

The table shows in a remarkable way the steady fall in the death-rate up to about 1921, from which time till about 1937 it tended to be fairly stable. Thereafter it has increased slightly and is now more in line with the death-rate of other Western European countries. There is a point below which death-rates cannot fall. Perhaps the major factor in the reduction of the death-rate in New Zealand has been the reduction in infantile deaths—that is, deaths under one year of age. The following table gives an indication of trends in this connection :—

Table No. 17.—Table showing the Number of Deaths per 1,000 Live Births of Infants under One Year at Five-yearly Intervals from 1876 to 1945

1876	..	..	103·48	1921	..	..	47·82
1881	..	..	92·41	1926	..	..	39·76
1886	..	..	98·40	1931	..	..	32·15
1891	..	..	91·23	1936	..	..	30·96
1896	..	..	77·32	1941	..	..	29·77
1901	..	..	71·40	1942	..	..	28·71
1906	..	..	62·10	1943	..	..	31·37
1911	..	..	56·31	1944	..	..	30·12
1916	..	..	50·72	1945	..	..	27·99

Although in the early part of the period there was a steady decline, the decline in the last two decades was of most significance. Over the past ten years, however, the rate has tended to be stabilized at about 30 per 1,000. This, coupled with the ageing of the population, is an explanation of the tendency of the death-rate to rise in recent years. In the early years, when the fall in the infantile rate was very heavy and the average age was lower than it is to-day, any marked decline in the infantile death-rate had a more than proportionate influence on the crude death-rate. To-day, when the population is considerably older, it is obvious that age brings with it a growing tendency to death, and, with the relative stabilization of the infantile death-rate, the net result is a rise in the total crude death-rate. The fall in the infantile death-rate, which is now the lowest in the world, can be attributed to the efficient child-welfare services in the Dominion. Particular credit must be given for the work to the Royal New Zealand Society for The Health of Women and Children, Inc. (The Plunket Society).

Crude death-rates are arrived at by applying the mean population for the year to the total deaths during the year. It will be clear, however, that changes in the age and sex composition of a community will materially affect the comparability of the figures from year to year, due to the changes in risks and causes of dying. To eliminate this factor the device of standardized death-rates is used. Under this method the age and sex structure of the population over a period is considered to be fixed, and the mortality in other years is weighted according to the age-distribution of that standard population. These standardized death-rates for a number of years may thus be regarded as indexes of the relative mortality free from the distortion which might arise from differences due to changing sex or age constitutions. For instance, in two populations of the same size the crude death-rate will differ, *inter alia*, according to the age-distribution. A young population will tend to have a smaller death-rate than an older population other things being equal. Hence to compare the relative liabilities to death in their communities, it is necessary to compare the death-rates for each age-group in one country with the death-rate for a corresponding age-group in the other country. This process carried out with a number of countries will provide a standardized death-rate. It can also be applied to a single country over a period of years. In New Zealand the standard sex and age constitution adopted is that of the census of 1911. The following table gives the standardized death-rates at quinquennial periods from 1875 to 1944 :—