# ALCOHOL



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## INTRODUCTION

In spring 2023, the Colorado State Epidemiological Outcomes Workgroup (SEOW) published this seven-part document as an overview of opioids, cannabis, alcohol, tobacco, and stimulant use and related harms in Colorado. Each substance is presented in its own profile, with demographics and mental health profiles provided for additional state context. The profiles were designed to be readily usable to all people working in fields related to substance use. They include many data sources and aim to present the most current and actionable findings.

This profile is a snapshot of alcohol consumption and health effects among Coloradans. Data are presented for adults and youth, with a special section on youth protective factors against alcohol use.

Certain considerations were taken into account in compiling these data, including time frame and the intended audience. First, the profiles contain all publicly available data. This ensures that anyone can access the original source for more information on any data point in the profile. It was also important to use a timespan in which the most complete data could be found within and across substances. Lag-time for data to become publicly available can vary widely. While the profiles were in development during the summer and fall of 2022, the most complete data were found and used for calendar year 2021. Exceptions include figures/charts featuring trend data prior to 2021, data collected biennially for which 2020 was the most recent year, and aggregate data when no single year yields a large enough sample size to make definitive statements.

All Healthy Kids Colorado Survey (HKCS) data presented are for public high school students, grades 9-12.

Each page includes data sources and years. For more detailed information on references, please see our references page.

The SEOW compiled the profiles with deliberate attention to our intended audience. They were designed to be practical and useful for all Coloradans who are interested in talking to others in their communities about substance use and related harms. This includes anyone from youth groups and community organizations to school superintendents and state legislators. The eight profiles can be used as stand-alone products or in conjunction with each other, as hard copy hand-outs or as a part of presentations.

WE STRONGLY RECOMMEND REVIEWING AND USING THE DEMOGRAPHICS AND MENTAL HEALTH PROFILES TO PROVIDE IMPORTANT CONTEXT TO DATA PRESENTED IN THE SUBSTANCE PROFILES.

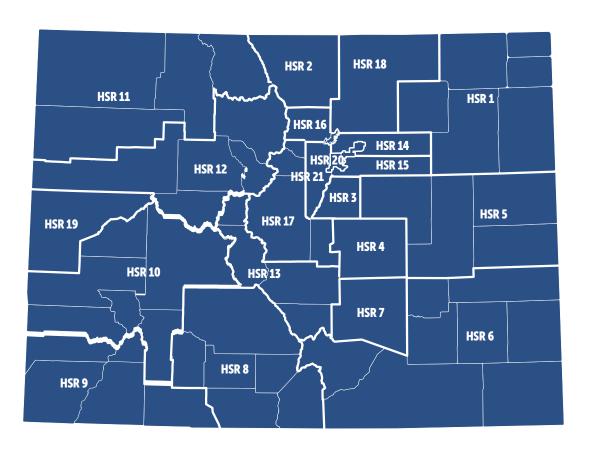
We hope the profiles facilitate conversation among Coloradans about the state of our state. For this reason, the profiles feature data from a variety of sources, include regional data when available, and introduce easily relatable use of benchmarks, such as national comparisons.

The SEOW partnered with The Evaluation Center - University of Colorado Denver on the development of the profiles, including the interpretation and visualization of data.

For more information, contact SEOW representative Sharon Liu (sharon.liu@state.co.us) at the Colorado Department of Public Health and Environment.

### Colorado is divided into 21 Health Statistics Regions (HSR)

The boundaries of these regions were developed by the Colorado Department of Public Health and Environment and local public health professionals and agencies based on demographic and statistical criteria. Data within Colorado are frequently collected and presented at the HSR level.



**HSR 2:** Larimer **HSR 3:** Douglas

HSR 7: Pueblo HSR 9: Archuleta, Delores, La Plata, HSR 10: Delta, Gunnison, Hinsdale, Montrose,

HSR 11: Jackson, Moffat, Rio Blanco, Routt HSR 12: Eagle, Garfield, Grand, Pitkin, Summit

**HSR 14:** Adams

**HSR 15:** Arapahoe

**HSR 16:** Boulder, Broomfield

HSR 18: Weld

HSR 19: Mesa

HSR 20: Denve **HSR 21:** Jefferson



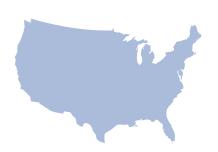
## ADULT CONSUMPTION

## Colorado per capita alcohol consumption is higher than the national average.





standard drinks per person/per year





standard drinks per person/per year **United States** 

Representative of the population over the age of 14.

#### WHAT IS A STANDARD DRINK?







1.5 fl oz 12 fl oz 5 fl oz REGULAR BEER TABLE WINE DISTILLED SPIRITS @ approx. 5% @ approx. 12% @ approx. 40% ABV **ABV ABV** 

Each beverage portrayed above represents one standard drink of "pure" alcohol, defined in the United States as 0.6 fl oz or 14 grams of alcohol. The percent of pure alcohol, expressed here as alcohol by volume (ABV), varies within and across beverage types. Although the standard drink amounts are helpful for following health guidelines, they may not reflect customary serving sizes.

39% of COLORADO ADULTS report **NOT DRINKING** in the past 30 days.

47% of ADULTS NATIONALLY report **NOT DRINKING** in the past 30 days.

## of Colorado adults **BINGE DRINK** Past 30-day prevalence

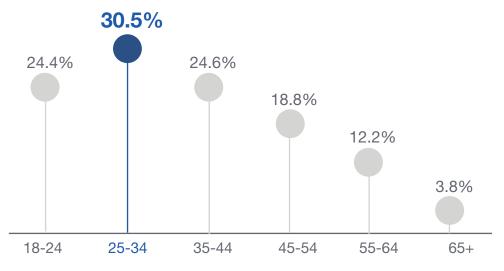
50% 40% 30% 20% **NATIONAL** 10%

In Colorado, MEN binge drink MORE THAN women.

BINGE DRINKING IS DEFINED AS HAVING FOUR OR MORE DRINKS ON ONE OCCASION FOR WOMEN AND FIVE OR MORE DRINKS ON ONE OCCASION FOR MEN.

Binge drinking is most common among 25-34 year olds.

Almost one third of Coloradans in this age group report binge drinking in the past 30 days a trend consistent with past years.

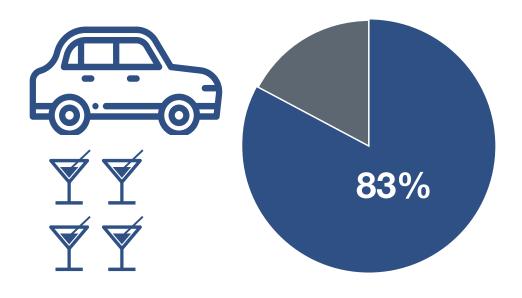


Current prevalence of binge drinking by age



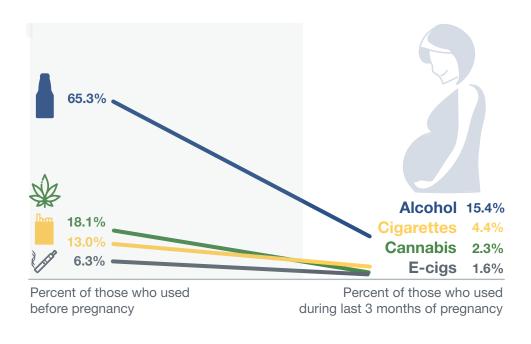
**Excessive drinking includes either HEAVY DRINKING** (eight or more drinks per week for women or 15 or more drinks per week for men), or BINGE DRINKING (four or more drinks for women or five or more drinks for men on one or more occasions in the past 30 days).

#### MANY ADULTS IN COLORADO WHO DRINK AND DRIVE ALSO BINGE DRINK.



In Colorado, of people who reported drinking and driving, 83% of them ALSO REPORTED **BINGE DRINKING.** 

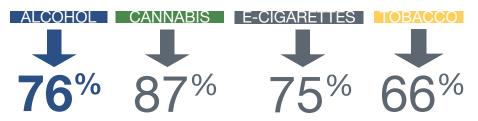
## Most of those who were pregnant in Colorado did not use any substance during the last 3 months of pregnancy in 2020.



20% 18% 14% 13% 5% 4% 5% 3% 3% 2% 2% 2% 2% 2% 15-20 21-25 36+ 26-30 31-35 Percent in each age range who used alcohol cannabis e-cigarettes cigarettes

during the last 3 months of pregnancy.

Alcohol use decreased 76% from before pregnancy to during the last 3 months of pregnancy.



According to the Health eMoms survey,

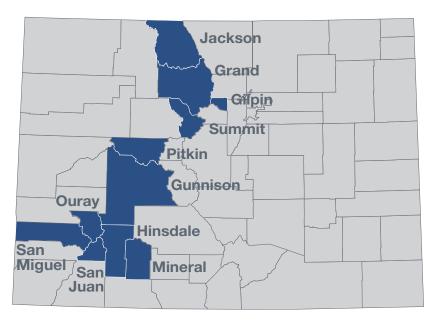
11.3% OF THOSE WHO ARE 12-14 MONTHS POSTPARTUM DRINK ALCOHOL TO COPE WHEN FEELING DOWN OR DEPRESSED.

Alcohol outlet density (AOD) is a measure of the physical availability of alcohol in a particular geographic area. Higher AOD is an environmental risk factor for excessive drinking and alcohol-related harms. Measuring AOD can be useful for monitoring the availability of alcohol in communities.



The Community Preventive Services Task Force recommends regulating alcohol outlet density as an evidence-based strategy for preventing excessive alcohol use. Identifying areas where alcohol outlet density is particularly high or increasing over time may guide prevention efforts.

Rural counties in the southwest, south central, and along the Rocky Mountain corridor have a higher alcohol outlet density per 10,000 residents but lower density per square mile than urban counties.\*



<sup>\*</sup>Alcohol outlet density measurements calculated using January 2020 licensee lists from the Colorado Department of Revenue-Liquor Enforcement Division and 2015-2019 American Community Survey population census estimates.

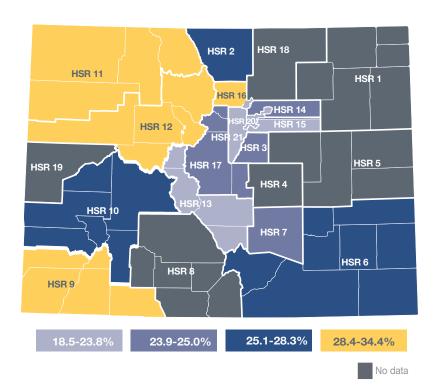




## YOUTH CONSUMPTION

MORE THAN THREE OF FOUR high school age youth in Colorado **DID NOT consume alcohol** in the past 30 days – a significant decrease from 2019.

OF YOUTH CURRENTLY USE ALCOHOL.

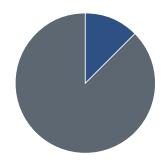


**CURRENT USE IS DEFINED AS HAVING AT LEAST 1 DRINK OF** ALCOHOL IN THE PAST 30 DAYS.

We cannot fully know the "why" behind youth substance use trends because the Healthy Kids Colorado Survey is a snapshot year-over-year rather than a longitudinal study that follows the same youth over time. What we know is schools were back in person in fall 2021 at the time of survey administration.

We observed decreases in sexual activity, decreases in participation in extracurricular activities and sports teams. and increases in parental monitoring — which all speaks to a continued, large-scale social disruption for young people at that time of the pandemic despite being back at school. We are very interested to see if these downward trends continue in 2023.

**12.5**% of youth report **BINGE DRINKING** in the past 30 days.



BINGE DRINKING IS DEFINED IN THE HEALTHY KIDS COLORADO SURVEY AS HAVING 5+ DRINKS WITHIN A COUPLE OF HOURS.

#### Early initiation

**USE BEFORE 13:** 

of Colorado students had their first drink of alcohol before age 13.



According to the National Institute on Drug Abuse (NIDA), "adolescence is a key window of vulnerability for using drugs and developing substance use disorders. The still-developing teenage brain is prone to act on impulse, take risks, and follow the influence of peers. Early intervention or treatment can prevent years of later problem drug use and keep young lives on a healthy track."

#### Access

**EASY TO GET ALCOHOL:** 

of Colorado students report that it would be "sort of easy" or "very easy" to get alcohol if they wanted.



The National Institute on Alcohol Abuse and Alcoholism states, "In many cases, adolescents have access to alcohol through family members or find it at home."

#### Perception of peer use

**INACCURATE PERCEPTIONS:** 

of Colorado students overestimate. how many of their peers drink.



Colorado students also overestimate how many of their peers use cannabis or e-cigarettes. Only 13% of students use cannabis although 40% of students thought five or more peers use. Similarly, only 16% use e-cigs although 50% of students thought five or more peers use.

NOTE: THESE HEALTHY KIDS COLORADO SURVEY RESULTS ARE REPRESEN-TATIVE OF YOUTH WHO ATTEND PUBLIC HIGH SCHOOLS IN COLORADO SOURCE: HEALTHY KIDS COLORADO SURVEY (HKCS), HIGH SCHOOL, 2021; NATIONAL INSTITUTE ON DRUG ABUSE, 2014; NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM, 2022

OF COLORADO STUDENTS THINK THEIR PARENT OR GUARDIAN WOULD FEEL IT IS WRONG IF THEY DRANK ALCOHOL REGULARLY.



OF COLORADO STUDENTS THINK PEOPLE WHO HAVE ONE OR TWO DRINKS NEARLY EVERY DAY HAVE MODERATE OR GREAT RISK OF HARM.

65%

OF COLORADO STUDENTS THINK IT IS WRONG FOR SOMEONE THEIR AGE TO DRINK ALCOHOL REGULARLY.

### USE OF ALCOHOL DIFFERS AMONG COLORADO YOUTH WHO REPORT THE PRESENCE OF PROTECTIVE FACTORS IN THEIR LIFE.

#### **AMONG STUDENTS WHO:**

have an adult to go to for help with a serious problem

22.4%

use alcohol

**COMPARED TO** 

26.9%

who do not report this protective factor.



feel they belong at school

21.4%

use alcohol

**COMPARED TO** 

27.6%

who do not report this protective factor.

think family has clear family rules

22.3%

use alcohol

**COMPARED TO** 

39.3%

who do not report this protective factor.



feel safe at school

22.9%

use alcohol

**COMPARED TO** 

29.7%

who do not report this protective factor.

have parents/guardians that ask if their homework is done

21.5%

use alcohol

**COMPARED TO** 

30.6%

who do not report this protective factor.





think their teacher notices when they're doing a good job and lets them know

19.7%

use alcohol

**COMPARED TO** 

29.2%

who do not report this protective factor.

## HARMFUL EFFECTS

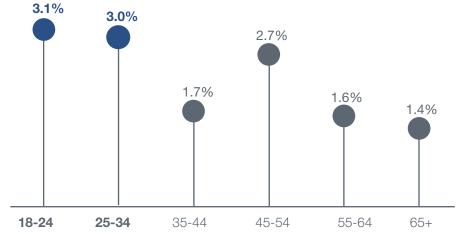


## 2.2% of Colorado adults DROVE AFTER HAVING TOO MUCH TO DRINK one or more times in the past 30 days in 2020.



ACCORDING TO THE COLORADO DEPARTMENT OF TRANSPORTATION, "THE PERCENTAGE OF ALCOHOL-INTOXICATED DRIVERS INVOLVED IN A FATAL CRASH INCREASED FROM 14.3% IN 2019 TO 15.7% IN 2020."

18-24 AND 25-34 YEAR OLDS HAVE THE HIGHEST PREVALENCE of drinking and driving in Colorado compared to all other age groups.



Prevalence of drinking and driving reported within the past 30 days in each age group

**COLORADO 2021:** 

22,577

TOTAL JUVENII F ARRESTS



JUVENILE ARRESTS FOR DRIVING UNDER THE INFLUENCE

JUVENILE ARRESTS FOR LIQUOR LAW VIOLATIONS

4.4% of Colorado students who report current alcohol use **DRANK AND DROVE ONE OR MORE TIMES** in the past 30 days.





#### 82.2%

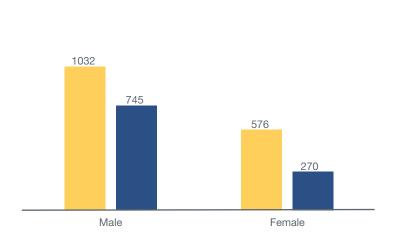
of Colorado students think ADULTS OVER 21 IN THEIR NEIGHBORHOOD THINK IT IS WRONG FOR KIDS TO DRINK ALCOHOL.

**56.7%** 

of Colorado students think PARENTS OR GUARDIANS WOULD CATCH THEM IF THEY DRANK ALCOHOL WITHOUT PERMISSION.

In Colorado from 2015-2019,

## 2,623 PEOPLE DIED PER YEAR DUE TO EXCESSIVE DRINKING



#### **ACUTE CAUSES**

causes (i.e., illness or injury) with a very short duration from the time of onset to the time of death such as alcohol poisoning, motor-vehicle traffic crashes, and suicide.

#### **CHRONIC CAUSES**

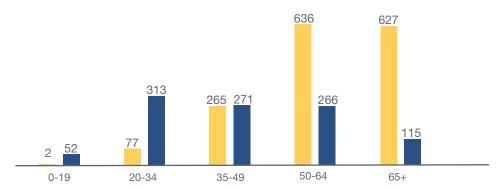
causes with a longer duration from the time of onset to the time of death such as alcohol abuse, alcoholic liver disease, and chronic pancreatitis.

#### NOTE: ARDI ESTIMATES FOR ALCOHOL-ATTRIBUTABLE DEATHS ARE AVERAGE DEATHS PER YEAR.

## 50-64 year-olds had the most

#### CHRONIC ALCOHOL ATTRIBUTABLE DEATHS

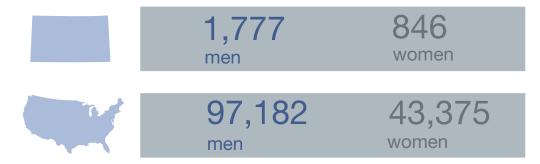
per year due to excessive drinking from 2015-2019.



Number of **chronic** and **acute** alcohol attributable deaths by age

#### From 2015-2019, MORE THAN 2X AS MANY MALES

as females died from alcohol-attributable causes, which is consistent with national trends.



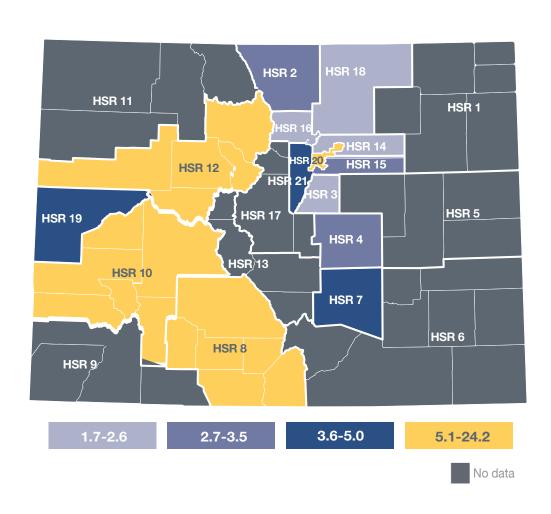
## The state average rate of

### **EMERGENCY DEPARTMENT VISITS**

## **DUE TO ALCOHOL POISONING**

### was 3.3 visits

per 100,000 people in 2021.

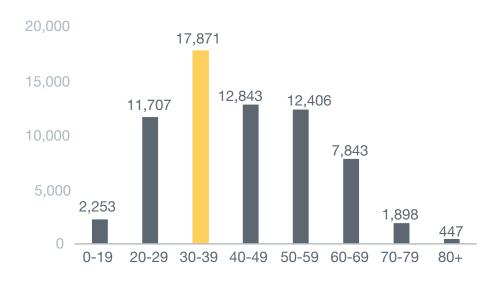


From 2019-2021,
HSRs 8, 10, 12, AND
20 HAD THE HIGHEST
RATES OF EMERGENCY
DEPARTMENT VISITS
DUE TO ALCOHOL
POISONING, at 24.2, 6.5,
6.8, and 5.3 respectively.
The state average over
the same period was 3.8
per 100,000 people.

The following emergency department (ED) data are based on any diagnosis of a 100% alcohol-attributable code or condition. Cases are non-fatal and do not capture alcohol-related codes that are not 100% attributed to alcohol, such as some cancers or injuries where alcohol was a contributing factor. Data are counts of ED visits, not unique patients. Each visit is only counted once, even if it included more than one alcohol-related diagnosis.

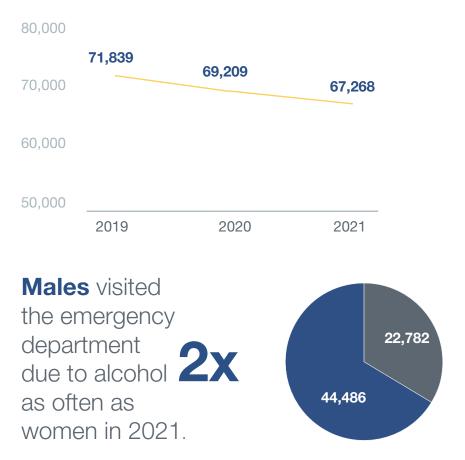
4% of emergency department visits were alcohol-attributable in 2021.

Coloradans, ages 30-39, had the most alcohol-attributable emergency visits in 2021.



## Alcohol-attributable emergency department visits declined

from 2019 to 2021.



Emergency Department visits based on 2021 Colorado Hospital Association data where an alcohol-related diagnosis was listed in at least one of the 30 diagnosis fields and the patient's state of residence is listed as Colorado. Alcohol-related diagnoses (100% alcohol attributable) include ICD10-CM codes: E24.4, F10.1[0-2,4-5,8-9], F10.2[0-9], F10.9[2,4-9], G31.2, G62.1, G72.1, I42.6, K29.2[0-1], K70.0, K70.1[0-1], K70.2, K70.3[0-1], K70.2, K70.3[0-1], K70.9, K85.2[0-2], K86.0, O35.4XX[0-5,9], O99.31[0-5], P04.3, Q86.0, T51.0X[1A-4S], T51.9[1-4,XA-XS], Y90.4, Y90.5, Y90.6, Y90.7, Y90.8)

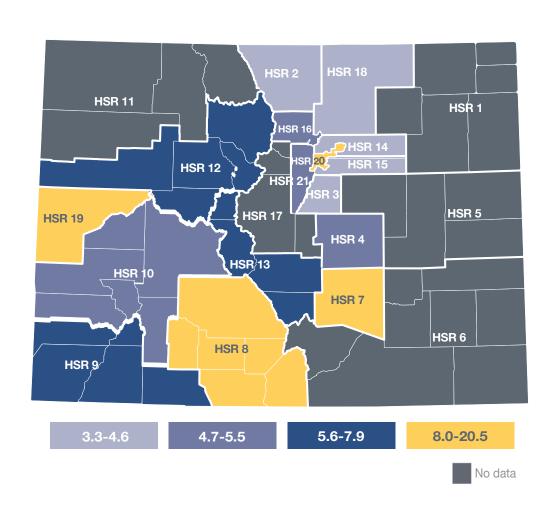
## The state average rate of

## **HOSPITAL ADMISSIONS**

### **DUE TO ALCOHOL POISONING**

## was 4.8 visits

per 100,000 people in 2021.



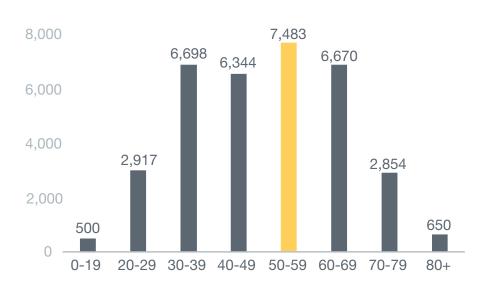
From 2019-2021,
HSRs 7, 8, 19 AND 20
HAD THE HIGHEST
RATES OF HOSPITAL
ADMISSIONS
DUE TO ALCOHOL
POISONING

at 13.2, 20.5, 8.3, and 11.9 respectively. The state average over the same period was 6.0 per 100,000 people.

The following hospital admissions data are based on any diagnosis of a 100% alcohol-attributable code or condition. Cases are non-fatal and do not capture alcohol-related codes that are not 100% attributed to alcohol, such as some cancers or injuries where alcohol was a contributing factor. Data are counts of hospital admissions, not unique patients. Each visit is only counted once, even if it included more than one alcohol-related diagnosis.

## 8% of hospital admissions were alcohol-attributable in 2021.

Coloradans, ages 50-59, had the most alcohol-attributable hospital admissions in 2021.



## Alcohol-attributable hospital admissions remained steady from 2019 to 2021.

40,000 32,500 34,203 34,116

33,<u>509</u> 34,203 34,116

20,000 2019 2020 2021

Males were admitted to the hospital due to alcohol almost as often as women in 2021.

11,514

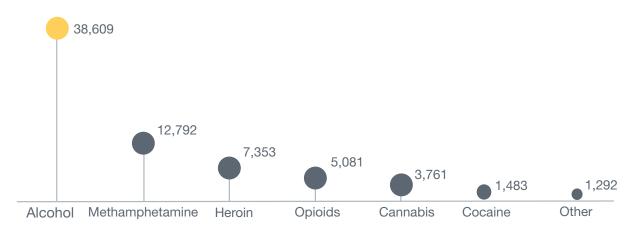
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# TREATMENT

#### MORE COLORADANS SEEK TREATMENT FOR ALCOHOL

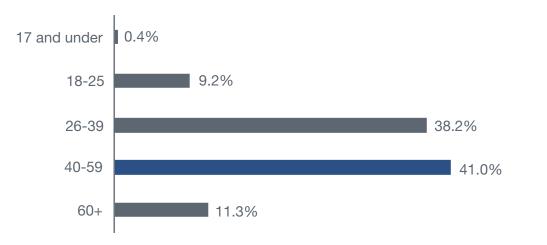
than for any other substance.



Primary substance reported at treatment admission

#### **40-59 YEAR OLDS**

ARE THE LARGEST AGE GROUP OF COLORADANS SEEKING TREATMENT FOR ALCOHOL USE DISORDER.



In the U.S. in 2021 10.6% of people 12 and older had an ALCOHOL

**USE DISORDER.** 

#### In Colorado

The median age of people seeking treatment for alcohol use disorder is 40 years old.

Among these people, on average they started using alcohol at age 17.

Treatment admissions refer to facilities licensed by the Colorado Behavioral Health Administration and do not include clients who received service through private pay, third party insurance providers, or non-Behavioral Health Administration licensed facilities.

KEY TERMS	
Acute causes of alcohol- related deaths	Acute causes include but are not limited to alcohol poisoning, fall injuries, motor-vehicle crashes, and firearm injuries. For a full list see the Centers for Disease Control and Prevention: Alcohol-Related Disease Impact (ARDI).
Alcohol impaired driving	Drivers who tested at Blood Alcohol Content (BAC) at greater than or equal to .08
Alcohol use disorder	Alcohol Use Disorder (AUD) is defined as meeting criteria for alcohol dependence or abuse based on definitions found in the 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V). AUD is a medical condition characterized by an impaired ability to stop or control alcohol use despite adverse social, occupational, or health consequences.
Average	A calculated central value of a set of numbers
Binge drinking	The National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines binge drinking as four or more drinks for a woman or five or more drinks for a man on an occasion during the past 30 days.
Chronic causes of alcohol related deaths	Chronic causes include but are not limited to alcoholic liver disease, chronic hepatitis, fetal alcohol syndrome, and liver cirrhosis. For a full list see the Centers for Disease Control and Prevention: Alcohol-Related Disease Impact (ARDI).
Excessive Drinking	Dietary Guidelines for Americans ( <a href="www.dietaryguidelines.gov">www.dietaryguidelines.gov</a> ) defines excessive drinking as engaging in either binge drinking (four or more [women] or five or more [men] drinks on one occasion in the past 30 days) OR chronic drinking (eight or more [women] or 15 or more [men] drinks per week).
Health Statistics Region	A geographic grouping based on demographic profiles and statistical criteria. Colorado has 21 Health Statistics Regions which correspond with existing county boundaries.
Healthy People 2030	Created by the U.S. Department of Health and Human Services, Healthy People 2030 provides data-driven national objectives to improve health and well-being over the next decade.
Liquor Law Violations	Can include sale to minors, sale to intoxicated person, and minor in possession. Liquor enforcement laws, rules, and regulations are published by the Office of the Secretary of State in the Colorado Code of Regulations.
Per capita	Per person
Prevalence	The proportion of a population who have specific characteristics in a given time period. Prevalence may be reported as a percentage (5%, or 5 people out of 100), or as the number of cases per 10,000 or 100,000 people.
Proportion	A proportion is a type of ratio that relates a part to a whole. For example, "One in five people" compares one person within a group to the whole group of people. This is equivalent to "four in twenty people" or "twenty in one hundred people."
Protective Factors	Characteristics within the individual or conditions in the family, school or community that help someone cope successfully with life challenges.
Quartile	A group that contains 25% of the data set
Ranking	Relative position
Rate	The ratio between two related quantities
Risk Factors	Characteristics within the individual or conditions in the family, school, or community that increase the likelihood someone will engage in unhealthy behaviors.
Significance	The probability is less than .05 that the difference or relationship happened by chance



We appreciate your feedback!

Click here or scan above to let us know what you think.



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