



Australian Institute for Suicide Research and Prevention



Suicide in Queensland: annual report 2021

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Dedication

We dedicate this report to people with a lived or living experience of suicide - that is, those who have had thoughts of suicide, survived a suicide attempt, cared for someone through a suicidal crisis or been bereaved by suicide.1 This report acknowledges that this experience is substantially different for Aboriginal and Torres Strait Islander peoples,² considering the different ways that Aboriginal and Torres Strait Islander peoples understand social and emotional wellbeing.3

Acknowledgements

We acknowledge the Queensland Government's funding of the Queensland Suicide Register (QSR) from 1990 onwards. We thank the Queensland Police Service and the Coroners Court of Queensland for sharing police reports. We acknowledge the 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.

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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 and present and extend that respect to other Aboriginal and Torres Strait Islander people. We acknowledge that this land has long been a place of research and learning. We advise Aboriginal and Torres Strait Islander readers that this report includes information on deaths by suicide of Aboriginal and Torres Strait Islander people. Some content in this report may be distressing to readers.





Acknowledgement of lived experience

We recognise and acknowledge those with lived experience and their critical role in informing how suicide is understood and prevented. Each person who has died by suicide 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 crucial part of each person's life story. We acknowledge that the coronial data within this report contain only some aspects of the person's experience. We perceive each suicide in this report not as a number but rather as a personal story, taken together with all other accounts of suicide to quantify these stories for understanding. These collective experiences help us reflect quantifiable commonalities and differences among lives lost to suicide.

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Support services

The information 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.

We advise Aboriginal and Torres Strait Islander readers that this report includes information on deaths by suicide of Aboriginal and Torres Strait Islander people. Some content in this report may be distressing to any readers. The following services may offer appropriate support.

Organisation	Target group	Availability	Phone number	Website
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	All	24/7	13 43 25 84	
Queensland			(13 HEALTH)	
National StandBy Response Service	People impacted by suicide	24/7		https://standbysupport.com. au/#Contact
eheadspace	Youth and young people	9am to 1am Melbourne time every day	1800 650 890	www.eheadspace.org.au
Kids Helpline	Youth and young people aged 5 to 25, parents and carers, schools and teachers	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 & Families Counselling	Current and ex-serving Australian Defence Force members and their families	24/7	1800 011 046	https://www.openarms.gov.au
Thirrili	After suicide support for Aboriginal and Torres Strait Islander Australians	24/7	1800 805 801	https://thirrili.com.au
Care Leavers	People who have grown-up	9am to 5pm	1800 008 774	https://clan.org.au
Australasia Network	in orphanages, children's homes, missions and foster care	weekdays	0425 204 747	
Carers	Carers	9am to 5pm	1800 422 737	www.carersaustralia.com.au
Australia		weekdays	(02) 6122 9900	
GriefLine	Anyone experiencing grief, loss or trauma	6am to midnight Australian Eastern Standard Time, every day	1300 845 745	https://griefline.org.au
headspace School Support	Bereavement in secondary schools	9am to 5pm weekdays	0455 079 803	www.headspace.org.au/what- works/school-support
QLife	Lesbian, gay, bisexual, transgender, intersex, queer Australians	3pm to midnight every day	1800 184 527	www.qlife.org.au
SANE Australia	Those affected by mental health issues	9am to 5pm weekdays	1800 18 7263	https://www.sane.org
Wellways Helpline	Those affected by mental health issues	9am to 9pm weekdays	1300 111 400	www.wellways.org
National 24/7 Alcohol and Other Drugs Hotline	Those seeking support and information about alcohol and other drugs	24/7	1800 250 015	
Alcohol and Drug Foundation	Those seeking support and information about alcohol and other drugs	9am to 5pm weekdays	1300 85 85 84	adf.org.au

Glossary

aftercare: Treatment after self-harm or a suicide attempt to reduce the possibility of future self-harm or suicide attempts.

age-specific rate: The crude (i.e. unadjusted) rate in a specific age group, expressed per 100,000 males, females or persons.

age-standardised suspected suicide rate: An adjustment to the crude rate to consider differences in population age structures over time, expressed per 100,000 males, females or persons.⁴ It addresses whether changes in the crude suicide rate may be due to increases in the age groups of people who typically die by suicide in a specific year. Rates are not calculated if less than 10 suicides.

confidence interval: A range around an estimate conveying how precise the estimate is.5

crude rate: Suicides in a period divided by the estimated resident population size halfway through that period.6

Hospital and Health Service: The statutory bodies providing public health services across Queensland.7

geocoding: Geocoding takes an address or place and provides output for geographical areas and the coordinates (latitude and longitude) of that address or location.

meta-analysis: The statistical combination of results from 2 or more separate studies.8

numbers: The number of deaths by suicide. Numbers are not provided if less than 5.

police reports: Formally called the Form 1 police report of death to a coroner, a Queensland Police Service officer completes this to provide details on reportable deaths to assist the coroner in their investigation, including deciding whether to order an autopsy and assist the pathologist performing the autopsy to establish a cause of death.9

post-mortem examination: The examination of a body after death to determine the cause of death.

postvention: Support provided to families, friends, colleagues, students and others after someone dies by suicide. 10

Primary Health Network: Independent organisations funded by the Australian Government to manage health regions.¹¹

psychosocial: The intersection and interaction of social. cultural and environmental influences on the mind and behaviour.12

public health surveillance: Using data to monitor health problems to support prevention or control.¹³

public health model of suicide prevention: A framework for identifying, developing, implementing and revising suicide prevention programs.14

Queensland resident: A person whose primary place of residence is in Queensland.

real-time: Real-time refers to information on suspected suicides received and collated as soon as possible after an event occurs, using police reports of deaths to coroners.

reportable deaths: Deaths may be reportable to the coroner where:

- the person's identity is unknown
- the death was violent or unnatural
- the death happened in suspicious circumstances
- a 'cause of death' certificate has not been issued and is not likely to be
- the death was related to health care
- the death occurred in care, custody or as the result of police operations.¹⁵

systematic review: A process that collects 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.¹⁶

social-ecological model of suicide prevention: A 4-tier framework of individual, relationship, community and societal levels, providing a comprehensive picture of risk and protective factors associated with at least one aspect of suicide-related thoughts, behaviour or both.17

suspected suicide: A death that appears to be a suicide, the coronial investigation and determination of the type of death is still ongoing. Coroners are responsible for determining whether or not a death is a suicide after investigating and considering all available evidence. Coroners may use common standards of practice to aid them in determining a suicide. 18 Until a coroner finalises their investigation, deaths are referred to as suspected suicides. Deaths in the interim Queensland Suicide Register

a probability code of 'probable' or 'confirmed' are termed 'suspected suicides' to acknowledge the ongoing coronial processes.

List of acronyms

ABS	Australian Bureau of Statistics		
ADF	Australian Defence Force		
AISRAP	Australian Institute for Suicide Research and Prevention		
APA	American Psychological Association		
CDC	Centers for Disease Control and Prevention		
HHS	Hospital and Health Service		
iQSR	interim Queensland Suicide Register		
LGBTIQ+	lesbian, gay, bisexual, transgender, intersex, queer, questioning and other people with diverse sexual orientations or gender identities		
LGBTIQ+ NCIS	queer, questioning and other people with		
	queer, questioning and other people with diverse sexual orientations or gender identities		
NCIS	queer, questioning and other people with diverse sexual orientations or gender identities National Coronial Information System		
NCIS NESB	queer, questioning and other people with diverse sexual orientations or gender identities National Coronial Information System non-English speaking background		
NCIS NESB PHN	queer, questioning and other people with diverse sexual orientations or gender identities National Coronial Information System non-English speaking background Primary Health Network		

How to share suicide statistics with others

This document outlines data and information about deaths by suicide. It is essential to use and refer to this type of data and information carefully. The Mindframe program¹⁹ advises using data and information carefully and using preferred language when discussing suicide.

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

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

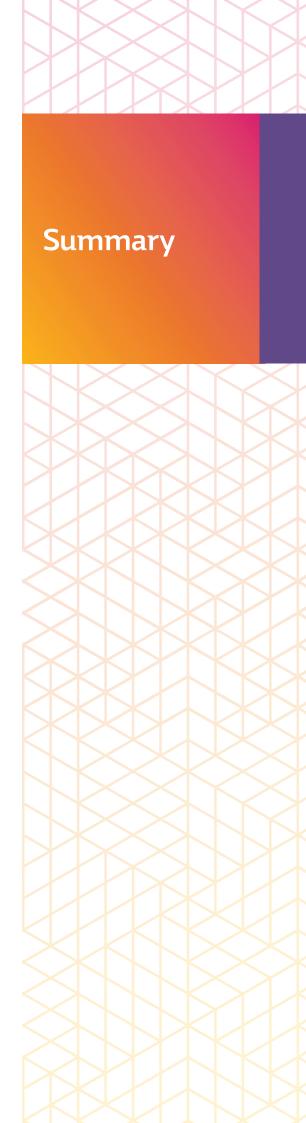
The human toll of lives lost and lives impacted by suicide is devastating to Queensland, Australian and international communities. Each life lost to suicide is one life too many. Despite ongoing investment in suicide prevention,²⁰ 791 people took their lives in Queensland in 2020. The age-standardised suicide rates in Queensland, which account for population growth, have increased by about 2 suicides per 100,000 people from 2006 to 2020. However, the age-standardised suicide rate in Queensland for 2020 (15.1) was lower than the average of the past 5 years (15.5).

Since early 2020, the COVID-19 pandemic has exacerbated known risk factors for suicide, including social isolation, unemployment, changes in how health and mental health services are accessed, and financial uncertainty. Evidence provided in this report demonstrates a continued need to focus on and strengthen suicide prevention efforts across Queensland and for targeted efforts in specific population groups such as males, middle-aged persons and Aboriginal and Torres Strait Islander people.

The causes and circumstances of suicide are complex and interlinked, yet understanding these complexities is key to reducing suicides. The first step in the public health model of suicide prevention is surveillance. Suicide surveillance and access to accurate suicide statistics are core pillars of national and international suicide prevention programs.²¹ Surveillance systems observe changes in the number and rate of suicides and help monitor changes in known risk and protective factors. Most importantly, surveillance systems can inform and help evaluate the impact of suicide prevention strategies and activities.

Every life: the Queensland suicide prevention plan 2019–2029 outlines the Queensland Government's reform agenda. Every life provides a whole-of-government action plan towards effective suicide prevention in Queensland, focusing on working across sectors to increase resilience, reduce vulnerability and enhance service provision. This plan builds on many years of suicide prevention efforts in Queensland. Together with the Queensland Government's ongoing funding of the Queensland Suicide Register (QSR), Every life demonstrates the Queensland Government's commitment to strengthening the quality and utility of surveillance as a crucial element of suicide prevention. Renewed and continuing suicide prevention reform by state and federal governments increases opportunities in Queensland to strengthen ongoing suicide prevention efforts.

The QSR (1990–) and interim Queensland Suicide Register (iQSR; 2011–) are comprehensive suicide databases – managed by the Australian Institute for Suicide Research and Prevention since 1996 and funded by the Queensland Government since 1990 – to maintain and disseminate Queensland suicide mortality data. The QSR is one of the most comprehensive suicide surveillance systems in Australia and the Asia-Pacific region. The World Health Organization recently featured it as a key case study example in their *Live life* implementation guide for suicide prevention.²³ The iQSR is a real-time suicide surveillance system developed in 2011. It was Australia's first suicide surveillance system to provide real-time suicide data and has contributed data twice to the International COVID-19 Suicide Prevention Research Collaboration.



Suicide in Queensland: annual report 2021 provides a comprehensive overview of suicide in Queensland by detailing the nature of suicide in Queensland in recent years. The report seeks to enable systems-based approaches to suicide prevention by informing efforts to implement and evaluate suicide prevention policies and programs through combining individual, relationship, community and societal considerations of suicide in Queensland.

Section 1 provides an overview of suicidal behaviour and suicide prevention before outlining the elements, methodologies, limitations and context of Queensland's suicide surveillance system.

Section 2 identifies population groups and areas most at risk of suicide by providing an overview of suicide numbers, rates and trends in Queensland, focusing on the period from 2016 to 2020.

Section 3 explores suicide characteristics, contributing factors and circumstantial issues for people who died by suicide in Queensland from 2015 to 2017.

Section 4 discusses the key findings of the report and their implications for policy and practice.

Key findings

This section presents the key findings of analysis of the iQSR in 2020 and the QSR from 2015 to 2017. The appendix contains information on accuracy.

2020

Total suspected suicides

- In total, **791 people** died by suspected suicide in Queensland in 2020.
- Of these suspected suicide deaths, 779 (98.5%) were by Queensland residents, 6 were interstate visitors, and 6 were overseas visitors.
- The age-standardised suspected suicide rate²⁴ for Queensland residents was 15.1 suspected suicides per 100,000 people.
- On average, this equated to one suspected suicide every 11 hours, or about 2 people per day.

Groups

- The age-standardised suspected suicide rate for males in Queensland was 24.0 per 100,000, while the rate for Queensland females was 6.6 per 100,000. The male rate was 3.6 times higher than the female rate in 2020.
- Men aged 35 to 39 had the highest number (74) of suspected suicides and the highest age-specific suspected suicide rate (42.8 per 100,000).
- Women aged 30 to 34 accounted for the highest number (22) and second-highest age-specific rate (11.9 per 100,000) of female suspected suicides by age group. The highest age-specific rate of female suspected suicide rate for females was in the 75 to 79 age group (10 women, a rate of 12.4 per 100,000).²⁵
- There were 66 suspected suicides by Aboriginal and Torres Strait Islander people in 2020, 8.3% of all suspected suicides.²⁶
- The age-standardised suspected suicide rate for Aboriginal and Torres Strait Islander people was 27.9 per 100,000, compared to 14.3 per 100,000 for non-Indigenous people.

Age-standardised suspected suicide rates across Queensland's regions²⁷

Age-standardised suspected suicide rates per 100,000 males were highest in very remote areas (42.6), followed by inner regional areas (30.6). Rates per 100,000 males were similar in major cities (28.9), outer regional (28.3) and remote Queensland (28.8). Rates per 100,000 females were highest in outer regional areas (8.5), followed by inner regional areas (6.9). Rates per 100,000 females were lowest in major cities (6.1) and were too small to calculate for remote and very remote Queensland.

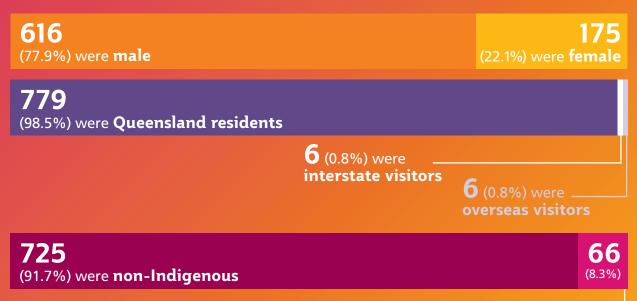
In Queensland Government Hospital and Health Service (HHS) catchment areas with larger populations, suspected suicide numbers were higher, and age-standardised suspected suicide rates were lower. Metro South HHS recorded the highest number of suspected suicides (160), while Gold Coast HHS had the lowest age-standardised rate of suspected suicides (11.6 per 100,000 people).

In the Australian Government's Primary Health Network (PHN) areas, Brisbane South PHN had the most suspected suicides (160). Gold Coast PHN had the lowest suspected suicide rate per 100,000 people of all PHNs (11.6). Northern Queensland PHN had the highest rate of suspected suicides (19.2). Finally, Western Queensland PHN had the least suspected suicides (under 14) but had a high rate (18.5).

2020 at a glance



two suspected suicides per day (2.2)



were **Aboriginal and** Torres Strait Islander people

- The age-standardised* rate for males was 24.0 per 100,000, while the rate for females was 6.6. The rate for males was 3.6 times higher than females.
- Men aged 35 to 39 accounted for the highest number (74) and highest rate (42.8) of male suicides by age group.
- Women aged 30 to 34 accounted for the highest number (22) and secondhighest rate (11.9) of female suicides by age group.

- The highest rate by age group for women was in the 75 to 79 age group at 12.4 per 100,000.
- The suicide rate of Aboriginal and Torres Strait Islander people was 27.9 per 100,000 compared to 14.3 per 100,000 for non-Indigenous people.

^{*} Age-standardised suicide rate per 100,000 estimated resident population as at 30 June 2020.

2015 to 2017

The 3 years from 2015 to 2017 comprise the most recent data from the QSR. This section reports on all 2,316 suicides in Queensland during this period.

Relationship status

From 2015 to 2017, over a third (780, 33.7%) of people dying by suicide in Queensland were reportedly married or in a de facto relationship. This proportion decreased slightly from the 2013 to 2015 reporting period (711, 34.1%). Numbers and proportions were similar for males (611, 34.5%) and females (169, 31.0%). Males dying by suicide were more frequently separated (270, 15.2%) than females (55, 10.1%).

Employment status

In terms of employment status, over a guarter (617, 26.6%) of individuals dying by suicide from 2015 to 2017 were reportedly unemployed. This proportion was similar to the 2013 to 2015 reporting period (569, 27.3%).28

Other individuals dying by suicide were reportedly retired (305, 13.2%), on a disability pension (83, 3.6%) and students or apprentices (81, 3.5%). Compared to the 2013 to 2015 reporting period, the proportion of retirees decreased slightly (288, 13.8%), the proportion of those on a disability pension also decreased (105, 5.0%), but the proportion of students or apprentices increased slightly (79, 3.8%).29

Occupations

Of all individuals who died by suicide from 2015 to 2017, technicians and trade workers represented the largest occupational group (141, 6.1%), followed by labourers (129, 5.6%) and managers (94, 4.1%). The proportions of all three groups increased from the 2013 to 2015 period (technicians and trades: 109, 5.2%; labourers, 92, 4.4%; managers: 59, 2.8%).30 The proportion of managers increased from the 2013 to 2015 data (59, 2.8%).31

Significant life events

The main life events preceding suicide, reported for males and in order of frequency, were relationship separation (511, 28.8%), financial problems (354, 20.0%) and relationship conflict (253, 14.3%). Compared to the 2013 to 2015 reporting period, the proportion of males reportedly experiencing relationship separation decreased slightly (487, 30.1%), the proportion of males reportedly experiencing financial problems decreased (304, 18.8%), and the proportion of males reportedly experiencing relationship conflict decreased slightly (250, 15.5%).32

For females, the major life events preceding suicide were bereavement (123, 22.6%), relationship separation (109, 20.0%) and family conflict (107, 19.7%). Compared to the 2013 to 2015 reporting period, the proportion of females reportedly experiencing bereavement increased (77, 15.1%), the proportion of females reportedly experiencing relationship separation decreased (110, 21.6%), and the proportion of females reportedly experiencing family conflict decreased slightly (92, 18.1%).33

Alcohol and other drug use

About one-third of the people who died by suicide from 2015 to 2017 reportedly consumed alcohol before their death (762, 32.9%). This proportion decreased from the 2013 to 2015 period, though the number of people was the same (762, 41.4%).34

Reported mental health conditions

Police reports and coronial findings referenced reported mental health conditions prominent in suspected suicides from 2015 to 2017. The total number and proportion of those who reportedly had a mental health condition both decreased from the 2013 to 2015 period (1,027, 50.8%)³⁵ to the 2015 to 2017 period (1,068, 46.1%).

Specifically, police reports and coroners found that over one-third of people dying by suspected suicide (832, 35.9%) from 2015 to 2017 reportedly had a diagnosis of depression. This proportion was lower than in the 2013 to 2015 period (791, 37.9%).³⁶ Almost 1 in 6 people dying by suicide reportedly had an anxiety condition (337, 14.5%), slightly higher than in 2013 to 2015 (246, 11.8%).37

Diagnosed substance use conditions reportedly existed for 243 (10.5%) people dying by suicide from 2015 to 2017. This proportion was slightly higher than in the 2013 to 2015 period (171, 8.2%).38 From 2015 to 2017, 175 (7.5%) people dying by suicide reportedly experienced psychosis or had a psychotic disorder, slightly higher than in the 2013 to 2015 period (118, 5.7%).39

One in every 20 people dying by suicide (121, 5.2%) from 2015 to 2017 reportedly had a diagnosis of bipolar disorder. This proportion was slightly higher than the 4.7% (99 people) reported for the 2013 to 2015 period.⁴⁰ Reported personality disorders were less common (67, 2.9%) from 2015 to 2017, though they were a slightly higher proportion than in the 2013 to 2015 period (53, 2.5%).41

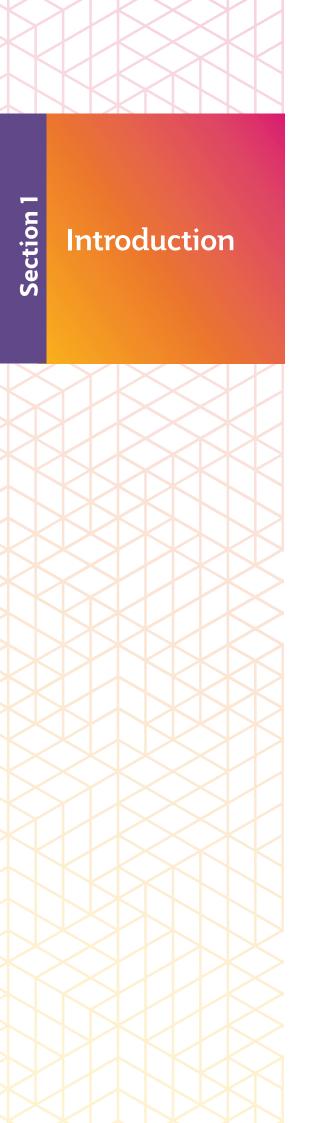
Prior suicidal thoughts and behaviour

Over half (1,219, 52.6%) of those who died had previously communicated an intent to die by suicide during their lifetime. This proportion increased from the 2013 to 2015 period (918, 44.1%).⁴² Four in 10 people (952, 41.1%) reportedly expressed an intention to die by suicide in the 12 months before their death, an increase of 8.7 percentage points from the 2013 to 2015 period (738, 35.4%).43

Close to one-third of people (770, 33.2%) had reportedly attempted suicide in their lifetime, representing a slight increase from the 2013 to 2015 data (625, 30.0%).44 Just over 1 in 6 people who died by suicide (397, 17.2%) from 2015 to 2017 had attempted suicide in the past year. This figure increased slightly from the 2013 to 2015 period (337, 16.1%).45

Help-seeking and service contact

Almost one-third (687, 29.7%) of people who died by suicide from 2015 to 2017 saw a general practitioner for a mental health condition in their lifetime. The proportion was higher among females (210, 38.5%) than males (477, 26.9%). About one-quarter of people (535, 23.1%) who died by suicide from 2015 to 2017 had been past or present psychiatric inpatients in their lifetime. Between 2015 and 2017, 378 (16.3%) people dying by suicide had received outpatient treatment for a mental health condition in their lifetime. This figure decreased from the 2013 to 2015 reporting period (410, 19.3%).



Each life lost to suicide is one life too many.

In 2020, 791 people lost their lives to suspected suicide in Queensland. The impact of each suicide can be devastating for families, friends, first responders and entire communities. The causes and circumstances of suicide are complex, yet understanding these complexities is vital for effective suicide prevention.

The Suicide in Queensland: annual report 2021 provides a comprehensive overview of suicide data in Queensland using Queensland's suicide surveillance system. This report outlines the context, strengths and limitations of the Queensland Suicide Register (QSR) and interim Queensland Suicide Register (iQSR) before exploring recent suicide patterns and trends, including suicide mortality data from 1990 to 2020.

This report offers further insights into the circumstances of suicides and highlights implications for suicide prevention to enable targeted, evidence-based interventions. Specifically, the report seeks to inform and support the planning, implementation and review of cross-sectoral policy, strategy and program responses to suicide at state and local levels across all sectors, including Hospital and Health Services (HHSs) and Primary Health Networks (PHNs). This report aims to encourage further research into the circumstances and potential causes of suicide by noting knowledge gaps and citing relevant national and international literature that can assist in understanding the complexities of suicide in Queensland.

Since early 2020, the COVID-19 pandemic has presented extra challenges to our personal, community and societal wellbeing. Some of these challenges, including unemployment, social isolation and financial uncertainty, are known risk factors of suicide and create additional obstacles to suicide prevention.

Public health surveillance plays a crucial role in understanding and reducing suicides by enabling the systematic and timely capture, analysis and interpretation of suicide data. ⁴⁶ The Queensland Government is committed to the surveillance and reduction of suicide. Since 1990 it has funded the QSR. The Queensland Government is taking extensive action at multiple levels to reduce suicide in the community and inform cross-sectoral prevention through *Every life*, which provides a whole-of-government strategy to reduce suicide across a 10-year plan. *Every life* demonstrates the Queensland Government's commitment to strengthening the quality and utility of surveillance as a crucial element of suicide prevention.

Presently, Queensland's suicide surveillance system includes the QSR and the iQSR (for further details, see Section 2). The Australian Institute for Suicide Research and Prevention manages these registers on behalf of the Queensland Government.⁴⁷

Nationally, the Australian Government has renewed its commitment to suicide prevention in the National Mental Health and Suicide Prevention Plan.⁴⁸ The final report of the National Suicide Prevention Adviser has informed this plan and has provided a refreshed national emphasis and greater emphasis on cross-government and cross-sectoral approaches to suicide prevention.⁴⁹ A focus on key groups at risk of suicide is a shared priority for the Queensland Government and the Australian Government.⁵⁰

National picture

Suicide has a significant human toll, with far-reaching impacts. In September 2021, the Australian Bureau of Statistics (ABS) released the latest data enabling comparisons of suicide deaths across Australian states and territories. Table 1.1 contains some critical statistics on suicide from the Causes of death, Australia, 2021 release for the 2020 reference period, issued by the ABS.51 Statistics in this table show that, although suicide was not a leading cause of death in Australia, it was a leading cause for younger age groups. Suicide accounts for the most years of potential life lost in Australia of all causes of death. While Queensland had the second-highest number of suicide deaths registered in 2020, the age-standardised suspected suicide rate per 100,000 persons was lower than in Northern Territory or

Table 1.1: Vital Australian and Queensland suicide statistics

Statistic	Value
The age-standardised suicide rate for Australia	12.1 per 100,000 people
The age-standardised suicide rate for Queensland	14.7 per 100,000 people
Deaths by suicide registered in Australia	3,139
Deaths by suicide registered in Queensland	759
Suicide's position in the leading causes of death in Australia	15th
Suicide's position in the leading causes of death in Australia for people aged 15 to 44	1st
The Queensland proportion of all deaths by suicide registered in Australia	24.2%
Queensland position in all Australian jurisdictions on the number of suicides	2nd, after New South Wales
Queensland position in all Australian jurisdictions on the proportion of suicides	2nd, after New South Wales
Queensland position in terms of the age-standardised suicide rate	Third, after the Northern Territory (20.4) and Tasmania (15.9)

Source: Australian Bureau of Statistics, Causes of death, Australia, 2020, ABS website, 29 September 2021, accessed 1 October 2021. https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/latest-release This section provides a comprehensive overview of suicide in Queensland, including the total number of suspected suicides in Queensland and an analysis of relevant characteristics and demographics of those who died by suicide in Queensland. This section also details suicides in Queensland by geographic regions, including remoteness areas, HHSs and PHNs.

Current suspected suicide numbers and rates in Queensland, 2020

In 2020, there were 791 suspected suicides in Queensland, including 779 Queensland residents, 6 interstate visitors and 6 overseas visitors. For the 779 Queensland residents, the age-standardised suspected suicide rate was 15.1 per 100,000 persons.

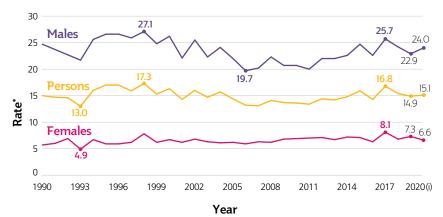
By sex

Of the 779 Queensland residents who died by suspected suicide in Queensland in 2020, 605 (77.7%) were male, and 174 (22.3%) were female. The agestandardised suspected suicide rate for males increased from 22.9 in 2019 to 24.0 per 100,000 males in 2020 (**Figure 2.1**). For females, it decreased from 7.3 in 2019 to 6.6 per 100,000 per females in 2020.

The male age-standardised suicide rate was 3.6 times higher than the female rate in 2020. Age-standardised suicide rates for males have been consistently 3 or more times higher than for females each year since 1990, except for 2011 when it was 2.8 times higher (**Figure 2.1**). Male age-standardised suicide rates were highest in 1998 (27.1) and gradually declined to their lowest level in 2006 (19.7). However, since 2006, male age-standardised suspected suicide rates have been increasing. In 2017 they reached 25.7, the highest level since 2000.

Female age-standardised suicide rates were lowest in 1993 (4.9) and highest in 2017 (8.1). They have been relatively stable with a slight increase between 1990 and 2020.

Figure 2.1: Age-standardised suicide rates by sex, Queensland residents, 1990 to 2020



- * Age-standardised suicide rate per 100,000 estimated resident population as at 30 June (midyear) each year.
- (i) Interim Queensland Suicide Register data are used for 2018–2020.

Sources: Queensland Suicide Register; interim Queensland Suicide Register.

By age group

Most suspected suicides in Queensland occurred in the age groups from 20 to 59 years old (72.6% of men and 66.7% of women). In 2020, men aged 35 to 39 accounted for the greatest number (74) and proportion (12.2%) of male suspected suicides and had the highest age-specific suspected suicide rate at 42.8 per 100,000 men (Figure 2.2 and Table 2.1).

Table 2.1 provides all numbers and rates of suspected suicides for males, females and total persons. In 2020, women aged 75 to 79 had the highest age-specific suspected suicide rate per 100,000 women (12.4). Women aged 30 to 34 had the highest number (22) and proportion of suspected suicides (12.6%) and the second-highest age-specific suspected suicide rate per 100,000 women (11.9).

Figure 2.2: Age-specific suicide numbers and rates by sex, Queensland residents, 2020



Note: The 10 to 14 group has been omitted from this Figure as suspected suicides less than 5.

Source: interim Queensland Suicide Register.

Table 2.1: Suspected suicide numbers and rates by age group and sex, Queensland residents, 2020

	Ma	les	Females		Persons	
Age group	Number	Rate	Number	Rate	Number	Rate
10 to 14	np	np	np	np	8	2.3
15 to 19	35	21.4	11	7.1	46	14.4
20 to 24	63	37.0	15	8.9	78	23.0
25 to 29	49	26.6	17	9.1	66	17.8
30 to 34	54	30.5	22	11.9	76	21.0
35 to 39	74	42.8	11	6.1	85	24.0
40 to 44	49	30.8	16	9.6	65	20.0
45 to 49	55	32.3	15	8.5	70	20.1
50 to 54	49	31.4	11	6.7	60	18.7
55 to 59	46	29.7	8	4.9	54	17.0
60 to 64	39	27.7	9	6.1	48	16.6
65 to 69	20	16.1	9	6.9	29	11.4
70 to 74	24	21.5	9	7.9	33	14.6
75 to 79	15	19.7	10	12.4	25	15.9
80+	28	33.6	8	7.2	36	14.9

Note: np = not provided (suspected suicides less than 5 for one or both sexes).

Age-standardised suicide rate per 100,000 estimated resident population as at 30 June 2020 (midyear).

Source: interim Queensland Suicide Register.

^{*} Age-specific suicide rate per 100,000 estimated resident population as at 30 June 2020 (midyear).

By location

Considering the location of suicides enables targeted suicide prevention activities based on the burden of suicide in different regions. This report focuses on remoteness areas, HHS catchment areas and PHNs.

Remoteness areas

The ABS defines remoteness by the road distance to the nearest urban centre and population size.⁵² Remoteness areas in Oueensland include:

- major cities (e.g. Brisbane, Gold Coast and Maroochydore)
- inner regional (e.g. Bundaberg, Gladstone, Maryborough, Rockhampton and Toowoomba)
- outer regional (e.g. Biloela, Cairns, Charters Towers, Emerald, Goondiwindi, Moranbah and Roma)
- remote (e.g. Cooktown and St George)
- very remote (e.g. Bamaga, Birdsville, Boulia, Burketown, Charleville, Cloncurry, Cunnamulla, Longreach, Mount Isa, Normanton, Winton and Weipa).

Numbers and rates of suspected suicides (Tables 2.2 and 2.3, respectively) varied across regions of Queensland in 2020. The major cities had the lowest age-standardised suspected suicide rates.

Figure 2.3 shows that male age-standardised suspected suicide rates were higher in very remote areas than in all other areas. Although slightly higher in inner regional Queensland, they were similar in all 4 other remoteness areas. Female age-standardised suspected suicide rates were similar in major cities and inner regional areas. They were somewhat higher in outer regional areas.

The increase of age-standardised suspected suicide rates outside major cities as remoteness increases has been linked to socio-economic inequalities, unemployment, higher alcohol consumption, lower health literacy, limited access to services, decreasing diagnosis and treatment of mental disorders, and a higher susceptibility to geographic clusters of suicide.⁵³

Men, farmers and Aboriginal and Torres Strait Islander people outside major urban areas are disproportionally affected by suicide. ⁵⁴ More insights into the effect of remoteness on suicide risk factors, local differences in risk factors, barriers to service access for vulnerable population groups, and further advances in addressing the underlying causes of suicidal ideation or behaviour, including drought and dispossession, are required for effective and sustainable suicide prevention intervention outcomes outside major cities. ⁵⁵

Table 2.2: Suspected suicide numbers by remoteness area, Queensland residents, 2020

Remoteness Area	Males	Females	Persons
Major cities in Queensland	342	106	448
Inner regional Queensland	142	34	176
Outer regional Queensland	97	29	126
Remote Queensland	11	np	np
Very remote Queensland	12	np	np

Note: np = not provided (suspected suicides less than 5 for one or both sexes).

Source: interim Queensland Suicide Register.

Table 2.3: Age-standardised suspected suicide rates by remoteness area, Queensland residents, 2020

Remoteness Area	Males	Females	Persons
Major cities in Queensland	20.9	6.1	13.2
Inner regional Queensland	30.6	6.9	18.5
Outer regional Queensland	28.3	8.5	15.1
Remote Queensland	28.8	np	21.6
Very remote Queensland	42.6	np	23.1

Note: np = not provided (suspected suicides less than 10).

Age-standardised suicide rate per 100,000 estimated resident population as at 30 June 2020 (midyear).

Source: interim Queensland Suicide Register.



Figure 2.3: Age-standardised suspected suicide rates by sex and remoteness area, Queensland residents, 2020

* Age-standardised suicide rate per 100,000 estimated resident population as at 30 June 2020 (midyear). Source: interim Queensland Suicide Register.

Hospital and Health Service catchment areas

HHS catchment areas are Queensland Government regions that regulate and separate health service catchment zones. Tables 2.4 and 2.5 show the numbers and rates of suspected suicides in HHS catchment areas in 2020.

The tables show that the Metro North and Metro South HHSs, the most populous HHS catchments, had the highest number of suspected suicide deaths but the lowest age-standardised suspected suicide rates. Gold Coast HHS had the lowest suspected suicide rate at 11.6 per 100,000 people.

Table 2.4: Suspected suicide numbers by Hospital and Health Service catchment area, Queensland residents, 2020

HHS	Males	Females	Persons
Cairns and Hinterland	35	15	50
Central Queensland	35	np	np
Central West	np	np	np
Darling Downs	43	12	55
Gold Coast	61	19	80
Mackay	23	6	29
Metro North	101	44	145
Metro South	129	31	160
North West	5	np	np
South West	np	np	np
Sunshine Coast	47	13	60
Torres and Cape	8	np	np
Townsville	38	9	47
West Moreton	41	9	50
Wide Bay	34	8	42

Note: HHS = Hospital and Health Service, np = not provided (suspected suicides less than 5 for one or both sexes). Source: interim Queensland Suicide Register.

Table 2.5: Age-standardised suspected suicide rates by Hospital and Health Service catchment area, Queensland residents, 2020

HHS	Males	Females	Persons
Cairns and Hinterland	27.1	11.5	19.1
Central Queensland	33.6	np	18.4
Central West	np	np	np
Darling Downs	32.7	9.4	20.8
Gold Coast	18.7	5.1	11.6
Mackay	25.7	np	16.4
Metro North	19.2	8.1	13.5
Metro South	21.9	5.1	13.3
North West	np	np	np
South West	np	np	np
Sunshine Coast	23.9	5.2	14.3
Torres and Cape	np	np	np
Townsville	31.4	np	19.4
West Moreton	28.4	np	16.9
Wide Bay	34.3	np	19.4

Note: HHS = Hospital and Health Service, np = not provided (suspected suicides less than 10). Age-standardised suicide rate per 100,000 estimated resident population as at 30 June 2020 (midyear). Source: interim Queensland Suicide Register.

Primary Health Networks

PHNs are independent primary health care organisations funded by the Australian Government to support ongoing reform and development within the primary health care system.⁵⁶ PHNs commission rather than provide services. The Australian Government has identified 7 priority areas to guide the work of PHNs, including mental health, Aboriginal and Torres Strait Islander health, population health, digital health, health workforce, aged care, and alcohol and other drugs.⁵⁷ PHNs support regional efforts to reduce suicide through partnerships with HHSs and other local stakeholders.⁵⁸

Tables 2.6 and 2.7 show the numbers and rates of suspected suicides in PHN catchment areas in 2020. Brisbane South PHN had the most suspected suicides (160), while Western Queensland PHN had the least (under 14). Northern Queensland had the highest age-standardised suspected suicide rate per 100,000 people (19.2), while Gold Coast PHN had the lowest (11.6).

Table 2.6: Suspected suicide numbers by Primary Health Network, Queensland residents, 2020

PHN	Males	Females	Persons
Brisbane North	101	44	145
Brisbane South	129	31	160
Central Queensland, Wide Bay, Sunshine Coast	116	np	np
Darling Downs and West Moreton	84	21	105
Gold Coast	61	19	80
Northern Queensland	104	np	np
Western Queensland	9	np	np

Note: PHN = Primary Health Network, np = not provided (suspected suicides less than 5 for one or both sexes). Source: interim Queensland Suicide Register.

Table 2.7: Age-standardised suspected suicide rates by Primary Health Network, Queensland residents, 2020

PHN	Males	Females	Persons
Brisbane North	19.2	8.1	13.5
Brisbane South	21.9	5.1	13.3
Central Queensland, Wide Bay, Sunshine Coast	28.8	5.0	16.6
Darling Downs and West Moreton	30.2	7.4	18.5
Gold Coast	18.7	5.1	11.6
Northern Queensland	29.7	8.9	19.2
Western Queensland	np	np	18.5

Note: PHN = Primary Health Network, np = not provided (suspected suicides less than 10). Age-standardised suicide rate per 100,000 estimated resident population as at 30 June 2020 (midyear).

Source: interim Queensland Suicide Register.

Readers may wish to skip this section if they find the discussion of suicide methods distressing.

Suicide methods

Sensitivity and care are paramount when reporting suicide methods. Research has shown that media reporting of suicide methods of celebrities is associated with a 30.0% increase in suicides by the same method. 59 If mentioning the method is necessary, Mindframe recommends removing specific details, discussing the method in general terms (e.g. 'mix of drugs' as opposed to the exact drug and amount) and avoiding the use of dramatic imagery (e.g. people standing on a ledge).60

Table 2.8 shows suicide methods used by people dying from suicide in 2020. This table indicates that strangulation or suffocation were the most common suicide methods for both males (388, 63.0%) and females (95, 54.3%) in Queensland in 2020. At an individual level, counselling on access to lethal means as part of a safety planning intervention with persons at risk of suicide can prevent suicidal behaviour.61

Even methods considered to be the most difficult to prevent – like strangulation or suffocation – may be reduced by gatekeepers (e.g. family or friends) limiting or removing access to lethal means, even temporarily, as a crisis emerges and passes.62

Some suicide methods are preventable by restricting access to the means of suicide on an aggregated level (e.g. nets and barriers at bridges). There is a need to continuously evaluate Queensland suicide prevention policy against the evidence for means restriction.

Table 2.8: Suicide methods, Queensland, 2020

		5	Sex		Pers	ons
	Ma	Male Female		nale		
Method	Number	%	Number	%	Number	%
Strangulation or suffocation	388	63.0	95	54.3	483	61.1
Poisoning (drugs) single	34	5.5	35	20.0	69	8.7
Poisoning (drugs) multiple	19	3.1	20	11.4	39	4.9
Poisoning (other)	np	np	np	np	40	5.1
Firearms	np	np	np	np	50	6.3
Jumping from height	29	4.7	6	3.4	35	4.4
Other	62	10.1	13	7.4	75	9.5
TOTAL	616	100.0	175	100.0	791	100.0

Note: np = not provided (suspected suicides less than 5 for one or both sexes).

Source: interim Queensland Suicide Register.

Section 3 explores the demographic and health characteristics, life events and service contact of those who died by suicide in Queensland, using data from 2015 to 2017 and from 2020 as indicated. This section provides an overview of the relevant characteristics and demographics of those who died by suicide in Queensland as applicable to specific population groups – Aboriginal and Torres Strait Islander people, culturally and linguistically diverse people, and individuals impacted by COVID-19.

This section also provides information on suicides in Queensland by critical characteristics, including relationship status, employment, reported mental health conditions, adverse life events and contact with health services. This information may assist in identifying factors that may play a role in a person's suicide and helps identify target groups for Queensland's suicide prevention strategy.

Specific population groups

Aboriginal and Torres Strait Islander people

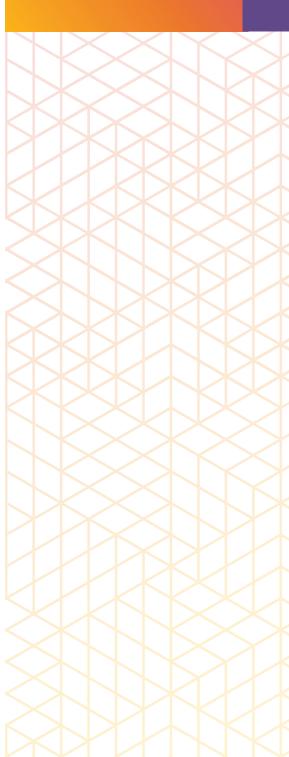
This report acknowledges that the experience of suicide is substantially different for Aboriginal and Torres Strait Islander people and recognises the different ways that Aboriginal and Torres Strait Islander people understand social and emotional wellbeing.⁶³

Suicide disproportionately affects Aboriginal and Torres Strait Islander people, particularly young Aboriginal and Torres Strait Islander people.⁶⁴ Aboriginal and Torres Strait Islander people have an increased likelihood of knowing someone who has died by suicide and a much higher risk of reporting exposures to multiple suicides compared to non-Indigenous Australians.⁶⁵

Aboriginal and Torres Strait Islander people are currently experiencing suicide within their communities at approximately twice the rate of the non-Indigenous population. ⁶⁶ While suicide is complex and multifaceted for all individuals and communities, the experiences and impacts of suicide on Aboriginal and Torres Strait Islander people and communities are particularly significant, far-reaching and long-lasting.

Several underlying factors can increase the suicide risk of Aboriginal and Torres Strait Islander people compared to non-Indigenous peoples living in Australia. These include historical, cultural, political, social, economic and geographic aspects. Key contributors include the experience of intergenerational trauma stemming from colonisation and genocide, and current racism, both systemic and societal.⁶⁷

Demographic factors, significant life events and contact with services



2020 findings

In 2020, 66 Aboriginal and Torres Strait Islander people died by suicide in Queensland, accounting for 8.3% of all suspected suicides in Queensland. The most recent population estimates show Aboriginal and Torres Strait Islander people accounted for 4.6% of Queensland's population in 2016.68 This discrepancy highlights the disproportionate impact of suicide on Aboriginal and Torres Strait Islander people.

Table 3.1 shows that Aboriginal and Torres Strait Islander youth aged 10 to 19 accounted for 21.2% of all suspected suicides by Aboriginal and Torres Strait Islander people in Queensland in 2020, compared to 5.7% for non-Indigenous youth of the same age. Aboriginal and Torres Strait Islander people under 30 years of age accounted for 51.5% of all suspected suicides in Aboriginal and Torres Strait Islander people, compared to 23.4% for non-Indigenous people of the same age.

Age-standardised suspected suicide rates for Aboriginal and Torres Strait Islander people living in Queensland have consistently been above the non-Indigenous rate for people living in Queensland since 2001 (Figure 3.1). In the last 2 decades, the lowest age-standardised suspected suicide rate for Aboriginal and Torres Strait Islander people was recorded by the QSR in 2008. The rate difference was highest in 2001 at 22.7 per 100,000 people and lowest in 2008 at 1.1 per 100,000 people.

Aboriginal and Torres Strait Islander youth suicide from 2001 to 2015

Recently published analyses of suicides in Queensland using the QSR have examined differences in rates between Aboriginal and Torres Strait Islander youth and non-Indigenous youth.⁶⁹ The findings indicated that the age-standardised suspected suicide rates for Aboriginal and Torres Strait Islander males, females and youth aged 10 to 19 were all over 4 times higher than for non-Indigenous males, females and youth aged 10 to 19, respectively (Table 3.2). The age-specific rate for Aboriginal and Torres Strait Islander youth aged 10 to 14 was over 7.5 times higher than that for non-Indigenous youth of the same age range (Table 3.2).

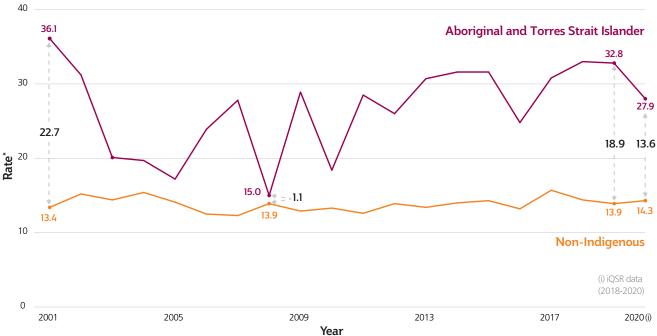
Table 3.1: Suspected suicide numbers by age, Aboriginal and Torres Strait Islander people in Queensland, 2020

	Aboriginal	and Torres Str	ait Islander	Non-Indigenous			
Age group (years)	Number	%	Rate	Number	%	Rate	
10 to 19	14	21.2	26.7	41	5.7	6.7	
20 to 29	20	30.3	47.4	128	17.7	19.2	
30 to 39	19	28.8	67.0	144	19.9	20.9	
40+	13	19.7	20.5	412	56.8	17.4	
TOTAL	66	100.0		725	100.1		

Note: Percentages for non-Indigenous suicides sum to 100.1 due to rounding. Rate refers to the age-specific suicide rate and is per 100,000 estimated resident population as of 30 June 2020 (midyear).

Source: interim Queensland Suicide Register.

Figure 3.1: Aboriginal and Torres Strait Islander and non-Indigenous age-standardised suspected suicide rates, Queensland residents, 2001 to 2020



^{*} Age-standardised suicide rate per 100,000 estimated resident population as at 30 June 2020 (midyear) each year. (i) interim Queensland Suicide Register data (2018 to 2020).

Sources: Queensland Suicide Register; interim Queensland Suicide Register.

Table 3.2: Age-specific suicide rates for Aboriginal and Torres Strait Islander and non-Indigenous young people (10 to 19 years of age) by sex and age group, Queensland, 2001 to 2015

Characteristic		original and Strait Islander	Non-	Indigenous	Rate ratio
	Suicide deaths	Age-specific suicide rate (95% CI)	Suicide deaths	Age-specific suicide rate (95% CI)	
Sex					
Male	85	28.0 (22.0 – 33.0)	280	6.7 (6.0 – 7.5)	4.1 (3.3 – 5.1)
Female	42	14.0 (10.0 – 19.0)	124	3.1 (2.6 – 3.7)	4.6 (3.4 – 6.3)
Aged 10 to 19 years	127	21.1 (17.5 – 24.8)	404	5.0 (4.5 – 5.5)	4.3 (3.5 – 5.1)
10 to 14 years	26	8.0 (4.9 – 11.0)	42	1.1 (0.7 – 1.4)	7.6 (5.0 – 12.0)
15 to 19 years	101	37.0 (30.0 – 44.0)	362	8.8 (7.9 – 9.7)	4.2 (3.4 – 5.1)

Note: CI = confidence interval. Age-specific suicide rate is calculated per 100,000 persons.

Source: M Gibson, J Stuart, S Leske, R Ward and R Tanton, 'Suicide rates for young Aboriginal and Torres Strait Islander people: the influence of community level cultural connectedness', Medical Journal of Australia, 2021, 214 (11):514-518.

The age-specific suicide rate for Aboriginal and Torres Strait Islander youth aged 10 to 19 years was 2.7 times higher in communities with elevated levels of reported discrimination than in communities with low levels of discrimination, from 2001 to 2015 (Table 3.3).

The age-specific suicide rate for Aboriginal and Torres Strait Islander youth was 1.7 times higher in regional and remote areas than in metropolitan areas. By socio-economic status, the age-specific suicide rate for Aboriginal and Torres Strait Islander youth was 1.3 times higher in communities with low socio-economic resource levels than in communities with medium or high levels of socio-economic resources (Table 3.3).

The age-specific suicide rate was 1.8 times higher in areas with low cultural social capital than in areas with high cultural social capital. However, community socio-economic resource levels were not associated with age-standardised suicide rates for young Aboriginal and Torres Strait Islander people despite the recognised relationship between poverty and age-standardised suspected suicide rates in general.⁷⁰

The analyses also identified associations between suicide mortality rates for young Aboriginal and Torres Strait Islander people and culturally specific risk and protective factors at the community level. 71 Areas in which greater proportions of Aboriginal and Torres Strait Islander people participated in cultural events, ceremonies, organisations and community activities and were more involved with their community had lower age-standardised suicide rates. Conversely, age-specific suicide rates were higher in communities where Aboriginal and Torres Strait Islander people reported greater levels of discrimination. 72 The Aboriginal and Torres Strait Islander Suicide Prevention Project provides a cultural framework for suicide prevention services and programs and more information about effective interventions. 73

Table 3.3: Age-specific suicide rates of Aboriginal and Torres Strait Islander youth (10 to 19 years), by cultural social capital, discrimination, remoteness and socio-economic resources, Queensland, 2001 to 2015

Characteristic	SA2s	Suicide deaths	Age-specific suicide rate (95% CI)	Rate ratio (95% CI)
Cultural social capital	481			
Low (lowest one-third)	166	93	26.0 (21.0 – 31.0)	1.8 (1.2 – 2.7)
High (highest two-thirds)	315	33	14.0 (9.5 – 19.0)	
Discrimination	481			
High (25% or more of residents)	310	106	24.0 (19.0 – 28.0)	2.7 (1.7 – 4.3)
Low (under 25% of residents)	171	20	8.7 (4.9 – 12.0)	
Remoteness*				
Regional and remote	234	101	24.0 (20.0 – 29.0)	1.7 (1.1 – 2.7)
Major cities	292	26	14.0 (8.6 – 19.0)	
Socio-economic resource status†				
Low (2 lowest quintiles)	217	93	23.0 (18.0 – 28.0)	1.3 (0.9 – 1.9)
Medium/high (3 highest quintiles)	295	34	18.0 (12.0 – 24.0)	

Note: SA2 = statistical area level 2; CI = confidence interval. Age-specific suicide rate is calculated per 100,000 persons.

† Socio-economic resource status is according to the Index of Relative Socioeconomic Advantage and Disadvantage: Australian Bureau of Statistics, *Australian statistical geography standard (ASGS): volume 5 – remoteness structure, July 2011*, cat. no. 1270.0.55.005, ABS website, 31 January 2013. https://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/17A7A350F48DE42ACA258251000C8CA0?opendocument. Although this standard has been superseded, it was closest to the midpoint of the study period.

Source: M Gibson, J Stuart, S Leske, R Ward and R Tanton, 'Suicide rates for young Aboriginal and Torres Strait Islander people: the influence of community level cultural connectedness', Medical Journal of Australia, 2021, 214(11):514–518.

^{*} Remoteness is according to the Australian Standard Geographical Classification: Queensland Government Statistician's Office, 'Estimated resident population by SA1 (ABS consultancy): single year of age, by sex, by statistical area levels 1 and 2 (SA1 & SA2), Queensland LGAs and Tweed, 2011 to 2020p', *Population estimates: regions*, Queensland Government, accessed 20 August 2021. https://www.qgso.qld.gov.au/statistics/theme/population/population-estimates/regions

Lesbian, gay, bisexual, transgender, intersex and queer or questioning people

Suicide disproportionately affects LGBTIQ+ people (lesbian, gay, bisexual, transgender, intersex, queer, questioning and other people with diverse sexual orientations or gender identities).74 This disproportionate impact stems directly and exclusively from the stigma, prejudice, discrimination and abuse experienced by LGBTIQ+ individuals.

Police reports and coronial findings provide information for coding sexuality or gender identity in the QSR and iQSR. These figures are likely an underestimate of suicide in the LGBTIQ+ community in Queensland. The accuracy of capturing this information relies on police or coronial reports, disclosure by friends or family, or identification of sexual, gender or body diversity. The QSR or iQSR have not recorded any suicides of intersex, questioning or queer people, so these groups are not discussed in detail in this chapter - though, as acknowledged, this is likely an underestimation.

In 2020, the iQSR recorded 18 suspected suicides of people identified as lesbian, gay, bisexual or transgender. Due to the small numbers, this report does not further break down this data by sexuality, gender or body diversity. Significant knowledge gaps remain regarding suicide in these populations because data regarding sexual orientation, gender identity and intersex status are rarely collected

The strongest risk factors for suicidal thoughts and behaviours in LGBTQ+ youth (there were no studies of intersex people in this review) include self-harm, sexual risk, exposure to suicide, thwarted belongingness, depression and intimate-partner

violence.⁷⁵ The strongest protective factors for suicidal thoughts and behaviours in LGBTQ+ youth (there were no studies of intersex people in this review) include self-compassion and self-esteem by acting in a compassionate, kind and accepting way towards the self; school belonging; supportive parents; and outness/openness.76

Non-English speaking background and country of birth

The QSR records information on non-English speaking background (NESB) and country of birth. The police record NESB as either 'yes', 'no' or 'unknown'.

Table 3.4 shows the proportion of people dying by suspected suicide in 2020 whom police identified as having an NESB. Less than 1 in 10 of all suspected suicides in Queensland had an NESB. The proportion was higher for females.

Analysis by country or region of birth may inform targeted suicide prevention strategies towards migrants from specific regions or countries. Nevertheless, analysis is limited to people born overseas, excluding people with parents born overseas.

Table 3.5 shows that the proportion of people born in New Zealand dying by suicide in 2020 in Queensland was slightly higher than their population proportion in Queensland in the 2016 Census. The ABS will release population estimates of the country of birth for people residing in Queensland from the 2021 Census in June 2022.77

Table 3.4: Suspected suicide numbers by non-English speaking background, Queensland, 2020

		9	Persons				
	Ma	les	Fem	ales			
NESB	Number	%	Number	%	Number	%	
Yes	42	6.8	19	10.9	61	7.7	
No	501	81.3	138	78.9	639	80.8	
Unknown	73	11.9	18	10.3	91	11.5	
TOTAL	616	100.0	175	100.1	791	100.0	

Note: NESB = non-English speaking background. Percentages for females sum to 100.1 due to rounding.

Source: interim Queensland Suicide Register.

Table 3.5: Suspected suicide numbers by region of birth, Queensland, 2020

		S	ex		Pers	ons	Queensland*
	Ma	les	Fem	ales			
Country of birth	Number	%	Number	%	Number	%	%
Australia	478	77.6	122	69.7	600	75.9	76.5
New Zealand	41	6.7	7	4.0	48	6.1	4.5
Other Oceania	np	np	np	np	6	0.8	np
England	22	3.6	8	4.6	30	3.8	4.1
Other United Kingdom	np	np	np	np	6	0.8	0.8
Ireland	np	np	np	np	5	0.6	0.3
Continental Europe	19	3.1	7	4.0	26	3.3	np
United States of America	np	np	np	np	7	0.9	0.4
Other Americas	np	np	np	np	np	np	np
India	np	np	np	np	6	8.0	1.1
Other Asia	12	1.9	6	3.4	18	2.3	np
Africa	np	np	np	np	np	np	np
Unknown	17	2.8	13	7.4	30	3.8	np
TOTAL	616	100.0	175	100.0	791	100.0	100.0

Note: np = not provided (suspected suicides less than 5 for one or both sexes).

Source: interim Queensland Suicide Register.

COVID-19

There has been some uncertainty and speculation about the impact of COVID-19 on suicide mortality. However, there is limited evidence that infectious disease-related public health emergencies increase suicides.⁷⁸ A study of preliminary, early-stage, real-time suicide mortality data in 21 countries found increased suicides in only three jurisdictions (Vienna, Austria; Puerto Rico; and Japan) during the first 9 months of the COVID-19 pandemic.⁷⁹

Currently, there is no evidence that COVID-19 has affected the overall number of suicides in Queensland. However, the COVID-19 pandemic was a possible contributing factor in some suicides. Police officers mentioned COVID-19 in police reports from 1 March 2020 to 31 December 2020. There were 9 instances where the impact of COVID-19 on the suspected suicide was unclear. In these cases, police reports mentioned COVID-19 in a way that did not clearly illustrate a link between the suspected suicide and the COVID-19 pandemic.

Thus, COVID-19 appeared to affect 53 (or 8.3%) of the 639 suspected suicides in Queensland from 1 March 2020 to 31 December 2020. Reported impacts, which often overlapped and aligned broadly with the known risk factors for suicide, included:

 22 suspected suicides where people had their employment or business affected by COVID-19. Police officers mentioned COVID-19 in the context of people having their hours of employment cut, jobs falling through or losing their job

- 15 suspected suicides where COVID-19 reportedly affected mood, coping, stress or anxiety. Police officers mentioned COVID-19 in the context of people suffering an increase in mental health conditions or more severe impacts of mental health conditions due to COVID-19, such as job loss or isolation
- 9 suspected suicides where police reported social isolation due to COVID-19 as a factor. Impacts due to COVID-19 linked to social isolation included loneliness and the inability to see family
- 7 suspected suicides where COVID-19 reportedly impacted finances, involving job loss or lost income
- 5 suspected suicides where changes in access to healthcare support and healthcare items due to COVID-19 reportedly affected the suicide. These instances included situations where people could not attend medical appointments or obtain medications due to COVID-19
- less than 5 suspected suicides involved either relationship breakdown or activity interruption from COVID-19.

^{*} Australian Bureau of Statistics, Country of Birth, Australia, 2016, ABS website, accessed 7 Nov 2021.

2015 to 2017

This section explores the demographic and health characteristics of 2,316 people (residents and non-residents) who died by suicide in Queensland between 2015 and 2017. These years are the most recent from the QSR and are explored in detail because more information is now available. This section identifies factors that may play a role in a person's suicide and helps identify target groups for Queensland's suicide prevention strategy.

QSR information on employment status and marital status comes from the police report and the National Coronial Information System. QSR coders rely on the police report if discrepancies between these sources occur.

Marital status and related life events

Recent separation and relationship conflict are known risk factors for suicide attempts and suicides.80 Over a third of people dying by suicide in Queensland were reportedly married or in a de facto relationship (780, 33.7%; Table 3.6). The numbers and proportions were similar between men (611, 34.5%) and women (169, 31.0%). Police reported, and coroners found, that men were more frequently separated (270, 15.2%) than females (55, 10.1%). Separation may be when people are at greater risk of suicide and need further support during this time.

Relationship conflict was a life event reported for almost a third (242, 29.9%) of married or de facto people who died by suicide from 2015 to 2017. Relationship separation was reportedly a life event for over a guarter (620, 26.7%) of suicide deaths.

Employment status and related life events

Underemployment and long-term unemployment are risk factors for suicide.81 Over a quarter (617, 26.6%) of people dying by suicide in Queensland between 2015 and 2017 were reportedly unemployed at the time they died (Table 3.7). By contrast, the unemployment rate in Queensland in June 2016 - midway between 2015 to 2017 - was 6.4% for males and 6.1% for females.82

Recent or pending unemployment was reportedly an adverse life event in 12.0% (278) of suicides between 2015 and 2017, specifically for 13.7% of males and 6.4% of females. In total, 3 in 10 (671, 31.3%) people who died by suicide were unemployed or reportedly experienced recent or pending unemployment near their death. This finding suggests that suicide prevention activities should consider periods after job loss as high-risk periods for suicide.83

Financial problems were reportedly an adverse life event in 354 male suicides (20.0%), suggesting opportunities for prevention and early intervention with people experiencing financial hardship.

Table 3.6: Marital status at the time of death, suicides in Queensland, 2015 to 2017

		5	Persons					
	Mal	ales Females						
Marital status	Number	%	Number	%	Number	%		
Never married	139	7.8	38	7.0	177	7.6		
Married / de facto	611	34.5	169	31.0	780	33.7		
Separated	270	15.2	55	10.1	325	14.0		
Divorced	103	5.8	41	7.5	144	6.2		
Widowed	48	2.7	43	7.9	91	3.9		
Single	318	18.0	110	20.2	428	18.5		
Unknown	282	16.0	89	16.3	371	16.1		
TOTAL	1,771	100.0	545	100.0	2,316	100.0		

Source: Queensland Suicide Register.

Table 3.7: Employment status by sex, suicides in Queensland, 2015 to 2017

		S	ex		Pers	ons
	Males		Females			
Employment status	Number	%	Number	%	Number	%
Unemployed	474	26.8	143	26.2	617	26.6
Full-time employment	401	22.6	54	9.9	455	19.6
Retired	218	12.3	87	16.0	305	13.2
Employed (unknown mode)	164	9.3	33	6.1	197	8.5
Part-time/casual employment	85	4.8	25	4.6	110	4.7
On disability pension	62	3.5	21	3.9	83	3.6
Student or apprentice	44	2.5	37	6.8	81	3.5
Other not in labour force	10	0.6	11	2.0	21	0.9
Unknown	313	17.7	134	24.6	447	19.3
TOTAL	1,771	100.1	545	100.1	2,316	99.9

Note: Percentages for males, females and persons sum to 100.1, 100.1 and 99.9 due to rounding.

Source: Queensland Suicide Register.

Occupation

A range of stressors exists across different occupational groups. These stressors can include occupation-related work culture, workload, risks and exposure to stressful or traumatic events that may affect a person's health and wellbeing.

Data on occupations were available for 646 (84.8%) people who were reportedly employed when they died by suicide. Table 3.8 lists the number and proportion of each major occupational group.84 The largest major occupational group identified was technicians and trades workers (141, 6.1%), which included 133 males (7.5%) and 8 females (1.5%). Labourers (129, 5.6%) were the next most frequent group.

A 2015 systematic review identified 13 workplace suicide prevention activities (Australian and international) involving general or occupation-specific training programs and prevention initiatives.85 The authors concluded that the effectiveness of these types of prevention activities was still unknown.86

However, occupation-specific suicide prevention programs often target high-risk industries or occupations. For example, MATES in Construction is an occupational health initiative to prevent suicides in the construction industry. A Queenslandwide study found that age-standardised suspected suicide rates in machinery operators, drivers and labourers decreased by 22.5% from before (2003 to 2007) to after (2008 to 2012) the introduction of MATES in Queensland.87 Improvements in suicide awareness and help-seeking intentions occurred after MATES in Construction awareness training.88

Australian Defence Force personnel

Reducing defence and veteran suicides are priorities in state and national suicide prevention approaches. There were 42 suspected suicides of current or ex-serving Australian Defence Force (ADF) personnel in Queensland between 2015 and 2017. This report only provides suicide numbers of current and ex-serving ADF together for confidentiality reasons. However, this is an underreported figure because data only come from police reports or coronial findings.

State and commonwealth initiatives will improve our understanding and response to ADF and veteran suicides, most notably through the Royal Commission into Defence and Veteran Suicide. These initiatives may inform our understanding of issues affecting this population.

Adverse life events

An adverse life event refers to any event before a suicide noted by police as impacting the deceased person. The main life events preceding suicide for males in order of frequency were relationship separation (511, 28.8%), financial problems (354, 20.0%) and relationship conflict (253, 14.3%). For females, the major life events preceding suicides were bereavement (123, 22.6%), relationship separation (109, 20.0%) and family conflict (107, 19.7%; **Table 3.9**).

Bereavement is a common adverse life event before suicide in Queensland. This finding suggests that suicide prevention initiatives should consider bereavement. Increasing awareness of grief and counselling specialist support groups and access to web-based bereavement care may be of benefit.89 Family conflict (as opposed to relationship conflict) commonly preceded suicides of both males and females. A more detailed analysis of the QSR may identify the demographic profiles of people experiencing family conflict.

 Table 3.8: Major occupational group by sex, suicides in Queensland, 2015 to 2017

		S	ex		Pers	ons
	Ma	les	Fem	ales		
Occupation group	Number	%	Number	%	Number	%
Technicians and trades	133	7.5	8	1.5	141	6.1
Labourers	114	6.4	15	2.8	129	5.6
Managers	86	4.9	8	1.5	94	4.1
Machinery operators and drivers	np	np	np	np	73	3.2
Professionals	56	3.2	24	4.4	80	3.5
Community and personal service	50	2.8	24	4.4	74	3.2
Sales workers	25	1.4	10	1.8	35	1.5
Clerical and administrative	np	np	np	np	20	0.9
Unknown	103	5.8	13	2.4	116	5.0
Not reportedly working	1,121	63.3	433	79.4	1,554	67.1
TOTAL	1,771	100.0	545	100.0	2,316	100.2

Note: np = not provided (suicides less than 5 for one or both sexes). Percentages for persons sum to 100.2 due to rounding. Source: Queensland Suicide Register.

Table 3.9: Adverse life events, suicides in Queensland, 2015 to 2017

		S	Pers	ons		
	Ma	Males		Females		
Adverse life event	Number	%	Number	%	Number	%
Relationship separation	511	28.8	109	20.0	620	26.7
Financial problems	354	20.0	70	12.8	424	18.3
Bereavement	252	14.2	123	22.6	375	16.2
Relationship conflict	253	14.3	84	15.4	337	14.5
Family conflict	212	12.0	107	19.7	319	13.8
Recent or pending unemployment	243	13.7	35	6.4	278	12.0
Pending legal matters	226	12.7	29	5.3	255	11.0
Work/school problems (not financial)	190	10.7	46	8.4	236	10.2
Child custody dispute	106	6.0	29	5.3	135	5.8
Interpersonal conflict	91	5.1	36	6.6	127	5.5
Childhood trauma	71	4.0	43	7.9	114	4.9
Sexual abuse	54	3.0	38	7.0	92	4.0

Note: One person can experience multiple life events, so the total percentages are not 100.0, and totals are not tallied here. Source: Queensland Suicide Register.

Alcohol use

Alcohol use is related to an increased risk of suicide. The QSR collects data on alcohol consumed before death. However, it is essential to note that these data do not mean that alcohol use contributed to the person's death – only that the person consumed alcohol before their death. About one-third of people (762, 32.9%) reportedly consumed alcohol before their death by suicide between 2015 and 2017 (Table 3.10).

A recent systematic review and meta-analysis found that interventions limiting alcohol use reduced self-harm and suicide attempts but did not reduce suicidal ideation or suicide deaths. 90 All types of therapeutic approaches were similarly effective. 91 Therapeutic interventions include brief and more intensive structured psychosocial interventions like acceptance and commitment therapy and cognitive behavioural therapy. These interventions explore the association between harmful alcohol use and current or past suicidal thoughts and behaviours. 92 Improved access to these therapies in Queensland may reduce suicide-related outcomes.

A recent review of alcohol policies and suicidal behaviour found that policies reducing access to alcohol often led to a reduction in suicidal behaviour.93 Interventions such as restricting alcohol availability and increasing the cost of alcohol were associated with fewer suicides in most studies in Western and Eastern Europe and in the United States.94 The authors of the review concluded that policies targeting harmful alcohol consumption might reduce suicidal behaviour at the population level. Although it is vital to recognise demographic and other differences between Australia and overseas, this may be relevant in developing future policy in Queensland.

Other drug use

Drug use can be a significant risk factor for suicide. Data on drug use refer to lifetime use (i.e. any use while alive). Individuals represented in this data may also have used more than one drug. These data do not mean that drug use contributed to the death.

Table 3.11 shows Illicit and licit drug use and that cannabis was the most common substance used in the lifetimes of males (387, 21.9%) and females (88, 16.1%) who died by suicide. Cannabis use is a risk factor for suicidality.95 Amphetamines or methamphetamines were the second most common substances used (433, 18.7%). Any use of amphetamines is associated with increased suicidality.96

Prescription drugs such as opioid-based pain medication and benzodiazepines were the third most common substance used in the lifetime of an individual who died by suicide in Queensland. Prescription drug misuse refers to using prescription medications or substances in any other way than their intended purpose. Table 3.11 shows that females (24, 4.4%) who died by suicide in Queensland were more likely than males (48, 2.7%) to have misused prescription drugs in their lifetime.

Policy-wise, there is a need to increase demand reduction and harm reduction strategies to balance these with supply reduction (e.g. law enforcement).97 From a suicide prevention perspective, expanding the use of drug-related diversion programs within the criminal justice system and increasing access to support and treatment programs for alcohol and other drugs may reduce the risk of suicide.

According to Australia's annual overdose report 2021,98 Queensland recorded the second-highest number of druginduced suicides (97) in Australia in 2019, behind New South Wales. Across Australia, the number of drug-induced suicides has steadily increased since 2005. The prevalence of druginduced suicides highlights that harmful drug use is a public health issue. While substance use can be harmful, treatment is effective. Support services are available, such as the National 24/7 Alcohol and Other Drugs Hotline and the Alcohol and Drug Foundation.

Mental health conditions

Some mental health conditions are associated with an increased risk of suicide. The QSR records reported mental health conditions of the person during their lifetime based on information included in the police report and the coronial findings (Table 3.12). There are limitations in these data sources: these conditions do not solely reflect a diagnosis by health professionals treating the person before their death, and they include reported diagnoses from next-of-kin and others who knew the deceased. Currently, the QSR does not record who reported the mental health condition to police or coroners and whether it reflects a formal diagnosis by a health professional or a police-reported diagnosis. These figures likely underestimate the actual number and proportion of mental health conditions. These reported conditions did not necessarily contribute to the person's death, and the person may not have been experiencing symptoms at the time of their death.

In total, 1,068 (46.1%) of people dying by suicide between 2015 and 2017, were reported to have had a mental health condition. Females who died by suicide were more likely to have a reported mental health condition, especially depression and anxiety.

Females had a greater proportion for all conditions except psychotic conditions. Females had higher proportions of reported anxiety and substance use conditions, while males had a slightly higher proportion of reported psychotic illnesses. A higher proportion of females were reportedly diagnosed with a personality disorder. Diagnoses of personality disorders are likely underestimated due to the requirement of specialist expertise in assessing personality disorders.

Although most people with mental health conditions do not die by suicide, having a mental health condition does increase the risk of suicide. 99 These conditions in people dying by suicide highlight the continued importance of evidence-based and fitfor-purpose strategies in health settings and other touchpoints with services.

Table 3.10: Alcohol reportedly consumed before suicide, suicides in Queensland, 2015 to 2017

		S	Persons			
	Ma	les	Females			
Alcohol use	Number	%	Number	%	Number	%
No	1025	57.9	363	66.6	1388	59.9
Yes	616	34.8	146	26.8	762	32.9
Unknown	130	7.3	36	6.6	166	7.2
TOTAL	1,771	100.0	545	100.0	2,316	100.0

Source: Queensland Suicide Register.

Table 3.11: Lifetime drug use, suicides in Queensland, 2015 to 2017

		S	Persons			
	Males		Females			
Lifetime drug use or misuse	Number	%	Number	%	Number	%
Use						
Cannabis	387	21.9	88	16.1	475	20.5
Amphetamines or methamphetamines	373	21.1	60	11.0	433	18.7
Cocaine	np	np	np	np	30	1.3
Other or unspecified opiates	22	1.2	8	1.5	30	1.3
Heroin	18	1.0	5	0.9	23	1.0
Misuse						
Prescription drug	48	2.7	24	4.4	72	3.1

Note: np = not provided (suicides less than 5 for one or both sexes). One person could have multiple reported conditions, so percentages will not sum to 100.0, and totals are not tallied here.

Source: Queensland Suicide Register.

Table 3.12: Lifetime mental health conditions reportedly experienced, suicides in Queensland, 2015 to 2017

	Sex				Persons	
	Ma	les	Females			
	Number	%	Number	%	Number	%
Depression	587	33.1	245	45	832	35.9
Anxiety	216	12.2	121	22.2	337	14.5
Substance use disorder	173	9.8	70	12.8	243	10.5
Psychotic conditions	138	7.8	37	6.8	175	7.5
Bipolar	67	3.8	54	9.9	121	5.2
Personality disorder	26	1.5	41	7.5	67	2.9

Note: One person could have multiple reported conditions, so percentages will not sum to 100.0, and totals are not tallied here. Source: Queensland Suicide Register.

History of suicidal behaviour

There are opportunities to prevent suicides when people communicate their intent to die by suicide or after previous suicide attempts. Table 3.13 shows that 914 (51.6%) of males and 305 (56.0%) of females who died by suicide from 2015 to 2017 had communicated an intention to die by suicide in their lifetime. In the 12 months prior to their death, 40.6% of males and 42.6% of females communicated their suicidal intent. One in 3 people who died by suicide had made a suicide attempt during their lifetime: 30.2% of males and 43.1% of all females dying by suicide. In the 12 months before their death by suicide, 16.9% of males and 23.4% of females had attempted suicide.

Brief acute care interventions delivered in a single encounter after a suicide attempt are associated with reduced future suicide attempts and increased opportunities to connect people to follow-up care. 100 These interventions typically include multiple components, such as care coordination between different care providers, safety planning, brief follow-up contacts and brief therapeutic interventions. 101 Care coordination in this context is vital to ensure that individuals receive the support they need. Policy levers to reduce suicides in people who have previously made attempts could include enabling universal access to brief acute care interventions delivered in single encounters.

Research has indicated that safety planning interventions (a predetermined plan of coping strategies and sources of support) may reduce suicidal thoughts and behaviours. 102 In terms of more intensive interventions, an updated 2021 review of the Collaborative Assessment and Management of Suicidality intervention concluded it was an effective intervention for lowering suicidal ideation. 103 However, it did not decrease suicide attempts or self-harm. Overall, a 2020 review of nearly 50 years of interventions for suicidal thoughts and behaviours found that most types of interventions were similarly effective. 104 Nevertheless, decreases in suicidal thoughts and behaviours appear to be highest for problemsolving therapy, eclectic psychotherapy (i.e. different psychotherapies), psychotherapy and medication combined, and cognitive therapy/cognitive behavioural therapy.

 Table 3.13: Prior suicidal behaviours, suicides in Queensland, 2015 to 2017

		Sex				Persons	
	Ma	Males		Females			
	Number	%	Number	%	Number	%	
Communication of intent in lifetin	ne						
Once or twice	620	35.0	202	37.1	822	35.5	
Several times	294	16.6	103	18.9	397	17.1	
No	450	25.4	116	21.3	566	24.4	
Unknown	407	23.0	124	22.8	531	22.9	
TOTAL	1,771	100.0	545	100.1	2,316	99.9	
Communication of intent in past 1	2 months						
Once or twice	551	31.1	176	32.3	727	31.4	
Several times	169	9.5	56	10.3	225	9.7	
No	488	27.6	124	22.8	612	26.4	
Unknown	563	31.8	189	34.7	752	32.5	
TOTAL	1,771	100.0	545	100.1	2,316	100.0	
Lifetime suicide attempts							
Once or twice	423	23.9	175	32.1	598	25.8	
Several times (3 or more)	79	4.5	39	7.2	118	5.1	
Yes (unknown times)	22	1.2	13	2.4	35	1.5	
Yes (multiple but unknown times)	11	0.6	8	1.5	19	0.8	
No	715	40.4	177	32.5	892	38.5	
Unknown	521	29.4	133	24.4	654	28.2	
TOTAL	1,771	100.0	545	100.1	2,316	99.9	
Suicide attempt in the past 12 mor	ıths						
Once or twice	255	14.4	107	19.6	362	15.6	
Several times (3 or more)	np	np	np	np	28	1.2	
Yes (unknown times)	np	np	np	np	8	0.4	
No	799	45.1	235	43.1	1034	44.6	
Unknown	693	39.1	191	35.0	884	38.2	
TOTAL	1,771	100.0	545	100.0	2,316	100.0	

Note: np = not provided (suicides less than 5 for one or both sexes). A person may have had multiple types of suicidal behaviour, which this table does not reflect. Several totals do not sum to 100.0% due to rounding.

Source: Queensland Suicide Register.

Contact with health services

This section explores the level of contact people who died by suicide in Queensland between 2015 and 2017 had with general practitioners, inpatient or outpatient hospital services, and other services. The figures given here refer to contact with services for a mental health condition.

Table 3.14 shows that 687 people (29.7%) reportedly saw a general practitioner for a mental health condition in their lifetime, with a higher proportion among females (210, 38.5%) than males (477, 26.9%). From 2015 to 2017, 378 (16.3%) of people dying by suicide had reportedly received outpatient treatment for a mental health condition in their lifetime.

Table 3.14: Contact with health services for a mental health condition, suicides in Queensland, 2015 to 2017

	Sex				Persons	
	Ma	les	Females			
	Number	%	Number	%	Number	%
Lifetime treatment from a general pra	ıctitioner					
Yes	477	26.9	210	38.5	687	29.7
Unknown	825	46.6	228	41.8	1053	45.4
Not applicable	469	26.5	107	19.6	576	24.9
TOTAL	1,771	100.0	545	99.9	2,316	100.0
Lifetime treatment as an inpatient						
Yes, current	29	1.6	14	2.6	43	1.9
Yes, past	341	19.3	151	27.7	492	21.2
No/unknown	935	52.8	273	50.1	1208	52.2
Not applicable	466	26.3	107	19.6	573	24.7
TOTAL	1,771	100.0	545	100.0	2,316	100.0
Lifetime treatment as an outpatient						
Yes, current	152	8.6	60	11.0	212	9.2
Yes, past	103	5.8	43	7.9	146	6.3
Yes, unknown when	14	0.8	6	1.1	20	0.9
No/unknown	1034	58.4	331	60.7	1365	58.9
Not applicable	468	26.4	105	19.3	573	24.7
TOTAL	1,771	100.0	545	100.0	2,316	100.0
Lifetime treatment from another serv	ice					
Yes, current	139	7.9	59	10.8	198	8.5
Yes, past	87	4.9	38	7.0	125	5.4
Yes, unknown when	18	1.0	11	2.0	29	1.3
No/unknown	1052	59.4	333	61.1	1385	59.8
Not applicable	475	26.8	104	19.1	579	25.0
TOTAL	1,771	100.0	545	100.0	2,316	100.0

Note: People may have been receiving or have received multiple types of treatment, which this table does not reflect. Lifetime treatment from a general practitioner sums to 99.9 due to rounding.

Source: Queensland Suicide Register.

Every life outlines a 10-year whole-of-government and whole-of-community approach to reducing the incidence and impact of suicide in Queensland. 105 Every life recognises surveillance as a critical enabler of a comprehensive and responsive approach to suicide prevention based on community needs. As Every life outlines, 'suicide prevention planning and implementation should be guided by the best available evidence'. 106 Surveillance data are critical to informing suicide prevention. The suicide surveillance system, including the development of real-time surveillance and associated improvements by the Queensland Government, maximises the benefits of this system and directly informs policy, enabling its translation into practice.

Key findings and their implications for policy and practice

Each suicide represents a life lost, a journey experienced and a tragedy affecting the loved ones left behind. Given this tragic context, the key findings in this report require careful consideration by all responsible for suicide prevention.

In 2020, **791** people took their lives in Queensland, equating to 15 suicides per 100,000 population. Over three-quarters of suicides were by males, with the time trends of age-standardised suicide rates demonstrating an increase since 2006. This finding reflects an ongoing challenge of suicide prevention in males in Queensland, comparable to the overall pattern in Australia and other Western countries.¹⁰⁷

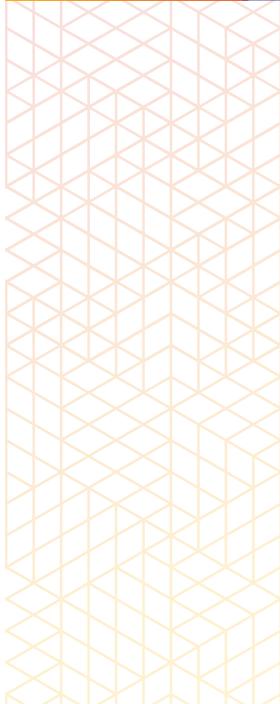
Male suicidal pathways are complex and explained by interrelated and differing factors. A recognition of lower help-seeking by some males makes it more challenging to involve males in clinical services and identify effective treatments.

Queensland's approach to target male suicide as a priority area under *Every life* aligns with the finding that middle-aged males aged 35 to 39 account for most suicides. While limited research focuses specifically on suicide prevention activities in middle-aged people, major risk factors relate to work and family, and suicide prevention activities should consider this. A systemic review and associated actions under *Every life* will improve evidence for effective cross-sectoral prevention and early intervention.

In 2020, suspected suicides were also high in young males aged 20 to 24, after an increasing trend in the past decade. Importantly, this age group broadly represents the peak onset of mental health problems (e.g. psychosis and bipolar disorder). The vulnerability of this group may also be associated with the critical point of entering 'adulthood' and experiencing stressful and challenging transitions, such as attending university or training programs, including apprenticeships, and entering the workforce. ¹⁰⁸ Therefore, it is critical to provide suitable early intervention and treatment responses.

Queensland is a large and decentralised state. Suicide rates increase with **remoteness** for both genders. However, this finding needs interpreting in the context that some rural and remote areas have greater populations of people disproportionately impacted by suicide, including Aboriginal and Torres Strait Islanders, farmers and agriculture workers. Therefore, specialist and targeted suicide prevention initiatives are required.¹⁰⁹

Implications for suicide prevention



As identified in this report, Aboriginal and Torres Strait Islanders, particularly young people, are at higher risk of suicide than non-Indigenous Queenslanders, with remoteness and racism identified as contributing factors. There is a need for evidence-based, community-led programs and services for Aboriginal and Torres Strait Islander people focusing on the disparities across age groups. These programs must consider community-level influences beyond individual risk and protective factors, including discrimination, cultural social capital and socio-economic resources. 110 Queensland's current suicide prevention plan has also highlighted this as a priority and includes dedicated actions to strengthen Aboriginal and Torres Strait Islander leadership in mental health and suicide prevention.111

Unemployed people continue to be over-represented in suicide mortality in Queensland. A recent review in this area found that higher unemployment benefits, active labour market programs and employment protection legislation seem to be protective against suicide. 112 There is also a need to focus on specific occupational groups and prioritise males employed as technicians, trades workers or labourers. Interventions like MATES in Construction, Mining and Energy currently have the most evidence in relevant settings in Queensland. 113

Approximately half of the people who died by suicide in Queensland reportedly had a lifetime mental health condition diagnosis. Although the reported presence of a mental health condition does not mean that it led to the suicide, such conditions are likely to contribute to or exacerbate other risk factors. Nevertheless, it is vital to increase help-seeking behaviour through more effective messages and expansion of available, user-friendly and person-centred mental health services, including alcohol and other drug services, particularly for males.

There is also great potential to prevent suicide by addressing alcohol and other drug use and collaborating with the alcohol and other drugs sector and other system touchpoints. People often consume alcohol before suicide, and other drug use is relatively frequent. Building resilience through health promotion activities, including drug and alcohol awareness, may promote insight and understanding about the health impacts of drug and alcohol use. Further, as was acknowledged in Shifting minds: Queensland mental health, alcohol and other drugs strategic plan 2018–2023,114 there is a need for a renewed cross-sectoral approach to address suicide and drug and alcohol use. A coordinated cross-sectoral approach of interventions and services targeting alcohol and substance use will help to reduce suicidal behaviour.

The COVID-19 pandemic did not affect the number of suicides in Queensland in 2020. This finding is consistent with the evidence of suicide trends from previous pandemics and from the early stages of the COVID-19 pandemic from high-income and upper-middle income countries. 115 Nevertheless, there is a need for ongoing real-time monitoring and early interventions. It is important to note that economic support from the government buffers the impact of economic hardship at the time of crisis on suicide. 116 Therefore, different government

stimulus packages such as JobSeeker and JobKeeper were timely activities in 2020 to support businesses and people who lost their work. The Queensland Government has made notable investments in education and training to re-skill the workforce based on the changing demands in the labour market. 117 Nevertheless, ongoing activities are required in the coming years to guide Queensland and Australia out of the crisis and to buffer the after-effects of the COVID-19 pandemic.

Finally, and importantly, there is a need to consider *support* and services for those left behind. Each suicide discussed within this report, and related events and associated factors, represent a person's story. These experiences remain in the memories of those left behind, a population tragically affected and who may themselves be vulnerable to suicide. Therefore, it is incumbent upon national and state bodies and the community to provide coordinated responses that support them and mitigate subsequent suicidality. Development of postvention responses must occur in partnership with those directly involved in supporting and identifying those potentially at risk.¹¹⁸ Importantly, localised responses that target individual-, family- and community-level needs must consider cultural, situational and familial bereavement traditions. Direct collaboration with lived experiences is critical in designing, delivering and evaluating postvention responses. A recent systematic review of suicide postvention service models and guidelines identified potentially effective postvention components, including involving trained volunteers or peers and focusing on interventions specifically for grief. 119 The availability of local services – such as StandBy, schools and organisations (including workplaces) – to facilitate at the local level may enhance postvention efforts.

Reported herein are vital and critical findings of the Suicide in Queensland: annual report 2021, which show the complex nature of suicide and the need for a statewide, multidisciplinary and cross-sectoral approach to its prevention. As noted in Every life, actions to save lives require all levels of community and stakeholder involvement. While the QSR and iQSR are essential in the surveillance of suicide through systematic data collection, there is further potential to enhance the general suicide surveillance model. Data linkages would enable an improved understanding of the pathways towards suicide, including the use of different services. Understandings derived from these multiple linkages may also assist in identifying critical points for early intervention and preventative responses. Further, a critical addition to the current suicide data surveillance system is extending the surveillance model to suicide attempts. This extension would expand our understanding of suicidal behaviour and its magnitude in Queensland, enabling more targeted and effective suicide prevention activities to many more vulnerable people reaching out for help.

Queensland Suicide Register and interim Queensland Suicide Register methods

Queensland's suicide surveillance system includes the Queensland Suicide Register (QSR) and the interim Queensland Suicide Register (iQSR).

The QSR records all confirmed, probable and suspected suicides in Queensland once coronial investigations are complete. The QSR currently comprises records from 1990 to 2017, providing insights into the magnitude, changes and effects of suicide in Queensland over time (Table A.1).

The iQSR was established in 2011 to provide real-time suicide mortality data. It records suspected suicides based on real-time information received from Queensland Police Service (QPS).

The information recorded in the iQSR is provisional. Once coronial investigations are complete, suspected suicides are reassessed and recorded in the QSR. The iQSR currently comprises records from 2011 to 2021. The iQSR provides immediate insights into the suspected occurrence of suicide in Queensland, enabling the detection of recent changes and trends. **Table A.1** lists the uses of QSR and iQSR data.

Table A.1: Uses of Queensland Suicide Register and interim Queensland Suicide Register data

Use	QSR	iQSR
Identify at-risk groups, individuals, places and situations	✓	✓
Estimate the magnitude of a health problem	✓	✓
Show long-term time trends	✓	
Detect and respond to clusters and contagion		✓
Document the burden and distribution of deaths by suicide	✓	✓
Enable epidemiological research (e.g. create and test hypotheses)	✓	✓
Evaluate prevention measures through analysing trends (e.g. large-scale aftercare interventions for people who have attempted suicide)	~	✓
Monitor the impact of external, environmental exposures (e.g. COVID-19, recession)	✓	✓
Monitor emerging or changing patterns of motives for suicide	✓	✓
Plan public health, prevention and postvention actions at local, state and national levels	✓	
Secure and allocate prevention and postvention resources	✓	
Identify emerging and preventable suicide methods		✓
Support tailored local, state and national suicide prevention efforts	✓	

Note: QSR = Queensland Suicide Register; iQSR = interim Queensland Suicide Register.

Source: Adapted from SB Thacker, 'Historical development', in LM Lee, SM Teutsch, SB Thacker and ME St Louis (eds), Principles and practice of public health surveillance, 3rd edn, Oxford University Press, New York, 2010; World Health Organization, Preventing suicide: a global imperative, WHO, Geneva, Switzerland, 2014.

Appendix

Data sources

iQSR information comes solely from the QPS's Form 1 police report of death to a coroner. The primary purpose of police reports is to report a death to a coroner. It contains information relevant to a coroner's investigation into the death, such as socio-demographic data, details of the circumstances of the death and contextual information (e.g. information about the deceased's mental health status or any stressors before the death).

In practice, QSR data comes from police reports and other coronial investigation material accessed from the National Coronial Information System (NCIS). This coronial investigation material includes:

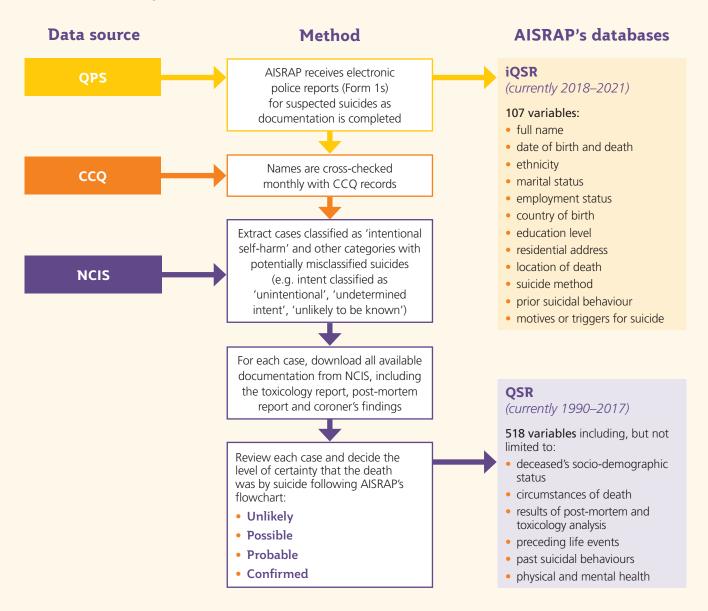
- a toxicology report from Queensland Health Forensic and Scientific Services, which provides information about substances the person may have consumed before death
- a post-mortem examination from Queensland Health Forensic and Scientific Services, which provides a detailed medical examination of a person's body
- the coroner's findings and notice of completion of the coronial investigation, which is a legal document outlining the coroner's findings concerning a death. This form includes information about the context and circumstances of the death, such as how the person died and the place, date and medical cause of the death.

Additional information comes from 3 organisations:

- An external geocoding provider supplies information on geographical areas, latitude and longitude for the deceased's residential address and the suicide site.
- The NCIS provides additional data on marital status, employment status, occupation, country of birth and Aboriginal and Torres Strait Islander origin. The NCIS is a purpose-built data platform established to support access to coronial information and reflects a commitment by all coroners and jurisdictions to improve accessibility for researchers.
- The Queensland Registry of Births, Deaths and Marriages provides the deceased's country of birth and Aboriginal and Torres Strait Islander status for recent years when this information is not yet available from the NCIS.

Each suicide death is entered in 2 stages, resulting in the iQSR and the QSR (Figure A.1).

Figure A.1: Flowchart depicting the processes of the interim Queensland Suicide Register and the Queensland Suicide Register



Note:

AISRAP = Australian Institute for Suicide Research and Prevention

iQSR = interim Queensland Suicide Register

NCIS = National Coronial Information System

QPS = Queensland Police Service

CCQ = Coroners Court of Queensland

QSR = Queensland Suicide Register.

Stage 1, iQSR: Information from the police report enters the iQSR. The iQSR includes administrative, demographic and geocoding data and information on the circumstances of suspected suicides. The iQSR is updated 3 times a week to include incoming data from forms on suspected suicides emailed from police, allowing real-time monitoring of suspected suicides in Queensland.

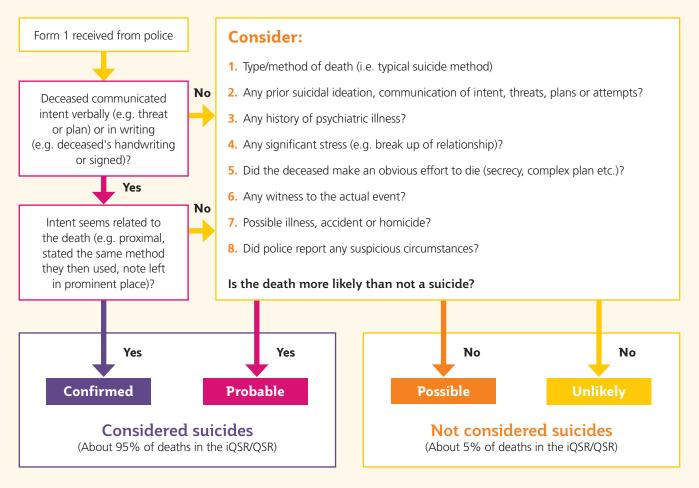
Stage 2, QSR: In the second stage, as coronial investigations close and all coronial information becomes available in the NCIS, suspected suicides in the iQSR are reassessed and then recorded in the QSR. All available information from the NCIS is downloaded, entered, reviewed and added to the QSR.

A decision tree (**Figure A.2**) helps reviewers to code deaths to 1 of 4 probabilities of suicide, based on health research criteria:

- **Unlikely:** the available information indicates that death by suicide was unlikely (e.g. heart attack).
- Possible: the available information suggests a 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).
- Probable: The available information does not allow for a 'confirmed' judgement of suicide but is still more consistent with a death by suicide than any other cause.
- Confirmed: The available information suggests that the deceased had written or stated their intent to die by suicide before their death.

The first 2 groups, 'unlikely' and 'possible' suicides, are excluded from analyses and not considered suicides, while 'probable' and 'confirmed' are considered suicides (Figure A.2).

Figure A.2: Decision tree for coding the probability of the death being a suicide



Note: iQSR = interim Queensland Suicide Register; QSR = Queensland Suicide Register.

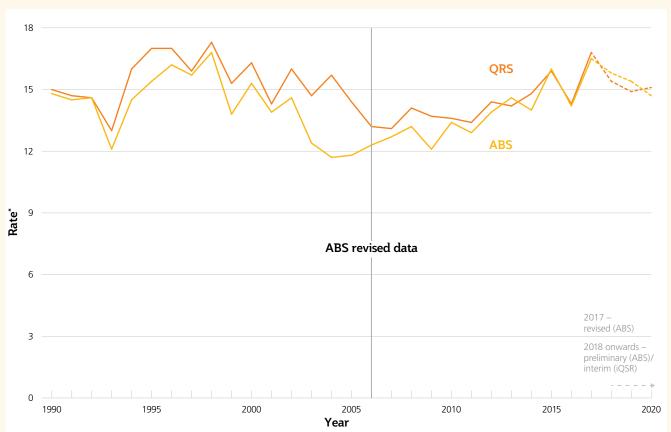
Other data sources

Comparing the Australian Bureau of Statistics and the Queensland Suicide Register

Both the Australian Bureau of Statistics (ABS) and the QSR publish annual numbers and rates of suicide for Queensland each year; however, differences exist in the number of suicides that the QSR and the ABS record. These are due to the ABS reporting suicides by year of registration, while the QSR and iQSR report by year of occurrence. The ABS and the iQSR include suspected suicides where the death is still under investigation. However, the ABS has nationwide NCIS access to identifiable information on open cases, which means that the ABS can access police reports of suspected suicides that are still under investigation. In contrast, the iQSR would not identify these deaths until they are closed in the NCIS. This consideration is relevant for Queensland residents dying by suspected suicide in other states in Australia, though this represents a small number of actual deaths.

Figure A.3 shows the ABS, QSR and iQSR statistics over time. In 2009, the ABS began revising all suspected suicides registered after 1 January 2007 to improve the quality of mortality data. In 2012, this revision process extended to suicide mortality data dating back to 1 January 2006. Figure A.3 highlights the ABS's revisions process for data from 2006 onwards and illustrates that both organisations published similar figures from 1990 to 2001.

Figure A.3: Age-standardised suicide rates, Australian Bureau of Statistics and Queensland Suicide Register/interim Queensland Suicide Register data, Queensland residents, 1990 to 2020



Note: QSR = Queensland Suicide Register; ABS = Australian Bureau of Statistics.

Sources: Queensland Suicide Register; interim Queensland Suicide Register; Australian Bureau of Statistics, Causes of death, Australia, 2020, ABS website, 29 Septembers 2021, accessed 1 October 2021.

https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/latest-release

^{*} Age-standardised suicide rate per 100,000 estimated resident population as at 30 June (midyear) each year.

The Australian Institute of Health and Welfare National Suicide and Self-Harm Monitoring System and the interim Queensland Suicide Register

In 2020, the Australian Institute of Health and Welfare launched the National Suicide and Self-Harm Monitoring System. The system is part of the national effort to address suicide and self-harm in Australia by collating, coordinating and reporting data on suicide and self-harm from various sources. It includes information on the demographics, trends, methods and risk factors of suicide and self-harm in Australia. It also provides data on suspected suicides from state-based suicide registers, including iQSR data from 2015 to 2020. As one part of their data development activities, the Australian Institute of Health and Welfare collaborates closely with several state-based suicide registers to facilitate the provision of more timely data on suspected deaths by suicide. The goal is to inform governments' decision-making in the context of COVID-19.

Comparing the Coroners Court of Queensland and the Queensland Suicide Register

Coroners must establish that a death was a suicide using the legal standard of proof – the balance of probabilities – which is a higher and more onerous standard of proof than the health research criteria used in the QSR and iQSR. They are also not required to explicitly determine a person's intent in making their findings concerning suspected suicides. They will consider all available evidence before determining this to the necessary legal standard.

Revisions to the Queensland Suicide Register

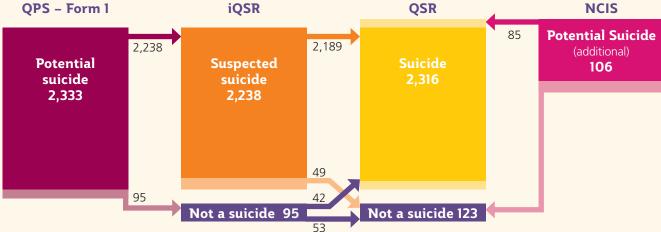
QSR coders independently reassess the probability of deaths being suicides once coronial information is available. This revision occurs without seeing the original coding in the iQSR. **Figure A.4** shows the flow of suspected suicides from the iQSR and the NCIS to the QSR from 2015 to 2017.

There are currently 3 years of data (2015 to 2017) with iQSR and QSR probability codes. Of the 2,333 deaths occurring between this time reported to the Australian Institute for Suicide Research and Prevention (AISRAP), coding between the iQSR and the QSR remained consistent 96.1% of the time. The net decrease in suicides between the iQSR and QSR for 2015 to 2017 was 7 (0.3%) of the 2,333 suspected suicides examined.

Across the 3 years, searches of the NCIS identified 106 extra deaths of interest from the 'intentional self-harm' and 'body not recovered' categories and the other intent categories of 'undetermined intent', 'unlikely to be known' and 'unintentional' that AISRAP considered might be suspected suicides. QSR staff coded 85 (80.2%) of these deaths of interest as suicides. NCIS searches thus added another 3.8% of suicides to the QSR above those coming from the QPS and Coroners Court of Queensland.

Overall, the net increase from the iQSR to the QSR for 2015 to 2017 was 78 suicides, averaging about 28 per year. Commonly, these suicides were not reported earlier because the initial circumstances of the death may not have indicated that it was a suspected or apparent suicide. Routine monitoring of other reportable death categories does not occur for identifying these deaths earlier for capture in the iQSR.





Note: QPS = Queensland Police Service; iQSR = interim Queensland Suicide Register; QSR = Queensland Suicide Register; NCIS = National Coronial Information System.

Supplementary tables with underlying data from figures in the annual report

Table A.2: Age-standardised suicide rates by sex, rate ratio and rate difference, Queensland residents, 1990 to 2020

		*		1 2	•
Year	Males	Females	Rate ratio*	Rate difference**	Persons
1990	24.7	5.7	4.3	19.0	15.0
1991	23.7	6.0	4.0	17.8	14.7
1992	22.7	6.9	3.3	15.8	14.6
1993	21.7	4.9	4.4	16.8	13.0
1994	25.6	6.7	3.8	18.9	16.0
1995	26.6	5.9	4.5	20.8	17.0
1996	26.6	5.9	4.5	20.8	17.0
1997	25.9	6.2	4.2	19.7	15.9
1998	27.1	7.8	3.5	19.3	17.3
1999	24.8	6.2	4.0	18.6	15.3
2000	26.2	6.7	3.9	19.6	16.3
2001	22.1	6.2	3.6	15.9	14.3
2002	25.5	6.8	3.7	18.7	16.0
2003	22.3	6.3	3.6	16.0	14.7
2004	24.1	6.1	3.9	18.0	15.7
2005	22.0	6.2	3.6	15.8	14.4
2006	19.7	5.9	3.4	13.8	13.2
2007	20.2	6.3	3.2	13.9	13.1
2008	22.3	6.2	3.6	16.1	14.1
2009	20.7	6.8	3.0	13.9	13.7
2010	20.7	6.9	3.0	13.9	13.6
2011	20.0	7.0	2.8	13.0	13.4
2012	22.0	7.1	3.1	15.0	14.4
2013	22.0	6.7	3.3	15.3	14.2
2014	22.6	7.2	3.1	15.4	14.8
2015	24.7	7.1	3.5	17.6	15.9
2016	22.6	6.3	3.6	16.4	14.3
2017	25.7	8.1	3.2	17.6	16.8
2018(i)	24.2	6.8	3.6	17.4	15.4
2019(i)	22.9	7.3	3.1	15.6	14.9
2020(i)	24.0	6.6	3.6	17.4	15.1

Note: Age-standardised suicide rate per 100,000 estimated resident population as at 30 June (midyear) each year. This table includes the rate difference because people perceive ratios (a relative measure) and differences (an absolute measure) differently. The relative measure often has a greater psychological impact. 120 Recommendations, therefore, suggest always presenting them together, especially when the base rate of the event is low (i.e. a rare event like suicide). 121 (i) interim data.

^{*} The rate ratio is the male rate divided by the female rate.

^{**} The rate difference is the male rate minus the female rate.

Table A.3: Suicides and suspected suicides of lesbian, gay, bisexual and transgender persons, Queensland, 2016 to 2020

2016	2017	2018 (i)	2019 (i)	2020 (i)
18	20	7	12	18

(i) interim data.

Sources: Queensland Suicide Register; interim Queensland Suicide Register.

Open access (freely available) publications using Queensland Suicide Register or interim Queensland Suicide Register data

AJ Clapperton, MJ Spittal, J Dwyer, A Garrett, K Kõlves, S Leske, C Millar, B Edwards, V Stojcevski, DR Crompton, J Pirkis. Patterns of suicide in the context of COVID-19: Evidence from three Australian states. Frontiers in Psychiatry, 2021, 2207. https://research-repository.griffith.edu.au/handle/10072/410599

M Gibson, J Stuart, S Leske, R Ward and Y Vidyattama, 'Does community cultural connectedness reduce the influence of area disadvantage on Aboriginal & Torres Strait Islander young peoples' suicide?', Australian and New Zealand Journal of Public Health, 2021, 45(6):643–650. https://onlinelibrary.wiley.com/doi/full/10.1111/1753-6405.13164

M Gibson, J Stuart, S Leske, R Ward and R Tanton, 'Suicide rates for young Aboriginal and Torres Strait Islander people: the influence of community level cultural connectedness', The Medical Journal of Australia, 2021, 214(11):514-518. https://www.mja.com.au/journal/2021/214/11/suicide-rates-young-aboriginal-and-torres-strait-islander-people-influence

S Leske, K Kõlves, D Crompton, E Arensman and D De Leo, 'Real-time suicide mortality data from police reports in Queensland, Australia, during the COVID-19 pandemic: an interrupted time-series analysis', The Lancet Psychiatry, 2021, 8(1):58-63. https://research-repository.griffith.edu.au/handle/10072/399522

C Modini, S Leske, S Roberts, N Whelan, A Chitakis, D Crompton and D Ellwood, 'Maternal deaths by suicide in Queensland, Australia, 2004–2017: an analysis of maternal demographic, psychosocial and clinical characteristics', Archives of Women's Mental Health, 2021, 24:1010-1025. https://link.springer.com/article/10.1007/s00737-021-01107-6

J Pirkis, A John, S Shin, M DelPozo-Banos, V Arya, P Analuisa-Aguilar, ... and MJ Spittal, 'Suicide trends in the early months of the COVID-19 pandemic: an interrupted time-series analysis of preliminary data from 21 countries', The Lancet Psychiatry, 2021, 8(7):579-588. https://cronfa.swansea.ac.uk/Record/cronfa56357/Details

References

- Roses in the Ocean, Lived experience of suicide, Roses in the Ocean website, 2021, accessed 21 July 2021. https:// rosesintheocean.com.au/lived-experience-suicide
- 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
- Roses in the Ocean, Lived experience of suicide.
- Australian Institute of Health and Welfare, Age-standardised rate, AIHW Metadata Online Registry website, n.d., accessed 21 July 2021. https://meteor.aihw.gov.au/content/index. phtml/itemId/327276
- The Cochrane Effective Practice and Organisation of Care group, Glossary, Cochrane, 2011, accessed 11 November 2021. https://epoc.cochrane.org/sites/epoc.cochrane. org/files/public/uploads/SURE-Guides-v2.1/Collectedfiles/ source/glossary.html
- AIHW, Crude rate, n.d., AIHW Metadata Online Registry website, accessed 21 July 2021. https://meteor.aihw.gov.au/ content/index.phtml/itemId/327274
- Queensland Health, Queensland Health organisational structure, Queensland Health website, n.d., accessed 1 November 2021. https://www.health.gld.gov.au/systemgovernance/health-system/managing/org-structure
- JJ Deeks, JPT Higgins and DG Altman, 'Analysing data and undertaking meta-analyses', in JPT Higgins, J Thomas, J Chandler, M Cumpston, T Li, MJ Page and VA Welch (eds), Cochrane handbook for systematic reviews of interventions, version 6.2 updated February 2021, Cochrane, 2021. www.training.cochrane.org/handbook
- Coroners Court of Queensland, Form 1 police report of death to a coroner, Coroners Court of Queensland, Queensland Government, Queensland, Australia, 2020.
- Postvention Australia, What is postvention?, Postvention Australia website, 2019, accessed 13 August 2021. https://postventionaustralia.org/what-is-postvention
- Department of Health, What primary health networks are, Australian Government Department of Health website, 2021, accessed 14 September 2021. https://www.health.gov.au/ initiatives-and-programs/phn/what-phns-are
- American Psychological Association, 'Psychosocial', APA dictionary of psychology, APA website n.d., accessed 23 August 2021. https://dictionary.apa.org/psychosocial
- Centers for Disease Control and Prevention, Principles of epidemiology in public health practice: an introduction to applied epidemiology and biostatistics, CDC, Atlanta,
- LB Potter, KE Powell and SP Kachur, 'Suicide prevention from a public health perspective', Suicide & Life-Threatening Behavior, 1995, 25(1):82-91.
- Queensland Courts, Reportable deaths, Queensland Courts website, n.d., accessed 3 November 2021. https://www. courts.qld.gov.au/courts/coroners-court/coroners-process/ reportable-deaths

- 16 J Chandler, M Cumpston, J Thomas, JPT Higgins, JJ Deeks and MJ Clarke, 'Introduction', in JPT Higgins, J Thomas, J Chandler, M Cumpston, T Li, MJ Page and VA Welch (eds), Cochrane handbook for systematic reviews of interventions, version 6.2 updated February 2021, Cochrane, 2021, accessed 21 July 2021. https://training.cochrane.org/handbook/ current/chapter-i
- RJ Cramer and ND Kapusta, 'A social-ecological framework of theory, assessment, and prevention of suicide', Frontiers in Psychology, 2017, 8:1756. https://www.ncbi.nlm.nih.gov/ pmc/articles/PMC5640776/
- ML Rosenberg, LE Davidson, JC Smith, AL Berman, H Buzbee, G Gantner, GA Gay, B Moore-Lewis, DH Mills and D Murray, 'Operational criteria for the determination of suicide', Journal of Forensic Sciences, 1988, 33(6):1445-1456.
- See https://mindframe.org.au/
- 20 Oueensland Mental Health Commission, Every life: the Queensland suicide prevention plan 2019-2029, Queensland Government, Brisbane, Queensland, 2019. https://www.qmhc.qld.gov.au/documents/everylifethequ eenslandsuicidepreventionplan2019-2029webpdf
- World Health Organization, Preventing suicide: a global imperative, WHO, Geneva, Switzerland, 2014; WHO, Suicide worldwide in 2019: global health estimates, WHO, Geneva, 2021.
- 22 Queensland Mental Health Commission, Every life.
- 23 WHO, Live life: an implementation guide for suicide prevention in countries, WHO, Geneva, Switzerland, 2021.
- 24 Age-standardised suicide rates are calculated for Oueensland residents only (i.e. calculations exclude interstate and overseas visitors) because the population used when calculating rates is the estimated resident population of Queensland. See the Glossary for more information.
- 25 As these age groups have small populations and few suicides, these rates may vary greatly if numbers of suicides change in these age groups.
- 26 This figure includes Aboriginal and Torres Strait Islander people dying by suspected suicide in Queensland, since they have higher temporary mobility than the non-Indigenous population.
- This report provides suicide data by Health and Hospital Services, primary health networks and remoteness areas. The more populated metro regions in Queensland tended to record more suspected suicides but lower suspected suicide rates. The less populated remote regions of Queensland tended to record lower numbers of suspected suicides but higher suspected suicide rates.
- 28 S Leske, D Crompton and K Kõlves, Suicide in Queensland: annual report 2019, Australian Institute for Suicide Research and Prevention (AISRAP), Griffith University, Brisbane, Queensland, Australia, 2019.
- 29 Leske et al., Suicide in Queensland: annual report 2019.
- 30 S Leske, G Adam, I Schrader, A Catakovic, B Weir and D Crompton, Suicide in Queensland: annual report 2020', AISRAP, Griffith University, Brisbane, Queensland, Australia, 2020.

References

- 31 Leske et al., Suicide in Queensland: annual report 2019.
- 32 Leske et al., Suicide in Queensland: annual report 2019.
- 33 Leske et al., Suicide in Queensland: annual report 2019.
- 34 Leske et al., Suicide in Queensland: annual report 2019.
- 35 Leske et al., Suicide in Queensland: annual report 2019.
- 36 Leske et al., Suicide in Queensland: annual report 2019.
- 37 Leske et al., Suicide in Queensland: annual report 2020.
- 38 Leske et al., Suicide in Queensland: annual report 2019.
- 39 Leske et al., Suicide in Queensland: annual report 2019.
- 40 Leske et al., Suicide in Queensland: annual report 2019.
- 41 Leske et al., Suicide in Queensland: annual report 2019.
- 42 Leske et al., Suicide in Queensland: annual report 2019.
- 43 Leske et al., Suicide in Queensland: annual report 2019.
- 44 Leske et al., Suicide in Queensland: annual report 2019.
- 45 Leske et al., Suicide in Queensland: annual report 2019.
- 46 WHO, Preventing suicide.
- 47 Queensland Mental Health Commission, Every life.
- 48 Department of the Prime Minister and Cabinet, National mental health and suicide prevention plan announced, Department of the Prime Minister and Cabinet website, 12 May 2021. https://pmc.gov.au/news-centre/domestic-policy/national-mental-health-and-suicide-prevention-plan-announced
- 49 Department of Health, National suicide prevention adviser final advice, Australian Government Department of Health, 19 April 2021. https://www.health.gov.au/resources/publications/national-suicide-prevention-adviser-final-advice
- 50 G Hunt, Historic \$2.3 billion national mental health and suicide prevention plan, media release, Australian Government Department of Health, 11 May 2021, accessed 14 September 2021. https://www.health.gov.au/ministers/the-hongreg-hunt-mp/media/historic-23-billion-national-mental-health-and-suicide-prevention-plan
- 51 The ABS (Australian Bureau of Statistics) releases an online report on causes of death in Australia each year. The current release in 2021 is for reference year 2020: ABS, Causes of death, Australia, 2020, ABS website, 29 October 2021. https://www.abs.gov.au/statistics/health/causes-death/ causes-death-australia/latest-release
- 52 As indicated by the geographic remoteness classification: AIHW, Person—geographic remoteness, classification (ASGS-RA) N, AIHW Metadata Online Registry website, n.d. https://meteor.aihw.gov.au/content/index.phtml/itemId/697101. Readers can view remoteness areas in Queensland at https://www.health.qld.gov.au/mass/subsidy-schemes/rural-remote. Readers can also examine current and past remoteness area boundaries in detail using ABS maps at https://dbr.abs.gov.au/absmaps/index.html.
- 53 SJ Fitzpatrick, T Handley, N Powell, D Read, KJ Inder, D Perkins and BK Brew, 'Suicide in rural Australia: a retrospective study of mental health problems, health-seeking and service utilisation', PLOS ONE, 2021, 16(7):e0245271.

- J Richardson-Cooke, 'Suicide in rural and remote Australia: mental health strategies cannot effectively operate in isolation', Future Directions International website, 28 January 2020, accessed 27 September 2021. https://www.futuredirections.org.au/publication/suicide-in-rural-and-remote-australia-mental-health-strategies-cannot-effectively-operate-in-isolation/
- 55 Fitzpatrick et al., 'Suicide in rural Australia'; Richardson-Cooke, 'Suicide in rural and remote Australia'.
- 56 Department of Health, What primary health networks are.
- 57 Department of Health, PHN program performance and quality framework, Australian Government Department of Health, Canberra, ACT, 2018.
- 58 Department of Health, *PHN primary mental health care flexible funding pool programme guidance: regional approach to suicide prevention*, Australian Government Department of Health, Canberra, ACT, 2019.
- 59 T Niederkrotenthaler, M Braun, J Pirkis, B Till, S Stack, M Sinyor, US Tran, M Voracek, Q Cheng, F Arendt, S Scherr, PSF Yip and MJ Spittal, 'Association between suicide reporting in the media and suicide: systematic review and meta-analysis', BMJ, 2020, 368:m575.
- 60 Mindframe, Discussing method and location, Mindframe website, n.d. https://mindframe.org.au/suicide/communicating-about-suicide/discussing-method-location
- 61 JM Boggs, A Beck, DP Ritzwoller, C Battaglia, HD Anderson and RC Lindrooth, 'A quasi-experimental analysis of lethal means assessment and risk for subsequent suicide attempts and deaths', Journal of General Internal Medicine, 2020, 35(6):1709–1714.
- 62 Y-Y Chen, KC-C Wu and PSF Yip, 'Suicide prevention through restricting access to suicide means and hotspots', in RC O'Connor, S Platt and J Gordon (eds), *International* handbook of suicide prevention: research, policy and practice, Wiley Blackwell, Hoboken, NJ, 2011.
- 63 Roses in the Ocean, Lived experience of suicide.
- 64 ABS, Causes of death, Australia, 2020.
- 65 M Maple, R Sanford, J Pirkis, N Reavley and A Nicholas, 'Exposure to suicide in Australia: a representative random digit dial study', *Journal of Affective Disorders*, 2019, 259:221–227.
- 66 ABS, Causes of death, Australia, 2020.
- 67 P Dudgeon, T Calma and C Holland, 'The context and causes of the suicide of Indigenous people in Australia', *The Journal of Indigenous Wellbeing: Te Mauri*, 2017, 2(2):5-15.
- 68 ABS, Estimates of Aboriginal and Torres Strait Islander Australians, June 2016, ABS website, 31 August 2018, accessed 22 September 2021. https://www.abs.gov.au/statistics/people/aboriginal-and-torres-strait-islander-australians/latest-release
- 69 M Gibson, J Stuart, S Leske, R Ward and R Tanton, 'Suicide rates for young Aboriginal and Torres Strait Islander people: the influence of community level cultural connectedness', *Medical Journal of Australia*, 2021, 214(11):514–518.

- 70 DH Rehkopf and SL Buka, 'The association between suicide and the socio-economic characteristics of geographical areas: a systematic review', Psychological Medicine, 2006, 36(2):145-157.
- 71 Gibson et al., 'Suicide rates for young Aboriginal and Torres Strait Islander people'.
- Gibson et al., 'Suicide rates for young Aboriginal and Torres Strait Islander people'.
- 73 See https://www.atsispep.sis.uwa.edu.au/
- 74 TS Hottes, L Bogaert, AE Rhodes, DJ Brennan and D Gesink, 'Lifetime prevalence of suicide attempts among sexual minority adults by study sampling strategies: a systematic review and meta-analysis', American Journal of Public Health, 2016, 106(5):e1-e12; T Salway, M Plöderl, J Liu and P Gustafson, 'Effects of multiple forms of information bias on estimated prevalence of suicide attempts according to sexual orientation: an application of a Bayesian misclassification correction method to data from a systematic review', American Journal of Epidemiology, 2019, 188(1):239–249.
- 75 T Hatchel, JR Polanin and DL Espelage, 'Suicidal thoughts and behaviors among LGBTQ youth: meta-analyses and a systematic review', Archives of Suicide Research: Official Journal of the International Academy for Suicide Research, 2021, 25(1):1-37.
- 76 Hatchel et al., 'Suicidal thoughts and behaviors among LGBTQ youth'.
- ABS, 2021 Census data release timeline, ABS website, n.d., accessed 11 November 2021. https://www.abs.gov.au/ census/2021-census-data-release-plans/2021-census-datarelease-timeline
- 78 JP Rogers, E Chesney, D Oliver, N Begum, A Saini, S Wang, P McGuire, P Fusar-Poli, G Lewis and AS David, 'Suicide, self-harm and thoughts of suicide or self-harm in infectious disease epidemics: a systematic review and meta-analysis', Epidemiology and Psychiatric Sciences, 2021, 30:e32; TC Zortea, CTA Brenna, M Joyce, H McClelland, M Tippett, MM Tran, E Arensman, P Corcoran, S Hatcher, MJ Heisel, P Links, RC O'Connor, NE Edgar, Y Cha, G Guaiana, E Williamson, M Sinyor and S Platt, 'The impact of infectious disease-related public health emergencies on suicide, suicidal behavior, and suicidal thoughts', Crisis, 2020, 42(6):474–487.
- 79 J Pirkis, A John, S Shin, M DelPozo-Banos, V Arya, P Analuisa-Aguilar, L Appleby, E Arensman, J Banties, A Baran, JM Bertolote, G Borges, P Brečić, E Caine, G Castelpietra, S-S Chang, D Colchester, D Crompton, M Curkovic, EA Deisenhammer, C Du, J Dwyer, A Erlangsen, JS Faust, S Fortune, A Garrett, D George, R Gerstner, R Gilissen, M Gould, K Hawton, J Kanter, N Kapur, M Khan, OJ Kirtley, D Knipe, K Kõlves, S Leske, K Marahatta, E Mittendorfer-Rutz, N Neznanov, T Niederkrotenthaler, E Nielsen, M Nordentoft, H Oberlerchner, RC O'Connor, M Pearson, MR Phillips, S Platt, PL Plener, G Psota, P Qin, D Radeloff, C Rados, A Reif, C Reif-Leonhard, V Rozanov, C Schlang, B Schneider, N Semenova, M Sinyor, E Townsend, M Ueda, L Vijayakumar, RT Webb, M Weerasinghe, G Zalsman, D Gunnell and MJ Spittal, 'Suicide trends in the early months of the COVID-19 pandemic: an interrupted time-series analysis of preliminary data from 21 countries', The Lancet Psychiatry, 2021, 8(7):579-588.

- 80 N Ide, M Wyder, K Kõlves and D de Leo, 'Separation as an important risk factor for suicide: a systematic review', Journal of Family Issues, 2010, 31(12):1689-1716. https://journals.sagepub.com/doi/10.1177/019251 3X10365317
- 81 A Milner, A Page and D LaMontagne, 'Long-term unemployment and suicide: a systematic review and metaanalysis', PLoS ONE, 2013, 8(1):e51333.
- 82 ABS, Labour force, Australia, July 2021, ABS website, 19 August 2021, accessed 23 August 2021. https://www.abs.gov.au/statistics/labour/employmentand-unemployment/labour-force-australia/jul-2021
- A Milner, A Page and AD LaMontagne, 'Cause and effect in studies on unemployment, mental health and suicide: a meta-analytic and conceptual review', Psychological Medicine, 2014, 44(5):909-917.
- 'Major occupational groups' refers to broadest level of the Australian and New Zealand Standard Classification of Occupations, based on skill level and skill specification: see ABS, ANZSCO - Australian and New Zealand Standard classification of occupations, 1st edn, revision 1, cat. no. 1220.0, ABS website, 25 June 2009. https://www.abs.gov.au/ausstats/abs@.nsf/0/ E3031B89999B4582CA2575DF002DA702?opendocument
- A Milner, K Page, S Spencer-Thomas and AD LaMontagne, 'Workplace suicide prevention: a systematic review of published and unpublished activities', Health Promotion International, 2015, 30(1):29-37.
- 86 Milner et al., 'Workplace suicide prevention'.
- 87 G Martin, S Swannell, A Milner and J Gullestrup, 'Mates in construction suicide prevention program: a five year review', Journal of Community Medicine & Health Education, 2016, 6(465):2161–2711.
- 88 V Ross, N Caton, J Gullestrup and K Kõlves, 'A longitudinal assessment of two suicide prevention training programs for the construction industry', International Journal of Environmental Research and Public Health, 2020, 17(3):803.
- 89 B Wagner, N Rosenberg, L Hofmann and U Maass, 'Webbased bereavement care: a systematic review and metaanalysis', Frontiers in Psychiatry, 2020, 11:525.
- 90 K Witt, KM Chitty, R Wardhani, A Värnik, D de Leo and K Kõlves, 'Effect of alcohol interventions on suicidal ideation and behaviour: a systematic review and meta-analysis', Drug and Alcohol Dependence, 2021, 226:108885.
- Witt et al., 'Effect of alcohol interventions on suicidal ideation and behaviour'.
- Witt et al., 'Effect of alcohol interventions on suicidal ideation and behaviour'.
- 93 K Kõlves, KM Chitty, R Wardhani, A Värnik, D de Leo and K Witt, 'Impact of alcohol policies on suicidal behavior: a systematic literature review', International Journal of Environmental Research and Public Health, 2020, 17(19):E7030.
- 94 Kõlves et al., 'Impact of alcohol policies on suicidal behavior'.

References

- 95 E Campeny, H López-Pelayo, D Nutt, C Blithikioti, C Oliveras, L Nuño, R Maldonado, G Florez, F Arias, S Fernández-Artamendi, JR Villalbí, J Sellarès, M Ballbè, J Rehm, MM Balcells-Olivero and A Gual, 'The blind men and the elephant: systematic review of systematic reviews of cannabis use related health harms', European Neuropsychopharmacology, 2020, 33:1-35.
- 96 R McKetin, J Leung, E Stockings, Y Huo, J Foulds, JM Lappin, C Cumming, S Arunogiri, JT Young, G Sara, M Farrell and L Degenhardt, 'Mental health outcomes associated with the use of amphetamines: a systematic review and meta-analysis', EClinicalMedicine, 2019, 16:81-97.
- 97 N Lee, Alcohol and other drug harm minimisation, consultation paper, Queensland Mental Health Commission, 2021; A Ritter, Options for reform, consultation paper, Queensland Mental Health Commission, 2021.
- 98 Penington Institute, Australia's Annual Overdose Report 2021, Penington Institute, Melbourne.
- 99 M Moitra, D Santomauro, L Degenhardt, PY Collins, H Whiteford, T Vos and A Ferrari, 'Estimating the risk of suicide associated with mental disorders: a systematic review and meta-regression analysis', Journal of Psychiatric Research, 2021, 137:242-249; LS Too, MJ Spittal, L Bugeja, L Reifels, P Butterworth and J Pirkis, 'The association between mental disorders and suicide: a systematic review and meta-analysis of record linkage studies', Journal of Affective Disorders, 2019, 259:302-313.
- 100 SK Doupnik, B Rudd, T Schmutte, D Worsley, CF Bowden, E McCarthy, E Eggan, JA Bridge and SC Marcus, '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, 77(10):1021-1030.
- 101 Doupnik et al., 'Association of suicide prevention interventions with subsequent suicide attempts, linkage to follow-up care, and depression symptoms for acute care settings'.
- 102 M Ferguson, K Rhodes, M Loughhead, H McIntyre and N Procter, 'The effectiveness of the safety planning intervention for adults experiencing suicide-related distress: a systematic review', Archives of Suicide Research, advance online publication; C Nuij, W van Ballegooijen, D de Beurs, D Juniar, A Erlangsen, G Portzky, RC O'Connor, JH Smit, A Kerkhof and H Riper, 'Safety planning-type interventions for suicide prevention: meta-analysis', The British Journal of Psychiatry, 2021, 219(2):419-426.
- 103 JK Swift, WT Trusty and EA Penix, 'The effectiveness of the Collaborative Assessment and Management of Suicidality (CAMS) compared to alternative treatment conditions: a meta-analysis', Suicide and Life-Threatening Behavior, 2021, 51(5):882–896. https://onlinelibrary.wiley.com/doi/ abs/10.1111/sltb.12765
- 104 KR Fox, X Huang, EM Guzmán, KM Funsch, CB Cha, JD Ribeiro and JC Franklin, 'Interventions for suicide and selfinjury: a meta-analysis of randomized controlled trials across nearly 50 years of research', Psychological Bulletin, 2020, 146(12):1117-1145.
- 105 Queensland Mental Health Commission, Every life.
- 106 Queensland Mental Health Commission, Every life, p. 29.
- 107 WHO, Suicide worldwide in 2019.

- 108 M Solmi, J Radua, M Olivola, E Croce, L Soardo, GS de Pablo, JI Shin, JB Kirkbride, P Jones, JH Kim, JY Kim, AF Carvalho, MV Seeman, CU Correll and P Fusar-Poli, 'Age at onset of mental disorders worldwide: large-scale meta-analysis of 192 epidemiological studies', Molecular Psychiatry, advance online publication.
- 109 MM Silverman and RD Felner, 'The place of suicide prevention in the spectrum of intervention: definitions of critical terms and constructs', Suicide & Life-Threatening Behavior, 1995, 25(1):70-81.
- 110 Gibson et al., 'Suicide rates for young Aboriginal and Torres Strait Islander people'.
- Queensland Mental Health Commission, Every life, p. 29.
- 112 F Shand, L Duffy and M Torok, 'Can government responses to unemployment reduce the impact of unemployment on suicide?', Crisis, advance online publication.
- 113 Ross et al., A longitudinal assessment of two suicide prevention training programs for the construction industry'; V Ross, N Caton, S Mathieu, J Gullestrup and K Kõlves, 'Evaluation of a suicide prevention program for the energy sector', International Journal of Environmental Research and Public Health, 2020, 17(17):6418.
- 114 Queensland Mental Health Commission, Shifting minds: Queensland mental health, alcohol and other drugs strategic plan 2018–2023, Queensland Mental Health Commission, Brisbane, Queensland, 2018.
- 115 Pirkis et al. 'Suicide trends in the early months of the COVID-19 pandemic'.
- 116 D Stuckler, S Basu, M Suhrcke, A Coutts and M McKee, 'The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis', The Lancet, 2009, 374(9686):315-323.
- The State of Queensland, Queensland's COVID-19 economic recovery plan: budget update, Queensland Government, Queensland, 2021.
- 118 V Ross, K Kõlves and D De Leo, 'Exploring the support needs of people bereaved by suicide: a qualitative study', Omega, 2021, 82(4):632-645.
- 119 K Andriessen, K Krysinska, K Kõlves and N Reavley, 'Suicide postvention service models and guidelines 2014-2019: a systematic review', Frontiers in Psychology, 2019, 10:2677.
- 120 J Baron, 'Confusion of relative and absolute risk in valuation', Journal of Risk and Uncertainty, 1997, 14(3):301-309; J Covey, 'A meta-analysis of the effects of presenting treatment benefits in different formats', Medical Decision Making, 2007, 27(5):638-654.
- 121 Jeffrey C Valentine, Ariel M Aloe and Timothy S Lau, 'Life after NHST: how to describe your data without "p-ing" everywhere', Basic and Applied Social Psychology, 2015, 37(5):260-273.

