

California Department of Public Health • Substance and Addiction Prevention Branch • Alcohol Harms Prevention Initiative
March 2023

Alcohol Use and Harms Among Adults in California, 2017-2021

Excessive alcohol use is a leading preventable cause of death among adults in the United States.1 It is responsible for 1 in 5 deaths among U.S. adults ages 20-49.1 It can have both chronic and immediate harmful effects on your health. Over time, excessive alcohol use can lead to chronic conditions such as high blood pressure, heart disease, stroke, cancer, depression and anxiety.² Immediate effects of excessive drinking can result in injuries, motor vehicle crashes, alcohol poisoning, sexually transmitted infections, unintended pregnancy, and poor pregnancy outcomes.² Adverse experiences in childhood have been moderately associated with excessive alcohol use (e.g., heavy drinking and binge drinking), and strongly associated with

Defining a Drink

Different types of alcoholic drinks have varying amounts of alcohol content. A "standard" drink is 14 grams or 0.6 fluid ounces of pure alcohol. The illustration below shows the alcohol content of "one standard drink" across alcoholic beverages.



problematic alcohol use (e.g., alcohol use disorder).3

Binge drinking is associated with other substance use and concurrent prescription drug misuse. The use of multiple substances increases the risk of drug overdose.⁴ From 2019-2020, overdose deaths where alcohol was involved increased by 41% for opioid overdose deaths and 59% for synthetic opioids other than methadone (e.g., fentanyl) overdose deaths in the U.S.⁵

What is Excessive Alcohol Use?

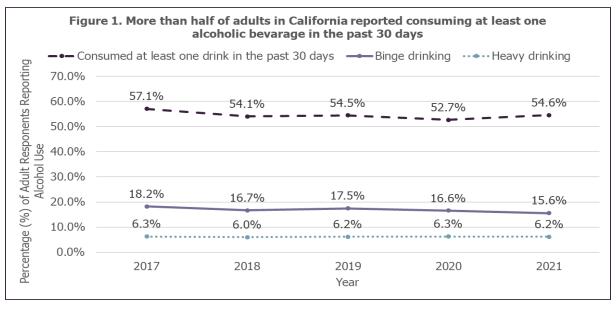
- Binge drinking, which is defined as consuming 4 or more drinks on one occasion for females and 5 or more drinks consumed on one occasion for males (one occasion= 2-3 hours)¹
- Heavy drinking, which is defined as consuming 8 or more drinks per week for females and 15 or more drinks consumed per week for males¹
- Any drinking while pregnant
- Any drinking by those under 21 years of age

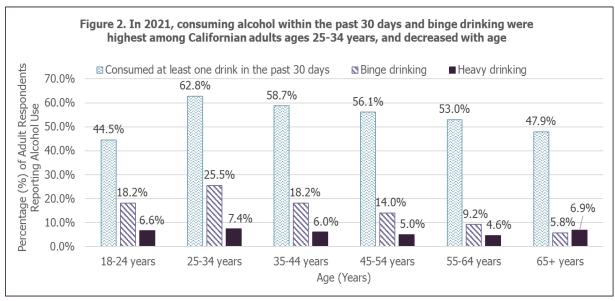
Adult Drinking Patterns

In 2021, more than half (55%) of adults reported consuming at least one alcoholic beverage in the past 30 days, 16% reported binge drinking, and 6% reported that they drank heavily (Figure 1).

Overall, alcohol consumption was highest among adults ages 25 to 34 years in 2021.⁴ Past 30-day alcohol use and binge drinking decreased as age increased after 25-34 years of age (Figure 2).⁶

Males had consistently higher past 30-day alcohol use and binge drinking as compared to females from 2017 to 2021. Heavy drinking was similar among males and females from 2017 to 2021. Fifty-nine percent (59%) of males reported drinking alcohol in the past 30 days, 19% reported binge drinking, and 6% reported heavy drinking in 2021.⁶ Forty-nine percent (49%) of females reported drinking alcohol in the past 30 days, 11% reported binge drinking, and 7% reported heavy drinking in 2021.⁶





Harms Associated with Alcohol Use in Adults

Some harms associated with alcohol use are fully attributable (e.g., alcoholic liver disease, alcohol dependence), meaning that they occur entirely because of alcohol use and others are partially attributable to alcohol use (e.g., high blood pressure, various types of cancer such as breast cancer) where a portion of the specific cause is from alcohol use. Harms that are partially attributable to alcohol use are only currently calculated for deaths associated with excessive alcohol use, whereas estimates of emergency department visits and hospitalizations only include conditions that are fully attributable to alcohol use. Therefore, the emergency department visits, and hospitalization rates do not include all causes of alcohol-related harms.

Deaths from Excessive Alcohol Use

Fast Fact

An average of 18,984 adult California residents aged 20 and older died per year due to excessive alcohol use from 2020-2021. This represents a 20% increase in alcohol attributable deaths since 2018-2019 (15,791 deaths).^{7,8}

These deaths led to an average of 472,361 years of potential life lost per year, shortening the lives of those who died by an average of more than 25 years. ^{7,8}

Adults ages 50-64 years and 65 years and older had the greatest number of alcohol-attributable deaths per year (5,874 deaths and 6,721 deaths, respectively). ^{7,8}

Across all adult age groups, males accounted for 69% of all alcohol-attributable deaths, with the highest number of deaths occurring among males ages 50-64 (4,234 average deaths per year). The highest number of alcohol-attributable deaths among females occurred among those aged 65 and older (2,698 average deaths). ^{7,8}

Alcoholic liver disease was the leading cause of alcoholattributable deaths among adults ages 35 years and older (4,533 average deaths per year). ^{7,8}

Among adults aged 20–34 years, the leading cause of alcohol attributable deaths was other poisonings (780 average deaths per year), which indicate deaths involving another substance (e.g., drug overdoses) in addition to a high blood alcohol concentration (0.10 g/dL). ^{7,8}

What is Alcoholic Liver Disease?

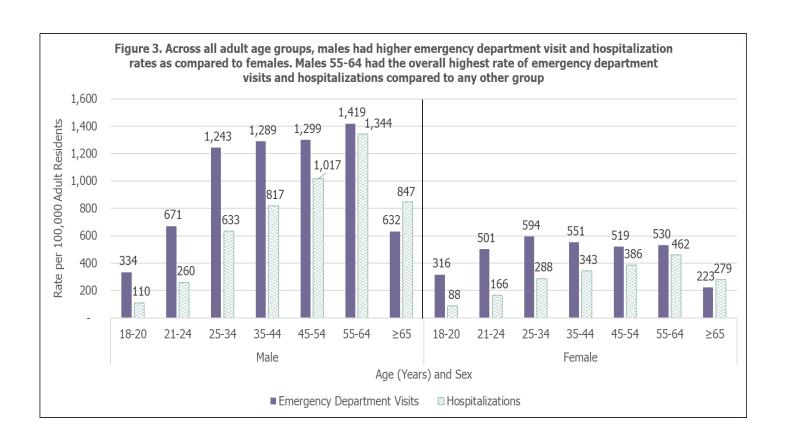
Alcoholic liver disease is an injury to the liver due to alcohol consumption. It covers a spectrum of disorders beginning from the fatty liver, progressing at times to alcoholic hepatitis and culminating in alcohol-related cirrhosis, which is the most severe stage of the disease.⁹

Alcohol-Related Emergency Department Visits and Hospitalizations

In 2021, there were 236,296 emergency department visits and 175,801 hospitalizations among adults aged 18 and older due to alcohol-related causes in California. Overall trends in 2021 were similar to 2020 trends.¹⁰

In 2021, adult males had higher rates of alcohol-related emergency department visits and hospitalizations as compared to females (Figure 3).¹⁰

- Males went to the emergency department at a rate of 1,072 visits per 100,000 residents and were hospitalized at a rate of 820 visits per 100,000 residents.
- Females went to the emergency department at a rate of 458 visits per 100,000 residents and were hospitalized at a rate of 319 visits per 100,000 residents.



In 2021, Black adult residents had the highest rates of alcohol-related emergency department visits and hospitalizations (see below: Tables 1a and 1b). ¹⁰ The differences in the rates may be explained, in part, by differences in emergency department utilization, access to routine care, and patient experience during care. Studies have shown that Black individuals are more likely than White individuals to report receiving routine healthcare in emergency departments and are less likely to report having a primary care provider. ¹¹

Table 1a. Emergency department visits counts and rates by race and ethnicity in California, 2021¹⁰

	Count	Crude Rate (per 100,000 adult residents)
American Indian/Alaska Native	1,310	951
Asian	5,479	129
Black	22,351	1,233
Hispanic	86,728	758
Multi-Racial	3,238	453
Native Hawaiian or Other	588	511
Pacific Islander		
White	103,936	829

Table 1b. Hospitalization counts and rates by race and ethnicity in California, 2021^{10}

	Count	Crude Rate (per 100,000 adult residents)
American Indian/Alaska Native	923	670
Asian	4,470	105
Black	17,185	948
Hispanic	59,969	524
Multi-Racial	2,127	297
Native Hawaiian or Other	476	414
Pacific Islander		
White	81,900	653

Alcohol Use Disorder

Alcohol use disorder (AUD) is a spectrum disorder that is characterized by an impaired ability to stop or control alcohol use despite adverse consequences. Severe AUD was previously referred to as alcoholism. AUD can have lasting changes on the brain. Most people who have an AUD, including a severe AUD, could benefit from specialized treatment.¹²

In 2021, 12% of adults aged 18 and older met the criteria for an alcohol use disorder.

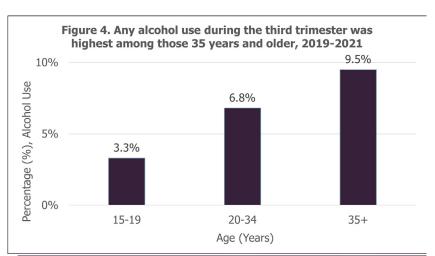
Among those who met the criteria for an alcohol use disorder, 11% of adults aged 18 years and over reported needing but not receiving treatment at a specialty facility for alcohol use in the past year.¹³

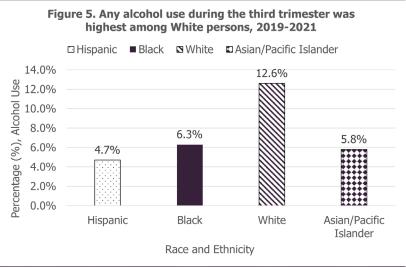
Exposure to Alcohol During Pregnancy

From 2019-2021, 7% of all pregnant people in California reported using alcohol in the third trimester. Alcohol use at all stages of pregnancy poses risks to the fetus. There is no known amount of alcohol use that is considered safe during pregnancy. It can cause miscarriage, stillbirth, and fetal alcohol spectrum disorders (FASDs). Children experiencing FASDs may experience learning disabilities, poor coordination, and a range of other physical, behavioral, and intellectual disabilities. The only way to prevent adverse birth outcomes and FASDs is to not drink alcohol while pregnant.

Any alcohol use during the third trimester in 2019-2021 was highest among those 35 years and older (10%; Figure 4).¹⁴

Any alcohol use during the third trimester in 2019-2021 was highest among White (13%) pregnant persons as compared to pregnant people of other racial or ethnic groups (Figure 5).¹⁴





For more data on alcohol use during pregnancy, check out the <u>Prenatal Substance Use</u> dashboard.

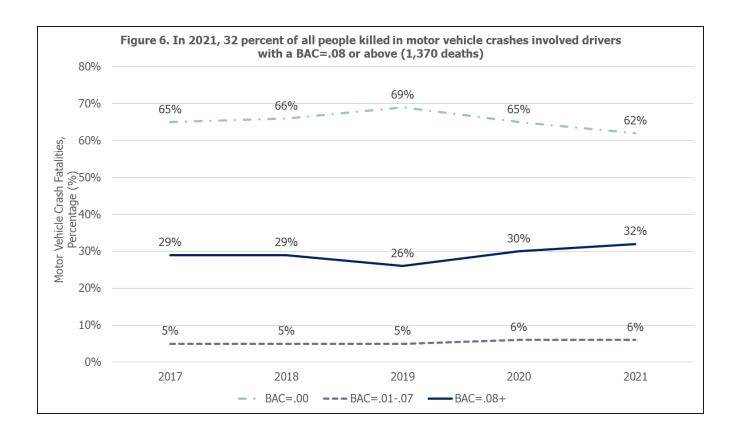
Alcohol-Related Motor Vehicle Crashes

The number of people killed in motor vehicle crashes involving a driver who had consumed alcohol (i.e., driver in crash with a blood alcohol concentration [BAC] of .01 or higher) increased 20 percent from 2017-2021 with 1,350 fatalities in 2017 and 1,619 fatalities in 2021.¹⁶

There was a 15% decrease in alcohol-related motor vehicle crash fatalities from 2017 (n=1,350) to 2019 (n=1,147). However, 2020 (n=1,400) saw an increase and return to numbers seen in previous years for alcohol-related motor vehicle crash fatalities (Figure 6). For more information about traffic injuries in California, please see the Crash Medical Outcomes Data Project.



Image Credit: Microsoft Stock Image



Public Health Recommendations

There are many actions that you can take to reduce the harms from excessive alcohol use:

- <u>2020-2025 Dietary Guidelines for Americans</u> recommends that adults choose not to drink or drink in moderation. If choosing to drink, limit intake to two drinks or less in a day for males and one drink or less in a day for females, on days when alcohol is consumed.
- Talk with your healthcare provider about your drinking behavior and request counseling if you drink too much.
- Choose not to serve or provide alcohol to those who should not be drinking, including those under 21 years of age, those who are already intoxicated, and those who are pregnant.
- There is no known safe amount of alcohol use during pregnancy or when trying to get pregnant
- To learn more about excessive alcohol use and access resources to help reduce the harms caused by excessive alcohol use, visit the <u>Alcohol Harms Prevention Initiative</u> webpage.

Effective Policies

The affordability, availability, and accessibility of alcohol affects how much people drink and the health-related harms of excessive use. To promote safe and healthy communities:

- Increase equitable access to screening for excessive alcohol use and treatment. Among those
 who use alcohol excessively, provide personalized feedback about the risks and consequences
 of excessive drinking, including referral to treatment if appropriate. One example of an
 electronic screening tool can be found here.
- Reduce affordability of alcohol. Increasing taxes on alcohol could provide revenue for community health initiatives. By making alcohol more expensive, people may purchase and drink less.
- Limit the number of places that sell alcohol and set them farther apart from each other. When there are many places that sell alcohol within a given area, excessive alcohol consumption, crime, and other problems can increase there.
- Restrict bars from serving alcohol to people who are intoxicated. One solution is to make it
 possible to hold bar owners legally responsible for car crashes or other harm caused by
 illegally served patrons.

To learn more about effective policies to reduce excessive alcohol use and its associated harms, check out the CDC's factsheet.

Getting Help

If you or someone you know needs help with their alcohol use, call SAMHSA's confidential, free, 24/7 National Hotline at 1-800-662-4357.

Call or text 988 if you or someone you're supporting is at risk for suicide or needs substance use or mental health support. A trained crisis counselor is available to help you 24/7 for free. You can also visit 988lifeline.org.

For more getting help resources, visit the <u>CDPH Getting Help webpage</u>.

References

- 1. Centers for Disease Control and Prevention (CDC). Alcohol Use and Your Health. Available at Alcohol Use and Your Health | CDC. Accessed April 14, 2023.
- 2. California Department of Public Health. Substance and Addiction Prevention Branch. Available at <u>Health Effects of Excessive Alcohol Use</u>. Accessed January 30, 2024.
- 3. Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., Jones, L., & Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. *The Lancet. Public health*, *2*(*8*), e356–e366. https://doi.org/10.1016/S2468-2667(17)30118-4
- 4. Esser MB, Pickens CM, Guy GP, Jr., et al. Binge drinking, other substance use, and concurrent use in the U.S., 2016-2018. *American Journal of Preventive Medicine* 2021;60:169–178.
- 5. White AM, Castle IP, Powell PA, et al. Alcohol-related deaths during the COVID-19 pandemic. *JAMA* 2022;327:1704–1706.
- 6. Centers for Disease Control and Prevention. BRFSS Prevalence & Trends Data. Available at: BRFSS Prevalence & Trends Data: Home | CDC. Accessed April 12, 2023.
- 7. Centers for Disease Control and Prevention. Alcohol Related Disease Impact (ARDI)
 Application. Available at: Alcohol-Related Disease Impact | CDC. Accessed April 14, 2023.
- 8. California Comprehensive Master Death File 2018, 2019, and 2020. California Comprehensive Death File (Static) Preliminary 2021.
- 9. Patel R, Mueller M. <u>Alcoholic Liver Disease</u>. [Updated 2022 Oct 24]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing. Accessed August 14, 2023.
- 10. California Department of Health Care Access and Information, Emergency Department Visit and Hospitalization Data, 2017-2021.
- 11. Parast, L., Mathews, M., Martino, S., Lehrman, W. G., Stark, D., & Elliott, M. N. (2022). Racial/Ethnic Differences in Emergency Department Utilization and Experience. *Journal of general internal medicine*, *37*(1), 49–56. https://doi.org/10.1007/s11606-021-06738-0

- 12. National Institute on Alcohol Abuse and Alcoholism. Health Topics: Alcohol Use Disorder. Available at: Health Topics: Alcohol Use Disorder | NIAAA. Accessed May 25, 2023.
- 13. Substance Abuse and Mental Health Services Administration (SAMHSA). National Survey on Drug Use and Health, 2021 (Preliminary). Available at: 2021 National Survey on Drug Use and Health: Model-Based Prevalence Estimates (50 States and the District of Columbia) | SAMHSA. Accessed April 21, 2023.
- 14. California Department of Public Health, Maternal and Child, and Adolescent Health Division. Prenatal Substance Use. Available at: <u>Data Dashboards: Prenatal Substance Use</u>. Accessed August 4, 2023.
- 15. Centers for Disease Control and Prevention. Alcohol Use During Pregnancy. Available at Alcohol Use During Pregnancy | CDC. Accessed April 20, 2023.
- 16. U.S. Department of Transportation. National Highway Traffic Safety Administration. Fatality Analysis Reporting System 2017-2020. Available at: <u>FARS Encyclopedia: States Alcohol (dot.gov)</u>. Accessed September 15, 2023.

Funding Source

This factsheet was supported by the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling \$166,667 annually with 100 percent funded by CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by CDC/HHS, or the U.S. Government.