

# OPIOIDS

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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 opioid misuse and health effects among Coloradans. Data are presented for adults and youth, with a special section on youth 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 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.**

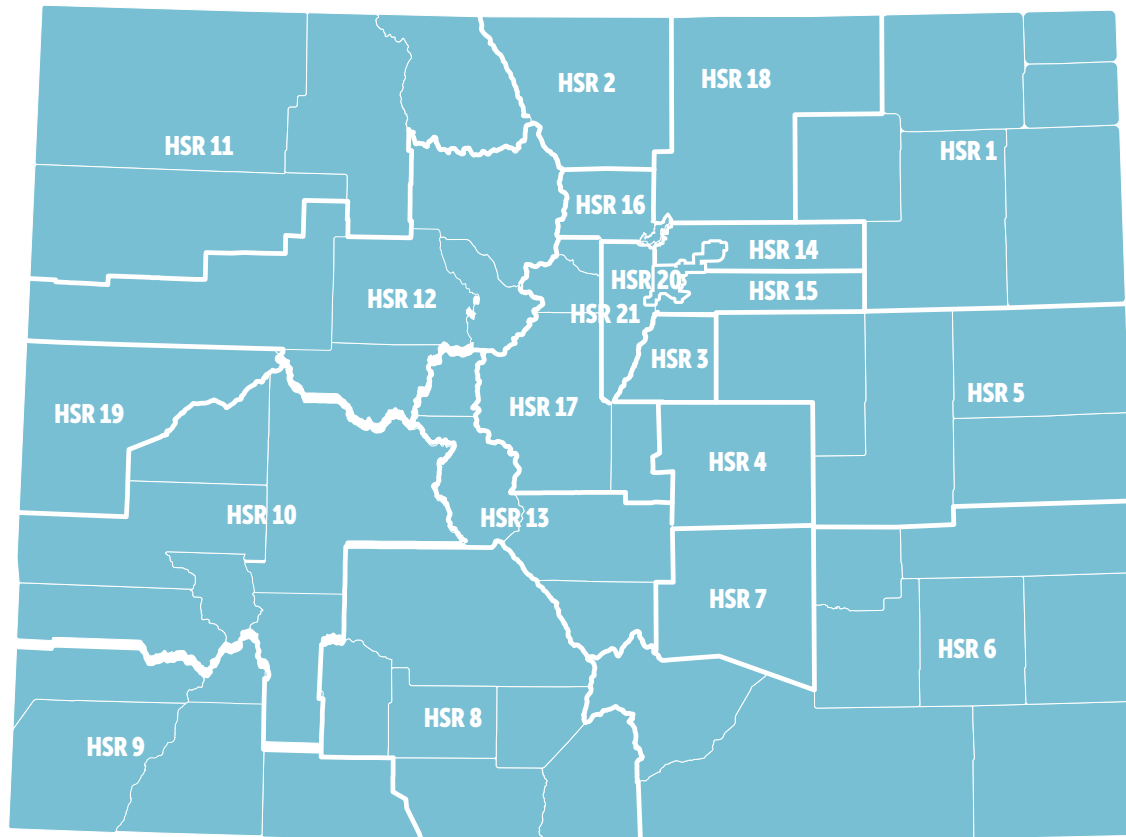
We hope the profiles facilitate conversation among Coloradans about the state of our state. For this reason, the profiles feature data from a variety of sources, include regional data when available, and introduce easily relatable use of benchmarks, such as national comparisons.

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](mailto: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 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 to take a drug; or use in any other way not directed by a doctor.”

**3.1%**  
of people in  
the US (aged  
12+) misuse  
prescription pain  
relievers.\*

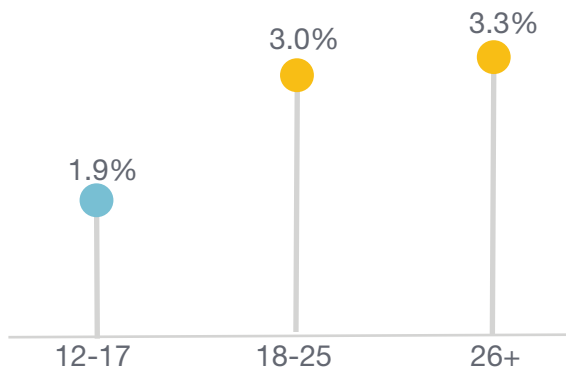


ACCORDING TO THE CENTERS FOR DISEASE CONTROL AND PREVENTION,

**“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.”

Misuse of prescription pain relievers was lowest among adolescents aged 12-17 compared to older age groups.



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.

\*Prescription pain relievers are products containing hydrocodone, oxycodone, tramadol, codeine, morphine, prescription fentanyl, buprenorphine, oxycodone, and hydromorphone, as well as Demerol®, methadone, or any other prescription pain reliever.



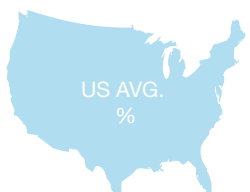
### PRESCRIBING RATES

According to the Centers for Disease Control and Prevention,

“The overall national opioid dispensing rate declined from 2012 to 2020. In 2020, the dispensing rate [fell] to the lowest [rate] in 15 years — 43.3 prescriptions per 100 persons or more than 142 million opioid prescriptions.”

However, in 2020 in 3.6% of U.S. counties, enough opioid prescriptions were dispensed for every person in those counties to have one.

In 2020, **5.5%** of Coloradans reported non-medical opioid use\* which is similar to the national average.



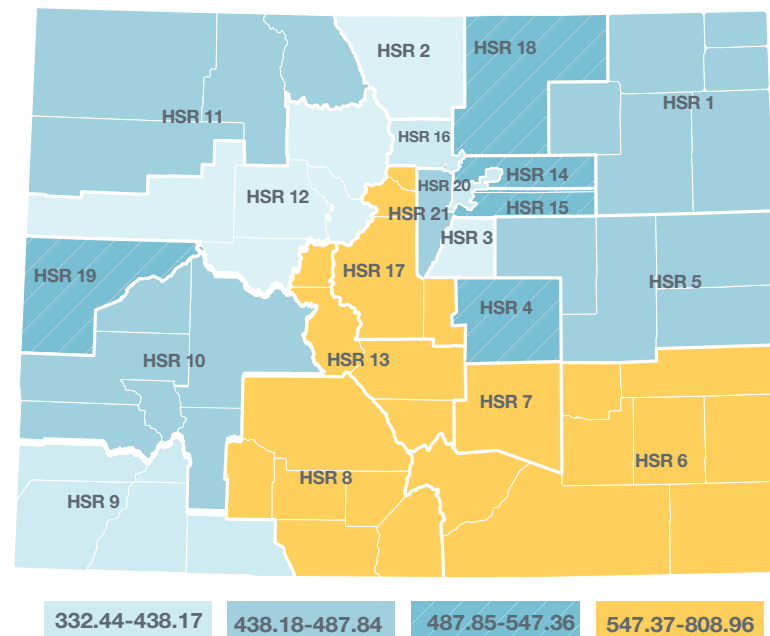
5.6%



5.5%

Many health statistics regions in the **southeast** of the state had **a higher fill rate than the state average in 2021.**

The opioid prescription fill rate in Colorado is 484.8 per 1,000 Coloradans.



Age-specific crude rates per 100,000 population

\*Non-medical use of prescription drugs is defined as use “in a way not directed by your healthcare provider.” These medications are opioid agonists that are used to treat acute and chronic pain. Other uses include opioid replacement therapy and digestion-related pain.



## Heroin Use Nationally

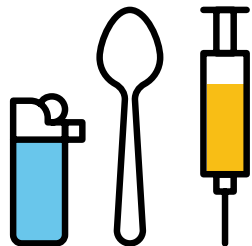
The incidence of heroin initiation is

**19x** higher

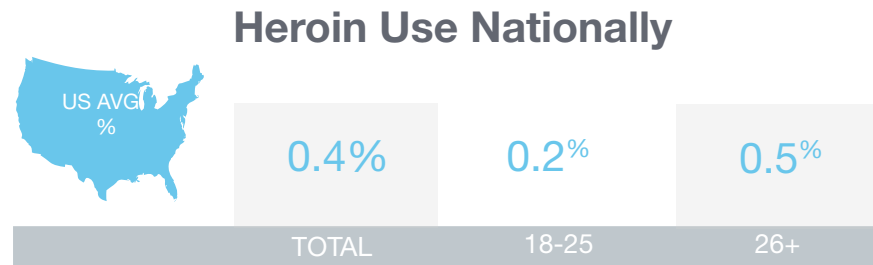
among those who report prior nonmedical pain reliever use than among those who do not.



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



Heroin use is **most prevalent among adults 26 years and older.**



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# YOUTH MISUSE



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.

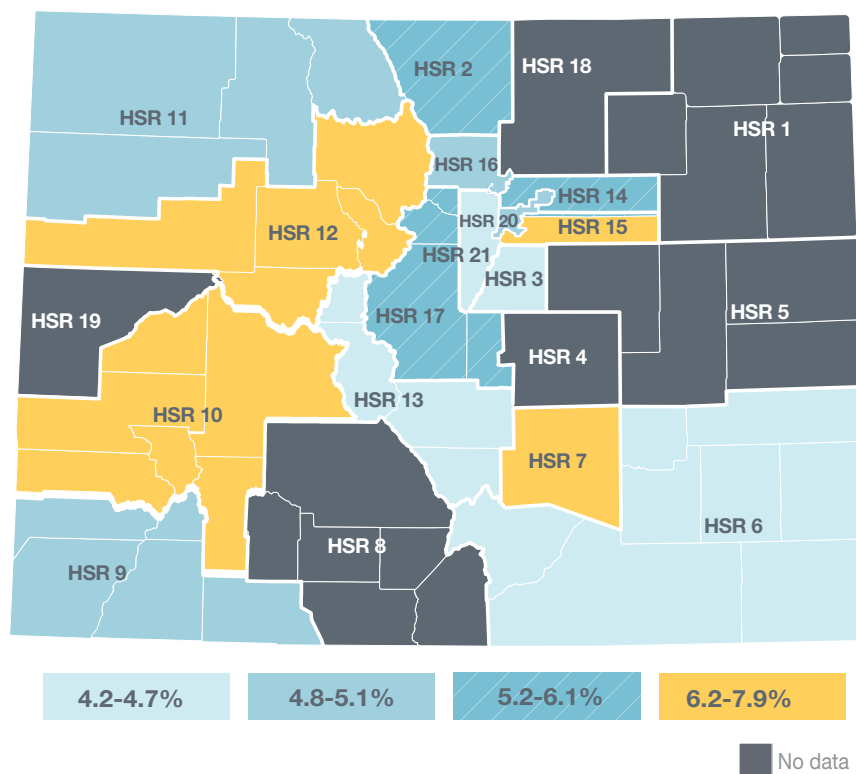
## PRESCRIPTION PAIN RELIEVER MISUSE IN COLORADO

**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

# 6%

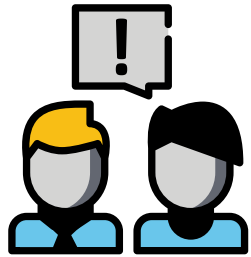
HSR Region **6** is the **lowest at 4.2%**  
 HSR Region **15** is the **highest at 7.9%**

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



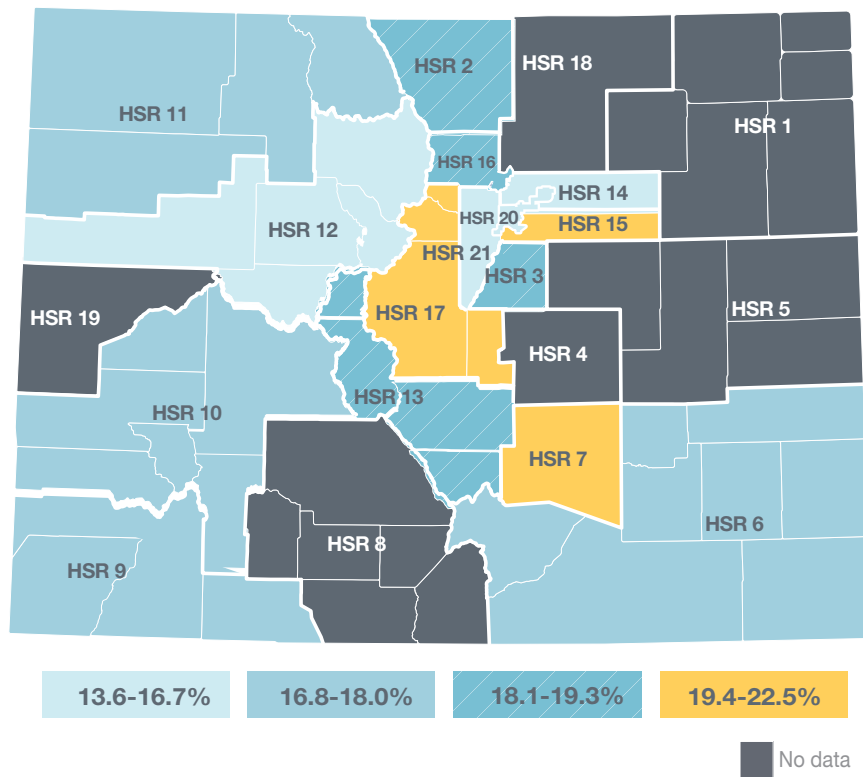
**NOTE:** THESE HEALTHY KIDS COLORADO SURVEY RESULTS ARE REPRESENTATIVE OF YOUTH WHO ATTEND PUBLIC HIGH SCHOOLS IN COLORADO  
**SOURCE:** HEALTHY KIDS COLORADO SURVEY (HKCS), HIGH SCHOOL, 2021

## Public High School Student Perceptions



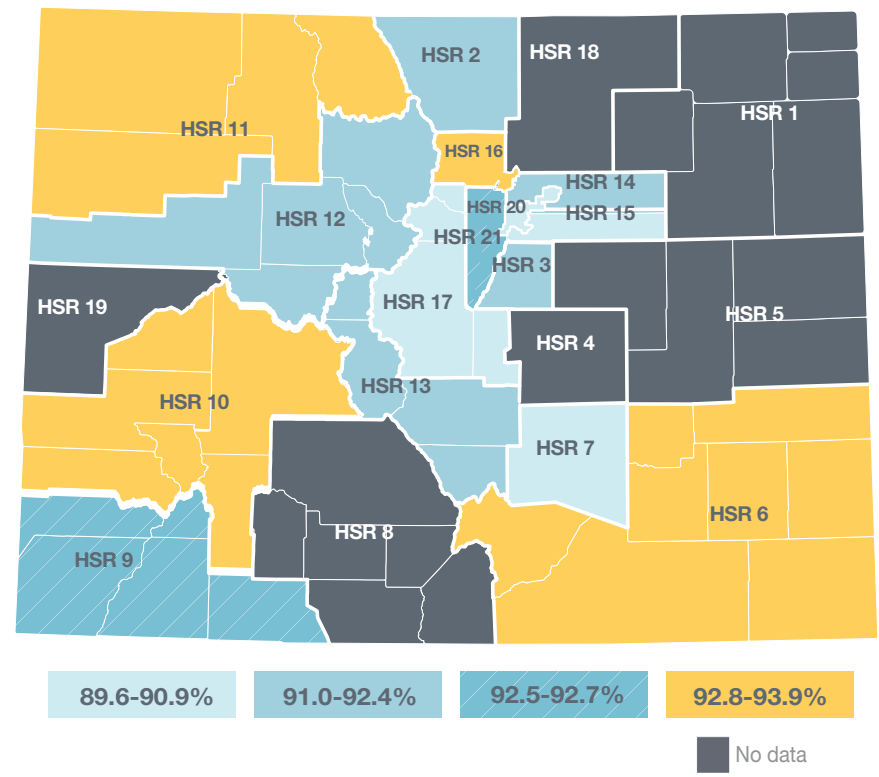
**19%** of Colorado high school students think it is **sort of or very easy to get prescription drugs** without a prescription.

Percent of students think it is **sort of or very easy to get prescription drugs** without a prescription.



**91%** of Colorado high school students think it is **wrong or very wrong to use prescription drugs** without a prescription.

Percent of students who think it is **wrong or very wrong to use prescription drugs** without a prescription.



**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

## MISUSE OF PRESCRIPTION PAIN RELIEVER DIFFERS AMONG PUBLIC HIGH SCHOOL STUDENTS WHO REPORT THE PRESENCE OF PROTECTIVE FACTORS IN THEIR LIFE.

AMONG STUDENTS WHO:

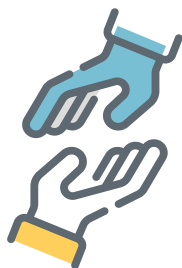
have an adult to go to for help with a serious problem,

4.4% misuse Rx drugs

COMPARED TO

9.9%

who do not report this protective factor.



feel they belong at school

4.0% misuse Rx drugs

COMPARED TO

9.2%

who do not report this protective factor.

think family has clear rules about alcohol and drug use,

5.1% misuse Rx drugs

COMPARED TO

16.2%

who do not report this protective factor.



feel safe at school,

4.7% misuse Rx drugs

COMPARED TO

15.2%

who do not report this protective factor.

have parents or guardians who ask if their homework is done

4.8% misuse Rx drugs

COMPARED TO

9.0%

who do not report this protective factor.



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

4.7% misuse Rx drugs

COMPARED TO

7.2%

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



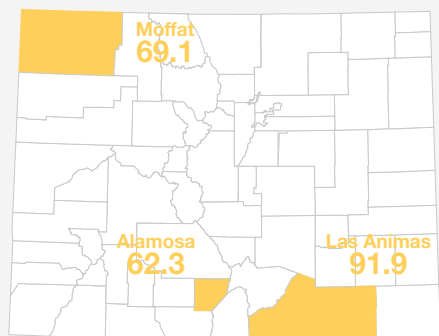
# HARMFUL EFFECTS

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

TOP THREE COLORADO COUNTIES WITH

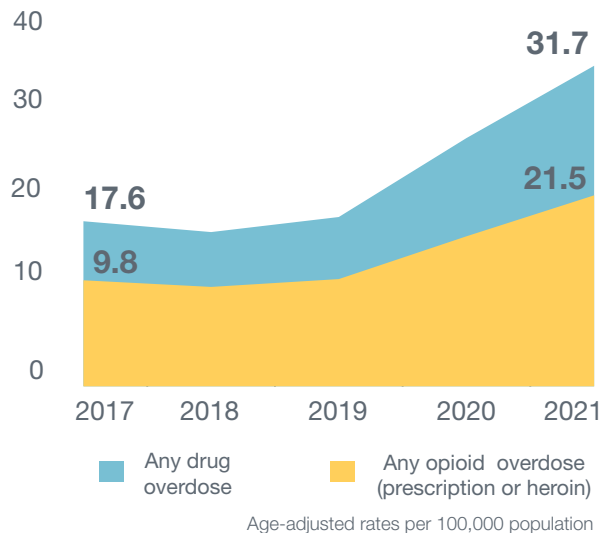
## HIGHEST RATE OF OPIOID OVERDOSE DEATHS, 2021

(Prescription or Heroin)<sup>1</sup>

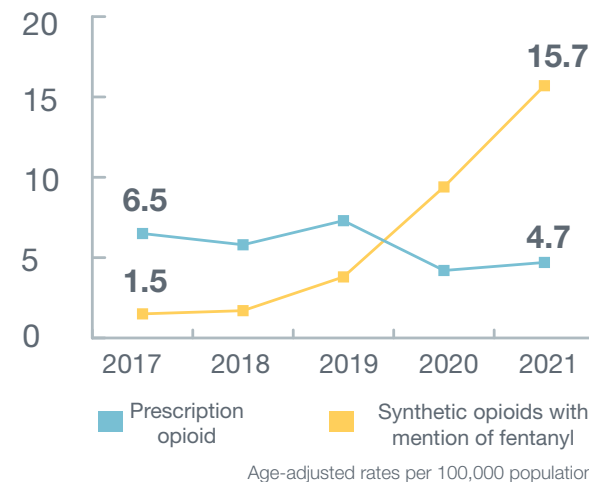


State Average 21.5 per 100,000 age-adjusted population

The rate of drug overdose deaths in Colorado, including those involving opioids, increased from 2019 to 2021.



Drug overdose deaths in Colorado involving fentanyl have increased each year between 2017-2021.

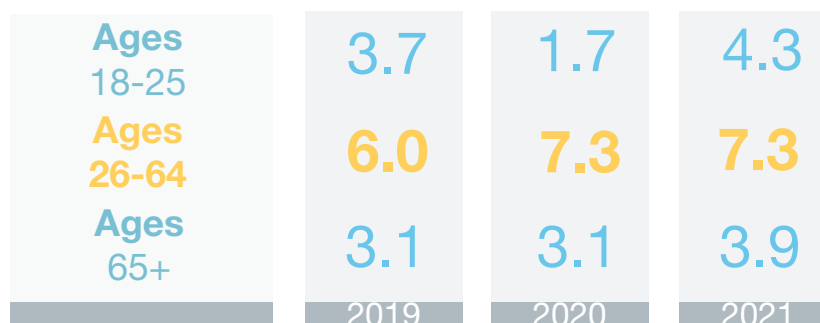


The male overdose death rate from prescription opioids was higher than that for women (though women have higher rates of prescriptions) in 2020 and 2021.



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 prescription).

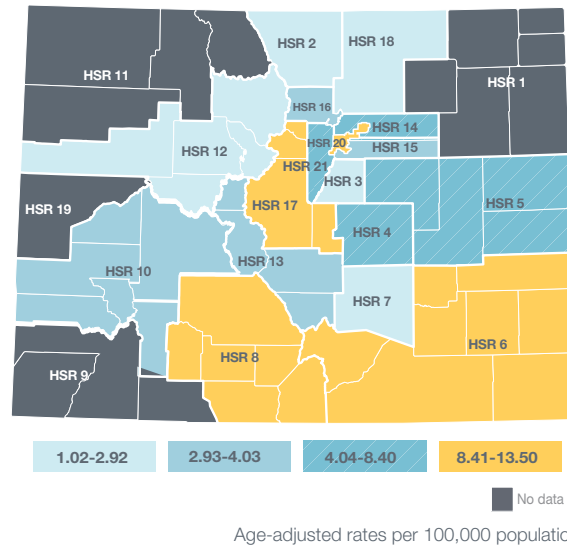


Age-specific crude rates per 100,000 population

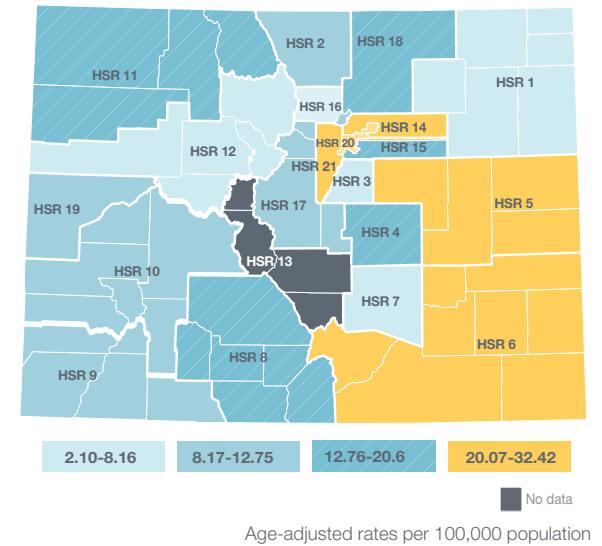
Fentanyl, one type of synthetic opioid, is of concern because of its **high potency**. A person taking an illicit drug may not know the drug contains fentanyl.

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

PRESCRIPTION OPIOID OVERDOSE DEATHS, 2021

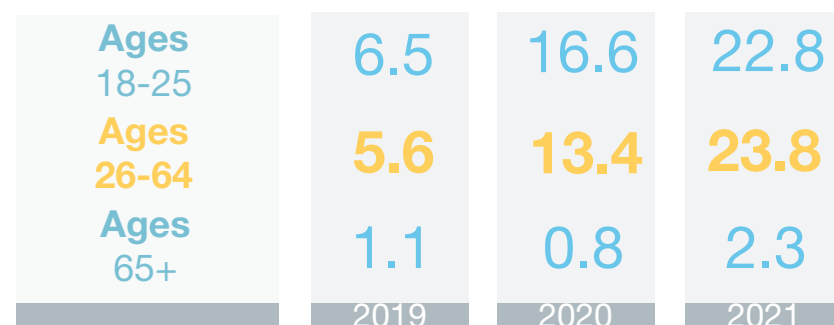


SYNTHETIC OPIOID OVERDOSE DEATHS WITH MENTION OF FENTANYL, 2021



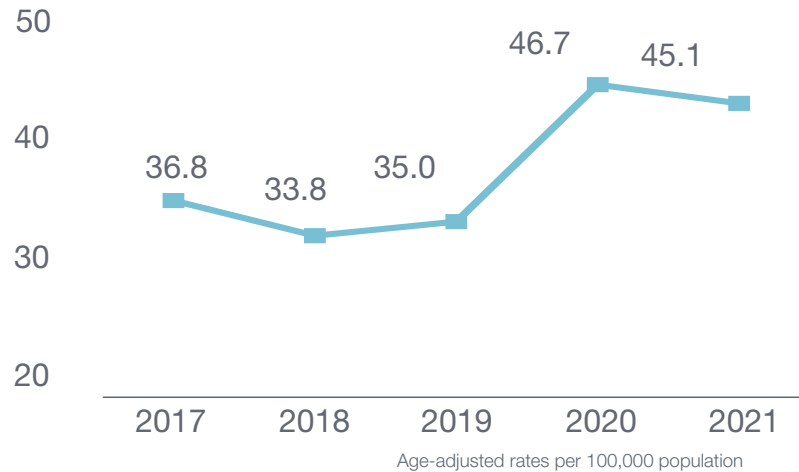
The **male overdose death rate** involving fentanyl is **consistently higher** than that for women.

The death rate involving fentanyl **increased for all age groups** from 2019 to 2021.

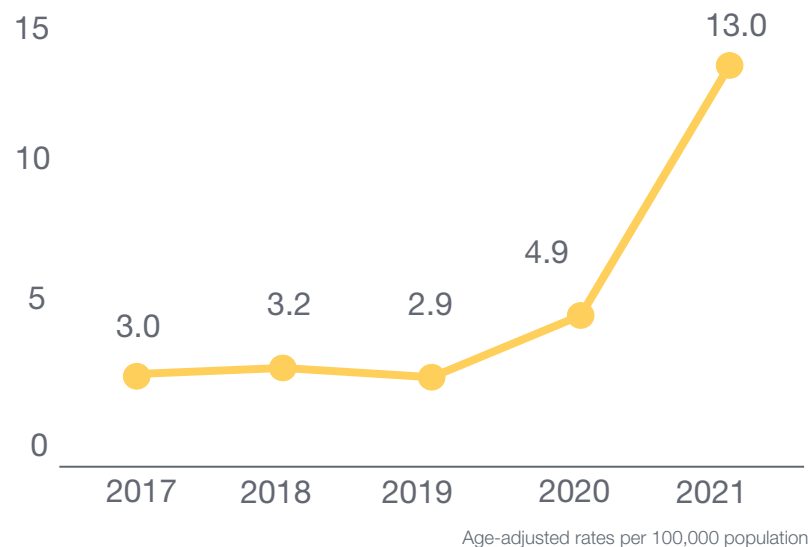




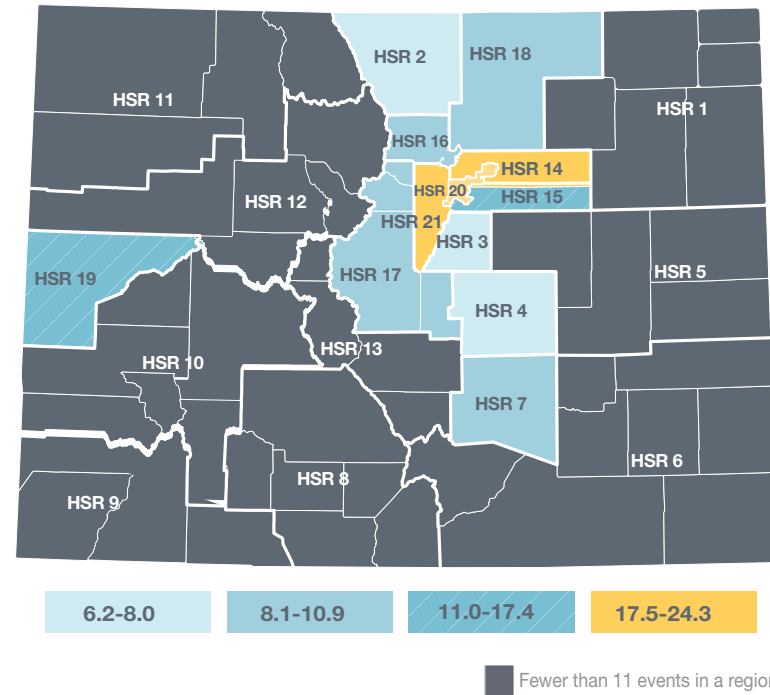
Rates of emergency department **visits involving opioids** (including prescriptions, fentanyl, and heroin) **increased** in Colorado in 2020 and remained high in 2021.



Rates of emergency department **visits involving synthetic opioids** (including fentanyl) **increased** in Colorado in 2020 and 2021.



## RATES OF EMERGENCY DEPARTMENT VISITS INVOLVING PRESCRIPTION OPIOIDS



- Synthetic opioids include fentanyl and tramadol.
- Methodone, 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, began to include a code for fentanyl only.

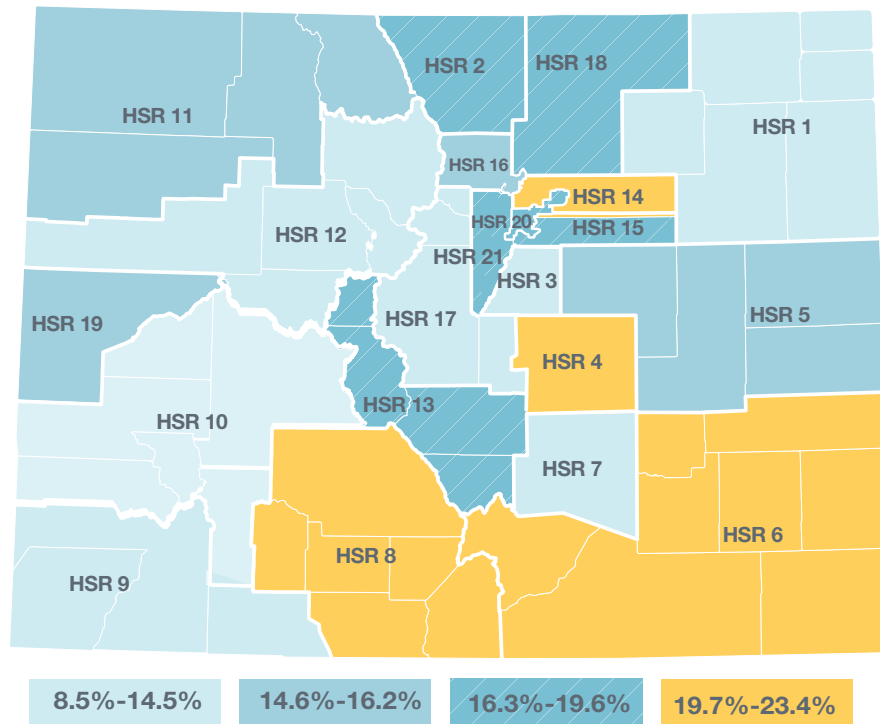


# TREATMENT

**17.7%** of treatment admissions in Colorado were for prescription opioids or heroin in 2021.

The proportion of treatment admissions for prescription opioids and heroin increased from 14.9% of total admissions in 2017 to 17.7% of total admissions in 2021.

Percent of total treatment admissions for prescription opioids or heroin in 2021.



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.

**23 years old**  
The average age of first use of prescription opioids and heroin for individuals admitted to treatment

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

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

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

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
Opioid analgesics	Commonly referred to as prescription opioids.
Per capita	Per person
Prescription opioids	<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"> <li>• Natural opioid analgesics (morphine and codeine)</li> <li>• Semi-synthetic opioid analgesics (oxycodone, hydrocodone, hydromorphone, and oxymorphone)</li> <li>• Methadone (a synthetic opioid that can be prescribed for pain reduction or for use in medication assisted treatment for opioid use disorder)</li> <li>• Synthetic opioid analgesics (other than methadone, including drugs such as tramadol and fentanyl).</li> </ul>
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.

## 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/opioids/basics/terms.html>



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

[www.coloradoseow.org](http://www.coloradoseow.org)