

Fully Alcohol-Attributable Deaths in Minnesota

UPDATE WITH PRELIMINARY DEATH DATA FOR 2020

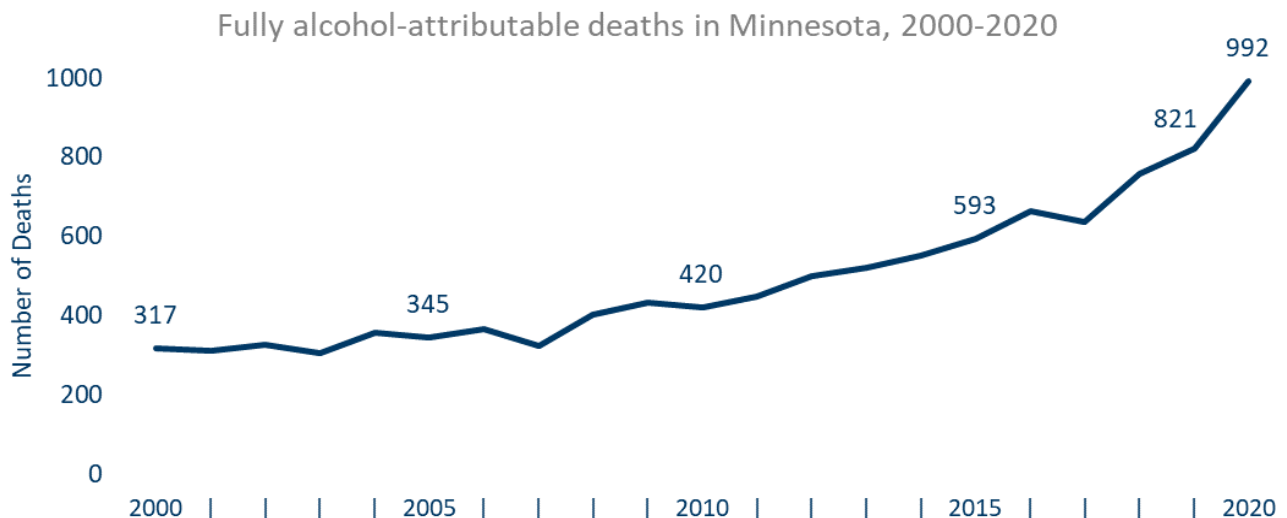
Note: Data contained in this report are preliminary and likely to change when finalized. The results throughout the report are indicative, not definitive, of the final 2020 alcohol-attributable deaths.

Excessive alcohol use can result in harms such as motor vehicle injuries, violence, heart disease, cancer, alcohol poisoning, and poor birth outcomes.¹ Excessive alcohol use cost \$3.9 billion in Minnesota in 2010.² Binge drinking is the most common form of excessive alcohol use, and typically results in acute intoxication and is responsible for almost half of deaths³ and three-quarters of the economic costs of excessive drinking.^{2,4} Binge drinking is defined as five or more drinks per occasion for men or four or more drinks for women. Minnesota has one of the highest binge drinking rates in the nation.⁵ In 2019, 20.7% of Minnesota adults age 18 and older reported binge drinking in the past 30 days (25.3% of men, 16.3% of women) compared to 16.8% nationally.⁵

Defining alcohol-attributable causes of death

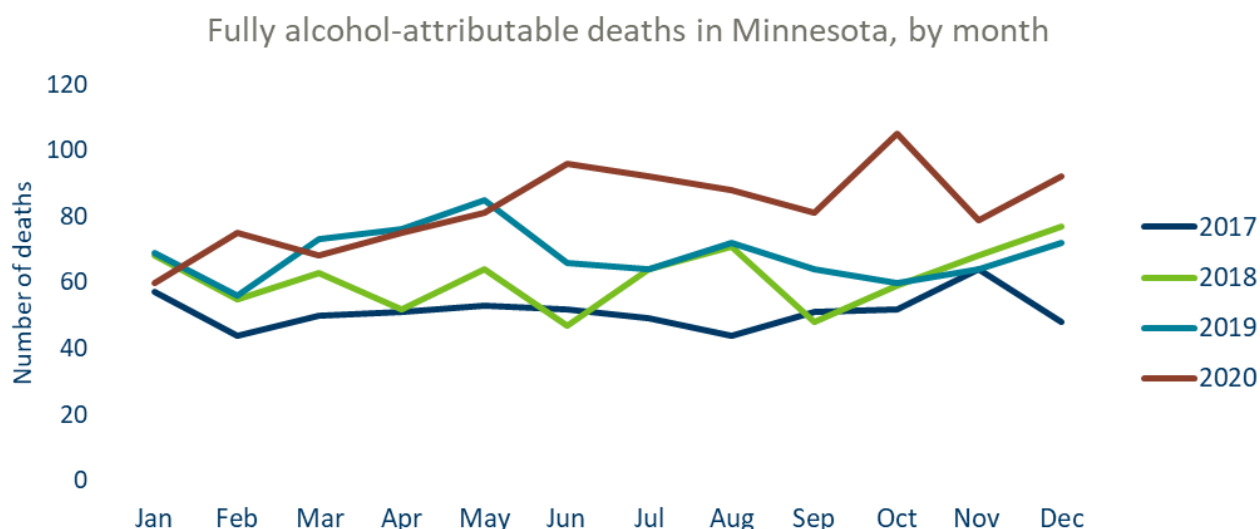
Alcohol-related deaths can be broken into two primary types of deaths, including those that are fully alcohol-attributable and those that are partially alcohol-attributable. This report describes fully alcohol-attributable deaths, which are those that would not occur in the absence of alcohol. These include 12 chronic causes such as alcoholic liver disease or gastritis, and three acute causes such as alcohol poisoning.⁶ The estimated average annual number of deaths from additional causes of alcohol-related deaths that are partially attributable to alcohol, where alcohol is a contributing factor in a proportion of the deaths from those conditions, are available on CDC’s [Alcohol-Related Disease Impact \(ARDI\)](#) application.⁶ This report focuses on trends in fully alcohol-attributable deaths and does not include partially alcohol-attributable deaths, and therefore, is an underestimate of alcohol-related deaths in Minnesota.

The number of fully alcohol-attributable deaths increased by one-third between 2000 and 2010, and more than doubled between 2010 and 2020 in Minnesota.



Minnesota Death Certificate Data.

A higher number of fully alcohol-attributable deaths occurred in Minnesota during the COVID-19 pandemic (2020) than during the previous three years.



Minnesota Death Certificate Data.

The greater number of deaths from fully alcohol-attributable conditions during 2020 should be seen within the context of increases in deaths from these conditions that have occurred throughout the past two decades in Minnesota. The 2020 increase of alcohol-attributable deaths may also be due to several other factors. Some studies indicate that alcohol consumption increased during the COVID-19 pandemic.^{7, 8} Most of the fully alcohol-attributable deaths were due to chronic diseases that develop over years of excessive alcohol consumption (94.7% of these deaths were due to chronic causes in 2020 compared to 90.7% during 2017-2019). Health care visits that were delayed due to pandemic-related concerns⁹ or avoidance of emergency care¹⁰ may have also contributed to the increased number of alcohol-attributable deaths.

Deaths due to alcohol are preventable

Deaths due to excessive alcohol use are preventable. The [Community Guide](#)¹¹ includes several evidence-based recommendations to reduce the likelihood of binge drinking, alcohol-related harms, and deaths due to excessive alcohol use:

- Increase the price of alcohol by increasing alcohol taxes
- Regulate alcohol outlet density
- Dram shop (commercial host) liability
- Avoiding privatization of retail alcohol sales
- Maintain limits on the days and hours when alcohol is sold (in settings such as liquor stores, restaurants, and bars)
- Enhanced enforcement of laws prohibiting alcohol sales to minors
- Electronic screening and brief intervention to reduce excessive alcohol use. These screening and brief intervention programs can be integrated into clinic and emergency department services, at work places, or in other community settings using mobile devices or computers.

References

1. Centers for Disease Control and Prevention. Fact sheets -- Alcohol use and your health. Available at: <https://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm>. Accessed March 19, 2021.
2. Sacks J, Gozales K, Bouchery E, Tomedi L, Brewer R. 2010 national and state costs of excessive alcohol consumption. *American Journal of Preventive Medicine*. 2015;49(5):e73-e79.
3. Esser MB, Sherk A, Liu Y ea. Deaths and years of potential life lost from excessive alcohol use — United States, 2011–2015. *Morbidity and Mortality Weekly Report*. 2020;69:1428-1433.
4. Esser M, Hedden S, Kanny D, Brewer R, Gfroerer J, Naimi T. Prevalence of alcohol dependence among US adult drinkers, 2009-2011. *Preventing Chronic Disease*. 2014;11:140329.
5. Centers for Disease Control and Prevention. Behavior Risk Factor Surveillance System prevalence & trends data. Atlanta GA: Centers for Disease Control and Prevention,; 2019.
6. Centers for Disease Control and Prevention. Alcohol Related Disease Impact (ARDI) Application website. Available at: www.cdc.gov/ARDI. Accessed 9/11/2020.
7. Capasso A, Jones AM, Ali SH, Foreman J, Tozan Y, DiClemente RJ. Increased alcohol use during the COVID-19 pandemic: The effect of mental health and age in a cross-sectional sample of social media users in the U.S. *Preventive Medicine*. 2021/04/01/ 2021;145:106422.
8. Pollard M, Tucker J, Green H. Changes in adult alcohol use and consequences during the COVID-19 pandemic in the US. *JAMA Network Open*. 2020;3(9):e2022942.
9. Ziedan E, Simon K, Wing C. Effects of state COVID-19 closure policy on non-COVID health care utilization. *NBER Working Paper Series*. Cambridge, MA: National Bureau of Economic Research; 2020.
10. Hartnett K, Kite-Powell A, DeVies J, et al. Impact of the COVID-19 Pandemic on Emergency Department Visits — United States, January 1, 2019–May 30, 2020. *MMWR Morb Mortal Wkly Rep*. 2020;69:699-704.
11. Community Preventive Services Task Force. Task force findings for excessive alcohol consumption. Available at: <https://www.thecommunityguide.org/topic/excessive-alcohol-consumption>. Accessed March 23, 2018.

This data brief was supported by Cooperative Agreement Number NU58DP001006 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.

Suggested Citation

Gloppen K, Roesler J, Farley D. Fully alcohol-attributable deaths in Minnesota: Update with preliminary data for 2020. Saint Paul, MN: Minnesota Department of Health, March 2021.

Minnesota Department of Health
 Injury & Violence Prevention Section
 PO Box 64882
 St. Paul, MN 55164-0882
Kari.Gloppen@state.mn.us
health.injuryprevention@state.mn.us
www.health.state.mn.us/injury