

NDEWS *National Drug Early Warning System*

Funded at the Center for Substance Abuse Research by the National Institute on Drug Abuse

Denver Metro Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2018

November 2018

NDEWS Coordinating Center

NDEWS *National Drug Early Warning System*

Funded at the Center for Substance Abuse Research by the National Institute on Drug Abuse



Sentinel Community Epidemiologists (SCEs)

Atlanta Metro

Brian J. Dew, PhD
Dept of Counseling and Psychological Svcs
Georgia State University
Phone: 404-413-8168
bdew@gsu.edu

Chicago Metro

Lawrence J. Ouellet, PhD
School of Public Health
University of Illinois at Chicago
Phone: 312-355-0145
ljo@uic.edu

Denver Metro

Marion Rorke, MPH
Dept of Public Health and Environment
City and County of Denver
Phone: 720-865-5453
marion.rorke@denvergov.org

Wayne County (Detroit Area)

Cynthia L. Arfken, PhD
Dept of Psychiatry and Behavioral
Neurosciences
Wayne State University
Phone: 313-993-3490
cynthia.arfken@wayne.edu

Los Angeles County

Mary-Lynn Brecht, PhD
Integrated Substance Abuse Programs
University of California at Los Angeles
Phone: 310-983-1196
lbrecht@ucla.edu

Maine

Marcella H. Sorg, PhD, RN
Rural Drug and Alcohol Research Program
University of Maine
Phone: 207-581-2596
mhsorg@maine.edu

Southeastern Florida (Miami Area)

James N. Hall, BA
Center for Applied Research on Substance Use
and Health Disparities
Nova Southeastern University
Phone: 786-547-7249
upfrontin@aol.com

New York City

Denise Paone, EdD
Bureau of Alcohol and Drug Use
Prevention, Care and Treatment
New York City Dept of Health & Mental
Hygiene
Phone: 347-396-7015
dpaone@health.nyc.gov

Philadelphia

Suet T. Lim, PhD
City of Philadelphia
Dept of Behavioral Health and Intellectual
disAbility Services
Community Behavioral Health
Phone: 215-413-7165
suet.lim@phila.gov

San Francisco

Phillip O. Coffin, MD, MIA
San Francisco Dept of Public Health
Phone: 415-437-6282
phillip.coffin@sfdph.org

King County (Seattle Area)

Caleb Banta-Green, PhD, MSW, MPH
Alcohol and Drug Abuse Institute
University of Washington
Phone: 206-685-3919
calebbg@u.washington.edu

Texas

Jane C. Maxwell, PhD
School of Social Work
The University of Texas at Austin
Phone: 512-656-3361
jcmaxwell@austin.utexas.edu

National Drug Early Warning System (NDEWS) Denver Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2018

Marion Rorke, M.P.H.
Denver Department of Public Health & Environment

Highlights

- **Overdose fatalities and polysubstance use:** In 2017 there were 201 overdose fatalities in the City and County of Denver. More than 70% of these deaths involved three or more substances, compared with cumulative 10-year data (2008–2017, $N = 1,850$), which shows only 61% of deaths involved three or more substances. Additionally, although 15% of overdose fatalities from 2008 to 2017 involved only one substance, this was reduced to 8% in 2017.
- In the nine-county Denver Metro Area (DMA), **overdose deaths** involving heroin decreased from 127 in 2016 to 113 in 2017. In this same geographic area, overdose deaths involving prescription opioids increased from a low of 179 (5.4/100,000) in 2016 to 216 (6.6/100,000) in 2017. Similar trends were seen regarding prescription opioid fatalities across the state.
- **Methamphetamine-involved overdose fatalities** are increasing in the City and County of Denver, the DMA, and the state of Colorado. In the DMA, methamphetamine overdoses have increased almost every year since a low of 23 in 2008. The largest increase was seen from 2016 to 2017 with increases from 112 (3.4/100,000) to 152 (4.6/100,000). In 2017, methamphetamine was involved in 299 of the overdose deaths across Colorado and in 88 of the overdose deaths in the City and County of Denver.
- **Fentanyl-involved overdose fatalities** have increased in the City and County of Denver, the DMA, and across the state in the past year. Almost 60% of those deaths occurred in the DMA. In 2017, there were a total of 81 (1.5/100,000) fentanyl-involved overdose deaths in Colorado, up from 49 (0.9/100,000) in 2016. In the City and County of Denver, fentanyl was involved in 21 of the 201 overdose deaths in 2017.
- **LSD** became the 9th most commonly seized substance by law enforcement in the DMA in 2017 with a total of 56 seizures.

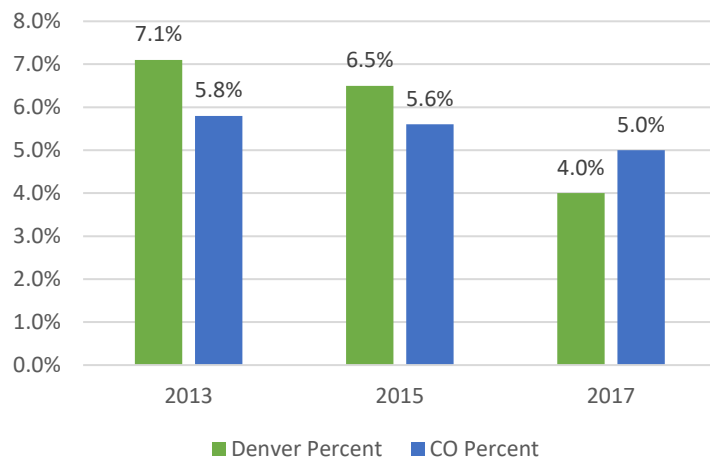
NDEWS Priority Substances

COCAINE/CRACK

Key Findings

Self-reported lifetime cocaine use among high school students surveyed has decreased in Denver and Colorado based on Healthy Kids Colorado data collected every other year. In 2013, 7.1% of Denver public school students surveyed reported ever using cocaine; in 2017, this number decreased to 4% (Figure 1). In Colorado, the decrease is less, from 5.8% reporting ever using cocaine in 2013 to 5% in 2017.

Figure 1. Self-Reported Lifetime Use of Any Form of Cocaine Among High School Students, Healthy Kids Colorado Survey, 2013–2017



Cocaine moved back into the position of the second most commonly seized substance by law enforcement in the nine-county Denver Metro Area (DMA) in 2017, accounting for almost 1/5th of all drug seizures. Cocaine was the second most commonly seized substance in 2014 and 2015 before being surpassed by cannabis in 2016.

Deaths involving cocaine in Colorado have remained low and stable in recent years, but there was a slight increase in cocaine-involved deaths among women statewide in 2017, whereas the number related to all sexes and men-only decreased slightly. Men still make up a greater proportion of cocaine-involved deaths, however, with 2.3/10,000 versus 1.0/100,000 among women. These same trends are seen in the DMA.

In Denver County, cocaine-involved overdose deaths have increased slightly in recent years, but the increase is not statistically significant. Overall cocaine-involved overdose deaths have decreased in the past 10 years.

Treatment admissions for cocaine as the primary substance in the DMA have decreased overall since 2012 when they accounted for 8.7% of all treatment admissions. In the DMA, men accounted for 69.8% of admissions, and 55.5% of admissions were people who identified as White/non-Hispanic, followed by 30.5% Hispanic/Latino, and 28.6% Black/African American. 20.9. A total of 21% of those admitted in 2017 were between 18 and 25 years old, and 4.6% reported injecting the drug.

In Denver County alone, admissions for cocaine treatment also decreased from a high of 647 in 2012 to a low of 356 (or 6.4% of all treatment admissions) in 2017.

In 2017, there were 55 cocaine human-exposure-related calls in Colorado to the Rocky Mountain Poison and Drug Center (RMPDC). This is a decrease from 80 in 2016.

Polydrug Use

Thirty-seven of the 201 overdose deaths in Denver County in 2017 involved cocaine. Of those, 38% (n=14) involved any opioid and 32% (n=12) involved methamphetamine.

Of those admitted to treatment in the DMA in 2017 with cocaine as the primary substance, about 1/3rd had alcohol as a secondary substance. Overall, 4.0% had heroin, 9.3% had methamphetamine, and nearly 25.0% had marijuana as secondary substances. In Denver County, the percentage of people listing specific secondary substances with cocaine as the primary was nearly identical, aside from a slightly lower amount reporting methamphetamine (7.3%) as a secondary substance.

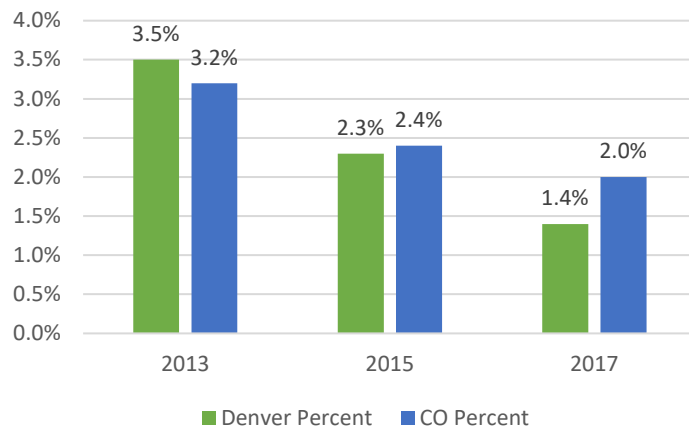
Of those admitted with cocaine *not* as the primary substance, many listed it as a secondary. For those admitted with alcohol as the primary substance, 9.0% identified cocaine as a secondary substance, 10.5% of those admitted for heroin as the primary identified cocaine as a secondary substance, 5.2% of those with a prescription opioid as primary had cocaine, and 8.2% of those admitted for marijuana had cocaine as a secondary substance. In Denver County, the percentages of cocaine as a secondary substance were as follows: 10.0% of those admitted for alcohol, 9.4% of those admitted for heroin, 5.1% of those admitted for a prescription opioid, 5.5% of those admitted for methamphetamine, and 8.1% of those admitted for marijuana. This indicates very little difference between Denver County and the eight surrounding counties included in the DMA.

METHAMPHETAMINE

Key Findings

According to the Healthy Kids Colorado survey, reported lifetime methamphetamine use among high school students has decreased each survey year in Denver, from 3.5% in 2013 to 1.4% in 2017 (Figure 2). Across the state, reported lifetime use among high school students has also decreased but to a lesser extent. Those reporting ever using methamphetamine decreased from 3.2% in 2013 to 2.0% in 2017.

Figure 2. Self-Reported Lifetime Methamphetamine Use Among High School Students, Healthy Kids Colorado Survey, 2013–2017



Methamphetamine has remained the number one seized drug in the DMA by law enforcement, as reported by the National Forensic Laboratory Information System (NFLIS). In 2017, methamphetamine accounted for 35.4% of all drugs seized. The total number of methamphetamine seizures continues to increase with a total of 3,618 seizures in 2017.

Overdose deaths involving methamphetamine have continued to increase in the DMA. Among men, this increase is happening more rapidly. In Colorado, the trend of increases in methamphetamine-involved deaths is also seen, with 299 deaths (or 5.2/100,000) in 2017, up from just 196 deaths (or 3.3/100,000) in 2016. Denver County has also observed a significant increase in the number of overdose deaths where methamphetamine was involved, surpassing the number of heroin-involved deaths in 2015.

Treatment admissions in the DMA for methamphetamine as the primary substance has increased overall since 2012—from 11.5% of admissions to 16.2% of admissions (or 2,685) in 2017. Of those admitted, more than 80% identified as White, non-Hispanic. Nearly 1/5th of methamphetamine admissions were among people 25 years or younger. Although most reported smoking the drug, nearly 1/3rd reported injecting it. Treatment admissions in Denver County follow similar trends to the DMA, where methamphetamine accounted for about 17% of all admissions in 2017. This is an increase overall from only 10% of admissions in 2012. In terms of numbers, treatment admissions in Denver County increased from a total of 485 in 2012 to 933 in 2017. Additionally, men represented a greater proportion of admissions in Denver County than in the DMA, accounting for 65.7% and 59.8%, respectively. A smaller proportion of people 25 and younger were admitted in Denver County, in comparison with the DMA (13.5% vs 18.0%).

In 2017, there were 146 methamphetamine-related human exposure calls to RMPDC across Colorado. This is a decrease from 157 calls the previous year.

Polydrug Use

Of the 201 overdose deaths in Denver County in 2017, 88 of them involved methamphetamine. Of those, more than half also involved an opioid, and about 25% specifically involved heroin.

Of those admitted to treatment for methamphetamine as the primary substance in the DMA in 2017, 20.7% had alcohol as a secondary substance, 10.4% had heroin, and 27.0% had marijuana. In Denver County, the percentage of those admitted for methamphetamines that had alcohol as secondary was 21.9%, heroin was 10.8%, and marijuana was 27.2%. Of those admitted to treatment in the DMA who did *not* have methamphetamine as the primary substance, it was listed as a secondary substance for 5.6% of those admitted for alcohol, 9.3% of those admitted for cocaine, 30.9% of those admitted for heroin, 6.1% of those admitted for prescription opioids, and 10.0% of those admitted for marijuana. In comparison, those admitted in Denver County who did *not* have methamphetamine as the primary substance had it listed 5.8% of the time with alcohol, 7.3% with cocaine, 29.9% with heroin, 7.1% with prescription opioids, and 9.5% with marijuana.

Additional Findings

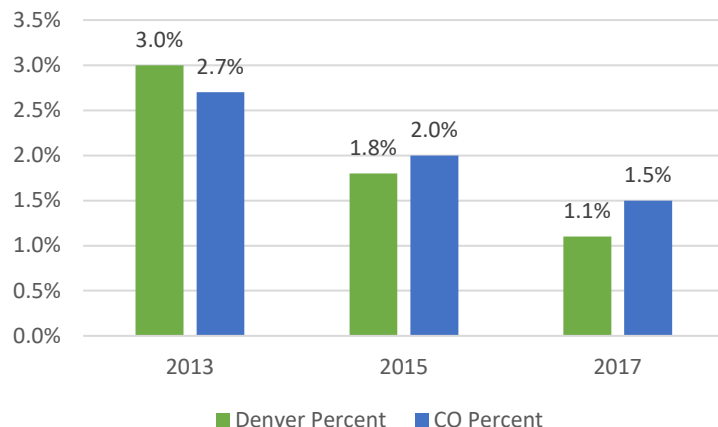
Syringe access programs in Denver County are seeing increases in the number of customers reporting injecting methamphetamine at intake. Additionally, customers reported injecting methamphetamine as well as heroin, although not necessarily at the same time as was common with “goofballs” (See the Denver Needs Assessment on Opioid Use and Al-Tayib et al. in the Sources section for additional information).

HEROIN

Key Findings

Self-reported lifetime use of heroin among high school students surveyed in Denver decreased from 3% in 2013 to 1.1% in 2017. Although reported lifetime use of heroin also decreased across the state, the decrease was less (2.7% in 2013 vs. 1.5% in 2017; Figure 3).

Figure 3. Self-Reported Lifetime Heroin Use Among High School Students, Healthy Kids Colorado Survey, 2013–2017



Heroin was the third most commonly seized drug in the DMA in 2017, accounting for 16.1% of all seizures (or 1,649 heroin seizures). This is an increase from heroin's spot as the fourth most commonly seized substance in 2015 and 2016. In 2016, there were 1,475 heroin seizures in the DMA.

Heroin-involved overdose deaths have begun to taper off from an increasing trajectory in the DMA and Colorado. It was the third most commonly involved drug in overdose deaths among men in the DMA in 2017 and the fourth most commonly involved drug among women. Across all sexes, it was the third most common in the DMA, behind opioid analgesics and methamphetamine. The trends are similar across the state, except that heroin is the third most commonly involved drug in overdose deaths among women in Colorado rather than the fourth. Heroin-involved overdose deaths in Denver County increased from 2.7/100,000 in 2008 to 6.1/100,000 in 2017, totaling 43 heroin-involved overdose deaths in 2017.

Treatment admissions for heroin as the primary substance in the DMA increased annually from 2012 to 2017. In 2017, heroin admissions accounted for 19.2% (or 3,177 admissions) of all treatment admissions in the DMA. In 2016, it became the second most common substance people received treatment for, only below alcohol, which is always significantly higher than any other drug. In Denver County, there were 1,110 treatment admissions for heroin in 2017.

Of those admitted to treatment for heroin in the DMA in 2017, 84.9% were White, non-Hispanic, 22.2% were Hispanic, 27.8% were 25 years old or younger, and 67% reported injecting the drug. In Denver County, 79.5% were White, non-Hispanic, 29.7% were Hispanic, 21.3% were 25 years old or younger, and 70.9% reported injecting the drug.

In 2017, RMPDC received 67 heroin-related human exposure calls, down from 80 in 2016.

Polydrug Use

Of the 43 heroin-involved overdose deaths in Denver County in 2017, half involved methamphetamines and 25% involved benzodiazepines. None involved fentanyl.

Of those admitted to treatment for heroin as the primary substance in the DMA, 6.3% had alcohol as a secondary substance, 10.5% had cocaine, 7.7% had prescription opioids, 30.9% had methamphetamine, 13.2% had marijuana, and 4.4% had benzodiazepines. In comparison, those admitted only in Denver County for heroin, 5.9% had alcohol as a secondary substance, 9.4% had cocaine, 5.8% had prescription opioids, 29.9% had methamphetamine, 12.5% had marijuana, and 5.0% had benzodiazepines.

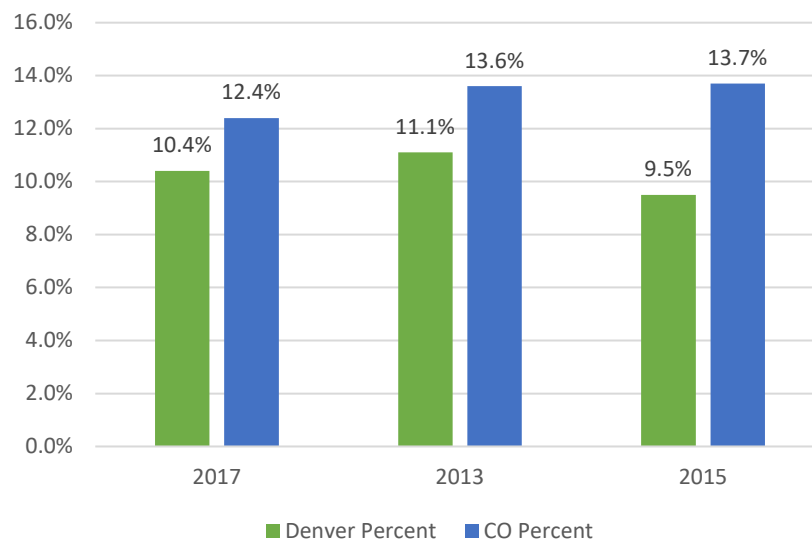
Of those admitted to treatment in the DMA with a primary substance that was *not* heroin, it was reported as a secondary substance for other drug categories. Those admitted for alcohol listed heroin as a secondary substance 1.5% of the time, cocaine 4.0% of the time, prescription opioids 7.6%, methamphetamine 10.4%, marijuana 1.5%, and benzodiazepines 5.3% of the time. Numbers were very similar for Denver County admissions alone.

PRESCRIPTION OPIOIDS

Key Findings

Self-reported lifetime use of a prescription opioid without a prescription decreased slightly overall among surveyed students in Denver high schools from 10.4% in 2013 to 9.5% in 2017. Across the state, reported lifetime use increased overall during the same period, from 12.4% to 13.7% (Figure 4).

Figure 4. Self-Reported Lifetime Prescription Opioid Use* Among High School Students, Healthy Kids Colorado Survey, 2013–2017



*Defined as taking a prescription pain medicine (such as codeine, Vicodin, OxyContin, hydrocodone, and Percocet) without a doctor's prescription one or more times during their life

Oxycodone is the only prescription opioid seized by law enforcement in the DMA that is in the top 10 seizures. In 2017, it was the 6th most commonly seized substance with 139 total seizures, or 1.4% of all drugs seized. Other prescription opioids seized include hydrocodone (in 14th place) with 37 seizures, buprenorphine (17 seizures), hydromorphone (11 seizures), oxymorphone (2 seizures), tramadol (11 seizures), and methadone (4 seizures).

Deaths in the DMA involving opioid analgesics increased to 216 (or 6.6/100,000) in 2017 from a low of 179 (or 5.4/100,000) in 2016, and it remains the number one involved drug category in overdose deaths (excluding alcohol). The same trend is true across the state; 2016 saw a low 300 prescription opioid-related overdose deaths before increasing to 373 in 2017.

Prescription opioid overdoses have essentially remained flat in Denver County over the past 10 years. Small insignificant increases, however, have been observed in recent years.

Treatment admissions for prescription opioids in the DMA increased overall since 2012, to 987 in 2017. They now represent a slightly lesser percentage of total treatment admissions, however. Of those admitted in 2017, 83.2% were White, non-Hispanic and about 25% were Hispanic. Approximately 15.0%

of those admitted were 25 years or younger and 20.1% were 45 years or older. The most common route of administration for prescription opioids was “oral/unknown/other,” whereas 11.2% reported inhaling, 6.5% injected, and 3.9% smoked.

Treatment admissions for prescription opioids in Denver County have increased every year since 2012, when there were 205 admissions, to nearly 300 in 2017 (representing 5.3% of all substance treatment admissions). Overall, 75.7% of those admitted were White, non-Hispanic, 35.1% were Hispanic, 11.5% were 25 years old or younger, and 20.6% were 45 years or older. The most common route of administration was “oral/unknown/other,” whereas 13.2% inhaled, 4.7% injected, and 3.4% smoked the drug.

Polydrug Use

In Denver County in 2017, prescription opioids were involved in overdose deaths that also involved meth (1/3 of the time), fentanyl (1/3 of the time), and benzodiazepines (1/5 of the time).

Of those admitted to treatment in the DMA for primarily prescription opioid use, 12.3% had alcohol as a secondary substance, 5.2% had cocaine, 7.6% had heroin, 6.1% had methamphetamine, 16.1% had marijuana, and 6.4% had benzodiazepines. In comparison, of those admitted in Denver County, 12.2% had alcohol as a secondary substance, 5.1% had cocaine, 8.8% had heroin, 7.1% had methamphetamine, 16.9% had marijuana, and 8.4% had benzodiazepines. In Denver County, the aforementioned secondary substances for people admitted for prescription opioid use accounted for less than 30 in the following categories: cocaine, heroin, methamphetamine, and benzodiazepines.

Of those admitted with a prescription opioid *not* as the primary substance in the DMA, it was mentioned as a secondary substance with alcohol (1.9%), cocaine (2.2%), heroin (7.7%), methamphetamine (1.8%), and benzodiazepines (8.8%). In Denver County, the numbers were also low. The only drug treatment categories that had more than 5% of people admitted mentioning prescription opioids as a secondary substance were heroin (5.8%) and benzodiazepines (10.5%).

FENTANYL AND OTHER NONPRESCRIPTION SYNTHETIC OPIOIDS

Key Findings

There were 15 law enforcement seizures of fentanyl/fentanyl analogs reported to NFLIS in the DMA in 2017. The majority (14) were fentanyl and one was furanyl fentanyl. This is a decrease from 17 fentanyl/fentanyl analogs the previous year. In addition, there were four seizures of U-47700 reported in 2017. Although there were two seizures of fluoroisobutrylfentanyl in 2016, they did not appear in any seizures in 2017.

Fentanyl-involved overdose deaths have increased but not as much as in other parts of the country. Nevertheless, fentanyl was involved in 81 deaths across Colorado in 2017, a 65% increase since the previous year. It is important to note, however, that because of the opioid epidemic, coroners may now be conducting toxicology specific to fentanyl that did not take place before, resulting in the reported increase in fentanyl-involved deaths. In the DMA and Denver County, increases have also been observed but not to the same extent, with just 21 fentanyl-involved deaths in Denver County in 2017.

Polydrug Use

In Denver County, fentanyl was involved in overdose deaths in combination with both methamphetamines and prescription opioids, although the total number of fentanyl-involved deaths remains small.

Additional Findings

Although the data are not available, law enforcement and treatment provider partners have reported finding some pressed pills that appear to be prescription opioids and benzodiazepines to come back positive for fentanyl.

Local harm reduction agencies have recently received fentanyl drug-checking strips from the state for distribution to customers for use. Data are not yet available.

Other Priority Substances in Denver

LSD

Key Findings

LSD was one of the top 10 most frequently seized substances in the DMA by law enforcement in 2017. In 2017, there were a total of 30 LSD-related human exposure calls in Colorado to the RMPDC. LSD does not appear in additional data sources.

Additional Findings

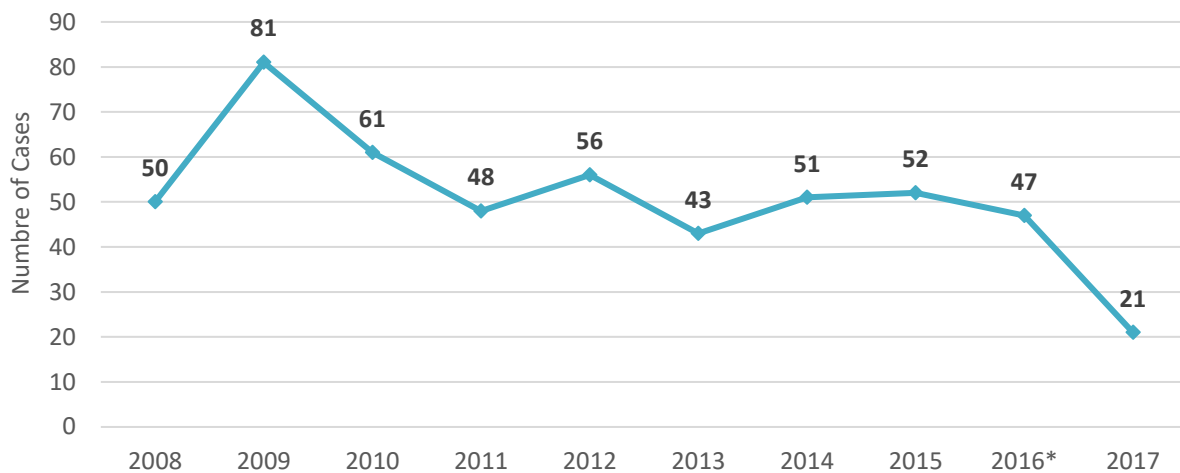
Anecdotal reports from service providers indicate that LSD use may be increasing among youth experiencing homelessness in Denver.

Infectious Diseases Related to Substance Use

HEPATITIS B

Confirmed hepatitis B cases in Denver County appear to have decreased over the past 10 years. The largest decrease was observed from 2016 to 2017, with a 55% decrease.

Figure 5. Total Number of Confirmed Hepatitis B Cases in All Ages in Denver County, 2008–2017

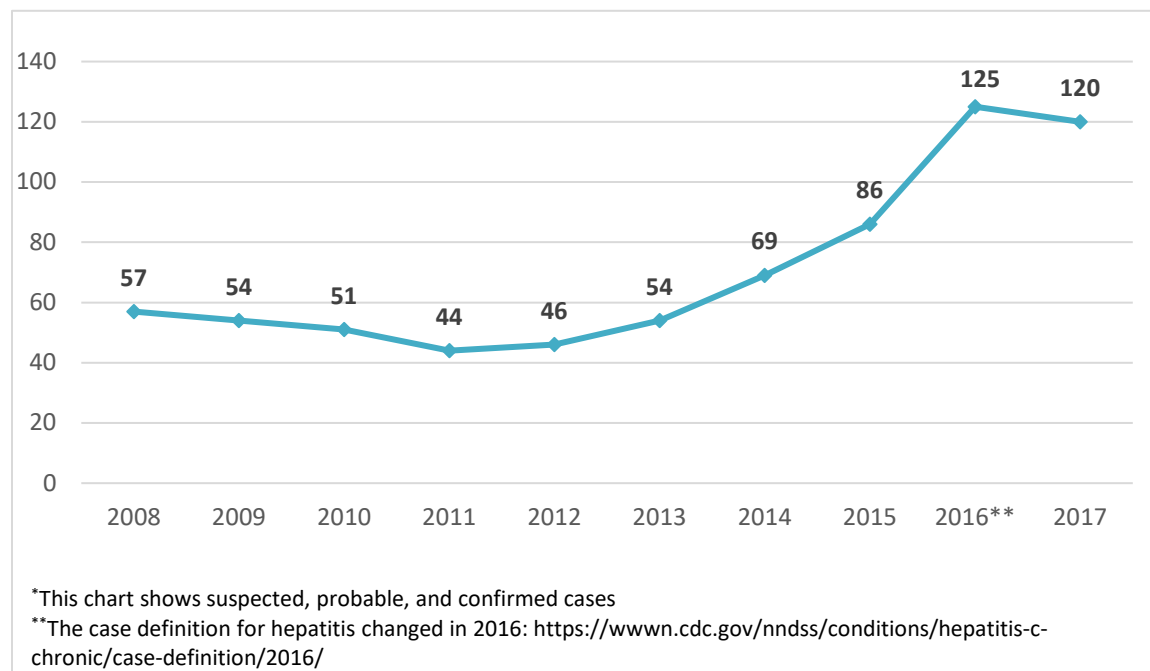


*The case definition for hepatitis changed in 2016: <https://wwwn.cdc.gov/nndss/conditions/hepatitis-c-chronic/case-definition/2016/>

HEPATITIS C

Reported hepatitis C cases in people younger than 30 in Denver County have decreased for the first time since 2011. Cases among people younger than 30 peaked in 2016 with 125 cases.

Figure 6: Total Number of Hepatitis C Virus* Cases in People Younger than 30, Denver County, 2008–2017



Across all ages, hepatitis C cases continue to increase in Denver County, to a high of 820 in 2017, representing a 10% increase from the previous year.

HIV

Newly identified HIV cases in Denver County attributable to men-who-have-sex-with-men who also inject drugs (MSM/PWID) and/or people who inject drugs (PWID) decreased from 26 in 2016 to 17 in 2017. In Denver County, there were a total of 154 newly identified cases of HIV in 2017.

In comparison, across Colorado, there were 440 newly identified HIV cases, 58 of which were attributable to MSM/PWID and/or PWID.

New Substance-Related Legislative and Policy Updates

In 2017, the Mayor's Office began convening an "Opioid Task Force" that meets bi-weekly. Around the same time, Denver's Collective Impact Group (CIG) began convening to develop a vision and plan to address opioids and other substances. Denver's CIG is modeled after and provides support for the Colorado Consortium for Prescription Drug Abuse Prevention, which is the statewide entity leading efforts to address opioids. Out of the CIG came the Leadership Committee for the Collective Impact (LCCI), which was tasked with developing and implementing a strategic plan. Members of the LCCI come from a wide variety of agencies including harm reduction, law enforcement, treatment, peer-run recovery organizations, local hospitals, mental health providers, and others.

Also in 2017, the Colorado Legislature created the Opioid and Other Substance Use Disorders Interim Study Committee, which was allowed to propose up to six bills during the regular session. Six were proposed, five of which passed; the only one that did not pass was SB18-040. The interim committee is convening again in 2018.

The six bills that were proposed by the interim study committee in early 2018 are as follows:

- **HB18-1003:** Opioid Misuse Prevention
- **SB18-022:** Clinical Practice for Opioid Prescribing
- **SB18-040:** Substance Use Disorder Harm Reduction
- **SB18-024:** Expanded Access to Behavioral Health Care Providers
- **HB18-1136:** Substance Use Disorder Treatment
- **HB18-1007:** Substance Use Disorder Payment and Coverage

Additional bills related to behavioral health that passed in 2018 include:

- **SB18-071:** Extend Substance Abuse Trend and Response Task Force
- **HB18-1172:** Money Allocated to Designated Managed Service Organizations
- **HB18-1307:** Limit Access to Products with Dextromethorphan
- **HB18-1357:** Behavioral Health Care Ombudsperson Parity Reports
- **SB18-161:** Repeal Behavioral Health Transformation Council

- **SB18-249:** Criminal Justice Behavioral Health
- **SB18-250:** Jail-based Behavioral Health Services
- **SB18-251:** Statewide Behavioral Health Court Liaison Program
- **SB18-270:** Behavioral Health Crisis Transition Referral Program

Exhibits

Exhibit 1. Age-Adjusted Rates of Death by Drug Category for All Sexes in Colorado, 2007–2017

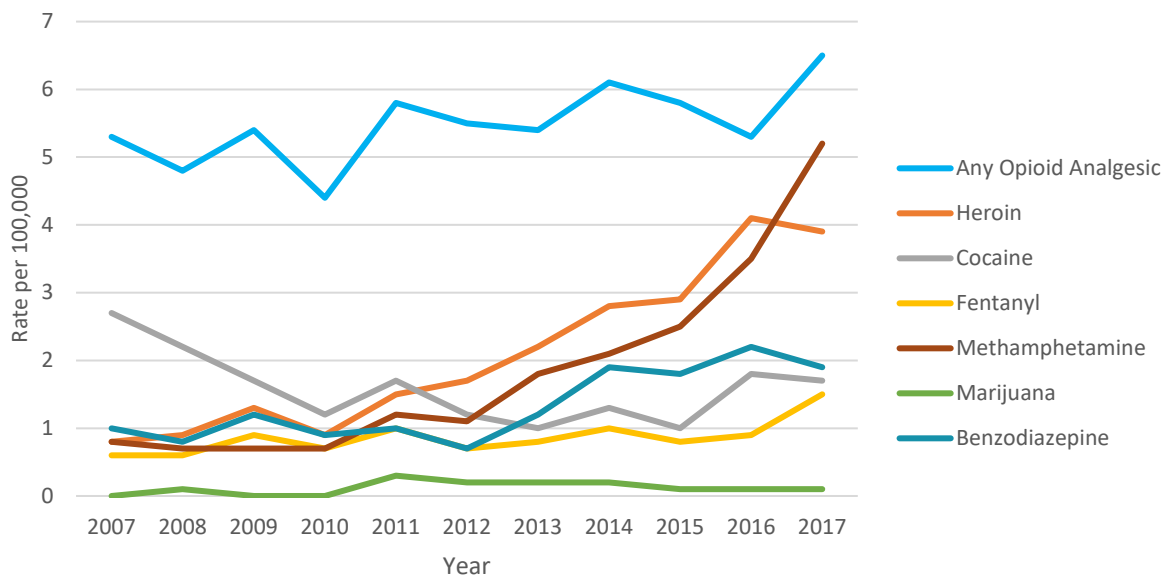


Exhibit 2. Age-Adjusted Rates of Death by Drug Category for All Sexes in the Nine County Denver Metro Area, 2007–2017

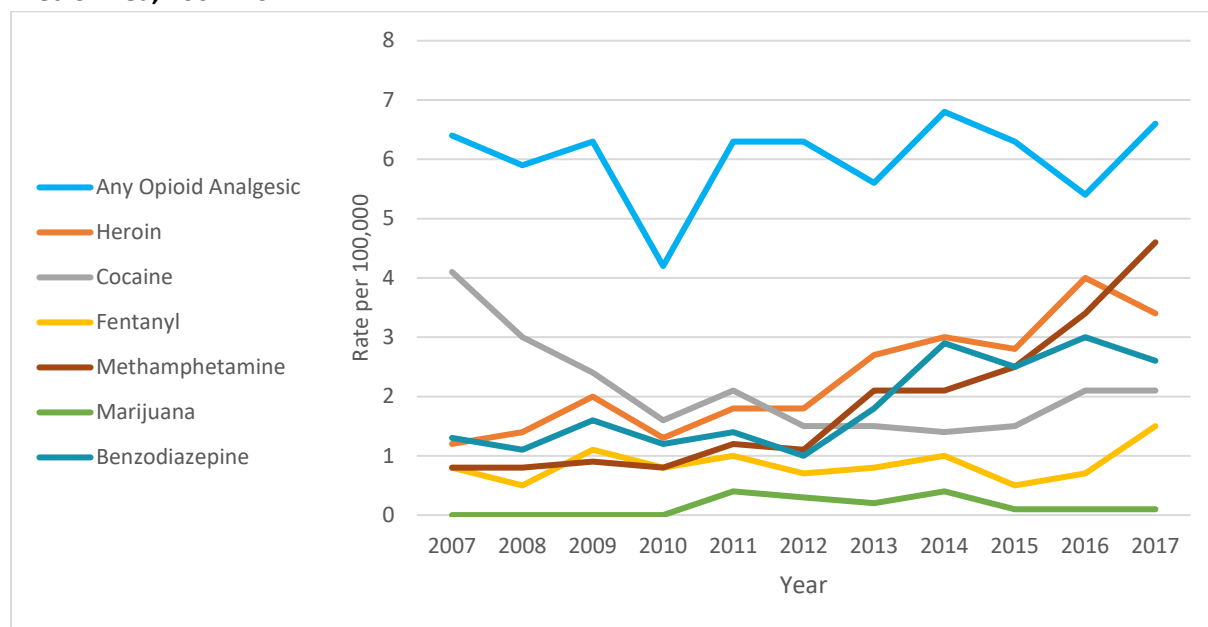


Exhibit 3. Drug-Related Deaths (per 100,000) in Denver County, 2008–2017

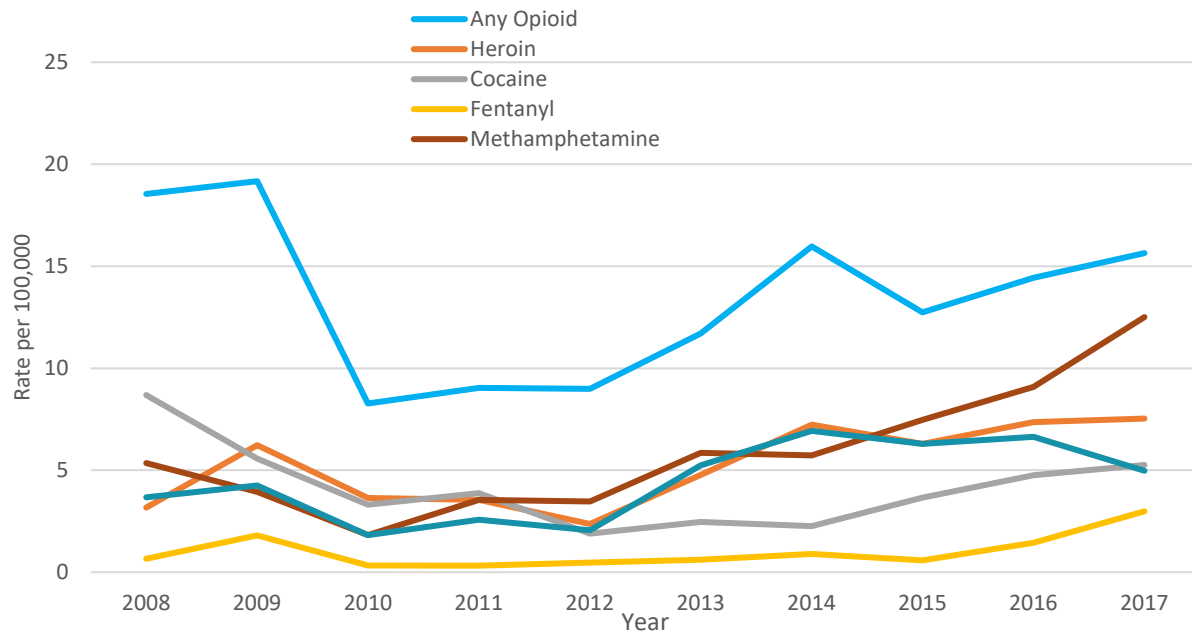
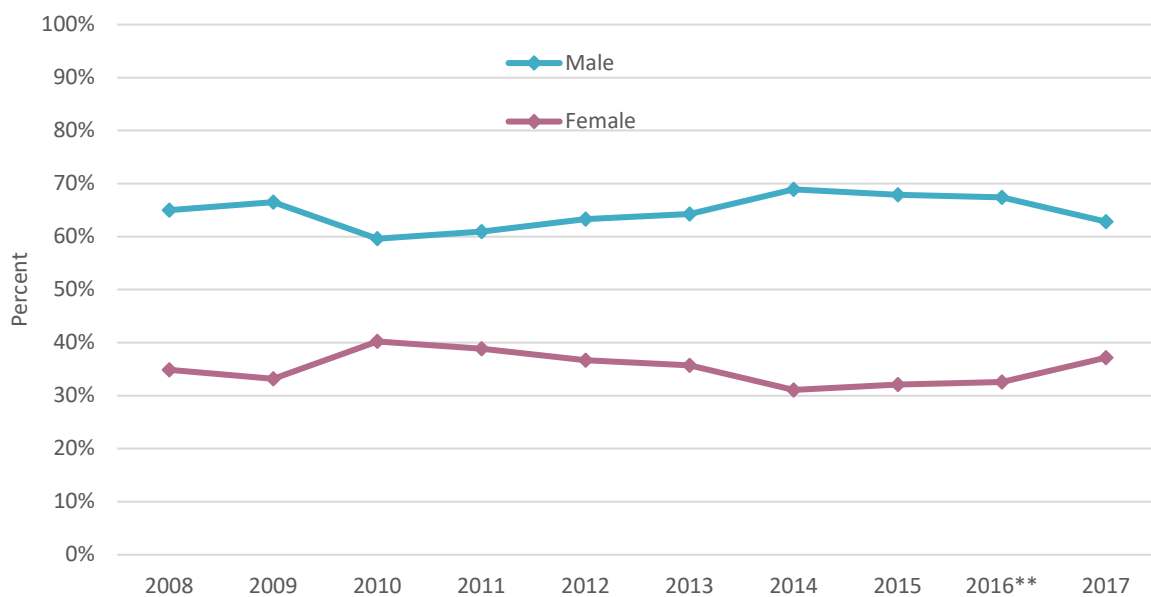


Exhibit 4. Incidence of Hepatitis C Virus* for Males and Females in Denver County, 2008–2017



*This chart shows suspected, probable, and confirmed cases

**The case definition for hepatitis Changed in 2016: <https://wwwn.cdc.gov/nndss/conditions/hepatitis-c->

Treatment Tables

Table 1: Trends in Admissions* to Programs Treating Substance Use Disorders, Denver Metro Area^ Residents, 2013-2017

Number of Admissions and Percentage of Admissions with Selected Substances Cited as Primary Substance at Admission, by Year and Substance

	2013		2014		2015		2016		2017	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
Total Admissions (#)	13,906	100%	15,580	100%	16,181	100%	15,394	100%	16,576	100%
Primary Substance of Abuse (%)										
Alcohol	5,612	40.4%	5,891	37.8%	6,041	37.3%	5,718	37.1%	6,220	37.5%
Cocaine/Crack	964	6.9%	931	6.0%	967	6.0%	810	5.3%	832	5.0%
Heroin	1,793	12.9%	2,319	14.9%	2,569	15.9%	2,850	18.5%	3,177	19.2%
Prescription Opioids**	863	6.2%	998	6.4%	838	5.2%	820	5.3%	987	6.0%
Methamphetamine	1,740	12.5%	2,381	15.3%	2,570	15.9%	2,511	16.3%	2,685	16.2%
Marijuana	2,589	18.6%	2,742	17.6%	2,832	17.5%	2,422	15.7%	2,390	14.4%
Benzodiazepines	57	0.4%	59	0.4%	68	0.4%	93	0.6%	91	0.5%
MDMA	72	0.5%	53	0.3%	29	0.2%	16	0.1%	29	0.2%
Synthetic Stimulants**	19	0.1%	36	0.2%	32	0.2%	34	0.2%	61	0.4%
Synthetic Cannabinoids	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Other Drugs/Unknown**	197	1.4%	170	1.1%	235	1.5%	120	0.8%	104	0.6%

Notes:

^ **Denver Metro Area:** Includes residents of Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson counties.

* **Admissions:** Includes admissions to all Colorado alcohol and drug treatment agencies (excluding detoxification and DUI services) licensed by the Colorado Department of Human Services, Office of Behavioral Health (OBH). Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

** **Prescription Opioids:** Includes non-prescription methadone and other opiates and synthetic opiates; **Synthetic Stimulants:** Includes other amphetamine (not methamphetamine) and other stimulant; and **Other Drugs/Unknown:** Includes inhalants, over-the-counter, and other drugs not specified.

unavail: Data not available.

SOURCE: Data provided to the Denver Metro NDEWS SCE by the Colorado Department of Human Services, Office of Behavioral Health (OBH), Drug/Alcohol Coordinated Data System (DACODS).

Table 2: Demographic and Drug Use Characteristics of Treatment Admissions* for Select Primary Substances, *Denver Metro Area*[^] Residents, 2017
Number of Admissions, by Primary Substance and Percentage of Admissions with Selected Demographic and Drug Use Characteristics

	Primary Substance																	
	Alcohol		Cocaine/Crack		Heroin		Prescription Opioids* **		Methamphetamine		Marijuana		Benzo-diazepines		Synthetic Stimulants		Synthetic Cannabinoids	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Number of Admissions (#)	6,220	100%	832	100%	3,177	100%	987	100%	2,685	100%	2,390	100%	91	100%	61	100%	unavail	unavail
Sex (%)																		
Male	4,145	66.6%	581	69.8%	1,955	61.5%	490	49.6%	1,606	59.8%	1,845	77.2%	60	65.9%	41	67.2%	unavail	unavail
Female	2,075	33.4%	251	30.2%	1,222	38.5%	497	50.4%	1,079	40.2%	545	22.8%	31	34.1%	< 30	nr	unavail	unavail
Race (%)																		
White, Non-Hisp.	4,841	77.8%	462	55.5%	2,696	84.9%	821	83.2%	2,204	82.1%	1,509	63.1%	73	80.2%	51	83.6%	unavail	unavail
African-Am/Black, Non-Hisp	481	7.7%	238	28.6%	94	3.0%	46	4.7%	103	3.8%	456	19.1%	< 30	nr	< 30	nr	unavail	unavail
Asian	57	0.9%	< 30	nr	33	1.0%	< 30	nr	41	1.5%	34	1.4%	< 30	nr	< 30	nr	unavail	unavail
Other	841	13.5%	115	13.8%	354	11.1%	111	11.2%	337	12.6%	391	16.4%	< 30	nr	< 30	nr	unavail	unavail
Ethnicity (%)																		
Hispanic/Latino	1,489	23.9%	254	30.5%	706	22.2%	241	24.4%	688	25.6%	829	34.7%	< 30	nr	< 30	nr	unavail	unavail
Age Group (%)																		
Under 18	30	0.5%	< 30	nr	< 30	nr	< 30	nr	46	1.7%	613	25.6%	< 30	nr	< 30	nr	unavail	unavail
18-25	802	12.9%	174	20.9%	871	27.4%	135	13.7%	430	16.0%	639	26.7%	39	42.9%	< 30	nr	unavail	unavail
26-44	3,422	55.0%	334	40.1%	1,914	60.2%	646	65.5%	1,825	68.0%	964	40.3%	34	37.4%	31	50.8%	unavail	unavail
45+	1,966	31.6%	303	36.4%	378	11.9%	198	20.1%	384	14.3%	174	7.3%	< 30	nr	< 30	nr	unavail	unavail
Route of Administration (%)																		
Smoked	< 30	nr	337	40.5%	861	27.1%	38	3.9%	1,600	59.6%	2,172	90.9%	< 30	nr	< 30	nr	unavail	unavail
Inhaled	< 30	nr	436	52.4%	133	4.2%	111	11.2%	216	8.0%	137	5.7%	< 30	nr	< 30	nr	unavail	unavail
Injected	< 30	nr	38	4.6%	2,128	67.0%	64	6.5%	811	30.2%	< 30	nr	< 30	nr	< 30	nr	unavail	unavail
Oral/Other/Unknown	6,200	99.7%	< 30	nr	55	1.7%	774	78.4%	58	2.2%	78	3.3%	87	95.6%	38	62.3%	unavail	unavail
Secondary Substance (%)																		
None	3,310	53.2%	192	23.1%	677	21.3%	390	39.5%	805	30.0%	902	37.7%	< 30	nr	< 30	nr	unavail	unavail
Alcohol	0	0.0%	269	32.3%	199	6.3%	121	12.3%	556	20.7%	807	33.8%	< 30	nr	< 30	nr	unavail	unavail
Cocaine/Crack	566	9.1%	0	0.0%	335	10.5%	51	5.2%	162	6.0%	195	8.2%	< 30	nr	< 30	nr	unavail	unavail
Heroin	96	1.5%	33	4.0%	0	0.0%	75	7.6%	279	10.4%	37	1.5%	< 30	nr	< 30	nr	unavail	unavail
Prescription Opioids**	121	1.9%	< 30	nr	245	7.7%	< 30	nr	48	1.8%	38	1.6%	< 30	nr	< 30	nr	unavail	unavail
Methamphetamine	349	5.6%	77	9.3%	983	30.9%	60	6.1%	0	0.0%	239	10.0%	< 30	nr	< 30	nr	unavail	unavail
Marijuana	1477	23.7%	199	23.9%	418	13.2%	159	16.1%	726	27.0%	0	0.0%	< 30	nr	< 30	nr	unavail	unavail
Benzodiazepines	68	1.1%	< 30	nr	140	4.4%	63	6.4%	< 30	nr	< 30	nr	0	0.0%	< 30	nr	unavail	unavail
Synthetic Stimulants**	30	0.5%	< 30	nr	< 30	nr	< 30	nr	< 30	nr	< 30	nr	< 30	nr	0	0.0%	unavail	unavail
Synthetic Cannabinoids	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail

Notes:

[^]**Denver Metro Area:** Includes residents of Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson counties.

***Admissions:** Includes admissions to all Colorado alcohol and drug treatment agencies (excluding detoxification and DUI services) licensed by the Colorado Department of Human Services, Office of Behavioral Health (OBH). Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

****Prescription Opioids:** Includes non-prescription methadone and other opiates and synthetic opiates; **Synthetic stimulants:** Includes other amphetamine (not methamphetamine) and other stimulant.

unavail: Data not available; **nr:** not reported due to total less than 30; **Percentages** may not sum to 100 due to missing data, rounding, and/or because not all possible categories are presented in the table. Category frequencies may not sum to drug total due to missing data and/or not all possible categories are presented in the table.

SOURCE: Data provided to the Denver Metro NDEWS SCE by the Colorado Department of Human Services, Office of Behavioral Health (OBH), Drug/Alcohol Coordinated Data System (DACODS).

Sources

DATA FOR THIS REPORT WERE DRAWN FROM THE FOLLOWING SOURCES:

Youth substance use data are from the Healthy Kids Colorado Survey, which collects data on health behaviors and attitudes of youth in Colorado. It is part of the Centers for Disease Control and Prevention's Youth Risk Behavior Survey and is reported in odd years (i.e., 2013, 2015, and 2017). Although the survey is distributed to both middle school and high school students, the information in this report only reflects responses from high school students as a result of differences in survey design across the two populations. The data in this report reflect lifetime (and in some cases past 30 day) substance use for Colorado high school students. The charts in this report show a comparison across responses from 2013, 2015, and 2017. Given that the survey is distributed to a random sample of schools across Colorado, and given that additional schools can opt in to taking the surveys, however, the location and number of schools across years may not be consistent. Data are only provided at the aggregate level, not at the school level, so there is no reliable method of comparing answers from the same schools across years. Data are weighted, however, to ensure each survey sample is representative of the youth population across Colorado during any given survey year. Information and data from these surveys can be found here: <https://www.colorado.gov/pacific/cdphe/hkcs>

Treatment admissions data are from the Drug/Alcohol Coordinated Data System, which is maintained by the Office of Behavioral health at the Colorado Department of Human Services. Data for this system are collected on clients at admission and discharge from all Colorado alcohol and drug treatment agencies licensed by the Office of Behavioral health. Treatment admissions are reported by the primary drug of choice (as reported by client at admission) unless otherwise specified and exclude admissions for DUI and detoxification. Annual figures are given for calendar years (CY) 2012 through 2017. Treatment data reported this year include both the nine-county Denver Metro Area (DMA) as well as the Denver County-only data.

Overdose fatality data for the DMA and state of Colorado were provided by the Colorado Department of Public Health & Environment, Vital Statistics Program, based on IDC-10 codes for 2007 through 2017. The numbers reported from this data source are unintentional overdose fatalities only.

Overdose fatality data for Denver County were provided by the Denver Department of Public Health & Environment, Office of the Medical Examiner for 2008 through 2017. These numbers may differ from those in previous SCS reports as a result of a change in the data source for Denver County overdose deaths. The numbers reported from this data source include both unintentional and intentional (suicide) overdose fatalities.

Human exposure poisoning call data are received from the Rocky Mountain Poison and Drug Center (RMPDC) for the state of Colorado. The data represent the number of calls (human exposure only) to the center regarding "street drugs" from 2007 through 2017.

Drug seizure data are from the National Forensic Lab Information System (NFLIS) for the nine-county DMA from 2014 to 2017. The NFLIS is a Drug Enforcement Administration program through its Office of Diversion Control that systematically collects drug identification results and associated information from drug cases analyzed by federal, state, and local forensic laboratories.

HIV, hepatitis B, and hepatitis C data were provided by the Colorado Department of Public Health & Environment, Disease Control & Environmental Epidemiology Division, STI/HIV/Viral Hepatitis Branch from 2008 through 2017. Numbers reported may differ from those in previous Denver SCS reports as a result of a change in case definitions for hepatitis C virus cases in 2016 and a recent in-depth analysis and retroactive cleaning of the data from previous years, resulting in more accurate information.

Emergency Department visits and hospitalization data were not available at the time that this report was submitted.

ADDITIONAL INFORMATION ON SUBSTANCE USE IN DENVER:

- Press release: [Denver Releases Opioid Response Strategic Plan to Address Growing Crisis](#)
- Denver's [Opioid Response Strategic Plan](#)
- Denver's [Opioid Epidemic Collective Impact Summary Report](#)
- [Denver Needs Assessment on Opioid Use](#)
- Denver among [four areas in Colorado](#) to receive funding to implement pilot projects for Law Enforcement Assisted Diversion (LEAD)
- Local research: Al-Tayyib A, Koester S, Langeegger S, et al. Heroin and methamphetamine injection: An emerging drug use pattern. *Substance Use & Misuse*. 2017. DOI: <http://dx.doi.org/10.1080/10826084.2016.1271432>

For additional information about the substances and substance use patterns discussed in this report, please contact Marion Rorke, M.P.H., Substance Use Resource Coordinator, Community & Behavioral Health Division of the Department of Public Health & Environment, City & County of Denver, Phone: 720-865-5453, E-mail: marion.rorke@denvergov.org.