As might be expected, Table 4.38 indicates that women in their 20s are the most reproductive. On the average, for every 1,000 women between the ages of 20 and 24, there were 113 infants born during 1974. Expressed another way, about one woman out of eight in that age group gave birth to a live-born infant. For the fourth consecutive year, women in the age group 25-29 had a higher rate (131) than those in their early 20s.

Another measure of fertility is the gross reproduction rate, shown in Table 4.38 to indicate the average number of female children born to each woman living through the child-bearing ages. In other words, the gross reproduction rate represents the average number of females that would be born to each woman who lived to age 50 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 exactly maintain itself.

Canada has always had one of the highest gross reproduction rates among the industrialized countries of the world. 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 dropped sharply from 1.788 to 0.911 in 1974 – appreciably below the replacement level of 1.000 for the first time in Canada's history. Among the provinces, Quebec, British Columbia and Ontario had the lowest gross reproduction rates in 1974, all below the replacement level.

## 4.6.3 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 (see Sections 4.6.1 and 4.7.1) 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. It dropped still further to 8.0 in 1974. Table 4.32 gives average rates of natural increase in the provinces for five-year periods 1951-70 and for individual years 1971, 1972, 1973 and 1974.

## 4.7 Mortality

The Canadian crude death rate is one of the lowest in the world (7.4 per 1,000 population in 1974). After a continuous gradual decline over the past century, the rate appears to have levelled off since about 1967. In the opinion of demographers, further reductions in the crude death rate are likely to be small, and to affect primarily persons in the older age groups.

## 4.7.1 General mortality

No official crude death rates (i.e. 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 as between 22 and 25. It is assumed that while mortality was high at all ages, the rate among infants, children and young adults