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, 2020

August 2020

NDEWS Coordinating Center

NDEWS National Drug Early Warning System

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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 2020, 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 2020 annual *Drug Use Patterns and Trends Report.***

NDEWS Sentinel Community Sites, 2020
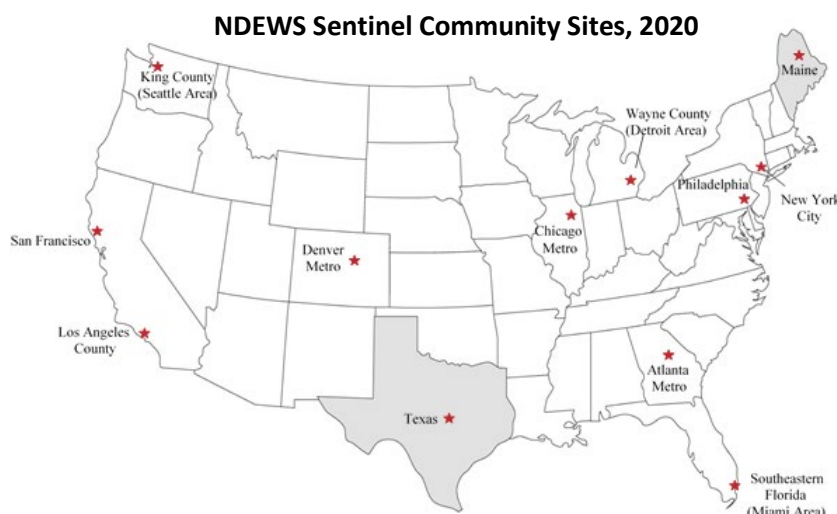
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National Drug Early Warning System (NDEWS)
Denver Sentinel Community Site (SCS)
Drug Use Patterns and Trends, 2020

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Highlights

- The number of **drug-related deaths** in the City & County of Denver has increased slightly in count from 2018 to 2019 with 209 and 213, respectively, but the rate per 100,000 residents has remained stable over the past three years.

- **Opioids** continue to appear in a large proportion of drug-related deaths in Denver, with some form of opioid involved in almost 60% of all drug-related fatalities in 2019. **Prescription-type opioids** appear to represent a larger portion of opioids involved in drug-related fatalities (from 32% in 2018 to 41% in 2019).

- **Methamphetamine**-involved drug-related deaths continue to represent a large number of drug-related deaths.

- **Polysubstance-related deaths** continue to be the norm in Denver County, with 54% of deaths involving 3 or more drugs and 18% of deaths involving 5 or more drugs.

- **Fentanyl/fentanyl analogue-related fatalities** have increased in Denver, contributing to 25% of drug-related deaths in 2019 compared to only 8% in 2018.

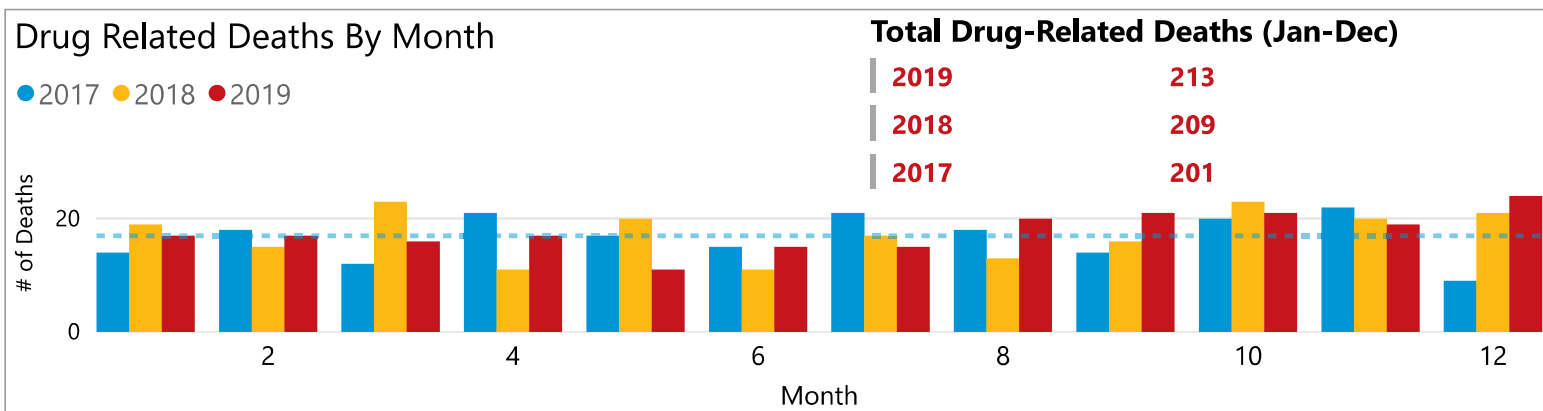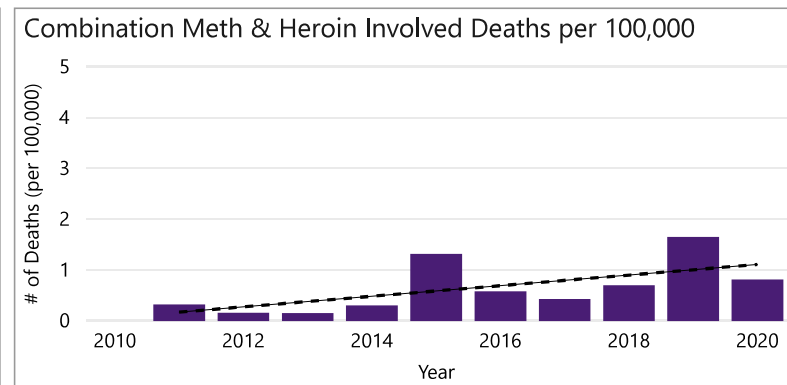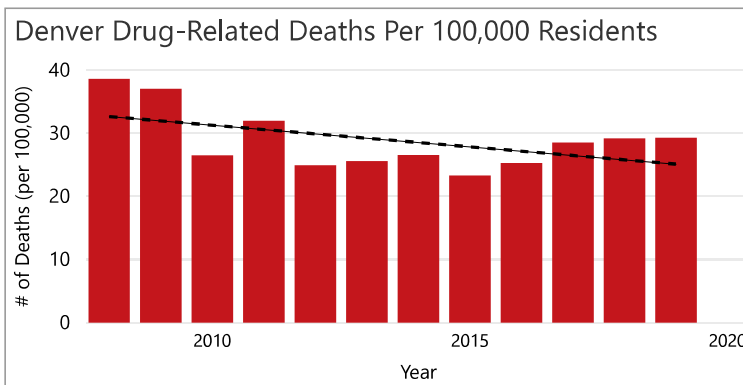# Drug-Related Deaths in the City & County of Denver

Data Source: Denver Department of Public Health & Environment, Office of the Medical Examiner

2019 Summary as of December 31, 2019

Note, this summary represents final counts for 2019

HISTORICAL TRENDS (2008-2019) - Overdose deaths have decreased in Denver on average over the last decade. Small recent increases fall within the normal variation of the data series. Deaths with Methamphetamine on board and with Fentanyl on board are increasing.

YEAR TO DATE - The total number of drug related deaths in Denver in 2018 was 209. In 2019, there were 213 drug related deaths.

Denver Drug-Related Deaths Per 100,000 Residents

Combination Meth & Heroin Involved Deaths per 100,000

Drug Related Deaths By Month

● 2017 ● 2018 ● 2019

Total Drug-Related Deaths (Jan-Dec)

2019	**213**
2018	**209**
2017	**201**

POLYSUBSTANCE USE - The majority of drug overdose deaths in Denver involve multiple substances found in the deceased's system, i.e. toxicology. In 2019 so far:

- 54% of deaths involved 3 or more drugs in the deceased's system.

- 18% of deaths involved 5 or more drugs in the deceased's system.

DRUGS PRESENT (see footnote 2) - In 2019, some type of opioid was present in the deceased's system (including heroin) in nearly 60% of drug-related deaths in Denver.

- 41% had prescription type opioids (not including heroin), compared to 32% in 2018.

- 8% had heroin present but not prescription opioids, compared to 5% in 2018.

- Methamphetamine has been present in 41% of deaths, compared to 42% in 2018.

- Denver has seen a rise in Fentanyl-related deaths, particularly between 2018 and 2019. In 2019, 25% of deaths had Fentanyl on board, compared to 9% in 2018.

HOUSING STATUS - The Denver Office of the Medical Examiner investigators determine that the majority of people (85%) who died from a probable drug-overdose were not experiencing homelessness (see footnote 3).

Number of Drugs Present (2019)
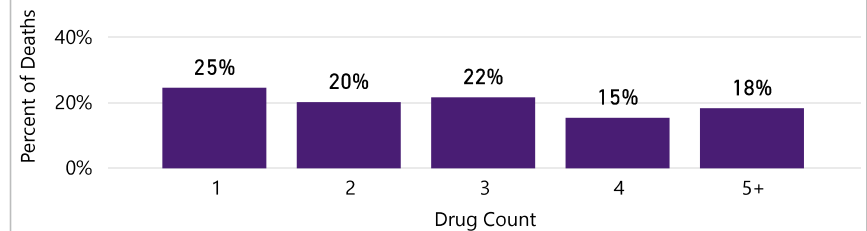
Change in Presence of Substances Over Time
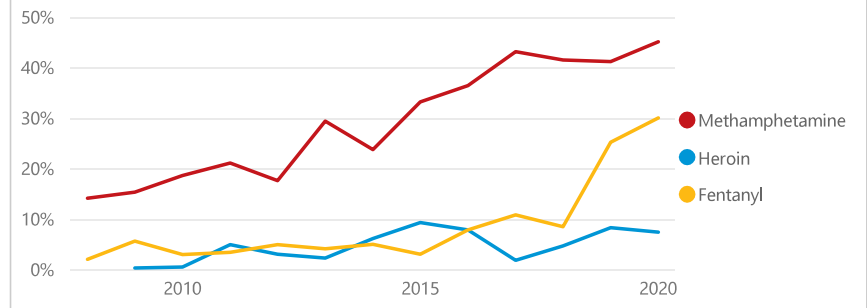
## Was Decedent Experiencing Homelessness (2019)
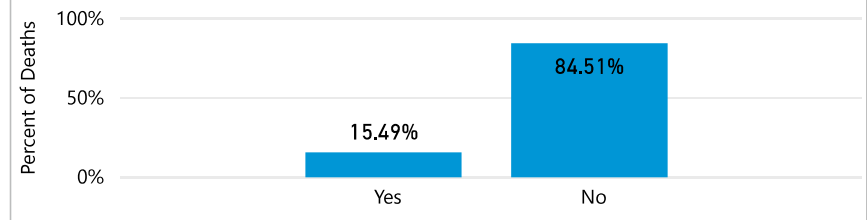
2. These data represent deaths in which the specified drugs were present in specimens examined. Each death may have had other contributing factors.

3. Determining homeless status is not an exact science. This determination is based on OME investigators' classification after extensive research into an individual's life.

LOCATIONS (see footnote 3) - Most drug related deaths occur in private residences or hospitals. In 2019:

- 67% of deaths occurred in private residences; roughly 17% occurred in a hospital.
- Only 8% of deaths occurred outdoors.

Place of Injury
year ● 2019

Place of Death
year ● 2019
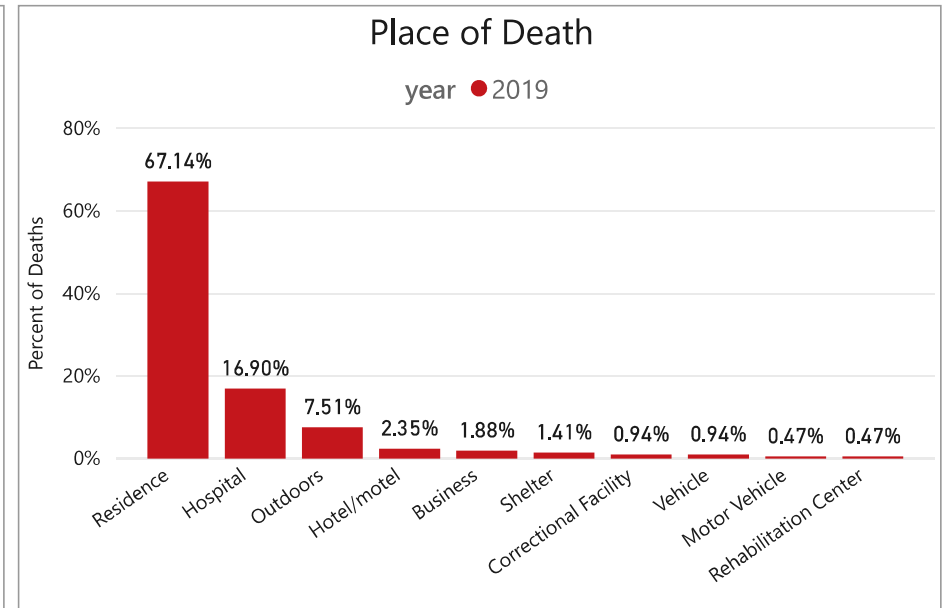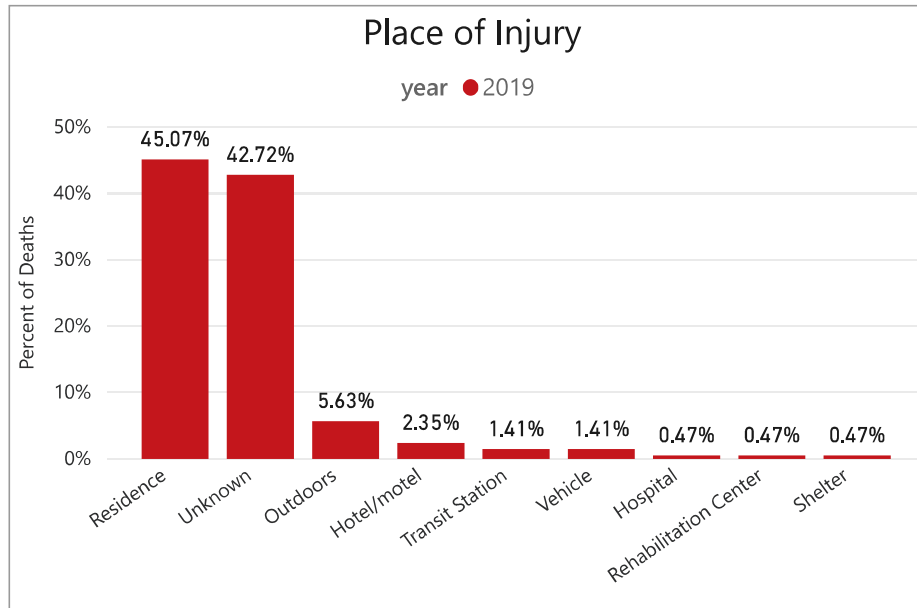
Additional Data Notes and Limitations

1. Cause of death may have intricate complexities and interpretations.
2. The numbers presented in this summary reflect deaths reported to the Denver Office of the Medical Examiner (OME) as required by CRS 30-10-606 (not every death in the City and County of Denver is reported to OME, just those required by statute).
3. Numbers may vary from other statewide data due to differences in reporting and coding.
4. Drug-related deaths can include a manner of natural, accident, suicide, homicide, and undetermined. The manner of death is the determination of how the injury or disease lead to the death, whereas cause of death is the specific injury or disease that lead to the death.

Footnotes

3. The place of death is where the decedent actually expired (e.g. died on the street). The place of injury is where the injury occurred prior to death (e.g. car accident location). The category "Unknown" in the Location of Injury chart represents cases where OME is not able to determine the location of injury (e.g. where substances were consumed).

Data Notes and Limitations

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Treatment Tables

Table 1: Trends in Admissions* to Programs Treating Substance Use Disorders, Denver Metro Area^ Residents, 2015-2019

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

	2015		2016		2017		2018		2019	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
Total Admissions (#)	**16,393**	**100%**	**16,380**	**100%**	**18,379**	**100%**	**18,181**	**100%**	**18,813**	**100%**
Primary Substance of Abuse (%)										
Alcohol	6,128	37.4%	6,125	37.4%	6,963	37.9%	7,197	39.6%	7,438	39.5%
Cocaine/Crack	973	5.9%	844	5.2%	925	5.0%	762	4.2%	693	3.7%
Heroin	2,635	16.1%	3,037	18.5%	3,449	18.8%	3,541	19.5%	3,544	18.8%
Prescription Opioids**	858	5.2%	885	5.4%	1,067	5.8%	970	5.3%	1,190	6.3%
Methamphetamine	2,581	15.7%	2,600	15.9%	2,982	16.2%	2,861	15.7%	3,037	16.1%
Marijuana	2,849	17.4%	2,546	15.5%	2,681	14.6%	2,523	13.9%	2,523	13.4%
Benzodiazepines	69	0.4%	98	0.6%	108	0.6%	114	0.6%	130	0.7%
MDMA	***	0.2%	***	0.1%	***	0.1%	***	0.1%	***	0.1%
Synthetic Stimulants**	33	0.2%	38	0.2%	67	0.4%	57	0.3%	72	0.4%
Synthetic Cannabinoids	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Other Drugs/Unknown**	238	1.5%	130	0.8%	114	0.6%	112	0.6%	165	0.9%

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.

*** Data suppressed to maintain client confidentiality.

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 Treament Admissions* for Select Primary Substances, *Denver Metro Area^* Residents, 2019
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 (#)	7,438	100%	693	100%	3,544	100%	1,190	100%	3,037	100%	2,523	100%	130	100%	72	100%	unavail	unavail
Sex (%)																		
Male	4,832	65.0%	458	66.1%	2,052	57.9%	640	53.8%	1,824	60.1%	1,895	75.1%	78	60.0%	46	63.9%	unavail	unavail
Female	2,606	35.0%	235	33.9%	1,492	42.1%	550	46.2%	1,213	39.9%	628	24.9%	52	40.0%	nr	nr	unavail	unavail
Race (%)																		
White, Non-Hisp.	4,772	64.2%	287	41.4%	2,384	67.3%	685	57.6%	1,917	63.1%	1,095	43.4%	99	76.2%	55	76.4%	unavail	unavail
African-Am/Black, Non-Hisp	478	6.4%	152	21.9%	102	2.9%	40	3.4%	109	3.6%	380	15.1%	nr	nr	nr	nr	unavail	unavail
Asian	55	0.7%	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	0	0.0%	unavail	unavail
Other	423	5.7%	50	7.2%	144	4.1%	96	8.1%	174	5.7%	156	6.2%	nr	nr	nr	nr	unavail	unavail
Ethnicity (%)																		
Hispanic/Latino	1,710	23.0%	189	27.3%	893	25.2%	360	30.3%	816	26.9%	865	34.3%	nr	nr	nr	nr	unavail	unavail
Age Group (%)																		
Under 18	69	0.9%	nr	nr	nr	nr	nr	nr	42	1.4%	636	25.2%	nr	nr	nr	nr	unavail	unavail
18-25	880	11.8%	141	20.3%	699	19.7%	210	17.6%	437	14.4%	686	27.2%	52	40.0%	nr	nr	unavail	unavail
26-44	4,286	57.6%	320	46.2%	2,442	68.9%	725	60.9%	2,031	66.9%	1,005	39.8%	47	36.2%	45	62.5%	unavail	unavail
45+	2,203	29.6%	218	31.5%	398	11.2%	242	20.3%	527	17.4%	196	7.8%	nr	nr	nr	nr	unavail	unavail
Route of Administration (%)																		
Smoked	nr	nr	253	36.5%	1,294	36.5%	119	10.0%	1,890	62.2%	2,257	89.5%	0	0.0%	nr	nr	unavail	unavail
Inhaled	nr	nr	382	55.1%	128	3.6%	196	16.5%	271	8.9%	171	6.8%	nr	nr	nr	nr	unavail	unavail
Injected	nr	nr	32	4.6%	2,063	58.2%	63	5.3%	786	25.9%	0	0.0%	nr	nr	nr	nr	unavail	unavail
Oral/Other/Unknown	7,398	99.5%	nr	nr	59	1.7%	812	68.2%	90	3.0%	95	3.8%	126	96.9%	45	62.5%	unavail	unavail
Secondary Substance (%)																		
None	3,836	51.6%	173	25.0%	798	22.5%	483	40.6%	836	27.5%	988	39.2%	nr	nr	nr	nr	unavail	unavail
Alcohol	n/a	n/a	212	30.6%	170	4.8%	120	10.1%	558	18.4%	869	34.4%	nr	nr	nr	nr	unavail	unavail
Cocaine/Crack	645	8.7%	n/a	n/a	306	8.6%	75	6.3%	215	7.1%	155	6.1%	nr	nr	nr	nr	unavail	unavail
Heroin	86	1.2%	nr	nr	n/a	n/a	97	8.2%	365	12.0%	nr	nr	nr	nr	nr	nr	unavail	unavail
Prescription Opioids**	117	1.6%	nr	nr	241	6.8%	n/a	n/a	65	2.1%	37	1.5%	nr	nr	nr	nr	unavail	unavail
Methamphetamine	446	6.0%	nr	nr	1,469	41.5%	95	8.0%	n/a	n/a	210	8.3%	nr	nr	nr	nr	unavail	unavail
Marijuana	1,839	24.7%	158	22.8%	310	8.7%	169	14.2%	814	26.8%	n/a	n/a	nr	nr	nr	nr	unavail	unavail
Benzodiazepines	72	1.0%	nr	nr	93	2.6%	66	5.5%	nr	nr	38	1.5%	n/a	n/a	nr	nr	unavail	unavail
Synthetic Stimulants**	49	0.7%	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	nr	n/a	n/a	unavail	unavail
Synthetic Cannabinnoids	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail

Notes:
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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:

- **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 statue). 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).

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.