

OPIOIDS



Colorado
State Epidemiological
Outcomes Workgroup

In early 2019, the Colorado State Epidemiological Outcomes Workgroup (SEOW) published this four-part document as an overview of opioid, marijuana, and alcohol consumption and consequences in Colorado. Each substance is presented in its own profile, with a Demographics profile provided for additional state context. These epidemiological profiles were designed to be readily usable to all people working in substance use prevention. They cross many data sources and aim to present the most actionable findings.

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

Certain considerations were taken into account in compiling these data, including timeframe and the intended audience. First, the profiles contain all publicly available data. This ensures that persons can access the original source data for more information on any data point in the profiles. 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 2018, the most complete data were found for calendar year 2016. With few exceptions, 2016 data are used consistently throughout the profiles. The exceptions include 2017 Healthy Kids Colorado Survey (HKCS) results and aggregate data when no one year yields a large enough sample size for researchers to make definitive statements. The 2017 HKCS was not administered in Adams and Jefferson Counties. When questions were an exact match to those in the HKCS, data from the Adams County Youth Initiative (ACYI) survey were used as a substitute. All HKCS data presented is for high school students, grades 9th - 12th only. For data that was accessed via websites, the citation applies to what was posted during the time span of June 2018 - October 2018.

These profiles were also compiled with deliberate attention to the intended audience. They were designed to be practical and useful for all Coloradoans who are interested in talking to others in their communities about substance use and prevention. This can include anyone from youth groups and community organizations to school superintendents and state legislators. The four profiles can be used as stand-alone products or in conjunction with each other, as hard copy hand-outs or as a power point presentation. We hope that these profiles will facilitate conversation among Coloradoans about the state of our state. For this reason, these profiles eliminate traditional barriers such as the use of estimates and confidence intervals and introduce easily relatable use of benchmarks, such as national comparisons.

The SEOW partnered with The Evaluation Center – University of Colorado Denver on the content for these profiles. Graphic design was provided by Zeto Creative.

For more information, contact Sharon Liu at the Colorado Department of Human Services, Office of Behavioral Health.

Key Terms	
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
Opiates	Drugs naturally derived from the flowering opium poppy plant, which include heroin, morphine, and codeine.
Opioids	Synthetic or semi-synthetic drugs that act like opiates, and include fentanyl, oxycodone (OxyContin), and hydrocodone (Vicodin). Opioids is commonly used as an umbrella term for both naturally-derived opiates and synthetic opioids.
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	Two ratios that have been set equal to each other
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
Significance	The probability is less than .05 that the difference or relationship happened by chance
Protective Factors	Characteristics within the individual or conditions in the family, school or community that help someone cope successfully with life challenges.

TABLE OF CONTENTS

Consumption 3

Rate of Prescription 4

High-Risk Prescribing Practices 5

High-Risk Prescribing Practices/Heroin 6

Youth Consumption 7

Youth Current Use 8

Youth Risk and Protective Factors 9

Harmful Effects 10

Overdose Deaths 11

Treatment 13

CONSUMPTION

Overview

The Centers for Disease Control and Prevention (CDC) reports opioid prescriptions and sales have increased, however, the amount of pain Americans report has not increased at a similar rate.

According to the CDC, primary care doctors account for about half of opioid prescriptions (as opposed to surgeons or acute care).

In 2016, the CDC ranked Colorado in the lowest quartile (least use) nationally, with 59.8% of patients having opioid prescriptions.

Prescription Fills By Age: (2016, Per 1,000 Residents)

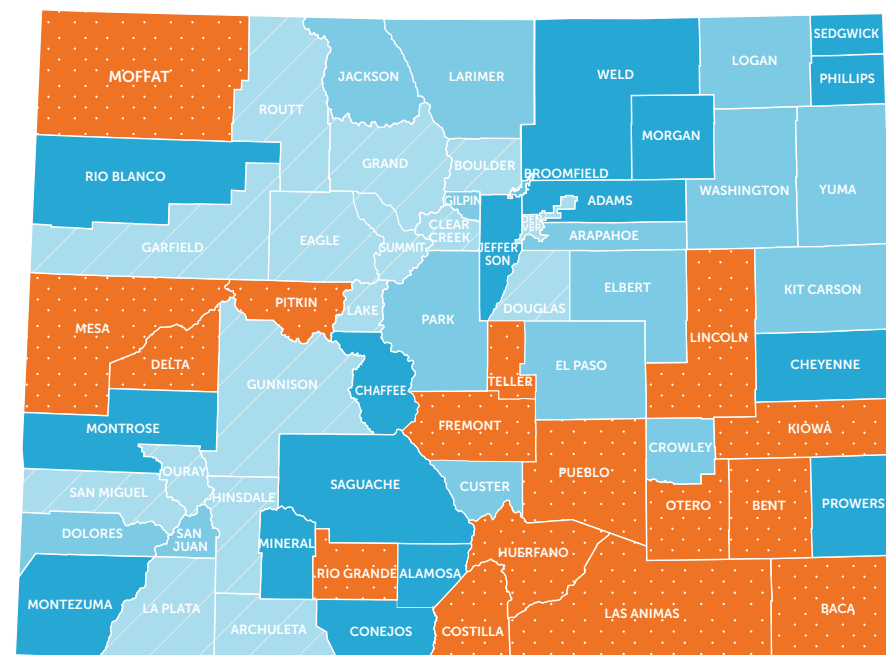
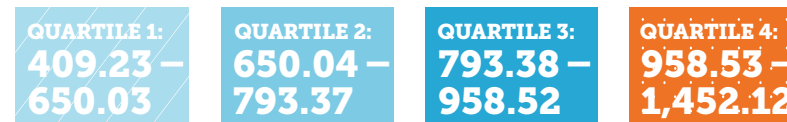


However, in these **11 counties** of Colorado, the age group **26-64** had a **higher prescription fill rate** than those aged 65 and over.



The Rate of Prescriptions in Colorado Remained Virtually Unchanged from 2014 to 2016.

2016 prescription fill rate per 1,000 residents



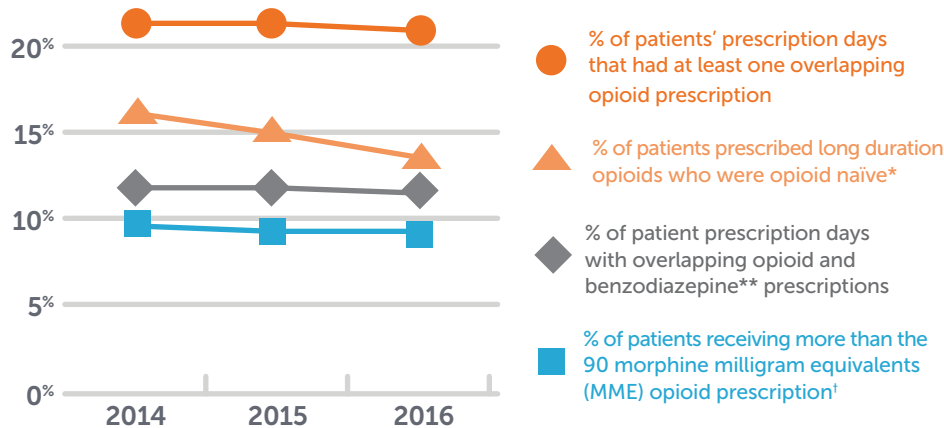
State average: 751.6 fills per 1,000 residents

Opioid Prescription Fill Rate by Gender



High-Risk Opioid Prescribing Practices¹ (2014 – 2016)

All of the high-risk prescribing practice numbers are virtually unchanged in Colorado since 2014:



* Patients who have not received a prescription for opioids in the previous 45 days.

** Benzodiazepines are a class of drugs commonly used for anxiety and sleep.

[†] MME is a way to calculate the total amount of opioids, accounting for differences in opioid drug type and strength.

PRESCRIBING RATES²

and high dose prescribing rates are declining nationally, while the average number of days of the prescriptions continue to increase, which is a risk factor for use disorder.



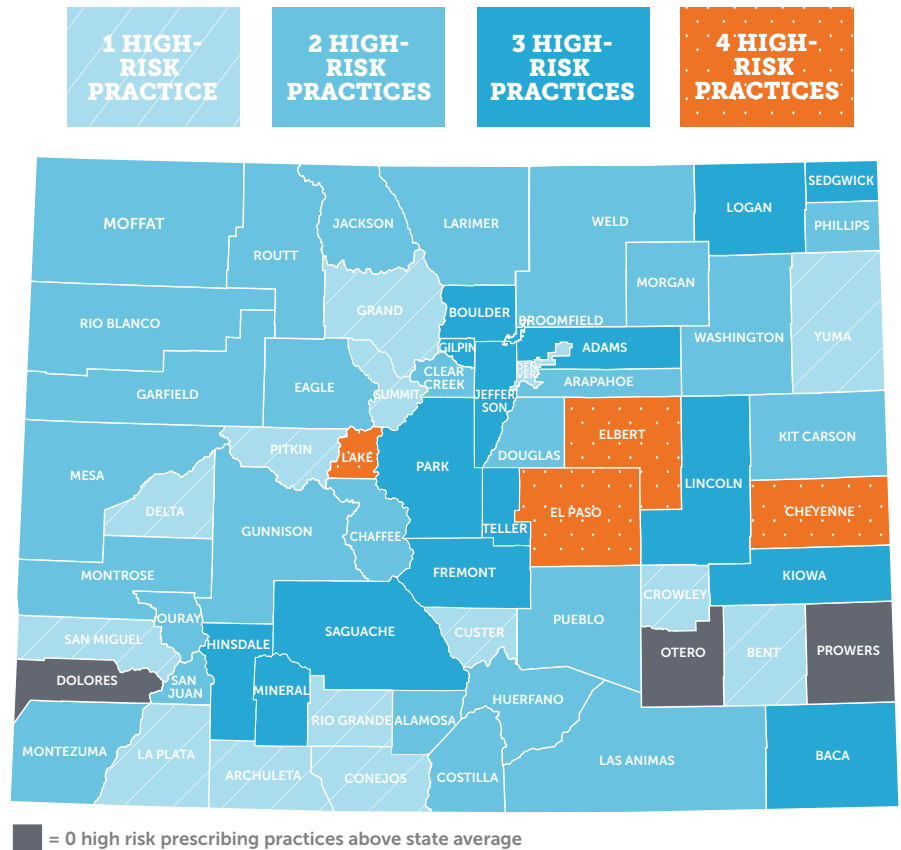
RISK FACTORS FOR ABUSE & OVERDOSE INCLUDE:

- Overlapping prescriptions from multiple providers
- High daily dosage of prescription pain relievers
- Mental illness or a history of alcohol or other substance abuse
- Living in rural areas and having low income

Inappropriate prescribing practices and opioid prescribing rates are substantially higher among Medicaid patients than among privately insured patients.

Aggregate Score of High-Risk Prescribing Practices¹ (2016)

Number of high-risk prescribing practices for which a county was above the state average.

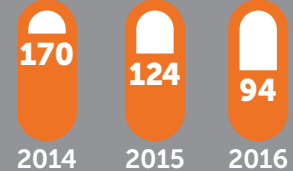


61 of 64 counties have 1 or more high-risk prescribing practices above the state average

Rate of Multiple Provider Episodes¹

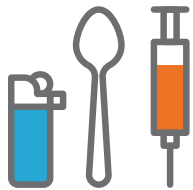
From 2014–2016, in Colorado, there has been a decrease in the rate of individuals using multiple providers to access multiple opioid prescriptions.

RATE OF MULTIPLE PROVIDER EPISODES PER 100,000 RESIDENTS:



Heroin Use Nationally³

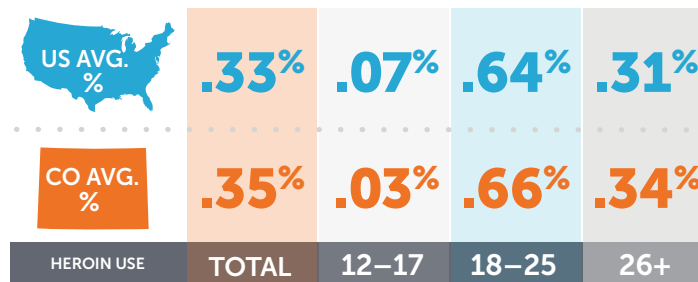
People addicted to prescription opioids are **40x** more likely to become addicted to heroin — and — among new heroin users, approximately **3 of 4** report having abused prescription opioids prior to using heroin.



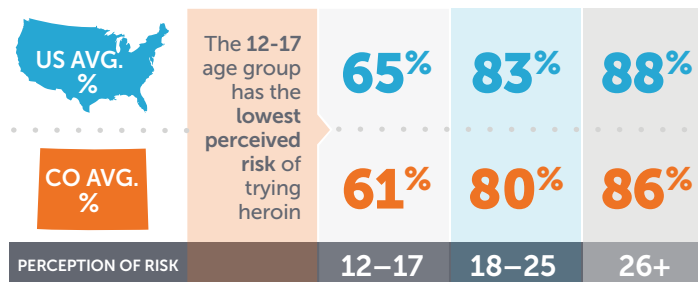
The price range for heroin in Denver hit a 5-year low in 2016, ranging from \$600–\$1,200 per ounce.⁴

Heroin Use in Colorado, 2016²

Almost twice as many 18–25 year olds used heroin than those 26 and over did in the past year.



Percent of individuals who perceive that trying heroin once or twice carries high risk²:



In a 2016 survey of people undergoing opioid use disorders in Denver, of those who had used heroin,⁴

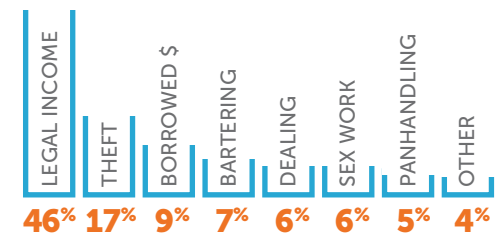
70%

said prescription drugs played a role in their decision to use heroin and of those, 37% started with a legal prescription.

COMMON REASONS FOR 1st TIME HEROIN USE:

40% curious or experimenting
21% cheaper than alternatives

COMMON WAYS TO GET MONEY TO BUY DRUGS:



3 = median number of overdose experiences

Most felt treatment would have been more effective by having stable housing, medication assisted treatment, and better transition to recovery support after treatment.

YOUTH CONSUMPTION

High School Students Use & Perceptions

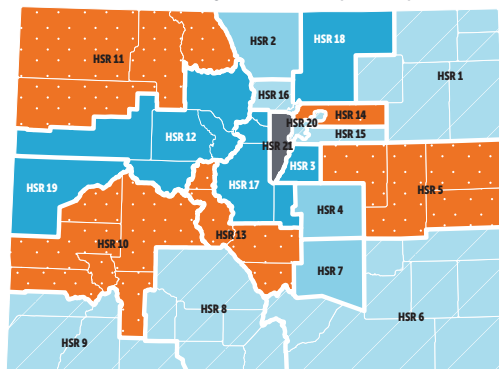


THE STATE AVERAGE
for students who have taken
a prescription pain medicine
without a doctor's prescription
one or more times during
their life is

12.4%

HSR Region **20** is the **lowest at 10.4%**
HSR Region **17** is **highest at 14.9%**

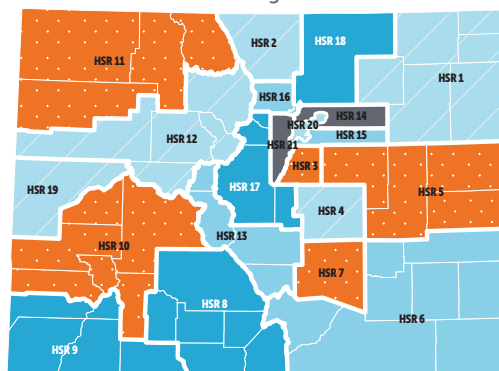
ACTUAL ILLEGAL Rx USE
% of students* who used prescription drugs
in the last 30 days without a prescription



State average 5.1%

QUARTILE 1	QUARTILE 2	QUARTILE 3	QUARTILE 4
4.10% – 5.10%	5.11% – 5.75%	5.76% – 6.03%	6.04% – 7.20%

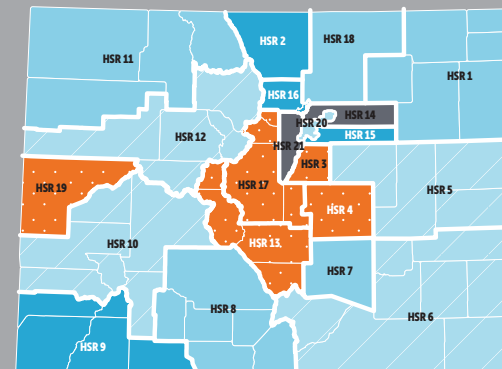
ACTUAL HEROIN USE
% of students* who used heroin one or more
times during their life



State average 1.5%

QUARTILE 1	QUARTILE 2	QUARTILE 3	QUARTILE 4
0.50% – 1.30%	1.31% – 1.50%	1.51% – 2.20%	2.21% – 3.70%

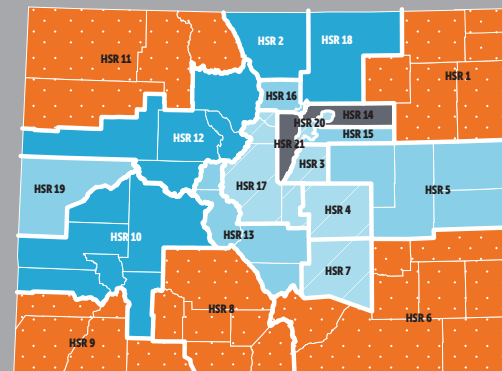
PERCEPTION OF ACCESS TO ILLEGAL Rx
% of students* who think it's sort of or
very easy to get prescription drugs
without a prescription



State average 25.3%

QUARTILE 1	QUARTILE 2	QUARTILE 3	QUARTILE 4
20.40% – 24.05%	24.06% – 24.90%	24.91% – 26.75%	26.76% – 30.5%

**PERCEPTION OF HOW WRONG ILLEGAL
Rx USE IS**
% of students* who think it's wrong or
very wrong to use prescription drugs
without a prescription



State average 88.7%

QUARTILE 1	QUARTILE 2	QUARTILE 3	QUARTILE 4
86.50% – 88.35%	88.36% – 89.70%	89.71% – 91.05%	91.06% – 92.5%

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

NO DATA

High school students who reported these protective factors were less likely to use prescription pain killers.



STUDENTS WHO
REPORTED
THINKING IT WAS
IMPORTANT TO
FINISH HIGH
SCHOOL

were
86%
less likely to use
prescription drugs

than those who
reported thinking it
was not important to
finish high school.



STUDENTS WHO
REPORTED HAVING
THEIR PARENTS/
GUARDIANS KNOW
WHERE AND WHO THEY
ARE WITH WHEN NOT
AT HOME

were
77%
less likely to use
prescription drugs

than those who
reported their parents
did not know where
and who they were with
when not at home.



CLEAR RULES IN
THEIR FAMILY
ABOUT ALCOHOL
AND DRUG USE

were
70%
less likely to use
prescription drugs

than those who
reported thinking their
family doesn't have
clear rules about
alcohol and drug use.



STUDENTS WHO
REPORTED HAVING AN
ADULT TO GO TO FOR
HELP WITH A SERIOUS
PROBLEM

were
52%
less likely to use
prescription drugs

than those who
reported not having an
adult to go to for help
with a serious problem.



STUDENTS WHO
REPORTED
HAVING SOMEONE
TO TALK TO WHEN
THEY WERE
FEELING SAD

were
43%
less likely to use
prescription drugs

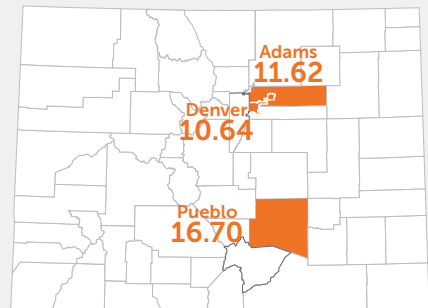
than those who
reported not having
anyone to talk to
when they were
feeling sad.

*For details on risk factors see demographics profile

HARMFUL EFFECTS

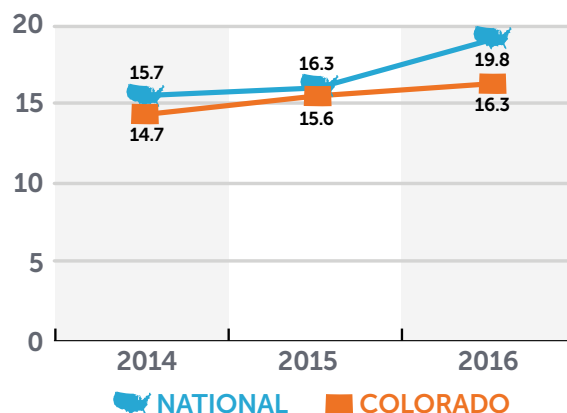
Prescription & Heroin Overdose Deaths

TOP THREE COLORADO COUNTIES WITH HIGHEST PROPORTION OF FATAL DRUG OVERDOSES²
(PRESCRIPTION OR HEROIN)
State Average 8.06 per 100,000

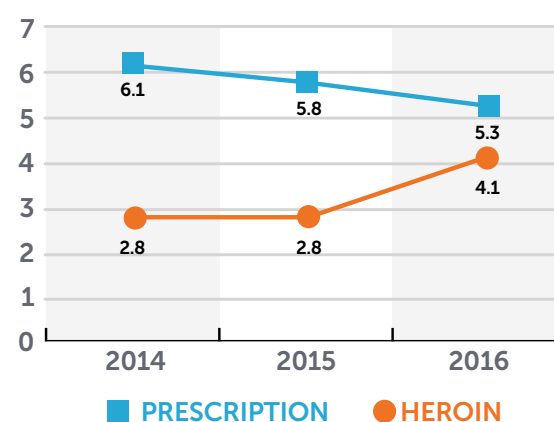


While Colorado's overall overdose rate from all drugs is virtually unchanged, the **heroin overdose rate has increased**.

All drug overdose deaths¹:
Per 100,000

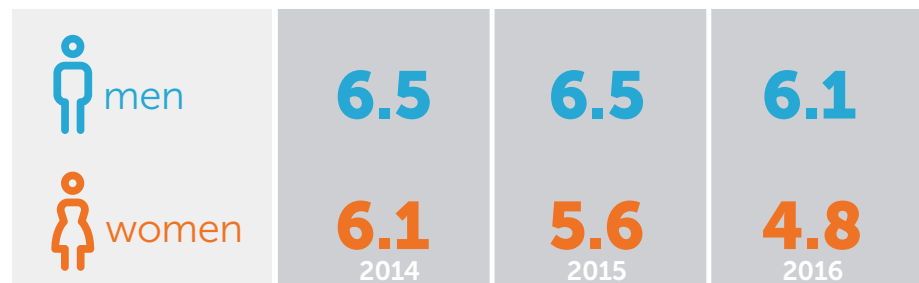


Colorado overdose deaths²:
Per 100,000

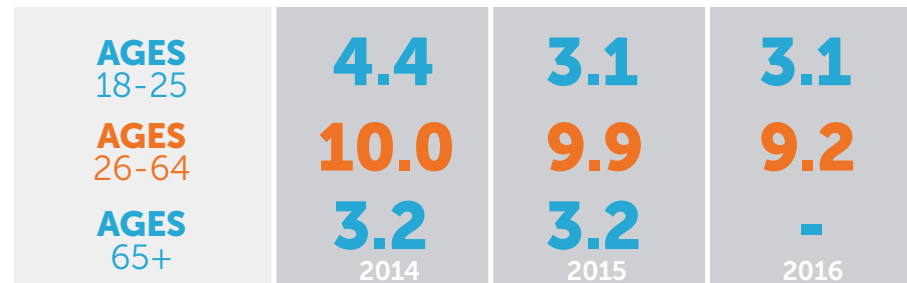


Colorado Drug-Related Poisoning Deaths That Mention Pharmaceutical Opioids²

Per 100,000



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



The death rate from prescription opioids is consistently **higher** for ages **26-64** than other ages, (though 65+ has higher rates of prescriptions).



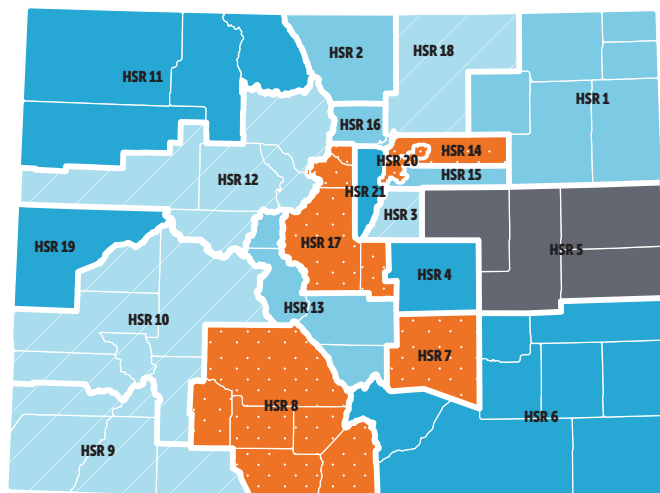
NATIONALLY, IN 2016

64.4%
of overdose deaths
were opioid-related²

The most common drugs involved
in prescription opioid overdose
deaths included:

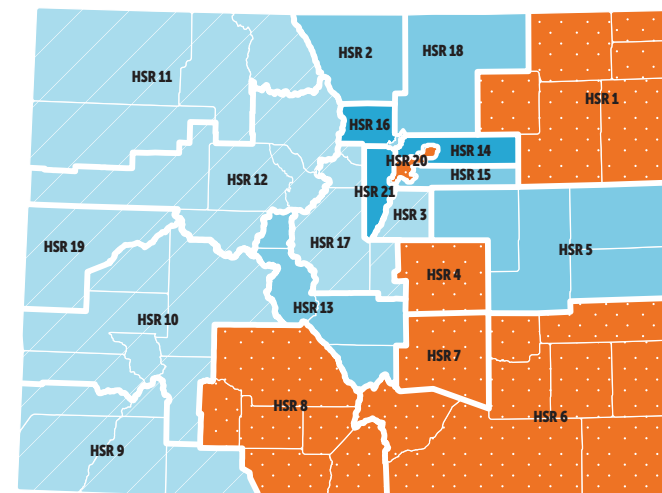
Methadone
Oxycodone (OxyContin)
Hydrocodone (Vicodin)

PHARMACEUTICAL OPIOIDS DEATH RATE¹



QUARTILE 1	QUARTILE 2	QUARTILE 3	QUARTILE 4
1.60 – 4.25	4.26 – 5.30	5.31 – 6.68	6.69 – 9.30

HEROIN DEATH RATE¹

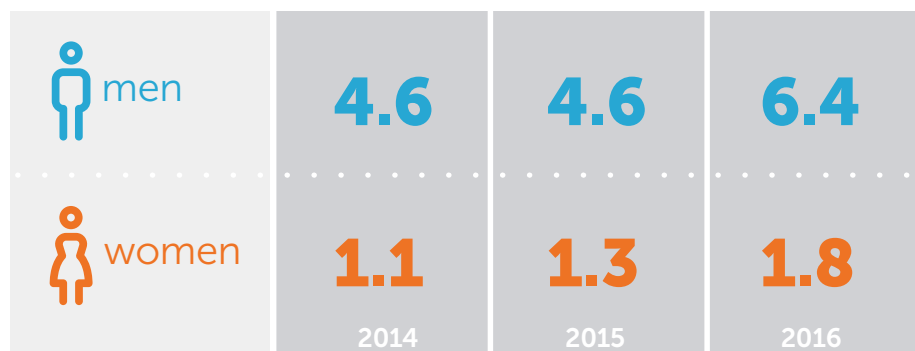


QUARTILE 1	QUARTILE 2	QUARTILE 3	QUARTILE 4
0.60 – 1.50	1.51 – 2.20	2.21 – 3.30	3.31 – 8.10

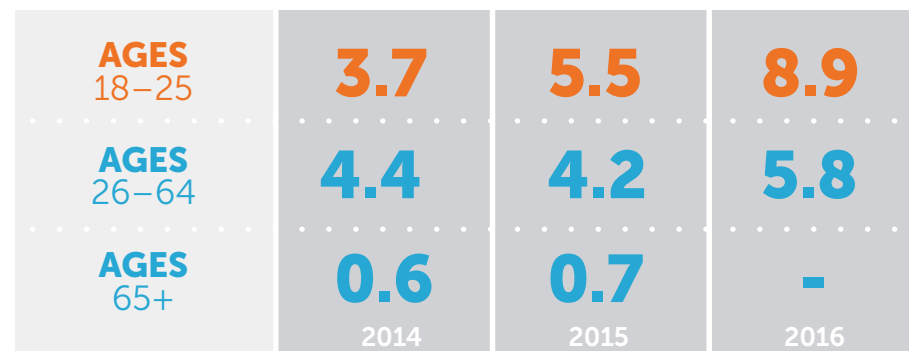
Rates are the annual average of age-adjusted per 100,000, from 2012–2016 ■ =None reported

Drug-Related Poisoning Deaths That Mention Heroin¹:

Per 100,000



The male death rate from heroin is
consistently higher than it is for women.



The death rate from heroin is consistently
higher for ages 18–25 than other ages.

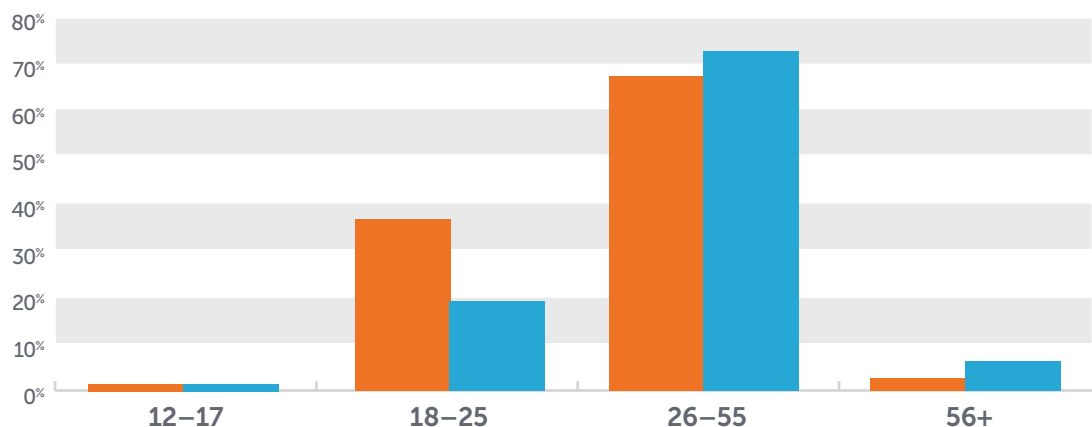
The percent of people seeking treatment* for heroin in Colorado is the next most frequent substance behind alcohol/alcohol with other substances.

2016
treatment
admissions for
heroin **9,071**

2016
treatment
admissions for
other opioids** **2,588**

Treatment Admissions For Heroin and Opioids

by Age, 2016



Of all the people
receiving treatment
in Colorado,

10.1%
received treatment for
HEROIN

61.8% male / 38.2% female

and
2.9%
received treatment for
**OTHER
OPIOIDS**

54.5% male / 45.5% female

*Treatment admissions are defined as clients aged 12 years and older admitted to treatment at facilities for alcohol and/or drug use. SAMHSA TEDS only tracks treatment admissions at facilities that are licensed or certified by a state substance abuse agency to provide care for people with a substance use disorder (or facilities that are administratively tracked for other reasons). Generally, facilities reporting SAMHSA TEDS data are those that receive state alcohol and/or drug agency funds (including federal block grant funds) for the provision of alcohol and/or drug treatment services.

**This category includes admissions for abuse of non-prescription methadone; for use of other opiates and synthetics, including buprenorphine, butorphanol, codeine, hydrocodone, hydromorphone, meperidine, morphine, opium, oxycodone, pentazocine, propoxyphene, tramadol, and other narcotic analgesics, opiates, or synthetics.