

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.

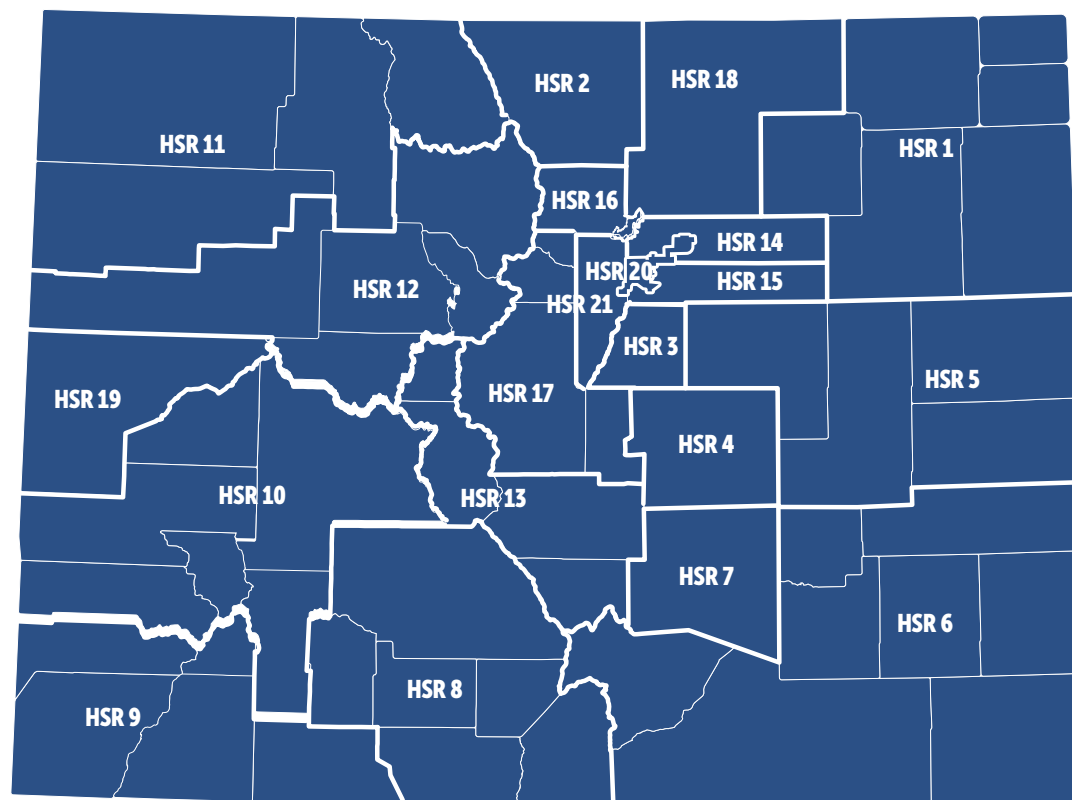
We hope the profiles facilitate conversation among Coloradans about the state of our state. For this reason, the profiles feature data from a variety of sources, include regional data when available, and introduce easily relatable use of benchmarks, such as national comparisons.

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 1: Logan, Morgan, Phillips, Sedgwick, Washington, Yuma
HSR 2: Larimer
HSR 3: Douglas
HSR 4: El Paso
HSR 5: Cheyenne, Elbert, Kit Carson, Lincoln

HSR 6: Baca, Bent, Crowley, Huerfano, Kiowa, Las Animas, Otero, Prowers
HSR 7: Pueblo
HSR 8: Alamosa, Conejos, Costilla, Mineral, Rio Grande, Saguache
HSR 9: Archuleta, Delores, La Plata, Montezuma, San Juan

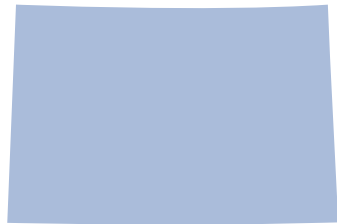
HSR 10: Delta, Gunnison, Hinsdale, Montrose, Ouray, San Miguel
HSR 11: Jackson, Moffat, Rio Blanco, Routt
HSR 12: Eagle, Garfield, Grand, Pitkin, Summit
HSR 13: Chaffee, Custer, Fremont, Lake
HSR 14: Adams
HSR 15: Arapahoe

HSR 16: Boulder, Broomfield
HSR 17: Clear Creek, Gilpin, Park, Teller
HSR 18: Weld
HSR 19: Mesa
HSR 20: Denver
HSR 21: Jefferson

ADULT CONSUMPTION



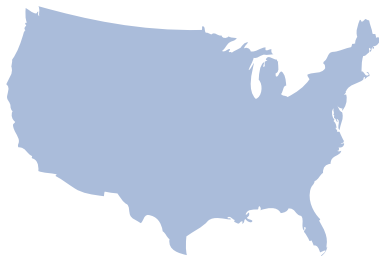
Colorado per capita alcohol consumption is **higher** than the national average.



645

standard drinks per person/per year

Colorado



536

standard drinks per person/per year

United States

Representative of the population over the age of 14.

WHAT IS A STANDARD DRINK?



12 fl oz

REGULAR BEER

@ approx. 5% ABV



5 fl oz

TABLE WINE

@ approx. 12% ABV



1.5 fl oz

DISTILLED SPIRITS

@ approx. 40% 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.

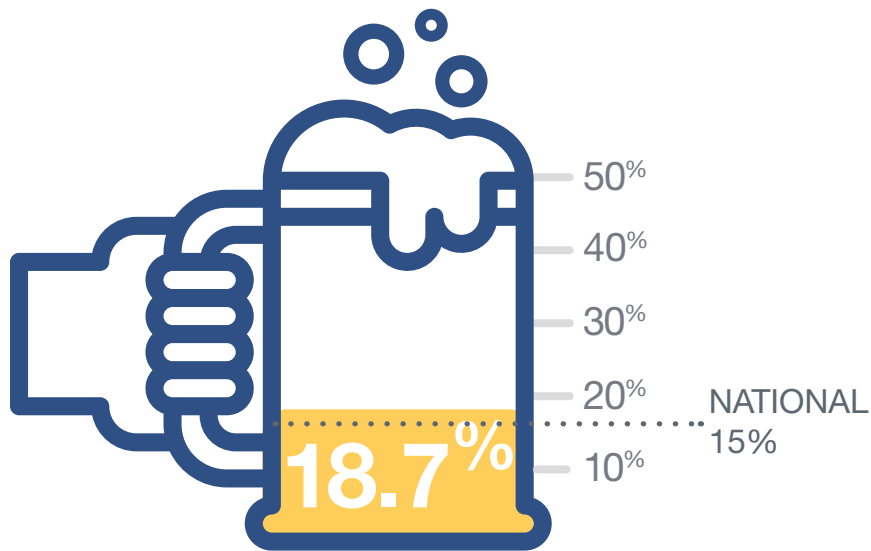
39% of COLORADO ADULTS report **NOT DRINKING** in the past 30 days.

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

SOURCES: NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM, 2020; BEHAVIORAL RISK FACTORS SURVEILLANCE SYSTEM (BRFSS), 2021; CENTERS FOR DISEASE CONTROL AND PREVENTION, 2022

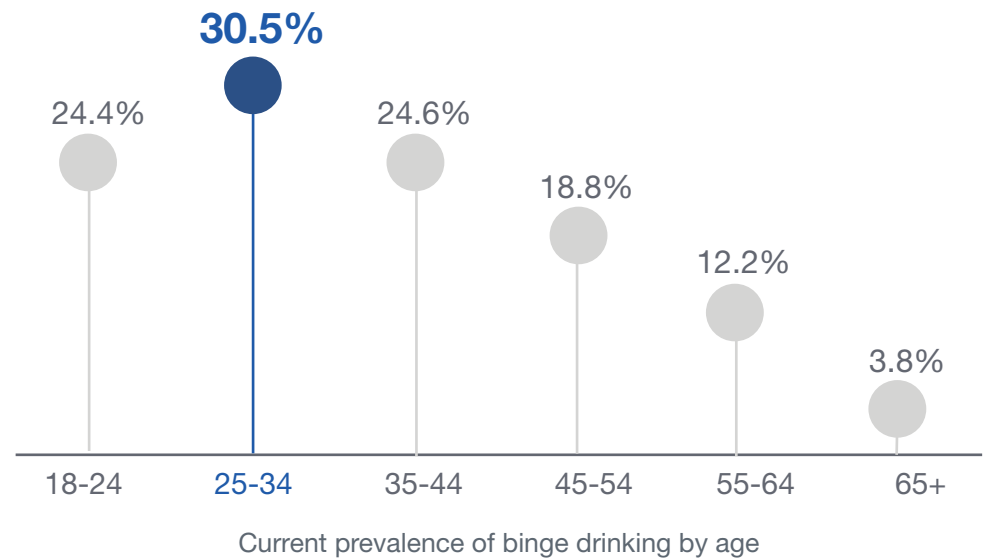
19% of Colorado adults
BINGE DRINK
Past 30-day prevalence

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.

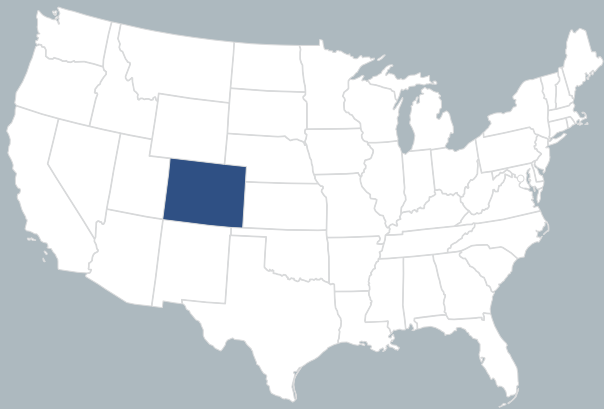


In Colorado, **MEN** binge drink **MORE THAN** women.

23% of
men

14% of
women

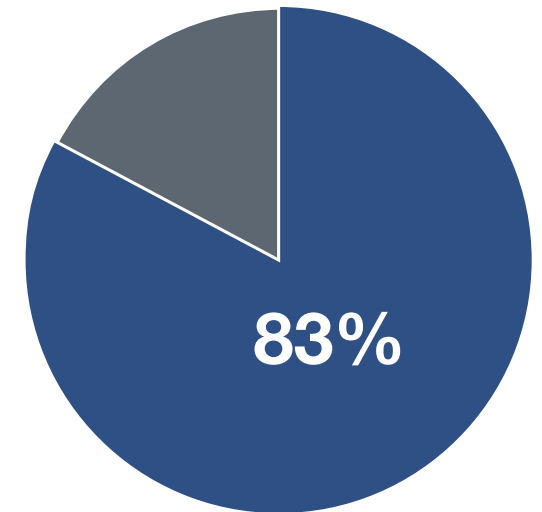
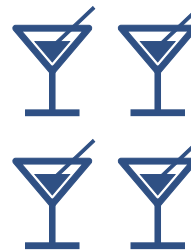
Colorado has the
9TH
 HIGHEST RATE



of
 EXCESSIVE DRINKING.

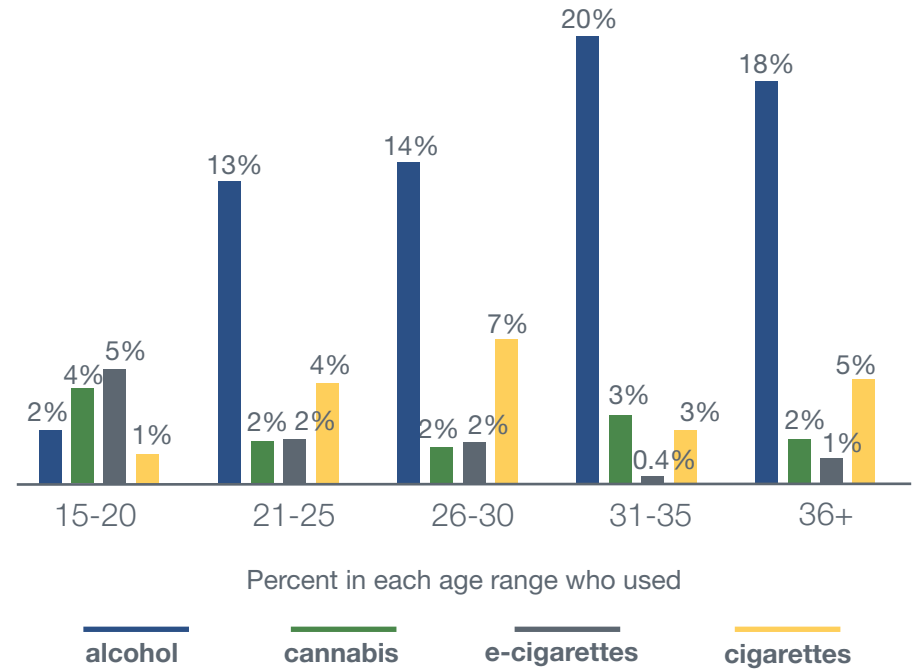
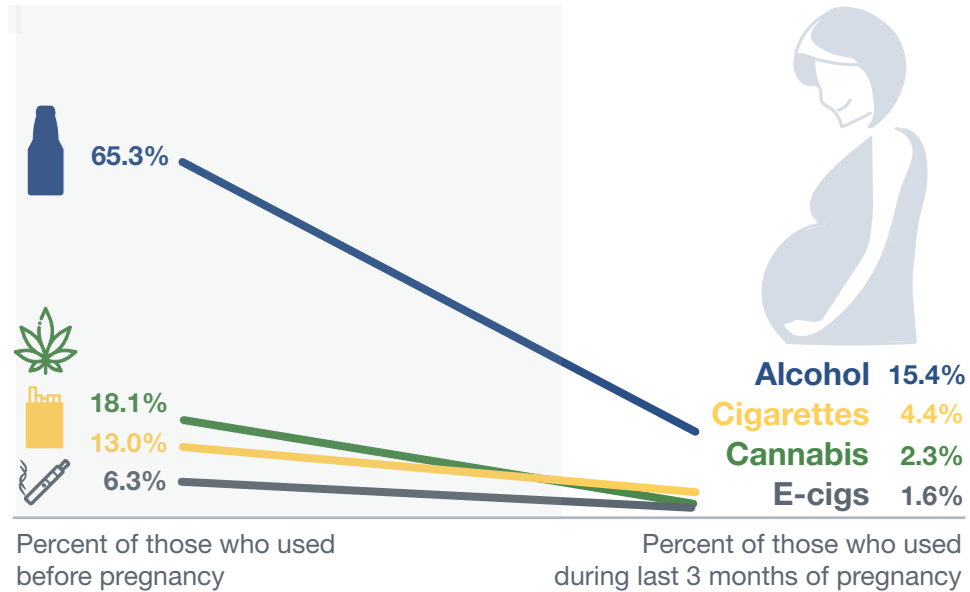
Excessive drinking includes either **HEAVY DRINKING** (eight or more drinks per week for women or 15 or more drinks per week for men), or **BINGE DRINKING** (four or more drinks for women or five or more drinks for men on one or more occasions in the past 30 days).

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.**

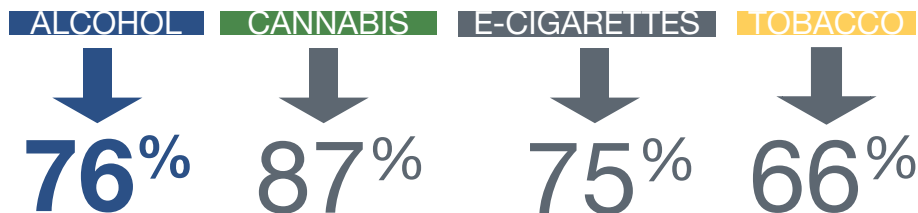
Most of those who were pregnant in Colorado did not use any substance during the last 3 months of pregnancy in 2020.



Percent in each age range who used

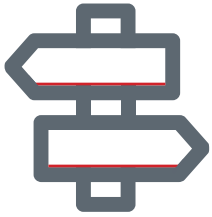
during the last 3 months of pregnancy.

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



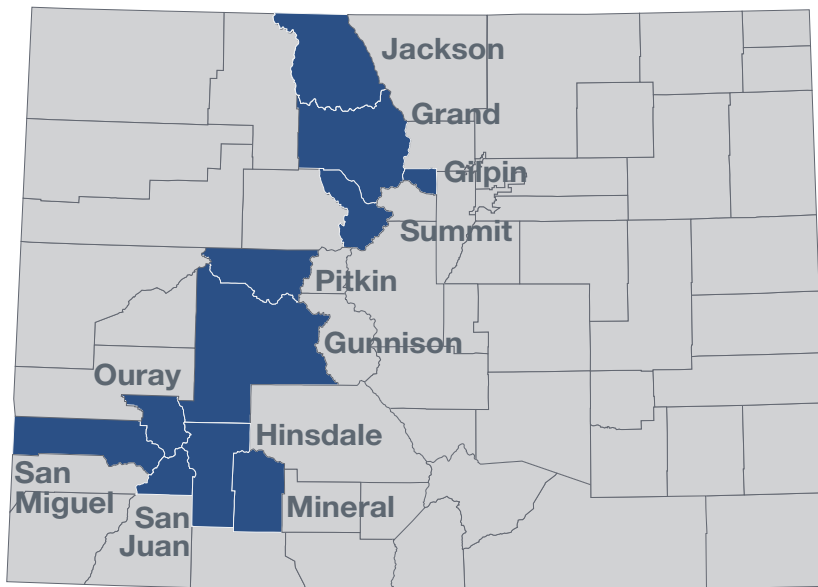
According to the Health eMoms survey, **11.3%** OF THOSE WHO ARE 12-14 MONTHS POSTPARTUM DRINK ALCOHOL TO COPE WHEN FEELING DOWN OR DEPRESSED.

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.*



*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.



Colorado's
alcohol outlet
density in 2020
was

22

alcohol retail outlets
per 10,000 CO
residents.*

In 2020,
Denver County
had about 29 alcohol
outlets per 10,000
residents and 13
alcohol outlets
per square mile,
representing the

**highest alcohol outlet
density among urban
counties that year.***

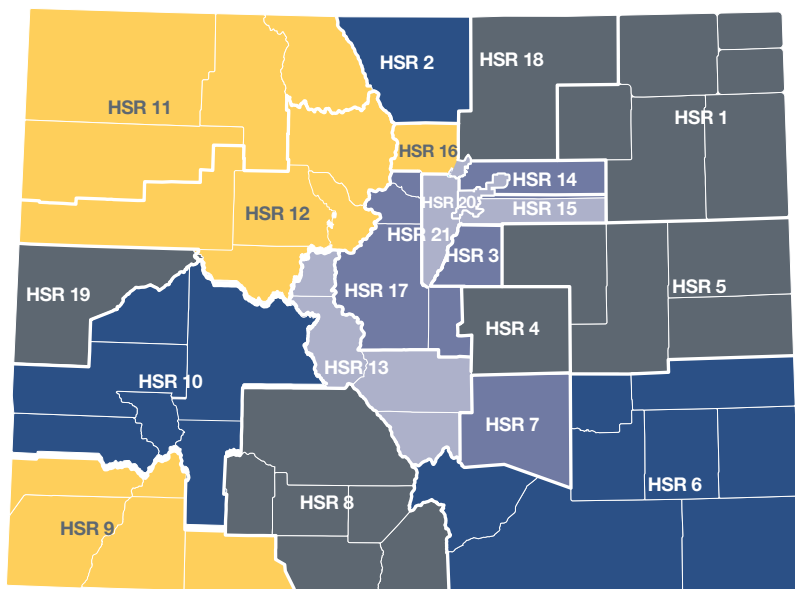
YOUTH CONSUMPTION



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.

24%

OF YOUTH CURRENTLY USE ALCOHOL.



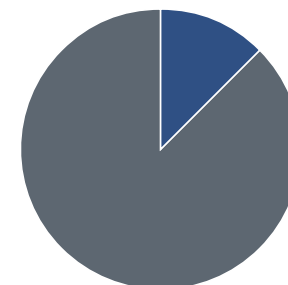
■ No data

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.

NOTE: THESE HEALTHY KIDS COLORADO SURVEY RESULTS ARE REPRESENTATIVE OF YOUTH WHO ATTEND PUBLIC HIGH SCHOOLS IN COLORADO

SOURCE: HEALTHY KIDS COLORADO SURVEY (HKCS), HIGH SCHOOL, 2021

Early initiation

USE BEFORE 13:

15%

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:

53%

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:

34%

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 REPRESENTATIVE 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

84%

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



80%

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.

NOTE: THESE HEALTHY KIDS COLORADO SURVEY RESULTS ARE REPRESENTATIVE OF YOUTH WHO ATTEND PUBLIC HIGH SCHOOLS IN COLORADO
SOURCE: HEALTHY KIDS COLORADO SURVEY (HKCS), HIGH SCHOOL, 2021

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



COMPARED TO



who do not report this protective factor.



think family has clear family rules



COMPARED TO



who do not report this protective factor.



have parents/guardians that ask if their homework is done



COMPARED TO



who do not report this protective factor.



feel they belong at school



COMPARED TO



who do not report this protective factor.

feel safe at school



COMPARED TO



who do not report this protective factor.

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



COMPARED TO



who do not report this protective factor.

NOTE: THESE HEALTHY KIDS COLORADO SURVEY RESULTS ARE REPRESENTATIVE OF YOUTH WHO ATTEND PUBLIC HIGH SCHOOLS IN COLORADO

SOURCE: HEALTHY KIDS COLORADO SURVEY (HKCS), HIGH SCHOOL, 2021

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.



In 2021 in Colorado there were

879

MOTOR VEHICLE FATALITIES

Out of this total,

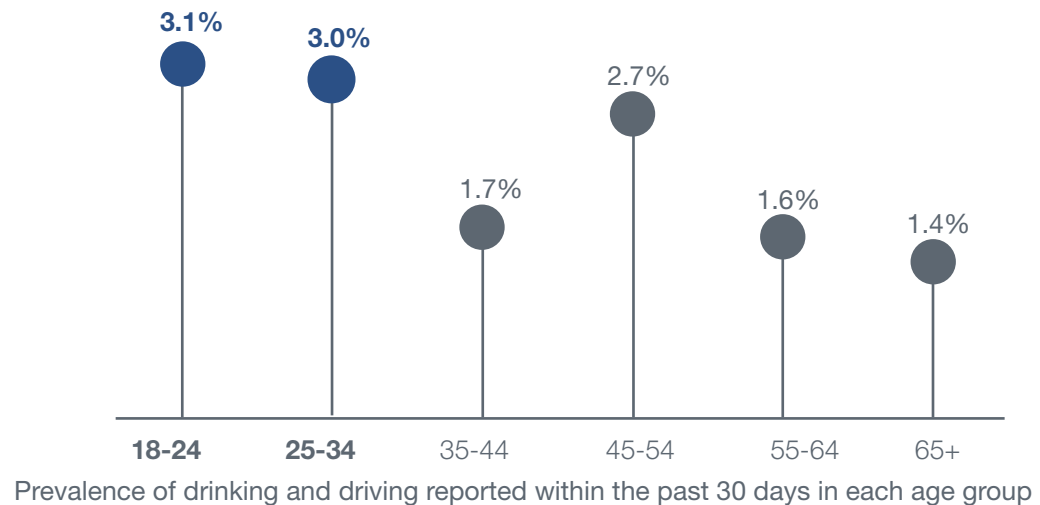
22%

WERE ALCOHOL-IMPAIRED DRIVER-RELATED FATALITIES.



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.



COLORADO 2021:

22,577

TOTAL JUVENILE ARRESTS



231 JUVENILE ARRESTS FOR DRIVING UNDER THE INFLUENCE

1,109 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.**

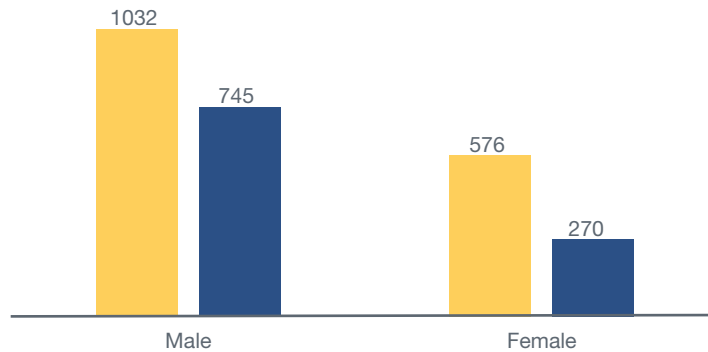
NOTE: THESE HEALTHY KIDS COLORADO SURVEY RESULTS ARE REPRESENTATIVE OF YOUTH WHO ATTEND PUBLIC HIGH SCHOOLS IN COLORADO

SOURCES: HEALTHY KIDS COLORADO SURVEY (HKCS), HIGH SCHOOL, 2021; COLORADO DEPARTMENT OF PUBLIC SAFETY, 2021

For questions about this profile, please contact the SEOW | 17

In Colorado from 2015-2019,

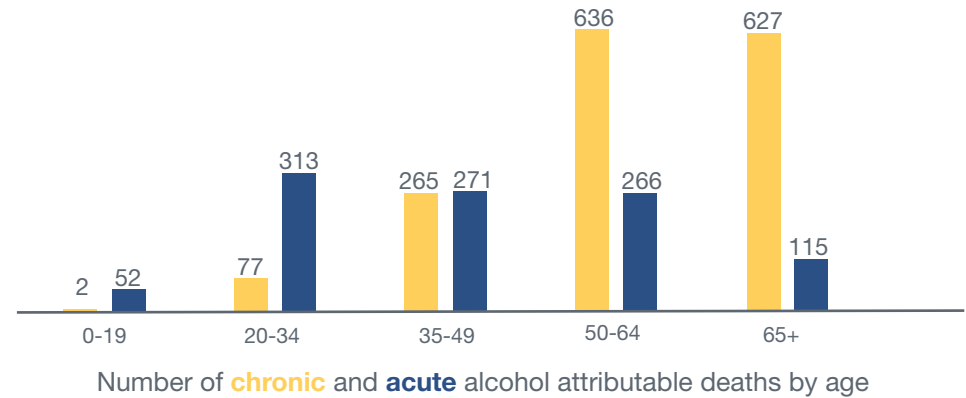
2,623 PEOPLE DIED PER YEAR
DUE TO EXCESSIVE DRINKING



● 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.

50-64 year-olds had the most
CHRONIC ALCOHOL ATTRIBUTABLE DEATHS
per year due to excessive drinking from 2015-2019.



From 2015-2019,
MORE THAN 2X AS MANY MALES
as females died from alcohol-attributable causes,
which is consistent with national trends.



1,777
men

846
women



97,182
men

43,375
women

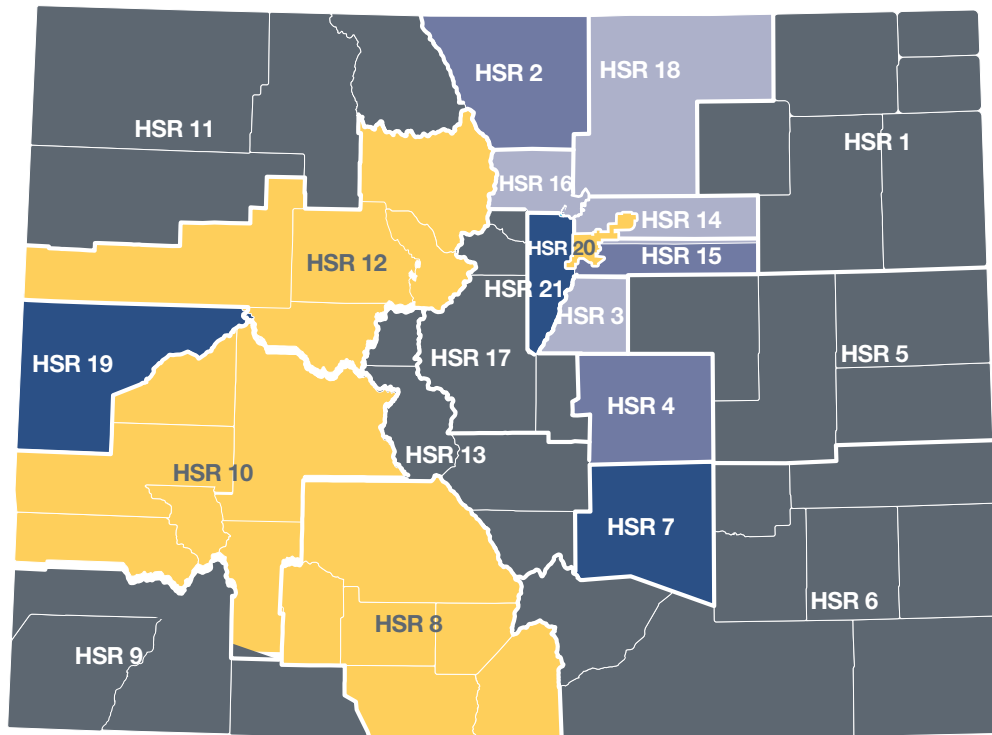
NOTE: ARDI ESTIMATES FOR ALCOHOL-ATTRIBUTABLE DEATHS ARE AVERAGE DEATHS PER YEAR.

SOURCE: ALCOHOL-RELATED DISEASE IMPACT (ARDI) APPLICATION, 2015-2019

For questions about this profile, please contact the SEOW | 18

The state average rate of
EMERGENCY DEPARTMENT VISITS
DUE TO ALCOHOL POISONING

was 3.3 visits
 per 100,000 people in 2021.



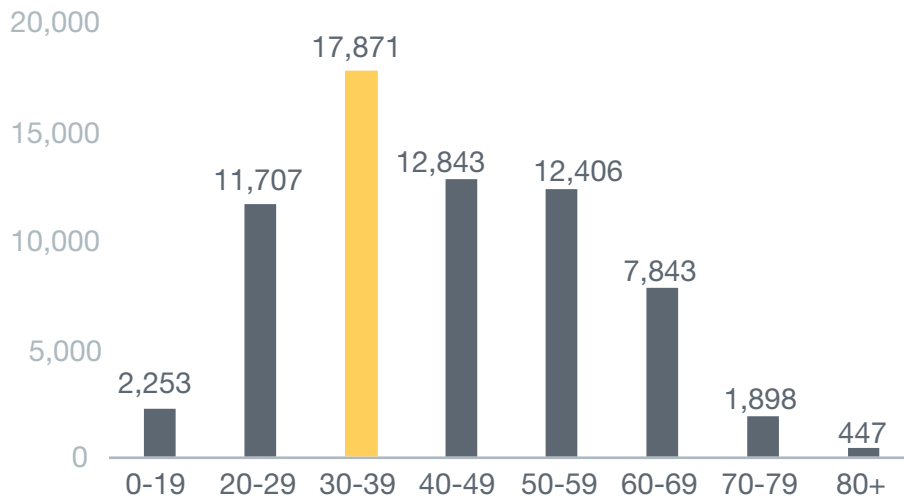
No data

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.

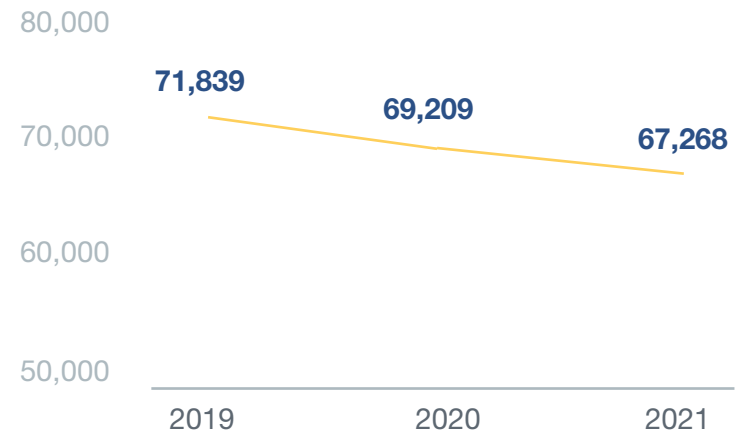
The following emergency department (ED) data are based on any diagnosis of a 100% alcohol-attributable code or condition. Cases are non-fatal and do not capture alcohol-related codes that are not 100% attributed to alcohol, such as some cancers or injuries where alcohol was a contributing factor. Data 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.

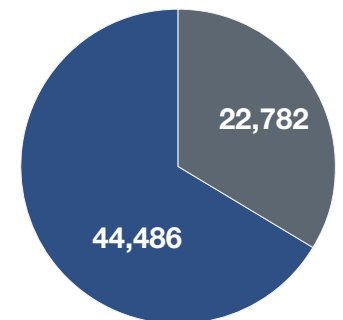
Coloradans, **ages 30-39**, had the most alcohol-attributable emergency visits in 2021.



Alcohol-attributable emergency department visits declined from 2019 to 2021.



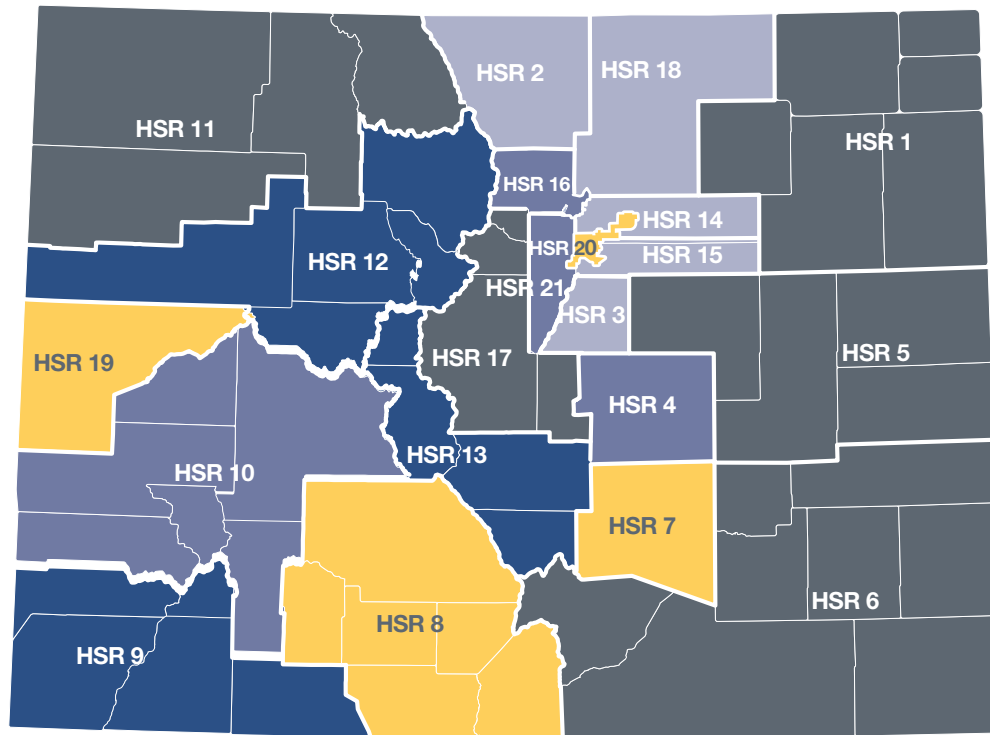
Males visited the emergency department due to alcohol **2x** as often as women in 2021.



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], K70.4[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.



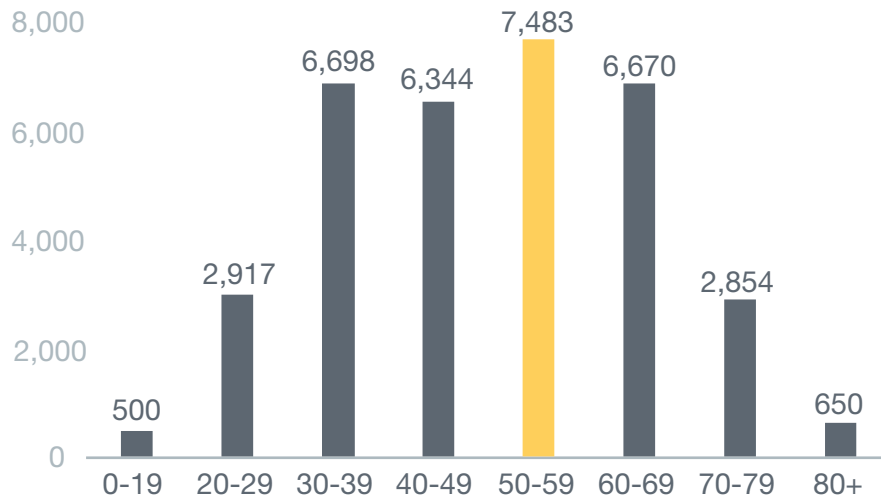
No data

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.

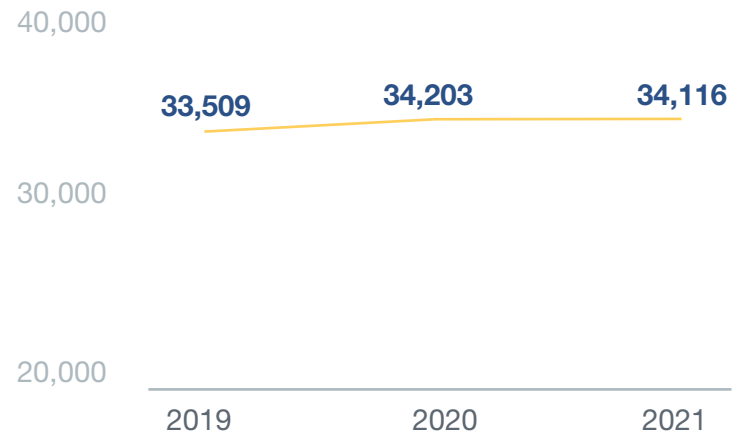
The following hospital admissions data are based on any diagnosis of a 100% alcohol-attributable code or condition. Cases are non-fatal and do not capture alcohol-related codes that are not 100% attributed to alcohol, such as some cancers or injuries where alcohol was a contributing factor. Data are 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.

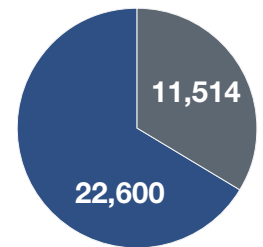
Coloradans, **ages 50-59**, had the most alcohol-attributable hospital admissions in 2021.



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



Males were admitted to the hospital due to alcohol almost **2x** as often as women in 2021.



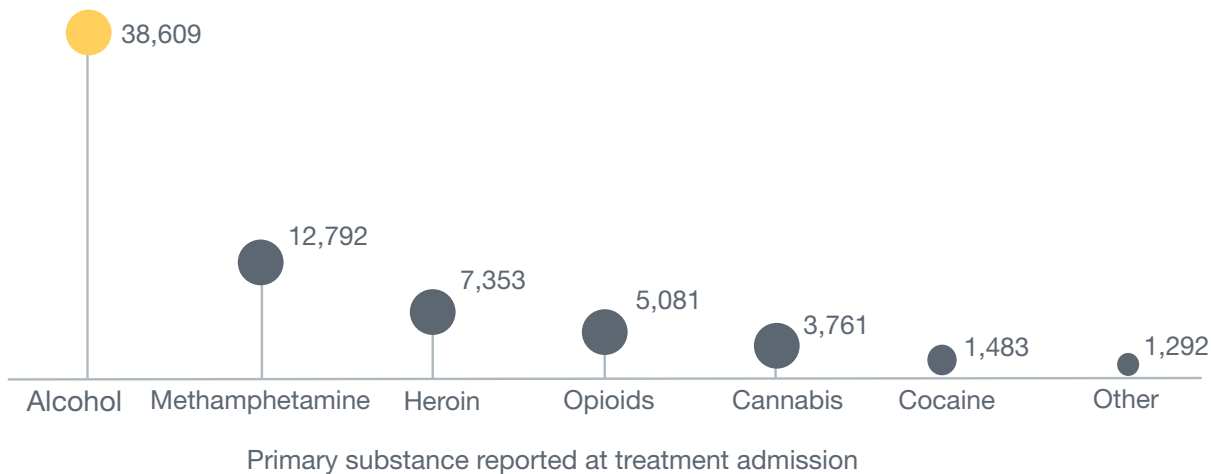
Emergency Department visits based on 2021 Colorado Hospital Association data where an alcohol-related diagnosis was listed in at least one of the 30 diagnosis fields and the patient's state of residence is listed as Colorado. Alcohol-related diagnoses (100% alcohol attributable) include ICD10-CM codes: 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], K70.4[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)



TREATMENT

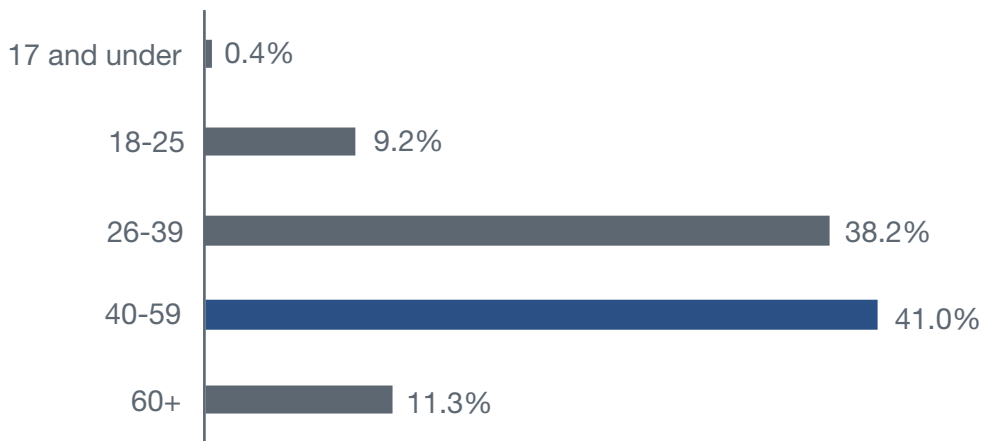
MORE COLORADANS SEEK TREATMENT FOR ALCOHOL

than for any other substance.



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 (www.dietaryguidelines.gov) 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



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