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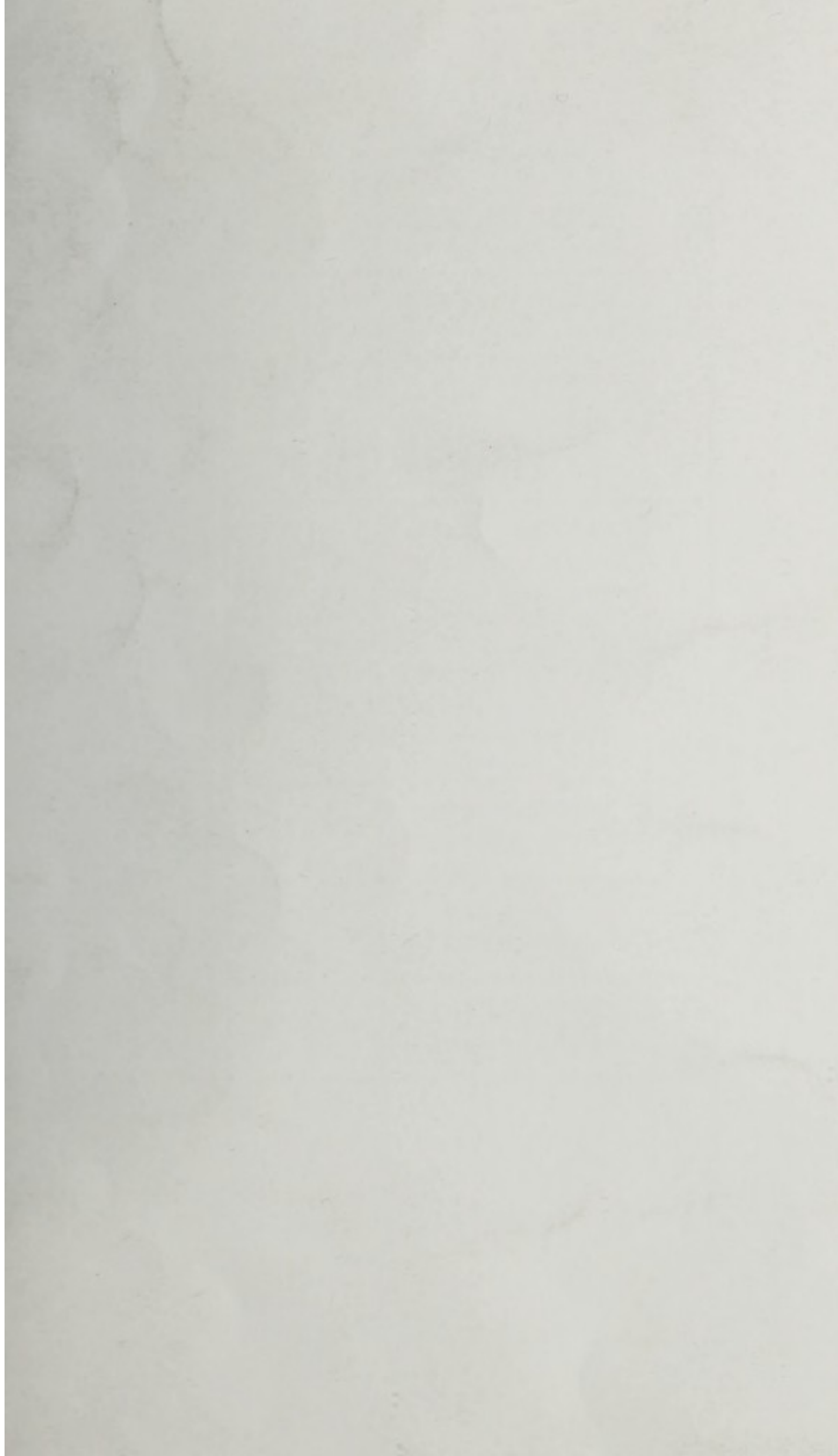
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County
Borough of Bolton.



ANNUAL REPORT
OF THE
Medical Officer of Health
FOR
1940.

BOLTON :
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1941.

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PUBLIC HEALTH DEPARTMENT,
CIVIC CENTRE,
BOLTON.

December, 1941.

To the Chairman and Members of the Public Health
Committee :

LADIES AND GENTLEMEN,

I have the honour to present the Report for 1940, the Sixty-ninth Annual Report on the Health of Bolton. The Report has been greatly reduced in size and scope in the interests of economy.

The number of deaths has increased. The civilian population has been reduced in numbers by the withdrawal of men and women for the National Service. The result is a substantial increase in the death-rate, as in the great towns generally. The death-rate among Bolton children under one year has fallen, and is lower than the average rate in the great towns.

There has been a slight increase in tuberculosis. Infectious diseases were more prevalent than in 1939. There was a big increase in cerebro-spinal fever. Fortunately, medical science has reduced the terrors of this disease, and there was only one death in 42 cases. A small outbreak of acute poliomyelitis (infantile paralysis) occurred.

The health record for the year is encouraging in view of all the circumstances of war. The reduction in deaths among infants is a significant indication of the value of the war-time arrangements for the provision of adequate food and care for young children.

I am, Ladies and Gentlemen,

Your obedient Servant,

R. M. GALLOPWAY,

Medical Officer of Health and School Medical Officer.

SUMMARY OF STATISTICS. 1940.

COUNTY BOROUGH OF BOLTON.

| | | | | |
|--|-----|-----|-----|----------------------------------|
| Position | ... | ... | ... | Lat. 53° 35' N., Long. 2° 27' W. |
| Elevation above sea level | ... | ... | ... | 230-ft. to 1,450-ft. |
| Geological Formation : Boulder Clay and Sand over Coal Measures. | | | | |
| Rainfall (Av. 1887-1940, 42.498") | ... | ... | ... | 43.883" |
| Area in Acres (Land and Inland Water) | ... | ... | ... | 15,280 |
| Population (Census 1921) | ... | ... | ... | 178,683 |
| „ (Census 1931) | ... | ... | ... | 177,250 |
| „ (Estimated Civilian Population, 1940) | ... | ... | ... | 161,000 |
| Persons per acre | ... | ... | ... | 10.1 |
| Inhabited Houses (Census 1921) | ... | ... | ... | 41,825 |
| „ „ (Census 1931) | ... | ... | ... | 46,618 |
| Private Families or Separate Occupiers (Census 1921) | ... | ... | ... | 42,635 |
| „ „ „ „ (Census 1931) | ... | ... | ... | 47,706 |
| New Houses Certified 1940 | ... | ... | ... | 81 |
| Estimated No. of Houses in the Borough at 31st December, 1940 | ... | ... | ... | 53,321 |
| Rateable Value at 31st March, 1941 | ... | ... | ... | £1,090,356 |
| Sum represented by a Penny Rate (1940-1941) | ... | ... | ... | £4,353 10s. 4d. |
| Births | ... | ... | ... | 2,243 |
| Birth-rate (per 1,000 of population) | ... | ... | ... | 13.9 |
| Deaths | ... | ... | ... | 2,586 |
| Death-rate (Crude) (per 1,000 of population) | ... | ... | ... | 16.0 |

SUMMARY—Continued.

| | |
|--|------|
| Average Death-rate (1931-1940) | 13.7 |
| Heart and Circulation Death-rate | 3.9 |
| Cancer Death-rate... .. | 1.7 |
| Respiratory Death-rate | 2.7 |
| Phthisis Death-rate | .58 |
| Epidemic Death-rate (seven chief diseases)... .. | .25 |
| Infantile Mortality (Deaths under one year per 1,000 live births) | 56 |
| Diarrhœa Death-rate (Deaths under two years per 1,000 live births) | 4.4 |
| Puerperal Death-rate (per 1,000 total births) | 4.2 |

126 COUNTY BOROUGHs AND GREAT TOWNS :—

| | |
|--|------|
| Birth-rate (per 1,000 of population) | 16.0 |
| Death-rate (per 1,000 of population) | 15.8 |
| Infantile Mortality (deaths under one year per 1,000 live births) | 61 |
| Diarrhœa and Enteritis (under two years), Death-rate per 1,000 live births | 5.9 |

ENGLAND AND WALES :—

| | |
|--|------|
| Birth-rate (per 1,000 of population) | 14.6 |
| Death-rate (per 1,000 of population) | 14.3 |
| Infantile Mortality (Deaths under one year per 1,000 live births) | 55 |
| Diarrhœa and Enteritis (under two years), Death-rate per 1,000 live births | 4.6 |

STATISTICS.

Births.

There were 2,243 live births to Bolton residents in 1940. 2,168 of these births were legitimate and 75 illegitimate. The birth-rate per 1,000 of the population was 13·9. 684 births occurred to Bolton residents in Townleys Hospital, and 336 in Haslam Maternity Home.

Stillbirths.

The number of stillbirths in Bolton in 1940 was 112, giving a stillbirth-rate of 47·5 per 1,000 total births. The number of stillbirths per 1,000 total births in the County Boroughs of England and Wales has varied between 41 and 43 since 1931. Bolton has had a rate persistently higher than the average of the county boroughs.

Deaths.

Bolton had 2,586 deaths in 1940, giving a death-rate of 16·0 per 1,000 of the population.

During the year, 734 persons, whose usual place of residence was in the area of this county borough, died outside the borough; of these, 609 died in Townleys Hospital or Fishpool Institution and 53 died in Mental Hospitals.

Non-residents who died in the area numbered 149, of whom 124 died in Bolton Royal Infirmary.

218 Bolton residents died in Bolton Royal Infirmary.

SUMMARY OF THE PRINCIPAL CAUSES OF DEATH, 1940.

| | No. of Deaths | Per cent of total Deaths |
|---|------------------|-----------------------------|
| INFECTIOUS AND PARASITIC DISEASES ... | 255 | 9·86 |
| Diphtheria ... | 17 | ·65 |
| Influenza ... | 86 | 3·32 |
| Measles ... | 8 | ·30 |
| Pulmonary tuberculosis ... | 94 | 3·64 |
| Other forms of tuberculosis ... | 18 | ·69 |
| Syphilis ... | 13 | ·50 |
| Other infectious and parasitic diseases ... | 19 | ·73 |

| | No. of Deaths | Per cent. of total Deaths |
|--|------------------|------------------------------|
| CANCER AND OTHER TUMOURS | 303 | 11·71 |
| Cancer | 286 | 11·05 |
| Tumours | 17 | ·65 |
| RHEUMATISM, DISEASES OF NUTRITION, ETC. ... | 53 | 2·04 |
| Rheumatic fever | 9 | ·34 |
| Chronic rheumatism, osteo-arthritis, etc.... | 7 | ·27 |
| Diabetes | 26 | 1·00 |
| Exophthalmic goitre | 6 | ·23 |
| Other diseases | 5 | ·19 |
| DISEASES OF THE BLOOD AND BLOOD FORMING | | |
| ORGANS | 28 | 1·08 |
| Anæmias | 16 | ·62 |
| Leukæmia, aleukæmia | 7 | ·27 |
| Other diseases | 5 | ·19 |
| DISEASES OF THE NERVOUS SYSTEM AND SENSE | | |
| ORGANS | 276 | 10·67 |
| Meningitis | 5 | ·19 |
| Diseases of medulla and spinal cord ... | 6 | ·23 |
| Cerebral hæmorrhage | 159 | 6·14 |
| Cerebral embolism and thrombosis ... | 67 | 2·59 |
| Epilepsy | 9 | ·34 |
| Other diseases | 30 | 1·16 |
| DISEASES OF THE CIRCULATORY SYSTEM ... | 636 | 24·59 |
| Heart diseases | 589 | 22·77 |
| Arterio-sclerosis | 28 | 1·08 |
| Gangrene | 5 | ·19 |
| High blood pressure | 7 | ·27 |
| Other diseases | 7 | ·27 |
| DISEASES OF THE RESPIRATORY SYSTEM ... | 442 | 17·09 |
| Bronchitis | 266 | 10·28 |
| Pneumonia | 137 | 5·29 |
| Pleurisy | 6 | ·23 |
| Congestion of lungs, etc. | 10 | ·38 |
| Asthma | 14 | ·54 |
| Other diseases | 9 | ·34 |

| | No. of Deaths | Per cent. of total Deaths |
|---|------------------|------------------------------|
| DISEASES OF THE DIGESTIVE SYSTEM ... | 101 | 3.90 |
| Ulcer of the stomach or duodenum ... | 18 | .69 |
| Diarrhœa and enteritis ... | 20 | .77 |
| Appendicitis ... | 5 | .19 |
| Hernia and intestinal obstruction ... | 24 | .92 |
| Cirrhosis of the liver ... | 6 | .23 |
| Diseases of the gall bladder and ducts ... | 8 | .30 |
| Other diseases ... | 20 | .77 |
| DISEASES OF THE URINARY AND GENITAL SYSTEMS... | 100 | 3.86 |
| Nephritis ... | 72 | 2.78 |
| Diseases of the prostate ... | 18 | .69 |
| Other diseases ... | 10 | .38 |
| THE PUERPERAL STATE ... | 10 | .38 |
| DISEASES OF THE SKIN AND CELLULAR TISSUE | 10 | .38 |
| CONGENITAL MALFORMATIONS ... | 17 | .65 |
| DISEASES OF EARLY INFANCY ... | 47 | 1.81 |
| Congenital debility ... | 8 | .30 |
| Premature birth ... | 29 | 1.12 |
| Injury at birth ... | 4 | .15 |
| Other diseases ... | 6 | .23 |
| OLD AGE ... | 206 | 7.96 |
| DEATHS FROM VIOLENCE... | 92 | 3.55 |
| Suicide ... | 28 | 1.08 |
| Accidents ... | 60 | 2.32 |
| Other violent deaths ... | 4 | .15 |
| MISCELLANEOUS CAUSES ... | 11 | .42 |

Deaths from Puerperal Causes.

Maternal mortality is the number of deaths of women classed to pregnancy and child-bearing. It is expressed as the rate per 1,000 births (live and still), and is sub-divided into the deaths due to puerperal sepsis, and the deaths due to all other puerperal causes.

There were 10 deaths from puerperal causes in 1940, giving a maternal mortality-rate of 4.24. The rate for England and Wales was 2.16.

| | | 10 | | |
|---------------------------|-----|--------|---|--|
| | | Deaths | BOLTON Rate per 1000 total births | ENGLAND & WALES Rate per 1000 total births |
| Puerperal sepsis | ... | 4 | 1.70 | .52 |
| Other puerperal causes... | | 6 | 2.54 | 1.64 |
| Total ... | | 10 | 4.24 | 2.16 |

In addition to the 10 deaths directly due to pregnancy and child-bearing there was one death where childbirth was a contributory cause. The death was assigned to lobar pneumonia.

Death-rate of Infants under One Year of Age.

The death-rate of infants is expressed as the number of deaths under one year per 1,000 live births, and is called the infantile mortality-rate.

Bolton's infantile mortality-rate for 1940 was 56. The figure for England and Wales was 55.

Of Bolton's 2,243 births, 2,168 were legitimate and 75 illegitimate.

The infantile mortality amongst the legitimate children was 54, and amongst the illegitimate 93.

Deaths under Four Weeks.

The part of the infantile mortality which occurs in the first four weeks of life is called the neo-natal mortality. There were 23.6 deaths of infants under 4 weeks per 1,000 live births.

The causes of death during the first four weeks of life were as follows :—

| CAUSES OF DEATH | Under 7 days | 7 and under 14 days | 14 and under 21 days | 21 and under 28 days | Total under 28 days |
|------------------------------|-----------------|---------------------------|----------------------------|----------------------------|---------------------------|
| Pneumonia (all forms) ... | 1 | — | — | 1 | 2 |
| Injury at Birth ... | 4 | — | — | — | 4 |
| Atelectasis ... | 5 | — | — | — | 5 |
| Congenital Malformations ... | 5 | — | 2 | — | 7 |
| Premature Births ... | 21 | 1 | 3 | — | 25 |
| Congenital Debility... | 2 | 1 | — | — | 3 |
| Other Causes ... | 1 | 1 | 2 | 3 | 7 |
| Totals ... | 39 | 3 | 7 | 4 | 53 |

GENERAL PROVISION OF HEALTH SERVICES.

LABORATORY FACILITIES.

The local authority employs a whole-time Public Analyst. His report on the work of the department is to be found on page 39.

The pathological examinations made in the Public Analyst's Laboratory during 1940 were as follows :—

| | | Total | Positive | Negative | Doubtful |
|-----------------------------------|-----|-------|----------|----------|----------|
| Sputum for <i>B. tuberculosis</i> | ... | 193 | 20 | 173 | — |
| Diphtheria (Throat swabs) | ... | 777 | 87 | 679 | 11 |
| Fever <i>B. typhosus</i> | ... | 8 | 1 | 7 | — |
| Paratyphoid A | ... | 8 | — | 8 | — |
| Paratyphoid B | ... | 8 | 6 | 2 | — |

The examinations made in the Public Health Laboratory, Manchester, were as follows :—

| | | Total | Positive | Negative |
|---|-----|-------|----------|----------|
| Milk (Inoculation test for <i>B. tuberculosis</i>) | | 80 | 7 | 73 |
| Widal reaction | ... | 28 | 14 | 14 |
| Pleural fluid for T.B. | ... | 1 | 1 | — |
| Fæces for typhoid and dysentery | ... | 46 | 17 | 29 |
| Wassermann reaction : | | | | |
| Blood | ... | 1,290 | | |
| Cerebro-spinal fluid | ... | 41 | | |
| Kahn test | ... | 21 | | |
| Gonorrhœa : | | | | |
| Microscopical test | ... | 13 | | |
| Complement fixation test | ... | 266 | | |

Medical Officers of the Department examined 300 sputum specimens for *B. tuberculosis*, 1,058 slides for the gonococcus, 15 slides for syphilis, 2,006 cultures for the diphtheria bacillus, and 45 cerebro-spinal fluids for the meningococcus, in the course of routine clinical work.

PROFESSIONAL NURSING IN THE HOME.

The Bolton District Nursing Association provides nursing in the home for all cases of illness other than certain infectious diseases and maternity nursing.

During the year, 2,366 cases were nursed, and these received a total of 95,523 visits. In addition to the general nursing, the staff gave 3,710 treatments to 1,545 first aid cases in factories and workshops. The nurses were also present at 39 operations.

The Bolton Corporation makes an annual grant of £400 to the funds of the Association. The Public Health Committee pays for any home nursing of the following diseases: puerperal pyrexia, measles, whooping cough, epidemic diarrhoea, ophthalmia neonatorum, tuberculosis and influenzal pneumonia.

Hospitals.

THE BOLTON ROYAL INFIRMARY.

During the year under review the number of cases admitted was 5,412, of whom approximately 28 per cent. were from outside the Borough of Bolton. In addition, 13,525 cases were dealt with as out-patients and 11,553 cases were received into the casualty department. At the end of the year there were 225 patients on the waiting list for admission.

The Edmund Potter Hospital, an auxiliary to the Bolton Royal Infirmary, has 43 beds for females. All the patients who are admitted are sent from the Bolton Royal Infirmary for convalescence. 825 patients were admitted during the year.

The Blair Convalescent Hospital, Bromley Cross, is a voluntary institution with 49 beds for male patients only. 567 cases were admitted in 1940.

TOWNLEYS HOSPITAL.

Townleys Hospital is a general hospital situated in Farnworth just outside the Borough Boundary and serves Bolton and Farnworth, and the townships of Kearsley, Little Hulton, Little Lever, Horwich, Westhoughton and Turton, with an approximate population of 272,000. The hospital has 530 beds and is administered by the Public Health Committee.

The following statistical return relates to the year ended 31st December, 1940 :—

| | |
|--|-------|
| Total No. of admissions (including infants born in hospital) | 5,165 |
| No. of women confined in hospital | 1,085 |
| No. of live births | 1,010 |
| No. of stillbirths | 76 |
| No. of deaths among children under 4 weeks of age (born in hospital) | 40 |
| Total No. of deaths among children under 1 year ... | 80 |
| No. of maternal deaths among women admitted to hospital for confinement | 11 |
| Total No. of deaths | 729 |
| Total No. of discharges (including infants born in hospital) | 4,283 |
| No. of cases whose total stay was for the following periods :— | |
| (a) Under 4 weeks | 3,947 |
| (b) 4 weeks and under 13 weeks | 886 |
| (c) 13 weeks or more | 179 |
| No. of beds occupied (excluding cots in maternity wards) :— | |
| (a) Average during year | 379 |
| (b) Highest (1st March, 1940) | 449 |
| (c) Lowest 1st January, 1940) | 274 |
| No. of operations under general anæsthetic... .. | 428 |
| Ante-natal Clinic :— | |
| Total No. of expectant mothers seen | 1,108 |
| No. of attendances | 5,548 |

**Classification of In-Patients who were Discharged from or who
Died in Townleys Hospital during the year.**

| DISEASE GROUPS | | | | | | Children (under 16 years of age) | | Men and Women | |
|---|--|-----|-----|-----|-----|--|------------|---------------------|------------|
| | | | | | | Dis- charged | Died | Dis- charged | Died |
| A. | Acute infectious disease (1) | ... | ... | ... | ... | 19 | 4 | 27 | 8 |
| B. | Influenza (2) | ... | ... | ... | ... | 4 | — | 21 | — |
| C. | Tuberculosis : | | | | | | | | |
| | Pulmonary | ... | ... | ... | ... | — | 2 | 12 | 9 |
| | Non-pulmonary | ... | ... | ... | ... | — | 3 | 6 | 5 |
| D. | Malignant disease | ... | ... | ... | ... | — | — | 38 | 90 |
| E. | Rheumatism : | | | | | | | | |
| | (1) Acute rheumatism (rheumatic fever) together with sub-acute rheumatism and chorea | ... | ... | ... | ... | 14 | — | 27 | — |
| | (2) Non-articular manifestations of so- called "rheumatism" (muscular rheumatism, fibrositis, lumbago and sciatica) | ... | ... | ... | ... | 1 | — | 8 | — |
| | (3) Chronic arthritis | ... | ... | ... | ... | — | — | 21 | 1 |
| F. | Venereal disease | ... | ... | ... | ... | 5 | — | 5 | — |
| G. | Puerperal pyrexia : | | | | | | | | |
| | (a) Women confined in the hospital | ... | ... | ... | ... | — | — | 5 | 1 |
| | (b) Other cases | ... | ... | ... | ... | — | — | 7 | 1 |
| H. | Other diseases and accidents connected with pregnancy and childbirth | ... | ... | ... | ... | — | — | 286 | 9 |
| I. | Mental diseases : | | | | | | | | |
| | (a) Senile Dementia | ... | ... | ... | ... | — | — | 4 | — |
| | (b) Other | ... | ... | ... | ... | — | — | 14 | — |
| J. | Senile decay (3) | ... | ... | ... | ... | — | — | 89 | 133 |
| K. | Accidental injury and violence (4) | ... | ... | ... | ... | 10 | — | 67 | 1 |
| <i>In respect of cases not included above :</i> | | | | | | | | | |
| L. | Disease of the Nervous System and Sense Organs | ... | ... | ... | ... | 81 | 16 | 180 | 69 |
| M. | " " Respiratory System | ... | ... | ... | ... | 123 | 21 | 247 | 48 |
| N. | " " Circulatory System | ... | ... | ... | ... | 50 | 15 | 223 | 203 |
| O. | " " Digestive System | ... | ... | ... | ... | 70 | 12 | 220 | 24 |
| P. | " " Genito-urinary System | ... | ... | ... | ... | 32 | 1 | 138 | 16 |
| Q. | " " Skin | ... | ... | ... | ... | 58 | 1 | 81 | — |
| R. | Other diseases | ... | ... | ... | ... | — | — | — | — |
| S. | Mothers and infants discharged | ... | ... | ... | ... | | | | |
| | from Maternity Wards and not | | | | | — | — | 1064 | — |
| | included in above figures | | | | | 968 | — | — | — |
| T. | Any persons not falling under any of the above headings | ... | ... | ... | ... | 25 | 28 | 40 | 1 |
| TOTALS | | | | | | 1460 | 103 | 2830 | 619 |

(1) Includes—with the exception of Acute Primary and Influenzal Pneumonia, Tuberculosis, Puerperal Pyrexia—all generally notifiable diseases, together with Measles, German Measles, Chickenpox, Whooping Cough and Mumps. Cases of Influenzal Pneumonia, Tuberculosis, Puerperal Pyrexia, and Acute Primary Pneumonia are recorded respectively under Groups B, C, G and M. Cases of Encephalitis Lethargica are entered under Group A if acute and under Group L if chronic.

(2) Includes Acute Influenzal Pneumonia.

(3) Confined to cases and deaths in which no more specific diagnosis was practicable.

(4) Includes suicides, attempted suicides and poisoning cases.

MATERNITY AND CHILD WELFARE.

Midwifery and Ante-Natal Work.

1—DOMICILIARY.

The following figures give a statistical summary of the work in relation to domiciliary midwifery for the year :—

- (a) Ante-natal clinics—Public Health Department (2 weekly).
412 expectant mothers attended and made 1,128 attendances.
130 X-ray examinations were made in the department.
- (b) Confinements conducted by midwives.
992 confinements were conducted by midwives.
In 331 cases they found it necessary to call in medical aid.
- (c) Confinements conducted by medical practitioners.
In addition to the 313 cases where practitioners were called in by the midwives, the doctors conducted approximately 200 confinements.

The following table gives particulars of the domiciliary midwives' work during the year :—

| | | | |
|--|-----|-----|-----|
| No. of midwives who have practised... | ... | ... | 32 |
| No. of cases attended ... | ... | ... | 992 |
| Average No. of cases per midwife | ... | ... | 31 |
| No. of calls for medical aid | ... | ... | 313 |
| Per cent of cases in which medical aid was sought... | ... | ... | 31% |
| No. on the register at the beginning of the year | ... | ... | 31 |
| No. who ceased to practise in Bolton | ... | ... | 1 |
| No. on the register at the end of the year | ... | ... | 31 |

In addition to the above, the midwives attended 103 cases as maternity nurses.

The following 376 notifications were received from domiciliary midwives in accordance with the regulations of the Central Midwives Board :—

| | | | | | | |
|------------------------------------|-----|-----|-----|-----|-----|-----|
| Medical assistance | ... | ... | ... | ... | ... | 313 |
| Stillbirths | ... | ... | ... | ... | ... | 45 |
| Artificial feeding | ... | ... | ... | ... | ... | 12 |
| Death of mother or child | ... | ... | ... | ... | ... | 4 |
| Laying out of dead body | ... | ... | ... | ... | ... | 1 |
| Liable to be a source of infection | ... | ... | ... | ... | ... | 1 |

When a family is not eligible for maternity benefit under the National Health Insurance Acts and the family income falls below a scale approved by the Council, the Public Health Committee pay the midwife's fee for her work at a confinement. Last year 177 such fees were paid.

The Public Health Committee provide home helps for mothers who are unable to pay for assistance in the home during confinement. Home helps were provided in 220 instances. In 86 cases part of the fees were recovered.

MUNICIPAL MIDWIVES.

During the year, the nine midwives appointed booked 787 cases, 741 as midwifery cases and 46 as maternity cases, and they made 645 deliveries, or an average of 71 cases per midwife.

The midwives paid 13,099 ante-natal and post-natal visits to their patients during the year.

2—INSTITUTIONAL MIDWIFERY.

(a) TOWNLEYS HOSPITAL.

Three ante-natal clinics are held weekly. During the year, 1,108 patients attended the clinic, 803 of which were Bolton cases.

The following particulars relate to the cases admitted during 1940 from Bolton and from the county areas served. Approximately 70 per cent. of the cases were from Bolton.

| | | | |
|---|-----|-----|-------|
| No. of beds used for maternity cases | ... | ... | 107 |
| No. of cases admitted | ... | ... | 1,186 |
| Average duration of stay in days | ... | ... | 18 |
| No. of cases notified as *Puerperal pyrexia... | ... | ... | 12 |
| *i.e., rise of temperature to 100·4°F. for 24 hours, or recurrence within that period. | | | |
| No. of cases of pemphigus neonatorum | ... | ... | Nil |
| No. of infants not entirely breast fed whilst in hospital | ... | ... | 99 |
| No. of cases of ophthalmia neonatorum | ... | ... | 1 |
| No. of maternal deaths | ... | ... | 11 |
| No. of infant deaths | ... | ... | 117 |
| (a) Stillborn | ... | ... | 76 |
| (b) Within 10 days of birth | ... | ... | 41 |

(b) HASLAM MATERNITY HOME.

The following table gives particulars of all cases admitted to the Home in 1940 :—

| | | | | | |
|--|-----|-----|-----|-----|------|
| No. of beds in the Home | ... | ... | ... | ... | 17 |
| No. of cases admitted | ... | ... | ... | ... | 412 |
| Average duration of stay in days | ... | ... | ... | ... | 13·3 |
| No. of cases delivered by :— | | | | | |
| (a) Midwives | ... | ... | ... | ... | 306 |
| (b) Doctors | ... | ... | ... | ... | 100 |
| No. of cases in which medical assistance was sought by the midwife | | | | | |
| | ... | ... | ... | ... | 86 |
| No. of cases notified as *Puerperal pyrexia... | | | | | |
| | ... | ... | ... | ... | 2 |
| *i.e., rise of temperature to 100·4°F. for 24 hours, or its recurrence within that period. | | | | | |
| No. of cases of pemphigus neonatorum | ... | ... | ... | ... | Nil |
| No. of infants not entirely breast fed whilst in the Home | ... | ... | ... | ... | 11 |
| No. of cases notified as ophthalmia neonatorum | ... | ... | ... | ... | Nil |
| No. of maternal deaths | ... | ... | ... | ... | 1 |
| No. of infant deaths :— | | | | | |
| | ... | ... | ... | ... | 21 |
| (a) Stillborn | ... | ... | ... | ... | 15 |
| (b) Within 10 days of birth | ... | ... | ... | ... | 6 |

DENTAL TREATMENT FOR EXPECTANT MOTHERS.

During the year, 68 expectant mothers made 358 attendances. Twenty-three mothers were provided with dentures. The charge made varies in accordance with the financial circumstances of the patient.

HEALTH VISITORS.

The following table shows the work done by the Health Visitors :—

VISITS BY HEALTH VISITORS.

| | | | | | |
|--|-----|-----|-----|-----|-------|
| Primary birth enquiries | ... | ... | ... | ... | 2,100 |
| Visits to children, 1—5 years... | ... | ... | ... | ... | 4,833 |
| Primary visits to expectant mothers... | ... | ... | ... | ... | 371 |
| Re-visits to infants under 1 year | ... | ... | ... | ... | 4,183 |
| Re-visits to expectant mothers | ... | ... | ... | ... | 214 |

| | | | | |
|--|-----|-----|-----|--------|
| Visits to puerperal pyrexia cases | ... | ... | ... | 6 |
| Visits to ophthalmia cases | ... | ... | ... | 38 |
| Stillbirth enquiries | ... | ... | ... | 103 |
| Death enquiries made (under one year of age) | ... | ... | ... | 108 |
| " " " (maternal) | ... | ... | ... | 6 |
| Visits to midwives' houses | ... | ... | ... | 67 |
| Visits—Children Act | ... | ... | ... | 27 |
| Miscellaneous visits | ... | ... | ... | 2,975 |
| Total Visits | ... | ... | ... | 15,031 |

DAY NURSERY.

The following are the statistics for the year ended 31st December, 1940 :—

Total number of attendances of children :—

| | | | | |
|--|-----|-----|-----|-------|
| Whole day under 3 years | ... | ... | ... | 7,135 |
| Whole day 3 years and over | ... | ... | ... | 747 |
| Total whole day | ... | ... | ... | 7,882 |
| Half day under 3 years | ... | ... | ... | 1,090 |
| Half day 3 years and over | ... | ... | ... | 139 |
| Total half day | ... | ... | ... | 1,229 |
| Average for year (whole day) | ... | ... | ... | 31.75 |
| " " " (half day) | ... | ... | ... | 21 |
| No. of days open during the year :— | | | | |
| Whole day | ... | ... | ... | 248 |
| Half day | ... | ... | ... | 50 |
| Actual No. of children who have attended | ... | ... | ... | 46 |
| Average No. of attendances per child | ... | ... | ... | 198 |

MASSAGE AND ARTIFICIAL SUNLIGHT TREATMENT FOR INFANTS.

Treatment is provided for any debilitated and rickety children who are in attendance at the Child Welfare Centres. The treatments are given in the Massage and Light Clinic in the Public Health Department.

The number of massage cases treated in 1940 was 113, and these received a total of 2,368 treatments.

The number of light cases treated in 1940 was 299, and these received a total of 2,112 treatments.

CLOSET ACCOMMODATION.

The position of Bolton as regards closet accommodation at the close of 1920 and the close of 1940 is shown in the following table :—

| | Dec. 31st, 1920 | Dec. 31st, 1940 |
|----------------------------|-----------------|-----------------|
| Fresh water closets | 11,062 | 42,767 |
| Waste water closets | 15,219 | 12,612 |
| Pail closets | 6,302 | 400 |
| Privy middens | 10,540 | 580 |

SANITARY INSPECTION.

The nature and extent of the work done by the Sanitary Inspectors is shown in the following statement :—

INSPECTIONS.

Complaints investigated:

| | |
|--|-------|
| From Public | 603 |
| From Factory Inspector | 14 |
| Closet conversions | 80 |
| Drains | 387 |
| Caravans | 42 |
| Keeping of animals | 79 |
| Newly infected houses... .. | 788 |
| Water supplies | 18 |
| Smoke observations | 148 |
| Common Lodging-houses | 239 |
| Houses let in lodgings | 64 |
| Factories with mechanical power | 146 |
| Factories without mechanical power... .. | 40 |
| Workplaces | 88 |
| Offensive trades premises | 150 |
| Butchers' shops and stores | 3,421 |
| Slaughterhouses | 1,172 |

| | | | | | | |
|---------------------------------|-----|-----|-----|-----|-----|-------|
| Bakehouses | ... | ... | ... | ... | ... | 792 |
| Fish Friers' premises | ... | ... | ... | ... | ... | 574 |
| Premises where food is prepared | ... | ... | ... | ... | ... | 1,411 |
| Dairies, cowsheds and milkshops | ... | ... | ... | ... | ... | 636 |
| Markets | ... | ... | ... | ... | ... | 475 |
| Shops (Shops Act) | ... | ... | ... | ... | ... | 309 |
| Theatres, Cinemas, etc. | ... | ... | ... | ... | ... | 48 |
| Ice Cream premises | ... | ... | ... | ... | ... | 123 |
| Houses inspected | ... | ... | ... | ... | ... | 1,021 |
| Houses revisited | ... | ... | ... | ... | ... | 5,868 |
| Miscellaneous | ... | ... | ... | ... | ... | 8,661 |

ACTION TAKEN.

| | | | |
|--|-----|-----|-------|
| Informal notices served or letters written | ... | ... | 1,473 |
| Verbal notices | ... | ... | 1,093 |
| Legal notices served | ... | ... | 119 |

RESULT OF ACTION.

DWELLINGS.

| | | | | | |
|----------------------------------|-----|-----|-----|-----|-------|
| Floors relaid or repaired | ... | ... | ... | ... | 319 |
| Walls and ceilings repaired | ... | ... | ... | ... | 1,519 |
| Dampness of walls remedied | ... | ... | ... | ... | 307 |
| Roofs repaired | ... | ... | ... | ... | 249 |
| Spouting repaired | ... | ... | ... | ... | 278 |
| Additional windows provided | ... | ... | ... | ... | 34 |
| Windows repaired or made to open | ... | ... | ... | ... | 496 |
| Pantries provided | ... | ... | ... | ... | 2 |
| Sinks provided | ... | ... | ... | ... | 130 |
| Houses re-decorated | ... | ... | ... | ... | 187 |
| Verminous houses disinfested | ... | ... | ... | ... | 27 |
| Overcrowding abated | ... | ... | ... | ... | 3 |

DRAINAGE, CLOSETS, ASHPITS, ETC.

| | | | | |
|---|-----|-----|-----|-------|
| Drains cleansed from obstruction | ... | ... | ... | 179 |
| Drains and intercepting chambers provided | ... | | | 5 |
| Drains re-laid, repaired or trapped | ... | ... | ... | 184 |
| Drains disconnected from sewer | ... | ... | ... | 39 |
| Yards drained, paved or repaired | ... | ... | ... | 158 |
| Additional W.C's provided | ... | ... | ... | 19 |
| W.C's reconstructed or repaired | ... | ... | ... | 157 |
| New pedestals provided | ... | ... | ... | 83 |
| Flushing cisterns provided or repaired | ... | ... | | 108 |
| Privies and pail closets converted | ... | ... | ... | 3 |
| Waste water closets converted | ... | ... | ... | 76 |
| *Ashpits abolished | ... | ... | ... | 1,702 |
| Dustbins provided | ... | ... | ... | 3,404 |

*Includes ashpits abolished incidental to the erection of domestic air raid shelters.

VARIOUS.

| | | | | | |
|--|-----|-----|-----|-----|--------------------|
| Smoke nuisances abated | ... | ... | ... | ... | 1 |
| Nuisances from animals abated | ... | ... | ... | | 8 |
| Offensive accumulations removed | ... | ... | ... | | 59 |
| Additional water taps provided | ... | ... | ... | | 2 |
| Improvements in factories, shops and food premises | | | | | 470 |
| Cowshed improvements | ... | ... | ... | ... | 6 |
| Dairy improvements | ... | ... | ... | ... | 4 |
| Miscellaneous | ... | ... | ... | ... | 1,518 |
| | | | | | <hr/> 11,736 <hr/> |

DISINFECTIONS.

| | | | | | |
|----------------------|-----|-----|-----|-----|-------|
| Houses disinfected | ... | ... | ... | ... | 1,005 |
| Articles disinfected | ... | ... | ... | ... | 4,698 |
| Articles destroyed | ... | ... | ... | ... | 273 |

PLACES UNDER INSPECTION.

| | | | | | |
|---------------------------------------|-----|-----|-----|-----|-----|
| Common lodging-houses | ... | ... | ... | ... | 10 |
| Houses let in lodgings | ... | ... | ... | ... | 111 |
| Factories without mechanical power... | ... | ... | ... | ... | 219 |
| Factories with mechanical power | ... | ... | ... | ... | 797 |
| Factory chimneys | ... | ... | ... | ... | 259 |
| Bakehouses | ... | ... | ... | ... | 408 |
| Fish Friers' premises | ... | ... | ... | ... | 198 |
| Premises where food is prepared | ... | ... | ... | ... | 442 |
| Outworkers' premises | ... | ... | ... | ... | 10 |
| Offensive trades | ... | ... | ... | ... | 24 |
| Slaughterhouses (in actual use) | ... | ... | ... | ... | 4 |
| Cowsheds | ... | ... | ... | ... | 259 |
| Milk shops | ... | ... | ... | ... | 596 |
| Theatres, Cinemas, etc. | ... | ... | ... | ... | 29 |
| Public Sanitary Conveniences | ... | ... | ... | ... | 31 |
| Travelling vans... | ... | ... | ... | ... | 41 |

Common Lodging-houses.

During the year one lodging-house was closed voluntarily and five others were refused re-registration on grounds of unfitness. One keeper appealed to the Courts against the refusal to register, but the appeal was withdrawn and the house closed. In another case where the keeper failed to close the premises proceedings were instituted under Sec. 236 of the Public Health Act, 1936; a fine of £3 was imposed and the house closed.

The number of registered common lodging-houses in Bolton at the end of the year was 10. Nine of these are used by males only and accommodate a total of 471 men. The other is used exclusively by women and accommodates 40.

INSPECTION AND SUPERVISION OF FOOD.

MILK.

The Milk and Dairies Order, 1926.

| | | | | |
|--|--------------------------------|-----|-----|-------|
| Cowkeepers | on register, December, 1939... | ... | ... | 112 |
| „ | added to register during 1940 | ... | ... | 2 |
| „ | discontinued during 1940 | ... | ... | 4 |
| | | | | <hr/> |
| „ | on register, December, 1940 | ... | ... | 110 |
| Cowsheds | on register, December, 1939 | ... | ... | 262 |
| „ | added to register during 1940 | ... | ... | 2 |
| „ | discontinued during 1940 | ... | ... | 5 |
| | | | | <hr/> |
| „ | on register, December, 1940 | ... | ... | 259 |
| Number of cows provided for in the cowsheds | | | | 3,014 |
| Average number of cows kept during the year | | | | 2,739 |
| Number of dairies and premises of milk purveyors | | | | 787 |

Milk (Special Designations) Orders, 1936 and 1938.

The following licences were granted under these Orders during 1940 :—

| | | | | | | |
|--|-----|-----|-----|-----|-----|----|
| Producer's licence to use the designation " Tuberculin Tested " | ... | ... | ... | ... | ... | 2 |
| Supplementary licence to use the designation " Tuberculin Tested " | ... | ... | ... | ... | ... | 1 |
| Dealer's licence to use the designation " Tuberculin Tested " | ... | ... | ... | ... | ... | 1 |
| Producer's licence to use the designation " Accredited " | ... | ... | ... | ... | ... | 15 |
| Supplementary licence to use the designation " Accredited " | ... | ... | ... | ... | ... | 3 |
| Dealer's licence to use the designation " Pasteurised " | ... | ... | ... | ... | ... | 1 |
| (Licence in respect of a Pasteurising establishment). | | | | | | |
| Supplementary licence to use the designation " Pasteurised " | ... | ... | ... | ... | ... | 1 |

MEAT.

The following table shows the number of animals slaughtered and inspected at the public abattoirs and private slaughterhouses in the Borough, with the diseased conditions grouped under two heads :—

- (1) Carcases affected with disease other than tuberculosis ; and
- (2) Carcases found to be affected with tuberculosis only.

Carcases Inspected and Condemned.

| | Cattle excluding Cows | Cows | Calves | Sheep and Lambs | Pigs |
|---|-----------------------------|-------|--------|-----------------------|-------|
| Total number killed and inspected ... | 5,305 | 6,042 | 1,500 | 64,304 | 7,900 |
| All Diseases except Tuberculosis : | | | | | |
| Whole carcases condemned... .. | 1 | 20 | 18 | 56 | 9 |
| Carcases of which some part or organ was condemned ... | 684 | 1,470 | — | 643 | 34 |
| Percentage of the number inspected affected with disease other than tuber- culosis | 12·9 | 24·6 | 1·2 | 1·0 | ·54 |
| Tuberculosis only : | | | | | |
| Whole carcases condemned | 10 | 129 | — | — | 20 |
| Carcases of which some part or organ was condemned ... | 160 | 1,254 | — | — | 443 |
| Percentage of the number inspected affected with tuber- culosis | 3·20 | 22·88 | — | — | 5·86 |

LEGAL PROCEEDINGS DURING 1940.

| DATE | OFFENCE | RESULT |
|----------|--|---|
| 29/ 2/40 | FOOD & DRUGS ACT, 1938, SEC. 3.: Selling butter not of the nature, substance and quality demanded | Fined £10/0/0. |
| 21/ 3/40 | PUBLIC HEALTH ACT, 1936, SEC. 93 : Premises in such a state as to be prejudicial to health or a nuisance | Withdrawn after adjournment. Work done by owner. |
| 21/ 3/40 | PUBLIC HEALTH ACT, 1936, SEC. 236 : Appeal against refusal to register common lodging-house | Appeal withdrawn, Lodging-house closed. |
| 5/ 4/40 | FOOD & DRUGS ACT, 1938, SEC. 3 : Selling lard not of the nature, sub- stance and quality demanded | Fined £5/0/0. |
| 17/ 5/40 | FOOD & DRUGS ACT, 1938, SEC. 3.: Selling milk not of the nature, sub- stance and quality demanded | Fined £3/0/0. |
| 17/ 5/40 | do. | Fined £2/0/0. |
| 17/ 5/40 | do. | Fined £2/0/0. |
| 24/ 5/40 | FOOD & DRUGS ACT, 1938, SEC. 13 : Seventeen contraventions of the above section | Fined £255/0/0. |

Legal Proceedings during 1940—*continued.*

| DATE | OFFENCE | RESULT |
|----------|---|----------------|
| 11/ 7/40 | MILK & DAIRIES ORDER, 1926, ARTICLE 28 : Returning churns not properly cleansed | Fined £43/0/0. |
| 10/10/40 | FOOD & DRUGS ACT, 1938, Sec. 3 : Selling distilled water not of the nature, substance and quality demanded | Fined £3/0/0. |
| 10/10/40 | PUBLIC HEALTH ACT, 1936, Sec. 236 Keeping a common lodging-house without registration | Fined £3/0/0. |
| 27/12/40 | TUBERCULOSIS ORDER, 1938 : Failing to notify cow suffering from disease of the udder | Fined £2/0/0. |

NOTIFIABLE INFECTIOUS DISEASES.

PREVALENCE AND MORTALITY.

Below are shown the number of cases of notifiable diseases notified in Bolton in 1940 and the number of deaths resulting from each of these notifiable diseases.

NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING THE YEAR 1940.

| Disease. | | | | | Total Cases Notified. | Total Deaths. |
|--|-----|-----|-----|-----|--------------------------|------------------|
| Smallpox | ... | ... | ... | ... | — | — |
| Scarlet Fever | ... | ... | ... | ... | 538 | — |
| Diphtheria | ... | ... | ... | ... | 235 | 17 |
| Enteric Fever (including Paratyphoid) | ... | ... | ... | ... | 16 | 1 |
| Relapsing Fever (Undulant) | ... | ... | ... | ... | 1 | — |
| *Pneumonia | ... | ... | ... | ... | 217 | 137 |
| Puerperal Pyrexia | ... | ... | ... | ... | 8 | 4 |
| Cerebro-spinal Fever | ... | ... | ... | ... | 42 | 1 |
| Acute Poliomyelitis | ... | ... | ... | ... | 14 | 4 |
| Acute Polio encephalitis | ... | ... | ... | ... | — | — |
| Encephalitis Lethargica | ... | ... | ... | ... | — | 4 |
| Dysentery | ... | ... | ... | ... | — | — |
| Ophthalmia Neonatorum | ... | ... | ... | ... | 7 | — |
| Erysipelas | ... | ... | ... | ... | 47 | — |
| Malaria | ... | ... | ... | ... | — | — |
| Measles | ... | ... | ... | ... | 2,408 | 8 |
| Whooping Cough | ... | ... | ... | ... | 563 | 5 |

*The cases notified are Acute Primary and Acute Influenzal, but the deaths include all forms of Pneumonia.

Deaths from Infectious Diseases.

The deaths in Bolton attributed to the various epidemic diseases are shown in the following table for the years 1931 to 1940 :—

CAUSES OF DEATH FROM EPIDEMIC DISEASES.

| | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 |
|---|------|------|------|------|------|------|------|------|------|------|
| Smallpox | — | — | — | — | — | — | — | — | — | — |
| Scarlet Fever | 2 | 1 | 10 | 2 | 3 | 1 | — | 3 | 1 | — |
| Diphtheria and Memb. Croup | 2 | 3 | 6 | 11 | 5 | 4 | 23 | 22 | 11 | 17 |
| Enteric Fever | — | — | — | — | — | — | 1 | 1 | — | 1 |
| Measles... .. | 24 | 9 | 14 | 12 | 6 | 9 | 4 | 10 | 3 | 8 |
| Whooping Cough | 14 | 11 | 9 | 2 | 13 | 8 | 14 | 1 | 4 | 5 |
| Diarrhoea and Enteritis under 2 years of age | 17 | 12 | 17 | 10 | 9 | 8 | 4 | 3 | 14 | 10 |
| Erysipelas | 7 | 3 | 7 | 10 | 5 | 6 | 5 | 1 | 1 | — |
| Puerperal Sepsis | 3 | 3 | 5 | 1 | 7 | 1 | 2 | 4 | 3 | 4 |
| Cerebro-spinal Fever | 7 | 5 | 3 | 2 | 1 | 2 | 2 | 1 | 6 | 1 |
| Encephalitis Lethargica | 6 | 3 | 2 | 5 | 5 | 7 | 4 | 7 | 4 | 4 |
| Influenza | 110 | 46 | 165 | 27 | 55 | 35 | 104 | 24 | 42 | 86 |

BOROUGH ISOLATION HOSPITAL—ADMISSIONS AND DISCHARGES.

| No. of Patients. | No. of Patients suffering from the following Diseases : | | | | | Total. |
|-----------------------------------|---|-------------|-------------------------|-----------------------------|-----------------|--------|
| | Scarlet Fever. | Diphtheria. | Pulmonary Tuberculosis. | Other Tuberculous Diseases. | Other Diseases. | |
| Remaining, Dec. 31st, 1939 | 24 | 19 | 14 | — | — | 57 |
| Admitted in 1940 | 393 | 236 | 30 | 1 | 92 | 752 |
| Total No. treated, 1940 | 417 | 255 | 44 | 1 | 92 | 809 |
| Discharged in 1940 | 388 | 214 | 35 | — | 81 | 718 |
| Died in 1940 | — | 16 | 9 | 1 | 9 | 35 |
| Remaining, Dec. 31st, 1940 | 29 | 25 | — | — | 2 | 56 |

DEATHS FROM CANCER, 1940.

The following table shows the age and sex distribution of all persons who were certified as having died of cancer in Bolton in 1940. The table shows also the localization of the disease.

| LESION | SEX | | AGE | | | | | | | | | | | | | | | | | | |
|---|-----|----|--------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------------|--|
| | | | 0 to 5 | 5 to 10 | 10 to 15 | 15 to 20 | 20 to 25 | 25 to 30 | 30 to 35 | 35 to 40 | 40 to 45 | 45 to 50 | 50 to 55 | 55 to 60 | 60 to 65 | 65 to 70 | 70 to 75 | 75 to 80 | 80 to 85 | 85 and upwards | |
| | M. | F. | | | | | | | | | | | | | | | | | | | |
| BUCCAL CAVITY : Pharynx | 2 | | | | | | | | | | | | | | | 1 | 1 | | | | |
| | | 1 | | | | | | | | | | | | 1 | | | | | | | |
| Tongue | 7 | | | | | | | | | | | | | | 1 | 2 | 2 | 2 | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Other Sites | 5 | | | | | | | | | | | | | | | 1 | 2 | 2 | | | |
| | | 3 | | | | | | | | | | | | | 3 | | | | | | |
| TOTAL—BUCCAL CAVITY ... | 14 | | | | | | | | | | | | | | | 2 | 5 | 5 | 2 | | |
| | | 4 | | | | | | | | | | | | | 1 | 3 | | | | | |
| DIGESTIVE ORGANS : Intestines | 14 | | | | | | | | | 2 | | 3 | 1 | 4 | | 2 | 2 | | | | |
| | | 27 | | | | | | | | | 1 | 1 | 2 | 3 | 6 | 5 | 5 | 4 | | | |
| Liver | 9 | | | | | | | | 1 | | 1 | | 1 | 1 | 2 | 2 | 1 | | | | |
| | | 3 | | | | | | | | | | | | 2 | | | 1 | | | | |
| Œsophagus | 6 | | | | | | | | | | | | | 1 | 2 | 1 | 1 | 1 | | | |
| | | 1 | | | | | | | | | | | | | | | 1 | | | | |
| Pancreas | 5 | | | | | | | | | | 1 | | | | 1 | 1 | 2 | | | | |
| | | 3 | | | | | | | | | | | | | 1 | 1 | 1 | | | | |
| Rectum | 12 | | | | | | | | | | | | | | 5 | 3 | 3 | | 1 | | |
| | | 3 | | | | | | | | | | | | 1 | | 1 | 1 | | | | |
| Stomach | 40 | | | | | | | | | 2 | 2 | 4 | 3 | 8 | 4 | 10 | 5 | 2 | | | |
| | | 20 | | | | 1 | | | | | | | 1 | 3 | 3 | 3 | 5 | 1 | 2 | 1 | |
| TOTAL—DIGESTIVE ORGANS : | 86 | | | | | | | | | 3 | 4 | 6 | 6 | 11 | 17 | 17 | 15 | 6 | 1 | | |
| | | 57 | | | | 1 | | | | 1 | 1 | 3 | 7 | 12 | 10 | 13 | 6 | 2 | 1 | | |

DEATHS FROM CANCER, 1940.—continued.

AGE AND SEX DISTRIBUTION AND LOCALIZATION OF DISEASE.

| LESION | SEX | | AGE | | | | | | | | | | | | | | | | | |
|----------------------------------|-----|-----|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|
| | M. | F. | 0 to 5 | 5 to 10 | 10 to 15 | 15 to 20 | 20 to 25 | 25 to 30 | 30 to 35 | 35 to 40 | 40 to 45 | 45 to 50 | 50 to 55 | 55 to 60 | 60 to 65 | 65 to 70 | 70 to 75 | 75 to 80 | 80 to 85 | 85 and up |
| RESPIRATORY ORGANS : | | | | | | | | | | | | | | | | | | | | |
| Larynx | 8 | | | | | | | | | | | | 1 | | | 2 | 4 | | | 1 |
| | | ... | | | | | | | | | | | | | | | | | | |
| Lungs... .. | 11 | | | | | | | | 1 | | | | 3 | 3 | 3 | | | 1 | | |
| | | 3 | | | | | | | | | | | | 1 | | 1 | | 1 | | |
| TOTAL—RESPIRATORY ORGANS | 19 | | | | | | | | 1 | | | 1 | 3 | 3 | 5 | 4 | | 1 | 1 | |
| | | 3 | | | | | | | | | | | | 1 | | 1 | | 1 | | |
| FEMALE GENITAL ORGANS : | | | | | | | | | | | | | | | | | | | | |
| Uterus | | 21 | | | | | | | | 1 | 3 | 1 | 6 | | 3 | 1 | 3 | 1 | 2 | |
| Ovary | | 10 | | | | | | | | | | 1 | 2 | 1 | 2 | 2 | | 2 | | |
| Other Sites | | 1 | | | | | | | | | | | | | | | 1 | | | |
| TOTAL—FEMALE GENITAL ORGANS | | 32 | | | | | | | | 1 | 3 | 2 | 8 | 1 | 5 | 3 | 4 | 3 | 2 | |
| BREAST | | | | | | | | | | | | | | | | | | | | |
| | | 39 | | | | | | 1 | | 4 | 4 | 5 | 6 | 5 | 3 | 4 | 3 | 3 | | 1 |
| MALE GENITO-URINARY ORGANS : | | | | | | | | | | | | | | | | | | | | |
| Prostate | | 4 | | | | | | | | | | | | 1 | | 3 | | | | |
| Scrotum | | 2 | | | | | | | | | | | | | | 1 | | | 1 | |
| Other Sites | | 1 | | | | | | | | | | | | | | | | 1 | | |
| TOTAL—MALE GENITO-URINARY ORGANS | | 7 | | | | | | | | | | | | 1 | | 4 | | 1 | 1 | |
| URINARY ORGANS | | 5 | | | | | | | | | | | 1 | | 3 | | 1 | | | |
| | | 4 | | 1 | | | | | | | 1 | | | | 1 | | 1 | | | |
| SKIN , | | 3 | | | | | | | | | | | | | | 1 | 2 | | | |
| | | ... | | | | | | | | | | | | | | | | | | |
| OTHER OR UNSPECIFIED ORGANS : | | 5 | | | | 1 | | | | | | 1 | | | 1 | 2 | | | | |
| | | 8 | | | | | | | | 1 | | 1 | | 4 | | | 2 | | | |
| TOTAL—MALES | 139 | | | | | 1 | | | 1 | 3 | 4 | 8 | 10 | 15 | 28 | 33 | 23 | 10 | 3 | |
| TOTAL—FEMALES | | 147 | | 1 | | | 1 | 1 | | 6 | 9 | 9 | 17 | 19 | 24 | 18 | 23 | 13 | 4 | 2 |
| TOTAL—BOTH SEXES | 286 | | | 1 | | 1 | 1 | 1 | 1 | 9 | 13 | 17 | 27 | 34 | 52 | 51 | 46 | 23 | 7 | 2 |

TUBERCULOSIS.

The total number of new cases notified in 1940 was 141 as compared with 139 in 1939. Ninety-seven of the new cases were pulmonary tuberculosis and 44 were non-pulmonary tuberculosis.

Age and sex distribution of cases of tuberculosis notified in Bolton in 1940.

PULMONARY TUBERCULOSIS NOTIFICATIONS.

| SEX | AGES | | | | | | | | | | | Total |
|-----------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|-------|
| | 0 to 1 | 1 to 5 | 5 to 10 | 10 to 15 | 15 to 20 | 20 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 and upwards | |
| Males ... | — | — | — | — | 16 | 4 | 12 | 15 | 7 | 14 | 2 | 70 |
| Females | 1 | — | — | 2 | 4 | 5 | 7 | 2 | 3 | 3 | — | 27 |
| Total | 1 | — | — | 2 | 20 | 9 | 19 | 17 | 10 | 17 | 2 | 97 |

NON-PULMONARY TUBERCULOSIS NOTIFICATIONS.

| SEX | AGES | | | | | | | | | | | Total |
|-----------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|-------|
| | 0 to 1 | 1 to 5 | 5 to 10 | 10 to 15 | 15 to 20 | 20 to 25 | 25 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 and upwards | |
| Males ... | 1 | 3 | 1 | 2 | 5 | 5 | 4 | 1 | — | 2 | — | 24 |
| Females | — | 1 | 3 | 3 | 5 | 1 | 3 | 3 | 1 | — | — | 20 |
| Total | 1 | 4 | 4 | 5 | 10 | 6 | 7 | 4 | 1 | 2 | — | 44 |

DEATHS FROM TUBERCULOSIS.

One hundred and twelve Bolton residents were certified as having died of tuberculosis during 1940. This compares with 102 in 1939.

Forty-one of these deaths took place in institutions.

The age and sex distribution of those who died from tuberculosis are given in these tables :—

PULMONARY TUBERCULOSIS DEATHS.

| SEX | AGES | | | | | | | | | Total |
|----------------|------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|-------|
| | Under 5 | 5 to 10 | 10 to 15 | 15 to 20 | 20 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 and upwards | |
| Males | — | 1 | — | 1 | 15 | 10 | 11 | 7 | 5 | 50 |
| Females | 1 | — | 2 | 7 | 21 | 7 | 6 | — | — | 44 |
| Total... .. | 1 | 1 | 2 | 8 | 36 | 17 | 17 | 7 | 5 | 94 |

NON-PULMONARY TUBERCULOSIS DEATHS.

| SEX | AGES | | | | | | | | | Total |
|----------------|------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|-------|
| | Under 5 | 5 to 10 | 10 to 15 | 15 to 20 | 20 to 35 | 35 to 45 | 45 to 55 | 55 to 65 | 65 and upwards | |
| Males | 1 | — | — | 2 | — | — | — | 2 | 1 | 6 |
| Females | 3 | — | — | 3 | 3 | 2 | — | 1 | — | 12 |
| Total... .. | 4 | — | — | 5 | 3 | 2 | — | 3 | 1 | 18 |

In 15 cases the disease had not been notified during life. 10 of these cases died in institutions, and the diagnosis was made after death.

The death-rate from tuberculosis of all forms during 1940 in certain Lancashire County Boroughs was as follows :—

| | | | |
|-------------------|-----|-------------------|------|
| Bury | ·40 | St. Helens | ·77 |
| Preston | ·65 | Wigan | ·80 |
| BOLTON | ·69 | Burnley | ·81 |
| Blackburn | ·70 | Rochdale... .. | 1·09 |
| Oldham | ·75 | Manchester | 1·17 |
| Warrington | ·76 | Salford | 1·27 |

TUBERCULOSIS DISPENSARY.

The dispensary is open every week-day (except Saturday) from 9 a.m. to 12 noon and on Monday and Friday from 2 p.m. to 5 p.m. The work done at the dispensary is shown by the following figures :—

| | |
|---|-------|
| Total attendances | 2,099 |
| Total number of patients sent for consultation ... | 303 |
| The results of these consultations were as follows :— | |
| Number found to have pulmonary tuberculosis ... | 87 |
| Number found to have non-pulmonary tuberculosis | 42 |
| Number of cases kept under observation for suspected pulmonary tuberculosis | 6 |
| Number of cases kept under observation for suspected non-pulmonary tuberculosis ... | — |
| Number in whom no evidence of tuberculosis was found | 168 |
| Visits by tuberculosis nurse | 1,243 |
| Number of specimens of sputum examined... .. | 296 |
| Total number of cases on the dispensary register :— | |
| Pulmonary tuberculosis | 310 |
| Non-pulmonary tuberculosis | 187 |
| Total | 497 |

| | |
|---|-----|
| X-ray examinations made in connection with dispensary work | 530 |
| Total number of cases on the notification register :— | |
| Pulmonary tuberculosis | 407 |
| Non-pulmonary tuberculosis | 199 |
| Total | 606 |

TREATMENT OF TUBERCULOSIS.

Three hundred persons applied for treatment in 1940. Two hundred and thirteen of these were cases of pulmonary tuberculosis and 87 of non-pulmonary tuberculosis. Three cases were admitted to hospital for observation.

The treatment given was as follows :—

| | |
|------------------------------|-----|
| Residential treatment | 141 |
| Domiciliary treatment... .. | 145 |
| Out-patient treatment... .. | 11 |

No patient requiring residential treatment was refused such treatment.

The following table summarizes the residential treatment given during 1940.

ACCOMMODATION PROVIDED BY LOCAL AUTHORITY WITH NUMBER OF PERSONS ADMITTED FOR TREATMENT DURING THE YEAR 1940.

| INSTITUTION. | Beds. | Admitted during the year. | | | Under Treatment 31st Dec. 1940. |
|---|-------|---------------------------|---------|-----------|---------------------------------|
| | | Total | Insured | Uninsured | |
| Wilkinson Sanatorium | 30 | 60 | 51 | 9 | 25 |
| Borough Hospital | 24 | 30 | 23 | 7 | — |
| *Heswall... .. | 6 | — | — | — | — |
| *Bolton Royal Infirmary | — | 31 | 10 | 21 | 1 |
| *Robert Jones and Agnes Hunt Orthopædic Hospital, Oswestry | — | 10 | 10 | — | 10 |
| *Children's Orthopædic Hospital, Marple | — | 7 | — | 7 | 6 |
| *Blencathra Sanatorium, Threlkeld | — | 1 | 1 | — | 2 |
| *Papworth Village Settlement | — | 1 | 1 | — | — |
| *Middleton in Wharfedale Sanatorium... .. | — | 1 | 1 | — | — |

*Paid for per user.

Ultra-Violet Ray Treatment.

During the year, 134 cases were referred to the ultra-violet ray department, the majority of these cases being of gland tuberculosis. 100 were given ultra-violet ray treatment, 28, Kromayer, 5 Kromayer and ultra-violet ray, and 1 radiant heat.

Artificial Pneumothorax.

Twenty-two patients attended the dispensary at intervals varying from two to four weeks. In addition to two afternoon sessions for this work, it has been found necessary to hold an evening session once in three weeks so that the patients who are working may continue to receive the treatment. Only a small percentage of patients are suitable for the treatment, as it depends on the resting of the diseased lung by collapsing it, and is therefore only applicable to patients with the other lung healthy, but the results again encourage its use wherever possible.

Examination of Contacts.

During the year, 41 contacts were examined at the dispensary or in the home; of these, 3 proved to be tuberculous. It is felt that by an extension of this work the aim and duty of the dispensary will be more fully discharged.

ASSISTANCE GIVEN TO NECESSITOUS TUBERCULOUS PATIENTS.

| | | | |
|--------------------------------------|-----|-----|--------------|
| 1. Total number of patients assisted | ... | ... | 172 |
| 2. Average time receiving assistance | ... | | 7 months |
| 3. Amount of milk given | ... | ... | 20,932 pints |
| 4. Malt and oil given... | ... | ... | ... 121 lbs. |

VENEREAL DISEASES.

The tables on pages 36, 37 & 38 show the work carried out at the Bolton Treatment Centre.

Return relating to all persons who were treated at the Treatment Centre
at Bolton Public Health Offices during the
year ended the 31st December, 1940.

| | Syphilis | | Soft Chancre | | Gonorrhœa | | Non- Venereal or undiagnosed conditions | | TOTALS | | |
|--|----------|-----|-----------------|-----|-----------|-----|--|-----|---------|-----|----------|
| | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. | Total. |
| 1. Number of cases on 1st January under treatment or observation... .. | 115 | 141 | ... | ... | 181 | 68 | 25 | 15 | 321 | 224 | 545 |
| 2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection | 6 | 5 | ... | ... | 6 | 1 | ... | ... | 12 | 6 | 18 |
| 3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from :— | | | | | | | | | | | |
| Syphilis, primary ... | 9 | 1 | ... | ... | ... | ... | ... | ... | 9 | 1 | 10 |
| " secondary ... | 7 (1) | 5 | ... | ... | ... | ... | ... | ... | 7 (1) | 5 | 12 (1) |
| " latent in 1st year of infection ... | 1 | 1 | ... | ... | ... | ... | ... | ... | 1 | 1 | 2 |
| " all later stages ... | 11 | 17 | ... | ... | ... | ... | ... | ... | 11 | 17 | 28 |
| " congenital ... | 4 | 7 | ... | ... | ... | ... | ... | ... | 4 | 7 | 11 |
| Soft Chancre | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Gonorrhœa, 1st year of infection... .. | ... | ... | ... | ... | 166 (2) | 56 | ... | ... | 166 (2) | 56 | 222 (2) |
| " later | ... | ... | ... | ... | 1 | 1 | ... | ... | 1 | 1 | 2 |
| Non-venereal conditions | ... | ... | ... | ... | ... | ... | 125 | 112 | 125 | 112 | 237 |
| Conditions remaining undiagnosed at 31st December... .. | ... | ... | ... | ... | ... | ... | ... | 2 | ... | 2 | 2 |
| 4. Number of cases dealt with for the first time during the year under report known to have received treatment for the same infection, or to have been under observation, at other Centres... .. | 3 | 1 | ... | ... | 4 | 4 | ... | ... | 7 | 5 | 12 |
| TOTALS OF ITEMS 1, 2, 3, AND 4 ... | 156 (1) | 178 | ... | ... | 358 (2) | 130 | 150 | 129 | 664 (3) | 437 | 1101 (3) |

[illegible]

| | Under 1 year | | 1 and under 5 years | | 5 and under 15 years | | 15 years and over | | Totals | |
|--|---------------|-----|---------------------|---------------|----------------------|----|-------------------|--|--------|----|
| | M. | F. | M. | F. | M. | F. | M. | F. | M. | F. |
| 12. Number of cases of congenital syphilis in Item 3 above classified according to age periods | ... | ... | ... | 1 | ... | 4 | 4 | 2 | 4 | 7 |
| 13. Pathological Work :— Number of specimens examined at, and by the medical officer of the Treatment Centre | Microscopical | | | | | | | Others for diagnosis of Venereal Disease | | |
| | for Syphilis | | | for Gonorrhœa | | | | | | |
| | 15 | | | 1058 | | | | ... | | |

Statement showing the services rendered at the Treatment Centre during the year, classified according to the areas in which the patients resided.

| Name of County or County Borough (or Country in the case of persons residing elsewhere than in England and Wales) : | Bolton | Lancs. C.C. | Manchester | Liverpool | Salford | Blackburn | Blackpool | Wigan | Bury | Rochdale | Macclesfield | Hyde | Total |
|---|----------|-------------|------------|-----------|---------|-----------|-----------|-------|------|----------|--------------|------|------------|
| A. Number of cases from each area included under the following headings in Item 3 :— | | | | | | | | | | | | | |
| Syphilis | 46 | 15 (1) | ... | ... | ... | ... | 1 | ... | ... | ... | 1 | ... | 63 (1) |
| Soft Chancre | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Gonorrhœa | 154 (1) | 62 (1) | 2 | ... | ... | ... | ... | 1 | 4 | ... | ... | 1 | 224 (2) |
| Non-venereal and undiagnosed conditions | 189 | 41 | 6 | ... | 1 | ... | ... | ... | ... | 2 | ... | ... | 239 |
| TOTAL | 389 (1) | 118 (2) | 8 | ... | 1 | ... | 1 | 1 | 4 | 2 | 1 | 1 | 526 (3) |
| B. Total number of attendances of all patients residing in each area | 9374 (2) | 3830 (20) | 51 | 1 | 6 | 2 | 12 | 22 | 60 | 3 | 16 | 17 | 13394 (22) |

NOTE.—Service Cases are included in the above figures and the numbers so included are shewn in brackets.

ANNUAL REPORT
of the
PUBLIC ANALYST AND BACTERIOLOGIST
for the year ended December 31st, 1940.

The following is the report on the work carried out in the Borough Laboratory.

| SUMMARY. | | | | | | Number of Samples. |
|---|-----|-----|-----|-----|-----|-----------------------|
| Food and Drugs | ... | ... | ... | ... | ... | 569 |
| Bacteriological Examinations for the Public Health Department | ... | ... | ... | ... | ... | 978 |
| Bacteriological Examinations of Milk | ... | ... | ... | ... | ... | 206 |
| Analyses for the Waterworks Committee | ... | ... | ... | ... | ... | 753 |
| Examinations for Townleys Hospital | ... | ... | ... | ... | ... | 47 |
| Royal Infirmary (Milks for Chemical and Bacterio- logical Examination) | ... | ... | ... | ... | ... | 11 |
| Food Executive Officer | ... | ... | ... | ... | ... | 11 |
| Water Examinations for Turton Urban District Council | ... | ... | ... | ... | ... | 15 |
| Miscellaneous Analyses | ... | ... | ... | ... | ... | 106 |
| | | | | | | 2,696 |

PUBLIC HEALTH COMMITTEE.

FOOD AND DRUGS.

| | Total | Genuine | Adulterated | Per cent Adulterated |
|---------------------|-------|---------|-------------|-------------------------|
| Milk ... | 268 | 255 | 13 | 4.85 |
| Tinned Cream | 4 | 4 | — | — |
| Butter | 13 | 10 | 3 | 23.08 |
| Margarine | 5 | 5 | — | — |
| Cheese | 10 | 10 | — | — |
| Lard ... | 9 | 7 | 2 | 22.22 |
| Tea ... | 1 | 1 | — | — |
| Coffee and Essences | 12 | 12 | — | — |
| Cocoa and Essences | 9 | 9 | — | — |

| | Total | Genuine | Adulterated | Per cent. Adulterated |
|-----------------------------------|-----------------|-----------------|----------------|--------------------------|
| Jam | 11 | 11 | — | — |
| Meat Products ... | 9 | 9 | — | — |
| Shredded Suet ... | 8 | 6 | 2 | 25·00 |
| Cereals | 39 | 39 | — | — |
| Condiments and Spices | 52 | 52 | — | — |
| Cakes and Cake Mixtures | 11 | 11 | — | — |
| Sweets | 11 | 11 | — | — |
| Drugs | 55 | 53 | 2 | 3·64 |
| Dried Fruits ... | 6 | 6 | — | — |
| Baking Powders ... | 8 | 6 | 2 | 25·00 |
| Lemon Curd ... | 1 | 1 | — | — |
| Mincemeat | 1 | 1 | — | — |
| Table Jelly | 5 | 5 | — | — |
| Sardines | 6 | 6 | — | — |
| Ground Nuts ... | 7 | 7 | — | — |
| Miscellaneous ... | 8 | 8 | — | — |
| | <hr/> 569 <hr/> | <hr/> 545 <hr/> | <hr/> 24 <hr/> | <hr/> 4·22 <hr/> |

MILK

| Total examined. | Genuine. | Adulterated. |
|-----------------|----------|--------------|
| 268 | 255 | 13 |

All the samples were examined for preservatives and colouring matter. In no case was any found.

The satisfactory quality has been maintained, the average being (exclusive of skimmed milk) for the year :—

| Milk Fat. | Non-fatty Solids. | Water. |
|-----------|-------------------|--------|
| 3·76% | 8·75% | 87·49% |

Minimum limits :—Milk Fat 3·00% ; Non-fatty Solids 8·50%

BACTERIOLOGICAL EXAMINATIONS.

(PUBLIC HEALTH DEPARTMENT).

| | | Total | Positive. | Negative. | Doubtful. |
|-------------------|-----|-------|-----------|-----------|-----------|
| Tuberculosis | ... | 193 | 20 | 173 | 0 |
| Diphtheria... | ... | 777 | 87 | 679 | 11 |
| Fever B. Typhosus | ... | 8 | 1 | 7 | 0 |
| Paratyphoid A | ... | 8 | 0 | 8 | 0 |
| Paratyphoid B | ... | 8 | 6 | 2 | 0 |

BACTERIOLOGICAL EXAMINATION OF MILK.

PASTEURISED MILK.

| | | | | |
|------------------------------|-----|-----|-----|--------|
| No. of samples examined | ... | ... | ... | 11 |
| Average Agar Count per 1 ml. | ... | ... | ... | 45,200 |

TUBERCULIN TESTED MILK.

| | | | | |
|---|-----|-----|-----|----|
| No. of samples examined | ... | ... | ... | 22 |
| No. of samples which satisfied methylene blue test... | ... | ... | ... | 22 |
| No. of samples containing B. Coli in 1/100th ml. | ... | ... | ... | 1 |

ACCREDITED MILK.

| | | | | |
|---|-----|-----|-----|-----|
| No. of samples examined | ... | ... | ... | 173 |
| No. of samples which satisfied methylene blue test... | ... | ... | ... | 169 |
| No. of samples containing B. Coli in 1/100th ml. | ... | ... | ... | 15 |

The four samples which did not satisfy the methylene blue test decolourised the methylene blue in 4, 3½, 3½, 3½ hours respectively.

MISCELLANEOUS EXAMINATIONS.

- 4 Urines.
- 7 Waters.
- 40 Swabs for Anthrax (Cattle).
- 35 Bath Waters.
- 38 Milks for Townleys Hospital.
- 9 Ice Creams for Townleys Hospital.
- 11 Kit Washings.
- 2 Feeding Stuffs.
- 1 Bacon.

EXAMINATIONS FOR WATERWORKS COMMITTEE.

| | |
|-----------------------------------|-----|
| Routine water examinations | 752 |
| Deposit from filter bed | 1 |

B. COLI.

Standards adopted for water at filter stations :—

Number of B. Coli per 100 mils.

0 Good.

1—2 Tolerable.

2—4 Unsatisfactory.

Above 4 Bad.

| | |
|---|---------------|
| No. of samples with 0 Typical B. Coli per 100 mils. ... | 220 or 94·42% |
| No. of samples with 1 Typical B. Coli per 100 mils. ... | 2 or 0·86% |
| No. of samples with 2 Typical B. Coli per 100 mils ... | 1 or 0·43% |
| No. of samples with 4 Typical B. Coli per 100 mils. ... | 10 or 4·29% |

AGAR COUNT (Total No. of Organisms of all types per 1 ml.).

| | |
|-------------------------------------|-----|
| Number of samples examined | 233 |
| Average Agar Count per 1 ml. | 7 |

C1 WELCHII.

| | |
|-----------------------------|---------------|
| Negative in 50 mils. | 226 or 97·00% |
| Positive in 50 mils. | 7 or 3·00% |

During the year, the following samples (approximately 6 per month) have been taken from the proximity of dead ends in the mains, i.e., at the places where the water might reasonably be expected to be of the worst quality.

The standard adopted for this piped supply is that suggested by the Ministry of Health, viz.:—

Number of B. Coli per 100 mils.

0 Highly satisfactory.

1—2 Satisfactory.

3—10 Suspicious.

Above 10 Unsatisfactory.

B. COLI.

| | |
|--|--------------|
| No. of samples with 0 Typical B. Coli per 100 mils. ... | 65 or 94.20% |
| No. of samples with 1 Typical B. Coli per 100 mils. ... | 1 or 1.45% |
| No. of samples with 2 Typical B. Coli per 100 mils. ... | 2 or 2.90% |
| No. of samples with 3 Typical B. Coli per 100 mils. ... | 0 or 0.00% |
| No. of samples with more than 10 Typical B. Coli per 100 mils. ... | 1 or 1.45% |

AGAR COUNT (Total No. of Organisms of all types per 1 ml.).

| | |
|----------------------------------|----|
| Number of samples examined ... | 69 |
| Average Agar Count per 1 ml. ... | 13 |

Cl. WELCHII.

| | |
|--------------------------|--------------|
| Negative in 50 mils. ... | 65 or 94.20% |
| Positive in 50 mils. ... | 4 or 5.80% |

ROYAL INFIRMARY.

11 Milks for Chemical and Bacteriological Examination.

CLEANSING COMMITTEE.

2 Fish Meals.

1 Meat Meal.

GAS COMMITTEE.

1 Water for Bacteriological Examination.

FOOD EXECUTIVE OFFICER.

7 Sausage.

1 Fish Ground Bait.

1 Butter.

1 Cream Trifle.

1 Cream Cake.

TURTON URBAN DISTRICT COUNCIL.

15 Waters for Chemical and Bacteriological Examination.

Meteorological Summary, 1940

(Compiled at Queen's Park Observatory by E. HENDY, F.R.Met.S.).

| 1940 | Barometer " | Mean Relative Humidity % | Mean of Maximum and Minimum Tempera- ture ° | Absolute extremes of Temperature | | | | Sunshine | | | Total Rainfall " |
|--------------|----------------|-----------------------------------|---|-------------------------------------|------|-------------|--------|--------------------------|--------------------------------|------|------------------------|
| | | | | Highest ° | Date | Lowest ° | Date | Total Amount hours | Maximum in one day hours | Date | |
| January... | 30.106 | 88.4 | 29.78 | 47.2 | 7 | 6.9 | 21 | 27.3 | 5.6 | 17 | 3.013 |
| February... | 29.904 | 89.4 | 35.87 | 54.1 | 27 | 19.0 | 12 | 22.3 | 5.3 | 26 | 2.709 |
| March ... | 29.846 | 82.8 | 41.36 | 59.1 | 25 | 23.2 | 7 | 88.7 | 9.8 | 28 | 3.135 |
| April ... | 29.872 | 77.5 | 45.03 | 63.0 | 26 | 29.1 | 17, 18 | 85.3 | 9.5 | 15 | 3.273 |
| May ... | 30.021 | 67.7 | 53.12 | 69.2 | 17 | 37.8 | 12 | 184.4 | 14.6 | 19 | 1.599 |
| June ... | 30.082 | 62.0 | 60.85 | 84.0 | 9 | 43.4 | 27 | 297.0 | 15.3 | 5 | 1.118 |
| July ... | 29.875 | 76.4 | 56.44 | 72.9 | 15 | 43.1 | 28 | 133.1 | 12.6 | 28 | 5.301 |
| August ... | 30.140 | 79.0 | 57.35 | 78.5 | 1 | 41.7 | 15 | 150.9 | 13.9 | 2 | 2.363 |
| September | 29.967 | 76.2 | 52.97 | 78.8 | 4 | 39.2 | 22 | 117.7 | 10.1 | 11 | 4.174 |
| October... | 29.856 | 77.5 | 48.88 | 62.8 | 20 | 31.4 | 28 | 58.0 | 6.5 | 11 | 4.273 |
| November | 29.701 | 84.3 | 42.90 | 58.0 | 2 | 28.0 | 30 | 40.9 | 6.7 | 22 | 7.723 |
| December ... | 30.102 | 85.1 | 39.49 | 54.0 | 16 | 28.0 | 12, 13 | 28.7 | 4.4 | 8 | 5.202 |
| Totals ... | 359.472 | 946.3 | 564.04 | | | | | 1234.3 | | | 43.883 |
| Averages | 29.956 | 78.9 | 47.00 | | | | | 102.9 | | | 3.657 |

Rainfall. Average 1887—1940 = 42.498"

