Suicide has a harrowing impact on families and whole communities across Australia. This impact is magnified in rural, regional and remote (rural) areas, where each individual’s wellbeing often hinges upon their connectedness to other people within their home town or region. The loss of a single person’s life through suicide can impact an entire population.

As a major cause of death in Australia, suicide takes the lives of eight people each day. This is more deaths than are caused by motor vehicles.¹

In general¹, suicide rates are increasing Australia-wide and within a number of demographic groups, such as rural communities, those in high-risk occupations, those who identify as Aboriginal or Torres Strait Islander, LGBTIQ+ people and the unemployed.

Youth, middle-aged and elderly

Within Australia, suicide rates vary across the lifespan.² The age groups with the highest suicide rates are 35–44 years (18.9 deaths per 100,000 persons), 45–54 years (18.8), and those 85 years and over (17.8). The greatest increase in suicide rates over the last ten years has been in people aged 85 and over, and those 15–24 years old. It has been understood for several decades that there is a ‘ripple effect’ in young people, in which suicide tends to appear in clusters of young adults who share social networks.³

Rural communities

Over the last ten years, rates of suicide have increased steadily, aligned with levels of remoteness, with Major Cities consistently experiencing the lowest rates.² In 2019, the age-standardised suicide rate outside Australia’s capital cities was over 60 per cent higher than within the capital cities, with New South Wales and the Northern Territory having over twice the suicide rate outside their capitals. Nationwide, it was one of the top ten leading causes of death in Outer Regional, Remote and Very Remote areas, compared to being the thirteenth leading cause of death in Major Cities and Inner Regional areas.³

Figure 1 uses data from the National Mortality Database 2010–19 of the Australian Institute of Health and Welfare to present the age-standardised suicide rate per 100,000 persons in each remoteness category.

¹ There is some natural variation in suicide rates over time within individual communities. Variation also exists between population groups sharing similar sociodemographic characteristics. For example, certain rural populations are more ‘immune’ to suicide than other rural populations. The data in this fact sheet may not be generalisable to every community or sociodemographic group.

² Caution is advised in interpreting data involving small population groups (for example very remote communities, men over 85 years) as small changes in suicide numbers can produce large fluctuations in suicide rates for these groups.
A more consistent trend is shown by averaging rates for Inner and Outer Regional, Remote and Very Remote areas.

Table 1. Intentional self-harm hospitalisations by remoteness (rate per 100,000 population)

<table>
<thead>
<tr>
<th>Remoteness Category</th>
<th>Rate per 100,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Cities</td>
<td>103.5</td>
</tr>
<tr>
<td>Inner Regional</td>
<td>132.0</td>
</tr>
<tr>
<td>Outer Regional</td>
<td>161.7</td>
</tr>
<tr>
<td>Remote</td>
<td>182.7</td>
</tr>
<tr>
<td>Very Remote</td>
<td>202.1</td>
</tr>
</tbody>
</table>

High-risk occupations

Rural parts of Australia have a significant number of people who work in industries that are at increased risk of suicide. These include groups who are recognised as being more likely to face stigma and reluctance to receive mental health care, such as farmers.7–12 Veterinarians have also been identified as a group at high risk,13–15 which has recently been reported as a significant issue affecting the sustainability of this workforce in rural areas.24 Other industries at high risk include construction workers17–21 and other labourers12,22,23, doctors14,25, and emergency and protective services personnel.26,27 Ex-serving defence force members have also been shown to experience higher rates of suicide, particularly early leavers.28–31 Everyone in these industries plays a crucial role in supporting the lifeblood and wellbeing of their communities, so there is a need to tailor interventions and support for these different occupational groups, especially in rural areas where communities are smaller and more localised.

Men

Men have consistently had higher suicide rates than women – accounting for approximately 75 per cent of all completed suicides. To reduce suicide attempts, men commonly require support for emotional expression, help-seeking behaviour and addressing their traditional gender role.32–35 Australian research has found that excessive self-reliance confers a much stronger risk of suicide in men, highlighting the need to encourage them to receive external support when needed.36 Men with certain demographic characteristics are also at a high risk of suicide, particularly those who are on low incomes, unemployed or recently separated.37 The concentration of men in rural Australia is approximately 1.5 per cent greater than in the major cities, and certain rural communities have much higher numbers of men than women.30 For example, the concentration of men in outback parts of Queensland and Western Australia is over 5 per cent greater than the two state totals. This demonstrates the importance of understanding each individual community, and the local issues they may face, when developing and implementing interventions to prevent suicide.

Although the number of suicides is significantly higher in men than women, incidences of non-lethal self-harm are higher for women. Between 2008–09 and 2018–19, the rate of hospitalisations due to intentional self-harm was two-thirds higher in women (approximately 150 hospitalisations per 100,000 population) compared to men (approximately 90 per 100,000). Studies suggest that deliberate self-harm without suicidal intent is often intended to alleviate negative emotions or for self-punishment.39,40 This shows that, in general, there are differences in the underlying motive for non-suicidal self-harm as opposed to suicide.

Means of suicide

Limited methods are used to complete suicide, with research showing that restricting access to the most frequently used means is very important in suicide prevention.42,43 It is also important that suicidal ideation is addressed so as
to reduce the likelihood of suicide by any means. Between rural and metropolitan areas, the means employed can differ significantly. For example, firearms are a very high-risk means in rural areas. Between 2001 and 2017, 92.8 per cent of all firearm-related suicides were in rural areas. Hanging is also more likely to be the means of suicide in rural areas; between 2001 and 2017, 77.1 per cent of suicides in Remote and Very Remote areas were by hanging, compared to 47.2 per cent in Major Cities.\(^4\) Poisoning due to deliberate pesticide ingestion is another common means in rural farming communities, based mostly on international research.\(^42\) However, reducing access to firearms, veterinary drugs and pesticides in rural areas can be challenging due to their occupational use.

### Risk factors and comorbidities

There are many risk factors for suicide, some of which are more common in rural areas, such as job insecurity, and alcohol and other drug use.\(^4\) Table 2 below summarises some of the Australian and international research.\(^46–49\)

<table>
<thead>
<tr>
<th>Mental/social</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant distressing events and upheaval.</td>
<td>Chronic pain, illness or disability.</td>
</tr>
<tr>
<td>Relationship problems and partner separation.</td>
<td>Physical trauma.</td>
</tr>
<tr>
<td>Suicide in immediate social group.</td>
<td>Sleep disturbances.</td>
</tr>
<tr>
<td>Depression, mood disorders and other mental illnesses.</td>
<td>Alcohol and other drug intoxication/relapse.</td>
</tr>
<tr>
<td>Job loss and insecurity.</td>
<td></td>
</tr>
</tbody>
</table>

Alcohol was associated with 26.7 per cent of all suicides in Australia between 2010 and 2015.\(^46\) As risky alcohol consumption increases significantly with remoteness\(^51\), suicides linked to alcohol are recognised as being higher in rural areas.

Mental comorbidities are more common for youth and middle-aged suicides, whereas physical comorbidities are more common in elderly suicides.\(^52\) For Aboriginal and Torres Strait Islander peoples, whose population is more concentrated in Remote and Very Remote Australia, the most significant comorbidities for suicide are alcohol dependence, depression and anxiety. Indigenous suicide is also associated with socially mediated factors within the broader community, including high rates of sexual assault, drug and alcohol misuse, persistent grief due to death within the community, racism and alienation, and factional violence.\(^53\) These all point to the need for suicide prevention initiatives in rural areas to be tailored to each individual and to each region. The research around risk factors highlights the need to increase resilience at the individual and community level, and the need to address modifiable risk factors, including risky alcohol intake.

### High-risk demographic groups

In addition to the high suicide risk for the groups mentioned above, including rural Australians, men and those in high-risk occupations, there are several other groups within Australia that have higher rates of suicide. These include Aboriginal and Torres Strait Islander peoples, the socioeconomically disadvantaged, and sexuality and gender diverse communities. Several of these groups comprise a higher proportion of the population in rural Australia than in metropolitan areas.

#### Aboriginal and Torres Strait Islander peoples

Aboriginal and Torres Strait Islander peoples, 62.2 per cent of whom live in rural areas, have twice the suicide rate of non-Indigenous people in Australia.\(^54\) Every two days, at least one Aboriginal or Torres Strait Islander suicide takes place. This rate has increased in recent years. The situation is so severe that suicide is the fifth leading cause of death for Indigenous people, and the second leading cause for Indigenous men. By contrast, it is the thirteenth leading cause of death in the whole Australian population. The rate of self-harm-related hospitalisations among Indigenous people is also devastating: in 2018–19 it was 3.1 times the rate of the non-Indigenous population.

Young Aboriginal or Torres Strait Islander people are at the greatest risk of suicide – the median age of death from suicide is 29.8 years; 14 years younger than the broader Australian population. Comparing jurisdictions, Western Australia has the highest rate and New South Wales has the lowest.\(^2\) When designing public health interventions and campaigns to reduce suicide rates in Indigenous communities, greater effort needs to be made to target youth and consider particular geographic needs. Consideration should also be given to findings that the level of connectedness to traditional cultures and values, and acceptance in the local community, are associated with a lower rate of suicide in young Aboriginal or Torres Strait Islander people.\(^55,56\)

#### Low socioeconomic status

The rate of suicide generally increases with increasing socioeconomic disadvantage, as do other major causes of disease burden.\(^57\) The indicators of poor socioeconomic status, such as low income and dependence on unemployment benefits, tend to increase with remoteness.\(^58\)

#### LGBTIQ+

Although not reported on a national scale, there are significant numbers of LGBTIQ+ people living rurally, based on available samples of Australian survey groups.\(^59–61\) According to Australian and international research, LGBTIQ+ people are more likely to attempt suicide\(^62–64\), particularly transgender people, who are up to 11 times more likely to commit suicide than non-LGBTIQ+ people.\(^55–68\)

Rural LGBTIQ+ individuals face significant barriers to
receiving health care to support suicide prevention, particularly due to limited access to local mental health services and specialised or LGBTIQ+ inclusive health services.\textsuperscript{45} Isolation from robust metropolitan LGBTIQ+ communities, lack of visible LGBTIQ+ role models in rural areas, and the desire to conceal sexual identity to avoid victimisation, all contribute to higher rates of distress for sexually diverse individuals living rurally.\textsuperscript{79}

Suicide literacy

Suicide literacy is an understanding of the warning signs, risk factors, treatment options and prevention strategies for suicide.\textsuperscript{80} Based on existing evidence, it is likely that suicide literacy in Australia is higher in major city dwellers than in their rural counterparts, particularly those in remote communities. For example, evidence-based interventions and the services of mental health professionals (such as psychologists, psychiatrists, GPs and social workers) are less likely to be viewed as helpful to treat mental health conditions in remote communities than in major cities.\textsuperscript{72} Evidence also suggests that people in remote areas are more likely to identify non-evidence-based treatments (such as alcohol and painkillers) as helpful interventions for mental health conditions and suicide prevention. These findings demonstrate the importance of effective health communication centred around best-practice treatment and management of mental health, and suicide prevention in rural areas.\textsuperscript{75,74}

Going against the generally perceived stereotype, farmers typically have higher rates of literacy in relation to suicide.\textsuperscript{75} However, they also face higher rates of stigma in relation to face-to-face consultations and support. To overcome these barriers to seeking help, there is a need to improve stigma reduction efforts and interventions which accommodate the need for anonymity and privacy for this at-risk group.

Suicide and COVID-19

With regard to the impact of COVID-19 on suicide rates, the most recently published research shows that, in 16 high-income countries (including Australia) and five upper-middle-income countries, there has been no increase in suicide rates throughout the COVID-19 pandemic.\textsuperscript{76-77} This is despite the rise in global suicides predicted in May 2020 due to unemployment in connection with the pandemic.\textsuperscript{78} At present, there is no research available to suggest that suicide rates in rural areas (or Australia more broadly) have been directly affected by COVID-19.\textsuperscript{79}

Policy implications

The development and implementation of policies to reduce suicide rates in rural Australia needs to be grounded in an understanding that isolated initiatives and actions are less likely to be as effective as an integrated approach. Research suggests that a multifaceted public health approach has a greater likelihood of yielding reductions in suicide attempts than single interventions, however well-designed they may be.\textsuperscript{42,80-83} A multifaceted approach to suicide reduction requires the following considerations:

- Orienting the mental health system towards mental wellbeing, suicide prevention and early behavioural intervention. This includes adequately funding activities and campaigns to improve mental health and suicide literacy in at-risk communities, as well as evaluating these interventions.

- Developing the most effective, evidence-based activities and messages to improve mental health literacy in at-risk rural communities. Based on Australian research, developing this messaging is complex and requires considerable caution to ensure it is appropriate and destigmatising.\textsuperscript{46,47} International studies suggest that disseminating information about the risk factors and warning signs for suicide can support a reduction in suicidal behaviour.\textsuperscript{46,47} This messaging could target the individual who is at risk, as well as close family, friends and peers – including special emphasis on the role that risky alcohol consumption plays in many rural suicides.

- Combining ‘universal’ interventions (population-wide), ‘selective’ interventions (for high-risk groups) and ‘indicated’ interventions (for individuals). This could include population-wide suicide literacy campaigns tailored to local community settings (universal), professional education for counselling high-risk groups in the community (selective) and individually tailored clinical care that addresses underlying risk factors and mental health needs, suicidal ideation and postvention for previous attempters (indicated).

- Expanding the Australian Government’s Better Access initiative to enable psychiatrists and allied mental health professionals to provide more Medicare-supported services for patients in need of extensive psychosocial support.

- Providing nationally recognised training to health professionals (particularly general practitioners) on the mental health needs of high-risk demographic groups. This could build on previous and existing training programs and research aimed at preparing the workforce to support the mental health needs of people in high-risk occupations such as farmers\textsuperscript{98,99}; men presenting with physical symptoms\textsuperscript{90-95}; people with alcohol and other drug disorders\textsuperscript{96-99}; Aboriginal and Torres Strait Islander peoples\textsuperscript{99-105}; and LGBTIQ+ groups (especially transgender).\textsuperscript{104}

- Evaluating and scaling up existing behavioural intervention programs in Australia that aim to prevent suicide, particularly for high-risk groups perceiving greater stigma and other barriers to access.\textsuperscript{11,107} These programs may include:
  - mental health hubs (such as Our Healthy Clarence pop-up hubs\textsuperscript{106}, Victorian youth mental health hubs\textsuperscript{107} and adult community mental health centres\textsuperscript{110}).
- telehealth (such as MindSpot111, HeadtoHelp112 and Virtual Psychologist113)
- peer support (such as Mental Health 4 Ag114)
- training for local community members (such as the Rural Adversity Mental Health Program115 and Mental Health First Aid Conversations about Suicide course116)
- community-led, multifaceted and culturally appropriate approaches (such as LifeSpan trials117 and the Aboriginal and Torres Strait Islander Suicide Prevention Evaluation Project118).

- Facilitating support groups and delivering free, confidential counselling for carers (including partners, family and close friends) following a suicide attempt.

- Enhancing digital connectivity and digital literacy for at-risk communities to maximise the effective use of telehealth services for mental health consultations, counselling and peer support.

- Supporting approaches to reduce access to the means of suicide used by high-risk groups. This is supported by robust international evidence indicating that restricted access to lethal means is associated with declines in suicide mortality.41,42

- Recognising the important contribution that social determinants of health can have on individual suicide risk. This includes not only income and employment, but also the broader social connectedness of the community and its engagement with different cultures and diversity.

Additional information and considerations in relation to rural mental health more broadly can be found in the following factsheet: Mental health in rural and remote Australia (www.ruralhealth.org.au/sites/default/files/publications/nhra-mental-health-factsheet-july2021.pdf)