

Table 4.36 indicates that women in their 20s are the most reproductive. On the average, for every 1,000 women between 20 and 24, there were 110 infants born during 1976. Expressed another way, about one woman out of eight in that age group gave birth to a live-born infant. The highest rate is found in the 25-29 age group with an average of 129 for every 1,000. Another measure of fertility is the gross reproduction rate which represents the average number of daughters that would be born to each woman throughout her child-bearing ages (15 to 49) if the fertility rate of the given year remained unchanged during the whole of her child-bearing period. A rate of 1.000 indicates that, on the basis of current fertility and without making any allowance for mortality among mothers during their child-bearing years, the present generation of child-bearing women would maintain itself.

Canada has always had one of the highest gross reproduction rates among industrialized countries. Even at low birth rates in the 1930s the rate varied between 1.300 and 1.500 and since World War II has ranged from 1.640 in 1946 to a high of 1.915 in 1959. However, since 1963 the national gross reproduction rate has dropped sharply from 1.788 to 0.887 in 1976 — appreciably below the replacement level of 1.000. Among the provinces, British Columbia, Quebec, and Ontario had the lowest gross reproduction rates in 1976, all below the replacement level.

4.5.3 Natural increase

The excess of births over deaths, or natural increase, has been the main factor in the growth of Canada's population. Some idea of the rate of natural increase back to the mid-1800s may be obtained from the estimates of births and deaths which produce the following natural increase rates (per 1,000 population): 1851-61, 23; 1861-71, 19; 1871-81, 18; 1881-91, 16; 1891-1901, 14; 1901-11, 18; 1911-21, 16.

During the 1920s and early 1930s the birth rate declined much more rapidly than the death rate and the natural increase rate dropped to a record low of 9.7 in 1937. Higher birth rates during and after World War II and a continued declining death rate caused the natural increase rate to rise steadily from 10.9 in 1939 to a record 20.3 in 1954. After that there was a steady drop due to declining birth rates and the natural increase rate fell below 10 for the first time in 1971 at 9.5 and dropped further to 8.0 in 1974. It edged up slightly in 1976 to 8.4 but fell to 8.3 in 1977. Table 4.32 gives average rates of natural increase in the provinces for five-year periods from 1951 to 1975 and for individual years 1976 and 1977.

4.5.4 Deaths

The Canadian crude death rate is one of the lowest in the world (7.3 per 1,000 population in 1976). After a gradual decline over the past century, the rate appears to have levelled off since 1967. In the opinion of demographers, a further reduction in the crude death rate is likely to be small.

General mortality. No official crude death rates (rates per 1,000 total population) are available prior to 1921. However, studies of the early Canadian censuses resulted in the following estimated annual crude rates: 1851-61, 22; 1861-71, 21; 1871-81, 19; 1881-91, 18; 1891-1901, 16; 1901-11, 13; 1911-21, 13.

Typical of pioneer populations, Canada had high death rates in the mid-1800s with the crude death rate estimated between 22 and 25. It is assumed that while mortality was high at all ages, the rate among infants and children must have been particularly high. Even in 1921 the Canadian infant mortality rate was 102.1 per 1,000 live births. With increasing urbanization and improved sanitation and medical services, the crude death rate dropped by 50% from 22 to 11 between 1851 and 1930. It continued to decline to a low of 7.3 in 1970 and 1971, rising slightly to 7.4 in 1973 and 1974 and declining to 7.3 in 1976 and 7.2 in 1977.

Table 4.33 shows the number of deaths in urban centres of 50,000 population and over in 1976 and 1977, and average deaths a year for the period 1971-75.

Age and sex distribution of deaths. Since 1921 the mortality trend at all ages has been downward. One of the contributing factors has been the reduction in the mortality of infants and children. Between 1951 and 1976, death rates for infants and for children