Suicide in Queensland

Annual Report 2020

Suicide in Queensland: Annual Report 2020

Stuart Leske, Ghazala Adam, Ina Schrader, Amra Catakovic, Bridget Weir & David Crompton

Australian Institute for Suicide Research and Prevention
World Health Organization Collaborating Centre for Research and Training in Suicide Prevention, School of Applied Psychology, Griffith University

September 2020

Please cite as Leske, S., Adam, G., Schrader, I., Catakovic, A., Weir, B., & Crompton, D. (2020). Suicide in Queensland: Annual Report 2020. Brisbane, Queensland, Australia: Australian Institute for Suicide Research and Prevention, School of Applied Psychology, Griffith University.

Published by the Australian Institute for Suicide Research and Prevention, School of Applied Psychology, Griffith University.

The Queensland Mental Health Commission commissioned this report.

Please send enquiries about this publication to the
Australian Institute for Suicide Research and Prevention
Griffith University, Mt Gravatt Campus,
Mt Gravatt, Queensland, 4122

Phone: +61 7 3735 3382 Fax: +61 7 3735 3450
Email: aisrap@griffith.edu.au

Queensland
Mental Health Commission

National Library of Australia Cataloguing-in-Publication entry

Authors: Stuart Leske, Ghazala Adam, Ina Schrader, Amra Catakovic, Bridget Weir & David Crompton

Australian Institute for Suicide Research and Prevention

Title: Suicide in Queensland: Annual Report 2020

Subjects: Suicide--Queensland--Statistics. Suicide--Research--Queensland. Suicidal behaviour--Queensland.

Dewey Number: 362.2809943

Griffith UNIVERSITY
Queensland, Australia

Australian Institute for Suicide Research and Prevention

Contents

Dedication

We dedicate this report to individuals with a lived experience of suicide. That is, those who have had suicidal thoughts, survived a suicide attempt, cared for someone through a suicidal crisis, or been bereaved by suicide.[1]

Acknowledgement of Country

We acknowledge the Yugarabul, Yuggera, Jagera and Turrbal peoples as the Traditional Custodians of the land on which we prepared this report. We pay respect to Elders, past, present, and emerging, and extend that respect to other Aboriginal and Torres Strait Islander people. We acknowledge that these lands have long been a place of research and learning.

Acknowledgements

We acknowledge the Queensland Mental Health Commission (QMHC) for funding the Queensland Suicide Register (QSR) from July 2013, and Queensland Health for funding the register from 1990 to July 2013. We thank the Queensland Police Service (QPS) and the Coroners Court of Queensland (CCQ) for sharing police reports with the Australian Institute for Suicide Research and Prevention (AISRAP). We acknowledge families, friends, police, forensic pathologists, registrars and coroners who have contributed to the information presented in this report. We recognise the many people who support these roles. We acknowledge the Department of Justice and Community Safety Victoria as the source organisation of the National Coronial Information System (NCIS) data in this report, and the NCIS as the database source of that data. We would like to thank current and former QSR investigators and research assistants. We also gratefully acknowledge reviewers of this report at the QMHC, the Coroners Court of Queensland and AISRAP.

Acknowledgement of lived experience

We recognise and acknowledge those with lived experience, and the critical role they have in informing the way suicide is understood and prevented. Each life is unique and plays an invaluable role in suicide prevention.

Each person represents a rich life experience: a life born, lived, contributed, tragically lost, and always remembered.

Each life consists of many individual stories.

The QSR reflects just one part of each person's life story (albeit an important experience of their life). It is acknowledged that the coronial data within this report contains only some aspects of the person's experience.

We perceive each suicide in this report not as a number, rather, as a personal story which taken together collectively with all other stories of suicide are quantified for shared understanding. These collective experiences assist us to reflect quantifiable commonalities and differences among lives lost to suicide.

It is important to note that staff working on the QSR maintain the highest respect, sensitivity and compassion towards all stories and experiences associated with the QSR.

Support services

The data in this report refers to real people, lives lived, and lives lost too early to suicide. One suicide is one too many, and we work with urgency to reduce the deaths by suicide in Queensland annually.

We acknowledge that some content in this report may be distressing. Please contact the following services to obtain support:

Lifeline	All	24/7	13 11 14	www.lifeline.org.au
Suicide Call Back Service	All	24/7	1300 659 467	www.suicidecallbackservice.org.au
Beyond Blue	All	24/7	1300 224 636	www.beyondblue.org.au
State Mental Health Crisis Line Queensland	All	24/7	13 43 25 84 (13 HEALTH)	
National StandBy Response Service	People impacted by suicide	24/7		https://standbysupport.com.au/#Contact
eheadspace	Youth and young people	9 am to 1 am Melbourne time every day	1800 650 890	www.eheadspace.org.au
Kids Helpline	Youth and young people	24/7	1800 55 1800	www.kidshelpline.com.au
ReachOut	Youth and young people	24/7		www.au.reachout.com
MensLine Australia	Men	24/7	1300 78 99 78	www.mensline.org.au
Open Arms — Veterans and Families Counselling	Current and ex-serving Australian Defence Force members and their families	24/7	1800 011 046	www.openarms.gov.au
Thirrili	Aboriginal and Torres Strait Islander Australians bereaved by suicide	24/7	1800 805 801	https://thirrili.com.au
Care Leavers Australasia Network	People who have grown up in orphanages, children's homes, missions and foster care	9 am to 5 pm weekdays	1800 008 774	https://clan.org.au
Carers Australia	Carers	9 am to 5 pm weekdays	1800 242 636	www.carersaustralia.com.au
GriefLine	Anyone experiencing grief, loss or trauma	12 pm to 3 am AEST every day	1300 845 745	www.griefline.org.au
headspace School Support	Bereavement in secondary schools	9 am to 5 pm weekdays	0455 079 803	www.headspace.org.au/what-works/school-support
QLife	LGBTIQ+ Australians	3 pm to 12 am every day	1800 184 527	www.qlife.org.au
SANE Australia	Those affected by mental health issues	9 am to 5 pm weekdays	1800 187 263	https://www.sane.org
Wellways Helpline	Those affected by mental health issues	9 am to 9 pm weekdays	1300 111 500	www.wellways.org

List of acronyms	
AEST	Australian Eastern Standard Time
ABS	Australian Bureau of Statistics
AISRAP	Australian Institute for Suicide Research and Prevention
ATSISPEP	Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project
CALD	Culturally and Linguistically Diverse
CAMS	Collaborative Assessment and Management of Suicidality
CBPATSISP	Centre of Best Practice in Aboriginal and Torres Strait Islander Suicide Prevention
CBT	Cognitive behaviour therapy
CCQ	Coroners Court of Queensland
DBT	Dialectical behaviour therapy
Every life	Every life: The Queensland Suicide Prevention Plan 2019-2029
HHS	Hospital and Health Service
iQSR	Interim Queensland Suicide Register
LGBTIQ+	Lesbian, gay, bisexual, transgender/gender diverse, intersex and queer
NCIS	National Coronial Information System
QMHC	Queensland Mental Health Commission
QPS	Queensland Police Service
QSR	Queensland Suicide Register
RBDM	Registry of Births, Deaths and Marriages
SEM	Social-ecological model

Glossary of key terms	
Age-standardised rate	An age-standardised rate adjusts the crude rate to consider differences in population age structures over time.[2]
Age-specific rate	The crude (i.e. unadjusted) rate in a specific age group, expressed per 100,000 males, females or persons.
Crude rate	The events (i.e. suicides) in a period divided by the estimated population size halfway through that period.[3]
Geocoding	Taking an input address or place and providing output for geographical areas and the coordinates (latitude and longitude) of that address or location.
Numbers	The number of deaths by suicide, also known as a count or frequency.
Suicide cluster	Three or more closely grouped deaths in three months, linked by space or social relationships.[4]
Systematic review	A process that tries to collect evidence fitting pre-specified eligibility criteria to answer a specific research question, minimising bias by using explicit, systematic methods described in advance in a published protocol.[5]
Social-ecological model of suicide prevention	The social-ecological model of suicide prevention is a four tier framework of individual, relationship, community and societal levels for organising a comprehensive picture of risk and protective factors associated with at least one aspect of suicide-related thoughts or behaviour or both.[6]

How to share these statistics with others

Mindframe, a national program that supports safe media reporting, portrayal and communication about suicide, provides the following guidelines for interpreting the Australian Bureau of Statistics (ABS) data, which also apply to the data in this report:

"The volume of the data, the complex nature of the figures and general content can be problematic or triggering for individuals who are considered vulnerable or have reduced resilience.

To decrease risk and promote safe discussion and sharing of information presented, please consider:

- Avoiding simplistic explanations that suggest figures are the result of a single factor or event
- Validating grief and loss
- Offering context and balance
- Promoting help-seeking information and services
- Checking language to avoid sensationalised or glamorised content."

Reproduced with permission from Everymind from the webpage: https://lifeinmindaustralia.com.au/about-suicide/suicide-data/understanding-the-abs-causes-of-death-data

Notes on language

AISRAP follows Mindframe's language guide when discussing suicide. Table 1 presents problematic and preferred language.

Table 1 Preferred language when discussing suicide

Issue	Problematic	Preferred
Presenting suicide as a desired outcome	'successful suicide', 'unsuccessful suicide.'	'died by suicide', 'took their own life.'
Associating suicide with crime or sin	'committed suicide', 'commit suicide.'	'took their own life', 'suicide death.'
Sensationalising suicide	'suicide epidemic.'	'increasing rates', 'higher rates.'
Language glamorising a suicide attempt	'failed suicide', 'suicide bid.'	'suicide attempt', 'non-fatal attempt.'
Gratuitous use of the term 'suicide.'	'political suicide', 'suicide mission.'	refrain from using the term suicide out of context.

Reproduced with permission from Everymind from the webpage: https://mindframe.org.au/suicide/communicating-about-suicide/language

Introduction

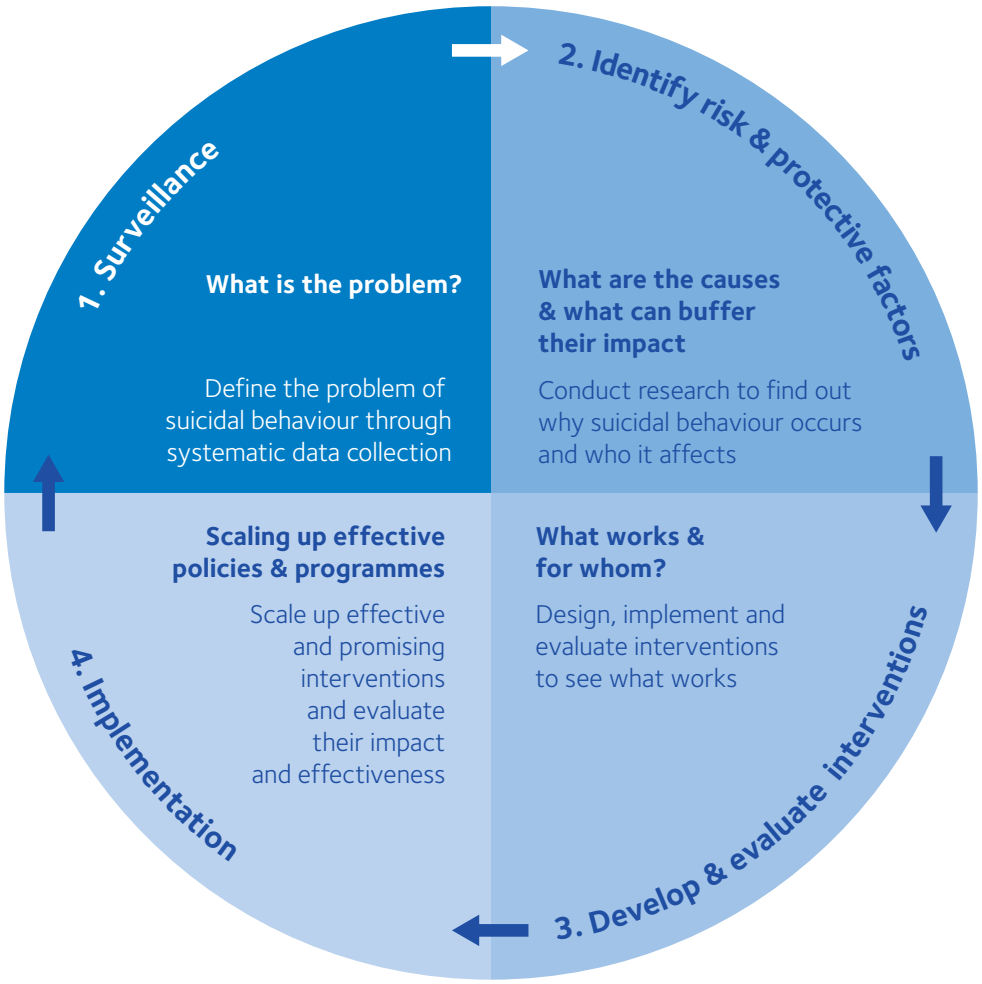
The Suicide in Queensland: Annual Report 2020 provides recent suicide trends in Queensland to help target and inform suicide prevention activities by understanding the circumstances of suicides. This report includes suicide data from 1 January 1990 to 31 July 2020.

The information in this report comes from a public health surveillance system — **the Queensland Suicide Register (QSR) and the interim Queensland Suicide Register (iQSR)**.

Public health surveillance is critical to public health and involves capturing, analysing and interpreting health data.[7] Health services use this information to plan, implement and evaluate interventions and share timely information with those who need to know to take prompt action to prevent further suicides.[8] Surveillance is critical (**Figure 1**) to **effectively understand and prevent suicides**.[9]

Suicide surveillance shows the size of the problem, helps develop health priorities, prioritise populations, and find patterns in suicide methods.[10] Surveillance can identify suicide clusters in specific geographical locations like towns or physical sites. Most importantly, surveillance systems can assess the impact of suicide prevention strategies and activities. As the number, characteristics and methods of suicides vary widely between people, places and across time, real-time surveillance of suicides is critical to support **tailored local, state, and national suicide prevention efforts.**[11]

Figure 1 The role of surveillance in preventing suicide



The Queensland Suicide Register

The QSR is a longstanding public health surveillance system operating since 1990 **including records on all confirmed, probable and suspected suicides by Queensland residents from 1990 to 2016**. AISRAP manages the QSR, and the QMHC funds the QSR.

In 2011, AISRAP developed the interim QSR (iQSR) to provide real-time suicide mortality data. iQSR information comes from police reports of suspected suicides to coroners[i]. **The iQSR contains suspected suicides for the years 2017 to present day**. Information on suspected suicides remains in the iQSR until coroners finalise investigations and deaths close in the NCIS. QSR staff then enter these suspected suicides into the QSR.

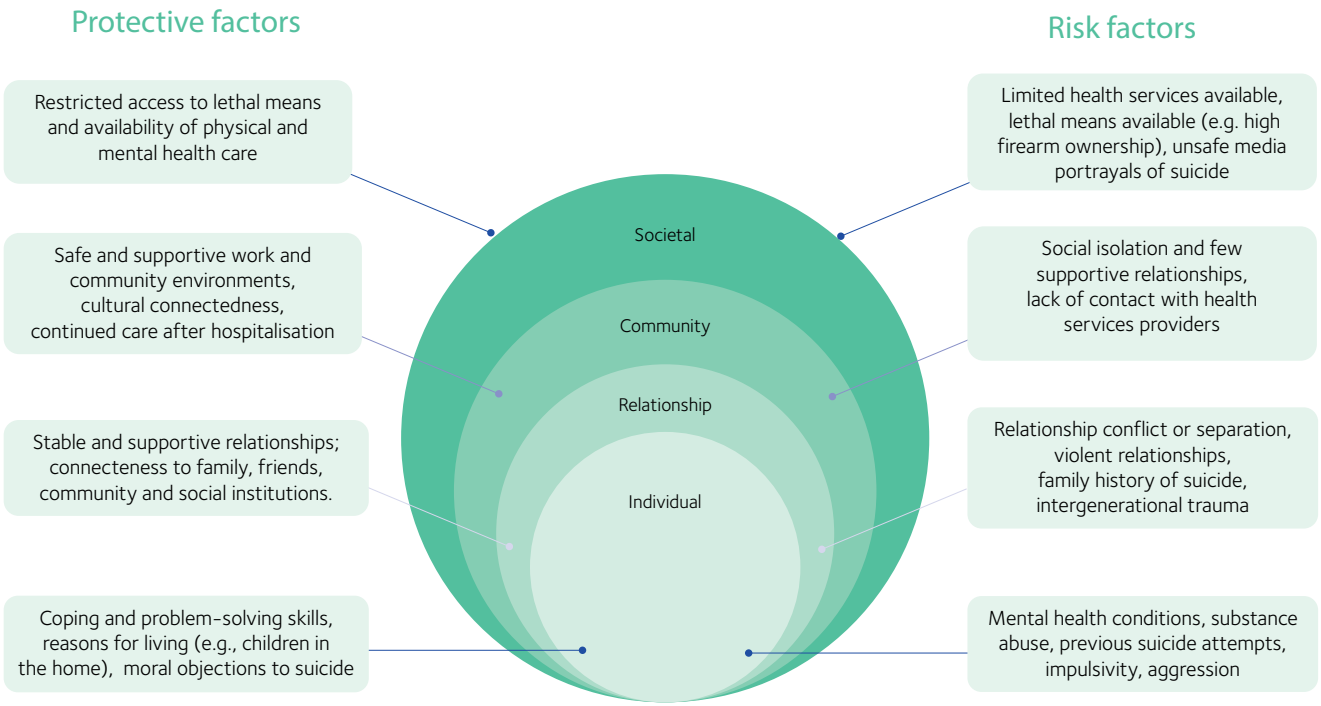
Understanding suicide

Suicide has a significant human toll, with far-reaching impacts. In 2018 there were 3,046 deaths by suicide registered in Australia.[12] **Queensland accounted for 25.8% of these deaths, but 20.1% of Australia's population**.[13] Queensland also had the second-highest suicide rate[ii] of all Australian jurisdictions for deaths registered in 2018.[14]

In a representative study of 3,002 Australians, 58% reported exposure to the suicide of someone they knew.[15] This exposure to suicide is associated with an increased likelihood of suicide attempts and deaths.[16] These losses produce grief in immediate family members.[17] Society-wide, suicide also has a substantial impact extending beyond immediate relatives and friends.[18] A recent systematic review found that exposure to suicide increases the risk of suicide-related behaviours following non-kin suicide deaths.[19] Non-kin close to those dying by suicide report higher levels of distress than kin close to those dying by suicide.[20]

Suicidal behaviour is complex, with no simple explanations or solutions. There are many models and theories to explain suicidal thoughts and actions, and no single model appears to have gained widespread acceptance worldwide. The **social-ecological model (SEM)**[21] focuses on the **relationship between individual and environmental characteristics**, allowing for a **multi-level public health approach** to public health concerns. This model suggests that society, community, relationship, and individual protective and risk factors influence suicide (**Figure 2**). The SEM emphasises the need for prevention efforts to occur on multiple levels, with communication between different sectors and disciplines, to consider various levels of influence.[22] These multi-level efforts are more effective than their components alone.[23] Modern suicide prevention frameworks recognise the importance of a social-ecological, **systems-based approach** to suicide prevention that involves **responses both in and outside health services**.

Figure 2 Examples of risk and protective factors for suicide deaths in a social-ecological model



i Interested readers can find the template for this police report at https://www.courts.qld.gov.au/__data/assets/pdf_file/0004/138766/form1-police-report-of-death.pdf.

ii All mentions of the 'suicide rate' refer to the age-standardised suicide rate. The glossary has a definition of the age-standardised suicide rate.

The SEM helps ensure that suicide prevention plans, activities and policies are comprehensive, coordinated, complementary and responsive to the issues identified from information on suicides by Queensland residents. **Every life: The Queensland Suicide Prevention Plan 2019–2029**,[24] published by the QMHC on behalf of the Queensland Government, outlines the multi-level, coordinated actions in Queensland on suicide prevention. This report mentions Every life to indicate how the literature and QSR findings align with it.

Queensland Suicide Register and interim Queensland Suicide Register methods

The QSR contains demographic, psychosocial, physical, psychological, interpersonal and circumstantial information on suicides in Queensland from 1990 to 2016. This information is vital to try to understand to prevent future suicides.

There are four primary data sources:

1. **The police report**[iii] of a suspected suicide to a coroner (Form 1), which includes sections on demographic information, general and mental health, and findings from interviewing next-of-kin, friends or acquaintances. This report is the sole data source for the iQSR but one of four QSR data sources. A QPS Officer completes this form soon after death, following an interview with the deceased's next-of-kin or other available people who knew the deceased. AISRAP receives police reports from the QPS and the Coroners Court of Queensland.
   Other data sources used only in the QSR come from the NCIS.[iv] The NCIS is an online repository of Australian coronial data that provides access to three separate data sources:
2. **A toxicology report** to detect substances that the person may have consumed before death.
3. A **post-mortem autopsy**, which examines the cause of death soon after a person's death.
4. The **coroner's finding**[v], which summarises the person's circumstances before their death, considers the results of other reports, and concludes when and where the person died, and what caused the person to die.

An external geocoding provider supplies information on geographical areas, latitude, and longitude, for the deceased's residential address and the suicide site.

The NCIS is further used to extract additional data on marital status, employment status, occupation, country of birth and Indigenous origin.

The Queensland Registry of Births, Deaths and Marriages (RBDM) provides the deceased's country of birth and Indigenous status when this information is not available from primary data sources.

Each suspected suicide is entered in two stages, resulting in the iQSR and the QSR (**Figure 3**). In the **first stage**, information from the **police report** for all suspected suicides enters the **iQSR**. The iQSR is updated weekly from police communications containing forms on suspected suicides, allowing **real-time monitoring of suspected suicides in Queensland**. The iQSR includes administrative, demographic, geocoding and circumstantial information on suspected suicides.

In the **second stage**, as investigations on **suspected suicides close in the NCIS**, they **move from the iQSR to the QSR**. All available information from the NCIS is downloaded, entered, reviewed and added to the QSR. Deaths are assigned one of **four probabilities of being a death by suicide**, based on health research criteria (**Figure 4**):

1. **Unlikely**: The available information indicates that death by suicide was unlikely (e.g. heart attack).
2. **Possible**: The available information suggests a death by suicide, but there remains a substantial possibility that the death may be from other internal or external causes of death (e.g. accident, illness or homicide).
3. **Probable**: The available information does not allow for a judgement of 'beyond reasonable doubt' but is still more consistent with a death by suicide than any other cause.
4. **Beyond reasonable doubt**: The available information suggests that the deceased had communicated verbally or in writing their intent to die by suicide before their death.

The suicide classification flow chart (Figure 3) shows the process followed to assign the level of probability to each death. QSR analyses exclude suicides classed as 'unlikely' or 'possible'.

iii Accessible at https://www.courts.qld.gov.au/__data/assets/pdf_file/0004/138766/form1-police-report-of-death.pdf

iv https://www.ncis.org.au/

v Accessible at https://www.courts.qld.gov.au/__data/assets/pdf_file/0011/87842/Form-20A-coroners-findings-and-notice-of-completion-of-coronial-investigation.pdf

Figure 3 Flowchart depicting the processes of the iQSR and QSR

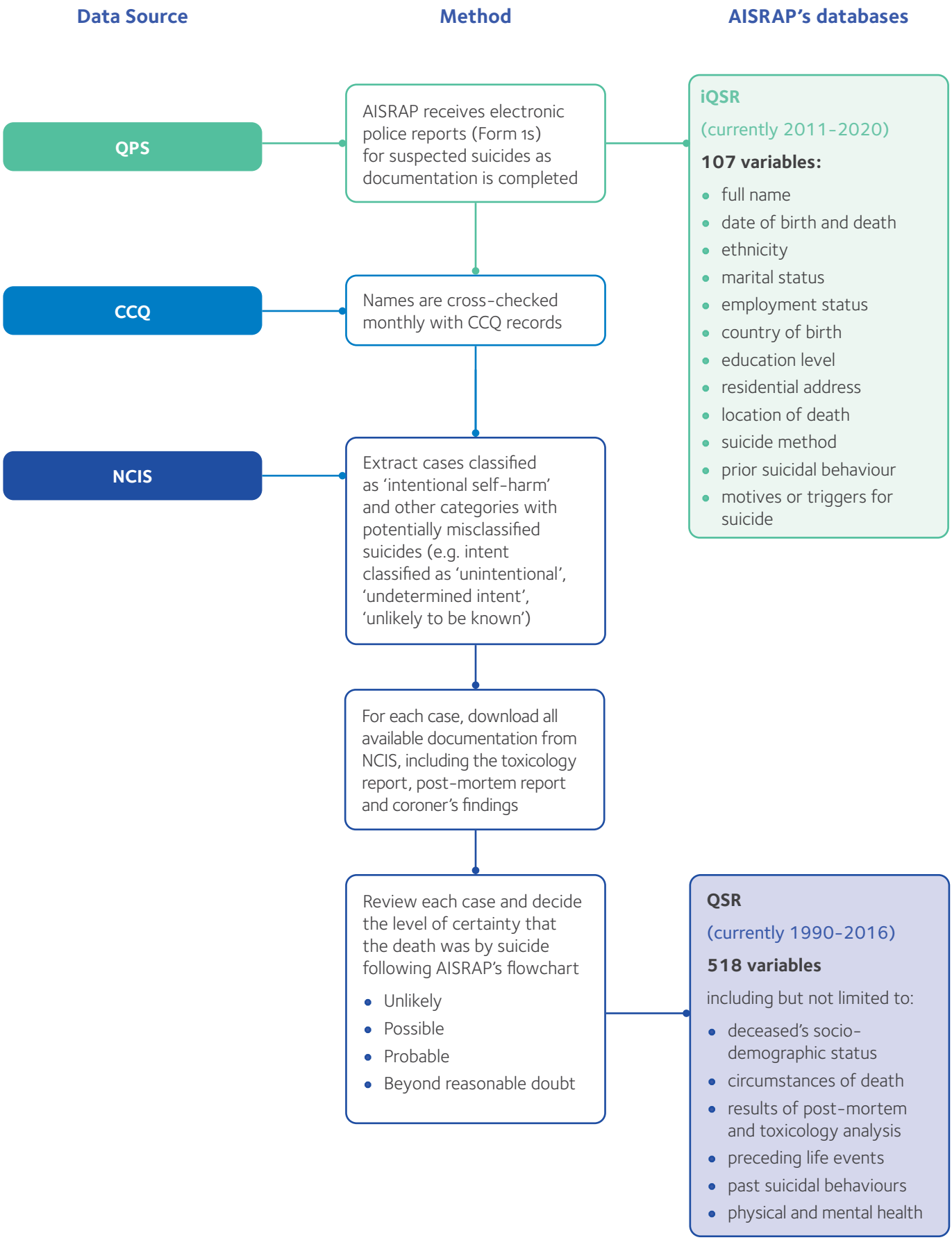
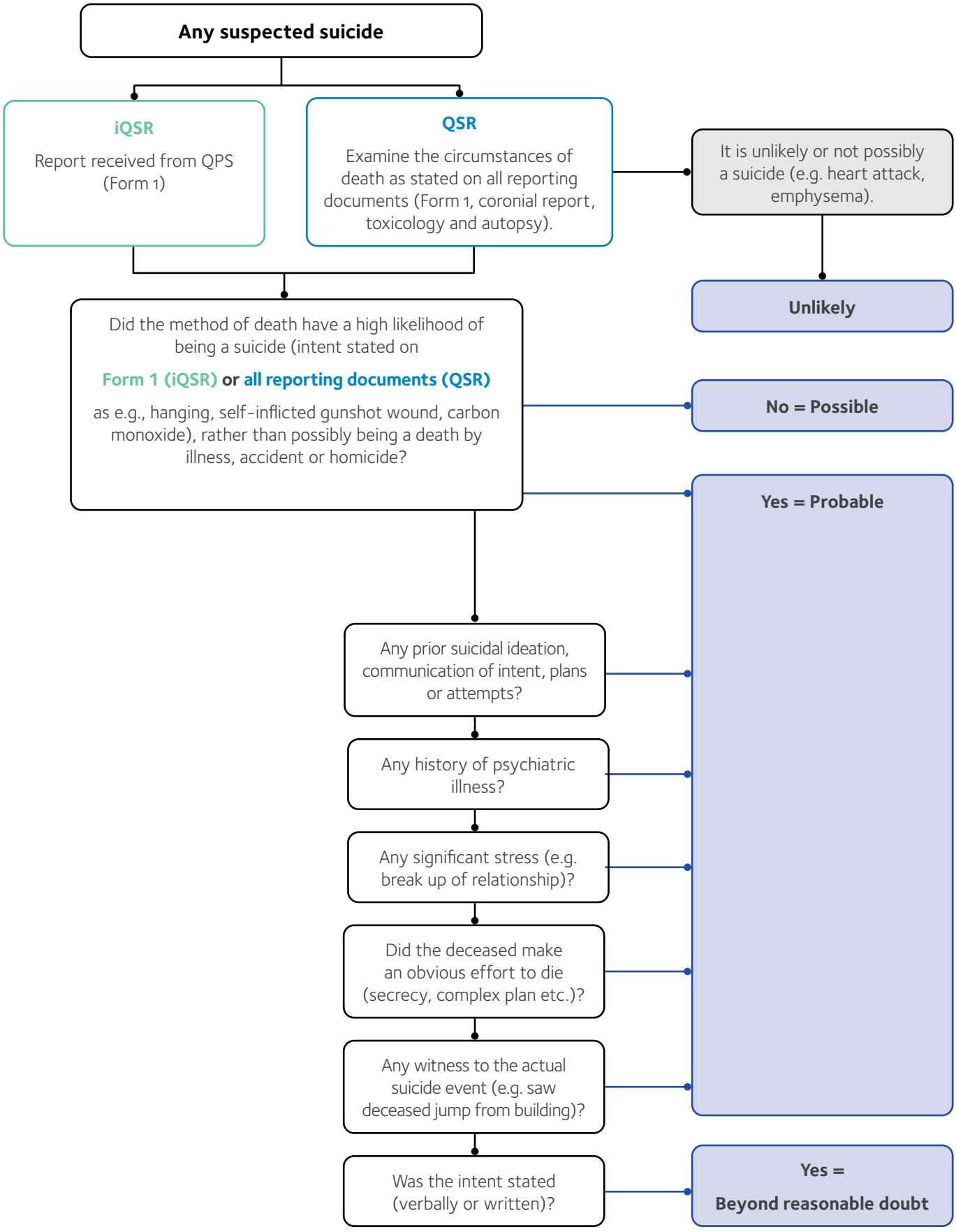


Figure 4 Suicide classification flow chart for the QSR and iQSR



Quality of the Queensland Suicide Register data

The police report is unique because it includes a narrative summary of the circumstances based on an officer being on the scene soon after the death occurs, talking to multiple people, and being able to include information about the person who died derived from various government agencies. Although police officers do not have the hindsight that coroners benefit from, they are among the first responders to the scene and so collect the most detailed and rich information directly from next-of-kin, witnesses to the death, and other people where possible given the difficult circumstances. **The availability and completeness of the police report depends on several factors**, including the ability or willingness of interviewees to provide information, and the skills and approaches police use. Factors such as situational stress, experience of interviewees and police officers, and cultural and language barriers may impact on what police discuss, interpret and note.

Cultural background is difficult to obtain for all deaths, so the QSR may underestimate deaths by suicide in CALD people. There is a need for a greater focus on Australian CALD communities in suicide prevention policy, research and evaluation, as a 2019 systematic review on this topic located no Australian studies.[25]

Caveats about the interim Queensland Suicide Register data (2017–2020)

Interim data has **significant limitations**. These limitations are **essential to keep in mind when interpreting findings from this data**. Although the police report is comprehensive, and police can access data from multiple information systems, limitations still exist in interim data.

1. The iQSR uses information from a police report of death to a coroner (Form 1). AISRAP receives Form 1s of suspected suicides. There are **no toxicology, post-mortem examination or coroners' reports to inform the cause of death** (e.g. a drug present in the body at lethal levels) to give the complete background of a person before their death.
2. QPS officers complete Form 1s soon after a death occurs, through statements taken from the deceased's next-of-kin or other non-kin. Form 1s inform the coroner. When investigating possible suicides, **officers may not ask or record information** that might be **relevant for** a better **understanding of the likelihood of suicide**.
3. The **police cannot always be sure of the specific cause of death** (e.g. when drugs, alcohol or medications appear to be involved). The death may appear accidental or due to natural causes. The iQSR does not record these deaths as suspected suicides.
4. Next-of-kin and other **people may not know or correctly recall** prior suicidality, history of mental health issues, significant stressors or the perceived or communicated intent of the deceased. Applying the iQSR flowchart (**Figure 4**) to Form 1s relies on the accuracy of statements from people when they are likely distressed.
5. If there is **not enough information** at the time of death, the flowchart will likely lead to a suicide probability rating of 'possible' for a death, which this report excludes.
6. When further information becomes available, reapplying the flowchart may reclassify the death as a suicide that was 'probable' or 'beyond reasonable doubt'. Therefore, **the iQSR may underreport suicides slightly to ensure that reporting is responsible** and most accurate by not over-reporting suspected suicides without enough evidence.
7. Two research assistants independently apply the flowchart (**Figure 4**) to iQSR data to classify the probability of suicide, and a third senior team member resolves all disagreements.

Comparison of the Queensland Suicide Register and the interim Queensland Suicide Register with Australian Bureau of Statistics suicide data

Differences exist in numbers of suicides that the QSR and the ABS register. These **differences are due to different years for some deaths and NCIS access (Table 2)**.

Table 2 Differences between ABS and QSR/iQSR data systems

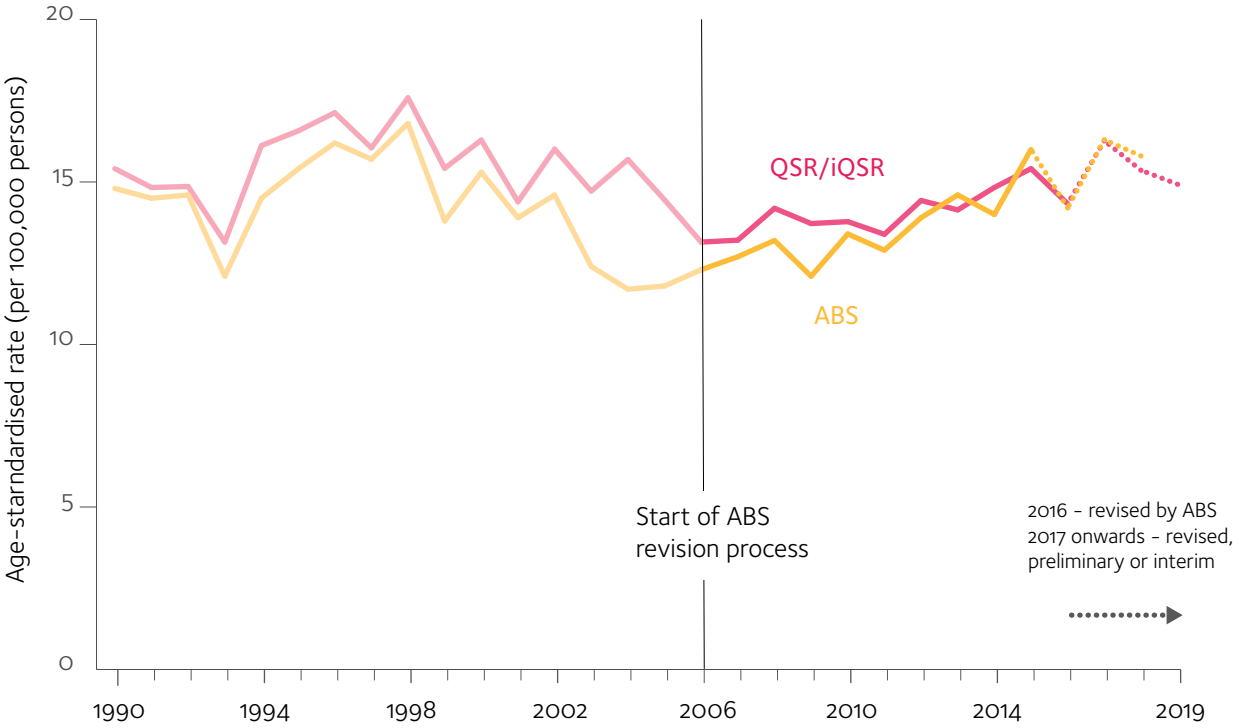
Characteristic	ABS	QSR/iQSR
Year included	Year death was registered	Year of death
NCIS access	Open and closed cases	Closed cases

For ABS data, state registries do not register about 4% to 7% of deaths from one year until the following year or later.[26] The ABS may also be able to identify deaths by suicide of Queensland residents in other states earlier than AISRAP due to differences in NCIS access.

Figure 5 shows the trends of suicide rates from 1990 to 2019 as reported by the ABS, QSR and iQSR — with the QSR and iQSR including cases with a level of probability ascertained as 'beyond reasonable doubt' and 'probable'. ABS data include revised (2017) and preliminary (2018) figures.

There were substantial differences between ABS and QSR numbers of suicides for 2002 to 2005 due to ABS starting a revisions process in 2006 that enabled identifying more deaths as suicides beyond initial processing of these deaths.[vi] ABS and **QSR data differed by 18 people in 2018 — 768 to 786 persons respectively**. In 2018, the iQSR recorded 15.4 suspected suicides per 100,000 Queensland residents while the ABS reported 15.8.

Figure 5 Age-standardised suicide rates in Queensland, based on Australian Bureau of Statistics[vii], Queensland Suicide Register and the interim Queensland Suicide Register data, 1990–2019[27]



Completeness of interim Queensland Suicide Register and Queensland Suicide Register data

This report contains data from both the iQSR and the QSR. Evaluations of the iQSR (2017-2020), focus on 2019 as it is the most recent year data was available for the full year. This report includes iQSR data up until 31 July, 2020, on monthly age-standardised suicide rates.

Information on the QSR comes from aggregated data for the 2014-2016 period. For deaths from 2014 to 2016, 118, or 5.3% were considered 'unlikely' or 'possible' suicides and excluded from analyses. iQSR data from 2017 up until 31 July 2020, includes 2,892 suspected suicides by Queensland residents, of which 110 (3.8%) were considered 'possible' suicides and excluded from analyses.

vi See explanatory notes 91–100 for ABS Catalogue number: 3303.0 — Causes of Death, Australia, 2018 at https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/3303.0Explanatory%20Notes12018?OpenDocument

vii ABS should issue their "Causes of Death, 2019" release in late October 2020.

Section 1 Executive Summary

This section summarises suspected (2017-2019, iQSR) and confirmed suicides (2014-2016, QSR).

Interim Queensland Suicide Register (2017-2019)

General

In the 2019 calendar year, there were 757 suspected suicides of Queensland residents.

This figure amounted to just under 15 suspected suicides for every 100,000 people.

Actual numbers of male suspected suicides decreased by 23, from 593 in 2018 to 570 in 2019.

Actual numbers of female suspected suicides increased by 12, from 175 in 2018 to 187 in 2019.

Suspected suicide rates of Queensland residents have decreased since 2017.

The suspected suicide rate decreased by 2.8% from 2018 to 2019 in all Queensland residents. It reduced by 5.6% for males but increased by 7.4% for females.

Gender

Among Queensland residents, males accounted for 75.3% of suspected suicides in 2019, a decrease of 1.9% from 2018.

Age groups

Suspected suicide numbers and rates were highest in males aged 40–49 and females aged 45–49.

Aboriginal and Torres Strait Islander Queenslanders

In 2019, of people with known Aboriginal and Torres Strait Islander status, Aboriginal and Torres Strait Islander females living in Queensland accounted for 11.9% of all female suicides and Aboriginal and Torres Strait Islander males residing in Queensland for 8.3% of all male suicides.

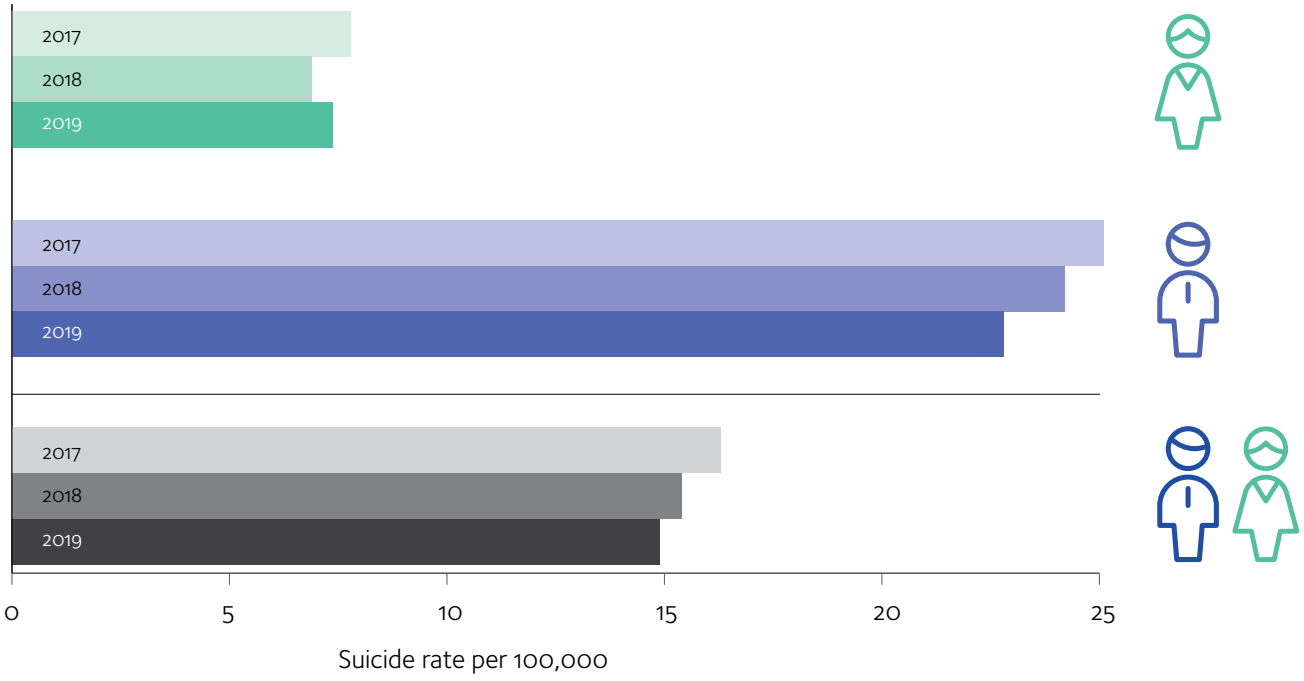
LGBTIQ+

There were 36 (1.5% of all) suspected suicides by persons identified as LGBTIQ+ from 2017-2019.

Hospital and Health Services (HHS) Catchment Areas

- Male suspected suicide rates were highest in Cairns and Hinterland and Wide Bay HHS Catchment Areas and lowest in Metro North, Metro South and Gold Coast. However, these three HHS catchment areas had the highest numbers of male suicides.
- Female suspected suicide rates were highest in Central Queensland and Gold Coast HHS Catchment Areas and lowest in Sunshine Coast and Wide Bay HHS Catchment Areas. Metro South, Metro North and Gold Coast HHS Catchment Areas had the highest numbers of female suicides.

Figure 6 Suspected suicide rate, males, females and total Queensland residents , 2017–2019.



Queensland Suicide Register (2014-2016, finalised data)

The QSR recorded 2,129 deaths by suicide in Queensland in the three years from 2014 to 2016. This aggregation offers the most up-to-date information contained in the QSR, while also accounting for annual fluctuations by reporting on three consecutive years.

Employment status

More than one in four people dying by suicide were unemployed (26.7%), while the unemployment rate in the middle of this period (July 2015) was 6.5%.[28]

Major occupational groups

Occupational information was available for about a quarter (26.1%) of all those dying by suicide. Of those with available details, labourers, and technicians and trades workers, both accounted for 119 deaths between 2014 and 2016 (5.6%). Machinery operators and drivers accounted for 70 deaths (3.3%), and managers accounted for 67, or 3.1% of deaths.

Adverse life events

The most frequent adverse life events before suicides were relationship separation (27.1% of all deaths by suicide) and financial problems (18.3%).

Mental health and suicidality

- Police and coroners reported that mental health conditions were prominent in those who died by suicide, with 51.5% reportedly having a diagnosed mental health condition. While almost one in three (32%) people had one diagnosed condition, nearly 1 in 5 people (19.5%) had two or more diagnosed mental health conditions. These diagnoses came from police and coronial reports only.
- There was evidence of untreated mental health concerns in 38.0% of all those dying by suicide.
- Almost half of all people dying by suicide (46.1%) stated an intent to die by suicide in their lifetime. Almost four in 10 (37.9%) expressed an intention to die by suicide within 12 months of their death.
- Almost a third (30.1%) had attempted suicide in their lifetime. One in six (15.7%) people made a suicide attempt in the year before they died.

Section 2 Current suicide rates and trends

A focus on 2020

There is much uncertainty around the medium and long term impacts of the Coronavirus Pandemic (COVID-19) on suicide mortality in Australia.[viii] Changes in Queensland that might affect suicide mortality include the duration and intensity of restrictions, the timeframe of the Queensland economy recovering, and the impact of state and federal government interventions to reduce the economic and social effects of COVID-19.

Therefore, not enough is known to understand the full impact of COVID-19 on suspected suicides. It is also essential to bear in mind that suicide is not influenced or caused by one factor but results from a complex interaction between multiple risk factors. **Table 3** presents suicide numbers for males, females and persons for January to July inclusive from 2015 to 2020.

The graphs below (**Figures 7 and 8**) show monthly age-standardised suicide rates from 1 January 2015 up until 31 July 2020 for Queensland males and females, respectively.

Table 3 Suspected suicides from January to July inclusive, by sex, 2015-2020

Year	Males	Females	Persons
2015	315	106	421
2016	290	92	382
2017	340	116	456
2018	341	89	430
2019	343	102	445
2020	352	102	454

Figure 7 Monthly age-standardised suspected suicide rate per 100,000, Queensland males, 1 January 2015–31 July 2020.

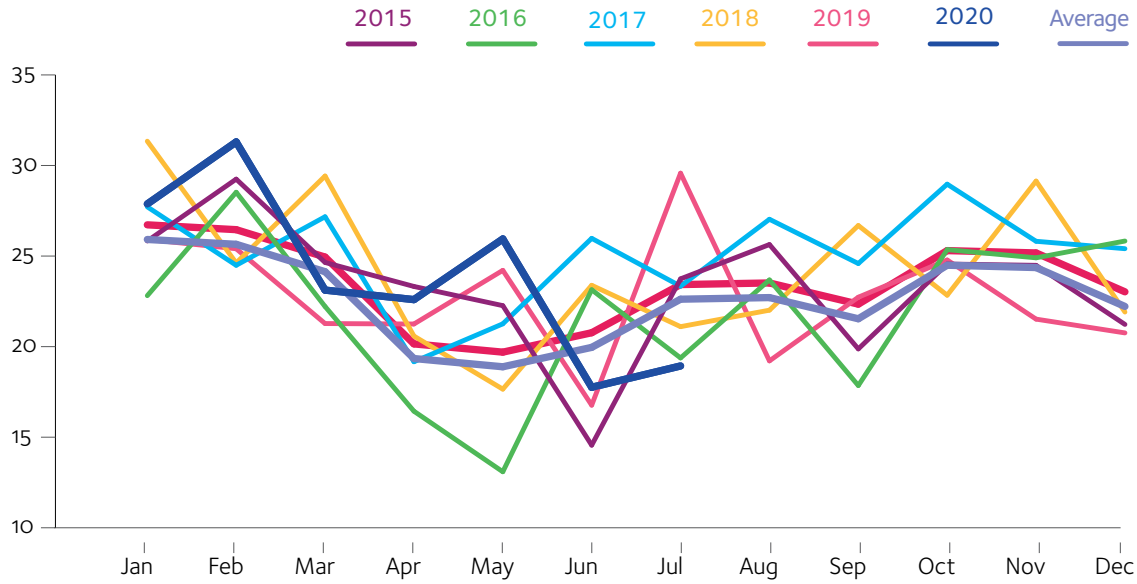
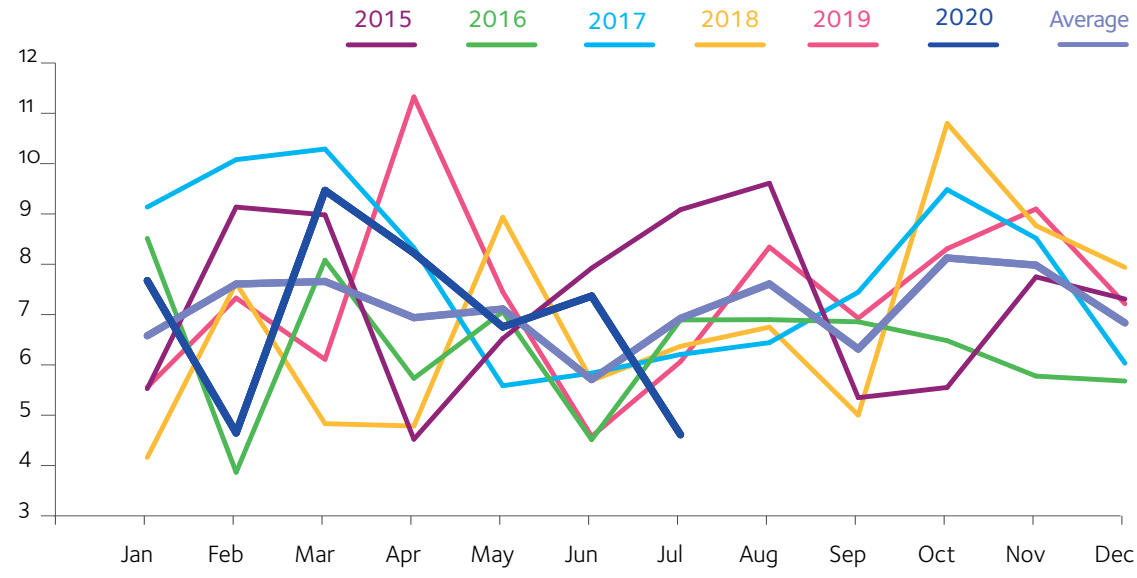


Figure 8 Monthly age-standardised suspected suicide rate per 100,000, Queensland females, 1 January 2015–31 July 2020



viii See for instance: https://insightplus.mja.com.au/2020/29/covid-19-and-suicide-variation-and-response/ and https://insightplus.mja.com.au/2020/30/suicide-deaths-forecast-for-13-7-increase/

The 2020 iQSR data show that up until 31 July 2020, police officers mentioned COVID-19 in 32 of 454 suspected suicides (7%). In four instances, it was unclear if COVID-19 contributed to the suspected suicide. COVID-19 did appear to contribute towards 28 suspected suicides. COVID-19 may have influenced suspected suicides through affecting mood, coping, stress and anxiety (14 people); employment (11 people); social isolation (8 people); changes in access to healthcare support and items (5 people); relationship breakdown (1 person) and finances (1 person). There was overlap (e.g. access to healthcare items and losing employment influenced mood).

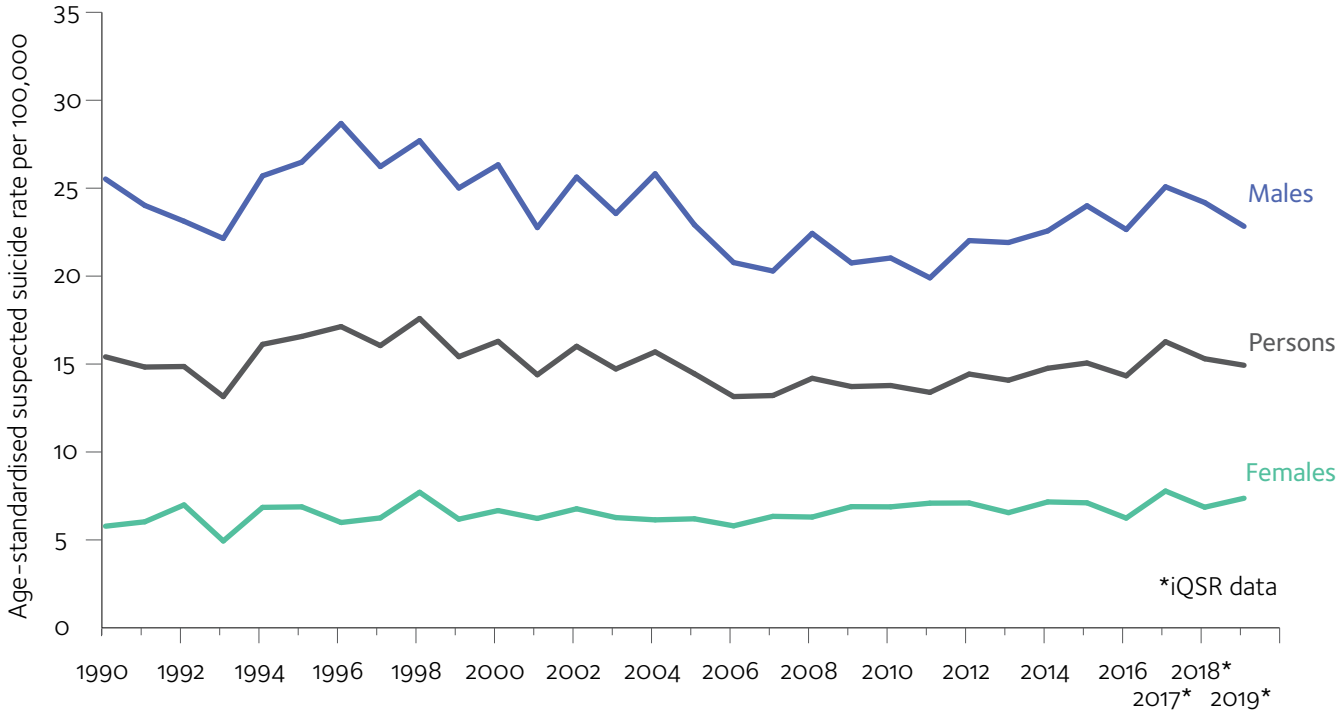
This information indicates that support offered to people who report that COVID-19 has impacted on mental health, employment, social connectedness, relationships, access to healthcare, and finances is valuable. Support for these concerns may prevent further suicides from occurring in similar circumstances.

Suicide trends in Queensland

Looking at suicide rates across time helps understand trends, assess the effects of suicide prevention interventions, inform future suicide prevention strategies, target suicide prevention activities to specific people, communities or places, and predict suicide numbers and rates. This section details current suicide rates in demographic groups in Queensland.

The QSR and iQSR show that numbers and rates of suicide in Queensland residents, while generally increasing since 2011, have declined since 2017 **(Figure 9)**. The two highest points in the past decade were in 2015 and 2017. Decreases in suicide rates followed both years.

Figure 9 Age-standardised suicide rates by gender, Queensland residents, 1990–2019



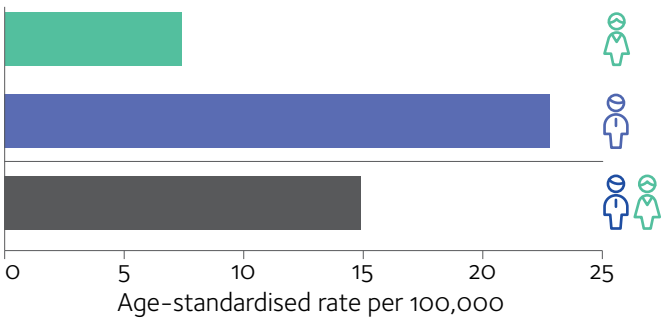
Current suicide numbers and rates in Queensland

In 2019, the iQSR recorded 757 suspected suicides by Queensland residents. This figure decreased by 1.4% from the 768 suspected suicides recorded in 2018.

By gender

In 2019, males represented 75.3% or 570 suspected suicides, while females accounted for 24.7% or 187. This ratio equated to just over three male suicides for every female suicide. In suicide rates, this meant 22.8 male suspected suicides for every 100,000 males in Queensland, 7.4 female suspected suicides for every 100,000 females and 14.9 total suspected suicides for every 100,000 persons (**Figure 10**).[ix]

Figure 10 Suicide rates, males, females and total Queensland residents, 2019



ix Suicide rates were calculated using the June 2001 Australian standard population and the estimated resident Queensland population numbers for June 2019. Australian Bureau of Statistics (2019). Australian Demographic Statistics, December 2019. ABS Catalogue number: 3101.0. Estimated Resident Population by Single Year of Age, Queensland. Released 18 June 2020.

As males accounted for over 75% of suspected suicides, evidence for interventions that reduce suicides in males is crucial. There is a lack of knowledge about effective suicide prevention interventions for males, young[29] and old.[30] Adolescent females appear more likely than males to benefit from existing suicide prevention initiatives.[31] A third (33%) of psychosocial suicide prevention interventions are more effective for women.[32]

Future research focusing on male suicide risk should consider men's lived experiences of suicidal behaviour, and how male gender moderates the effectiveness of specific suicide interventions.[33] Notably, the Australian Government recently announced $5.6 million for suicide prevention interventions with Australian boys and men.[x]

Six of 10 chief investigators on this project are male, and the project will employ male researchers and involve boys and men with lived experience.[34]

The five universities involved are the University of Melbourne, Monash University, Deakin University, University of Wollongong and the University of British Columbia.[35] These universities have partnered with 14 community organisations with a strong commitment to male suicide prevention: the Australian Men's Health Forum, Australian Psychological Society, Everymind, Heiress Films, Gotcha4Life, Lifeline, Mantle Health, MATES in Construction, Mental Health First Aid, Movember, Stop Male Suicide and Suicide Prevention Australia, Tomorrow Man, and the Victorian Men's Sheds Association.[36]

Current suicide numbers and rates in Queensland, 2017–2019

Suicide numbers and rates differ across age groups; therefore, analysis of different age groups helps to target resources in suicide prevention.

- Numbers of suicides were highest in males aged 40–49.
- Males aged 85 or older have low numbers of suicide but high suicide rates.
- **Figure 11** shows that the Queensland suicide prevention sector should prioritise males of all age groups, particularly those aged 40–49, as they have the highest numbers and rates of suicide. These findings align with Action area 2 of Every life.[37] This action area states the need to prioritise suicide prevention for men with several specific actions to better understand and respond to male suicide.

Figure 11 Age-specific suspected suicide numbers and rates per 100,000 Queensland residents by age group, by gender, 2017–2019

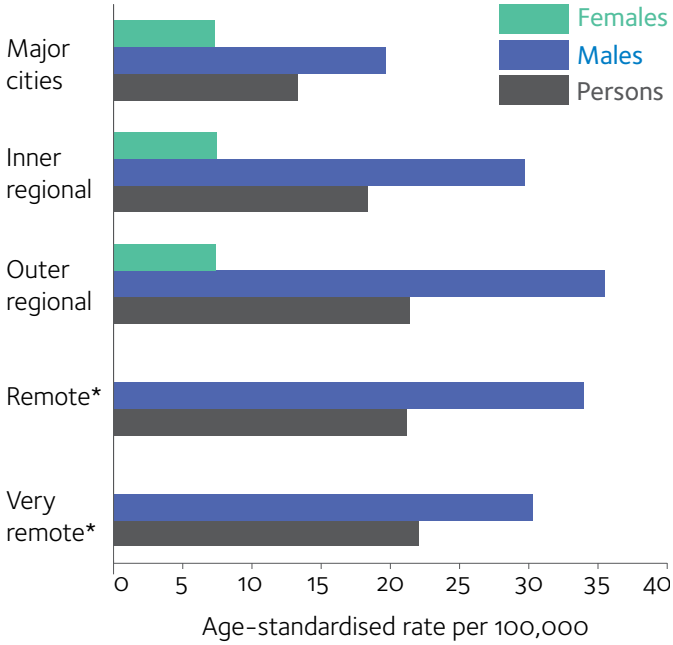
x https://www.health.gov.au/ministers/the-hon-greg-hunt-mp/media/additional-20-million-for-mental-health-and-suicide-prevention-research

Analysis by remoteness

Considering remoteness[xi] helps target suicide prevention activities based on the burden of suicide in different regions, providing a place-based lens to tailor locally developed and led initiatives. The ABS defines remoteness by the road distance to the nearest urban centre and its population size.[xii]

Rates (**Figure 12**) of suspected suicides varied across areas of Queensland from 2017 to 2019. While rates for females were similar across remoteness areas, male suspected suicide rates were highest in outer regional areas, followed by remote areas. Suspected suicide rates for males were quite similar in very remote and inner regional areas, while they were lowest in major cities. Numbers of suspected suicides by females in remote and very remote areas were too small to present rates.

Figure 12 Age-standardised suspected suicide rates by gender, by remoteness areas, Queensland residents, 2017–2019



* female rates not presented due to suicide numbers <20.

Regional and remote populations are also quite diverse, including Aboriginal and Torres Strait Islander people, CALD communities and farmers. A recent systematic review found that living in regional and remote areas was associated with a higher risk of suicide for Aboriginal and Torres Strait Islander youth.[38] In terms of accessing treatments in regional and remote areas, self-guided digital programs may be an option. However, no recent reviews of these interventions[39] have mentioned regional, rural or remote participants.

Aboriginal and Torres Strait Islander people in Queensland

Aboriginal and Torres Strait Islander people[xiii] have an increased likelihood of knowing someone who has died by suicide and a much higher risk of reporting multiple suicide exposures.[40]

Suicide rates vary substantially worldwide for Indigenous people. Researchers believe this is due to the differing impact of colonisation.[41] The broader historical, cultural, political, social, and economic contexts and the experience of underlying intergenerational trauma, racism, risk factors, and life events can all contribute to higher rates of suicide in Aboriginal and Torres Strait Islander Australians.[42] These factors can also impact the success of suicide prevention activities.

Aboriginal and Torres Strait Islander concepts of suicide can also differ from Western ideas.[43] Culturally appropriate and effective suicide prevention programs are therefore needed to support Aboriginal and Torres Strait Islander Australians. Central initiatives and organisations for suicide prevention with Aboriginal and Torres Strait Islander people and communities in Australia include:

- The foundational work of the Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project (ATSISPEP)
- The Centre of Best Practice in Aboriginal and Torres Strait Islander Suicide Prevention (CBPATSISP),[xiv] and
- The recent establishment of the Aboriginal and Torres Strait Islander Lived Experience Centre.

This report combines all available information from three sources to provide updated estimates of suicide rates for Aboriginal and Torres Strait Islanders people residing in Queensland from 2001 to 2018. Data on Aboriginal and Torres Strait Islander status comes from three sources. The first source is the police report (Form 1) of a death to a coroner. The second source is Aboriginal and Torres Strait Islander Origin from the NCIS, which assesses if NCIS coders identified a deceased person as being of Aboriginal or Torres Strait Islander descent or origin from coronial records. This assessment is based on all information collected during the coronial investigation, and not just the police report. The NCIS quality assures this information. The last source is Aboriginal and Torres Strait Islander status from the RBDM. This data source assesses if a person identified as being of Aboriginal or Torres Strait Islander descent or origin, based on information obtained by the RBDM at the time the death is certified.

xi Readers can view remoteness areas in Queensland at https://www.health.qld.gov.au/mass/subsidy-schemes/rural-remote. Readers can download a PDF of these remoteness areas at http://www.tmr.qld.gov.au/~/media/busind/Queensland%20Road%20Freight%20Industry%20Council/QLDRemotenessareamapAtt2.pdf.

xii As indicated by Person—geographic remoteness, classification (ASGS-RA) N at https://meteor.aihw.gov.au/content/index.phtml/itemId/697101

xiii By referring to Aboriginal and Torres Strait Islander people or Aboriginal and Torres Strait Islander Queenslanders, we acknowledge that within these broad groupings, before colonisation, there were over 500 different clan groups, also known as 'nations', in Australia, many with distinctive cultures, beliefs and languages. See https://info.australia.gov.au/about-australia/our-country/our-people.

xiv https://www.cbpatsisp.com.au/

- Numbers of suicides by Aboriginal and Torres Strait Islander Queenslanders have generally increased over time but have varied each year largely (**Figure 13**). An increase in numbers does not necessarily mean rates have increased too.
- In 2019, there were 42 suspected suicides by Aboriginal and Torres Strait Islander males and 19 by Aboriginal and Torres Strait Islander females residing in Queensland. These numbers are provisional and may increase due to cross-checking 2019 ethnicity with the NCIS.
- Aboriginal and Torres Strait Islander youth aged under 25 accounted for 41% of all suspected suicides by Aboriginal and Torres Strait Islander Queenslanders in 2019. Those aged under 30 accounted for 60.7%.

Table 4 Age distribution of Aboriginal and Torres Strait Islander Queenslanders who died by suspected suicide in 2019.

Age Group	Frequency	Percentage
15-19	11	16.9
20-24	14	21.5
25-29	12	18.5
30-34	6	9.2
35-44	12	18.5
45-54	10	15.4
Total	**65**	**100**

Table 6 Remoteness area of Aboriginal and Torres Strait Islander Queenslanders who died by suspected suicide in 2019.

Remoteness Area	Frequency	Percentage
Major Cities	12	18.5
Inner Regional	13	20
Outer Regional	31	47.7
Remote and very remote	9	13.8
Total	**65**	**100**

Table 5 HHS of Aboriginal and Torres Strait Islander Queenslanders who died by suspected suicide in 2019.

Hospital and Health Service	Frequency	Percentage
Torres and Cape	<5	
Cairns and Hinterland	12	18.5
Townsville	16	24.6
Mackay	<5	
North West	<5	
Central Queensland	5	7.7
Central West Queensland	0	0
Wide Bay	<5	
Sunshine Coast	0	0
Metro North	5	7.7
Metro South	<5	
Gold Coast	<5	
West Moreton	<5	
Darling Downs	9	13.8
Total	**65**	**100**

Table 7 Number and percent for suspected suicides by Aboriginal and Torres Strait Islander Queenslanders, 1 January 2015 to 31 July 2020.

Year	Frequency	Percentage
2015	63	8.6
2016	54	7.8
2017	59	7.4
2018	69	9.1
2019	65	9.4
2020	40	8.8

Figure 13 Number of Aboriginal and Torres Strait Islander Queenslanders who died by suicide, 2001–2019

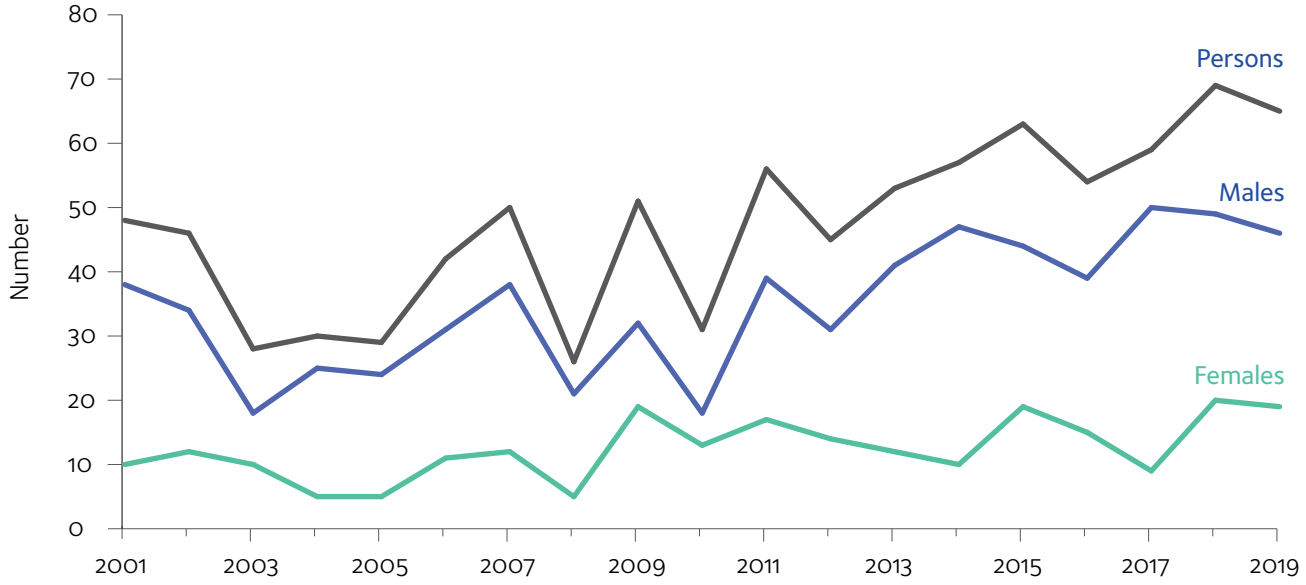


Figure 14 shows that the proportion of Aboriginal and Torres Strait Islander Queenslanders dying by suicide out of the total number of suicides has generally increased over time. In 2019 Aboriginal and Torres Strait Islander females accounted for 11.9% of all female suicides and Aboriginal and Torres Strait Islander males accounted for 8.3% of all male suicides.

Figure 15 shows the suicide rate per 100,000 people, as the number for Aboriginal and Torres Strait Islander females is too small (less than 20 deaths) to present separately.

The Aboriginal and Torres Strait Islander suicide rate in Queensland varies a lot more than the non-Indigenous rate as the number of deaths by suicide and population is smaller. The suicide rate has never been lower for Aboriginal and Torres Strait Islander Queenslanders compared to non-Indigenous Queenslanders. After almost being the same as the non-Indigenous rate in 2008, the Aboriginal and Torres Strait rate continues to be higher.

Figure 14 Aboriginal and Torres Strait Islander male and female percentage of total deaths by suicide in Queensland, males and females, 2001–2019

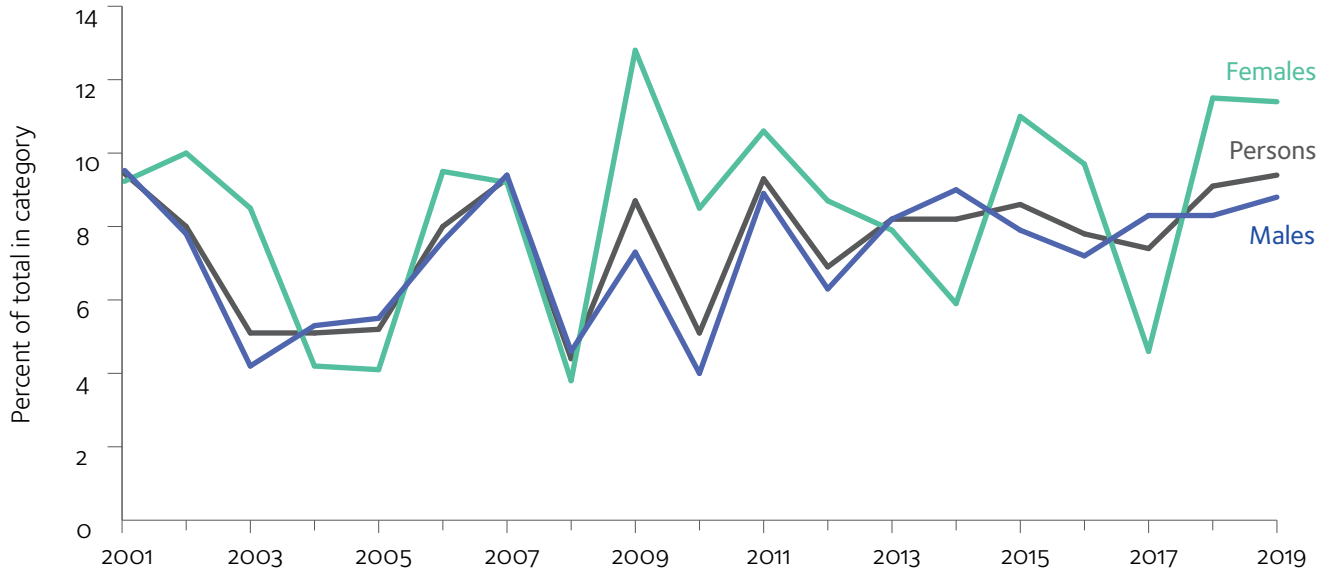
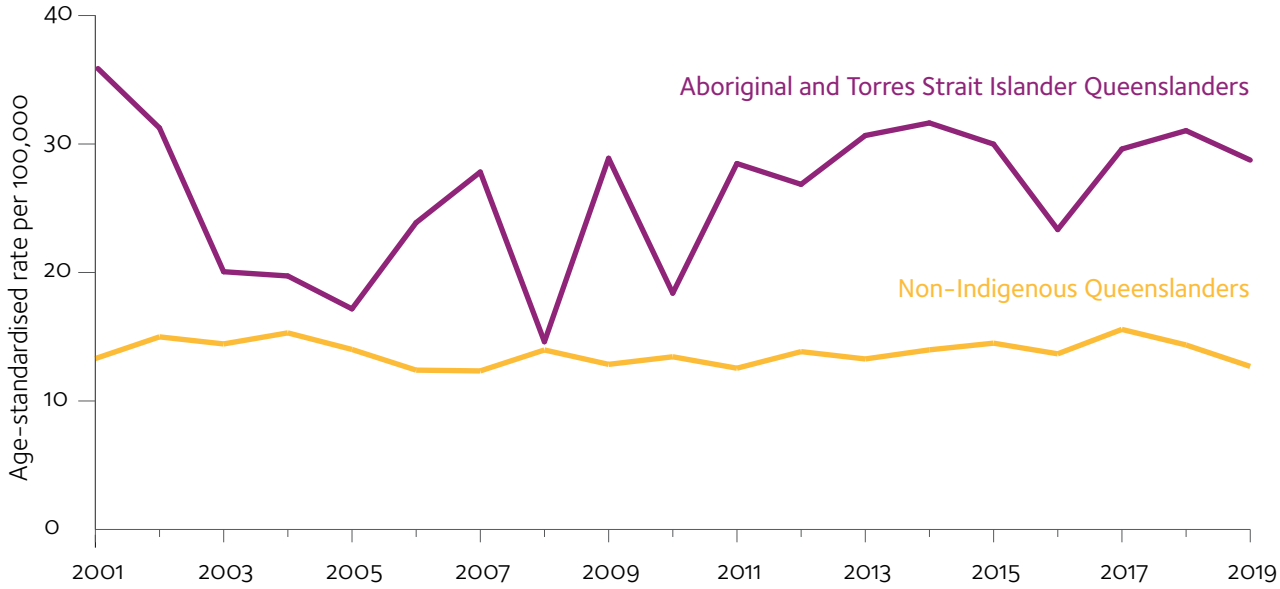


Figure 15 Suicide rates for Aboriginal and Torres Strait Islander Queenslanders and non-Indigenous Queenslanders, 2001–2019xv



A recently published systematic review of suicide prevention interventions for Indigenous peoples globally found 24 studies from Australia, Canada, New Zealand and the United States.[44] Suicide attempts and deaths did decrease in some before-after studies without control groups.[45] The limited available evidence from multiple reviews supports multi-level, multi-component interventions led by Indigenous communities with universal, selective and indicated levels.[46] Current research and policy environments in Australia are increasingly recognising the importance of connection to culture and community as protective factors in Aboriginal and Torres Strait Islander health, including community and individual resilience in dealing with trauma and stress. Strength-based concepts like identity, hope, empowerment, and endurance are crucial protective factors and strongly impacted by connectedness to country, culture, spirituality and kin.[47] Including those with lived experience and Aboriginal and Torres Strait Islander Elders, community and people leading and owning initiatives are successful factors in suicide prevention programs.[48]

Lesbian, Gay, Bisexual, Transgender, Intersex and Queer (LGBTIQ+) Communities

QSR figures likely underrepresent the actual number of LGBTIQ+ suicides, as they rely on police or coronial reports, disclosure by friends or family, or identification of same-sex relationships to identify sexual orientation or gender identity. Between 2017 and 2019, the iQSR recorded 36 suspected suicides by people identified as LGBTIQ+ through available data. Of these 36 people, 23 (63.9%) were male, and 13 (36.1%) were female. A 2020 review of digital interventions for sexual and gender minorities found no intervention studies trying to reduce suicidal thoughts or behaviour.[49] Instead, these interventions focused on mental health-related outcomes.

Suicides in Hospital and Health Service catchments, 2017–2019

This section focuses on current suicide numbers and rates in Queensland Health's Hospital and Health Service catchments (**Tables 7–9**) to inform policy at the service level and allow each catchment area to take a more localised approach. Information in this section supplements online maps (**Appendix**). This data enables tailoring approaches to better respond to identified needs for priority groups or specific elements. This report does not present rates where there were less than 20 suspected suicides in the subgroup.[50]

xv This figure uses the estimated resident population (ERP) for Aboriginal and Torres Strait Islander Queenslanders in the years 2001–2017 and the projected population for 2018 and 2019. The Non-Indigenous population for the years 2018 and 2019 was obtained by subtracting the Aboriginal and Torres Strait Islander Queenslanders projected population from the total Queensland ERP.

Table 8 Number of suspected suicides by sex, by HHS catchment area, 2017–2019

HHS	Female	Male	Persons
Torres and Cape	5	12	17
Cairns and Hinterland	29	147	176
Townsville	23	106	129
Mackay	14	85	99
North West	8	15	23
Central Queensland	32	92	124
Central West	<5	5	np
Wide Bay	23	115	138
Sunshine Coast	40	128	168
Metro North	**102**	**302**	**404**
Metro South	**123**	**329**	**452**
Gold Coast	**97**	**180**	**277**
West Moreton	29	124	153
Darling Downs	33	119	152
South West	<5	9	np

np = not provided

Table 9 Age-standardised suspected suicide rate per 100,000 residents by sex, by HHS catchment area, 2017–2019

HHS	Female	Male	Persons
Torres and Cape	np	np	np
Cairns and Hinterland	8.1	**39.0**	**23.2**
Townsville	6.4	29.8	18.0
Mackay	np	**33.5**	19.7
North West	np	np	**27.5**
Central Queensland	**10.2**	29.0	19.7
Central West	np	np	np
Wide Bay	6.1	**38.8**	**22.0**
Sunshine Coast	5.8	21.1	13.2
Metro North	6.6	19.7	13.0
Metro South	7.0	19.1	12.9
Gold Coast	**9.7**	19.6	14.5
West Moreton	6.8	29.6	18.0
Darling Downs	**8.3**	30.8	19.2
South West	np	np	np

np = not provided

Suicides in Primary Health Network (PHN) catchments, 2017-2019

Table 10 Number of suspected suicides by sex, by PHN catchment area, 2017–2019

PHN	Female	Male	Persons
Brisbane North	103	304	407
Brisbane South	121	333	454
Central Queensland, Wide Bay, Sunshine Coast	94	330	424
Darling Downs and West Moreton	62	241	303
Gold Coast	96	182	278
Northern Queensland	74	349	423
Western Queensland	6	29	35

np = not provided

Table 11 Age-standardised rate per 100,000 residents by sex, by PHN catchment area, 2017-2019

PHN	Female	Male	Persons
Brisbane North	6.7	19.9	13.1
Brisbane South	6.7	19.3	12.9
Central Queensland, Wide Bay, Sunshine Coast	6.9	27.0	16.8
Darling Downs and West Moreton	7.4	29.7	18.3
Gold Coast	9.6	19.8	14.5
Northern Queensland	7.4	34.1	20.6
Western Queensland	np	32.3	20.0

np = not provided

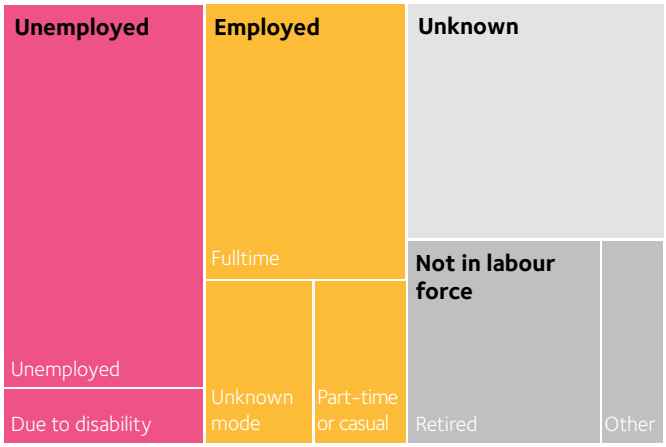
Section 3 Contributing factors and circumstantial issues

This section highlights a range of economic, social and health characteristics of 2,129 people who died by suicide in Queensland between 2014 and 2016 based on the most recent QSR data. It identifies factors that may be involved in a person's suicide and helps identify vulnerable groups and factors for Queensland's suicide prevention strategy.

Employment status

Over a quarter (n = 569, 26.7%) of all those dying by suicide between 2014 and 2016 in Queensland were reportedly unemployed when they died (**Figure 16**). In contrast, the seasonally adjusted July 2015 unemployment rate in Queensland was 6.5%.[51]

Figure 16 Employment status of those dying by suicide in Queensland, 2014–2016



The QSR recorded recent or pending unemployment as a life event in 270 (12.7% of) suicides occurring between 2014 and 2016. Almost a third (n = 633, 29.7%) of people dying by suicide were either unemployed or had experienced recent or pending unemployment. The economic downturn due to the coronavirus pandemic warrants careful monitoring of suicide mortality data,[52] to assess the potential effects of short- and long-term unemployment, amongst other stressors.

As people may interact with state or federal departments or employment agencies during periods of unemployment, opportunities exist to identify risk and refer for suicidality and other risk factors, share help-seeking information or deliver evidence-based psychological interventions. To this end, Action #41 of Every life[53] has all Queensland Government agencies establish policies, training and pathways to enable public sector employees to recognise, respond to and appropriately refer members of the public in distress or potentially suicidal.

In terms of major occupational groups, labourers, and technicians and trades workers, were each the reported groups of 119 people (i.e. 238 people altogether) dying by suicide between 2014 and 2016 (both 5.6% of all those dying by suicide). Machinery operators and drivers accounted for 70 deaths by suicide (3.3%), and managers accounted for 67, or 3.1% of deaths by suicide.

Community and personal service workers accounted for 57, or 2.7% of all deaths by suicide. Sales workers accounted for 32, or 1.5% of all deaths by suicide. Clerical and administrative workers accounted for 18, or 0.8% of all suicides. These figures highlight the ongoing importance of industry-specific suicide prevention activities (e.g., MATES in Construction, Mining and Energy)[xvi] to address the reasons for increased vulnerability.

Marital status

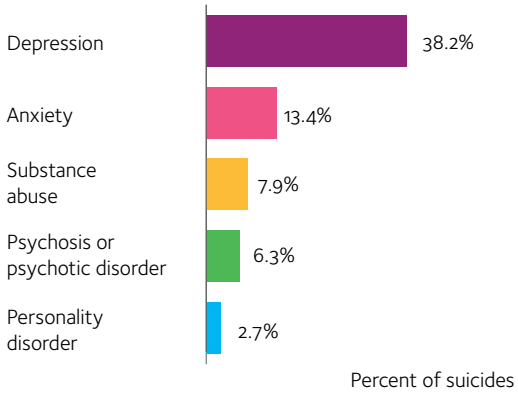
The QSR recorded relationship conflict or separation as life events in 42.5% of all suicides occurring in Queensland from 2014 to 2016. For non-marital separation (e.g., those cohabitating or in de-facto relationships), only a few intervention studies have improved mental health outcomes.[54] There appears to be no similar review of intervention studies for those experiencing marital separation.

Mental health conditions

Over half (51.5%) of all people who died by suicide between 2014 and 2016 reportedly had one or more diagnosed mental health conditions. Depression was the most common (**Figure 17**), followed by anxiety and substance use conditions. A quarter (25.3%) of all people had seen a mental health professional in the last three months for a mental health condition. Suicide prevention interventions with people with mental health conditions work better when they explicitly discuss suicidality.[55]

QSR data from 2014 to 2016 showed that there was evidence of an untreated mental health condition (e.g. not taking medication) for 810 persons, 38% of all those dying by suicide.

Figure 17 Diagnosed mental health conditions of those dying by suicide, 2014–2016



xvi https://mates.org.au/

Life events before suicides

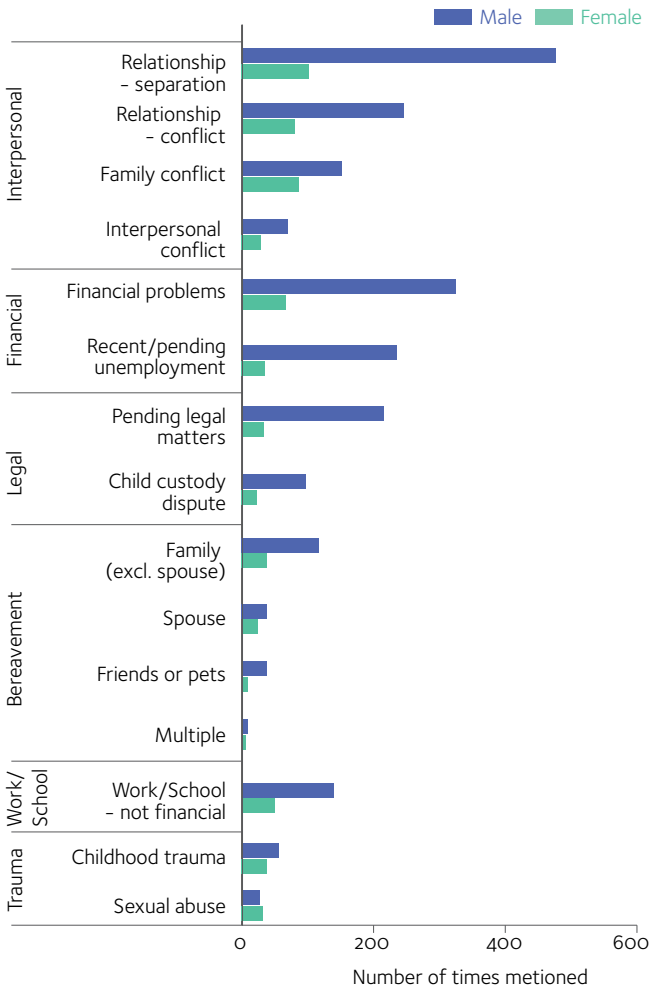
Of the life events captured, **relationship separation** (27.2%) and **conflict** (15.3%) were the most frequent when combined (**Figure 18**). In all, 42.5% of suicides reportedly occurred during relationship difficulties. There were 145 domestic violence orders or applications involving the deceased, accounting for 6.9% of all suicides. In most instances (99, 4.7%), the deceased was the perpetrator (the respondent), then the victim (27, 1.3%), and in 19 cases (0.9%), the details were unknown.

Financial problems were the next most frequent life event recorded (18.3%), followed by **interpersonal or familial conflict** (15.7%), **bereavement** (13.2%), **recent or pending unemployment** (12.7%), **pending legal matters** (11.6%) and **work or school problems** (8.9%).

Of the life events captured, males dying by suicide were more likely than females to experience relationship separation (29.3% vs 20.3%) but not conflict (15.1% vs 15.9%); pending legal matters (13.2% vs 6.6%), financial problems (20.0% vs 13.1%), recent or pending unemployment (14.5% vs 7.0%), and child custody disputes (6.0% vs 4.6%). Action area 2, "Reducing vulnerability" in Every life,[56] will involve a systemic review of male suicides that explores potential opportunities for reducing suicides involving relationships, employment issues, family law and alcohol and other drug misuse.

Females dying by suicide were more likely than males to have experienced spousal bereavement (4.8% vs 2.3%), family (17.1% vs 9.3%) or interpersonal (5.8% vs 4.2%) conflict, childhood trauma (7.6% vs 3.4%), sexual abuse (6.4% vs 1.7%) and work or school problems that were not financial (10.0% vs 8.5%).

Figure 18 Type of life events of those dying by suicide, 2014–2016



History of suicidality

From 2014 to 2016, almost half of all people dying by suicide (46.1%) communicated intent to die by suicide in their lifetime. This figure was higher for Aboriginal and Torres Strait Islander Queenslanders (52.9%). Almost four in 10 (37.9%) expressed an intention to die by suicide within 12 months of their death. This figure was again higher for Aboriginal and Torres Strait Islander Queenslanders (46.5%). Nearly a third (30.1%) had attempted suicide in their lifetime, a percentage slightly lower for Aboriginal and Torres Strait Islander Queenslanders (26.5%). One in six people (15.7%) made a suicide attempt in the year before their death. This figure was slightly lower for Aboriginal and Torres Strait Islander Queenslanders (12.9%).

Notably, 417 people (42.5%) who stated an intent to die by suicide in their lifetime had no known mental health diagnoses. Of Aboriginal and Torres Strait Islander Queenslanders who communicated an intention to die by suicide in their lifetime, 70% had no known mental health diagnoses.

The World Health Organization's Brief Intervention and Contact program for people who have attempted suicide reduces the likelihood of suicide.[57] Recently, a review of brief psychological interventions for suicidal presentations found that they did not lower suicidal ideation but did show fewer suicide attempts and suicides in some studies.[58] Active contact and follow-up interventions for patients admitted to emergency departments also reduce the likelihood of repeat suicide attempts within six months.[59] Brief acute care suicide prevention interventions are also associated with reduced suicide attempts post-intervention.[60]

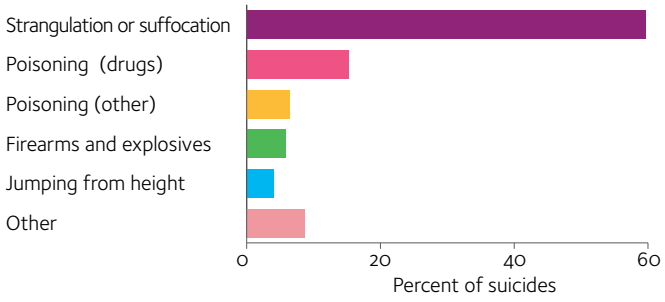
Emergency departments (EDs) are not ideal places for interventions to prevent suicide attempts and deaths.[61] Every life[62] highlights actions to identify and trial alternatives to ED environments. A recent review indicated that other options, like community-level interventions for preventing suicides and outpatient speciality mental health settings for preventing suicide attempts, had the highest effects.[63]

An effective but more intense response after suicide attempts is cognitive behaviour therapy (CBT), which can halve the risk of repeated suicide attempts.[64] More broadly, but of similar intensity, psychotherapy (i.e. psychological therapy) also seems to be an effective treatment for suicide attempts.[65] Also, moderate evidence suggests that psychoanalytic and psychodynamic therapies reduce suicide attempts.[66] Readers can consider this extensive literature in the context of Action area from Every life,[67] which focuses exclusively on "enhancing responsiveness" to suicidality.

Suicide methods

Monitoring suicide methods and sites can help prevent suicides through means restriction. Per Mindframe guidelines on discussing method and location,[xvii] this section avoids explicit or technical descriptions of suicide methods and presents them in general terms. **Figure 19** shows the leading suicide methods used overall. In 2014–2016, over half (59.7%) of all suicides in Queensland involved strangulation or suffocation. Other frequent methods included poisoning by drugs (15.2%), poisoning by other means (6.5%), firearms and explosives (5.9%) and jumping from heights (4%).

Figure 19 Suicide methods in Queensland 2014–2016



Strangulation and suffocation are challenging to prevent, even in institutions. The circumstances in which strangulation and suffocation occur[68] suggest the need for interventions that could manage suicidal crises. Dialectical Behaviour Therapy (DBT) is an example of a skills training intervention focusing on regulating emotions and tolerating distress. It reduces self-directed violence and frequency of mental health crisis service.[69]

Section 4 Conclusion

There are opportunities to prevent suicides by delivering evidence-based interventions with documented effectiveness to the groups of Queensland residents identified in this report. These interventions and the groups are:

1. Mass media campaigns and restricting access to means for all Queensland residents (universal interventions)
2. The World Health Organization's Brief Intervention and Contact, cognitive behavioural therapy, brief acute care, and active contact and follow-up interventions for people who attempted suicide (indicated interventions)
3. Multi-level interventions for Aboriginal and Torres Strait Islander Queenslanders led, developed, implemented, and evaluated by Aboriginal and Torres Strait Islander people and communities.

Interventions can be targeted towards people experiencing the most common types of life events recorded in the QSR. Specifically, these include relationship separation and conflict, financial problems, recent or pending unemployment and pending legal matters. People experiencing multiple life events warrant a particular focus in suicide prevention initiatives.

To this end, future directions for the QSR and iQSR include increasing the breadth and depth of information collected on those who have died by suicide. Most importantly, this will be accompanied by efforts to make that information available and timely to those who need to know through increased analysis, visualisation, and reporting. These efforts will ensure that the Queensland suicide prevention sector is well-informed of the characteristics of existing suicides occurring in their geographic areas and aware of the relevant literature on interventions[xviii] to address various risk factors.

xvii https://mindframe.org.au/suicide/communicating-about-suicide/discussing-method-location

xviii see https://www.griffith.edu.au/griffith-health/australian-institute-suicide-research-prevention/research/qsr/annual-report-2020

References

1 Roses in the Ocean, *lived experience of suicide, 2020*, https://rosesintheocean.com.au/lived-experience-suicide/

2 Australian Institute of Health and Welfare, *METeOR Metadata Online Registry: Age-standardised rate,* 2018.

3 Australian Institute of Health and Welfare, *METeOR Metadata Online Registry: Crude rate,* 2018.

4 Larkin, G.L., & Beautrais, A.L. *Geospatial mapping of suicide clusters,* Auckland: Te Pou o Te Whakaaro Nui, 2012.

5 J Chandler, J., Cumpston, M., Thomas, J., Higgins, J.P.T., Deeks, J.J. & Clarke, M.J. Chapter I: Introduction, in *Cochrane Handbook for Systematic Reviews of Interventions version 6.0 (updated August 2019),* Cochrane, 2019.

6 Cramer R.J., & Kapusta, N.D. A Social-Ecological Framework of Theory, Assessment, and Prevention of Suicide, *Frontiers in Psychology, 8,* 2017.

7 World Health Organization, *Preventing suicide: a global imperative,* 2014.

8 Centers for Disease Control, *Comprehensive plan for epidemiologic surveillance,* CDC, Atlanta, Georgia, 1986.

9 World Health Organization, *Preventing suicide: a global imperative.*

10 Data Surveillance Task Force of the National Action Alliance for Suicide Prevention, Improving National Data Systems for Surveillance of Suicide-Related Events, *American Journal of Preventive Medicine,* 47(3), Supplement 2, 2014, S122–S129.

11 World Health Organization, *Preventing suicide: a global imperative.*

12 Australian Bureau of Statistics, *Causes of Death, Australia, 2018,* cat. no. 3303.0, 2019.

13 Australian Bureau of Statistics, *Causes of Death, Australia, 2018,* cat. no. 3303.0, 2019.

14 Australian Bureau of Statistics, *Causes of Death, Australia, 2018*, cat. no. 3303.0, 2019.

15 Maple, M., Sanford, R., Pirkis, J., Reavley, N. & Nicholas, A. Exposure to suicide in Australia: A representative random digit dial study, *Journal of Affective Disorders,* 259, 2019, 221–227.

16 Hill, N.T.M., Robinson, J., Pirkis, J., Andriessen, K., Krysinska, K., Payne, A., Boland, A., Clarke, A., Milner, A.J., Witt, K., Krohn S. & Lampit, A. Association of suicidal behavior with exposure to suicide and suicide attempt: A systematic review and multilevel meta-analysis, *PLOS Medicine,* 17(3), 2020, e1003074.

17 Kõlves, K., Zhao, Q., Ross, V., Hawgood, J., Spence, S.H. & de Leo, D. Suicide and other sudden death bereavement of immediate family members: An analysis of grief reactions six-months after death, *Journal of Affective Disorders,* 243, 2019, 96–102.

18 Maple M. & Sanford, R. Suicide exposure and impact within a non-representative Australian community sample, *Death Studies,* 44(6), 2020, 329–337.

19 Maple, M., Cerel, J., Sanford, R., Pearce, T., & Jordan, J. Is Exposure to Suicide Beyond Kin Associated with Risk for Suicidal Behavior? A Systematic Review of the Evidence, *Suicide & Life-Threatening Behavior,* 47(4), 2017, 461–474.

20 Maple & Sanford. Suicide exposure and impact within a non-representative Australian community sample.

21 Bronfenbrenner, U. Toward an experimental ecology of human development, *American Psychologist*, 32(7), 513–531.

22 Cramer & Kapusta. A Social-Ecological Framework of Theory, Assessment, and Prevention of Suicide.

23 Hofstra, E., van Nieuwenhuizen, C., Bakker, M., Özgül, D., Elfeddali, I., de Jong S.J. & van der Feltz-Cornelis, C.M. Effectiveness of suicide prevention interventions: A systematic review and meta-analysis, *General Hospital Psychiatry*, 63, 2020, 127–140.

24 Queensland Mental Health Commission, *Every life: The Queensland Suicide Prevention Plan 2019-2029*, Queensland, Australia, 2019.

25 Bowden, M., McCoy, A. & Reavley N. Suicidality and suicide prevention in culturally and linguistically diverse (CALD) communities: A systematic review, *International Journal of Mental Health*, 0(0), 2019, pp. 1–28.

26 Australian Bureau of Statistics, *Causes of Death, Australia, 2018, cat. no. 3303.0.*

27 Australian Bureau of Statistics data obtained from Australian Bureau of Statistics publications. Specifically, the years and the Australian Bureau of Statistics publications they were obtained from are as follows: 2009-2018 (Australian Bureau of Statistics, *Causes of Death, Australia, 2018, cat. no. 3303.0.*), 2005-2008 (Australian Bureau of Statistics, 3303.0 - *Causes of Death, Australia, 2017*, 2018); 2004 and 1994 (Australian Bureau of Statistics, 3303.0 - *Causes of Death, Australia, 2004*, 2006); 2003 and 1993 (Australian Bureau of Statistics, 3303.0 - *Causes of Death, Australia, 2003*, 2005); 2002 and 1992 (Australian Bureau of Statistics, 3303.0 - *Causes of Death, Australia, 2002*, 2003); 2001 and 1991 (Australian Bureau of Statistics, 3303.0 - *Causes of Death, Australia, 2001*, 2002); 1996–2002 (Australian Bureau of Statistics, 3303.0 - *Causes of Death, Australia, 2002); 1995* (Australian Bureau of Statistics, *3303.0 - Causes of Death, Australia, 2005*, 2007); 1990 (Australian Bureau of Statistics, 3303.0 - *Causes of Death, Australia, 2000*, 2001).

28 Australian Bureau of Statistics, 6202.0 - *Labour Force, Australia, Jul 2015*, Canberra, ACT, Australia, 2015.

29 Robinson, R., Bailey, E., Witt, K., Stefanac, N., Milner, A.J., Currier, D., Pirkis, J., Condron, P. & Hetrick, S. What Works in Youth Suicide Prevention? A Systematic Review and Meta-Analysis, *EClinicalMedicine,* 4, 2018, 52–91.

30 Okolie, C., Dennis, M., Simon Thomas, E. & John, A. A systematic review of interventions to prevent suicidal behaviors and reduce suicidal ideation in older people, *International Psychogeriatrics,* 29(11), 2017, 1801–1824.

31 Hamilton, E. & Klimes-Dougan, B. Gender Differences in Suicide Prevention Responses: Implications for Adolescents Based on an Illustrative Review of the Literature, *International Journal of Environmental Research and Public Health,* 12(3), 2015, 2359–2372.

32 Krysinska, K., Batterham, P.J. & Christensen, H. Differences in the Effectiveness of Psychosocial Interventions for Suicidal Ideation and Behaviour in Women and Men: A Systematic Review of Randomised Controlled Trials, *Archives of Suicide Research*, 21(1), 2017, 12–32.

33 Sagar-Ouriaghli, I., Godfrey, E., Bridge, L., Meade, L. & Brown, J.S.L. Improving Mental Health Service Utilization Among Men: A Systematic Review and Synthesis of Behavior Change Techniques Within Interventions Targeting Help-Seeking, *American Journal of Men's Health*,13(3, 2019.

34 Pirkis, J. RE: URGENT: AISRAP annual report - Question regarding grant for suicide prevention interventions with boys and men, 2020.

35 Pirkis, RE: URGENT: AISRAP annual report - Question regarding grant for suicide prevention interventions with boys and men.

36 Pirkis, RE: URGENT: AISRAP annual report - Question regarding grant for suicide prevention interventions with boys and men.

37 Queensland Mental Health Commission, *Every life: The Queensland Suicide Prevention Plan 2019-2029*.

38 Dickson J.M., Cruise K., McCall C.A. & Taylor P.J., A systematic review of the antecedents and prevalence of suicide, self-harm and suicide ideation in Australian aboriginal and torres strait islander youth, *International Journal of Environmental Research and Public Health*, vol. 16, no. 17, 2019.

39 Büscher, R., Torok, M., Terhorst Y., & Sander, L. Internet-Based Cognitive Behavioral Therapy to Reduce Suicidal Ideation: A Systematic Review and Meta-analysis, *JAMA Network Open*, 3(4), 2020, pp. e203933–e203933; Torok, M., Han, J., Baker, S., Werner-Seidler, A., Wong, I., Larsen, M.E., & Christensen, H. Suicide prevention using self-guided digital interventions: a systematic review and meta-analysis of randomised controlled trials, *The Lancet Digital Health*, 2(1), 2020, pp. e25–e36; Witt, K., Spittal, M.J., Carter, G., Pirkis, J., Hetrick, S., Currier, D., Robinson J. & Milner A. Effectiveness of online and mobile telephone applications ("apps") for the self-management of suicidal ideation and self-harm: a systematic review and meta-analysis, *BMC Psychiatry*, 17(1), 2017, 297.

40 Maple et al., Exposure to suicide in Australia.

41 Dickson J.M. et al. A Systematic Review of the Antecedents and Prevalence of Suicide, Self-Harm and Suicide Ideation in Australian Aboriginal and Torres Strait Islander Youth, *International Journal of Environmental Research and Public Health*, 16(17), 2019, 3154.

42 Dudgeon, P., Calma, T. & Holland, C. The context and causes of the suicide of Indigenous people in Australia – Te Mauri – Pimatisiwin, *Journal of Indigenous Wellbeing*, 2(2), 2017, 5–15.

43 Nasir, B.F., Hides, L., Kisely, S., Ranmuthugala, G., Nicholson, G.C., Black, E., Gill, N., Kondalsamy-Chennakesavan S. & Toombs, M. The need for a culturally-tailored gatekeeper training intervention program in preventing suicide among Indigenous peoples: a systematic review, *BMC Psychiatry*, 16(1), 2016, 357.

44 Leske, S., Paul, E., Gibson, M., Little, B., Wenitong M. & Kõlves, K. A global systematic review of the effects of suicide prevention interventions in Indigenous Peoples, *Journal of Epidemiology and Community Health*, 2020.

45 Leske et al., A global systematic review of the effects of suicide prevention interventions in Indigenous Peoples.

46 Dudgeon, P., Milroy, J., Calma, T., Luxford, Y., Ring, I., Walker, R., Cox, A., Georgatos, G. & Holland, C. *Solutions that work - What the evidence and our people tell us. Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project Report,* School of Indigenous Studies, University of Western Australia, for the Department of the Prime Minister and Cabinet, 2016; Leske et al., A global systematic review of the effects of suicide prevention interventions in Indigenous Peoples.

47 Australian Institute of Health and Welfare, *Aboriginal and Torres Strait Islander Health Performance Framework (HPF) report 2017*, Australian Institute of Health and Welfare, 2018.

48 Dudgeon, P., Rouhani, L., Darwin, L., & Boe, M. I*ndigenous Lived Experience of Suicide: Literature Review*, Centre of Best Practice in Aboriginal and Torres Strait Islander Suicide Prevention, Canberra, 2018.

49 Tasnim, S., Trisha, N.F., Fan, Q., Sultana, A., Mishu, S.H., Hasan N.T. & Hossain, B. *Improving mental health and wellbeing among sexual and gender minorities using digital interventions: a systematic review*, preprint, PsyArXiv, 2020.

50 Australian Institute of Health and Welfare, *Principles on the use of direct age-standardisation in administrative data collections: for measuring the gap between Indigenous and non-Indigenous Australians*, Australian Institute of Health and Welfare, Canberra, 2011.

51 Australian Bureau of Statistics, 6202.0 - Labour Force, Australia, Jul 2015.

52 Holmes, E.A., O'Connor, R.C., Hugh Perry, V., Tracey, I., Wessely, S., Arseneault, L., Ballard, C., Christensen, H., Cohen Silver, R., Everall, I., Ford, T., John, A., Kabir, T., King, K., Madan, I., Michie, S., Przybylski, A.K., Shafran, R., Sweeney, A., Worthman, C.M., Yardley, L., Cowan, K., Cope, C., Hotopf, M. & Bullmore, E. Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science, *The Lancet Psychiatry*, 2020.

53 Queensland Mental Health Commission, *Every life: The Queensland Suicide Prevention Plan* 2019-2029.

54 Kazan, D., Calear, A.L. & Batterham, P.J. A Systematic Review of Controlled Trials Evaluating Interventions Following Non-Marital Relationship Separation, *Journal of Relationships Research*, 8, 2017.

55 Meerwijk, E.L., Parekh, A., Oquendo, M.A., Elaine Allen, I., Franck, L.S. & Lee, K.A. Direct versus indirect psychosocial and behavioural interventions to prevent suicide and suicide attempts: a systematic review and meta-analysis, *The Lancet Psychiatry*, 3(6), 2016, 544–554.

56 Queensland Mental Health Commission, *Every life: The Queensland Suicide Prevention Plan 2019-2029*.

57 Riblet, N.B.V., Shiner, N., Young-Xu Y. & Watts B.V., Strategies to prevent death by suicide: Meta-analysis of randomised controlled trials, *The British Journal of Psychiatry*, 210(6), 2017, 396–402.

58 McCabe, R., Garside, R., Backhouse A. & Xanthopoulou, P. Effectiveness of brief psychological interventions for suicidal presentations: a systematic review, *BMC Psychiatry*, 18, 2018.

59 Inagaki, M., Kawashima, Y., Yonemoto, N. & Yamada, M. Active contact and follow-up interventions to prevent repeat suicide attempts during high-risk periods among patients admitted to emergency departments for suicidal behavior: a systematic review and meta-analysis, *BMC Psychiatry*, 19(1), 2019, 44.

60 Doupnik, S.K., Rudd, B., Schmutte, T., Worsley, D., Bowden, C.F., McCarthy, E., Eggan, E., Bridge, J.A. & Marcus, S.C. Association of Suicide Prevention Interventions With Subsequent Suicide Attempts, Linkage to Follow-up Care, and Depression Symptoms for Acute Care Settings: A Systematic Review and Meta-analysis, *JAMA Psychiatry*, 2020.

61 Hofstra et al. Effectiveness of suicide prevention interventions; Queensland Mental Health Commission, *Every life: The Queensland Suicide Prevention Plan 2019-2029*.

62 Queensland Mental Health Commission, *Every life: The Queensland Suicide Prevention Plan 2019-2029*.

63 Hofstra et al., Effectiveness of suicide prevention interventions.

64 Gøtzsche, P.C., & Gøtzsche, P.K. Cognitive behavioural therapy halves the risk of repeated suicide attempts: systematic review, *Journal of the Royal Society of Medicine*, 110(10), 2017, 404–10.

65 Calati, R. & Courtet, P. Is psychotherapy effective for reducing suicide attempt and non-suicidal self-injury rates? Meta-analysis and meta-regression of literature data, *Journal of Psychiatric Research,* 79, 2016, 8–20.

66 Briggs, S., Netuveli, G., Gould, N., Gkaravella, A., Gluckman, N.S., Kangogyere, P., Farr, R., Goldblatt M.J. & Lindner R. The effectiveness of psychoanalytic/psychodynamic psychotherapy for reducing suicide attempts and self-harm: systematic review and meta-analysis, *The British Journal of Psychiatry*, 214(6), 2019, 320–328.

67 Queensland Mental Health Commission, *Every life: The Queensland Suicide Prevention Plan 2019-2029*.

68 Kõlves, K., McDonough, M., Crompton, D. & de Leo, D. Choice of a suicide method: Trends and characteristics, *Psychiatry Research*, 260, 2018, 67–74.

69 DeCou, C.R., Comtois, K.A. & Landes, S.J. Dialectical Behavior Therapy Is Effective for the Treatment of Suicidal Behavior: A Meta-Analysis, *Behavior Therapy,* 50(1), 2018, 60–72.

Australian Institute for Suicide Research and Prevention, 2020

Griffith UNIVERSITY
Queensland, Australia