

THE CONQUEST OF PESTILENCE

by CHARLES F. BOLDUAN, M.D.¹

IT is always most interesting to go back through the annual reports covering the work of New York City's Health Department fifty or more years ago, and to see the problems which faced our predecessors. Still more fascinating is it to go back to the beginning of the nineteenth century and note the course of the general death rate during the long period from that time to the present, as is done in the graph reproduced herewith.

The death rates for the early part of this period are, of course, not exact. It must be remembered that the compulsory reporting of deaths was not in force until after the middle of the nineteenth century. The record of deaths up to that time is based on the compilation of interment records, and is admittedly incomplete. But the death rate as plotted is at least the minimum during the first half of the century. On the other hand, it is not probable that the rates were much higher. It is true that from time to time the City Inspector's reports during the 30's and 40's lament the fact that in case of burials outside of the City there is often no record of death. However, in view of the fact that there was ample room for cemeteries on the Island of Manhattan and that ferry transportation was still most primitive, it is very doubtful that there was any significant proportion of burials outside of New York City during the first quarter of the nineteenth century. All in all, the writer believes that the death rates plotted in the graph constitute a tolerably accurate index to health conditions in New York City since the beginning of the nineteenth century.

One is struck at once by the appalling death rates recorded in 1832, 1849, and 1854, when cholera devastated the City. Had we gone back to 1798, yellow fever would have shown 1,500 deaths in a population of approximately 60,000. This outbreak is men-

¹ Director of Health Education, New York City Department of Health.

THE CONQUEST OF PESTILENCE IN NEW YORK CITY

DEATH RATE PER 1,000 POPULATION, FROM OFFICIAL RECORDS OF THE DEPARTMENT OF HEALTH, SINCE 1804

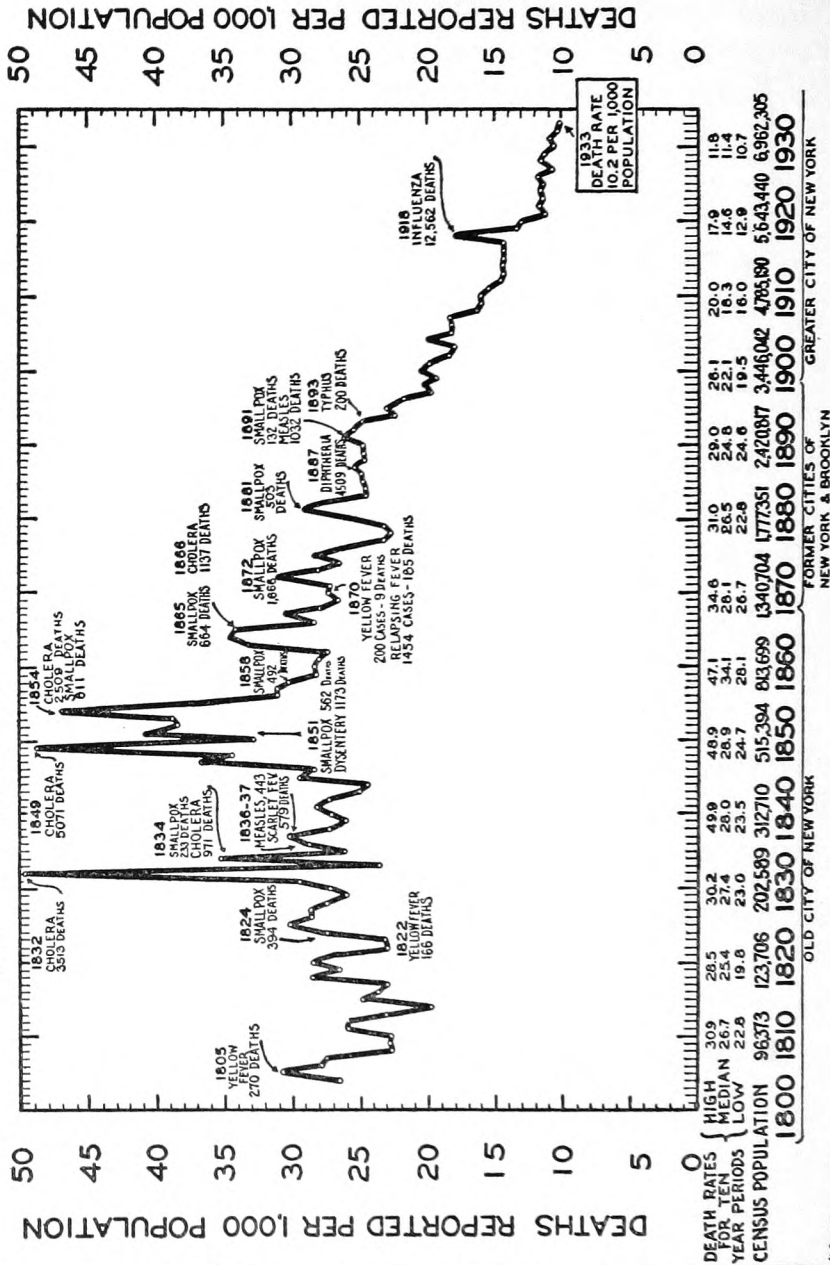


Fig. 1.

tioned to illustrate the very grave risk run by the physicians of those days, for of approximately forty physicians practising in the City at that time, sixteen fell victims to that fearful epidemic.

After the epidemic of 1798, yellow fever appeared in this City repeatedly, and as late as 1870 was charged with 200 cases. Small-pox, it will be noted, was almost constantly present, being charged with 1,666 deaths in 1872, over 500 in 1881, and 132 even as late as 1891.

Terrible as these various epidemics were they created no such fearful panics as did the several epidemics of cholera, which, incidentally, followed those in Europe. We of today still recall the pandemic of influenza in 1918, which exacted what we considered to be an enormous toll of lives in New York. A glance at the course of the death rate shows how insignificant this was in comparison with the epidemics of cholera during the first half of the nineteenth century. When cholera appeared many persons fled the City in terror. They did so also during the epidemic of yellow fever in 1798, a contemporaneous account pointing out that many even moved their entire families to Greenwich Village on the shores of the Hudson!

During the several cholera epidemics the prevailing death rate was approximately doubled. From about 25 per thousand it suddenly jumped to 50 per thousand. Should present-day New York City have a death rate of 50 per thousand, it would mean over 350,000 deaths in place of the 75,000 which now occur per annum. But even if an epidemic disease were to cause a doubling of the present death rate such an event would properly be regarded as an appalling calamity. However, in the present state of medical knowledge and application such a calamity is so remote as to be almost unthinkable.

While the course of the City's death rate during the last eighty years as here recorded is most gratifying, there is danger that it may make us too complacent, and inclined to believe that there is

little left for health officers to do. The fact is that we are still faced with many important and difficult health problems. Although many of the infectious diseases which formerly constituted the most serious menace to health have been effectively controlled, tuberculosis and syphilis, both preventable infectious diseases, still rank among the major causes of death. In recent decades the diseases of later adult life have been assuming even greater importance. Diseases of the cardio-arterio-renal system, cancer, diabetes—these are some of the conditions to which we must direct our efforts. The rising death rate from automobile accidents must give us grave concern. The reason for the high death rate from appendicitis must be investigated. Something must be done to reduce maternal mortality and the deaths of infants during the first month of life. In other words much still remains to be done, and complacency over progress during the past seventy-five years is entirely out of order. Let us rather use this graph as an incentive to do as well as did our predecessors.