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## PUBLIC HEALTH DEPARTMENT.

# REPORT

ON THE HEALTH OF THE

# CITY OF LIVERPOOL

DURING THE YEAR

1942

BY

W. M. FRAZER, O.B.E., M.D., M.Sc., D.P.H., Barrister-at-Law,

Medical Officer of Health.



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#### Public Health Department, Liverpool.

My LORD MAYOR, LADIES AND GENTLEMEN,

I have the honour to submit to you herewith my twelfth Annual Report, relating to the health of the City of Liverpool.

Owing to the war, and in order to comply with the Ministry of Health's circular on the subject, the report has been considerably curtailed. The various modifications suggested by the Minister have been carried out and the text has been limited to matters of special interest. I desire to acknowledge figures and information for inclusion in the Report from the various Heads of Departments and also from the officers of the various voluntary hospitals and charitable institutions.

The total number of births was 13,729, giving a birth-rate of 20.5 per 1,000 as contrasted with a figure of 19.4 for the previous year. The total number of deaths from all causes was 9,388, giving a general death-rate of 14.0 as compared with 19.3 in 1941. Infantile mortality showed a rate of 76 per 1,000 births. The birth-rate of 20.5 per 1,000 is still higher than that of England and Wales, which is 15.8 per 1,000. Fourteen deaths occurred from puerperal fever as contrasted with nine in 1941, and the maternal mortality rate was 2.38 per 1,000 births.

I should like to be permitted to express my thanks to the Chairmen and Members of the Corporation Committees concerned with the Public Health Department for the courtesy and kindness with which they have considered the various suggestions and recommendations made to them.

I am,

Your obedient Servant,

W. M. FRAZER, Medical Officer of Health. Digitized by the Internet Archive in 2017 with funding from Wellcome Library

## CITY OF LIVERPOOL.

## SUMMARY

OF

## VITAL STATISTICS FOR 1942.

| Area (land and inland water)           | 27,321 Acres (43 sq. miles)  |
|--|--|
| Live Births 13,729                     | Live Birth rate 20.5 per 1,000 of estimated population.                                |
| Deaths (all causes) 9,388              | Death rate 14.0 per 1,000 of estimated population.                                     |
| Deaths (under 1 year of age) 1,039     | Infant Mortality 76 per 1,000 live births  |
| Deaths from :-                         |  |
| Seven principal Zymotic diseases } 234 | Zymotic death rate \} 0.35   |
| Pulmonary Tuberculosis } 653           | Pulmonary<br>Tuberculosis<br>death rate  |
| Other forms of Tuberculosis } 124      | Non Pulmonary Tuberculosis death rate  per 1,000 of the estimated resident population. |
| Respiratory diseases 1,366             | Respiratory death rate } 2.04  |
| Cancer 1,279                           | Cancer death rate 1.91   |
| Maternal Deaths 34                     | Maternal Mortality rate } 2.38 per 1,000 births.                                       |

#### BIRTHS.

The number of live births recorded during the year 1942 was 13,729, equal to a rate of 20.5 per 1,000 of the estimated resident mid-year population. Of the total births, 7,071 were males, and 6,658 were females. The number of illegitimate live births was 871 or 6.3 per cent. of the total births, 467 being males and 404 females.

The birth-rate in the City of Liverpool was considerably above the average of the great towns, which was 17.3 per 1,000 of the population, as well as of England and Wales taken as a whole, where the rate was 15.8 per 1,000.

The number of still-births registered was 552 as shown in the table below. This represented 38.6 per thousand of the total (live and still) births registered and 0.82 per 1,000 of the estimated population.

|                            | I           | IVE BIRTH | S.        | 1         | STILL BIRT | HS.   |
|----------------------------|-------------|-----------|-----------|-----------|------------|-------|
|                            | Males.      | Females.  | Total.    | Males.    | Females.   | Total |
| Legitimate<br>Illegitimate | 105 101 051 | 62<br>222 | 247<br>21 | 509<br>43 |            |       |
|                            | 7,071       | 6,658     | 13,729    | 284       | 268        | 552   |

The following figures show not only an increase in the actual number of illegitimate births, but an increase in the proportion of illegitimate births when compared with 1938.

|      | Births. | Birth<br>Rate. | Illegitimate Birth Rate per 1,000 population. | % of<br>Total<br>Births. | Total<br>Illegitimate<br>Births. |
|------|---------|----------------|---|--------------------------|----------------------------------|
| 1938 | 16,175  | 18.7           | 0.89  | 4.8                      | 771                              |
| 1942 | 13,729  | 20.5           | 1.30  | 6.3                      | . 871                            |

#### DEATHS.

The total deaths registered during the year numbered 9,388 (5,047 males and 4,341 females), equal to a death-rate of 14.0 per 1,000 of the estimated resident population. During the period since the commencement of the war the deaths of non-civilians were excluded for tabula-

tion elsewhere. The death-rate for England and Wales was 11.6 and that of the great towns was 13.3. The following table shows deaths at various age periods, expressed as a percentage of total deaths, for each year 1915 to 1942:—

|                        | Under    |                  |     |        | AT AG  | es—YE | ARS.     |          |          |     |            |
|------------------------|----------|------------------|-----|--------|--------|-------|----------|----------|----------|-----|------------|
| Year                   | years.   | 5—               | 10— | 20-    | 30-    | 40-   | 50—      | 60-      | 70       | 80- |            |
| 1915                   | %<br>33  | %                | %   | %      | %      | %     | %<br>12  | %<br>13  | %<br>12  | %   | 100        |
| 1916                   | 30       | 3                | 4   | 5      | 6      | 9     | 12       | 14       | 13       | 4   | 100        |
| 1917<br>1918           | 29<br>29 | 3 5              | 4 6 | 5<br>8 | 7 8    | 9     | 12       | 14<br>12 | 13       | 3   | 100        |
| 1919                   | 25       | 4                | 5   | 7      | 8      | 9     | 12       | 13       | 13       | 4   | 100        |
| 1915-1919<br>(average) | 29       | 3                | 5   | 6      | 7      | 9     | 12       | 13       | 12       | 4   | 100        |
| 1920                   | 33       | 2                | 4   | 5      | 7      | 9     | 11       | 13       | 12       | 4   | 100        |
| 1921                   | 33       | 2                | 4   | 5      | 6      | 9     | 11       | 13       | 12       | 5   | 100        |
| 1922<br>1923           | 28<br>30 | 2 2              | 4   | 5      | 6      | 9     | 12<br>12 | 15<br>14 | 14<br>13 | 5   | 100        |
| 1924                   | 29       | 2                | 4   | 4      | 6      | 8     | 12       | 15       | 15       | 5   | 100        |
| 1920-1924<br>(average) | 30       | 2                | 4   | 5      | 6      | 9     | 12       | 14       | 13       | 5   | 100        |
| 1925                   | 28       | 2                | 4   | 4      | 5      | 9     | 12       | 15       | 15       | 6   | 100        |
| 1926                   | 28       | 2                | 3   | 5      | 6      | 9     | 12       | 15       | 14       | 6   | 100        |
| 1927<br>1928           | 25<br>25 | 2 9              | 3   | 5      | 5      | 9     | 12<br>12 | 16<br>16 | 16<br>16 | 7 6 | 100        |
| 1929                   | 23       | 2<br>2<br>2<br>3 | 3   | 5      | 5      | 9     | 12       | 16       | 17       | 7   | 100        |
| 1925-1929<br>(average) | 26       | 2                | 3   | 5      | 5      | 9     | 12       | 16       | 16       | 6   | 100        |
| 1930                   | 20       | 3                | 4   | 5      | 5      | 9     | 14       | 17       | 16       | 7   | 100        |
| 1931<br>1932           | 23<br>22 | 2 2              | 3   | 5      | 5      | 8 8   | 12       | 17       | 18       | 7 8 | 100        |
| 1932                   | 21       | 2                | 3   | 5      | 5      | 8     | 13<br>13 | 17<br>17 | 17<br>18 | 8   | 100        |
| 1934                   | 20       | 2                | 3   | 5      | 6      | 8     | 12       | 18       | 18       | 8   | 100        |
| 1930-1934<br>(average) | 21       | 2                | 3   | 5      | 5      | 8     | 13       | 17       | 18       | 8   | 100        |
| 1935                   | 17       | 2                | 3   | 5      | 5      | 8     | 13       | 19       | 20       | 8   | 100        |
| 1936                   |          | 2<br>2<br>2      | 3   | 5      | 5      | 7     | 14       | 19       | 21       | 8   | 100        |
| 1937<br>1938           | 17<br>16 | 1                | 2 3 | 5 4    | 5<br>5 | 7 7   | 13<br>13 | 19<br>20 | 21<br>22 | 9   | 100<br>100 |
| 1938                   | 13       | 1                | 3   | 4      | 4      | 7     | 14       | 21       | 23       | 10  | 100        |
| 1935-1939<br>(average) | 16       | 2                | 3   | 5      | 5      | 7     | 13       | 19       | 21       | 9   | 100        |
| 1940                   | 1000000  | 2                | 3   | 4      | 5      | 8     | 14       | 21       | 20       | 9   | 100        |
| 1941<br>1942           | 40.00    | 2                | 4 2 | 5      | 6      | 8 7   | 13       | 20<br>22 | 19<br>22 | 8 9 | 100        |
| 1942                   | 14       | 1                | 1 4 | 4      | 5      | 1     | 14       | 22       | 1 22     | 9   | 100        |

## ANALYSIS OF CAUSES OF MORTALITY.

| Deaths i | rom certain Gro   | ups of Diseases          | in each decade                                  | from 1871 to 1                               | Deaths from certain Groups of Diseases in each decade from 1871 to 1940, and during 1941 and 1942. | .941 and 1942. |                                 |
|----------|---|--------------------------|---|--|--|----------------|---------------------------------|
| Years.   | (a)<br>Infective<br>diseases<br>(less Diarrhœa<br>and Influenza). | (b) Tubercular diseases. | (c) Respiratory diseases (including Influenza). | (d) Digestive diseases (including Diarrhœa). | Total Deaths<br>from Classes<br>(a), (b), (c) & (d)  | (e)<br>Cancer. | Total Deaths<br>from all causes |
| 871.1880 | 27.205  | 19.869                   | 29.763  | 14,747                                       | 91,584   | 2,015          | 147,005                         |
| 881.1890 | 19.748  | 17.870                   | 32,507  | 13,186                                       | 86,311   | 2,820          | 146,195                         |
| 891-1900 | 13,515  | 16.714                   | 35,819  | 18,491                                       | 84,539   | 4,223          | 145,522                         |
| 901.1910 | 13.967  | 16,054                   | 32,995  | 18,163                                       | 81,179   | 6,480          | 150,962                         |
|          | 10,417  | 14.946                   | 36,480  | 12,282                                       | 74,125   | 7,603          | 137,223                         |
| 991-1930 | 7.831   | 12,664                   | 29,447  | 8,184  | 58,126   | 9,852          | 117,756                         |
| 931-1940 | 6.473   | 9,413                    | 18,196  | 5,987  | 40,069   | 12,619         | 115,632                         |
|          | 623   | 846                      | 2,226   | 447  | 4,142  | 1,211          | 13,253                          |
| 942      | 495   | 777                      | 1,403   | 383  | 3,058  | 1,279          | 9,388                           |

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| 871.1880  | 19-2 | 13.5 | 20.5 | 10.0 | 65.9 | 1.4  | 100.  |
|-----------|------|------|------|------|------|------|-------|
| 881.1890  | 14.1 | 12.7 | 23.5 | 9.4  | 59.4 | 2.0  | 100.  |
| 006       | 6.5  | 10.8 | 24.6 | 12.7 | 57.4 | 2.9  | 100-  |
| 910       | 9.8  | 10-6 | 21.8 | 12.0 | 53.0 | 4.3  | 100-  |
| 920       | 7-9  | 10.9 | 27.3 | 6.8  | 55.0 | 5.2  | 100-  |
| 930       | 9.9  | 10-7 | 25.0 | 6.9  | 49.4 | 8.4  | 100   |
| 1931-1940 | 5.6  | 8.1  | 15.7 | 5.5  | 34.7 | 10.9 | 100.0 |
|           | 4.7  | 6.4  | 16.8 | 3.4  | 31.3 | 9-1  | 1001  |
|           | 5.3  | 8.3  | 14.9 | 4-1  | 32.6 | 13.6 | 100-  |

Death Rates per 1,000 Population.

| aths Cancer. from all causes.                         | 0.4 28.5  |           | 0.7 23.9 |      |     |           |     |      | 0 .  |
|---|-----------|-----------|----------|------|-----|-----------|-----|------|------|
| Total Deaths<br>from<br>(a), (b),(c) & (d)            | 17-3      | 15:1      | 13.8     | 11.1 | 9.2 | 6.5       | 4.7 | 5-9  | 1    |
| (d) Digestive diseases (including Diarrhoea).         | 5.8       | 2.4       | 3.0      | 2.2  | 1.6 | 6-0       | 1.0 | 9.0  | 0.0  |
| (c) Respiratory diseases (including Influenza).       | 5-7       | 5.9       | 6.9      | 4.5  | 4.7 | 00.00     | 2.1 | 3.5  |      |
| (b)<br>Tubercular<br>diseases.                        | 3.6       | 20.50     | 2.7      | 2.5  | 1.9 | 1.4       | 1.1 | 1.2  |      |
| (a) Infective diseases (less Diarrhœa and Influenza). | 5.5       | 3.6       | 2.5      | 1.9  | 1.3 | 6.0       | 0.7 | 6-0  |      |
| Years.  | 1871-1880 | 1881-1890 | _        |      | _   | 1921-1930 |     | 1941 | 0701 |

Death-Rates expressed as a percentage of the rates experienced in 1871-1880 (Index Numbers).

| 871-1880  | 100.0    | 100.0 | 0.001 | 100-0 | 100-0 | 0.001 | 0.001 |
|-----------|----------|-------|-------|-------|-------|-------|-------|
| 881-1890  | 0.69     | 0.88  | 104.0 | 85.7  | 89-1  | 125.0 | 91.0  |
| 891-1900  | 42.0     | 75.0  | 104.0 | 107.2 | 79.3  | 175.0 | 84.0  |
| 901-1910  | 36.0     | 61.0  | 79.0  | 89-3  | 64.3  | 225.0 | 20.07 |
| 1911-1920 | 26.0     | 50.0  | 83.0  | 56.7  | 0.99  | 250.0 | 0.49  |
| 921-1930  | 17.1     | 40.0  | 58.8  | 36.8  | 38.5  | 280.0 | 47.7  |
| 931-1940  | 13.5     | 30.6  | 36.8  | 25.0  | 27.2  | 375.0 | 48.1  |
| 941       | 17.3     | 33.3  | 56.1  | 21.4  | 34.1  | 450.0 | 7.19  |
| 942       | <br>13.5 | 30.6  | 36.8  | 21.4  | 26.0  | 475.0 | 49.1  |

## Infant Mortality.

The following table shows the deaths and death-rates of infants under one year of age for the year 1942:—

|                      |     |     |   | Infant<br>Deaths. |       | Infa    | nt Death Rates.          |
|----------------------|-----|-----|---|-------------------|-------|---------|--------------------------|
| All Infants          |     |     |   | 1,039             | 76 pe | r 1,000 | 0 live births.           |
| Legitimate Infants   |     |     |   | 946               | 74    | ,,      | legitimate live births.  |
| Illegitimate Infants | *** | *** | } | 93                | 107   | ,,      | illegitimate live births |

Analysis of causes of Infant Mortality in successive quinquennia 1896-1940, and the years 1941 and 1942 (A.)—Recorded Deaths.

| rs.    | 1 Total Births. | Total<br>Deaths<br>Under | General<br>Diseases<br>(excluding | Tubercular<br>Diseases. | 5<br>Nervous<br>Diseases | Respiratory Diseases | 7 Digestive Diseases (including | 8<br>Malforma-<br>tions,<br>Premature<br>Birth, | 9<br>Externa<br>Causes. |
|--------|-----------------|--------------------------|-----------------------------------|-------------------------|--------------------------|----------------------|---------------------------------|---|-------------------------|
| 91-    | 4,001           | d Year of Age.           | Tubercu-<br>losis).               |                         |                          |                      | Diarrhœa.)                      |   |                         |
| 1900   | 111,700         | 21,160                   | 1,508                             | 698                     | 2,476                    | 3,575                | 6,376                           | 5,698   | 819                     |
| 1905   | 118,801         | 20,353                   | 1,546                             | 644                     | 2,516                    | 3,484                | 5,187                           | 5,732   | 565                     |
| 1910   | 118,313         | 17,739                   | 1,613                             | 465                     | 2,052                    | 3,146                | 3,902                           | 5,520   | 539                     |
| 1915   | 111,872         | 15,458                   | 1,309                             | 345                     | 1,432                    | 2,916                | 3,635                           | 4,953   | 426                     |
| 1920   | 99,451          | 11,510                   | 1,118                             | 202                     | 1,083                    | 2,821                | 1,872                           | 4,107   | 179                     |
| 1925   | 104,217         | 10,497                   | 1,066                             | 200                     | 573                      | 2,776                | 1,786                           | 3,764   | 120                     |
| 1930   | 95,701          | 9,002                    | 978                               | 109                     | 401                      | 2,553                | 1,670                           | 2,981   | 81                      |
| 1935   | 88,644          | 7,904                    | 902                               | 82                      | 368                      | 2,050                | 1,184                           | 3,125   | 67                      |
| 1940   | 80,936          | 6,226                    | 573                               | 74                      | 519                      | 1,457                | 698                             | 2,691   | 84                      |
| 11     | 13,291          | 1,350                    | 112                               | 17                      | 83                       | 468                  | 115                             | 476   | 59                      |
| 12     | 13,729          | 1,039                    | 39                                | 18                      | 82                       | 307                  | 92                              | 455   | 14                      |
|        |                 | ORDINANO (BIBLIO         | (B.)—De                           | ath Rates I             | er 1,000                 | Births.              |                                 |   | erikalı. Neurosine sel  |
| 1900   | *33.4           | 189                      | 12.7                              | 6.2                     | 22.1                     | 32.0                 | 57:1                            | 51.0  | 7.3                     |
| 1905   | 33.4            | 172                      | 13.0                              | 5.5                     | 21.2                     | 29.3                 | 43.7                            | 48.1  | 4.7                     |
| 1910   | 32.2            | 149                      | 13.6                              | 3.9                     | 17:4                     | 26.6                 | 33.0                            | 46.7  | 4.6                     |
| 1915   | 29-3            | 137                      | 11.6                              | 3.1                     | 12.8                     | 26.1                 | 32.5                            | 43.1  | 3.8                     |
| 1920   | 24.9            | 116                      | 11.1                              | 2.0                     | 10.9                     | 28.4                 | 18.8                            | 42.0  | 1.8                     |
| 1925   | 25.1            | 100                      | 10.2                              | 1.9                     | 5.2                      | 26.6                 | 17.1                            | 36.1  | 1.2                     |
| 1930   | 22.1            | 94                       | 10.2                              | 1.1                     | 4.2                      | 26.7                 | 17.4                            | 31.1  | 0.8                     |
| 1935   | 20.5            | 89                       | 10-1                              | 0.9                     | 4.2                      | 23.1                 | 13.4                            | 35.3  | 0.8                     |
| 1940   | 19-4            | 77                       | 7.0                               | 0.9                     | 6.4                      | 17.9                 | 8-8                             | 32.9  | 1.0                     |
| 4-14-4 | 100-100         |                          |                                   | 1.0                     | 0.0                      | 35.2                 | 8.6                             | 35.8  | 4.4                     |
| 41     | 19.4            | 106                      | 8.4                               | 1.3                     | 6.2                      | 99.7                 | 0.0                             | 99.9  | 4.4                     |

<sup>\*</sup>In column 1 the rates indicate the number of births per 1,000 of the population.

8

(C.)—Death Rates expressed as a percentage of the rates recorded in 1896-1900.

|           | 1               | 2                                 | 3  | 4                       | 5     | 6                             | 7   | 8  | 9                 |
|-----------|-----------------|-----------------------------------|--|-------------------------|-------|-------------------------------|---|--|-------------------|
| Years.    | Birth<br>Rates. | Total Deaths Under 1 Year of Age. | General<br>Diseases<br>(excluding<br>Tubercu-<br>losis). | Tubercular<br>Diseases. |       | Respira-<br>tory<br>Diseases. | Digestive<br>Diseases<br>(including<br>Diarrhœa.) | Malforma-<br>tions,<br>Premature<br>Birth,<br>Maras-<br>mus, &c. | Externs<br>Causes |
| 1896/1900 | 100.0           | 100.0                             | 100.0  | 100.0                   | 100.0 | 100.0                         | 100.0   | 100.0  | 100.0             |
| 1901/1905 | 100.0           | 91.0                              | 102.3  | 89.3                    | 95.9  | 91.5                          | 76.5  | 94.0   | 65.7              |
| 1906/1910 | 93.0            | 78-6                              | 107.1  | 62.9                    | 78.6  | 83.1                          | 57.8  | 91.0   | 63.0              |
| 1911/1915 | 87.0            | 72.5                              | 91.9   | 50.0                    | 57.9  | 81.2                          | 56.9  | 84.0   | 52-1              |
| 1916/1920 | 76.0            | 61.4                              | 87.4   | 32-2                    | 49.3  | 88.7                          | 32.7  | 82.0   | 25.5              |
| 1921/1925 | 75.1            | 54.9                              | 80.3   | 30.6                    | 24.9  | 84.7                          | 29-9  | 70.8   | 16.4              |
| 1926/1930 | 66.2            | 49.7                              | 80.3   | 17:7                    | 18.9  | 83.2                          | 30.4  | 60.9   | 11.0              |
| 1931/1935 | 61.4            | 47.2                              | 79.5   | 14.8                    | 18.9  | 72.2                          | 23.4  | 69.2   | 10.4              |
| 1936/1940 | 58.1            | 40.7                              | 55.1   | 14.5                    | 29.0  | 55-9                          | 15.4  | 64.5   | 13.7              |
| 1941      | 58.1            | 56.1                              | 66.1   | *20.9                   | 28.1  | 110.0                         | 15.1  | 70.2   | 60*)*             |
| 1942      | 61.4            | 40.2                              | 22.0   | 20.9                    | 27.1  | 70.0                          | 11.7  | 64.9   | 13-3              |

#### CANCER.

There was an increase in the number of deaths recorded from cancer, namely, 1,279, as compared with 1,211 in 1941, this being equivalent to a death-rate of 1.9 per 1,000 of the population.

It is interesting to record that in December, 1942, the Hospitals and Port Health Committee accepted in principle a scheme for the diagnosis and treatment of cancer, under the Cancer Act of 1939. It was not then considered possible to bring into effect the full arrangements during the war and accordingly an interim scheme was prepared which has been submitted to the Ministry of Health for approval. It is designed to improve immediately the arrangements for the treatment of persons suffering from cancer, in the following ways:—

- (1) The appointment of medical staff who are expert in the radiotherapeutic treatment of cancer, including an Assistant Radiotherapist of senior standing, a Junior Assistant Radiotherapist, a Physicist, etc.
- (2) The provision of a Radiotherapeutic Centre at the Radium Institute.
- (3) The establishment of a Deep X-ray Therapy Department at the Royal Infirmary, and at one of the City Hospitals; and the organisation of Consultative Clinics at the Radium Institute, the Royal Infirmary, and one of the Council's hospitals.
- (4) Organising the production of Radon at the Liverpool Cancer Control Organisation's plant under the supervision of the Physicist.
  - (5) The formation of a Clinical Register and a Pathological Register.

DEATHS FROM CANCER AT VARIOUS AGE-PERIODS, 1942.

|                     |        |            |             |               | Num | ber c | of De | aths.   |     |       |     |        |  |  |
|---------------------|--------|------------|-------------|---------------|-----|-------|-------|---------|-----|-------|-----|--------|--|--|
| Organs<br>Affected. | Males. | . Females. |             | At Ages—Years |     |       |       |         |     |       |     |        |  |  |
|                     |        |            | Under<br>10 | 10-           | 25- | 40-   | 50-   | 60-     | 70- | 75-   | 80- | Ages.  |  |  |
| Buccal Cavity       | 39     | 7          |             | _             | _   | 2     | 5     | 22      | 9   | 7     | 1   | 46     |  |  |
| Stomach             | 183    | 124        | _           | _             | 7   | 28    | 69    | 113     | 50  | 29    | 11  | 30     |  |  |
| Liver               | 12     | 14         | -           | -             | -   | 2     | 3     | 9       | 1   | 6     | 5   | 20     |  |  |
| Intestines          | 156    | 147        | -           | -             | 9   | 29    | 50    | 111     | 47  | 35    | 22  | 303    |  |  |
| Lungs               | 147    | 38         |             | 2             | 6   | 30    | 64    | 62      | 13  | 5     | 3   | 183    |  |  |
| Female Genital      |        |            |             |               | 735 | 1     |       | 1 3 7 7 |     | - 150 |     | 1 1500 |  |  |
| Organs              | _      | 113        |             | 1             | 7   | 20    | 42    | 24      | 9   | 6     | 4   | 11:    |  |  |
| Breast              |        | 117        |             | -             | 4   | 21    | 33    | 36      | 8   | 9     | 6   | 11'    |  |  |
| Skin                | 10     | 10         | 1           |               | _   | 1     | 4     | 6       | 1   | 5     | 2   | 20     |  |  |
| Other Organs        | 115    | 47         | 2           | 2             | 8   | 12    | 30    | 47      | 28  | 18    | 15  | 16     |  |  |
|                     | 662    | 617        | 3           | 5             | 41  | 145   | 300   | 430     | 166 | 120   | 69  | 1,27   |  |  |

#### METEOROLOGY.

The Director to the Liverpool Observatory and Tidal Institute, Bidston, has kindly furnished the following tables relating to Meteorological observations made by him at the Observatory, Bidston:

Latitude 53° 24′ N. Longitude 3° 4′ W. Height above the Mean Level of the Sea, 202 feet.

Difference from average quantities observed during the past 76 years.

|               | BARON             | METER.            | TEMPER            | RATURE,           | RAIN              | FALL.            |
|---------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|
| 1942.         | Above<br>Average. | Below<br>Average. | Above<br>Average, | Below<br>Average. | Above<br>Average, | Below<br>Average |
|               | Inches.           | Inches.           | Degrees<br>F.     | Degrees<br>F.     | Inches.           | Inches.          |
| January       | 0.022             |                   |                   | 3.7               | 1.587             |                  |
| February      | 0.219             |                   |                   | 5.8               |                   | 0.659            |
| March         | 0.001             |                   |                   | 0.6               | 0.490             |                  |
| April         | 0.004             |                   | 1.7               |                   |                   | 0.362            |
| May           |                   | 0.097             |                   | 0.8               | 1.333             |                  |
| June          | 0.134             |                   |                   | 0.6               |                   | 1.849            |
| July          | 0.017             |                   |                   | 1.5               | 0.214             |                  |
| August        |                   | 0.030             | 1.2               |                   |                   | 0.174            |
| September     |                   | 0.091             |                   | 0.4               | ***               | 0.870            |
| October       | 0.000             |                   | 1.5               | ***               | 111               | 0.660            |
| November      | 0.378             |                   | 0.0               |                   |                   | 1.838            |
| December      | ***               | 0.036             | 4.6               | ***               | 0.267             | ***              |
| Year's Totals | 0.044             |                   |                   | 0.3               |                   | 2.521            |
|               |                   |                   |                   | almen and         | ameline.          |                  |

Meteorological Statistics compiled at the Liverpool Observatory and Tidal Institute.

|           |                  |                    | RAI     | NFALL.   | Moon Homidia  |
|-----------|------------------|--------------------|---------|--|---|
| 1942.     | Barometer. Mean. | Temperature. Mean. | Amount. | No. of days<br>on which<br>0.01 in, or<br>more fell. | Mean Humidit<br>of the air<br>(Complete<br>Saturation<br>100%). |
|           | Inches.          | Degrees F.         | Inches. |  |   |
| January   | 29.947           | 36.0               | 3.854   | 18   | 85.8  |
| February  | 30.144           | 34.4               | 1.094   | 9  | 82.1  |
| March     | 29.897           | 41.6               | 2.264   | 13   | 83.4  |
| April     | 29.907           | 48.2               | 1.287   | 11   | 67.4  |
| fay       | 29.870           | 51.2               | 3.358   | 17   | 72.7  |
| June      | 30.130           | 56.7               | 0.185   | 5  | 74.5  |
| July      | 29.960           | 58.7               | 2.941   | 18   | 78.1  |
| August    |                  | 61.0               | 2.894   | 19   | 80.1  |
| September | 29.880           | 55.8               | 1.807   | 14   | 78.1  |
| October   |                  | 51.3               | 2.665   | 16   | 81.8  |
| November  | 30.261           | 44.0               | 0.780   | 10   | 83.7  |
| December  | 29.827           | 45.4               | 2.949   | 16   | 84.7  |

11

# Monthly Analysis of Wind Observations during 1942. Compiled from daily observations at 4 fixed hours (9, 13, 17, 21).

|              | Force of Wind<br>(Miles per hour.) |      |       |                |    | Direction of Wind including "Calm." |     |      |     |      |     |      |      |  |  |
|--------------|------------------------------------|------|-------|----------------|----|-------------------------------------|-----|------|-----|------|-----|------|------|--|--|
| 1942.        | Calm.                              | 3-12 | 13-37 | 38 or<br>over. | N. | N.E.                                | E,  | S.E. | s.  | s.w. | W.  | N.W. | Calm |  |  |
| January      | 9                                  | 41   | 74    |                | 13 | 5                                   | 20  | 28   | 11  | 6    | 22  | 10   | 9    |  |  |
| February     | 7                                  | 54   | 51    |                | 17 | 15                                  | 27  | 15   | 6   | 3    | 11  | 11   | 7    |  |  |
| March        | 11                                 | 42   | 69    |                | 1  | 7                                   | 46  | 33   | 2   | 9    | 9   | 4    | 11   |  |  |
| April        |                                    | 23   | 94    |                | 1  | 13                                  | 39  | 17   | 8   | 12   | 16  | 11   | 3    |  |  |
| May          |                                    | 54   | 68    |                | 2  | 8                                   | 19  | 10   | 18  | 15   | 26  | 24   | 2    |  |  |
| June         |                                    | 53   | 41    |                | 12 | 2                                   | 1   | 3    | 3   | 3    | 22  | 48   | 26   |  |  |
| July         | 12                                 | 45   | 67    |                | 7  | 1 4                                 | 1   | 4    | 9   | 10   | 40  | 40   | 12   |  |  |
| August       |                                    | 55   | 43    |                | 5  |                                     | 1   | 12   | 19  | 14   | 26  | 17   | 26   |  |  |
| September    | 23                                 | 46   | 47    |                | 2  | 1                                   | 14  | 14   | 5   | 11   | 30  | 16   | 23   |  |  |
| October      |                                    | 56   | 49    |                | 7  | 3                                   | 2   | 11   | 7   | 13   | 49  | 13   | 19   |  |  |
| November     |                                    | 63   | 22    |                | 10 | 8                                   | 2   | 11   | 7   | 5    | 18  | 24   | 35   |  |  |
| December     | 12                                 | 43   | 68    | 1              | 1  | -                                   | 6   | 30   | 27  | 12   | 18  | 18   | 12   |  |  |
| Year's Total | 185                                | 575  | 693   | 1              | 78 | 67                                  | 178 | 188  | 122 | 113  | 287 | 236  | 185  |  |  |

## NOTIFICATION OF INFECTIOUS DISEASE.

The following is a list of the diseases notifiable in Liverpool during 1942:—

Anthrax
Acute Poliomyelitis
Cerebro-spinal Fever
Cholera
Diphtheria
Dysentery
Enteric (Typhoid) Fever
Erysipelas
Encephalitis Lethargica, Acute
Malaria
Measles
Membranous Croup
Ophthalmia Neonatorum

Paratyphoid Fever
Plague
Pneumonia, Acute Influenzal
Pneumonia, Acute Primary
Polio-encephalitis, Acute
Puerperal Pyrexia
(including Puerperal Fever)
Relapsing Fever
Scarlet Fever or Scarlatina
Smallpox
Tuberculosis (all forms)
Typhus Fever
Whooping Cough

TABLE I.

MONTHLY NUMBERS OF NOTIFICATIONS OF INFECTIOUS DISEASES DURING 1942.

| January   | <br> |     | <br> | 755     |
|-----------|------|-----|------|---------|
| February  | <br> |     | <br> | 659     |
| March     | <br> |     | <br> | 697     |
| April     | <br> |     | <br> | 917     |
| May       | <br> |     | <br> | 1,382   |
| June      | <br> | *** | <br> | 1,605   |
| July      | <br> |     | <br> | 1,491   |
| August    | <br> |     | <br> | 906     |
| September | <br> |     | <br> | 1,012   |
| October   | <br> |     | <br> | 1,068   |
| November  | <br> |     | <br> | 1,105   |
| December  | <br> |     | <br> | - 1,354 |
|           |      |     |      |         |
|           |      |     |      | 12,951  |

TABLE II.

NUMBERS OF CASES OF INFECTIOUS DISEASES COMING TO NOTICE DURING 1942.

AND NUMBERS ADMITTED TO HOSPITAL.

|   |         | 7        |       | _     |      | _    | -    | _      |           |         |          |          |        | _                                | Townson Tru                            |
|---|---------|----------|-------|-------|------|------|------|--------|-----------|---------|----------|----------|--------|----------------------------------|--|
|   | January | February | March | April | May  | June | July | August | September | October | November | December | TOTALS | Cases<br>admitted<br>to hospital | Per centage<br>admitted<br>to hospital |
| Smallpox  | _       | _        | -     | _     | _    | -    | _    | _      | _         | _       | -        | _        | -      | _                                | _                                      |
| Plague  | -       | -        | -     | -     | -    | -    | -    | -      | -         | -       | -        |          | -      | -                                | _                                      |
| Enteric Fever   | -       | -        | 1     | 1     | 2    | _    | 1    | 1      | 2         | 5       | _        | _        | 13     | 12                               | 92.3                                   |
| Scarlet Fever   | 143     | 110      | 93    | 99    | 131  | 109  | 118  | 135    | 156       | 206     | 214      | 205      | 1719   | 793                              | 46.1                                   |
| feasles and<br>German Measles                         | 62      | 60       | 137   | 272   | 973  | 921  | 986  | 632    | 424       | 519     | 360      | 746      | 6092   | 437                              | 7.2                                    |
| Diphtheria  | 376     | 292      | 230   | 215   | 200  | 158  | 125  | 154    | 162       | 236     | 176      | 172      | 2496   | 2438                             | 97.7                                   |
| Puerperal Pyrexia                                     | 30      | 25       | 16    | 23    | 34   | 28   | 19   | 27     | 21        | 36      | 14       | 33       | 306    | 279                              | 91.2                                   |
| Erysipelas  | 43      | 43       | 24    | 32    | 45   | 28   | 30   | 47     | 40        | 44      | 46       | 42       | 464    | 158                              | 34.1                                   |
| terebro-spinal Fever                                  | 23      | 36       | 29    | 27    | 32   | 13   | 8    | 3      | 5         | 10      | 8        | 7        | 201    | 194                              | 96.5                                   |
| Poliomyelitis and<br>Polio-encephalitis<br>Ophthalmia | _       | _        | _     | _     | 1    | _    | _    | _      | _         | -       |          | _        | 1      | 1                                | 100.0                                  |
| Neonatorum  | 54      | 55       | 52    | 42    | 62   | 61   | 53   | 53     | 56        | 73      | 45       | 41       | 647    | 244                              | 37.7                                   |
| Pneumonia & Influenzal Pneumonia                      | 162     | 107      | 111   | 127   | 133  | 83   | 64   | 45     | 50        | 89      | 71       | 168      | 1210   | 399                              | 33.0                                   |
| falaria   | 6       | 3        | -     | 2     | 3    | 5    | 4    | 8      | 14        | 8       | 4        | 3        | 60     | 30                               | 50.0                                   |
| Dysentery   | -       | 5        | 1     | 1     | 3    | 4    | 4    | 4      | 2         | 2       | 10       | 43       | 79     | 73                               | 92.4                                   |
| Encephalitis<br>Lethargica                            | _       | _        | _     | _     | _    | _    | _    | _      | _         | _       | _        | _        | _      | of many                          | _                                      |
| Vhooping Cough  | 29      | 11       | 34    | 38    | 47   | 62   | 67   | 109    | 62        | 82      | 116      | 181      | 838    | 116                              | 13.8                                   |
| inthrax   | -       | _        | -     | -     | 1    | -    | 1    | _      | -         | _       | _        | 1        | 3      | 3                                | 100.0                                  |
| hickenpox   | 33      | 54       | 31    | 59    | 84   | 92   | 54   | 40     | 18        | 16      | 21       | 30       | 532    | 79                               | 14.8                                   |
| TOTALS  | 961     | 801      | 759   | 938   | 1751 | 1564 | 1534 | 1258   | 1012      | 1326    | 1085     | 1672     | 14661  | 5256                             | 35.9                                   |

The numbers of patients admitted to hospital include the cases which occurred while in hospital.

#### INFECTIOUS SICKNESS.

#### Plague.

No case of plague occurred in the city during the year.

#### Smallpox.

No case of smallpox occurred in the city during the year.

#### Typhus Fever.

No case of typhus fever occurred during the year.

#### Anthrax.

Five patients suffering from Anthrax were treated at the City Hospital, Fazakerley, during 1942. Three of these were Liverpool residents, the other two coming from Stockton Heath and Widnes, respectively. Cases 96 and 97 were dock labourers and case 100 worked in a Tannery. Patient 98 was an animal slaughterer and received his infection from the carcase of a cow which had died of Anthrax. Patient 99 was employed in the tea blending department of a multiple grocer's warehouse, and it is possible that the chests of tea, which he handled in the course of his work, whilst coming overseas, had become contaminated on the outside by Anthrax infected dust in the ship, and from this the infection originated.

During the year eighteen persons attended the hospital for investigation as suspected Anthrax infection, but in none was the presence of Anthrax confirmed. The conditions which aroused suspicion included boils, pimples, carbuncles, etc.

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#### CASES OF ANTHRAX UNDER TREATMENT DURING 1942.

| Series<br>No.<br>con-<br>inued<br>from<br>1941. | Age. Sex. Occupation |    | Occupation. Days ill on admission. |   | Site<br>of<br>infection. | Clinical Notes.  | Serum<br>injected<br>daily<br>Each dose<br>expressed<br>in c.c.'s. | Result.  |
|---|----------------------|----|------------------------------------|---|--------------------------|--|--|----------|
| 96  | 33                   | М. | Dock<br>Labourer                   | 5 | Centre of<br>forehead    | Diffuse lesion;<br>swelling covered<br>scalp and upper<br>half of face. Heavy<br>serum rash.     | 250 c.c.<br>250 c.c.<br>250 c.c.                                   | Recovery |
| 97  | 39                   | М. | Dock<br>Labourer                   | 5 | Back of left<br>forearm  | Heavy serum rash.  | 200 e.e.<br>250 e.e.   | Recovery |
| 98  | 29                   | М. | Slaughterer.                       | 2 | Back of<br>left hand     | Mild serum rash.   | 150 c.c.<br>150 c.c.   | Recovery |
| 99  | 48                   | М. | Tea Ware-<br>houseman              | 5 | Below left<br>ear.       | Swelling from above<br>left ear to clavicle;<br>dysphonia and<br>dyspnœa. Copious<br>serum rash. | 300 e.c.<br>200 e.c.<br>100 e.c.                                   | Recovery |
| 100   | 14                   | М. | Tannery<br>Hand                    | 4 | Right<br>temple          | Extensive swelling<br>face and neck.<br>Copious serum<br>rash.                                   | 145 c.c.<br>130 c.c.<br>150 c.c.                                   | Recovery |

All serum was given intravenously with, at the same time, 0.3 gms. Neokharsivan on the first day of treatment, and 0.45 gms. Neokharsivan on the third day, except in patient No. 100 who received 0.2 gms. and 0.3 gms. Neokharsivan, and case No. 99 who received a third injection of .03 gms. Neokharsivan.

This series of 100 cases treated since 1924 by serum and arsenicals without excision has a mortality of seven. The last 50 cases all recovered although many of these, such as No. 100 above, were very severe.

#### Typhoid and Paratyphoid Fever.

During the year there occurred 7 cases of typhoid fever and 6 cases of paratyphoid fever.

TABLE III.

TYPHOID AND PARATYPHOID FEVER.

| T             |      | Ca   | ises.  | Deaths. |        |  |  |
|---------------|------|------|--------|---------|--------|--|--|
| Туре.         |      | Male | Female | Male    | Female |  |  |
| Typhoid Fever | <br> | 6    | 1      | 2       | 1      |  |  |
| Paratyphoid-A | <br> | -    | -      | _       | -      |  |  |
| Paratyphoid—B | <br> | 2    | 4      | 1       | -      |  |  |
| Paratyphoid—C | <br> | -    | -      | -       | -      |  |  |
| Unclassified  | <br> | -    | _      | _       | -      |  |  |

The 7 typhoid cases represent a case-rate of 0.01 per 1,000 of the population. The 6 paratyphoid cases represent a case-rate of 0.01 per 1,000 of the population.

TABLE IV.

TYPHOID AND PARATYPHOID FEVER.—AGE AND SEX DISTRIBUTION.

| A            | Typ   | ohoid  | Paraty | phoid  |
|--------------|-------|--------|--------|--------|
| Age          | Male  | Female | Male   | Female |
| Under 1 Year | <br>_ | _      | _      |        |
| 1 +          | <br>1 | _      | 1      |        |
| 2 +          | <br>  | 1      |        | _      |
| 5 +          | <br>- |        | -      |        |
| 10 +         | <br>2 | _      | _      | -      |
| 15 +         | <br>1 | -      |        |        |
| 20 +         | <br>  | _      | _      | 1      |
| 30 +         | <br>1 | _      | -      | 1      |
| 40 +         | <br>  | _      | 1      | 1      |
| 50 +         | <br>1 | _      | _      | 1      |
| 70 +         | <br>  | _      | -      |        |
| TOTAL        | <br>6 | 1      | 2      | 4      |

Port Cases of Typhoid Fever.

During the year four cases of typhoid fever were imported from overseas. These cases are not included in Tables III and IV.

#### Register of Chronic Typhoid and Paratyphoid Excretors.

The following chronic excretors of typhoid or paratyphoid organisms are known and under observation. Bacteriological examination of faeces is carried out every three months.

| Case<br>Number. | Sex. | Age. | Disease.        | Date of illness. | Date Fæces<br>last positive. |
|-----------------|------|------|-----------------|------------------|------------------------------|
| 1               | F.   | 63   | Paratyphoid "B" | Jan., 1937       | May, 1943                    |
| 2               | F.   | 53   | fever.          | July, 1941       | May, 1943                    |
| 3               | F.   | 23   | **              | July, 1941       | May, 1943                    |
| 4               | M.   | 54   |                 | July, 1941       | May, 1943                    |
| 5               | F.   | 8    | ,,              | July, 1941       | May, 1943                    |
| 6               | F.   | 48   | ,,              | July, 1941       | May, 1943                    |
| 7               | F.   | 41   | ,,              | July, 1941       | April, 1943                  |
| 8               | F.   | 38   | ,,              | Aug. 1941        | May, 1943                    |

#### Undulant Fever.

No case of undulant fever was reported during the year.

#### Diphtheria.

During 1942, 2.496 cases of diphtheria were reported, a case-rate of 3.7 per 1,000 of the population. Of these cases, 99 proved fatal, making a fatality rate of 4.0 per 100 cases and a mortality rate of 14.7 per 100,000 of the population.

Ages at Death. Under 10- 15-20-30-40-50- 60-2\_ All 1 year. Ages. 13 99 6 Ages of Notified Cases. 55 132 458 221 170 35 180 211 957 53 2496 63% PERCENTAGE FATALITY AT EACH AGE. 16.4 4.4 6.2 2.4 17.1 6:0 4.4 0.6 25.0 4.0

#### Scarlet Fever.

During 1942, 1,719 cases of scarlet fever were reported, a case-rate of 2.6 per 1,000 of the population. Of these cases, 4 proved fatal, making a fatality-rate of 0.2 per 100 cases, and a mortality-rate of 0.6 per 100,000 of the population.

AGES AT DEATH.

Under All 10- 15-20- 30-40-50-2-3-5-60-1 year. Ages. 4 \*\*\* AGES OF NOTIFIED CASES. 157 837 303 53 100 127 50 44 21 15 9 1,719 25.9% 48.7% 17.6% 7.8%

### Inoculation against Diphtheria.

PERCENTAGE FATALITY AT EACH AGE.

6.6

0.2

0.2

1.9

TABLE V.

#### NUMBER OF COMPLETED DIPHTHERIA INOCULATIONS.

| Where or by whom inoculated |      | 1925-<br>31 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940  | 1941  | 19 |
|-----------------------------|------|-------------|------|------|------|------|------|------|------|------|-------|-------|----|
| Inoculation Clinics:        |      | 101         | **** | 000  | 100  | 100  | 0.00 | 20#  | 100  |      |       |       |    |
| Carnegie                    | ***  | 434         | 572  | 333  | 422  | 405  | 367  | 237  | 196  | 104  | 64    | 452   |    |
| Townsend Avenue             |      | -           | 381  | 340  | 354  | 368  | 305  | 183  | 197  | 151  |       | 1,006 |    |
| Child Welfare Centres       |      | -           | -    | -    |      | 198  | 452  | 1119 | 1792 | 1096 | 859   | 2,617 | 14 |
| Schools:                    |      |             |      |      |      | 000  |      |      |      |      |       |       |    |
| Public Elementary           |      | 153         | 3904 | 3895 | 4917 | 4001 | 6251 | 4855 | 6356 | 2978 | 1.738 | 2,503 | 7. |
| Residential                 |      | 560         | 264  | 681  | 433  | 323  | 431  | 382  | 389  | 137  |       | 1,021 | 1  |
| Secondary                   |      | -           | -    | -    |      | -    | -    | -    | -    | _    | -     | _     |    |
| MUNICIPAL HOSPITALS:        |      |             |      |      |      |      |      |      | -    |      | 0     | 0     |    |
| Fazakerley                  |      | 640         | 635  | 1264 | 434  | 239  | 267  | 150  | 182  | 124  | 113   | 66    |    |
| Fever Hospitals-North, Se   | outh | 1000        |      |      |      |      |      |      |      |      |       |       |    |
| and East                    |      | 57          | 151  | 141  | 205  | 258  | 113  | 202  | 185  | 238  | 123   | 50    |    |
| Alder Hey                   |      | 62          | 121  | 132  | 122  | 98   | 163  | 148  | 152  | 121  | 76    | 47    | ı  |
| Olive Mount                 |      | 38          | 174  | 277  | 92   | 49   | 24   | 41   | 56   | 29   | 2     | 13    | ı  |
| Other Municipal Hospitals   |      | -           | -    | -    | 81   | 34   | 92   | 80   | 86   | 84   | 49    | 54    | ı  |
| Miscellaneous               |      | 713         | 272  | 173  | 38   | 15   | 5    | 19   | 4    | 5    | 8     | 1     |    |
| Medical Practitioners       |      | 114         | 173  | 135  | 123  | 128  | 78   | 85   | 71   | 39   | 63    | 257   |    |
| TOTALS                      |      | 2771        | 6647 | 7371 | 7221 | 6116 | 8548 | 7501 | 9666 | 5106 | 3,418 | 8,087 | 27 |

Grand Total ... 99,820

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| total population at<br>the end of 1942. |              | Total under 5 years<br>of age 15,337 being | 23.4% of the | age.  |       |       | Total 5-9 years of<br>age 28,824, being |       |       |       |       | Total 10-14 years of<br>age 35,758, being | 62.4% of th |       |     |     | 180    |        |
|---|--------------|--|--------------|-------|-------|-------|---|-------|-------|-------|-------|---|-------------|-------|-----|-----|--------|--------|
| 1942                                    | 42           | 3,632                                      | 2,551        | 2,492 | 2,490 | 3,273 | 2,868                                   | 2,032 | 1,469 | 1,054 | 1,061 | 1,137                                     | 1,385       | 1,236 | 213 | 433 | 27,368 |        |
| 1941                                    | 4            | 1,096                                      | 857          | 799   | 726   | 1,254 | 1,218                                   | 689   | 241   | 168   | 154   | 182                                       | 216         | 183   | 40  | 260 | 8.087  | 2000   |
| 1940                                    | 61           | 413  | 282          | 193   | 204   | 737   | 771                                     | 284   | 74    | 32    | 63    | 77  | 85          | 78    | 17  | 106 | 3.418  | Charto |
| 1939                                    | 5            | 671  | 304          | 248   | 453   | 1,133 | 1,042                                   | 587   | 138   | 26    | 75    | 90  | 100         | 06    | 20  | 124 | 5.106  | 0,440  |
| 1938                                    | 1            | 806  | 524          | 433   | 710   | 2,286 | 2,722                                   | 1,110 | 242   | 66    | 95    | 113                                       | 126         | 114   | 25  | 158 | 9 666  | - 1    |
| 1937                                    | 00           | 595  | 461          | 367   | 869   | 1,658 | 1,820                                   | 823   | 320   | 110   | 96    | 115                                       | 128         | 1117  | 25  | 160 | 7 501  | 1,000  |
| 1936                                    | 5            | 359  | 340          | 259   | 513   | 2,297 | 2,497                                   | 1,211 | 304   | 75    | 103   | 124                                       | 137         | 125   | 27  | 172 | 24.0   | 0,010  |
| 1935                                    | 1            | 211  | 232          | 222   | 489   | 1,541 | 1,563                                   | 872   | 216   | 100   | 100   | 120                                       | 133         | 122   | 27  | 167 | 8118   | 0,110  |
| 1934                                    | 61           | 213  | 157          | 164   | 301   | 1,637 | 1,999                                   | 1,222 | 489   | 157   | 132   | 158                                       | 176         | 159   | 35  | 220 | 7 991  | 1,22,1 |
| 1933                                    | 19           | 187  | 219          | 246   | 466   | 1,375 | 1,583                                   | 1,357 | 519   | 266   | 170   | 203                                       | 227         | 205   | 45  | 284 | 1 971  | 1,371  |
| 1932                                    | 27           | 183  | 189          | 189   | 253   | 1,224 | 1,405                                   | 1,048 | 585   | 351   | 179   | 214                                       | 239         | 216   | 47  | 298 | 0 0 41 | 6,647  |
| 1931                                    | 53           | 150  | 88           | 85    | 103   | 112   | 94                                      | 66    | 81    | 86    | 68    | 106                                       | 119         | 108   | 24  | 148 | 100    | 1,543  |
| 1930                                    | 16           | 35   | 51           | 09    | 39    | 26    | 13                                      | 15    | 18    | 21    | 28    | 34  | 38          | 35    | 00  | 47  | -      | 484    |
| 1929                                    | 0            | 0  | 0            | 1     | 1-    | 13    | 44                                      | 44    | 14    | 6     | 80    | 6   | 10          | 6     | 67  | 13  | 901    | 183    |
| 1928                                    | 0            | 0  | 61           | 00    | 14    | 20    | 55                                      | 11    | E     | 6     | 67    | 8   | 60          | 60    | 0   | 4   | 0      | 112    |
| 1925-                                   | 61           | 4  | 4            | 00    | 14    | 58    | 24                                      | 13    | 33    | 29    | 47    | 52  | 28          | 53    | 12  | 73  | 1      | 449    |
| Age at date of 1925<br>inoculation. 27  | Under 1 year | 1+   | +57          | +8    | 4+    | +9    | +9                                      | 7+    | +8    | +6    | 10+   | 111+                                      | 12+         | 13+   | 14+ | 15+ |        | Total  |

TABLE VII.

DIPHTHERIA-COMPARATIVE CASE, RATES DURING 1933/42 AMONG THE INOCULATED AND NON-INOCULATED PERSONS IN LIVERPOOL.

| Age.         Cases of incondisted application and points of the condition and condition.         Case of incondisted application and condition.         Case of incondisted application.         Case of incondisted application.         Case of incondisted and condition.         Case of incondisted and condition. </th <th></th> <th>Nor INOCULATED</th> <th>TATED</th> <th></th> <th></th> <th></th> <th></th> <th>IN</th> <th>INOCULATED.</th> <th>ED.</th> <th></th> <th></th> <th>122</th> <th></th> <th></th>  |                   | Nor INOCULATED  | TATED                        |   |       |     |   | IN  | INOCULATED. | ED.  |   |     | 122  |   |                                       |
|--|-------------------|---|------------------------------|---|-------|-----|---|---|-------------|--|---|-----|--|---|---------------------------------------|
| Particulated   Part |                   | Cases of  |                              |   | LA.F. |     | M.T.  | Toxoid.                                     |             |  | F.T.  |     |  | A.P.T.                                      |                                       |
| er 1         305         1.9         48         0         Nii         3         0         Nii         5         0         Nii         5         0         Nii         1,363         0         Nii         1,299         0         Nii         1,363         0         Nii         1,363         0         Nii         1,613         0         Nii         1,363         0         Nii         1,369         0         Nii         1,363         0         Nii         1,453         0         0         Nii         1,453         0         0         1,445         0         Nii         1,453         0         0         1,445         0         Nii         1,453         1         0         1,453         0         0         1,444  | Age.              | diphtheria<br>in non-<br>inoculated<br>persons<br>during<br>1933/42 | rate<br>per<br>1,000<br>p.a. | Inoculated<br>population<br>at risk during<br>10 years<br>1932/41 |       |     | Inoculated<br>population<br>at risk during<br>10 years<br>1932,41 | Cases of<br>diphtheria<br>during<br>1933,42 |             | Inoculated<br>population<br>at risk during<br>9 years<br>1933/41 | Cases of<br>diphtheria<br>during<br>1934/42 |     | Inoculated population at risk during 7 years 1935/41 | Cases of<br>diphtheria<br>during<br>1936/42 | Case-<br>rate<br>per<br>1,000<br>p.a. |
| 1+         843         6-5         717         0         Nii         106         0         Nii         329         0         Nii         1,363           2+         1,619         10-9         1,445         0         Nii         305         0         Nii         615         0         Nii         1,308           3+         2,102         14-6         2,142         1         0-5         437         2         4-6         895         0         Nii         2,308           4+         2,291         16-3         3,210         3         0-9         579         2         4-6         895         0         Nii         3,080           5+         2,291         16-3         3,210         3         3         3         3         3         4         1,105         4         1,105         3 <td>Under 1</td> <td>305</td> <td>1.9</td> <td>48</td> <td>0</td> <td>INI</td> <td>65</td> <td>0</td> <td>Nil</td> <td>20</td> <td>0</td> <td>IEN</td> <td>00</td> <td>0</td> <td>Nil</td>  | Under 1           | 305   | 1.9                          | 48  | 0     | INI | 65  | 0   | Nil         | 20   | 0   | IEN | 00   | 0   | Nil                                   |
| 2+         1,619         10-9         1,445         0         Nil         305         0         Nil         615         0         Nil         2,308           3+         2,102         14-5         2,142         1         0-5         437         2         4-6         895         0         Nil         3,080           4+         2,102         14-5         2,142         1         0-5         4-7         4-6         895         0         Nil         3,080           5+         2,291         16-8         3,210         3         0-9         579         2         3-649         4         1-3         9,062           6+         2,833         22.0         7,184         6         0-8         818         3         7         2,049         4         1-3         9,062           6+         2,835         22.0         1,1047         2         1-9         3,120         5         1-6         14,055         1-6         14,055         1-6         14,055         1-6         14,055         1-6         11,058         1-6         11,058         1-6         11,058         1-7         14,055         1-7         14,055         1-7         14,0   | 1+                |   | 9.9                          | 717   | 0     | Nil | 106   | 0   | Nil         | 329  | 0   | Nil | 1,363  | 0   | Nil                                   |
| 3+         2,102         14·5         2,142         1         0·5         437         2         4·6         895         0         Nil         3,080           4+         2,291         16·3         3,210         3         0·9         579         2         4·6         0·7         4,515         1           5+         2,833         22·0         7,184         6         0·8         818         3         3·7         2,949         4         1·3         4,515         3·062           6+         2,833         22·0         7,184         6         0·8         818         3         3·7         2,949         4         1·3         9·062           7+         1,771         15·8         11·0         1,047         2         1·9         3·120         5         1·6         14·055           8+         1,389         11·1         1,413         2·1         1·4         1·513         2·1         3·079         5         1·6         15·627           8+         1,173         1.4         1,753         1·3         1·3         1·3         1·3         1·3         1·3         1·3         1·3         1·3         1·3         1·3  | 15+2              |   | 10.9                         | 1,445   | 0     | Nil | 305   | 0   | Nil         | 615  | 0   | Nil | 2,308  | 1   | 9.0                                   |
| 4+         2,291         16·3         3,210         3         6·9         579         2         3·5         1,425         1         6·7         4,515           5+         2,833         22·0         7,184         6         0·8         818         3         7         2,949         4         1·3         9,062           6+         2,833         22·0         7,184         6         0·8         818         3         7         2,949         4         1·3         9,062         9         9,062         9         9         1·047         2         1·9         3,120         5         1·6         14,055         1         9         1·4,055         1         9         1·4,055         1         1·6         1/4,055         1         1·6         1/4,055         1         1·6         1/4,055         1         1·6         1/4,055         1         1·6         1/4,055         1         1·6         1/4,055         1         1·6         1/4,055         1         1·6         1/4,055         1         1·6         1/4,055         1         1·6         1/4,055         1         1·6         1/4,055         1         1         1/4         1/4         1/4   | 3+                |   | 14.5                         | 2,142   | 1     | 0.2 | 437   | 61  | 4.6         | 895  | 0   | Nil | 3,080  | 5   | 1.6                                   |
| 5+         2,833         22.0         7,184         6         0·8         818         3         3·7         2,949         4         1·3         9,062           6+         2,835         20·4         13,065         13         1·0         1,047         2         1·9         3,120         5         1·6         14,055           7+         1,771         16·8         17,216         36         2·1         1,269         3         2·4         3,079         5         1·6         14,055         1           8+         1,738         11·9         18,733         39         2·1         1,513         2         1·3         2,910         8         2·7         15,627         1           9+         11/19         18,733         2·1         1·4         1·753         1         0·6         2,635         0         Nil         13,831         1           10+         16,689         12·4         3·1         7·830         15         1·9         1·8         1·9         1·8         1·9         1·9         1·9         1·9         1·9         1·9         1·9         1·9         1·9         1·9         1·9         1·9         1·9         1·1   | 4+                |   | 16.3                         | 3,210   | 60    | 6.0 | 629   | 61  | 3.5         | 1,425  | 1   | 2.0 | 4,515  | 10  | 2.2                                   |
| 2,357         20-4         13,065         13         1·0         1,047         2         1·9         3,120         5         1·6         14,055           1,771         15·8         17,215         36         2·1         1,269         3         2·4         3,079         5         1·6         15,858         1·6         1·5,858         1·6         1·5,858         1·6 <td>12+9</td> <td></td> <td>22.0</td> <td>7,184</td> <td>9</td> <td>8.0</td> <td>818</td> <td>00</td> <td>3.7</td> <td>2,949</td> <td>4</td> <td>1.3</td> <td>9,062</td> <td>15</td> <td>1.6</td>  | 12+9              |   | 22.0                         | 7,184   | 9     | 8.0 | 818   | 00  | 3.7         | 2,949  | 4   | 1.3 | 9,062  | 15  | 1.6                                   |
| 7+         1,771         15-8         17,215         36         2·1         1,269         3         2·4         3,079         5         1·6         15,858           8+         1,389         11·9         18,733         39         2·1         1,513         2         1·3         2,910         8         2·7         15,627         15,627           9+         1,179         9·3         19,419         27         1·4         1,753         1         0·6         2,635         0         Nil         13,831         1           1cr         1,179         9·3         12·4         1·5         7,830         15         1·9         17,962         23         1·3         79,707         1           10+         7,535         1·2         1·2         1·2         7,830         13         0·6         4,594         4         0·9         18,543         1  | +9                |   | 20.4                         | 13,065  | 13    | 1.0 | 1,047   | 61  | 1.9         | 3,120  | 5   | 1.6 | 14,055   | 39  | 2.8                                   |
| 8+         1,389         11:9         18,733         39         2·1         1,513         2         1·3         2,910         8         2·7         15,627           9+         1,179         9·3         19,419         27         1·4         1,753         1         0·6         2,635         0         Nil         13,831           1er 10         16,689         12·4         83,178         125         1·5         7,830         15         1·9         17,962         23         1·3         79,707         1           10+         7,535         1·2         134,362         128         0·9         23,380         13         0·6         4,594         4         0·9         18,543  | 7+                |   | 8.91                         | 17,215  | 36    | 2.1 | 1,269   | co  | 2.4         | 3,079  | ð   | 9.1 | 15,858   | 45  | 2.8                                   |
| 9+         1,179         9·3         19,419         27         1·4         1,753         1         0·6         2,635         0         Nil         13,831           lor 10         16,689         12·4         83,178         125         1·5         7,830         15         1·9         17,962         23         1·3         79,707         1           10+         7,535         1·2         134,362         128         0·9         23,380         13         0·6         4,594         4         0·9         18,543   | +8                |   | 11.9                         | 18,733  | 39    | 2.1 | 1,513   | 61  | 1.3         | 2,910  | 8   | 2.7 | 15,627   | 33  | 2.1                                   |
| lor 10+         7,535         1.2         134,362         128         0.9         23,380         13         0.6         4,594         4         0.9         18,543   | +6                |   | 9.3                          | 19,419  | 27    | 1.4 | 1,753   | 1   | 9.0         | 2,635  | 0   | Nil | 13,831   | 26  | 1.9                                   |
| 7,535 1.2 134,362 128 0.9 23,380 13 0.6 4,594 4 0.9 18,543   | Total<br>under 10 |   | 12.4                         | 83,178  | 125   | 1.5 | 7,830   | 15  | 1.9         | 17,962   | 23  | 1.3 | 79,707   | 174   | 5.5                                   |
|  | 10+               |   | 1.2                          | 134,362   | 128   | 6-0 | 23,380  | 13  | 9.0         | 4,594  | 4   | 6-0 | 18,543   | 50  | 2.7                                   |

#### Inoculation against Scarlet Fever.

#### TABLE VIII.

#### NUMBER OF COMPLETED SCARLET FEVER INOCULATIONS.

| Where or by whom<br>inoculated          | 1927-<br>31 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 |
|---|-------------|------|------|------|------|------|------|------|------|------|------|------|
| NOCULATION CLINICS:                     |             |      |      | 181  |      |      |      |      |      |      |      |      |
| Carnegie                                | . 412       | 508  | 303  | 366  | 332  | 294  | 148  | 104  | 52   | -    | -    | -    |
| Townsend Avenue .                       |             | 395  | 323  | 313  | 315  | 244  | 127  | 85   | 63   | 4    | -    | -    |
| MUNICIPAL HOSPITALS:                    |             |      |      |      |      |      |      |      |      |      |      |      |
| Fazakerley                              | . 165       | 197  | 121  | 120  | 99   | 121  | 79   | 92   | 105  | 83   | 53   | 82   |
| Fever Hospitals—North<br>South and East | 4           | 57   | 7    | 10   | 16   | 26   | 52   | 40   | 48   | 44   | 30   | 29   |
| Alder Hey                               | . 36        | 111  | 132  | 143  | 98   | 108  | 131  | 123  | 136  | 71   | 46   | 130  |
| Olive Mount                             |             | 11   | 34   | 61   | 33   | 25   | 38   | 55   | 29   | 7    | -    | _    |
| Other Hospitals                         |             | -    | _    | -    | 29   | 86   | 71   | 76   | 71   | 54   | 13   | -    |
| RESIDENTIAL SCHOOLS                     | . 164       | 218  | 465  | 478  | 202  | 294  | 108  | 143  | 31   | -    | -    | -    |
| MISCELLANEOUS                           | . 447       | 191  | 74   | 45   | -    | -    | -    | -    | _    | _    | -    | -    |
| MEDICAL PRACTITIONERS                   | 90          | 129  | 105  | 94   | 93   | 57   | 40   | 33   | 21   | - 7  | 24   | 28   |
| TOTALS                                  | . 1,329     | 1817 | 1564 | 1630 | 1217 | 1255 | 794  | 751  | 556  | 270  | 166  | 269  |

GRAND TOTAL ... 11,618

#### Measles.

During 1942, 6,092 cases of measles were reported, representing a case-rate of 9·1 per 1,000 of the population. The number of deaths was 25, making a fatality-rate of 0·4 per 100 cases and a mortality-rate of 3·7 per 100,000 of the population.

#### DEATHS FROM MEASLES.

|                  |     |     |     |        | AGE   | S AT I | DEATH  |       |     |     |     |     |           |
|------------------|-----|-----|-----|--------|-------|--------|--------|-------|-----|-----|-----|-----|-----------|
| Under<br>1 year. | 1—  | 2—  | 3—  | 4-     | 5—    | 10—    | 15—    | 20—   | 30— | 40— | 50— | 60— | All Ages. |
| 4                | 14  | 1   |     | 1      | 4     |        | 1      |       |     |     |     |     | 25        |
|                  |     |     |     |        | AGE   | s of ( | CASES. |       |     |     |     |     |           |
| 273              | 676 | 676 | 668 | 784    | 2,835 | 125    |        |       |     | 55  |     |     | 6.092     |
|                  |     |     | PER | CENTAG | E FAT | ALITY  | ат Е   | асн А | GE. |     |     |     |           |
| 1.5              | 2.1 | 0.2 |     | 0.1    | 0.1   |        | 1      |       | - 1 | -8  |     |     | 0.4       |

#### Whooping Cough.

During 1942, 838 cases of whooping cough came to the notice of the Health Department, a figure representing a case-rate of 1.2 per 1,000 of the population. Of these cases 15 proved fatal, corresponding to a death-rate of 2.2 per 100,000 of the population.

| Numbe<br>at v       |    |    |    | Whoo<br>s duri |    |     | Total                  |                     | eaths |      | ssed as |    | centa | ge  |
|---------------------|----|----|----|----------------|----|-----|------------------------|---------------------|-------|------|---------|----|-------|-----|
| under<br>1<br>year. | 1+ | 2+ | 3+ | 4+             | 5+ | 10+ | Deaths<br>all<br>ages. | under<br>1<br>year. | 1+    | 2+   | 3+      | 4+ | 5+    | 10+ |
| 6                   | 5  | 2  | 2  |                |    |     | 15                     | 40.3                | 33.4  | 13.3 | 13.3    |    |       |     |

#### Cerebro-spinal Fever.

#### TABLE IX.

CASES AND DEATHS DURING 1942 AND NINE PREVIOUS YEARS.

|                            |         | 1933     | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 |
|----------------------------|---------|----------|------|------|------|------|------|------|------|------|------|
| Cases                      |         | <br>64   | 69   | 69   | 94   | 94   | 76   | 70   | 468  | 453  | 201  |
| Deaths                     |         | <br>45   | 37   | 33   | 55   | 47   | 37   | 28   | 84   | 79   | 38   |
| Fatality-rate<br>100 cases | per<br> | <br>70.3 | 53.6 | 48.1 | 58.5 | 50.0 | 48.7 | 40.0 | 17.9 | 17.4 | 18.9 |

The fall in the fatality rate which has occurred in the last three years is, in the main, due to the success of treatment with Sulphonamide drugs.

#### Deaths from Influenza and other Respiratory Diseases.

TABLE X.

| 1000     | Yearly average<br>number of<br>deaths. | Percentage proportion to all deaths. | Respiratory<br>death-rate per<br>1,000 population. | Death-rates<br>compared with<br>the 1871-80<br>death-rate<br>called 100. |
|----------|--|--------------------------------------|--|--|
| 1871-80  | 2,976                                  | 20.2                                 | 5.7  | 100  |
| 1881-90  | 3,251                                  | 23.2                                 | 5.9  | 104  |
| 891-1900 | 3,582                                  | 24.6                                 | 5.9  | 104  |
| 1901-10  | 3,299                                  | 21.8                                 | 4.5  | 79   |
| 911-20   | 3,648                                  | 27.3                                 | 4.7  | 83   |
| 921-30   | 2,904                                  | 24.7                                 | 3.5  | 61.4   |
| 931-40   | 1,762                                  | 15.1                                 | 2.1  | 36.8   |
| 941      | 2,226                                  | 16.8                                 | 3.2  | 56.1   |
| 1942     | 1,403                                  | 14.9                                 | 2.1  | 37.0   |

#### Dysentery.

During 1942, 78 cases of bacillary dysentery were reported in the city, of which 22 cases were due to Flexner's bacillus, 55 to Sonne's bacillus and 1 case where no organism was found. In addition there was one case of Amoebic dysentery.

## MATERNITY and CHILD WELFARE.

#### Summary of Vital Statistics for 1942.

| Live births  |          | 13,729        |   | Live  | birth   | rate |      | 20.5 |
|--------------|----------|---------------|---|-------|---------|------|------|------|
| Still-births |          | [552          |   | Still | l-birth | rate |      | 0.8  |
|              |          | Total birth   | S | 14,   | 281     |      |      |      |
| Infar        | nt Morta | ality rate    |   |       |         |      | 76   |      |
| Neo-         | natal M  | ortality rate |   |       |         |      | 33.6 |      |
| Mate         | rnai Me  | ortality rate |   |       |         |      | 2.38 |      |

#### THE MIDWIFERY DEPARTMENT.

During the year, 186 midwives gave the required notice under Section 10 of the Midwives Act, 1902, of their intention to practise midwifery in this city.

The number of municipal midwives at the end of 1942 was 53.

During the year, the municipal midwives attended-

| Midwifery | cases | <br> | <br>3,353 |
|-----------|-------|------|-----------|
| Maternity | cases | <br> | <br>350   |

#### Notification of Live and Still-Births.

A total of 5,275 births (5,136 live births and 139 still-births) were attended by midwives during the year, which represented 36 per cent. of the total (live and still) births notified in the City. The total number of births which took place in institutions was 8,291 (7,896 live births=95.2%, 395 still-births=4.8%).

### Statement of Notifications of Live and Still Births received during the year 1942.

|                              |                 | 1942.            |        | Still Births          |
|------------------------------|-----------------|------------------|--------|-----------------------|
| Commission and the           | Live<br>Births. | Still<br>Births. | Total. | per cent<br>of total. |
| Midwives (Municipal)         | 3,310           | 87               | 3,397  | 2.6                   |
| Do. (Independent)            | 698             | 23               | 721    | 3.2                   |
| Medical Attendants           | 966             | 38               | 1,004  | 3.8                   |
| Liverpool Maternity Hospital | 2,023           | 109              | 2,132  | 5.1                   |
| Municipal Hospitals          | 5,345           | 258              | 5,603  | 4.6                   |
| Other Institutions           | 528             | 28               | 556    | 5.0                   |
| District Homes               | 1,128           | 29               | 1,157  | 2.5                   |
|                              | 13,998          | 572              | 14,570 | 3.9                   |

The number of still-births notified was 572, of which number 139 were notified by midwives. Enquiries were made into the circumstances of all still-births, and the number of visits paid was 491.

#### Visits paid by Staff of the Midwifery Department.

| Routine and special visits to midwives        |          |         |     | 1,679 |
|---|----------|---------|-----|-------|
| Visits regarding claims for fees from medical | practi   | tioners | for |       |
| attendance in emergency cases                 |          |         |     | 1,889 |
| Visits in respect of ophthalmia neonatorum    |          |         |     | 4,961 |
| Special visits (puerperal pyrexia, venereal d | iseases, | etc.)   |     | 400   |

#### Medical Assistance.

Under the rules of the Central Midwives Board, midwives sought medical aid in 2,040 cases—1,463 mothers and 577 children.

#### Consultant Services.

During the year, the total number of occasions on which the services of a consultant obstetrician were requisitioned in connection with cases of puerperal fever, puerperal pyrexia or complications during pregnancy was 2.

#### Prevention of Spread of Infection.

Eight municipal midwives and one independent midwife were suspended from practice in order to prevent the spread of infection.

# Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926, 1928 and 1939.

The number of cases of puerperal pyrexia notified during the year was 306. Of these, 279 were admitted to or occurred in hospitals, and 63 occurred in the practice of midwives, and in 31 cases nurses were provided.

#### Maternal Mortality.

The number of live and still births registered in the city, together with maternal deaths and maternal death-rates, for the year 1942 are as follows:—

|                    |                  |                  | MATERNAL MORTALITY. |                                       |         |                                       |         |  |  |  |  |
|--------------------|------------------|------------------|---------------------|---------------------------------------|---------|---------------------------------------|---------|--|--|--|--|
| BIRTHS REGISTERED. |                  |                  | Puerpe              | eral Fever.                           | Other H | uerperal<br>uses.                     | Total.  |  |  |  |  |
| Live<br>Births.    | Still<br>Births. | Total<br>Births. | Deaths.             | Rate<br>per 1,000<br>total<br>births. | Deaths. | Rate<br>per 1,000<br>total<br>births. | Deaths. | Rate<br>per 1,000<br>total<br>(live and<br>still)<br>births. |  |  |  |
| 13,729             | 552              | 14,281           | 14                  | 0.98                                  | 20      | 1.40                                  | 34      | 2.38   |  |  |  |

### Special Investigation of Maternal Deaths, 1942.

As a result of inquiries it was found that 44 deaths occurred owing to pregnancy, child birth or concurrent diseases, such as heart disease or lung disease associated with pregnancy.

| Class | I—Deaths  | directly due to childbearing   | <br> | 27 |
|-------|-----------|--------------------------------|------|----|
| Class | II—Deaths | not primarily due to pregnancy | <br> | 17 |

#### Ophthalmia Neonatorum.

Inflammation of the eyes of the newly-born.

The number of cases brought to the notice of the department during the year was 647, which consisted of:—

| Mild cases                              |           |    | 568 |
|---|-----------|----|-----|
| Severe cases                            |           |    | 79  |
|   | Total     |    | 647 |
|   |           |    |     |
| Number of cases treated during the year |           |    | 647 |
| ,, ,, ,, brought forward from pre       | vious yea | ır | 8   |
|   | Total     |    | 655 |
| Number of cases cured                   |           |    | 627 |
| " died under treatment                  |           |    | 6   |
| " under treatment at 31/12/42           |           |    | 15  |
| ,, removed from district                |           |    | 7   |
| ,, sight lost                           | ***       |    | 0   |
|   | Total     |    | 655 |
|   |           |    | -   |

During the year, 34 babies were admitted to the City Hospitals.

In addition to the above, 28 notified cases were not cases of ophthalmia neonatorum.

Arrangements are made with the City Bacteriologist to examine the discharge in every notified case of inflamed eyes in the newly-born. This enables a prompt verification of the disease to be determined.

| No. of<br>notifications. | Cases from which<br>specimens were<br>examined by the City<br>Bacteriologist and at<br>Hospital. | No. of<br>cases of<br>positive<br>Gonorrhoea. | Percentage<br>to total<br>cases<br>examined. | Percentage<br>to total<br>notifications. |  |
|--------------------------|--|---|--|--|--|
| 647                      | 73   | 31  | 42.4   | 4.8                                      |  |

#### Nursing Homes.

During the year, 1 application for registration was received by the Town Clerk. Four registrations were cancelled due to removal of the keepers.

The nursing homes on the register at the end of the year numbered 21, the approximate number of beds being 148. Babies born in nursing homes numbered 615, including 9 twin births.

#### THE HEALTH VISITORS' DEPARTMENT.

This work is carried out by a staff of trained health visitors and comprises the following:—

- (1) Attendance at Maternity and Child Welfare Centres.
- (2) Home visiting under the Public Health Act, 1936.
- (3) Special visits to cases of (a) Measles, whooping cough and pneumonia, (b) Infantile diarrhea.
- (4) Other special visits in connection with matters relating to health and welfare.

#### Ante-Natal and Post-Natal Clinics.

| Total number of centres at which ante-nata   | l clinic | es are | held   | 22     |  |  |  |  |  |  |  |
|--|----------|--------|--------|--------|--|--|--|--|--|--|--|
| Number of clinic sessions held per week      |          |        |        | 49     |  |  |  |  |  |  |  |
| ,, ,, post-natal ,, ,, ,, ,,                 |          |        |        | 3      |  |  |  |  |  |  |  |
| Number of new cases attending ante-natal     | clinics  | ***    |        | 18,473 |  |  |  |  |  |  |  |
| Total attendances at ante-natal clinics      |          |        |        | 85,599 |  |  |  |  |  |  |  |
| ,, ,, post-natal ,,                          |          |        |        | 4,551  |  |  |  |  |  |  |  |
| Child Welfare Clinics.                       |          |        |        |        |  |  |  |  |  |  |  |
| Total number of centres at which child welfs | re clin  | ics ar | e held | 18     |  |  |  |  |  |  |  |
| Number of clinic sessions held per week      |          |        |        |        |  |  |  |  |  |  |  |
| ", ", new cases—Under 1 year of age          |          |        |        | 8,255  |  |  |  |  |  |  |  |
| Aged 1-5 years                               |          |        |        | 495    |  |  |  |  |  |  |  |
|  |          |        |        | 8,750  |  |  |  |  |  |  |  |
| Total attendances—Under 1 year of age        |          |        |        | 68,861 |  |  |  |  |  |  |  |
| Aged 1-5 years                               |          |        |        | 20,034 |  |  |  |  |  |  |  |
|  |          |        |        | 88,895 |  |  |  |  |  |  |  |

The attendances amounted to 59 per cent. of the births notified.

# CITY OF LIVERPOOL. Notifiable Diseases (other than Tuberculosis) during the Year 1942.

|  |              | Number of Cases Notified. |     |      |      |      |       |       |     |     |     | Cases |     |                |                 |
|--|--------------|---------------------------|-----|------|------|------|-------|-------|-----|-----|-----|-------|-----|----------------|-----------------|
| Disease.                                   | At           |                           |     |      |      | At   | Ages— | Years |     | ,   |     |       |     | admitted<br>to | TOTAL<br>DEATHS |
|  | all<br>Ages. | Under<br>1                | 1—  | 2—   | 3—   | 4    | 5—    | 10    | 15— | 20— | 35— | 45—   | 65— | Hospital       |                 |
| mall-pox                                   | _            | _                         | _   | _    | _    | -    | -     | _     | _   | _   | _   | _     | _   | -              | *****           |
| carlet Fever                               | 1719         | 9                         | 53  | 100  | 127  | 157  | 837   | 303   | 50  | 52  | 23  | 8     | _   | 793            | 4               |
| Diphtheria                                 | 2496         | 35                        | 55  | 132  | 180  | 211  | 957   | 458   | 221 | 199 | 32  | 14    | 2   | 2438           | 99              |
| Interic Fever (including Para-<br>typhoid) | 13           | _                         | 2   | _    | _    | 1    | _     | 2     | 1   | 3   | 1   | 3     | _   | 12             | 4               |
| uerperal Pyrexia                           | 306          | -                         | -   | _    | _    | -    | -     | -     | 27  | 233 | 44  | 2     | -   | 279            | _               |
| neumonia                                   | 1210         | 79                        | 76  | 50   | 51   | 33   | 109   | 46    | 86  | 185 | 173 | 261   | 61  | 399            | 200             |
| erebro-spinal Fever                        | 201          | 38                        | 19  | 12   | 9    | 8    | 20    | 17    | 17  | 29  | 11  | 16    | 5   | 194            | 38              |
| oliomyelitis and Polioencephalitis         | 1.           | -                         | -   | -    | -    | -    | -     | -     | -   | 1   | -   | -     | -   | 1              | 1               |
| ncephalitis Lethargica                     | -            | -                         | -   | -    | -    |      | -     | -     | -   | -   | -   | -     | -   | -              | 17              |
| ysentery                                   | 79           | 6                         | 11  | 8    | -    | 4    | 4     | 2     | 1   | 6   | 6   | 16    | 15  | 73             | 11              |
| phthalmia Neonatorum                       | 647          | 647                       | -   | -    | -    | -    | -     | -     | -   | -   | -   | -     | -   | 244            | -               |
| rysipelas                                  | 464          | 5                         | 2   | 3    | 4    | 1    | 8     | - 11  | 27  | 84  | 93  | 166   | 60  | 158            | 4               |
| (alaria                                    | 60           | -                         | -   | -    | -    | -    | -     | -     | 3   | 37  | 12  | 8     | -   | 30             | 2               |
| nthrax                                     | 3            | -                         | -   | -    | -    | -    | -     | -     | -   | -   | 2   | 1     | -   | 3              | -               |
| Ceasles                                    | 6092         | 273                       | 676 | 676  | 668  | 784  | 2835  | 125   | 23  | 24  | 5   | 3     | -   | 437            | 25              |
| Vhooping Cough                             | 838          | 79                        | 101 | 107  | 131  | 101  | 307   | 10    | -   | 2   | -   | -     | -   | 116            | 15              |
|  |              |                           |     |      |      |      |       |       |     |     |     |       |     |                |                 |
| Totals                                     | 14129        | 1171                      | 995 | 1088 | 1170 | 1300 | 5077  | 974   | 456 | 855 | 402 | 498   | 143 | 5177           | 420             |

#### The Health Visitors' Work carried out in the Homes.

Visiting in the homes is carried out under the Public Health Act, 1936, and is continued periodically, whether the child attends a clinic or not.

Children are referred for appropriate treatment for defects, when necessary.

340 children under five years of age were referred for special treatment to the school medical department as follows:—

| Defective vision   | <br> | <br>210 |
|--------------------|------|---------|
| Otorrhœa           | <br> | <br>33  |
| Orthopædic defects | <br> | <br>97  |

#### Statistics relating to Home Visits.

| Visits to expectant mothers by health visitor    | rs    |         |     | 7,996  |
|--|-------|---------|-----|--------|
| Number of births visited during the year         |       |         |     | 15,019 |
| Re-visits to infants during the 1st year         |       |         |     | 62,511 |
| ,, ,, aged 1 year to 5 years                     |       |         |     | 80,202 |
| Visits paid to homes of nurse children           |       |         |     | 1,292  |
| Visits to 293 children discharged from muni      | cipal | hospita | als | 662    |
| Visits to cases of Infectious Disease—           |       |         |     |        |
| Visits to cases of measles (first visits, 5,880) |       |         |     | 7,864  |

| Visits | s to | cases  | of measles (first visits, 5,880)     | <br> | 7,864 |
|--------|------|--------|--------------------------------------|------|-------|
| ,,     | ,,   | ,,     | ,, whooping cough (first visits, 14) | <br> | 20    |
| ,,     | ,,   | ,,     | ", pneumonia                         | <br> | 602   |
| ,,     | ,,   | ,,     | ,, infantile diarrhœa                | <br> | 100   |
| Enqu   | irie | s into | deaths due to diarrhea               | <br> | 83    |

#### Child Life Protection.

| (a) | Number of | persons receiving | children for rewar | d on the |
|-----|-----------|-------------------|--------------------|----------|
|     | Register  | at the end of the | year 1942          | 46       |

| (b) | Number     | of | children  | on the | Register :- |
|-----|------------|----|-----------|--------|-------------|
| 100 | 14 diminer | OT | CHILLGICH | ou one | Trestore.   |

|     | (1)    | (1) at the end of the year |       |         |     |       |      |            |     | <br>67  |
|-----|--------|----------------------------|-------|---------|-----|-------|------|------------|-----|---------|
|     | (2)    | who                        | died  | during  | the | year  | (in  | homes)     | *** | <br>1   |
|     | (3)    | ,,                         | ,,    | ,,      | ,,  | ,,    | (in  | hospitals) |     | <br>Nil |
| (c) | Procee | ding                       | s tak | en duri | ng  | the ; | year |            |     | <br>Nil |

#### Neo-natal Mortality.

The number of neo-natal deaths amounted to 462, equal to a rate of 33.6 per thousand live births registered. Special enquiry was made into the deaths of all children who died within 28 days after birth.

#### Dental Clinics.

| Total atten | danc | es at the | four  | clinics | <br>1,706 |
|-------------|------|-----------|-------|---------|-----------|
| New cases   |      |           |       |         | <br>654   |
| Ante-natal  | and  | post-nat  | al mo | thers   | <br>1,664 |
| Children    |      |           |       |         | <br>42    |

#### War-Time Nurseries.

The following nurseries were available for the children of women war-workers during the year 1942:—

## (1) Part-time Nurseries for children aged 2-5 years:-

|          |          |                     |     |        |              | Acco | mm | odation for |
|----------|----------|---------------------|-----|--------|--------------|------|----|-------------|
| Coancil  | School,  | Banks Road, Garston |     | Opened | 25 - 11 - 41 | ***  | 40 | children    |
| 71       | .,       | Leamington Road     |     | 17     | 1-12-41      |      | 60 | ,,          |
| ,,       | ,,       | Gwladys Street      |     | .,     | 16-2-42      |      | 46 | ,,          |
| 11       | **       | Winstone Road       | *** | - 11   | 2-3-42       |      | 40 | 1,,         |
| .,,      |          | Colwell Road        |     | ,,     | 26-2-42      |      | 40 | .,          |
| ,,       | ,,       | Maidford Road       |     | .,     | 26 - 3 - 42  |      | 40 | ,,          |
| ,,       | ,,       | Stockton Wood Road  | *** | ,,     | 15 - 4 - 42  |      | 80 | 2.2         |
| 12.      | ,,       | Southbank Road      | *** | 11     | 4-5-42       |      | 40 |             |
| Notre I  | Dame D   | emonstration School |     | - 11   | 1-7-42       |      | 60 | ,,          |
| Harring  | gton Cor | uncil School        |     | ,,     | 21 - 9 - 42  |      | 40 | ,,          |
| Sacred   | Heart 1  | R.C. School         |     | ,,     | 19-10-42     |      | 30 | ,,          |
| Harriso  | n Jones  | Council School      |     | ,,     | 20 - 10 - 42 |      | 30 | .,          |
| Ashfield | l Street | Council School      |     |        | 7-12-42      |      | 40 | 11          |
| Pinehu   | rst Road | l Council School    |     | ,,     | 14-12-42     |      | 40 | ,,          |
|          |          |                     |     |        |              |      |    |             |

# (2) Full-time Nurseries for children aged 0-5 years:-

|                                  |     |        |              | 24000 |    | odurion 101 |
|----------------------------------|-----|--------|--------------|-------|----|-------------|
| 1, The Elms, Dingle              |     | Opened | 1-12-41      |       | 36 | children    |
| 264, Westminster Road, Kirkdale  |     | ,,     | 22 - 12 - 41 |       | 50 | ,,          |
| 18, Great George Square          |     | ,,     | 19 - 1 - 42  |       | 36 | ,,          |
| Salisbury Street Council School  |     | ,,     | 27 - 4 - 42  |       | 63 | . ,,        |
| Wellesbourne Road Council School |     | **     | 6-7-42       |       | 60 | **          |
| Monksdown Road Council School    |     | ,,     | 13 - 7 - 42  |       | 60 | ,,          |
| Formosa Drive Council School     | *** | .,,    | 20 - 7 - 42  |       | 60 | 11          |
| "The Bridge," Sefton Park        | *** | **     | 23 - 9 - 42  |       | 36 | ,,          |

#### (3) Residential Nurseries for children aged 2-5 years:

Accommodation for

Accommodation for

Unit, 5, Gwydrin Road, 7, Montclair ... Opened 19-10-42 ... 25 children Drive, 22, Sinclair Drive,

The part-time nurseries mentioned under heading (1) are under the direct administrative control of the Education Committee.

# TUBERCULOSIS.

#### Notification.

Public Health (Tuberculosis) Regulations, 1930.

SUMMARY OF NOTIFICATIONS DURING THE PERIOD FROM 1ST JANUARY, 1942, TO 31ST DECEMBER, 1942:—

TABLE I.

| Notifications on Schedule A.  Number of Primary Notifications of New Cases of Tuberculosis. |        |          |          |          |           |           |            |           |           | Total<br>Notifica-<br>tions on<br>Form A |          |   |                                      |
|---|--------|----------|----------|----------|-----------|-----------|------------|-----------|-----------|--|----------|---|--------------------------------------|
| Age-periods.  | 0-     | 1-       | 5-       | 10-      | 15-       | 20-       | 25-        | 35-       | 45-       | 55-                                      | 65-      | Total<br>Primary<br>Notifica-<br>tions. | (includ-<br>ing<br>dupli-<br>cates.) |
| Pulmonary— Males Females  | 8 3    | 11<br>10 | 15<br>12 | 13<br>14 | 86<br>104 | 97<br>144 | 140<br>141 | 128<br>89 | 123<br>51 | 106<br>46                                | 19<br>10 | 746<br>624                              | 911<br>755                           |
| Non-Pulmonary—<br>Males<br>Females  | 7<br>5 | 33<br>18 | 25<br>16 | 16<br>27 | 23<br>30  | 21<br>30  | 20<br>22   | 12<br>14  | 13<br>5   | 4 5                                      | 1        | 175<br>173                              | 199<br>202                           |

Out of a total of 1,370 primary notifications of pulmonary tuberculosis 955 were received from private and 415 from hospital practitioners, whilst in the case of non-pulmonary tuberculosis these figures are 147 and 201 respectively, forming a total of 348.

# The Notification and Dispensary Registers.

In Table II is shown the number of cases on the notification and dispensary registers at the end of the year, the difference (2,174) between the figures for the respective registers representing the number of patients who, for various reasons, discontinued public treatment under this authority before reaching the "cured" stage. A few notified cases are also included in which the patients have refused to make use of the treatment facilities available.

TABLE II

| No.   |        | onary<br>culosis. |        | lmonary<br>culosis. | Totals. |
|---|--------|-------------------|--------|---------------------|---------|
|   | Males. | Females.          | Males. | Females.            | Totals, |
| Number of cases on the<br>Notification Register           | 2,317  | 2,114             | 681    | 781                 | 5,893   |
| Number of established cases<br>on the Dispensary Register | 1,543  | 1,323             | 399    | 454                 | 3,719   |
| Difference  | 774    | 791               | 282    | 327                 | 2,174   |

In Table III is given an analysis of the 2,174 persons whose names are on the notification register but are not on the dispensary register, according to the latest information concerning them.

TABLE III

|                       |           |            | Pul<br>Tube | mon       |            |         |           | No<br>T    | n-Pu<br>uberc | lmon<br>ulosi | ary<br>s.  |         | Manual States |
|-----------------------|-----------|------------|-------------|-----------|------------|---------|-----------|------------|---------------|---------------|------------|---------|---------------|
|                       |           | Males      |             | F         | emal       | es.     |           | Males      | 3.            | F             | emal       | es.     | war g         |
|                       |           | State      | of th       | e Di      | sease      |         |           | State      | of th         | ie Di         | sease      |         | Totals.       |
| Whereabouts<br>Known. | Arrested. | Quiescent. | Active.     | Arrested. | Quiescent. | Active. | Arrested. | Quiescent. | Active.       | Arrested.     | Quiescent. | Active. | 1850          |
| otals                 | 34        | 155        | 585         | 66        | 155        | 570     | 36        | 105        | 141           | 46            | 118        | 163     | 2,174         |

## Tuberculosis Clinics and Dispensary System.

A statistical summary of the work of the Tuberculosis Clinics, so far as all cases on the dispensary registers are concerned, is given in Table IV, and in addition there are included a few statistics of a general nature.

# TABLE IV.

| - one has granous   | P       | ULMO            | NARY.  |      | No    | N-PU                      | LMON            | ARY   |                  | Тот                | AL.            |                |                     |
|---|---------|-----------------|--------|------|-------|---------------------------|-----------------|-------|------------------|--------------------|----------------|----------------|---------------------|
| Diagnosis.  | Ad      | ults.           | Chil   | dren | Ad    | ults.                     | Chil            | dren  | Ad               | ults.              | Chile          | lren.          | GRANI               |
| The comparable  | M.      | F.              | M.     | F.   | M.    | F.                        | M.              | F.    | M.               | F.                 | M.             | F.             | TOTAL               |
| New Cases examined during<br>the year (excluding contacts):<br>) Definitely tuberculous<br>) Diagnosis not completed<br>) Non-tuberculous                                       | 479<br> | 419             | 25<br> | 25   | 61    | 90                        | 56              | 51    | 540<br>47<br>529 | 509<br>39<br>299   | 81<br>15<br>92 | 76<br>18<br>73 | 1,206<br>119<br>993 |
| CONTACTS examined during the year:— ) Definitely tuberculous ) Diagnosis not completed ) Non-tuberculous  | =       | 3 -             | =      | =    | =     | =                         | 2 _             | =     | _<br>            | 3<br>65            | $\frac{2}{92}$ | _<br>84        | 5<br>268            |
| Cases written off the Dispensary Register as:  Recovered  Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) | 45      | 43              | 10     | 8    | 14    | 17                        | 20              | 18    | 59<br>556        | 60<br>364          | 30             | 26<br>157      | 175                 |
| Number of Cases on Dispensary Register on Dec. 31st ) Definitely tuberculous ) Diagnosis not completed  | 1,405   | 1,201           | 138    | 122  | 176   | 272                       | 223             | 192   | 1,581<br>47      | 1,473<br>39        | 361<br>15      | 304<br>18      | 3,719<br>119        |
| Number of cases on Dispensar<br>on January 1st  | y Reg   | gister<br>      | 3,59   | 3    | 2. N  | area                      | sand            | case  | s retur          | sferred<br>ned aft | ter dis        |                |                     |
| Number of cases transferred to cases not desiring further under the scheme, and casight of "  | assis   | tance           | 55     | 18   | 4. Ca |                           | vritte<br>cause |       | during           | g the y            |                | Dead           | 653                 |
| Number of attendances at the (including Contacts)   | Disper  | nsary           | 9,41   | 9    | 6. N  |                           |                 |       |                  | rsons t            |                |                |                     |
| Number of consultations with practitioners:—  (a) Personal  (b) Other   | th me   | edical          | 2,99   | 4 3* | 8. N  | to                        |                 | s (in |                  | ng pe              |                |                |                     |
| Number of visits by Nurses<br>Visitors to homes of patient  | or H    | ealth<br>       | 17,79  |      |       | a) S <sub>j</sub><br>b) X | ecim<br>-ray    | ens o | ninatio          | om, etc<br>ons ma  | de in          |                |                     |
| Number of "Recovered" cas<br>to Dispensary Register, and<br>A (a) and A (b) above   | es res  | tored<br>led in | 1      | 1    | 12. N |                           |                 |       |                  | ıs" ca<br>Decer    |                |                |                     |

<sup>&#</sup>x27;In addition to 2,993 consultations, 1,956 reports concerning patients were sent to medical practitioners.

#### General Remarks.

The city death rates for the year 1942 for pulmonary and non-pulmonary tuberculosis are 0.97 and 0.18 per 1,000 respectively, making a total of 1.15 per 1,000 for all forms of the disease. The comparable rate for 1941 was 1.23 for all forms of tuberculosis. An analysis of unnotified cases of tuberculosis is given in Table VIII.

The Tuberculosis Officers continue to carry out the examination of certain recruits to the Forces in accordance with the requirements of the National Service (Armed Forces) Act, 1939, and 418 reports have been submitted to the Ministry of Labour. A further 395 reports have been rendered in accordance with the requirements of the Public Health (Tuberculosis) Regulations, 1940 (Men), whilst reports have been made on 84 cases out of a total of 2,595 names submitted under the Public Health (Tuberculosis) Regulations, 1942 (Women).

MILK. It was not found necessary during the year to take any action under the Public Health (Prevention of Tuberculosis Regulations) 1925 or Public Health Act, 1936, Section 172.

Contacts. The Tuberculosis Officers have examined 273 persons who were known to have been in contact with infectious cases of pulmonary tuberculosis and found evidence of disease in 5, or 1.83 per cent.

TABLE V.

PATIENTS UNDER DISPENSARY TREATMENT AT THE END OF THE YEAR.

|                        |                    | Pulmonary. | Non-pulmonary. | Totals. |
|------------------------|--------------------|------------|----------------|---------|
| T                      | Males              | . –        | 1              | 1)      |
| Insured<br>Persons     | Females            | . 3        | 1              | 4       |
|                        | Male Adults        | . 3        | - 1            | 3 ]     |
| N T                    | Female Adults .    | . 29       | 6              | 35      |
| Non-Insured<br>Persons | Male Children* .   | . 8        | 7              | 15 66   |
|                        | Female Children* . | . 2        | 11             | 13      |
| TOTALS                 |                    | . 45       | 26             | 77      |

<sup>\*</sup> Under 15 years of age.

TABLE VI.

PATIENTS NOT NEEDING TREATMENT WHO WERE UNDER DISPENSARY
SUPERVISION AT THE END OF THE YEAR.

|                    |                  | Pulmonary. | Non-pulmonary. | Totals.  |
|--------------------|------------------|------------|----------------|----------|
| 110                | Males            | <br>436    | 108            | 544      |
| Insured<br>Persons | Females          | <br>272    | 122            | 394 } 93 |
| OU.                | Male Adults      | <br>65     | 19             | 847      |
| Non-Insured        | Female Adults    | <br>215    | 86             | 301      |
| PERSONS            | Male Children*   | <br>81     | 171            | 252      |
|                    | Female Children* | <br>73     | 127            | 200      |
| TOTALS             |                  | <br>1142   | 633            | 1775     |

<sup>\*</sup> Under 15 years of age.

## Home Nursing.

The domiciliary nursing of both pulmonary and non-pulmonary cases continues to be carried out by the Liverpool Queen Victoria District Nursing Association in accordance with the existing agreement. During the year, 71 pulmonary and 39 non-pulmonary cases were nursed in their homes, and to these cases 3,950 visits were paid. The Garston and Grassendale Nursing Association and the Woolton and District Nursing Society have dealt with cases outside the area supplied by the District Nursing Association. The calling-up of young women for the Services continues to leave many sick parents unattended at home and has increased the demand for sanatorium beds.

## Domiciliary Treatment.

At the end of the year, 1,038 patients remained under domiciliary treatment of whom 786 were persons insured under the National Health Insurance Act, and in receipt of treatment from their panel doctors and 252 were not insured and were under the treatment of District Medical Officers or doctors of their own choice. The domiciliary reports received relating to insured persons numbered 511. Table VII shows the position at the end of the year.

TABLE VII.

PATIENTS UNDER DOMICILIARY TREATMENT AT THE END OF THE YEAR.

|                        | the same of the sa | Pulmonary. | Non-pulmonary. | Totals. |
|------------------------|--|------------|----------------|---------|
| I warman               | Males  | 506        | 16             | 522     |
| Insured<br>Persons     | Females  | 243        | 21             | 264 78  |
| The state of           | Male Adults  | 78         | 7              | 85]     |
| Non-insured<br>Persons | Female Adults  | 134        | 16             | 150     |
| PERSONS                | Male Children*   | 7          | 4              | 11 25   |
|                        | Female Children*   | 4          | 2              | 6       |
| TOTALS                 |  | 972        | 66             | 1038    |

#### \* Under 15 years of age.

#### Co-operation.

During the year, 922 reports were rendered by the Tuberculosis Officers in respect of school children. Many cases have also been examined at the request of organisations such as the Liverpool Personal Service Society; Child Welfare Association, etc.

# Silicosis and Asbestosis Scheme (1931).

The Tuberculosis Officers continue to examine workmen under this scheme, and reports are rendered to the Chief Medical Officer (Silicosis and Asbestosis Scheme).

# Summary of Treatment, etc., carried out in Sanatoria in connection with the working of the Tuberculosis Scheme.

| Operations (Thoracic and other)   | 114   |        |           |                  | SI III         |
|-----------------------------------|-------|--------|-----------|------------------|----------------|
| Gold and other treatments         | 295   |        |           | (Screenings)     | 3,511<br>6,799 |
| Light Therapy (Exposures)         | 5,075 | ***    | ,,        | (bereenings).    | 0,100          |
| Artificial Pneumothorax (New In-  | 1     | Dental | Treatment | (Extractions)    | 457            |
| ductions)                         | 120   | ,,     | - 11      | (Fillings)       | 147            |
| Artificial Pneumothorax (Refills) | 7,660 | ,,     | ,,        | (Miscellaneous). | 238            |

## Notification and Deaths.

During the year 78 persons within the city died from tuberculosis without notification having been effected prior to death. The result of enquiry into the reasons for such failure to notify are summarised in Table VIII.

#### TABLE VIII.

| Disease.           | No. of<br>Persons<br>who died<br>within<br>the City. | No. of<br>Cases<br>not notified<br>before<br>death. | Diagnosis<br>made at<br>a Post-<br>mortem<br>Examina-<br>tion.<br>(Includes<br>Coroner's<br>Cases.) | Diagnosis<br>delayed<br>owing to<br>Clinical<br>difficulties. | Doctor<br>thought<br>case had<br>been<br>notified by<br>another<br>Practi-<br>tioner. | Notifica-<br>tion<br>forgotten. | Patient<br>died before<br>notifica-<br>tion<br>could be<br>effected. |
|--------------------|--|---|---|---|---|---------------------------------|--|
| onary Tuberculosis | 653  | 36<br>5·5%  | 14<br>2·1%  | 3 0.4%  | 8<br>1·2%   | 5<br>0·8%                       | 6 0.9%   |
| Tuberculosis       | 124  | 42<br>33·8%   | 11<br>8·9%  | 15<br>12·1%   | 1.6%  | 8<br>6·4%                       | 6<br>4·8%  |

### Deaths from Tuberculosis.

The number of deaths from pulmonary tuberculosis and from non-pulmonary tuberculosis in Liverpool from 1931 to 1942, together with the number of new cases notified and the death rates which prevailed in England and Wales are given in Tables IX and X where case rates for Liverpool are also shown.

TABLE IX.

DEATHS FROM PULMONARY TUBERCULOSIS.

| Years. | Cases notified. | Case rate<br>per 1,000<br>population. | Number<br>of<br>deaths. | Death rate<br>per 1,000<br>Liverpool. | Death rate<br>per 1,000<br>England and<br>Wales. |
|--------|-----------------|---------------------------------------|-------------------------|---------------------------------------|--|
| 1931   | 2,358           | 2.75                                  | 989                     | 1.15                                  | 0.74   |
| 1932   | 2,005           | 2.33                                  | 969                     | 1.14                                  | 0.69   |
| 1933   | 2,279           | 2.63                                  | 1,009                   | 1.19                                  | 0.69   |
| 1934   | 1,903           | 2.20                                  | 867                     | 1.03                                  | 0.63   |
| 1935   | 1,697           | 1.96                                  | 812                     | 0.97                                  | 0.60   |
| 1936   | 1,645           | 1.90                                  | 713                     | 0.85                                  | 0.58   |
| 1937   | 1,555           | 1.79                                  | 684                     | 0.82                                  | 0.58   |
| 1938   | 1,378           | 1.59                                  | 666                     | 0.81                                  | 0.53   |
| 1939   | 1,213           | 1.47                                  | 647                     | 0.81                                  | 0.54   |
| 1940   | 1,311           | 1.73                                  | 761                     | 1.01                                  | 0.59   |
| 1941   | 1,302           | 1.90                                  | 699                     | 1.02                                  | 0.60   |
| 1942   | 1,370           | 2.04                                  | 653                     | 0.97                                  | 0.54   |

TABLE X.

DEATHS FROM NON-PULMONARY TUBERCULOSIS.

| Years. | Cases notified. | Case rate<br>per 1,000<br>population. | Number of deaths. | Death rate<br>per 1,000<br>Liverpool. | Death rate<br>per 1,000<br>England and<br>Wales. |
|--------|-----------------|---------------------------------------|-------------------|---------------------------------------|--|
| 1931   | 719             | 0.84                                  | 164               | 0.19                                  | 0.15   |
| 1932   | 672             | 0.77                                  | 170               | 0.20                                  | 0.15   |
| 1933   | 654             | 0.75                                  | 148               | 0.17                                  | 0.13   |
| 1934   | 585             | 0.67                                  | 129               | 0.15                                  | 0.13   |
| 1935   | 502             | 0.58                                  | 123               | 0.15                                  | 0.11   |
| 1936   | 445             | 0.21                                  | 126               | 0.15                                  | 0.17   |
| 1937   | 388             | 0.45                                  | 112               | 0.13                                  | 0.11   |
| 1938   | 386             | 0.45                                  | 103               | 0.12                                  | 0.10   |
| 1939   | 317             | 0.38                                  | 99                | 0.12                                  | 0.09   |
| 1940   | 274             | 0.36                                  | 122               | 0.16                                  | 0.11   |
| 1941   | 305             | 0.44                                  | 147               | 0.21                                  | 0.13   |
| 1942   | 348             | 0.52                                  | 124               | 0.18                                  | 0.11   |

TABLE XI.

AGE PERIODS OF DEATH FROM TUBERCULOSIS DURING 1942.

| A Desired    | PULM   | ONARY.   | Non-Pu | LMONARY. |  |
|--------------|--------|----------|--------|----------|--|
| Age Periods. | Males. | Females. | Males. | Females  |  |
| 0            | 3      | 2        | 7      | 6        |  |
| 1            | 4      | 1        | 17     | 15       |  |
| 5—           | 1      | 1        | 8      | 2        |  |
| 10           | 4      | 5        | 5      | 6        |  |
| 15           | 23     | 38       | 8      | 9        |  |
| 20           | 26     | 54       | 2      | 8        |  |
| 25—          | 65     | 77       | 7      | 7        |  |
| 35—          | 82     | 38       | 2      | 3        |  |
| 45-          | 89     | 17       | 5      | 4        |  |
| 55           | 72     | 19       | _      |          |  |
| 65—          | 21     | 11       | 1      | 2        |  |
| TOTALS       | 390    | 263      | 62     | 62       |  |

# VENEREAL DISEASES.

The Clinics operated by the Corporation during 1942 were: -

Seamen's Dispensary—Males only.

Mill Road Infirmary—Females only.

Royal Infirmary—Males and Females.

Edge Lane Hospital—Females only.

Sparrow Hall Hospital—Males and Females.

The Seamen's Dispensary and the Royal Infirmary are open all day for treatment of these diseases in the male. At Mill Road Infirmary, the Royal Infirmary and Edge Lane Hospital treatment for females is provided each day at hours convenient to the greatest number of patients.

All cases of venereal diseases requiring in-patient treatment are now concentrated in the special wards at Belmont Road Hospital. Periodic examinations of the children born and apparently free from disease are arranged. Infected parents are encouraged to attend the clinics until cure is accomplished. Further pregnancies are supervised and prophylactic treatment for congenital syphilis is given throughout.

It is becoming increasingly realised that the infected unit is not the individual but the family and thus whole families are examined, and, if need be, treated as the result of one diagnosed case. The maternity wards in particular of the various hospitals have referred numerous cases to the clinics for treatment, while the ante-natal centres throughout the city have sent many patients for diagnosis and treatment. It is only by a greater development of this co-operation between the health services that the large numbers of women and their families who would otherwise not be treated for this hidden scourge can come under proper treatment.

The following table summarises the work of the Clinics for the year 1942:—

|  | Seamen's<br>Dis-     |              | oyal<br>mary. | Infirm<br>†Belmo | Road<br>ary and<br>nt Road<br>pital. | †Edge<br>Lane<br>Medical<br>Home. | *Sparro | w Hall.  | Total<br>Male<br>and<br>Fema |
|--|----------------------|--------------|---------------|------------------|--------------------------------------|-----------------------------------|---------|----------|------------------------------|
|  | pensary. Males only. | Males.       | Females.      | Males.           | Females                              | Females only.                     | Males.  | Females. |                              |
| New cases  | 3,575                | 879          | 450           | 3                | 663                                  | 123                               | 9       | -        | 5,7                          |
| Old and new patients<br>Total attendances<br>In-patient days | 42,782               | 14,057<br>27 | 8,237         | 171<br>11,432    | 16,568<br>8,286                      | 7,499                             | 45      | _ 1      | 81,88<br>27,2                |

†Beds for In-patients are reserved at these Institutions. \*Closed 9/9/1942.

There was an increase in the number of new patients (5,702 in 1942 compared with 5,648 in 1941), and an increase in in-patient days of treatment (27,244 and 23,718 respectively), also in the number of attendances (81,861 and 69,115 in 1942 and 1941).

Early syphilis appears to have increased roughly four times in the male and eight times in the female population since 1938:—

| 193 | 8. | 193 | 9. | 194 | 0. | 194 | 11. | 19  | 12. |
|-----|----|-----|----|-----|----|-----|-----|-----|-----|
| M.  | F. | М.  | F. | М.  | F. | М.  | F.  | М.  | F.  |
| 147 | 34 | 187 | 25 | 354 | 59 | 584 | 139 | 567 | 260 |

Deaths from Yenereal Disease.

| Years                                |                            | SYPI      | SYPHILIS.                  |                            | and the same of | Lo    | Госомотов | OR AT                      | ATAXY.                           |       | NERAL  | GENERAL PARALYSIS OF<br>INSANE.         | SIS OF   | Tor                   | AL VEN                                  | EREAL ]                          | TOTAL VENEREAL DISEASE.  |
|--------------------------------------|----------------------------|-----------|----------------------------|----------------------------|-----------------|-------|-----------|----------------------------|----------------------------------|-------|--|---|--|-----------------------|---|----------------------------------|--|
|                                      | Under                      | 1-        | 40-                        | All<br>Ages.               | atanaman.       | Under | 1         | 40-                        |                                  | =-    | 1 1  | 40-                                     | All<br>Ages.   | Under                 | 1-                                      | 40-                              | All<br>Ages.   |
| 1915<br>1916<br>1917<br>1918<br>1919 | 43<br>36<br>37<br>38<br>38 | 9 17 17 6 | 01 2 2 4                   | 62<br>64<br>67<br>88<br>88 | 529             | ::::: | 0-4       | 10<br>13<br>16<br>19<br>12 | 11<br>14<br>19<br>20<br>20<br>16 | ::::: | 227 22 23 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25 | 52 52 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 | 35<br>35<br>70<br>76<br>56                                 | 255<br>36<br>37<br>38 | 20<br>18<br>42<br>52<br>32              | 45<br>37<br>62<br>74<br>50       | $ \begin{array}{c} 108 \\ 91 \\ 129 \\ 163 \\ 120 \end{array} $  |
| 1920<br>1921<br>1922<br>1923<br>1924 | 48<br>41<br>31<br>39<br>29 | ∞ L- 10 ∞ | 20023                      | 61<br>57<br>48<br>46<br>43 | 255             | 11111 | 8-00-     | 16<br>16<br>15<br>15       | 13<br>17<br>18<br>17<br>16<br>16 | 11111 | 18<br>18<br>18<br>15                                   | 24<br>35<br>29<br>29<br>31              | 42<br>53<br>56<br>47<br>47<br>46                           | 48<br>31<br>39<br>29  | 28<br>36<br>24<br>24                    | 39<br>62<br>55<br>46<br>52       | $ \begin{array}{c} 116 \\ 127 \\ 122 \\ 110 \\ 105 \end{array} $ |
| 1925<br>1926<br>1927<br>1928<br>1929 | 25<br>10<br>10<br>10       | w :10 m   | 8<br>11<br>12<br>20<br>20  | 33 88 33                   | 169             | 11111 | :00       | 841133                     | 18<br>17<br>14<br>13<br>16<br>16 | 11111 | 2481-9   | 22222                                   | $\begin{array}{c} 32 \\ 29 \\ 40 \\ 36 \\ 26 \end{array}$  | 25<br>10<br>10<br>10  | 15<br>7<br>16<br>14<br>10               | 46<br>52<br>59<br>53             | 85<br>84<br>89<br>77<br>75                                       |
| 1930<br>1931<br>1932<br>1933<br>1934 | 010048                     | 86814     | 28<br>26<br>26<br>26<br>25 | 14 04 0<br>30 14 E         | 189             | 11111 | 21::      | 2002                       | 11<br>8<br>10<br>20<br>20<br>2   | ::::: | r-80 8-9   | 18<br>16<br>16<br>17<br>18              | 25<br>19<br>32<br>28<br>28<br>27                           | 010948                | 18 13 13 13 13 13                       | 55<br>49<br>54<br>67<br>48       | 77<br>67<br>72<br>89<br>89<br>66                                 |
| 1935<br>1936<br>1937<br>1938<br>1939 | F-4400                     | 49595     | 36<br>41<br>39<br>55       | 47<br>58<br>58<br>63       | 267             | ::::: | ::-::     | 10<br>13<br>8<br>8         | 10<br>114<br>113<br>8            | 11111 | ⊕ 4 to − ;   | 18<br>19<br>20<br>15<br>19              | $\begin{bmatrix} 24 \\ 23 \\ 23 \\ 16 \\ 19 \end{bmatrix}$ | 1-4400 cc             | 100 100 100 100 100 100 100 100 100 100 | 64<br>72<br>82<br>82<br>82<br>82 | 81<br>88<br>82<br>87<br>87<br>90                                 |
| 1940<br>1941<br>1942                 | 01401                      | 01 40 60  | 48<br>48<br>29             | 52<br>58<br>34             |                 | :11   | -11       | 14<br>10<br>6              | 15<br>10<br>6                    | :11   | 440  | 8 2 6                                   | 16<br>16<br>14   | 01401                 | 20 8                                    | 554                              | 79<br>84<br>54   |

The increase in the deaths under the heading Syphilis is probably due to improved diagnosis in cardio-vascular cases.

#### Scabies.

The Scabies Order, 1941, under the Emergency Powers (Defence) gives the Medical Officer of Health, where he is satisfied, upon information given, that a person is in a verminous condition, power to cause such a person to be medically examined in suitable premises and further give him or her notice that he must present himself at a place where suitable arrangements have been made for him or her to be disinfected.

The treatment of scabies consists in giving the patient a hot bath, applying a suitable remedy, such as a 25 per cent. emulsion of benzyl benzoate and disinfection of clothing.

At the close of 1941 scabies was becoming widely prevalent, and it became necessary to proceed with the provision of suitable premises, in the form of scabies clinics, on a considerable scale. There were 4 cleansing stations available for the treatment of scabies, namely, (1) Everton Road, (2) Clifton Street, Garston, (3) Eldon Place, (4) South Dispensary. A further unit with 7 baths was then opened in Belmont Road Emergency Hospital which could be used for the treatment of scabies. Accordingly, during 1942 arrangements were made to open a number of fresh centres. Each was provided with a hot air disinfector:

| (1) | Mill Road Infirmary                  | 7 | Baths | <br>Opened | 2-2-42  |
|-----|--------------------------------------|---|-------|------------|---------|
| (2) | Stalisfield Avenue, Norris Green     | 1 | Bath  | <br>11     | 28-6-42 |
| (3) | Carnegie Welfare Centre              | 2 | Baths | <br>,,     | 4-5-42  |
| (4) | Walton Hospital Decontamination Unit | 2 | ,,    | <br>,,     | 22-6-42 |
| (5) | Alder Hey Hospital                   | 3 | ,,    | <br>,,     | 29-7-42 |
| (6) | East Dispensary Decontamination Unit | 2 | **    | <br>,,,    | 3-8-42  |
| (7) | Fazakerley Isolation Hospital        | 2 | ,,    | <br>,,     | 5-6-42  |
|     |                                      |   |       | Closed     | 1-1-43  |
| (8) | South Tuberculosis Clinic, Park Road | 3 | ,,    | <br>Opened | 8-2-43  |
| (9) | 33, Walton Road                      | 3 |       | 11         | 1-2-43  |
|     |                                      |   |       |            |         |

The total number of baths thus provided was 25.

An additional centre with 2 baths was established for adults at Belmont Road. This and the clinic at Walton Hospital were open in the evenings from 5 to 7 to enable workers to receive treatment after working hours. These two clinics were run by staffs of the Hospitals Department and each was open on two nights per week, one night for males and one night for females, thus giving the maximum facilities for adults. The other clinics were run by the School Medical Department and were available for children and mothers.

The total number of cases of scabies thus dealt with in 1942 was 19,785.

# INFECTIOUS HOSPITALS and SANATORIA.

During 1942 the hospital accommodation for infectious cases was as follows:—

City Hospitals North (70 beds), South (37 beds), East (194 beds), Fazakerley (160 beds), Fazakerley Annexe (155 beds), Sparrow Hall (150 beds), total, 766 beds; Fazakerley Sanatorium (182 beds), Cleaver Sanatorium (200 beds), total, 382 beds.

The following tables, prepared by the medical staff of each of the city hospitals, show the number of patients admitted, the nature of the illness in each case and the results of treatment, during the year 1942:—

|                |      |      |                               |                                 |  |  |   |  | -           | -                            |  |               |
|----------------|------|------|-------------------------------|---------------------------------|--|--|---|--|-------------|------------------------------|--|---------------|
| Dise           | ASES | we I | Remaining<br>Dec. 31st, 1941. | Admitted<br>during the<br>year. | Transferred<br>from other<br>City Hospitals. | Total under<br>Treatment<br>during the year. | Transferred<br>to Convalescent<br>Hospital. | Transferred<br>to other City<br>Hospitals. | Discharged. | Remaining<br>at end of year. | Died within<br>48 hours of<br>Admission. | Total Deaths. |
|                |      | Ci   | ty H                          | ospita                          | Nort   | h, Net                                       | herfie                                      | ld Roa                                     | d.          |                              |  | egiti         |
| Scarlet Fever  |      |      | _                             | _                               | _  | -  | -   | -  | -           | _                            | -  | _             |
| Diphtheria     |      |      | 91                            | 283                             | 16   | 390  | -   | 11   | 277         | 91                           | -  | 11            |
| Other Diseases |      |      | 6                             | 145                             | 1  | 152  | -   | 11   | 131         | 10                           | _  | _             |
| Totals         |      |      | 97                            | 428                             | 17   | 542  | -   | 22   | 408         | 101                          | -  | 11            |
|                |      | - 1  | City I                        | Hospit                          | al Sou                                       | th, Gr                                       | afton                                       | Street.                                    |             |                              |  |               |
| Scarlet fever  |      |      | 35                            | 250                             | 5  | 290  | -   | 4  | 259         | 26                           | -  | 1             |
| Diphtheria     |      |      | _                             | 1                               | -  | 1  | _   | -  | 1           |                              | -  | _             |
| Measles        |      |      | -                             | 24                              | -  | 24   | _   | -  | 21          | 3                            | -  | _             |
| Other Diseases |      |      | 1                             | 29                              | -  | 30   | -   | 1  | 27          | 1                            | -  | 1             |
| Totals         |      |      | 36                            | 304                             | 5  | 345  |   | 5  | 308         | 30                           | _  | 2             |

| Diseases.                                 |        | Remaining<br>Dec. 31st, 1941. | Admitted<br>during the<br>year. | Transferred<br>from other<br>City Hospitals. | Total under<br>Treatment<br>during the year. | Transferred<br>to Convalescent<br>Hospital. | Transferred<br>to other City<br>Hospitals. | Discharged | Remaining<br>at end of year. | Died within<br>48 hours of<br>Admission. | Total Deaths. |
|---|--------|-------------------------------|---------------------------------|--|--|---|--|------------|------------------------------|--|---------------|
| Admit Salburg                             | Cit    | y Hos                         | spital                          | East,  | Mill L                                       | ane, O                                      | ld Sw                                      | an.        |                              |  |               |
| Scarlet Fever                             |        | 3                             | 255                             | 6  | 264  | -   | 15   | 193        | 56                           |  | _             |
| Measles                                   |        | -                             | 186                             | 2  | 188  | _   | 11   | 154        | 21                           | 1  | 2             |
| Diphtheria                                |        | 138                           | 577                             | 16   | 731  | -   | 12   | 610        | 83                           | 10                                       | 26            |
| Other Diseases                            |        | 16                            | 248                             | 6  | 270  | -   | 7  | 249        | 12                           | 1  | 2             |
| Totals                                    |        | 157                           | 1,266                           | 30   | 1,453  | -   | 45   | 1,206      | 172                          | 12                                       | 30            |
|   |        | C                             | ity H                           | ospital                                      | s, Faz                                       | akerle                                      | у.   |            |                              |  |               |
| Scarlet fever                             |        | 29                            | 364                             | 74   | 467  |   | 34   | 379        | 54                           | - 1                                      | _             |
| Enteric fever group                       |        | 10                            | 11                              | 1  | 22   | _   | _  | 22         |                              | -  | -             |
| Diphtheria                                |        | 252                           | 1,054                           | 218  | 1,524  | -   | 138  | 1,170      | 173                          | 9  | 43            |
| Measles                                   |        | 3                             | 222                             | 55   | 280  | -   | 48   | 203        | 23                           |  | 6             |
| Whooping Cough                            |        | -                             | 11                              | 4  | 15   | -   | 1  | 11         | 3                            | _  | -             |
| Other diseases                            |        | 66                            | 885                             | 185  | 1,136  | -   | 114  | 932        | 76                           | 5  | 14            |
| Totals                                    |        | 360                           | 2,547                           | 537  | 3,444  | _   | 335  | 2,717      | 329                          | 14                                       | 63            |
| • These admission<br>864 cases and Sparro |        |                               |                                 |  |  | pital—1                                     | ,022 ca                                    | ses, F     | zakerle                      | y Anne                                   | хе            |
|   |        |                               | Fazak                           | erley  | Sanato                                       | rium.                                       |  |            |                              |  |               |
| Tuberculosis                              |        | 182                           | 239                             | 50   | 471  | -   | 11   | 173        | 213                          | 1  | 74            |
|   |        |                               | Clea                            | ver S  | anatori                                      | um.   |  |            |                              | n ig                                     |               |
| Tuberculosis                              |        | 201                           | 169                             | 71   | 441  | -   | 23   | 157        | 213                          |  | 48            |
| Т   | otals- | —All                          | Isolat                          | ion H  | ospita                                       | ls and                                      | San  | atoria     |                              | HANT                                     |               |
| All Diseases                              |        | 1,033                         | 4,953                           | 710  | 6,696  |   | 441  | 4,969      | 1,058                        | 27                                       | 228           |

General and Children's Hospitals and other Institutions. Statement of Admissions, Discharges, Births, Deaths, and Transfers.

| Hospital or Establishment.      | Remaining 27/12/41 | Admitted. | Trans-<br>ferred<br>to | Born. | Dis-   | Trans-<br>ferred<br>from | Died. | Remaining<br>26/12/42 |
|---------------------------------|--------------------|-----------|------------------------|-------|--------|--------------------------|-------|-----------------------|
| Administered under the Poor Law |                    |           |                        | ab    | OFF.   |                          | 101   | olys                  |
| Belmont Road Institution        | 1,594              | 8.643     | 493                    | 16    | 7,179  | 643                      | 1,467 | 1,457                 |
| Kirkdale Homes                  | 1,314              | 165       | 467                    | 1     | 323    | 130                      | 297   | 1,196                 |
| Olive Mount Children's Hospital | 267                | 1,695     | 340                    | 1     | 1,526  | 451                      | 15    | 310                   |
| Cottage Homes, Fazakerley       | 373                | 06        | 272                    | 1     | 247    | 96                       | 1     | 392                   |
| Shaw Street Boys' Home          | 30                 | 7         | 16                     | 1     | 22     | 1                        | 1     | 31                    |
| Seafield House (Greaves Hall)   | 98                 | 60        |                        | 1     | 7      | 1                        | 1     | 81                    |
| Administered under the Public   | u du<br>Giove      | I INC     |                        |       |        |                          |       | B                     |
| Health Acts:— Walton Hospital   | 1,036              | 17,090    | 181                    | 3,258 | 18,588 | 334                      | 1,540 | 1,103                 |
| Alder Hey Hospital              | 730                | 8,251     | 16                     | 1     | 7,475  | 242                      | 463   | 892                   |
| Smithdown Road Hospital         | 199                | 7,907     | 88                     | 1,892 | 8,473  | 541                      | 835   | 579                   |
| Broadgreen Emergency Hospital   | 127                | 3,431     | 48                     | 1     | 3,090  | 20                       | 201   | 295                   |
| TOTAL                           | 6,118              | 47,282    | 1,976                  | 5,166 | 46,930 | 2,458                    | 4,818 | 6,336                 |
|                                 |                    | 80        | 25                     |       |        |                          |       |                       |

NOTE.—Emergency Medical Service cases are included in above Return; Mill Road evacuated.

# MUNICIPAL HOSPITALS and INSTITUTIONS.

## General Review of Hospital Services.

STRUCTURAL WORK. During 1942, structural work was undertaken only if it was essential for the casualty services. At Broadgreen Emergency Hospital the building of hutment extensions for the accommodation of patients was completed. These additional wards were planned by the Ministry of Health and the expenditure incurred will be a charge on the Emergency Medical Service.

The extension of certain ancillary departments at both Alder Hey and Broadgreen Hospitals in continuance of the policy of upgrading, described in the Annual Report for 1939 was also carried out. During the year Broadgreen Emergency Hospital functioned as a general hospital.

During the year under review, heavy demands were made on the hospital accommodation for the treatment of normal civilian sickness. With the development of the Emergency Medical Service increased use was made of the outlying hospitals, which were used mainly for convalescent cases transferred from the City hospitals for completion of their cure. Under the Ministry of Health's schemes the staffing of these hospitals was steadily improved throughout the year in order that they would be able to play a larger part in the treatment of sickness and casualties.

STAFFS. The consultant medical staffs were strengthened by the additional appointments already mentioned. The establishments of resident medical staffs for the various hospitals were laid down by the Central Medical War Committee. In order to make the best use of the available medical manpower, and to provide useful training for prospective entrants to the services, newly-qualified practitioners were employed in the municipal hospitals to a much greater extent than in peace time. Considerably greater responsibilities were, consequently, borne by the senior resident medical officers, and the value of these officers was fully demonstrated. It is probable that, in the future, the appointment of such senior staffs in larger numbers than formerly will be an important step in the maintenance of an efficient hospital service.

The nursing staffs of hospitals were supplemented by the Civil Nursing Reserve, comprising trained nurses, assistant nurses and nursing

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DETAILS OF ADMISSIONS, DISCHARGES, ETC., AND WORK UNDERTAKEN AT THE FIVE MUNICIPAL HOSPITALS FOR PERIOD 1938 to 1942.

|                                     |        | WAL           | Walton Hospital | PITAL  |        | Shrrr                | SMITHDOWN ROAD | Road  | HOSPITAL.     | AL.    | Мп                                 | L ROA   | MILL POAD INFIRMARY. | EMARY.  |      | Ar                                    | ALDER HEY     |         | HOSPITAL.                   |         | Broadgreer<br>Emergenc<br>Hospital | greer<br>gency<br>ital. |
|-------------------------------------|--------|---------------|-----------------|--------|--------|----------------------|----------------|-------|---------------|--------|------------------------------------|---------|----------------------|---------|------|---------------------------------------|---------------|---------|-----------------------------|---------|------------------------------------|-------------------------|
|                                     | 1938   | 1939          | 1940            | 1941   | 1942   | 1938                 | 1939           | 1940  | 1941          | 1942   | 1938                               | 1939    | 1940                 | 1941    | 1942 | 1938 1                                | 1939          | 1940    | 1941                        | 1942    | 1941                               | 195                     |
| *Admissions                         | 16,995 |               | 14,149 14,018   | 16,209 | 17,090 | 9,594                | 161'8          | 7,937 | 7,276         | 7,907  | 10,024                             | 9,155 8 | 8,857 3              | 3,081   | 3    | 9,713 7,                              | 7,855 6,      | 6,612 7 | 7,981 8                     | 8,251   | 1,986                              | 3,48                    |
| *Transferred to                     | 195    | 151           | 160             | 205    | 181    | 223                  | 153            | 103   | 152           | 89     | 169                                | 146     | 164                  | 99      | 1    | 155                                   | 149           | 134     | 83                          | 16      | 1                                  | 4                       |
| *Born                               | 2,848  | 2,334         | 2,196           | 2,409  | 3,258  | 1,670                | 1,504          | 1,597 | 1,211         | 1,892  | 1,603 1                            | 1,409 1 | 1,458                | 482     | 1    | 1                                     | 1             | 1       | 1                           | 1       | 1                                  | 1                       |
| *Discharged                         | 17,478 | 17,478 14,801 | 14,105          | 16,745 | 18,588 | 9,514                | 8,308          | 8,066 | 7,417         | 8,473  | 10,496                             | 9,638   | 9,370 3,             | 3,211   | 1    | 8,459 6,                              | 6,976 5       | 5,306 7 | 7,173 7                     | 7,475   | 1,913                              | 3,10                    |
| *Transferred from                   | 484    | 538           | 266             | 309    | 334    | 727                  | 759            | 496   | 909           | 541    | 384                                | 473     | 334                  | 102     | 1    | 762 1,                                | 1,000         | 727     | 230                         | 242     | 1                                  | 64                      |
| *Died                               | 1,972  | 1,776         | 1,604           | 1,773  | 1,540  | 1,164 1,031          | 1,031          | 362   | 898           | 835    | 797                                | 746     | 669                  | 278     | 1    | 829                                   | 515           | 551     | 637                         | 463     | 28                                 | 62                      |
| Surgical Operations                 | 5,468  | 3,639         | 4,932           | 5,580  | 6,432  | 1,729 1,793 2,668    | 1,793          | 2,668 | 2,810 2,991   |        | 3,900 3                            | 3,744 3 | 3,631                | 1,277   | 1    | 2,327 2,                              | 2,063 2,      | 2,308 2 | 2,375 2                     | 2,520   | 727                                | 2,2                     |
| Out-Patient<br>Attendances          | 66,850 | 62,112        | 59,799          | 67,412 | 79,991 | 37.733 38,971 43,866 | 38,971         |       | 41,713 42,022 |        | 85,501 94,941 91,420 58,071 41,344 | 4,941 9 | 1,420 5              | 8,071 4 |      | 33,001 49                             | 9,883 38      | 3,820   | 49,883 38,820 15,215 41,081 |         | 3,772                              | 8,29                    |
| Pathological<br>Examinations        | 30,098 | 27,363        | 25,377          | 27,742 | 30,697 | 20,611 30,288 31,557 | 30,288         |       | 38,769 52,639 |        | 25,226 23,461 21,917               | 3,461 2 |                      | 8,219   |      | 31,600 2                              | 21,686 20,718 |         | 19,767 21,643               | 1,643   | 1                                  | 10,2                    |
| Post-mortems                        | 1,067  | 1,043         | 1,000           | 962    | 930    | 76                   | 84             | 88    | 137           | 195    | 161                                | 183     | 198                  | 51      | 1    | 131                                   | 121           | 96      | 118                         | 107     | 1                                  | 4                       |
| X-Ray Examinations<br>(Radiographs) | 22,328 | 21,435        | 22,278          | 23,441 | 22,463 | 8,079                | 9,426          | 8,885 | 9,343 1       | 11,455 | 14,708 17,924 17,706               | 7,924 1 |                      | 7,829   | -    | 13,327 10                             | 10,838 12,243 |         | 13,150 13,361               | 3,361   | 4,451                              | 8,12                    |
|                                     |        |               |                 |        |        | -                    | - 1            |       |               |        |                                    |         |                      | -       |      | min accounts for the clicht warietien | f of me       | on the  | alicht                      | oitomon |                                    |                         |

\*These figures correspond with the returns to the Ministry of Health and are made up to the last week-end of each year. This accounts for the slight variation between the figures returned by the respective Hospitals which are for the actual Calendar year.

Nore.—Mill Road Infirmary statistics compiled to date of evacuation, viz:—4.5.41, with the exception of O.P. attendances which are for the full year 1942.

auxiliaries and their usefulness further increased. The training of nursing auxiliaries was continued at a number of the hospitals, including Belmont Road Emergency Hospital, Fazakerley Sanatorium and Kirkdale Homes. The training of probationer nurses continues on fairly normal lines, although a shortage of student nurses was experienced in the children's and other special hospitals. Some consideration was given to the salaries of trained staffs, and recommendations for salary increases were submitted and subsequently approved. Conscription caused the departure of several members of the male staff during the year but the training of substitutes made it possible to maintain all the essential services.

MATERNITY CASES. Post-natal patients from Walton and Smithdown Road Hospitals continued to be transferred to the Hydropathic Hospital, Southport, and to Rosefield Hall, Southport. This arrangement relieved the pressure on the lying-in accommodation at Walton. The units at Southport were staffed by Walton Hospital. The number of births at Walton rose from 2,409 in 1941 to 3,258 in 1942, and those at Smithdown Road from 1,211 to 1,892. The total rise was from 3,620 to 5,150.

Tuberculosis. Adult cases of tuberculosis were admitted mainly to the Sanatoria at Fazakerley and Heswall and to the tuberculosis unit at Walton Hospital. Cases of tuberculosis in children were admitted to the William and John Jones Convalescent Home, Rhyl. Despite the loss of sanatorium beds by the change in user of Broadgreen Sanatorium, in-patient treatment was provided reasonably expeditiously in all appropriate cases. Two wards at Broadgreen Hospital were opened for the reception of cases of tuberculosis.

Infectious Diseases. Diphtheria continued to be the most pressing problem although the numbers of cases showed a considerable decline in comparison with 1941. Measles was prevalent both in the first half of the year and in the fourth quarter. Provision was made for the admission of cases of minor infections such as mumps, chickenpox and rubella among service units and from on shipboard.

AIR RAID PRECAUTIONS. Reference has already been made to certain arrangements made in connection with the casualty services. Fire precautions and decontamination arrangements again received further attention during the year. Additional equipment was provided and the training of personnel continued.

# SANITARY ADMINISTRATION.

During the year, sanitary inspectors made 163,588 inspections and visits for the investigation and abatement of nuisances. 18,382 complaints of nuisances were received as compared with 14,237 the previous year. The total number of nuisances reported was 31,910, and out of this number, 2,980 nuisances were outstanding at the end of the year. The number of notices served for the abatement of nuisances was 14,764 informal, and 15,417 statutory, 2,142 of these being served for the provision of dustbins.

In 60 cases legal proceedings were instituted at the City Court for failure to comply with notices served by this department under the Public Health Act, 1936, and other enactments.

## Departmental References.

The co-operation which the Public Health Department receives from other departments of the Corporation is fully appreciated, whereby many sanitary defects are brought to notice and dealt with immediately. The number of references received from other departments was 6,152, whilst the number of references to other departments was 9,499.

#### Infected Houses.

The sanitary inspectors made 10,856 investigations relating to cases of infectious disease, resulting in 10,664 visits to infected houses, and 1,196 visits to phthisis cases. There were also 153 inquiries made in respect to suspected smallpox contacts.

#### Closet Accommodation.

There still remain 95 privies and 77 pails on farms and outlying houses in the city where sewers are not reasonably available.

## Drain Testing

583 dainage systems were tested, 87 by colour test, of which 40 were positive and 47 negative; 210 by smoke rocket test, of which 114 were positive and 96 negative; 286 by smoke machine test, of which 178 were positive and 108 negative. Where defects have been revealed by these tests, repairs have been carried out. In the case of tests of important buildings and offices, as well as dwelling-houses of higher rateable value, the assistance of the City Engineer's Department has been utilised.

#### Disused Drains.

513 sites of demolished premises due to enemy action were inspected and on 473 sites unsealed or defective drain connections were found. These were referred to the City Engineer and Surveyor for sealing in accordance with Ministry of Home Security Circutar 270/1941.

# Factories and Workplaces Inspection. Factories Act, 1937, and Public Health Act, 1936.

Factories and Workplaces.—All factories and workplaces are visited by inspectors appointed under the Act, the various premises being grouped in districts so as to secure the maximum number of visits in the minimum time.

## Register of Factories, Section 8 (3).

The total number of factories (including bakehouses) on the register was 4,803.

With mechanical power ... 2,455 Without mechanical power ... 2,348

6,345 visits were made to factories, 659 in consequence of special complaints to the department, 5,686 in the course of ordinary routine inspection. During these visits 843 defects were found, in respect of which 375 informal notices and 55 statutory notices were issued on owners or occupiers, the defects not remedied at the end of the year being 72.

# Register of Workplaces (including Offices).

The number of workplaces on the register was 3,208.

1,703 visits were made to workplaces, and 1,011 in respect of offices. There were 129 defects, 15 of which were unsuitable or defective sanitary conveniences, 6 inadequate ventilation, and the remainder want of cleanliness. All defects were remedied during the year.

## Outworkers. Factories Act, 1937. Sections 110 and 111.

69 visits were made to premises and no instances of employment in unwholesome premises were found.

## Rag Flock Acts, 1911 and 1928.

Eight visits to two factories in which rag flock is manufactured and 69 visits to premises where rag flock was used, were made, 53 samples of rag flock being taken and with the exception of 4 were in accordance with the standard of cleanliness required by the rag flock regulations. In each of the 4 cases the offender was cautioned.

#### Bakehouses.

The number of bakehouses in use at the end of the year was 339, of which 109 were without mechanical power, 13 of these being basement, and 230 with mechanical power, of which 27 were basement bakehouses. 956 visits were made to bakehouses. 38 informal notices and 30 statutory notices were issued in respect of want of cleanliness, all of which were complied with.

#### Restaurants and Café Kitchens.

All kitchens in connection with cafés and restaurants are regularly visited, particular attention being paid to the cleanliness of the premises and of the workers employed in the kitchens. There were 340 in use at the end of the year, 2,093 visits were made to restaurant and café kitchens, 101 informal and 133 statutory notices being issued in respect of want of cleanliness, unsuitable or defective sanitary conveniences, accumulation or deposit of refuse in rooms, all of which were complied with.

#### Licensed Premises.

1,546 visits were made to licensed premises and it was found that the conditions under which beer is stored and sold are satisfactory on the whole. Measures have been taken to maintain a good standard of cleanliness.

82 informal and 154 statutory notices were issued, and with the exception of premises requiring structural alteration, the carrying out of which has been retarded owing to the shortage of labour and materials, the remaining defects were remedied.

#### Offensive Trades.

There were on the register of offensive trades at the end of the year 92 businesses, and 798 visits were made to these premises.

#### Fish Friers' Premises.

At the end of the year there were 472 fish friers' premises within the city, and 2,561 visits were made to see that the requirements of the byelaws were carried out.

#### Furniture Removers.

136 visits were made to the premises of furniture removers and 145 vans were inspected and found in a clean condition.

## Employment Agencies.

These premises are controlled by byelaws made under the Liverpool Corporation Act, 1927, and visits are made from time to time to ascertain that the requirements of the byelaws are being carried out. There are at present 23 licensed employment agencies on the register.

## Railway Carriages and Fish Arrivals.

During the year 425 visits were made to the main line railway stations within the city to ascertain if the railway carriages and fish arrival platforms were in a clean condition. All were found to be clean.

# Shops Acts, 1912 to 1938.

For the purposes of the administration of the Shops Act, inspection of shops throughout the City has been carried out by the Shops Inspectors, who are also engaged as Enforcement Inspectors under the Ministry of Food, in the performance of duties in connection with Food Control Administration.

Routine inspection of shops has been carried out as far as possible in order to keep the register of shops up to date, particularly in view of the number of shops which have been damaged or demolished by enemy action, or are unoccupied for this or other reasons. Shopkeepers, in addition to the many demands on their attention by the various Food Control Regulations, have complied with the requirements of the Shops Acts, respecting the employment of Shop Assistants and Young Persons, and with regard to the hours of closing, in a very satisfactory manner.

During the operation of Defence Regulation 60AB and the Liverpool (Hours of Closing) Order, 1941, made thereunder, by which the general evening closing hours of 9 p.m. on the "late" day, Saturday, and 8 p.m. on the other days in the week, were restricted to 6 p.m. on all days of the week, no contraventions of the Shops Acts were reported. Many of the shops closed before 6 p.m. including some of the food shops in the main thoroughfares, which closed at 5 p.m. No complaints have been received that the public have been inconvenienced by the earlier closing hour, which considerably minimised the risk to persons in the streets during the hours after black-out. The Regulation is operative during the period beginning with the first Sunday in November in any year, and ending with the day before the first Sunday in March in the succeeding year.

In accordance with the requirements of the Public Health Act, 1936, Section 205, enquiries have been made by a female shops inspector, in addition to her other duties, with reference to the employment of women after child-birth, and in this connection 206 visits have been made to factories within the city to ensure that the appropriate requirements of the Act are complied with.

The total number of visits to shops was 85,372, and 99 special complaints were investigated under the various enactments. The number of shops registered was 6,929.

In connection with the closing of shops on the weekly half-holiday, 76,280 visits were made, 20 with respect to evening closing, whilst the visits on Sunday amounted to 2,243. Re-visits in connection with contraventions numbered 1984, calls incidental to the Shops Acts were 1,165, and 7 premises were visited respecting nuisances dealt with under the Public Health Act. Four informations for contraventions of the Shops Acts were laid against 4 defendants who were convicted, the fines inflicted amounting to £3. Warning letters were sent in 4 instances regarding minor offences.

#### Food Control.

The total number of visits made by Enforcement Inspectors was 7,217, and the complaints investigated included 208 cases in which informations were laid. The fines totalled £556. In one case there was a penalty of £25, together with three months imprisonment. Costs allowed amounted to £24 17s. 6d.

## Theatres, Cinemas, etc.

506 visits were made by the Shops Inspectors, and in 7 cases minor defects observed, these being remedied on the attention of the managers being called thereto.

## Common Lodging Houses.

At the commencement of the year 1942, there were on the register 25 lodging houses providing accommodation for 1,397 lodgers. 8 applications were received from persons for registration as Keepers, of which 6 were granted. 3 houses ceased to be used as common lodging houses and were removed from the register. 28 applications were received from persons for the renewal of registration as Keepers, of which number 22 were granted for a further period of twelve months, and 6 applications were granted until the termination of hostilities, or for a period of twelve months whichever is the less.

At the end of the year there were on the register 28 lodging houses providing accommodation for 1,564 lodgers, 24 houses with accommodation for 1,411 males, and 4 houses with accommodation for 153 females. The number of inspections of these houses was 1,888.

In 142 cases informal action was taken for infringements of the byelaws, and in 125 cases the requirements were complied with. No informations were laid against keepers. 64 statutory nuisances were found, and of this number 15 nuisances were outstanding at the end of the year.

## Houses Let-in-Lodgings.

During the year, 5,432 inspections were made of houses occupied by members of more than one family. Offences were observed in 132 houses due to dirty floors, walls and ceilings, yards and water-closets, stairs and passages not washed, and beds, bedclothes and bedding dirty or verminous. Informal action was taken in 125 cases, and of this number 124 cases were abated. Formal action was taken in 7 cases and these were later complied with.

# Seamen's Lodging Houses.

Since the outbreak of hostilities and more particularly of recent months there has been an abnormal increase in the number of houses within the city accommodating British and Allied Merchant Seamen. In order to provide the necessary legislation to control Seamen's Lodging Houses, the Council of the City of Liverpool has approved draft by elaws under the Merchant Shipping Act, 1894, and have been submitted to the Board of Trade for approval. Inspections have been made of all known seamen's lodging houses, the majority of which are large aged dwelling-houses of the terrace type situate within the old city boundary and generally provided with the usual sanitary arrangements associated with dwelling-houses of this type, and sufficient only to meet the needs of one family.

The keepers of many of the lodging houses are under contract with the several shipping companies, and in this direction liaison was arranged between the government departments, local authority, and the shipping companies concerned to secure a suitable standard of sanitation in such houses, and the sanitary conditions in many of these houses have been greatly improved.

During the year, 1,765 inspections were made of 97 lodging houses. Overcrowding was found to exist in 28 houses and 170 rooms on the basis of 40 square feet of floor space for each person to occupy a sleeping apartment at one time, and 2 houses and 44 rooms were decrowded. In 92 houses, 2,044 statutory nuisances were found. The necessary action was taken and 1,018 nuisances were abated, the remainder are in course of abatement. In one case it was necessary to take legal proceedings against an owner and the prosecution was successful.

### The Scabies Order, 1941.

46 inspections of 29 Common Lodging Houses were made under the above Order. Body lice were found in 81 beds and bedding concerning 19 houses. 75 beds and bedding were disinfested by the Disinfection Department, 3 by the keepers concerned, and 3 beds were destroyed. 75 persons said to have occupied the verminous beds were advised to attend hospital for treatment and cleansing, and 43 persons attended. 26 persons believed to be verminous left the lodging houses and were not traced. 1,200 inspections were made of Seamen's Lodging Houses under the above Order. The bed bug was found in 7 lodging houses, and in 180 beds. 160 beds were disinfested by the Disinfection Department, and in addition 20 were destroyed at the request of the keepers concerned. All beds inspected were found to be free from the body louse.

#### Canal Boats.

Eight new boats were registered, and 5 were broken up, making a total of 390 canal boats on the register at the end of the year, with a population of 396 males and 5 females. The number of inspections of these boats was 2,123, 72 contraventions were found on 48 boats, and of this number 68 contraventions were remedied. 50 notices were issued to owners, and 2 verbal notices were given to masters.

## The Hydrogen Cyanide (Fumigation) Act, 1937.

Official notice has been received in respect of 22 fumigations under the Hydrogen Cyanide (Fumigation) Act, 1937. The number of dwelling-houses fumigated was 5, and 17 warehouses, each fumigation being supervised by the sanitary inspectors and satisfactorily carried out.

# Co-operation of Civil, Naval, Army and Air Force Authorities in Sanitary Matters.

In consequence of Ministry of Health Circular W.2, inspections have been made of Military and Air Force camps and billets, and nuisances have been dealt with by the department. Officers commanding have been advised of all matters appertaining to the health and comfort of their personnel.

#### Miscellaneous.

Stables within the city are systematically visited by the district sanitary inspectors, constant attention being paid to the frequent removal of manure and to general sanitation.

The total number of visits to stables during the year was 10,939, the number occupied was 488, and the number disused was 1,078. 53 visits were made to manure depots.

MARINE STORES. During the year 276 visits were paid to 10 marine stores, and in 5 cases nuisances were found and the necessary steps taken for their abatement.

PARKS. Fortnightly visits are paid by sanitary inspectors to all public sanitary conveniences within parks and gardens throughout the city to ascertain if they are kept in a clean condition and in good repair. 1,027 visits were paid and in 37 instances they were found to be incorrect. The necessary action was taken to remedy the defects.

POULTRY DEPOTS. 13 poultry depots were visited fortnightly by sanitary inspectors. In 9 instances nuisances were found, and steps taken to have them abated.

Schools. 3,944 visits were made to all schools, and in 154 instances defects were found. The necessary steps were immediately taken to have the defects remedied.

## Court and Alley Inspections.

4,065 inspections were made of courts and alleys, and 5,685 inspections of water-closets, the visits being made weekly by sanitary inspectors to ascertain whether these common water-closets are kept in a clean condition.

## Prohibition of Sale of Verminous Furniture, etc.

1,413 visits have been paid to premises by sanitary inspectors, and no infringements were observed.

#### Removal of Remains.

Under the terms of licences issued from the Home Office, sanitary inspectors supervised the exhumation and re-interment of 15 bodies during the year.

# Rats and Mice (Destruction) Act, 1919.

It has not been found necessary to take any proceedings for non-compliance with the provisions of the Rats and Mice (Destruction) Act, 1919. Sanitary inspectors paid 93,383 visits to ascertain if premises were infested by rats. 280 premises were found rat infested owing to defective drains, or accumulation of rubbish or lumber. 44 notices were served upon the persons responsible for the abatement of the nuisance, and these have since been complied with. Rat catchers have paid 29,581 visits to premises for the purpose of ascertaining whether they were infested with rats, and in 2,342 instances evidence of rats was found. 13,873 rats were caught, of this number 13,595 were brown, and 278 were black. The City Bacteriologist examined 2,243 rats to ascertain if they were free from plague or other diseases, and the remainder were burnt.

## Inspection of Air Raid Shelters.

During the year 1942, 50,992 inspections were made of all types of shelters, and reports were submitted to the appropriate departments where remedial work was necessary. 1,870 complaints were investigated and reported upon.

The sanitary condition of public shelters has improved very considerably, the cleansing being carried out by the City Engineer and Surveyor.

The strengthening of surface shelters is now complete, but constant inspection is still necessary to ensure that shelters are free from fault, and to prevent serious nuisances arising.

Much deliberate damage has been done to shelters by children and youths, particularly to the electrical fittings, bunks, etc. A shelter campaign was inaugurated in November by the Civil Defence Emergency Committee, when three Ministry of Information vans, with trained speakers in attendance, for a fortnight toured the districts where shelters had suffered most damage. After that period one van toured the city for three months. The local Press gave publicity every week with regard to the shelter damage, and the Director of Education agreed that direction should be given in every school in the city by the teachers. The churches also agreed to give direction from the pulpits.

It is interesting to note that during a three-month period 1,366 shelters were damaged, but the result of the shelter campaign is becoming apparent in the marked improvement in the condition of shelters. The Wardens' Organisation is endeavouring to persuade persons allocated to shelters to keep them locked, but many locks are still being lost, and these are becoming more difficult to replace.

During early morning and night visits bedding is examined, and 288 bundles were found to be verminous or dirty and likely to become verminous. These were disinfested by the department and the shelters disinfected. Owing to the wooden bunks becoming infested with bugs, it has been necessary to replace these with steel in one of the largest shelters in the city.

# Ambulance and Disinfecting Department.

The staff of the Ambulance and Disinfecting Department is engaged in (1) the removal of cases of infectious disease to hospital by ambulance, (2) the disinfection of premises and articles exposed to infection, (3) the disinfestation of verminous houses and articles, (4) the supervision of the City mortuary. The number of cases of infectious disease removed to hospital was 5,856. The number of houses disinfected after infectious disease was 7,603, whilst the number of articles of bedding, clothing, etc., disinfected by steam after exposure to infectious disease was 120,441.

#### DISINFESTATION OF PREMISES AND HOUSEHOLD EFFECTS.

Premises. 2,001 Corporation houses and 331 Corporation tenements were inspected for vermin. 373 houses and 164 tenements were infested with bugs, and the table below describes the action taken in these cases.

| period was the tried that one Sampane     | Corporati | on Houses. | Non-<br>Corporation |  |
|---|-----------|------------|---------------------|--|
| eniant allignment collections the         | Houses.   | Tenements. | Houses,             |  |
| Number treated                            | 373       | 150        | 0                   |  |
| Awaiting treatment at the end of the year | 53        | 23         | 0                   |  |

## City Mortuary.

The number of bodies removed to the mortuary was:-

| From the river | <br> | <br> | 15  |
|----------------|------|------|-----|
| From the city  | <br> | <br> | 380 |

The number of still-births received was 45.

#### Cremation.

The number of cremations which took place at the Liverpool Crematorium during 1942 was 460.

#### Smoke Abatement.

In accordance with national policy, industrial smoke abatement practice has been discontinued. The West Lancashire and Cheshire Regional Smoke Abatement Committee have suspended their operations for the duration of the war.

# INSPECTION OF FOOD.

A numerical summary of the visits paid to premises by the food inspectors is given in Table I.

TABLE I.

VISITS PAID TO PREMISES BY FOOD INSPECTORS.

| ughter-<br>ouses. | Butchers' shops. |        | Fruit  |       | factor- |    | Ice Cream<br>premises |     |   | Total visits paid. |
|-------------------|------------------|--------|--------|-------|---------|----|-----------------------|-----|---|--------------------|
| 7                 | 12,098           | 16,419 | 12,423 | 1,249 | 9       | 14 | 12                    | 485 | 9 | 42,725             |

## Private Slaughter-houses.

There are 4 private slaughter-houses in the city at which, during the year, no animals were slaughtered.

# The City Abattoir.

205,909 animals of different kinds were slaughtered in Liverpool for human food. An analysis of this figure is given in Table II.

TABLE II.

NUMBER OF ANIMALS SLAUGHTERED IN LIVERPOOL FOR HUMAN FOOD.

|                    | Bulls | Bullocks | Cows   | Heifers | Calves | Sheep<br>and<br>Lambs | Swine | Horses | Goats. |
|--------------------|-------|----------|--------|---------|--------|-----------------------|-------|--------|--------|
| Public<br>Abattoir | 306   | 14,260   | 11,093 | 7,185   | 31,437 | 139,410               | 1,947 | 214    | 57     |
| TOTALS             | 306   | 14,260   | 11,093 | 7,185   | 31,437 | 139,410               | 1,947 | 214    | 57     |

TABLE III.

CARCASES OF ANIMALS (HOME-KILLED) BROUGHT INTO LIVERPOOL FROM OTHER
DISTRICTS.

| Brought into the— | Beef.  | Veal. | Mutton. | Lamb.  | Pork. |
|-------------------|--------|-------|---------|--------|-------|
| Meat Market       | 10,119 | 472   | 1,176   | 73,568 | 119   |
| TOTALS            | 10,119 | 472   | 1,176   | 73,568 | 119   |

In addition to the above, 4,073 boxes or packages of home-killed offal were dealt with in the meat market.

TABLE IV.

CARCASES OF IMPORTED (FROZEN AND CHILLED) MEAT PASSING THROUGH THE CITY MEAT MARKET.

| Beef. | Veal. | Mutton. | Lamb.   | Pork.  |
|-------|-------|---------|---------|--------|
| 3,212 |       | 60,869  | 466,230 | 10,750 |

In addition to the above, 237,611 boxes and packages of imported meat and offal were dealt with in the meat market.

949 lbs. imported beef and 518 lbs. imported offal were destroyed for unsoundness, chiefly mould and brine damage.

#### Diseased Conditions.

The carcases of 17,288 animals showed abnormal conditions, and a detailed examination was made in each case, 2,188 carcases being rejected as unfit for human food. Of these, 1,214 were destroyed at the abattoir and 974 were destroyed at knackers' yards. A description of the diseased conditions found during 1942 which led to the total or partial destruction of carcases is given in Table V.

TABLE V.

| Disease.                  |         | No. | Disease.                 |             | No.     |
|---------------------------|---------|-----|--------------------------|-------------|---------|
| Abscess (total)           | <br>    | 3   | Melanosis (total)        |             | <br>1   |
| " (partial)               | <br>    | 54  | " (partial)              |             | <br>1   |
| Arthritis, Septic (total) | <br>    | 15  | Moribund                 |             | <br>7   |
| ,, Simple (partial)       | <br>    | 81  | Nephritis Septic         |             | <br>15  |
| Asphyxia                  | <br>    | 156 | Parturient Fever         |             | <br>1   |
| Contamination (partial)   | <br>    | 15  | Pyæmia                   |             | <br>7   |
| Decomposition (total)     | <br>    | 16  | Peritonitis Septic       |             | <br>19  |
| ,, (partial)              | <br>    | 18  | Pneumonia                |             | <br>31  |
| Distomatosis              | <br>    | 17  | Pleurisy                 |             | <br>7   |
| Dropsy                    | <br>    | 78  | Pleurisy (partial)       |             | <br>11  |
| Emaciation                | <br>    | 8   | Presternal Calcification | 1 (partial) | <br>4   |
| Enteritis                 | <br>    | 91  | Sarcoma                  |             | <br>2   |
| Gangrene (total)          | <br>    | 2   | Septicæmia               |             | <br>12  |
| Gastritis (total)         | <br>    | 1   | Septic Mastitis          |             | <br>9   |
| mmaturity                 | <br>    | 2   | ,, Metritis              |             | <br>11  |
| Injury (total)            | <br>    | 8   | ,, Pericarditis          |             | <br>2   |
| ,, (partial)              | <br>    | 160 | Swine Fever              |             | <br>22  |
| Jaundice                  | <br>    | 14  | Swine Erysipelas         |             | <br>3   |
| Johnes Disease            | <br>*** | 2   | Tuberculosis (total)     |             | <br>640 |
| Joint Ill                 | <br>    | 10  | ,, (partial)             |             | <br>457 |
| Malignant Neoplasm        | <br>    | 2   | Urticaria (partial)      |             | <br>- 1 |

In addition to the number of carcases totally destroyed because diseased conditions made them unfit for human food, a number of organs with localised disease were condemned.

Quantities of Food Materials Condemned as being unfit for Human Food.

TABLE VI.

|                    |           | Eggs.       | 8  | Dried<br>181 lbs | Inshell<br>180<br>eggs.        |
|--------------------|-----------|-------------|--|------------------|--------------------------------|
|                    | Canned    | Food-       | stuffs.  | Lbs.             | 169,500                        |
|                    |           |             | Lbs.   | 42,351           |                                |
|                    | Nuts,     | Cokernuts.  | Lbs.   | 1                |                                |
| Fruit. Vegetables. | Potatoes, | Cabbages.   | Sprouts, Almonds, Sundries of Turnips, etc.          | Lbs.             | 217,462                        |
| Fruit.             | Apples,   | Pears.      | Bananas<br>Oranges,<br>Lemons,<br>etc.               | Lbs.             | 89,968 217,462                 |
|                    |           | Rabbita     | Head.  | 8,241            |                                |
|                    | саше.     | Partridges. | Grouse, and Bananas Spreetc. Hares. Oranges, Onietc. | Head.            | 54                             |
| 1                  | Fourty.   | Fowls       | Ducks,<br>Geese,<br>Turkeys,<br>etc.                 | Head.            | 3,671                          |
|                    | Cockles.  | Mussels     | and<br>Winkles.                                      | Bags.            | 325                            |
| Crabs,             | Ovsters,  | Crawfish    | Shrimps,<br>Prawns,<br>Scallops.                     | Lbs.             | 7,970                          |
|                    | h.        |             | Dry.   | Lbs.             | 24,083                         |
|                    | Fish.     |             | Wet. Dry   | Lbs. Lbs.        | 239,673                        |
|                    |           | Offal       |  | Lbs.             | 444,712 610,685 239,673 24,083 |
|                    | Veel,     | Mutton      | Pork.  | Lbs.             | 444,712                        |

## The Tuberculosis Order, 1938.

This Order aims at the destruction of cows suffering from tuberculosis in a form that is a source of danger to human beings and to other animals. During 1942, 70 cows were slaughtered under this Order at the City Abattoir.

## Slaughter of Animals Act, 1933.

The following applications for licences as slaughtermen were received, namely: 5 for new licences, 97 for renewal of existing licences and 218 temporary licences for the slaughter of animals for the food of Mohammedans. In each case the licence was granted.

#### Food Control.

## Defence (General) Regulations, 1939.

Proceedings were instituted in 32 cases. £87 10s. 0d. was imposed in fines and £6 15s. 0d. in costs.

# THE SUPERVISION OF COWSHEDS, DAIRIES AND MILKSHOPS.

#### Registration of Dairies.

#### TABLE VII.

(Milk and Dairies Order, 1926.)

| Number of<br>registered<br>dairies at the<br>end of 1941. | New applications for registration. | Registration refused. | Dairies<br>removed<br>from the<br>register. | Number of<br>registered<br>dairies at the<br>end of 1942. |
|---|------------------------------------|-----------------------|---|---|
| 551   | 14                                 | _                     | 26  | 539   |

(19 dairies were transferred from one owner to another.)

#### Inspection of Dairies.

2,198 visits of inspection were paid to dairies. In 21 instances infringements of the Milk and Dairies Order, 1926, were found. In every case the notice of requirements was complied with at once. The corresponding visits for 1941 were 2,147.

### Registration of Dairymen.

#### TABLE VIII.

| Number<br>of registered<br>dairymen on<br>Jan. 1st, 1942. | Applications<br>for<br>registration. | Applications<br>refused. | Ceased<br>to be<br>dairymen. | Remaining on the<br>register,<br>Dec. 31st, 1942. |
|---|--------------------------------------|--------------------------|------------------------------|---|
| 563   | 14                                   | _                        | 26                           | 551   |

Of the 551 dairymen on the register at the end of the year, 12 were milk-hawkers who, having no premises of their own, are registered at the dairy from which they obtain their supplies and where they store their utensils.

#### Conveyance and Distribution of Milk Churns.

Observations were made at railway stations and other distributing centres to ensure that Sections 28 and 29 of the Milk and Dairies Order, 1926, relating to the marking, construction and cleanliness of milk churns, were complied with. 4 notices were sent to farmers outside the city drawing their attention to defects in milk churns. In every case the defects were remedied.

#### The Licensing of Places for Keeping Cattle.

(Liverpool Corporation Act, 1921.)

Under Sections 475 to 483 of the Liverpool Corporation Act, 1921, every person who keeps cattle is required to hold a licence from the Corporation both in respect of himself and also in respect of the premises. In Table IX is a summary of the register of licences in respect of milch cows.

TABLE IX.

REGISTRATION OF PREMISES ON WHICH MILCH COWS ARE KEPT.

|  | End of 1941. | End of 1942. |
|--|--------------|--------------|
| Number of licensed cowsheds              | 165          | 162          |
| Number of cows specified on the licences | 3,189        | 3,132        |
| Approximate average number of cows kept  | 2,489        | 2,411        |

(4 licences were transferred from one person to another.)

958 visits of inspection were paid to cowsheds. Five of the cowsheds visited were the subject of notices drawing the attention of the occupiers to contraventions of the Liverpool Corporation Act, 1921. All the notices were complied with, and no prosecutions were necessary nor was any licence forfeited because premises were not properly kept.

#### REGISTRATION OF PREMISES ON WHICH PIGS ARE KEPT.

|  |      | End of 1942. |
|--|------|--------------|
| Number of licensed piggeries             | <br> | 98           |
| Number of pigs specified on the licences | <br> | 3,779        |
| Approximate average number of pigs kept  | <br> | 1,558        |

Eleven new licences to keep pigs were applied for, involving the keeping of one hundred and forty-four pigs. These applications were granted. Two licences were transferred and four licences surrendered. 305 visits of inspection to piggeries were made, three piggeries visited were the subject of notices drawing the attention of the occupiers to contraventions of the Liverpool Corporation Act, 1921, and in every case the notice was complied with. In farms situated in the outer districts of the city, premises registered for the keeping of milch cows may be used also for keeping store cattle. At the end of 1942, 475 store cattle were kept on registered premises.

#### The Daily Supply of Milk to Liverpool.

The quantity of milk consumed in Liverpool daily is as follows:-

TABLE X.

DAILY CONSUMPTION OF MILK DURING 1942.

|                              | Grade  | of Mill | ۲. |      |      | Quantity in<br>Gallons. |
|------------------------------|--------|---------|----|------|------|-------------------------|
| Tuberculin-tested (Certified | 1)     |         |    | <br> |      | <br>None                |
| Tuberculin-tested            |        |         |    | <br> |      | <br>680                 |
| Tuberculin-tested (Pasteuri  | sed)   |         |    | <br> |      | <br>300                 |
| Accredited                   |        |         |    | <br> |      | <br>6,800               |
| Raw ungraded                 |        |         |    | <br> |      | <br>7,728               |
| Pasteurised under licence    |        |         |    | <br> |      | <br>33,800              |
| Heat-treated to pasteurisat  | ion st | andard  |    | <br> |      | <br>6,200               |
| Sterilized                   |        |         |    | <br> |      | <br>7,392               |
|                              |        |         |    | To   | otal | <br>62,900              |

The relative quantities of milk produced within the city or brought into the city by road or by rail are as follows:—

TABLE XI.

DAILY SOURCE OF MILK DURING 1942.

| Produced from cows kept | Brought into the City | Brought into the City |
|-------------------------|-----------------------|-----------------------|
| within the City.        | by road.              | by rail.              |
| 7,233 gallons           | 54,667 gallons        | 1,000 gallons         |

Total, 62,900 gallons.

The growth of road transport during recent years has led to increased difficulties in sampling.

#### Graded Milk.

The daily quantity of graded milk consumed is given in Table X.

TABLE XII.

PRODUCERS AND VENDORS OF GRADED MILK IN LIVERPOOL.

| Nature of licence or licences. | Tuberculin<br>Tested<br>(Certified)<br>Milk | Tuberculin<br>Tested<br>Milk | Tuberculin<br>Tested<br>(Pasteurised)<br>Milk | Accredited<br>Milk | Pasteurised<br>Milk. |
|--------------------------------|---|------------------------------|---|--------------------|----------------------|
| Producer only                  | 0   | 0                            | 0   | 23                 | 0                    |
| Producer and retail vendor     | 0   | 0                            | 1   | 36                 | 6                    |
| Retail vendor only .           | 0   | 0                            | 9   | 6                  | 2                    |

The following changes in licence-holders took place, namely: The licences of three producer-retailers and seven vendors of "Accredited" milk, were surrendered. Eight vendors of Tuberculin Tested Milk and two vendors of Tuberculin Tested (Pasteurised) Milk ceased to trade in Graded Milk.

#### The Provision of Milk for School Children.

Pasteurised milk only is supplied to school children under the Milk Marketing Board's Scheme. During March some 61,889 children were each supplied with a third of a pint daily. This number is approximately 89 per cent. of the children attending school. During the year, 134 samples were examined bacteriologically and chemically, and the results as a whole were satisfactory in view of war-time conditions. One of the samples was found to be tuberculous. The cause was traced to a broken spring in the steam control valve mechanism of the preheater, resulting in insufficient heating of the milk.

# THE CLEANLINESS OF MILK.

#### TABLE XIII.

#### EXAMINATION OF SAMPLES OF TUBERCULIN TESTED MILK.

| Cumplied                   | Number  | Where taken                    |                    | NE BLUE<br>ON TEST.  |                   | ENCE OR                |                         |                          |
|----------------------------|---------|--------------------------------|--------------------|----------------------|-------------------|------------------------|-------------------------|--------------------------|
| Supplied<br>by             | Samples | where taken                    | Satis-<br>factory. | Unsatis-<br>factory. | The second second | Present<br>in<br>1 ml. | Present<br>in<br>10 ml. | Present<br>in<br>100 ml. |
| A                          | 9       | Hospitals and<br>Institutions. | 7                  | 2                    | 7                 | 0                      | 0                       | 2_                       |
| В                          | 12      | Do.                            | 12                 | 0                    | 8                 | 3                      | 1                       | 0                        |
|                            | 16      | Do.                            | 11                 | 5                    | 9                 | 3                      | 2                       | 2                        |
| D                          | 12      | Wholesale depot                | 10                 | 2                    | 6                 | 1                      | 3                       | 2                        |
| C<br>D<br>E<br>F<br>G<br>H | 9       | Do.                            | 8                  | 1                    | 6                 | 2                      | 0                       | 1                        |
| F                          | 2       | Do.                            | 2                  | 0                    | 2                 | 0                      | 0                       | 0                        |
| G                          | 1       | Do.                            | 1                  | 0                    | 1                 | 0                      | 0                       | 0                        |
| H                          | 4       | Do.                            | 4                  | 0                    | 1                 | 0                      | 0                       | 3                        |
| TOTALS                     | 65      |                                | 55                 | 10                   | 40                | 9                      | 6                       | 10                       |

#### TABLE XIV.

#### THE EXAMINATION OF ACCREDITED MILKS PRODUCED IN LIVERPOOL.

| tal Number |               | E BLUE TEST.    | PRESEN    | NCE OR ABS | SENCE OF C | OLIFORM B. | CILLI. |  |
|------------|---------------|-----------------|-----------|------------|------------|------------|--------|--|
| Samples.   |               |                 | Absent in |            | Present    | in         | ,      |  |
|            | Satisfactory. | Unsatisfactory. | 1 ml.     | 1 ml.      | 1 ml.      | 100 ml.    | 1 ml.  |  |
| 166        | 102           | 64              | 56        | 23         | 24         | 16         | 47     |  |
|            | 61.4%         | 38.6%           | 33 7%     | 13.9%      | 14.5%      | 9.6%       | 28.3%  |  |

#### THE EXAMINATION OF ACCREDITED MILKS PRODUCED OUTSIDE LIVERPOOL.

| tal Number | METHYLENI     | E BLUE TEST.    | PRESER    | NCE OR ABS | SENCE OF C | OLIFORM BA | ACILLI. |
|------------|---------------|-----------------|-----------|------------|------------|------------|---------|
| Samples.   |               |                 | Absent in |            | Presen     | t in       |         |
|            | Satisfactory. | Unsatisfactory. | 1 ml.     | 1 ml.      | 1 ml.      | 100 ml.    | 1000 ml |
| 110        | 78            | 32              | 54        | 15         | 8          | 14         | 19      |
|            | 70.9%         | 29.1%           | 49.1%     | 13.6%      | 7.3%       | 12.7%      | 17.3%   |

TABLE XV.

# EXAMINATION OF SAMPLES OF UNGRADED AND UNTREATED MILK PRODUCED IN LIVERPOOL.

|          |   | Number  |                    | ENE BLUE             |       |       | OR ABS |           |         |  |
|----------|---|---------|--------------------|----------------------|-------|-------|--------|-----------|---------|--|
| Month    |   | of      |                    |                      | 41 .  |       | Preser | resent in |         |  |
|          |   | Samples | Satis-<br>factory. | Unsatis-<br>factory. |       | 1 ml. | 1 ml.  | 100 ml.   | 1000 ml |  |
| January  |   | 6       | 5                  | 1                    | 4     | 0     | 1      | 0         | 1       |  |
| February |   | 12      | 12                 | 0                    | 7     | 3     | 2      | 0         | 0       |  |
| March    |   | 8       | 6                  | 2                    | 4     | 2     | 1      | 0         | 1       |  |
| April    |   | 10      | 6                  | 4                    | 2     | 2     | 1      | 2         | 3       |  |
| May      |   | 14      | 8                  | 6                    | 2     | 4     | 2      | 2         | 4       |  |
| June     |   | 9       | 2                  | 7                    | 2     | 0     | 0      | 0         | 7       |  |
| July     |   | 5       | 1                  | 4                    | 1     | 0     | 0      | 0         | 4       |  |
| August   |   | 7       | 3                  | 4                    | 0     | 1     | 1      | 2         | 3       |  |
| Septembe | г | 7       | 3                  | - 4                  | 1     | 0     | 0      | 1         | 5       |  |
| October  |   | 8       | 2                  | 6                    | 0     | 0     | 3      | 1         | 4       |  |
| Novembe  | r | 20      | 16                 | 4                    | 7     | 2     | 5      | 2         | 4       |  |
| December |   | 10      | 8                  | 2                    | 5     | 2     | 2      | 0         | 1       |  |
|          | _ |         |                    |                      |       |       |        |           |         |  |
| TOTAL    |   | 116     | 72                 | 44                   | 35    | 16    | 18     | 10        | 37      |  |
|          |   |         | 62.1%              | 37.9%                | 30.2% | 13.8% | 15.5%  | 8.6 %     | 31.9%   |  |

#### Ice Cream.

During the year 12 visits of inspection were paid to the premises of ice cream vendors and makers. Twenty-five samples were examined and found satisfactory. In 56 per cent. the total count was under 10,000 organisms per c.c., and in 44 per cent. coliform bacilli were absent in 1 c.c.

# TUBERCULOUS MILK.

The Examination for Tuberculosis, of Milk produced within the City.

#### TABLE XVI.

| Kind of Milk.     | Number of samples. | Tubercle bacilli<br>present. | Percentage<br>tuberculous. |
|-------------------|--------------------|------------------------------|----------------------------|
| Graded milk       | 182                | 12                           | 6.5%                       |
| Ungraded raw milk | 117                | 10                           | 8.5%                       |

The Examination for Tuberculosis, of Milk produced in Areas outside the City.

#### TABLE XVII.

| Kind of Milk.     | Number of<br>samples | Tubercle bacilli<br>present. | Percentage<br>tuberculous. |
|-------------------|----------------------|------------------------------|----------------------------|
| Graded milk       | 152                  | 5                            | 3.3%                       |
| Ungraded raw milk | 428                  | 40                           | 9.3%                       |

#### TABLE XVIII.

THE SITUATION OF AREAS OUTSIDE THE CITY FROM WHICH MILK SAMPLED FOR TUBERCULOSIS WAS DERIVED.

| County.      | Description | n of Milk. | Numb<br>Tubero<br>samp | culous  | Tubercle<br>bacilli<br>present. | Percentage<br>tuberculous. |
|--------------|-------------|------------|------------------------|---------|---------------------------------|----------------------------|
|              | Ungraded.   | Graded.    | Ungraded.              | Graded. | Totals.                         |                            |
| Lancashire   | <br>127     | 31         | 8                      | 1       | 9                               | 5.7%                       |
| Cheshire     | <br>261     | 96         | 31                     | 4       | 35                              | 9.8%                       |
| Denbighshire | <br>24      | 4          | 1                      | _       | 1                               | 3.6%                       |
| Flintshire   | <br>16      | _          | -                      | _       | -                               | -                          |
| Shropshire   | <br>_       | 9          |                        | _       | _                               | _                          |
| Cumberland   | <br>-       | 12         | _                      | _       | -                               |                            |
|              | 428         | 152        | 40                     | 5       | 45                              | 7.8%                       |

# THE ADULTERATION OF FOOD AND DRUGS.

During 1942, 7,368 samples of food and drugs were purchased or taken and submitted for examination. Of these samples 1,229 were formal samples and 6,139 were informal samples.

#### TABLE XIX.

OFFENCES UNDER THE FOOD AND DRUGS ACT, 1938, THE PHARMACY AND POISONS ACT, 1933 AND THE PHARMACY AND MEDICINES ACT, 1941.

| N. 1 C                             |   |  | RESULT OF                         | LEG  | AL      | PRO     | CEEI    | OIN     | GS.  |
|------------------------------------|---|--|-----------------------------------|------|---------|---------|---------|---------|------|
| Number of<br>Informations<br>laid. | Nature of Sample.                                 | Nature of Offence.                                     | Number<br>of<br>convic-<br>tions. | F    | ines    |         | Co      | osts    | 3.   |
| 34                                 | Milk  | Contained added water                                  | 34                                | £ 28 | s.<br>0 | d.<br>0 | £<br>39 | s.<br>1 | d    |
| 2                                  | Milk  | Refusal to sell to Inspector                           | 2                                 | 2    | 0       | 0       | 1       | 1       | 0    |
| 1                                  | Whisky  | Contained 14 per cent. excess of water                 | 1                                 | 5    | 0       | 0       | 1       | 1       | 0    |
| 1                                  | Soya Flour  | Giving a label which falsely described the flour.      | 1                                 | 10   | 0       | 0       | 1       | 1       | 0.0  |
| 1                                  | Parsley, Thyme<br>and Lemon<br>Stuffing           | Was devoid of lemon                                    | 1                                 | 10   | 0       | 0       | 1       | 1       | 00   |
| 1                                  | Onion<br>Flavouring                               | Giving a label which falsely described the flavouring. | 1                                 | 10   | 0       | 0       | 2       | 2       | 00   |
| 1                                  | Glycerine,<br>Lemon and<br>Ipecacuanha<br>Mixture | Giving a label which falsely described the mixture.    | 1                                 | ×    |         |         | 2       | 6       | 0    |
| 1                                  | Dried Parsley                                     | Contained 22 per cent. sand                            | 1                                 | 10   | 0       | 0       | 1       | 5       | (    |
| 1                                  | Liquid Tonic                                      | Giving a label which falsely described the tonic.      | 1                                 | 5    | 0       | 0       | 3       | 3       | -    |
| 1                                  | Malt Extract<br>with Cod<br>Liver Oil             | Giving a label which falsely described<br>the extract  | 1                                 | 5    | 0       | 0       | 1       | 1       | 1111 |
| 1                                  | Blood Mixture                                     | Sold without a declaration of the constitutents        | 1                                 | 5    | 0       | 0       | 2       | 2       | 1    |
| 1                                  | Orange Quinine                                    | do. do.  | Dismissed.                        |      | -       |         |         | -       | +    |
| 1                                  | Disinfectant                                      | Unlawfully selling disinfectant                        | 1                                 | 2    | 0       | 0       | 2       | 2       | ro   |
| 47                                 |   |  | 46                                | 92   | 0       | 0       | 57      | 6       | 1    |
|                                    |   |  |                                   |      |         | £149    | 6       | 6       | 3    |

#### Fertilisers and Feeding Stuffs.

During 1942, 107 samples of fertilisers and feeding stuffs were submitted for analysis. It was not necessary to take legal proceedings.

#### Pharmacy and Poisons Act, 1933.

The Pharmacy and Poisons Act, 1933, regulates the sale of poisons. It is the duty of the Local Authority to carry out Part II of the Act, which deals with the registration of persons selling poisons mentioned in the Poisons List Confirmation Order, 1935. The number of names entered in the register is 351. Legal proceedings were taken against one unregistered vendor. (See Table XIX.)

#### Food Control.

#### Defence (General) Regulations, 1939.

Legal proceedings were instituted against one vendor who made an overcharge of threepence per pound in respect of pork sausages. A fine of £10 0s. 0d. was imposed.

#### REPORT OF THE CITY BACTERIOLOGIST.

In 1942 the number of specimens examined amounted to 98,266, of which 7,687 were for outside authorities and 5,786 for the Armed Forces.

Plague. None of the 3,658 rats examined was found infected with plague.

ANTHRAX. The Government Wool Disinfecting Station submitted 100 specimens of hair and wool for examination. Of these 50 were untreated and 4 contained anthrax bacilli; 50 were treated and of these none was infected with anthrax.

# Examinations made in the Bacteriological Department for the City of Liverpool during the year 1942.

| Milk (fresh-liquid)           |         |        |          |         | ***   | ***  | *** | 1,075  |
|-------------------------------|---------|--------|----------|---------|-------|------|-----|--|
| Foodstuffs                    |         |        |          |         |       |      |     | 54   |
| Water                         |         |        |          |         |       |      |     | 943  |
| Rats for plague bacilli       |         |        |          |         |       |      |     | 2,251  |
| Swabs for diphtheria bacil    |         |        |          |         |       |      |     | 58,233   |
| Specimens for enteric         |         |        |          |         |       |      |     | 1,401  |
| Cerebro-spinal fluid, etc. fe | or pat  |        |          |         |       |      |     | 201  |
| Sputum, etc., for tubercle    |         |        |          |         |       | ***  |     | 1,311  |
| Exudates for anthrax baci     |         |        |          |         |       |      |     | 78   |
| Miscellaneous specimens       |         |        | ***      |         |       |      |     | 222  |
|                               |         |        |          |         |       |      | _   |  |
|                               |         |        |          |         |       |      |     | 65,769   |
|                               |         |        |          |         |       |      | -   | -  |
| Venereal Diseases:            |         |        |          |         |       |      |     |  |
| Serological tests             |         |        |          |         |       |      |     | 16,680   |
| Other tests                   |         |        | ***      | ***     |       |      |     | 837  |
| Other tests                   |         |        | ***      | ***     |       |      |     | 001  |
|                               |         |        |          |         |       |      |     | 17,517   |
|                               |         |        |          |         |       |      | -   | 17,017   |
| Port Health Authority:        |         |        |          |         |       |      |     |  |
|                               | -       | -911   |          |         |       |      |     | 700  |
| Wool and hair for anthi       |         |        | ****     | ***     | ***   | ***  | *** | 100  |
| Rats for plague bacilli       | ***     | ***    | ***      | ***     | ***   | ***  | *** | 1,407  |
|                               |         |        |          |         |       |      | -   | 1 707  |
|                               |         |        |          |         |       |      |     | 1,507  |
| Evaminations made for (       | mteide  | Anthe  | wities . |         |       |      | -   | -  |
| Examinations made for C       | Juisiae | Authe  | ormes :  |         |       |      |     |  |
| Bacteriological               |         |        | ***      |         | ***   |      |     | 5,704  |
| Venereal Diseases             |         |        |          |         |       |      |     | 1,983  |
|                               |         |        |          |         |       |      | -   |  |
|                               |         |        |          |         |       |      |     | 7,687  |
|                               |         |        |          |         |       |      | -   | - Contractor of the Contractor |
| Examinations made for the     | he Ari  | med Fo | rces:    |         |       |      |     |  |
| Bacteriological               |         |        |          | ***     |       |      |     | 2,272  |
| Venereal Diseases             |         |        |          |         |       |      |     | 3,514  |
|                               |         |        |          |         |       |      | -   |  |
|                               |         |        |          |         |       |      |     | 5,786  |
|                               |         |        |          |         |       |      | 04  | -  |
|                               |         | -1     |          |         |       |      |     |  |
|                               |         | SUMM   | ARY.     |         |       |      |     |  |
| LIVERPOOL:                    |         |        |          |         |       |      |     |  |
| Specimens of water,           | milk.   | foodst | uffs an  | d infec | tious |      |     |  |
| material                      |         |        |          |         |       | 65,7 | 769 |  |
| Venereal Diseases             |         |        |          |         |       | 17,5 |     |  |
| Port Health Authorit          |         |        |          |         |       | 1,5  |     |  |
|                               |         |        |          |         |       |      |     | 84,793   |
| Outside Authorities:          |         |        |          |         |       |      |     |  |
| Bacteriological               |         |        |          |         |       | 5,7  | 04  |  |
| Venereal Diseases             |         |        |          |         |       |      | 83  |  |
| . VALVA UMI APADURGUO         |         |        |          |         |       |      |     | 7,687  |
| Armed Forces:                 |         |        |          |         |       |      |     | .,,,,,,  |
|                               |         |        |          |         |       | 0.0  | 100 |  |
| Bacteriological               |         |        |          | ***     |       |      | 272 |  |
| Venereal Diseases             |         |        |          |         |       | 3,8  | 514 | E 700  |
|                               |         |        |          |         |       | -    | _   | 5,786  |
|                               |         |        |          |         |       |      | -   | 00 000   |
|                               |         |        |          |         |       |      |     | 98,266   |
|                               |         |        |          |         |       |      |     | ASSESSMENT OF REAL PROPERTY.   |

#### HOUSING.

Owing to the War, and the terms of the Ministry of Health Circular No. 1,866, dated September 8th, 1939, normal progress in regard to slum clearance has ceased. During the year 916 houses were demolished and 2,120 persons re-housed.

#### Landlord and Tenant (War Damage) Amendment Act, 1941.

The total number of houses inspected during the year under the above enactment was 340. 216 applications for examination under the Act were made by landlords; 105 certificates of fitness were issued, and in 111 cases the applicants were notified that a certificate could not be granted.

124 applications for examination under the Act were made by tenants. In 104 cases it was found on examination that the dwelling-house had not been repaired so as to be deemed reasonably capable of being used for housing purposes.

### Defence (General) Regulations, 1939. Regulation 66AA.

Applications were received for licences to re-open 27 houses in clearance areas under the above regulations. Repairs and cleansing were carried out in 21 houses and licences issued. 26 applications were received for the renewal of licences, and these were granted. During the year two licences were revoked.

## Increase of Rent and Mortgage Interest (Restrictions) Acts, 1920/1939.

Certificates have been issued under the above Acts in respect of 2 dwelling-houses which were not in all respects reasonably fit for human habitation.

Houses Erected on Suburban Estates at 31st December, 1942.
(Including houses erected on the outskirts for slum clearance purposes.)

| Estates.                          |       |     | Non-Parlour. | Parlour. | TOTAL. |
|-----------------------------------|-------|-----|--------------|----------|--------|
| Dovecot Estate                    |       |     | 2,331        | 686      | 3,017  |
| Edge Lane Drive Estate            |       |     | 560          | 311      | 871    |
| Elms House Estate                 |       |     | 252          | _        | 252    |
| Fazakerley Estate                 |       |     | 1,030        | 410      | 1,440  |
| Finch Lane                        |       | *** | 54           | -        | 54     |
| Highfield Estate                  |       |     | _            | 618      | 618    |
| King Street, etc., Garston        |       |     | 76           | -        | 76     |
| Knotty Ash Estate                 |       |     | 389          | 263      | 652    |
| Knowsley Estate                   |       |     | 874          | _        | 874    |
| Larkhill Estate                   |       |     | 476          | 1,834    | 2,310  |
| ,, ,, (Flats)                     |       |     | 90           | 120      | 210    |
| Norris Green Estate               |       |     | 4,730        | 2,965    | 7,695  |
| Pinehurst Road Estate             |       |     | 287          | 395      | 682    |
| Ronald Street                     |       |     | 78           | -        | 78     |
| Sparrow Hall Estate               |       |     | *531         | 63       | 594    |
| ,, ,, (Flats)                     |       |     | 36           | -        | 36     |
| Speke (Banks Lane) Estate         |       |     | 286          |          | 286    |
| Speke                             |       |     | 951          | 667      | 1,618  |
| ,, (Flats)                        |       |     | -            | 8        | 8      |
| Speke Road (Flats)                |       |     | 312          |          | 312    |
| Springwood Estate                 |       |     | 250          | 1,249    | 1,499  |
| ,, (Flats)                        |       |     | -            | 49       | 49     |
| Walton-Clubmoor Estate            |       |     | 1,525        | 1,671    | 3,196  |
| Woolton                           |       |     | 416          | 73       | 489    |
| Partly-developed Estates          |       |     |              | 554      | 554    |
| Total within the area of the City | y     |     | 15,534       | 11,936   | 27,470 |
| Huyton Farm Estate                |       |     | 937          | 79       | 1,016  |
| Knowsley Estate                   |       |     | 3,631        | 710      | 4,341  |
| " " (Flats)                       | • • • |     | 108          | -        | 108    |
| Total outside the City boundary   | ·     |     | 4,676        | 789      | 5,465  |
| Grand Total                       |       |     | 20,210       | 12,725   | 32,935 |

<sup>\*</sup>Including 20 experimental non-timber houses.

#### Housing Statistics.

The number of houses inspected for housing defects under Public Health or Housing Acts was 16,955, and the number of inspections made for the purpose was 19,705.

Notices were served requiring defects to be remedied under the Public Health Act in respect of 18,935 houses. The number of dwelling-houses in which defects were remedied after service of formal notices was 11,172, and 7,048 defective dwelling-houses were rendered fit in consequence of informal action.

#### Housing Act, 1936. Part IV. Overcrowding.

78,471 visits were made to houses in connection with the overcrowding provisions of the Housing Act.

#### Houses Owned by the Local Authority.

Total number of houses and flats owned by the Local Authority at 31st December, 1942 (excluding 20 houses built under the powers of the Housing Acts and subsequently sold).. 41,959

Number of houses built in the last two years under-

| 1. | Housing Act | , 1936 | , Part III | <br>*** | <br>* * * | Nil |
|----|-------------|--------|------------|---------|-----------|-----|
| 2. |             |        | Part V     | <br>    | <br>      | 293 |

The following table shows the accommodation which has been provided in the Corporation's housing and rehousing schemes up to 31st December, 1942:—

| No. of rooms                                    |         | Number of 1             | Touses and | Flats erecte | :u.    |        |
|---|---------|-------------------------|------------|--------------|--------|--------|
| per dwelling                                    | On S    | uburban Est             | ates.      | In Centr     | m      |        |
| (exclusive of<br>bathroom,<br>sculleries, etc.) | Houses. | Aged persons' cottages. | Flats.     | Houses.      | Flats. | Totals |
| 1   |         | 130                     | 18         |              | 223    | 371    |
| 2   | -       | 220                     | 98         |              | 1,737  | 2,055  |
| 3   | 1,422   | -                       | 251        | 18           | 3,503  | 5,194  |
| 4   | 17,570  |                         | 207        | 158          | 3,143  | 21,078 |
| 5   | 12,849  | -                       | 151        | 18           | 230    | 13,248 |
| 6   | 18      |                         | -          | -            | 14     | 32     |
| 7   | 1       | -                       | -          | _            | _      | 1      |
| Totals  | 31,860  | 350                     | 725        | 194          | 8,850  | 41,979 |

#### Rentals.

The weekly rentals of flats (including rates), range from  $2/9\frac{1}{2}$  for a bed living room flat to 11/- for a five bedroom flat. The inclusive weekly rentals of houses vary between 8/3 for the non-parlour type, and 19/5 for the parlour type, and 23/6 per week for houses with garages.

## General Statistics.

| Area of City   |         |          |         |        |        |          |      |     | 27,321    | acres. |
|----------------|---------|----------|---------|--------|--------|----------|------|-----|-----------|--------|
| Number of inh  | abited  | houses   | at 31st | Dece   | mber,  | 1942     |      |     | 196,066   |        |
| Number of stru | ictural | ly separ | ate dwe | llings | occupi | ed (1931 | Cens | us) | 173,938   |        |
| Rateable value |         |          |         |        |        |          |      | £   | 6,624,027 |        |
| Sum represent  | ed by   | a Penny  | Rate    |        |        |          |      |     | £23,593   |        |

#### APPENDIX A.

#### CITY OF LIVERPOOL.

# Birth-Rates, Death-Rates, and Analysis of Mortality during the year 1942.

England and Wales, London, 126 County Boroughs and Great Towns, and 148 Smaller Towns. (Provisional Figures)

|  |              | ate<br>1,000<br>ation. | Annual Death-Rate per 1,000 Population. |                                    |            |          |               |                 |             | Rate per 1,000 Live Births. |   |                                 |
|--|--------------|------------------------|---|------------------------------------|------------|----------|---------------|-----------------|-------------|-----------------------------|---|---------------------------------|
|  | Live Births. | Still-births.          | All Causes.                             | Typhoid and<br>Paratyphoid Fevers. | Small-pox. | Measles. | Scarlet Fever | Whooping Cough. | Diphtheria. | Influenza.                  | Diarrhœa and<br>Enteritis (under<br>two years). | Total Deaths<br>under one year. |
| England and Wales  | 15.8         | 0.54                   | 11.6                                    | 0.00                               |            | 0.01     | 0.00          | 0.02            | 0.05        | 0.09                        | 5.2   | 49                              |
| 126 County Boroughs and Great Towns, including London                    | 17:3         | 0.66                   | 13.3                                    | 0.00                               |            | 0.02     | 0.00          | 0.03            | 0.06        | 0.09                        | 7.5   | 59                              |
| 148 Smaller Towns (Resident Populations 25,000 to 50,000 at Census 1931) | 18.4         | 0.62                   | 12.1                                    | 0.00                               |            | 0.01     | 0.00          | 0.02            | 0.04        | 0.10                        | 4.8   | 46                              |
| London   | 14.0         | 0.48                   | 13.9                                    | 0.00                               |            | 0.01     | 0.00          | 0.04            | 0.02        | 0.07                        | 8.6   | 60                              |
| Liverpool  | 20.5         | 0.82                   | 14.0                                    | 0.01                               |            | 0.04     | 0.01          | 0.02            | 0.15        | 0.05                        | 6.3   | 76                              |

Puerperal Sepsis, Others. Total. 1.59 2.01

The maternal mortality rates (provisional) for England and Wales are as follows: per 1,000 Total Births ...

### CITY OF LIVERPOOL.

Causes of, and ages at, Death during the year 1942,

|  |              | NET D      | EATHS AT | VARIOUS<br>G WITHIN | AGES, O | F "REST | DISTRICT | VHETHER |       | Total Deaths<br>in Liverpool           |
|--|--------------|------------|----------|---------------------|---------|---------|----------|---------|-------|--|
| Causes of Death.   | At           |            |          |                     | AT AGE  | s-Years |          |         |       | District,<br>whether of<br>"Residents" |
|  | all<br>ages. | Under<br>1 | 1—       | 3-                  | 5—      | 15—     | 25       | 45—     | 65—   | or "Non-<br>Residents."                |
| All Causes { Certified                                       | 9349         | 1033       | 171      | 85                  | 219     | 325     | 926      | 2563    | 4027  | 10342                                  |
| Uncertified  | 39           | 6          | -        | 2                   | 2       | 2       | 6        | 11      | 10    | 39                                     |
| 1. Typhoid and Paratyphoid Fevers                            | 4            | -          | 1        | -                   | -       | 1       | -        | 2       | -     | 4                                      |
| 2. Measles   | 25           | 4          | 15       | 1                   | 4       | 1       | -        | -       | -     | 28                                     |
| 3. Scarlet Fever   | 4            | _          | 1        | -                   | 2       | -       | 1        | -       | -     | 4                                      |
| 4. Whooping Cough  | 15           | 6          | 7        | 2                   | -       | -       | -        | -       | _     | 16                                     |
| 5. Diphtheria  | 99           | 6          | 17       | 21                  | 53      | 1       | _        | _       | 1     | 116                                    |
| 6. Influenza   | 37           | 3          | -        | _                   | 1       | 2       | 3        | 17      | 11    | 37                                     |
| 7. Encephalitis Lethargica                                   | 17           | _          | _        | _                   | _       | _       | 9        | 7       | 1     | 17                                     |
| 8. Cerebro-spinal Fever                                      | 38           | 10         | 12       | 4                   | 3       | 2       | 2        | 1       | 4     | 47                                     |
| 9. Tuberculosis of Respiratory System                        | 653          | 5          | 4        | 1                   | 11      | 141     | 262      | 197     | 32    | 693                                    |
| 10. Other Tuberculous Diseases                               | 124          | 13         | 25       | 7                   | 21      | 27      | 19       | 9       | 3     | 147                                    |
| 11. Syphilis   | 34           | 2          | _        | _                   |         |         | 5        | 18      | 9     | 42                                     |
| 12. General Paralysis of the Insane                          | 14           | _          |          | _                   | _       | 1       | 4        | 9       |       | 14                                     |
| 13. Cancer   | 1279         | _          | _        | 1                   | 2       | 5       | 109      | 596     | 566   | 1441                                   |
| 14. Diabetes   | 64           | _          | _        |                     | 2       |         | 7        |         | 30    |  |
| 15. Cerebral Haemorrhage                                     | 593          |            |          |                     | -       | 2       |          | 25      | 10000 | 74                                     |
| 16. Heart Disease  | 1889         |            |          |                     | -       |         | 13       | 199     | 379   | 635                                    |
| 17. Aneurysm   | 2            |            |          | _                   | 8       | 16      | 118      | 481     | 1266  | 2045                                   |
| 18. Other Circulatory Diseases                               | 563          |            | 0.770    | -                   | -       | -       | 1        | _       | 1     | 4                                      |
| 19. Bronchitis   | 1000000      | -          | _        |                     | 1       | 2       | 6        | 114     | 440   | 603                                    |
| 20. Pneumonia (all forms)                                    | 650          | 37         | 6        | 4                   | 2       | 3       | 34       | 210     | 354   | 681                                    |
|  | 606          | 264        | 25       | 7                   | 7       | 12      | 49       | 115     | 127   | 656                                    |
|  | 110          | 6          | 7        | 1                   | 1       | 3       | 16       | 40      | 36    | 122                                    |
|  | 85           | _          | -        | -                   | -       | 1       | 18       | 44      | 22    | 107                                    |
| 23. Diarrhoea, etc   | 118          | 85         | 5        | -                   | 1       | 3       | 7        | 9       | 8     | 132                                    |
| 24. Appendicitis   | 27           | -          | -        | 1                   | 2       | 5       | 2        | 11      | 6     | 32                                     |
| 25. Cirrhosis of Liver                                       | 10           | -          | -        | -                   | -       | -       | -        | 6       | 4     | 15                                     |
| 26. Other Diseases of Liver                                  | 21           | -          | -        | -                   | 1       | 2       | 2        | 8       | 8     | 28                                     |
| 27. Other Digestive Diseases                                 | 122          | 7          | -        | .4                  | 5       | 1       | 14       | 49      | 42    | 143                                    |
| 28. Acute and Chronic Nephritis                              | 222          | 1          | 1        | 2                   | - 6     | 7       | 27       | 90      | 88    | 239                                    |
| 29. Puerperal Sepsis   | 10           | -          | -        | -                   | -       | 4       | 6        | -       | -     | 11                                     |
| 30. Other Puerperal Causes                                   | 20           | -          | -        | -                   | -       | 4       | 16       | -       | -     | 23                                     |
| 31. Congenital Debility, Premature Birth, Malformations, etc | 461          | 455        | 3        | _                   | . 3     | _       | _        | -       | _     | 515                                    |
| 32. Senility   | 267          | -          | -        | -                   | -       | -       | -        | 8       | 259   | 307                                    |
| 33. Suicide  | 56           | -          | -        | -                   |         | 2       | 12       | 25      | 17    | 60                                     |
| 34. Other Violence   | 427          | 14         | 20       | 22                  | 43      | 33      | 64       | 109     | 122   | 479                                    |
| 35. Other Defined Causes                                     | 717          | 121        | 22       | 9                   | 41      | 47      | 106      | 173     | 198   | 858                                    |
| 36. Causes III-defined or unknown                            | 5            | -          |          | -                   | -       | -       | -        | 2       | 3     | 6                                      |
| TOTALS   | 9388         | 1039       | 171      | 87                  | 220     | 328     | 932      | 2574    | 4037  | 10381                                  |

YOUGHNAVIA TO YTIO

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#### CITY OF LIVERPOOL.

#### Infant Mortality during the year 1942.

Net Deaths from stated Causes at various Ages under One Year.

| CAUSE OF DEATH.                | Under 1 Week. | 1 Week and<br>under<br>2 Weeks. | 2 Weeks and<br>under<br>3 Weeks. | 3 Weeks and<br>under<br>4 Weeks. | Total under<br>4 Weeks. | 4 Weeks and<br>under 3 Months. | 3 Months and<br>under 6 Months. | 6 Months and<br>under 9 Months. | 9 Months and<br>under 12 Months. | Total<br>Deaths<br>under<br>One<br>Year. |
|--------------------------------|---------------|---------------------------------|----------------------------------|----------------------------------|-------------------------|--------------------------------|---------------------------------|---------------------------------|----------------------------------|--|
| All Causes. Certified          | 296           |                                 | 50                               | 36                               | 457<br>5                | 196                            | 217                             | 107                             | 56<br>—                          | 1033                                     |
| Typhoid Fever                  |               |                                 | -                                | -                                | -                       | -                              |                                 | -                               | -                                | -  |
| Chicken-pox                    |               | -                               | -                                | -                                | -                       | -                              | -                               | -                               | -                                | -  |
| Measles                        |               | -                               | -                                | -                                | -                       | 1                              | -                               | 2                               | 1                                | 4  |
| Scarlet Fever                  |               | -                               | -                                | -                                | -                       | -                              | -                               | -                               | -                                | -  |
| Whooping Cough                 |               |                                 | -                                | -                                | -                       | -                              | 2                               | 3                               | 1                                | 6  |
| Diphtheria                     |               | -                               | 3                                | -                                | 3                       | 1                              | 1                               | -                               | 1                                | 6  |
| Cerebro Spinal Fever           |               | -                               | -                                | -                                | -                       | 1                              | 2                               | 4                               | 3                                | 10                                       |
| Influenza                      |               | -                               | -                                | -                                | -                       | 2                              | 1                               | -                               | -                                | 3  |
| Dysentery                      |               |                                 | -                                | -                                | -                       | -                              | 1                               | -                               | 1                                | 2  |
| Erysipelas                     |               | -                               | -                                | -                                | -                       | -                              | -                               | -                               | -                                | -  |
| Pulmonary Tuberculosis         |               |                                 | -                                | -                                | -                       | 1                              | 1                               | -                               | 3                                | 5  |
| Tuberculous Meningitis         |               | -                               | -                                | -                                | -                       | 1                              | -                               | 5                               | 4                                | 10                                       |
| Other Toberculous Diseases     |               | -   -                           | -                                | -                                | -                       | -                              | 2                               | 1                               | -                                | 3  |
| Meningitis (not Tuberculous)   |               | -   -                           | -                                | -                                | -                       | 2                              | 6                               | 3                               | 1                                | 12                                       |
| Convulsions                    |               | 1                               | 1                                | 2                                | 6                       | 2                              | 2                               | 2                               | 1                                | 13                                       |
| Bronchitis                     |               | - 1                             | -                                | 5                                | 6                       | 9                              | 9                               | 10                              | 3                                | 37                                       |
| Pneumonia (all forms)          | 1             | 16                              | 14                               | 9                                | 53                      | 73                             | 82                              | 36                              | 20                               | 264                                      |
| Diarrhœa                       |               |                                 | -                                | -                                | -                       | -                              | _                               | _                               | -                                | _  |
| Enteritis                      |               | - 1                             | 2                                | 1                                | 4                       | 26                             | 39                              | 10                              | 6                                | 85                                       |
| Other Diseases of Stomach      |               | -                               | -                                | -                                | -                       | -                              | -                               | _                               | -                                | _  |
| Syphilis                       |               | -                               | -                                | _                                | 1                       | -                              | _                               | 1                               | _                                | 2  |
| Rickets                        |               | .   _                           | -                                | -                                | _                       |                                | _                               | _                               | _                                |  |
| Suffocation                    |               | 1                               | 1                                | _                                | 3                       | 3                              | 2                               | _                               | _                                | 8  |
| Injury at Birth                | 3             |                                 | -                                | _                                | 41                      | -                              | _                               | _                               | _                                | 41                                       |
| Atelectasis                    | 33            |                                 | _                                | 1                                | 39                      | 2                              | 1                               | 1                               | -                                | 43                                       |
| Malformations                  | 31            |                                 | 3                                | 3                                | 50                      | 10                             | 3                               | 3                               | and the same                     |  |
| Premature Birth                | 170           |                                 | 19                               | 11                               | 227                     | 23                             | 1                               |                                 | 3                                | 69                                       |
| Atrophy, Debility and Marasmus |               |                                 | 3                                | 2                                | 8                       | 10                             | 16                              | -                               | -                                | 251                                      |
| Other Course                   |               | 1                               | 4                                | 2                                | 21                      |                                |                                 | 3                               | _                                | 37                                       |
| Other Causes                   |               |                                 |                                  |                                  |                         | 29                             | 47                              | 23                              | 8                                | 128                                      |
|                                | 30            | 72                              | 50                               | 36                               | 462                     | 196                            | 218                             | 107                             | 56                               | 1039                                     |

Net Births in the year

Legitimate ... 12,858 Illegitimate ... 871

Net Deaths in the year of

Legitimate Infants 946
Illegitimate Infants 93

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| DINEANES   | SEX  |   |  |                    |                           |                                |                       |                              | AGE-RECOW                |   |   |  |                                   |  |                            |   |   |   |   |  |  |   |  |  | THON DESTRICT SOUTH  | Affice ferrierr   | Топыя   |
|  | Make.  | Francis   |  | 2                  | 3                         |                                |                       | 10                           | 10                       | 24                                      | 20                                      | 20   | 21                                |  | 40                         | -00   | 85  | -00   | 44  | 76   | 11   |   | 10   | Over<br>30   | SECRETARISON   | HIGHTRA<br>ON   |   |
| L—Edections and Parasitis Stamons III—Cannot and other Tenumes IIII—Edections and other Tenumes IIII—Edections and other Cannot Homes V—Obranic Potential VIII—Discount of Newton System VIII—Discount of Cannot System VIII—Discount of Cannot System VIII—Discount of Cannot System VIII—Discount of Cannot System X—Discount of Cannot System X—Discount of Cannot System XIII—Cannot of State VIII—Cannot of State VIIII—Cannot of State VIIII—State Section Vindens  | 0042<br>648<br>627<br>70<br>100<br>100<br>100<br>100<br>100<br>100<br>100<br>100<br>100                | 6340<br>632<br>134<br>632<br>134<br>630<br>830<br>830<br>140<br>30<br>130<br>130<br>130<br>130<br>130<br>130<br>130<br>130<br>130 | 3000<br>85 - 12   12   15   15   15   15   15   15 | 113 40             | a millingaliabile         | # #                            | O Realistantalille    | IN General enemal   I        | S Manual annual Hallat   | 100 100 100 100 100 100 100 100 100 100 | 121   1   0   0   1   0   0   0   0   0 | 120 Manual 120 Manual on 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 200 00 11 1 months and [ m ]   14 | 000 BO **  | 1011111 * 11日日日 - ** 11日 日 | 1 Elilian SESSES 11E1   | 100 100 100 100 100 100 100 100 100 100   | 10 日本日本 日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本日本日                     | 三 の日本の日本の日本日日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の  | 1004 A4 500 E5 5 | 1006<br>17<br>100<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10  | 100 100 100 100 100 100 100 100 100 100 | 114 × 60 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Salition of the Salitain   | 3631<br>313<br>313<br>313<br>313<br>313<br>313<br>313<br>313<br>313                              | 4007<br>900<br>130<br>43<br>43<br>134<br>134<br>134<br>130<br>131<br>131<br>131<br>131<br>131<br>131<br>131 | 1119-<br>1206-<br>104-<br>121-<br>4 A23-<br>4 A23-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206-<br>1206- |
| Class L.—Pyphosi Fyorp Condens-spined From Condens-spined From Displayers Lightlerer Explainers Filter of Congression of Congression  This of Congression of Proteomine  Coder Organ  Today  Hologic  Today  Today | 2 (1) 2 (2) (4) (2) (4) (2) (4) (2) (4) (4) (2) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4                 | 10 00 00 00 00 00 00 00 00 00 00 00 00 0  | in the late and the little                         | alizilling balanch | la las lasta little lasta | In two Line in Littlich Little | Hamilton Land Billian | land the latter out the unit | 111111111111mang12111111 | Hitestillangualilian                    | in the Hannittine of the                | 1111-20   0   1-   1110                                      | [a]][[[[]]]                       | THE PROPERTY OF THE PERSON NAMED IN COLUMN NAM | the title the section that | entiestationitalian   | relieus au seculii i i i i i              | and the tast of the fifth to                                  | 1111   2   1   1   1   1   1   1   1   1  | talled the thank at the  | telligitalisticalities   | 111111   11111   1111111                | HILLIAHHAHHHH                              | THE PROPERTY OF THE PARTY OF TH | 22 11 2 2 2 12 1 2 2 2 1 1 1 2 2 2 2 1 1 1 2 2 2 2 1 1 1 2 | 2<br>17<br>2<br>18<br>18<br>18<br>18<br>18<br>18<br>18<br>18<br>18<br>18<br>18<br>18<br>18                  | 4 38 4 13 50 60 7 20 7 20 12 2 38 4 14 30 15 11 37 21 21  |
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| Clier & Bloomatic Ferry Octobe Rhomation Englance Englance Englance Other George Deceme Clier & AAromin  | 17 17 17 18  | 20 42 22 *  | 11111  |                    |                           |                                | - Hillia              | C LINE .                     | I lines                  | - 111 se 1                              |   | - 11111 -  |                                   | - press  | a minum                    | a least   |   | - Lullan  | a legar   | 17:22 471 10   | a limit a  | a lined a                               | . Itual .                                  | 11111  | BERT A   | 10 Mil 31 - 3   | 42<br>53<br>64<br>18<br>20  |
| Class &—Modeling Other Chronic Presenting  | 1  | 2000  | 1  |                    |                           |                                |                       | 1 -10                        | 1                        | 1                                       |   | - In-  | 101 1                             | 1  | -                          | 1   | -   |   | 1 11  | 1  | 1 1 84   | 1.15                                    | 11.  | 111  | 1007   | :   | 47<br>12<br>0   |
| Clear 6.—Ecosphalitis Mentaglia George House of Paping Cord Combined Houseverlage Paralysis Railyany Controllation produce & years) Other Enterior of Newton Mystem Market Element   | 11日本年の日の日の日  | 2<br>300<br>11<br>9<br>7<br>22<br>22<br>22  | H  | I lettitues        | 11111111                  | willilli t                     | AUSTRIAL A            | 1 (4111114)                  | walliland 1              | I limited in                            | I I les la lan                          | i - i  - in   inn  | sattitities i                     | - in in its  | - 11-2141-1                |   |   |   | I miliagilia I  | 111 - 112 - 111  | 1 - 12 - 1-1   | 1 - 1 1 1 1 1 1 1                       | 11114,01111                                | I IIImmilli  | To the Real Property of  | 1 4 10 10 10 10 10 10 10 10 10 10 10 10 10  | 7<br>38<br>7<br>38<br>34<br>27<br>35<br>47<br>39  |
| Class 2.—Proteordina. Article Educación Article Educación Article Educación Proteorio. Angino Proteorio. Article Educación Article Educación Article Educación Article Educación Article Educación Article Educación Congreso High Educación Chies Educación (*Clivelalary System)   | 3<br>9<br>200<br>008<br>039<br>41<br>2<br>244<br>3<br>30<br>7  | 2<br>20<br>100<br>600<br>62<br>20<br>20<br>7<br>31<br>31<br>3   | 111111111111                                       |                    |                           |                                |                       | Hamiltonii.                  | - CHILITIAN              | 11111111                                | -   -                                   | IIII sessibal  | 11111-142-1                       | ledulating   | indian in the              | I amel attitud  | 1 2 2 30 30 31 4 1 8 10 10 1              | nel Wellishins  | 10 10 mm 10 10 mm | 1<br>20<br>20<br>20<br>20<br>20<br>34<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40<br>40  | 1 100 100 100 100 100 100 100 100 100 1  | - 111 250<br>250 × 100 × 1              | 1   -8 a.     -                            | 11181-18111  | The State of Street  | 2<br>13<br>344<br>944<br>97<br>36<br>210<br>8<br>46<br>7  | 2<br>20<br>200<br>1988<br>100<br>50<br>2<br>800<br>80<br>83<br>30   |
| Class 8.—Diseases of Laryna<br>Remarks processed<br>Processed processed<br>Processes Compution<br>Adultus<br>Other Empiricity Forums   | 100<br>200<br>200<br>104<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10<br>10 | 2<br>318<br>190<br>86<br>4<br>13<br>13<br>23<br>9   | 2 M<br>20 m<br>40 m<br>1 m                         | 1 1 4 2 4 4 1 1 1  |                           | tage that                      |                       | [111] ages                   | lear lile                | 111-11-                                 | list seal                               | luxu   lee   | Intlant                           | Interior   | 100011100                  | Inter   les   | 10 m 12 m - m 0                           | 18 30 H 11 11 14 15   | 120日の日本の  | 100 01 00 00 00 00 00 00 00 00 00 00 00  | 100 St 17 St 18 St | 1000000                                 | 11 -1 with                                 | li-illa!   | 2<br>206<br>172<br>100<br>6<br>8<br>27<br>20   | 2<br>412<br>204<br>66<br>13<br>21<br>14<br>18   | ***************************************   |
| Clase B.— Element of Broad Carley Clar of the of the of the Control Dark Distance of Stemath Appendixts Appendixts Estation A Research Appendixts Estation Corbain—Non Abrobale Other Homans of Ever Coller Distance of Eigentire System Coller Distance of Eigentire System   |  | 12 m 0 m 10 m 0   | 2   10   14   14                                   | 1111111111111      | 11111111111111            | HIII-HAILIE                    | -1111-1111            | Willes Hilli                 | 4 11 14 1 1 14 1 1       |   | 111111111111111111111111111111111111111 |  |                                   |  | is to ten in in            | Increase in i-  | 1 12 14 14 14                             |   | or bearing in   | unconsult.   |  | lane ten la la                          | Illamentita                                | THIRD THE  | ** 4 ** 1 * * * 1 * * * 1 * * * * 1 * * * *  | 7 36 57 6 11 6 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6  | 14<br>80<br>0<br>10<br>27<br>30<br>21<br>30<br>21<br>31   |
| Clear 26.—Acute Nephritis<br>Charania Nephritis<br>Older Elemans of Khibuya<br>Basses of Bholdar<br>Cortics<br>Cortics<br>Charania<br>Other Elemans of Francis Gas, Organia  | T Zummari  | 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | 1 107 1111   | -11111111-         |                           | HIHOTE-                        | 17111117              | 4 [4 11111                   | 111111                   | -11111111-                              |   | 11111  | 111111                            | will will an   | (R-)                       | 124     1-2   | 1 14 2 2 1 1 1 1                          | - Non- last !   | al ourself-   | Dog at 1   | I I Bi molle   | 1 10 4 5 1 10 1 1                       | 10 4 4 1 1                                 | 111111111  | 9<br>100<br>17<br>11<br>51<br>53<br>7  | 11<br>300<br>20<br>30<br>30<br>4<br>30<br>3<br>3  | 20<br>200<br>200<br>21<br>21<br>9<br>64<br>3<br>30  |
| Clear II.—Pursperal Sepaia<br>Other Pursperal Courses  | - 12   | 20  |  |                    |                           |                                |                       |                              |                          |   |   | 1.   | 1 100                             | 1 2  | ***                        |   |   |   | = -   |  | = -  |   |  | 11   | :  | 11 7  | 30<br>20<br>7   |
| Other Diseases of Skin Clase EL—Diseases of Boson Other Organs of Mercanist  | 20   | 9 2   | 2 -  | -                  | 11                        |                                | -                     | - 4                          |                          |   | -                                       | 1 1  | -                                 | 1  |                            | 1   |   | 1   | -   | 1  | 3  |   | -  | -  | 1  | 17<br>2   | 20  |
| Class 14.—Multimentions  Class 15.—Congenited Debility Presentines Both Joseph Held Johnston Other Docume of early Infancy   | 47<br>19<br>143<br>35<br>30<br>4   | 30<br>300<br>13<br>13<br>13<br>13   | 0)<br>20<br>20<br>40<br>11                         | 11111 30           | . 111111                  |                                |                       |                              |                          |   |   |  |                                   |  |                            |   |   |   |   |  |  |   |  | 11111  | 0 10110114   | 22<br>124<br>22<br>20<br>20   | 37<br>37<br>384<br>43<br>43<br>14   |
| Class 26.—COS Age  | 114  | 111   |  | -                  |                           |                                |                       |                              |                          |   | -                                       | -  |                                   |  |                            |   |   | 1   | 1   | D  | 33   | 15                                      | m  | 20   |  | 214   | 267   |
| Coal Gas   Handing   Han | Hallen and and the   | 17<br>4<br>1<br>1<br>1<br>2<br>2<br>31<br>4<br>34<br>30   | attatti titistis                                   | 111111             | AND DESIGNATIONS          | manimum 111111                 | newfull lillill       |                              | Seattill Tillit          | Seat of all 11111                       | allili - lineana                        | willill lillians   | seal till littles                 | saulanni laille  | allellellelle              | 4-1111  -1-1-08   | Seat It   land local                      | Table lattern   | BEnlull mercen  | Example  | Water of the Party   | Mallall Illia                           | Mail                                       | WHITTH TELL  | Hillshi on Halli   | 10<br>0<br>0<br>0<br>1<br>1<br>1<br>2<br>8<br>20<br>6<br>16<br>42<br>90                                     | 24 2 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5  |
| Clear 18.—43 defined Carnes  |  |   |  |                    |                           |                                |                       |                              |                          |   |   |  |                                   |  |                            |   | 1   | 1   |   | 3  |  |   |  | -  |  | ,   | à   |
| Mass   |  |   | 438  | 42                 | 26                        | 22                             | 17 26                 | 41                           | 32                       | 76                                      | 66                                      | A1<br>30   | 60<br>100                         | 123  | 106                        | 200   | 211                                       |   | 276   | e(3)   | 513  | 533                                     | 204  | 11   | 1905   | 2040  | 1047  |