

# Data sources and data quality

## Data Sources

### Numerator:

- The National Mortality Database is the data source for mortality data.
- The National Perinatal Data Collection.

### Denominator:

- ABS Births Collection
- The National Perinatal Data Collection
- Estimated Resident Population
- Experimental Estimates and Projections

## Data Quality

### Population data

Accurate Indigenous population estimates are required for measuring the size of the population. The quality of population estimates is underpinned by the completeness of Indigenous identification and the accuracy of the count in the 5-yearly Census of Population and Housing, the quality of the Census Post Enumeration Survey (PES), and the quality of birth and death registration data. Population estimates are used as the denominator in all rate calculations, including mortality rates, hospitalisation rates and in the life expectancy calculations. The accuracy of Indigenous population estimates are affected by the level of under-count in the Census and how well this can be adjusted by the PES results as well as the small sample size of the PES.

### Deaths data

Indigenous identification in deaths data is incomplete with the Indigenous status of the deceased is not always recorded correctly. The incompleteness of Indigenous identification means that the number of deaths registered as Indigenous underestimates the number of deaths occurring in the Aboriginal and Torres Strait Islander population. Therefore, the observed difference between Indigenous and non-Indigenous mortality rates is an underestimate of the true differences. This also impacts on time series analysis as the quality of identification may vary over time.

Although the identification of Indigenous deaths is incomplete in all State and Territory registration systems, five jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed as having adequate numbers for reporting. Therefore, the reporting is currently limited to these jurisdictions.

Given the small numbers involved, small errors in Indigenous identification can result in large proportional differences and changes over time and between jurisdictions.

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### **Perinatal data**

Problems in the quality of Indigenous identification affect the quality of perinatal data. Each jurisdiction uses its own unique collection form to record perinatal data with variations to the Indigenous status question and recording categories.

Given the small numbers involved, small errors in Indigenous identification can result in large proportional differences and changes over time and between jurisdictions.

Currently, perinatal statistics record the Indigenous status of the mother, but not the Indigenous status of the baby. Work is underway to include the Indigenous status of the baby in the Perinatal National Minimum Data Set (PNMDS).

The PNMDS currently includes low birth weight and work is underway to include data on antenatal care, tobacco smoking, alcohol and substance use during pregnancy.

### **Geographic data**

The data quality problems in the identification of Indigenous Australians in administrative datasets also affect geographic analysis. The quality of data varies by jurisdiction and remoteness with higher quality Indigenous identification in remote areas.