

Estimates of Alcohol Poisoning Deaths

MINNESOTA 2021

What is alcohol poisoning?

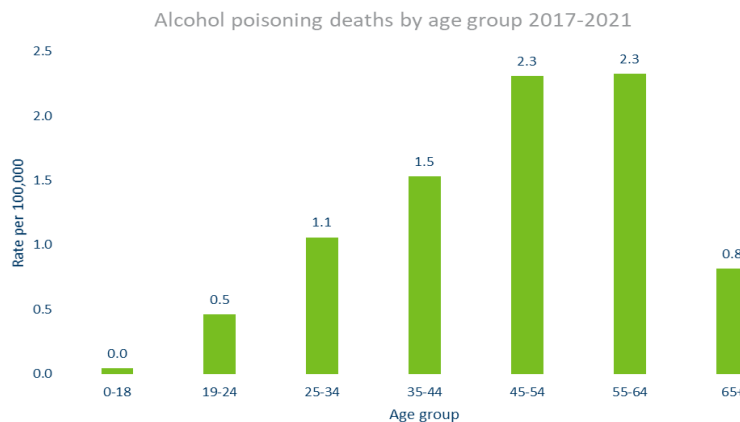
Alcohol poisoning, or alcohol overdose, occurs when a person consumes alcohol faster than their liver can process it. This leads to a rise in blood-alcohol concentration, and the areas of the brain responsible for basic life-support functions—such as breathing, heart rate, and temperature control—are impaired. This can ultimately lead to permanent brain damage or death.

Nationally, 2,467 people died from alcohol poisoning on average each year during 2017 to 2020 [age-adjusted rate 0.7 per 100,000].¹ In Minnesota, an estimated 62 people died each year from alcohol poisoning between 2017 and 2021 [age adjusted rate 1.0 per 100,000]. Nationwide and statewide rates were similar during 2017-2021 compared with 2012-2016. In these cases, alcohol poisoning was the underlying cause of death, but alcohol poisoning can also be a contributing cause of death. In 2021, for example, alcohol poisoning was a contributing cause of death for 429 people in Minnesota.

One of the greatest risk factors for alcohol poisoning is binge drinking. Binge drinking is defined as consuming four or more drinks for females, or five or more drinks for males, on an occasion.

Alcohol poisoning as underlying cause of death

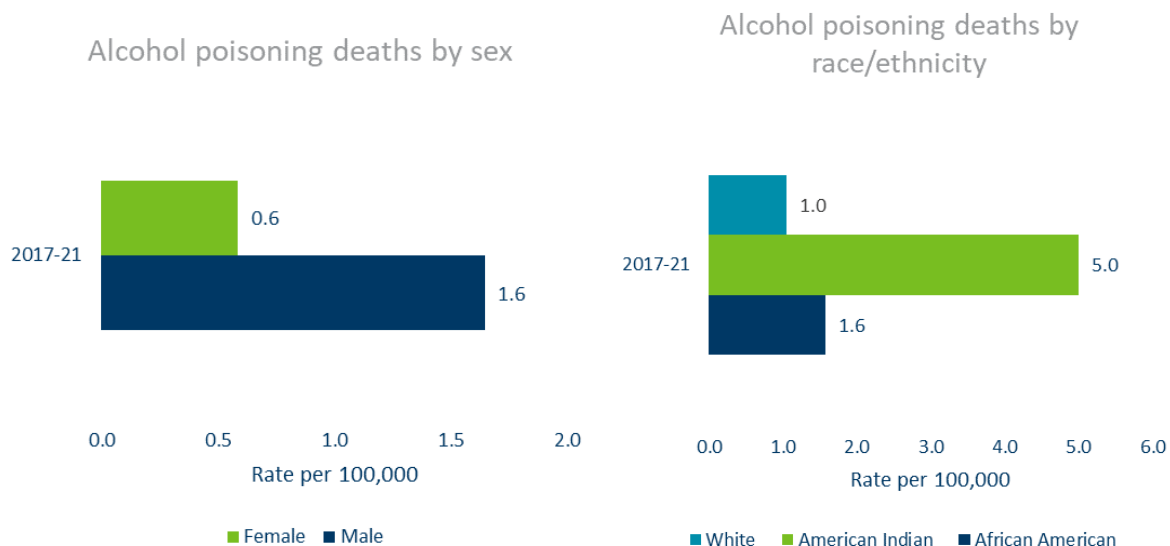
Alcohol poisoning death rates peak among 45–64-year-old adults in Minnesota



¹ United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Underlying Cause of Death 1999-2020 on CDC WONDER Online Database, released 2021.

Alcohol poisoning deaths can occur among people at any age. Despite lower rates of self-reported binge drinking,² Minnesotans ages 45-64 years experienced the highest rates of alcohol poisoning fatalities, during 2017 to 2021.

Alcohol poisoning deaths differ by sex and race/ethnicity



Most alcohol poisoning deaths in Minnesota occur among males. Minnesotan males die from alcohol poisoning at a rate nearly three times higher than females. Additionally, most people who die from alcohol poisoning in Minnesota are white. But American Indians, who comprise a smaller portion of the Minnesota population, experience a disproportionate number of the deaths. From 2017-21, approximately 5.0 per 100,000 American Indian people died from alcohol poisoning—a rate nearly five times higher than any other race or ethnic group in Minnesota. These trends in alcohol poisoning deaths remained constant over the last decade and should be considered in the context of historical trauma related to frontier colonialism throughout American history, which may contribute to other risk factors (such as poverty, family history of alcohol use disorder, early exposure to alcohol).³

² Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2021.

³ Szlemko WJ, Wood JW, Thurman PJ. Native Americans and alcohol: past, present, and future. *J Gen Psychol.* 2006;133(4):435-451. doi:10.3200/GENP.133.4.435-451

What can be done to reduce rates of alcohol poisoning?

Everyone can

- Use the [Alcohol Screening Tool \(https://cdc.gov/alcohol/checkyourdrinking/index.html\)](https://cdc.gov/alcohol/checkyourdrinking/index.html) to learn more about your drinking and create a plan for drinking less or not drinking.
- Avoid binge drinking. If you choose to drink alcohol, limit intake to **two drinks or less in a day for males or one drink or less in a day for females**.
- Call 911 for anyone experiencing life-threatening signs of alcohol poisoning. Do not wait for more symptoms to develop. Symptoms of alcohol poisoning include:
 - Confusion, difficulty staying conscious, or inability to wake up
 - Clammy skin, vomiting, seizure
 - Dulled responses (e.g., no gag reflex)
 - Slow (less than eight breaths per minute) or irregular (10 seconds or more between breaths) breathing
 - Low body temperature (indicated by shivers and pale or bluish skin color)

Healthcare providers can

- Screen all adult patients for binge drinking.
- Counsel all patients who drink excessively, and provide referrals to treatment, as appropriate.

States and communities can

- Track alcohol-related injuries and deaths.
- Support evidence-based policies to reduce binge drinking.

Visit the [Community Guide \(https://www.thecommunityguide.org/topic/excessive-alcohol-consumption\)](https://www.thecommunityguide.org/topic/excessive-alcohol-consumption) and the [Dietary Guidelines for Americans \(Dietary Guidelines for Americans, 2020-2025\)](#) to learn more.

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