

The Department of Health came into being in 1901 at a time when the diphtheria death-rate was below 1 per 10,000, and, compared with other infectious diseases, notably scarlet fever, enteric fever, measles, and whooping-cough, it was regarded as of little importance. In fact, the table of principal causes of death published in the annual reports for several years omitted diphtheria altogether.

In 1914 the incidence of diphtheria began to rise, and continued to do so for five years. The notifications in 1914 numbered 1,093, while in 1918 they were 5,539. The highest death-rate of this period was in 1917 with 240 deaths, or a rate of 2·18 per 10,000. In 1918 the deaths totalled 195, with a rate of 1·77. This was the year of the influenza pandemic, and for this reason very little mention of diphtheria is made in the Department's annual report.

From 1919 onwards the disease receded and the incidence dropped steadily to reach a new low level in 1934, in which year the deaths numbered 26 only, with a death-rate of 0·18 per 10,000. For the next ten years it remained low and the death-rate fluctuated between 0·1 and 0·2 per 10,000, but in 1943 the prevalence of diphtheria again increased, and in 1945 the notifications, for the first time in fourteen years, exceeded 1,000.

This latest increase in diphtheria incidence is clearly part of a world-wide resurgence of the disease. This has been particularly marked throughout north-western Europe, as the following figures will show :—

*Notified Cases of Diphtheria*

| Year.      | Denmark. | France. | Netherlands. | Norway. | Sweden. | Iire. |
|------------|----------|---------|--------------|---------|---------|-------|
| 1939 .. .. | 1,106    | 14,019  | 1,273        | 71      | 188     | 2,087 |
| 1943 .. .. | 2,527    | 46,539  | 58,603       | 22,787  | 2,496   | 4,650 |
| 1944 .. .. | 3,333    | 40,230  | ..           | ..      | 4,520   | 5,168 |

In comparison with these figures, it is interesting to note the trend of the disease in England and Wales and the United States over the same period :—

| Year.      | England and Wales. | United States. |
|------------|--------------------|----------------|
| 1939 .. .. | 47,698             | 24,391         |
| 1943 .. .. | 35,944             | 14,943         |
| 1944 .. .. | 29,446             | 14,103         |

Prior to the war, prophylactic inoculation against diphtheria was extensively practised in the United States, but it was not clear whether the low incidence of the disease could be attributed to this or to the general epidemiological factors affecting the world as a whole. Incidence was also low in such countries as Norway, Sweden, and the Netherlands, where little systematic inoculation was carried out. The state of affairs during 1942–44 would seem to have supplied the answer to this question. Norway and Sweden have suffered an extensive epidemic, whereas in the United States the incidence has remained low. But the outstanding example of the value of large-scale inoculation