# National Indigenous Reform Agreement: PI 08-Tobacco smoking during pregnancy, 2020; Quality Statement

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# National Indigenous Reform Agreement: PI 08-Tobacco smoking during pregnancy, 2020; Quality Statement

## Identifying and definitional attributes

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| **Metadata item type:** | Data Quality Statement |
| **METEOR identifier:** | 726260 |
| **Registration status:** | Indigenous, Standard 06/02/2020 |

## Data quality

**Data quality statement summary:**

The data used to calculate this indicator are from the National Perinatal Data Collection (NPDC), which is a national population-based cross-sectional data collection of pregnancy and childbirth.

Data supplied for the NPDC consists of the Perinatal National Minimum Data Set (NMDS), as well as a series of additional data items. The Perinatal NMDS is an agreed set of standardised perinatal data elements for mandatory supply by states and territories to support national reporting.

The Perinatal NMDS includes two standardised data elements on tobacco smoking during pregnancy for births from July 2010: smoking during the first 20 weeks of pregnancy, and smoking after 20 weeks of pregnancy. All states and territories reported these items in 2017 and data are complete for 98.5% of mothers.

Definitions and methods used for data collection of smoking during pregnancy differ among the jurisdictions and therefore comparisons between states and territories should be made with caution.

The NPDC has included information on the Indigenous status of the mother in accordance with the Perinatal NMDS since 2005.

In 2017, 0.3% of mothers who gave birth had missing information on Indigenous status.

Remoteness data for 2012 and subsequent years are not directly comparable with remoteness data for previous years.

**Institutional environment:**

The Australian Institute of Health and Welfare (AIHW) is a major national agency set up by the Australian Government under the Australian Institute of Health and Welfare Act 1987 to provide reliable, regular and relevant information and statistics on Australia's health and welfare. It is an independent corporate Commonwealth entity established in 1987, governed by a management Board, and accountable to the Australian Parliament through the Health portfolio.

The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.

The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.
One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national datasets based on data from each jurisdiction, to analyse these datasets and disseminate information and statistics.

The Australian Institute of Health and Welfare Act 1987, in conjunction with compliance to the Privacy Act 1988 (Cth), ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.

For further information see the AIHW website www.aihw.gov.au.

Data for the NPDC were supplied to the AIHW by state and territory health authorities. The state and territory health authorities receive these data from patient administrative and clinical records, with the information usually collected by midwives or other birth attendants. States and territories use these data for service planning, monitoring and internal and public reporting

**Timeliness:**

The reference period for the data is the calendar year 2017.

Collection of data for the NPDC is annual.

**Accessibility:**

A variety of products draw upon the NPDC. Products published by the AIHW that are based primarily on data from the NPDC include:

- *Australia's mothers and babies* annual report (e.g. AIHW 2019)
- *Australia's mothers and babies* data visualisations
- National Core Maternity Indicators reports and data visualisations

Ad hoc data from the AIHW are also available on request (charges apply to recover costs).

Data for this indicator are published in a number of reports, including annually in the *National Indigenous Reform Agreement* performance information reports (which are available on the Productivity Commission website) and the Australia's mothers and babies reports (e.g. AIHW 2019), and biennially in reports such as the *Aboriginal and Torres Strait Islander Health Performance Framework* report.

**Interpretability:**

Supporting information on the quality and use of the NPDC, including information on the quality of Indigenous status data, is published annually in the AIHW's Australia's mothers and babies report (Appendixes A and D in the 2017 edition) (AIHW 2019) and in the data quality statement for the NPDC.

Readers are advised to read caveat information to ensure appropriate interpretation of the performance indicator.

Metadata information for this indicator are published in the AIHW's online metadata repository, METeOR. Metadata information for the NPDC are published in the National Health Data Dictionary (NHDD) on METeOR and in the Maternity Information Matrix.

**Relevance:**

The NPDC comprises data items as specified in the Perinatal NMDS, plus additional items collected by the states and territories. The purpose of the NPDC is to collect information about births for monitoring pregnancy, childbirth and the neonatal period for both the mother and baby.

The NPDC is a specification for data collected on all births in Australia in hospitals, birth centres and the community. It includes information for both live births and stillbirths, where gestational age is at least 20 weeks or birthweight is at least 400 grams. Live births and stillbirths may include termination of pregnancy after 20 weeks. Stillbirths can include fetus papyraceous and fetus compressus. In Victoria and Western Australia, data were included for both live births and stillbirths of at least 20 weeks gestation or, if gestation was unknown, the birthweight was at least 400 grams. In South Australia, data may not include all terminations of pregnancy for psychosocial reasons after 20 weeks gestation where birthweight was not recorded.

The NPDC includes data items relating to the mother—including demographic characteristics and factors relating to the pregnancy, labour and birth— and data items relating to the baby—including birth status (live birth or stillbirth), sex, gestational age at birth, birthweight and neonatal morbidity and deaths.

The NPDC includes all relevant data elements for this indicator. Smoking status of the mother and Indigenous status of the mother are data elements in the Perinatal NMDS.

In the NPDC, mother's smoking status is self-reported.

Nationally agreed data items on smoking during the first 20 weeks of pregnancy and smoking after 20 weeks of pregnancy were added to the Perinatal NMDS from July 2010. Standardised data for these items were implemented by all states and territories in 2012 except Tasmania which had partial implementation until January 2013. In 2017, data were available for all states and territories. Due to differences in definitions and methods used for data collection, care must be taken when comparing across jurisdictions. Note that in Western Australia, smoking status was determined at multiple locations and times and is therefore difficult to report accurately at time of birth.

Before 2012, non-standard data provided voluntarily to the NPDC were used when information from standard data items was not available or where standard data items did not exist. Definitions used for non-standard data items on smoking during pregnancy differed among the jurisdictions. From 2005 onwards, all states and territories asked at least one smoking question as part of their routine perinatal data collections, except Victoria which collected this information from 2009 onwards.

While each jurisdiction has a unique form for collecting perinatal data on which the format of the Indigenous status question and recording categories vary slightly, all forms have included the Perinatal NMDS item on Indigenous status of the mother from 2005.

Analysis excludes non-Australian residents, residents of external territories and where state/territory of usual residence was not stated.

Analysis by state/territory and remoteness is based on the usual residence of the mother.

Reporting by remoteness is in accordance with the Australian Statistical Geography Standard (ASGS).

**Accuracy:**

Inaccurate responses may occur in all data provided to the AIHW. The AIHW does not have direct access to state and territory perinatal records to determine the accuracy of the data provided. However, the AIHW does undertake validation on all data provided by the states and territories. Data received from the states and territories are checked for completeness, validity and logic errors. Potential errors are queried with jurisdictions, and corrections and resubmissions are made in response to these queries.

Errors may occur during the processing of data by the states and territories or at the AIHW. Processing errors prior to data supply may be found through the validation checks applied by the AIHW. The AIHW does not adjust data to account for possible data errors or to correct for missing data.

This indicator is calculated from data that has been reported to the AIHW. Before publication, data are referred back to jurisdictions for checking and review. The numbers reported for this indicator may differ from those in reports published by the states and territories for the following reasons:

- data editing and subsequent updates of state/territory databases after the supply of data to the AIHW
- data are reported by state/territory of usual residence rather than state/territory of birth.

The geographical location code for the area of usual residence of the mother is included in the Perinatal NMDS. Only 0.4% of records were for Australian non-residents, residents of external territories or could not be assigned to a state or territory of residence in 2017. There is no scope in the data element 'Area of usual residence of mother' to discriminate temporary residence of mother for the purposes of accessing birthing services from usual residence. The former may differentially impact populations from Remote and Very remote areas, where services are not available locally.

Nationally, smoking status was not stated for 1.5% of all mothers in 2017 (1.2% of Indigenous mothers and 1.5% of non-Indigenous mothers). Data for this indicator excludes records for women whose smoking status was not stated and includes women who quit smoking during pregnancy.

Data presented by Indigenous status are influenced by the quality and completeness of Indigenous identification of mothers which may differ across jurisdictions. In 2017, information on the Indigenous status of the mother was not stated for 0.3% of mothers who gave birth. Jurisdictional differences in the level of not stated data for Indigenous status ranged from 0.0% to 2.2%, and there may also be differences in the rates of Indigenous under-identification. Therefore, jurisdictional comparisons of data by Indigenous status should be made with caution. For this indicator, records where Indigenous status was not stated were excluded from Indigenous and non-Indigenous analyses.

**Coherence:**

Data for this indicator are published annually by the AIHW in the *Australia's mothers and babies* reports (e.g. AIHW 2019), and biennially in reports such as the *Aboriginal and Torres Strait Islander health performance framework* (e.g. AHMAC 2017). The numbers presented in these publications may differ slightly from those presented here as this measure is reported by state and territory of usual residence, and presents both crude per cents and age-standardised per cents.

Data presented for this indicator for 2017 may not be consistent or comparable with data for earlier years. The introduction of the standardised items progressively from July 2010 may have resulted in higher rates of smoking being reported, particularly for jurisdictions that previously only collected smoking status information at the first antenatal visit. For these jurisdictions, women who started smoking in pregnancy after the first antenatal visit and women who ceased smoking prior to their first antenatal visit may not have been counted as smokers; whereas, under the standardised data items, these women would be counted as smokers. Given the different timing and instruments for data collection on smoking during pregnancy, comparisons over time and between states and territories should be interpreted with caution.

Changing levels of Indigenous identification over time and across jurisdictions may also affect the accuracy of compiling a consistent time series in future years.

The NPDC has collected information on the Indigenous status of the mother in accordance with the Perinatal NMDS since 2005.

In 2011, the ABS updated the standard geographical framework from the Australian Standard Geographical Classification (ASGC) to the ASGS. NPDC data by remoteness for 2011 and earlier years are based on the ASGC, while data for 2012 onwards are based on the ASGS. The AIHW considers the change to be a break in series when applied to remoteness data supplied for this indicator; therefore, remoteness data for 2012 are not directly comparable with data for previous years.

For data reported from 2012, the standard population used for the calculation of age-standardised rates for mothers was amended from the Australian female population who gave birth in each reporting period to the Australian female Estimated Resident Population (ERP) aged 15–44 as at 30 June 2001. Data back to the baseline reporting year (2007) were revised accordingly.

## Source and reference attributes

**Submitting organisation:** Australian Institute of Health and Welfare

**Reference documents:**

AHMAC (Australian Health Ministers' Advisory Council) 2017. Aboriginal and Torres Strait Islander health performance framework 2017 Report. Canberra: AHMAC. Viewed 24 September 2019, https://www.niaa.gov.au/indigenous-affairs/evaluations-and-evidence/aboriginal-and-torres-strait-islander-health-performance-framework-hpf.

AIHW 2019. Australia's mothers and babies 2017—in brief. Perinatal statistics series no. 35. Cat. no. PER 100. Canberra: AIHW. Viewed 24 September 2019, https://www.aihw.gov.au/reports/mothers-babies/australias-mothers-and-babies-2017-in-brief/contents/table-of-contents.

## Relational attributes

**Related metadata references:**

Supersedes National Indigenous Reform Agreement: PI 08-Tobacco smoking during pregnancy, 2019; Quality Statement
Indigenous, Standard 07/02/2019

See also National Perinatal Data Collection, 2017: Quality Statement
AIHW Data Quality Statements, Superseded 29/05/2020

**Indicators linked to this Data Quality statement:**

National Indigenous Reform Agreement: PI 08-Tobacco smoking during pregnancy, 2020
Indigenous, Standard 23/08/2019