

# Alcohol Use and Suicide Examining the Link & Solutions

Suicide is a major public health issue facing multiple generations not only in Nebraska but across the entire nation. Nebraska suicide rates have spiked above the national average in recent years and evidencebased, environmental alcohol strategies are needed to help reduce these rates and prevent suicides.

### **Excessive Alcohol Use is a Key Risk Factor for Suicide**

Suicide is a complex issue with many contributing factors and alcohol use has been identified as a key risk behavior for suicidal completion. Excessive alcohol consumption can cause a decrease in cognitive capacity, which may result in difficulty considering alternative problem-solving solutions.<sup>1</sup> Alcohol is the top substance used among drug-related suicide attempts that end up in the emergency department, alcoholism is a factor in approximately 30% of completed suicides, and approximately 7% of those with alcohol dependence will die by suicide.<sup>2</sup>

Research has shown that a greater alcohol outlet density (having a high concentration of alcohol retailers in a small area) is linked to increased alcohol-related suicide rates within a community.<sup>3</sup> As a result, it's important to not only focus on individuals when working to prevent suicide, but also to address environmental factors that can influence how individuals consume alcohol which can impact how those with mental health issues think and act.

## Suicide Prevalence in the U.S. and Nebraska

- In 2021, it was the second leading cause of death among those 10-14 and 25-34 years old and the third leading cause of death among 15-24-year-olds.<sup>4</sup>
- A death by suicide occurs approximately every 11 minutes.<sup>5</sup>
- 37% of suicides and 40% of suicide attempts are preceded by the acute use of alcohol.<sup>6</sup> 2003-2011 data showed that 36% of males and 28% of females who died by suicide tested positive for alcohol.<sup>7</sup>
- Suicide attempts and death by suicide cost the U.S. nearly \$490 billion annually in medical and work loss costs, value of statistical life, and quality of life costs.8
- In Nebraska, suicide was the eleventh leading cause of death in 2021, with an overall rate of 15.07 per 100,000 people, exceeding the overall national rate of 14.04 per 100,000 people.
  - Suicide was the second leading cause of death among those 10-34 years of age.<sup>9</sup> 0
  - Between 2020-2021, 20% of suicides in Nebraska involved alcohol annually.<sup>10</sup> 0

- <sup>4</sup> CDC, 2022
- <sup>5</sup> CDC, 2024
- <sup>6</sup> Cherpitel et al., 2004
- <sup>7</sup> Kaplan et al., 2014 <sup>8</sup> Peterson et al., 2021
- <sup>9</sup> AFSP, 2022 <sup>10</sup> CDC ARDI, 2022

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<sup>&</sup>lt;sup>1</sup> Wasserman, 2016

<sup>&</sup>lt;sup>2</sup> Ali et al., 2013

<sup>&</sup>lt;sup>3</sup> Giesbrecht et al., 2015



#### **Vulnerable Populations**

It is imperative to understand that not all populations are impacted by suicide in the same manner. Vulnerable populations include, but are not limited to, veterans and military personnel, American Indians and Alaska Natives, and the LGBTQ population.

A 2016 study found that 6% of soldiers reported suicidal thoughts and behaviors within the past year. Those who indicated the highest levels of alcohol use were most likely to have seriously considered and/or attempted suicide.<sup>11</sup>

Since 2003, suicide rates have been increasing among the American Indian/Alaska Native (AI/AN) population. A 2018 report stated that in 2015 suicide rates were 3.5 times higher among AI/AN populations at 21.5 per 100,000, than among racial/ethnic groups with the lowest rates. More than one-third (35.7%) of AI/AN individuals who died by suicide were aged 10-24 years and were 2.1 times more likely to have a positive alcohol toxicology result. Of the 846 participants that were tested for alcohol, 54% of them tested positive for the presence of alcohol in their bloodstream.<sup>12</sup>

Sexual minorities, particularly those with a substance use disorder, often have additional psychiatric disorders. While research is limited, transgender children and adolescents have reported higher levels of depression, suicidality, self-harm, and eating disorders than their non-transgender counterparts.<sup>13</sup>

### Solutions

- Screening, Brief Intervention, and Referral to Treatment (SBIRT) is an intervention which may be used to prevent and reduce excessive alcohol consumption as well as mental health problems in a clinical setting that can help individuals identify and treat both mental health and substance misuse problems before they become more serious for the individual and increase the risk of harms in the community.<sup>14</sup>
- Access to alcohol should be limited, at both the individual and societal levels.<sup>15</sup> The World Health Organization<sup>16</sup> has identified evidence-based strategies which can be used to reduce both access and exposure to alcohol, which can reduce and prevent alcohol-related harms including suicide.

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<sup>&</sup>lt;sup>11</sup> Herberman et al., 2016

<sup>&</sup>lt;sup>12</sup> Leavitt et al., 2018

<sup>&</sup>lt;sup>13</sup> Connolly et al., 2016

<sup>&</sup>lt;sup>14</sup> SAMHSA, 2017

<sup>&</sup>lt;sup>15</sup> Wasserman, 2016

<sup>&</sup>lt;sup>16</sup> WHO, 2011

- Limiting alcohol availability. Physical availability refers to the accessibility or convenience of obtaining and consuming these products. Research shows that when alcohol is too readily available the negative effects pile up. Ways to limit alcohol availability include maintaining limits on the days and hours that alcohol can be sold, regulating alcohol outlet density and maintaining the minimum legal drinking age. Nebraska law allows local governing bodies to regulate alcohol outlets through land use and zoning powers. The City of Omaha has seized on this ability in passing its "Good Neighbor Ordinance" (Ord. 39471) that can offer an alternative process for addressing outlets that drain the city's enforcement resources and reduce the quality of life in neighborhoods. Other Nebraskan cities and counties could pass similar measures.
- Reducing exposure to alcohol advertising. Numerous long-term studies have found that the more young people are exposed to alcohol advertising, the more likely they are to begin drinking or, if already drinking, to drink more. Alcohol advertising and marketing have a significant impact on youth and adult decisions to drink by influencing expectations and attitudes and helping to create an environment that glamorizes alcohol consumption.
- Increasing alcohol taxes. Although excise taxes are often raised for revenue-generating reasons, numerous studies have found that higher alcohol taxes also have a significant impact on excessive consumption and its related harms. Alcohol taxes have not been increased in Nebraska since 2003, rather there have been multiple efforts to seek lower rates for things like alcopops and ready-to-drink cocktails.

#### References

Ali, S., Nathani, M., Jabeen, S., Yazdani, I., Mouton, C. D., Bailey, R. K., ... & Riley, W. J. (2013). Alcohol: the lubricant to suicidality. *Innovations in clinical neuroscience*, *10*(1), 20.

American Foundation for Suicide Prevention (AFSP). (n.d.). Preventing suicide in LGBTQ communities. Retrieved October 17, 2022 from <u>https://afsp.org/preventing-suicide-in-lgbtq-communities</u>

American Foundation for Suicide Prevention (AFSP). (2022). Suicide Data: Nebraska. Retrieved June 24, 2024 from https://afsp.org/facts/nebraska

Centers for Disease Control and Prevention (CDC). (2022). 10 Leading Causes of Death – 2021. Web-based Injury Statistics Query and Reporting System (WISQARS) [Online]. National Center for Injury Prevention and Control, CDC (producer). Retrieved June 24, 2024 from <u>https://www.cdc.gov/injury/wisqars/LeadingCauses.html</u>

Centers for Disease Control and Prevention (CDC). (2022). Alcohol-Related Disease Impact Application (ARDI). Retrieved October 19, 2022 from https://nccd.cdc.gov/DPH\_ARDI/default/default.aspx

Centers for Disease Control and Prevention (CDC). (2024). Facts About Suicide. Retrieved June 24, 2024 from https://www.cdc.gov/suicide/facts/index.html

Cherpitel, C. J., Borges, G. L., & Wilcox, H. C. (2004). Acute alcohol use and suicidal behavior: a review of the literature. *Alcoholism: clinical and experimental research*, *28*, 18S-28S.

Connolly, M. D., Zervos, M. J., Barone II, C. J., Johnson, C. C., & Joseph, C. L. (2016). The mental health of transgender youth: Advances in understanding. *Journal of Adolescent Health*, *59*(5), 489-495.

Giesbrecht, N., Huguet, N., Ogden, L., Kaplan, M. S., McFarland, B. H., Caetano, R., ... & Nolte, K. B. (2015). Acute alcohol use among suicide decedents in 14 US states: impacts of off-premise and on-premise alcohol outlet density. *Addiction*, *110*(2), 300-307.

Herberman Mash, H. B., Fullerton, C. S., Ng, T. H. H., Nock, M. K., Wynn, G. H., & Ursano, R. J. (2016). Alcohol use and reasons for drinking as risk factors for suicidal behavior in the US Army. *Military medicine*, *181*(8), 811-820.

Kaplan, M. S., Huguet, N., McFarland, B. H., Caetano, R., Conner, K. R., Giesbrecht, N., & Nolte, K. B. (2014). Use of alcohol before suicide in the United States. *Annals of epidemiology*, *24*(8), 588-592.

Leavitt, R. A., Ertl, A., Sheats, K., Petrosky, E., Ivey-Stephenson, A., & Fowler, K. A. (2018). Suicides among American Indian/Alaska Natives—National violent death reporting system, 18 states, 2003– 2014. *Morbidity and Mortality Weekly Report*, 67(8), 237.

Omaha, NE., Article IX. – Alcohol Sales Locations – Ordinance 39471. Retrieved October 19, 2022 from https://library.municode.com/ne/omaha/codes/code\_of\_ordinances?n odeld=PTIIMUCO\_CH18NU\_ARTIXALSALO

Peterson, C., Miller, G. F., Barnett, S. B. L., & Florence, C. (2021). Economic cost of injury—United States, 2019. *Morbidity and Mortality Weekly Report*, 70(48), 1655.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2017). About Screening, Brief Intervention, and Referral to Treatment (SBIRT). Available at https://www.samhsa.gov/sbirt/about

Wasserman, D. (2016). *Suicide: an unnecessary death*. Oxford University Press.

World Health Organization (WHO). (2011). From burden to "best buys": Reducing the economic impact of non-communicable diseases in low- and middle-income countries. Available at https://ncdalliance.org/sites/default/files/resource\_files/WHO%20Fro m%20Burden%20to%20Best%20Buys.pdf

#### **Contact Information**

Project Extra Mile 6001 Dodge Street, CEC 228B Omaha, NE 68182-0600 Ph: (402) 963-9047 Email: info@projectextramile.org

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