

# National Health Performance Authority Healthy Communities: Percentage of live singleton births that were of low birthweight, 2007–2011

## Identifying and definitional attributes

<b>Metadata item type:</b>	Indicator
<b>Indicator type:</b>	Indicator
<b>Short name:</b>	Percentage of live singleton births that were of low birthweight, 2007–2011
<b>METEOR identifier:</b>	578021
<b>Registration status:</b>	<ul style="list-style-type: none"><li>• <a href="#">National Health Performance Authority (retired)</a>, Retired 01/07/2016</li></ul>
<b>Description:</b>	The number of low birthweight liveborn singleton babies, expressed as a percentage of all liveborn singleton babies.
<b>Indicator set:</b>	<a href="#">National Health Performance Authority: Healthy Communities: 2011–National Health Performance Authority (retired)</a> , Retired 01/07/2016

## Collection and usage attributes

<b>Computation description:</b>	<p>Low birthweight is defined as a birthweight of less than 2,500 grams.</p> <p>Multiple births and stillbirths are excluded.</p> <p>The percentages of live births that were of low birthweight are calculated at Medicare Local catchment and Medicare Local peer group levels for:</p> <ul style="list-style-type: none"><li>• Liveborn singleton babies of <b>all women</b> who gave birth during the <b>three</b> calendar years from <b>1 January 2009 to 31 December 2011</b></li><li>• Liveborn singleton babies of <b>Aboriginal and Torres Strait Islander women</b> who gave birth during the <b>five</b> calendar years from <b>1 January 2007 to 31 December 2011</b>.</li></ul> <p>Analysis by Medicare Local catchment and Medicare Local peer group is based on Statistical Local Area (SLA) of usual residence of the mother, irrespective of where the birth occurred.</p> <p>Australian non-residents and residents of external territories are excluded.</p>
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**Computation:** (Numerator ÷ Denominator) x 100

### Reliability of percentages

NPDC data are based on administrative data and therefore are not subject to sampling error. However, when the counts on which percentages have been calculated are small, the percentages may be subject to natural random variation. To quantify the random variation associated with NPDC data, variability bands were calculated using the standard method for calculating 95% confidence intervals for percentages:

$$CI(P)_{95\%} = P \pm 100 \times 1.96 \times \sqrt{\frac{P}{100} \left(1 - \frac{P}{100}\right) \frac{1}{n}}$$

where P = the percentage of liveborn singleton babies that were of low birthweight; and

n = the number of liveborn singleton babies.

### Suppression of estimates

The variability bands were used to calculate the Relative Standard Error (RSE) for each estimate and this information was used as one of the criteria for suppression of estimates.

Results were suppressed for confidentiality where the numerator was less than 5 and for reliability where the denominator was less than 100. Additional suppression rules based on the limits for RSE were developed and applied to ensure robust reporting of these data at small areas. For a dichotomous proportion, RSE has been defined as the ratio of the standard error and the minimum of the estimate and its complement (100% - estimate). Data were suppressed where the RSE was 33% or greater or the variability band width was 33% or greater.

**Numerator:** For 2009–2011, the number of low birthweight liveborn singleton babies of all women who gave birth.

For 2007–2011, the number of low birthweight liveborn singleton babies of Aboriginal and Torres Strait Islander women who gave birth.

**Numerator data elements:**

#### Data Element / Data Set

NMDS / DSS

[Perinatal NMDS 2010-2011](#)

#### Data Element / Data Set

NMDS / DSS

[Perinatal NMDS 2011-12](#)

#### Guide for use

Data source type: Administrative by-product data

Include babies with birth plurality = 1, i.e. singleton

#### Data Element / Data Set

NMDS / DSS

[Perinatal NMDS 2011-12](#)

#### Guide for use

Data source type: Administrative by-product data

Include babies with birth status = 1, i.e. live birth

#### Data Element / Data Set

NMDS / DSS

[Perinatal NMDS 2011-12](#)

**Guide for use**

Data source type: Administrative by-product data

Include babies with birthweight < 2,500 grams

**Data Element / Data Set**

[Birth—birth weight, total grams NNNN](#)

**Data Source**

[AIHW National Perinatal Data Collection \(NPDC\)](#)

**NMDS / DSS**

[Perinatal NMDS 2008-2010](#)

**Data Element / Data Set**

[Birth—birth status, code N](#)

**Data Source**

[AIHW National Perinatal Data Collection \(NPDC\)](#)

**NMDS / DSS**

[Perinatal NMDS 2008-2010](#)

**Data Element / Data Set**

[Birth event—birth plurality, code N](#)

**Data Source**

[AIHW National Perinatal Data Collection \(NPDC\)](#)

**NMDS / DSS**

[Perinatal NMDS 2008-2010](#)

**Denominator:**

For 2009–2011, the number of liveborn singleton babies of all women who gave birth.

For 2007–2011, the number of liveborn singleton babies of Aboriginal and Torres Strait Islander women who gave birth.

**Denominator data elements:**

**Data Element / Data Set**

NMDS / DSS

[Perinatal NMDS 2010-2011](#)

**Data Element / Data Set**

NMDS / DSS

[Perinatal NMDS 2011-12](#)

**Guide for use**

Data source type: Administrative by-product data

Include babies with birth plurality = 1, i.e. singleton

**Data Element / Data Set**

NMDS / DSS

[Perinatal NMDS 2011-12](#)

**Guide for use**

Data source type: Administrative by-product data

Include babies with birth status = 1, i.e. live birth

**Data Element / Data Set**

[Birth—birth status, code N](#)

**Data Source**

[AIHW National Perinatal Data Collection \(NPDC\)](#)

NMDS / DSS

[Perinatal NMDS 2008-2010](#)

**Data Element / Data Set**

[Birth event—birth plurality, code N](#)

**Data Source**

[AIHW National Perinatal Data Collection \(NPDC\)](#)

NMDS / DSS

[Perinatal NMDS 2008-2010](#)

**Disaggregation:**

The percentages of live births that were of low birthweight are calculated at Medicare Local catchment and Medicare Local peer group levels for:

- Liveborn singleton babies of all women who gave birth during the three calendar years from 1 January 2009 to 31 December 2011
- Liveborn singleton babies of Aboriginal and Torres Strait Islander women who gave birth during the five calendar years from 1 January 2007 to 31 December 2011.

For 2007–2011, Indigenous status of mother is derived from Person—Indigenous status, code N.

Medicare Locals plan and fund health services in communities across Australia. They help to ensure patients can access the care they need, particularly when a variety of health workers are involved in providing treatments. A Medicare Local catchment refers to the geographic area of a Medical Local (see [Administrative health region—Medicare Local identifier, code AANNN](#))

Medicare Local peer groups are the grouping of the 61 Medicare Locals into seven peer groups, which allows Medicare Locals to be compared to other Medicare Locals with similar characteristics, and to the average for their peer group (see [Administrative health region—Medicare Local peer group, code N](#)). This grouping was undertaken by the National Health Performance Authority using statistical cluster analysis of 2006 Census based socioeconomic status for each Medicare Local and, 2006 Census based Remoteness Area categories (ABS cat. no. 2039.0). Additional information on the average distance to the closest large city and major hospital (A1 public hospital peer group classification, 2010–11) contributed to the assignment of Medicare Locals to peer groups. Groupings were tested for face validity with a stakeholder group. The National Health Performance Authority has created 7 peer groups: Metro 1 to 3, Regional 1 and 2 and Rural 1 and 2. See [Healthy Communities: Australians' experiences with primary health care in 2010–11, Technical Supplement](#) for more information.

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

[Person—Indigenous status, code N](#)

**Data Source**

[AIHW National Perinatal Data Collection \(NPDC\)](#)

**NMDS / DSS**

[Perinatal NMDS 2008-2010](#)

**Data Element / Data Set**

[Person—Indigenous status, code N](#)

**Data Source**

[AIHW National Perinatal Data Collection \(NPDC\)](#)

**NMDS / DSS**

[Perinatal NMDS 2010-2011](#)

**Data Element / Data Set**

[Person—Indigenous status, code N](#)

**Data Source**

[AIHW National Perinatal Data Collection \(NPDC\)](#)

**NMDS / DSS**

[Perinatal NMDS 2011-12](#)

**Guide for use**

Data source type: Administrative by-product data

Indigenous status of babies is based on the Indigenous status of the mother.

**Data Element / Data Set**

[Person—area of usual residence, geographical location code \(ASGC 2007\) NNNNN](#)

**Data Source**

[AIHW National Perinatal Data Collection \(NPDC\)](#)

**NMDS / DSS**

[Perinatal NMDS 2008-2010](#)

**Guide for use**

Data source type: Administrative by-product data

Used for disaggregation of 2007, 2008 and 2009 data by Medicare Local catchment.

**Data Element / Data Set**

[Person—area of usual residence, geographical location code \(ASGC 2009\) NNNNN](#)

**Data Source**

[AIHW National Perinatal Data Collection \(NPDC\)](#)

**NMDS / DSS**

[Perinatal NMDS 2010-2011](#)

**Guide for use**

Data source type: Administrative by-product data

Used for disaggregation of 2010 data by Medicare Local catchment.

**Data Element / Data Set**

[Person—area of usual residence, geographical location code \(ASGC 2010\) NNNNN](#)

**Data Source**

[AIHW National Perinatal Data Collection \(NPDC\)](#)

**NMDS / DSS**

[Perinatal NMDS 2011-12](#)

**Guide for use**

Data source type: Administrative by-product data

Used for disaggregation of 2011 data by Medicare Local catchment.

**Data Element / Data Set**

[Administrative health region—Medicare Local identifier, code AANNN](#)

**Guide for use**

Aggregated data on the percentage of live births that were of low birthweight are reported by Medicare Local catchment for:

- Liveborn singleton babies of all women who gave birth during the three calendar years from 1 January 2009 to 31 December 2011

- Liveborn singleton babies of Aboriginal and Torres Strait Islander women who gave birth during the five calendar years from 1 January 2007 to 31 December 2011.

#### Data Element / Data Set

[Administrative health region—Medicare Local peer group, code N](#)

#### Guide for use

Aggregated data on the percentage of live births that were of low birthweight are reported by Medicare Local peer group for:

- Liveborn singleton babies of all women who gave birth during the three calendar years from 1 January 2009 to 31 December 2011
- Liveborn singleton babies of Aboriginal and Torres Strait Islander women who gave birth during the five calendar years from 1 January 2007 to 31 December 2011.

#### Comments:

The most recent data currently available from the AIHW National Perinatal Data Collection are for the 2011 calendar year.

Information is included in the AIHW National Perinatal Data Collection for all live births and stillbirths of at least 400 grams birthweight or at least 20 weeks gestation in Australia, including births in hospitals, in birth centres and in the community. Indigenous status of babies is currently only available based on the Indigenous status of the mother.

## Representational attributes

<b>Representation class:</b>	Percentage
<b>Data type:</b>	Real
<b>Unit of measure:</b>	Person
<b>Format:</b>	N[NN].N

## Indicator conceptual framework

#### Framework and dimensions:

[PAF-Effectiveness](#)

- [PAF-Appropriateness](#)
- [PAF-Effectiveness of access](#)
- [PAF-Quality](#)
  - [PAF-Capability](#)
  - [PAF-Continuity](#)
  - [PAF-Responsiveness](#)
  - [PAF-Safety](#)
- [PAF-Sustainability](#)

## Data source attributes

#### Data sources:

#### Data Source

[AIHW National Perinatal Data Collection \(NPDC\)](#)

#### Frequency

Calendar years ending 31 December each year

#### Data custodian

Australian Institute of Health and Welfare

## Accountability attributes

**Reporting requirements:** National Health Performance Agreement-Performance and Accountability Framework

**Organisation responsible for providing data:** Australian Institute of Health and Welfare

**Accountability:** National Health Performance Authority

**Further data development / collection required:** Specification: Long-term

## Source and reference attributes

**Submitting organisation:** National Health Performance Authority

**Origin:** Healthy Communities

**Reference documents:** National Health Performance Authority-Performance and Accountability Framework

Healthy Communities: Child and maternal health in 2009–2012, Technical Supplement.  
Available from:  
[http://www.myhealthycommunities.gov.au/Content/publications/downloads/NHPA\\_HC\\_Report\\_Child\\_and\\_maternal\\_health\\_Technical\\_Supplement\\_July\\_2014.pdf](http://www.myhealthycommunities.gov.au/Content/publications/downloads/NHPA_HC_Report_Child_and_maternal_health_Technical_Supplement_July_2014.pdf)

## Relational attributes

**Related metadata references:**

See also [Administrative health region—Medicare Local identifier, code AANNN](#)

- [National Health Performance Authority \(retired\)](#), Retired 01/07/2016

See also [Administrative health region—Medicare Local peer group, code N](#)

- [National Health Performance Authority \(retired\)](#), Retired 01/07/2016

See also [National Healthcare Agreement: PI 01-Proportion of babies born of low birth weight, 2014](#)

- [Health](#), Superseded 14/01/2015