951. It was not, however, possible to supply night watchers in 50% of the cases requiring such assistance.

The arrangements which were put into effect during 1950 for tripartite action between the Hospital Authority and the Health and Welfare Departments of the City Council, for the welfare of the aged, together with the ever-increasing interest of the general practitioners, has been the means, within the powers possessed by all concerned, of affording maximum assistance and thereby alleviating in their old age, distress and mental strain.

The problems in this field are many and complex, and difficult to overcome. That there has been achievement by all concerned is borne out by the great number of appreciative letters received and the kind remarks of thankfulness which are conveyed to the staff during their hours of duty.

Health Education

Details of the organisation and administration of this section of the Department were given in the Survey report on page 54, and it seems only necessary in this section to add that there continued during 1952 the health talks by health visitors at welfare centres, and courses of lectures of 13 weeks' duration at H.M. Prison, Winson Green, together with courses of health education for junior staffs of two City stores and one industrial firm, and also instruction given at the City of Birmingham Day Continuation School.

Health education lectures have also been given to the following organisations which have not received mention earlier :—Westhill Training College, Young Women's Christian Association, Youth Leaders' Course, Bristol Road Women Teachers' Training College, Saltley Men Teachers' Training College, to Parents' Groups which have been formed, and Odeon Cinema Clubs.

There was no annual exhibition by the Birmingham Accident Prevention Council, but it is hoped during the next year to provide a display on Home Safety and the Department will then once more co-operate in this matter.

The Chief Sanitary Inspector and senior members of his staff, including the Senior Smoke and Factories Inspector and the Senior Rodent Officer, have continued their co-operation with the Health Education Section by giving 35 lectures during 1952 to City store and factory workers, women's guilds, prisoners, etc.

The following statement shows the continued expansion in Health Education activities which, with the present staff available, seem to have reached their maximum :—

<i>Lectures given :</i>						<i>1952</i>	<i>1951</i>
Schools	...	...	...	...	...	2,382	2,278
Youth organisations	...	...	...	...	...	576	617
Adult Groups	...	...	...	...	...	731	605
						<hr/>	<hr/>
						3,689	3,500
						<hr/>	<hr/>

POSTER CAMPAIGN

130 posters on health topics have been displayed at various vantage points in the City such as the City Baths, Libraries, Welfare Centres, Day Nurseries, a main railway station and other public buildings ; added to which two City stores have willingly co-operated in allocating suitable space for the display of health posters. Five display boards formerly used by the Empire Marketing Board now continuously bear health education material.

Loan of Nursing Equipment

In this section of the service the year has been mainly one of consolidation, and whilst the total number of items loaned shows a comparatively small increase, from 3,831 to 4,011, as mentioned earlier in the item on Care of the Aged, there were substantial increases in the loan of some items of equipment such as wheel chairs, bedsteads, and commodes. These increases are no doubt a direct result of the growing interest in the care of the aged and infirm.

In order that the individual requirements of each applicant can best be met, no fewer than 17 types of wheel chairs are held in stock at the central stores. Whilst there is a steady demand for chairs of all types during the winter months, there is a greatly increased demand during the summer months for out-door chairs, and many expressions of gratitude and appreciation of this service have been received from patients who would otherwise have been house-bound. The loan of self-operated merlin chairs which give mobility within the house to a patient, otherwise immobile, is also very greatly appreciated and sometimes transforms the life of the patient.

During the year the Royal Orthopædic Hospital offered to give to the Department 40 wheel chairs of various types since they no longer lend out chairs. These were gratefully accepted and most of them have been re-conditioned and put into use and have formed a valuable addition to our stock. A welcome gift of 2 spinal carriages and 5 pairs of crutches has also been received from the British Legion.

There is a growing demand for bedsteads of the hospital type with lifting pole and other attachments to enable patients to help themselves and sometimes to continue exercises taught in hospital. Iron bedsteads of the domestic type are also loaned where there is a definite medical need for the patient to have a separate bed, or where the patient must be nursed downstairs.

The large increase in the loan of commodes is mostly to old people and often replaces crude improvisation, thereby greatly improving the conditions under which such people can be cared for.

Close co-operation exists with the hospital almoners and every endeavour is made to comply promptly with the recommendations for equipment for patients about to be discharged to their homes. Sometimes these requests present a special problem, requiring the technical advice of the Department's Manager of Works, which is always gladly given.

One such case was that of a man of over 60 who was quite helpless with severe arthritis when admitted to hospital, but who on discharge was able to shuffle an inch or two at a time with the aid of crutches. The wife, who was much older and very frail, suffering from heart trouble, was no longer able to do very much for her husband, but a hospital type bed with lifting pole was provided, and although the patient was quite stiff at the knees, there was some flexibility in the hip joints and he was able to hoist himself into and out of bed. There was no indoor sanitation, and the patient could not use a commode, but he said "If only I could use the outside w.c. I should feel a man again." This problem was happily solved by building a ramp from the kitchen step into the yard and by a joist fixed to the reinforced w.c. roof, to which was attached a simple apparatus enabling the patient to lower and raise himself alone, and to "become a man again."

AMOUNTS OF EQUIPMENT LOANED DURING EACH OF THE PAST THREE YEARS

					1950	1951	1952
Wheel chairs	...	...	...	...	162	261	371
Merlin chairs	...	...	...	...	11	38	61
Stairway chairs	...	...	...	...	4	13	12
Spinal carriages	...	...	...	...	3	10	5
Bedsteads	...	...	...	...	5	19	75
Special mattresses	...	...	...	...	15	34	95
Fracture boards...	...	...	...	...	4	3	—
Lifting poles and chains	...	...	...	...	1	5	22
Self-operating tilting bed	...	...	...	...	1	1	2
Crutches, pairs	...	...	...	...	4	22	25
Walking sticks	...	...	...	...	—	3	5
Walking machines	...	...	...	...	—	2	1

The above are additional to the normal items of " sick-room equipment " available on loan to persons in need. The following is a list of items of ordinary " sick-room equipment " issued during the years :—

	1950	1951	1952
Air beds	70	98	75
Air rings and sorbo cushions	700	835	788
Back rests	196	318	302
Bedpans	742	923	711
Leg cradles	44	82	111
Mackintosh sheets	556	708	715
Urinals	229	319	343
Sick feeders	30	42	44
Commodos	20	54	90
Miscellaneous items	66	41	58

MENTAL HEALTH

SECTION 51

In November, 1952, a medical officer was appointed as Administrative Medical Officer of Health for Mental Health. He is responsible for the co-ordination and development of this particular section of the Department. The need for such an appointment has been apparent for some time, especially as the three principal sections of this service have hitherto worked rather independently. Co-ordination is important as a first step in the development of a service to prevent mental illness, which is regarded in its broadest sense, as an impairment of the individual's capacity for work, comfort and happiness, and for making and maintaining satisfactory social relationships. It is a measure of the success of preventive medicine that medical thought is more and more being directed to preventive psychiatry. Indeed, this is not difficult to appreciate when one realises that the physical welfare of the mother and child is largely catered for and infectious disease has diminished in incidence and lost much of its horror. Unfortunately, this is not so of mental illness ; but perhaps this statement is not basically accurate as many more illnesses are now regarded as being of a psycho-somatic nature. In the past, how many doctors would suggest sending a patient with a duodenal ulcer to see a Psychiatrist? This apparent rise in mental illness may therefore be, to a large extent, an increased awareness of its manifestations.

The prevention of mental illness is mainly the immediate objective of the Psychiatric Social Service. The co-ordination of the service has already resulted in an increase in the referral of cases to the Psychiatric Social Service and in view of this it is proposed to expand the Parent Guidance Clinic.

The benefits of re-organisation have been principally in the field of mental deficiency where the need for a full-time medical officer was more acute. In the past, the service has depended on consultant psychiatrists engaged on a sessional basis, who have not always been available. This led to a long waiting list of cases to be ascertained, and the delay in examining new referrals in turn has given a false picture of the hospital waiting list. It has also led to a lack of continuity in the arrangements for dealing with defectives. These difficulties are now being overcome.

Health Advice Bureau

In order to prevent more severe forms of mental illness it is proposed to form a Health Advice Bureau in the coming year. This Bureau will be unique in that all the ancillary services of the Department will be at the disposal of patients. In some cases, it may be that the patient's need is more spiritual than physical, and then the help of a minister of the appropriate denomination will be enlisted.

The following particulars of the Service are set out in compliance with the request of the Minister of Health.

I. 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) **Numbers and Qualifications of Staff**

See pages 56 to 61 of this Report.

- (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 is excellent. There is a happy relationship, both with the mental hospitals and mental deficiency institutions. During the year the Psychiatric Social Service has provided the part-time assistance of one social worker for Highcroft Hall Hospital. This is shortly to be extended to the equivalent of 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 relating to those patients who are considered suitable for licence. Information for the visitors to assist them in carrying out their duties in accord-

ance with Section II of the Mental Deficiency Act, 1913, is also made available. 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	.....	.....	Nil

2. ACCOUNT OF WORK UNDERTAKEN IN THE COMMUNITY

(a) Mental Deficiency Section

(i) *Ascertainment*

Mental Deficiency by definition means an arrested or incomplete development of the mind existing before the age of eighteen years. In ascertaining such deficiency, it is necessary to determine the patient's intellectual capacity and mental stability and the resulting capacity to retain such knowledge and habits as can be acquired with the intellectual capacity at his disposal. It is deficiency in these factors that leads to the patient's varying degree of social failure or his failure to make a normal social relationship with his environment.

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, and, having considered the nature and extent of this defect, to provide suitable care and training or occupation for them.

The general aim is to retain such defectives within the community and train them to become useful members thereof. In the majority of cases, care takes the form of statutory supervision in their own home or, where the defect is more marked, guardianship or institutional care. Institutional care is only recommended in the very low-grade cases where much hardship is caused at home, or in the more high-grade case where a period of training and stabilisation is necessary before the patient is ready to take his place in the community.

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 1952 :

	<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	115	99	14	17	245
Reported by Police or Courts	—	1	—	—	1
Reported by other sources	7	7	8	5	27
	122	107	22	22	273

Admissions :

	<i>Under 16</i>		<i>Over 16</i>		<i>Total</i>
	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	
Number of cases admitted to Institutions during 1952	16	25	18	18	77

Total cases on Authority's registers as at 31.12.1952 :

Under Statutory Supervision	237	124	1,095	870	2,326
In Institutions	113	98	1,032	956	2,199
Under Guardianship	—	—	20	16	36
In " Places of Safety "	—	1	2	—	3
Awaiting admission to Institutions ...	74	30	23	15	142

(ii) Guardianship

There are 36 patients under Guardianship, 26 of them are in receipt of maintenance grants paid by the Health Committee. 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 Inspectors and the Administrative Medical Officer of Health for Mental Health.

(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	237	124	1,095	870	2,326

The majority of those cases under 16 years who are under Statutory Supervision are of low intelligence and likely to be unemployable, while the reverse is true of cases over 16 years, 66% (approximately), being gainfully employed.

Number of females gainfully employed	448
Number of males gainfully employed	928

The visiting of cases under Statutory Supervision and the provision of training in occupation and industrial centres are 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>Occupation Centres :</i>	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	
Burlington Hall, Aston	19	9	—	4	32
Glebe Farm	14	12	—	5	31
Kingstanding	14	12	—	5	31
St. Oswald's, Small Heath ...	13	13	1	6	33
St. Paul's, Balsall Heath ...	18	6	2	4	30
Weoley Castle	16	11	—	6	33
Wretham Road, Handsworth ...	21	3	3	4	31
<i>Industrial Centres :</i>					
Burlington Hall, Aston	3	—	23	—	26
Moseley Road, Highgate	8	—	17	—	25

The subjects taught at the occupation centres are handicrafts, speech-training, domestic and sense training, percussion bands, eurhythmics, physical training, etc., whilst at the industrial centres the subjects are more advanced—basket-making, leatherwork, rug-making, boot repairing, weaving, clay modelling and woodwork. The object of such training is to develop a sense of muscular co-ordination and capacity for manual work.

During the year, the children were taken on outings to places of interest and visited the pantomime. Some older boys in company with the Supervisor attended association football matches, and each centre had its Christmas party at which the children gave an entertainment.

Arrangements were made during 1952 for 98 mental defectives, most of whom attend occupation and industrial centres, to have a week's holiday in the country free of cost. These children would not have had a holiday otherwise, and it proved of great benefit both to the children and to their relatives, who were able to have a well-earned rest from the responsibility of looking after them.

Most of the defectives travel to the centres by public service vehicles and fares are paid by the Health Committee. Guides are provided where necessary. A number of spastic mentally defective children are conveyed to the centres by private cars.

Forty-four mental defectives, who are unable to attend occupation centres, are provided with training by Home Teachers in their own homes.

During 1952, 190 cases, being reasonably stabilised and secure and in respect of whom satisfactory reports had been received for some years, were discharged from Statutory Supervision.

(iv) *Licence*

On 31.12.1952, there were 206 patients (104 male and 102 female) on licence from various mental deficiency institutions resident in this area supervised by the Local Health Authority's Officers. Of these, 183 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	2	58
Hotel service	15	—
Hospital domestic staff	—	17
Factory workers	21	7
Corporation Salvage Department	10	—
Corporation Parks and Cemeteries Department	18	—
Corporation Public Works Department	8	—
Building trade	3	—
Miscellaneous	18	6

During the summer, arrangements were made 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. The expenses of the holiday were borne by the patients.

During the year, 48 patients (25 males and 23 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 duties carried out by the Duly Authorised Officers have increased considerably in recent years.

<i>Year</i>	<i>Cases dealt with</i>
1945	768
1946	846
1947	929
1948	1,733
1949	1,779
1950	1,687
1951	1,868
1952	2,026

This increase may be taken as a very rough indication of increased mental illness existing in the community, but however, the general ageing of the population may also be a responsible factor as there are now more cases of senile dementia. It is not the policy of the Department to encourage the certification of such cases, and it is only when all the other domiciliary services have been tried and found inadequate that certification is considered.

The nature of a Duly Authorised Officer's duties is at all times responsible ; he frequently has to act on his own initiative, indeed he is compelled by law to do so. He must be familiar with the Lunacy and Mental Treatment Acts, and have experience in the signs and symptoms of mental illness. His failure to take action may make him personally liable for damages. In this City a twenty-four hour service is maintained.

CASES DEALT WITH IN 1952

<i>Classification</i>	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	1951
Certified ...	51	57	54	55	55	39	73	55	47	56	57	50	649	585
Voluntary ...	62	62	82	73	78	59	83	72	68	77	65	60	841	778
Temporary ...	1	—	—	—	—	—	4	2	4	1	1	2	15	12
Section 20. Lunacy Act ...	5	11	2	3	11	7	8	14	13	13	14	11	112	87
Section 21, Lunacy Act ...	9	10	10	10	3	13	16	13	9	11	7	21	132	142
Urgency Orders	4	5	5	8	10	2	6	7	7	9	8	3	74	63
Not Certified ...	19	19	13	12	18	11	8	9	10	10	14	11	154	178
Withdrawn ...	—	3	2	2	1	1	2	—	2	—	3	2	18	—
Criminal Justice Act ...	1	—	—	1	—	2	3	2	—	—	2	—	11	—
Cases investigated (not included in above categories)	—	—	—	—	—	—	—	—	—	—	11	9	20	23
Total cases dealt with in 1952 ...	152	167	168	164	176	134	203	174	160	177	182	169	2026	1868

(c) **Psychiatric Social Service (Prevention, Care and After Care)**

The co-ordination of the Mental Health Service has marked the beginning of an expansive period. There has been a sharp rise in the cases referred. The Parent Guidance Clinic has been transferred to the Psychiatric Social Service and agreement was reached with Highcroft Hall Hospital to double the work done on behalf of the hospital.

NEW CASES REFERRED DURING 1952

Source of Referral	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Public Health Department	3	2	4	10	3	1	3	5	4	3	5	7	50
Hospitals	7	10	8	8	3	9	6	9	8	8	5	8	89
General Practitioners	4	1	2	—	3	—	—	1	—	—	2	2	15
Ministry of Labour	3	1	3	1	3	1	—	—	2	1	7	—	22
Children's Department	—	—	1	—	—	—	1	1	2	2	6	4	17
Probation Officer	—	—	1	1	—	1	1	—	—	—	2	3	9
Friend, Relative or Self	5	3	5	1	4	1	4	5	5	1	3	5	42
Voluntary Social Agencies	2	1	3	3	1	6	6	7	3	4	6	4	46
National Assistance Board	—	—	1	1	1	1	—	1	1	—	1	—	7
Miscellaneous	1	1	1	2	—	1	1	3	1	—	2	—	13
Total	25	19	29	27	18	21	22	32	26	19	39	33	310

The sources of referral and type of case remain the same, with one important exception. The service now carries out investigations in co-operation with the Children's Department. It is hoped that in a number of cases the Psychiatric Social Service, in conjunction with other treatment and social agencies, may be able to help a parent to regain a more healthy state of mind without the necessity of the child being transferred from the mother's care. In all cases referred it was thought

the Children's Department would benefit from a more expert opinion on the needs of the case, while the family would benefit from help given to meet various environmental difficulties.

The following case illustrates this :

Mrs. X was referred by the Children's Department in the hope that the family could be rehabilitated without the necessity of removing the child from the care of the mother.

Mrs. X was in a poor state physically and mentally. She was suffering with a progressive neurological disease—Huntington's Chorea—with consequent loss of control and co-ordination of movements. Six months prior to referral Mr. X left his wife, their child and the home, but continued to support them, though he never visited.

Referral was precipitated by Mr. X notifying the Children's Department that Mrs. X was unfit to look after the child. It took two weeks of almost daily visits and several letters before entry into the house was gained, Mrs. X being afraid that the child would be taken from her and she placed in an institution.

When entry to the house was gained a pitiful state of affairs was revealed. Nothing had been touched for at least six months. All the crockery was dirty and broken, the floor was littered with old milk bottles, full bottles of milk gone sour, pieces of bread and other food, old rags and torn dirty newspapers. Small pieces of furniture had been knocked over and left, the copper was full of slimy water, ashes from the one fire were piled so high inside the fire guard that the fire could hardly burn. The beds and bedding were too filthy to be really used again. The child of seven did her best, helped her mother to prepare food and make cups of tea with the odds and ends of utensils that they had left. Mrs. X knew of the state that the house was in, but it had got beyond her and she now made no effort to do anything whatsoever. The child and mother were dirty, ragged, and their hair was matted.

In the first week very little was done at all. Although daily visits were made, the time was spent in getting to know the family and in gaining their confidence and at the end of the week Mrs. X was looking forward to the visits and had a more hopeful attitude.

After much persuasion she agreed to allow the Department to remove the bulk of the rubbish. Beds and bedding had to be destroyed and replaced with the help of the Red Cross and other agencies. This was quickly followed by the provision of a home help, who has proved to be a quite exceptionally hardworking, tolerant and helpful person and much of the success achieved is to her credit.

Having settled the immediate problem of the cleanliness and running of the home, the next problem to be tackled was the future of the child. This was discussed with the Consultant Psychiatrist and, though superficially the child had been neglected, it was felt that fundamentally mother and child were devoted to each other and they both would suffer from separation, and the neglect was due to circumstances beyond Mrs. X's control. It was, therefore, decided to try and keep them together and to help the mother care for her more adequately. The child was dirty, verminous and very poorly dressed. A grant was obtained from voluntary funds to re-clothe the child. A friend of the Social Worker gave the use of her bathroom and the child was bathed, disinfected and re-clothed and on return it was hardly possible to recognise the same girl of the earlier part of the day. From then on the home help has looked after her, giving her a bath, attending to her hair and clothes and seeing that she gets off to school alright.

Six months have now elapsed since the case was referred and during that time 56 visits have been paid, the house has been transformed and both Mrs. X and the child are very much happier, partly because their living conditions have so much improved and partly because the threat of separation is no longer hanging over them. Mrs. X still suffers from the effects of Huntington's Chorea and will continue to do so, but previously this has been overshadowed by a mental reaction of defeat and hopelessness while now to the best of her ability she is making an effort to co-operate.

The future cannot be foreseen. It is known that the family can never live a completely normal life, but it is hoped that Mrs. X will remain well long enough for the child to grow up and be self-supporting or, at any rate, be very much older before it is necessary for her to leave home, thus she will have spent her early years with the mother and should be old enough to appreciate the need for separation if it should come.

Often, particularly in the hospital service, a Psychiatric Social Worker spends the greater part of her time supplying the doctors with information regarding the patient's illness and little time or opportunity is available for intensive case work or after-care. This is frustrating to the worker and a waste of training. An after-care service which cannot give intensive case work is then of no real value.

Fortunately, such type of work is carried out by the Psychiatric Social Service, but lack of trained personnel is a limiting factor. At the present time, however, this after-care is devoted mainly to the unco-operative and temporarily inaccessible patient.

This is a typical case.

A boy of 16, the eldest of four, was referred by his mother, who is a war widow. Two years prior to referral this boy had suddenly become ill

and was a suspect case of poliomyelitis. It was later thought that the trouble might be meningitis. No definite diagnosis was made and the boy made a fairly rapid recovery.

When referred, he said that since that time he had never felt the same, had gradually developed a fear that something was failing in his head and thought he was going mad. He began to think that people were talking about him, so that he gave up his job and for five weeks had refused to go out even to the doctor or Ministry of Labour and was bringing no money into the home.

The home situation was becoming increasingly tense because of arguments between the boy and his mother, who could not afford to keep him for nothing.

The case was thoroughly investigated and strong reassurance was given to both the boy and his mother that a solution to the present difficulty could be found and the boy need have no fear of impending insanity. This was sufficient to break the vicious circle which was set up and to make the symptoms recede; then in conjunction with the Juvenile Employment Officer he was found a new job more in line with his interests and within a month of referral he was back at work happier than he had been for years.

This is not, however, the end of the story. Since this there have been several occasions when a state of domestic tension has recurred and the boy's mother had telephoned and said she could not put up with the boy any longer. On each occasion it was felt that there were faults on both sides and the worker was able to mediate between them. The boy, however, has not had any recurrence of nervous or mental symptoms and has remained in regular work.

Here was a lad showing clearly marked mental symptoms, refusing to co-operate and creating a domestic situation which was aggravating his symptoms and developing into a vicious circle. Because of his refusal to go to the doctor or Employment Exchange he placed himself outside the range of available help until the advent of the Psychiatric Social Worker into the home was able to break down his hostility and fear. Experience has shown that cases which once showed a neurotic reaction to a difficult situation are prone to relapse in the face of further difficulties and tensions, and here again, by being available on call and making regular follow-up visits, it has been possible to prevent small domestic differences developing into major proportions.

HIGHCROFT HALL HOSPITAL

The Psychiatric Social Service has continued to undertake part-time work on behalf of this hospital.

It is more usual for a mental hospital to have its own Psychiatric Social Worker who is responsible for the needs of the patient while he is

receiving treatment and on discharge any after-care that is required is provided by a worker from the Local Authority. There are, however, definite advantages to be derived from a joint usership arrangement as exists here and it is hoped that the augmented service available in the coming year will provide a first-class example of this alternative pattern.

Work done during the twelve months ending 31st December, 1952.

Social histories	...	...	...	...	...	...	...	289
Pre-discharge visits	...	...	...	...	...	...	...	23
On trial visits	...	...	...	...	...	...	...	5
Miscellaneous	...	...	...	...	...	...	...	31
								<hr/> 348 <hr/>

PARENT GUIDANCE CLINIC

This clinic is a pioneer venture developed by the Maternity and Child Welfare Service of the Department and recently transferred to the Mental Health Service. It is intended to meet the difficulties of parents and their children under school age. Many of the maladjustments of children arise from the emotional difficulties of the parents. It is felt that from birth to 5 years the child is particularly susceptible to such difficulties and the maladjustments produced are likely to have a lasting effect in later life on his mental stability. Fortunately, preventative psychiatry is likely to be most successful at this time. In addition, the young newly-married mother is more malleable and likely to be helped.

The present staff consists of one Consultant Psychiatrist (engaged on a sessional basis) and one Psychiatric Social Worker. The Consultant Psychiatrist undertook ninety-five sessions with a total attendance of 361. The Psychiatric Social Worker gives two-thirds of her time to this work and the remainder to work with the Children's Department.

New patients numbered 136. Forty were visited at home, 85 were seen at the clinic by the Psychiatrist and Psychiatric Social Worker and 10 by the Psychiatric Social Worker only. Of those seen at the clinic during 1952, 6 had been referred during 1951 and 2 referred during 1952 were carried forward to 1953.

Forty-four mothers were referred for the following reasons:—

Anxiety	...	...	...	...	...	...	...	9
Depression	...	...	...	...	...	...	...	11
Domestic difficulties	...	...	...	...	...	...	...	17
Other emotional difficulties	...	...	...	...	...	...	...	7

Housing difficulties were contributory factors in a number of cases. There were 8 expectant mothers and 18 had babies under one year.

Fifty-five boys and 37 girls were referred for the following reasons :—

	Boys	Girls
Aggressive behaviour	25	11
Timid behaviour and fears	11	15
Sleeping difficulties	5	4
Enuresis	4	3
Encopresis	4	—
Speech difficulties	2	—
Backward children	2	1
Feeding difficulties	1	—
Pilfering	—	2
Masturbation	1	1

Patients were referred by the following :—

Welfare Centre Doctors and Health Visiting Staff	108
General Practitioners	9
Day Nurseries	8
Direct request by Parents	4
Social Workers	4
Tuberculosis Visitors	1
Hospital Psychiatrist	1
Mental Deficiency Section	1

The Psychiatric Social Worker has continued educational work, mainly at refresher courses for midwives, at courses for nursery and nursery school staffs and at the Health Visitors' Training Centre. She has spoken to several Parent-Teacher Association Groups and to the Birmingham Midwife Teachers, and has taken a regular part in the courses for neglectful mothers held at Winson Green Prison.

CHILDREN'S DEPARTMENT

One-third of the Psychiatric Social Worker's time was available for this work and every effort was made to tackle the problems very soon after referral by the Children's Officer.

The work carried out was as follows :—

Visits to Reception Home	33
Visits to Cottage Home	18
Visits to Family Home	15
Visits to Foster Homes	72
Visits to children's relatives	16
Visits to Copeley Hill Hostel	7
Visits to Shawbury Approved School	1
Visits to Day Schools	4
Visits to Employers	1
Interviews with foster children at Lancaster Street Welfare Centre	33
Interviews with relatives at Lancaster Street Welfare Centre	4
Interviews with foster parents and children in Children's Department	9
Interviews with Social Workers other than Children's Department Staff	3

There were frequent consultations with the Children's Visitors and other members of staff. Reports were designed to give as much help and information as possible and so tended to be rather long and time-consuming.

NATIONAL ASSISTANCE ACT, 1948

NATIONAL ASSISTANCE (AMENDMENT) ACT, 1951

Increased work in connection with the care of the aged has already been referred to in the item on Prevention of Illness, etc. A similar position is reflected by an increase in the number of cases visited under the National Assistance Acts. A greater percentage of the cases have presented a considerable degree of hardship. This is not surprising when the precarious existence of many of the elderly is considered, living as they often do, alone or depending on the help of relatives, friends or neighbours. The greatest enemy to their independent existence is ill health. Even a short illness is enough to create conditions which are insurmountable to them, and often the start of a progressive deterioration in home environment.

	1952	1951
Cases investigated	94	87
Cases removed under the National Assistance Act, Section 47	2	—
Cases removed under National Assistance (Amendment) Act	1	—
Other arrangements	40	67
No action	38	16
Died before going to hospital	4	4
Admitted to hospital voluntarily	9	—

It will be seen from the above figures that in the majority of cases it was possible to afford some form of help to the elderly.

Cases removed under National Assistance Acts

Case I. (National Assistance Act, 1948, Section 47).

This old lady, aged 78 years, had been known to the officers of the Department for some considerable time. She lived alone in a five-roomed artisan dwelling. The house itself was uncared for, filthy and contained many deposits of human excrement. Mrs. B never used the toilet and did not even bother to undress. Her personal clothing was in a filthy condition, and, at the time of her removal to hospital, much of her clothing had rotted away.

She was an alcoholic and made a nuisance of herself to the local shopkeepers. Her extreme filth made her unwelcome everywhere and when she began pestering young children it was felt necessary to effect her removal.

Case II. (National Assistance Act, 1948, Section 47).

Miss M was an old lady aged 76, who also had been known to the officers of the Department for many years. She lived in one room in a house let in lodgings. She had come of a well-to-do family and was still receiving a private income from her brother-in-law. She was very badly crippled and suffered from cardiac degeneration, but refused medical aid. She was quite uncared for and her insanitary habits made her a serious nuisance to the neighbours. As this was a house let in lodgings where there were many young children, her removal was considered necessary for the safety of others.

Case III. (National Assistance (Amendment) Act, 1951).

This old lady, Mrs. A aged 82, was bedridden, living in one room, covered with filthy rags, without food or coal and completely uncared for. She was suffering from general weakness and bronchitis. In view of the severity of the weather and her lack of care, immediate hospitalisation was considered necessary. The speedier procedure under the National Assistance (Amendment) Act, 1951, was therefore used.

FOOD AND DRUGS

Little of the routine work of the Sanitary Inspector may be said to be spectacular and yet there is nothing more calculated to improve social conditions in the community than the efforts of a painstaking, conscientious Sanitary Inspector. Least glamorous of all his work, perhaps, is that connected with the supervision of food premises. There is seldom very much to be seen in justification of the many hours spent in careful observation, frank discussion of problems, explanation of recommendations made and exhortation of management and employees to maintain the highest hygienic standards at all times, and yet without a constant effort by the Sanitary Inspector, standards could decline.

Not least in importance to the health of the community is the supervision of milk supplies, and reference should be made to the technical and mechanical knowledge required of the Milk and Dairies Inspectors responsible for the control of milk processing plants, of which there are no less than 27 in the City. The satisfactory position in regard to the purity of the City's milk supply to-day has been influenced to a very large extent by these Inspectors and a cordial relationship of confidence and co-operation with the trade.

The two foregoing paragraphs have indicated the work performed in the Public Health Department. Each year, the Chief Veterinary Officer has very kindly provided an item on the work of his Department in relation to the inspection of meat and other foods and of inspections made under the Milk and Dairies Regulations, together with information as to steps taken towards the eradication of tuberculosis from the milk supply. On many occasions throughout the year joint inspections take place of food preparation premises which concern both Departments, and consultations upon matters of mutual interest are frequent.

Eating Houses and Premises where Food is Prepared or Stored for Sale

An important part of the work of the sanitary inspectors engaged on district duties is the supervision of premises where food is prepared, manufactured or stored for the purpose of sale, or where food is actually sold.

A total of 10,602 visits was made to food premises by these inspectors during the year, made up as follows :—

Visits to cafes, hotels, restaurants, eating houses, etc.	...	...	7,671
Visits to factory canteens	...	...	1,982
Visits to bakeries	...	...	631
Visits to licensed premises where food is sold	...	...	318
			<hr/> 10,602 <hr/>

This figure compares with a total of 10,171 for the year 1951.

Much of the work needed to bring premises up to the standards required by the Food and Drugs Act, 1938, and the Byelaws made in 1950 under Section 15 of that Act, has been carried out. The friendly co-operation of managements and staff have, in the main, continued to assist the Department in obtaining a uniformly high standard of food hygiene without recourse to legal proceedings.

After a visit of inspection has been made, and, if found necessary, recommendations made and explained to the management, it is usual for a schedule of requirements to be sent. These requirements are occasionally extensive and involve managements in considerable sums of money. Resentment has been expressed on many occasions that, to provide an instantaneous gas or electric heater which gives a convenient and readily available supply of hot water to comply with Section 13, 1 (i) of the Act, it is necessary to pay a substantial sum in purchase tax, particularly when the firm operates a number of shops or premises, each requiring more than one such heater.

The schedules are usually properly complied with, but it was necessary during the year to seek authority to institute legal proceedings on two occasions in order to secure compliance. At the close of the year one case had been heard. This case, which came before the Magistrates, concerned a cafe, and involved six 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 premises, the absence of a sufficient supply of hot water and failure to protect the food in the kitchen and food store from dust, filth and flies. The defendant was found guilty and fined £5 in respect of each of the seven charges. Later he relinquished management, and at the close of the year the cafe was being equipped prior to re-opening under new management.

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 1952 there were 1,152 eating houses registered with the Corporation.

Mobile Canteens

During the year a survey of all mobile canteens operating in the City was undertaken. Vehicles and the premises from which they operated were inspected and both proprietor and premises were registered in appropriate cases, under the provisions of the Birmingham Corporation Act, 1948, Section 42. Nineteen persons and their premises were registered, and where conditions were found to be unsatisfactory, schedules of

requirements were sent to the operators. In one case the requirements were not complied with, and early in 1953 the Health Committee gave authority to institute legal proceedings under the Byelaws made under Section 15 of the Food and Drugs Act, 1938.

Bakehouses

There were 169 bakehouses in the City at the end of the year, including 21 primarily concerned with the manufacture of confectionery. The sanitary inspectors engaged in district duties made 631 visits to bakehouses during the year. Whenever contraventions of the Food and Drugs Act and the Byelaws were noted the co-operation of the management and staff concerned was sought and many improvements were effected.

Following vigorous action by the Department in an attempt to secure improvements at one bakery, the management decided that the premises were unsuitable and closed the bakery.

Samples of synthetic cream and cream cake filling were taken periodically from those bakeries where it was in use, as follows :—

	<i>Synthetic Cream</i>	<i>Cream Cake Filling</i>
From tins in which it was supplied by the manufacturers	83	20
From mixing bowl 	76	17
	<hr/>	<hr/>
	159	37
	<hr/>	<hr/>

Twenty-five of these samples were considered unsatisfactory.

Consultations between management, handler and inspector usually resulted in a change in methods followed by satisfactory results.

Other Food Premises inspected included :—

- Biscuit factories.
- Mineral water factories.
- Breweries.
- Sweet manufacturers.
- School and factory canteens.

Catering Licences

The number of applications made to the Department in connection with the issuing of catering licences was 167, showing a marked decline from the 267 in 1951.

The types of new applications dealt with in 1952 are shown below :—

1. Public Houses	(a) full catering	...	...	4	
	(b) snacks only	...	...	11	
				<hr/>	15
2. Cafes	(a) full catering	...	...	34	
	(b) snacks only	...	...	35	
				<hr/>	69

3.	Fish friers providing meals on premises	...	...	—
4.	Factory canteens	...	...	...	22
5.	Mobile canteens, with premises at which food is stored and prepared	...	...	...	2
6.	School canteens	...	...	...	1
7.	Food preparation premises providing meals for consumption off the premises	...	...	...	1
8.	Clubs, full-time (unlicensed) :				
	(a) full catering	...	...	—
	(b) snacks only	...	...	—
				—	—
9.	Clubs, full-time (licensed) :—				
	(a) full catering	...	...	—
	(b) snacks only	...	...	1	
				—	1
10.	Clubs, part-time (unlicensed) :—				
	(a) full catering	...	...	3	
	(b) snacks only	...	...	45	
				—	48
11.	Clubs, part-time (licensed) :—				
	(a) full catering	...	...	—
	(b) snacks only	...	...	—
				—	—
12.	Residential establishments :—				
	(a) Private hotels	...	...	—
	(b) Boarding houses	...	...	—
				—	—
13.	Premises used for manufacture of cooked meats and other foods	...	...	...	—
14.	Premises proposed, but found unsuitable by Public Works (Town Planning) Dept., or this Department, or licence refused by Food Office	...	...	...	6
15.	Proposals subsequently abandoned	...	...	...	2
					—
					167

There has been a notable reduction in the number of applicants for licences in connection with cafes, clubs and residential establishments.

It is anticipated that new bodies meeting in church and similar halls will no longer make application for catering licences as tea—the commodity which was most sought after—is no longer rationed. Nevertheless such premises will continue to be inspected from time to time to ensure that conditions are maintained at a satisfactory standard.

Once again excellent co-operation has been maintained between the Department, the Food Office and the City Engineer and Surveyor in connection with the new applications and the extension of food preparation premises.

MILK AND DAIRIES, ICE CREAM AND SYNTHETIC CREAM

The statutory duties placed on the Health Committee, together with the large amount of advisory work which is vitally necessary to ensure the preservation of the high standards expected in this City for premises concerned in the manufacture and distribution of foods, is undertaken by the staff of the Milk and Dairies Section (1 senior and 4 inspectors, 2 samplers and 1 full time clerk). This work is under the immediate control of the Administrative Medical Officer of Health for General Purposes.

The following details summarise the work of supervision of plant and premises carried out during the year :—

							<i>Number of such premises in the City</i>
Visits to pasteurising plants	...	...	...	...	743	14
„ „ sterilising plants	...	...	...	...	677	13
„ „ wholesale purveyors	...	...	...	...	517	19
„ „ retail purveyors	...	...	...	...	759	73
„ „ ice cream manufacturers	...	...	...	...	1,359	132
„ „ ice cream dealers	...	...	...	...	4,613	2,613
„ „ milk bars	...	...	...	...	163	12
„ „ milk shops*	...	...	...	...	3,655	2,668
„ „ confectionery bakehouses**	...	...	...	...	672	21
Other visits	...	...	...	...	544	
Unsuccessful visits	...	...	...	...	775	
Interviews	...	...	...	...	128	

* The supervision of these premises has been in the hands of the District Sanitary Inspectors, as previously.

** These visits do not include visits for the purpose of taking samples of synthetic cream, nor do they include visits by District Sanitary Inspectors to bread bakeries or smaller premises where synthetic cream is not so extensively used as at the larger confectionery bakeries.

Milk and Dairies

The supervision of milk processing and sale has led to the issue of licences as follows :—

Pasteurising plants	H.T.S.T.	...	...	...	...	10
	Holder	...	...	...	...	3
	Other	...	...	...	...	1
Sterilising plants	...	...	...	...	...	13
Wholesale and retail distributors	...	...	...	...	...	92
Dealers' licences (milk shops)	...	...	...	...	...	2,668
“ Tuberculin Tested ” licences issued to producers of pasteurised and sterilised milk for the production of T.T. (Pasteurised) and T.T. (Sterilised) milk...						
	...	...	...	...	...	12

The premises under reconstruction at the time of the last report (page 223/51) were completed and new H.T.S.T. plant was installed in April, when processing was transferred from the former overcrowded and sub-standard premises, which were removed from the register.

Other projected developments include two planning applications, one in respect of a new processing dairy, and the other for an extension of existing premises to house additional sterilising, bottle filling and bottle washing plant.

The long-awaited specification of the Birmingham and Wolverhampton, etc., area, under the Milk (Special Designation) (Specified Areas) Order, 1952, took effect on 1st November, 1952. This prohibited not only the sale of non-designated milk, but also the distribution of loose milk from open containers. Not only must the milk be pasteurised or sterilised, tuberculin-tested or meantime, accredited, but it must be put into the container in which it is to be delivered to the consumer at the premises of the licence-holder. To comply with this, all but two retail purveyors are now purchasing their supplies already bottled or in containers sealed at the principal dairies. These two retail purveyors purchase pasteurised milk in bulk and bottle their own registered premises.

It may be said that very few consumers indeed have experienced a change through the designation of Birmingham as a "specified" area.

Problems have been experienced in enforcing the Order as a result of the transfer of supervisory control of dairy farms from the Local Authority to the Ministry of Agriculture and Fisheries under the Milk and Dairies Regulations, 1949. An instance can be quoted where, a few weeks after the Order became operative, it was ascertained that a producer-retailer who did not hold a licence to produce or sell accredited milk, was labelling a non-designated milk produced by him as "accredited." Additionally, pasteurised milk in bulk was being purchased and was bottled and labelled as "accredited" at the farm dairy. It would have been difficult for this contravention to take place under the system of regular supervisory inspections formerly undertaken by the Local Authority.

There has been little difficulty in the supervision of plant. There were, however, two instances of extraneous water in bottled pasteurised milk which were traced to defective bottle-washing technique at the dairies concerned.

The following complaints were notified to the Department during the year :—

Dirty bottles and foreign matter in bottles ...	...	...	...	...	18
Insect infestation of bottles ...	...	...	...	...	1

No doubt similar complaints are made direct to the dairymen but, in view of the many millions of bottles of milk supplied during the year, this small number of complaints is remarkable.

The condition of the bottle the subject of complaint can usually be attributed to it not being rinsed after emptying the milk, together with delay in returning it to the dairy for cleansing.

The method of cleansing bottles returned to the dairy is to soak them in a solution of caustic soda, and subsequently to pass them through the mechanical bottle-washing plant. A proportion of these are found to be incapable of being rendered sufficiently clean for use, and have to be destroyed. The risk of a number of imperfectly cleansed bottles passing through to the bottle filler cannot be disregarded, even where a person is employed solely as a viewer.

Insect infestation by the *Drosophila busckii* and other insects of this species has been the cause of considerable comment by the trade and is responsible for many of the complaints received by dairymen during the warmer weather. These insects breed in the dried curdy residue of dirty milk bottles and the insect, in its pupal stage, is found firmly adherent to the inner surface of the glass. That it is sterile and incapable of harming the milk is fortunate, but its presence is always undesirable. Whether or not there is any association between such infestation and domestic misuse of the milk bottle through omission of cleansing and delay in return, it is at least known that these insects frequent the domestic dustbin. Delay in returning milk bottles to the roundsman must create an added risk of this form of contamination.

YOGHOURT CULTURED MILK

The preparation and sale of this commodity is increasing, and a number of the larger dairy firms now produce it, the manufacture being under the control of their laboratories.

The keeping quality appears to be good, if stored at 50°F. or below, and only one complaint of surface mould and unpleasant flavour has been recorded in respect of a strawberry-flavoured Yoghourt. It is believed that this sample had been kept too long at room temperature and that acidity had increased.

MILK SAMPLING

The following table shows the results of examination of 2,901 samples of various milks taken for methylene blue, phosphatase or turbidity tests.

<i>Classification of Milk</i>	<i>Total No. of Samples</i>	<i>Failed Methylene Blue Test</i>	<i>Failed Turbidity Test</i>	<i>Failed Phosphatase Test</i>	<i>Declared Void</i>
Raw Milk (Undesignated)	72	6 (8.33%)	Not applicable	Not applicable	Not applicable
Raw Milk (Designated)	165	16 (9.7%)	ditto	ditto	ditto
Pasteurised Milk from Plants inside City :					
(a) Jan.-June	780	11 (1.41%)	ditto	7 (.90%)	79 (10.13%)
(b) July-Dec.	1,178	11 (0.93%)	ditto	Nil	Nil
Pasteurised Milk from Plants outside City :					
(a) Jan.-June	182	3 (1.65%)	ditto	5 (2.75%)	17 (9.34%)
(b) July-Dec.	303	5 (1.65%)	ditto	4 (1.32%)	Nil
Sterilised Milk from plants inside City	146	Not applicable	Nil	Not applicable	Not applicable
Sterilised (T.T.) Milk from plants inside City	12	Not applicable	Nil	Not applicable	Not applicable
Sterilised Milk from plants outside City	63	Not applicable	Nil	Not applicable	Not applicable

During the year it was decided to discontinue the former practice of taking only one bottle as a sample of pasteurised milk, which necessitated carrying out the phosphatase test on the day subsequent to sampling and after carrying out the methylene blue test. Two bottles are now taken when sampling, one for each test, so that the phosphatase test can be carried out on the day of sampling.

Such a policy may involve as many as six bottles being taken from an individual roundsman on a single day, and complaints were soon received from the trade in regard to the financial loss incurred. The Health Committee considered the matter and decided to waive their right of taking these samples without payment, and a system of payment came into operation on 1st December, 1952.

Biological tests for detecting living tubercle germs were carried out on samples failing the phosphatase test and which, therefore, were judged to be inefficiently pasteurised. The results were all negative.

It will be noted that 96 samples of pasteurised milk taken in the period January to June are classified as void in accordance with the provisions of Section 1 of Part 3 of the Third Schedule of the Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949. It should also be noted that during the warm weather the arrangements for keeping of samples of pasteurised milk taken for methylene blue test were altered at the laboratory, these being kept in the basement, with the resultant absence of "voids."

CHURN AND BOTTLE WASHINGS

Samples of churn and bottle washings were taken to check the efficiency of churn and bottle-washing apparatus at pasteurising establishments. These gave the following results:—

<i>Estimated Bacterial Content of Churns:</i>						
<i>No. of Samples taken</i>	<i>Nil</i>	<i>1-1,000</i>	<i>1,001-10,000</i>	<i>10,001-100,000</i>	<i>100,001-500,000</i>	<i>B. Coli Present</i>
<i>Bottles</i>						
18	1	12	2	3	—	1
<i>Churn Washings</i>						
16	—	3	6	1	6	2

A high standard of purity in milk sold was maintained throughout the year, and it is pleasing to place on record the care and attention given by the dairymen in this City to the advice and recommendations of the Milk and Dairies staff, and to the helpful spirit of co-operation which exists between the Trade and the Local Authority.

No instance of milk-borne infection was ascertained during the year.

Another, and less satisfactory feature, is the trend by which milk reaching the City dairies continues to be of poorer quality in so far as milk solids-not-fat are concerned. The presumptive figure of 8·5% for genuine milk must be very difficult to maintain when such a high proportion of farm supplies—in one instance, 44%—fail to reach the 8·5% standard. It is believed that the problem is partly an economic one, and partly the result of war-time stressing of the importance of yield without sufficient attention being paid to quality, so that the most satisfactory solution and the only remedy, would be payment to the farmer on a quality basis.

Ice Cream

During the year 13 manufacturers' licences were cancelled (4 traders giving up business, and 9 reverting to retail sale only), leaving a total of 132 manufacturers on the register at the end of 1952. Of this total of 132, 94 made ice-cream in some degree during the year; the remaining 38 have not manufactured for several years and are now only selling ice-cream by retail. Their wish to remain on the register can be appreciated, as they might elect to manufacture again at a later date. This situation is inevitably wasteful of inspectors' time as such premises must nevertheless remain under supervision.

The number of premises registered for sale only was 2,613 against 2,377 in 1951. It has again been observed that the trend towards the sale of pre-packed ice-cream in preference to loose ice-cream from retail premises has continued.

Four temporary registrations were granted for the sale of ice-cream at fêtes, etc., and trade exhibitions.

Thirteen persons made unsuccessful application for the registration of premises for the sale of ice-cream, as it was found on inspection that the premises were unsuitable by reason of sanitary defects or the nature of other trade carried on. In each instance the applicant was advised of the necessary requirements and of his right of appeal, but no further action was taken by any of the persons concerned.

No less than 108 mobile vehicles, including tricycles and propelled barrows, operate from registered premises in Birmingham. The few mobile vehicles, from which loose ice-cream is sold, are equipped with facilities for the sterilisation of servers and means for hand washing. It has been observed that the motor vehicle is fast replacing the tricycle and hand-barrow, so popular some years ago.

Application was received from one large firm during the year for permission to adopt the H.T.S.T. method as authorised by the Ice Cream (Heat Treatment, etc.), Amendment Regulations, 1952, for the pasteurisation of ice-cream mix. Two nitrite tests were carried out as advised by Ministry of Health Circular, 14/52, and the plant satisfied the conditions for the use of this method. At the end of 1952 the plant had not been brought into regular use.

Sampling both as a routine and in following up unsatisfactory results has been continued as formerly, samples submitted to the methylene blue test being reported upon as follows:—

METHYLENE BLUE TEST

<i>Pro- visional 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 1952</i>	<i>Results 1951</i>
1	349 (76·87%)	82 (73·87%)	431 (76·29%)	470 (77·30%)
2	60 (13·22%)	22 (19·82%)	82 (14·51%)	87 (14·31%)
3	25 (5·51%)	5 (4·50%)	30 (5·31%)	29 (4·77%)
4	20 (4·40%)	2 (1·81%)	22 (3·89%)	22 (3·62%)
	454 (100·00%)	111 (100·00%)	565 (100·00%)	608 (100·00%)

Analysis of the 45 City samples falling into Grades 3 and 4 showed that 38 of these (25 in Grade 3 and 13 in Grade 4) were taken from three of the larger manufacturers in the City. These included test samples taken at various stages of manufacture with a view to ascertaining the cause of the failures originally recorded.

Informal sampling was also carried out under the Food Standards (Ice Cream) Orders 1951 and 1952. This gave the following results:—

	<i>No. of Samples</i>	<i>No. falling below standard</i>
Manufactured inside City	256	14 *(5·46%)
Manufactured outside City	71	6 (8·45%)

* One sample failed in both fat and milk solids-not-fat.

In several instances during the season there was evidence that temperatures of wholesale ice-cream consignments had risen during the course of transit. This was mainly brought about through distribution by insulated single-compartment vehicles refrigerated by means of solid carbon dioxide (cardice) only. This form of refrigeration is not considered entirely satisfactory where such vehicles are used to cover wide areas, serving a large number of shops, which entails the frequent opening and closing of the hatches or doors of the vehicles so permitting the temperature inside the vehicle to rise on each occasion. All vehicles used for this type of distribution should be divided into compartments fitted with air-locks or the ice-cream should be distributed in smaller individually insulated containers carried in the vehicles. Alternatively, ice-cream should be despatched in properly insulated vehicles incorporating some more positive form of refrigeration than CO₂. This matter has been brought to the notice of the trade in Birmingham and towards the end of the season several manufacturers had provided suitable vehicles for this purpose.

ICED LOLLIPOPS

During the year several iced-lollipop manufacturers both inside and outside the City were incorporating a percentage of ice-cream mix in the manufacture of their product. Samples of this type of iced-lollipop were taken for analysis and gave the following results:—

Total samples taken 25

Nineteen were submitted to examination by plate count, and for presence of B.Coli.

<i>Plate Count.</i>					<i>No. of samples</i>	<i>B.Coli present</i>
<i>No. of colonies per 1 ml. after 48 hours at 37°C.</i>						
Nil	...	...	...	...	1	Nil
1—1,000	...	...	...	...	11	Nil
1,001—10,000	...	...	...	...	4	Nil
10,001—100,000	...	...	...	...	2	Nil
100,001—500,000	...	...	...	...	1	Nil
					—	
					19	
					—	

Two of these, and 2 further samples were submitted to the Methylene Blue Test and were found to be of Provisional Grade 1 standard.

The remaining 4 samples were taken for chemical analysis.

From the above it will be seen that the standard of ice-cream manufactured, and sold, in the City has been satisfactorily maintained, and it is pleasing to record that no infection was traced during the year to the consumption of this popular food.

Synthetic Cream

Supervision of consignments of synthetic cream reaching confectionery bakeries in the City, has continued and a close watch is also maintained over its handling in the bakehouse.

Routine sampling both from the unopened container as soon after delivery as possible, and subsequently after handling, has been carried out at the following premises :—

- (a) The larger confectionery bakeries supervised by the Milk and Dairies staff.
- (b) The smaller bakeries supervised by the staff of the Chief Sanitary Inspector, and
- (c) Those dairies in the City found to be bottling synthetic cream as a substitute for fresh cream.

The results of sampling are set out below :—

<i>Source of Samples</i>	<i>Colony Count per 1 ml. of cream after 48 hours' incubation at 37°C.</i>	<i>No. of Samples</i>	<i>Coliform Bacilli present in 1 cc.</i>	<i>No. of Samples</i>
<i>(a) Confectionery Bakeries :</i>				
Unopened Container	Nil	9	Nil	84
	0—1,000	60	1—10	Nil
	1,001—10,000	3	11—100	Nil
	10,001—100,000	4	—	—
	100,001—500,000	2	—	—
	Over 500,000	6	—	—
		84		84
Mixing Bowl	Nil	13	Nil	81
	0—1,000	52	1—10	1
	1,001—10,000	9	11—100	—
	10,001—100,000	4	—	—
	100,001—500,000	2	—	—
	Over 500,000	2	—	—
		82		82

CONTINUED OVERLEAF.

<i>Source of Samples</i>	<i>Colony Count per 1 ml. of cream after 48 hours incubation at 37°C</i>	<i>No. of Samples</i>	<i>Coliform Bacilli present in 1 cc.</i>	<i>No. of Samples</i>
<i>(b) Smaller Bakehouses :</i>				
Unopened Container	Nil	9	Nil	83
	0—1,000	51	1—10	—
	1,001—10,000	14	11—100	—
	10,001—100,000	4	—	—
	100,001—500,000	4	—	—
	Over 500,000	1	—	—
		83		83
<i>Mixing Bowl</i>				
	Nil	2	Nil	75
	0—1,000	45	1—10	1
	1,001—10,000	18	11—100	—
	10,001—100,000	8	—	—
	100,001—500,000	1	—	—
	Over 500,000	2	—	—
		76		76
<i>(c) Dairies :</i>				
Unopened Container	Nil	1	Nil	4
	0—1,000	2	—	—
	1,001—10,000	1	—	—
	10,001—100,000	—	—	—
	100,001—500,000	—	—	—
	Over 500,000	—	—	—
		4		4
<i>Bottles</i>				
	Nil	1	Nil	8
	0—1,000	2	1—10	—
	1,001—10,000	1	11—100	—
	10,001—100,000	3	—	—
	100,001—500,000	1	—	—
	Over 500,000	—	—	—
		8		8

These results are remarkably satisfactory from a handling point of view, but, in spite of the absence of coliform organisms in no less than 167 samples taken from the unopened container, apprehension must always be present because of the high colony count noted from time to time on arrival of a consignment.

Such cases have been closely investigated with the co-operation of the Medical Officer of Health in whose area the synthetic cream is manufactured, and invariably it seems that the method of transportation and

delay in receipt are responsible. The manufacture of this product has greatly improved in recent years from a hygienic point of view. It must be realised, however, that there is a risk not only from unhygienic methods of manufacture and from unhygienic handling at the bakery, but also from keeping cream confectionery under unsuitable conditions or for too long a period in the home. It is clearly safest to consume on the day of purchase until such time as some suitable and harmless preservative agent, possibly hydrogen peroxide, may legitimately be used by the confectioner. This was at one time used by one large manufacturer supplying a number of premises in the City, until it was pointed out that the addition of any preservative, however harmless, was a direct contravention of the Regulations as to Preservatives in Foods. It is understood that research has been carried out with a view to the amendment of the Regulations in regard to this.

For all one's apprehension, however, no infection was finally traced to consumption of synthetic cream during the year under review.

During the year various samples of cream fillings were also taken, with results as set out below. These fillings are either purchased ready for use, or are made up by the confectioner from ingredients available to him.

<i>Source of Samples</i>	<i>Colony Count per 1 ml. of filling after 48 hours' incubation at 37°C.</i>	<i>Number of Samples</i>	<i>Coliform Bacilli present in 1.0 cc.</i>	<i>Number of Samples</i>
Unopened Container	Nil	2	Nil	18
	0—1,000	15	1—10	1
	1,001—10,000	3	11—100	1
	10,001—100,000	—	—	—
	100,001—500,000	—	—	—
	Over 500,000	—	—	—
		20		20
Mixing Bowl	Nil	1	Nil	17
	0—1,000	11	1—10	1
	1,001—10,000	5	11—100	1
	10,001—100,000	1	—	—
	100,001—500,000	1	—	—
	Over 500,000	—	—	—
		19		19

The total number of samples of synthetic cream and cream fillings, taken during the year was 376.

Shell Fish

Four samples of oysters and 64 samples of mussels were taken by the Veterinary and Food Inspection Department for bacteriological examination during 1952. These were reported upon as follows :—

<i>B. Coli Type I</i>					<i>Number</i>
<i>per 1.0 ml. of fish</i>					<i>of Samples</i>
Nil	...	...	...	...	54
1—5	...	...	...	...	11
6—10	...	...	...	...	0
11—20	...	...	...	...	1
Over 20	...	...	...	...	2

In one instance in which purified mussels imported from Ireland proved unsatisfactory, the bags were found to be seriously damaged on arrival.

Two samples of Danish mussels were found to be unsatisfactory, and information has been received that investigations are proceeding at the area of collection. In the case of another Danish source, however, no faecal *B. Coli* were found in 23 samples, while in one only there was a minor degree of contamination.

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 statute law relating to food is contained in the Food and Drugs Act, 1938. The Act also deals with related matters, including 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. Practically all the home-killed meat consumed in Birmingham and surrounding district comes from the public abattoir and sixteen bacon factories located in various parts of the City. The customers registered with butchers' shops in the City number well over a million, and the surrounding districts draw on Birmingham for meat supplies for approximately 250,000 registered customers. Since 1940, except for the bacon factories, all slaughtering in the City has been concentrated at the abattoir.

In addition to the home-killed meat, there are large refrigerated stores at the abattoir where imported meat is stored until allocated to the various retail shops. Prior to 1939, imported meat formed approximately 55 per cent. of Birmingham's meat supply.

The supervision of meat supplies commences at the abattoir and is maintained throughout the various supply channels to the retail food shops and food preparation premises.

Slaughter of Animals and Inspection of Meat. 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.

A revised memorandum (M.F. 14/52) regarding the method and criteria of meat inspection has been issued by the Ministry of Food, for adoption by local authorities and their officers, upon whom falls the responsibility for inspecting meat intended for sale for human consumption.

The inspectors also supervise the humane and scientific methods of slaughter carried out by licensed slaughtermen—278 slaughtermen's licences were in force at the 31st December.

Carcases and offals are submitted to careful examination before meat supplies are distributed to retail butchers in Birmingham and district.

The vehicles used in the City for the transport of animals and of meat are also subject to inspection.

A laboratory is maintained at the abattoir to assist in the diagnosis of various diseases.

Bacon Factories. Birmingham is a large centre for bacon factories, there being sixteen, with licensed slaughterhouses in operation where veterinary inspectors are constantly engaged examining pigs' carcasses.

ANIMALS SLAUGHTERED IN 1952					
	<i>Beasts</i>	<i>Calves</i>	<i>Sheep</i>	<i>Pigs</i>	<i>Total</i>
Public Abattoir	69,356	57,649	211,762	64,620	403,387
Pigs slaughtered in Bacon Factories				263,554	263,554
Total, 1952 :	69,356	57,649	211,762	328,174	666,941
Total, 1951 :	75,512	72,459	157,504	225,393	530,868

NOTE. 230 cases of *cysticercus bovis* (measly beef) were found at the abattoir during the year.

Of the 69,356 cattle slaughtered at the public abattoir, 11,878 or 17% were low grade cattle of manufacturing grade. The percentage of the total number of cattle killed during 1952, affected with tuberculosis, was 21.1%, 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.

Fish, Poultry, Fruit and Vegetable Supplies. The wholesale supplies of fish, poultry, fruit and vegetables in the markets are subjected to regular daily inspection. In the case of shellfish, such as oysters, mussels, etc., a careful check on the origin of supplies is kept and, in addition, samples are taken for bacteriological examination.

The fish market supplies an area within a radius of twenty miles from the City Centre and about 800 tons of fish pass through weekly.

Merchandise Marks Act, 1926. The Ministry of Agriculture and Fisheries issued a Notice, 33C, which summarises the requirements of Marking Orders made under the above Act in respect of agricultural, horticultural and fishery produce. All the Marking Orders summarised in this Notice have been in force since 25th May, 1951.

The district food inspectors have been asked to draw the attention of shopkeepers and others to the requirements of the Marking Orders relating to foodstuffs made under the above Act.

Hawkers. The 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 their storage premises, and has operated from 1st June, 1949. At the end of 1952 registration had been effected in 279 cases.

Retail Food Shops and Other Premises. After foodstuffs have been distributed from the wholesale markets they are still under the supervision of the district food inspectors, for which purpose the City is divided into eight districts. The visiting list contains over 9,000 establishments and includes butchers, fishmongers, grocers, greengrocers, fish and chip shops, wholesale warehouses, etc. In addition, supervision of food supplies is maintained of over 200 Birmingham Restaurants and School Meals Centres. 103,393 visits of inspection were made.

Byelaws made under Sec. 15 of the Food and Drugs Act, 1938. The district inspectors also pay attention to the observance of the provisions of the byelaws made under Sec. 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.

Animal Feeding Meat. Byelaws were made under Sec. 43 of the Birmingham Corporation Act, 1948, requiring the sterilisation of animal feeding meat. The byelaws came into operation on 1st December, 1950.

Foods Judged as Unfit. Condemned meat and offal are utilised by the Corporation Salvage Department and manufactured into fertilisers, bone meal, etc., and other suitable condemned foodstuffs are salvaged for animal feeding.

FOODS JUDGED AS UNFIT									
<i>Number of Surrenders</i>	<i>Class of Foodstuff</i>					<i>T.</i>	<i>c.</i>	<i>q.</i>	
14,243	Meat and offal	...	...	...	...	915	7	3	
983	Fish	...	...	...	...	98	18	2	
192	Poultry, Rabbits, etc.	...	...	...	...	5	11	1	
197	Fruit and vegetables	...	...	...	...	101	10	1	
3,415	Miscellaneous	...	...	...	...	157	7	3	
<hr/>						<hr/>			
19,030	1952 :					1,278	15	2	
<hr/>						<hr/>			
18,171	1951 :					1,432	11	2	
<hr/>						<hr/>			

NOTE. Approximately 12 tons condemned miscellaneous foodstuffs were dealt with by the Ministry of Food for animal feeding.

Food and Drugs Act, Sec. 14 (1) (b). Registration of Premises used for the preparation and manufacture of sausages, or potted pressed, pickled or preserved food intended for sale. Registration of premises which complied with the requirements of the Veterinary and Public Health Departments was carried out in 7 cases during 1952. At the end of the year there were 326 food preparation premises on the register as follows :—

Sausages, cooked meat and pork pie manufacturers	...	...	324
Jam manufacturers	...	...	2
<hr/>			
			326
<hr/>			

There were 8,723 visits of inspection made to these premises during the year.

In 8 cases registered food preparation premises changed hands, and the register was amended accordingly.

Inspection of Meat, Fish and Other Foods at Birmingham Civic Restaurants, School Meal Centres, etc. The premises visited include :

Institutions and Residential Homes	...	...	...	...	55
School Meal Centres	...	...	...	...	184
Birmingham Civic Restaurants	...	...	...	...	45
Factory Canteens	...	...	...	...	26
					<hr/>
					310
					<hr/>

There were 3,154 visits of inspection made during the year to the above premises. 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.

Meat Contracts. In addition to their normal food inspection duties, the district food inspectors maintain a supervision of meat supplied to institutions, schools, restaurants and canteens, and check for quality and prices according to the conditions of contract.

Prosecutions

	<i>Fines</i>	<i>Costs</i>
Bye-laws made under Section 15 of the Food and Drugs Act, 1938 :		
5 cases of failing to display names and addresses on barrows	£6/10/-	—
Public Health (Meat) Regulations :		
Failure to wear protective headgear	£2	—
Food and Drugs Act 1938 (Sec. 38) :		
Failure to display notice regarding sale of horseflesh	£1	—
Birmingham Corporation Act 1948 (Sec. 43) :		
Sale of uncooked meat for animal consumption :		
6 offences	£9	—

CARCASSES INSPECTED AND CONDEMNED

	CITY MEAT MARKET				BACON FACORIES
	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed	46,921	22,435	57,649	211,762	263,554
Number inspected	46,921	22,435	57,649	211,762	64,620
					64,620
<i>All diseases except Tuberculosis:</i>					
Whole carcasses condemned		81	531	260	236
Carcasses of which some part or organ was condemned		1,169	199	5,855	1,956
Percentage of the number killed affected with disease other than tuberculosis		1.80%	1.27%	2.89%	0.83%
<i>Tuberculosis only:</i>					
Whole carcasses condemned		702	22	—	168
Carcasses of which some part or organ was condemned		13,924	18	—	12,941
Percentage of the number killed affected with tuberculosis		21.09%	0.07%	—	4.97%
Total diseased, 1952		22.89%	1.34%	2.89%	5.80%
Total diseased, 1951		25.70%	1.46%	2.62%	5.85%

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

At the end of 1952 there were 25 dairy farms housing 563 milch cows, in 71 sheds, viz. :—

Attested herds	6
Tuberculin tested herds	2
Accredited herds	8
Non-designated herds	9

(NOTE.—Four herds became " Attested " during the year).

Regular monthly veterinary inspections were made of all City dairy herds.

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

Accredited herds	Cows examined
23	573
Non-designated herds	
15	124

In connection with the Ministry's voluntary scheme for vaccination of heifer calves against contagious abortion, 37 calves have been vaccinated.

Cows. The cows were examined for any evidence of disease and uncleanliness; with a view to preventing danger to health from the sale of infected milk. The health and cleanliness of the cows in City dairy herds remain good.

Mastitis. During the year 16 cows were found to be affected with acute catarrhal mastitis and the sale of milk produced from these cows was prohibited.

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, and all 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 table shows the number of samples of milk taken and submitted for biological examination during 1952 :—

<i>Source</i>	<i>Samples taken at Depots, etc.</i>	<i>Samples infected</i>	<i>No. of T.B. cows traced</i>
Derbyshire	14	4	3
Gloucestershire	20	—	—
Herefordshire	22	—	—
Leicestershire	87	4	1
Shropshire	334	13	13
Staffordshire	698	35	40
Warwickshire	640	28	38
Worcestershire	428	5	5
	<hr/> 2,243	<hr/> 89	<hr/> 100
City Dairies	61	2	1
	<hr/> 2,304	<hr/> 91	<hr/> 101

SUMMARY OF RESULTS

<i>From Outside Dairies</i>	<i>No. taken</i>	<i>No. infected</i>
Tuberculin tested	54	1
Accredited and Non-designated	2,189	88
<i>From City Dairies</i>		
Mixed samples	61	2
	<hr/> 2,304	<hr/> 91

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, 101 tuberculous cows (100 at dairies outside the City and 1 within the City) were dealt with under the Tuberculosis Order during 1952, and these have been eliminated from dairy herds supplying milk to Birmingham.

At 9 farms the investigations had not been completed at the end of the year.

The following table shows the number of samples of milk taken from outside sources during the past ten years and the percentage infected :

<i>Year</i>						<i>Samples taken</i>	<i>Samples infected</i>	<i>Percentage infected</i>
1943	...	...	...	...	...	2,456	146	5.9
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
<hr/>								
Average for period					...	...	...	4.9
<hr/>								
Average for period, 1933-42					...	...	...	8.6
<hr/>								

The improvement can be attributed in a large measure to dairy farmers disposing of old and unprofitable cows for slaughter owing to the high cost of feeding stuffs ; also the percentage of Attested cattle (in herds free from tuberculosis) to total cattle in Great Britain has increased from 31.3% at 31st December, 1951, to 39.8% at 31st December, 1952.

Area Eradication Plan for Tuberculosis

The following Orders came into operation on 1st October, 1952 :—

The Tuberculosis (Area Eradication) Amendment Order, 1952.

The Tuberculosis (South-West Wales Eradication Area) Order, 1952.

The Tuberculosis (South-West Scotland Eradication Area) Order 1952.

The Ministry of Agriculture and Fisheries appointed 1st October, 1950, as the date from which they would apply the systematic eradication of tuberculous cattle, starting in particular areas selected by the Ministry and extending the process, area by area, throughout the country. Future eradication areas will only be declared when the maximum voluntary response has been obtained. For two years the final stage in the campaign against bovine tuberculosis—the Area Eradication Plan—has been in progress. The main instrument in the eradication of bovine tuberculosis remains the voluntary Tuberculosis (Attested Herds) Scheme.

Attested Herds Scheme (Herds free from Tuberculosis)

The position as at 31st December, 1952, in the Counties with which we are chiefly concerned, was as follows :

<i>County of</i>	<i>Total Cattle as at 4.6.52</i>	<i>Number of Attested Herds as at 31.12.52</i>	<i>Number of Cattle in Attested Herds as at 31.12.52</i>	<i>Percentage of Attested Cattle to Total Cattle</i>
Derby ...	183,577	815	38,560	21.0
Gloucester ...	195,604	1,397	74,410	38.0
Hereford ...	133,654	1,103	43,600	32.6
Leicester ...	168,250	592	32,110	19.1
Salop ...	276,262	1,510	78,990	28.6
Stafford ...	232,043	877	41,060	17.7
Warwick ...	149,494	718	39,230	26.2
Worcester ...	98,843	507	25,190	25.5
England ...	6,769,056	46,878	2,214,836	32.7
Great Britain	9,303,133	96,429	3,702,995	39.8
Great Britain	... ..	... ..	at 31.12.51	31.3

Tuberculin Testing of Herds

The number of animals tested during 1952 was :—

Rubery Hill Hospital	115	animals tested and passed
Marston Green Homes	78	„ „ „ „
Monyhull Hall ...	136	„ „ „ „

ENVIRONMENTAL HEALTH SERVICES

HOUSING

Again the number of houses erected during the year under review was substantially greater than during the previous year. Of the 5,509 erected, 4,744 were built by the Corporation. This number of Corporation houses has only been exceeded twice before, in 1926 (5,159) and in 1930 (6,687). In the years before the war the rate of house building, including of course those houses erected by private enterprise, proved to be sufficient not only to keep pace with an increasing population, but to enable sufficient provision to be made for slum clearance and overcrowding operations. The estimated mid-year population for 1952 of 1,119,000 shows an increase of population of 6,660 since the census in 1951, so it can be seen that some quantitative progress was made despite demolition and other permanent loss of dwellings involving 563 houses.

In order justly to appreciate the present position it is necessary amongst other things to assess correctly the value of the existing housing accommodation. This accommodation, it will be remembered, includes the prefabricated bungalows erected as a temporary expedient and all that mass of houses generally referred to as "slums." The latter total about 50,000 houses, one half within the Redevelopment Areas, the remainder outside and under private ownership. The houses taken over by the Corporation are covered by the day to day and systematic repair schemes, which often involve expenses vastly in excess of the amounts received as rents, the average cost per house in 1952 being £180. Despite such beneficial management, these houses remain slums because of defects which, mainly inherent in structure and arrangement, are incapable of remedy, or are such as not to justify even higher expense. The "slum" houses outside the Areas are in no better, and in some cases worse, condition than those which were taken over by the Corporation. The temporary bungalows and the whole of these 50,000 houses are included in any statement giving the total number of houses in the City, and are consequently given a value in any calculations of sufficiency of housing accommodation. The result is that a faulty picture of the situation is presented to anyone who bases conclusions on figures alone.

Back-to-Back Houses

Experience gained in close contact with the houses in the lowest grade areas, and their occupants, drives home irresistibly the conclusion that any assessment of position must take into account more than mere figures, and give due weight to the needs of flesh and blood in the shape of the parents, the children and the old people occupying these bad houses. Included in the 50,000 quoted are 27,731 back-to-back type houses. Most people know that authoritative opinion regards back-to-back houses as unfit for human habitation, but frequently the impression is gained that

their unfitness is due solely to lack of through ventilation. This is not in fact the case. The back-to-back house of the Birmingham type is in general between 90-120 years old, and was built at a time when there were no effective regulations governing house building or street planning. The very rapid expansion which took place from the time of the industrial revolution had its inception in the need for dwellings in close proximity to places of work in the days when transport was difficult and paved and lighted streets were rare. The narrow tunnel entrances to courtyards, to-day properly regarded as severe disabilities, had some merit at the time of their construction in that it was prudent, by a heavy external door, to bar access to footpads, robbers and the like, leaving the small courtyard community tolerably secure from physical interference.

Ideas on sanitation have undergone revolutionary changes in the last 100 years, and to-day a privy midden in a central courtyard would be regarded with horror, and quite rightly so. This feature, together with others, has, over the lapse of years and in line with the awakening public conscience, been swept away, but many other conditions only slightly less evil remain because they cannot be ameliorated; the radical remedy of demolition is the only one possible.

In general, the back-to-back houses referred to have steep, unlighted, and often winding staircases and have only one wall, the front wall, over 4½" thick. There is necessarily no back yard and no window or ventilating opening in the rear wall. The essential sanitary and other conveniences are situated in the common courtyard, in common view, and usually in such numbers that they have to be shared by the occupants of more than one house.

In order to examine fully the effects of housing conditions on the life of the various occupants it is well to envisage the daily life cycle, summer and winter, of individuals of the different age groups, and then to study the effects, good or bad, of the conditions met with in the various types of back-to-back houses and of course, additionally, in the lowest grades of through houses.

The person who inevitably spends the longest continuous time within the house is the housewife herself. On rising the fire has to be lit. Straight away troubles may be encountered. It is common to find some defects in the firegrate or flue and there is seldom any readily accessible coal store. Even when there is a small internal store, facilities are not available for ordering and storing coal in sufficient quantities; this weighs even more heavily in these days of fuel shortage. The livingroom, probably with traces of activities of the day before lingering in the atmosphere, requires ventilating. Many of the windows in this type of house are without properly hung sashes so that upper sashes can only be adjusted from outside. Hot water is necessary to commence the day's activities. Gas stoves are common, but in the majority of cases there is no proper arrangement for ventilation and the fumes of gas and of cooking

circulate into the atmosphere of the livingroom, and thence up the narrow winding staircase which forms an upcast ventilation shaft. Breakfast involves the clearing of residual dishes ; this requires hot water, never laid on in this type of house. Cooking usually has to be done within sight of the table and the subsequent washing-up is a task on patience.

Probably whilst the housewife is engaged in these first essential tasks the rest of the household are engaged with their toilet. If there is a sink that one sink is in constant demand and it is quite impossible for the female members of the household to obtain privacy, and that part of the female toilette which governs outward appearance at business or factory will be affected by occupation density. Use of the w.c. in a well built private dwelling involves a certain measure of competition ; where the w.c. is in the open area of a court and is shared by the occupants of another house the consequences are obvious. When the w.c. is in disrepair, and a member of a clean family visits after a member of a dirty family, further complications ensue. Breakfast, in common with all meals, accentuates the lack of proper facilities for storing food, crockery and utensils

Artificial light as an aid to natural light is more commonly found in this class of house than elsewhere, although in 1946 the Housing Survey disclosed that there were over 1,000 houses with no artificial lighting whatever. It is on those mornings when in good class houses artificial lighting may be dispensed with that defects due to insufficient or badly arranged windows are most apparent. The standard of natural lighting may be simply defined as a sufficiency to enable small newsprint to be read in the furthest corner of the room by a person with normal eyesight when normal daylight conditions prevail. A back-to-back house has windows in one wall only, and it is in this wall that the access door must perforce be situated. Thus it is frequently impossible to re-arrange the main window, even though the owner may be willing to spend money on improvement. Tall overshadowing buildings often add to the gloom.

The disposal of domestic refuse is one of the earlier tasks of the housewife. The arrangements usually consist of a number of bins intended to serve at least double that number of houses. However soundly the dust-bin standings may be constructed, the bins are found grouped together, and the general standard of cleanliness at this point is almost inevitably that of the dirtiest household in the courtyard.

Washing arrangements are very important to a housewife. In the class of house under discussion it is common for the washing accommodation to consist of a wash-house in the area of the courtyard to serve not less than four households. The actual accommodation usually consists of a flat sink or slop stone with a wash boiler in the corner, but the wash-house does not necessarily have an internal tap. It requires little imagination to comprehend the difficulties facing the conscientious housewife with a young infant. Despite any rota system, competition is fierce ; even

the wringing machine is a bone of contention. To these inherent disabilities, disrepair resulting in sloppy floors and preventing the maintenance of proper cleanliness bears down like "the last straw." Clothes drying, whether in the common courtyard or in the congested over-occupied livingroom, presents obvious difficulties; airing is even more difficult and ironing more difficult still by reason of the constant use of the livingroom by all members of the family.

The livingroom is also the kitchen and at the same time the parlour, and the effect of having to receive unexpected visitors in a room where the only table is occupied by pastries, encumbered by airing washing, and where there is a lingering smell from the last boiling of cabbage, cannot be over stressed.

Evenings bring their special problems. Children at school may wish to study. All children need frequent bathing, that is to say, children of both sexes and varying ages. Babies need napkins, baths and feeding. Father must perforce use the same room if he spends the evening in the house. These conditions do not need further elaboration, and thought of the added complications when, say, a young married couple also reside in the house will make the picture clearer. On a cold winter's night, and assuming that the privacy of the room has been obtained for the bath of the adolescent and grown females, any one of them may have to resort to the w.c. and in so doing may have to encounter perhaps unfriendly neighbours.

As mentioned, many back-to-back courtyards are approached by a narrow tunnel less than 3 feet wide. Apart from other obvious disadvantages the effect at the time of a funeral is to bring embarrassment to the adults responsible for the arrangements. An urge for a garden is seldom capable of satisfaction, whilst the free play space for the children is limited, with considerable friction usual on a good drying day.

All these conditions bear more onerously where it is not possible to give decent sleeping accommodation, decent, that is, in terms of sex and space to the different members of the family. The effect on a married couple of having to have in the same room another adolescent or adult or perhaps two is known to be grave, whilst the effect on growing children who have to share the bedroom of young parents is known to be harmful. Although the numbers calculated as permissible under the Housing Act, 1936 include an allowance for the livingroom as a sleeping room, it is clearly impossible beneficially to use this room for sleeping, with the result that sex admixture is frequently inevitable, with critical and embarrassing results in the case of girls of 12 years old and upwards.

One feature of this class of house that is not sufficiently stressed is that of the defects in structure and arrangement which foster accidents. Many of the floors are solid, and one depressed or broken quarry may lie at a point at which the table leg should stand. The table itself is the platform on which hot water or perhaps the tea-pot frequently stands,

and a toddler clutching at the table edge is therefore in dire peril. Staircases in disrepair lose their nosings or are repaired in such a manner that the rise is varied. Many of the staircases are almost ladder steep. No handrail arrangement is fully effective. A winding staircase often has treads varying from zero to 8 inches wide in a span of 2' 6". Such staircases, which would not be tolerated in factories, form major defects, and, fire and ventilation troubles apart, constitute an accident hazard to active persons, but much more so to pregnant women and to old people. It has been mentioned that windows may not be properly hung; defects in window hanging lead to accidents, and it is quite common to meet tenants who have suffered injury whilst manipulating the windows. Slight differences in level and awkward entrance door steps also increase accident risk. Slippery courtyards with uneven and irregular paving, not well lighted at night, are dangerous, especially in time of frost.

Danger to health is more apparent when one considers disrepair such as gives rise to damp walls, leaky roofs, loose plaster, bug harbourage, rat entry, etc., but it is proper to emphasise particularly the effect of a leaky roof on sleeping arrangements; it is quite common to find that it is impossible during the continuance of such a leak to maintain the bed in the only sensible position in the room.

The subject is extensive and could be pursued much further to include such things as the effect on young women who have to keep up appearances and wish to include in their lives attendances at dances and social functions but who are constantly hindered in attaining proper standards by their living conditions.

The social effects are considerable. Although there may be a substantial income, jointly earned by the various adult members of the family, the lack of room space drives those individuals out to seek amusement and relaxation elsewhere. Courting couples in inclement weather, unable to converse freely in the cinema, gravitate to the public house where in the midst of a crowd they can converse privately. The men folk, finding their presence embarrassing during domestic and toilet activity, seek the company of their fellows, again in the public house, as the alternatives to such places are few. The nicenesses of cleanliness, often instilled in the Birmingham council schools, cannot be put into practice. Instruction in table laying and practice of the social graces such as receiving and attending to guests is well nigh impossible, whilst devotion to artistic pursuits is denied an outlet at home. In the long run the habit of spending money on outside amusements develops a habit of thought which results in the retention for individual pleasure of a much more substantial proportion of the personal budget; this is reflected in due course in a prospective tenant's statement of his inability to pay the rent demanded for other accommodation. It is frequently found that a suggested rent is regarded as much too high when in fact it does not exceed one-sixth to one-tenth of the income of the applicant.

The difficulty of obtaining other accommodation, the apparent lethargy of many property owners regarding repairs, that conservatism which makes people disinclined to change districts and acquire new neighbours, the uncertainties of the times, all add to the disadvantages above quoted in bringing about a state of mind obvious to the Department's officers who visit these houses continually—a state of acquiescence and apathy rather than fierce resentment and an urge for betterment.

Any housing condition which impedes the enjoyment by the occupants of a full, satisfying and inspiring life must be held to be bad. This must embrace in some measure all houses which are defective in arrangement and construction, but it is especially applicable to the class of house which has been described in detail. The greatest stress must however be put on the fallacy of regarding an "uncrowded" family in a back-to-back house as having no housing need.

Disrepair

It is not only in slums that bad conditions are found. A great many of the houses provided nominally with the essential conveniences are defective because of disrepair and deterioration. Before 1939 it was possible for the Department to exercise its powers under Public Health and Housing Acts so effectively that such houses were maintained in a comparatively satisfactory state. Under the Housing Acts it was normal in suitable cases to prescribe all the works necessary in order to render a house fit for human habitation and effectively to pursue the service of a Notice by enforcement, if necessary, to the point of executing works in default. The rights of owners under this procedure are safeguarded by a provision of the Act which limits the cost of repairs included in a Notice to a "reasonable" expense, so that an owner feeling himself aggrieved by a mandate to carry out works at an unreasonable expense can object, and if necessary appeal to the County Court, for the Corporation Order to be set aside. There was seldom need for such an appeal. When an owner approached the Department urging that the expense likely to be involved was unreasonable and the Department's officers concurred, there was no objection to the alternative action prescribed in detail in the Act, namely, demolition. In the years immediately prior to the war, all houses built by the Corporation were earmarked for the purposes of slum clearance, and the abatement of overcrowding; thus a house not worth repair could be dealt with in the most satisfactory manner—by demolition.

The onset of war brought radical changes. The damage due to enemy action, the deterioration due to lack of attention, and the very considerable transfer of labour to the City brought about a situation which could only be described as one of emergency. When hostilities ceased it was thought that a gradual easement would take place, that, albeit slowly, new houses would be forthcoming in sufficient numbers to make up the leeway, and that house maintenance arrears would be overtaken gradually.

Unfortunately events did not justify this optimistic outlook. The national situation was such that house building could not be undertaken on a sufficiently large scale even to cope with the annual wastage. Building labour and materials immediately after the war were scarce. The building industry was out of gear and building labour was engaged in tasks other than house building. These difficulties might gradually have been overcome but another factor obtruded, that of cost of repairs in relation to rent.

At the outset of the war rents were frozen. Those rents, it may be remembered, included an element which should have been regarded as earmarked for the purpose of repair and maintenance, and in theory at any rate, that part of the rent could be regarded as having been set aside to meet repair expenses when conditions eased to such an extent as to make repair physically possible. Unfortunately, in common with most things, building prices rose, and it is true to-day to say that the cost of house repair work is three times the 1939 figure. The deterioration of houses during the war years and immediately after was considerable and was accentuated by the lack of essential maintenance such as painting, pointing, immediate attention to leaks, etc.

The position faced by the Department was difficult. Even if in any particular case only the bare essentials were incorporated in a Notice, it was found that the cost of works was out of all proportion to that portion of the rent earmarked for repairs; it was, in fact, frequently out of all proportion to the rent as a whole. Repairs to a house on a frankly minimal scale often involved expenditure equalling many years' net rental.

Partly because of the national situation and partly because of the cost issues involved, it was not and has not since been found practicable to operate Section 9 of the Housing Act, 1936, the Section under which all works necessary to bring a house to a state of fitness may be ordered. More important than the two reasons quoted, is the stipulation in the Act that the cost shall be reasonable; this effectively bars the general application of Section 9.

The alternative procedure available under the Public Health Act, 1936, is that of requiring abatement of nuisances. This power was, and is, applied to houses where they are inspected as the result of a complaint or met with in the course of house-to-house inspection, but it is necessarily restricted to active nuisances. Even so, the works specified in a Notice confined to essentials may demand an expenditure which, to take an equitable view, is unreasonable. The reasonable cost condition mentioned in relation to Housing Act procedure does not appear in the Public Health Act, although in certain cases resisted by owners the parallel has been mentioned and urged.

Even action under the Public Health Acts gives rise to opposition in two principal directions. In the case of a house not inherently appropriate for condemnation it is urged that the requirements of the Notice should be limited to sums capable of being collected by way of rent.

Alternatively, and this applies in the case of houses which approach a standard which formerly would have justified condemnation, owners urge that it is inequitable and unreasonable to require expenditure in excess of the rent yield, and they suggest that demolition is the only remedy for the conditions found.

It will be seen therefore that the day-to-day task of the Chief Sanitary Inspector in dealing with nuisances in houses is fraught with difficulties and involves constant endeavours at persuasion, followed by enforcement where necessary.

One disturbing feature of the present situation is that, as the action now being taken has perforce to be limited to the abatement of nuisances, it is therefore not possible to order those works which may be necessary to prevent critical deterioration, or longer term general deterioration, unless existing nuisances can be proved.

In the latter part of the year sufficient has been said in Government circles by both Ministers and officers to indicate that attention is being given to this problem which is, of course, not peculiar to Birmingham. Some form of rent increase with or without various safeguards has been mooted. Alternatives have been suggested that power should be given to Local Authorities to acquire areas in the same way as those subject to the Birmingham (Central Redevelopment) Order, 1946, or to aid owners by means of loans to carry out repairs on a sufficient scale. These are questions of policy and detailed comments must therefore be withheld until such time as the precise nature of any Government action is known.

Progress has continued on the areas covered by the Birmingham (Central Redevelopment) Order, 1946. At the end of the year 29,018 dwellings had been acquired by the Corporation. Substantial progress has been made with the multi-storey flats now in course of erection on the Duddeston and Nechells area. Constant attention has been given to day-to-day and urgent repairs, and the redevelopment plan is now sufficiently far advanced to remove previous obstacles and to justify the expectation that the block repair scheme will be applied to an increasing number of houses whose expectation of life is now known fairly accurately. The very difficult conditions in privately owned houses under the shadow of vesting have been substantially eased by the year's programme, and at the end of the year only 1,056 houses remained to be vested, 41 of these being without an internal water supply.

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	...	...	...	...	...	...	10,695
Number of re-visits	...	...	...	...	...	...	26,197
Number of inspections or surveys on duties under the Housing Acts:							
Grading	...	...	...	...	...	...	27,688
Sections 11 and 12	...	...	...	...	...	...	948
Miscellaneous visits including liaison with other Departments	...	...	...	...	...	...	4,874
TOTAL	...	...	...	...	...	...	70,402

No figure can be quoted as properly representing the number of houses inspected or surveyed on duties under the Housing Acts as a continuous examination of substantial areas of doubtful property is constantly in progress ; approximately 50,000 houses were thus involved in a survey which varied from detailed individual inspection to cursory external examination.

New Houses

During the year 5,509 houses were built, 4,744 (or 86.1%) by the Corporation and 765 (or 13.9%) by private enterprise. Of these, 2,513 erected by the Corporation were non-traditional in type. In addition 9 war damaged houses were rebuilt by private enterprise and 70 additional dwellings were provided by conversions into flats, 7 by the Corporation and 63 by private enterprise.

The gross yield of new dwellings during the year was, therefore, 5,588 additional houses or flats, 4,751 (or 85.02%) being constructed by the Corporation and 837 (or 14.98%) by private enterprise.

I am indebted 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	By Private	By Corporation		Government	Total
	Enterprise	Traditional	Non-traditional	Temporary Bungalows	
1919-1929	12,775	26,203	—	—	38,978
1930	1,738	6,687	—	—	8,425
1931	1,983	3,893	—	—	5,876
1932	2,159	1,703	—	—	3,862
1933	3,028	2,029	—	—	5,057
1934	4,226	837	—	—	5,063
1935	6,265	985	—	—	7,250
1936	6,926	2,285	—	—	9,211
1937	7,662	2,643	—	—	10,305
1938	7,804	3,003	—	—	10,807
1939	5,178	1,413	—	—	6,591
1940	1,183	302	—	—	1,485
1941	181	10	—	—	191
1942	26	63	—	—	89
1943	5	35	—	—	40
1944	37	2	—	—	39
1945	25	6	—	325	356
1946	550	413	—	1,475	2,438
1947	667	826	—	1,333	2,826
1948	470	1,400	—	*1,492	3,362
1949	470	1,225	2	—	1,697
1950	671	1,478	538	—	2,687
1951	555	1,674	1,793	—	4,022
1952	765	2,231	2,513	—	5,509
	65,349	61,346	4,846	4,625	136,166

* Programme completed.

These figures relate to new houses only and do not include numbers of houses rebuilt after war damage nor flats provided by the sub-division of existing larger houses.

No applications have been dealt with by the Public Works Committee during the year under Section 4 of the Housing Act, 1949, but two applications under Sections 20-30 of the Act have been approved by the House Building Committee in respect of the payment of an Improvement Grant, subject to the approval of the Minister of Housing and Local Government.

Housing Act, 1936—Slum Clearance

Again it is pleasing to record that there has been a substantial increase in the production of new houses ; 5,509 houses were erected during 1952 as against 4,022 in 1951, an increase of 37 %. Although such an increase in the available housing accommodation within the City will inevitably have achieved an easement in the housing position, the immediate effect has not been sufficiently marked to enable slum clearance operations to be extended as they should be. During 1951 the number of official representations with a view to the making of Demolition Orders or Closing Orders was 74 ; during the current year the corresponding number was 169, bringing the total number of such representations to 954 during the period September, 1939 to December, 1952. The action taken in this direction during the year has been severely limited by the lack of suitable and available accommodation for displaced tenants and, as mentioned above, merely represents a limit of practicability in the present circumstances ; it cannot be held to be a just index of the number of houses deserving immediate demolition on urgent grounds.

The difficulty of providing other accommodation acceptable to tenants displaced from low rented slum houses is not new, nor is it likely to ease unless the general housing stringency eases to such an extent that voluntary interchanges become possible. So many factors govern the housing shortage that it is not possible to forecast with any certainty when a given number of new houses will restore normal conditions, but it seems certain that the present slum rehousing problems will continue for some years. Equally, it is certain that houses in the lowest grades will continue to deteriorate because of their age and defective construction, coupled with the effects of neglect in maintenance. Even if the almost imperative resumption of systematic slum clearance operations is postponed for a while the number of houses requiring immediate demolition is likely to increase. This is a factor beyond the control of the Authority, as has been proved by the experience of the Housing Management Committee in the Redevelopment Areas.

Broadly speaking, individual condemnations have only been recommended to the Housing Management Committee where some condition of crisis has made action inevitable, e.g., pending collapse or danger, or active and grave nuisances impossible of remedy within the powers conferred by the Public Health Acts.

It has not yet been possible to carry out the demolition of a number of houses in areas affected by slum clearance action initiated before September, 1939. On areas affected by Clearance Orders, or Housing Compulsory Purchase Orders, fully approved and capable of being operated when other accommodation becomes available, there are 119 houses still standing, 90 of them occupied. On 16 areas officially represented before the war for clearance but in respect of which proceedings were suspended at some stage short of the operable Order, there are 261 houses standing, 215 of which are still occupied. These figures do not include represented areas taken over by the Corporation under the Central Redevelopment Scheme, but the condition of the houses affected is no better and is in many cases worse than those now owned and managed by the Corporation.

The following table gives particulars of the 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	165
2. Number of dwellinghouses in respect of which Undertakings under Section 11 (3) were accepted :	
(a) Not to use for human habitation	9
(b) To carry out works to render fit for human habitation ...	1
3. Number of dwellinghouses in respect of which Demolition Orders were made	136
4. Number of houses demolished :	
(a) In pursuance of Demolition Orders	45
(b) After the making of Closing Orders	9
(c) After an undertaking not to use for human habitation had been accepted	4
(d) After representation and prior to the making of Demolition Orders	13
5. Number of dwellinghouses rendered fit for human habitation in pursuance of undertakings under Section 11 (3) ...	Nil
Undertaking not to use cancelled, on house being rendered fit for human habitation	1

Proceedings under Section 12 of the Housing Act, 1936

1. Number of parts of buildings, separate tenements or underground rooms in respect of which official representations were made	4
2. Number of parts of buildings or underground rooms in respect of which Closing Orders were made	6

Total number of houses dealt with under Sections 11 and 12 of the Housing Act, 1936 :

(a) during 1952	169
(b) from September, 1939, to December 31st, 1951	785
Total at 31st December, 1952	954

It has been possible to suspend action already embarked upon in the case of 156 houses lying within represented areas which are now in Corporation ownership, although not within the scope of the Central Redevelopment Order. Under the authority of Ministry of Health Circular 1866 of the 8th September, 1939, 13 houses remain in occupation even though officially represented and are regularly inspected to ensure that reasonable conditions are maintained.

At the close of the year, 205 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

Acquisition of the areas covered by the Birmingham Central Redevelopment Order continued in accordance with the original programme. Orders made covered 4,611 dwellinghouses, 294 shops and dwellings and 20 business premises containing dwellings, bringing the total to 29,018 dwellings acquired.

I am indebted to Mr. Allerton, the Housing Manager, for the following figures :—

The number of houses renovated during 1952	...	...	...	980
The total number of houses renovated up to December 31st, 1952				6,180
The number of houses at which renovation was in progress at December 31st, 1952	...	...	...	525
The number of houses in respect of which repair schedules or contracts were prepared or were in course of preparation at December 31st, 1952	...	...	...	125
The average cost of renovation per house during 1952	...	...	...	£180
The average number of initial tenants' complaints per week during 1952	...	...	...	1,600

The houses covered by the recent acquisitions were in need of a considerable amount of attention and, together with the houses already in management, required a considerable expenditure of time and labour in connection with mere day-to-day repair. Notifications of disrepair were passed to the Housing Management Department by the Chief Housing Inspector in 7,165 instances, each of these notifications being in respect of items which would, had the house been in private ownership, have properly been the subject of a Notice served upon the owner ; 6,820 such notifications were complied with during 1952, leaving 3,567 outstanding at the end of the year.

These intimations did not cover all complaints made, as many were in respect of items which could not be rectified immediately ; some complaints were frankly made with a view to supporting applications for other accommodation. Each complaint as received is investigated immediately and examined as to merit ; the resultant intimation of the necessary works is only approved after due consideration of other factors which may have an effect, e.g., short potential life or knowledge that block repair operations are about to commence.

Separate internal water supplies were installed in 381 houses ; at the end of the year there were 1,077 houses without that service, 41 of these being not yet vested. In general, water supplies are to be installed in all houses unlikely to be demolished within the near future. Demolitions for redevelopment purposes can be forecast accurately but it is not possible accurately to assess the life of those houses which may, because of extreme deterioration, have to be demolished within a few years. Additional w.c's were provided in six cases. Excepting in the short lived houses it is proposed to continue this operation until there are not more than two houses to any one w.c., although there are cases where lack of space in congested courtyards makes even this improvement impossible. On the five areas 240 houses were demolished during the year. These were in two principal groups ; those so badly deteriorated as to be beyond practicable repair, and those which lie on sites required for development at an early date. At the end of the year the number demolished since the inception of the scheme totalled 1,470 while 304 houses vacated during the year remained void pending demolition, at the 31st December.

General housing conditions within the City profoundly affect redevelopment operations within the area boundaries. Although in due time the new dwellings erected on the redevelopment areas will house a substantial number of tenants, there must be a stage prior to the erection of such dwellings during which disturbed tenants must be accommodated elsewhere. From this it will be seen that any difficulties in re-housing such tenants may well be reflected in a slowing down of essential clearance operations, whilst the problem of day-to-day maintenance of houses known to be earmarked for demolition immediately following vacation bristles with difficulties.

The systematic repair scheme continued at a somewhat slower rate, but the total number now subject to that process is sufficiently substantial to enable the benefits of that scheme to be assessed. Although the works carried out are frankly palliative, and although most of the houses affected are inherently defective, the improvement in conditions of life of the tenants in the houses affected amply justifies the expenditure incurred. As will be seen from the Housing Manager's figures above, the average cost of renovation per house during the year was £180. This expenditure has made possible the retention of otherwise comparatively worthless houses until such time as replacement houses can be built.

Included in the redevelopment areas are a number of clearance areas represented as unfit for human habitation prior to the war. These were too extensive to allow for immediate demolition, and they were not, in all cases, conveniently situated for demolition under the redevelopment plan. Consequently they have had to be dealt with in the same way as have the other houses in the areas and the following figures show the position at December 31st, 1952.

<i>Redevelopment Area</i>						<i>Represented Houses</i>	
						<i>Standing</i>	<i>Occupied</i>
Duddeston and Nechells	...	...	...	...	...	1,034	954
Summer Lane	...	...	...	...	...	115	92
Ladywood	...	...	...	...	...	353	321
Bath Row	...	...	...	...	...	—	—
Gooch Street	...	...	...	...	...	894	837
						<hr/> 2,396	<hr/> 2,204

All these houses are in Corporation management.

Overcrowding

During the year there was no diminution in the rate at which applications for special consideration flowed into the Department, this despite the substantial increase in the number of allocations made by the Housing Management Department. Steps taken during the year may, however, have an effect on this in the near future as the Housing Management Committee have formulated a new points scheme which it is hoped will accurately reflect all conditions which should be taken into account in granting accommodation. The Housing Manager has kindly supplied the following figures :—

Total number of dwellings available for letting from January 1st—

December 31st, 1952 :

New properties	...	...	...	...	...	...	4,662
Various properties acquired	...	...	...	...	...	...	5
Relets	...	...	...	...	...	...	771
Redevelopment Areas relets	...	...	...	...	...	...	169
							<hr/> 5,607

Total number of families rehoused during 1952 6,816

Number of weekly properties in rent at 31st December, 1952 (ex-

cluding Redevelopment Areas) 71,091

In 460 rehousing cases the Housing Management Department referred to the Public Health Department particulars of applicants living in overcrowded or undesirably sub-let houses. Of these, 311 were found to be overcrowded according to the limited standard of the Housing Act, 1936. Of the total number of cases, 129 were from Housing Management Department property, and 331 were from privately owned houses, involving in all 1,013 adults and 861 children, a total of 1,874 persons at an average of 4.1 persons per family rehoused.

Of the 311 houses found to be overcrowded when allocation was made, 86 continued to be overcrowded when the selected family had been transferred, in some cases by the tenant family, in others by the 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 principal occupier and, later, visits were made periodically to prevent further contravention. Some extremely grave cases were reported, many in which overcrowding was further accentuated by disease or disability.

As required by the Housing Act, certificates giving "permitted numbers" were supplied—894 to owners of privately owned houses, 5,207 to the City Estates Officer, and 5,013 to the Housing Management Department, a total of 11,114. These certificates involved measurement of rooms, or a check of existing records in each case.

The medical or technical staff, separately or jointly as appropriate, investigated the circumstances of 1,465 families who applied for priority on grounds of illness, overcrowding, sanitary or structural defects. Applications were received through every possible channel; direct from the tenant to the Public Health Department, through the Estates or Housing Management Departments, from Members of Parliament or Members of the City Council, and from every type of voluntary association. Those involving considerations of health or disability often came from general medical practitioners or hospitals, whilst the Department's own visitors and inspectors referred all cases discovered by them which appeared to merit an opinion on medical issues.

In 287 cases recommendations were made for consideration to be given to priority rehousing and in 280 other cases information was passed to the Housing Management Department for use in the allocation of points. It was not possible in the remaining cases for any recommendations to be made.

The re-housing of the tuberculous has been referred to elsewhere.

A new points scheme for the allocation of Corporation houses which comes into operation in January, 1953, enables a measure of priority to be given to families who need special consideration on grounds of ill-health. This is in addition to an award of points based on unsatisfactory housing circumstances.

In 1952 much preliminary work in connection with this new scheme was undertaken, and will be reported next year.

SANITARY INSPECTION

The health of the people is in no small way affected by the conditions under which they live and work. The duties of a sanitary inspector are largely concerned with these conditions, and take him into the homes, and places of work, refreshment and entertainment. The work of the inspector is in consequence full of interest and variety.

During the year the ten district inspectors, assisted by their staffs, which have averaged a total of forty inspectors throughout the year, have made 162,151 visits, classified as under :—

	Percentage
House inspections (128,744)	79·4
Inspections of food premises (10,602)	6·5
Visits <i>re</i> infectious diseases (762)	0·5
Other successful visits (14,414)	8·9
Inspections of milk shops (3,655)	2·3
Visits to school premises (189)	0·1
Visits to second-hand dealers (27)	0·02
Inspections of outworkers' premises (955)	0·6
Inspections of tents, vans and sheds (143)	0·09
Inspections of stables, pigstys, etc. (1,292)	0·8
Inspections of tips (345)	0·21
Visits to burials, exhumations (79)	0·04
Inspection of pleasure fairs and circuses (77)	0·04
Visits <i>re</i> water sampling (500)	0·3
Visits <i>re</i> taking of rag flock samples (367)	0·2
	<hr/>
	100·00
	<hr/>

Repairs to Houses

It will be observed that visits to houses account for 79·4% of the total visits made. Since the outbreak of war in 1939 until mid 1951 inspections of dwellinghouses were normally only made following the receipt of a complaint from some interested party. Complaints were received in the Department in large numbers and for some years sorely taxed the resources of the limited staff of inspectors. As the position with respect to building materials and labour eased, owners were more able to carry out repairs on receipt of complaints from their tenants; indeed many owners embarked on programmes of maintenance to catch up with the arrears. The number of complaints to the Department fell in 1949 and 1950, and by June, 1951 the Department was in a position to commence its programme of routine house to house inspection for the detection of nuisances within the meaning of Section 92 of the Public Health Act, 1936.

Section 92 of the Public Health Act, 1936

The policy of the Committee is for the worst known houses to be inspected first. At the outset it was anticipated that many difficulties would be encountered and experience has confirmed that view.

The first difficulty to be overcome was the natural reluctance of owners to spend money on property which they considered valueless, and which they were prepared to have demolished if only the Corporation would rehouse the tenants. This the Corporation is unable to do in the majority of cases.

Secondly, the work which could be required by notice to abate nuisances, such as leaking roofs, spoutings, broken sashcords, floorboards, door frames, cracked and leaking sinks, drains, etc., though expensive enough in itself, was limited, and even when carried out there could be no guarantee that further defects would not occur which would give rise to nuisance. The Public Health Act, 1936, does not give power to anticipate a nuisance and, therefore, works of maintenance cannot be required unless a nuisance exists.

Thirdly, an owner of a block of some 18 to 20 houses would receive notices, affecting in most cases every house, and bills for work on the block in such cases frequently exceeded £500. Some of this work the owner would claim to be the aftermath of war damage, but even so, the Department would press for early compliance knowing full well that the last bomb fell in Birmingham some nine years ago. Often a bill will absorb the entire rent yield of the property for at least three years, leaving the owner to find money for future day to day repairs out of his own funds. These, and many other serious difficulties, have to be overcome as they arise. The Health Committee has given sympathetic consideration in individual cases and, as a matter of policy, readily agree to comply with the requirements of notices served when requested to do so by an owner. When the work has been done and the cost is known, the repayment by the owner to the Committee can be spread over an approved period. Interest is charged on the loan, but no establishment charges are added. This long-sighted policy has done much to assist in the improvement in living conditions for tenants and has enabled the houses to remain available for habitation for a further period. In the course of inspection it is sometimes found that a house is so totally unfit for habitation that extensive repairs are out of the question, and it is necessary for such houses to be represented as unfit and for the tenants to be rehoused.

Tenants who have had work carried out at their houses, following routine inspection and action by this Department, now realise the value of a sanitary inspector's visit, and are quick to complain to the Department in the event of fresh defects arising.

As a result of the year's work by the inspectors, 15,333 statutory notices were served on owners of houses in private ownership. Of these, 13,291 were served under Section 93 of the Public Health Act, 1936, 4,791 or 36·04% of them being served as a result of routine house to house inspection, as opposed to inspections after receipt of complaint.

These notices vary considerably in their requirements, from minor items such as stopped up sink waste pipes and drains to the virtual re-conditioning of a neglected property, including the provision of, perhaps, a piped water supply and a new drainage system.

The total number of notices is made up as follows :—

Nuisances—mainly leaking roofs, spoutings, fallen plaster, sash-cords, floorboards—dealt with under Section 93 of the Public Health Act, 1936	13,291
Stopped up drains, soil pipes, w.c.'s, etc.—dealt with under Birmingham Corporation Act, 1946	1,180
Urgent nuisances—badly leaking roofs, broken w.c. pedestals, etc.—dealt with under Birmingham Corporation Act, 1948 ...	510
Provision or improvement of piped water supply—Section 138 Public Health Act, 1936, as amended by Section 30, Water Act, 1945	108
Yard paving and drainage—Section 56, Public Health Act, 1936	61
Byelaw infringements	56
Unsatisfactory drainage—Section 39, Public Health Act, 1936 ...	51
Verminous or filthy premises—Section 83, Public Health Act, 1936	45
Additional water closets—Section 44, Public Health Act, 1936 ...	23
Conversion of closets—Section 47, Public Health Act, 1936 ...	8
TOTAL	15,333

Included in the work required by these notices were :—

Repairs to :

Roofs	6,601
Wall and ceiling plaster in rooms	14,739
Eaves gutters and down spouts	5,775
Windows, sashcords, etc.	9,701

95% of the notices served were complied with, the remainder, comprising notices cancelled for such reasons as :—

- (a) Change of ownership due to death of owner or sale of property ; or
- (b) Because the property was demolished.

Over the year the average time taken from service of a notice under Section 93 of the Public Health Act, 1936, to completion of the work, was two months and nineteen days.

To enforce the requirements of these notices for the abatement of nuisances it was found necessary to serve 597 summonses (representing 4·5% of the total of notices served) resulting in 123 Magistrates' Orders. In 33 cases, affecting 61 houses, it was necessary to execute the work at the default of the owners and to recover the costs.

The statistics concerning summonses taken out during 1952 are :—

General nuisances	...	...	...	...	...	...	...	597
Houses let in lodgings (1 penalty)	...	...	...	...	...	...	...	3
Contraventions of Shops Act	...	...	...	...	...	...	...	4
Smoke and atmospheric pollution	...	...	...	...	...	...	...	4
Dogs fouling footpath	...	...	...	...	...	...	...	1
Food and Drugs Act, 1938	...	...	...	...	...	...	...	7
Filthy premises	...	...	...	...	...	...	...	1
City of Birmingham Nuisance Byelaws (pig keeping)	...	...	...	...	...	...	...	1
								<hr/> 618 <hr/>

Total amount of fines imposed :—

						£	s.	d.
Contraventions of Shops Act (4)	...	...	...	...	...	5	0	0
Smoke and atmospheric pollution (4)	...	...	...	...	...	16	0	0
Dogs fouling footpath (1)	...	...	...	...	...	1	0	0
Contraventions of Houses let in Lodgings Byelaws (1)	...	...	...	...	...	2	0	0
Food and Drugs Act, 1938 (7)	...	...	...	...	...	35	0	0
Filthy premises (1)	...	...	...	...	...	3	0	0
City of Birmingham Nuisance Byelaws (1)	...	...	...	...	...	5	0	0
						<hr/> £67	<hr/> 0	<hr/> 0 <hr/>

Enforcement Section

During this year 140 specifications have been prepared, the total cost of works involved being £6,394 13s. 7d.

121 specifications were prepared to abate nuisances at houses, at a total cost of £5,330 17s. 6d.

The works executed in accordance with the specifications have been carried out by competitive tender in 3 cases, and in 137 cases on a daywork basis of labour and materials plus costs in accordance with the National Schedule of Daywork Charges. This method of securing the execution of works has again proved satisfactory and ensures that essential repairs to property can be carried out without those delays which necessarily occur after tenders are invited, and in arranging preparation of the required legal documents and the affixing of the Corporation seal.

Where the estimated cost of works exceeded £250, competitive tenders were invited from reputable builders on the Department's approved list of building contractors, in accordance with the Standing Orders and Instructions to Committees and has resulted in keen and fair prices being obtained. In exceptional circumstances such works have been carried out on a daywork basis, the building contractor concerned being required to enter into formal contract with the Corporation.

Work has been carried out on 61 houses at the default of the owners, and on 210 houses at the request of the owners.

					<i>No. of Houses dealt with</i>		<i>Cost</i>		
					<i>at default</i>		£	s.	d.
1951	...	...	...	...	63		753	15	1
1952	...	...	...	...	61		583	17	8

					<i>No. of Houses dealt with</i>		<i>Cost</i>		
					<i>at request</i>		£	s.	d.
1951	...	...	...	...	110		2,184	3	1
1952	...	...	...	...	210		4,746	9	10

Works for the improvement and installation of water supplies, drainage, water closet construction and conversions, paving of yards, courts and passages, and to bring houses let in lodgings up to Byelaw standard have also been carried out, both at request and at default of the owners concerned.

The provisions of Section 275 of the Public Health Act, 1936, permit local authorities to execute work by agreement on behalf of owners and, during the year, both 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 over a period 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 individual merits.

An interest charge of 3% is made where repayments are spread over a period of 1-5 years and a charge of 4% is made where repayments are spread over a period not exceeding 15 years.

In 64 cases owners, in requesting the Department to carry out works on their behalf, have indicated that they desire to make repayment of the expenses incurred by instalments. During the year 22 instalment orders for the recovery of expenses were prepared by the Town Clerk.

Agreements for recovery of expenses were made in 19 cases and the collection of rents of properties in recovering expenses was undertaken in 7 instances.

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. General nuisances, repairs to defective houses:</i>								
At default of owners	...	...	...	33	61	583	17	8
At request of owners	...	...	...	88	210	4,746	9	10
<i>Section 56, Public Health Act, 1936. Paving of courts, yards and passages:</i>								
At request of owners	...	...	...	1	2	1	10	0

			Jobs	Houses	Cost		
					£	s.	d.
<i>Section 39, Public Health Act, 1936. Drainage works :</i>							
At default of owners	...	...	2	7	10	14	2
At request of owners	...	...	3	10	170	11	5
<i>Section 44, Public Health Act, 1936. Construction of additional water closets and rebuilding of existing water closets :</i>							
At request of owners	...	...	2	9	60	0	0
<i>Section 47, Public Health Act, 1936. Replacement of existing privy midden by water closet :</i>							
At request of owners	...	...	1	2	58	11	5
<i>Houses provided with internal water supply :</i>							
At default of owners	...	...	1	1	24	11	4
At request of owners	...	...	1	4	108	8	5
<i>Houses already having internal water supply, but where supply was insufficient—improvement effected :</i>							
At default of owners	...	...	3	38	326	6	11
At request of owners	...	...	2	17	198	1	9
<i>Houses let in Lodgings Byelaws :</i>							
On behalf of owners	...	...	2	2	85	7	6
<i>Prevention of Damage by Pests Act, 1949.</i>							
At default of owners	...	...	1	10	20	3	2

Urgent Nuisances

1. BIRMINGHAM CORPORATION ACT, 1946—SECTION 59

This section continues to prove of great value to the Department in effecting the prompt execution of works necessary to unstop drains, w.c's and soil pipes.

The average time taken for the completion of notices served under this section is less than five days.

Total number of notices served during 1952	...	...	...	1,224
Work carried out by owners in the time specified	...	...	...	879
Orders given by Corporation to builders to carry out the necessary work	...	...	...	345
Cost of work carried out by Department's contractors	...	...	...	£856 4 8

The smallest job cost 7s. 0d. and the largest £24 11s. 10d., the average being £2 9s. 7d.

2. BIRMINGHAM CORPORATION ACT, 1948—SECTION 32

Section 32 gives power to the local authority to serve a notice on an owner informing him that unless he gives written notice of his intention to do the work necessary to abate an urgent nuisance, the Corporation

will exercise its powers under that section to do the work after nine days have elapsed. This section is extremely useful in securing the early execution of works to houses affected by gales, or where there is other serious nuisance to the occupiers caused by structural defects in the dwellinghouse.

Total number of notices served during 1952	...	...	...	452
Work carried out by owners in the time specified	...	...	...	331
Orders given by Corporation to builders to carry out the necessary work	...	...	...	121
Cost of work carried out by Department's contractors	...	...	...	£809 3 7

The smallest job undertaken under the provisions of this section cost £1 13s. 6d., the highest £125 16s. 6d. and the average cost was £6 13s. 9d.

Rent Restrictions Acts

As and when either of the two Rent Tribunals which were set up to deal with cases in this City, make decisions concerning rents of properties, official notifications are forwarded to the Chief Sanitary Inspector, who acts as Local Registrar for the purposes of the above Acts. This duty involves the keeping of two registers, viz. :—

(A) The Furnished Houses (Rent Control) Act, 1946.

(B) The Landlord and Tenant (Rent Control) Act, 1949.

During 1952, a total of 415 notifications was received, resulting in the recording of 378 entries in Register "A" as well as 37 entries in Register "B." These two registers are available for inspection by the general public, and on 38 occasions they were produced for this purpose. As a result, 18 certified copies of entry were issued on payment of the sum of one shilling in each case.

The above enactments also provide for the issue of Certificates of Disrepair and Clearance Certificates, a payment of one shilling must be made to the Local Authority in each case where an inspection is requested under the Acts.

A total of 91 applications for certificates was received, involving a similar number of inspections by the sanitary inspectors throughout the year. It will be seen from the following information that an inspection does not always warrant the issue of a certificate :—

Number of applications and subsequent inspections	...	...	91
Number of Certificates of Disrepair issued	...	...	64
Number of Clearance Certificates issued	...	...	14
Number of Disrepair Certificates "not warranted"	...	...	9
Number of Clearance Certificates "not warranted"	...	...	4

The above figures show a gradual decrease compared with those for 1951, when 107 applications were received, resulting in 73 Disrepair and 22 Clearance Certificates being issued.

A marked decrease has also been noted in the number of enquiries received from tenants seeking the advice of the Department in connection with the provisions of the Acts. Appropriate advice relevant to the case in question was given in each instance on request.

Houses Let-in-Lodgings

Certain houses which are let off in rooms to two or more families become houses let-in-lodgings within the meaning of the Byelaws and must be registered with the Department. There were 296 such houses on this Department's register in 1952 with a total of 2,191 rooms let off and occupied by 3,509 persons. Of this accommodation 851 lets were of one room only, while 560 lets were of two or more rooms.

The demand for accommodation of this type does not appear to abate, and many workers, often of other nationalities, attracted to work in this City, find this the only accommodation wherein to establish a home. Even so there is a reduction of 18 in the number of registered houses let-in-lodgings compared with the figure for the previous year.

Sanitary inspectors made a total of 1,621 visits to houses let-in-lodgings to ensure that adequate facilities for cooking, washing, food storage, etc., were maintained, and in 95 cases it was necessary to serve notices and in 3 cases to take proceedings under the City Byelaws in respect of houses let-in-lodgings to achieve satisfactory conditions.

In two instances a request by the landlord was made for the Department to comply with the requirements of notices served under the Byelaws and to submit an account on completion, but it was found that the Housing Act, 1936, made no provision for the local authority to do work on request in this type of case, and consequently no charge could be registered on the property. It was, therefore, necessary to adhere to the default procedure laid down in Section 7 of the Act before the work could be commenced.

Number of houses registered ...	...	...	...	...	...	296
Number of rooms for letting ...	...	...	...	...	...	2,191
Number of lets of single rooms ...	...	...	...	...	...	851
Number of lets of two or more rooms ...	...	...	...	...	...	560
Total accommodation ...	...	...	...	...	...	3,509
Number of visits made during the year ...	...	...	...	...	...	674
Number of re-visits made during the year ...	...	...	...	...	...	947

Common Lodging Houses

In accordance with the provisions of Section 237 of the Public Health Act, 1936, it is the duty of every local authority to maintain a register of all established common lodging houses within their district. Such registers must contain entries which detail the full name and addresses of all persons registered as "keepers" and similar information regarding any persons who are to act as "deputy keepers." In addition, information must be recorded as to the situation of every such lodging house, including the maximum number of persons authorised to be accommodated therein.

At the beginning of the year 13 lodging-houses for men and one for women were registered in the City, providing accommodation for 772 males and 46 females. In May one of the smaller lodging-houses for males closed down, reducing the total male accommodation in the City by 26 to 746.

Byelaws made under the above Act are framed to secure proper management and control of these houses, and Section 241 (2) of the Act requires either the keeper or the deputy keeper so registered to be on the premises continuously between the hours of nine o'clock in the evening and six o'clock in the morning of the following day.

Routine visits of inspection, at not less than monthly intervals, are carried out both by day and by night ; 270 such visits were made, comprising 124 during day-time and 122 by night-time and 24 special visits. These inspections revealed only minor contraventions of the Byelaws which were brought to the attention of the keeper at the time of visit. In all cases a letter of confirmation was sent by the Department to the registered keeper and relevant contraventions received satisfactory attention. It was not necessary to serve formal notice in any case during the year.

Number of houses on register—men only	...	...	...	...	12
Number of houses on register—women only	...	...	...	...	1
Number of male lodgers allowed	...	...	...	...	746
Number of female lodgers allowed	...	...	...	...	46
Number of day-time visits	...	...	...	...	124
Number of night visits	...	...	...	...	122
Number of special visits	...	...	...	...	24

Uncommon Nuisances

The investigation and abatement of nuisances forms a great part of the work of the Sanitary Inspector, and procedure is governed by the provisions of the Public Health Acts and associated Byelaws. Investigations cover a wide field of activity in the everyday life of the Inspector and may vary in character from the renewal of a broken sashcord to the presence of offensive smells arising from a pig-sty.

It is interesting to note, however, that on occasions the Inspector is requested to assist in dealing with Nuisances of a somewhat rare and unique character and for which in some cases, he is not in possession of statutory powers to secure their abatement. To illustrate this, a complaint was made to the Department by the tenant of a ground floor flat as to a nuisance arising from the actions of a tenant on the first floor above. It was alleged that the upstairs flat dweller shook mats and carpets from a window to the detriment of the health of those residing below.

Another person complained that a certain thoroughfare, in a quiet and residential district, was used by residents in the neighbourhood for the exercising of their dogs late at night. It was alleged that the condition of the footway in the morning was not only dangerous but inimical to health. Another complaint referred to the dense growth of weed and the ill-kept appearance of an adjoining private back garden, and in another instance, a large tree was thought to be diseased and in danger of collapse.

The investigation of all these complaints demanded the utmost tact and discretion on the part of the Inspectors concerned.

During the first week of July the attention of the Department was drawn to a serious nuisance, which necessitated much effort on the part of Senior Inspectors for the remainder of the year. Numerous complaints were received of strong and offensive smells emanating from a disused canal which passes through a Corporation Housing Estate. The majority of complaints originated from tenants of municipal houses, the back gardens of which abutted on the waterway. The section of canal in question is approximately 1,400 yards in length and 410 houses are situated in the immediate vicinity.

Prompt investigation proved the complaints to be fully justified and immediate contact with the Docks and Inland Waterways Executive was made, the Executive being responsible for the maintenance of the canal. The smells were obviously due to stagnant water and rank and rotting vegetation. Initial action was taken by the staff of the Disinfecting Station who treated some 450 yards of the canal surface with chloride of lime; a charge for this work was made to the Executive. This was an emergency measure only, to alleviate the smell as much as possible in view of the very hot weather prevailing at the time.

Joint inspections carried out between representatives of the Department and the Docks and Inland Waterways Executive revealed that indiscriminate tipping into the canal had been taking place over a lengthy period. Waste material thrown into the water consisted of empty paint tins and drums, bedsteads, bicycle frames, builders' refuse, mattresses, timber, etc. This refuse had prevented the free circulation of water, allowing a dense and prolific growth of weed to take place.

To abate and prevent a recurrence of this nuisance the Docks and Inland Waterways Executive were requested to undertake cleansing operations which would obviously take several months to complete. Tipping had brought about a silting up of the canal which denied the use of a small boat from which chain scythes could be operated. Cleansing work was in fact carried out by men wearing thigh waders and using hand scythes.

The assistance of the Chief Constable was sought by the Department to endeavour to prevent unauthorised persons gaining access to the tow-path. The Housing Manager co-operated in sending a circular letter to all occupiers of municipal houses concerned, requesting them, in the interests of their own health, to prevent the canal being used as a dumping ground.

The canal was kept under constant observation during the latter half of the year and numerous inspections were made by the Department to observe progress made in cleansing operations. At the end of the year work was still proceeding, although rapidly nearing completion.

Removal of Human Remains

In September last, work commenced on what was originally a burial ground of St. Mary's Church. This site is required in connection with the extension of a Hospital.

The work was carried out under the supervision of the Public Works Department, but certain aspects of the work were made the responsibility of the Public Health Department. A District Sanitary Inspector was in daily attendance and supervised the boxing, recording and removal of all human remains found.

The area of work was approximately 6,800 sq. yds. and the soil was excavated to a depth of nine feet. More than half a million cubic feet of soil has been turned over and the remains of 2,497 persons have been boxed and re-interred at Warstone Lane Cemetery.

There was no evidence or indication of any sort as to identity, and the number of skulls determined the number of remains in each box. Removals took place at 7 o'clock in the morning.

One interesting event occurred recalling "Old Birmingham." On the 17th December, digging exposed the base of a monument with the following inscription :—

" In memory of the following persons who were killed in an explosion at the Percussion Factory, Whittall Street, Birmingham, on the 27th September, 1859."

Fifteen names followed. At the side of the slab four more names were recorded of females killed in the same explosion but buried elsewhere. All the dead were females and many were as young as 11, 12 and 14 years.

The brick vault had collapsed and few remains were found, due, it is conjectured, to a bomb dropped between 1939-45, the crater and part of the vault being filled with miscellaneous debris.

All human remains had been removed from the site by early February, 1953.

THE 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

The construction of the new Claerwen Dam at the Head Works in Wales was completed during the year, and the reservoir was formally inaugurated by Her Majesty Queen Elizabeth II, accompanied by His

Royal Highness the Duke of Edinburgh, on the 23rd October, 1952. The additional new storage of 10,625 million gallons provided by this dam has increased the total capacity of the impounding reservoirs to 21,800 million gallons which, as far as raw water storage is concerned, is sufficient to meet an anticipated eventual maximum demand of 75 million gallons per day.

Aqueduct

The laying of instalments of 60" concrete lined steel pipes on the siphon sections of the Elan Aqueduct has proceeded. A length of 4.6 miles from the inlet of the Severn Siphon to Sturt has been completed and taken into commission, whilst work on the next section of 2.3 miles on this siphon, to Seckley Wood, is nearing completion. On Downton Siphon a further length of approximately 1 mile from Woodhouse to Stanage has been completed and brought into use. Good progress has been made in laying pipes on the half-mile-long Wye Siphon.

Reconditioning of one of the two original 42" cast iron mains on the Teme Siphon was completed in the early part of the year and led to a satisfactory increase in its carrying capacity. Similar work on the second main of this siphon is nearing completion.

Frankley

At the Frankley Works steady progress has been made in the construction of a battery of eight rapid gravity filters which, when completed, will have a combined maximum capacity of 16 million gallons per day.

Area of Supply

The laying of the undermentioned lengths of concrete lined cast iron and steel trunk mains which are required to improve supplies in the Department's area has proceeded :—

<i>Diameter</i>	<i>Zone</i>	<i>Locality</i>	<i>Length Miles</i>
36"	Northfield	Rednal Road to Wharf Road, King's Norton	1.5
15"	Warley	City Road to Meadow Road	1.4
60"	Middle	Whitehill to Selly Oak	1.3
24"	Hagley Road	Rotton Park Road to Wellington Street	1.7
18"	Middle and Low	Stratford Road to Coventry Road	2.3
24"	Warley	Scotland Lane to Woodgate Lane, Bartley Green	1.0

The whole of the four first-mentioned lengths and 1.7 miles of the Middle and Low Level main were completed and taken into commission during the year. The 24" Warley Level main was approximately 50% completed.

Local Works—Whitacre

Ministerial sanction has now been given for the implementation of a scheme for reconstruction of the Whitacre works to increase their capacity sufficiently to enable a supply in bulk up to a maximum of 2½ million gallons per day to be afforded to the Borough of Nuneaton. The present output of the works, which is barely sufficient at times to fulfil the long standing agreement to afford a bulk supply to Coventry, is restricted by both the capacity of the existing plant, etc., and by the amount of raw water which can be abstracted from the River Bourne. The new scheme is designed to take water from the River Blythe, and includes the installation of modern methods of filtration and treatment, new pumping plant, etc., together with the laying of various mains.

General

All water distributed has been treated with chlorine generally at a rate of 0·3 parts per million.

Seagulls, at times in considerable numbers, made frequent visits to Bartley Reservoir over a prolonged period during the winter months of 1951–52. The visitation of these birds was undoubtedly responsible for the high degree of contamination revealed in the reservoir water samples during the month of January and the early part of February, 1952. The contamination was, however, effectively dealt with by filtration and chlorination.

The water distributed in the City area was almost wholly the soft moorland water of the Elan Supply. It was, however, necessary for about 3 weeks in July during a period of very high consumption, to draw on the local Short Heath Well in order to assist in maintaining pressures in part of the distribution system, which is still working to full capacity even under normal conditions of draught.

At all times throughout the year, water supplies have been satisfactory from the point of view of quality and quantity.

ROUTINE SAMPLING OF CORPORATION WATER

The arrangements in operation during 1951* were continued without substantial alteration during 1952 and the following is a summary of the reports upon the water samples obtained from various points throughout the supply systems.

Elan Valley Supply

Eleven samples at approximately monthly intervals from the River Claerwen above Rhiwnant were taken as a check upon possible pollution arising in connection with the building of the Claerwen Dam. The samples taken in April, July and August contained more than 240 B.Coli Type 1 per 100 m.l., but as a result of retention of the water in Caban

* For description see Annual Report, 1951

Reservoir and its dilution by water from the Elan reservoirs, coupled with filtration and chlorination before entering the Aqueduct, this had no significant effect upon the purity of the water samples taken at about the same time from a point half way along the Aqueduct at Ludlow. The remaining 8 samples contained on an average only 14 B.Coli Type 1 per 100 m.l.

Seven samples from springs and streams on the Elan Estate were of great purity. Two others showed some faecal contamination, probably from animals.

Nineteen samples from the Aqueduct at Ludlow contained a very few B.Coli on only 4 occasions and the average number of organisms per one m.l. was only 4. On reaching the Frankley end of the aqueduct the water is sampled weekly, traces of B.Coli being found on only 5 occasions. Only once were more than 27 organisms per m.l. found in these 52 samples.

After storage in Frankley and Bartley reservoirs the water passes into the works for purification. Weekly samples taken from valve chamber No. 1, which are representative of the Bartley raw water only, showed heavy faecal contamination during January and early February and again during December. These adverse results occurred at times when gulls were frequenting the reservoir. On 14 other occasions B.Coli was present in mere traces.

Fifty-three samples were taken during the year from filters in commission. On only 2 occasions were traces of B.Coli detected in the water after slow sand filtration. These were during the period when the water to be filtered contained at least 240 B.Coli Type 1. Only twice did the filtrate contain more than 10 organisms per m.l.

Weekly samples of chlorinated and filtered water leaving the Frankley works before passing into the distribution system did not on any occasion contain B.Coli and never were there more than a total of 9 organisms per 1 m.l.

Apart from some slight contamination which occurred in Hagley Road and Edgbaston Reservoirs, 125 samples from the covered reservoirs showed that the high degree of purity of the Welsh water had been maintained, and 62 samples drawn from taps throughout the City on the 3 levels of supply never contained B.Coli Type 1, and rarely had as many as 10 organisms per 1 m.l.

Whitacre Supply

Weekly samples of the polluted River Bourne usually contained 5,000-6,000 organisms per 1 m.l., though much higher counts were recorded. 24,000 or more B.Coli Type 1 per 100 m.l. were present on 26 occasions. Samples usually gave the worst results when the river was in flood.

Weekly samples from the River Blythe, which it is also contemplated using as a source of supply, were heavily contaminated too, but far less than the samples from the River Bourne.

Reports upon weekly samples from Shustoke lower reservoir demonstrated the great degree of purification attained by allowing the water to stand in the reservoir. 240 B.Coli Type 1 per 100 m.l. were recorded on 11 occasions and all but three of these were during the winter-time. Apart from these high readings the average B.Coli content was 8 per 100 m.l. There was similar reduction in the total organisms.

On passing through the slow sand filters coliform organisms were virtually eliminated and the total organisms present were reduced to an average of 30 per 1 m.l. with extremes of 3 and 136. On chlorination a further reduction in organisms took place. B.Coli was invariably absent in each weekly sample and the average number of organisms per 1 m.l. was 21 with extremes of 2 and 74.

Wells

SHORT HEATH WELL was used for supply between 3rd July and 27th July.

Fortnightly samples were taken from this source. On most occasions the raw and chlorinated water were almost sterile. B.Coli Type 1 was never found.

LONGBRIDGE WELL. Fortnightly samples of raw and of chlorinated water were virtually sterile. No B.Coli Type 1 was detected in any sample.

Chemical Analysis of Water Samples

141 samples were taken from many of the above mentioned situations during the year. The reports did not differ significantly from those obtained in 1951 and set out in the Annual Report for that year.

Private Wells

At the close of the year there were twenty wells and two springs known to the Department serving a total of 36 houses and 4 temporary dwellings. The numbers are a reduction on last year and will be further reduced as a result of the rehousing of the tenants of houses to be demolished in connection with the development of housing estates in 1953. It is possible that water mains will be made available to others during the coming year.

97 bacteriological and 38 chemical samples have been taken in connection with a survey carried out during the year. Works of improvement have been carried out to two wells with good effect.

Industrial Premises and Institutions

58 bacteriological and 52 chemical samples were taken from 32 of the industrial wells in the City.

A total of 130 premises are known to use water from bore holes within the City made up as follows :—

Breweries and Mineral Water Manufacturers, using well water for all purposes	...	...	...	...	...	...	...	10
Hotels and blocks of flats using well water for all purposes	...							3
Hospitals using well water	...	...	...	...	...	...		2
Industrial premises using well water for all purposes	...	...						19
Industrial premises using well water for industrial purposes only								96
								<hr/> 130 <hr/>

Provision of Piped Water Supply within Dwellinghouses

At the close of 1951 there were 2,373 houses in the City known to the Department which did not have a separate piped supply of water within the house. By the end of 1952 this number was reduced to 1,937.

Those installed during the year were made up as follows :—

By private owners after service of notice	...	...	...	...	...	...	...	49
By tenants	...	...	...	...	...	...	...	5
By the Corporation in vested houses	...	...	...	...	...	...	...	381
								<hr/> 435 <hr/>

A few more houses were found during the year not to have a separate supply within the house, but this number was counter-balanced by those demolished which did not have a separate supply. A further 14 occupiers did not wish to have sinks and water brought into the house.

The number of houses in the City known still to be without a separate internal supply of water is made up as follows :—

Those having suitable life (<i>i.e.</i> , not less than five years) and which were awaiting service of notices	...	...	...	...	...	...	...	37
Those where notices had been served and were outstanding	...							16
Those where the life of the property was considered insufficient to justify the cost of the provision of a separate water supply	...							111
Those at present supplied by wells and usually situated some distance from the nearest main supply	...	...	...					37
Those where, through limitation of space within the livingrooms or for other reasons, it was not practicable to provide sinks and water supply within the house	...	...	...	...	...	...	...	10
Those where the occupiers did not desire an internal water supply								638
Those where the absence of drainage arrangements made such provision impracticable	...	...	...	...	...	...	...	2
Those where the Corporation was negotiating for acquisition	...							9
Those which are situated on Redevelopment Areas and many of which are to be provided with such a supply as they vest in the Corporation :—								
Already vested	...	...	...	...	...	...	1,036	
Not yet vested	...	...	...	...	...	...	41	
							<hr/> 1,077 <hr/>	
								<hr/> 1,937 <hr/>

SAMPLING OF SWIMMING BATH WATER

243 samples of water were taken during the year at approximately monthly intervals whilst each bath was in use, and the relationships between the concentration of free chlorine and the bacteriological reports were studied.

<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 m.l.</i>	<i>Total samples</i>	<i>Percentage of excellent results</i>
Nil	0	1	0%
0.1	6	12	50%
0.2	24	34	71%
0.3	29	36	81%
0.4	28	29	97%
0.5	18	21	86%
0.6	12	13	92%
0.7	14	14	100%
0.8	19	20	95%
0.9	0	0	no observations
1.0	33	33	100%
1.1	0	0	no observations
1.2	1	1	100%
1.3	10	10	100%
1.4	0	0	100%
1.5	7	7	100%
more than 1.5	12	12	100%

The percentages set out above in relation to the free chlorine concentration are substantially similar to those obtained in 1951 and confirm that if, in spite of heavy bathing loads, the concentration of free chlorine can be maintained above .5 parts per million, there is likely to be a high degree of bacterial purity. Of the samples recorded during 1951 only 26% had a free chlorine content above .5 parts per million. The corresponding figure for 1952 was that 45% of samples contained more than .5 parts per million of free chlorine. During the year new chlorinating apparatus of a semi-automatic type has been installed at 5 baths carrying heavy summer bathing loads and during the latter half of the year the reports upon all bath water samples were almost uniformly excellent throughout the City.

The higher chlorine concentrations have necessitated increased vigilance in counteracting the tendency of the water to become acid. Acidity encourages the development of compounds of chlorine which irritate the eyes, but on the other hand chlorine is more actively bactericidal in an acid medium.

Frequent observations of this factor have shown that a very satisfactory compromise has been achieved.

Increasing the chlorine concentration has not only improved the water bacteriologically, but has greatly enhanced its clarity and attractiveness owing to the oxidation of microscopic particles in the water.

DRAINAGE AND SEWERAGE

Included in the item which follows are details of works undertaken by the Public Works Committee, and for this information thanks are expressed to Mr. H. J. Manzoni, City Engineer and Surveyor.

A valley sewer in the Bartley Green area, from California to Woodcock Lane, to provide an outlet for sewers on Woodcock Hill Farm Housing Estate, has now been completed.

An extension of the Rea Valley Main sewer from the existing Callow Brook sewer to Tessall Lane is under construction ; this sewer will provide for the drainage of the Corporation's Housing Estate at Egghill Lane.

The reconstruction of the surface water sewer in Alcester Road South, Kings Heath, from Howard Road East to Woodthorpe Road, has also been completed.

During the year sewerage works have been completed for the following principal Housing Estates :—

Bangham Pit Farm Estate	...	...	...	...	By Contract
Bell Holloway Estate	...	...	...	...	"
Brandwood Park Road Estate	...	...	...	...	"
Brays Road (Sheldon) Estate	...	...	...	...	"
Church Road Estate, Northfield...	...	...	...	...	"
Common Lane Estate	...	...	...	...	"
Fordrough & Rednal Road Estate	...	...	...	...	"
Hamstead House Estate	...	...	...	...	"
Heathy Farm Estate	...	...	...	...	"
Holly Bank Farm Estate...	...	...	...	...	"
Jiggins Lane Estate	...	...	...	...	"
Manor Farm Estate	...	...	...	...	"
Metchley Grange Estate	...	...	...	...	"
Staplehall Farm Estate	...	...	...	...	"
Tile Cross Housing Estate	...	...	...	...	"
West Heath Main Estate	...	...	...	...	"
Woodcock Hill Farm Estate, Parts 1 and 2	...	...	...	...	"
Highfield Farm Estate	...	...	...	...	"
Buckland End Estate	...	...	...	...	By Direct Labour
Duddeston & Nechells Housing Estate, Unit No. 1	...	...	...	...	"
Ward End Hall Estate	...	...	...	...	"

Sewerage work in connection with the following Corporation Housing Estates is in hand :—

Brandwood Road Estate	...	...	...	...	By Contract
Bunbury Road Estate	...	...	...	...	"
Egghill Lane Estate	...	...	...	...	"
Welsh House Farm Estate, Part 1	...	...	...	...	"
Wychall Farm Estate	...	...	...	...	"
Ward End Hall Estate Extension	...	...	...	...	"
Shard End Estate, Part 1	...	...	...	...	By Direct Labour

In addition to the above Corporation estates, approximately 1·02 miles of sewers have been laid by private developers.

Taking into account the sewers which have been completed up to the end of December, 1951, the total length of sewers now laid in the City is 1,561·75 miles, of which 523·12 are surface water sewers and 1,038·63 are foul water sewers, a total increase of 18·45 miles during 1952.

Forty-five dumbwells have been demolished and filled in during the year 1952, and the properties formerly draining to them have been connected to the main drainage system.

With the extension of sewers in connection with the development of housing estates, more houses were able to dispense with cesspools. A survey was carried out of properties believed not to be connected to the main sewers. This revealed that there were still no less than 20 privy middens, serving 30 properties—mainly at farms and farm cottages—and 26 houses served by 20 pail closets in the City. Action is being taken in appropriate cases to convert the privy middens to water closets where a sewer and water supply are available, failing that the privies will be replaced by pail closets.

One owner who had been requested by the tenant to convert a pail closet to a water closet approached the Department for financial assistance under Section 47 of the Public Health Act, 1936. To convert the closet and provide a connection to the sewer involved a long length of drain as no way-leave could be negotiated over the shortest route. The cost was estimated at £375. The Health Committee, after due consideration of all the circumstances, agreed to contribute one third of the cost in order to dispense with the cesspool, in the interests of the tenant and public health. When the tenant was given an estimate of the increase in rent permitted by the Rent Acts for this improvement he withdrew his request and the owner accordingly carried out necessary improvements to the cesspool and drains without converting the pail closet to a water closet.

REFUSE DISPOSAL

Mr. W. H. Andrews, General Manager of the Salvage Department, has kindly supplied the following details :—

The collection, utilisation and disposal of domestic refuse and certain trade refuse is the responsibility of the Salvage Department of the Corporation. In addition this Department carries out the cleansing of cesspools, privy pans and privy middens, and the removal of condemned meat, offals and other refuse from the City Markets, Abattoir and slaughter houses.

Provision of Dustbins

The provision of dustbins under the rate-borne scheme has continued, 29,341 bins being supplied during 1952. The total number provided under the scheme from its inception in April, 1950, to 31st December, 1952, was 91,358, which means that about one-third of the refuse receptacles in the City have been replaced under the rate-borne scheme.

The galvanising of dustbins, which was prohibited by Government Order in March, 1951, was again permitted with effect from August, 1952, and the issue of the bituminous painted bins, which were the substitutes for the galvanised bins, was therefore discontinued. Some 39,000 painted bins were supplied to properties during the time galvanising was not permitted, and these will require renewal within a comparatively brief period. They have a much shorter life than the galvanised type, which generally lasts for an average of eight years.

Refuse Collection and Disposal

The collection of refuse is carried out by a mechanical fleet of 209 vehicles which includes some of the most modern types.

The quantity of refuse and other materials of all classes dealt with by the Salvage Department during 1952 was 342,205 tons, most of which was, with the exception of cesspool contents which are disposed of into sewers, treated at the five Refuse Utilisation and Salvage Works in the City. In addition, 27,895 tons of street sweepings were disposed of for the Public Works Department.

Whilst the output of refuse varies considerably in different parts of the City, the average weight collected during the year from each premises in the whole of the City was 20·8 cwts.

Recovery of Waste Materials and By-Products

Although the recovery from house refuse of those materials suitable for return to industry continues to be an important part of the activities of the Salvage Department, the demand for certain items has declined. This applies particularly to waste paper, the outlets for which have been very limited since March, 1952. The markets for textile waste were also adversely affected during the year.

The Department continued the separate collection of kitchen waste from nearly 9,000 communal receptacles, the material being converted into sterilised food for pigs and poultry at Montague Street Works. Those materials collected from the City Markets, Abattoir, etc., which possess residual values are treated in the Department's organic plant for the production of fertilizers, feeding meal and fats. A total of 6,150 tons of animal feeding stuffs, fertilisers, fats, etc., was produced during the year.

Cesspools

At the end of 1952 there were 151 cesspools, serving 206 premises, being regularly emptied by the Salvage Department. Fourteen cesspools were abolished during the year in consequence of premises being connected to main sewers and two new cesspools were added.

Privy Pans and Middens

There are still 205 pans and 19 middens being emptied regularly, these being situated in the outlying parts of the City.

DISINFESTATION OF VERMINOUS PREMISES, ARTICLES AND PERSONS

The Disinfecting Station situated in Bacchus Road, is under the supervision of a Depot Superintendent, who is directly responsible to the Chief Sanitary Inspector to ensure prompt and efficient execution of all disinfestation duties.

Domestic premises in which infestations of bugs, fleas, flies, cockroaches, black beetles, crickets, etc., occur are treated by the Department and no charge is made for this work. In every case, a thorough inspection of the premises is carried out by the sanitary inspector to establish the nature and degree of infestation existing, and in certain instances, secondary treatment is carried out to prevent re-infestation. 903 premises were so treated ; this compares with 1,190 for the year 1951 and 1,548 in respect of 1950. The steady downward trend supports the view established in the Department during recent years, that infestations of this nature are declining, due to the introduction and extensive use of modern insecticides.

Similar work was also carried out in houses owned by the Corporation where infestations occurred. Treatment of infested premises, including furniture and effects, is always undertaken by the Department prior to the removal of families into municipal accommodation. Liaison with the Housing Management Department resulted in 622 houses being so treated during the year, as compared with 830 houses in 1951.

In addition, frequent advice and assistance has been given to occupiers of business premises, particularly in the case of food preparation rooms and kitchens, in dealing with infestations of steam flies and cockroaches. This resulted in many treatments being undertaken and appropriate charges were made for the services rendered.

Work of this nature has also been carried out in public Slipper and Turkish Baths at the request of the Baths Department. Ten such establishments were treated and, where necessary, work was executed on Sundays, so as not to impair facilities afforded to the public.

At the beginning of the year the Department introduced an " On Call " Service to assist hospitals, nursing homes and similar institutions in the disinfestation of their main and ancillary buildings. The Department does not carry out this work on a contract basis, but makes a charge for every treatment, which is based on the cost of labour and materials only. Time spent by the sanitary inspector in investigation prior to treatment is not charged for.

Nine hospitals availed themselves of this service, including four of the major general hospitals in the City. In these four cases, first inspections proved to be extensive surveys of all buildings, lasting two days and were carried out by two sanitary inspectors. The inspectors were able to thoroughly familiarise themselves with the general layout,

which proved invaluable during secondary treatments. These inspections revealed serious infestations of steam flies, cockroaches, blackbeetles, crickets and ants, and the cost of initial treatments varied between £40 and £50. It is interesting to note, however, that only one or two secondary treatments were necessary, and these proved to be of a minor character, varying in cost between £3 and £5.

Other services are also undertaken by the staff of the Disinfecting Station. Families in poor financial circumstances, where the mother or father is suffering from tuberculosis, are assisted in the removal of their furniture and effects from old houses to new municipal houses. Requests for this service are made by the Anti-Tuberculosis Centre and 28 families were assisted in this manner during the course of the year.

The Disinfecting Station also undertakes the sterilisation of straw used by manufacturers in the City for the packing of goods which they export. The straw is received either loose or in bales, and a charge is made. The steam disinfector will treat approximately 2 cwt. in one operation and 175 stovings were carried out, sterilising an approximate quantity of 17.5 tons of straw.

A free service is undertaken in the cleansing and removal of refuse from homes of aged people, who, due to their infirmity, are incapable of maintaining their homes in a reasonably clean condition. 29 houses were cleansed in this manner resulting in the collection of 47 beds for destruction.

Separate bathing facilities are provided for men and women at the Disinfecting Station for the cleansing of scabies cases and verminous persons. Details of treatments for the year are as follows :—

<i>Bacchus Road Clinic</i>				<i>Scabies</i>	<i>Body Lice</i>	<i>Pubic Lice</i>
(Men Only)						
Men	...	...	...	37	368	29
Boys	...	...	...	3	1	—
				<hr/>	<hr/>	<hr/>
TOTAL	...	...	...	40	369	29
				<hr/>	<hr/>	<hr/>

<i>Bacchus Road Clinic</i>		<i>Scabies</i>	<i>Head Lice</i>	<i>Body Lice</i>	<i>Pubic Lice</i>
(Women only)					
Women	...	51	49	21	3
Girls	...	27	48 } 48 }	27 } 27 }	Nil } Nil }
Boys	...	28			
Second treatments		3	—	—	—
		<hr/>	<hr/>	<hr/>	<hr/>
TOTALS	...	109	97	48	3
		<hr/>	<hr/>	<hr/>	<hr/>

Two part-time clinics are also operated for scabies treatment only on Mondays to Fridays inclusive from 5 to 8 p.m., and on Saturdays from 2 to 5 p.m. Details of treatments are as follows :—

Floodgate Street Clinic

(Men only)

102 treatments

Sheep Street Clinic

(Women only)

Women 87 treatments

13 Second treatments

Girls 58 treatments

Boys 42 treatments

Total 200 treatments

Children indicated in the above statistics represent contacts in infected households, who have received treatment at the same time as their parents.

Infectious Disease

A total of 762 visits was made by inspectors in connection with enquiries into cases of food poisoning and such infectious diseases as dysentery and paratyphoid fever. Enquiries are not now made by the sanitary inspector as a routine into cases of scarlet fever and diphtheria.

Tents, Vans and Sheds

A survey carried out during the year revealed that 34 sites were in occupation throughout the City and contained a total of 128 dwellings of various types, as follows :—

40 modern trailers

78 coaches, 'buses, converted bodies, etc.

10 immovable dwellings

Allowing for the movement of caravan dwellers to and from the City, these dwellings housed approximately 300 adults and 100 children. This population was varied in its composition, consisting of travelling showmen, gipsies, building operatives and those people who reside in caravans due to the housing shortage.

Sanitary inspectors paid 143 visits to the sites and in several instances appropriate action was taken in accordance with the provisions of Section 268 of the Public Health Act, 1936, to secure the provision of water supplies, sanitary accommodation and satisfactory arrangements for the disposal of refuse, where necessary. This sometimes resulted in the owner of the site giving the dwellers in question notice to quit, rather than comply with the requirements of the notice served upon him.

There has been an increased tendency to the sudden occupation of open and vacant sites in the City by large numbers of caravan dwellers without the prior consent of the owner. An example of this occurred at the beginning of December. A bombed site approximately one acre in extent, flanked by a main road and in a heavily congested area, was occupied by two trailer caravans housing 5 adults and 6 children. These two vehicles attracted the attention of a party of travelling showpeople, who were gipsies of foreign extraction, and who pulled on to the site.

They were joined almost immediately by a second and similar gathering and within a week, there were no less than 8 mobile dwellings of various types housing a population upwards of 20 adults, together with 14 children. As the site was devoid of a water supply, the dwellers begged their drinking water from neighbouring houses. Use was made of nearby public lavatories, as only three chemical closets existed in the camp.

Under the provisions of the Birmingham Corporation Act, 1935, it is necessary for permission to be obtained from the Corporation, subject to certain exceptions, before land is used as a site for caravans or movable dwellings. After an approach had been made to the owner of the site and the occupiers of the caravans, the site was quickly vacated to avoid risk of legal proceedings being instituted.

It is clear that the provisions of the Town and Country Planning Act, 1947, are neither sufficiently speedy nor effective to prevent the short term occupation of such sites by the itinerant caravan dweller.

Offensive Trades

The number of premises used in connection with offensive trades continues slowly to decrease. Only 35 such premises were registered, and 97 visits of inspection were made in 1952.

While there may be several reasons for the decline in numbers, it is thought that the small businesses of former years are no longer needed and consequently have disappeared. Rag and bone dealers have become either exclusively rag dealers or have combined rags and waste paper, and thus no longer come within the category of Offensive Trades.

With this reduction it logically follows that nuisances from offensive trades have correspondingly fallen, but this fact alone does not account for the lack of serious trouble one might reasonably expect. Rigid enforcement of the Byelaws and the desire of the traders to avoid, as far as possible, giving cause for complaint are the real reasons for the singular position that the City's offensive trades would not be regarded by many as offensive.

Recourse to formal action by the service of a notice was necessary only once in the year.

Pig Keeping

With the re-introduction on 1st July, 1951, of the Byelaws regarding pig keeping, it was anticipated that considerable difficulty would be encountered in securing compliance with the Byelaws. The passage of time has shown that most pig keepers who were keeping pigs in contravention of the Byelaws have responded well to informal or formal action. In many cases where the required distance of 60 feet between a sty and a dwelling could not be obtained, the pig keepers have requested a reasonable extension of time to dispose of their stock and have then ceased to keep pigs.

A few keepers have felt that undue severity was being exercised and mistakenly contended their one or two pigs were no nuisance. However, when it became a question of compliance with the City Byelaws or giving up pig keeping the requirements were carried out in most cases.

On the other hand, it is recognised that some complaints are made merely because pigs are being kept in a particular vicinity and, on investigation, it is found that neither nuisance nor contravention of the Byelaws exists.

Notices requiring abatement of nuisances or compliance with Byelaws were served in 24 cases and in one instance only the Department was compelled to take legal action resulting in a fine of five pounds upon the offender.

An amendment was made in March, 1952, to the Byelaws of 1909 relating to nuisances. This amendment has the effect of exempting from the provisions of the Byelaw the keeping of pigs within 60 feet of a dwellinghouse if those pigs are kept in a slaughterhouse. This amendment was made to clarify the legal position in view of case law and the occasional application for Town Planning permission to rebuild and extend existing slaughterhouses.

Tips

Certain areas of land in the City in their present condition are unsuitable for building or recreational use, and in some cases because of quarrying and other operations, are often found in a dangerous state. The disposal of large quantities of industrial waste and building rubble, etc., assists in the preparation of such land for ultimate development. In 1948 the Corporation obtained Byelaw powers for controlling the method and extent of tipping so that nuisances arising therefrom could be prevented. It is part of the work of the sanitary inspector to make routine visits to such tips and see that those Byelaws are observed. 345 visits were made to the 14 established tips in the City and the co-operation of the operators was obtained.

There is still, however, a considerable amount of what is known as "fly tipping" taking place on the many disused and war-damaged sites within the City which presents quite a problem. As far as possible obnoxious matters so deposited are removed and the owner of the site is asked to take action to prevent repetition, but the only lasting solution will be the ultimate development of the sites for a useful purpose.

Pleasure Fairs

The number of pleasure fairs and circuses on sites within the City remains more or less constant.

Normal procedure is that the proprietor makes an application to the Clerk to the Justices for the requisite music licence, and the Clerk notifies all Corporation Departments concerned. This Department is interested in the following respects :—

1. Provision of a wholesome and adequate water supply.
2. Provision of suitable and adequate sanitary accommodation for both sexes.
3. The siting of generating power plants to avoid, as far as possible, nuisance from smoke, noise and vibration in any adjoining dwellings.
4. The satisfactory clearance of the site at the close of the fair.

Generally, the applicants for licences for such fairs are well acquainted with the requirements of the Department and on receipt of notification the inspector finds the fair established and ready to open.

In only one case during the past year were complaints received about a fun fair. Local residents near a very small " bombed site " found the noise occasioned by the music and shouting more than had been anticipated. Investigation was made and it was considered that, having regard to all the circumstances of the case, the noise was not excessive. There was no action open to the Department under the Public Health Acts and, as the fair was to remain for a few days only, the provisions of the Town and Country Planning Act, 1947, could not be effectively used on that occasion.

Byelaws to control conditions at fair sites are in course of preparation but have not yet received Ministerial approval.

Canal Boats

In compliance with Section 249 (3) of the Public Health Act, 1936, the Canal Boat Regulations and the Canal Boats Amendment Regulations, 1925, 970 canal boats have been inspected. These boats were registered for the accommodation of a total of 3,013½ persons, and when inspected, were found to be carrying 679 men, 565 women and 655 children, representing in terms of adults a total of 1,571½. Of the 970 boats inspected, 867 or 89·38% were in good condition and conforming with the Act and Regulations, while in 103 or 10·62% of the total, various contraventions were found. Complaint notes were duly served on the owners in all cases.

Signed certificates were returned during the year showing that 76 complaint notes, referring to 158 contraventions, were complied with, and the defects remedied. Other work may be done but cannot be recorded if the certificates are not signed or returned. Sometimes these are mislaid, or not returned for a considerable time after work is done. Some boats may not return to Birmingham for several months, or may

just come to discharge a cargo and be away again before further inspection can be carried out.

The general health of the occupants of canal boats has been good. No cases of infectious disease were reported. The number of canal boats on the Birmingham register is 475 ordinary boats and 111 motor boats, a total of 586 boats.

Prevention of Damage by Pests Act, 1949

The work of the Rodent Control Section has continued, with the complaints received once again showing an increase over those of the previous year.

	1952	1951	1950	1949	1948
Complaints	5,387	4,901	4,843	3,536	2,649

It might be assumed that the rodent population of the City is ever increasing, but experience has shown that the reverse is, in fact, the case. Many complaints received relate to the presence of one rat or mouse. Investigations and treatments have revealed only 48 major infestations during the year compared with 72 during 1951. (An infestation is considered major when the rat population exceeds 20). Nine major infestations involved food premises.

The public is now very conscious of the service provided by the Department in rodent control, and once an occupier has successfully appealed for help in clearing his premises, he does not hesitate to call again on the Department in time of need. Also the news of successful treatments is passed on to friends and neighbours.

The City is divided into five areas for rodent control, and once again, the Central area showed the greatest number of complaints, with the Hall Green, Acocks Green, King's Heath and Sparkhill areas having the next highest total.

It was found necessary to alter slightly the boundaries of some of the areas, in an effort to relieve some of the pressure from the Central area.

The investigation of a complaint frequently leads to the inspection of several properties in the immediate vicinity, and the number of inspections again shows an increase over previous years.

<i>Inspections</i>			<i>1952</i>		<i>1951</i>	
			<i>Domestic</i>	<i>Industrial</i>	<i>Domestic</i>	<i>Industrial</i>
Original visits	...	...	5,979	2,332	5,784	2,357
Revisits	...	...	1,552	1,557	1,437	1,703
TOTAL			11,420		11,281	

A new system of record keeping has facilitated a statistical study of the work of this section of the Department.

				<i>Treatment for</i>	
				<i>Rats</i>	<i>Mice</i>
Domestic and bombed sites	...	5,979	1,552	2,257	1,268
Local Authority's Property :					
Schools	...	169	23	96	93
Civic restaurants and bake-houses	...	49	37	36	25
Corporation tips	...	9	—	4	—
Allotments, parks, etc.	...	31	19	18	2
Welfare centres and nurseries	...	67	50	25	23
Destructors	...	15	217	2	—
Offices, stores, depots, etc.	...	57	33	43	25
Industrial :					
Private schools	...	13	3	7	3
Private tips	...	4	3	2	—
Hospitals, nursing homes, etc.	...	85	18	42	22
Cafes, restaurants and hotels	...	160	161	89	62
Other food premises	...	617	506	252	187
Cinemas and theatres	...	37	41	6	29
Canal and railway banks	...	3	1	2	—
Non-food shops	...	347	197	120	86
Non-food factories, offices, etc.	...	577	227	320	201
Agricultural :					
Farms, piggeries, etc.	...	44	4	19	1
Other visits	...	48	12	—	—
Total treatments				3,340	2,027
Night visits	...	189			
Smoke tests	...	381			
Notices served for proofing	...	77			
Notices served for treatment	...	1			
Notices completed	...	76			
Reminder letters sent	...	1			
Letters sent re proofing	...	11			

The Health Department undertakes treatments for all the various Corporation Departments, in compliance with the Prevention of Damage by Pests Act, 1949, Section 2 (b), i.e., "the local authority shall destroy rats and mice on land of which they are the occupier and otherwise to keep such land so far as practicable free from rats and mice."

Although the inspections for 1952 show an increase over those of 1951, the actual treatments found to be necessary during 1952 were 5,367, a reduction of 145 from 1951.

<i>Treatments</i>				<i>Rats</i>	<i>Mice</i>
Domestic	...	...	...	2,257	1,268
Industrial	...	...	...	1,083	759

This is the first year where it has been possible to differentiate between treatments for rats and mice, but the following table shows the comparative totals for the previous years :—

			1952	1951	1950	1949	1948
Treatments :							
Domestic	...		3,525	3,837	3,614	2,458	1,765
Industrial	...		1,842	1,675	1,615	1,240	1,120
			5,367	5,512	5,229	3,698	2,885

The total does not include the special treatments carried out at the Salvage Department destructors, but refers only to conventional work.

More and more firms are making use of the Section and requests are continually received, week by week, for a service such as the pest control firms offer, viz., contracts for regular treatments at particular intervals, but in view of the decision of the Ministry of Agriculture and Fisheries on this point, the Department has not undertaken this type of contract.

RATS IN DRAINS AND SEWERS

Defective drainage systems continue to give rise to many infestations, particularly in the older built-up areas of the City, and it was found necessary to carry out 381 smoke tests during the year. In each case where a defect was proved, a notice was served under the provisions of Section 4 of the Act. The Department insists that all drainage systems exposed as a result of the service of such a notice must be inspected, both during the course of the repairs and relaying, and also before the excavation is filled up, when a further smoke test is carried out. In a few instances builders have been loath to notify the commencement of the work, but the majority of builders and agents are only too ready to accept the knowledge and experience which is available to them.

Mention was made in the Annual Report for 1951 of the rat infestation in the gardens of the Emily Street Flats, due to unsealed disused drainage systems. The work of excavating for old drainage systems was carried out during 1952, which revealed a disused drain in each of the eight excavations of the entries serving the original properties on the Vaughton Street frontage.

As a result of the experience gained on this site a fresh clause was inserted in the contracts for demolition of all properties where local authority flats are to be built, and it was found advisable to excavate for disused drains on several sites now being developed in the Redevelopment Areas of the City.



Considerable trouble with rat infestation in new houses was experienced once again during the year, the cause being extreme carelessness in not sealing the footings of the houses at the point where the service pipes, etc., pass through. An example of this carelessness is shown in the accompanying photograph. The house shown was one of a block of eight, which had been erected approximately twelve months, and the excavation revealed that the footings of each house were defective at the same point, viz., around the soil pipe of the all-purpose system of drainage. The builder of this block was successfully held responsible for the necessary reinstatement work.

The problem of defective drainage systems is closely allied to the problem of dealing with the rat population in the sewers of the City. There are approximately 1,561 miles of sewers within the City boundary, with some 18,000 manholes and these manholes provide a convenient place for baiting and poisoning rats in the sewers.

For this purpose the sewage system has been plotted into 115 areas and the sewer squads continually bait and poison the sewers week by week. The 12th maintenance was completed during the year and over 90% of the 13th; this maintenance actually being completed early in January, 1953.

The staff position of the sewer squads has been a little better this year and for the greater part of the period it has been possible to have two squads out each day.

<i>No. of Maint.</i>	<i>No. of Manholes</i>	<i>Manholes pre-btd.</i>	<i>Takes</i>			<i>No Takes</i>	<i>Manholes poisoned</i>
			<i>Complete</i>	<i>Good</i>	<i>Small</i>		
12th	6,839	5,694	52	292	606	4,698	5,831
13th	9,212	6,721	122	367	329	5,904	6,770
	16,051	12,415	174	659	935	10,602	12,601

Doubts are sometimes expressed as to the efficiency of the sewer baiting scheme and whether it has any actual effect on the rat population in the sewers, with its consequent effect on the surface infestations. The all-round reduction in the "takes" and the increase in the "no takes" shown by the following comparison of the initial treatment of 1944—45 and the 13th maintenance of 1952—53, should put this matter in the correct perspective, and it will be seen that although this portion of the Section's activities is not spectacular in any way, the continuance of this scheme is showing results.

			<i>Takes</i>			<i>No. Takes</i>	<i>Total Baited</i>
			<i>Complete</i>	<i>Good</i>	<i>Small</i>		
Initial treatment	...		246	2,227	2,368	5,564	12,560
13th Maintenance	...		122	373	336	6,239	9,697

From experience gained the number of manholes baited has been reduced. This has been possible by omitting some of those manholes which have persistently shown no takes, therefore, no rat population.

SALVAGE DEPARTMENT DESTRUCTORS

Four of the five destructors owned by the Salvage Department continue to be the sites of the heaviest rat infestations in the City, but the repeated and continuous operations carried out by the Section in the premises have had the result of confining the infestations to particular portions of the premises, such as the hoppers and firing decks.

This is a tremendous step forward when it is realised that at the time the Department took over the work of rodent control at the destructors in 1944, the infestations were such that one treatment at Montague Street destructor produced a kill of up to 20,000 rats in one night and the infestations covered practically every portion of the premises and overflowed into the surrounding property in some instances.

These poison treatments and hand killings, etc., have kept the infestations down, and no opportunity is missed of reducing the population. Regular inspections are carried out, both by day and night, in all the destructors and the premises are thus kept constantly under review, and any sudden increase in the rat population can be dealt with immediately. The closest co-operation and support of the Salvage Department in this work on their premises is enjoyed.

AN UNUSUAL EXPERIENCE

A very unusual infestation was found during the summer. A house was very heavily infested with rats in every room and the tenant, a lady of 84 years of age, had succeeded in taming the rats and was observed actually feeding them on several occasions. The infestation proved a very difficult one to deal with, but eventually a complete clearance was effected. A considerable amount of refuse and rubbish was removed from the house by the Department. On a visit some six months later there was still no fresh evidence of infestation in the premises.

GENERAL

The abilities and experience of the staff have been utilised by the Ministry of Agriculture and Fisheries for the supply of live rats for experimental purposes in London, and during the year six consignments totalling approximately 500 live rats have been sent to the Ministry's laboratories. Dead rats were also supplied for dissection and study elsewhere.

From time to time members of the staff give talks upon the work of this section of the Department.

STAFF

Although the total establishment is 38, the actual working strength throughout the year has been approximately 30, and for a considerable period this number was 28. This led to some difficulties in the actual treatments of premises, and for a time the pressure of work was such that about 20 treatments per week had to be postponed. The work is of a specialised nature and trained operatives and inspectors are scarce.

Staff as at 31st December, 1952 :—

Senior Rodent Officer	1
Senior Assistant Rodent Officer	1
Assistant Rodent Officer	1
Senior Clerk	1
Clerks	2
Inspectors	7
Foreman Operative	1
Rodent Operatives	11
Bait mixer	1
Trainee Operative	1
Sewer Gang Foreman	1
Sewer Gang Operatives	6
	—
	34
	—

Throughout the year the Rodent Control Staff has enjoyed the closest co-operation with other Corporation Departments, Servicing Firms, the Ministry of Agriculture and Fisheries and other responsible bodies.

The Rag Flock and Other Filling Materials Act, 1951

All premises where rag flock is manufactured or stored for sale to registered upholsterers have to be licensed under the above Act. Premises where upholstering of new furniture, furnishings and bedding is carried on have to be registered with the local authority.

At the end of 1952 there were :—

Licensed Premises	.....	.....	.....	.....	6
Registered Premises	.....	.....	.....	.....	54

Samples of rag flock and filling materials to which the Act applies were taken from all premises during the year. Some firms use materials from several suppliers, and it is the aim of the Department to sample every source of material of whatever type ; this has been achieved.

Two hundred and forty-five samples were taken. Twenty-one of these were formal and 224 informal.

<i>Material</i>				<i>Satisfactory</i>	<i>Unsatisfactory</i>	<i>Total</i>
1.	Rag flock	...	...	61	1	62
2.	Cotton felt	...	...	34	21	55
	Cotton linters	...	...	3	—	3
	Cotton millpuff	...	...	5	2	7
3.	Woollen felt	...	...	12	2	14
	Woollen flock	...	...	2	—	2
4.	Jute	...	...	6	9	15
5.	Synthetic fibres	...	...	—	—	—
6.	Hair	...	...	15	—	15
7.	Feathers or down	...	...	9	2	11
8.	Kapok	...	...	3	—	3
9.	Coir fibre	...	...	36	—	36
	Algerian fibre	...	...	17	—	17
10.	Sisal and cotton felt pads	...	...	2	3	5
				205	40	245

It will be seen that forty samples failed to satisfy the requirements of the Regulations, and in every case the cause of the unsatisfactory sample was traced back to its source and the co-operation of the manufacturer and supplier sought.

Of the 62 samples of rag flock taken during the year only one failed to satisfy the requirements of the Regulations, in that the soluble impurities were 1·9% as compared with the permitted 1·8%. The soluble chlorides and the oil and soap contents were well within the prescribed limits.

Cotton felt and jute produced the greatest number of unsatisfactory samples ; these were mainly taken in the early part of the year. By the end of the year there was a marked improvement in the standard of cleanliness of both materials.

Twenty-one samples of cotton felt out of 55 proved unsatisfactory. Nine samples of jute felt out of 15 proved unsatisfactory.

The policy adopted by the Health Committee endeavours to gain the co-operation of the trade in the production and the use of materials which conform to the requirements of the Regulations made under the Act of 1951. No prosecutions were taken, but in many cases where bad samples were obtained representatives of the firms concerned were interviewed in the Department, and after full discussion, returned to take the necessary steps to produce a clean product.

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 Winter Closing Order made by the City Council on the 25th October, 1951, under Section 2 (1) of the Act remained in force until the 1st March, 1952.

It was found necessary to institute proceedings against four shopkeepers for contraventions of the Act. These consisted of three cases of illegal trading on Sundays and one case of illegal sales after the general closing hour at night. In addition to the charge of illegal trading, one shopkeeper was also charged with failing to exhibit an exemption notice as prescribed by the Act. In every case a written warning had been sent for previous infringements, but illegal trading had continued. In each case the charge was proved and a fine imposed.

The work of the Shops Act Inspectors is summarised as follows :—

GENERAL INSPECTIONS

Visits	...	...	...	...	...	...	...	...	8,101
Revisits	...	...	...	...	...	...	...	...	2,620
TOTAL INSPECTIONS									10,721

SPECIAL VISITS

Half-day closing	...	...	...	...	...	...	...	4,522
Night closing	...	...	...	...	...	...	...	842
Sunday trading	...	...	...	...	...	...	...	1,490
Appointments, etc.	...	...	...	...	...	...	...	706
Complaints and enquiries	...	...	...	...	...	...	...	67
Jewish traders	...	...	...	...	...	...	...	70
TOTAL SPECIAL VISITS								7,697

STREETS PATROLLED

Half-day closing	...	...	...	...	...	...	...	4,824
Night closing	...	...	...	...	...	...	...	1,356
Sunday trading	...	...	...	...	...	...	...	1,717
TOTAL STREETS PATROLLED								7,897

NOTICES AND STAFF ACCOMMODATION

Shops Act forms provided	...	...	...	...	...	...	1,500
Staff accommodation remedied	...	...	...	...	...	...	671

OFFENCES REPORTED

Half-day closing :							
Not closing to time	...	...	...	...	...	...	88
Sales after closing time	...	...	...	...	...	...	8
Night closing :							
Not closing to time	...	...	...	...	...	...	60
Sales after closing time	...	...	...	...	...	...	6
Sunday trading	...	...	...	...	...	...	67
Warning letters sent	...	...	...	...	...	...	77
Prosecutions	...	...	...	...	...	...	4

On the 22nd October the Shops (Revocation of Winter Closing Provisions) Order, 1952, was laid before Parliament and came into operation on the 1st November. This Order revoked such of the provisions of Sections 2 and 6 of the Shops Act, 1950 as prescribed the general closing hours of shops during the winter months, and accordingly the general closing hours were made to be the same throughout the year. Despite the adverse criticism caused by the passing of this Order, little or no difference has been noticed in the times of closing of the shops in the centre of the City, but advantage has been taken by some of the smaller owner-occupied shops situated in the suburbs in remaining open somewhat later than in previous years.

SUPERVISION OF INDUSTRIAL PREMISES

The Senior Smoke and Factories Inspector, with a Deputy and three Inspectors, working in close collaboration with the Administrative Medical Officer of Health for General Purposes and Chief Sanitary Inspector, carry out all duties in relation to the control of smoke, fumes and noise, and they are responsible for securing implementation of certain of the provisions of the Factories Act, 1937. They have also maintained the satisfactory liaison previously established with the Public Works Department in connection with the operation of the Town and Country Planning Act, 1947.

Smoke Abatement

The amenity of a clean air, without obstruction of the available sunlight by the products of incomplete combustion of fuel is the citizen's right ; for it is a long established fact that without sunlight children fail to thrive, while health at all ages tends to deteriorate where natural sunlight is restricted and the air is laden with sulphur, carbon and tar. It is not, however, health alone which is affected; the erosion and blackening of stonework and fabrics, the corrosion and stifling of plant life, and the complications of air travel owing to smoke fog lead to a constant drain upon our financial resources, national, local and personal, in cleansing, repair and delay.

Incomplete combustion occurs not only in the industrial boiler or furnace, but also in the home, and the proportions of tar and sulphur found in domestic smoke are more harmful than the ash which is predominant in industrial smoke.

Apart, however, from the education of the householder, dealt with in another section of this report, the Local Authority must confine its attention to the industrial fuel user.

To comply with the basic principles required for complete combustion of raw coal, the stoker of a hand-fired installation must adjust his methods of firing to suit the fuel available to him. Consignments vary, unfortunately, especially in relation to calorific value, volatile matter, and ash content, with the result that unless a stoker is highly skilled and capable of adapting his method of firing to suit changing fuel conditions, incomplete combustion takes place accompanied by the emission of excessive smoke and, inevitably, some loss in efficiency.

Steam generators of the shell type, where load and conditions vary, are constant offenders, especially under hand-fired conditions. Whilst anticipation of peak loads is not beyond the capabilities of a skilled oper-

ative, it is generally found that smoke emissions take place just after peak periods, when it has been necessary for a boilerman to allow a fire to remain idle so as to prevent loss of steam through the safety valve. Being idle the temperature of a furnace is lowered, and when fresh fuel is applied a further drop in temperature takes place with the result that there is insufficient heat to burn off the volatiles from the distillation of the fresh fuel, which results in smoke emissions. The installation of steam accumulators is rarely met with under these circumstances, although they are of great advantage. When it is necessary to investigate the cause of the emission the points invariably put forward as to causation relate to neglect or ignorance on the part of the stoker. It is regretted that the courses available locally for boilermen and furnacemen, through the West Midlands Advisory Council for Technical, etc., Education, are not more keenly sought after and attended. Much valuable instruction is given by the Smoke Inspector on the firing floor, but if the young stoker is to attain a high level of proficiency and ultimately raise his status as well as the efficiency of the plant he operates, he has much to learn and should take the opportunity available to him through these courses.

Several complaints have arisen from the burning of coal on slow combustion stoves. Under ordinary conditions this type of apparatus, whether for low pressure steam-raising or hot-water installation, is not constructed to burn the volatiles arising from the combustion of bituminous coal. Slow combustion stoves require smokeless fuel, and if for economic reasons coal is the fuel used, automatic stoking on the underfeed principle is the best method to employ in order to ensure efficiency and smokelessness.

Co-operation between smoke inspectors and officials of the Regional Fuel Efficiency Branch of the Ministry of Fuel and Power continues, and in several cases the combined efforts of the officials concerned have resulted in the up-grading of fuel to manufacturers, with a general improvement in the combustion and plant conditions.

Fumes

The use of cellulose paints and synthetic enamels gives rise to numerous complaints of effluvia and deposit when spraying operations are carried out in close proximity to dwellings. The most effective way of overcoming this nuisance is by means of washing the exhaust fumes, or passing them through a coke scrubber with washing arrangements, and disposal of the treated gases into the atmosphere by means of a high stack.

The fumes created during the process of varnish manufacture can be most obnoxious, but by passing the fumes from the resin-boilers through a condenser and then subjecting the non-condensing vapours to washing by means of spray jets, the pungent odour from gum-running and varnish-manufacture has been practically eliminated. This has been the case in a particular works about which many complaints were received.

Other fumes dealt with include those vapours which arise from non-ferrous metal-melting, plating vats and anodising of aluminium products.

Co-operation continues with the District Inspector appointed under the Alkali, etc., Works Regulation Act, 1906. When complaints are received of fumes emanating from processes registered under this Act, the information is passed on to the Alkali Inspector and in some cases a joint visit has been paid.

Noise Abatement

Complaints of noise from the operation of industrial machinery have related mainly to night shifts and in particular to power presses, drop forge hammers, pneumatic rivetting, tube piercing and general metal handling.

It is realised that noise is inevitably created during the forging of hot ingots, the smelting of metals, stamping and the operation of power presses, and that it is frequently not even capable of mitigation except by cessation of work or removal of the offending plant to some new site at a suitable distance from dwelling houses.

Co-operation is therefore sought with the management in such cases, with a view to eliminating, insofar as is practicable, the operation of such plant between the hours of 10 p.m. and 6 a.m., unless it is possible to re-site machinery suitably and at reasonable cost. The powers available under Section 58 of the Birmingham Corporation Act, 1935, for dealing with excessive noise as a statutory nuisance are such that regard must be taken of cost and of local conditions and circumstances.

Industrial noise is frequently associated also with vibration. Mitigation of the nuisance is sometimes achieved in these cases by the insulation of machinery bed-plates, or by the fitting of anti-vibration shock-absorbers, and there have been several instances where managements have, at considerable expense, adopted such measures to eliminate or reduce noise and vibration for the benefit of their neighbours.

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.

During the year 697 planning applications, together with appropriate plans, were referred to this Department and were examined by sanitary inspectors and other specialised officers, including the smoke and factories

inspectors whose particular knowledge of the nuisances likely to arise from industrial processes was used with advantage in suggesting more satisfactory alternatives or adjustments where appropriate. In 200 cases it was found necessary to make comment which was, as far as possible, offered in constructive form and almost always acted upon.

Factories Act, 1937

The number of visits paid to industrial premises defined as Factories under the Act totalled 3,592. This figure includes visits paid under Section 9 of the Factories Act, which relates to sanitary defects, and also routine and advisory visits paid in respect of work in progress following the service of notices.

The policy adopted with the City Surveyor, whereby plans of new industrial buildings when deposited for inspection under the Building Bye-laws are also subject to scrutiny by the Health Department, has resulted in the remedy of a number of infringements of the Sanitary Accommodation Regulations, 1938, whilst still at the planning stage. This saves time, money and labour, for it is clear that by consultation with the industrialist and his architect any defects may be pointed out before they have, in fact, occurred.

H.M. District Inspectors of Factories give every assistance in matters under the jurisdiction of the Local Authority by drawing attention to new factories, and to the introduction of mechanical power into non-power factories which come to their notice, etc. Several joint visits have been paid in an advisory capacity with H.M. Factory Inspectors to premises where air-extraction fans have been installed with a view to improving working conditions within the factory, but which when installed have caused deterioration in the amenities of the surrounding area, by reason of smoke, fumes or noise. By such consultative action, a remedy for the nuisance created can usually be found.

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 Authority	780	157	14	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	6,065	3,411	245	—
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises)	112	24	3	—
TOTAL	6,957	3,592	262	—

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	3	—	—	—
Overcrowding (S.2)	1	1	—	—	—
Unreasonable temperature (S.3)	—	—	—	1	—
Inadequate ventilation (S.4)	1	1	—	—	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary conveniences (S.7)	36	66	—	32	—
(a) Insufficient	443	416	—	139	—
(b) Unsuitable or defective	21	18	—	18	—
(c) Not separate for sexes	21	11	4	—	—
Other offences against the Act (not including offences relating to outwork)					
TOTAL	527	516	4	190	—

Outworkers

955 visits of inspection were made during the year by the sanitary inspectors to premises where outwork is known to be carried on. These premises are usually the homes of persons who carry out light tasks in connection with the making, ornamenting or finishing of certain classes of goods. Employers of such persons are required by Section 110 of the Factories Act, 1937 to supply lists of addresses to the local authorities concerned. These lists are received in the months of February and August each year and during 1952 the names of 580 outworkers were notified.

It has not been necessary during the year to take proceedings under this Section, or the next succeeding Section.

<i>Nature of Work</i>								<i>Number of out-workers in August.</i>
Wearing apparel :								
Making, etc., cleaning and washing	...	...	...	...	...	...	...	130
Household linen	...	...	...	...	...	...	...	3
Electro-plate	...	...	...	...	...	...	...	34
Brass and brass articles	...	...	...	...	...	...	...	226
Paper bags	...	...	...	...	...	...	...	4
The making of boxes or other receptacles or parts thereof made wholly or partially of paper	...	...	...	...	...	...	...	36
Brush making	...	...	...	...	...	...	...	15
Carding, etc., of buttons, etc.	...	...	...	...	...	...	...	129
Stuffed toys	...	...	...	...	...	...	...	3
TOTAL								580

INDEX

A

Accidents, 71
 Accident ambulances, 199
 Aged and chronic sick, 206
 Airport—health control, 94
 Ambulance service, 196
 Analytical Laboratory, 95
 Animal feeding meat, 243
 Ante natal care—responsibility for, 147
 Ante natal clinics, 151, 168
 Area comparability factors, 67
 Area of city, 66
 Atmospheric pollution, 300
 Attendances—maternity and child welfare clinics, 151

B

Back to back houses, 250
 Bacon factories, 241
 Bacteriological laboratory, 102
 Bakehouses, 228
 B.C.G. vaccination, 120
 Bed bureau, 205
 Birmingham general, 63
 Births—incidence and rates, 66, 73, 74, 124
 Blood tests, expectant mothers, 153
 Breast milk bank, 159
 Bronchitis Deaths, 67, 68
 Broncho-pneumonia deaths, 67, 69

C

Canal boats, 290
 Cancer deaths, 67
 Canteens—mobile, 227
 Care of mothers and young children, 151
 Care of the aged and chronic sick, 206
 Care of the unmarried mother, 164
 Catering licences, 228
 Central redevelopment, 261
 Cesspools, 284
 Child minders, 192
 Children Act, 1948, 193
 Children's clinics, 170
 Child welfare centres, 151

Child welfare clinics, 154, 168
 Chiropody clinic, 156
 Circulatory system—deaths, 67
 Climatology—Birmingham, 63
 Clinic assistants, 157
 Clinics—percentage attendance at, 152
 Common lodging houses, 272
 Comparability factors, 67
 Consultation clinics, 156
 Contacts—tuberculosis, 117
 Contents, 3
 Contributors to report, 5
 Convalescent care, 205
 Convalescent home for mothers and young babies, 158
 Cream, synthetic, 230, 237

D

Daily guardian scheme, 163
 Dairies, 230, 246
 Day nurseries, 160
 Deaths—incidence and rates, 67, 72, 73, 74, 75, 76, 125, 128
 Death rate, 4 weeks—1 year, 126
 Dental treatment, 157
 Deprived children—medical care of, 193
 Diphtheria, 77
 Diphtheria immunisation, 78
 Disinfection after tuberculosis, 118
 Disinfecting station, 285
 Disinfestation of verminous premises, articles and persons, 285
 District nursing service, 188
 Diversional and occupational therapy, 122
 Domestic help service, 191
 Domiciliary care of the premature infant, 138
 Domiciliary diversional and occupational therapy, 122
 Domiciliary treatment of the tuberculous, 122
 Drainage and sewerage, 282
 Dustbins—provision of, 283
 Dysentery, 82

E

- Eating houses, 226
- Elmdon airport—health control, 94
- Emergency maternity service, 177, 203
- Employment of expectant mothers, 125, 127
- Encephalitis, 82
- Environmental health services, 250
- Epidemiology—general, 77
- Expectant mothers—blood tests, 153
- Expectant mothers—employment of, 125, 127
- Expectant mothers—mass radiography, 153
- Expectant mothers—relaxation classes, 153

F

- Factories Act, 1937, 300, 303
- Fairgrounds, 289
- Family service unit, 157
- Fish, poultry, fruit and vegetable supplies, 242
- Food and Drugs, 226
- Food poisoning, 83
- Food shops—retail, 242
- Food—unfit, 243
- Fumes, 301

G

- Gas and air analgesia, 176
- General epidemiology, 77
- Growth of infants, 164

H

- Harborough Hall—convalescent home for mothers and babies, 158
- Hawkers—registration of, 242
- Health advice bureau, 212
- Health Committee members, 4
- Health education, 208
- Health services—special survey, 18
- Health visiting, 178
- Health visitors' training course, 186
- Health visitors—tuberculosis, 118
- Home help service, 191
- Home nursing service, 188
- Home population, 66
- Hospital car service, 204
- Hospital confinements, 144
- Hostel accommodation for the tuberculous, 113
- Houses let in lodgings, 272
- House to house inspection, 265

- Housing, 250
- Housing of the tuberculous, 119
- Human milk bureau, 159
- Human remains—removal of, 275

I

- Ice cream, 230, 235
- Iced lollipops, 236
- Illegitimacy, 66
- Immunisation—diphtheria, 78
- Immunisation—whooping cough, 92
- Industrial premises—supervision of, 300
- Infant mortality, 66, 73, 74, 129
- Infants—mortality among, 125
- Infectious diseases, 77, 93
- Infectious diseases—follow-up visits, 287
- Influenza, 84
- Internal water supplies within dwelling-houses, 280
- International certificates, 94
- Investigations, 164

K

- Kitchen and cooking arrangements—nurseries, 161

L

- Laboratory services, 95
- Lady Mayoress—visits to welfare centres, 157
- Laundry arrangements—nurseries, 161
- Laundry service for the aged and chronic sick, 207
- Legitimacy in relation to mortality among infants, 127
- Loan of nursing equipment, 209
- Lobar pneumonia deaths, 67, 70
- Local Health Services Survey, 18
- Lodging houses—common, 272

M

- Malaria, 84
- Mass radiography—expectant mothers, 153
- Mass radiography—nursing staff, 161, 189
- Maternal mortality, 66, 132
- Maternity and child welfare, 123
- Maternity and child welfare centres, 151
- Maternity and child welfare clinics—percentage attendance at, 152
- Maternity service—emergency, 177, 203

Maternity services, 144
 Measles, 85
 Meat and other foods—inspection of, 240
 Medical care of deprived children, 193
 Meningococcal infection, 86
 Mental health, 211
 Merchandise Marks Act, 1926, 242
 Meteorological observatory, 63
 Middens, 284
 Midwifery—domiciliary, 172
 Midwives Act, 1951, 174
 Midwives—district training, 176
 Milk and dairies, 230, 246
 Milk sampling, 233
 Milk supply, 246
 Milk—tuberculous, 246
 Mobile Canteens, 227
 Mortality among infants, 125
 Mortality—infant rates, 73, 74
 Mortality rates, 128

N

National Assistance Acts, 224
 National Health Service Act—General, 196
 Section 22—Care of mothers and young children, 151
 Section 23—Midwifery, 172
 Section 24—Health Visiting, 178
 Section 25—Home Nursing, 188
 Section 26—Immunisation and vaccination, 78, 90
 Section 27—Ambulance service, 196
 Section 28—Prevention of illness, care and after care, 205
 Section 29—Domestic help, 191
 Section 51—Mental health, 211.
 National Health Service—special survey, 18
 Neonatal deaths, 66
 New houses, 258
 Night watchers' service, 191, 207
 Noise abatement, 302
 Non-notification of tuberculosis, 116
 Nuisances—uncommon, 273
 Nuisances—urgent, 270
 Nurseries and Child Minders' Regulation Act, 192
 Nurseries—day, 160
 Nurseries—private, 192
 Nurseries—training, 162
 Nursery staffs—training courses, 162

Nursery students, 162
 Nursing agencies, 192
 Nursing attendants, 189
 Nursing equipment—loan of, 209
 Nursing homes, 192
 Nursing staff—mass radiography, 161, 189

O

Obstructed drains, 270
 Occupational therapy, 122
 Offensive trades, 288
 Ophthalmia neonatorum, 136
 Outworkers, 306
 Overcrowding, 263

P

Paratyphoid, 86
 Parent guidance clinic, 222
 Parrot disease, 89
 Pemphigus neonatorum, 136
 Perinatal death-rate, 125, 147
 Perinatal mortality rate, 142
 Pethedine, 176
 Pig keeping, 288
 Pleasure fairs, 289
 Pneumonia, 87
 Pneumonia deaths, 67, 69, 70
 Poliomyelitis, 87
 Population, 66
 Post natal clinics, 154, 169, 170
 Premature Infants—domiciliary care of, 138
 Prematurity, 137
 Prevention of Damage by Pests Act, 1949, 291
 Prevention of illness, care and after care, 205
 Privy pans and middens, 284
 Provision of internal water supplies within dwellinghouses, 280
 Psittacosis, 89
 Psychiatric social service, 218
 Public Health (Imported Food) Regulations, 94.
 Public Health Laboratory Service, 102
 Puerperal pyrexia and puerperal sepsis, 136

R

Rag Flock and Other Filling Materials Act, 1951, 297
 Rainfall details, 63, 65
 Redevelopment areas, 261
 Refuse collection and disposal, 283

Rehabilitation of the tuberculous, 119
 Relaxation classes—expectant mothers, 153
 Remedial exercise classes, 156
 Removal of human remains, 275
 Rent Restrictions Acts, 271
 Residential nursery for child contacts of tuberculosis, 117
 Respiratory system—deaths, 67
 Responsibility for ante natal care, 147
 Rodent control, 291

S

Salvage and refuse collection, 283
 Sampling of Corporation water, 277
 Sampling of swimming bath water, 281
 Sanitary inspection, 265
 Scabies, 89
 Scarlet fever, 89
 Sewerage, 282
 Sewing classes, 156
 Shell fish, 240
 Shops, supervision of, 298
 Skilts—nursery for child contacts of tuberculosis, 117
 Slaughterhouses, 240
 Slum clearance, 259
 Smallpox, 90
 Smoke abatement, 300
 Staff, 7
 Statistics—vital, 66
 Stillbirths, 66, 74
 Suicide, 71
 Sunshine details, 63, 65
 Supervision of industrial premises, 300
 Survey of local health services, 18
 Swimming bath water—sampling of, 281
 Synthetic cream, 230, 237

T

Temperature details, 63, 65
 Tents, vans and sheds, 287
 Tips, 289
 Toddlers' clinics, 170
 Town and Country Planning Act, 1947, 302
 Training courses for nursery staff, 162
 Training of health visitors, 186
 Training nurseries, 162

Tuberculosis, 105
 Tuberculosis and the milk supply, 246
 Tuberculosis—B.C.G. Vaccination, 120
 Tuberculosis—contacts, 117
 Tuberculosis—disinfection after, 118
 Tuberculosis—domiciliary diversional and occupational therapy, 122
 Tuberculosis—domiciliary treatment of, 122
 Tuberculosis—health visitors, 118
 Tuberculosis—non-notification of, 116
 Tuberculosis—residential nursery for child contacts, 117.
 Tuberculous—hostels for, 113
 Tuberculous—housing of, 119
 Tuberculous—rehabilitation of, 119
 Typhoid fever, 90

U

Uncommon nuisances, 273
 Unmarried mothers—care of, 164
 Urgent nuisances, 270

V

Vaccination, 90
 Vaccination, B.C.G., 120
 Vaccination certificates, 94
 Venereal diseases, 91
 Verminous premises, articles and persons, 285
 Veterinary and food inspection, 240
 Violence—deaths from, 72
 Virus infections during pregnancy, 164
 Vital statistics, 66, 75
 Voluntary workers, 156

W

Water—sampling of, 277
 Water—sampling of swimming bath water, 281
 Water supplies—provision of internal, 280
 Water supply, 275
 Weather details, 63
 Welfare centres, 151
 Welfare centres, voluntary workers, 156
 Wells, 279
 Welfare of the aged, 206
 Whooping cough, 91
 Whooping cough immunisation, 92

