

8. Sudden infant death syndrome (SIDS)

Sudden infant death syndrome (SIDS) can be defined as 'the sudden death of an infant under one year of age which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history' (Willinger et al. 1991:681).

SIDS was the main cause of death among infants for most of the 1990s. However, the rate of SIDS declined over the decade, especially in the early 1990s. The fall coincided with the 1991 National SIDS Council of Australia public health education campaign, 'Reducing the Risks of Cot Death'. The rate is higher in low (1,500–2,499 g) and very low (500–1,499 g) birthweight infants than in normal birthweight children (Sowter et al. 1999).

A number of factors are considered to increase the risk of SIDS, although many of them remain contentious. The two major risk factors are sleeping position and maternal smoking (American Academy of Pediatrics 2000). NHMRC guidelines (1991) suggest that babies be placed on their back, or on their side in such a way that they cannot roll onto their stomach, to sleep. This is also the first recommendation made by the National SIDS Council of Australia (2001a) for reducing SIDS. In Tasmania, changes in sleep position from the stomach to the back accounted for 70% of the decline in SIDS. Changes in the prevalence of other risk factors accounted individually for less than 10% of the fall in the Tasmanian rate, suggesting that while these factors helped to reduce deaths from SIDS, they were not significant contributors to the decrease (Dwyer et al. 1995).

Smoking during pregnancy, or smoking near the baby once it is born, has been shown to increase the risk of SIDS (NHMRC 1991). The risk increases with the number of cigarettes smoked near the baby, particularly if the person smokes in the same room as the baby (Klonoff-Cohen et al. 1995). MacDorman et al. (1997) suggest that smoking is one of the most important preventable risk factors for SIDS, with intervention programs having the potential to reduce rates considerably.

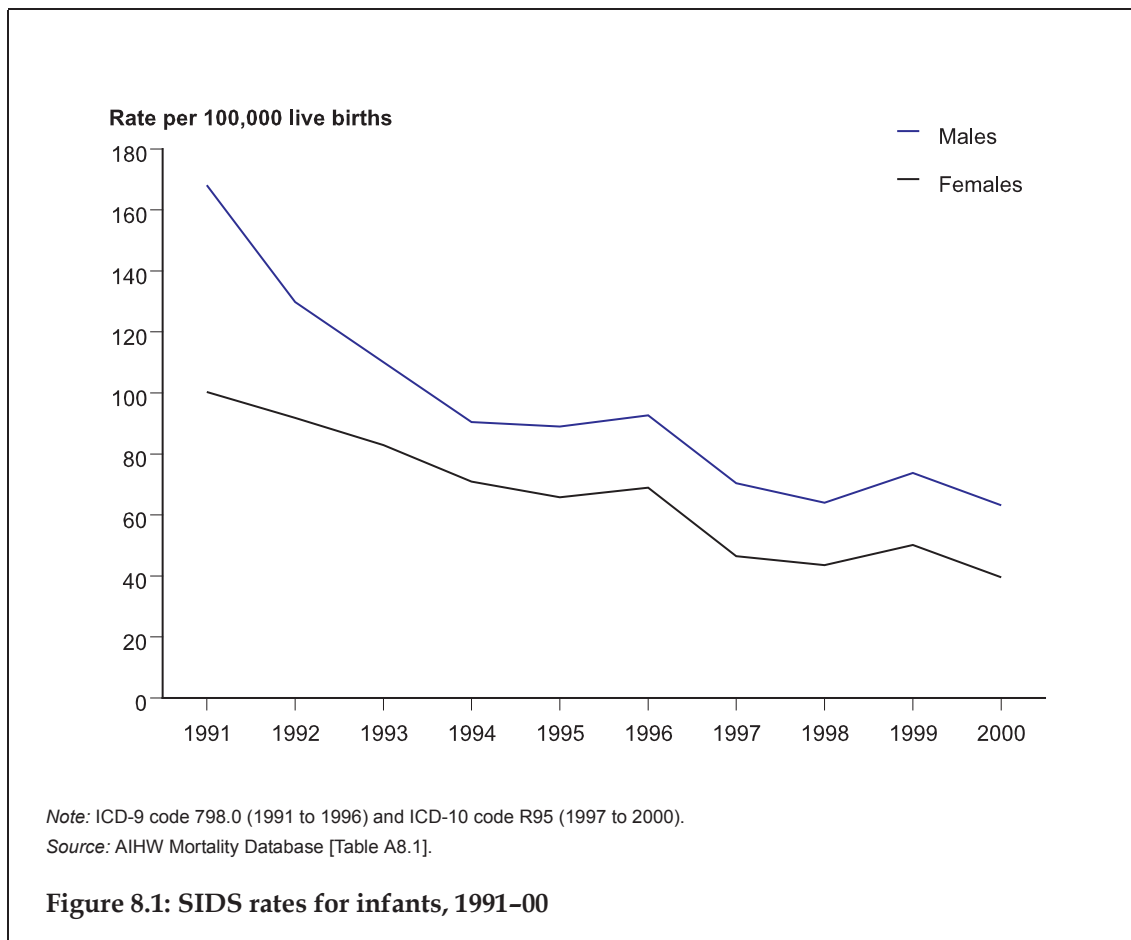
The risk of SIDS may be reduced by breastfeeding (NHMRC 1991), although this effect is negated if the infant is exposed to tobacco smoke (Klonoff-Cohen et al. 1995).

One contentious risk factor is sharing a bed with parents, with evidence for this factor being mixed. Blair et al. (1999) found that bed-sharing did not increase the risk of SIDS when infants were older than 14 weeks, when parents did not smoke, or when the infant was put back in his/her own cot. The risk was greater for infants aged 4–13 weeks, and for infants whose parents smoked. Sleeping with an infant on a sofa or chair has been seen to increase the risk of SIDS or accidental suffocation, and should be avoided (Blair et al. 1999; Kemp et al. 2000).

Trends

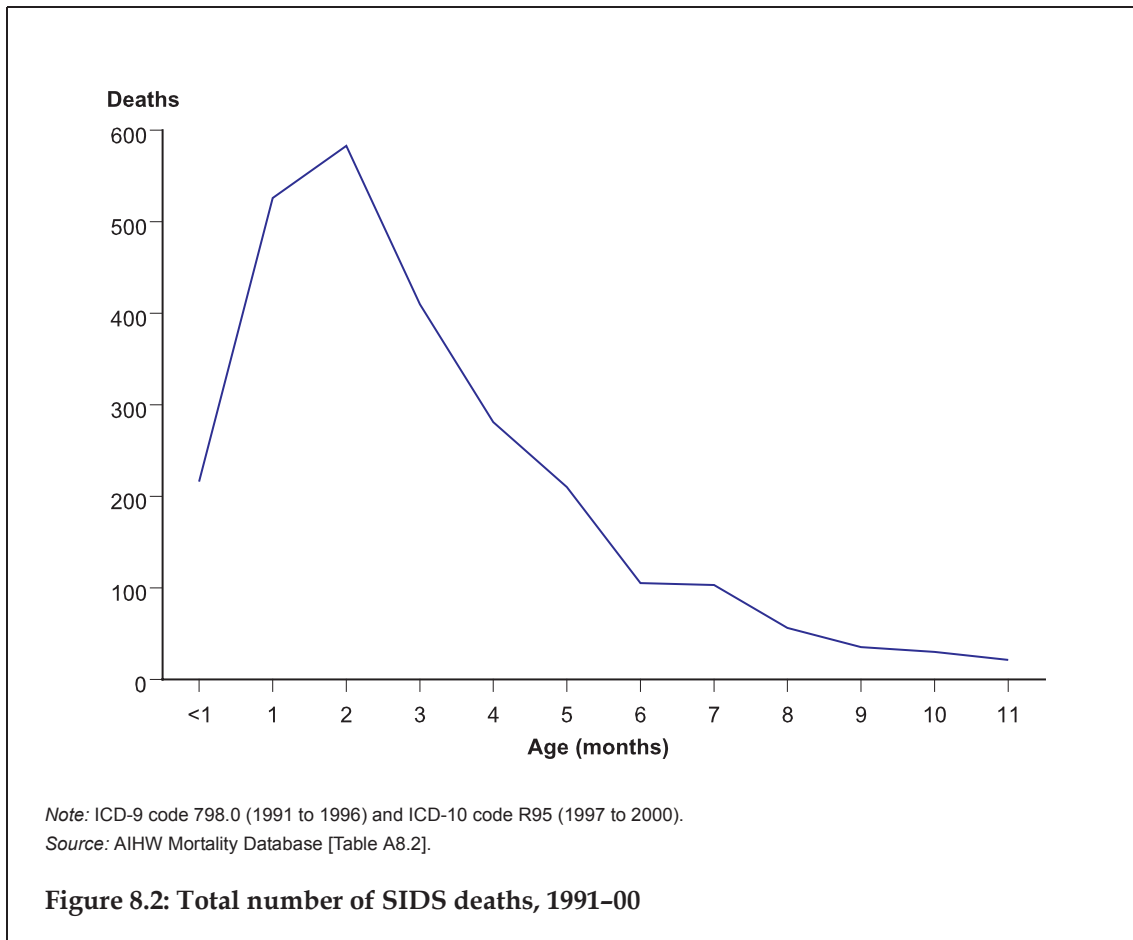
The indicator for SIDS deaths is the number of infants whose death is attributable to SIDS in a given year as a rate per 100,000 live births.

Since 1991, the SIDS rate has been falling, apart from a small increase in 1996, and again in 1999 (Figure 8.1).



- Between 1991 and 2000, the SIDS death rate decreased by 62%. In 1991, 242 male and 137 female SIDS deaths were recorded, with rates of 168.1 and 100.4, respectively. In 2000, 81 male and 48 female SIDS deaths were recorded, with rates of 63.2 and 39.5 per 100,000 live births, respectively.
- Over the decade, male death rates were on average 1.4 times higher than female rates.

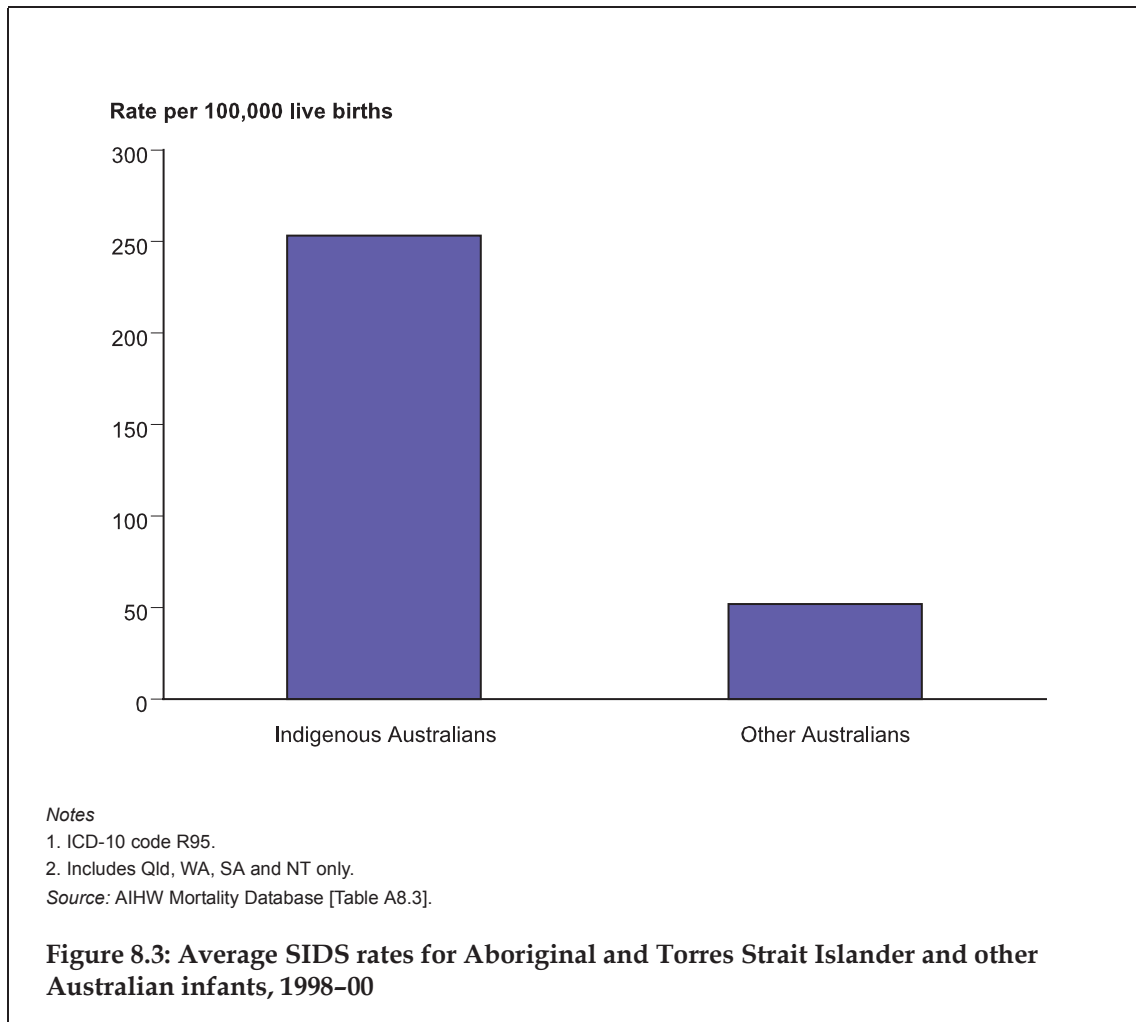
Age distribution



- Between 1991 and 2000, 2,084 infants died from SIDS. The highest number of SIDS deaths across 1991–00 occurred around 2 months of age. Throughout the decade, 22% occurred at 2 months, and 20% at 1 month of age.
- Between 1991 and 2000, 71 children between the ages of 1 and 3 years were reported as having died from SIDS. However, these children do not meet the definition of SIDS, due to their age.

Aboriginal and Torres Strait Islander Infants

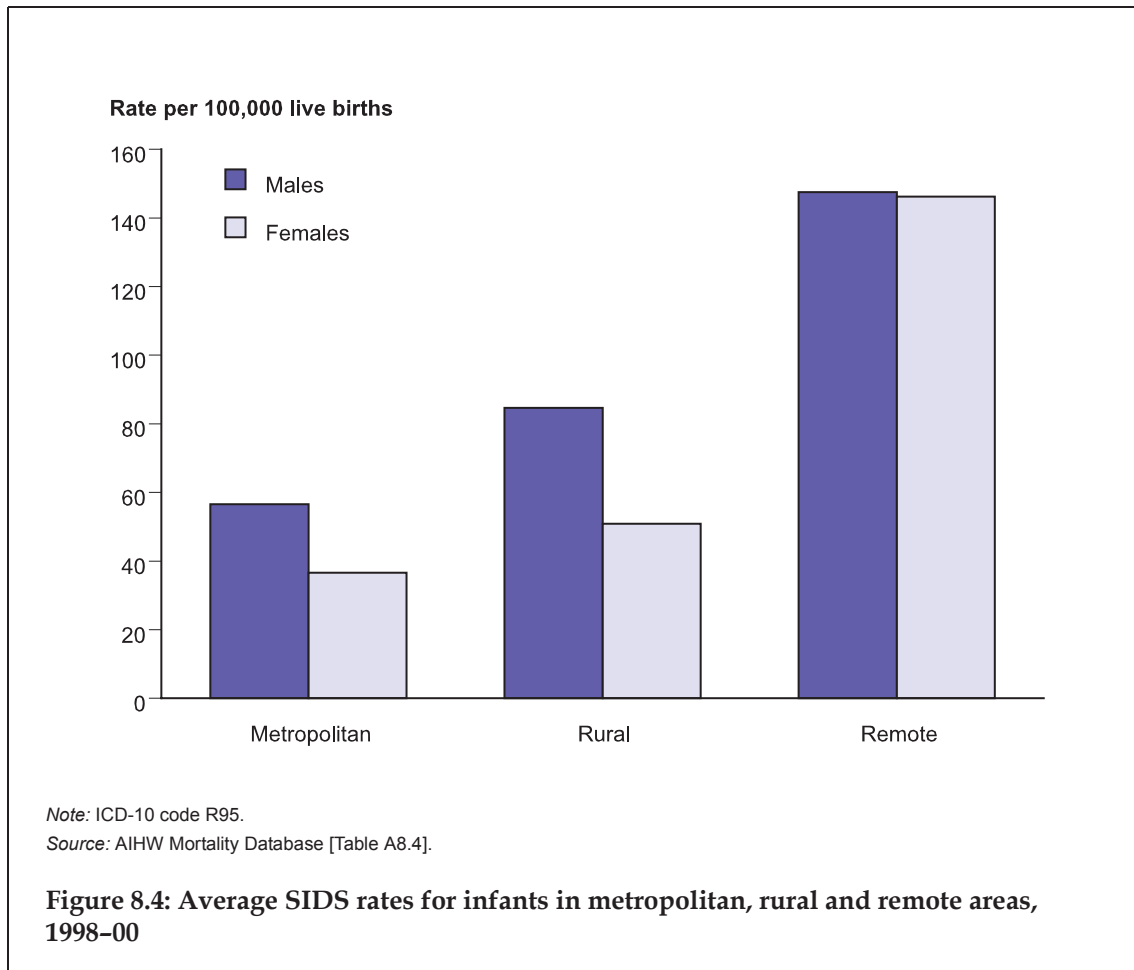
SIDS rates are much higher among Aboriginal and Torres Strait Islander infants than among other Australian infants (Figure 8.3).



- Between 1998 and 2000 in Queensland, Western Australia, South Australia and the Northern Territory, 51 Aboriginal and Torres Strait Islander infants died from SIDS.
- The average SIDS death rates for Aboriginal and Torres Strait Islander infants were 5 times those for other Australian infants (253.2 compared with 51.9).

In order to address the higher incidence of SIDS among Aboriginal and Torres Strait Islander populations, the National SIDS Council of Australia (2001b) has prepared a pamphlet specifically targeted towards educating Indigenous women, which includes clear statements and illustrations about preventing SIDS.

Infants in metropolitan, rural and remote areas



- Between 1998 and 2000, 250 infants in metropolitan areas, 126 in rural areas and 43 in remote areas died from SIDS.
- Average SIDS rates were between 2 and 4 times higher in remote areas than in metropolitan areas, depending on sex (147.5 compared with 56.6 per 100,000 live male births, 146.2 compared with 36.6 per 100,000 live female births). However, it is possible that the higher rates in rural and remote areas may result from incorrectly using diagnostic guidelines, because of isolation and a lack of resources (Byard 2001).
- In remote areas, the female rate was approximately the same as for male infants. In rural areas, male infants had an average rate 1.6 times that of female infants (84.6 compared with 50.9 per 100,000 live births).

Burden of disease attributable to SIDS

In 1996, SIDS was estimated to account for 6,278 DALYs or 2.9% of the total disease burden in children aged 0-14 years (AIHW: Mathers et al. 1999). Boys accounted for 55% of the SIDS burden of disease, and girls 45%.

