



Australian Government
Australian Institute of
Health and Welfare



Investigating enhancements of Indigenous data in suicide-relevant data sets



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The AIHW is an independent statutory Australian Government agency producing authoritative and accessible information and statistics to inform and support better policy and service delivery decisions, leading to better health and wellbeing for all Australians.

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About the cover artwork:

Artist: Linda Huddleston

Title: The journey towards healing

At the centre of the artwork is the Clearinghouse. The black half-circles are the people who come to the Clearinghouse for information about mental health and suicide prevention.

The waves of red, yellow and white dots surrounding the inner circle represent strength and healing.

The footprints represent the journey towards healing.

The red and white circles around the edge represent different programs and policies aimed at helping people heal.

The hands represent success and wellbeing.

Caution: Some people may find the content in this report confronting or distressing.

Please carefully consider your needs when reading the following information about Indigenous mental health and suicide prevention. If you are looking for help or crisis support, please contact:

13YARN (13 92 76), Lifeline (13 11 14) or Beyond Blue (1300 22 4536).

The AIHW acknowledges the Aboriginal and Torres Strait Islander individuals, families and communities that are affected by suicide each year. If you or your community has been affected by suicide and need support, please contact the **Indigenous Suicide Postvention Services** on **1800 805 801**.

The AIHW supports the use of the [Mindframe guidelines](#) on responsible, accurate and safe suicide and self-harm reporting. Please consider these guidelines when reporting on these topics.



Summary

Under the 2020 National Agreement on Closing the Gap, all levels of government in Australia have committed to the reduction, towards zero, of suicide among Aboriginal and Torres Strait Islander people. To measure progress against this target, and to inform policy, there is a need for accurate and timely data about Indigenous suicide deaths and non-lethal intentional self-harm. However, further enhancements to data collection are needed to improve data quality and consistency within and between agencies and jurisdictions; to reduce the time taken to process deaths data; and to identify individuals and communities at risk.

Based on consultation and desktop research, this report makes four important contributions to our understanding of the sources of data that can inform our work to reduce Aboriginal and Torres Strait Islander suicide:

- It provides a detailed description of the key players and stages in the identification and recording of suicide and non-lethal intentional self-harm incidents among Aboriginal and Torres Strait Islander people.
- It brings together information on suicide-relevant data collections with national, state or territory coverage – including their purpose; their Indigenous status derivation; and their limitations.
- It identifies the sources of error in the classification of Indigenous status; of suicide as a cause of death; and of suicidal intent in cases of self-harm.
- It describes the work already underway to enhance the quality, consistency and timeliness of data collection and reporting, and work that needs to be undertaken.

Key findings

The report reveals a high amount of complexity, involving many players and many stages in the process of classifying, coding and interrogating data in suicide-relevant data sets. There is little standardisation in coronial and other reporting practices within and between jurisdictions and key players at different points in the process. This contributes to differences in data quality between jurisdictions. Efforts to address these issues have been made by agencies at both national and state and territory levels, but the scope of these enhancements tends to be limited to certain sectors or jurisdictions.

The statistically small number of incidents makes it difficult to achieve accurate estimates of suicide events – and community-level statistics among smaller populations, such as the Indigenous Australian population, can be misinterpreted. This is especially relevant when disaggregating by age group or by small geographical areas, where a single incident may give an impression of change in overall suicide rates. Reporting small numbers can also raise privacy and confidentiality concerns.



Supporting Indigenous Australians to identify in more settings will improve the consistency of Indigenous status within data sets and improve the accuracy of analysis using these data. Specific, evidence-based advice on how to collect Indigenous status data in crisis situations could facilitate more accurate data collection by ambulance, police and emergency department staff. Staff trained in the collection of Indigenous status in health-related data sets should also be able to address privacy concerns raised by clients. These changes could contribute the reduction of under-reporting and misclassification of data about Indigenous Australians.

Differentiating suicide attempts from non-suicidal self-injury is important for a number of reasons. A history of intentional self-harm (with or without the intention of dying) is one of the main predictors of suicide risk for individuals. Intentional self-harm rates can also be used as an indicator of suicidal behaviour in the community and help to identify communities most in need. Measuring changes in these rates would also allow more accurate evaluation of suicide prevention programs. However, using existing ICD-10-AM morbidity coding, intentional self-harm with lethal intent (suicide attempt) cannot be distinguished from self-harm with non-lethal intent. The report notes these limitations and welcomes implementation of ICD-11 across all health settings (including primary care) to improve identification of suicidal intent in morbidity coding.





1



Introduction



1 Introduction

Every life lost to suicide is a tragedy for family, friends, kin and communities. Although suicide and intentional self-harm are complex issues, they can be prevented. The Australian Institute of Health and Welfare respectfully acknowledges those who have died or have been affected by suicide or intentional self-harm.

Suicide among Aboriginal and Torres Strait Islander people is a matter of high priority for all levels of government in Australia. Under the National Agreement on Closing the Gap, governments have committed to a target of 'significant and sustained reduction in suicide of Aboriginal and Torres Strait Islander people towards zero' (PMC 2020:38). To measure progress against this target, it is critical to have accurate and timely data on deaths of Indigenous Australians due to suicide. Accurate data are also important in identifying communities at high risk of suicide and in monitoring changes, over time, in rates of deaths and hospitalisations due to intentional self-harm. However, producing accurate and timely data is not straightforward, due to the unreliable recording of Indigenous status (AIHW 2019b) and other factors. Data about deaths due to suicide are also affected by unclear suicidal intent and by lengthy coronial processes (Harrison et al. 2009). In addition, national data about non-lethal intentional self-harm are predominantly sourced from hospital administration data, missing instances of self-harm that do not result in presentation to hospitals (AIHW 2021d). These factors can affect the accuracy and timeliness of suicide-relevant data.

The Australian Institute of Health and Welfare (AIHW) published a report in 2019 on the extent of misclassification of Indigenous status in death records. Using data linkage, the AIHW found that, between 2001 and 2015, about 13.6% of male and 13.9% of female Indigenous death records had been misclassified as non-Indigenous. Adjusting estimates to include these additional misclassified records reduced life expectancy estimates of Indigenous Australians in 2001–2005, 2006–2010 and 2011–2015 by 2.6, 2.1 and 2.3 years for males and 1.6, 1.5 and 2.1 years for females, respectively (AIHW 2019b). Through the Census Data Enhancement project, the Australian Bureau of Statistics (ABS) also works to overcome the effect of misclassification on Indigenous life expectancy estimates. For 2015–2017, the ABS produced estimates of 71.6 and 75.6 years for males and females, respectively (ABS 2018b). Due to differences in methodology and reference periods, the AIHW and ABS estimates are not comparable, and it is also important to note that there are quality issues associated with the estimates produced by both agencies (ABS 2018b).

Suicide-relevant data

In 2018, suicide and self-inflicted injuries accounted for 4.6% of the total burden of disease for Indigenous Australians – the third highest burden, after coronary heart disease (5.8%) and anxiety disorders (5.3%) (AIHW 2022a). The Australian Government engages with state and territory governments, national agencies and key stakeholders to improve the availability and quality of Indigenous Australian health and mortality data, particularly data on deaths due to suicide. However, issues with suicide reporting have been identified over the decades in Australia. A number of national strategies have since highlighted accurate and timely reporting of suicide as an important target. Officially, deaths due to suicide are recorded and reported by the ABS as 'deaths due to intentional self-harm (suicide)' (ABS 2021). This report uses the term 'suicide' to mean deaths due to intentional self-harm.



A history of non-lethal intentional self-harm is a strong risk factor for future suicide attempts and suicide death (Chan et al. 2016). Intentional self-harm frequency has been associated with a greater likelihood of suicide attempt (Victor and Klonsky 2014). However, there is no agreed definition of 'intentional self-harm' in health literature. The term 'intentional self-harm' encompasses episodes of both suicidal and non-suicidal intent. However, suicide attempts are different from episodes of non-suicidal self-injury. Non-suicidal self-injury is used to cope with emotional distress without the intention to die, whereas the intention behind a suicide attempt is death (Taliaferro et al. 2019). In general, for the behaviour to be classed as intentional self-harm, it must be considered socially unacceptable in the person's community (Grandclerc et al. 2016). This report uses the term 'intentional self-harm' to mean deliberately hurting or injuring oneself in a way that is outside of cultural norms, with or without the intention of dying.

Given the strong link between intentional self-harm and suicide, intentional self-harm data can be used as a proxy measure to better understand suicidal behaviour and can also be used as a tool to evaluate suicide prevention programs (Owens et al. 2002). However, it is important to note that there are some limitations to this approach:

- At present, national intentional self-harm data are almost exclusively sourced from hospital administrative data. It is not possible to distinguish 'suicide attempts' from 'non-suicidal self-injury' in these data using current clinical coding systems.
- Suicide attempts do not always result in injury or presentation to hospital and therefore may not be fully captured in hospital data.
- Additionally, in some Indigenous Australian cultures, self-injury can have a cultural aspect (Farrelly and Francis 2009). There is potential for this to lead to false positives in intentional self-harm data (Black and Kisely 2017). Farrelly and Francis (2009) found that, while traditional forms of self-injury (such as mourning cuts or initiation rites) still occurred in some areas, the community was able to distinguish this from suicidal self-injury. It is unknown whether these traditional forms of self-injury result in presentation to hospital and therefore appear in these data.

What will this report do?

The key to improving the accuracy of data about Indigenous Australians in suicide-relevant data sets is to improve Indigenous identification during data collection. The AIHW is already working to enhance Indigenous identification in health data sets, often using data linkage. This report looks at the collection of suicide and intentional self-harm data, focusing on the collection and derivation of Indigenous status in relevant data sets. Where there has been a lack of publicly available information, data custodians and stakeholders have been consulted. Information gathered through these consultations has been used throughout the report.

The report will identify:

- the national data sets that can be used to provide information about suicide and suicidal behaviour among Indigenous Australians, and the limitations of these data
- the work that has been done to improve the identification of Indigenous Australians in these data sets, and how it can continue to be improved.



It will do this by:

- outlining the processes for recording suicide-relevant data, including how Indigenous identification is collected
- providing an overview of relevant national and jurisdictional data sets
- discussing the sources of error in these data sets
- identifying previous and ongoing enhancements and focus areas for further enhancements.



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Suicide deaths and intentional self-harm data collection



2 Suicide deaths and intentional self-harm data collection

Suicide deaths data collection

The production of deaths data is complex, involving funeral directors, grieving families, and jurisdictional and national agencies at different stages. Deaths from external or unknown causes – including cases of known or suspected suicide – are referred by police or by a medical doctor to that jurisdiction's coroner for investigation to confirm the cause of death (Harrison et al. 2009). In 2020, 161,300 deaths were registered, of which 12.6% (around 20,300) were certified by a coroner (ABS 2021).

Recording of cause of death data starts at the beginning of the coronial investigation. Any new cases added to court case-management systems are uploaded to the National Coronial Information System (NCIS) each night, with additional information updated as the case progresses. For example, added information normally includes a report from a forensic pathologist based on post-mortem examination (autopsy) of the body.

Meanwhile, the Registrars of Births, Deaths and Marriages (RBDMs) in each state and territory are notified of the death via the death registration form (DRF). The DRF is lodged by a funeral director working with a relative or other person well-acquainted with the deceased, or by an official of the institution where the death occurred. The main function of the DRF is as a legal identity document, as well as a compliance document to show that the body has been appropriately buried or cremated. The DRF also collects demographic information about the deceased, including whether that person was of Aboriginal or Torres Strait Islander origin.

The RBDMs also receive the report from the forensic pathologist (known as a coroner's note or autopsy certificate), which is then sent to the Australian Bureau of Statistics (ABS). For all states and territories, except New South Wales and Victoria, the coroner's note includes Indigenous origin information about the deceased. The source of Indigenous status on the coroner's note varies between jurisdictions, with some relying on the police report of death and others using community engagement to improve identification (see Table 3.1). The ABS uses the Indigenous origin information on the coroner's note to supplement the Indigenous status provided on the DRF. However, neither New South Wales nor Victoria includes this information on the coroner's note (ABS 2021).

While the coronial investigation is still under way, the ABS uses records from the RBDMs and the NCIS to code a preliminary underlying cause of death. The ABS uses coding rules from the International Classification of Diseases and Related Health Problems, 10th revision (ICD-10) for mortality statistics. Suicide deaths are coded as 'intentional self-harm' using codes in the range X60–X84 and Y87.0 (ABS 2021).

Coded data are then returned to source agencies, before being sent to the Australian Coordinating Registry (ACR) and back to the ABS to be turned into the Cause of death unit record file (COD URF). The COD URF is then distributed by the ACR to approved agencies, such as the AIHW and NSW Department of Health (see Figure A.1). The ACR manages access to the Cause of death unit record file on behalf of all Australian RBDMs and the NCIS (Queensland Government 2021).



Cause of death data are finalised once the case is closed on the NCIS. Cases are closed on the NCIS when the coroner's investigation has been completed, and all required data entry has been performed by the court.

To improve the timeliness of data from coroner-certified deaths, the ABS releases data to the public for any given reference year in 3 stages:

- 'preliminary data', which may be subject to change as coronial processes are finalised
- 'revised data', which are released 12 months after the initial release and include any updates to causes of death from coronial cases that have been closed since initial processing
- 'final data', which are released 24 months after the initial release and incorporate any coronial cases closed after the previous revision.

For more information about the death registration and coding processes, see Appendix A.

Intentional self-harm data collection

When a person presents to hospital, the treating clinician will record notes relevant to each episode of care (such as diagnoses and interventions) to support clinical decisions. Specialist clinical coders then review those notes and assign codes to diagnoses from the International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification (ICD-10-AM). Intentional self-harm diagnoses are assigned principal diagnosis codes in the category range S00–T75 and category T79 (injury, poisoning and certain other consequences of external causes), with 'intentional self-harm' given codes in the range X60–X84 and Y87.0 (external causes of morbidity) (AIHW 2021a). Intentional self-harm, however, can be difficult to distinguish from other types of injury in clinical settings, so under-reporting of self-harm hospitalisations is possible. In addition, ICD-10 and ICD-10-AM do not differentiate between suicide attempt and non-suicidal self-harm. Whether a person intended to end their life when self-harming is therefore not captured in the data. The states and territories then report the coded clinical data, along with demographics and other information about the episode of care, to the National Hospital Morbidity Database held by the AIHW (AIHW 2021d).

Data on non-lethal intentional self-harm can provide an insight into suicidal behaviour. It is an imprecise measure, as intentional self-harm can occur with or without suicidal intent. Suicide attempt data are rarely reported separately from intentional self-harm because of the difficulty of determining whether the person presenting to hospital intended to end their life. Even though not all self-harming behaviour is suicidal, a history of self-harming is a strong risk factor for suicide.

Intentional self-harm is likely to be under-reported because reporting relies on data collected by hospitals, supplemented by data from the [National Ambulance Surveillance System](#). However, international research has shown that primary health-care settings are often the first point of contact for people experiencing self-harm or suicidal ideation (Marchant et al. 2020). In Australia at present, diagnostic information from primary health-care services – such as, Aboriginal Community Controlled Health Services, government-provided Indigenous specific clinics, or mainstream GP (general practice) clinics – is not reported in any national data sets. This may affect reporting for Indigenous Australians disproportionately, because of the geographical distribution of the population. In areas distant from the nearest hospital, mental health care is largely provided by primary health care services, such as Aboriginal Community Controlled Health Services (AIHW and NIAA 2020).



3



National suicide- relevant data sets



3 National suicide-relevant data sets

As outlined in Section 2, the collection of suicide-relevant data is complex and involves many different individuals and agencies. At present, there are 2 main types of suicide-relevant data in Australia: deaths data and non-lethal intentional self-harm data.

- Data about deaths due to suicide are generally collected by police, coroners' courts and Registrars of Births, Deaths and Marriages (RBDMs); coded by the Australian Bureau of Statistics (ABS); and ultimately distributed by the Australian Coordinating Registry (ACR) to key national mortality data collections in Australia.
- Non-lethal intentional self-harm data are collected from hospital administrative data in each jurisdiction and are held by the AIHW.

The data sets described in Table 3.1 are sources of national or state and territory data for suicide deaths or intentional self-harm incidents. These data sets use different methods for collecting and deriving Indigenous status, as set out in Table 3.1, along with the key limitations for each collection. It is important to note that significant work has already been done to improve the quality of Indigenous identification and the accuracy of suicide and self-harm data in many of these collections. These improvements are outlined in Section 5.

Table 3.1: National suicide-relevant data collections and their limitations

Data collection	Custodian	Coverage	Description	Indigenous status derivation	Limitations
Causes of Death, Australia	Australian Bureau of Statistics	National	Source of deaths data, including deaths due to suicide. Main source of cause of death data in Australia. Contributes to other key collections, such as the National Mortality Database and the National Coronial Information System via the Cause of death unit record file (COD URF). The COD URF also contains the enhanced Indigenous status value determined by the ABS, and is therefore a source of Indigenous status for other key mortality data collections. Contains data on causes of death coded to the International Classification of Diseases (ICD), as well as numbers of deaths by sex, age and Indigenous status. Coding of death by intentional self-harm determined by ABS analysis of coroners' reports. The Causes of Death, Australia collection is updated annually and released in September each year. Non-reportable deaths are updated more frequently in the Deaths, Australia reports, released approximately monthly. Coroner-certified deaths, including suicide, are usually only updated annually, due to the time needed for coronial investigations.	Indigenous status for coroner-certified deaths, including intentional self-harm deaths, are derived from the Death registration form (DRF) and, for all states and territories except NSW and Victoria, from the coroner's note (autopsy certificate). If the deceased is listed as Aboriginal and/or Torres Strait Islander on either of these records, then the ABS records that person as Indigenous. The source of Indigenous status on the coroner's note varies between jurisdictions, but in most instances is drawn from the police report of death to a coroner. Police may source this information from the family of the deceased, from health records or from police records – however, this process is not standardised across jurisdictions. For all other deaths in the Causes of Death, Australia collection, Indigenous status is derived from the DRF and the Medical certificate of cause of death (MCCD). If the Indigenous status of the deceased differs between these sources, then an identification of 'Aboriginal and/or Torres Strait Islander' from either source is given preference over an identification of non-Indigenous or unknown status (ABS 2021).	The number of deaths registered as Indigenous in Vic, Tas and the ACT, and the correspondingly small number of suicide deaths introduces random error, preventing comparisons of suicide deaths over time for these jurisdictions (ABS 2021). The small number of deaths could be due to a small Indigenous Australian population in these jurisdictions or due to data quality issues in the recording of Indigenous status on death records. A number of deaths occur each year for which Indigenous status is not stated on the death registration form. In 2020, Indigenous status was 'Not stated' in 0.7% (1,195) of all registered deaths. For NSW and Vic, the DRF is the sole source of Indigenous status information (ABS 2021). Coronial processes mean that there are long time lags between the date of death and the release of data for coroner-certified deaths. To improve timeliness, the ABS releases data annually in 'preliminary', 'revised' and 'final' versions. Lagged registrations for reportable deaths can create large yearly variations in the data for causes of death where numbers are statistically small, such as suicide among Indigenous Australians.

(continued)

Table 3.1 (continued): National suicide-relevant data collections and their limitations

Data collection	Custodian	Coverage	Description	Indigenous status derivation	Limitations
National Mortality Database (NMD)	Australian Institute of Health and Welfare	National	Deaths data, sourced from the COD URF. Contains records of deaths in Australia from 1964. Data are supplied to the AIHW in the COD URF by the Australian Coordinating Registry (ACR). NMD is included in the National Integrated Health Services Information Analysis Asset (NIHSI AA). Key source for the AIHW National Suicide and Self-harm Monitoring System. Annual updates.	All data, including Indigenous status, are sourced from the COD URF. The COD URF includes Indigenous status as determined by the ABS.	Inconsistent data collection and reporting practices between coroners' courts in different jurisdictions mean that the type and quality of data supplied varies. Additionally, the complexity of processes surrounding reportable deaths means that data development activities undertaken by individual coroners' courts may not flow through to the ABS. Data collection processes for Indigenous status are not standardised across police services in different jurisdictions, resulting in inconsistent data quality. The National best practice guidelines for collecting Indigenous status in health data sets, released in 2010, are general guidelines that could also be used by police services.
				Same data quality and timeliness issues as for the Causes of Death, Australia collection. NMD only includes finalised causes of death data, which means the latest data included in the database are for 2–3 years prior to the present year.	

(continued)

Table 3.1 (continued): National suicide-relevant data collections and their limitations

Data collection	Custodian	Coverage	Description	Indigenous status derivation	Limitations
National Coronial Information System (NCIS)	NCIS	National	Source of suicide deaths data. Contains data on coroner-certified deaths for all Australian states and territories from 2000 (except Queensland, which commenced in 2001). Reports include police, autopsy, toxicology and coroners' findings. Information on risk factors such as mental health conditions, lifestyle factors, or chronic diseases may be included in these reports. The ABS has access to the NCIS collection for cause of death ICD-10 coding. ICD-10 codes are incorporated back into the NCIS via the provision of a Cause of death unit record file (COD URF).	The NCIS uses 2 fields for Indigenous identification. The first is the <i>Indigenous origin</i> data field which is provided by the coronial offices, and the second is the <i>Indigenous status</i> field from the Births, Deaths and Marriages registries (RBDMs) in each state and territory (via the COD URF). Indigenous origin is primarily collected by police on the police report of death form. The Indigenous origin question used on these forms differs between jurisdictions. Indigenous origin may be updated during the course of the coronial investigation (particularly in the state of Victoria, where there is a formal process for determining whether the deceased is Aboriginal and/or Torres Strait Islander).	Indigenous identification is known to be under-reported in coronial data and the quality varies between jurisdictions. The NCIS supplements the <i>Indigenous origin</i> field used by the coroners with the <i>Indigenous status</i> field provided by RBDMs in each state and territory. The same field is used in the ABS Causes of Death, Australia collection and its limitations are covered above (NCIS 2021). Indigenous origin data from the Coroners Court of Victoria prior to 2018 is not reliable. However, data collection has improved since the implementation of the Koori Engagement Unit (CCOV 2022).
State/Territory Registries of Births, Deaths and Marriages	RBDMs	National	Source of demographic data, including Indigenous status, for suicide deaths. Demographic data are collected on the Death registration form (DRF). One of the sources of Indigenous status in the ABS Causes of Death, Australia collection.	Indigenous status is provided by next of kin, by another person who knew the deceased, or by an official of the institution where the death occurred. Indigenous status collected on the DRF (often by the funeral director) is then sent to the RBDM of the state or territory where the death occurred.	A number of deaths occur each year for which Indigenous status is not stated on the death registration form. In 2020, 1,195 (0.7%) of all registered deaths did not have Indigenous status stated (ABS 2021). Using linkage with 2016 census data, the ABS found that the number of deaths identified as Aboriginal and/or Torres Strait Islander through the Death registration form (DRF) or the Medical certificate of cause of death (MCCD) was less than

(continued)

Table 3.1 (continued): National suicide-relevant data collections and their limitations

Data collection	Custodian	Coverage	Description	Indigenous status derivation	Limitations
NSW Suicide Monitoring System	NSW Ministry of Health, NSW Department of Communities and Justice, the State Coroner and NSW Police	New South Wales	Source of suicide and suspected suicide deaths data for New South Wales. Established in October 2020. Reports are published 8 weeks after the last day of the reporting month. Monthly updates. Key source for the AIHW National Suicide and Self-harm Monitoring System.		expected for several jurisdictions (ABS 2018b). This work is expected to be repeated with results from the 2021 census. Data based on suspected suicides are estimates only. Suicide deaths of Indigenous Australians are not reported.
Victorian Suicide Register (VSR)	Coroners Court of Victoria (CCOV)	Victoria	Source of suicide and suspected suicide deaths data for Victoria. Contains case information about reported suicide deaths from 2010. Primary purpose is to assist coroners to make recommendations. Key source for the AIHW National Suicide and Self-harm Monitoring System. Funded by the Victorian Department of Health. Monthly reports.	The Coroners Court of Victoria has a 5-stage process to identify Aboriginal and Torres Strait Islander cases among deaths referred to the court: 1. Mortuary staff ask the police or medical doctor referring the case whether the deceased is Aboriginal or Torres Strait Islander. 2. The police report of death (VP Form 83: Police report of death to a coroner) contains an Indigenous origin question. 3. The CCOV Statement of Identification (SOID) form contains an Indigenous origin question. 4. Once the body has been received by the mortuary, the Coronial Admission and Enquiry team contact the family to establish the senior next of kin and to ask about Indigenous origin.	Poor data quality for Aboriginal and Torres Strait Islander identification prior to 2018. Identification post-2018 has improved due to the introduction of a Koori Engagement Unit in the CCOV (CCOV 2022).

(continued)

Table 3.1 (continued): National suicide-relevant data collections and their limitations

Data collection	Custodian	Coverage	Description	Indigenous status derivation	Limitations
Interim Queensland Suicide Register (iQSR)	Australian Institute for Suicide Research and Prevention, Griffith University	Queensland	Source of suspected suicide deaths data for Queensland. Includes information on suicide deaths of all residents of Queensland since 2011. Real-time data obtained from the Queensland Police Service (QPS) via the police report of death form. Data are reported by year of occurrence, rather than year of registration. Reports regional data to the PHN (Primary Health Network) level. Key source for AIHW Suicide and self-harm monitoring.	5. If any of the stages above indicate that the deceased is of Aboriginal or Torres Strait Islander origin, the Koori Engagement Unit will call the family to confirm the Indigenous status of the deceased and to offer assistance to the family. Collected by police on the police report of death (QPS Form 1: Police report of death to a coroner).	Data based on suspected suicides are estimates only. The quality of Indigenous identification by police can be inconsistent.
Queensland Suicide Register (QSR)	Australian Institute for Suicide Research and Prevention, Griffith University	Queensland	Source of confirmed suicide deaths data for Queensland. Includes information on confirmed suicide deaths of all residents of Queensland since 1990, including for Queensland residents who have died in other jurisdictions. Data obtained from the iQSR and the NCIS. Sources include police reports, post-mortem and toxicology reports. Data are reported by year of occurrence, rather than year of registration.	The QSR uses the Indigenous origin from the NCIS, where available. For recent years, in instances where Indigenous origin is not yet available in the NCIS, the QSR uses Queensland RBDM Indigenous status instead.	Same data quality and timeliness issues as for the NCIS, particularly as the QSR uses only the Indigenous origin, rather than the supplementary Indigenous status field.

(continued)

Table 3.1 (continued): National suicide-relevant data collections and their limitations

Data collection	Custodian	Coverage	Description	Indigenous status derivation	Limitations
Tasmanian Suicide Register (TSR)	Magistrates Court of Tasmania, Coronial Division	Tasmania	Source of suicide and suspected suicide deaths data for Tasmania. Joint initiative between the Tasmanian Departments of Justice and Health. Contains over 100 unique variables that are sourced from primary documents, including coronial findings, police reports of death, autopsy/toxicology reports, medical records and witnessed affidavits.	From coronial records, such as coronial findings, police reports of death, autopsy/toxicology reports, medical records and witnessed affidavits (Magistrates Court of Tasmania n.d.).	Data based on suspected suicides are estimates only. The quality of Indigenous identification by police can be inconsistent.
South Australian suicide register	Coroners Court of South Australia	South Australia	Established in 2022		At the time of writing, no data have been reported from this register.
National Ambulance Surveillance System (NASS)	Turning Point and Monash University	New South Wales, Victoria, Queensland, Tasmania and Australian Capital Territory	Source of intentional self-harm and suicidal behaviour data. Data for the NASS are compiled by Turning Point in partnership with Monash University and are sourced from paramedic electronic patient care records (ePCRs) provided by Australian state and territory-based ambulance services. The AIHW has contracted Turning Point through Monash University to develop the NASS for self-harm related attendances. Ambulance attendance data includes 1-month per quarter snapshots from New South Wales, Victoria, Tasmania and the Australian Capital Territory from 2018 to 2021, and Queensland from 2020 to 2021.	Indigenous status is not reported. Data are collected for operational rather than monitoring or research purposes; no additional information is requested by researchers. Paramedics only record data they deem clinically relevant to patient care. Data comes from what the paramedics observe or have provided to them by the patient or bystanders. It is possible that relevant information with respect to self-harm or mental health variables is not recorded, or that similar events may not be recorded consistently by different paramedics over time (AIHW 2022d).	

(continued)

Table 3.1 (continued): National suicide-relevant data collections and their limitations

Data collection	Custodian	Coverage	Description	Indigenous status derivation	Limitations
National Hospital Morbidity Database (NHMD)	Australian Institute of Health and Welfare	National	Information is obtained and coded through manual scrutiny of de-identified ePCRs. Intent of self-harm behaviours derived from the ePCR may be from either stated or physical evidence, or where there is evidence, but the patient may have denied the behavioural intent (Lubman et al. 2020). Source of data on intentional self-harm hospitalisations. The NHMD is a compilation of episode-level records from admitted patient morbidity data collection systems in Australian hospitals. It is a comprehensive data set that has records for all episodes of admitted patient care from essentially all public and private hospitals in Australia (AIHW 2022d). The data supplied are based on the National Minimum Data Set (NMDS) for Admitted Patient Care and include administrative, demographic, clinical and length of stay data, as well as data on the diagnoses of the patients, the procedures they underwent in hospital and external causes of injury and poisoning (AIHW 2022d).	Indigenous status is collected from the patient or parent/guardian on hospital admission forms. Collection practices vary between hospitals and jurisdictions.	The data quality statement for Admitted Patient Care (AIHW 2019a) states: Separations for Aboriginal and Torres Strait Islander people are generally under-enumerated in the NMDS for Admitted Patient Care. In 2011–12, about 88% of Indigenous Australians were identified correctly in hospital admissions data, and the 'true' number of separations for Indigenous Australians was about 9% higher than reported. The quality of the data for private hospitals is not known, but likely to be poor. Variations in admission practices and policies lead to variation among providers in the number of admissions for some conditions and procedures (such as chemotherapy and endoscopies).

(continued)

Table 3.1 (continued): National suicide-relevant data collections and their limitations

Data collection	Custodian	Coverage	Description	Indigenous status derivation	Limitations
			The scope of the NMDS includes episodes of care for admitted patients in all public and private acute and psychiatric hospitals; free standing day hospital facilities; and alcohol and drug treatment centres in Australia. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's offshore territories are not in scope but may be included (AIHW 2022d). NHMD is included in the NIHSI AA. Quarterly or annual updates.		There is also some variation between states and territories as to whether hospitals that predominantly provide public hospital services, but are privately owned and/or operated, are reported as public or private hospitals. From 2011–12, there are changes in coverage or data supply from New South Wales, Victoria, Queensland, Western Australia, South Australia and the Australian Capital Territory which may affect the interpretation of the data over time. Changes to care type definitions affect the comparability of data over time. The overall quality of the data provided for Indigenous status is considered to be in need of some improvement and varies between states and territories. Data on state or territory of hospitalisation should be interpreted with caution because of cross-border flows of patients. Changes in the ICD-10-AM/ACHI classifications and the associated Australian Coding Standards may affect the comparability of the data over time.



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Sources of error in suicide- relevant data



4 Sources of error in suicide-relevant data

As outlined in Section 3 of this report, there are considerable limitations to the quality and scope of key suicide-relevant data sets, particularly in relation to the identification of Aboriginal and Torres Strait Islander people in the data. These issues are sources of error in the data and are largely due to inconsistent data collection, leading to variable data quality over time and between jurisdictions.

Section 4 will discuss the main issues underlying these limitations, starting with sources of error specific to suicide-relevant data about Indigenous Australians, followed by sources of error affecting suicide-relevant data for all Australians. It is important to note that the collection of suicide-relevant data is complex and sensitive, and that there is considerable work that has been and is being done to address these issues. These will be presented in Section 5.

Sources of error affecting Aboriginal and Torres Strait Islander suicide-relevant data

Cultural safety at points of data collection

‘Cultural safety’ is a term that has been used in the health context for some time and is now applied more broadly to other contexts, such as education and general workplaces. It requires creating an environment where Indigenous cultural values, strengths and differences are respected, and racism and inequity are addressed (AIHW 2022b). Importantly, it is not the service or organisation that decides whether the space is culturally safe. Rather, it is the experience of the Indigenous person using the space that determines cultural safety (AIHW 2022b).

Reduced propensity for individuals to identify as Indigenous

Identifying as Aboriginal or Torres Strait Islander is voluntary. This is not a misclassification but does contribute to under-reporting, particularly in morbidity data. The likelihood of someone self-identifying is known as their propensity to identify (ABS 2021) and the decision about whether to identify is influenced by the environment and circumstances in which a person is asked the question (NSW Aboriginal Affairs 2015). Cultural safety is about the patient’s experience of health care (AIHW 2022b) and a feeling of poor cultural safety can reduce the propensity to identify.

The reasons people may choose not to identify include:

- fear of having their Indigenous identity challenged, particularly for descendants of Indigenous Australians who were removed from their families as children
- concerns about privacy and the use of the information
- racism, discrimination and stereotyping (NSW Aboriginal Affairs 2015).

Mainstream services may be viewed as culturally unsafe when Indigenous cultural values, strengths and differences are not respected, and racism and inequity are not addressed (AIHW 2022b). This can also affect the recruitment and retention of Indigenous Australian staff (Farrelly and Carlson 2011).



Reduced engagement with coronial processes

Like health services, the perception of poor cultural safety at the coroners' court can limit the engagement of Indigenous Australians with coronial processes. Mistrust of police and justice systems may prevent families and witnesses being forthcoming with police and coronial staff. In many parts of Australia, such as regional New South Wales, the Australian Capital Territory and the Northern Territory, the role of the coroner is fulfilled by a magistrate. This may add to the mistrust of coronial investigations for Indigenous Australians, who are more likely to have had contact, or to have had family or kin in contact, with the criminal justice system (AIHW and NIAA 2022). In addition, the formality, complexity and long timeframes of coronial processes can be traumatic for grieving families, further reducing the willingness to engage (ALS NSW/ACT 2021). With poor engagement from families and witnesses, the coroner may not be able to make accurate findings or meaningful recommendations. In addition, a culturally unsafe environment can negatively affect the recruitment and retention of Indigenous Australian staff (Farrelly and Carlson 2011).

Misclassification of Indigenous status during data collection

Best-practice guidelines for collecting Indigenous status information state that everyone receiving a health service should be asked about their Indigenous status (AIHW 2010). However, in services with poor cultural awareness, staff might ask people inconsistently, or ascribe Indigenous status based on a person's appearance. This practice may be particularly common in contexts where suicide data are collected, particularly in agencies with poor cultural sensitivity. For example, suicide data is often recorded by police, paramedics and medical professionals at the location of a crisis event, within an ambulance, or at a hospital. The sensitive nature of these events may discourage staff from asking family or close friends about the Indigenous status of the deceased, for fear of adding to the family's distress (Dudgeon and Luxford 2017).

Alternatively, police and coronial staff may be unable to determine a deceased person's Indigenous status. A person's Indigenous status can be unknown for various reasons. For example, police or coronial staff may be unable to verify the Indigenous status of a member of the Stolen Generations who was not known as Indigenous in the community and who never identified when using health services. These issues can lead to staff making assumptions about someone's Indigenous status, resulting in Indigenous Australians being misclassified as non-Indigenous, or non-Indigenous people being misclassified as Aboriginal or Torres Strait Islander.

Complexity of processes surrounding a reportable death and limited visibility of improvements across agencies

There is little publicly available information on the processes used to collect Indigenous identification. Processes surrounding a reportable death are complex. Consultations for this report revealed that individuals working with these data sometimes had limited knowledge of the data sources and processes used by other agencies. Differing data collection procedures and forms between jurisdictions, as well as the sheer number of individuals and agencies involved, adds further complexity. In addition to families, funeral directors and doctors, there are around 35 national, state and territory agencies responsible for the collection, collation or processing of Indigenous data in the Cause of death unit record file (COD URF).



These include:

- State/territory police services
- State/territory forensic medicine services
- State/territory coroners' courts
- State/territory Registries of Births, Deaths and Marriages
- Australian Coordinating Registry
- National Coronial Information System
- Australian Bureau of Statistics

Some jurisdictional coroners' courts are implementing changes to improve the identification of Indigenous Australians among the deaths referred to the court. However, due to the complexity surrounding deaths data, data improvement processes undertaken by individual agencies do not automatically translate to an improvement in national reporting. For example, since the Koori Engagement Unit was established at the Coroners Court of Victoria (CCOV) in 2019, it has made a concerted effort to improve the identification of Indigenous Australians among the deaths referred to the coroner in that state. This involves a system with 5 points at which the deceased person may be identified as Aboriginal or Torres Strait Islander (see Table 3.1). The Koori Engagement Unit also works with funeral directors at the time the body is released to the funeral home to ensure that funeral directors have the correct Indigenous status on their records. The work done by this unit to improve suicide data for Indigenous Australians within Victoria has been considerable.

However, the CCOV collects these data for internal and community use, rather than national reporting purposes. While the ABS so far has not been involved in these changes, national data may have benefitted from the CCOV's 5 point identification system. If the enhanced data are captured on the forms the ABS uses to collect Indigenous status data, then it is likely that this work has already improved the quality of Indigenous identification among coroner-certified deaths in the Cause of death unit record file. (However, consultation with the ABS for this report indicated that this will still need to be confirmed.)

Statistically small numbers of incidents

Deaths due to suicide are statistically rare events, with widespread and devastating impacts on communities. The small number of incidents makes it difficult to achieve accurate estimates of suicide events. Reporting small numbers can also raise privacy and confidentiality concerns. For smaller populations, such as the Indigenous Australian population, suicide rates can appear to fluctuate from one period to the next. This is referred to as 'random variability', where variation between time periods is the result of random factors rather than underlying systemic issues or emerging clusters. This is especially relevant for subgroups of populations: for example, when disaggregating by age groups or small geographical areas (AIHW 2022g). These factors present challenges when making estimates of suicide rates among Indigenous Australians – particularly for smaller geographic units such as community-level reporting. When attempting to calculate the suicide risk of communities with small populations, a single suicide event can increase the calculated rate of suicide for the area for that year. As a result, assessing community-level statistics about suicide among Indigenous Australians requires several years of data because the rate will vary from one year to the next.



Sources of error affecting suicide-relevant data for all Australians

Unclear intent in intentional self-harm incidents and deaths

The reasons why people attempt suicide are complex. Intent is not always clear when a suspected suicide attempt or suicide death occurs. Suicide acts may be impulsive or planned, and people who die by suicide can have many risk factors (CARC 2010). The process of determining whether a person had suicidal intent leading to their death can be long and difficult. It is also important to note that Indigenous Australians may be exposed to unique risk factors that do not affect the rest of the population, such as ongoing trauma due to past policies of child removal (AIHW 2022f). More information about these unique factors can be found in the [Protective and risk factors for suicide among Indigenous Australians](#) report by the AIHW Indigenous Mental Health and Suicide Prevention Clearinghouse.

A history of intentional self-harm or injury (with or without the intention of dying), is one of the main predictors of suicide risk (Cooper et al. 2005). After an incident of intentional self-harm or a suicide attempt, emergency departments are often the first point of contact with health professionals (Da Cruz et al. 2011). As shown in Section 3, in Australia, hospitals are the only source of national-level data on episodes of non-lethal intentional self-harm. Intentional self-harm injuries are therefore only documented if a person is medically treated for this injury at a hospital or, in some jurisdictions, attended by ambulance. Monitoring intentional self-harm incidents in this way can be difficult, because cases of self-harm may be unreported if medical treatment is not required. Other information that may help to determine suicidal intent – like mental ill-health, psychological distress, or suicidal ideation – may also go unrecorded or remain undisclosed by the person involved (Hedegaard et al. 2018; Lubman et al. 2020). Without this information, it can be difficult to know whether a case of intentional self-harm was a suicide attempt.

Similarly, in some instances of death due to suicide (such as a single-vehicle collision or the overdose death of a habitual drug user), the intent may be unclear and the coroner may find that the cause of death is due to ‘misadventure’ (accident) or that it remains undetermined (CARC 2010). Other cases of suicide may not be referred to a coroner at all – such as where there are serious underlying health conditions – because the manner of death appears similar to natural causes of death. In New South Wales, for example, a doctor certifying a death due to natural causes does not need to have a ‘complete understanding of the mechanism by which the condition progressed to be fatal’ (Coroners Court of NSW 2020). These situations can arise because the deceased person purposefully obscured the fact that the death was due to suicide. The family of the deceased may also wish to avoid an inquiry due to stigma around suicide and self-harm (Harrison et al. 2009; CARC 2010).

Limitations of ICD-10-AM morbidity coding

Morbidity coding in Australia at present is done using the ICD-10 (International Statistical Classification of Diseases and Related Health Problems, 10th revision) with an Australian Modification (ICD-10-AM). Using ICD-10-AM, intentional self-harm with lethal intent (suicide attempt) cannot be distinguished from intentional self-harm with non-lethal intent. Intentional self-harm rates are used as an indicator of suicidal behaviour in the community. However, as intentional self-harm without



lethal intent is a different phenomenon to suicide attempt, intentional self-harm rates are a blunt measure. Measuring suicide attempts would allow more accurate evaluation of suicide prevention programs, as well as help identify communities most at risk.

The [World Health Organization](#) has released ICD-11, which will ultimately supersede ICD-10 and ICD-10-AM. ICD-11 has additional capacity which allows for specific suicide attempt classification using extension codes to capture psychosocial risk factors, previous suicide attempt and intention to die. (For specific extension codes, see Appendix B). ICD-11 is also designed to be implemented across all health settings, including primary care. General practices and other primary health services are in a unique position to capture self-harm and suicidal behaviour data before the patient reaches crisis point.

However, the implementation of ICD-11 nationally is no small undertaking. The revision has been in development since 2007 and a first draft was released for testing in 2011. Field testing commenced in Australia in 2016–17, with the AIHW and ABS testing ICD-11 for morbidity and mortality coding, respectively (AIHW 2022e). However, the decision on when and how to implement ICD-11 in Australia is yet to be made (AIHW 2022h). The AIHW is leading the work to further assess the implications of its implementation: heading the Australian ICD-11 Task Force; conducting stakeholder workshops; and gathering evidence on whether ICD-11 is fit for purpose for different use cases in Australia (AIHW 2022e, 2022h).

Time lags in finalising suicide deaths data

Difficulty determining the suicidal intent of a case can lead to long time lags between when data of a suspected suicide incident are collected and when finalised data are released in national reports. Some coronial cases can take months or years to close, for instance, if there is an inquest or a complex investigation. As a result, the assembling and national reporting of final numbers of deaths by suicide has a time lag of up to 18 months (AIHW 2022g; Dudgeon and Luxford 2017). Without timely and accessible data, it is difficult for jurisdictions to make reliable, up-to-date estimates of suicidal behaviours. This can hinder a jurisdiction's ability to take appropriate action to prevent the suicide of other Indigenous Australians (Dudgeon & Luxford 2017). To overcome this, several jurisdictions have established suicide registers which report on suspected suicides. However, data from suicide registers are not directly comparable with finalised suicide data released in the Causes of Death, Australia collection.

Differences between jurisdictions in the determination of death due to suicide

In Australia, only coroners can legally make routine determinations of suicide for the purposes of mortality coding (Tait et al. 2018). However, the legal definition of suicide is not standardised across Australian jurisdictions. Australian law does not precisely describe which acts are considered intentional acts to end life (Jowett et al. 2019). Whether a death is determined to be suicide depends on the discretion of the coroner and on their interpretation of legislation (Tait et al. 2018). There is little standardisation in coronial reporting practices within and between jurisdictions, meaning that coronial findings about suicidal intent can be worded in different ways. There may not be any statement regarding intent, and if there is, it may be located anywhere within the coroner's report (CARC 2010).



Although the coronial system in Australia plays a key role in determining suicide, no state or territory Coroners Act requires a coroner to make an explicit determination of suicidal intent (Jowett et al. 2019). Terminology across state and territory legislation has been found to be inconsistently interpreted. For example, the 'cause of death' required in legislation can be interpreted by coroners to be solely the medical cause, or to include any relevant circumstances which indicate suicidal intent. An explicitly reported finding of suicidal intent depends on the coroner's discretion, if they believe it is relevant to the circumstances of death (Jowett et al. 2019). In South Australia, for example, the deceased's intention is not reported unless an inquest has been held, and inquests are only mandatory when a death occurs in a custodial setting. Therefore, for the majority of deaths due to suicide occurring outside custodial settings, South Australian coroners feel they are not permitted to make a finding on suicidal intent (De Leo et al. 2010). By contrast, inquests are held for all reportable deaths in the Australian Capital Territory and the manner of death must be determined in the findings (Jowett et al. 2019). (For a comparison of the findings that may be made in each jurisdiction, see Appendix C). Therefore, there are inconsistencies between jurisdictions in the determination of death by suicide (Harrison et al. 2009; CARC 2010).



5



Previous and ongoing enhancements



5 Previous and ongoing enhancements

In the last 15 years, considerable efforts have been made to improve the quality of Indigenous status data and of suicide-relevant data more generally. In this section, the report will provide an overview of key enhancement activities and initiatives that have been completed or that are under way. Data linkage enhancements have been included here due to their importance in improving reporting, given the current limitations of Indigenous identification in key data sets. The data collection enhancements identified in this section have been used to inform the focus areas for future enhancement, as discussed in Section 6.

The previous and ongoing enhancements have been grouped as follows:

- Enhancements to the collection of Indigenous status in suicide-relevant data sets
- Enhancements to the collection of Indigenous status in other data sets
- Enhancements to suicide deaths data
- Enhancements to intentional self-harm injury data
- Enhancements to Indigenous data reporting.

Enhancements to the collection of Indigenous status in suicide-relevant data sets

- The Coroners Court of Victoria (CCOV) has improved the identification of Aboriginal and Torres Strait Islander people in its suicide data through the introduction of a Koori Engagement Unit in 2019. The unit has confirmed that suicide data from 2018 has accurate Indigenous identification (CCOV 2022). The unit has improved identification by working with Indigenous communities to facilitate engagement with the Coroners Court. The Koori Engagement Unit has also created a database of Indigenous deaths handled by the CCOV. The team shares key statistics from this database with local communities. This includes information on psychosocial factors, as well as on demographics. It also works with court staff to improve cultural responsiveness. It is being used as a model for similar roles and units in the coroners' courts of other jurisdictions.
- In October 2021, the New South Wales Department of Communities and Justice implemented an Aboriginal Coronial Information and Support Officer role in the NSW Coroners Court – broadly modelled on the Koori Engagement Unit in Victoria. This may improve the accuracy of Indigenous identification in the Coroners Court of New South Wales by improving cultural safety for families.
- The New South Wales Health Pathology's Forensic Medicine service provides 'Culturally Respectful Care' through its forensic medicine social workers. These staff work with Aboriginal families in New South Wales and provide culturally appropriate care for the deceased (NSW Health Pathology 2015). This may improve cultural safety for families engaging with this part of the coronial process and in turn improve identification flowing through to the ABS.
- To overcome known under-reporting of Indigenous origin in coronial data, the National Coronial Information System (NCIS) supplements the Indigenous origin field used by the coroners with the Indigenous status field used by Birth, Deaths and Marriages registries (RBDMs) in each state and territory. An internal NCIS review examining cases reported between 2006–2015 found that there



was an available RBDM value for the 'Indigenous status' field in 99% of instances where the coronial Indigenous origin field was *Unlikely to be known* (NCIS 2021). However, the ABS has found that there are still data quality issues in RBDM-supplied data from some jurisdictions.

- The [National Agreement on Closing the Gap](#) was signed by all Australian governments in 2020 (PMC 2020). Target 14 of this agreement is to achieve 'Significant and sustained reduction in suicide of Aboriginal and Torres Strait Islander people towards zero' (PMC 2020:38). Data development required to support Target 14 includes exploring options to improve Indigenous identification in deaths data, including at regional/community levels.

Enhancements to the collection of Indigenous status in other data sets

- The ABS works with state and territory Registrars of Births, Deaths and Marriages through the [Civil Registration and Vital Statistics Australasia committee](#). The aim is to progress strategies that improve Indigenous identification in a nationally consistent way (ABS 2021).
- The ABS started using the 'Standard Indigenous Question' (SIQ) – 'Are you of Aboriginal or Torres Strait Islander origin?' – in 1996 and reviewed its use in 2013 (ABS 2014). The review recommended that the SIQ be retained without change and that the ABS should undertake another review at the time of the 2021 census (ABS 2014). At the time of writing, the 2021 review had not taken place.
- Under the National Indigenous Reform Agreement (NIRA) Schedule F, states and territories committed to adopting the SIQ for recording Indigenous identification information in health data sets by December 2012 (AIHW and NIAA 2021). Funding for Schedule F ceased in 2013 (ANAO 2019). The National Agreement on Closing the Gap replaced the NIRA in 2020.
- The [National best practice guidelines for collecting Indigenous status in health data sets](#), released by the AIHW in 2010, provide advice for recording Indigenous status in different circumstances, including if the client is deceased or is too ill to be asked the question (AIHW 2010). The AIHW conducted an evaluation of the implementation of these guidelines in 2013, which highlighted the need for targeted support for the general practice sector. The findings were published in [Towards better Indigenous health data](#) (AIHW 2013b). The guidelines have not been reviewed since then.
- The AIHW has provided targeted support to the general practice sector to implement the best practice guidelines, since accurate Indigenous identification is important for service delivery (AIHW 2013a). Specific barriers and improvements identified in consultation with the sector are published in [Taking the next steps: identification of Aboriginal and Torres Strait Islander status in general practice](#) (AIHW 2013a). Indigenous identification in the general practice sector has not been reviewed since then.
- The AIHW has investigated the quality of Indigenous identification in mental health, [drug and alcohol treatment](#), [hospitals](#), [perinatal](#), [cancer registry](#), diabetes registry and community services data collections (AIHW and NIAA 2021).
- The AIHW's National Indigenous Data Improvement Support Centre (NIDISC) was established to support jurisdictions, data custodians and service providers to implement the best practice guidelines (AIHW 2021c). The NIDISC helpdesk assists health providers on the collection and recording of Indigenous status. Posters, brochures and other promotional materials that encourage Indigenous identification are available on the [NIDISC](#) webpage.

- The AIHW NIDISC has also developed a [training tool](#) to assist administrative staff to collect Indigenous status data (AIHW 2021c).

Enhancements to suicide deaths data

- To accommodate delays in the release of coronial suicide data, most Australian jurisdictions have established suicide registers of suspected deaths by suicide. Data from suicide registers are based on initial police reports and other information available at the time of referral to the coroner. Though data from suicide registers are not directly comparable with finalised suicide data released in the Causes of Death, Australia collection, differences between these data are generally small. Findings show that data from the Victorian Suicide Register are consistently 95% accurate or better at identifying deaths that the coroner ultimately determines to be suicide (CCOV 2022). Suicide registers have been established in several jurisdictions. To date, suicide registers have been established in Queensland (1990), Victoria (2012), Tasmania (2017), New South Wales (2020) and South Australia (forthcoming). The AIHW has been working with state coroners and health officials in the Australian Capital Territory and the Northern Territory to establish suicide registers in these jurisdictions as well (AIHW 2022c).
- Suicide Prevention Australia and the (then) Department of Health and Ageing established the National Committee for Standardised Reporting on Suicide (NCSRS), which first met in April 2009. The committee's duty was to coordinate various projects across jurisdictions to standardise the collection and compilation of suicide statistics (CARC 2010). The NCSRS noted the wide range of information gathered by police, and recommended that background information regarding the individual's social life, medical and mental health history be collected in order to determine suicidal intent.
- As deaths by suicide in Australia are statistically rare events it is difficult to achieve the statistical power that is necessary to identify patterns or to draw conclusions about changes in the suicide rate. In 2019–20, the AIHW worked with the Australian National University (ANU) Centre for Social Research and Methods (CSRM) to develop methodologies for determining incidence trends and spatial clustering of deaths by suicide and to conduct complex modelling on deaths by suicide. In 2020–21, the AIHW extended the work with the ANU CSRM. This work included validating the model and undertaking analysis of spatial data in the National Mortality Database, to investigate geographical areas of persistently higher suicide rates (AIHW 2022c).
- In response to concerns about the under-reporting of suicide deaths in the Causes of Death, Australia collection, the ABS implemented a revisions process in 2007 (CARC 2010). The revisions process allows the inclusion of completed and finalised coronial cases. It also addressed the issue of inaccurately assigning ICD codes to cases that are open on the NCIS database. ABS coders review coronial files and use additional information from police reports, toxicology reports, autopsy reports and coroners' findings to assign more specific causes of death. This occurs either 12 or 24 months after initial processing, and the specificity of the assigned codes increases over time. The revisions process has enabled the use of additional information regarding reportable deaths as it becomes available over time (Harrison et al. 2009).
- Since 2006, the ABS has applied new coding guidelines to enable deaths to be coded to 'suicide' if (following further investigation of information on the NCIS), the evidence shows that the death was from intentional self-harm. Previously, the rules required a coroner to make a finding of 'intentional self-harm' for a suicide code (CARC 2010). Now, if the 'intent' status at the time of coding was neither 'intentional self-harm' nor 'assault', the ABS may consider additional information available on NCIS (ABS 2021). This may include the mechanism and other available data, such as the presence of a suicide note or previous suicide attempts.

- The NCIS has worked with the states and territories to improve the quality and timeliness of information provided to the NCIS database from coronial systems. These improvements result in changes in the information available to ABS coding staff. In 2012, the NSW coronial system implemented JusticeLink, which significantly changed the exchange of information from the Coroners Court of New South Wales and the NCIS. JusticeLink enables nightly uploads of new information to the NCIS database. This high frequency results in information being available earlier in the investigation process, and more complete when coding the cause of death. This system change has improved the quality of preliminary coding for deaths due to intentional self-harm (ABS 2016).
- The AIHW National Suicide and Self-harm Monitoring Project provided funding to the ABS until 2022 to continue the enhancement of the national Causes of Death, Australia data set. This will enable coding of psychosocial risk factors for all coroner-referred deaths (including deaths by suicide), via a comprehensive manual review of reports included in the NCIS. The AIHW is working with the ABS to embed this work in future national mortality data sets. Coding has been completed for 2019 and 2020 risk factor data included in police, autopsy, toxicology and coroners' reports for deaths, where the underlying cause of death was 'Intentional self-harm'. Coding of 2021 data is underway (AIHW 2022c).

Enhancements to intentional self-harm injury data

- The lack of data on suicidal behaviours from hospital emergency departments is a key data gap. Via the Mental Health Information Strategy Standing Committee, the AIHW has been working with states and territories to explore strategies for improving the consistency and quality of emergency department data – without adding undue reporting burden to medical staff (AIHW 2022c).
- The AIHW has contracted Turning Point, through Monash University, to develop the National Ambulance Surveillance System (NASS), with components funded by the (then) Department of Health, the Department of Health and Human Services (Victoria) and the AIHW (AIHW 2022c). The NASS is a novel and world-first public health monitoring system for attendances associated with mental health, alcohol and drug harms, and self-harm (including suicidal behaviours).
- The AIHW has engaged the University of Melbourne to evaluate the National Suicide and Self-harm Monitoring Project. The evaluation, led by Professor Jane Pirkis of the Centre for Mental Health, has been conducted alongside the development and implementation of the system in 2021. The AIHW published the final evaluation report in 2022 and evaluation findings will inform future quality improvements of the system (AIHW 2022c).
- The Centre for Best Practice for Aboriginal and Torres Strait Islander Suicide Prevention commissioned 'Guidelines for best practice psychosocial assessment of Aboriginal and Torres Strait Islander people presenting to hospital with self-harm and suicidal thoughts'. These guidelines, released in 2019, are designed to assist clinical staff to assess patients for suicidal intent, in order to provide effective and appropriate care (Leckning et al. 2019). Accurate assessment of intent is important to differentiate suicide attempt from other self-harm; however, this cannot be captured using current ICD-10-AM coding.
- In August 2022, the AIHW made a public submission to the Australian Classification Exchange to amend the suicidal ideation coding convention at R45.81 and to add 'suicidal intent' to ICD-10-AM, 13th edition. This is intended to be an interim measure to bridge the gap until ICD-11 is implemented.



Enhancements to Indigenous data reporting

Given the extent of Indigenous under-identification in many of the underlying data, there is a need to assess the level of under-identification and adjust the data to improve reporting from key data sets. This can be done through a range of approaches, including data linkage.

- In order to estimate the under-reporting of Indigenous Australian deaths in the death registration system, the ABS has conducted the Indigenous Mortality Study as part of the Census Data Enhancement project, for each Census of Population and Housing since 2006 (ABS 2018b). Most recently, to estimate a more accurate number of Indigenous Australian deaths, 2016 Census records were linked with registered deaths between August 2016 and September 2017 (ABS 2018b). This has improved estimation of Indigenous life expectancy, published in *Life tables for Aboriginal and Torres Strait Islander Australians* (ABS 2018b). This project is expected to be repeated with data from the 2021 census.
- The AIHW is using data linkage to improve Indigenous status identification in data sets (AIHW 2012, 2019b). Linking data sets makes it possible to identify Indigenous Australians that had missing or incorrect Indigenous status records in one data set but are identified as Indigenous in another data set. As a result, data linkage reduces the number of Indigenous people unaccounted for in data sets because they were misclassified as non-Indigenous during data collection. The AIHW, in collaboration with the ABS and the states and territories, developed the *National best practice guidelines for data linkage activities relating to Aboriginal and Torres Strait Islander people* (AIHW and ABS 2012). These guidelines have not been reviewed since their release.
- The Department of Health and Aged Care and the AIHW are investigating whether the Medicare Voluntary Indigenous Identifier (VII) database can be linked to the NIHSI AA (National Integrated Health Services Information Analysis Asset) as a means of enhancing Indigenous identification in that asset (DoH 2021). The VII is an opt-in system in which people can register for Indigenous-specific Medicare items. Using the VII in data linkage enables those who have voluntarily identified themselves as Indigenous to be identified across data sets.
- The AIHW has published a series of reports assessing the under-reporting of Indigenous identification in hospitals data. The most recent report, *Indigenous identification in hospital separations data: quality report* (2013), found that an estimated 88% of Indigenous patients were correctly identified in public hospital admission records in 2011–12. This indicates that hospital admissions for Indigenous Australians were likely to be 12% higher than reported for that period. A similar level of under-reporting was found in 2007–08, with an estimated 89% of Indigenous patients correctly identified in hospital admission records in that period. The results of the 2007–08 study were published in 2010 in the *Indigenous identification in hospital separations data: quality report*. These quality reports were preceded by *Improving the quality of Indigenous identification in hospital separations data*, published in 2005, and *Assessing the quality of identification of Aboriginal and Torres Strait Islander people in hospital data*, published in 1999.



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**Discussion
and suggested
focus areas
for further
enhancement**



6 Discussion and suggested focus areas for further enhancement

Accurate data are needed to identify communities at high risk of suicide and to monitor changes in number of deaths and intentional self-harm hospitalisations over time. However, the quality of these data often suffers from limitations related to unreliable recording of Indigenous status; long time lags; and unclear suicidal intent, which can affect the accuracy of Indigenous data in suicide-relevant data sets. Improving the collection of data is key to improving the quality of this data.

The purpose of this report was to:

- a. identify the main areas for enhancement in the collection of Aboriginal and Torres Strait Islander status in suicide-relevant data sets
- b. suggest ways to improve the quality of suicide-relevant data about Indigenous Australians more broadly.

To gain a better understanding of how data on the suicide of Aboriginal and Torres Strait Islander people are collected, this report discussed:

- data collection processes for suicide deaths and intentional self-harm data
- nationally significant suicide-relevant data sets – including how Indigenous status is collected or derived – and the limitations of each collection
- the main sources of error affecting suicide-relevant data about Indigenous Australians
- key enhancements that have already been made or are currently under way.

The report identified that poor cultural safety and lack of cultural competency were key factors leading to under-reporting and misclassification of data about Indigenous Australians in suicide-relevant data sets. This, in combination with a lack of standardised processes and limited visibility between agencies, contributes to differences in data quality between jurisdictions. Efforts to address these issues have been made by agencies at both the national and jurisdictional levels. However, the scope of the enhancements has been limited to certain sectors or jurisdictions.

As discussed in Section 4, the main sources of error in Indigenous data in suicide-relevant data sets involve issues related to:

- cultural safety at points of data collection, including:
 - reduced propensity for individuals to identify as Indigenous
 - reduced engagement with coronial processes
 - misclassification of Indigenous status during data collection
- complexity of processes surrounding a reportable death and limited visibility of improvements across agencies
- statistically small numbers of incidents
- unclear intent in intentional self-harm incidents and deaths
- limitations of ICD-10-AM morbidity coding
- time lags in finalising suicide deaths data
- differences between jurisdictions in the determination of death due to suicide.



Suggested areas of focus for data collection enhancements

Review and update national best practice guidelines for collecting Indigenous status in health data sets. Expand guidelines to cover the ambulance and police services and to include specific advice for first responders and data collection in crisis situations.

The 'National best practice guidelines for collecting Indigenous status in health data sets' were released in 2010 and evaluated in 2013 (AIHW 2013b). The guidelines have now been in effect for 10 years and are due to be reviewed and updated. Since the release of the guidelines, new sources of data (such as the National Ambulance Surveillance System and the state and territory suicide registers) have become available and should be included in the guidelines. The guidelines could also be expanded to assist police when gathering information from next-of-kin. Ambulance officers, police officers and emergency department staff collect information from people in crisis and highly-emotionally charged situations. This may create barriers (or perceived barriers) to asking for information that may not seem relevant to the situation at hand.

Expansion of the guidelines to provide specific, evidence-based advice on how to collect Indigenous status data in crisis situations (and on the relevance of this information to service provision and policing) could facilitate more accurate data collection by ambulance, police and emergency department staff.

Review death registration forms in all jurisdictions to ensure consistent wording of the Indigenous status question. Ensure funeral directors understand how to request and record Indigenous status information, in line with the national best practice guidelines.

At present, death registration forms (DRFs) are the main source of Indigenous status data in the Causes of Death, Australia data collection and the Cause of death unit record file (COD URF). DRFs are therefore the main source of Indigenous status data in several national mortality data collections.

Consultation with the ABS indicated that Registries of Births, Deaths and Marriages (RBDMs) actively engaged with the community in their respective states or territories to improve data quality. However, there were challenges in reaching all funeral directors, due to the number of individuals and organisations involved.

Ensuring that the Indigenous status question is consistent across the forms used by each jurisdiction – as well as supporting funeral directors to ask the question as written and to record the responses as provided by the person registering the death – could improve the quality of Indigenous status data in national mortality data collections.

Update the police report of death to a coroner form in all jurisdictions to include the Standard Indigenous Question, in line with the national best practice guidelines.

The police report of death form is a police service form or a coroners' court form, depending on the jurisdiction. (In either case, the form is designed to collect information for the coroner.) It is an important source of Indigenous identification for coronial processes, and in several jurisdictions, the main source of Indigenous status data reported on the autopsy certificate. As the 'coroner's note' (autopsy report) is used by the ABS as a supplementary source of Indigenous status data, improving the quality of the data on the autopsy certificate will improve the quality of Indigenous status data in the main national mortality data sets. Consultation for this report revealed that the Indigenous origin question is worded, and presented, differently on forms from different jurisdictions – if it is included at all.



Updating the police report of death forms in each jurisdiction to use the Standard Indigenous Question could improve the consistency of the data for use in national data sets. Improving the useability of the forms and streamlining data collection for police officers, coupled with specific advice on data collection for first responders, could increase compliance – and, ultimately, the quality of Indigenous status in data collections compiled from coroners' reports.

Facilitate greater transparency and collaboration between agencies

As outlined in Section 5, there are already a number of strategies in place to help standardise the collection of deaths data. However, due to the complexity of the systems involved – as well as the sheer number of agencies, organisations and individual staff - visibility of improvements occurring in other agencies can be limited. For example, the Coroners Court of Victoria (CCOV) has implemented changes to improve the quality of suicide-relevant data about Indigenous Australians. However, these changes may not be visible to external agencies. The Koori Engagement Unit at the CCOV has been improving the quality of suicide death data for Indigenous Australians in Victoria for the benefit of the coroner and local communities. However, since the focus has been on improving local data, the changes so far have not involved the ABS. Because the Koori Engagement Unit is being used and recommended as a model for other jurisdictions to improve the quality of Indigenous identification in coronial data, it is critical that the ABS collaborates with the CCOV and the unit to understand what data are being collected. The ABS should also provide guidance to coroners' courts implementing these changes, to ensure that improvements at the jurisdictional level meet national reporting requirements.

Implement Aboriginal and Torres Strait Islander engagement units in coroners' courts nationally.

Employing Aboriginal and Torres Strait Islander liaison officers to engage with communities is one way to improve the identification of deaths entering the coroners' courts. These liaison officers support the family through the coronial processes and facilitate culturally respectful care of the deceased. Liaison officers may also contribute to more accurate findings, through improved communication with family and communities engaging with coronial processes. Some courts and forensic medicine services, including the Coroners Court of Victoria (CCOV), the Coroners Court of New South Wales and New South Wales Health Pathology's Forensic Medicine service, are already using liaison officers. The Coroners Court of Victoria estimates that Indigenous identification in the court has improved dramatically since the Koori Engagement Unit was implemented in 2019. The Koori Engagement Unit has driven process changes within the CCOV, which now has a 5-stage process to identify Aboriginal and Torres Strait Islander cases among deaths referred to the court (see Table 3.1). However, as discussed above, to ensure these improvements reach national data sets, the ABS needs to be involved in these changes.

Implementing similar roles and processes in coroners' courts and forensic medicine services in all jurisdictions could improve the accuracy of Indigenous data reporting in the ABS Causes of Death, Australia collection, which relies on autopsy certificates as a supplementary source of Indigenous status data.



Improve cultural safety at points of data collection for morbidity data sets

Improving cultural safety can help to reduce some of the barriers that people encounter when considering whether to identify as Indigenous. This could be done by engaging with the local Indigenous community or the Aboriginal community controlled health sector to find out what would improve cultural safety of the hospital, clinic or other service where these data are collected. Examples of actions that could help create a more welcoming environment are:

- cultural safety training for staff
- employing Aboriginal and Torres Strait Islander liaison officers or health workers
- making changes to create a more welcoming environment, such as displaying Aboriginal and Torres Strait Islander flags or artwork.

Staff trained in the collection of Indigenous status should also be able to address privacy concerns raised by clients, as recommended in the national best practice guidelines for collecting Indigenous status in health-related data sets. Posters or infographics may also assist with client education about why Indigenous status data are collected and how it is used (Kelaher et al. 2010). Supporting Indigenous Australians to identify in more settings increases the consistency of their Indigenous status across data sets. This is important for data linkage activities, which rely on various algorithms to determine Indigenous status where there are different values in different data sets (AIHW and ABS 2012). The more frequently someone is identified as Indigenous in a linked asset, the more likely they are to be included in any sampling of the Indigenous population.

Improve identification of suicidal intent in morbidity coding by implementing ICD-11 across all health settings, including primary care.

Morbidity coding in Australia at present is done using the ICD-10-AM. Using this coding system, intentional self-harm with lethal intent (suicide attempt or suicide death) cannot be distinguished from self-harm with non-lethal intent. Intentional self-harm rates are used as an indicator of suicidal behaviour in the community. Differentiating suicide attempts from non-suicidal self-injury would allow more accurate evaluation of suicide prevention programs, as well as help identify communities most in need.

ICD-10 is due to be superseded by ICD-11, which has additional capacity to allow classification of specific contextual information for suicide attempts. This is done through extension codes that can be used to capture psychosocial risk factors, previous suicide attempt and intention to die. ICD-11 is designed to be implemented across all health settings, including primary care. However, the decision on when and how to implement ICD-11 in Australia is yet to be made (AIHW 2022h). The AIHW is leading the work to get to that decision, heading the Australian ICD-11 Task Force, conducting stakeholder workshops and gathering evidence on whether ICD-11 is fit for purpose for different use cases in Australia (AIHW 2022e, 2022h).



Appendixes



Appendix A: The death registration process

When a death occurs, the cause of that death is either certified by a medical practitioner or, in some circumstances, referred to the state or territory's coroner's court for further investigation. The circumstances that require a death to be referred to the jurisdiction's coroners' court are defined by legislation in each state and territory; deaths that fall under this legislation are known as 'reportable deaths' (ABS 2021). Deaths that are not reportable are the most common causes of death and can be certified by a medical practitioner; in Australia, approximately 86–89% of deaths are certified by a medical practitioner (ABS 2021). Most external causes of death (suicides, accidents and assaults) are referred to a coroner for investigation, and approximately 11–14% of all deaths are certified by a coroner. In these circumstances, the death may first be brought to the attention of police, who will then refer the case to the coroner. Whether a death should be reportable to a coroner varies by jurisdiction, governed by the Coroners Act of the state or territory. Generally, any of the following circumstances will make a death reportable to a coroner, where the:

- person died unexpectedly and the cause of death is unknown
- person died in a violent or unnatural manner
- person died during, or as a result of, an anaesthetic
- person was in custody immediately before they died
- person was in care when they died
- identity of the person who has died is unknown (ABS 2021).

Once the coroner has been notified of a reportable death, an investigation is established and the case is considered to be open.

The Aboriginal and Torres Strait Islander status of a deceased person is noted on either the Death registration form (DRF) or the Medical certificate of cause of death (MCCD) completed by a medical practitioner (for non-reportable deaths). For reportable deaths, the coroner's note (autopsy certificate) serves as a proxy for the MCCD. Typically, if the Indigenous status reported in the DRF is inconsistent with that in the MCCD, an identification from either source that the deceased was an Indigenous person is given preference over non-Indigenous or an unknown status. Funeral directors, medical practitioners or coroners may be responsible for registering a death or assessing the cause of death. They must obtain Indigenous status from the next of kin, close friends, relatives, members of the household of the deceased or from previous records. This should be completed before sending the death registration form to the state or territory Registry of Births, Deaths and Marriages (AIHW 2010).

The ABS Causes of Death, Australia collection

The Causes of Death, Australia collection is compiled by the Australian Bureau of Statistics (ABS). It contains data on International Classification of Diseases (ICD) coded causes of death, as well as numbers of deaths by sex, age and Indigenous status. Registration information about each death comes from the state and territory Registries of Births, Deaths and Marriages (RBDMs). Death registration is only considered complete once a cause of death has been certified – which means that the registration of cases referred to the coroner may not be complete when the data is supplied to the ABS. In these instances, the data is supplemented with information supplied by the National Coronial Information System (NCIS) (see Figure A.1).



The ABS includes open coronial cases in its yearly releases. This improves the timeliness of data because coronial cases can take months or years to reach a finding, with the registration remaining open until the cause of death is certified. Suicide deaths are affected by this lag because any death known or suspected to be suicide is referred to the coroner for investigation. The ABS updates the cause of death with the coroner's findings at 12 or 24 months after initial processing, so for any given reference year:

- the initial release is 'preliminary data', which may be subject to change as coronial processes are finalised
- the data are revised the following year (released as 'revised data') and include any updates to causes of death from coronial cases that have been closed in the 12 months prior to initial processing
- the 'final data' are published after a second year, and this again includes any coronial findings made in the preceding 12 months.

Indigenous status in the Causes of Death, Australia collection is primarily derived from the Death registration form, supplemented by the MCCD or autopsy note. The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths and changes to death forms and/or processing systems. Due to the small size of the Indigenous Australian population, these factors can significantly impact on trends over time and between jurisdictions. A number of deaths occur each year for which the Indigenous status is not stated on the death registration form. Thus, there may be some degree of under-identification of Indigenous Australians in mortality data, the magnitude of which may also change from year to year.

In 2009, the AIHW found that ABS mortality data underestimated the number of deaths by suicide in 2004 (2,458 deaths compared with ABS data of 2,110) (CARC 2010). In response to concerns regarding the under-reporting of suicide deaths in the Causes of Death collection, the ABS implemented a revisions process in 2006. The revisions process allows the inclusion of completed and finalised coronial cases. Before 2006, ABS Causes of Death processing was finalised at a point in time approximately 13 months after the end of the reference period. This meant that any cases that were not completely investigated by a coroner (open cases) by this point were coded based on available information – which may have been incomplete. If cases had insufficient information to code a cause of death, less specific ICD codes were used, compared with the codes used if the investigation was complete with all information available on the NCIS (Harrison et al. 2009; CARC 2010).

Coronial processes can take up to several years, depending on the complexity of the case. The revisions process addressed the issue of inaccurately assigning ICD codes to cases that are open on the NCIS database. ABS coders review coronial files and use additional information from police reports, toxicology reports, autopsy reports and coroners' findings to assign more specific causes of death. This occurs at either 12 or 24 months after initial processing, and the specificity of the assigned codes increase over time. After 12 or 24 months, many coronial cases are closed with relevant findings and the coroner's cause of death made available. The revisions process has enabled the use of additional information regarding reportable deaths as it becomes available over time (Harrison et al. 2009).

Figure A.1: How Indigenous identification is incorporated into the national reporting of suicide deaths

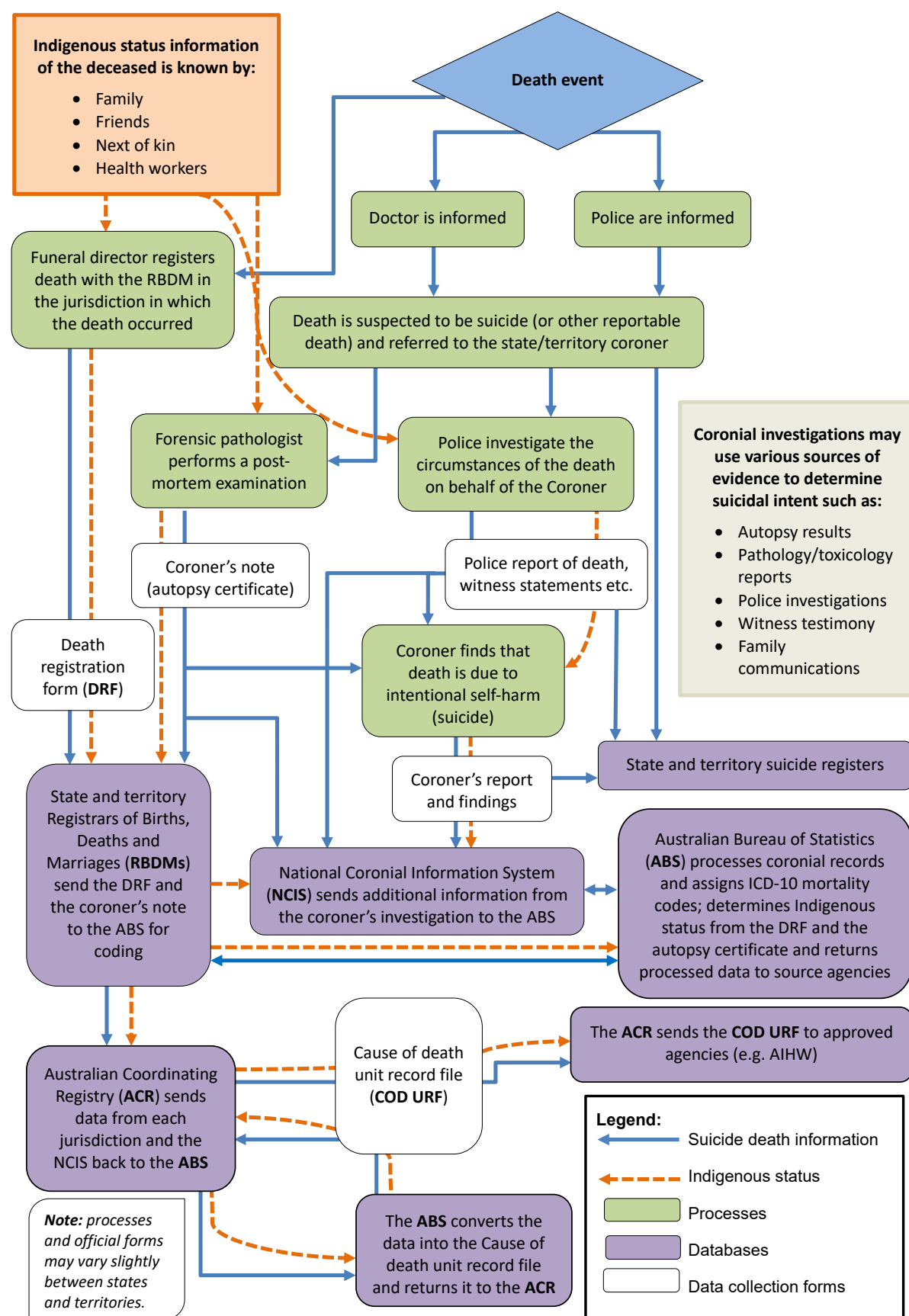


Chart: AIHW.

Appendix B: ICD-11 extension codes for aspects of intentional self-harm events

Table B.1: Aspects of intentional self-harm events

Proximal risk-factors for intention self-harm

XE17Z Conflict in relationship with family member, partner, or friend

XE9SZ Proximal risk factors for intentional self-harm, Conflict in relationship with spouse, partner, boy/girlfriend

XE6QA Proximal risk factors for intentional self-harm, Conflict in relationship with parent

XE1A1 Proximal risk factors for intentional self-harm, Conflict in relationship with offspring

XE3GP Death of a relative, partner, or friend

XE19R Proximal risk factors for intentional self-harm, Suicide of a relative, partner or friend

XE8T3 Proximal risk factors for intentional self-harm, Other manner of death of a relative, partner or friend

XE2FT Proximal risk factors for intentional self-harm, Unspecified manner of death of a relative, partner or friend

XE97R Physical problem

XE5CU Proximal risk factors for intentional self-harm, HIV or AIDS

XE3AG Proximal risk factors for intentional self-harm, Unwanted pregnancy

XE6XD Psychological or psychiatric condition

XE2Q7 Proximal risk factors for intentional self-harm, Substance abuse

XE79G Proximal risk factors for intentional self-harm, Postpartum depression

XE3U9 Income-related or financial problem

XE70C Proximal risk factors for intentional self-harm, Work-related

XE4UX Proximal risk factors for intentional self-harm, Dowry

XE5J3 Abuse

XE8HX Proximal risk factors for intentional self-harm, Sexual abuse

XE8ND Proximal risk factors for intentional self-harm, Physical abuse

XE2RX Proximal risk factors for intentional self-harm, Neglect

XE31V Proximal risk factors for intentional self-harm, Legal system encounters

XE8MK Proximal risk factors for intentional self-harm, School-related problem

XE98Q Proximal risk factors for intentional self-harm, Religious belief or affiliation

XE6TW Proximal risk factors for intentional self-harm, Cultural issue

(continued)



Table B.1 (continued): Aspects of intentional self-harm events

Previous non-fatal intentional self harm

XE76W Previous suicide attempt, No

XE3YR Previous suicide attempt, Yes

Intention to die aspect of self-harm

Inclusions:

- parasuicide (incomplete suicide attempt)
- self-mutilation
- suicide

XE97V Intentional self-harm, person intended to die

Intentional self-harm with intent to cause the death of the person.

XE5D6 Intentional self-harm, person did not intend to die

Self-injury, self-harm, cutting or self-mutilation undertaken intentionally for reasons other than to bring about the death of the person.

XE2SF Intentional self-harm, not known or not determined if person intended to die

Information that a competent person (e.g. psychiatrist, coroner) had concluded that it could not be determined whether the intentional self-harm was done with intent to die. No information or insufficient information was available.

Table: AIHW. Source: icd.who.int

Appendix C: Jurisdictional differences in coronial findings

Table C.1: Findings That May Be Made by Australian Coroners (by Jurisdiction)*

Jurisdiction	Findings If Inquest Is Held	Findings If Inquest Is Not Held
Australian Capital Territory	Manner and cause of death. ¹	Coroners must hold an inquest into all reportable deaths. ² Coroners may only dispense with a hearing where manner and cause of death are already sufficiently disclosed. ³
New South Wales	Manner and cause of death. ⁴	Cause of death. Reasons for dispensing with an inquest must sufficiently disclose manner of death. ⁵
Northern Territory	Cause of death and any relevant circumstances concerning death. ⁶	Cause of death and any relevant circumstances concerning death. ⁷
Queensland	How and what caused death. ⁸	How and what caused death. ⁹
South Australia	Cause and circumstances of death. ¹⁰	Cause of death. ¹¹ State and Deputy State Coroners consider they are forbidden from finding on intent. ¹²
Tasmania	How the death occurred and the cause of death. ¹³	How the death occurred and the cause of death. ¹⁴
Victoria	Cause and circumstances of death. ¹⁵	Cause of death. ¹⁶ No requirement to make a finding with respect to circumstances if the Coroner finds it would not serve the public interest to do so. ¹⁷
Western Australia	How the death occurred and the cause of death. ¹⁸	How the death occurred and the cause of death. ¹⁹

* The requirements listed in this table are not exhaustive and are in addition to other requirements such as those relating to time and place of death as well as the identity of the deceased.

1 *Coroners Act 1997* (ACT) ss 13(1), 52(1)(c).

2 *Coroners Act 1997* (ACT) s 13(1).

3 *Coroners Act 1997* (ACT) s 34A(1)(a).

4 *Coroners Act 2009* (NSW) ss 81(1)(c), 27(1)(d).

5 *Coroners Act 2009* (NSW) ss 25(1), 27(1)(c)(i).

6 *Coroners Act 1993* (NT) ss 34(1)(iii), (v).

7 *Coroners Act 1993* (NT) ss 34(1)(iii), (v).

8 *Coroners Act 2003* (Qld) ss 45(2)(b), (e).

9 *Coroners Act 2003* (Qld) ss 45(2)(b), (e), (6).

10 *Coroners Act 2003* (SA) s 25(1).

11 *Coroners Act 2003* (SA) s 29.

12 De Leo et al. 2010.

13 *Coroners Act 1995* (Tas) ss 28(1)(b), (c).

14 *Coroners Act 1995* (Tas) ss 28(1)(b), (c).

15 *Coroners Act 2008* (Vic) ss 67(1)(b), (c).

16 *Coroners Act 2008* (Vic) s 67(1)(b).

17 *Coroners Act 2008* (Vic) s 67(2)(b)(ii).

18 *Coroners Act 1996* (WA) ss 25(1)(b), (c).

19 *Coroners Act 1996* (WA) ss 25(1)(b), (c).

Source: Jowett et al. (2019):36



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Abbreviations

ABS	Australian Bureau of Statistics
ACHI	Australian Classifications of Health Interventions
ACR	Australian Coordinating Registry
ACT	Australian Capital Territory
AIHW	Australian Institute of Health and Welfare
ANU CSRM	Australian National University Centre for Social Research and Methods
CCOV	Coroners Court of Victoria
COD URF	Cause of death unit record file
DRF	Death registration form
ePCR	electronic patient care record
ICD-10	International Statistical Classification of Diseases and Related Health Problems, 10th revision
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification
ICD-11	International Statistical Classification of Diseases and Related Health Problems, 11th revision
iQSR	interim Queensland Suicide Register
MCCD	Medical certificate of cause of death
NASS	National Ambulance Surveillance System
NCIS	National Coronial Information System
NCSRS	National Committee for Standardised Reporting on Suicide
NHMD	National Hospital Morbidity Database
NMDS	national minimum data set
NIDISC	National Indigenous Data Improvement Support Centre
NIHSI AA	National Integrated Health Services Information Analysis Asset
NIRA	National Indigenous Reform Agreement
NSW	New South Wales
NT	Northern Territory
Qld	Queensland
QPS	Queensland Police Service
QSR	Queensland Suicide Register



RBDMs	Registries/Registrars of Births, Deaths and Marriages
SA	South Australia
SIQ	Standard Indigenous Question
Tas	Tasmania
VII	Voluntary Indigenous Identifier
Vic	Victoria
VP	Victoria Police
WA	Western Australia

References

- ABS (Australian Bureau of Statistics) (2014) *4733.0 – Information Paper: Review of the Indigenous Status Standard, 2014*, ABS website, accessed 9 June 2022.
- (2016) *'Explanatory notes'*, 3303.0 – *Causes of Death, Australia*, 2015, ABS website, accessed 9 June 2022.
- (2018a) *Estimates of Aboriginal and Torres Strait Islander Australians*, ABS website, accessed 16 August 2022.
- (2018b) *Life tables for Aboriginal and Torres Strait Islander Australians*, ABS website, accessed 9 June 2022.
- (2021) *Causes of Death, Australia methodology*, ABS website, accessed 16 November 2021.
- AHRC (Australian Human Rights Council) (2020) *Wiyi Yani U Thangani report*, AHRC, Australian Government, accessed 21 June 2022.
- AIHW (Australian Institute of Health and Welfare) (2010) *National best practice guidelines for collecting Indigenous status in health data sets*, AIHW, Australian Government, accessed 16 November 2021.
- (2012) *An enhanced mortality database for estimating Indigenous life expectancy: a feasibility study*, AIHW, Australian Government, accessed 16 November 2021.
- (2013a) *Taking the next steps: identification of Aboriginal and Torres Strait Islander status in general practice*, AIHW, Australian Government, accessed 17 June 2022.
- (2013b) *Towards better Indigenous health data*, AIHW, Australian Government, accessed 17 June 2022.
- (2019a) *Data quality statement: Admitted Patient Care 2017–18*, METEOR website, accessed 17 June 2022.
- (2019b) *Improving Indigenous identification in mortality estimates*, AIHW, Australian Government, accessed 16 November 2021.
- (2021a) *'Codes and classifications'*, Suicide & self-harm monitoring, AIHW website, accessed 9 June 2022.
- (2021c) *Indigenous identification*, AIHW, Australian Government, accessed 9 June 2022.
- (2021d) *'Intentional self-harm hospitalisations'*, Suicide & self-harm monitoring, AIHW website, accessed 9 June 2022.
- (2022a) *'Australian Burden of Disease Study: impact and causes of illness and death in Aboriginal and Torres Strait Islander people 2018'*, Australian Burden of Disease Study series 26, AIHW, Australian Government, accessed 8 June 2022.
- (2022b) *Cultural safety in health care for Indigenous Australians: monitoring framework*, AIHW, Australian Government, accessed 14 July 2022.
- (2022c) *'Data development activities'*, Suicide & self-harm monitoring, AIHW website, accessed 9 June 2022.

- (2022d) '[Data sources](#)', Suicide & self-harm monitoring, AIHW website, accessed 9 June 2022.
- (2022e) [International Classification of Diseases revision](#), AIHW website, accessed 9 June 2022.
- (2022f) [Protective and risk factors for suicide among Indigenous Australians](#), AIHW, Australian Government, accessed 16 September 2022.
- (2022g) '[Suicide & self-harm monitoring data](#)', *Suicide & self-harm monitoring*, AIHW website, accessed 9 June 2022.
- (2022h) [World Health Organization Collaborating Centre for the Family of International Classifications Australia: ICD-11 stakeholder update #2 – July 2022](#), AIHW website, accessed 20 September 2022.
- AIHW and ABS (2012) [National best practice guidelines for data linkage activities relating to Aboriginal and Torres Strait Islander people](#), AIHW, Australian Government, accessed 16 November 2021.
- AIHW and NIAA (National Indigenous Australians Agency) (2020) [3.10 Access to mental health services](#), Aboriginal and Torres Strait Islander Health Performance Framework website, accessed 17 June 2022.
- (2021) [Data development](#), Aboriginal and Torres Strait Islander Health Performance Framework website, accessed 17 June 2022.
- (2022) [2.11 Contact with the criminal justice system](#), Aboriginal and Torres Strait Islander Health Performance Framework website, accessed 17 July 2022.
- ALS (Aboriginal Legal Service) NSW/ACT (2021) [Submission to the Inquiry into Coronial Jurisdiction in New South Wales](#), ALS NSW/ACT, accessed 22 July 2022
- ANAO (Australian National Audit Office) (2019) [Closing the Gap](#), ANAO, Australian Government, accessed 17 June 2022.
- Black EB and Kisely S (2017) 'A systematic review: non-suicidal self-injury in Australia and New Zealand's indigenous populations', *Australian Psychologist*, 53(1):3–12, doi:10.1111/ap.12274.
- CARC (Community Affairs References Committee) (2010) [The hidden toll: suicide in Australia](#), The Senate, Australian Government, accessed 16 November 2021.
- Chan MKY, Bhatti H, Meader N, Stockton S, Evans J, O'Connor RC, Kapur N and Kendall T (2016) 'Predicting suicide following self-harm: systematic review of risk factors and risk scales', *British Journal of Psychiatry*, 209(4):277–283, doi:10.1192/bjp.bp.115.170050.
- Cooper J, Kapur N, Webb R, Lawlor M, Guthrie E, Mackway-Jones K and Appleby L (2005) 'Suicide after deliberate self-harm: a 4-year cohort study', *American Journal of Psychiatry*, 162(2):297–303, doi:10.1176/appi.ajp.162.2.297.
- Coroners Court of NSW (2020) [For healthcare professionals](#), Coroners Court of NSW website, accessed 15 September 2022.
- CCOV (Coroners Court of Victoria) (2022) [Suicides of Aboriginal and Torres Strait Islander people: Victoria, 2018–2021 \[PDF 327.31KB\]](#), CCOV, Victorian Government, accessed 8 June 2022.
- Da Cruz D, Pearson A, Saini P, Miles C, While D, Swinson N, Williams A, Shaw J, Appleby L and Kapur N (2011) 'Emergency department contact prior to suicide in mental health patients', *Emergency Medicine Journal*, 28(6):467–471, doi:10.1136/emj.2009.081869.

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- De Leo D, Dudley MJ, Aebersold CJ, Mendoza JA, Barnes MA, Harrison JE and Ranson DL (2010) 'Achieving standardised reporting of suicide in Australia: rationale and program for change', *Medical Journal of Australia*, 192(8):452–456, doi:10.5694/j.1326-5377.2010.tb03584.x.
- DoH (Department of Health) (2021) *Voluntary Indigenous Identifier Framework*, DoH, Australian Government, accessed 17 June 2022.
- Dudgeon P and Luxford Y (2017) *Real time suicide data: a discussion paper*, ATSISEEP, accessed 16 November 2021.
- Farrelly T and Carlson B (2011) *Towards cultural competence in the justice sector*, produced for the Indigenous Justice Clearinghouse, Australian Institute of Criminology, Australian Government, and the Law, Crime and Community Safety Council, New South Wales Government, accessed 21 October 2022.
- Farrelly T and Francis K (2009) 'Definitions of suicide and self-harm behaviour in an Australian Aboriginal community', *Suicide and Life-Threatening Behavior*, 39(2):182–189.
- Grandclerc S, De Labrouhe D, Spodenkiewicz M, Lachal J and Moro M (2016) 'Relations between nonsuicidal self-injury and suicidal behavior in adolescence: a systematic review', *PLoS ONE*, 11(4):e0153760, doi:10.1371/journal.pone.0153760.
- Harrison JE, Pointer S and Elnour AA (2009) '*A review of suicide statistics in Australia*', Injury research and statistics series number 49, AIHW, Australian Government, accessed 16 November 2021.
- Hedegaard H, Schoenbaum M, Claassen C, Crosby A, Holland K and Proescholdbell PS (2018) 'Issues in developing a surveillance case definition for nonfatal suicide attempt and intentional self-harm using International Classification of Diseases, Tenth Revision, Clinical Modification (ICD–10–CM) coded data', *National Health Statistics Reports*, 2018 (108):1–19.
- Jowett S, Carpenter B and Tait G (2019) 'Determining a suicide under Australian law: a comparative study of coronial practice', *UNSW Law Journal* 42(2):534–556.
- Kelaher M, Parry A, Day S, Anderson I, Paradies Y, Parkhill A, Lawlor J, Solomon L, Scotney A, Mahoney R, Adams K and Freemantle J (2010) *Improving the identification of Aboriginal and Torres Strait Islander people in mainstream general practice*, The Australian National University and the Lowitja Institute, accessed 15 January 2022.
- Leckning B, Ringbauer A, Robinson G, Carey TA, Hirvonen T and Armstrong G (2019) *Guidelines for best practice psychosocial assessment of Aboriginal and Torres Strait Islander people presenting to hospital with self-harm and suicidal thoughts*, Menzies School of Health Research, accessed 21 June 2022.
- Lubman DI, Heilbronn C, Ogeil RP, Killian JJ, Matthews S, Smith K, Bosley E, Carney R, McLaughlin K, Wilson A, Eastham M, Shipp C, Witt K, Lloyd B and Scott D (2020) 'National Ambulance Surveillance System: a novel method using coded Australian ambulance clinical records to monitor self-harm and mental health-related morbidity', *PLoS ONE*, 15(7): e0236344, doi:10.1371/journal.pone.0236344.
- Marchant A, Turner S, Balbuena L, Peters E, Williams D, Lloyd K, Lyons R and John A (2020) 'Self-harm presentation across healthcare settings by sex in young people: an e-cohort study using routinely collected linked healthcare data in Wales, UK', *Archives of Disease in Childhood*, 105(4):347–354, doi:10.1136/archdischild-2019-317248.



Magistrates Court of Tasmania (n.d.) [Tasmanian Suicide Register](#), Magistrates Court of Tasmania website, accessed 22 July 2022.

NCIS (National Coronial Information System) (2021) [Data quality statement: Identification of Aboriginal and Torres Strait Islander people on the NCIS](#), NCIS, accessed 8 June 2022.

NSW Aboriginal Affairs (2015) [Aboriginal identification: the way forward. An Aboriginal peoples' perspective](#), NSW Aboriginal Affairs, Department of Education, NSW Government, accessed 21 June 2022.

NSW Health Pathology (2015) [Forensic medicine](#), NSW Health Pathology website, accessed 22 July 2022.

Owens D, Horrocks J and House A (2002) 'Fatal and non-fatal repetition of self-harm: systematic review', *The British Journal of Psychiatry*, 181:193–199, doi:10.1192/bjp.181.3.193.

PMC (Department of the Prime Minister and Cabinet) (2020) [National Agreement on Closing the Gap](#), PMC, Australian Government, accessed 17 June 2022.

Queensland Government (2021) [National death data](#), Queensland Government website, accessed 8 June 2022.

Tait G, Carpenter B and Jowett S (2018) 'Coronial practice, Indigeneity and suicide', *International Journal of Environmental Research and Public Health*, 15(4):765, doi:10.3390/ijerph15040765.

Taliaferro LA, Almeida J, Aguinaldo LD and McManama O'Brien KH (2019) 'Function and progression of non-suicidal self-injury and relationship with suicide attempts: A qualitative investigation with an adolescent clinical sample', *Clinical Child Psychology and Psychiatry*, 24(4):821–830, doi:10.1177/1359104519862340.

Victor SE and Klonsky ED (2014) 'Correlates of suicide attempts among self-injurers: a meta-analysis', *Clinical Psychology Review*, 34(4):282–297, doi:10.1016/j.cpr.2014.03.005.

Accurate data on the suicide of Aboriginal and Torres Strait Islander people are important for understanding communities at risk and measuring changes in suicide rates over time. However, Indigenous Australians are often poorly identified in these data. This report identifies suicide relevant key data sets and explores their limitations. It also describes previous and current data enhancement activities and suggests areas for further enhancement.



Stronger evidence,
better decisions,
improved health and welfare

