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## **Data quality information — Emergency management, chapter 9**

### **Data Quality Information**

Data quality information (DQI) has been prepared for the first time for the 2011 Report on Government Services. DQI provides information against the seven ABS data quality framework dimensions, for fire deaths in the Emergency management chapter. DQI for additional indicators will be progressively introduced in future reports.

DQI is available for the following performance indicator:

**Fire deaths**

**2**

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## Fire deaths

Data quality information for this indicator has been drafted by the Secretariat in consultation with the ABS, with additional Steering Committee comments.

### Indicator definition and description

<b>Element</b>	Fire events performance indicator framework – Outcomes
<b>Indicator</b>	Fire deaths
<b>Measure (computation)</b>	<p>This indicator is defined as the number of deaths from fire:</p> <p><u>Numerator/s</u></p> <p>The following International Classification of Diseases (ICD) codes are aggregated to define the data set:</p> <p>Exposure to smoke, fire and flames (ICD X00—X09) as follows:</p> <p>ICD X00 Exposure to uncontrolled fire in building or structure</p> <p>ICD X01 Exposure to uncontrolled fire, not in building or structure</p> <p>ICD X02 Exposure to controlled fire in building or structure</p> <p>ICD X03 Exposure to controlled fire, not in building or structure</p> <p>ICD X04 Exposure to ignition of highly flammable material</p> <p>ICD X05 Exposure to ignition or melting of nightwear</p> <p>ICD X06 Exposure to ignition or melting of other clothing and apparel</p> <p>ICD X08 Exposure to other specified smoke, fire and flames</p> <p>ICD X09 Exposure to unspecified smoke, fire and flames</p> <p>Intentional self-harm by smoke, fire and flames (ICD X76)</p> <p>Assault by smoke, fire and flames (ICD X97)</p> <p>Exposure to smoke, fire and flames, undetermined intent (ICD Y26)</p> <p><u>Denominator:</u></p> <p>Population by State and Territory and Australian total and is expressed by State and Territory and Australian total, by ICD code detail and total, as an annual, and a three year rolling weighted average rate per million people.</p>
<b>Data source/s</b>	<p><u>Numerator:</u></p> <p>ABS Causes of Death 3303.0 (Underlying causes of death, State and Territory tables, published and unpublished data).</p> <p><u>Denominator:</u></p> <p>ABS Estimated Residential Population 3101.0 (for more detail about the population data used in the Report see RoGS Statistical Appendix, Attachment Table AA2).</p>

### Data Quality Framework dimensions

<b>Institutional environment</b>	<p>The Causes of Death collection is published by the Australian Bureau of Statistics (ABS), with data sourced from deaths registrations administered by the various State and Territory Registrars of Births, Deaths and Marriages. It is a legal requirement of each State and Territory that all deaths are registered.</p> <p>The ABS operates within a framework of the Census and Statistics Act 1905 and the Australian Bureau of Statistics Act 1975. These ensure the independence and impartiality from political influence of the ABS, and the confidentiality of respondents. For more information on the institutional environment of the ABS, including the legislative obligations of the ABS, financing and governance arrangements, and mechanisms for scrutiny of ABS operations, please see ABS Institutional Environment.</p>
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<b>Relevance</b>	<p>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.</p> <p>Data in the Causes of Death collection include demographic items, as well as Causes of Death information coded according to the International Classification of Diseases (ICD). The ICD is the international standard classification for epidemiological purposes and is designed to promote international comparability in the collection, processing, classification, and presentation of cause 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 since 1997.</p>
<b>Timeliness</b>	<p>Causes of Death data are published on an annual basis.</p> <p>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.</p> <p>Preliminary ERP data is compiled and published quarterly and is generally made available five to six months after the end of each 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 becomes available. In the case of births and deaths, the revised data are 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. ERP data are not changed once finalised. Releasing preliminary, revised and final ERP involves a balance between timeliness and accuracy.</p>
<b>Accuracy</b>	<p>Information on Causes of Death is obtained from a complete enumeration of deaths registered during a specified period and is not subject to sampling error. However, deaths data are subject to non sampling error. Non-sampling error can arise from inaccuracies in collecting, recording and processing the data. The most significant of these errors are: mis-reporting of data items; deficiencies in coverage; non-response to particular questions; and processing errors. Every effort is made to minimise error by working closely with data providers, the careful design of forms, training of processing staff and efficient data processing procedures.</p> <p>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.</p> <p>Causes of Death data for 2007 are subject to revision. All coroner certified deaths registered after 1 January 2007 will be subject to a revision process. This is a change from previous years, where 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.</p>

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	<p>Where insufficient information was available to code a cause of death (e.g. 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 will enable the use of additional information relating to coroner certified deaths as it becomes available over time. This will result in increased specificity of the assigned ICD-10 codes. Causes of death data for 2007 coroner certified deaths will be updated as more information becomes available to the ABS. Revisions will only impact on coroner certified deaths, as further information becomes available to the ABS about the causes of these deaths. See Causes of Death, 2007, 3303.0.</p> <p>Some rates are unreliable due to small numbers of deaths over the reference period. All rates in this indicator must be used with caution.</p>
<b>Coherence</b>	<p>The ABS provide source data for the numerator and denominator for this indicator.</p>
<b>Accessibility</b>	<p>Causes of Death data are available in a variety of formats on the ABS website under the 3303.0 product family.</p> <p>ERP data is available in a variety of formats on the ABS website, <a href="http://www.abs.gov.au">www.abs.gov.au</a>, under the 3101.0 and 3201.0 product families.</p> <p>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.</p>
<b>Interpretability</b>	<p>Data for this indicator are presented as crude rates, per million estimated resident population, and as three year weighted rolling averages due to volatility of the small numbers involved.</p> <p>Information on how to interpret and use the data appropriately is available from Explanatory Notes in Causes of Death, Australia (3303.0). Data are reported by jurisdiction of residence.</p>

### **Data Gaps/Issues Analysis**

#### **Key data gaps/issues**

- The Steering Committee notes the following key data gaps/issues:
- Timeliness – data available for the Report on Government services are delayed by one reference year. This is due to a trade off between accuracy and timeliness.
  - Volatility - due to the small numbers of fire deaths annually, there is a high level of volatility in reported indicator rates. It is important therefore to assess longer term trends where data are available.