An Analysis of Diphtheria Deaths in Ontario

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STATISTICAL study of deaths due to diphtheria made by Carey for the Massachusetts State Department of Health, led to an inquiry being instituted by the writer into the same subject in Ontario. As a matter of interest, it may be noted that diphtheria deaths were registered for the first time in England in 1859, and in the Province of Ontario in 1870. Between the years 1870 and 1880 death registrations were incomplete, and for some unknown reason, no deaths from this disease were registered during the year 1875, or, if they were, no record of them is obtainable. This analysis, therefore, is concerned with diphtheria death registrations between the years 1880 and 1918.

These registrations have been analyzed and tabulated to illustrate the total deaths each year due to diphtheria, the percentage of diphtheria deaths of the total deaths from all causes and the ratio of diphtheria deaths per 100,000 of population (Figures 1, 2, 3). Each tabulation includes all years between 1880 and 1918.

There is a striking similarity in the form of the curves plotted to illustrate these points. In all of them the fall in the death rate between 1906 and 1918 is manifest. In each the fact that in 1918 there was recorded the lowest diphtheria mortality yet observed in the Province of Ontario, is clearly brought out. Despite a steady increase in the population from 1,884,000 in 1880, to 2,800,000 in 1918 the total number of diphtheria deaths fell from 1,251 in the former year (1880) to 335 in the latter year (1918).