

2.18 Tobacco smoking during pregnancy

The proportion of Indigenous mothers who smoked during pregnancy

Data sources

Data for this measure come from the AIHW National Perinatal Data Collection.

There is currently no data element in the Perinatal National Minimum Data Set (NMDS) for smoking during pregnancy. Five jurisdictions currently collect data on smoking during pregnancy in their perinatal collections, however, the definitions used differ among them. The Australian Capital Territory and New South Wales have two questions – did the mother smoke during pregnancy, and average number of cigarettes smoked per day during the second half of the pregnancy. Western Australia asks a question on whether the mother smoked during pregnancy. South Australia has a question on smoking status at the first antenatal visit and a second question on average number of tobacco cigarettes smoked per day in the second half of pregnancy. The Northern Territory has a question on smoking consumption at the first antenatal visit, and at 36 weeks gestation. Given the different questions currently asked in the five jurisdictions, comparisons between states and territories should be interpreted with caution.

Data on mothers for whom Indigenous status was 'not stated' have been excluded from analysis.

Data analyses

Proportions have been directly age standardised to account for differences in the age structure of the Indigenous and non-Indigenous female populations who give birth.

Smoking during pregnancy

- Approximately 4.2% of mothers in New South Wales, Western Australia, South Australia, the Australian Capital Territory and the Northern Territory identified as Aboriginal or Torres Strait Islander in 2003. Approximately 2,937 Indigenous mothers in these jurisdictions reported they smoked during pregnancy, 2,437 reported they did not smoke during pregnancy and for 257 Indigenous mothers, smoking status was not known.
- When the effect of age was controlled for, Aboriginal and Torres Strait Islander mothers in the five jurisdictions smoked during pregnancy at around three times the rate of non-Indigenous mothers in these jurisdictions (52% compared to 16%).

Smoking during pregnancy by state/territory

The number and proportion of mothers who smoked during pregnancy are presented by Indigenous status and state/territory for 2003 in Table 2.18.1 and Figure 2.18.1.

- In New South Wales, Aboriginal and Torres Strait Islander mothers smoked during pregnancy at around four times the rate of non-Indigenous mothers. In Western Australia, South Australia and the Australian Capital Territory, Indigenous mothers smoked at three

times the rate of non-Indigenous mothers and in the Northern Territory, Indigenous mothers smoked during pregnancy at twice the rate of non-Indigenous mothers.

Table 2.18.1: Mother's tobacco smoking status during pregnancy, by Indigenous status, NSW, WA, SA, ACT and NT, 2003^{(a)(b)}

Smoking status	NSW	WA	SA ^(c)	ACT ^(d)	NT ^(e)	Total
Number						
Indigenous						
Smoked	1,228	794	227	36	602	2,937
Did not smoke	933	732	163	44	565	2,437
Not stated	0	0	28	0	229	257
Total	2,161	1,526	468	80	1,396	5,631
Non-Indigenous						
Smoked	11,645	3,791	4,028	549	449	20,462
Did not smoke	71,175	18,962	12,777	4,130	1,643	108,687
Not stated	12	0	244	4	124	384
Total	82,832	22,753	17,049	4,683	2,216	129,533
Proportion^(f)						
Indigenous						
Smoked	56.2	51.8	58.8	44.4	44.3	52.3
Did not smoke	43.8	48.2	35.9	55.6	40.4	43.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Non-Indigenous						
Smoked	14.5	16.9	23.6	13.1	19.7	16.1
Did not smoke	85.5	83.1	75.0	86.8	74.7	83.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Rate ratio^(g)						
Smoked	3.9	3.1	2.5	3.4	2.3	3.2
Did not smoke	0.5	0.6	0.5	0.6	0.5	0.5

(a) Excludes births where the mother's Indigenous status was not stated.

(b) State-level data are based on place where birth occurred, not place of usual residence. Cross-border issues need to be considered here, for example, a high proportion of births in ACT hospitals are for mothers resident in NSW.

(c) For SA, 'smoked' includes women who quit before the first antenatal visit.

(d) Of the women who gave birth in the ACT in 2003, 15.3% were non-ACT residents. Care must be taken when interpreting percentages.

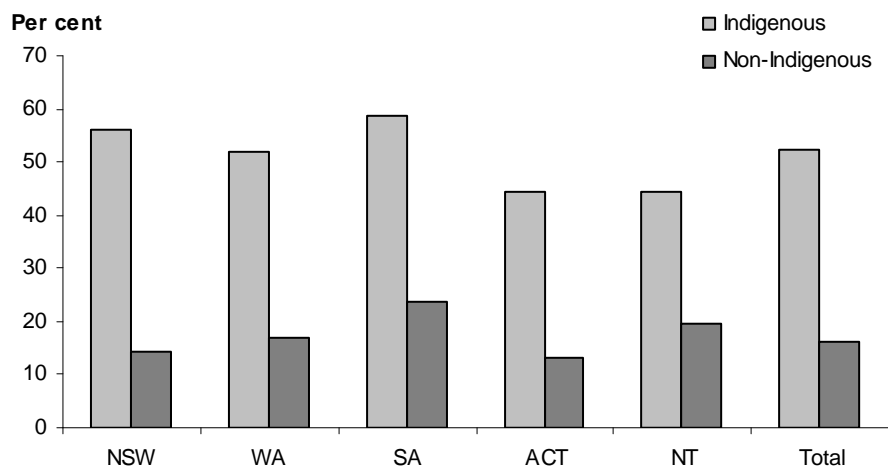
(e) For NT, smoking status was recorded at the first antenatal visit.

(f) Proportions are directly age standardised using the Australian female population aged 15–44 years who gave birth in 2003.

(g) Rate ratio is equal to the rate for Indigenous mothers divided by the rate for non-Indigenous mothers.

Note: Data not available for Victoria, Queensland and Tasmania.

Source: AIHW analysis of National Perinatal Statistics Unit (NPSU) National Perinatal Data Collection.



Source: AIHW analysis of NPSU National Perinatal Data Collection.

Figure 2.18.1: Proportion of mothers who smoked during pregnancy, by Indigenous status and selected states/territories, 2003

Data quality issues

Perinatal data

Under-identification

All jurisdictions collect the Indigenous status of the mother. However, this does not provide the Indigenous status of the baby and will underestimate Indigenous births. In addition, not all jurisdictions use the standard wording for the Indigenous status question in the National Perinatal Data Collection. This impacts on the quality and comparability of the data collected. There are also problems with the accuracy of the identification of Indigenous mothers.

Studies linking perinatal data with birth registration data and hospital admissions show that Indigenous women are under-identified. However, there has not been a systematic audit of the accuracy of these data across the nation. Therefore, at this stage, it is not possible to quantify or adjust for errors in identification. All jurisdictions are working towards improving the quality of the Indigenous status data (AIHW: Laws & Sullivan 2004).

Smoking during pregnancy data

Smoking during pregnancy data are not currently included in the Perinatal National Minimum Data Set (NMDS). Jurisdictions have taken different approaches to the collection of this information. Data on smoking during pregnancy are currently only available from five states and territories as there is no national data element for this information. Tasmania and Queensland began collecting data in 2005. Victoria collects information on smoking during pregnancy using mechanisms other than their perinatal data collection.

Work is under way to develop a national definition for inclusion in the national Perinatal NMDS.

Under-reporting of smoking status has been found to range from 5% to 25% depending on the circumstances (AIHW: Laws & Sullivan 2004). In addition, the accuracy of recall could be a problem depending on when the questions are asked.

Given the small numbers involved, small errors in Indigenous identification can result in large proportional differences and changes over time and between jurisdictions. Fluctuations in the smoking status during pregnancy of Indigenous mothers over time partly reflect changing levels of identification of Indigenous women in the perinatal data. Caution should be exercised in assessing trends over time and comparisons with the non-Indigenous population. Given the different questions currently asked in the five jurisdictions, it is recommended that no comparisons between jurisdictions be undertaken at this stage.

References

AIHW (Australian Institute of Health and Welfare): Laws PJ & Sullivan EA 2004. Report on the Evaluation of the Perinatal National Minimum Data Set. Perinatal Statistics Series no. 14. AIHW cat. no. PER 27. Sydney: AIHW National Perinatal Statistics Unit.