3.4 Infant mortality

Why this measure is included
The infant mortality rate, which reflects the rate of survival of children in their first year of life, is used internationally, along with birth weight, as a key indicator of a country’s overall infant health status.\(^{21}\)

**Figure 3.5: Infant mortality: rate per 1,000 live births, Western Australia and Australia, 2003 to 2012**

Source: ABS 2013, *Deaths, Australia, 2012*

**Table 3.5: Infant mortality: number and rate per 1,000 live births, Western Australia and Australia, 2003 to 2012**

<table>
<thead>
<tr>
<th>Year</th>
<th>Western Australia Rate</th>
<th>Western Australia Number</th>
<th>Australia Rate</th>
<th>Australia Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>4.1</td>
<td>100</td>
<td>4.8</td>
<td>1,199</td>
</tr>
<tr>
<td>2004</td>
<td>3.9</td>
<td>99</td>
<td>4.7</td>
<td>1,184</td>
</tr>
<tr>
<td>2005</td>
<td>4.6</td>
<td>120</td>
<td>4.9</td>
<td>1,302</td>
</tr>
<tr>
<td>2006</td>
<td>4.9</td>
<td>136</td>
<td>4.7</td>
<td>1,262</td>
</tr>
<tr>
<td>2007</td>
<td>2.4</td>
<td>71</td>
<td>4.1</td>
<td>1,203</td>
</tr>
<tr>
<td>2008</td>
<td>3.4</td>
<td>108</td>
<td>4.1</td>
<td>1,226</td>
</tr>
<tr>
<td>2009</td>
<td>3.2</td>
<td>99</td>
<td>4.2</td>
<td>1,261</td>
</tr>
<tr>
<td>2010</td>
<td>3.6</td>
<td>113</td>
<td>4.1</td>
<td>1,229</td>
</tr>
<tr>
<td>2011</td>
<td>3.0</td>
<td>96</td>
<td>3.8</td>
<td>1,140</td>
</tr>
<tr>
<td>2012</td>
<td>2.5</td>
<td>83</td>
<td>3.3</td>
<td>1,031</td>
</tr>
</tbody>
</table>

Source: ABS 2013, *Deaths, Australia, 2012*
### Table 3.6: Infant mortality: rate per 1,000 live births, by gender and Aboriginal status, Western Australia 2007–09 to 2010–2012

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th></th>
<th>Male</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aboriginal</td>
<td>Non-Aboriginal</td>
<td>Aboriginal</td>
<td>Non-Aboriginal</td>
</tr>
<tr>
<td>2007–09</td>
<td>4.9</td>
<td>2.7</td>
<td>9.4</td>
<td>2.8</td>
</tr>
<tr>
<td>2008–10</td>
<td>4.7</td>
<td>2.8</td>
<td>10.7</td>
<td>3.5</td>
</tr>
<tr>
<td>2009–11</td>
<td>3.7</td>
<td>2.6</td>
<td>10.2</td>
<td>3.3</td>
</tr>
<tr>
<td>2010–12</td>
<td>4.4</td>
<td>2.5</td>
<td>8.5</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Source: ABS 2013, *Deaths, Australia, 2012*

Note: The rates are expressed as the reference year averaged with the preceding two years.

**What is this measure?**

This measure looks at the infant mortality rate in Western Australia (WA) and Australia. This information is drawn from the Australian Bureau of Statistics (ABS) data on deaths in Australia, based on information provided by each state’s Registry of Births, Deaths and Marriages. These statistics report on children who are born alive but pass away within their first year of life – these are considered ‘infant’ deaths.

**Commentary**

For both WA and Australia, the overall number of infant deaths is relatively low and is trending downwards. WA’s infant mortality rate is lower than the Australian rate, and this has been the case since 2007 (Figure 3.5 and Table 3.5). The infant mortality rate in WA for 2012 continues to be lower than the Australian average (2.5 per 1,000 in WA compared to 3.3 per 1,000 nationally).

Male infants have a higher rate of mortality than female infants. This applies to both Aboriginal and non-Aboriginal babies (Table 3.6).

Aboriginal male infants have the highest rate of infant mortality in WA compared with female infants and non-Aboriginal male infants (Table 3.6). The rate of 8.5 per 1,000 recorded for Aboriginal male infants for the period 2010–12 was almost twice the rate for Aboriginal female infants (4.4 per 1,000) and three times the rate for non-Aboriginal male infants (2.8 per 1,000) (Table 3.6).

In terms of international comparison, Australia’s infant mortality rate of 4.1 per 1,000 live births in 2010 was just under the OECD average of 4.3 per 1,000 live births for the same year. Australia’s Aboriginal infant mortality rate is higher than many Western European countries with the rate for Aboriginal male infants being twice the OECD average.

In 2010, the WA Perinatal and Infant Mortality Committee released a report analysing perinatal and infant deaths between 2005 and 2007. Over this period there were 310 infant deaths in WA. The report stated that the most prevalent causes of death were:

- congenital abnormalities (30% of all deaths)
- extreme prematurity (19.7%)
- Sudden Infant Death Syndrome (SIDS) (14.2%)
- neurological (12.3%).

Notably, for all of these conditions other than neurological, the rate for babies of Aboriginal mothers was higher to a statistically significant level.
The same report highlights an increased risk of perinatal and post-neonatal deaths for rural and regional areas of WA. With the exception of the South West, all rates of perinatal deaths were significantly higher than for the metropolitan area and all rural areas exceeded the metropolitan rate for post-neonatal deaths.\textsuperscript{76}

The ongoing decrease in infant mortality rates in WA is attributed to continuing advances in medical and obstetric care, increased public awareness of health issues for babies, antibiotics and vaccinations, and campaigns to address deaths through Sudden Infant Death Syndrome (SIDS) and accidents.\textsuperscript{77}

Strategies

**Safe Infant Sleeping Policy and Framework, Government of Western Australia (released 2013)**

In June 2013 the Department of Health released the Safe Infant Sleeping Policy and Framework 2013. This framework takes an evidence-based approach to provide best-practice information on safe sleeping to parents, carers, families and communities. The framework is available at www.health.wa.gov.au/circularsnw/attachments/807.pdf

**Improving Maternity Services: Working Together Across Western Australia. A Policy Framework, Government of Western Australia (released 2008)**

The main goal of this framework is to maintain a high standard of maternity care for all women and their babies including in the areas of:

- improving health outcomes for Aboriginal women and babies
- improving the health and wellbeing of women and their unborn babies through better preconception and early pregnancy care
- improving the health and development of infants and addressing the needs of new parents.

Further information is available at www.healthnetworks.health.wa.gov.au/projects/mat_services.cfm

**National Maternity Services Plan 2010–2015, Commonwealth Government**

This is a five-year plan to improve outcomes in maternity care for mothers and babies throughout Australia, following the *Report of the Maternity Services Review*. The plan focuses on maintaining the high standards of safety and quality in maternity care, while improving access to services and choice of models of care.


The first outcome of the National Early Childhood Development Strategy is to ensure that children are born and remain healthy. The strategy action list includes strengthening maternal, child and family health services.


Want to know more?

**Data on infant mortality**


The Organisation for Economic Co-operation and Development provides international comparative figures on infant mortality rates, available at www.oecd.org/


The WA Department of Health publishes annual information on WA births, available at www.health.wa.gov.au/publications/subject_index/p/Perinatal_infant_maternal.cfm

Research, reports and articles

Ombudsman WA 2012, *Investigation into ways that State Government departments can prevent or reduce sleep-related infant deaths*, Ombudsman WA.

One of the functions of the Ombudsman WA is to investigate certain child deaths. In carrying out this role the Ombudsman noted a pattern of sleep-related deaths in infants, and as a result undertook an own motion inquiry, which resulted in this report, presented to Parliament in November 2012. The report makes 23 recommendations about ways to prevent or reduce sleep-related infant deaths including:

- a safe sleeping statement
- strategies appropriate for parents and carers of Aboriginal and culturally and linguistically diverse backgrounds
- departmental policies, assessment tools and professional development for staff
- working collaboratively with non-government organisations in Aboriginal communities
- working in partnership with universities and colleges
- the Best Beginnings service.


Other information

SIDS and Kids Safe Sleeping Campaign, SIDS and Kids

The SIDS and Kids Safe Sleeping Campaign is an evidence-based health promotion campaign developed for health professionals, childcare workers, new and expectant mothers, parents and anyone who cares for babies and infants. The campaign, which was developed in conjunction with national and international researchers, started in 1991 and provides information about SIDS and fatal sleeping accidents. Since its inception, the campaign has reduced the incidence of SIDS by 85 per cent, which equates to preventing the deaths of 6,500 infants. Further information is available at www.sidsandkids.org/safe-sleeping/

Women’s and Newborns Health Network

This network, part of the WA Department of Health, produces research and information on aspects of maternal and newborn health. It is available at www.healthnetworks.health.wa.gov.au/network/womens.cfm