

5.7.2 Infant mortality

Table 5.46 shows the striking improvement that has taken place in the mortality rates among infants (under one year of age) during the past 20 years. Both male and female rates have been more than halved during this period. For example, if the 1951 death rate had applied in 1971 there would have been 13,944 infant deaths instead of the 6,356 actually recorded, or an actual saving of 7,588 lives. This improvement is attributable to many factors — the higher proportion of births taking place in hospital or under proper prenatal and postnatal care, better supervision of water supplies, improved sanitation, pasteurization of milk, the use of antibiotics, improved home environment as a result of higher living standards and, in recent years, the generally lower age of mothers.

The variations that exist in infant mortality rates from province to province and from one locality to another may be explained by differences in the extent to which these factors apply provincially or locally. Among the provinces, the 1971 male infant mortality rates ranged from a record low of 17.1 to a high of 26.3, compared with the national average of 19.9, the latter including the high rate among the Northwest Territories aboriginal population. Female rates ranged from 13.3 (also a record low) to 19.4, compared with the national rate of 15.1. Although the national and provincial rates for both sexes had been declining steadily for some years, and despite, for some unknown reason, some reversals in provincial rates during 1968, the 1971 rates have declined to new record lows in most provinces.

Table 5.46 shows that mortality among male infants is roughly 20-25% higher than that among female infants for Canada, with wider variations for the individual provinces. For the country as a whole, out of every 1,000 infant boys born alive in 1969, 22 died before reaching their first birthday, whereas out of every 1,000 infant girls born alive, 17 died within one year. As already pointed out, there are on the average 1,055 males born to every 1,000 females but, because male infant mortality is higher, the excess of males is reduced greatly by the end of the first year. For example, in 1964-69 there were 1,213,833 male children born compared with 1,150,240 female children, an excess of 63,593 or 5.5%; in the same period, 30,240 male children died during their first year compared with 22,634 female children so that the excess of males at one year of age was reduced to 55,987 or 4.9%.

Causes of infant deaths. Infant mortality by cause of death is shown in Table 5.47. For example, of the 6,356 infants dying during 1971 before reaching their first birthday, 3,295 — or 52 out of every 100 — died of conditions usually associated with very early infancy or delivery. Of these, 1,356 died of anoxia or hypoxia (absence or deficiency of oxygen); 708 were due to immaturity of the foetus; 575 to some disease or condition in the mother, difficult labour or other complication of pregnancy or delivery; and 332 to some condition in the placenta or umbilical cord. Congenital malformations accounted for an additional 1,334 deaths. Of the 685 deaths from respiratory diseases, 514 were due to pneumonia. Of the 344 accidental deaths, 254 were due to suffocation by food or other objects. Of the 167 deaths from infective and parasitic diseases, 80 were due to dysentery, enteritis and diarrheal diseases.

Ages of infant deaths. As indicated in Table 5.48, of the 6,356 infants who died in 1971 within a year of their birth, 4,485, or 70% were less than four weeks old — conventionally referred to as the “neonatal period”. Of these neonatal deaths, 3,956 (or almost nine out of every ten) died within one week of their birth, of this number 2,644 died within 24 hours of delivery.

It has been stated that deaths occurring within the first four weeks following birth are conventionally referred to as “neonatal” deaths. As would be expected, deaths occurring in this hazardous neonatal period during 1971 were caused mainly by conditions associated with pregnancy, delivery or congenital malformations.

As in the case of total infant deaths, the neonatal death rate dropped from 22.6 in 1951 to 12.4 in 1971, with corresponding improvements in all provinces. Variations in provincial rates are narrowing, the 1971 rates ranging from 10.9 to 17.6. However, as the rate approaches a “hard-core” level, improvements during the past decade have not been as dramatic as they were during the previous two decades.

Perinatal mortality refers to the combined total of stillbirths and deaths of live-born infants occurring “around” the natal period and is a relatively new vital statistics concept. Since such deaths frequently have the same underlying causes associated with pregnancy or delivery (regardless of whether they occur before or after delivery) they are generally considered as including the combined total of stillbirths occurring after at least 28 weeks