

# National Healthcare Agreement: PI 07–Infant and young child mortality rate, 2022

## Identifying and definitional attributes

<b>Metadata item type:</b>	Indicator
<b>Indicator type:</b>	Progress measure
<b>Short name:</b>	PI 07–Infant and young child mortality rate, 2022
<b>METEOR identifier:</b>	740882
<b>Registration status:</b>	<ul style="list-style-type: none"><li>• <a href="#">Health</a>, Standard 24/09/2021</li></ul>
<b>Description:</b>	Mortality rates for infants and children aged less than 5 years.
<b>Indicator set:</b>	<a href="#">National Healthcare Agreement (2022)</a> <a href="#">Health</a> , Standard 24/09/2021
<b>Outcome area:</b>	<a href="#">Prevention</a> <a href="#">Health</a> , Standard 07/07/2010

## Collection and usage attributes

**Computation:**

Infants (<1 year old) crude rate:  $1,000 \times (\text{Numerator} \div \text{Denominator})$   
 Children (0–4 year olds) crude rate:  $100,000 \times (\text{Numerator} \div \text{Denominator})$

Calculated separately for each of the two age groups, and for all Australians, Indigenous and non-Indigenous Australians.

Variability bands are to be calculated for single-year rates and aggregate rates by state/territory using the following method for estimating 95% confidence intervals:

$$CI (CR) = CR \pm 1.96 \times (CR/\sqrt{d})$$

Where d = number of deaths

CI = confidence interval

CR = crude rate

Presented as:

- number of deaths per 1,000 live births (infant)
- number of deaths per 100,000 population (child).

Rate ratios and rate differences are calculated for comparing Indigenous and non-Indigenous Australians.

Infant mortality rates: The rates for a single year use single year infant deaths for the numerator, and the number of single year live births for the denominator. The rates for 3 or 5 years of data combined use the average of 3 or 5 years data for the numerator, and the number of single year live births in the midpoint year of the 3 or 5 years for the denominator.

Child mortality rates: The rates for 3 or 5 years of data combined use the average of 3 or 5 years data for the numerator and mid-point for the denominator. Child mortality rates for single years are not part of NHA performance reporting but are available on request and use single year data both for the numerator and denominator.

**Numerator:**

- Number of deaths among infants (<1 year old).
- Number of deaths among children (0–4 year olds).

**Numerator data elements:****Data Element / Data Set**

[Person—age, total years N\[NN\]](#)

**Data Source**

[ABS Death Registrations Collection](#)

**Guide for use**

Data source type: Administrative by-product data

**Denominator:**

- Number of live births; and
- Population aged 0–4.

**Denominator data elements:**

**Data Element / Data Set**

**Data Element**

Person—projected Indigenous population of Australia, total people N[N(7)]

**Data Source**

[ABS Indigenous estimates and projections \(2016 Census-based\)](#)

**Guide for use**

Data source type: Census-based plus administrative by-product data  
Used for the denominator for the mortality rate for Indigenous children aged 1–4, and as a component of the denominator for the mortality rate for Indigenous children aged 0–4.

**Data Element / Data Set**

[Birth—birth status, code N](#)

**Data Source**

[ABS birth registration data](#)

**Guide for use**

Data source type: Administrative by-product data  
Used as the main component of the denominator for the infant mortality rate.  
Include live births only, i.e. value = 1.

**Data Element / Data Set**

[Person—estimated resident population of Australia, total people N\[N\(7\)\]](#)

**Data Source**

[ABS Estimated resident population \(2016 Census-based\)](#)

**Guide for use**

Data source type: Census-based plus administrative by-product data  
Used for the denominator for the mortality rate for children aged 1–4, and as a component of the denominator for the mortality rate for children aged 0–4.

**Disaggregation:**

2018–2020—Nationally and state/territory

2016–2020—State and territory, by Indigenous status.

2020—Nationally, infant (<1 year old).

2020—Nationally, children (0–4 year olds) (not reported).

2020—Nationally, by Indigenous status (not reported).

2020—Nationally, by remoteness children (0–4 year olds) (Major Cities, Inner and Outer Regional combined, Remote and Very remote combined) (not reported).

Some disaggregations may result in numbers too small for publication.  
Disaggregation by Indigenous status will be based on data only from jurisdictions for which the quality of Indigenous identification is considered acceptable—New South Wales, Queensland, Western Australia, South Australia and Northern Territory.

**Disaggregation data elements:**

**Data Element / Data Set**

[Person—age, total years N\[NN\]](#)

**Data Source**

[ABS Death Registrations Collection](#)

**Guide for use**

Data source type: Administrative by-product data

**Data Element / Data Set**

[Person—Indigenous status, code N](#)

**Data Source**

[ABS Death Registrations Collection](#)

**Guide for use**

Data source type: Administrative by-product data

**Data Element / Data Set**

[Person—area of usual residence, statistical area level 2 \(SA2\) code \(ASGS 2016\) N\(9\)](#)

**Data Source**

[ABS Death Registrations Collection](#)

**Guide for use**

Data source type: Administrative by-product data

Used for disaggregation by state/territory and remoteness

**Comments:** Most recent data available for 2022 National Healthcare Agreement performance reporting: 2020.

Because of small numbers of deaths each year data are presented in 3-year (total population) or 5-year (Indigenous population) groupings (state and territory only). Infant mortality rates for the Indigenous population are also presented at the state and territory level in 3-year groupings.

Single year data are reported for time series analysis (total population, infants only).

A system error affected the reporting of Western Australia Aboriginal and Torres Strait Islander death registrations for 2007, 2008 and 2009 which affected the WA and national death rates reported for the 2011 and 2012 COAG Reform Council reports. These data have been revised for 2013 reporting.

Data by remoteness may be available, pending assessment of data quality.

Although most deaths of Aboriginal and Torres Strait Islander people are registered, it is likely that some are not accurately identified as Aboriginal and Torres Strait Islander. Therefore, these data are likely to underestimate the Aboriginal and Torres Strait Islander population.

Data are based on the state or territory of usual residence of the deceased, regardless of where in Australia the death occurred or was registered.

Registrars of Births, Deaths and Marriages in New South Wales, Queensland and the Northern Territory took a number of initiatives in recent years to improve processing systems and timeliness of registrations of births. These issues affected the birth counts of these jurisdictions. Care should therefore be taken when interpreting changes in mortality rates for these jurisdictions and national totals.

Further details on infant and child mortality among Indigenous Australians are available from the Aboriginal and Torres Strait Islander Health Performance Framework ([measure 1.20: Infant and child mortality](#) and [measure 1.21: Perinatal mortality](#)).

## Representational attributes

**Representation class:** Rate  
**Data type:** Real  
**Unit of measure:** Life event (e.g. birth, death)  
**Format:** N[NN].N

## Indicator conceptual framework

**Framework and dimensions:** [Deaths](#)  
[Effectiveness](#)

## Data source attributes

**Data sources:****Data Source**

[ABS Indigenous estimates and projections \(2016 Census-based\)](#)

**Frequency**

Periodic

**Data custodian**

Australian Bureau of Statistics

**Data Source**

[ABS Death Registrations Collection](#)

**Frequency**

Annual

**Data custodian**

Australian Bureau of Statistics

**Data Source**

[ABS birth registration data](#)

**Frequency**

Annual

**Data custodian**

Australian Bureau of Statistics

**Data Source**

[ABS Estimated resident population \(2016 Census-based\)](#)

**Frequency**

Quarterly

**Data custodian**

Australian Bureau of Statistics

## Accountability attributes

**Reporting requirements:** National Healthcare Agreement

**Organisation responsible for providing data:** Australian Bureau of Statistics

**Further data development / collection required:** Specification: Final, the measure meets the intention of the indicator.

## Source and reference attributes

**Reference documents:** Australian Institute of Health and Welfare (AIHW) 2020. *Aboriginal and Torres Strait Islander Health Performance Framework*. Canberra: AIHW. Viewed 19 February 2021, <https://indigenoushpf.gov.au/>

## Relational attributes

**Related metadata references:**

Supersedes [National Healthcare Agreement: PI 07–Infant and young child mortality rate, 2021](#)

- [Health](#), Standard 03/07/2020

See also [Australian Health Performance Framework: PI 2.1.6–Potentially avoidable deaths, 2020](#)

- [Health](#), Standard 01/12/2020

See also [Australian Health Performance Framework: PI 3.4.1–Infant and young child mortality rate, 2020](#)

- [Health](#), Standard 13/10/2021

See also [National Healthcare Agreement: PI 01–Proportion of babies born of low birth weight, 2022](#)

- [Health](#), Standard 24/09/2021

See also [National Healthcare Agreement: PI 06–Life expectancy, 2022](#)

- [Health](#), Standard 24/09/2021

See also [National Healthcare Agreement: PI 08–Major causes of death, 2022](#)

- [Health](#), Standard 24/09/2021

See also [National Healthcare Agreement: PI 16–Potentially avoidable deaths, 2022](#)

- [Health](#), Standard 24/09/2021

See also [National Indigenous Reform Agreement: PI 06–Under five mortality rate by leading cause, 2020](#)

- [Indigenous](#), Standard 17/11/2019

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