

# National Healthcare Agreement: P03- Incidence of end-stage kidney disease, 2010 QS

## Identifying and definitional attributes

Metadata item type:	Quality Statement
METEOR identifier:	392603
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## Relational attributes

Indicators linked to this Quality statement:	<a href="#">National Healthcare Agreement: P03-Incidence of end-stage kidney disease, 2010 Health</a> , Superseded 08/06/2011
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## Data quality

### Quality statement summary:

- This indicator estimates the incidence of end-stage kidney disease (ESKD) from linked mortality and Australia and New Zealand Dialysis and Transplant Registry (ANZDATA) data. It does not include people with ESKD who were not on the ANZDATA registry and did not die in the reference period.
- The coding list used to estimate ESKD from mortality data is conservative.
- For disaggregation by state and Indigenous status, data have been reported for four aggregated years to ensure statistical validity. Northern Territory estimates could only be reliably estimated for persons, and not by sex. Reporting one year's data only would mean that small states could not be reported.
- The Northern Territory has higher incidence rates of ESKD than other states/territories; however there is no clear difference between other states/territories from confidence interval analysis.
- Indigenous Australians have higher incidence rates of ESKD than non-Indigenous Australians, according to confidence interval analyses.

**Institutional environment:** The Australian Institute of Health and Welfare (AIHW) linked data from the ANZDATA registry, the National Death Index (NDI) and the AIHW National Mortality Database to calculate the numerator.

Completed ANZDATA records were supplied to the AIHW by the Australia and New Zealand Dialysis and Transplant Registry.

Mortality data was provided by the Australian Bureau of Statistics (ABS) to the AIHW.

The NDI is a national compilation of data on all deaths occurring in Australia. Data are supplied to the AIHW by Registrars of Births Deaths and Marriages (RBDM) from each state and territory and this results in a database which contains all deaths occurring in Australia since 1980.

The AIHW is an independent statutory authority within the Health and Ageing portfolio, which is accountable to the Parliament of Australia through the Minister. For further information see the AIHW website.

**Timeliness:** The reference period of the total Australian population is 2006. This is the most recent year for which mortality data are available.

Four years of data (2003, 2004, 2005 and 2006) were combined to provide estimates for the state/territory and Indigenous breakdowns, due to small numbers.

**Accessibility:** Aggregate ANZDATA reports are available free at their website [www.anzdata.org.au](http://www.anzdata.org.au).

The AIHW provides a variety of products for mortality data including online data cubes and reports.

Linked data are subject to regulations governing research ethics and are not available publically.

**Interpretability:** Information on how ANZDATA are collected can be found at [www.anzdata.org.au](http://www.anzdata.org.au).

Information on the mortality database can be found on the AIHW website and information on the ICD10 on the WHO website.

**Relevance:** This is an interim measure; the long-term measure requires linkage to hospital data.

ANZDATA is a register of all people in Australia receiving dialysis or kidney transplant to survive—that is, people with treated ESKD—and therefore is highly relevant to this indicator. The AIHW is confident that this dataset produces good counts of treated cases. Treated cases are grouped by state of first treatment. The AIHW is not involved in collecting and validating the data however, ANZDATA (ANZDATA 2009) report that they employ checks for validity on data received and query possible errors with the renal units who provide the data.

Mortality data are of high quality, however it is not certain that all untreated cases have been counted because cases can not be included when they die of an unrelated cause or do not have ESKD recorded on their death certificates even though it contributed to the death (Li et al. 2003). Untreated cases are grouped by state of registration of death.

Mortality data have incomplete Indigenous identification rates, therefore care should be taken when interpreting the data. Only states where identification is considered to be above 70% are included in the estimate (NT, Qld, SA, WA and NSW).

ANZDATA registry Indigenous identification is based on self-identification in hospital records. However it is believed that Indigenous identification in the Registry is more complete than in general hospital data (Cass et al. 2001).

Cass A, Cunningham J, Wang Z & Hoy W 2001. Regional variation in the incidence of end-stage renal disease in Indigenous Australians. *Medical Journal of Australia* 175:24–7.

Li SQ, Cass A & Cunningham J 2003. Cause of death in patients with end-stage renal disease: assessing concordance of death certificates with registry reports. *Australian and New Zealand Journal of Public Health* 27:419–24.

**Accuracy:** Each data source used in the construction of this indicator has broad population coverage and local data checking and validation processes.

This is the first time that reporting of ESKD incidence has included untreated cases, greatly increasing the accuracy of the estimate.

Confidence intervals were calculated to assess differences between state/territories and between Indigenous and non-Indigenous populations:

- Confidence intervals overlapped between most states and territories excluding the Northern Territory for the person rate.
- Indigenous Australians have higher incidence rates of ESKD than non-Indigenous Australians.

The count of untreated cases is likely to have missed some cases and included other non-cases due to coding issues. On balance it appears likely that this is an undercount, as indicated by 56% of ANZDATA cases who died having no mention of ESKD (as defined for this indicator) on their death certificate.

Linkage of ANZDATA to the NDI and then the Mortality Database found some discrepancies between the data sources:

- Matched records may have different dates of birth and dates of death on the ANZDATA and Mortality Database. Where there was a discrepancy the ANZDATA date was taken.

Cells have been suppressed to protect confidentiality (where the presentation could identify a person or a single service provider), where rates are highly volatile (for example, the denominator is very small), or data quality is known to be of insufficient quality (for example, where Indigenous identification rates are low).

**Coherence:** Incidence of ESKD has been reported previously, using a different methodology. This is the first time that reporting of ESKD incidence has included untreated cases.

## Source and reference attributes

**Submitting organisation:** Australian Institute of Health and Welfare

## Relational attributes

**Related metadata references:** Has been superseded by [National Healthcare Agreement: PI 03-Incidence of end-stage kidney disease, 2011 QS](#)

- [Health](#), Superseded 04/12/2012

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