

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, 2019

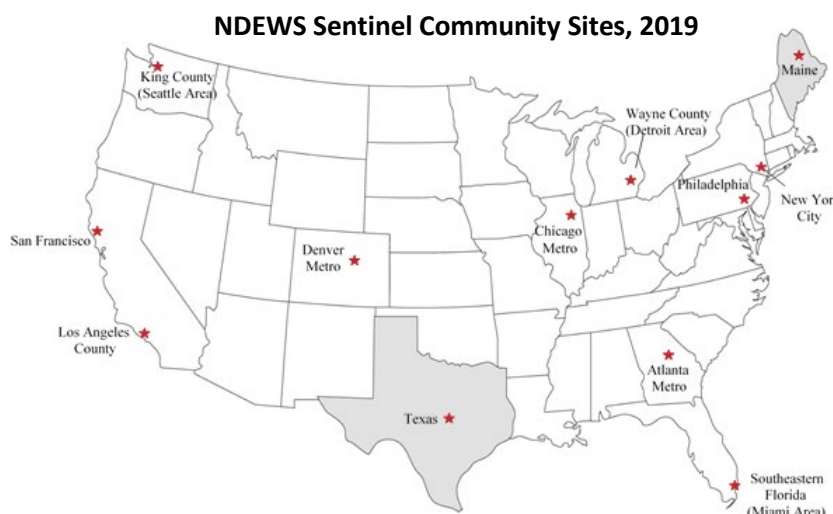
November 2019

NDEWS Coordinating Center

NDEWS *National Drug Early Warning System*

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

A unique feature of NDEWS is its capability to describe and compare drug use patterns and trends in selected communities across the United States. The NDEWS Coordinating Center works closely with Sentinel Community Epidemiologists (SCEs) in 12 Sentinel Community Sites (SCSs) across the U.S. Emerging drugs and changing drug trends are monitored by each local SCE utilizing indicators such as drug overdose deaths, treatment admissions, hospital cases, poison center exposure calls, and law enforcement seizures. **In May 2019, each SCE was asked to review available indicators and identify up to five drugs they considered most important to summarize for their site and include in their 2019 annual *Drug Use Patterns and Trends Report*.**



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)

Ben Hackworth, MPH
Commission on Behavioral Health & Drug
Prevention
United Way of Broward County
Phone: 954-453-3740
bhackworth@unitedwaybroward.org

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

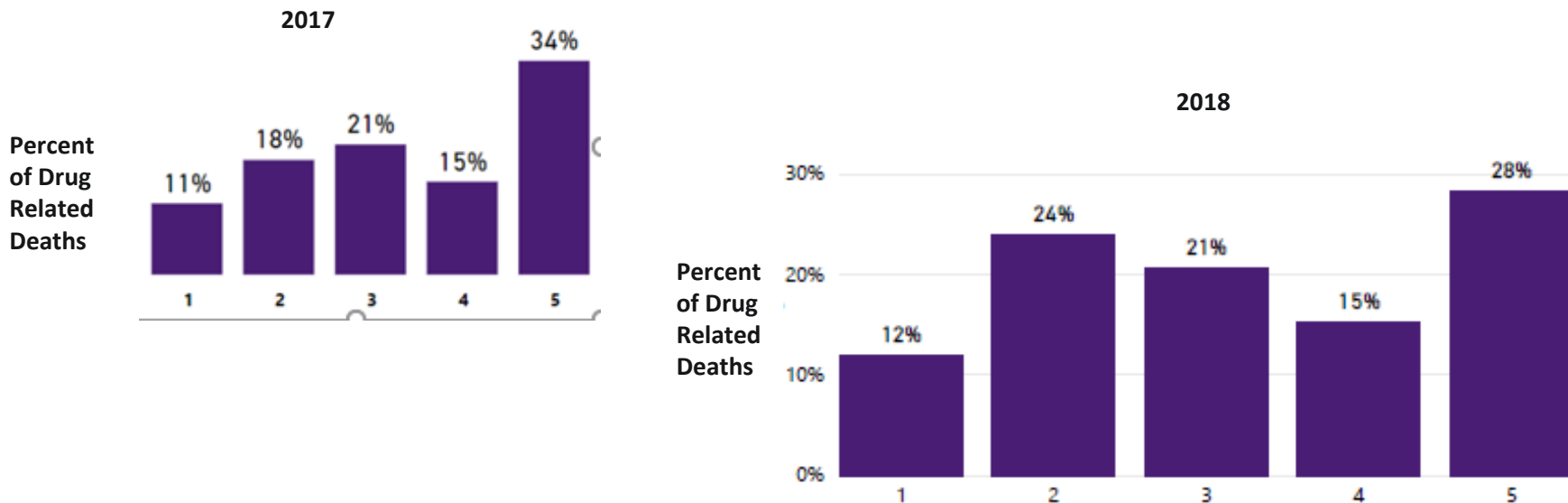
National Drug Early Warning System (NDEWS) Denver Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2019

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

Highlights

- Methamphetamine continues to increase across indicators, including drug-related death/poisoning in the Denver, the 9-County Denver Metro area, and Colorado.
- Polysubstance-related deaths continue to be the norm in Denver County, and multiple substances are common in treatment admissions, particularly among those admitted for heroin or methamphetamine.
- Cocaine appears to be increasing in Denver, the 9-County Denver Metro area, and Colorado.
- Alcohol use is prevalent, resulting in the largest percentage of treatment admissions, and statewide substance use prevalence.
- Opioid analgesics contribute to the largest number of drug-related death/poisonings, but are leveling off or decreasing, depending on region.
- Fentanyl/fentanyl analogues are still relatively uncommon compared to other parts of the country, but contribute an increasingly higher number of drug-related deaths/poisonings in Denver, the 9-County Denver Metro area, and Colorado.

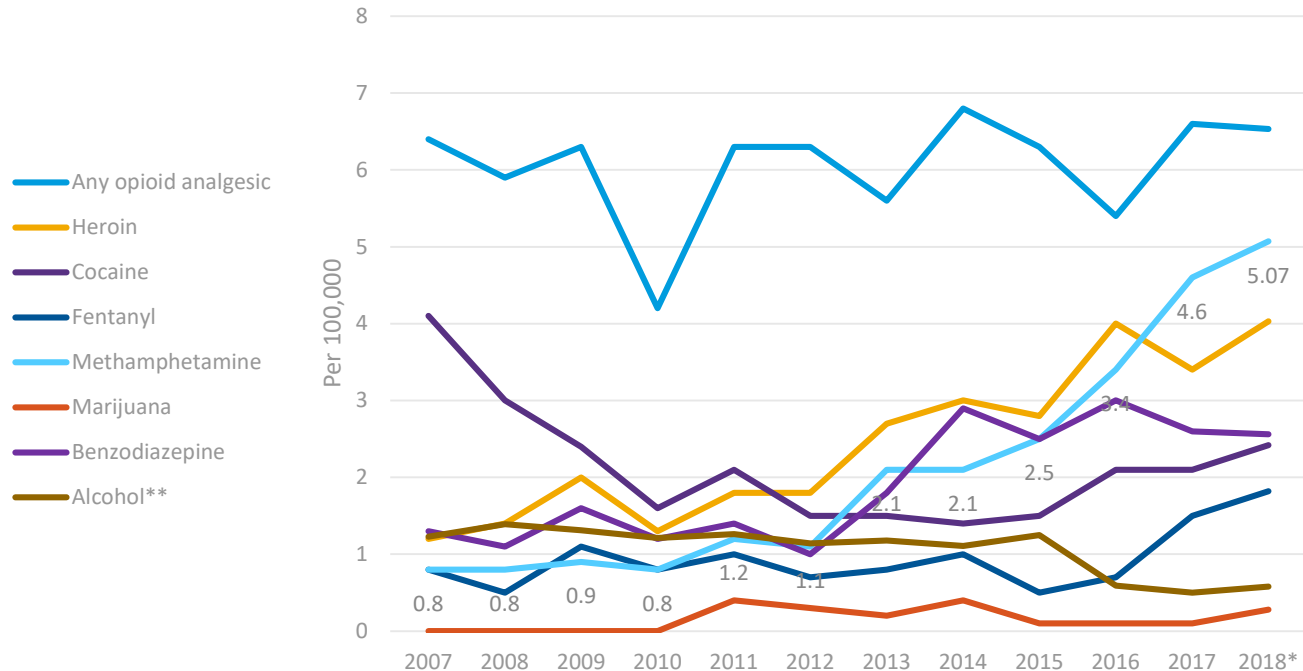
Number of Drugs Present in Drug-Related Deaths, Denver County, Office of the Medical Examiner, 2017- 2018



- In Denver County in 2018, 64% of the 209 drug-related deaths involved 3 or more drugs in the deceased's system. (Denver's Office of the Medical Examiner). In 2017 there were 201 drug-related deaths reported by the Office of the Medical Examiner.
- Alcohol was present in 23% of the drug-related deaths reported to the Denver Office of the Medical Examiner (OME) in 2018.
- Prescription opioids were involved in 24% of the deaths that did not also include heroin, reported to OME in 2018. According to CDPHE Vital Statistics, in the 9-county Denver Metro area there were 228 opioid analgesic-related deaths/poisonings. This represents a slight increase in count, and a slight decrease per 100,000 from 2017. Across Colorado the number decreased from 373 in 2017 to 349 in 2018 (or 6.5/100,000 to 5.8/100,000).
- In 2018 fentanyl was present in 8% of the drug-related deaths reported by Denver OME. In the 9-county metro area, fentanyl was involved in 61 drug poisoning deaths, as reported by the Vital Statistics Program, Colorado Department of Public Health and Environment (CDPHE). Across Colorado, there were 102, up from 81 in 2017.

Methamphetamine

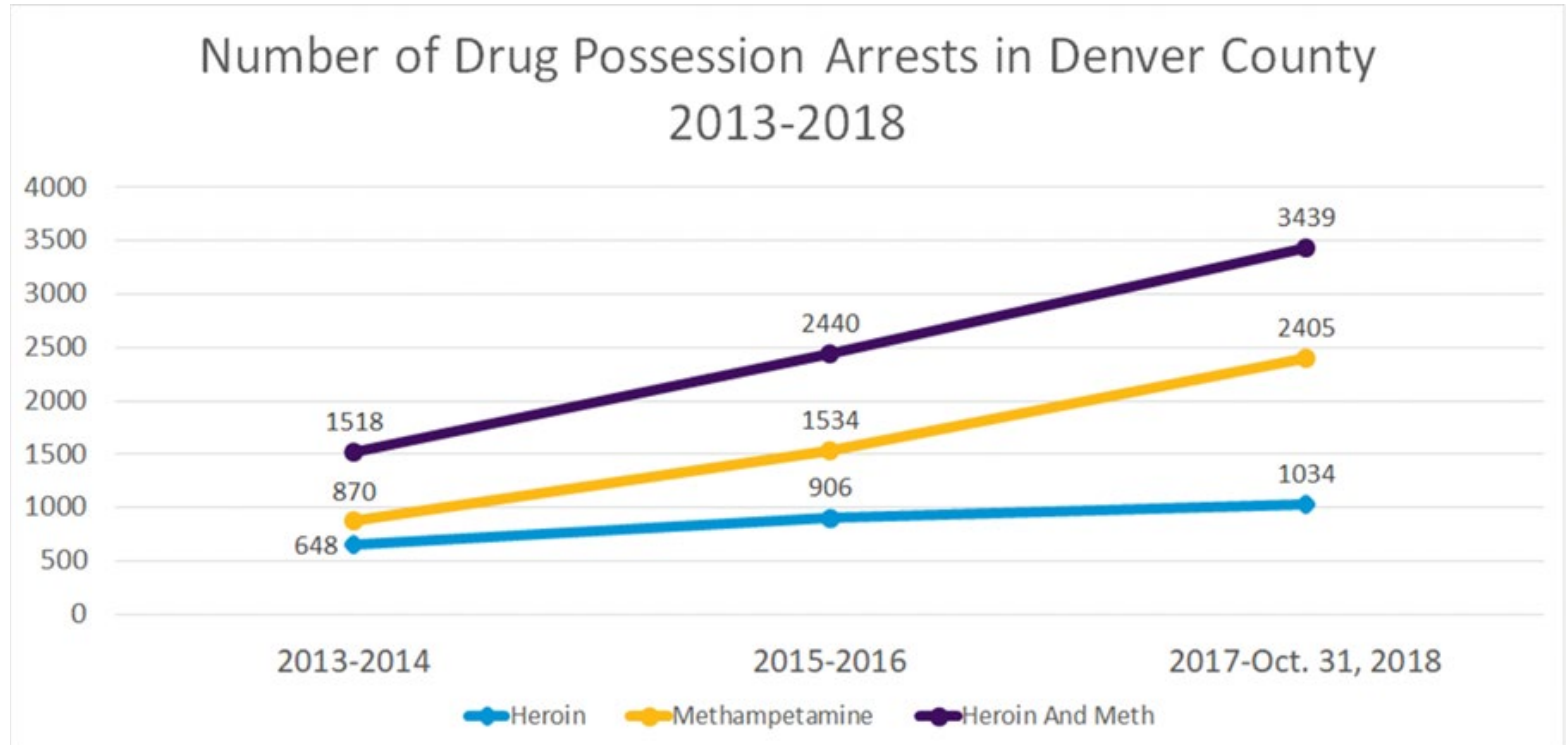
Age-Adjusted Rates of Drug Deaths by Category, 9-County Denver Metro Area, 2007-2018*



- Methamphetamine-related deaths have increased in Denver, 9-county Denver Metro Area (DMA), and Colorado in recent years.
- Methamphetamine was involved in 40% of the drug-related deaths reported by Denver's Office of the Medical Examiner (OME) in 2018, and 171 and 317 in the DMA and Colorado, respectively.
- Treatment admissions for methamphetamine use as the primary substance increased in Denver County from 485 in 2012 to 933 in 2017.
- Methamphetamine was the most common secondary substance for people admitted to treatment with a primary heroin use disorder in Denver in 2017.

*2018 data is provisional

Methamphetamine

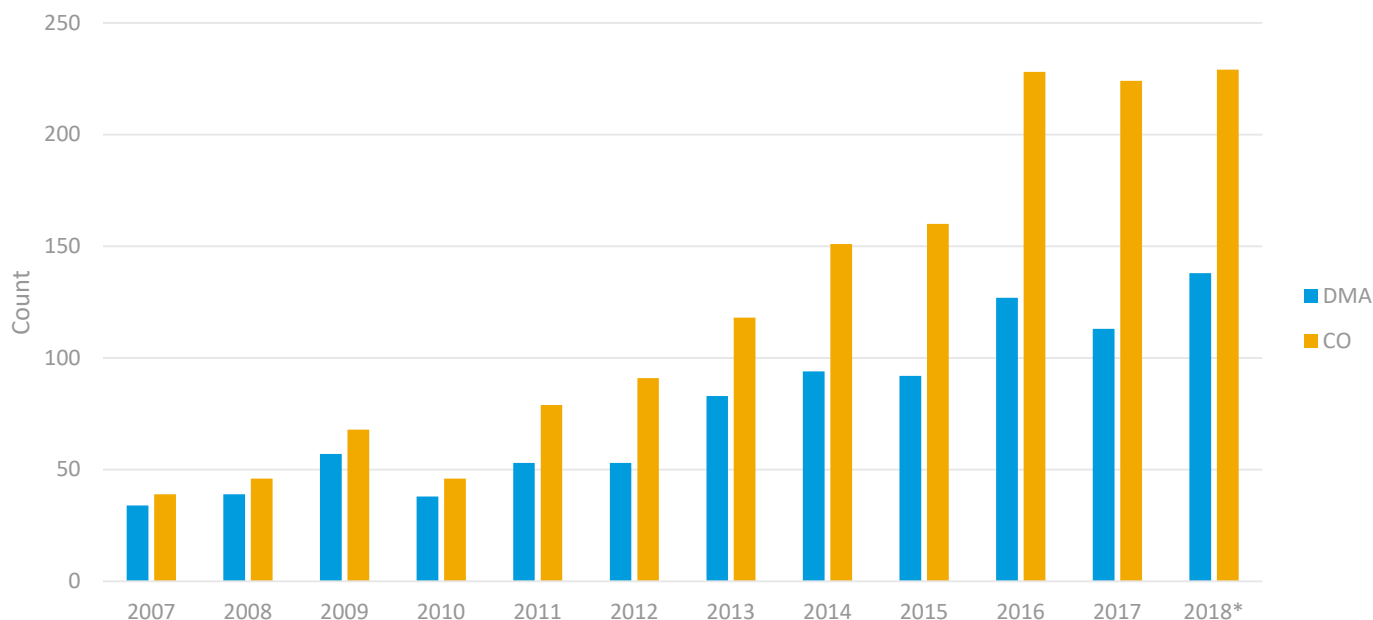


- Methamphetamine has remained the most commonly seized drug reported to the National Forensic Laboratory Information System (NFLIS) in the DMA year after year, accounting for over one-third of seized drugs in the first half of 2018.
- Arrests for the possession of methamphetamine have increased in Denver County from a low of 870 from 1/1/2013-12/31/2014 to 2,405 from 1/1/2017-10/31/2018*.
- Treatment admissions for methamphetamine in Denver County increased from 485 in 2012 to 933 in 2017.

*2018 end-of-year data was not yet analyzed.

Heroin

Number of Heroin-Related Deaths in the Denver Metro Area and Colorado, 2007-2018*



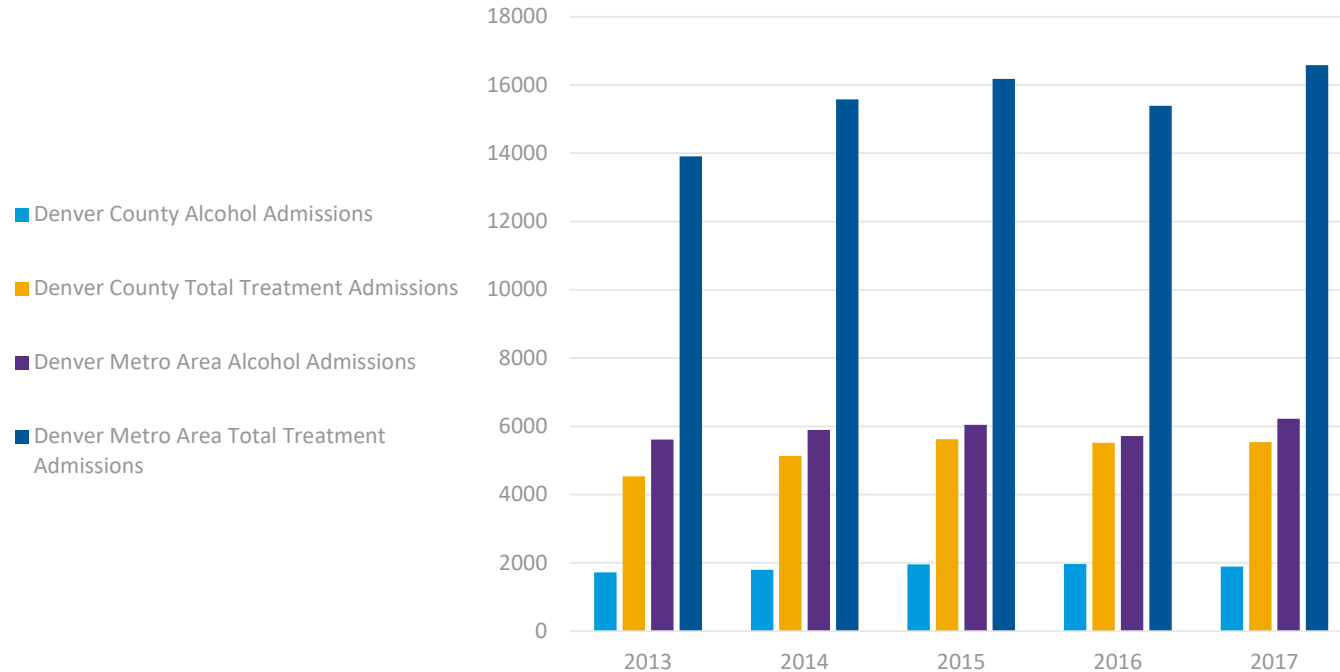
- Heroin remains the third most commonly seized substance reported to NFLIS, accounting for almost 15% in the DMA in the first half of 2018.
- Treatment admissions in Denver County nearly doubled from 2012-2017, from 587 to 1110.
- Heroin-involved deaths continue to increase in the DMA and Colorado with 138 and 229, respectively, in 2018*.
- Arrests for the possession of heroin in Denver County continue to increase with 648 from 1/1/2013-12/31/2014 to 1034 from 1/1/2017-10/31/2018** (*see previous slide*).

*provisional data

**2018 end-of-year data was not yet analyzed.

Alcohol

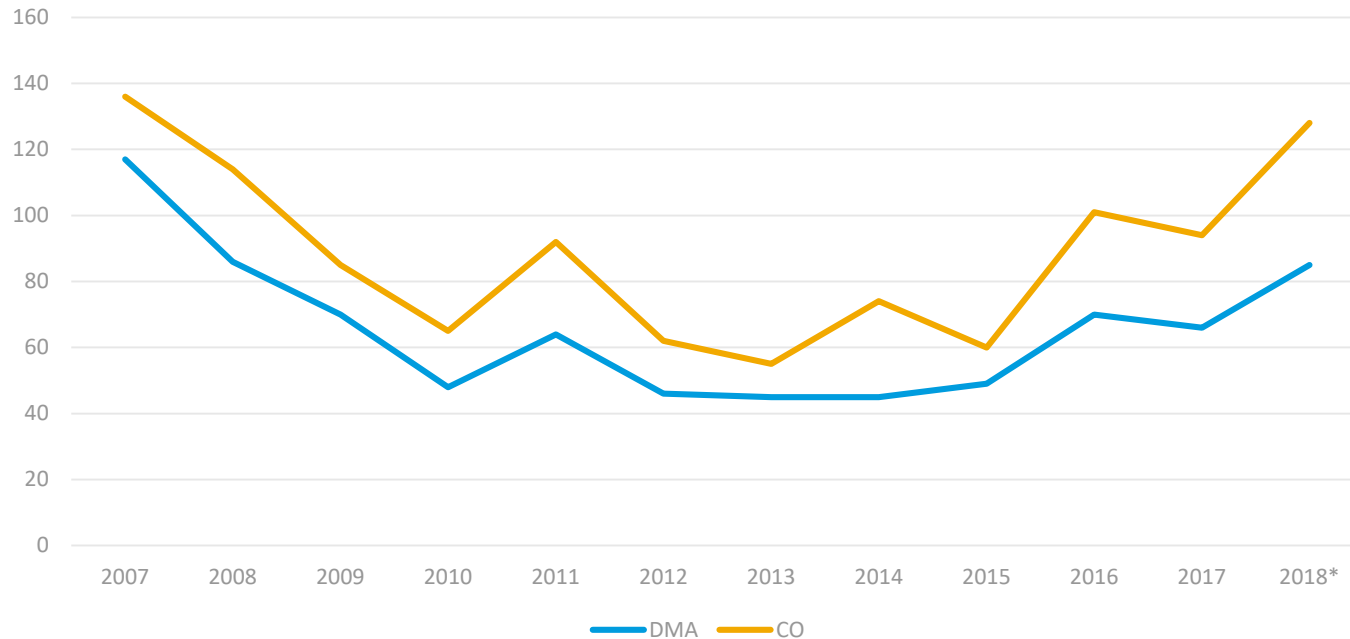
Total Number of Treatment Admissions and Alcohol-Specific Admissions
in Denver County and DMA, 2013-2017



- Alcohol was present in 23% of drug-related deaths in Denver County in 2018.
- Alcohol is the most commonly used substance in Colorado, with nearly 65% of people 18 and older surveyed reporting use in the past 30 days, and 20% of people aged 12-20.
- Based on NSDUH estimates, nearly 7% of Coloradans 18 and older have an alcohol use disorder.
- Alcohol is the most commonly admitted substance for treatment in Denver County and the Denver Metro area, accounting for approximately 38% of all treatment admissions in the DMA in 2017.
- Alcohol was the most commonly indicated secondary substance in 2017 for people admitted to treatment in Denver with a primary methamphetamine use disorder (DACODS/Colorado Office of Behavioral Health).

Cocaine

Number of Cocaine-Related Deaths, Denver Metro Area and Colorado, 2007-2018*



- While treatment admissions have decreased since 2012, cocaine remains the 2nd most commonly seized substance in the DMA, accounting for over 17% seized drugs reported in the 1st half of 2018.
- Gradual increases in cocaine-related deaths are being observed in Denver County, DMA, and Colorado.
- Cocaine-related deaths in Colorado are approaching the peak of 2.7/100,000 in 2007, with 2.1/100,000 in 2018*, surpassing benzodiazepine-related deaths.

*provisional data

Treatment Tables

Table 1: Trends in Admissions* to Programs Treating Substance Use Disorders, Denver Metro Area^ Residents, 2014-2018

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

	2014		2015		2016		2017		2018	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
Total Admissions (#)	15,580	100%	16,181	100%	15,394	100%	16,576	100%	17,383	100%
Primary Substance of Abuse (%)										
Alcohol	5,891	37.8%	6,041	37.3%	5,718	37.1%	6,220	37.5%	6,842	39.4%
Cocaine/Crack	931	6.0%	967	6.0%	810	5.3%	832	5.0%	735	4.2%
Heroin	2,319	14.9%	2,569	15.9%	2,850	18.5%	3,177	19.2%	3,412	19.6%
Prescription Opioids**	998	6.4%	838	5.2%	820	5.3%	987	6.0%	921	5.3%
Methamphetamine	2,381	15.3%	2,570	15.9%	2,511	16.3%	2,685	16.2%	2,741	15.8%
Marijuana	2,742	17.6%	2,832	17.5%	2,422	15.7%	2,390	14.4%	2,420	13.9%
Benzodiazepines	59	0.4%	68	0.4%	93	0.6%	91	0.5%	135	0.8%
MDMA	53	0.3%	29	0.2%	16	0.1%	29	0.2%	19	0.1%
Synthetic Stimulants**	36	0.2%	32	0.2%	34	0.2%	61	0.4%	54	0.3%
Synthetic Cannabinoids	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Other Drugs/Unknown**	170	1.1%	235	1.5%	120	0.8%	104	0.6%	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, 2018

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 (#)	6,842	100%	735	100%	3,412	100%	921	100%	2,741	100%	2,420	100%	135	100%	54	100%	unavail	unavail
Sex (%)																		
Male	4,561	66.7%	512	69.7%	1,988	58.3%	506	54.9%	1,672	61.0%	1,874	77.4%	90	66.7%	30	55.6%	unavail	unavail
Female	2,281	33.3%	223	30.3%	1,424	41.7%	415	45.1%	1,069	39.0%	546	22.6%	45	33.3%	< 30	nr	unavail	unavail
Race (%)																		
White, Non-Hisp.	4,381	64.0%	321	43.7%	2,292	67.2%	626	68.0%	1,813	66.1%	1,129	46.7%	99	73.3%	40	74.1%	unavail	unavail
African-Am/Black, Non-Hisp	498	7.3%	178	24.2%	95	2.8%	35	3.8%	115	4.2%	419	17.3%	< 30	nr	0	0.0%	unavail	unavail
Asian	60	0.9%	< 30	nr	38	1.1%	< 30	nr	30	1.1%	35	1.4%	< 30	nr	0	0.0%	unavail	unavail
Other	1,903	27.8%	232	31.6%	987	28.9%	253	27.5%	783	28.6%	837	34.6%	< 30	nr	< 30	nr	unavail	unavail
Ethnicity (%)																		
Hispanic/Latino	1,627	23.8%	206	28.0%	903	26.5%	231	25.1%	710	25.9%	768	31.7%	< 30	nr	< 30	nr	unavail	unavail
Age Group (%)																		
Under 18	65	1.0%	< 30	nr	< 30	nr	< 30	nr	49	1.8%	619	25.6%	< 30	nr	0	0.0%	unavail	unavail
18-25	908	13.3%	141	19.2%	744	21.8%	145	15.7%	447	16.3%	654	27.0%	65	48.1%	< 30	nr	unavail	unavail
26-44	3,806	55.6%	338	46.0%	2,270	66.5%	579	62.9%	1,793	65.4%	958	39.6%	50	37.0%	30	55.6%	unavail	unavail
45+	2,063	30.2%	235	32.0%	390	11.4%	189	20.5%	452	16.5%	189	7.8%	< 30	nr	< 30	nr	unavail	unavail
Route of Administration (%)																		
Smoked	6,800	99.4%	< 30	nr	76	2.2%	669	72.6%	73	2.7%	98	4.0%	127	94.1%	< 30	nr	unavail	unavail
Inhaled	< 30	nr	276	37.6%	1,100	32.2%	70	7.6%	1,657	60.5%	2,191	90.5%	< 30	nr	< 30	nr	unavail	unavail
Injected	< 30	nr	399	54.3%	145	4.2%	135	14.7%	230	8.4%	131	5.4%	< 30	nr	< 30	nr	unavail	unavail
Oral/Other/Unknown	< 30	nr	36	4.9%	2,091	61.3%	47	5.1%	781	28.5%	0	0.0%	< 30	nr	< 30	nr	unavail	unavail
Secondary Substance (%)																		
None	3,530	51.6%	163	22.2%	778	22.8%	390	42.3%	772	28.2%	893	36.9%	< 30	nr	< 30	nr	unavail	unavail
Alcohol	n/a	n/a	266	36.2%	181	5.3%	97	10.5%	512	18.7%	818	33.8%	30	22.2%	< 30	nr	unavail	unavail
Cocaine/Crack	635	9.3%	n/a	n/a	301	8.8%	50	5.4%	218	8.0%	168	6.9%	< 30	nr	< 30	nr	unavail	unavail
Heroin	77	1.1%	31	4.2%	n/a	n/a	80	8.7%	324	11.8%	35	1.4%	< 30	nr	< 30	nr	unavail	unavail
Prescription Opioids**	101	1.5%	< 30	nr	227	6.7%	n/a	n/a	65	2.4%	50	2.1%	< 30	nr	< 30	nr	unavail	unavail
Methamphetamine	388	5.7%	73	9.9%	1,262	37.0%	58	6.3%	n/a	n/a	234	9.7%	< 30	nr	< 30	nr	unavail	unavail
Marijuana	1,700	24.8%	153	20.8%	380	11.1%	137	14.9%	707	25.8%	n/a	n/a	32	23.7%	< 30	nr	unavail	unavail
Benzodiazepines	85	1.2%	< 30	nr	124	3.6%	51	5.5%	< 30	nr	38	1.6%	n/a	n/a	< 30	nr	unavail	unavail
Synthetic Stimulants**	< 30	nr	< 30	nr	< 30	nr	< 30	nr	< 30	nr	< 30	nr	< 30	nr	n/a	n/a	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.

n/a: Not applicable; **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:

- **9-County DMA and Colorado death rates and numbers** : Vital Statistics Program, Colorado Department of Public Health and Environment (CDPHE). Definitions used based on NCHS Data Brief, No. 81, December 2011, "Drug Poisoning Deaths in the United States, 1980-2008".

2018 data is provisional but not expected to change much. Rates are per 100,000 population in year and sex category. 95% LCL and UCL represent the lower and upper confidence limits of the 95% confidence interval of the age-adjusted rate. Opioid analgesics include natural and semi-synthetic opioid analgesics (for example, morphine, hydrocodone, and oxycodone) and synthetic opioid analgesics (for example, methadone and fentanyl). Some deaths in which the drug was poorly specified or unspecified may involve opioid analgesics. Definitions used based on NCHS Data Brief, No. 81, December 2011, "Drug Poisoning Deaths in the United States, 1980-2008". Source: Vital Statistics Program, Colorado Department of Public Health and Environment.

- **Denver County death rates and numbers**: Denver Office of the Medical Examiner (OME), Denver Department of Public Health & Environment (DDPHE).

These data represent deaths in which the specified drugs were present in specimens examined. Each death may have had other contributing factors. Cause of death may have intricate complexities and interpretations. Numbers reflect deaths reported to Denver OME as required by CRS 30-10-606 (not every death in the City & County of Denver is reported to OME, just those required by statute). Numbers may vary from other statewide data due to differences in reporting and coding.

- **Treatment admissions** data: Colorado Department of Human Services, Office of Behavioral Health (OBH), Drug/Alcohol Coordinated Data System (DACODS).
- **Seized drugs** data: National Forensic Laboratory Information System (NFLIS); provided to Denver Sentinel Community Epidemiologist by the National Drug Early Warning System Coordinating Center at University of Maryland.
- **Denver possession arrest** data: Retrieved from Denver Department of Safety, Denver Police Department's website and analyzed by DDPHE's Division of Community & Behavioral Health.

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.