SUDDEN INFANT DEATH SYNDROME (SIDS) IN CANADA

SUMMARY

Infant mortality rates due to Sudden Infant Death Syndrome (SIDS) have fallen in Canada in recent decades.

SIDS rates vary widely among Canadian provinces and territories. Recent data indicate that Quebec has the lowest rate, while Nunavut has the highest.

The decrease in SIDS may be explained by a decrease in risk factors such as maternal smoking during pregnancy, and an increase in protective behaviours such as placing babies on their back to sleep and breastfeeding.

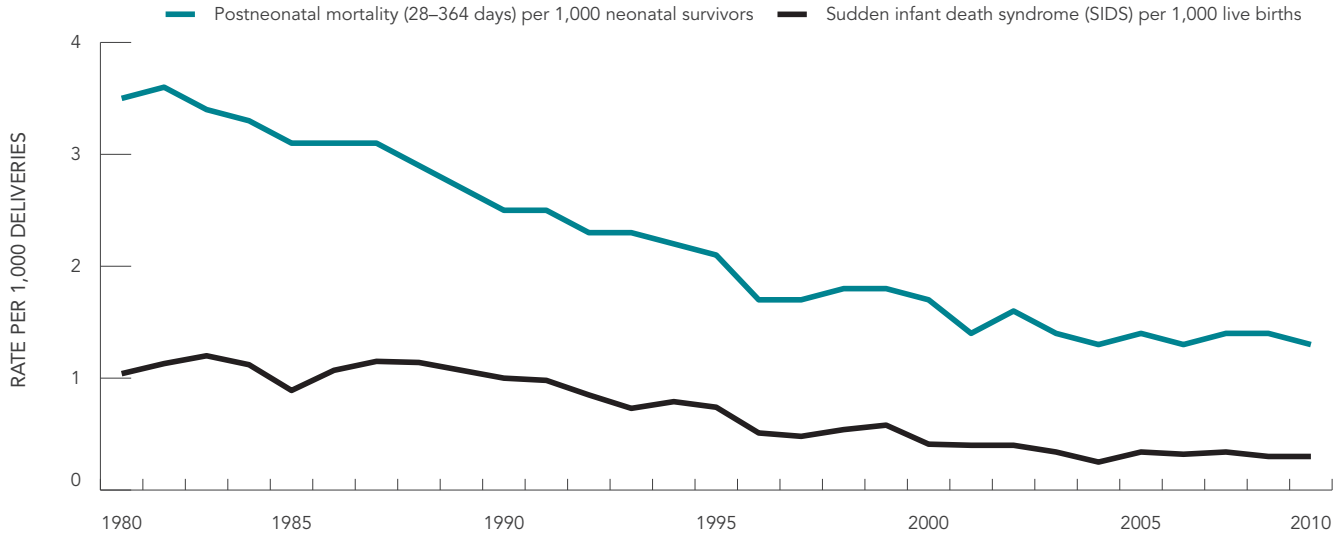
INTRODUCTION

SIDS is defined as the sudden death of an infant less than one year of age, which remains unexplained after a thorough case investigation, including a review of the clinical history, an examination of the death scene, and a complete autopsy.[1] Risk factors for SIDS include sleeping prone (on the abdomen), maternal smoking during pregnancy, and lack of breast-feeding.[2] Although SIDS can occur either 0 to 27 days after birth (the **neonatal** period), or 28 to 364 days after birth (the **postneonatal** period), more than 90% of cases occur in the postneonatal period.[3,4]

In 2003–2007, SIDS accounted for 21% of postneonatal deaths and 6% of overall infant deaths in Canada.[5]

SIDS IN CANADA

FIGURE 1: Postneonatal and SIDS mortality in Canada (excluding Ontario), 1981–2009



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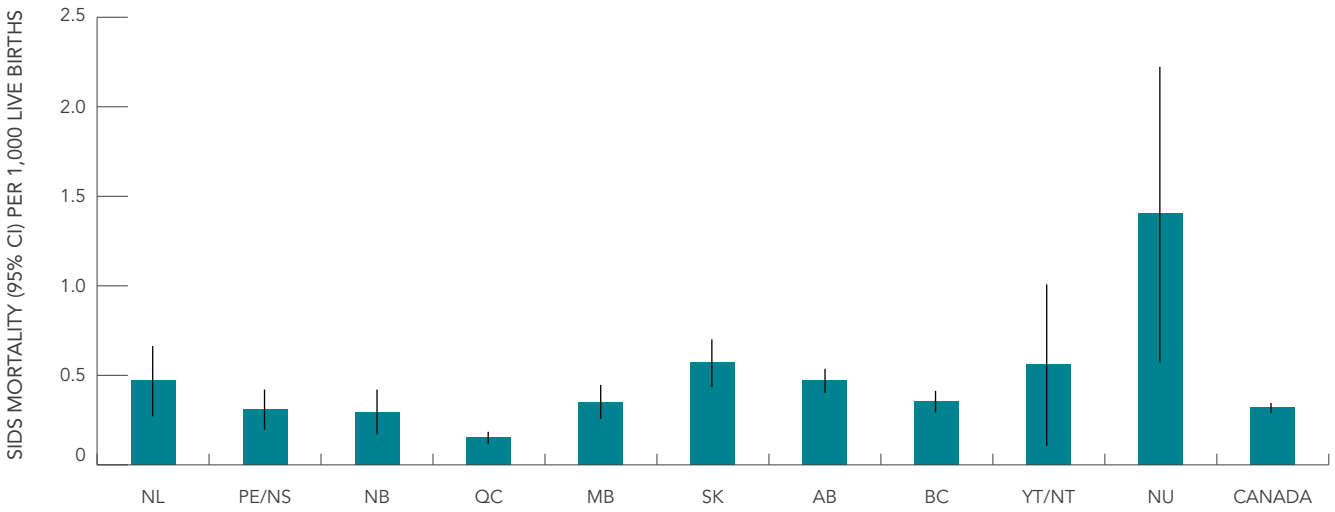
SOURCE: Statistics Canada, Vital Statistics, Death file (unlinked). Data from Ontario were excluded because of concerns about data quality.

SIDS mortality declined from 1.0 per 1,000 live births in 1981 to 0.3 per 1,000 live births in 2009 (a 71% reduction). During the same period, postneonatal mortality declined from 3.5 to 1.3 per 1,000 neonatal survivors (a 64% reduction). See Figure 1.

As shown in Figure 2, between 2000 and 2009, the lowest SIDS mortality rate was measured in Quebec, while the highest was in Nunavut.

FIGURE 2: SIDS Mortality by province and territory, Canada (excluding Ontario), 2000–2009



SOURCE: Statistics Canada, Vital Statistics, Death file (unlinked). Data from Ontario were excluded because of concerns about data quality.
CI-Confidence Interval

The decrease in SIDS may be explained by an increase in the proportion of babies placed supine (on their back) to sleep and in breastfeeding, two major protective behaviours, and a decrease in maternal smoking during pregnancy. The Safe Sleep campaigns[2,6] conducted by Health Canada, the Public Health Agency of Canada (the Agency), the Canadian Paediatric Society, and other organizations may have contributed to the decline. A recent analysis done by the Agency ruled out a change in reporting practices for underlying causes of infant death (often referred to as "code shifting") as the explanation for the SIDS decline.[3]

Further analysis carried out by the Agency showed a link between socioeconomic status and SIDS rates. Disadvantaged groups have higher rates of SIDS, even though rates have declined in both wealthier and poorer neighbourhoods.[4]

DATA SOURCES AND LIMITATIONS

Overall and cause-specific death counts are based on Statistics Canada's *Death File*, while live birth counts are based on Statistics Canada's *Birth File*. Both files were created using records collected by provincial and territorial Vital Statistics Registrars. Data from Ontario were excluded from these analyses because of concerns about data quality.[5]

REFERENCES

1 Willinger M, James LS, Catz C. Defining the sudden infant death syndrome (SIDS): deliberations of an expert panel convened by the National Institute of Child Health and Human Development. Pediatr Pathol 1991;11(5):677–684.

2 Public Health Agency of Canada. Joint statement on safe sleep: preventing sudden infant deaths in Canada. Ottawa, 2011.

3 Gilbert NL, Fell DB, Joseph KS, Liu S, León JA, Sauve R. Temporal trends in sudden infant death syndrome in Canada from 1991 to 2005: contribution of changes in cause of death assignment practices and in maternal and infant characteristics. Paediatr Perinat Epidemiol 2012;26(2):124–130.

4 Gilbert NL, Auger N, Wilkins R, Kramer MS. Neighbourhood income and neonatal, postneonatal and sudden infant death syndrome (SIDS) mortality in Canada, 1991–2005. Can J Public Health 2013;104(3):e187-e192.

5 Public Health Agency of Canada. Canadian Perinatal Health Report, 2008 Edition. Ottawa, 2008.

6 Injury Prevention Committee, Canadian Paediatric Society. Reducing the risk of sudden infant death. Paediatr Child Health 1996;1:63–67.

The Public Health Agency of Canada's Canadian Perinatal Surveillance System monitors and reports on key indicators of maternal, fetal and infant health in Canada. For more information visit: **www.phac-aspc.gc.ca/rhs-ssg/**

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