DEMOGRAPHY 155

The proportion of older people in the population has been rising in recent years. Consequently, cancer and cardiovascular diseases account for a larger proportion of all deaths than formerly. On the other hand, deaths of infants, children and young adults from such diseases as pneumonia and tuberculosis have sharply declined.

Table 4.44 shows that the leading causes of infant mortality are radically different from the main causes of death at later periods. Accidents are the primary cause of death for males between one and 44 years of age. The majority of deaths among older males are due either to

cardiovascular diseases or to cancer.

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

4.7.2 Infant mortality

Table 4.45 shows that mortality rates for both male and female infants (under one year of age) have been reduced by more than half since 1951. For example, if the 1951 death rate had remained unchanged until 1973, there would have been 13,220 infant deaths in that year, rather than 5,339. 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 1973 provincial mortality rates for infants of both sexes ranged from 14.1 for Ontario to 19.3 in the case of Newfoundland, with the rates for the Northwest Territories being substantially higher. The national death rate for all infants was 15.5, the lowest on record, with

all provinces recording the lowest infant mortality rates in their history.

Table 4.45 shows that male infant mortality in Canada over the past couple of years was 20-25% higher than the corresponding female mortality. Of 1,000 infant boys born alive in Canada during 1973, 17 failed to reach their first birthday, whereas for every 1,000 girl infants born alive there were only 14 fatalities by the end of the first year. Thus, while about 1,060 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. As shown in Table 4.46, 3,692 or over 69% of the 5,339 infants who died during 1973 within a year of their birth died during the first four weeks of life, which is conventionally called the "neonatal" period. Of the 3,692 neonatal deaths, 2,146 or over 58% died during the first day of life and 3,221 or 87% died during the first week. Deaths occurring during the hazardous neonatal period are caused mainly by conditions associated with pregnancy, difficult labour or congenital malformations. As in the case of total infant deaths, the Canadian neonatal death rate dropped by over half since 1951, from 22.6 to 10.8 in 1973, with substantial improvements in all the provinces (see Table 4.45).

Causes of infant deaths. Of the 5,339 infants dying in 1973, 2,619 or close to 50% died of "perinatal" conditions of very early infancy. There were 1,114 deaths from anoxia or hypoxia (absence or deficiency of oxygen), and 502 due to immaturity of the foetus. Still in the "perinatal" mortality group, 257 deaths were ascribed to some condition of the placenta or umbilical cord. Congenital malformations accounted for an additional 1,204 deaths. Of the 490 deaths from respiratory diseases, 334 were due to pneumonia. Suffocation by food and other objects caused 183 infant deaths in 1973. Of the 174 infant deaths from infective and parasitic diseases 97 were due to intestinal infections (see Table 4.44).

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, say, 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