STIMULANTS



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INTRODUCTION

INTRODUCTION **Stimulants**

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 stimulant misuse and health effects among Coloradans. Data are presented for adults and youth, with a special section on youth protective factors against stimulant misuse.

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.

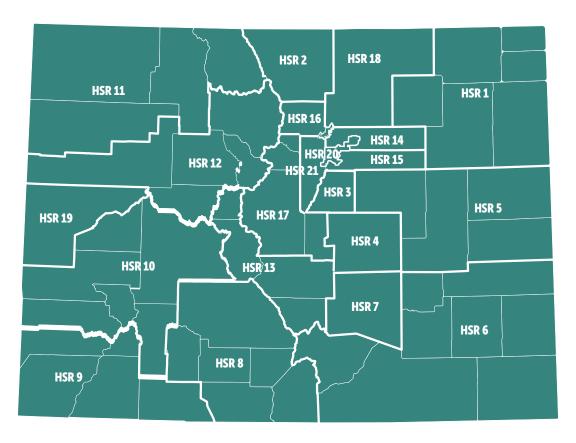
We hope the profiles facilitate conversation among Coloradans about the state of our state. For this reason, the profiles feature data from a variety of sources, include regional data when available, and introduce easily relatable use of benchmarks, such as national comparisons.

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 11: Jackson, Moffat, Rio Blanco, Routt

HSR 14: Adams **HSR 15:** Arapahoe

HSR 16: Boulder, Broomfield HSR 17: Clear Creek, Gilpin, Park, Teller

HSR 18: Weld

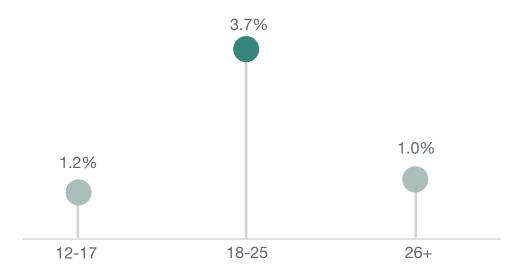


ADULT MISUSE

1.3% of people (12+) in the U.S. misused prescription stimulants in 2021.



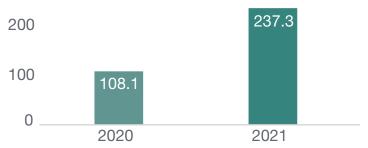
Nationally, adults aged 18-25, misuse prescription stimulants at higher rates than other age groups.



Stimulants are a class of drug that increases activity or speed up the body's central nervous system. Prescription stimulants belong to a class of drugs that includes both legal and illegal substances. Stimulants may temporarily increase alertness, attention, and energy, effects caused by the increased level of activity that occurs in the central nervous system as a result of stimulant use. Stimulants include prescription medications such as methylphenidate (Ritalin), amphetamine (Adderall), and illegal substances such as cocaine and methamphetamine. Misuse of prescription stimulant means "use in any way not directed by a doctor, including use without a prescription of one's own or use in greater

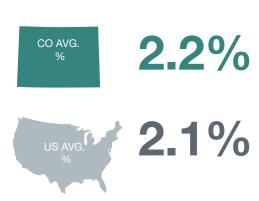
Young adults who attend college are more likely to misuse prescription stimulants when compared to their noncollege attending peers.

The rate of prescription stimulants dispensed to Colorado residents more than doubled from 2020 to 2021.



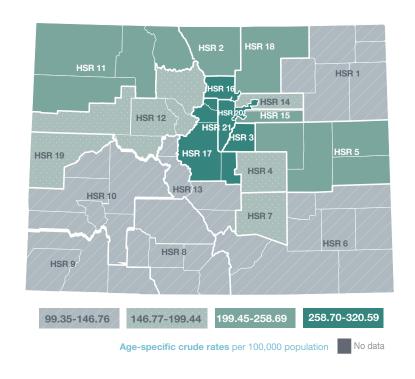
Age-adjusted prescription dispense rates per 1,000 Colorado residents

In 2020, **2.2%** of Coloradans reported nonmedical use of prescription stimulants* which is similar to the national average.



Health Statistics Regions 3, 16, 17, 20, and 21 had the highest fill rates in 2021.

The stimulant prescription fill rate in Colorado is 237.3 per 1,000 Colorado residents



*Stimulants are used to treat attention deficit hyperactivity disorder (ADHD) or narcolepsy. They are known to aid with losing weight, staying awake, or studying. Non-medical use is defined as use "in a way not directed by your healthcare provider."

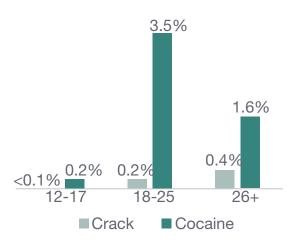
Crack Cocaine Use Nationally

in 2021

0.4%

of people 12 and older (or 996,000 people) used crack in the past year.

Cocaine use* is highest among 18-25 year-olds. Crack use is lowest among adolescents ages 12-17 and increases with age.



*Measures of use of cocaine include powder, crack, free base, and coca paste



Cocaine use is most prevalent among 18-25 year-olds.

Most people think using cocaine once a month is a great risk.

Cocaine Use Nationally in 2021

1.7% 0.2%

3.5%

1.6%

66.2%

50.7%

58.8%

69.2%

TOTAL

12-17

18-25

26+

The Substance Abuse and Mental Health Services Administration recently discovered the combined 2019-2020 state prevalence estimates from the National Survey on Drug Use and Health (NSDUH) contain methodological issues and should not be used. Therefore, Colorado estimates are not available for the 2023 epidemiological profiles.

Furthermore, 2021 national estimates should not be compared to prior years moving forward.

Although methamphetamine is legally available by prescription (Desoxyn®), most methamphetamine used in the United States is produced and distributed illicitly rather than through the pharmaceutical industry.



Methamphetamine Use Nationally

Methamphetamine use is most prevalent among adults age 26 and older.

0.1% 0.5% 1.1%

Methamphetamine use disorder was highest among adults age 26 or older.

0.7% 0.6% 0 1% 0.3% TOTAL 18-25 26+

In 2021 a total of 101,000 people over the age of 12 initiated methamphetamine use.

Of those.

50%

were older than 25.

The Substance Abuse and Mental Health Services Administration recently discovered the combined 2019-2020 state prevalence estimates from the National Survey on Drug Use and Health (NSDUH) contain methodological issues and should not be used. Therefore, Colorado estimates are not available for the 2023 epidemiological profiles.

0.9%

Furthermore, 2021 national estimates should not be compared to prior years moving forward.

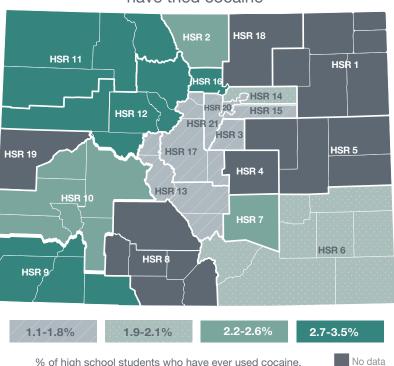


YOUTH MISUSE

95.3% of public high school students have never used drugs in their life. Drugs include cocaine, methamphetamine, heroin, ecstasy, and inhalants.

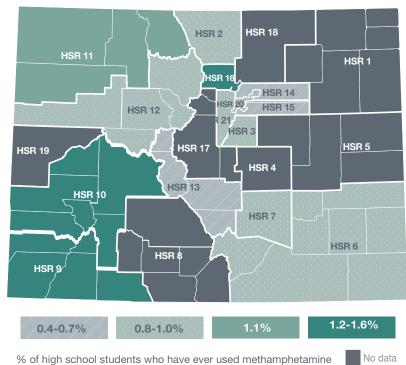
Stimulant misuse is associated with overdose, polysubstance use, substance use disorders, and other medical harms. Substance use is often initiated during adolescence and young adulthood, and interventions during these crucial years have the potential to impact the lifetime risk of stimulant use disorder and associated harms.

2.1% of Colorado high school students have tried cocaine



% of high school students who have ever used cocaine.

0.8% of Colorado high school students have tried methamphetamine





HIGH SCHOOL STUDENT PERCEPTIONS 14.4% of Colorado high school students think it is sort of or very easy to get drugs like cocaine, LSD, or amphetamines if they wanted.

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

MISUSE OF STIMULANTS* DIFFERS AMONG YOUTH WHO REPORT THE PRESENCE OF PROTECTIVE FACTORS IN THEIR LIFE.

*Stimulant misuse includes public high school students who have ever used methamphetamine or cocaine.

AMONG STUDENTS WHO:

have an adult to go to for help think family has clear rules with a serious problem

misuse stimulants*

COMPARED TO

3.7%

who do not report this protective factor.



feel they belong at their school

misuse stimulants*

COMPARED TO

3.4%

who do not report this protective factor.

about alcohol and drug use

misuse stimulants*

COMPARED TO

7.1%

who do not report this protective factor.



feel safe at school

1.6%

misuse stimulants*

COMPARED TO

6.3%

who do not report this protective factor.

have parents or guardians who ask if their homework is done

1.6%

misuse stimulants*

COMPARED TO

3.7%

who do not report this protective factor.





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

misuse stimulants*

COMPARED TO

2.8%

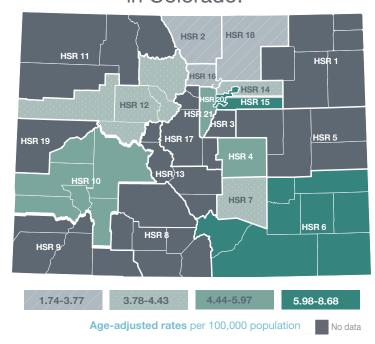
who do not report this protective factor.



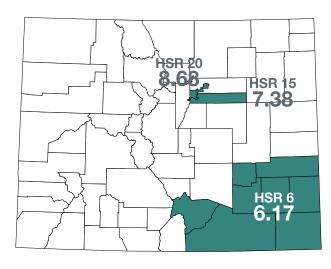
HARMFUL EFFECTS

Overdose deaths involving cocaine increased in recent years in the U.S. and Colorado. They **nearly** doubled in our state from 2.34 deaths per 100,000 in 2019 to 4.63 deaths per 100,000 in 2021.

Overdose deaths involving cocaine in Colorado.



TOP THREE COUNTIES WITH HIGHEST RATE OF COCAINE OVERDOSE **DEATHS PER 100,000 IN 2021**



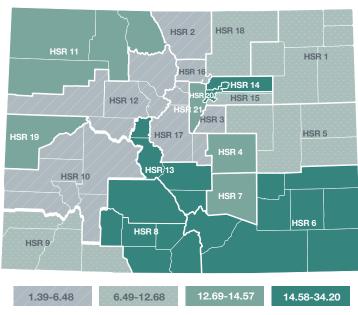
Age-adjusted rates per 100,000 population

Stimulants & Fentanyl

According to the Centers for Disease Control and Prevention, "The risks of fentanyl contamination of illegal drugs are a growing concern, as this can lead to an increase in overdose deaths among people who may or may not be aware that their drugs include this deadly additive."

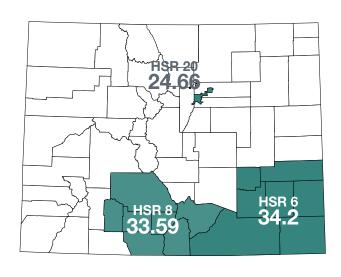
Overdose deaths involving methamphetamine increased in recent years in the U.S. and Colorado. They more than doubled in our state from 6.1 deaths per 100,000 in 2019 to 12.9 deaths per 100,000 in 2021.

Overdose deaths involving methamphetamine in Colorado.



Age-adjusted rates per 100,000 population

TOP THREE COUNTIES WITH HIGHEST RATE OF METHAMPHETAMINE **OVERDOSE DEATHS IN 2021**

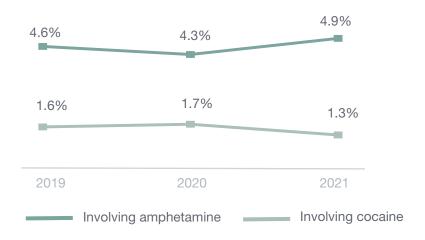


Age-adjusted rates per 100,000 population

Stimulants & Fentanyl

The Centers for Disease Control and Prevention found in a 10-state study that "almost 57% of people" who died from an overdose tested positive for fentanyl and fentanyl analogs also tested positive for cocaine, methamphetamine, or heroin."

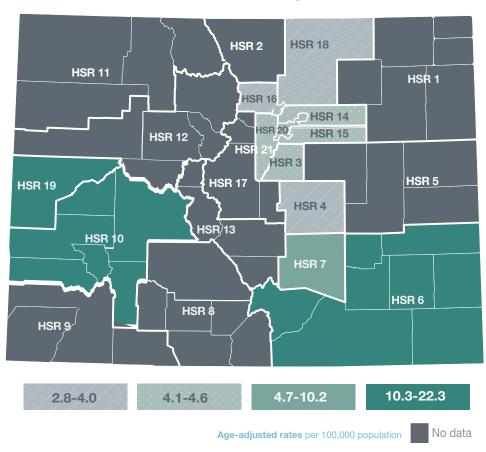
EMERGENCY DEPARTMENT VISITS IN COLORADO INVOLVING COCAINE OR AMPHETAMINES REMAINED STEADY BETWEEN 2019-2021.



Between 2008-2018 in the United States. emergency department visits involving psychostimulants, such as methamphetamine, increased significantly from 2.2 visits per 10,000 people to 12.9 visits per 10,000 people.

Emergency department visits for "psychostimulants are less often identified as related to drug toxicity or withdrawal and more often require interventions to address acute cardiopulmonary and psychiatric complications." Emergency department visits involving amphetamines were highest in HSRs 6, 10, and 19 in 2021.

EMERGENCY DEPARTMENT VISITS INVOLVING AMPHETAMINE, 2021





TREATMENT

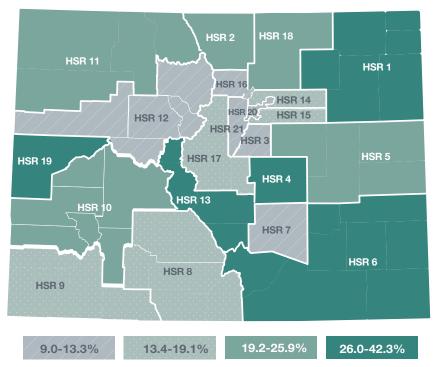
TREATMENT

20.3% of treatment admissions* in Colorado were for methamphetamine or cocaine in 2021.

8 6 X In the same year, the number of treatment admissions for **methamphetamine** was 8.6 times higher than those for cocaine.

TREATMENT ADMISSIONS FOR STIMULANTS WERE HIGHEST IN HSR 1 AT 42.3%.

% of treatment admissions for which stimulants were the primary substance in 2021



The average age of first use of methamphetamine for individuals admitted to treatment

The average number of years of use prior to current treatment for methamphetamines

The average age of first use of cocaine for individuals admitted to treatment

The average number of years of use prior to current treatment for cocaine

KEY TERMS	
Age-adjusted rate	Represent what rates would be if time periods or different geographies have the same composition of ages; age-adjusted rates allow for fair comparison of rates across different geographies or periods of time
Age-specific crude rate	A variation of a crude rate in which the number of events are summed within an age group and divided by the total population within the same age group
Aggregate	A mathematical computation using a set of values rather than a single value
Average	A calculated central value of a set of numbers
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
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. This measure can include people who newly acquire the characteristic within the time frame and with an existing characteristic.
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
Treatment admissions	Treatment admissions are defined as clients aged 12 years and older admitted to licensed treatment facilities for alcohol and/or drug use.

For information on additional terms, see: <u>Drug Enforcement Administration's Resource on Stimulants</u>



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<u>Click here</u> or scan above to let us know what you think.

For more information on the Colorado SEOW and additional publications, please visit our website:

www.coloradoseow.org