under 5 years of age dropped by more than 60% (Table 4.39). Rates for the 5-14 age group also declined significantly. However, rates for boys and young men from 15 to 24 did not appreciably improve. Death rates for males over 25 were generally lower in 1976 than in 1951, though the magnitudes varied for different age groups. Rates for females of all ages declined substantially between 1951 and 1976.

Sharp reductions in male infant and child mortality and substantial declines in the female rates for all younger age groups have tended to raise the average age at death. In 1976 the average age for males was 64.3, while that for females was 70.1. The male median age at death was 68.9 and the female one was 75.6.

**Causes of death.** Cancer and cardiovascular diseases account for a larger proportion of deaths than before. On the other hand, deaths of infants, children and young adults from such diseases as pneumonia and tuberculosis have sharply declined.

Table 4.39 shows that the leading causes of infant death are radically different from the main causes of death at later periods. Accidents account for a significant number of male deaths for young adults. The majority of deaths among older males are due to cardiovascular diseases and cancer.

Accidents are also the primary cause of death among girls, with cancer being the leading cause for young and middle-aged women. Cardiovascular diseases and cancer are the leading causes of death for elderly women.

More information on causes of death is in Section 5.1.3 of Chapter 5, Health.

**Infant death.** Table 4.40 shows that death rates for both male and female infants (under one year of age) have been reduced by more than 60% since 1951. This is due to better prenatal and postnatal care, improved sanitation, the use of antibiotics and other preventive treatments, and the younger age patterns of child-bearing women.

The 1976 mortality rates for infants of both sexes varied among the provinces and territories with the rates for the Northwest Territories being substantially higher. The national death rate for all infants was 13.5, the lowest on record (Table 4.40).

## Life expectancy

Life tables indicate the measures of life expectancy compiled from the death rates prevailing over a period. They assume that a given group of people (usually 100,000) born simultaneously in a particular year, are subjected through their lives to the agespecific death rates by age prevailing in that year, (or in respect of the official life tables to the average death rates for a three-year period centred around that year). The expected deaths in the group are calculated (in the case of a complete life table) for the first year of life, second year of life, and the diminishing group is followed for 100 or more years until all members are eliminated. Life expectancy at birth is calculated for the entire group and, subsequently, remaining life expectancy is calculated for the survivors at one-year intervals. The assumptions of such a life table are approximations to reality and the hypothetical cohorts in life tables do not represent any actual population. Usually, persons in an actual group born in the life-table year will have a higher life expectancy than those in the life-table group because during their lifetimes public health conditions will improve and standards of medical care will advance.

Seven official sets of life tables were published, based on deaths in the three-year period around each of the censuses of 1931, 1941, 1951, 1956, 1961, 1966 and 1971. The Canadian life-table values for the 1971 period are given for selected ages in Table 4.41. This table shows that at 1970-72 mortality rates 2,002 of 100,000 males born would have died in their first year with 97,998 surviving to one year of age, that 126 more would have died in their second year with 97,872 reaching their second birthday and so on, with 191 survivors at age 100. The probability of dying column represents the ratio between the population at each age and the number of expected deaths in the coming year. The expectation of life column shows the number of remaining years of life expected at each age, given the 1970-72 mortality rates.

Male probabilities of dying were higher than the corresponding female probabilities at all ages. Mortality rates and the probabilities of dying were lowest at the age of about 10 for both sexes. Then male probabilities rose rapidly, reflecting accidents to teen-age boys; female probabilities rose more gradually. Male mortality was fairly constant from

4.5.5