



# Closing the Loop

## Alcohol & Other Drugs In Suicidality

This series is designed to ‘close the loop’ between research and policy by translating research evidence into policy directions and advice. These papers review key findings from National Suicide Prevention Research Fund<sup>1</sup> projects and identifies evidence-based policy recommendations. This edition focuses on the area of alcohol and other drugs in suicide prevention.

### Research summary

This article summaries a rapid review of evidence on the role of alcohol and other drugs as a risk factor for suicidality, and review of effective interventions in reducing suicide attempts and deaths (Fisher et al. 2020).

Three research questions were addressed in this review: what role does alcohol and/or other drugs play in suicidal behaviour and how does it interact with other risk factors for suicide, what alcohol and other drug interventions have been shown to be effective in reducing suicidal thoughts and behaviours, and what recommendations could be made about interventions within the Australian context (Fisher et al. 2020).

This evidence check was to synthesise the evidence base and provide recommendations to inform the National Suicide Prevention Adviser’s advice to the Prime Minister.

### Evidence review

#### The role of alcohol and other drugs in suicidal behaviour

Alcohol and other drugs (AOD) use has a substantiated association with risk of suicidality, and the role of AOD in experiencing suicidal thoughts and behaviours is complex and multidimensional (Fisher et al. 2020).

The severity of AOD use was found to have a role in increased risk of suicide, with chronic and/or acute use common among suicide attempts and deaths (Fisher et al. 2020).

A meta-analysis included in the review found alcohol consumption to be associated with 65% increased risk of suicidality (Amiri & Behnezhad, 2020), and research in the U.S. found risk of death by suicide to be increased 30.7 times for people with multiple AOD disorders (Lynch et al. 2020).

Another included review of autopsy studies further demonstrated 19-63% of deaths by suicide have a history of diagnosed AOD use disorder/s (Connery et al. 2020).

The association between AOD use and increased risk of suicidality may be due to coping with psychological distress or reduced inhibitions resulting in impulsivity to act upon suicidal behaviours (Fisher et al. 2020).

<sup>1</sup> [The National Suicide Prevention Research Fund](#) is funded by the Australian Government Department of Health to drive world-class research and build best practice in suicide prevention.

Factors such as age (in particular adolescence and youth), sex, co-existing mental health conditions, trauma, and minority group stressors (e.g., Aboriginal and Torres Strait Islander and LGBTQI communities) were found to have a related role of AOD use in experiencing suicidality/deaths by suicide (Fisher et al. 2020).

There are many factors which contribute to risk of suicide including biological, psychological, social, environmental, and cultural (Fisher et al. 2020, World Health Organization, 2014). As AOD use often plays a role in a diversity of factors, it is challenging to make precise determinations of its relationship to suicidality. (Fisher et al. 2020, World Health Organization, 2014).

## Effective AOD interventions in suicide prevention

While the evidence base for effective AOD interventions for suicide prevention is limited, lacking evaluation studies, and requires further research, some promising results in reducing suicidality were yielded.

The literature that was included in the rapid review primarily focused on public-health oriented interventions, with a secondary focus on individual treatment/clinical interventions (Fisher et al. 2020).

Key findings on interventions which provided positive results:

- Government policies on alcohol accessibility (e.g. age restrictions), taxation, and zero tolerance driving (Xuan et al. 2016).
- Some depression-focussed interventions have witnessed reductions in suicide deaths internationally (Japan, Italy & Germany) (Fountoulakis et al. 2011).
- School-based interventions targeted to reducing harmful AOD use among young people (King et al. 2018; Paschall et al. 2018).
- Interventions targeting men including public awareness campaigns, 'gatekeeper' awareness campaigns and GP education (Struszczyk et al. 2019; Fisher et al. 2020).
- Self-determination for Indigenous communities in community-initiated alcohol restrictions (Clifford et al. 2012).
- Evidence-based therapeutic interventions for youth experiencing suicidality (Busby et al. 2020).
- Alcohol and suicide interventions for teenagers (O'Brien et al. 2018).

## Policy implications

Suicide is a complex, multi-factorial human behaviour and only half of those who die by suicide each year in Australia have previously accessed mental health services (National Suicide Prevention Adviser, 2020). Addressing the social determinants of health such as AOD use which evidence demonstrates can lead to increased suicide risk, is critical in reducing deaths by suicide.

The research presented in this rapid review provides an evidence-base for the need for policy makers, service providers, and communities to recognise how AOD use can contribute and/or heighten suicidal behaviours. Suicide is a complicated human behaviour with many diverse risk factors, preventing suicide is a very complex issue with no single solution.

While evidence exists that AOD use interventions can reduce suicidality, further research with a focus on Australian priority population groups is required to continue building a robust evidence base for suicide prevention.

The recent National Agreement on Mental Health and Suicide Prevention identifies shared responsibilities of the Commonwealth Government and States and Territories for people who use drugs and other substances.

These include improving collaboration and coordination between government funded services including trialling and evaluating joint planning and regional commissioning of AOD services, implementing clear and consistent care pathways for people with co-occurring AOD and mental health issues, ensuring warm referrals across AOD services, integration of AOD and mental health and suicide prevention services, and developing a nationally consistent approach to data collection (Australian Government, 2022). These are important commitments and should be delivered in a timely, evidence-based way.

## Policy recommendations

1. Governments review policies on alcohol accessibility, taxation and drink driving and adopt evidence-supported reforms to address the high prevalence of harms attributable to AOD usage
2. Prioritise implementation of the shared government commitments on AOD outlined in the National Agreement on Mental Health and Suicide Prevention.

3. Suicide prevention interventions should recognise and respond to the complexity of AOD use in suicidality and address multiple risk factors for suicide while understanding these may vary among priority population groups.
4. Integration of screening, assessment, and treatment for AOD use in existing suicide prevention services (including but not limited to psychosocial interventions, aftercare and postvention).
5. Suicide prevention education and training for AOD frontline staff to identify people at risk of suicide.
6. Targeted gatekeeper training for members of the community who may encounter people with high levels of alcohol and/or other drug use.
7. AOD-use interventions and education targeted at young people on the relationship of AOD use and suicidality.
8. Commission further research on the efficacy of AOD use interventions in preventing suicidal thoughts, attempts, and deaths, with focus given to priority populations who may benefit from targeted approaches.

Note: recommendations are proposed by Suicide Prevention Australia based on the above research, they are not recommendations of the researchers referenced.

## References

Amiri, S. & Behnezhad, S. (2020). Alcohol use and risk of suicide: a systematic review and Meta-analysis. *Journal of Addictive Diseases*, 114.

Australian Government. (2022). National Mental Health and Suicide Prevention Agreement.

Busby, D.R., Hatkevich, C., McGuire, T.C. & King, C.A. (2020). Evidence-based interventions for youth suicide risk. *Current Psychiatry Reports*, 22(2):1-8.

Clifford, A., Doran, C. & Tsey, K. (2012). Suicide prevention interventions targeting Indigenous peoples in Australia, New Zealand, the United States and Canada: a rapid review brokered by the Sax Institute for NSW Health.

Connery, H.S., Korte, F.M. & McHugh, R.K. Suicide and Substance Use Disorder. *Psychiatric Annals*. 2020;50(4):158-62.

Fisher, A., Marel, C., Morley, K., Teesson, M. & Mills, K. (2020). 'The role of alcohol and other drugs in suicidal behaviour and effective interventions to reduce suicidal thoughts and behaviours. Evidence check prepared for the National Suicide Prevention Task Force and commissioned through the Suicide Prevention Research Fund, managed by Suicide Prevention Australia. Available at:

[https://www.suicidepreventionaust.org/wp-content/uploads/2020/11/Dr-Alana-Fisher-USYD-Innovation-Taskforce-ProjectSPARReport\\_AODSuicide\\_FINAL-1.pdf](https://www.suicidepreventionaust.org/wp-content/uploads/2020/11/Dr-Alana-Fisher-USYD-Innovation-Taskforce-ProjectSPARReport_AODSuicide_FINAL-1.pdf)

Fountoulakis, K.N., Gonda, X. & Rihmer, Z. (2011). Suicide prevention programs through community intervention. *Journal of Affective Disorders*, 130(1-2):10-6.

King, C.A., Arango, A. & Foster, C.E. (2018). Emerging trends in adolescent suicide prevention research. *Current Opinion in Psychology*, 22:89-94.

Lynch, F.L., Peterson, E.L., Lu, C.Y., Hu, Y., Rossom, R.C., Waitzfelder, B.E., et al. (2020). Substance use disorders and risk of suicide in a general US population: a case control study. *Addiction Science Clinical Practice*, 15(1):1-9.

National Suicide Prevention Adviser. (2020). Final Advice, Australian Government.

O'Brien, K.H.M., Sellers, C.M., Battalen, A.W., Ryan, C.A., Maneta, E.K., Aguinaldo, L.D., et al. (2018). Feasibility, acceptability, and preliminary effects of a brief alcohol intervention for suicidal adolescents in inpatient psychiatric treatment. *Journal of Substance Abuse Treatment*, 94:10512.

Paschall, M.J. & Bersamin, M. (2018). Schoolbased mental health services, suicide risk and substance use among at-risk adolescents in Oregon. *Preventive Medicine*, 106:209-15.

Struszczyk, S., Galdas, P.M. & Tiffin, P.A. (2019). Men and suicide prevention: a scoping review. *Journal of Mental Health*, 28(1):80-8.

World Health Organization. (2014). Preventing suicide: A global imperative: World Health Organization.

Xuan, Z., Naimi, T.S., Kaplan, M.S., Bagge, C.L., Few, L.R., Maisto, S., et al. (2016). Alcohol policies and suicide: a review of the literature. *Alcoholism: Clinical Experimental Research*, 40(10):2043-55.

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**Lifeline: 13 11 14**  
www.lifeline.org.au

**Suicide Call Back Service: 1300 659 467**  
www.suicidecallbackservice.org.au

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