



Suicide Prevention
Australia

Foundations Paper: **Priority Populations**

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The *Foundations* papers are series of reports each providing background information for a program of work conducted by Suicide Prevention Australia. The reports are produced by volunteers and students on placement at Suicide Prevention Australia under the supervision of staff. Suicide Prevention Australia would like to thank Lilliana Clark for her work producing this paper.



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Introduction

Suicide is a prevalent issue in today's society, with suicide being the 15th leading cause of death for all Australians and the leading cause of death for Australians aged 15-44¹. Currently the age standardised suicide rate in Australia is 12.0 per 100 000², however there are several population groups at higher risk of suicide.

Suicide is a complex issue often the result of a range of risk factors, psychological distress and the absence of protective factors such as social support (cite). While suicide cannot be predicted, there are a number of population groups that are at higher risk of suicide and require additional attention, support and resources.

The aim of this paper is to collate available research and data on priority population groups in Australia in order to identify the different factors that contribute to the elevated risk of suicide among specific groups. It is important to note that there is often significant overlap between groups/risk factors and rarely can a single group be considered in isolation. It should also be noted that the document and list of priority population groups are not ordered. This report will be updated annually and is designed to provide a stocktake of available research rather than a definitive list of priority cohorts.

Many different papers, documents and reports produce lists of the priority population groups in suicide prevention. These groups are often sorted under a number of broader categories. For example, the Victorian Suicide and Response Strategy categorises groups under the following categories: those with lived experience, the Aboriginal community, young people and diverse communities.³ Due to the complexity of suicide and the intersectionality of risk factors among populations, there are many ways to group these priority cohorts. For the purpose of this paper, the priority groups will be sorted under following 5 headings:

- Demographic factors
- Groups experiencing stigma and discrimination
- Mental wellbeing risk factors
- Occupational risk factors
- Circumstantial risk factors

Demographic factors

There are several population demographics that are at elevated risk of suicide. This includes, men, young people (aged 15-24), older people (aged 60+) and those living in regional, rural and remote areas. Due to these groups being quite broad, more general and common risk factors experienced by these populations/demographics will be listed. However, each group is very diverse and so certain sub-groups may be exposed to different and/or additional risk factors and at a higher risk of suicide. Any of the people that fall under the above listed groups could also identify as LGBTIQ+, Aboriginal and Torres Strait Islander, culturally and linguistically diverse or someone with a disability. Additionally, risk factors for these cohorts may themselves also be considered priority groups in suicide prevention.

¹ Australian Bureau of Statistics. 2021. Causes of Death, Australia, 2021. [online] Available at: <<https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/latest-release>>

² Ibid.

³ Department of Health, 2022. Suicide Prevention and Response Strategy. Victoria: State Government of Victoria.

Males

Male suicide is a particularly important issue as over 75% of people that die by suicide are men.⁴ A Queensland study found that the male suicide rate was 3.6x higher than that of females.⁵ Interestingly however, studies have also found that males have a much lower rate of suicide attempts than females, but a far higher rate of suicide deaths.⁶ Common risk factors for male suicide include history of self-harm, separation or divorce, relationship conflict, legal issues, death of a family member and financial problems.⁷ It is also well documented that men are also far less likely to seek help which poses unique challenges for male suicide prevention.⁸ Research has also found that there is an association between adherence to traditional masculine norms, such as self-reliance, and higher suicide risk.⁹

Young people

Young people are also another important population group in suicide prevention as suicide is currently the leading cause of death for Australians aged 15-24¹⁰. Young people are often exposed to a number of stressors and risk factors making them a vulnerable group.¹¹ Studies have also found important differences in the associated risk factors for suicide attempts and deaths for young people compared to adults, thus young people need to be targeted specifically in suicide prevention initiatives. Young people more commonly identify interpersonal problems as a precipitating factor and are also more likely to have a higher number of previous suicide attempts compared to adults.¹² Young people with a history of suicide attempts are also more likely to be diagnosed with a personality disorder than adults.¹³ However, young people are also a diverse group, with various groups of young people at increased risk of suicide, including Indigenous and LGBTIQ+ young people.¹⁴

People living in regional, rural and remote areas

Those living in regional, rural and remote areas have also been identified as at increased risk of suicide. An Australian study reported the estimated male suicide rates for metro, rural and remote areas to be 15.6, 18.19 and 30.0 per 100 000 respectively. This same 'urban-rural' gradient was not observed for females, suggesting males in rural and remote areas are disproportionately affected. Possible explanations for higher rates of suicide include employment options, social isolation, physical access barriers, lower education levels, increased access to means, higher risk occupations and environmental/ecological factors (e.g drought). There is also a higher proportion of Indigenous Australians living in non-metropolitan areas and the higher rates of suicide amongst First Nations

⁴ National Mental Health Commission, 2020. Monitoring Mental Health and Suicide Prevention Reform: National Report 2020. Sydney.

⁵ S. Leske, I. Schrader, G. Adam, A. Catakovic, B. Weir and K. Kölves, 2021. Suicide in Queensland: annual report 2021, Australian Institute for Suicide Research and Prevention, World Health Organization Collaborating Centre for Research and Training in Suicide Prevention, School of Applied Psychology, Griffith University, Brisbane, Queensland, Australia.

⁶ Freeman, A., Mergl, R., Kohls, E., Székely, A., Gusmao, R., Arensman, E., Koburger, N., Hegerl, U. and Rummel-Kluge, C., 2017. A cross-national study on gender differences in suicide intent. *BMC Psychiatry*, 17(1).

⁷ Australian Institute of Health and Welfare. 2021. Psychosocial risk factors and deaths by suicide. [online] Available at: <https://www.aihw.gov.au/suicide-self-harm-monitoring/data/behaviours-risk-factors/psychosocial-risk-factors-suicide>.

⁸ Chatmon, B., 2020. Males and Mental Health Stigma. *American Journal of Men's Health*, 14(4),

⁹ Feigelman, W., Coleman, D. and Rosen, Z., 2021. Examining the social origins and young adult life trajectories of high traditional masculinity (HTM) males: A group at elevated suicide risk. *Suicide and Life-Threatening Behavior*, 51(4), pp.696-714.

¹⁰ Australian Bureau of Statistics. 2021. Causes of Death, Australia, 2021. [online] Available at: <<https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/latest-release>>

¹¹ Bilsen, J., 2018. Suicide and Youth: Risk Factors. *Frontiers in Psychiatry*, 9.

¹² Lee, J., Bang, Y., Min, S., Ahn, J., Kim, H., Cha, Y., Park, I. and Kim, M., 2019. Characteristics of adolescents who visit the emergency department following suicide attempts: comparison study between adolescents and adults. *BMC Psychiatry*, 19(1).

¹³ Kwan, Y., Choi, S., Min, S., Ahn, J., Kim, H., Kim, M. and Lee, J., 2021. Does personality problems increase youth suicide risk?: A characteristic analysis study of youth who visit the emergency department following suicide attempt. *Journal of Affective Disorders*, 282, pp.539-544.

¹⁴ Robinson, J, Bailey, E, Browne, V, Cox, G, & Hooper, C., 2016. Raising the bar for youth suicide prevention. Melbourne: Orygen, The National Centre of Excellence in Youth Mental Health.

people may also contribute to these statistics.¹⁵ On top of the limited physical access to health care services, other barriers to help seeking include concerns regarding confidentiality, costs, waiting lists, lack of after-hours services, lack of specialised health care professionals and stigma/negative attitudes towards help-seeking.¹⁶

Older people

Another priority demographic often left out of conversations regarding suicide prevention is older people. Those aged 60 and over often experience a number of risk factors that place them at higher risk of suicide. In 2017, the highest age-specific suicide rate was among males aged 85 years and above, with a rate of 32.8 deaths per 100 000.¹⁷ Interestingly, females of the same age group have the lowest suicide rates, indicating that older men are at a much higher risk of suicide.¹⁸ One of the key risk factors identified is physical illness, injury and disability that commonly occur with age.¹⁹ Other risk factors include social isolation, bereavement and interpersonal problems.²⁰

Groups facing stigma/discrimination

Aboriginal and Torres Strait Islander peoples

There are also a number of population groups that experience significant stigma and discrimination which contributes to their higher risk of suicide. According to data from Queensland, the 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 Australians in 2020.²¹ Suicide is currently the 5th leading cause of death and the 3rd leading cause of avoidable death for Indigenous Australians.²² Furthermore, in 2018-19 around 31% of Indigenous adults had high to very high levels of psychological distress.²³ Indigenous Australians experience significant discrimination, disadvantage and intergenerational trauma, which contributes to poorer mental health outcomes and suicide risk.²⁴ Some risk factors disproportionately affecting Aboriginal and Torres Strait Islander people include: cultural and social exclusion, socioeconomic disadvantage, racism, higher rates of unemployment, mental illness and substance use.²⁵ As mentioned above, a significant proportion of Indigenous Australians live outside of major cities and so also may be subjected to additional risk factors and physical access barriers common to non-metropolitan areas.²⁶

¹⁵ Baxter, J., Gray, M. and Hayes, A., 2011. Families in regional, rural and remote Australia.

¹⁶ Rajkumar, S. and Hoolahan, B., 2004. Remoteness and issues in mental health care: experience from rural Australia. *Epidemiologia e Psichiatria Sociale*, 13(2), pp.78-82.

¹⁷ Australian Bureau of Statistics. 2018. Causes of Death, Australia, 2017. [online] Available at: <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0~2017~Main%20Features~Intentional%20self-harm,%20key%20characteristics~3>.

¹⁸ Ibid.

¹⁹ Harwood, D., Hawton, K., Hope, T., Harriss, L. and Jacoby, R., 2006. Life problems and physical illness as risk factors for suicide in older people: a descriptive and case-control study. *Psychological Medicine*, 36(9), pp.1265-1274.

²⁰ Ibid.

²¹ S. Leske, I. Schrader, G. Adam, A. Catakovic, B. Weir and K. Kölves, 2021. Suicide in Queensland: annual report 2021, Australian Institute for Suicide Research and Prevention, World Health Organization Collaborating Centre for Research and Training in Suicide Prevention, School of Applied Psychology, Griffith University, Brisbane, Queensland, Australia.

²² Australian Institute of Health and Welfare 2020. Aboriginal and Torres Strait Islander Health Performance Framework 2020 summary report. Cat. no. IHPF 2. Canberra: AIHW.

²³ Ibid.

²⁴ Kairuz, C., Casanelia, L., Bennett-Brook, K., Coombes, J. and Yadav, U., 2020. Impact of racism and discrimination on the physical and mental health among Aboriginal and Torres Strait Islander peoples living in Australia: a protocol for a scoping review. *Systematic Reviews*, 9(1).

²⁵ Hunter, E. and Milroy, H., 2006. Aboriginal and Torres Strait Islander Suicide in Context. *Archives of Suicide Research*, 10(2), pp.141-157.

²⁶ Hunter, E., 2007. Disadvantage and discontent: A review of issues relevant to the mental health of rural and remote Indigenous Australians. *Australian Journal of Rural Health*, 15(2), pp.88-93.

LGBTIQ+ people

There is unfortunately a lack of reliable data on suicide attempts, deaths and rates among LGBTIQ+ people given most surveys and databases do not collect information regarding sexual orientation or gender identity.²⁷ However, available research and data indicates that LGBTIQ+ people disproportionately experience suicidal ideation and behaviours. One study found that over 30% of LGBTIQ+ participants reported they had attempted suicide.²⁸ Within the LGBTIQ+ community, research shows that bisexual and homosexual males were at higher risk than similar identifying females.²⁹ Transgender people are also at elevated risk with 45% of transgender youth reporting having experienced or experiencing serious suicidal ideation.³⁰ One explanation is higher exposure to risk factors, especially for young LGBTIQ+ people. Risk factors include discrimination, social isolation, substance use, physical abuse and mental illness.³¹ LGBTIQ+ people may also experience lower levels of parental support, peer social support and school safety, factors that can protect against suicidal ideation and behaviour.³² LGBTIQ+ people also experience several barriers to help-seeking such as stigma, lack of culturally appropriate services and concerns regarding confidentiality.³³

Culturally and linguistically diverse communities

Culturally and linguistically diverse (CALD) communities also may be at higher risk of suicide with Queensland data reporting that 7.7% of all suicide deaths in Queensland in 2020 were of people from non-English speaking backgrounds.³⁴ However, there is a lack of data and research into suicide in CALD communities in Australia, despite knowing that they face some specific cultural and language barriers and risk factors that may place them at higher risk.³⁵ Some of the risk factors identified in the literature include: racism, acculturation difficulties, language barriers, employment/financial challenges, stigma and social isolation.³⁶ It is also important to ensure that CALD populations are not treated as a homogenous group as different cultural or ethnic groups will have different risk and protective factors.³⁷

²⁷ Haas, A., Eliason, M., Mays, V., Mathy, R., Cochran, S., D'Augelli, A., Silverman, M., Fisher, P., Hughes, T., Rosario, M., Russell, S., Malley, E., Reed, J., Litts, D., Haller, E., Sell, R., Remafedi, G., Bradford, J., Beautrais, A., Brown, G., Diamond, G., Friedman, M., Garofalo, R., Turner, M., Hollibaugh, A. and Clayton, P., 2010. Suicide and Suicide Risk in Lesbian, Gay, Bisexual, and Transgender Populations: Review and Recommendations. *Journal of Homosexuality*, 58(1), pp.10-51.

²⁸ Hill, A., Bourne, A., McNair, R. and Lyons, A., 2020. *Private Lives 3: The Health and Wellbeing of LGBTIQ People in Australia*. Private Lives. Melbourne: Australian Research Centre in Sex, Health and Society, La Trobe University.

²⁹ Remafedi, G., French, S., Story, M., Resnick, M. and Blum, R., 1998. The Relationship Between Suicide Risk and Sexual Orientation: Results of a Population-Based Study. *American Journal of Public Health*, 88(1).

³⁰ Grossman, A. and D'Augelli, A., 2007. Transgender Youth and Life-Threatening Behaviors. *Suicide and Life-Threatening Behavior*, 37(5), pp.527-537.

³¹ Rivers, I., Gonzalez, C., Nodin, N., Peel, E. and Tyler, A., 2018. LGBT people and suicidality in youth: A qualitative study of perceptions of risk and protective circumstances. *Social Science & Medicine*, 212, pp.1-8.

³² Gorse, M., 2020. Risk and Protective Factors to LGBTQ+ Youth Suicide: A Review of the Literature. *Child and Adolescent Social Work Journal*, 39(1), pp.17-28.

³³ White Hughto, J., Reisner, S. and Pachankis, J., 2015. Transgender stigma and health: A critical review of stigma determinants, mechanisms, and interventions. *Social Science & Medicine*, 147, pp.222-231.

³⁴ S. Leske, I. Schrader, G. Adam, A. Catakovic, B. Weir and K. Kólves, 2021. *Suicide in Queensland: annual report 2021*, Australian Institute for Suicide Research and Prevention, World Health Organization Collaborating Centre for Research and Training in Suicide Prevention, School of Applied Psychology, Griffith University, Brisbane, Queensland, Australia.

³⁵ Bowden, M., McCoy, A. and Reavley, N., 2020. Suicidality and suicide prevention in culturally and linguistically diverse (CALD) communities: A systematic review. *International Journal of Mental Health*, 49(4), pp.293-320.

³⁶ McKenzie, K., Serfaty, M. and Crawford, M., 2003. Suicide in ethnic minority groups. *British Journal of Psychiatry*, 183(2), pp.100-101.; Bowden, M., McCoy, A. and Reavley, N., 2020. Suicidality and suicide prevention in culturally and linguistically diverse (CALD) communities: A systematic review. *International Journal of Mental Health*, 49(4), pp.293-320.

³⁷ Ibid.

Migrants, immigrants, refugees and asylum seekers

Migrants, immigrants, refugees and asylum seekers are also a number of groups that may experience specific risk factors and barriers to help-seeking, making them a priority in suicide prevention. A number of studies have found that the suicide rates of recent migrants are higher than that of their country of birth, suggesting that factors associated with migration elevates risk of suicide.³⁸ Similarly to CALD communities, the process of acculturation has been identified as a contributory factor for suicide risk.³⁹ One study found that immigrants who identified more closely with their heritage cultural were at an increased risk for suicidal ideation.⁴⁰ Another common risk factor is mental illness, with studies finding that refugees tend to have higher rates of mental health problems.⁴¹ However, there is unfortunately little research that looks at suicide among specific migrant, immigrant, refugee or asylum seeker groups.

People with disabilities

There is also some research to suggest that people with a disability or disabilities are at higher risk of suicide. This particular issue is quite complex as there is a number of different types of disabilities and the research is limited. Disabilities often impact on quality of life which has been linked to feelings of hopelessness, suicidality and mental illness such as depression.⁴² This is most common among people with disabilities associated with chronic pain.⁴³ Other risk factors include drug use (often used to manage pain) and poor physical health.⁴⁴ Learning disabilities are also of particular focus in literature, with risk factors such as depression, impulsivity and lack of social supports being common and potentially contribute to suicide risk.⁴⁵ Those who acquire disabilities later in life, especially spinal cord injuries, are also at higher risk of suicide, with suicide being one of the top 4 causes of death for people with spinal cord injuries.⁴⁶ Research has also indicated links to increased suicide risk with a number of other disabilities including autism,⁴⁷ multiple sclerosis,⁴⁸ and fibromyalgia.⁴⁹ There are also a number of barriers to help-seeking for people with disabilities such as funding, funding policy/eligibility requirements and accessibility.⁵⁰

³⁸ Burvil, P., 1998. Migrant suicide rates in Australia and in country of birth. *Psychological Medicine*, 28(1), pp.201-208.; Bursztein Lipsicas, C., Mäkinen, I., Apter, A., De Leo, D., Kerkhof, A., Lönnqvist, J., Michel, K., Salander Renberg, E., Sayil, I., Schmidtke, A., van Heeringen, C., Värnik, A. and Wasserman, D., 2011. Attempted suicide among immigrants in European countries: an international perspective. *Social Psychiatry and Psychiatric Epidemiology*, 47(2), pp.241-251.

³⁹ Kennedy, M., Parhar, K., Samra, J. and Gorzalka, B., 2005. Suicide Ideation in Different Generations of Immigrants. *The Canadian Journal of Psychiatry*, 50(6), pp.353-356.

⁴⁰ Ibid.

⁴¹ Australian Institute of Health and Welfare. 2018. Culturally and linguistically diverse communities. [online] Available at: <https://www.aihw.gov.au/getmedia/f3ba8e92-afb3-46d6-b64c-ebfc9c1f945d/aihw-aus-221-chapter-5-3.pdf.aspx>.

⁴² Båtstad, H. and Rudmin, F., 2016. Suicidal tendencies as correlates of disability measures. *Journal of Health Psychology*, 21(12), pp.3037-3047.

⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ Bender, W., Rosenkrans, C. and Crane, M., 1999. Stress, Depression, and Suicide among Students with Learning Disabilities: Assessing the Risk. *Learning Disability Quarterly*, 22(2), pp.143-156.

⁴⁶ DeVivo, M., 1989. Cause of Death for Patients With Spinal Cord Injuries. *Archives of Internal Medicine*, 149(8), p.1761.; Soden, R., Walsh, J., Middleton, J., Craven, M., Rutkowski, S. and Yeo, J., 2000. Causes of death after spinal cord injury. *Spinal Cord*, 38(10), pp.604-610.

⁴⁷ Hedley, D., and Uljarević, M. 2018. Systematic review of suicide in autism spectrum disorder: current trends and implications. *Current Developmental Disorders Reports*, 5(1), pp. 65-76.

⁴⁸ Giannini, M.J., Bergmark, B., Kreshover, S., Elias, E., Plummer, C. and O'Keefe, E., 2010. Understanding suicide and disability through three major disabling conditions: Intellectual disability, spinal cord injury, and multiple sclerosis. *Disability and health journal*, 3(2), pp.74-78.

⁴⁹ Khazem, L.R., 2018. Physical disability and suicide: recent advancements in understanding and future directions for consideration. *Current opinion in psychology*, 22, pp.18-22.

⁵⁰ Munce, S., Webster, F., Fehlings, M., Straus, S., Jang, E. and Jaglal, S., 2014. Perceived facilitators and barriers to self-management in individuals with traumatic spinal cord injury: a qualitative descriptive study. *BMC Neurology*, 14(1).

Mental wellbeing risk factors

People experiencing mental illness

There are also a number of established psychological factors that individuals may experience that can be a risk factor for suicide. Not all, but a large proportion of people who experience suicidal ideation, attempt suicide or die by suicide, experience mental illness.⁵¹ In a Queensland study looking at 5752 suicide deaths from 2002-2011, 49.2% of all suicide cases had at least one psychiatric disorder.⁵² A Victorian study found that those with diagnosed mental illness experienced a higher number of stressors such as substance use, family conflict, financial issues and relationship breakdown.⁵³ People experiencing mental illness are also more likely to be exposed to additional risk factors for suicide such as self-harm or a previous suicide attempt.⁵⁴ Additionally, the WHO has also found that a significant proportion of those with mental illness such as depression, bipolar and schizophrenia, are not being treated.⁵⁵ Help seeking for mental illness can be difficult for a number of reasons such as affordability and access to services, however stigma is often explored and cited as one of the key barriers to mental health help-seeking.⁵⁶

People experiencing substance use disorders/addiction

Another priority group is people experiencing substance use disorders. Substance use is a commonly identified stressor/risk factor for suicide. A Victorian study calculating the suicide rates for specific stressors found that the suicide rate for those experiencing alcohol and/or other drug problems was 58.59 per 100 000.⁵⁷ This is significantly higher than the rate for the Victorian population in the same period which was calculated to be 8.9 per 100 000.⁵⁸ Alcohol and/or drug use is also commonly associated with a number of additional risk factors for suicide including mental illness and interpersonal conflicts.⁵⁹

Survivors of previous suicide attempts

There is also a significant amount of research to show that survivors of previous suicide attempt/s are at a higher risk of death by suicide.⁶⁰ This risk is generally thought to be elevated for the period immediately following a suicide attempt, but elevated risk can remain for years following a suicide

⁵¹ Brådvik, L., 2018. Suicide Risk and Mental Disorders. *International Journal of Environmental Research and Public Health*, 15(9), p.2028.

⁵² Kölves, K., Potts, B. and De Leo, D., 2015. Ten years of suicide mortality in Australia: Socio-economic and psychiatric factors in Queensland. *Journal of Forensic and Legal Medicine*, 36, pp.136-143.

⁵³ Clapperton, A., Newstead, S., Bugeja, L. and Pirkis, J., 2019. Differences in Characteristics and Exposure to Stressors Between Persons With and Without Diagnosed Mental Illness Who Died by Suicide in Victoria, Australia. *Crisis*, 40(4), pp.231-239.

⁵⁴ McManus, S., Hassiotis, A., Jenkins, R., Dennis, M., Aznar, C., Appleby, L., Bebbington, P. and Brugha, T., 2014. Suicidal thoughts, suicide attempts, and self-harm. *Mental health and wellbeing in England: adult psychiatric morbidity survey 2014*.

⁵⁵ Thornicroft, G., 2008. Stigma and discrimination limit access to mental health care. *Epidemiologia e Psichiatria Sociale*, 17(1), pp.14-19.

⁵⁶ Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., Morgan, C., Rüsch, N., Brown, J. and Thornicroft, G., 2014. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine*, 45(1), pp.11-27.

⁵⁷ Clapperton, A., Newstead, S., Bugeja, L. and Pirkis, J., 2019. Relative risk of suicide following exposure to recent stressors, Victoria, Australia. *Australian and New Zealand Journal of Public Health*, 43(3), pp.254-260.

⁵⁸ Australian Institute of Health and Welfare. 2021. Suicide & self-harm monitoring. [online] Available at: <https://www.aihw.gov.au/suicide-self-harm-monitoring/data/deaths-by-suicide-in-australia/suicide-deaths-by-state-territories>.

⁵⁹ Kölves, K., Draper, B., Snowdon, J. and De Leo, D., 2017. Alcohol-use disorders and suicide: Results from a psychological autopsy study in Australia. *Alcohol*, 64, pp.29-35.

⁶⁰ Bostwick, J., Pabbati, C., Geske, J. and McKean, A., 2016. Suicide Attempt as a Risk Factor for Completed Suicide: Even More Lethal Than We Knew. *American Journal of Psychiatry*, 173(11), pp.1094-1100.

attempt.⁶¹ In a Queensland report from 2021, it was found that of the 2316 deaths by suicide, around one third had attempted suicide in their lifetime and 17.2% had made a suicide attempt within the 12 months leading up to their death.⁶² Although self-harm is not always intended to be a deliberate attempt to end one's life, those with a history of self-harm are also at higher risk of suicide.⁶³ The AIHW found that personal history of self-harm was the most frequently occurring psychosocial risk factor in suicide deaths in 2020.⁶⁴ Additionally, studies have found that mental illness and alcohol use disorders are prominent risk factors for suicide attempts and re-attempts.⁶⁵ Survivors of previous suicide attempts also report experiencing significant internal and external stigma, guilt and high levels of psychological distress which contributes to the increased risk of death by suicide.⁶⁶

People experiencing bereavement, including those bereaved by suicide

People experiencing recent bereavement, including those bereaved by suicide and suicide attempts, have also been a focus in suicide prevention. It has been found that bereavement, particularly sudden death bereavement is associated with increased suicide risk.⁶⁷ Within this group, the highest risk for suicide was among those bereaved by suicide specifically.⁶⁸ This group should also extend to include those impacted by suicide attempts. Unfortunately, while we know suicide attempts can result in significant psychological distress for families, friends and carers, there is a lack of research in this area and the extent of the impact of suicide attempts on suicide risk is unknown. Common risk factors associated with bereavement and elevated risk of suicide includes stigma, low levels of social support and social isolation, avoidance behaviours and significant psychological distress.⁶⁹

Occupational risk factors

People working in high-risk occupations

There are a number of groups that are exposed to occupational risk factors which contribute to suicide risk. There are a number of occupations that for a number of reasons see a higher proportion of employee suicides. Such areas of work include technicians and trade workers, labourers, managers,⁷⁰

⁶¹ Probert-Lindström, S., Berge, J., Westrin, Å., Öjehagen, A. and Skogman Pavulans, K., 2020. Long-term risk factors for suicide in suicide attempters examined at a medical emergency in patient unit: results from a 32-year follow-up study. *BMJ Open*, 10(10), p.e038794.

⁶² S. Leske, I. Schrader, G. Adam, A. Catakovic, B. Weir and K. Kölves, 2021. Suicide in Queensland: annual report 2021, Australian Institute for Suicide Research and Prevention, World Health Organization Collaborating Centre for Research and Training in Suicide Prevention, School of Applied Psychology, Griffith University, Brisbane, Queensland, Australia.

⁶³ Carroll, R., Metcalfe, C. and Gunnell, D., 2014. Hospital Presenting Self-Harm and Risk of Fatal and Non-Fatal Repetition: Systematic Review and Meta-Analysis. *PLoS ONE*, 9(2), p.e89944.

⁶⁴ Australian Institute of Health and Welfare. 2021. Psychosocial risk factors and deaths by suicide. [online] Available at: <https://www.aihw.gov.au/suicide-self-harm-monitoring/data/behaviours-risk-factors/psychosocial-risk-factors-suicide>.

⁶⁵ Parra-Urbe, I., Blasco-Fontecilla, H., Garcia-Parés, G., Martínez-Naval, L., Valero-Coppin, O., Cebrià-Meca, A., Oquendo, M. and Palao-Vidal, D., 2017. Risk of re-attempts and suicide death after a suicide attempt: A survival analysis. *BMC Psychiatry*, 17(1).

⁶⁶ Mcmenamy, J., Jordan, J. and Mitchell, A., 2008. What do Suicide Survivors Tell Us They Need? Results of a Pilot Study. *Suicide and Life-Threatening Behavior*, 38(4), pp.375-389.

⁶⁷ Hamdan, S., Berkman, N., Lavi, N., Levy, S. and Brent, D., 2020. The Effect of Sudden Death Bereavement on the Risk for Suicide. *Crisis*, 41(3), pp.214-224.

⁶⁸ Pitman, A., Osborn, D., Rantell, K. and King, M., 2016. Bereavement by suicide as a risk factor for suicide attempt: a cross-sectional national UK-wide study of 3432 young bereaved adults. *BMJ Open*, 6(1), p.e009948.

⁶⁹ Molina, N., Viola, M., Rogers, M., Ouyang, D., Gang, J., Derry, H. and Prigerson, H., 2019. Suicidal Ideation in Bereavement: A Systematic Review. *Behavioral Sciences*, 9(5), p.53; Stroebe, M., Stroebe, W. and Abakoumkin, G., 2005. The Broken Heart: Suicidal Ideation in Bereavement. *American Journal of Psychiatry*, 162(11), pp.2178-2180.

⁷⁰ S. Leske, I. Schrader, G. Adam, A. Catakovic, B. Weir and K. Kölves, 2021. Suicide in Queensland: annual report 2021, Australian Institute for Suicide Research and Prevention, World Health Organization Collaborating Centre for Research and Training in Suicide Prevention, School of Applied Psychology, Griffith University, Brisbane, Queensland, Australia.

farmers, pharmacists, health professionals⁷¹ and emergency service workers.⁷² The aspects of these professionals that contribute to a higher risk of suicide are varied but include: increased access to means,⁷³ high levels of stress,⁷⁴ exposure to traumatic events,⁷⁵ socioeconomic factors,⁷⁶ social isolation⁷⁷ and even high levels of physical pain.⁷⁸ Access to means is a particularly common identified factor with one study finding that suicide rates were 3.02x higher for females and 1.24x higher for males in occupations with access to means.⁷⁹ For those working in occupations stationed in rural or remote areas such as farmers, accessing health and community services may be difficult.

Australian Defence Force members and veterans

There has been recent focus on suicide among Australian Defence Force members and veterans. A 2021 report released by the AIHW found that suicide rates for ADF members were actually lower than the rest of the population.⁸⁰ However, the suicide rates for ex-serving members are 24% higher for males and 102% higher for females.⁸¹ Among ADF members and veterans, the risk was higher for those who left for involuntary medical reasons.⁸² Among veterans, navy veterans are at most risk of suicide, followed by army veterans and ex-air force members.⁸³ Other risk factors aside from physical injuries include trauma and mental illness such as PTSD.⁸⁴

Circumstantial risk factors

People experiencing homelessness or housing instability

Some priority population groups can be identified by the circumstances they are currently living in/exposed to. People experiencing homelessness or housing instability are exposed to a range of additional risk factors and stressors, making them a particularly vulnerable group in terms of suicide risk. Risk factors include: social isolation, mental illness, unemployment, substance use, relationship breakdown and physical and/or sexual abuse.⁸⁵ People experiencing homelessness also face a number

⁷¹ Roberts, S., Jaremin, B. and Lloyd, K., 2012. High-risk occupations for suicide. *Psychological Medicine*, 43(6), pp.1231-1240.

⁷² Milner, A., Witt, K., Maheen, H. and LaMontagne, A., 2017. Suicide among emergency and protective service workers: A retrospective mortality study in Australia, 2001 to 2012. *Work*, 57(2), pp.281-287.

⁷³ Roberts, S., Jaremin, B. and Lloyd, K., 2012. High-risk occupations for suicide. *Psychological Medicine*, 43(6), pp.1231-1240.

⁷⁴ Milner, A., Spittal, M., Pirkis, J., Chastang, J., Niedhammer, I. and LaMontagne, A., 2017. Low Control and High Demands at Work as Risk Factors for Suicide: An Australian National Population-Level Case-Control Study. *Psychosomatic Medicine*, 79(3), pp.358-364.

⁷⁵ Lawn, S., Roberts, L., Willis, E., Couzner, L., Mohammadi, L. and Goble, E., 2020. The effects of emergency medical service work on the psychological, physical, and social well-being of ambulance personnel: a systematic review of qualitative research. *BMC Psychiatry*, 20(1).

⁷⁶ Kennedy, A., Adams, J., Dwyer, J., Rahman, M. and Brumby, S., 2020. Suicide in Rural Australia: Are Farming-Related Suicides Different?. *International Journal of Environmental Research and Public Health*, 17(6), p.2010.

⁷⁷ Ibid.

⁷⁸ Milner, A., Spittal, M., Pirkis, J., Chastang, J., Niedhammer, I. and LaMontagne, A., 2017. Low Control and High Demands at Work as Risk Factors for Suicide: An Australian National Population-Level Case-Control Study. *Psychosomatic Medicine*, 79(3), pp.358-364.

⁷⁹ Milner, A., Witt, K., Maheen, H. and LaMontagne, A., 2017. Access to means of suicide, occupation and the risk of suicide: a national study over 12 years of coronial data. *BMC Psychiatry*, 17(1).

⁸⁰ Australian Institute of Health and Welfare. 2021. Annual reporting about Australian Defence Force suicide deaths expanded to include members who served since 1985. [online] Available at: <https://www.aihw.gov.au/news-media/media-releases/2021-1/september/annual-defence-suicide-deaths-reporting>.

⁸¹ Ibid.

⁸² Ibid.

⁸³ ABC News. 2021. New research reveals full extent of veteran suicide crisis as royal commission begins work. [online] Available at: <https://www.abc.net.au/news/2021-09-29/defence-veteran-suicide-figures-three-times-worse-than-reported/100497818>.

⁸⁴ Bruce, M., 2010. Suicide risk and prevention in veteran populations. *Annals of the New York Academy of Sciences*, 1208(1), pp.98-103.

⁸⁵ Coohy, C., Easton, S., Kong, J. and Bockenstedt, J., 2014. Sources of Psychological Pain and Suicidal Thoughts Among Homeless Adults. *Suicide and Life-Threatening Behavior*, 45(3), pp.271-280.

of barriers to help-seeking including cost, waiting times, lack of available appointments, illness/poor health, stigma and physical barriers (e.g transportation).⁸⁶

People experiencing job loss, unemployment, job insecurity and/or financial hardship

Those experiencing job loss, unemployment, job insecurity and/or financial hardship are also at elevated risk of suicide. From 2015-2017 in Queensland, 31.3% of individuals that died by suicide were either unemployed or pending unemployment and financial problems were reported in 20% of all male suicides.⁸⁷ In many cases, financial hardship appears to be the cumulative effect of a number of other factors/stressors such as mental illness, domestic violence and bereavement, all contributing to an individual's risk of suicide.⁸⁸ Socioeconomic factors on a macrolevel scale have also been seen to have an impact on suicide risk in populations. A study in the US found that for every \$1000 USD increase in the GDP per capita, suicide rates were reduced by 2%.⁸⁹ Furthermore, the same study found that a 1% increase in global unemployment rates were associated with a 1% increase in male suicides.⁹⁰

People experiencing loss of relationship/family breakdown

Relationship or family conflict and breakdown has also been identified as a common risk factor for suicide. One study reported that there was a 3-fold increase in suicidal ideation and an 8-fold increase in suicide plans and attempts following a relationship separation.⁹¹ Another study in Queensland found that relationship separation was reportedly a preceding life for 26.7% of all suicide deaths between 2015-2017, however for male suicides the proportion was slightly higher at 28.8%.⁹² The type of relationship/family conflict also appears to vary across age groups, with younger suicide attempters more likely to report family conflict (mainly between parent/s and the child), whereas older adolescents and adults are more likely to report conflict in a romantic relationship.⁹³ Furthermore, relationship problems were more commonly identified for people aged 15-24 so may be a contributing factor to elevated suicide risk among young people.⁹⁴ The types of conflict also vary between males and females, with males 75% more likely to refer to relationship breakdown than females, and females 60% more likely to identify interpersonal and family conflict.⁹⁵

⁸⁶ Australian Institute of Health and Welfare (AIHW) 2021, Health of people experiencing homelessness. [online] Available at: <https://www.aihw.gov.au/reports/australias-health/health-of-people-experiencing-homelessness>

⁸⁷ S. Leske, I. Schrader, G. Adam, A. Catakovic, B. Weir and K. Kólves, 2021. Suicide in Queensland: annual report 2021, Australian Institute for Suicide Research and Prevention, World Health Organization Collaborating Centre for Research and Training in Suicide Prevention, School of Applied Psychology, Griffith University, Brisbane, Queensland, Australia.

⁸⁸ Barnes, M., Gunnell, D., Davies, R., Hawton, K., Kapur, N., Potokar, J. and Donovan, J., 2016. Understanding vulnerability to self-harm in times of economic hardship and austerity: a qualitative study: Table 1. *BMJ Open*, 6(2), p.e010131.

⁸⁹ Meda, N., Miola, A., Slongo, I., Zordan, M. and Sambataro, F., 2021. The impact of macroeconomic factors on suicide in 175 countries over 27 years. *Suicide and Life-Threatening Behavior*, 52(1), pp.49-58.

⁹⁰ *Ibid.*

⁹¹ Batterham, P., Fairweather-Schmidt, A., Butterworth, P., Cleave, A., Mackinnon, A. and Christensen, H., 2014. Temporal effects of separation on suicidal thoughts and behaviours. *Social Science & Medicine*, 111, pp.58-63.

⁹² S. Leske, I. Schrader, G. Adam, A. Catakovic, B. Weir and K. Kólves, 2021. Suicide in Queensland: annual report 2021, Australian Institute for Suicide Research and Prevention, World Health Organization Collaborating Centre for Research and Training in Suicide Prevention, School of Applied Psychology, Griffith University, Brisbane, Queensland, Australia.

⁹³ Frey, L. and Cerel, J., 2013. Risk for Suicide and the Role of Family. *Journal of Family Issues*, 36(6), pp.716-736.

⁹⁴ Tiller, J., Kupinski, J., Burrows, G., Mackenzie, A., Hallenstein, H. and Johnston, G., 1998. Completed and attempted youth suicide in Victoria. *Stress Medicine*, 14(4), pp.249-254.

⁹⁵ Barber, J., Blackman, E., Talbot, C. and Saebel, J., 2004. The themes expressed in suicide calls to a telephone help line. *Social Psychiatry and Psychiatric Epidemiology*, 39(2), pp.121-125.

People experiencing chronic physical illness or injury

Those experiencing chronic physical illness or injury, particularly older people, have also been identified as a priority group in suicide prevention. Using data from Victorian registers for 2013, it was found that the suicide rates for those experiencing physical illness and accident/injury was 12.77 and 13.61 per 100 000 respectively.⁹⁶ This was compared to a suicide rate of the general Victorian population of 8.9 per 100 000.⁹⁷ The increased risk of suicide due to illness or injury is particularly prevalent amongst older people with a study finding that older people that died by suicide were more likely to have illnesses such as cancer, heart disease, pulmonary disease, peptic ulcer and prostatic disorder.⁹⁸ Chronic injuries and illnesses have also been found to be a risk factor for mental illness such as depression which may lead to suicidal ideation or behaviour.⁹⁹

People experiencing, at risk of, or exposed to abuse and violence

There is also an association between suicide and history of domestic violence and abuse. Various studies have found that adults with a history of sexual and/or physical abuse in childhood are more likely to self-harm and experience suicidal ideation and behaviours.¹⁰⁰ Domestic violence, exposure to domestic violence and childhood sexual abuse have been found to be the most common risk factors for suicide attempts after adjusting for mental illness.¹⁰¹

People who are or have been in contact with the CJS

Another priority population group in suicide prevention is people who are or have been incarcerated. A study conducted in England and Wales found that suicide was 5.1 times more common for male prisoners, and 20x more common for female prisoners compared to the general population.¹⁰² Studies have found that the majority of suicide deaths occur within the first 2 months of being in custody.¹⁰³ Incarcerated adults are also far more likely to report experiencing suicidal ideation and suicide attempts. A study from the ACT found that 48% of detainees reported lifetime suicidal ideation and 31% reported attempting suicide at least once.¹⁰⁴ Furthermore, Aboriginal and Torres Strait Islander peoples are overrepresented in prison populations and are more likely to report attempting suicide.¹⁰⁵

⁹⁶ Clapperton, A., Newstead, S., Bugeja, L. and Pirkis, J., 2019. Relative risk of suicide following exposure to recent stressors, Victoria, Australia. *Australian and New Zealand Journal of Public Health*, 43(3), pp.254-260.

⁹⁷ Australian Institute of Health and Welfare. 2021. Suicide & self-harm monitoring. [online] Available at: <https://www.aihw.gov.au/suicide-self-harm-monitoring/data/deaths-by-suicide-in-australia/suicide-deaths-by-state-territories>.

⁹⁸ Quan, H., Arboleda-Flórez, J., Fick, G., Stuart, H. and Love, E., 2002. Association between physical illness and suicide among the elderly. *Social Psychiatry and Psychiatric Epidemiology*, 37(4), pp.190-197.

⁹⁹ Goodwin, R., Kroenke, K., Hoven, C. and Spitzer, R., 2003. Major Depression, Physical Illness, and Suicidal Ideation in Primary Care. *Psychosomatic Medicine*, 65(4), pp.501-505.

¹⁰⁰ Mina, E. and Gallop, R., 1998. Childhood Sexual and Physical Abuse and Adult Self-Harm and Suicidal Behaviour: A Literature Review. *The Canadian Journal of Psychiatry*, 43(8), pp.793-800.

¹⁰¹ Devries, K., Watts, C., Yoshihama, M., Kiss, L., Schraiber, L., Deyessa, N., Heise, L., Durand, J., Mbwanbo, J., Jansen, H., Berhane, Y., Ellsberg, M. and Garcia-Moreno, C., 2011. Violence against women is strongly associated with suicide attempts: Evidence from the WHO multi-country study on women's health and domestic violence against women. *Social Science & Medicine*, 73(1), pp.79-86.

¹⁰² Fazel, S., Benning, R. and Danesh, J., 2005. Suicides in male prisoners in England and Wales, 1978–2003. *The Lancet*, 366(9493), pp.1301-1302; Fazel, S. and Benning, R., 2009. Suicides in female prisoners in England and Wales, 1978–2004. *British Journal of Psychiatry*, 194(2), pp.183-184.

¹⁰³ Powell, C. and Zevitz, R., 2011. Death behind bars: an examination of mortality in jail, lockup, and hospital confinement – a historical study. *Criminal Justice Studies*, 24(1), pp.105-124.

¹⁰⁴ Butler, A., Young, J., Kinner, S. and Borschmann, R., 2018. Self-harm and suicidal behaviour among incarcerated adults in the Australian Capital Territory. *Health & Justice*, 6(1).

¹⁰⁵ Larney, S., Topp, L., Indig, D., O'Driscoll, C. and Greenberg, D., 2012. A cross-sectional survey of prevalence and correlates of suicidal ideation and suicide attempts among prisoners in New South Wales, Australia. *BMC Public Health*, 12(1).

There are a number of risk factors associated with incarceration as well as risk factors that are common among incarcerated people that can contribute to risk of suicide. Factors include: childhood abuse, sexual assault, negative experiences in prison such as denial of request for parole, lack of social support, mental illness, violent offending, traumatic brain injury, drug use and self-harm.¹⁰⁶ Relationship issues are also identified as common risk factors that can be the result of, or exacerbated by incarceration.¹⁰⁷ Additionally, there are institutional risk factors such as poor health care, overcrowding, single-cell occupation or no social visits.¹⁰⁸ However, some studies have found that prison specific factors are not significantly associated with suicide, suggesting that being incarcerated alone is not a risk factor but instead higher rates of suicide are a result of a complex interaction of various different risk factors.¹⁰⁹

There is also evidence to suggest that suicide rates are higher among those recently released from prison. A Queensland study found that released women and men were 14.2 times and 4.8 times more likely to die from suicide respectively, than the general population.¹¹⁰ A Swedish study found that 14% of all deaths after release were a result of suicide and associated factors included previous attempts, multiple sentences, psychotic disorders and substance use disorders.¹¹¹

Suicide Prevention Australia acknowledges the unique and important understanding provided by people with lived and living experience. This knowledge and insight is critical in all aspects of suicide prevention policy, practice and research. Advice from the Lived Experience Panel and other individuals with lived experience helped guide the research, discussion and recommendations outlined in this policy position.

As the national peak body for suicide prevention, our members are central to all that we do. Advice from our members, including the largest and many of the smallest organisations working in suicide prevention, as well as practitioners, researchers and community leaders is key to the development of our policy positions. Suicide Prevention Australia thanks all involved in the development of this policy position.

¹⁰⁶ Butler, A., Young, J., Kinner, S. and Borschmann, R., 2018. Self-harm and suicidal behaviour among incarcerated adults in the Australian Capital Territory. *Health & Justice*, 6(1); Larney, S., Topp, L., Indig, D., O'Driscoll, C. and Greenberg, D., 2012. A cross-sectional survey of prevalence and correlates of suicidal ideation and suicide attempts among prisoners in New South Wales, Australia. *BMC Public Health*, 12(1); Marzano, L., Hawton, K., Rivlin, A. and Fazel, S., 2011. Psychosocial influences on prisoner suicide: A case-control study of near-lethal self-harm in women prisoners. *Social Science & Medicine*, 72(6), pp.874-883.

¹⁰⁷ Suto, I. and Arnaut, G., 2010. Suicide in Prison: A Qualitative Study. *The Prison Journal*, 90(3), pp.288-312.

¹⁰⁸ Zhong, S., Senior, M., Yu, R., Perry, A., Hawton, K., Shaw, J. and Fazel, S., 2021. Risk factors for suicide in prisons: a systematic review and meta-analysis. *The Lancet Public Health*, 6(3), pp.e164-e174.

¹⁰⁹ Fazel, S., Ramesh, T. and Hawton, K., 2017. Suicide in prisons: an international study of prevalence and contributory factors. *The Lancet Psychiatry*, 4(12), pp.946-952.

¹¹⁰ Spittal, M., Forsyth, S., Pirkis, J., Alati, R. and Kinner, S., 2014. Suicide in adults released from prison in Queensland, Australia: a cohort study. *Journal of Epidemiology and Community Health*, 68(10), pp.993-998.

¹¹¹ Moore, K., Siebert, S., Brown, G., Felton, J. and Johnson, J., 2021. Stressful life events among incarcerated women and men: Association with depression, loneliness, hopelessness, and suicidality. *Health & Justice*, 9(1).