

Alcohol is the most commonly used substance among Vermonters.¹ Since 2011, the percentage of Vermont adults 18+ who use alcohol has remained stable, with nearly two-thirds reporting drinking in the past 30 days.² While Vermont has seen increases in overdose deaths over time³ – some involving alcohol – alcohol itself contributes to several health conditions beyond overdoses and poisonings (the acute, negative effect of taking too much of a substance).

In a study published in the *Journal of the American Medical Association (JAMA) Network Open* in 2022, researchers from the Centers for Disease Control and Prevention (CDC) and the Canadian Institute for Substance Use Research found that in the United States, an estimated one in five deaths among adults aged 20-49 years is due to excessive alcohol use.⁴ In Vermont, excessive alcohol use is associated with nearly one in four deaths (24.7%) among people aged 20-34 and one in five (19.3%) of those aged 35-49.⁵

The CDC also found that between 2019 and 2020, alcohol-induced deaths were higher, and increasing more rapidly, in rural areas than in urban areas. For this analysis, only the combined Chittenden/Franklin/Grand Isle Counties were categorized as urban. The other 11 Vermont counties were considered rural.⁶

Although there may be interest in comparing deaths due to alcohol with other substances, this is not recommended. The health impacts of many substances are not as widely known or studied as those related to alcohol. Additionally, substances are typically used together, making it difficult to parse out health impacts of specific substances.

Measuring the Health Impacts of Alcohol Use

The Alcohol-Related Disease Impact (ARDI) Application was developed by the CDC to measure the health impacts of alcohol use. Data presented in this brief were calculated using ARDI Custom Data, a feature that allows states to use their own data to calculate alcohol-related deaths in preferred geographies and timelines.⁷ The application uses alcohol-attributable fractions (AAF) to calculate the number of deaths from a given disease that are due to alcohol use. As a result, it should be noted that **the numbers presented in this brief are estimates** and do not reflect the actual number of Vermonters who died due to alcohol consumption. Furthermore, because estimates of alcohol-related deaths are tied to specific conditions, changes in the number of deaths due to those conditions create changes in the number of alcohol-related deaths. For example, if deaths due to heart disease increase, ARDI data would show an increase in deaths from heart disease related to alcohol use.

KEY POINTS

- **Alcohol-attributable deaths and years of potential life lost each increased by 36% between 2017 and 2021.**
- **Alcohol-attributable deaths increased across age and sex, although males and people 35-49 had the largest increases.**
- **Orleans County had the highest rate of alcohol-attributable deaths between 2017 and 2021.**

Alcohol-Related Deaths

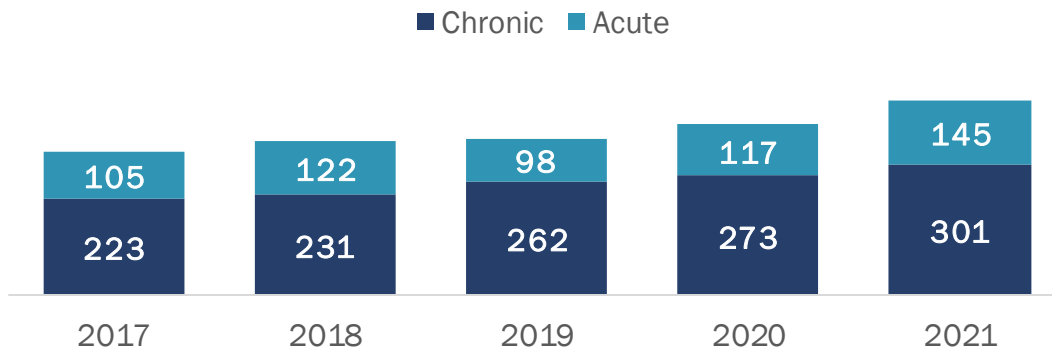
Although the following data are estimates, they are based on research into the role of alcohol in acute (immediate causes of death such as poisonings or injuries) and chronic health conditions (long-term conditions such as cancer or cirrhosis).⁸ The information presented in this data brief can be used for grant applications, outreach, and discussions with community stakeholders, but presentations of the data should describe the approximate or estimated nature of the analyses.

Alcohol-Attributable Deaths Among Vermonters

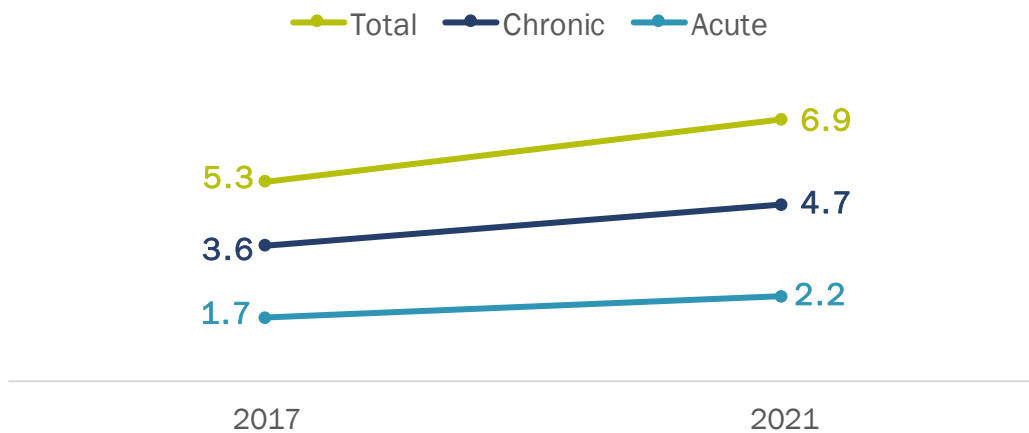
Alcohol-attributable deaths increased by 36% between 2017 and 2021 (328 in 2017 to 446 in 2021). Two thirds of alcohol-related deaths are associated with chronic conditions. There are two reasons for this: 40 of the 58 health conditions measured by the ARDI application are chronic conditions, and more Vermonters die of chronic disease than acute causes of death.⁹

Deaths involving alcoholic liver disease, alcohol misuse, and poisoning involving drugs other than alcohol all increased between 2017 and 2021, with deaths involving misuse and poisoning more than doubling over the same period. ARDI distinguishes between overdoses 100% attributable to alcohol and those involving other drugs that could have also involved alcohol, as many overdose deaths involve multiple substances.

The number of **chronic** and **acute** alcohol-attributable deaths has increased since 2017.



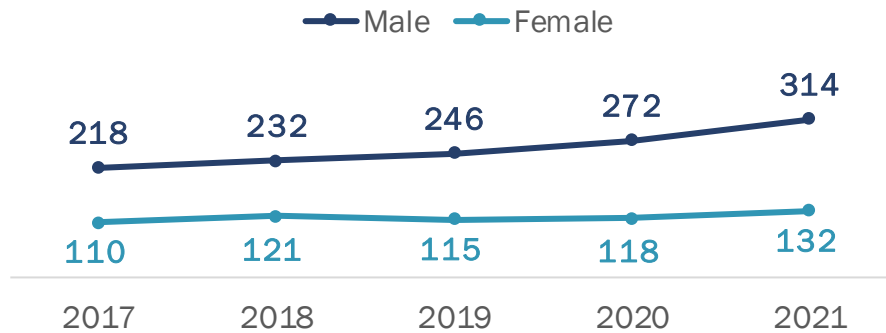
The rate of **total**, **chronic**, and **acute** alcohol-attributable deaths per 10,000 people has increased since 2017.



Alcohol-Related Deaths

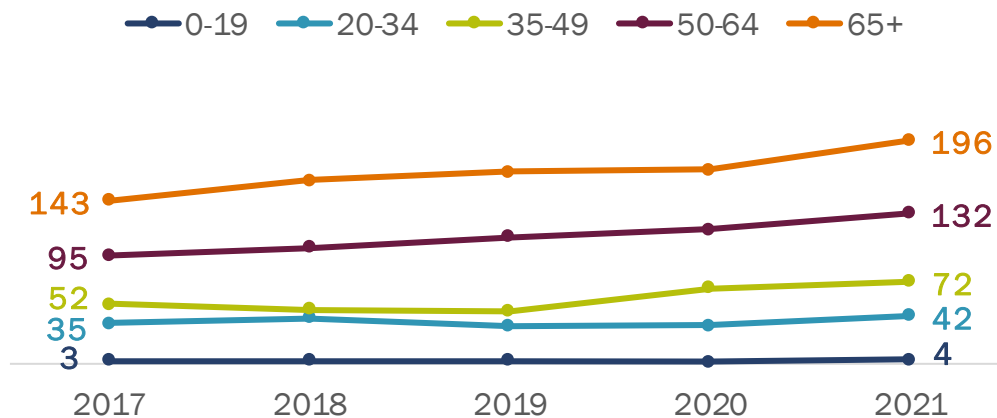
Alcohol-attributable deaths increased among both males and females. Alcohol-attributable deaths among males increased by 44% between 2017 and 2021, compared to 20% among females.

Male alcohol-attributable deaths are higher and increasing faster than female alcohol-attributable deaths.



Alcohol-attributable deaths increased among most age groups. Although 35- to 49-year-olds had the largest increase in alcohol-attributable deaths between 2017 and 2021 (59%), older Vermonters (65+) account for the highest proportion of people dying from alcohol-related conditions. This is because older Vermonters are more likely than younger Vermonters to die of the chronic conditions included in the ARDI application.

Adults 65+ have more alcohol-attributable deaths than other age groups.

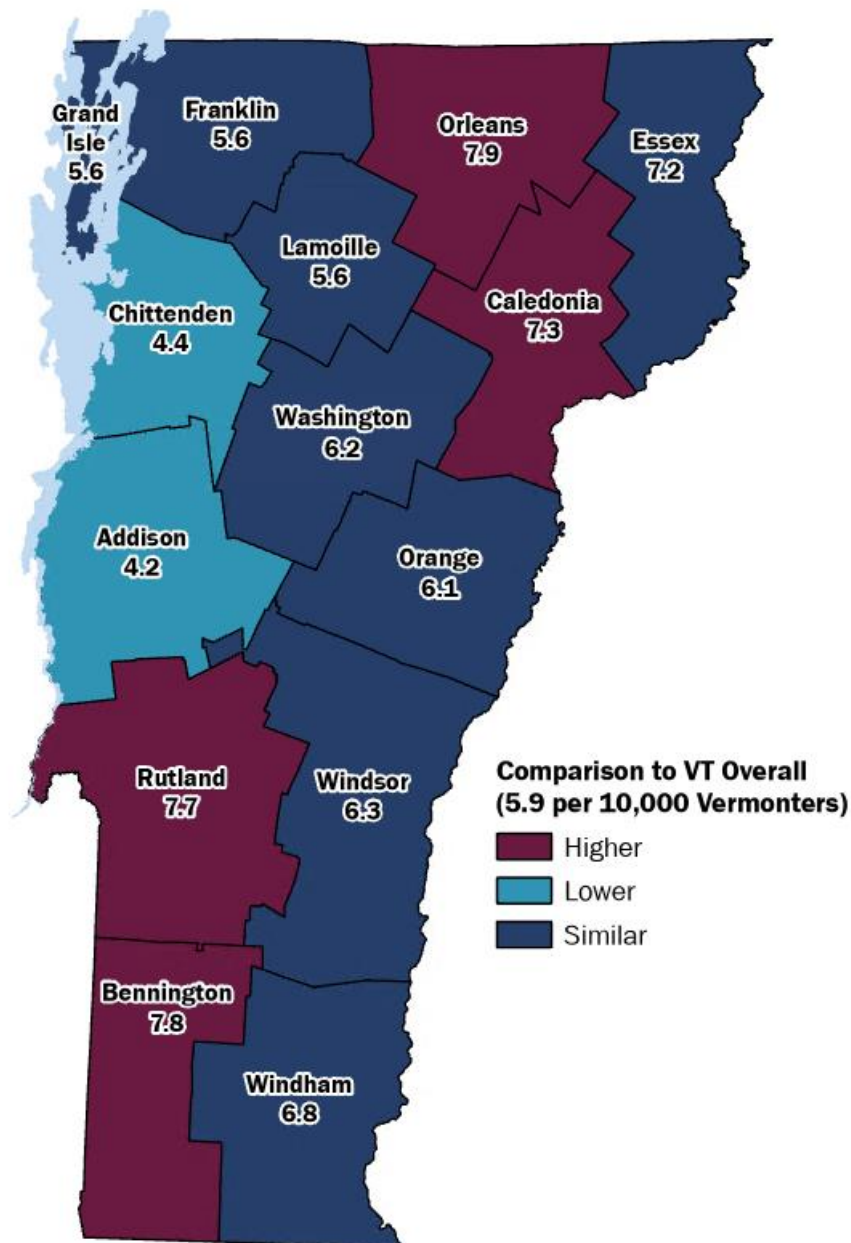


The rate of alcohol-attributable deaths among Vermonters who are Black, Indigenous, or people of color (BIPOC) (2.8 per 10,000) was statistically lower than among white, non-Hispanic Vermonters (6.2) between 2017 and 2021. Due to small numbers, estimates of AAD among BIPOC and white, non-Hispanic Vermonters are combined for these years.

Alcohol-Related Deaths

Between 2017 and 2021, Orleans (7.9 per 10,000), Bennington (7.8), Rutland (7.7), and Caledonia (7.3) Counties had statistically higher rates of alcohol-attributable deaths than Vermont overall (5.9). Addison (4.2) and Chittenden (4.4) had statistically lower rates than Vermont during this period.

Orleans, Bennington, Rutland, and Caledonia Counties had statistically higher rates of alcohol-attributable deaths per 10,000 than Vermont overall.



Alcohol-Related Deaths

Although the data are not presented here, alcohol-attributable deaths and years of potential life lost (YPLL), which is described in detail below, are similar within counties – those with the highest rate of alcohol-attributable deaths typically have the highest rate of YPLL and vice versa.

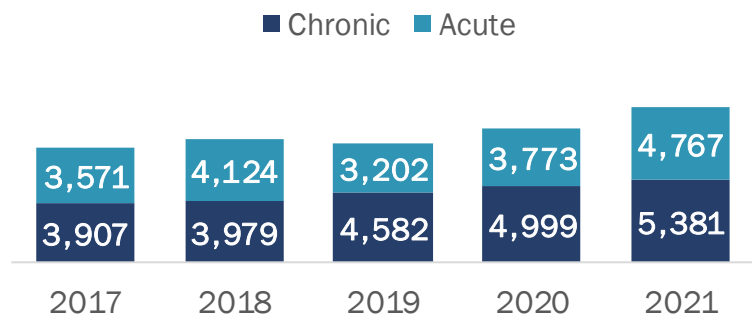
Years of Potential Life Lost Among Vermonters

In addition to alcohol-attributable deaths, ARDI calculates years of potential life lost (YPLL) due to alcohol use. YPLL is calculated using estimates of years of life remaining from the National Center for Health Statistics. Based on these estimates, a person has a certain number of years of life left when they die. These are summed for all people who died of alcohol-related health conditions and presented as YPLL; however, caution should be taken when interpreting the results. Per the ARDI website, “YPLL generally tends to be higher for causes of death that disproportionately affect youth and young adults (e.g., motor vehicle traffic deaths) and lower for causes that primarily affect older adults (e.g., coronary heart disease).”⁴

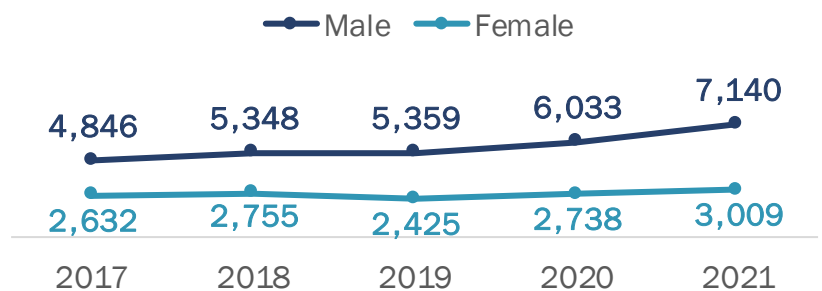
Like alcohol-attributable deaths, YPLL increased by 36% between 2017 and 2021 (7,479 years in 2017 to 10,148 in 2021). Although acute conditions accounted for 42% of alcohol-attributable deaths in 2021, 47% of YPLL was due to deaths from acute conditions related to alcohol use. As described above, this difference is because younger people are more likely to die of acute causes than older adults, resulting in more years of potential life lost.

Although YPLL has increased among males and females, it has increased the most among males (47% increase between 2017 and 2021, compared to 14% among females). Additionally, males accounted for 70% of YPLL in 2021.

Vermonters lost more than 10,000 years of potential life due to chronic and acute alcohol use in 2021 - a 36% increase from 2017.



Years of potential life lost increased more for males than females.

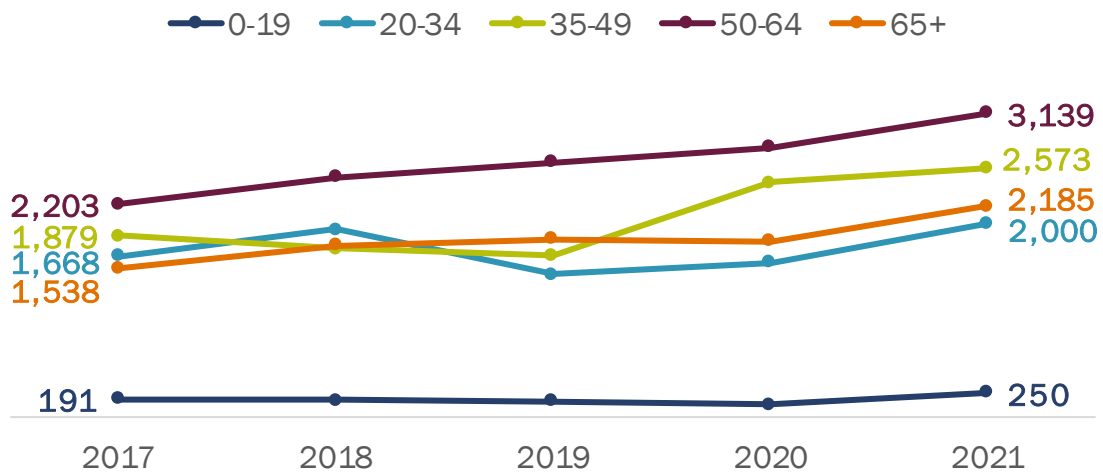


The number of years of potential life lost due to alcohol use among Vermonters increased by 36% between 2017 and 2021.

Alcohol-Related Deaths

YPLL has also increased across age groups. It increased the most among Vermonters 50 and older (42%) and was highest among those 50 to 64 (3,139 in 2021) and 35 to 49 (2,573 in 2021). This differs from alcohol-attributable deaths in that YPLL is higher among younger age groups, while alcohol-attributable deaths are higher among older age groups. This is, again, due to YPLL being higher among younger people because they have more years left to live, as estimated by the National Center for Health Statistics.

Years of potential life lost are highest for those aged 50-64 and lowest for those 0-19.



Key Takeaways

Alcohol-related deaths have increased 59% for people ages 35-49 between 2017 and 2021 although more people age 65+ died than any other age group. Men are more likely than women to have an alcohol-related death. Years of potential life lost (YPLL) have also increased since 2017, especially for men and older adults. Though this change is mostly driven by increases in deaths due to chronic conditions, deaths due to acute conditions have increased as well.

While much focus has been placed on the opioid epidemic, alcohol use contributes to many health conditions that can lead to death. Some of these conditions may emerge more quickly in the form of acute incidents (e.g., overdose, car accidents, etc.), while long-term effects are not as obvious. As a result, these numbers are easier to overlook but warrant the same urgency as other existing health crises.

Vermont's Programming to Address Alcohol Use and Misuse

There are resources available statewide to address alcohol misuse, from prevention programming to treatment and recovery services.

Prevention efforts include media campaigns, school-based prevention programming, community-based coalitions that work with community leaders to implement prevention activities needed within given regions, and training and education opportunities.

Alcohol-Related Deaths

Three campaigns currently focus on specific populations that are at high risk of use with information about the risks of alcohol use. By design, each campaign is not branded as coming from the Health Department, based on research that indicates this would decrease receptivity among the intended audiences. One of the campaigns focuses on alcohol and cannabis use prevention for teens aged 13-17. Another provides information on the risks of binge drinking and co-use of alcohol and stimulants for young adults aged 21-25. The third campaign addresses the risks of opioid misuse and how risks increase when co-using alcohol, reaching young adults aged 18-25 at higher risk of opioid and alcohol misuse. Other prevention resources are available at [Parent Up](#), which provides guidance to parents in having conversations with their kids on tough topics such as substance use and mental wellness, and [One More Conversation](#) which provides information for health care providers and their perinatal patients about the importance of discussing the risks of alcohol use during pregnancy.

The Division of Substance Use Programs (DSU) conducts provider training to increase awareness and understanding of alcohol use disorder, including its prevalence, identification, and application of clinical best practices, which includes the use of medications as a part of comprehensive treatment strategies. DSU and treatment providers are working to improve timely access to treatment for alcohol use disorder through a project that clarifies access pathways so when a person presents to any of the participating providers, including the emergency department, there is a direct link to a treatment provider who can provide timely services. In addition, there are trained professionals embedded in all Vermont emergency departments to support people who are struggling with substance use to provide resources and guidance on next steps toward a healthier life.



VT Helplink
Alcohol & drug support center

The [DSU website](#) includes additional information and resources, including information specific to [alcohol use in older adults](#).

For those who are struggling with alcohol use, [Vermont Helplink](#) provides screening and referrals to appropriate services statewide.

For more information: AHS.VDHDSU@vermont.gov

¹State level data national survey on drug use and health. (2019-2020). Healthvermont.gov. <https://www.healthvermont.gov/sites/default/files/documents/pdf/SubstanceUseVermont-NSDUH2020.pdf>

² Vermont Behavioral Risk Factor Surveillance System. [Healthvermont.gov/health-statistics-vital-records/population-health-surveys-data/brfss](https://www.healthvermont.gov/health-statistics-vital-records/population-health-surveys-data/brfss)

³ Opioid-related fatal overdoses among Vermonters. (2022). Healthvermont.gov. Retrieved December 15, 2022, from

<https://www.healthvermont.gov/sites/default/files/documents/pdf/ADAP-OpioidFatalOverdoseDataBrief-2021.pdf>

⁴ ARDI methods. (2022, April 18). Cdc.gov. <https://www.cdc.gov/alcohol/ardi/methods.html>

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- ⁵ Esser, M. B., Leung, G., Sherk, A., Bohm, M. K., Liu, Y., Lu, H., & Naimi, T. S. (2022). Estimated deaths attributable to excessive alcohol use among US adults aged 20 to 64 years, 2015 to 2019. *JAMA Network Open*, 5(11), e2239485. <https://doi.org/10.1001/jamanetworkopen.2022.39485>
- ⁶ CDCMMWR. (2022). QuickStats: Age-adjusted rates of alcohol-induced deaths, by urban-rural status§ - United States, 2000-2020. *MMWR. Morbidity and Mortality Weekly Report*, 71(44), 1425. <https://doi.org/10.15585/mmwr.mm7144a5>
- ⁷ *Alcohol-related disease impact - home Page*. (n.d.). Cdc.gov. Retrieved December 15, 2022, from https://nccd.cdc.gov/DPH_ARDI/default/default.aspx
- ⁸ *Alcohol-related ICD codes*. (2021, July 6). Cdc.gov. <https://www.cdc.gov/alcohol/ardi/alcohol-related-icd-codes.html>
- ⁹ *Vital statistics 136th report relating to the registry and return of births, deaths, marriages, divorces, and dissolutions*. (n.d.). Healthvermont.gov. Retrieved December 15, 2022, from <https://www.healthvermont.gov/sites/default/files/documents/pdf/Vital%20Statistics%20Bulletin%202020.pdf>