

OPIOIDS

In early 2021, the Colorado State Epidemiological Outcomes Workgroup (SEOW) published this five-part document as an overview of opioid, marijuana, alcohol, and tobacco use and related harms in Colorado. Each substance is presented in its own profile, with a demographics profile 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 opioid misuse and health effects among Coloradans. Data are presented for adults and youth, with a special section on youth perceptions and protective factors against opioid 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 2020, the most complete data were found and used for calendar year 2019. Exceptions include figures/charts featuring trend data prior to 2019, data collected biennially for which 2018 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 high school students, grades 9th - 12th. 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 five 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 PROFILE** TO PROVIDE IMPORTANT CONTEXT TO DATA PRESENTED IN THE SUBSTANCE PROFILES.

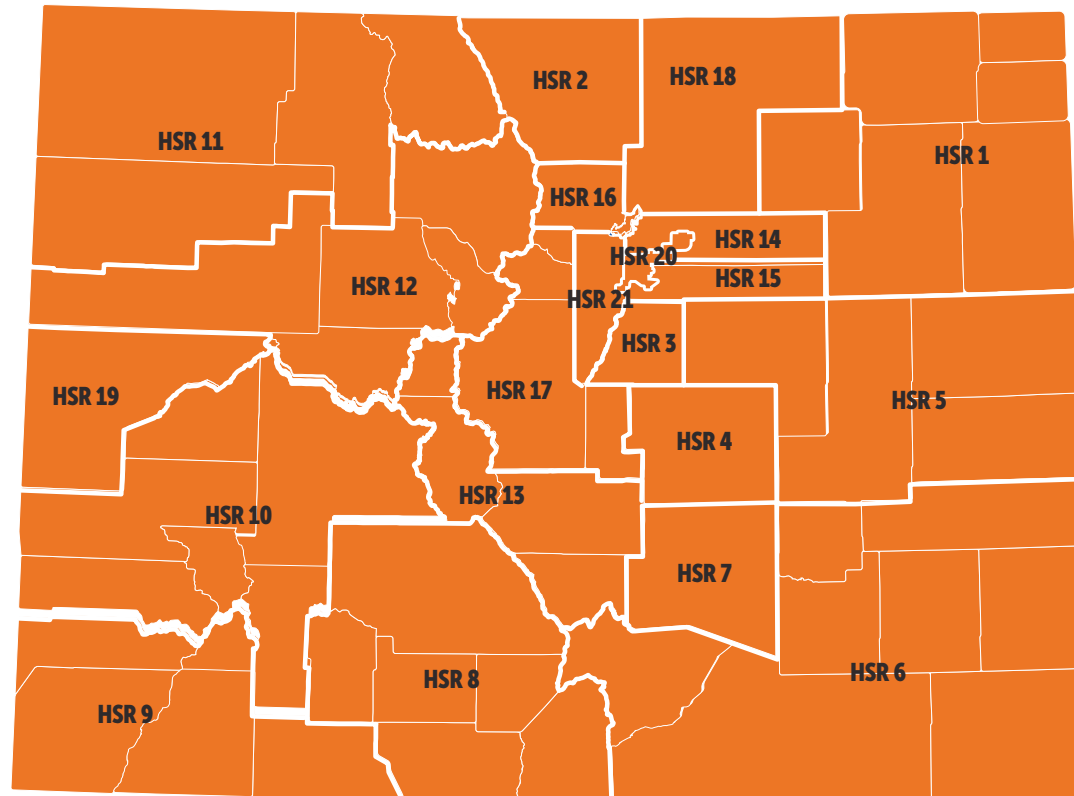
We hope the profiles facilitate conversation among Coloradans about the state of our state. For this reason, the profiles feature data from a variety of sources, include regional data when available, and introduce easily relatable use of benchmarks, such as national comparisons.

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.liu1@state.co.us) at the Colorado Department of Human Services, Office of Behavioral Health.

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 Key

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, Dolores, 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

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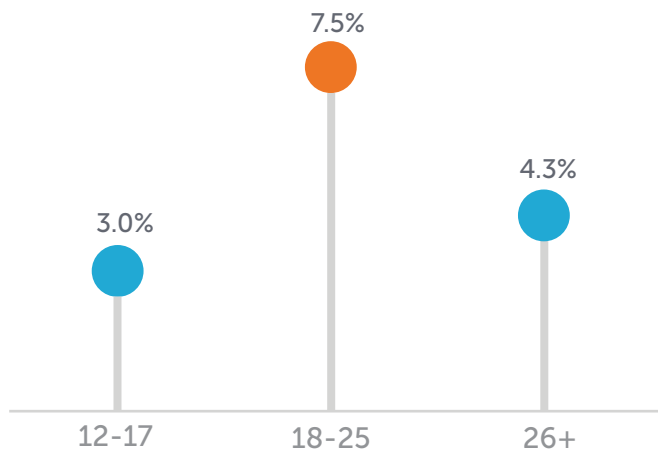
ADULT MISUSE

Misuse of prescription pain relievers* means “use in any way not directed by a doctor, including use without a prescription of one’s own or use in greater amounts, more often, or longer than told.”

4.8%
of Colorado
adults (18+)
misuse
prescription
pain relievers.
The national average of 3.9%

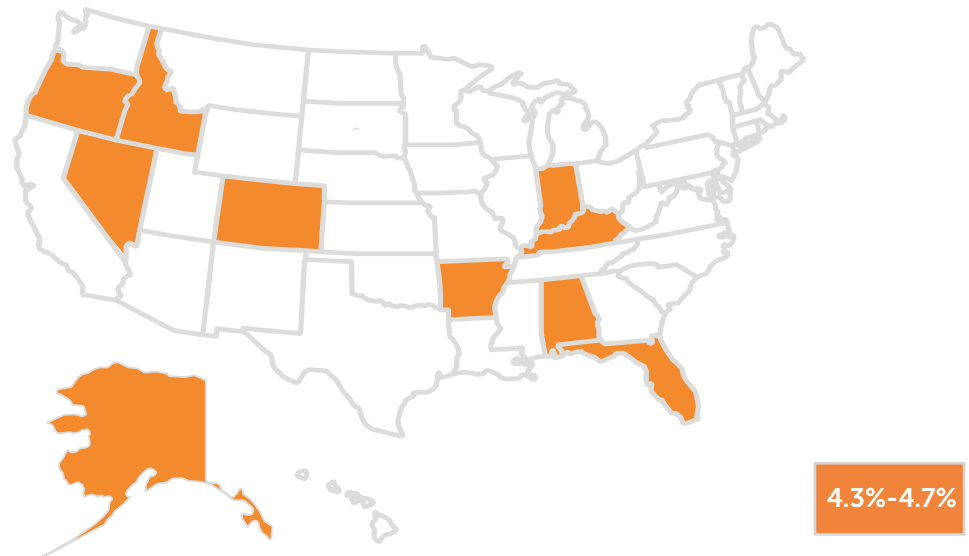


Coloradans, **aged 18-25**, misuse prescription pain relievers at higher rates than other Coloradans.



*Prescription pain relievers include opioids such as hydrocodone, oxycodone, and morphine. Questions about specific pain relievers in the National Survey on Drug Use and Health focus only on opioid pain relievers.

Colorado is among the **TOP TEN** states for misuse of prescription pain relievers in the United States for individuals 12 and older. Several top states are in the Western U.S.

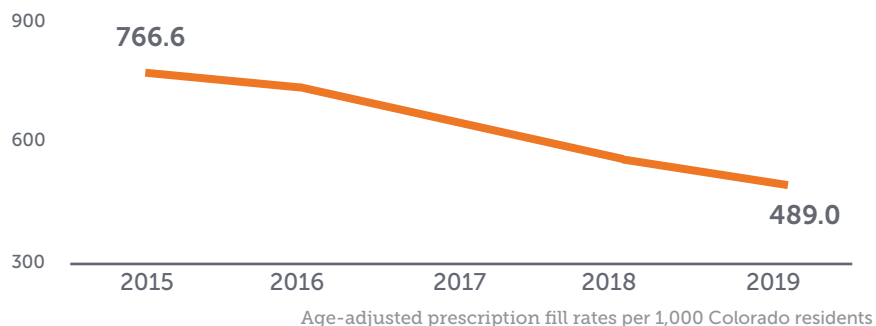


ACCORDING TO THE CENTERS FOR DISEASE CONTROL AND PREVENTION,

“Anyone who takes prescription opioids can become addicted to them.”

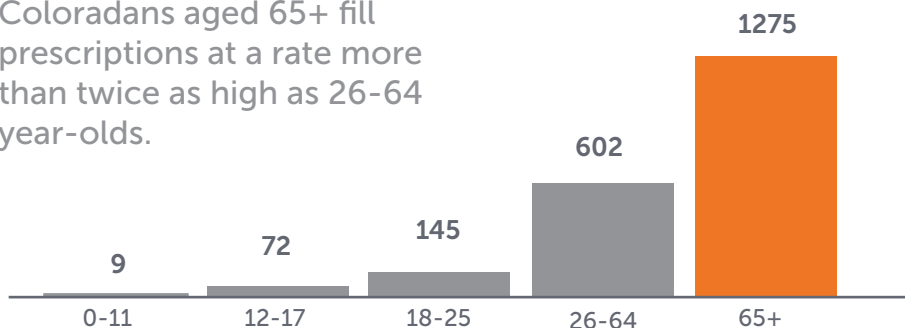
“As many as one in four patients receiving long-term opioid therapy in a primary care setting struggles with opioid addiction.”

The rate of prescription opioid fills **decreased from 2015 to 2019.**



The rate of prescription fills **increased with age in 2019.**

Coloradans aged 65+ fill prescriptions at a rate more than twice as high as 26-64 year-olds.

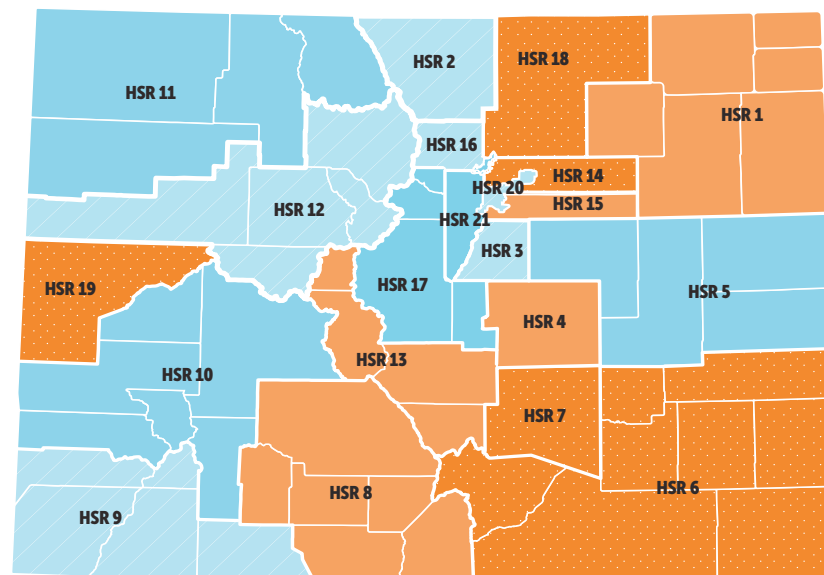
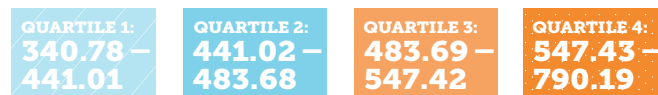


However, in these **four counties** (Hinsdale, Jackson, Mineral, and San Juan), **26-64 year-olds** had a **higher prescription fill rate** than those aged 65+ in 2019.



Many counties in the **northeast** and **southeast** of the state had a **higher fill rate than the state average in 2019.**

The opioid prescription fill rate in Colorado is 489 per 1,000 Colorado residents.

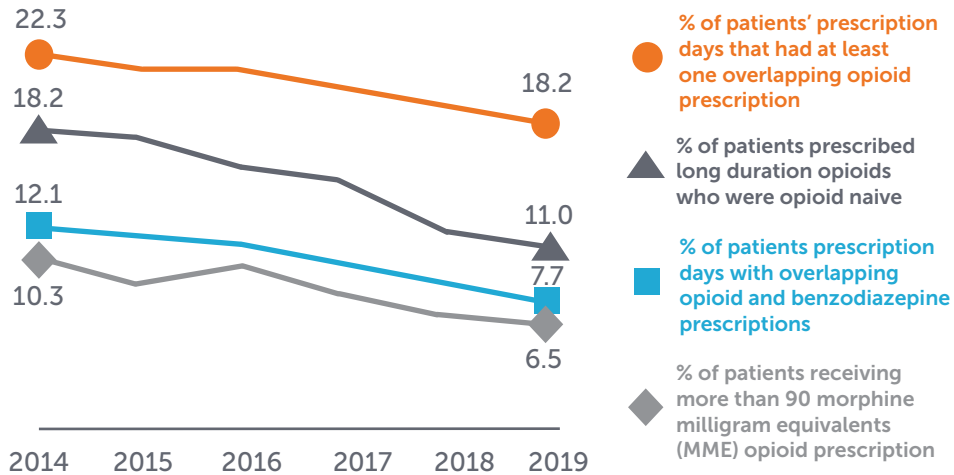


Statewide, on average, **women filled**

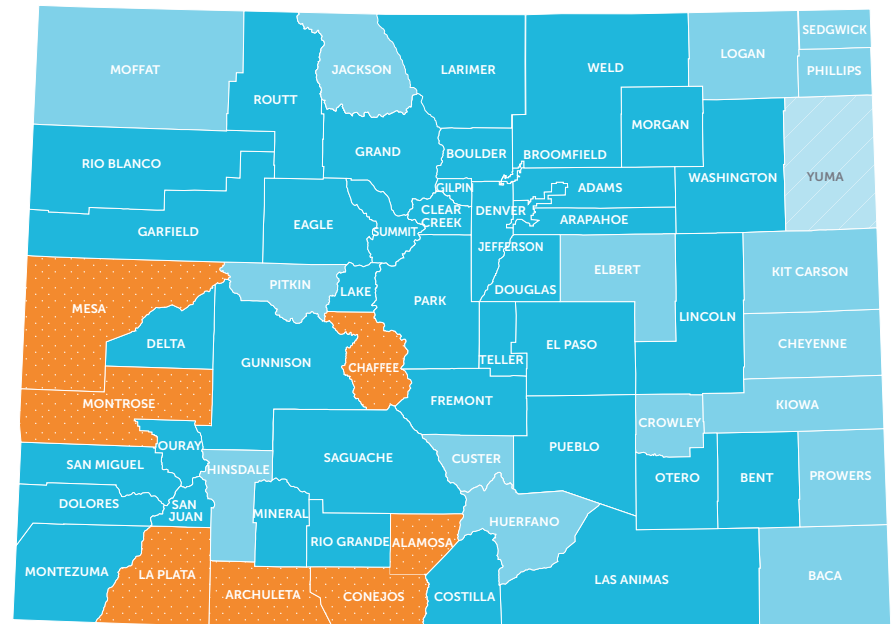
1.35x more opioid prescriptions than men in 2019.

A figure that remained unchanged between 2016-2019.

Potential high-risk prescribing practices in Colorado **declined from 2014 to 2019.**



From 2014 to 2019, 7 counties (Alamosa, Archuleta, Chaffee, Conejos, La Plata, Mesa, and Montrose) saw a decline in the percent of patients involved in all four potentially high-risk prescribing practices.



Number of high risk prescribing practices that decreased per county between 2014 and 2019

PRESCRIBING RATES and high dose prescribing rates are declining nationally, while the average number of days per prescription continues to increase.

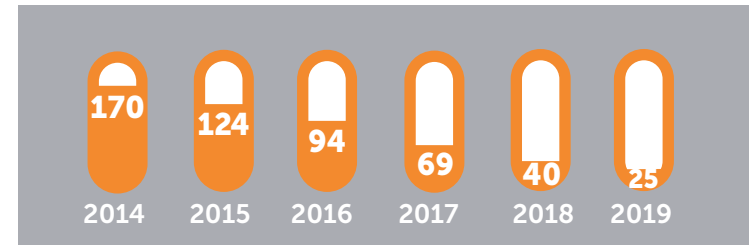


COUNTIES WITH HIGHER PRESCRIBING TYPICALLY

have the following characteristics:

- Smaller cities or larger towns
- Higher percentage of white residents
- Higher number of dentists/primary care physicians per capita
 - More people who are uninsured or unemployed
- More residents who have diabetes, arthritis, or a disability

From 2014-2019, Colorado saw a **decrease in the rate of individuals using multiple providers** to access multiple opioid prescriptions.



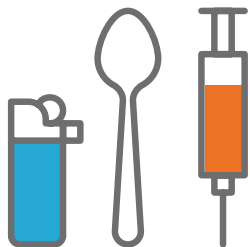
Rates per 1,000 Colorado residents

Heroin Use Nationally

The incidence of heroin initiation is

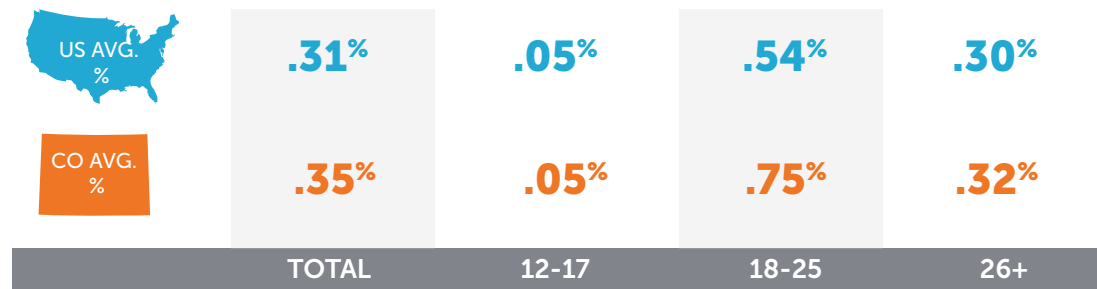
19x higher among those who report prior nonmedical pain reliever use than among those who do not.

86% of injection drug users misuse opioid pain relievers before using heroin.

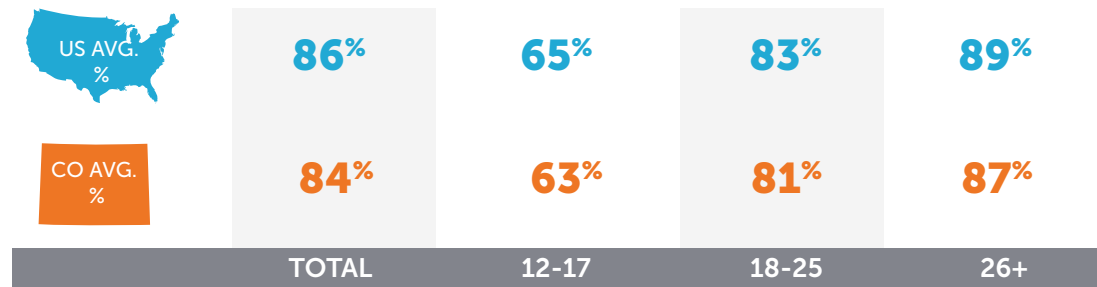


Heroin Use in Colorado

Heroin use is **most prevalent among 18-25 year-olds**.



Most people in the U.S. and Colorado **think trying heroin once or twice is a great risk**.



YOUTH MISUSE



Prescription Pain Reliever Misuse Nationally



14% of U.S. high school students misused a prescription pain reliever in the **past year**.

7% of U.S. high school students misused a prescription pain reliever in the **past month**.

Use of other substances, particularly current use of **alcohol** (59.4%) and **marijuana** (43.5%), was common among students currently misusing prescription opioids.

Prescription Pain Reliever Misuse in Colorado

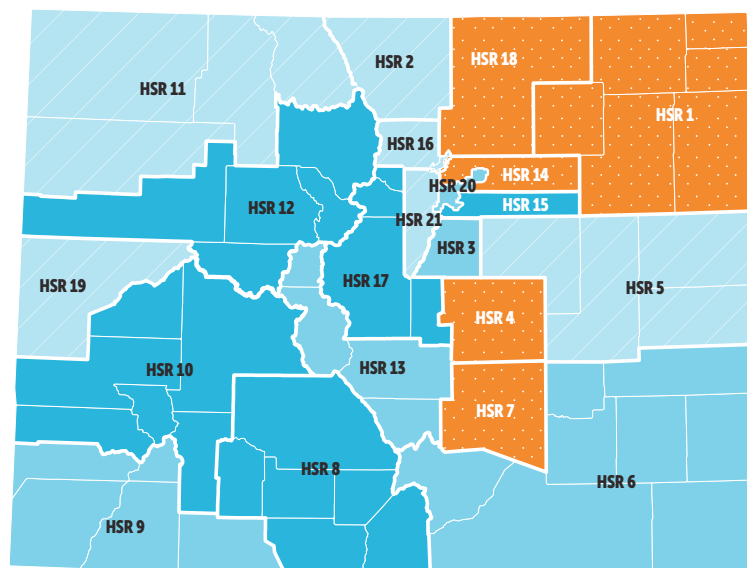
THE STATE AVERAGE

for high school students who have taken a prescription pain reliever without a doctor's prescription one or more times **during the past month** is

7%

HSR Region 2 is the **lowest** at 4.1%
 HSR Region 4 is the **highest** at 9.6%

% OF YOUTH WHO MISUSED PRESCRIPTION PAIN RELIEVERS IN THE PAST MONTH



State average 6.9%



Percent of high school students who misused a prescription pain reliever in the past month.

*Prescription pain relievers are referred to as prescription pain medicine on the Healthy Kids Colorado Survey and the Youth Risk Behavior Survey and include drugs such as codeine, Vicodin, OxyContin, and Percocet.

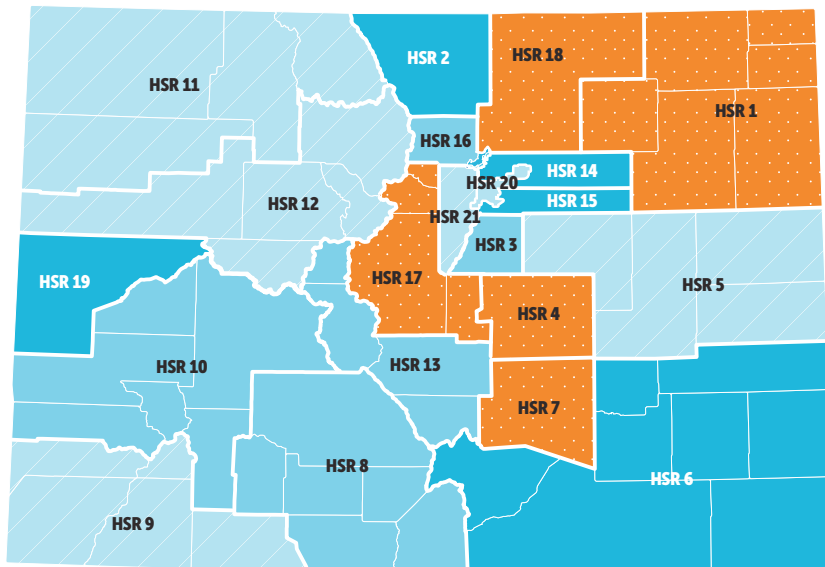
High School Student Perceptions



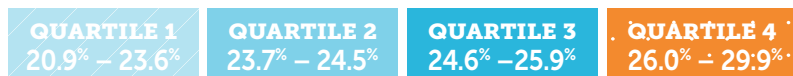
25% of Colorado high school students think it is sort of or very easy to get prescription drugs without a prescription.

89% of Colorado high school students think it is wrong or very wrong to use prescription drugs without a prescription.

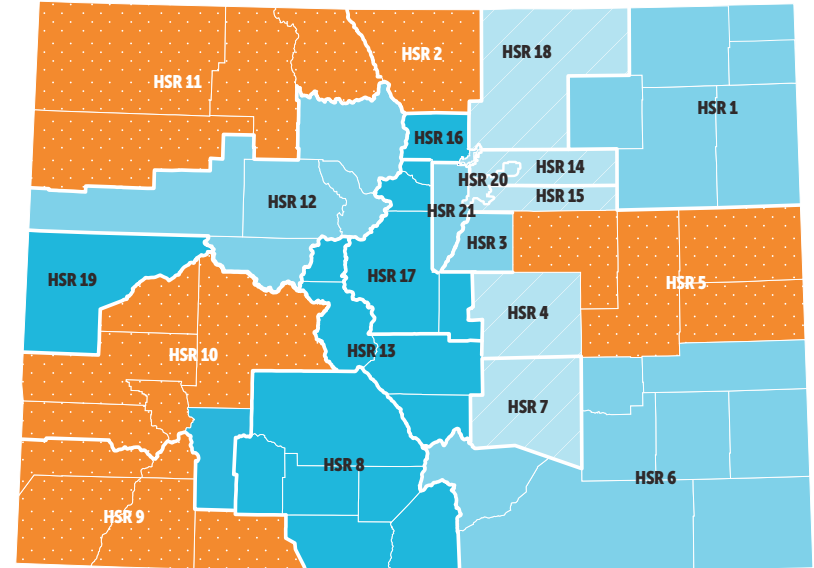
% OF YOUTH WHO THINK IT IS EASY OR SORT OF EASY TO ACCESS PRESCRIPTION PAIN RELIEVERS WITHOUT A PRESCRIPTION



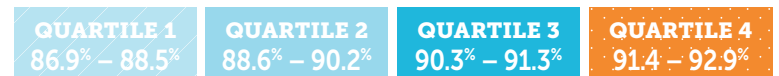
State average 25.1%



% OF YOUTH WHO PERCEIVE USING PRESCRIPTION PAIN RELIEVERS WITHOUT A PRESCRIPTION IS WRONG



State average 88.9%



MISUSE OF PRESCRIPTION PAIN RELIEVER DIFFERS AMONG 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,

5.0% misuse Rx drugs

COMPARED TO

11.7%

who do not report this protective factor.



participate in extracurricular activities,

5.5% misuse Rx drugs

COMPARED TO

8.8%

who do not report this protective factor.

think family has clear rules about alcohol and drug use,

5.4% misuse Rx drugs

COMPARED TO

15.7%

who do not report this protective factor.



feel safe at school,

5.5% misuse Rx drugs

COMPARED TO

13.4%

who do not report this protective factor.

when not home, their parents/guardians know where they are and who they are with,

5.6% misuse Rx drugs

COMPARED TO

19.0%

who do not report this protective factor.



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

5.3% misuse Rx drugs

COMPARED TO

7.7%

who do not report this protective factor.

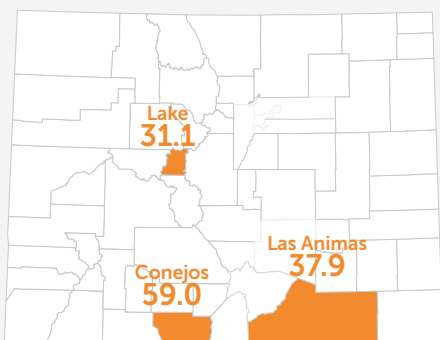


HARMFUL EFFECTS

Prescription opioids, also known as opioid analgesics/pain relievers, include fentanyl. Fentanyl is a synthetic opioid 50-100 times more potent than morphine and natural opioids derived from morphine.

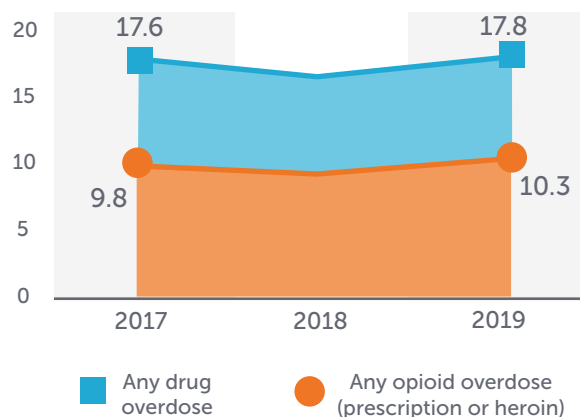
TOP THREE COLORADO COUNTIES WITH HIGHEST RATE OF OPIOID OVERDOSE DEATHS, 2019

(Prescription or Heroin)¹



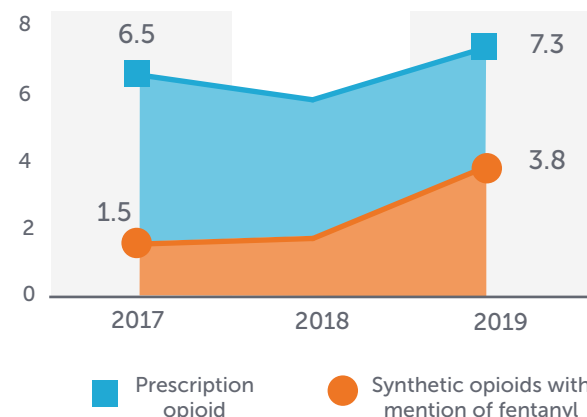
State Average 10.3 per 100,000 age-adjusted population

The rate of drug overdose deaths in Colorado, including those involving opioids, **remained stable** from 2017 to 2019.



Age-adjusted rates per 100,000 population

Drug overdose deaths in Colorado involving **fentanyl** increased from 2017-2019, with a **significant increase from 2018-2019**.



Age-adjusted rates per 100,000 population

The **male overdose death rate** from prescription opioids is **consistently higher** than that for women (though women have higher rates of prescriptions).



Opioid analgesics (prescription opioids) overdose deaths, age-adjusted rates per 100,000 population

The death rate for prescription opioids is **higher for individuals aged 26-64** than other ages (though individuals aged 65+ have higher rates of prescriptions).

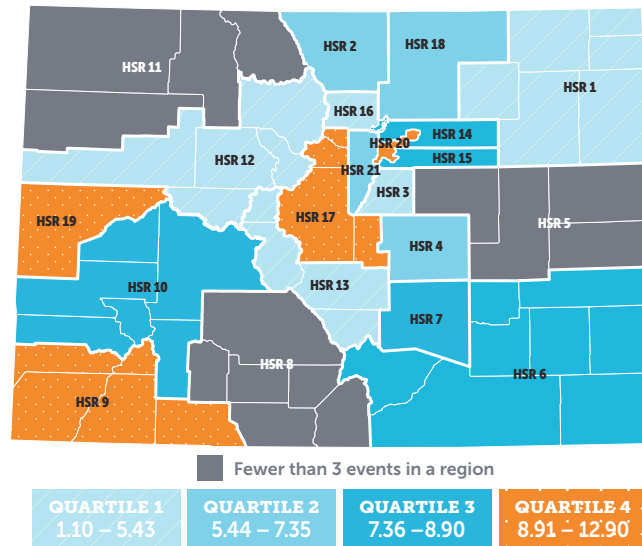


Age-specific crude rates per 100,000 population

Fentanyl, one type of synthetic opioid, is of concern because of **its high potency**. A person taking an illicit drug may not know the drug contains fentanyl.

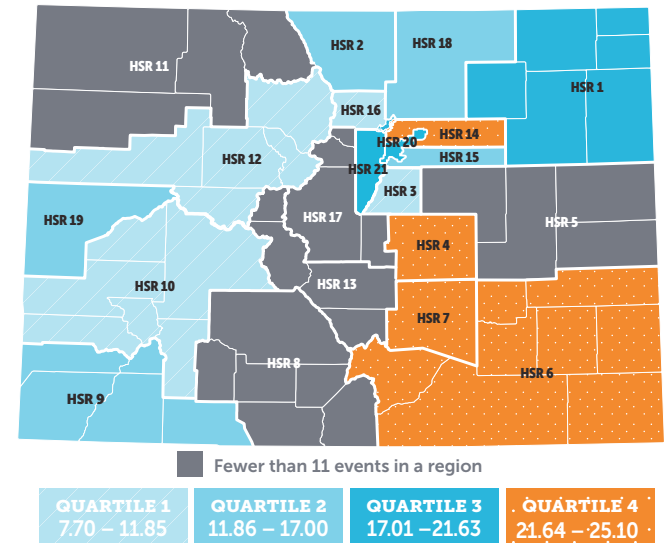
Results could reflect **increased testing** for fentanyl and/or **increased specific substances reported** on death certificates.

PRESCRIPTION OPIOID OVERDOSE DEATHS, 2019



Age-adjusted rates per 100,000 population

SYNTHETIC OPIOID OVERDOSE DEATHS WITH MENTION OF FENTANYL, 2019



Age-adjusted rates per 100,000 population

The **male overdose death rate** involving fentanyl is **consistently higher** than that for women.



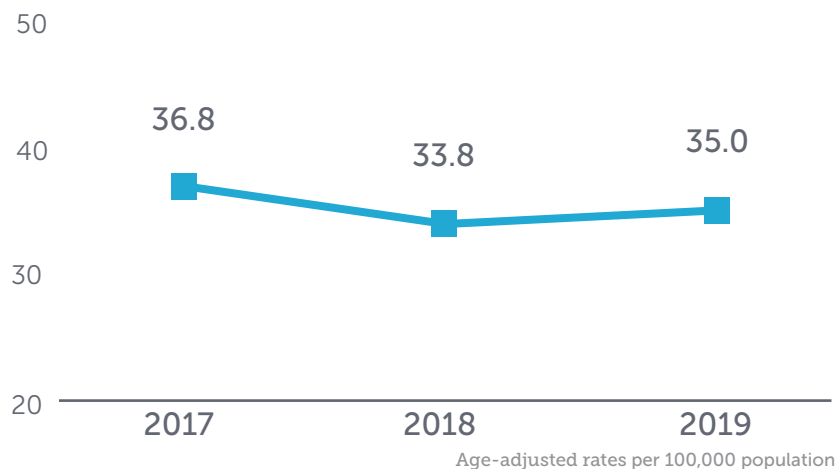
Fully synthetic opioid overdose deaths with specific mention of fentanyl, age-adjusted rates per 100,000 population

The death rate involving fentanyl **increased for all age groups** from 2018 to 2019.

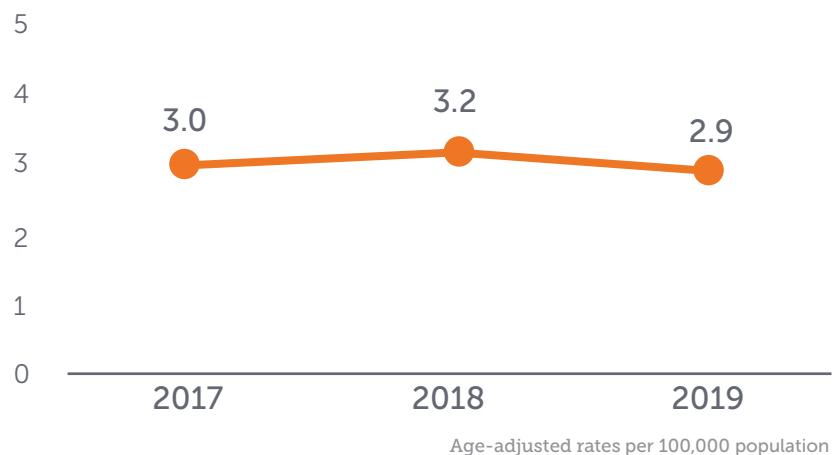


Fully synthetic opioid overdose deaths with specific mention of fentanyl, age-specific crude rates per 100,000 population

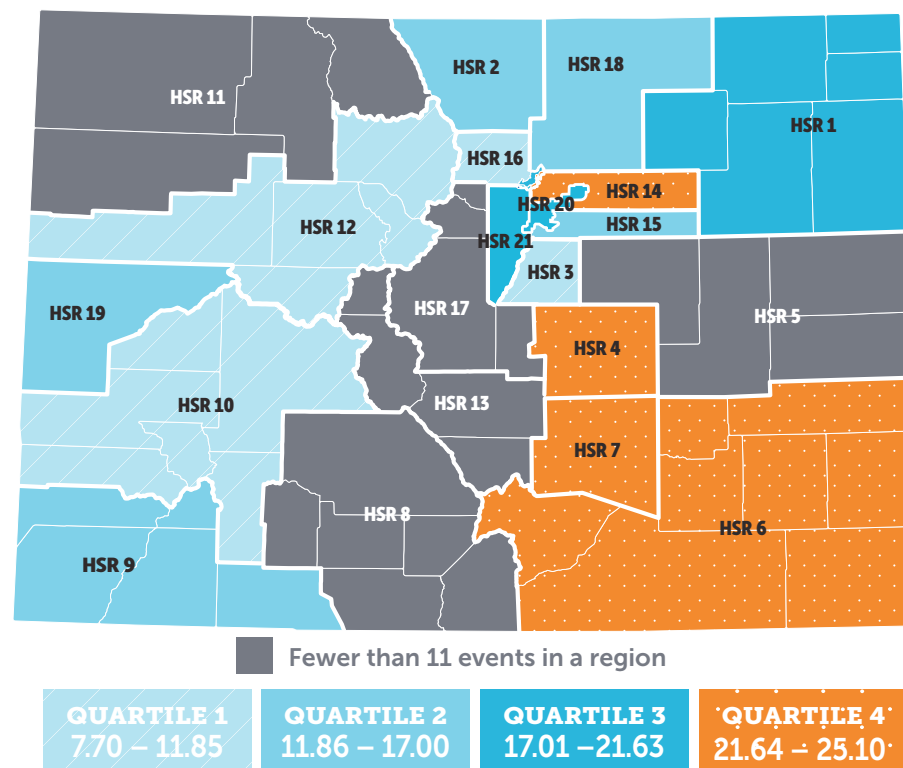
Rates of emergency department **visits involving opioids** (including prescriptions, fentanyl, and heroin) **remain stable** in Colorado.



Rates of emergency department **visits involving synthetic opioids** (including fentanyl) **remain stable** in Colorado.



RATES OF EMERGENCY DEPARTMENT VISITS INVOLVING PRESCRIPTION OPIOIDS

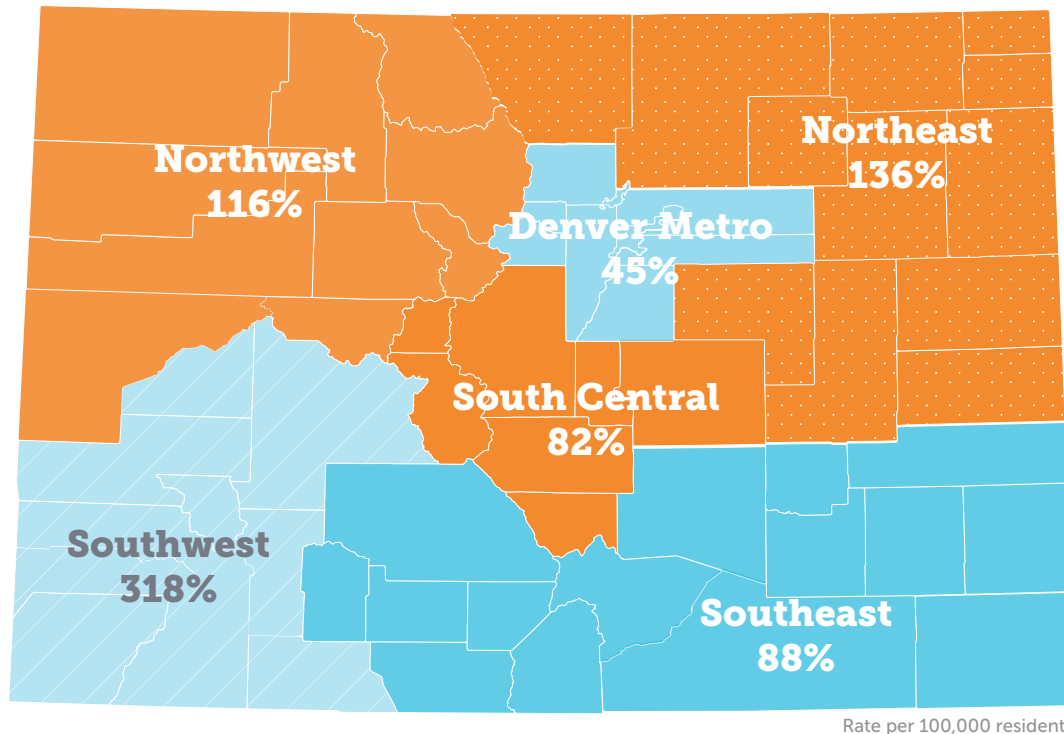


- Synthetic opioids include fentanyl and tramadol.
- Methadone, which is used in the treatment of opioid use disorder, is not included in these results.
- Beginning October 1, 2020, the national coding system for health care billing, such as treatment in emergency department, will include a code for only fentanyl.

25% of treatment admissions in Colorado were for prescription opioids or heroin in 2019.

TREATMENT ADMISSIONS FOR HEROIN INCREASED IN EVERY REGION ACROSS THE STATE.

Percent increase in treatment admissions for heroin from 2014-2019



Expanding access to evidence-based treatments, including medication-assisted treatment (MAT), is crucial to treating individuals with opioid use disorder. MAT addresses patient needs through a combination of medication, counseling, and behavioral therapies.

24

The average age of first use of prescription opioids and heroin for individuals admitted to treatment

12

The average number of years of use prior to current treatment for prescription opioids

9

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

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
Fentanyl	A synthetic opioid pain reliever many more times powerful than other opioids and approved for treating severe pain.
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 unit of population
Prescription opioids/opioid analgesics	<p>Opioids prescribed by doctors to treat moderate to severe pain – common types are oxycodone (OxyContin), hydrocodone (Vicodin), morphine, and methadone.</p> <p>Also referred to as opioid analgesics and include the following:</p> <ul style="list-style-type: none"> • Natural opioid analgesics (morphine and codeine) • Semi-synthetic opioid analgesics (oxycodone, hydrocodone, hydromorphone, and oxymorphone) • Methadone (a synthetic opioid that can be prescribed for pain reduction or for use in medication assisted treatment for opioid use disorder) • Synthetic opioid analgesics (other than methadone, including drugs such as tramadol and fentanyl).
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	Two ratios that have been set equal to each other
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.

KEY TERMS

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, related terms, see: <https://www.cdc.gov/drugoverdose/opioids/terms.html>



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publications, please visit our website:
www.coloradoseow.org