

# National Healthcare Agreement: PI 08-Major causes of death, 2017 QS

## Identifying and definitional attributes

**Metadata item type:** Quality Statement  
**METEOR identifier:** 630403  
**Registration status:**

- [Health](#), Standard 31/01/2017

## Relational attributes

**Indicators linked to this Quality statement:** [National Healthcare Agreement: PI 08–Major causes of death, 2017 Health](#), Superseded 30/01/2018

## Data quality

**Institutional environment:** These collections are conducted under the [Census and Statistics Act 1905](#). For information on the institutional environment of the Australian Bureau of Statistics (ABS), including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, see [ABS institutional environment](#).

**Timeliness:**

Death records are provided electronically to the ABS by individual registrars on a monthly basis, for compilation into aggregate statistics on a quarterly and annual basis. One dimension of timeliness in death registrations data is the interval between the occurrence and registration of a death. As a result, a small number of deaths occurring in one year are not registered until the following year or later.

Traditionally, the Causes of Death, Australia dataset is released annually, approximately 15 months after the end of the reference period. The 2015 Causes of death dataset has been released approximately 6 months earlier than usual, allowing more timely access to Australian mortality data. For more information on process changes see [A more timely annual collection: changes to ABS processes \(technical note\)](#) in [Causes of death Australia, 2015](#) (ABS 2017a).

There is a focus on fitness for purpose when causes-of-death statistics are released. To meet user requirements for accurate causes-of-death data, it is necessary to obtain information from other administrative sources before all information for the reference period is available. This specifically applies to coroner-certified deaths, where extra information relating to the death is provided through police, toxicology, autopsy and coronial finding reports. A balance therefore needs to be maintained between accuracy (completeness) of data and timeliness. The ABS provides the data in a timely manner, ensuring that all coding possible can be undertaken with accuracy prior to publication.

As coroner-certified deaths can have ill-defined causes of death until a case is closed within the coronial system, a revisions process was introduced to enhance the cause-of-death output for open coroner cases. This process enables the use of additional information relating to coroner-certified deaths either 12 or 24 months after initial processing. See Explanatory notes 52–55 and the [Causes of death revisions, 2012 and 2013 technical note](#) in [Causes of death, Australia, 2014](#) (ABS 2016), for further information on the revision process.

[Causes of death, Australia, 2015](#), (ABS 2017a) does not include revised data for the 2013 or 2014 reference periods. The ABS remains committed to the revision of coroner-referred deaths and will release revised data for these reference periods in early 2017.

Preliminary estimated resident population (ERP) data are compiled and published quarterly and is generally made available 5–6 months after the end of each reference quarter. Every year, the 30 June ERP is further disaggregated by sex and single year of age, and is made available 5–6 months after the end of the reference quarter. Commencing with data for September quarter 2006, revised estimates are released annually and made available 21 months after the end of the reference period for the previous financial year, once more accurate births, deaths and net overseas migration data become available. In the case of births and deaths, the revised data is compiled on a date-of-occurrence basis. In the case of net overseas migration, final data are based on actual traveller behaviour. Final estimates are made available every 5 years after a Census and revisions are made to the previous inter-censal period. Generally, ERP data are not changed once they have been finalised unless there are compelling reasons to do so, as in June 2013 when data from September 1991 to June 2006 were revised. For more information on this recasting process, see the feature article titled [Recasting 20 years of ERP](#) in the December quarter 2012 issue of *Australian demographic statistics* (ABS 2013).

For further information on ABS ERP, see the relevant data quality statement.

**Accessibility:**

Causes-of-death data are available in a variety of formats on the ABS website under the 3302.0 product family. Further information on deaths and mortality may be available on request. The ABS observes strict confidentiality protocols as required by the *Census and Statistics Act 1905*. This may restrict access to data at a very detailed level.

**Interpretability:**

In 2014, the ABS implemented Iris, a new automated coding software product for assisting in the processing of cause-of-death data. This software has been used to code the 2013, 2014 and 2015 cause-of-death data provided in this supply. With the introduction of new coding software, the ABS also implemented the most up-to-date versions of the ICD-10 when coding 2013 (and 2014, 2015) data (using the 2013 and 2015 versions, respectively), and improved a number of coding practices to realign with international best practice. See Technical note 1, [ABS implementation of the Iris software: understanding coding and process improvements](#), in *Causes of death, Australia, 2013* (ABS 2015) for further details.

Data for all deaths in this indicator have been age-standardised, using the direct method, to 85 years +. Data for Indigenous deaths in this indicator have been age-standardised, using the direct method, to 75 years + to account for differences between the age structures of the Indigenous and non-Indigenous populations. Direct age-standardisation to the 2001 total Australian population was used (see [Data cube: standard population for use in age-standardisation table](#) in *Australian demographic statistics, Dec 2013* (ABS 2014). Age-standardised results provide a measure of relative difference only between populations.

**Relevance:**

The ABS Causes of Death collection includes all deaths that occurred and were registered in Australia, including deaths of persons whose usual residence is overseas. Deaths of Australian residents that occurred outside Australia may be registered by individual registrars, but are not included in ABS deaths or causes of death statistics.

Data in the Causes of Death collection include demographic items, as well as causes of death information, which is coded according to the International Statistical Classification of Diseases and Related Health Problems (ICD). ICD is the international standard classification for epidemiological purposes and is designed to promote international comparability in the collection, processing, classification, and presentation of causes of death statistics. The classification is used to classify diseases and causes of disease or injury as recorded on many types of medical records as well as death records. The ICD has been revised periodically to incorporate changes in the medical field. The 10th revision of ICD (ICD-10) has been used by the ABS to code cause of death since 1997.

For further information on the ABS Causes of Death collection, see the relevant data quality statement.

**Accuracy:**

Information on causes of death is obtained from a complete enumeration of deaths registered during a specified period and are not subject to sampling error. However, deaths data sources are subject to non-sampling error which can arise from inaccuracies in collecting, recording and processing the data.

Although it is considered likely that most deaths of Aboriginal and Torres Strait Islander (Indigenous) Australians are registered, a proportion of these deaths are not registered as Indigenous. Information about the deceased is supplied by a relative or other person acquainted with the deceased, or by an official of the institution where the death occurred and may differ from the self-identified Indigenous origin of the deceased. Forms are often not subject to the same best practice design principles as statistical questionnaires, and respondent and/or interviewer understanding is rarely tested. Over-precise analysis of Indigenous deaths and mortality should be avoided.

All coroner-certified deaths registered after 1 January 2006 are now subject to a revisions process. In this round of Council of Australian Governments (COAG) reporting, 2010, 2011 and 2012 data are final, 2013 data are revised and 2014 and 2015 data are preliminary. Data for 2013, 2014 and 2015 are subject to further revisions. Prior to 2006, all ABS processing of causes-of-death data for a particular reference period was finalised approximately 13 months after the end of the reference period. Where insufficient information was available to code a cause of death (for example, a coroner-certified death was yet to be finalised by the coroner), less specific ICD codes were assigned as required by the ICD coding rules. The revision process enables the use of additional information relating to coroner-certified deaths, as it becomes available over time. This results in increased specificity of the assigned ICD-10 codes.

Revisions will only impact on coroner-certified deaths, as further information becomes available to the ABS about the causes of these deaths. [See Technical note: causes of death revisions 2012 and 2013](#) in *Causes of death, Australia*.

[2014](#) (ABS 2016). The ABS remains committed to revisions of coroner-referred deaths, including the revision of the 2013 and 2014 reference periods. Releases of revised data for these periods will occur in early 2017.

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Aboriginal and Torres Strait Islander Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Aboriginal and Torres Strait Islander death data for Queensland for 2010. Note that there are differences between data output in the [Causes of death, Australia, 2010](#) publication (ABS 2012) and 2010 data reported for the National Healthcare Agreement, as this adjustment was not applied in the publication. For further details see Technical note: registration of outstanding deaths, Queensland 2010, from the [Deaths, Australia, 2010](#) publication (ABS 2011) and Explanatory note 103 in the [Causes of death, Australia, 2010](#) publication (ABS 2012).

Investigation conducted by the Western Australia Registrar of Births, Deaths and Marriages indicated that some deaths of non-Indigenous people were wrongly recorded as deaths of Indigenous people in Western Australia for 2007, 2008 and 2009. The ABS discussed this issue with a range of key stakeholders and users of Aboriginal and Torres Strait Islander deaths statistics. Following this discussion, the ABS did not release Western Australia Aboriginal and Torres Strait Islander deaths data for the years 2007, 2008 and 2009 in the 2010 issue of *Deaths, Australia* publication (ABS 2011), or in the 2011 COAG data supply. The Western Australia registry corrected the data and resupplied the corrected data to the ABS. These corrected data were then released by the ABS in spreadsheets attached to *Deaths, Australia, 2010* (ABS 2011) publication on 24 May 2012, and are included in this round of COAG reporting. In addition to that, 3 deaths in Western Australia for 2009 which were wrongly coded as deaths of Indigenous people have been corrected as deaths of non-Indigenous people in previous rounds of COAG reporting.

All ERP data sources are subject to non-sampling error. Non-sampling error can arise from inaccuracies in collecting, recording and processing the data. In the case of Census and Post Enumeration Survey (PES) data every effort is made to minimise reporting error by the careful design of questionnaires, intensive training and supervision of interviewers, and efficient data processing procedures. The ABS does not have control over any non-sampling error associated with births, deaths and migration data. For more information see the [Demography working paper 1998/2 - quarterly birth and death estimates, 1998](#) (ABS 1999) and [Australian demographic statistics](#) (ABS 2017b).

Non-Indigenous estimates are available for census years only. In the intervening years, Indigenous population projections are based on assumptions about past and future levels of fertility, mortality and migration. In the absence of non-Indigenous population figures for these years, it is possible to derive denominators for calculating non-Indigenous rates by subtracting the projected Indigenous population from the total population. In the present tables, non-Indigenous population estimates have been derived by subtracting the 2011 Census-based Indigenous population estimates/projections from the 2011 Census-based total persons ERP. Such figures have a degree of uncertainty and should be used with caution, particularly as the time from the base year of the projection series increases.

Non-Indigenous data from the Causes of Death collection do not include death registrations with a 'not stated' Indigenous status.

Some rates are unreliable due to small numbers of deaths over the reference period. Resultant rates could be misleading, for example, where the non-Indigenous mortality rate is higher than the Indigenous mortality rate. Age-standardised death

rates based on a very low death count have been deemed unpublishable. Some cells have also not been published to prevent back-calculation of these suppressed cells. Caution should be used when interpreting rates for this indicator.

Mortality rates for neoplasms may differ compared to individual state and territory cancer registry mortality rates due to different sources of death data being used to calculate these rates. ABS mortality data are the cause-of-death data used for this indicator.

**Coherence:** The methods used to construct the indicator are consistent and comparable with other collections and with international practice.

## Source and reference attributes

- Reference documents:**
- ABS (Australian Bureau of Statistics) 1999. Demography working paper 1998/2 - quarterly birth and death estimates, 1998. ABS cat. no. 3114.0. Canberra: ACS. Viewed 21 June 2017, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyCatalogue/B5BE54544A5DAFEFCA257061001F4540?OpenDocument>.
- ABS 2011. Deaths, Australia, 2010. ABS cat. no. 3302.0. Canberra: ABS. Viewed 20 June 2017, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/8CE24F3B3F710F8FCA257AAF0013D433?opendocument>.
- ABS 2012. Causes of death Australia, 2010. ABS cat. no. 3303.0. Canberra: ABS. Viewed 20 June 2017, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3303.0>Main+Features12010?OpenDocument>.
- ABS 2013. Australian demographic statistics, Dec 2012. ABS cat. no. 3101.0. Canberra: ABS. Viewed 21 June 2017, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/3101.0Feature%20Article2Dec%202012?opendocument&tabname=Summary&prodno=3101.0&issue=Dec%202012&num=&view=>.
- ABS 2014. Australian demographic statistics, Dec 2013. ABS cat. no. 3101.0. Canberra: ABS. Viewed 21 June 2017, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/FA627CA7C5708380CA257D5D0015EB95?opendocument>.
- ABS 2015. Causes of death Australia, 2013. ABS cat. no. 3303.0. Canberra: ABS. Viewed 21 June 2017, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/80A033B8145BCD76CA257F6F000D0C6A?opendocument>.
- ABS 2016. Causes of death, Australia, 2014. ABS cat. no. 3303.0. Canberra: ABS. Viewed 20 June 2017, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/E639C737904FE78FCA25803B0017FF1A?opendocument>.
- ABS 2017a. Causes of death Australia, 2015. ABS cat. no. 3303.0. Canberra: ABS. Viewed 20 June 2017, <http://www.abs.gov.au/ausstats%5Cabs@.nsf/0/47E19CA15036B04BCA2577570014668B?OpenDocument>.
- ABS 2017b. Australian demographic statistics. ABS cat. no. 3101.0. Canberra: ABS. Viewed 20 June 2017, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/second+level+view?ReadForm&prodno=3101.0&viewtitle=Australian%20Demographic%20Statistics~Sep%202016~Latest~23/03/2017&&tabname=Past%20Future%20Issues&prodno=3101.0&issue=Sep%202016&num=&view=>.

## Relational attributes

**Related metadata references:**

Supersedes [National Healthcare Agreement: PI 08-Major causes of death, 2016 QS](#)

- [Health](#), Superseded 31/01/2017

Has been superseded by [National Healthcare Agreement: PI 08-Major causes of death, 2018 QS](#)

- [Health](#), Standard 30/01/2018