

13,307 infant deaths in that year, as against the observed 5,192. The improvement is due to many factors including better prenatal and postnatal care, improved sanitation, the use of antibiotics and higher living standards. In recent years, also, older women (a high-risk group) have been having fewer babies.

The 1974 provincial mortality rates for infants of both sexes ranged from 13.4 for Ontario to 20.7 in Saskatchewan, with the rates for the Northwest Territories being substantially higher. The national death rate for all infants was 15.0, the lowest on record, with most of the provinces recording the lowest infant mortality rates in history. (Table 4.43)

Male infant mortality in Canada in recent years was 20-25% higher than the corresponding female mortality. Of 1,000 infant boys born alive in Canada during 1974, 16.6 failed to reach their first birthday, whereas for every 1,000 infant girls born alive there were only 13.4 fatalities by the end of the first year. Thus, while about 1,058 males are born for every 1,000 females, the higher male infant mortality reduces the excess to some extent during the first year.

Ages of infant deaths. Table 4.44 shows that 3,506 or nearly 68% of the 5,192 infants who died during 1974 within a year of their birth died during the first four weeks of life, the "neonatal" period; 2,033 or about 58% of these neonatal deaths occurred during the first day of life and 3,069 or 87.5% during the first week. Deaths in the neonatal period are caused mainly by conditions associated with pregnancy, difficult labour or congenital malformations. As in the case of the infant mortality rate, the Canadian neonatal death rate dropped by over half since 1951, from 22.6 to 10.1 in 1974, with substantial improvements in all the provinces (see Table 4.43).

Causes of infant deaths. Of the 5,192 infants dying in 1974, 2,451 or over 47% died of "perinatal" conditions of early infancy. There were 1,064 deaths from anoxia or hypoxia (absence or deficiency of oxygen), and 498 due to immaturity of the foetus. In the "perinatal" mortality group, 219 deaths were ascribed to conditions of the placenta or umbilical cord. Congenital malformations accounted for 1,204 deaths. Of the 420 deaths from respiratory diseases, 282 were due to pneumonia. Suffocation by food and other objects caused 151 infant deaths in 1974. Of the 175 infant deaths from infective and parasitic diseases 87 were due to intestinal infections (see also Table 4.42).

4.7.3 Life expectancy

Life tables are measures of life expectancy compiled from the death rates prevailing over a period. They assume that a given cohort of people (usually 100,000) are born simultaneously in a particular year and continue to be subject all their lives to the death rates prevailing in that year, or perhaps to the average death rates for a three-year period centred around that year. The "expected" deaths in the cohort are calculated (in the case of a "complete" life table) for the first year of life, second year of life, etc., and the diminishing cohort is "followed" for 100 or more years until it has been virtually eliminated. Life expectancy at birth is calculated for the entire cohort and, subsequently, remaining life expectancy is calculated for the survivors at one year, two years, etc. It should be noted that the assumptions of such a life table are never fulfilled in practice and that the hypothetical cohorts in life tables do not represent any actual population. Usually, the persons in an actual cohort born in the life-table year will have a higher life expectancy than those in the life-table cohort because during their lifetimes public health conditions will presumably constantly improve and standards of medical care will also presumably 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 4.45. This table shows that at 1970-72 mortality rates 2,002 of