

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, 2016

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National Drug Early Warning System (NDEWS) Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2016

The National Drug Early Warning System (NDEWS) was launched in 2014 with the support of the National Institute on Drug Abuse (NIDA) to collect and disseminate timely information about drug trends in the United States. The Center for Substance Abuse Research (CESAR) at the University of Maryland manages the NDEWS Coordinating Center and has recruited a team of nationally recognized experts to collaborate on building NDEWS, including 12 Sentinel Community Epidemiologists (SCEs). The SCEs serve as the point of contact for their individual Sentinel Community Site (SCS), and correspond regularly with NDEWS Coordinating Center staff throughout the year to respond to queries, share information and reports, collect data and information on specific drug topics, and write an annual *SCE Narrative* describing trends and patterns in their local SCS.

This *Sentinel Community Site Drug Use Patterns and Trends* report contains three sections:

- ◇ The *SCS Snapshot*, prepared by Coordinating Center staff, contains graphics that display information on drug use, substance use disorders and treatment, drug poisoning deaths, and drug seizures. The *SCS Snapshots* attempt to harmonize data available for each of the 12 sites by presenting standardized graphics from local treatment admissions and four national data sources.
- ◇ The *SCE Narrative*, written by the SCE, provides their interpretation of important findings and trends based on available national data as well as sources specific to their area, such as data from local medical examiners or poison control centers. As a local expert, the SCE is able to provide context to the national and local data presented.
- ◇ The *SCS Data Tables*, prepared by Coordinating Center staff, include information on demographic and socioeconomic characteristics of the population, drug use, substance use disorders and treatment, drug poisoning deaths, and drug seizures for the Sentinel Community Site. The *SCS Data Tables* attempt to harmonize data available for each of the 12 sites by presenting standardized information from local treatment admissions and five national data sources.

The *Sentinel Community Site Drug Use Patterns and Trends* reports for each of the 12 Sentinel Community Sites and detailed information about NDEWS can be found on the NDEWS website at www.ndews.org.

National Drug Early Warning System (NDEWS) Sentinel Community Site (SCS) Drug Use Patterns and Trends: SCS Snapshot

The *SCS Snapshot* is prepared by NDEWS Coordinating Center staff and contains graphics that display information on drug use, substance use disorders and treatment, drug poisoning deaths, and drug seizures. The *SCS Snapshots* attempt to harmonize data available for each of the 12 sites by presenting standardized graphics from local treatment admissions and four national data sources:

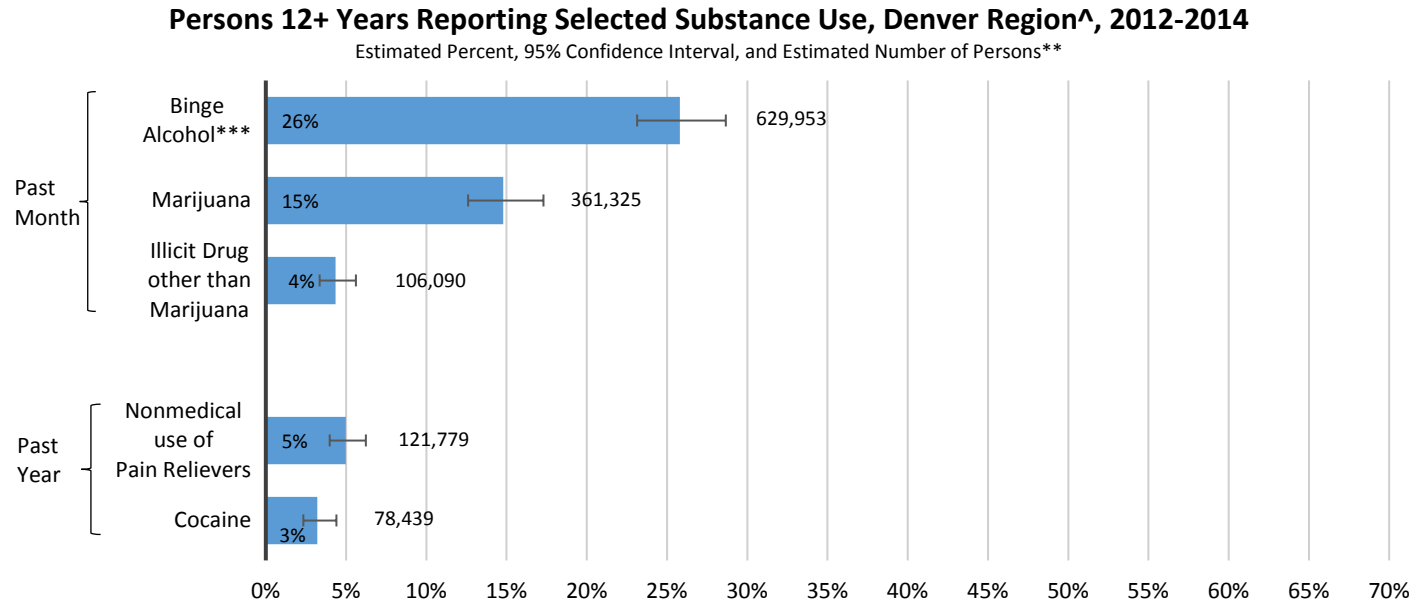
- ◊ National Survey on Drug Use and Health;
- ◊ Youth Risk Behavior Survey;
- ◊ SCE-provided local treatment admissions data;
- ◊ National Vital Statistics System mortality data queried from CDC WONDER; and
- ◊ National Forensic Laboratory Information System.

The *SCS Snapshots* for each of the 12 Sentinel Community Sites and detailed information about NDEWS can be found on the NDEWS website at www.ndews.org.

Denver Metro SCS Snapshot, 2016

Substance Use

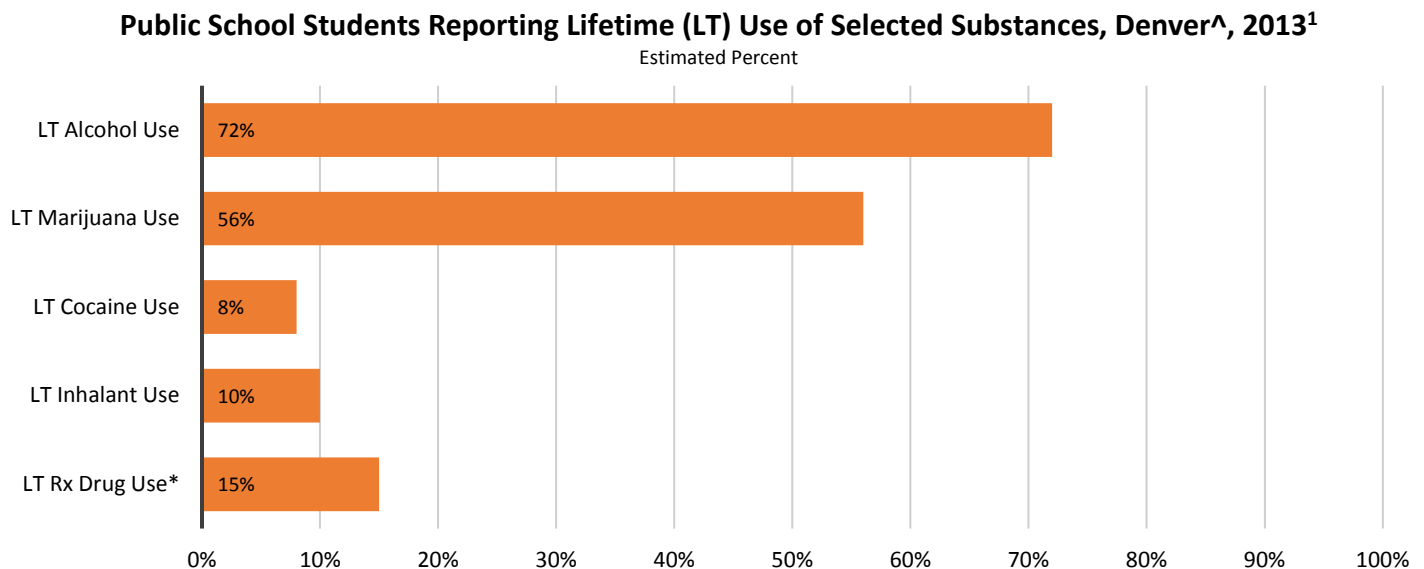
*National Survey on Drug Use and Health (NSDUH): Survey of U.S. Population**



*U.S. Population: U.S. civilian non-institutionalized population. [^]Denver Region: NSDUH Region 2 & 7 (Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, & Jefferson counties). **Estimated Number: Calculated by multiplying the prevalence rate and the population estimate of persons 12+ years (2,441,220) from Table C1 of the NSDUH Report. ***Binge Alcohol: Defined as had five or more drinks of alcohol in a row within a couple of hours.

Source: Adapted by the NDEWS Coordinating Center from data provided by SAMHSA, NSDUH. Annual averages based on 2012 to 2014 NSDUH data.

Healthy Kids Colorado Survey (HKCS): Survey of Student Population



¹2013: YRBS data were not available for Denver in 2013 or 2015 so 2013 *Healthy Kids Colorado* local student survey data are presented.

[^]Denver: Includes data from a representative sample of middle and high school students in Denver Public Schools.

*LT Rx Drug Use: Defined as ever took prescription drugs without a doctor's prescription.

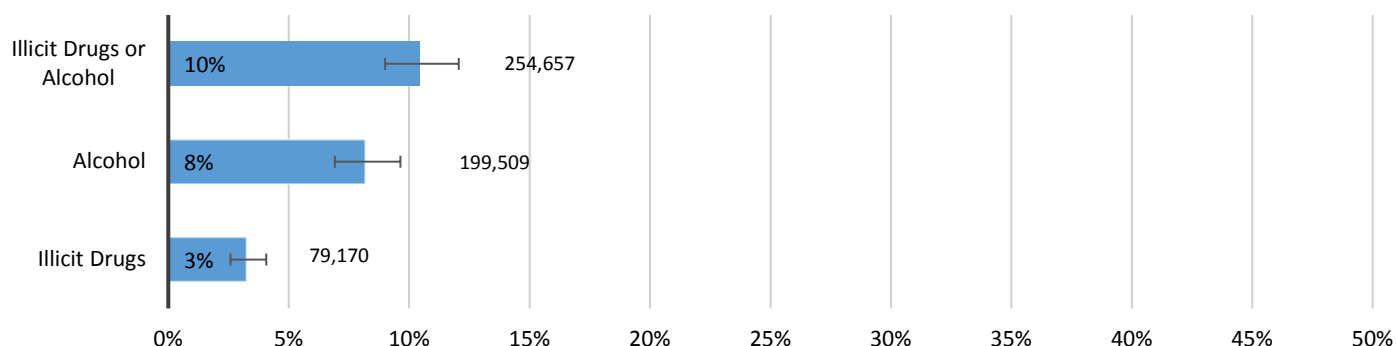
Source: Data provided by the Denver Metro SCE from the Denver Public School sample of the Healthy Kids Colorado Survey, 2013.

Substance Use Disorders and Treatment

National Survey on Drug Use and Health (NSDUH): Survey of U.S. Population*

Substance Use Disorders** in Past Year Among Persons 12+ Years, Denver Region^, 2012-2014

Estimated Percent, 95% Confidence Interval, and Estimated Number of Persons***



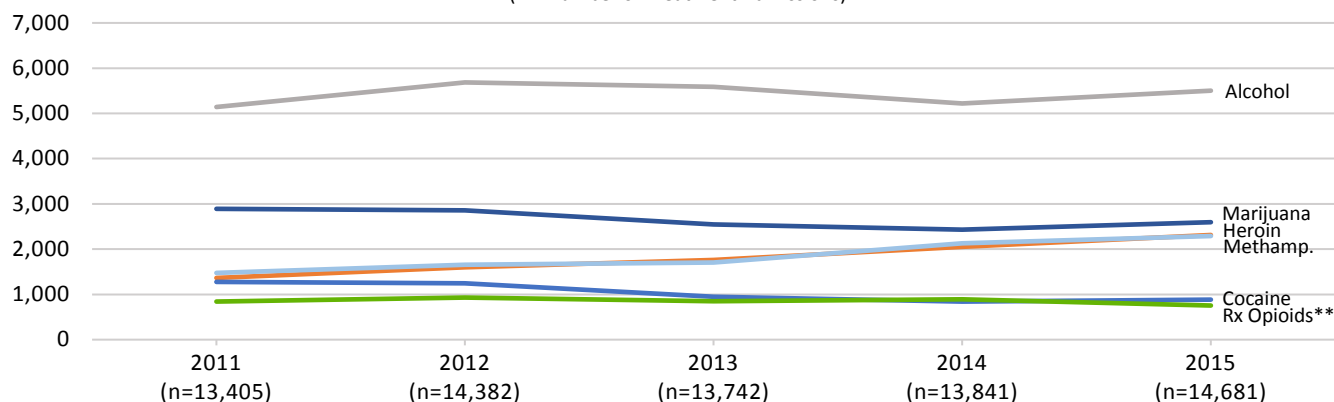
*U.S. Population: U.S. civilian non-institutionalized population. **Substance Use Disorders in Past Year: Persons are classified as having a substance use disorder in the past 12 months based on responses to questions that meet the criteria specified in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*. ^Denver Region: NSDUH Region 2 & 7 (Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, & Jefferson counties). ***Estimated Number: Calculated by multiplying the prevalence rate and the population estimate of persons 12+ years (2,441,220) from Table C1 of the NSDUH Report.

Source: Adapted by the NDEWS Coordinating Center from data provided by SAMHSA, NSDUH. Annual averages based on combined 2012 to 2014 NSDUH data.

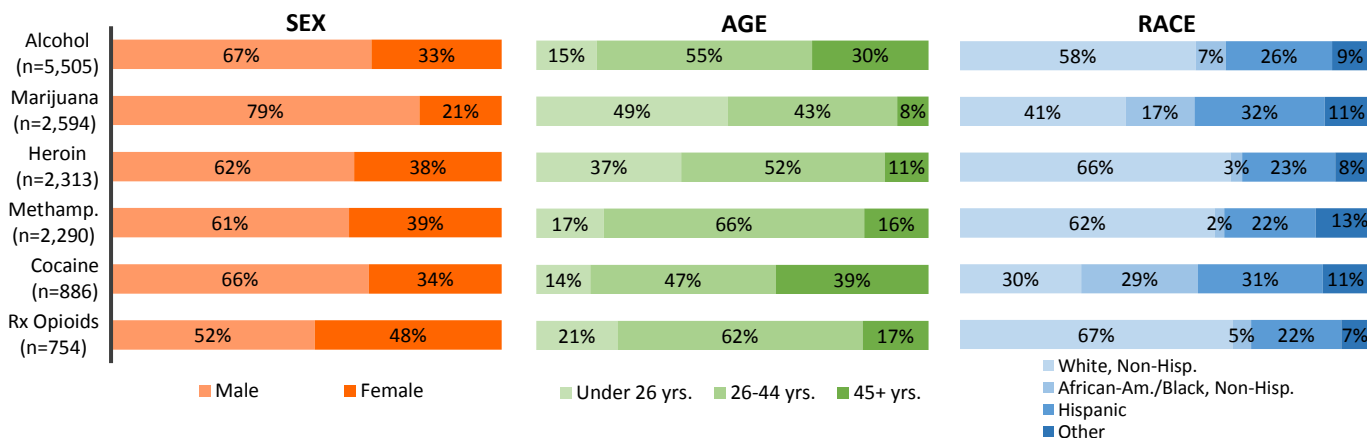
Treatment Admissions Data from Local Sources

Trends in Treatment Admissions*, by Primary Substance of Abuse, Denver Metro Area^, 2011-2015

(n = Number of Treatment Admissions)



Demographic Characteristics of Treatment Admissions*, Denver Metro Area^, 2015



*Treatment Admissions: Includes admissions to all Colorado alcohol and drug treatment agencies licensed by the Colorado Department of Human Services, Office of Behavior Health (OBH). ^Denver Metro Area: Includes residents of Adams, Arapahoe, Boulder, Clear Creek, Denver, Gilpin, and Jefferson Counties. **Rx Opioids: Includes non-prescription methadone and other opiates and synthetic opiates. Percentages may not sum to 100 due to rounding.

See *Sentinel Community Site (SCS) Data Tables and Overview & Limitations* section for more information regarding the data.

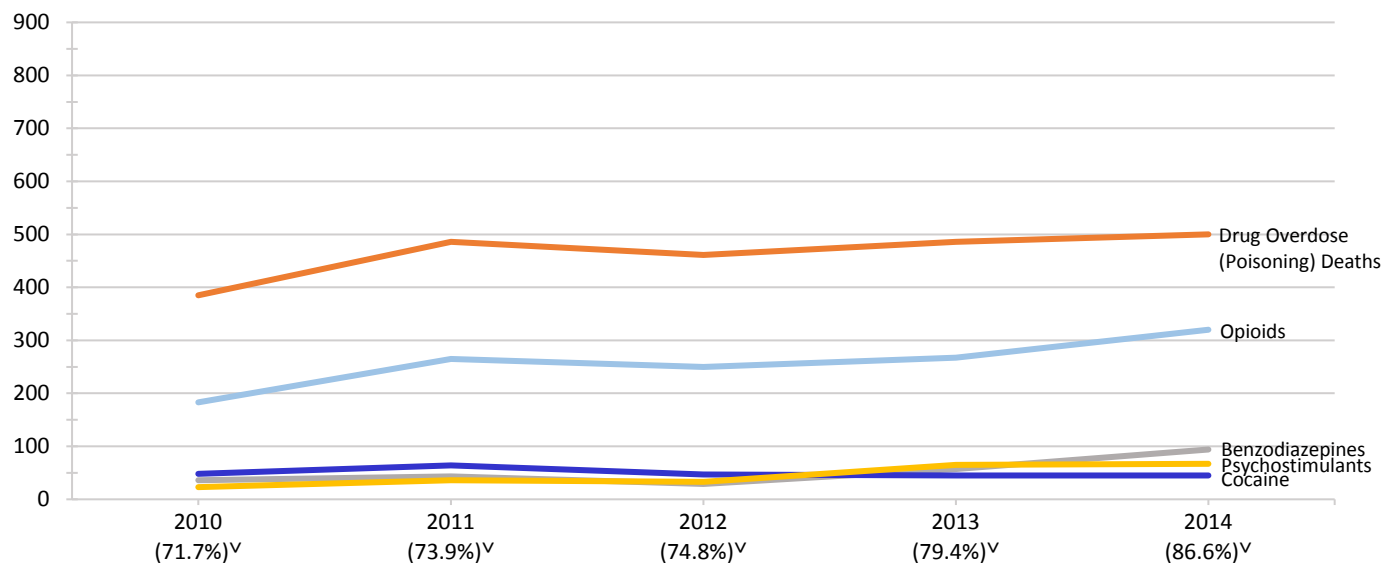
Source: Data provided to the Denver Metro NDEWS SCE by the Colorado Department of Human Services, Office of Behavior Health (OBH), Drug/Alcohol Coordinating Data System (DACODS).

Drug Overdose (Poisoning) Deaths

National Vital Statistics System (NVSS) via CDC WONDER

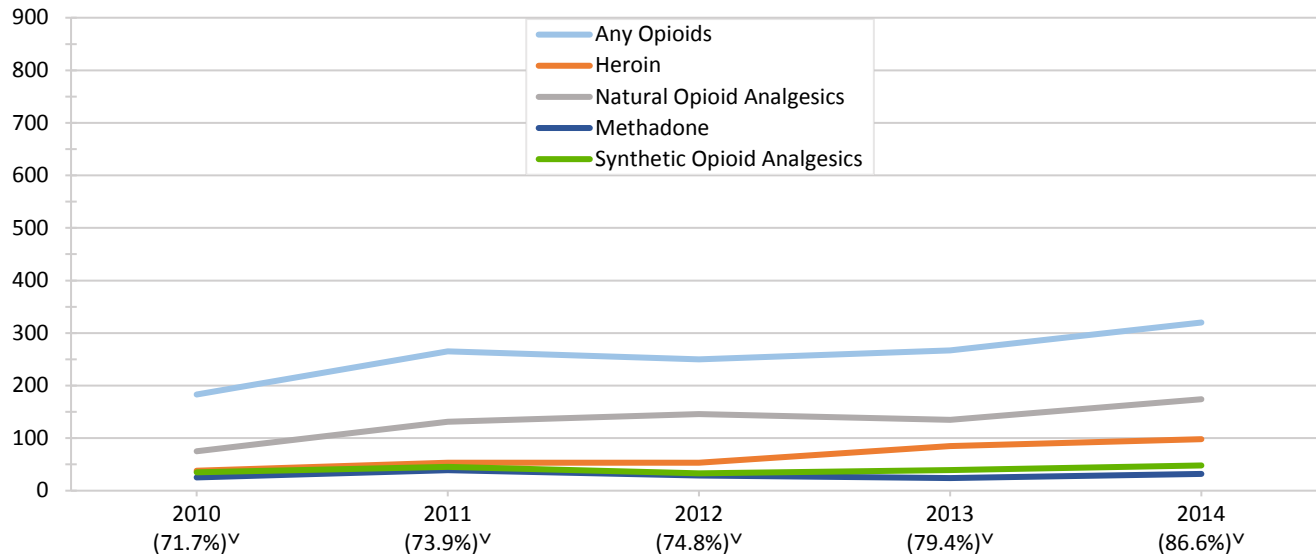
Trends in Drug Overdose (Poisoning) Deaths*, by Drug**, Denver Metro Area^, 2010–2014

(Number of Deaths and Percent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified^)



Trends in Opioid Overdose (Poisoning) Deaths*, by Opioid, Denver Metro Area^, 2010–2014

(Number of Deaths, by Drug** and Percent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified^)



*Drug Overdose (Poisoning) Deaths: Defined as deaths with ICD-10 underlying cause-of-death (UCOD) codes: X40-X44, X60-X64, X85, and Y10-Y14. **Drug Overdose (Poisoning) Deaths, by Drug: Drug overdose (poisoning) deaths with ICD-10 multiple cause-of-death (MCOD) T-codes: Benzodiazepines (T42.4); Cocaine (T40.5); Psychostimulants with Abuse Potential [excluding cocaine] (T43.6)—may include amphetamines, caffeine, MDMA, methamphetamine, and/or methylphenidate; Any Opioids (T40.0-T40.4, OR T40.6). Specific opioids are defined: Opium (T40.0); Heroin (T40.1); Natural Opioid Analgesics (T40.2)—may include morphine, codeine, and semi-synthetic opioid analgesics, such as oxycodone, hydrocodone, hydromorphone, and oxymorphone; Methadone (T40.3); Synthetic Opioid Analgesics [excluding methadone] (T40.4)—may include drugs such as tramadol and fentanyl; and Other and Unspecified Narcotics (T40.6). ^Denver Metro Area: NDEWS Denver catchment area is comprised of Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson Counties. ^Percent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified: The percentage of drug overdose (poisoning) deaths with specific drugs mentioned varies considerably by state/catchment area. This statistic describes the annual percentage of drug poisoning deaths that include at least one ICD-10 MCOD code in the range T36-T50.8. See *Sentinel Community Site (SCS) Data Tables and/or Overview & Limitations* for additional information on mortality data.

Source: Adapted by the NDEWS Coordinating Center from data provided by the Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Multiple cause of death 1999-2014, available on the CDC WONDER Online Database, released 2015. Data compiled in the Multiple cause of death 1999-2014 were provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved between December 2015 - May 2016, from <http://wonder.cdc.gov/mcd-icd10.html>

Law Enforcement Drug Seizures

National Forensic Laboratory Information System (NFLIS)

Drug Reports* for Items Seized by Law Enforcement in the Denver Metro Area^ in 2015 DEA National Forensic Laboratory Information System (NFLIS)

Top 10 Drug Reports and Selected Drug Categories

Drug Identified	Number (#)	Percent of Total Drug Reports (%)
TOTAL Drug Reports	9,179	100%
Top 10 Drug Reports		
Methamphetamine	2,771	30.2%
Cocaine	1,499	16.3%
Cannabis	1,493	16.3%
Heroin	1,427	15.5%
Non-Controlled Non-Narcotic Drug	514	5.6%
Oxycodone	174	1.9%
Alprazolam	125	1.4%
3,4-methylenedioxymethamphetamine (MDMA)	115	1.3%
Amphetamine	81	0.9%
Hydrocodone	80	0.9%
Top 10 Total	8,279	90.2%
Selected Drugs/Drug Categories		
Opioids	1,833	20.0%
Fentanyl	8	0.1%
Other Fentanyl***	2	<0.1%
Synthetic Cannabinoids	71	0.8%
Synthetic Cathinones	56	0.6%
Tryptamines	23	0.3%
2C Phenethylamines	11	0.1%
Piperazines	1	<0.1%

Top 5 Drugs, by Selected Drug Category (% of Category)**

Synthetic Cannabinoids (n=71)

AB-CHIMINACA (34%)
AB PINACA (23%)
ADB-CHIMINACA (16%)
XLR-11 (13%)
5-Fluoro AMB (9%)
Other (7%)

Synthetic Cathinones (n=56)

Ethylone (86%)
alpha-PVP (5%)
BK-DMBDB (4%)
Methylone (4%)
Butylone (2%)

Tryptamines (n=23)

DMT (61%)
alpha-Methyltryptamine (22%)
4-HO-MET (9%)
5-HT (4%)
5-MeO-DALT (4%)

*Drug Reports: Drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database. The NFLIS database allows for the reporting of up to three drugs per item submitted for analysis. The data presented are a total count of first, second, and third listed reports for each selected drug item seized and analyzed.

^Denver Metro Area includes Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson Counties. The Aurora Police Department laboratory's last reported data is July 2014, following the migration to a new LIMS.

Percentages may not sum to 100 due to rounding. *Other Fentanyl are substances that are structurally related to fentanyl (e.g., acetylfentanyl and butyrfentanyl). See *Notes About Data Terms in Overview and Limitations* section for full list of Other Fentanyl that were reported to NFLIS during the January to December 2015 timeframe. See *Sentinel Community Site (SCS) Data Tables and Overview & Limitations* for more information regarding the data.

Source: Adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Diversion Control Division, Drug and Chemical Evaluation Section, Data Analysis Unit. Data were retrieved from the NFLIS Data Query System (DQS) on May 18, 2016.

National Drug Early Warning System (NDEWS) Sentinel Community Site (SCS) Drug Use Patterns and Trends: SCE Narrative

The *SCE Narrative* is written by the Sentinel Community Epidemiologist (SCE) and provides their interpretation of important findings and trends based on available national data as well as sources specific to their area, such as data from local medical examiners or poison control centers. As a local expert, the SCE is able to provide context to the national and local data presented.

This *SCE Narrative* contains the following sections:

- ◇ SCS Highlights
- ◇ Changes in Legislation
- ◇ Substance Use Patterns and Trends
- ◇ Local Research Highlights (if available)
- ◇ Infectious Diseases Related to Substance Use (if available)

The *SCE Narratives* for each of the 12 Sentinel Community Sites and detailed information about NDEWS can be found on the NDEWS website at www.ndews.org.

National Drug Early Warning System (NDEWS) Denver Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2016: SCE Narrative

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Highlights

- Both the Denver metro area (DMA) and Colorado respondents reported substantially higher past month **marijuana** use and lower perception of risk than did national respondents. Overall, past month marijuana use in the Denver Public Schools showed almost no change over the last three surveys. Marijuana treatment admissions and new users (admitted to treatment within the first three years of use) showed slight downward trends (although with a leveling between 2014 and 2015), while hospital discharges and emergency department (ED) visits and Rocky Mountain Poison and Drug Center (RMPDC) calls showed strong upward trends. Because of marijuana legalization, National Forensic Lab Information System (NFLIS) and Denver Crime Lab (DCL) exhibits trends were downward.
- **Synthetic cannabinoid** supply and consequences (e.g., ED visits) peaked in 2013 in the DMA but remained plentiful in 2014 and 2015. There were major changes in the varieties of available synthetic cannabinoids.
- **Methamphetamine** had declined from peak years in 2005–2006 through 2010 in the DMA, but it has resurged sharply since 2011 with all indicators (treatment admissions, hospital discharges, ED visits, mortality, RMPDC calls, and NFLIS and DCL exhibits) on the rise.
- All **heroin** indicators in the DMA are increasing including treatment admissions, hospital discharges, ED visits, mortality, calls to the RMPDC, and NFLIS and DCL exhibits.
- **Prescription opioids** continue to be a major drug of abuse in the DMA. Nevertheless, trends are somewhat mixed. Indications are that prescription opioids peaked for the most part in 2011 and 2012 and have been stable or down slightly since then, including treatment admissions (down slightly since 2012), ED visits (stable from 2013 to 2014), hospital discharges (down from a 2011 peak), and mortality (down from 2011 through 2013 according to CDPHE data for the DMA; mortality in the city and county of Denver via medical examiner reports show downward numbers from 2011 to 2014 but an uptick in 2015). NFLIS and DCL exhibits were stable from 2014 to 2015.
- **Cocaine** prevalence has decreased with most cocaine indicators declining through 2015 (i.e., treatment admissions, mortality, hospital discharges, and NFLIS and crime lab exhibits). Yet, there was an uptick in calls to the RMPDC from 2014 to 2015, as well as a small increase in the number of cocaine-related deaths reported to the Denver Medical Examiner.
- **Benzodiazepines** are not a major drug of abuse in the DMA. There were only 60 benzo treatment admissions in 2015, slightly more than those from 2011 through 2014. In the city and county of Denver, the highest number of benzodiazepine-related deaths reported to the medical examiner peaked in 2009. Benzodiazepines in NFLIS and DCL data remained stable.
- **NPS** (bath salts, tryptamines, and phenylthylamines) only appear in the crime lab data. Bath salts declined somewhat through 2015, while tryptamines and phenylthylamines increased in the crime lab data through 2015.

Changes in Legislation

Changes in the Prescription Drug Monitoring Program (PDMP): Account Registration Is the Law.

The recently enacted law (HB 1283) requires PDMP account registration by Colorado-licensed pharmacists and prescribers who are registered with the U.S. Drug Enforcement Administration (DEA) for prescribing controlled substances. The affected prescribers include:

- Dentists
- Nurses with Prescriptive Authority
- Optometrists
- Physicians and Physician Assistants
- Podiatrists
- Veterinarians

The deadlines for affected pharmacists and prescribers to register their accounts are staggered based on license renewals. Advanced practice nurses with prescriptive authority, pharmacists, dentists, optometrists, podiatrists, and veterinarians should have all registered by now. Physicians and physician assistants must have registered by November 30, 2014.

Additional Changes. The law included other changes in the PDMP, including:

- **Push Notices:** Starting in October 2014, prescribers and pharmacies received “push notices” when a patient to whom they had prescribed filled prescriptions for controlled substances from multiple sources and in potentially harmful quantities. The information is intended to assist the practitioner in delivering optimal care to the patient, including assessing possible drug misuse or diversion. The report should be interpreted by the practitioner in the context of a complete patient assessment.
- **Delegated Account Access:** To make it easier for prescribers and pharmacists to get the information they need to provide the best care for their patients, they can assign sub-accounts to up to three members of their health-care team. To do so, the prescriber or pharmacist must have a registered account. This feature was put in place beginning January 2015.

More Enhancements to the PDMP. In addition to the new law, improvements are being made to make the PDMP more usable and functional. An extensive update will make the interface more intuitive with fewer “clicks” to retrieve patient information. The update will also include new functionality, including the ability to recover a forgotten username or password; to view all of the searches performed by the user’s account within a certain timeframe; and to view all of the user’s available reports in one spot.

Additionally, pharmacies have been required to upload dispensing data every day since October 2014. This change is meant to give prescribers and pharmacists more immediate, timely data and to make the PDMP that much more current and useful.

Substance Use Patterns and Trends

BENZODIAZEPINES

- Benzodiazepines are not a major drug of abuse in the Denver metro area (DMA). There were only 60 benzo treatment admissions in 2015, slightly more than those from 2011 through 2014. In the city and county of Denver, the highest number of benzodiazepine-related deaths reported to the medical examiner peaked in 2009. Benzodiazepines in the National Forensic Lab Information System (NFLIS) and Denver Crime Lab (DCL) data remained stable.

Exhibit 1 shows that there are few admissions to treatment with benzodiazepines as the primary drug in the DMA. As indicated, the benzodiazepine admissions increased from only 4 in 2007 to 60 in 2015.

In the DMA in 2015, 46.7% of those treated for benzos were male, while 53.3% were female. Eighty-five percent of those admitted to treatment for benzos were White, 7.4% were Hispanic, and 5.6% were “other” (Exhibit 2). The most common age for treatment admission for benzos was 25–34 years of age (31.7%), and the most common route of administration in 2015 was oral/other (86.7%) followed by inhaling (8.3%) and injecting (5.0%).

Exhibits 4a and 4b display benzodiazepine-related mortality as reported by the Denver Office of the Medical Examiner (DME). Such deaths increased from 15 in 2003 to a high of 68 in 2009, declining to 51 and 44 in 2014 and 2015, respectively. Overall, benzo-related deaths increased from 10.8% to 30.3% of total deaths from 2003 to 2015.

Alprazolam ranked 7th in both 2015 ($n = 125$, 1.5%) and 2014 ($n = 137$, 1.7%) among the most common drugs submitted for testing by local law enforcement in the Denver metro area (Exhibit 5a and 5b).

COCAINE

- Cocaine prevalence has decreased with most cocaine indicators declining through 2015 (i.e., treatment admissions, mortality, hospital discharges, and NFLIS and crime lab exhibits). Yet, there was an uptick in calls to the Rocky Mountain Poison and Drug Center (RMPDC) from 2014 to 2015, as well as a small increase in the number of cocaine-related deaths reported to the Denver Medical Examiner.

Most of the cocaine available in Colorado is sourced by polydrug trafficking organizations based in Sinaloa and, to a lesser extent, Chihuahua, Mexico. Cocaine transportation and distribution in the state are also controlled primarily by Mexican polydrug trafficking organizations. Cocaine loads are transported from Mexico and Southwest border states to Colorado. Overall, cocaine supplies remained stable during this reporting period, although individual distributors periodically experienced shortages. Prices were stable, and they were largely determined by the purported quality of the cocaine for sale. In Denver, an ounce of cocaine commands \$900 to \$1,500, depending on purported quality and

availability; a kilogram can command up to \$30,000 or more, depending on purported quality and availability.

For the DMA, past year cocaine use increased slightly from 2006–2008 to 2008–2010 from 3.49% to 3.55% (not significant) but then declined to 2.95% from 2008–2010 to 2010–2012 (not significant—Exhibit 6). During all reported years, the Denver metro area reported higher past year cocaine use than did their national counterparts.

The number of cocaine treatment admissions in the DMA had increased from 1,862 in 2007 (15% of total admissions) to a high of 1,910 in 2008 (13.9% of total admissions) but then decreased to a low of only 886 admissions in 2015 (6.0% of total admissions—Exhibit 7).

In the DMA in 2015, 66.0% of those treated for cocaine were male, while 34.0% were female. There are somewhat more males than in 2006 (60.8%). Thirty-eight percent of those admitted to treatment for cocaine were White, 36.4% were African American, and 20.5% were Hispanic (Exhibit 2). The most common age for treatment admission for cocaine was 45–54 years of age (30.2%). Cocaine treatment admits are an aging cohort with nearly 2 in 5, 45 and older in 2015 versus only 1 in 5 in 2006. The most common route of administration for cocaine in 2015 was smoking (52.1%) followed by inhaling (39.8%) and injecting (4.3%). These figures are similar to 2006.

As shown in Exhibit 8, cocaine-related hospital discharges in the DMA ranked 2nd (including alcohol) in 2007 but declined to 4th from 2008 through 2014. From 2007 to 2014, Denver cocaine hospital discharges decreased from 2,583 to 1,833 while the rate decreased from 96.2 to 60.6 per 100,000 population, or by 37.0% from 2007 to 2014.

As shown in Exhibit 9, DMA cocaine emergency department (ED) visits (including alcohol) ranked 4th in 2011 and 2012, dropping to 5th in 2013 and 2014. The rate per 100,000 of cocaine-related emergency department (ED) visits in the Denver metro area decreased from 84.4 to 73.5, from 2011 to 2012, increased to 83 in 2013, but declined to 72 in 2014, the lowest rate in the time period shown.

Exhibit 10 shows cocaine mortality numbers and the rate per 100,000 population for the DMA from 2007 through 2013. Cocaine ranked 3rd (including alcohol) from 2007 through 2012, dropping to 4th in 2013. The number of cocaine deaths declined steadily from 155 in 2007 to 65 in 2013, while the rate per 100,000 also declined from 5.8 to 2.2 during the same time period.

Exhibits 4a and 4b show drug-related deaths reportable to the DME from 2003 to 2015. During this time period, cocaine deaths declined overall from 53 to 24 and from 38.1% to 16.6% of total deaths.

From 2006 to 2014, statewide cocaine-related human exposure calls to the RMPDC declined dramatically from a high of 129 in 2006 to a low of 46 in 2014. But there was an increase to 75 in 2015 (Exhibit 11).

Cocaine was the 2nd most common drug submitted for testing by local law enforcement in both 2015 ($n = 1,499$, 18.1%) and 2014 ($n = 1,755$, 22.3%) in the Denver metro area (Exhibits 5a and 5b). In comparison, cocaine ranked 3rd among samples analyzed for the entire United States in both 2015 ($n = 190,444$, 17.1%) and 2014 ($n = 191,595$, 16.8%).

MARIJUANA

- Both the DMA and Colorado respondents reported substantially higher past month marijuana use and lower perception of risk than did national respondents. Overall, past month marijuana use in the Denver Public Schools showed almost no change over the last three surveys. Marijuana treatment admissions and new users (admitted to treatment within the first three years of use) showed slight downward trends (although with a leveling between 2014 and 2015), while hospital discharges and ED visits and RMPDC calls showed strong upward trends. Because of marijuana legalization, NFLIS and DCL exhibits trends were downward.

Production of marijuana in Colorado is rampant, both within and outside the state-licensed industry. Since 2014, there has been an influx of not only individuals but also organized groups of individuals who have settled in Colorado for the sole purpose of producing marijuana to transport and sell in other markets. Many of these operations involve multiple, sometimes dozens, of homes that are purchased or rented and converted into grow sites. In particular, there has been an influx of marijuana growers from South Florida, many of whom are tied to polydrug trafficking and criminal organizations. They often relocate to Colorado in organized cells that orchestrate numerous grow operations to produce large amounts of marijuana for out-of-state markets.

Colorado's state laws legalizing marijuana do not explicitly limit how much marijuana can be grown within a private residence. Moreover, no law or regulations directly govern marijuana home grows, nor is any state agency empowered to oversee this rapidly expanding market. By default, any oversight or enforcement of marijuana grows in residential structures is left to county or municipal authorities. This absence of oversight and disjointed approach has led to a proliferation of large-scale marijuana grow operations in hundreds of homes throughout the state. Much of the marijuana produced in large home grows is shipped out of Colorado and sold in markets where it commands a high price.

Although growing large numbers of marijuana plants within private residences can fall within the parameters of state law, it presents significant potential risk to the occupants, homeowners, and neighbors of these residences, as well as to first-responders who are called to them. Marijuana grows often cause extensive damage to the houses in which they are contained and are increasingly the causes of house fires, blown electrical transformers, and environmental damage. Much like the "meth houses" of the 1990s, many of these homes may ultimately be rendered uninhabitable.

Marijuana produced in Colorado outside the state-sanctioned industry commands anywhere from \$1,700 to \$2,400 per pound in-state. In markets outside the state, particularly in the Midwest and on the East Coast, a pound of Colorado-grown marijuana can cost up to \$4,000 to \$6,000, depending on seasonal demands.

For the Denver metro area, past month marijuana use increased from 2006–2008 to 2008–2010 (9.62% to 12.20%; significant <.01) and from 2008–2010 to 2010–2012 (12.20% to 13.45%; not significant). The DMA reported substantially higher past month marijuana use than did national respondents (Exhibit 12).

In Exhibit 13, the range for past 30-day marijuana use for Denver Public School (DPS) students in 2013 was from 3% to 30%, 6th to 12th grade, with a high-school average of 27%. The percentages varied very

little from the 2011 DPS survey. In the 2015 survey, 7th-, 8th-, and 11th-grade DPS students reported somewhat higher levels of past 30-day marijuana use than they did in the prior surveys, while 9th and 10th graders reported lower levels. Past 30-day marijuana use among 12th graders remained stable, as did the average for all high-school students.

Exhibit 14 demonstrates that even with the legalization of marijuana, the number of Colorado residents who are approved for a medical marijuana license has remained stable since 2012, even though the number of applications continues to increase. Exhibit 14 shows that the most medical marijuana centers are found in the DMA.

In the DMA, marijuana treatment admissions increased from 2,929 in 2007 (23.5% of total admissions) to a high of 3,295 in 2008 and remained at about that level in 2009 and 2010, 3,289 and 3,229 admissions, respectively. In 2011, marijuana admissions declined by 10.5% to 2,891. They declined slightly to 2,856 in 2012, or by 1.2%, and declined to 2,584 in 2013, or by 9.5% (18.6% of total admissions). In 2014, DMA marijuana admissions totaled 2,713 (17.6% of total admissions), 5% more than 2013 admissions. Nevertheless, in 2015, they decreased to 2,594 (17.7% of total admissions—Table 4a).

In the DMA in 2015, 79.0% of those treated for marijuana were male, while 21.0% were female. These percentages are similar to those of ten years ago. Overall, 50.9% of those admitted to treatment for marijuana were White, 21.9% were Hispanic, and 21.2% were African American (Exhibit 2). The most common age for treatment admission for marijuana users was 25–34 years of age (32.5%). This is a big change from ten years ago when nearly two fifths of marijuana treatment clients were younger than 18. The most common secondary drug among marijuana treatment clients was alcohol (32%, somewhat lower than ten years ago 40.4%—Exhibit 2).

In the DMA, marijuana was the 4th most common drug (behind alcohol, cocaine, and prescription opioids) reported in substance-abuse-related hospital discharges in 2007. Yet, from 2008 to 2012, it ranked 3rd behind alcohol and prescription opioids. In 2013 and 2014, marijuana was the 2nd most common drug after only alcohol. Overall, from 2007 through 2014, the marijuana hospital discharge rate per 100,000 for the Denver metro area more than doubled from 77.9 to 180.47 (Exhibit 8).

As shown in Exhibit 9, DMA metro marijuana ED visits (including alcohol) ranked 2nd in 2011 through 2014. The rate per 100,000 of DMA marijuana-related ED visits almost doubled from 152.9 to 303.3 from 2011 to 2014.

From 2005 to 2015, statewide marijuana-related human exposure calls to the RMPDC increased nearly four-fold from 78 to 286 (Exhibit 11).

Exhibit 15 shows cannabis-related motor vehicle fatal crashes and fatalities among total motor vehicle fatalities in Colorado from 2008 through 2013. As indicated, the number of cannabis-related fatal crashes increased from 30 in 2008 to 52 in 2011, declined to 35 in 2012, but then increased to 44 in 2013. Also, the total number of fatalities in those crashes increased from 36 in 2008 to 59 in 2011, declining to 45 in 2012, but increasing to 52 in 2013. Likewise, the percentage of cannabis-related fatalities doubled from 6.6% in 2008 to 13.2% in 2011, declining to 9.5% in 2012, increasing slightly to

10.8% in 2013.

Marijuana was the 3rd most common drug submitted for testing by local law enforcement in 2015 in the DMA (Exhibit 5a), compared with the 4th most common in 2014 (Exhibit 5b). As shown, marijuana accounted for 18.0% of samples in 2015 (vs. 32.4% in the United States) compared with 15.9% in 2014 (vs. 35.9% in the United States). In both, 2014 and 2015, marijuana ranked 1st among samples analyzed for the entire United States.

METHAMPHETAMINE

- Methamphetamine had declined from peak years in 2005–2006 through 2010 in the DMA, but it has resurged sharply since 2011 with all indicators (treatment admissions, hospital discharges, ED visits, mortality, RMPDC calls, and NFLIS and DCL exhibits) on the rise.

Polydrug traffickers with ties to Mexico supply most of the methamphetamine available in the Denver area. Large methamphetamine loads are transported from Mexico and Southwest border states to Colorado. Methamphetamine transported to Denver is most often in crystal form, but seizures of methamphetamine in liquid solution are not uncommon.

Methamphetamine purity levels remain high. Most exhibits, whether at the wholesale or retail level, are analyzed at 95% or higher. Additionally, prices remain low. In the Denver area, an ounce of methamphetamine costs \$700 to \$900; a pound costs \$6,000 to \$8000.

In the DMA, methamphetamine treatment admissions decreased from 1,722 in 2007 (13.8% of total admissions) to a low of 1,475 in 2011 (11.0% of total admissions) but then increased to 2,359 in 2014 (15.3% of admissions), remaining at about that level in 2015 at 2,290 admissions (15.6% of total admissions—Exhibit 7).

In the DMA in 2015, 60.9% of those treated for methamphetamine were male, while 39.1% were female. The percentage of males has increased from ten years ago (54.7). Seventy-seven percent of those admitted to treatment for methamphetamine were White, 14.4% were Hispanic, and 5.7% were “other”. The most common age for treatment admission for methamphetamine users was 25–34 years of age (41.1%). This is about the same as ten years ago (38.8%). Nevertheless, the younger meth treatment clients (24 and younger) have decreased from 28.0% to 12.9%, while those 35 and older have increased from one third to nearly one half of meth treatment clients from 2006 to 2015. The most common route of administration for methamphetamine in 2015 was smoking (59.9%) followed by injecting (29.5%) and inhaling (7.9%). Smoking and inhaling have both declined over the past ten years while injecting has increased (Exhibit 2).

In the Denver metro area, stimulant hospital discharges were the 5th most common drug reported in substance-abuse–related hospital discharges from 2007 through 2014. Overall, from 2007 to 2014, the stimulant hospital discharge rate per 100,000 for the DMA rose from 31.1 to 45.9, or by 47.6% (Exhibit 8).

As shown in Exhibit 9, Denver metro stimulant ED visits (including alcohol) ranked 5th in 2011 and 2012, but were 4th in 2013 and 2014. The rate per 100,000 of stimulant ED visits in the DMA more than

doubled from 52.6 to 109 from 2011 to 2014.

From 2005 to 2006, statewide methamphetamine-related human exposure calls to the RMPDC declined from 127 to only 29. Yet, from 2006 to 2015, they increased more than five-fold from 29 to 159 (Exhibit 11).

Methamphetamine was the most common drug submitted for testing by local law enforcement in 2015 (as in 2014) in the DMA (Exhibits 5a and 5b). As shown, methamphetamine accounted for 33.5% and 31.0% of the samples analyzed in the Denver metro area in 2015 and 2014, respectively. This is compared to 23.3% and 20.0% for the entire United States in 2015 and 2014, respectively (ranked 2nd both years).

Exhibits 4a and 4b show drug-related deaths reportable to the DME from 2003 to 2015. During this time period, methamphetamine deaths increased overall from 12 to 38 and from 8.6% to 26.2% of total deaths.

NEW PSYCHOACTIVE SUBSTANCES (OTHER THAN OPIOIDS)

- Synthetic cannabinoid supply and consequences (e.g., ED visits) peaked in 2013 in the DMA but remained plentiful in 2014 and 2015. There were major changes in the varieties of available synthetic cannabinoids.
- NPS (bath salts, tryptamines, and phenylthylamines) only appear in the crime lab data. Bath salts have declined somewhat through 2015, while tryptamines and phenylthylamines have increased in the crime lab data through 2015.

Synthetic Cannabinoids

Recent data from the RMPDC details the problem arising from synthetic cannabinoid use. In 2010, RMPDC received 44 human exposure calls related to synthetic cannabinoids, with 39 in 2011, 34 in 2012, 90 in 2013, 21 in 2014, and 45 in 2015. Symptoms reported by callers included tachycardia (abnormally rapid heart rate), confusion, agitation/irritability, dysphoria, hallucinations/delusions, nausea/vomiting, drowsiness/lethargy, tremors, mydriasis (pupil dilation), seizures, etc.

Exhibit 16 shows the number and variety of synthetic cannabinoids tested by the DCL from December 2010 to May 2016. There were 37 different synthetic cannabinoid homologs tested by the DCL of which the most common were XLR11 (171 samples tested); AM-2201 (72 samples tested); and AB FUBINACA (65 samples tested).

Synthetic Cathinones

A class of drugs appearing on the scene in the Denver metro area and in Colorado circa 2010–2011 is the synthetic stimulant called—bath salts, or psychoactive bath salts (PBS). Marketed with such benign sounding names as Cloud Nine, Vanilla Sky, Bliss, and White Dove, these stimulants have effects similar to methamphetamine and ecstasy. The actual names for these drugs include mephedrone, methylone, and MDPV. In 2011, the DCL reported analyzing 15 types of PBSs, increasing to 41 analyzed in 2012, but

decreasing to 9 analyzed in 2013, 12 in 2014, and 16 in 2015. Nonetheless, these drugs do not typically appear in any other institutional data sets at this point, with the exception of the RMPDC. According to the RMPDC, based on data from January through April 2011, there were 9 exposures to bath salts (8 males and 1 female). These bath salt users reported 21 different symptoms including slurred speech, seizures, hypertension, excessive sweating, acidosis, chest pain, confusion, agitation and irritability, and tachycardia. Although, as mentioned, bath salts are not in the treatment data set, one Denver area treatment program reports an increase in bath salts use, mainly by males in their late 20s to early 30s.

Other New Psychoactive Substances (NPS)

Other NPS in the DMA include tryptamines (LSD, DMT, Foxy, Methoxy, Psilocybin, etc.) and phenylthylamines (e.g., 2-CB), which also only show up in the crime lab data. From 2001 to 2007, these NPS averaged 33 samples a year in the DCL. Yet, from 2008 to 2015, the average samples per year increased to 52.

OPIOIDS

- All heroin indicators in the DMA are increasing including treatment admissions, hospital discharges, ED visits, mortality, calls to the RMPDC, and NFLIS and DCL exhibits.
- Prescription opioids continue to be a major drug of abuse in the DMA. Nevertheless, trends are somewhat mixed. Indications are that prescription opioids peaked for the most part in 2011 and 2012 and have been stable or down slightly since then, including treatment admissions (down slightly since 2012), ED visits (stable from 2013 to 2014), hospital discharges (down from a 2011 peak), and mortality (down from 2011 through 2013 according to CDPHE data for the DMA; mortality in the city and county of Denver via medical examiner reports show downward numbers from 2011 to 2014 but an uptick in 2015). NFLIS and DCL exhibits were stable from 2014 to 2015.

Heroin

Mexican brown powder heroin is the predominant heroin type encountered in Denver, although Mexican black tar can be found as well. Heroin distribution organizations operating in Denver are generally tied directly to sources of supply in Sinaloa and Nayarit, Mexico. Heroin is transported from source locations in Mexico, through Arizona, southern California, or Nevada, and into Denver.

Several Mexican trafficking cells control the transportation and distribution of wholesale quantities of Mexican brown heroin in Denver. Wholesale quantities are transported to Denver from southern California or Arizona by Mexican organizations. The wholesale distribution of heroin in Denver is controlled almost exclusively by Mexican drug organizations. Likewise, street-level distribution of quarter-ounce to ounce quantities is dominated by Mexican and Honduran distribution cells.

Information suggests that Mexican heroin trafficking organizations continue to advance in their efforts to manufacture white heroin. Those organizations are sending small quantities of white heroin to the Denver area. Yet, as Colorado has long been a Mexican black tar and brown powder market, white

heroin is not in high demand. In the Denver area, an ounce of brown powder heroin commands up to \$1,200.

In addition to the information from the DEA, the Denver Epidemiology Work Group (DEWG) held a special meeting recently to discuss the heroin problem in the DMA. Some of the relevant issues raised at the meeting include:

- The average age of heroin first use has declined from 24 to 23.
- Youth have access to online tutorials on how to inject drugs.
- Some youth are reporting their first injection before the age of 14.
- A current trend in Denver is mixing heroin with methamphetamine.
- Potency on the street is reported to be 20% (high for Denver but not when compared with purity on the East Coast).

The number of heroin treatment admissions in the DMA has nearly tripled from 846 in 2007 (6.8% of total admissions) to a high of 2,313 in 2015 (15.8% of total admissions). As to percentage of treatment admissions in the Denver metro area (excluding alcohol), heroin increased 2.5 times from 10.6% to 25.2% from 2007 to 2015 (Exhibit 7).

In 2015, 62.3% of those treated for heroin were male, while 37.7% were female (an increase among females from 32.0% in 2006). Overall, 79.0% of those admitted to treatment for heroin were White, 13.7% were Hispanic, and 4.0% reported “other” (Exhibit 2). The most common age for treatment admission for heroin users was 25–34 years of age (43.5%). In 2006, nearly three in five heroin treatment admits were 35 and older. This has declined to only 1 in 4 in 2015. The most common route of administration for heroin in 2015 was injecting (69.7%) followed by smoking (24.5%) and inhaling (3.9%). Those reporting a smoking route of administration have more than doubled from 2006 to 2015 (10.0% to 24.5%), while those injecting have declined from 82.4% to 69.7%.

As shown in Exhibit 8, heroin-related hospital discharges per 100,000 in the Denver metro area ranked 6th (including alcohol) from 2007 through 2014 but increased from 1 ($n = 26$) to 2.5 ($n = 75$) per 100,000 during that time period.

As shown in Exhibit 9, Denver metro heroin ED visits (including alcohol) ranked 6th in 2011 through 2014. The rate per 100,000 of heroin-related ED visits in the Denver metro area increased from 5.4 to 9.3 during that time period.

Exhibit 10 shows heroin mortality numbers and the rate per 100,000 population for the Denver metro area from 2007 through 2013. The number of heroin deaths increased overall from 34 in 2007 to 77 in 2013, with a rate per 100,000 from 1.3 to 2.6 during the same time period.

Exhibits 4a and 4b show drug-related deaths reportable to the DME from 2003 to 2015. During this time period, heroin deaths increased overall from 17 to 52 (2014) and 42 (2015), from 12.2% to 32.7% (2014) of total deaths.

From 2005 to 2015, statewide heroin-related human exposure calls to the RMPDC more than tripled from 24 to 77 (Exhibit 11).

Heroin was the 4th most common drug submitted for testing by local law enforcement in the DMA in 2015 (at 17.2% of samples) compared with 3rd most common in 2014 (at 17.0% of samples). In comparison, heroin was ranked 4th among samples tested in the United States in both 2015 (14.9%) and 2014 (13.4%—see Exhibits 5a and 5b).

Prescription Opioids

For the DMA, past year nonmedical use of pain relievers increased from 2006–2008 to 2008–2010 from 5.71% to 6.57% (not significant) but declined from 2008–2010 to 2010–2012 to 5.69% (not significant). The DMA respondents reported higher past year nonmedical use of pain relievers than did national respondents (Exhibit 17).

The number of prescription opioid treatment admissions in the DMA more than doubled from 429 in 2007 (3.4% of total admissions) to a high of 992 in 2014 (6.4% of total admissions), decreasing to 754 in 2015 (5.1% of total admissions—Exhibit 7).

In the DMA in 2015, 52.1% of those treated for prescription opioids were male, while 47.9% were female. These numbers are nearly identical to ten years ago. Seventy-nine percent of those admitted to treatment for prescription opioids were White, 12.4% were Hispanic, and 5.4% reported they were African American. The most common age for treatment admission for opioid users was 25–34 years of age (42.3%). Since 2006, prescription opioid treatment admits have become younger with nearly 3 in 5 younger than 35 in 2015 versus about 1 in 2 in 2006 (Exhibit 2). The percentage of those inhaling prescription opioids more than doubled from 2006 (5.8%) to 2015 (12.5%).

As shown in Exhibit 8, prescription opioid–related hospital discharges per 100,000 in the DMA ranked 3rd in 2007, 2013, and 2014, and 2nd from 2008 through 2012, increasing from 85.7 to 133.8, or by 56.1% from 2007 to 2014. The number of prescription opioid hospital discharges increased from 2,301 to 4,049 during the same time period. The prescription opioid peak rate per 100,000 was in 2011 (148.8).

As shown in Exhibit 9, DMA prescription opioid ED visits (including alcohol) ranked 3rd in 2011 through 2014. The rate per 100,000 of prescription opioid–related ED visits in the Denver metro area increased from 110.5 to 134.2, or by 21.4%, from 2011 to 2014.

Exhibit 10 shows prescription opioid mortality numbers and the rate per 100,000 population for the DMA area from 2007 through 2013. The number of prescription opioid deaths increased slightly from 506 in 2007 to 525 in 2009 but decreased somewhat to 479 through 2013. The prescription opioid mortality rate per 100,000 decreased slightly overall from 18.9 to 16.2 from 2007 to 2013.

Exhibits 4a and 4b show drug-related deaths reportable to the DME from 2003 to 2015. During this time period, prescription opioid deaths increased overall from 30 to 96 and from 21.6% to 66.2% of total deaths.

Oxycodone ranked 6th in both 2015 ($n = 174$, 2.1%) and 2014 ($n = 225$, 2.9%) among the most common drugs submitted for testing by local law enforcement in the Denver metro area (Exhibits 5a and 5b), while hydrocodone ranked 10th in 2015 ($n = 80$, 1.0%) and 8th in 2014 ($n = 70$, 0.9% of total drugs

samples analyzed).

Opioid Analogs

There have been at least two fatal overdoses in Colorado involving U-47700. U-47700 and other novel synthetic drugs, such as furanyl fentanyl and W-18, are increasingly encountered and are available through online “research chemical” vendors. U-47700 is an opioid seven times more powerful than morphine. Furanyl fentanyl is an opioid analgesic and analogue of fentanyl. W-18 was developed by a Canadian laboratory around 2010 and is potentially lethal, although its full pharmacological effects are unknown.

Infectious Diseases Related to Substance Use

HIV & AIDS

A cumulative total of 11,300 cases of AIDS and 7,565 cases of HIV infection have been reported in Colorado, and an estimated 12,635 persons were living with HIV disease through the end of 2013.

Colorado’s HIV (not AIDS) prevalence of 129 persons per 100,000 population was lower than the U.S. prevalence of 292 in 2012. Colorado’s 2012 AIDS prevalence was 106 persons per 100,000 population compared with the U.S. prevalence of 162 during the same year. In 2013, Colorado ranked 23rd in total cumulative aids cases reported among all states and represented .90% of all reported AIDS cases in 2012.

Exhibit 18 shows the risk factors for the people living in Colorado with HIV and AIDS. The highest reported risk factor is males having sex with males.

Hepatitis B

Acute hepatitis B is a short-term illness that occurs within the first six months of infection with the hepatitis B virus. Symptoms are usually mild to moderate and include fatigue, nausea, vomiting, abdominal pain, jaundice, and abnormal liver function tests.

Chronic hepatitis B results when HBV remains in the body after the acute phase of illness. People with a chronic infection do not develop protective antibodies to the hepatitis B surface antigen. Among those infected, 30% to 50% of younger children, and up to 90% of infants will develop chronic hepatitis B.

Exhibit 19a shows the gender breakdown in the DMA for hepatitis B cases across years. The years 2009–2010 show the highest number of cases, especially for the male population.

Exhibit 19b is the breakdown of hepatitis B cases by the reported risk factors. Those with chronic hepatitis B report being born in an endemic country.

Hepatitis C

Up to 85% of persons infected with the hepatitis C virus (HCV) develop chronic infection. Chronic liver disease or liver cancer develops in approximately 15% 25% of people infected with HCV for 20 years or longer. When symptoms appear, they are often a sign of advanced liver disease and may include the same symptoms as an acute infection. The surveillance case definition relates to past or present cases of hepatitis C rather than to truly chronic infections. According to Exhibit 20a, hepatitis C cases have declined since 2009 but have remained relatively steady across both genders.

Risk factor data include injection drug use, household contact, sex contact, and male sex with male. Exhibit 20b shows the breakdown of risk factors in Denver County. The highest reported risk factor is IV drug use.

Exhibits

Exhibit 1. Benzodiazepine Treatment Admissions in the DMA: 2007–2015

Item	2007	2008	2009	2010	2011	2012	2013	2014	2015
Benzo Admits	4	35	25	28	48	57	50	49	60

Source: Drug/Alcohol Coordinated Data System, Office of Behavioral Health, Colorado Department of Human Services

Exhibit 2. Demographic Characteristics of Clients Admitted to Treatment in Denver Metro: CY 2006 Compared With CY 2015

	Benzodiazepine		Cocaine		Heroin		Meth.		Prescription Opioids		Marijuana	
Year	2006*	2015	2006	2015	2006	2015	2006	2015	2006	2015	2006	2015
Total N by Year		60	1,848	886	829	2,313	1,699	2,290	433	754	2,902	2,594
Gender												
Male		46.7	60.8	66.0	68.0	62.3	54.7	60.9	52.0	52.1	76.6	79.0
Female		53.3	39.2	34.0	32.0	37.7	45.3	39.1	48.0	47.9	23.4	21.0
Race/Ethnicity												
White		85.2	44.0	37.8	65.1	79.0	81.8	77.1	85.9	79.4	42.8	50.9
African American		1.9	20.8	36.4	6.6	3.3	1.3	2.8	2.5	5.4	20.7	21.2
Hispanic		7.4	31.3	20.5	23.5	13.7	12.9	14.4	9.0	12.4	31.3	21.9
Other		5.6	5.2	5.3	4.8	4.0	4.0	5.7	2.6	2.8	5.2	6.0
Age at Admission												
Younger than 17		0.0	2.6	0.9	0.2	0.5	3.8	1.4	0.5	0.7	39.1	20.1
18 to 24		26.7	13.3	10.4	12.8	30.3	24.2	11.5	11.8	15.6	27.0	24.2
25 to 34		31.7	26.5	25.5	29.6	43.5	38.8	41.1	34.9	42.3	20.2	32.5
35 to 44		25.0	37.0	24.3	21.4	14.6	25.5	29.6	25.2	24.5	10.1	15.2
45 to 54		13.3	18.3	30.2	25.9	5.9	7.3	14.1	20.6	10.6	2.9	5.9
55 and older		3.3	2.3	8.7	10.1	5.3	0.4	2.4	7.2	6.2	0.7	2.1
Route of Ingestion for Primary Substance												
Smoking		0.0	57.4	52.1	10.0	24.5	65.7	59.9	0.9	5.7	92.9	92.6
Inhaling		8.3	36.2	39.8	6.0	3.9	12.1	7.9	5.8	12.5	5.2	3.5
Injecting		5.0	4.3	4.3	82.4	69.7	18.2	29.5	10.2	8.6	0.0	0.2
Oral/Other		86.7	0.6	3.7	0.4	1.9	4.0	2.8	83.1	73.2	1.9	3.7
Secondary Substance												
Alcohol		16.7	33.5	32.5	6.5	7.3	17.6	19.3	13.9	13.1	40.4	32.0
Cocaine		5.0	0	0	30.3	15.3	12.1	7.2	9.7	5.4	11.8	7.4
Heroin		15.0	1.8	3.4	0	0	0.7	6.6	3.2	6.9	0.3	1.1
Methamphetamine		1.7	5.2	6.2	5.2	18.2	0	0	3.2	4.5	8.2	9.8
Marijuana		15.0	25.2	22.7	9.2	15.8	31.9	27.8	7.2	16.2	0.0	0
Prescription Opiates		18.3	0.7	2.1	6.3	10.9	0.9	1.9	0	0	0.4	2.0
Hallucinogens		0.0	0.3	0.5	0.1	0.2	0.4	0.7	0.5	0.1	0.7	2.6
Sedatives		3.4	0.8	0.3	2.6	4.0	0.7	0.5	6.9	8.2	0.3	0.4
Other		6.6	0.9	2.6	0.4	1.6	1.3	5.0	1.5	9.0	1.3	4.6
None		18.3	31.6	29.7	39.3	26.7	34.5	31.0	52.7	36.6	36.6	40.1

*2006 benzodiazepine frequencies are not shown as admission numbers are too few

Source: Drug/Alcohol Coordinated Data System, Office of Behavioral Health, Colorado Department of Human Services

Exhibit 3. Top Cities/Areas for Retail Marijuana Stores as of March 2016

Cities/Areas	Number of Retail Stores	Percent of Total
City/County of Denver	157	37.0
Rest of Denver Metro Area	94	22.2
Front Range Outside Denver Metro Area	54	12.7
Western Slope	119	28.1
TOTAL ALL CITIES	424	100

Exhibit 4a. Denver Drug-Related Mortality from Office of the Medical Examiner: 2003–2015

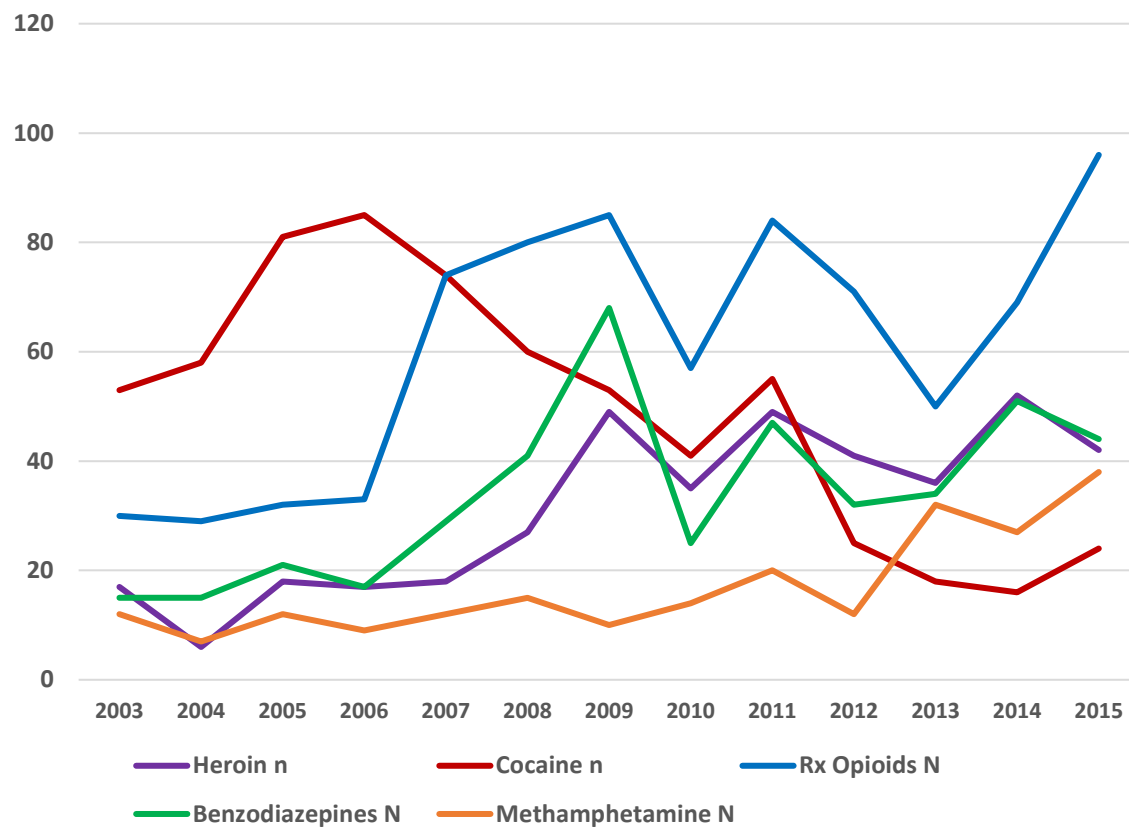


Exhibit 4b. Denver Drug-Related Mortality: 2003–2015, Numbers and Percentages

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Heroin <i>n</i>	17	6	18	17	18	27	49	35	49	41	36	52	42
Heroin %	12.2%	4.0%	10.6%	10.1%	9.5%	12.7%	23.7%	23.0%	25.8%	27.9%	25.0%	32.7%	29.0%
Cocaine <i>n</i>	53	58	81	85	74	60	53	41	55	25	18	16	24
Cocaine %	38.1%	38.4%	47.6%	50.3%	39.2%	28.3%	25.6%	27.0%	28.9%	17.0%	12.5%	10.1%	16.6%
Prescription Opioids <i>N</i>	30	29	32	33	74	80	85	57	84	71	50	69	96
Prescription Opioid %	21.6%	19.2%	18.8%	19.5%	39.2%	37.7%	41.1%	37.5%	44.2%	48.3%	34.7%	43.4%	66.2%
Benzodiazepines <i>N</i>	15	15	21	17	29	41	68	25	47	32	34	51	44
Benzodiazepines %	10.8%	9.9%	12.4%	10.1%	15.3%	19.3%	32.9%	16.4%	24.7%	21.8%	23.6%	32.1%	30.3%
Methamphetamine <i>N</i>	12	7	12	9	12	15	10	14	20	12	32	27	38
Methamphetamine %	8.6%	4.6%	7.1%	5.3%	6.3%	7.1%	4.8%	9.2%	10.5%	8.2%	22.2%	17.0%	26.2%
Total Deaths	139	151	170	169	189	212	207	152	190	147	144	159	145

Exhibit 5a. Denver Area and U.S. NFLIS Samples: Top 10 Most Frequently Identified Drugs of Total Analyzed Drug Items: CY 2015

Drug	Denver Area		Total US	
	<i>N</i>	%	<i>N</i>	%
Methamphetamine	2,771	33.5	259,818	23.3
Cocaine	1,499	18.1	190,444	17.1
Marijuana/Cannabis	1,493	18.0	361,829	32.4
Heroin	1,427	17.2	166,856	14.9
Noncontrolled non-narcotic drug	514	6.2	34,678	3.1
Oxycodone	174	2.1	37,538	3.4
Alprazolam	125	1.5	40,429	3.6
MDMA	115	1.4	*	0
Amphetamine	81	1.0	*	0
Hydrocodone	80	1.0	25,267	2.3
TOTAL	8,279	100	1,116,859	100

* Not in top ten

Source: National Forensic Lab Information System-primary, secondary, and tertiary reports

Note: Denver Area in this comparison includes Denver, Jefferson, and Arapahoe counties

Exhibit 5b. Denver Area and U.S. NFLIS Samples: Top 10 Most Frequently Identified Drugs of Total Analyzed Drug Items: CY 2014

Drug	Denver Area		Total US	
	N	%	N	%
Methamphetamine	2,435	31.0%	228,826	20.0%
Cocaine	1,755	22.3%	191,595	16.8%
Heroin	1,341	17.0%	153,702	13.4%
Marijuana/Cannabis	1,252	15.9%	410,890	35.9%
Noncontrolled non-narcotic drug	516	6.6%	33,324	2.9%
Oxycodone	225	2.9%	39,424	3.4%
Alprazolam	137	1.7%	36,714	3.2%
Hydrocodone	70	0.9%	39,256	3.4%
MDMA	69	0.9%	*	0.0%
XLR-1 (synthetic cannabinoid)	67	0.9%	9,788	0.9%
TOTAL	7,867	100%	1,143,519	100%

* Not in top ten

Source: National Forensic Lab Information System-primary, secondary, and tertiary reports

Note: Denver Area in this comparison includes Denver, Jefferson, and Arapahoe counties

Exhibit 6. Cocaine Use in Past Year: Comparison of 2006–2008, 2008–2010, and 2010–2012 NSDUH: Denver Metro vs. Colorado vs. United States

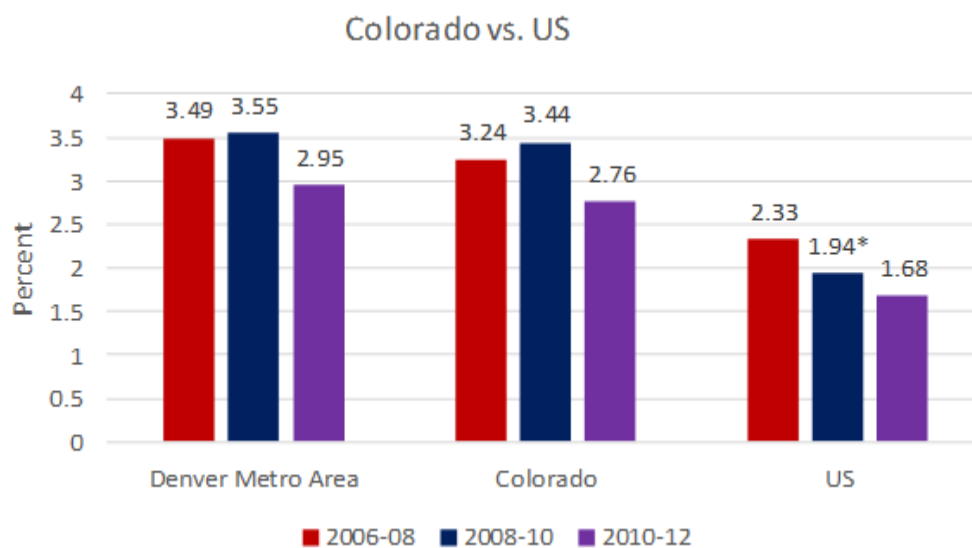


Exhibit 7. Numbers and Percentages of Treatment Admissions by Primary Drug Type in Denver Metro Area: CY 2007-2015

Drug		2007	2008	2009	2010	2011	2012	2013	2014	2015
Alcohol	<i>n</i>	4,451	5,095	5,265	4,973	5,142	5,685	5,628	5,840	5,505
	%	35.8	37.0	38.0	37.3	38.4	39.5	40.5	37.8	37.5
Marijuana	<i>n</i>	2,929	3,295	3,289	3,229	2,891	2,856	2,584	2,713	2,594
	%	23.5	23.9	23.8	24.2	21.6	19.9	18.6	17.6	17.7
	<i>(excluding alcohol)</i> %	36.6	38.0	38.3	38.7	35.0	32.9	31.3	28.2	28.3
Methamphetamine	<i>n</i>	1,722	1,714	1,641	1,562	1,475	1,653	1,726	2,359	2,290
	%	13.8	12.4	11.9	11.7	11.0	11.5	12.4	15.3	15.6
	<i>(excluding alcohol)</i> %	21.5	19.7	19.1	18.7	17.9	19.0	20.9	24.6	25.0
Cocaine	<i>n</i>	1,862	1,910	1,602	1,355	1,276	1,244	962	929	886
	%	15.0	13.9	11.6	10.2	9.5	8.6	6.9	6.0	6.0
	<i>(excluding alcohol)</i> %	23.3	22.0	18.7	16.2	15.4	14.3	11.6	9.7	9.7
Heroin	<i>n</i>	846	925	1,062	1,154	1,364	1,599	1,792	2,298	2,313
	%	6.8	6.7	7.7	8.7	10.2	11.1	12.9	14.9	15.8
	<i>(excluding alcohol)</i> %	10.6	10.7	12.4	13.8	16.5	18.4	21.7	23.9	25.2
Other Opioids ¹	<i>n</i>	429	570	688	786	843	930	860	992	754
	%	3.4	4.1	5.0	5.9	6.3	6.5	6.2	6.4	5.1
	<i>(excluding alcohol)</i> %	5.4	6.6	8.0	9.4	10.2	10.7	10.4	10.3	8.2
Depressants ²	<i>n</i>	50	68	64	44	66	77	72	80	92
	%	0.4	0.5	0.5	0.3	0.5	0.5	0.5	0.5	0.6
	<i>(excluding alcohol)</i> %	0.6	0.8	0.7	0.5	0.8	0.9	0.9	0.8	1.0
Other /Stimulants	<i>n</i>	17	29	22	31	31	32	19	36	29
	%	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
	<i>(excluding alcohol)</i> %	0.2	0.3	0.3	0.4	0.4	0.4	0.2	0.4	0.3
Hallucinogens ³	<i>n</i>	18	18	15	9	22	34	29	31	33
	%	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
	<i>(excluding alcohol)</i> %	0.2	0.2	0.2	0.1	0.3	0.4	0.4	0.3	0.4
Club Drugs ⁴	<i>n</i>	42	53	43	63	85	74	72	58	36
	%	0.3	0.4	0.3	0.5	0.6	0.5	0.5	0.4	0.2
	<i>(excluding alcohol)</i> %	0.5	0.6	0.5	0.8	1.0	0.9	0.9	0.6	0.4
Other ⁵	<i>n</i>	82	97	152	121	210	197	152	109	149
	%	0.7	0.7	1.1	0.9	1.6	1.4	1.1	0.7	1.0
	<i>(excluding alcohol)</i> %	1.0	1.1	1.8	1.4	2.5	2.3	1.8	1.1	1.6
Total	<i>N</i>	12,448	13,774	13,844	13,328	13,405	14,382	13,896	15,445	14,681
(excluding alcohol)	<i>N</i>	7,998	8,680	8,579	8,355	8,263	8,697	8,268	9,605	9,176

¹ Includes nonprescription methadone and other opiates and synthetic opiates

² Includes barbiturates, benzodiazepine tranquilizers, clonazepam, and other sedatives

³ Includes LSD, PCP, and other hallucinogens

⁴ Includes Rohypnol, ketamine (Special K), GHB, and MDMA (ecstasy)

Exhibit 8. Number and Rates of Denver Metro Drug-Related Hospital Discharge Reports per 100,000 Population for Selected Drugs (unduplicated): 2007–2014

Number and Rate per 100k	2007	2008	2009	2010	2011	2012	2013	2014
Alcohol <i>N</i>	14,465	16,005	16,130	17,515	18,264	18,144	18,645	18,963
Alcohol Rate	538.87	586.01	580.92	622.77	638.24	623.13	628.54	626.51
Marijuana <i>N</i>	2,091	2,438	2,507	3,397	3,526	3,558	4,655	5,462
Marijuana Rate	77.9	89.26	90.29	120.79	123.22	122.19	156.9	180.41
Cocaine <i>N</i>	2,583	2,334	2,135	2,252	2,231	1,901	1,870	1,833
Cocaine Rate	96.22	85.46	76.89	80.07	77.96	65.29	63.04	60.56
Heroin <i>N</i>	26	37	58	33	59	64	69	75
Heroin Rate	0.97	1.35	2.09	1.17	2.06	2.2	2.33	2.48
Rx Opioid <i>N</i>	2,301	2,618	2,851	3,441	4,257	4,098	4,030	4,049
Rx Opioid Rate	85.72	95.86	102.68	122.35	148.76	140.74	135.85	133.71
Stimulant <i>N</i>	836	712	786	1,021	969	1,077	1,367	1,388
Stimulant Rate	31.14	26.07	28.31	36.3	33.86	36.99	46.08	45.86
Population	2,684,335	2,731,197	2,776,620	2,812,417	2,861,627	2,911,749	2,966,417	3,026,511

Source: Colorado Department of Public Health and Environment, Colorado Hospital Association Discharge Data Program Database

Exhibit 9. Denver Metro ED Visits by Selected Drug for 2011–2014

	2011	2012	2013	2014
Alcohol ED Rate per 100,000	990.8	984.6	1130.9	1119.3
Marijuana ED Rate per 100,000	152.9	176.2	256.5	303.3
Rx Opioid ED Rate per 100,000	110.5	121.1	135.6	134.2
Cocaine ED Rate per 100,000	84.4	73.5	83	72
Stimulant ED Rate per 100,000	52.6	63.0	102.7	109
Heroin ED Rate per 100,000	5.4	6.9	7.9	9.3

Exhibit 10. Denver Metro Area Mortality for Alcohol and Selected Drugs

	2007	2008	2009	2010	2011	2012	2013
Population	2,684,335	2,731,197	2,776,620	2,812,417	2,861,627	2,911,749	2,962,704
Alcohol Count	706	827	882	819	806	775	792
Alcohol Rate/100,000	26.3	30.3	31.8	29.1	28.2	26.6	26.7
Rx opioid Count	506	479	525	418	515	500	479
Rx Opioid Rate/100,000	18.9	17.5	18.9	14.9	18.0	17.2	16.2
Cocaine Count	155	119	103	81	93	75	65
Cocaine Rate/100,000	5.8	4.4	3.7	2.9	3.3	2.6	2.2
Heroin Count	34	39	60	38	53	53	77
Heroin Rate/100,000	1.3	1.4	2.2	1.4	1.9	1.8	2.6
Marijuana Count	*	4	*	*	*	6	4
Marijuana Rate/100,000	*	0.15	*	*	*	0.21	0.14
Stimulant Count	27	29	40	32	45	46	75
Stimulant Rate/100,000	1.0	1.1	1.4	1.1	1.6	1.6	2.5
Benzo Count	44	33	49	39	45	33	54

Exhibit 11. Number of Statewide Drug-Related Calls to the Rocky Mountain Poison and Drug Center: 2005–2015 (human exposure calls only)

Drug	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Alcohol	884	868	858	916	840	913	991	951	912	890	997
Cocaine/Crack	107	129	91	104	63	64	96	64	80	46	75
Heroin	24	25	21	23	29	19	47	50	44	51	77
Marijuana	78	45	70	61	54	107	98	130	136	238	286
Methamphetamine	127	29	31	51	60	72	78	72	117	131	159
Club Drugs	49	47	49	55	46	48	53	51	33	56	49

Note: Club Drugs includes Gamma Hydroxybutyrate and MDMA

Source: Rocky Mountain Poison and Drug Center

**Exhibit 12. Marijuana Use in the Past Month: Comparison of 2006–2008, 2008–2010, and 2010–2012
NSDUH: Denver Metro vs. Colorado vs. United States**

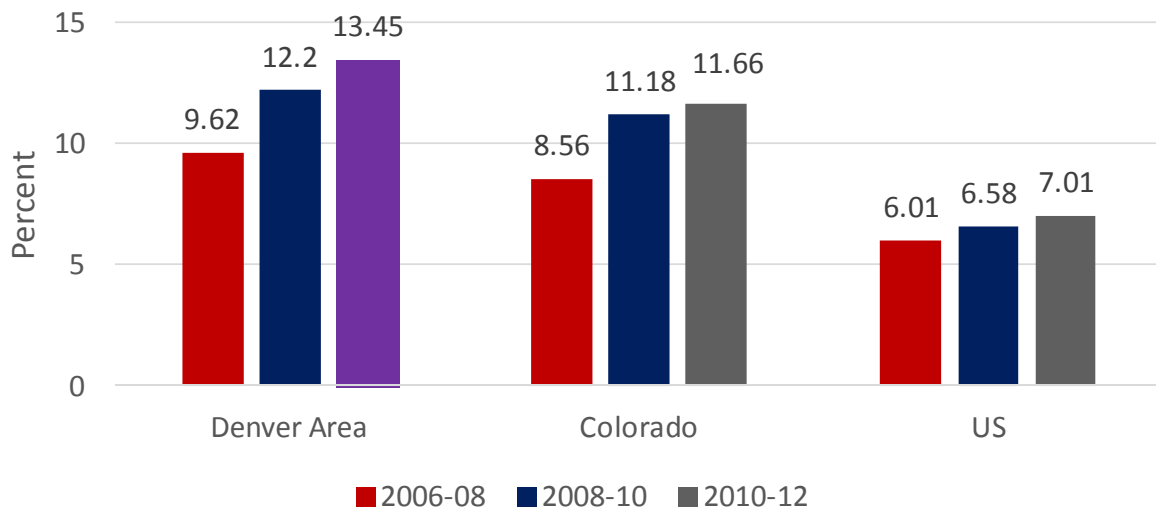


Exhibit 13. Past 30 Day Marijuana Use Among DPS Students 2011, 2013, and 2015

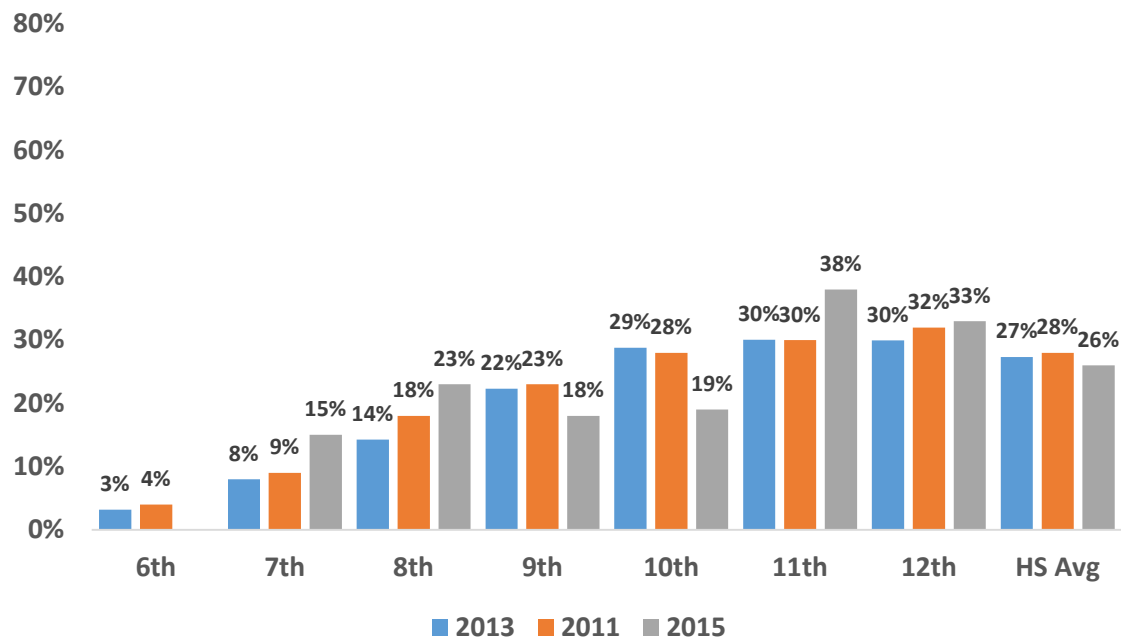


Exhibit 14. Colorado Medical Marijuana Centers (MMCs); Denver Metro Area Compared With Outside Metro Area* by License Type (as of March 2016)**

License Type	Denver Metro <i>N</i>	Denver Metro % of Statewide MM Centers	Outside Denver <i>N</i>	Outside Denver % of Statewide MM Centers	Total MM Centers in Colorado
Type 1	227	44.2	208	40.5	435
Type 2	36	7.0	19	3.7	55
Type 3	17	3.3	7	1.4	24
Total	280	54.4	234	45.6	514

Source: Colorado Department of Revenue: Medical Marijuana Enforcement

***Metro Area** includes the following nine counties: Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson

****License Types:**

- Type 1 Centers are those with 1 to 300 Primary Patients
- Type 2 Centers are those with 301 to 500 Primary Patients
- Type 3 Centers are those with 501 and above Primary Patients
- This excludes Infused Product Manufacturing Licenses

Exhibit 15. Cannabis-Related Motor Vehicle Fatalities Among Total Motor Vehicle Fatalities in Colorado by Year: 2008–2013*

Year	Cannabis-Related Crashes	Fatalities of Cannabis-Related Crashes	Total Motor Vehicle Fatalities	Percent Fatalities Cannabis Related
2008	30	36	548	6.6%
2009	37	41	465	8.8%
2010	42	47	450	10.4%
2011	52	59	447	13.2%
2012	35	45	474	9.5%
2013*	44	52	481	10.8%

*2013 data are preliminary

Exhibit 16. Synthetic Cannabinoid Samples Analyzed by the Denver Crime Lab 2010–2016

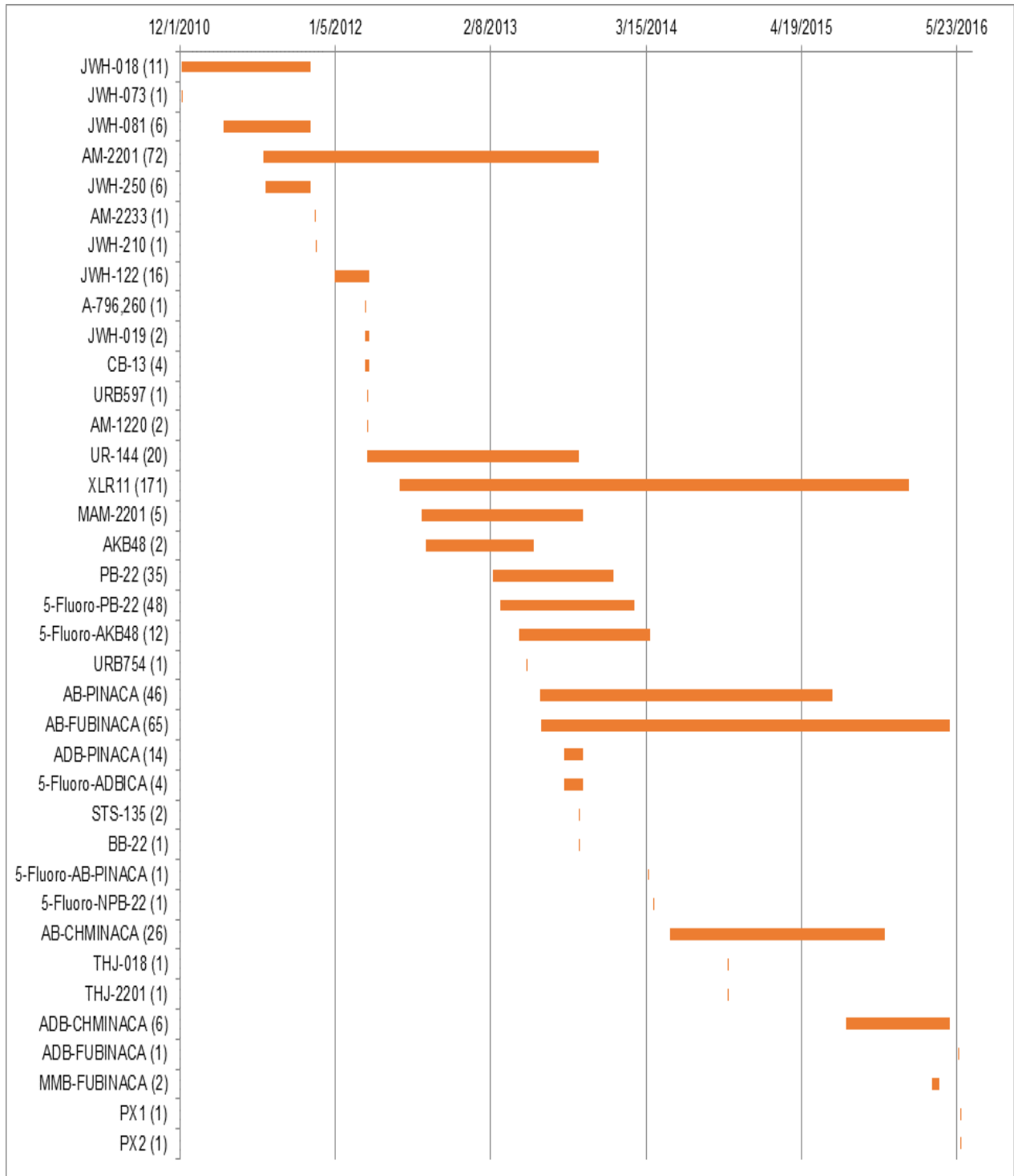


Exhibit 17. Nonmedical Use of Pain Relievers in the Past Year: Comparison of 2006–2008, 2008–2010, and 2010–2012 NSDUH: Denver Metro vs. Colorado vs. United States

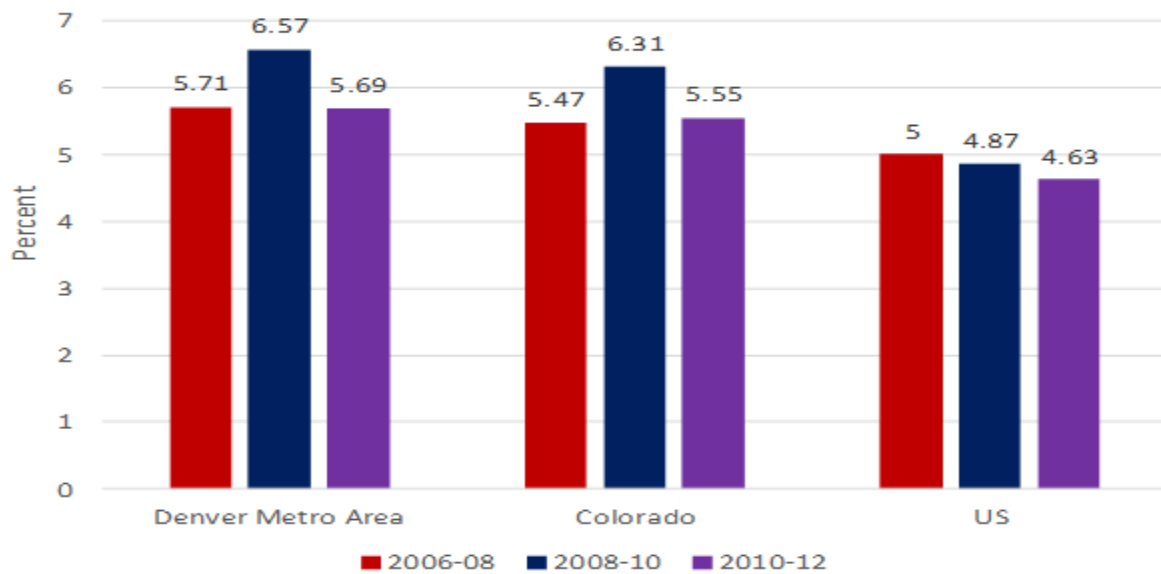


Exhibit 18. Individuals Living With HIV and AIDS by Risk Factors

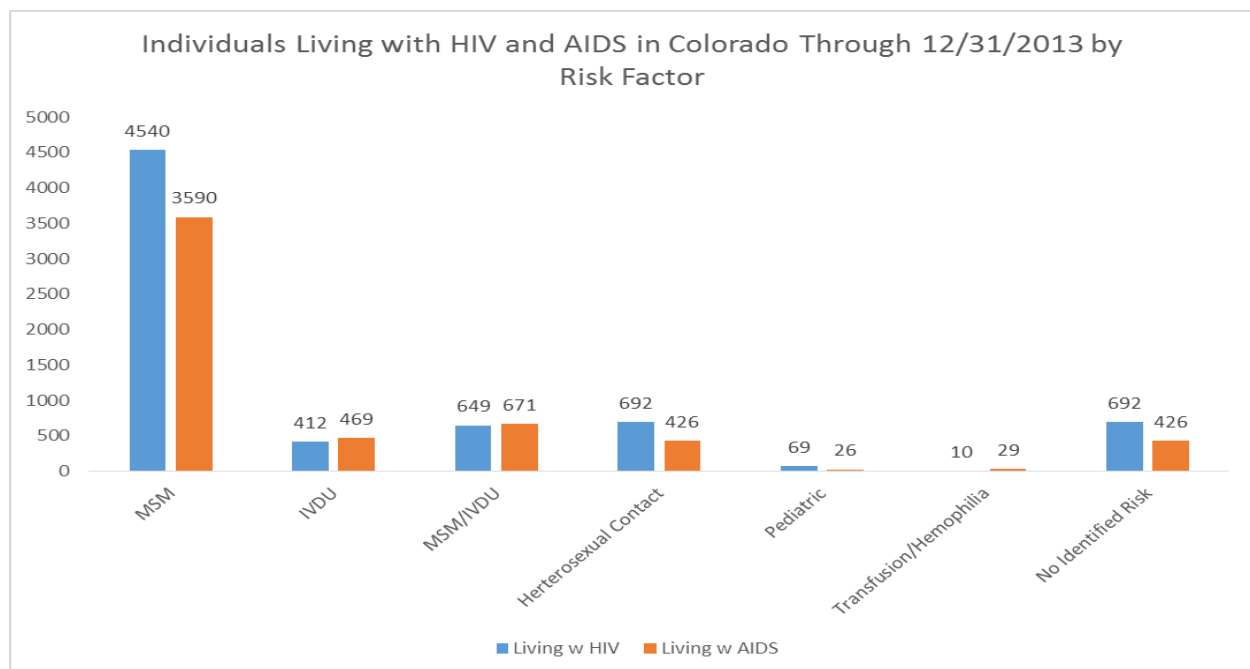


Exhibit 19a: Reported Hepatitis B Cases in Denver County by Gender 2008–2013

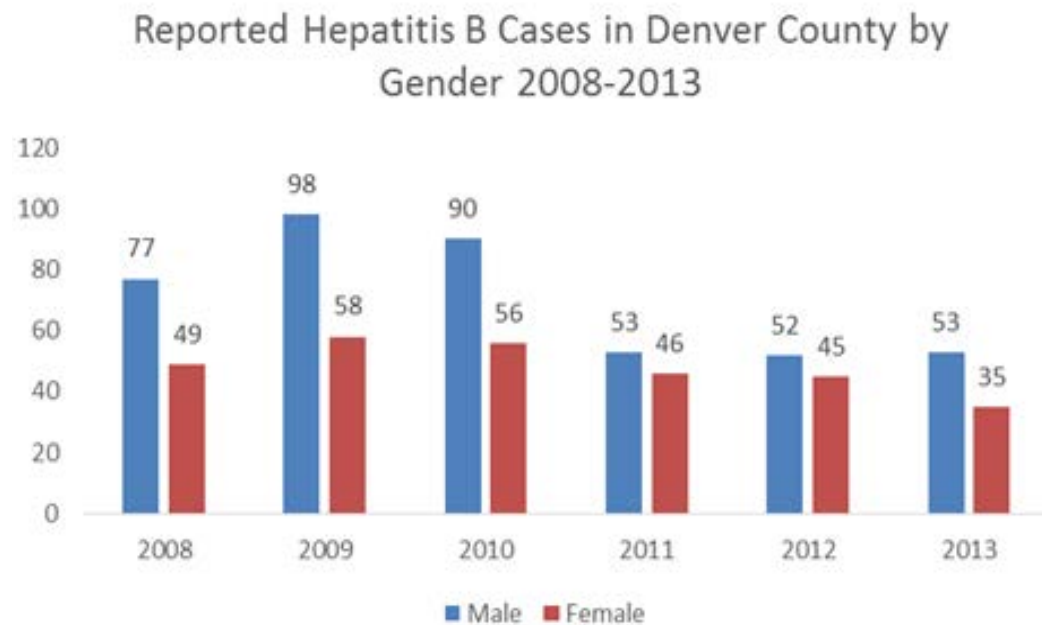


Exhibit 19b: Reported Hepatitis B Cases by Risk Factors in Denver County

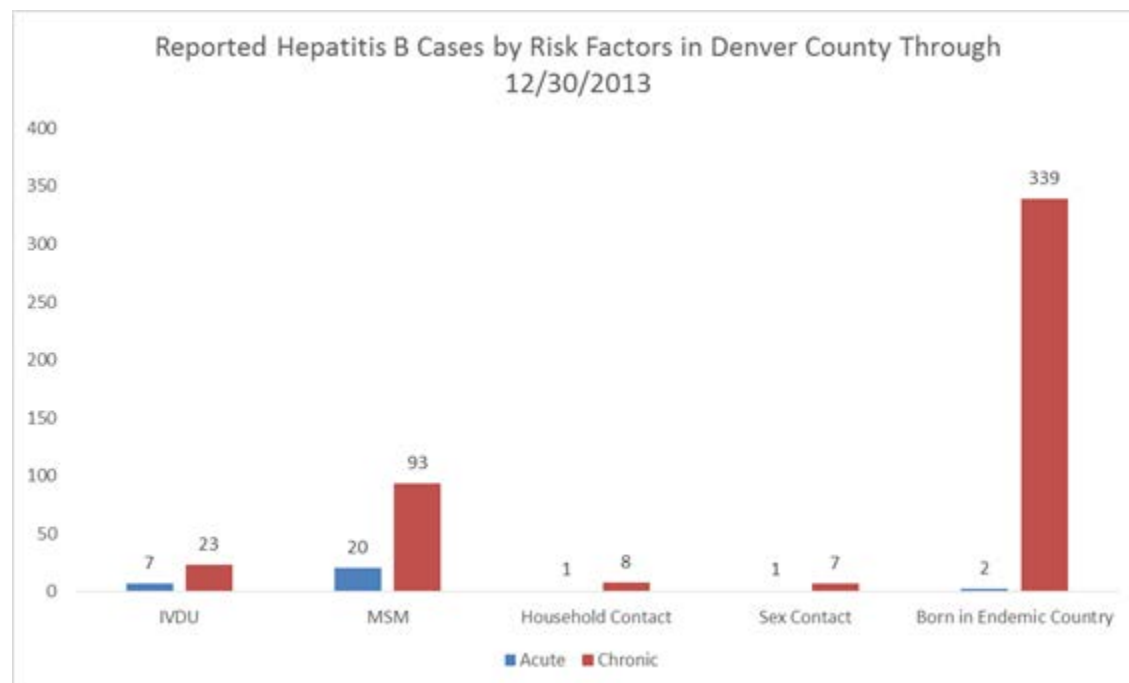


Exhibit 20a: Reported Hepatitis C Cases in Denver County by Gender 2008–2013

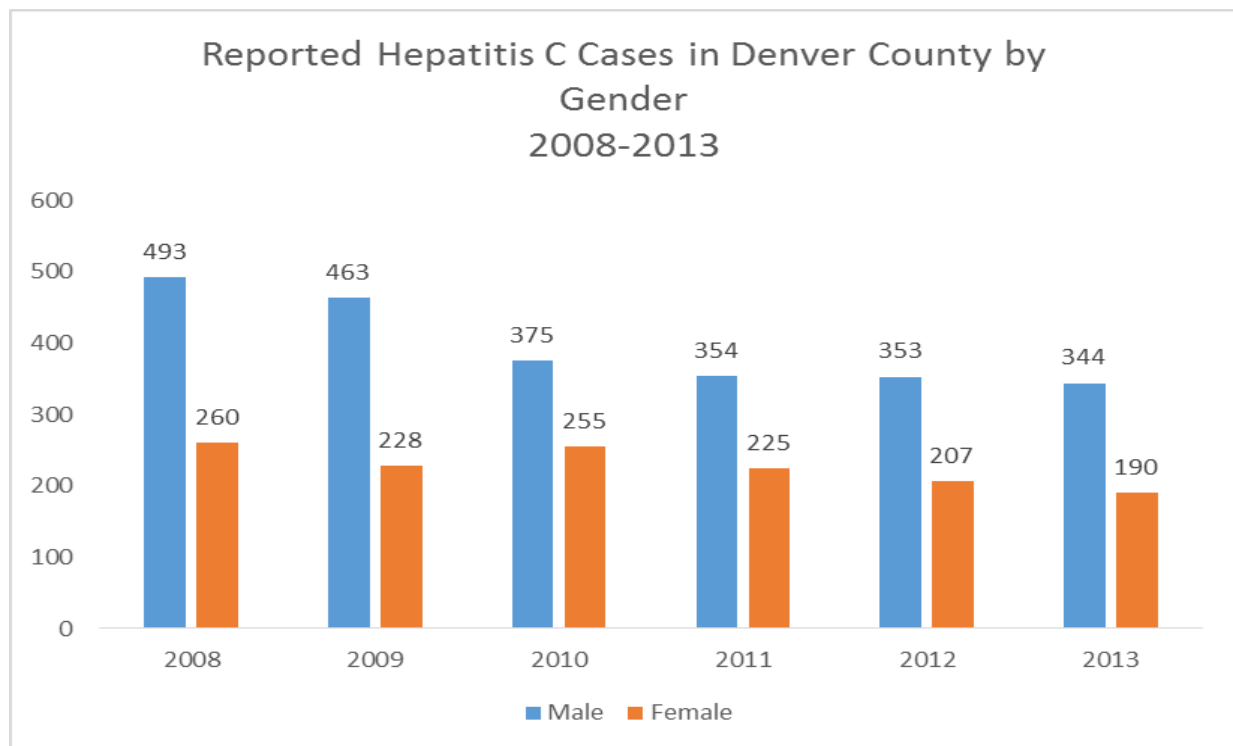
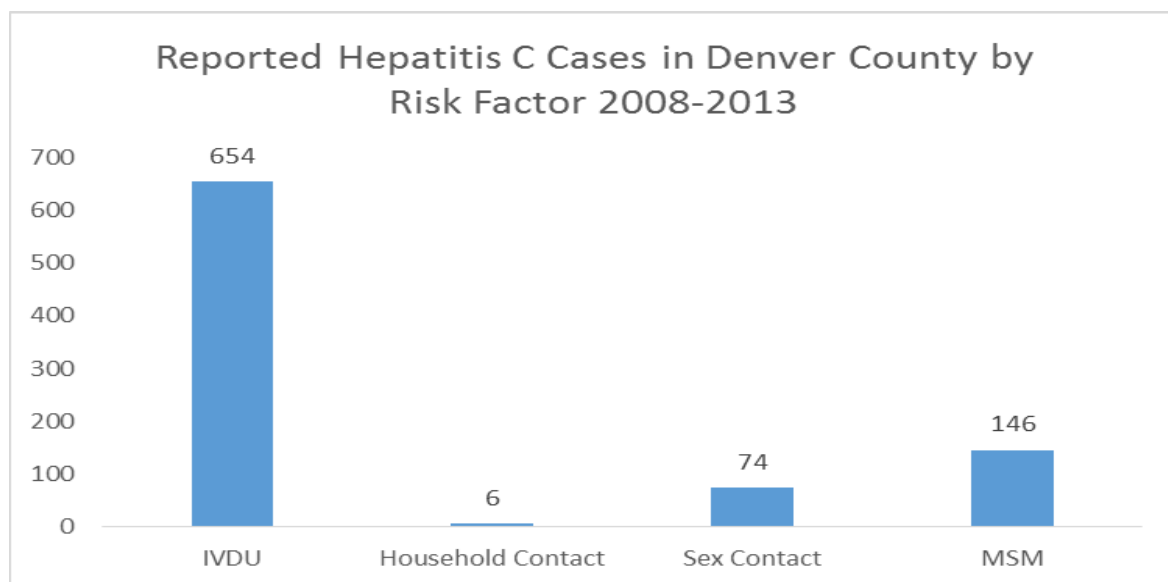


Exhibit 20b: Reported Hepatitis C Cases in Denver County by Risk Factor 2008–2013



Data Sources

Data for this report were drawn from the following sources:

Prevalence data for the DMA are derived from the National Survey on Drug Use and Health (NSDUH), which is an annual survey sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA). The survey is the primary source of information on the use of illicit drugs, alcohol, and tobacco in the civilian, noninstitutionalized population of the United States aged 12 years or older. The survey interviews approximately 67,500 persons each year. Data are available at the state and substate levels. The current NDEWS report for the DMA uses 2006–2008, 2008–2010, and 2010–2012 NSDUH data.

Student data are from the Healthy Kids Colorado Survey (HKCS). The HKCS was developed to monitor statewide and local trends for school-attending youth by surveying a representative sample of middle- and high-school students. The HKCS integrates items from the CDC's Youth Risk Behavioral Survey (YRBS), the Colorado Youth Survey (CYS), and additional items selected by Colorado state agencies. The HKCS contains a total of 142 items on the high school version and 127 items on the middle school version. The HKCS provides information on a wide range of youth attitudes and behaviors including substance use, violence and delinquency, mental health, and academic performance. The HKCS data used in this report capture Denver Public School (DPS) middle- (6th–8th grade) and high-school (9th–12th grade) students from the 2011, 2013, and 2015 school years.

Treatment data are provided by the Drug/Alcohol Coordinated Data System (DACODS), which is maintained by the Office of Behavioral Health (DBH) 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 DBH. Treatment admissions are reported by the primary drug of choice (as reported by the client at admission) unless otherwise specified. Annual figures are given for calendar years (CY) 2007 through 2015.

Alcohol- and drug-related emergency department (ED) visits for the city/county of Denver, the Denver metropolitan area, and Colorado were provided by the Colorado Department of Public Health and Environment (CDPHE) based on ICD-9-CM codes for 2011 through 2014.

Alcohol- and drug-related hospital discharges for the city/county of Denver, the Denver metropolitan area, and Colorado were provided by the Colorado Department of Public Health and Environment (CDPHE) based on ICD-9-CM codes for 2007 through 2014.

Alcohol- and drug-related mortality for the city/county of Denver, the Denver metropolitan area, and Colorado were provided by the Colorado Department of Public Health and Environment (CDPHE) based on ICD-10 codes for 2007 through 2013.

Alcohol- and drug-related mortality data for the city/county of Denver for CY 2007 through CY 2015 are from the Denver Office of the Medical Examiner. Drugs associated with mortality are based on blood toxicology performed as part of the autopsy. The toxicology findings are part of the autopsy report.

Rocky Mountain Poison and Drug Center (RMPDC) data are presented for Colorado. The data represent the number of calls (human exposure only) to the center regarding “street drugs” from 2006 through 2015.

National Forensic Lab Information System (NFLIS) data are presented for Denver, Jefferson, and Arapahoe counties for 2014 and 2015 with a comparison to the entire United States. 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.

Additional drug specific crime lab statistics for 2000 through 2015 were obtained from the Denver Crime Lab, Denver Police Department.

Statistics on prescriptions filled for Denver residents by drug type from the 3rd quarter 2007 through the 2nd quarter 2013 were obtained from the Colorado Prescription Drug Monitoring Program (PDMP), Colorado Department of Regulatory Agencies, Division of Registrations, and Board of Pharmacy.

Data on the number of medical marijuana applications and approved patients from December 2009 through the February 2016 are from the Colorado Department of Public Health and Environment, Medical Marijuana Registry.

Data on medical marijuana centers, retail stores, medical marijuana infused product manufactures, and medical marijuana grow sites are provided by the Colorado Department of Revenue. Data are presented through March 2016.

Data on price, purity and trafficking come from the Denver Field Division of the Drug Enforcement Administration with additional data from the Denver Police Department and the High Intensity Drug Trafficking Areas Program (HIDTA).

Data on HIV/AIDS, Hepatitis B, and Hepatitis C came from the Department of Public Health and Environment.

Cases of HIV and AIDS among persons who were living in Colorado at the time of their diagnosis are reported to the CDPHE STI/HIV Surveillance Program and entered into a database that is used to enumerate HIV and AIDS cases in Colorado.

The Colorado Board of Health requires physicians and other health-care providers to report suspected cases of hepatitis B virus within 7 days, and it requires laboratories to report HBV serologic tests that are indicative of infection within 7 days. Hepatitis B vaccination became a school entry requirement in 1997.

Viral hepatitis surveillance in Colorado is primarily based on laboratory reporting of serologic results. Laboratory-based reporting enables the identification of asymptomatic persons infected by the virus as well as those displaying symptoms. In Colorado, the Board of Health requires physicians and other health-care providers to report suspected cases of acute hepatitis C within 7 days, and laboratories to report positive HCV serologic tests (including positive serum antibody titers with single-to-cutoff ratios

or more specific tests) within 7 days. Upon receipt of these reports, the Viral Hepatitis Program uses established case definitions to assign the appropriate diagnosis and case status for each person.

For additional information about the drugs and drug use patterns discussed in this report, please contact Cindy Laub, Ph.D., Office of Behavioral Health Strategies, Department of Human Services, City and County of Denver, 1200 Federal Blvd, Denver, CO 80204, Phone: 720-944-1148, E-mail: cindy.laub@denvergov.org.

National Drug Early Warning System (NDEWS) Sentinel Community Site (SCS) Drug Use Patterns and Trends: SCS Data Tables

The *SCS Data Tables* are prepared by NDEWS Coordinating Center staff and include information on demographic and socioeconomic characteristics of the population, drug use, substance use disorders and treatment, drug poisoning deaths, and drug seizures for the Sentinel Community Site. The *SCS Data Tables* attempt to harmonize data available for each of the 12 sites by presenting standardized information from local treatment admissions and five national data sources:

- ◇ American Community Survey;
- ◇ National Survey on Drug Use and Health;
- ◇ Youth Risk Behavior Survey;
- ◇ SCE-provided local treatment admissions data;
- ◇ National Vital Statistics System mortality data queried from CDC WONDER; and
- ◇ National Forensic Laboratory Information System.

The *SCS Data Tables* for each of the 12 Sentinel Community Sites and detailed information about NDEWS can be found on the NDEWS website at www.ndews.org.

Table 1: Demographic and Socioeconomic Characteristics
Denver and State of Colorado
2010–2014 ACS 5-Year Estimates

	Denver City		Colorado	
	Estimate	Margin of Error	Estimate	Margin of Error
Total Population (#)	633,777	**	5,197,580	**
Age				
18 years and over (%)	78.9%	+/-0.1	76.2%	+/-0.1
21 years and over (%)	75.6%	+/-0.1	72.1%	+/-0.1
65 years and over (%)	10.6%	+/-0.1	11.8%	+/-0.1
Median Age	34.0		36.2	
Race (%)				
White, Not Hisp.	52.9%	+/-0.1	69.4%	+/-0.1
Black/African Am, Not Hisp.	9.5%	+/-0.1	3.8%	+/-0.1
Hispanic/Latino (of any race)	31.2%	**	20.9%	**
American Indian/Alaska Native	0.6%	+/-0.1	0.5%	+/-0.1
Asian	3.4%	+/-0.1	2.8%	+/-0.1
Native Hawaiian/Pacific Islander	0.1%	+/-0.1	0.1%	+/-0.1
Some Other Race	0.2%	+/-0.1	0.2%	+/-0.1
Two or More Races	2.2%	+/-0.2	2.3%	+/-0.1
Sex (%)				
Male	50.0%	+/-0.1	50.2%	+/-0.1
Female	50.0%	+/-0.1	49.8%	+/-0.1
Educational Attainment (Among Population Aged 25+ Years) (%)				
High School Graduate or Higher	85.6%	+/-0.4	90.4%	+/-0.1
Bachelor's Degree or Higher	43.7%	+/-0.5	37.5%	+/-0.2
Unemployment (Among Civilian Labor Force Population Aged 16+ Years) (%)				
Percent Unemployed	7.8%	+/-0.3	7.9%	+/-0.1
Income (\$)				
Median Household Income (in 2014 inflation-adjusted dollars)	\$51,800	+/-682	\$59,448	+/-312
Health Insurance Coverage (Among Civilian Noninstitutionalized Population) (%)				
No Health Insurance Coverage	15.9%	+/-0.5	13.9%	+/-0.2
Poverty (%)				
All People Whose Income in Past Year Is Below Poverty Level	18.3%	+/-0.6	13.1%	+/-0.2

NOTES:

Margin of Error: Can be interpreted roughly as providing a 90% probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value.

**The estimate is controlled; a statistical test for sampling variability is not appropriate.

SOURCE: Adapted by the NDEWS Coordinating Center from data provided by the U.S. Census Bureau, 2010–2014 American Community Survey (ACS) 5-Year Estimates.

Table 2a: Self-Reported Substance Use Behaviors Among Persons 12+ Years in Denver/Boulder Region[^] and State of Colorado, 2012–2014
 Estimated Percent, 95% Confidence Interval, and Estimated Number*
 Annual Averages Based on Combined 2012 to 2014 NSDUH Data

Substance Use Behaviors	Region: Denver/Boulder [^]		Colorado	
	Estimated % (95% CI)*	Estimated #*	Estimated % (95% CI)*	Estimated #*
Used in Past Month				
Alcohol	60.75 (57.52 – 63.88)	1,482,931	60.73 (58.28 – 63.13)	2,646,711
Binge Alcohol**	25.80 (23.14 – 28.66)	629,953	25.16 (23.01 – 27.43)	1,096,455
Marijuana	14.80 (12.61 – 17.30)	361,325	14.01 (12.32 – 15.88)	610,477
Use of Illicit Drug Other Than Marijuana	4.35 (3.35 – 5.61)	106,090	4.11 (3.32 – 5.09)	179,288
Used in Past Year				
Cocaine	3.21 (2.34 – 4.40)	78,439	2.83 (2.19 – 3.66)	123,409
Nonmedical Use of Pain Relievers	4.99 (3.98 – 6.23)	121,779	5.03 (4.18 – 6.05)	219,288
Substance Use Disorders in Past Year***				
Illicit Drugs or Alcohol	10.43 (9.00 – 12.06)	254,657	9.96 (8.86 #####)	433,980
Alcohol	8.17 (6.91 – 9.64)	199,509	7.83 (6.83 – 8.97)	341,446
Illicit Drugs	3.24 (2.58 – 4.07)	79,170	3.11 (2.58 – 3.75)	135,626

NOTES:

[^]**Denver/Boulder Region:** Includes NSDUH Substate Regions 2 and 7; Region 2 comprises Adams, Arapahoe, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson counties; Region 7 comprises Boulder County.

***Estimated %:** Substate estimates are based on a small area estimation methodology in which 2012–2014 substate level NSDUH data are combined with county and census block group/tract-level data from the state; **95% Confidence Interval (CI):** Provides a measure of the accuracy of the estimate. It defines the range within which the true value can be expected to fall 95 percent of the time; **Estimated #:** The estimated number of persons aged 12 or older who used the specified drug or are dependent/abuse a substance was calculated by multiplying the prevalence rate and the population estimate of persons 12+ years (Regions 2 & 7 = 2,441,220 and Colorado = 4,358,205) from Table C1 of the NSDUH report. The population estimate is the simple average of the 2012, 2013, and 2014 population counts for persons aged 12 or older.

****Binge Alcohol:** Defined as drinking 5 or more drinks on the same occasion on at least 1 day in the past 30 days.

*****Substance Use Disorders in Past Year:** Persons are classified as having a substance use disorder in the past 12 months based on responses to questions that meet the criteria specified in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

SOURCE: Adapted by the NDEWS Coordinating Center from data provided by the Substance Abuse and Mental Health Services Administration (SAMHSA), Substate Estimates of Substance Use and Mental Illness from the 2012–2014 National Surveys on Drug Use and Health. Available at: <http://www.samhsa.gov/data/population-data-nsduh/reports?tab=38>

Table 2b: Self-Reported Substance Use Behaviors Among Persons in *Denver/Boulder Region*[^] and *State of Colorado*, by Age Group, 2012–2014

Estimated Percent and 95% Confidence Interval (CI)*, Annual Averages Based on Combined 2012 to 2014 NSDUH Data

Substance Use Behaviors	Region: Denver/Boulder Area						Colorado					
	12–17		18–25		26+		12–17		18–25		26+	
	Estimated Percent (95% CI)*		Estimated Percent (95% CI)*		Estimated Percent (95% CI)*		Estimated Percent (95% CI)*		Estimated Percent (95% CI)*		Estimated Percent (95% CI)*	
Used in Past Month												
Binge Alcohol**	6.81	(5.28 – 8.74)	42.1	(37.80 – 46.51)	25.44	(22.27 – 28.90)	6.84	(5.57 – 8.38)	42.31	(39.06 – 45.62)	24.46	(21.90 – 27.22)
Marijuana	12.38	(10.09 – 15.11)	31.98	(27.73 – 36.55)	12.33	(9.83 – 15.35)	11.74	(9.91 – 13.86)	29.86	(26.68 – 33.24)	11.6	(9.70 – 13.83)
Use of Illicit Drug Other Than Marijuana	3.88	(2.75 – 5.45)	8.62	(6.53 – 11.29)	3.71	(2.63 – 5.22)	3.81	(2.83 – 5.10)	8.02	(6.49 – 9.88)	3.49	(2.62 – 4.64)
Used in Past Year												
Cocaine	1.03	(0.58 – 1.83)	8.31	(6.13 – 11.18)	2.65	(1.69 – 4.14)	0.97	(0.58 – 1.61)	7.89	(6.23 – 9.93)	2.2	(1.50 – 3.22)
Nonmedical Use of Pain Relievers	6.44	(4.84 – 8.51)	9.77	(7.76 – 12.24)	4.05	(2.96 – 5.50)	6.44	(5.07 – 8.14)	9.81	(8.18 – 11.74)	4.06	(3.14 – 5.22)
Substance Use Disorder in Past Year***												
Illicit Drugs or Alcohol	7.26	(5.57 – 9.42)	22.08	(18.82 – 25.74)	8.93	(7.32 – 10.86)	6.86	(5.52 – 8.51)	20.82	(18.37 – 23.50)	8.5	(7.25 – 9.94)
Alcohol	3.57	(2.58 – 4.91)	15.97	(13.05 – 19.40)	7.47	(6.05 – 9.17)	3.57	(2.73 – 4.65)	15.7	(13.46 – 18.24)	7.02	(5.90 – 8.33)
Illicit Drugs	5.19	(3.84 – 6.98)	9.46	(7.40 – 12.01)	2.01	(1.38 – 2.92)	4.86	(3.78 – 6.23)	8.9	(7.29 – 10.83)	1.93	(1.42 – 2.61)

NOTES:

[^]**Denver/Boulder Region:** Includes NSDUH Substate Regions 2 and 7; Region 2 comprises Adams, Arapahoe, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson counties; Region 7 comprises Boulder County.

***Estimated %:** Substate estimates are based on a small area estimation methodology in which 2012–2014 substate level NSDUH data are combined with county and census block group/tract-level data from the state; **95% Confidence Interval (CI):** Provides a measure of the accuracy of the estimate. It defines the range within which the true value can be expected to fall 95 percent of the time.

****Binge Alcohol:** Defined as drinking 5 or more drinks on the same occasion on at least 1 day in the past 30 days.

*****Substance Use Disorders in Past Year:** Persons are classified as having a substance use disorder in the past 12 months based on responses to questions that meet the criteria specified in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

SOURCE: Adapted by the NDEWS Coordinating Center from data provided by the Substance Abuse and Mental Health Services Administration (SAMHSA), Substate Estimates of Substance Use and Mental Illness from the 2012–2014 National Surveys on Drug Use and Health. Available at: <http://www.samhsa.gov/data/population-data-nsduh/reports?tab=38>

Table 3: Self-Reported Substance Use Behaviors Among *Denver*[^] Public High-School Students, 2015
 Estimated Percent and 95% Confidence Interval (CI)
 2013 and 2015 YRBS*

Substance Use Behaviors	2015 vs 2013			2015 by Sex			2015 by Race		
	2015 Estimate (95% CI)	2013 Estimate (95% CI)	<i>p</i> value	Male Estimate (95% CI)	Female Estimate (95% CI)	<i>p</i> value	White Estimate (95% CI)	Black Estimate (95% CI)	Hispanic Estimate (95% CI)
Used in Past Month									
Alcohol	—	—		—	—		—	—	—
Binge Alcohol**	—	—		—	—		—	—	—
Marijuana	—	—		—	—		—	—	—
Ever Used in Lifetime									
Alcohol	—	—		—	—		—	—	—
Marijuana	—	—		—	—		—	—	—
Cocaine	—	—		—	—		—	—	—
Hallucinogenic Drugs	—	—		—	—		—	—	—
Synthetic Marijuana	—	—		—	—		—	—	—
Inhalants	—	—		—	—		—	—	—
Ecstasy also called "MDMA"	—	—		—	—		—	—	—
Heroin	—	—		—	—		—	—	—
Methamphetamine	—	—		—	—		—	—	—
Rx Drugs without a Doctor's Prescription	—	—		—	—		—	—	—
Injected Any Illegal Drug	—	—		—	—		—	—	—

NOTES:

[^]**Denver:** 2015 YRBS data were not available for Denver in 2016, so no data is presented.

'—': Data not available.

****Binge Alcohol:** Defined as had five or more drinks of alcohol in a row within a couple of hours on at least 1 day during the 30 days before the survey.

SOURCE: Adapted by the NDEWS Coordinating Center from data provided by the Centers for Disease Control and Prevention (CDC), 1991-2015 High School Youth Risk Behavior Survey Data. Available at <http://nccd.cdc.gov/youthonline/>. Accessed on [7/5/2016].

Table 4a: Trends in Admissions* to Programs Treating Substance Use Disorders, Denver Metro Area^ Residents, 2011-2015

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

	Calendar Year									
	2011		2012		2013		2014		2015	
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)
Total Admissions (#)	13,405	100%	14,382	100%	13,742	100%	13,841	100%	14,681	100%
Primary Substance of Abuse (%)										
Alcohol	5,142	38.4%	5,685	39.5%	5,586	40.6%	5,222	37.7%	5,505	37.5%
Cocaine/Crack	1,276	9.5%	1,244	8.6%	951	6.9%	841	6.1%	886	6.0%
Heroin	1,364	10.2%	1,599	11.1%	1,760	12.8%	2,048	14.8%	2,313	15.8%
Prescription Opioids**	843	6.3%	930	6.5%	852	6.2%	890	6.4%	754	5.1%
Methamphetamine	1,475	11.0%	1,653	11.5%	1,707	12.4%	2,127	15.4%	2,290	15.6%
Marijuana	2,891	21.6%	2,856	19.9%	2,544	18.5%	2,431	17.6%	2,594	17.7%
Benzodiazepines	54	0.4%	62	0.4%	57	0.4%	54	0.4%	63	0.4%
MDMA**	81	0.6%	72	0.5%	71	0.5%	49	0.4%	36	0.2%
Synthetic Stimulants	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	29	0.2%
Synthetic Cannabinoids	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail	unavail
Other Drugs/Unknown**	279	2.1%	281	2.0%	214	1.6%	179	1.3%	211	1.4%

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 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; **MDMA:** coded as "club drugs" which are mostly MDMA

** **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 4b: Demographic and Drug Use Characteristics of Primary Treatment Admissions* for Select Substances of Abuse, *Denver Metro Area*[^] Residents, 2015
Number of Admissions, by Primary Substance of Abuse and Percentage of Admissions with Selected Demographic and Drug Use Characteristics

	Primary Substance of Abuse															
	Alcohol		Cocaine/Crack		Heroin		Prescription Opioids**		Methamphetamine		Marijuana		Benzo-diazepines		Synthetic Stimulants	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Number of Admissions (#)	5,505	100%	886	100%	2,313	100%	754	100%	2,290	100%	2,594	100%	63	100%	29	100%
Sex (%)																
Male	3,671	66.7%	585	66.0%	1,440	62.3%	393	52.1%	1,395	60.9%	2,048	79.0%	31	49.2%	19	65.5%
Female	1,834	33.3%	301	34.0%	873	37.7%	361	47.9%	895	39.1%	546	21.0%	32	50.8%	10	34.5%
Race/Ethnicity (%)																
White, Non-Hisp.	3,176	57.7%	263	29.7%	1,533	66.3%	503	66.7%	1,428	62.4%	1,051	40.5%	48	76.2%	20	69.0%
African-Am/Black, Non-Hisp	407	7.4%	253	28.6%	65	2.8%	34	4.5%	53	2.3%	438	16.9%	1	1.6%	2	6.9%
Hispanic/Latino	1,431	26.0%	271	30.6%	527	22.8%	167	22.1%	513	22.4%	827	31.9%	8	12.7%	4	13.8%
Asian	44	0.8%	9	1.0%	25	1.1%	4	0.5%	32	1.4%	34	1.3%	1	1.6%	1	3.4%
Other	447	8.1%	90	10.2%	163	7.0%	46	6.1%	264	11.5%	244	9.4%	5	7.9%	2	6.9%
Age Group (%)																
Under 18	37	0.7%	8	0.9%	11	0.5%	5	0.7%	32	1.4%	522	20.1%	0	0.0%	0	0.0%
18-25	811	14.7%	114	12.9%	844	36.5%	151	20.0%	362	15.8%	746	28.8%	23	36.5%	6	20.7%
26-44	3,021	54.9%	419	47.3%	1,199	51.8%	471	62.5%	1,520	66.4%	1,119	43.1%	29	46.0%	19	65.5%
45+	1,636	29.7%	345	38.9%	259	11.2%	127	16.8%	376	16.4%	207	8.0%	11	17.5%	4	13.8%
Route of Administration (%)																
Smoked	0	0.0%	462	52.1%	566	24.5%	43	5.7%	1,371	59.9%	2,401	92.6%	0	0.0%	9	31.0%
Inhaled	0	0.0%	353	39.8%	90	3.9%	94	12.5%	180	7.9%	91	3.5%	5	7.9%	4	13.8%
Injected	0	0.0%	38	4.3%	1,613	69.7%	65	8.6%	675	29.5%	4	0.2%	3	4.8%	2	6.9%
Oral/Other/Unknown	5,505	100%	33	3.7%	44	1.9%	552	73.2%	64	2.8%	98	3.8%	55	87.3%	14	48.3%
Secondary Substance (%)																
None	2,921	53.1%	263	29.7%	503	21.7%	276	36.6%	710	31.0%	1,040	40.1%	11	17.5%	15	51.7%
Alcohol	0	0.0%	288	32.5%	169	7.3%	99	13.1%	441	19.3%	830	32.0%	11	17.5%	5	17.2%
Benzodiazepines	47	0.9%	3	0.3%	83	3.6%	60	8.0%	12	0.5%	8	0.3%	1	1.6%	1	3.4%
Cocaine/Crack	427	7.8%	0	0.0%	353	15.3%	41	5.4%	159	6.9%	193	7.4%	4	6.3%	0	0.0%
Heroin	50	0.9%	30	3.4%	0	0.0%	52	6.9%	150	6.6%	28	1.1%	9	14.3%	0	0.0%
Prescription Opioids**	121	2.2%	19	2.1%	259	11.2%	0	0.0%	44	1.9%	53	2.0%	12	19.0%	2	6.9%
Methamphetamine	289	5.2%	55	6.2%	422	18.2%	34	4.5%	0	0.0%	254	9.8%	1	1.6%	2	6.9%
Marijuana	1,308	23.8%	201	22.7%	365	15.8%	122	16.2%	637	27.8%	0	0.0%	9	14.3%	4	13.8%

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 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.

unavail: Data not available; **Percentages** may not sum to 100 due to either rounding, missing data and/or because 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).

Table 5: Drug Overdose (Poisoning) Deaths*, by Drug and Year, Denver Metro Area^, 2010–2014**
Number, Crude Rate, and Age-Adjusted Rate*** (per 100,000 population)

	2010			2011			2012			2013			2014		
	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate	Number (#)	Crude Rate	Age-Adjusted Rate
Drug Overdose (Poisoning) Deaths	385	13.8	13.2	486	17.0	16.3	461	15.8	15.3	486	16.4	15.7	500	16.5	15.8
Opioids[‡]	183	6.5	6.3	265	9.3	8.9	250	8.6	8.4	267	9.0	8.7	320	10.6	10.0
Heroin	38	1.4	1.3	53	1.9	1.8	53	1.8	1.8	85	2.9	2.8	98	3.2	3.1
Natural Opioid Analgesics	75	2.7	2.5	131	4.6	4.3	146	5.0	4.9	135	4.5	4.4	174	5.7	5.4
Methadone	25	0.9	0.8	39	1.4	1.3	29	1.0	1.0	24	0.8	0.8	32	1.1	1.0
Synthetic Opioid Analgesics	35	1.3	1.2	45	1.6	1.6	33	1.1	1.1	39	1.3	1.2	48	1.6	1.5
Benzodiazepines	36	1.3	1.2	43	1.5	1.4	29	1.0	1	57	1.9	1.8	94	3.1	3.0
Benzodiazepines AND Any Opioids	26	0.9	0.9	29	1.0	0.9	22	0.8	0.8	43	1.4	1.4	77	2.5	2.5
Benzodiazepines AND Heroin	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	11	UNR	UNR	14	UNR	UNR
Psychostimulants															
Cocaine	48	1.7	1.6	64	2.2	2.1	47	1.6	1.5	45	1.5	1.5	45	1.5	1.4
Psychostimulants with Abuse Potential	23	0.8	0.8	36	1.3	1.2	33	1.1	1.1	65	2.2	2.1	67	2.2	2.1
Cannabis (derivatives)	SUP	SUP	SUP	14	UNR	UNR	SUP	SUP	SUP	SUP	SUP	SUP	14	UNR	UNR
Percent with Drugs Specified[‡]	71.7%			73.9%			74.8%			79.4%			86.6%		

NOTES:

***Drug Overdose (Poisoning) Deaths:** Defined as deaths with **underlying cause-of-death** codes from the World Health Organization's (WHO's) *International Classification of Diseases, Tenth Revision* (ICD-10) of X40-X44, X60-X64, X85, and Y10-Y14. See [Overview & Limitations](#) section for additional information on mortality data and definitions of the specific ICD-10 codes listed.

****Drug Overdose (Poisoning) Deaths, by Drug:** Among the deaths with drug poisoning identified as the underlying cause, the specific drugs are identified by ICD-10 **multiple cause-of-death (MCOD)** T-codes (see below). Each death certificate may contain up to 20 causes of death indicated in the MCOD field. Thus, the total count across drugs may exceed the actual number of dead persons in the selected population. Some deaths involve more than one drug; these deaths are included in the rates for each drug category. This is not a complete list of all drugs that may have been involved with these drug poisoning deaths.

^Denver Metro Area: NDEWS Denver catchment area is comprised of Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson Counties.

*****Age-Adjusted Rate:** Age-adjusted rates are weighted averages of the age-specific death rates, where the weights represent a fixed population by age (2000 U.S. Population). Age adjustment is a technique for removing the effects of age from crude rates, so as to allow meaningful comparisons across populations with different underlying age structures. Age-adjusted rates should be viewed as relative indexes rather than as direct or actual measures of mortality risk. See <http://wonder.cdc.gov/wonder/help/mcd.html> for more information.

‡Opioids: Includes any of these MCOD codes T40.0-T40.4, or T40.6

Opium (T40.0); *Heroin* (T40.1); *Natural Opioid Analgesics* (T40.2)—may include morphine, codeine, and semi-synthetic opioid analgesics, such as oxycodone, hydrocodone, hydromorphone, and oxymorphone; *Methadone* (T40.3); *Synthetic Opioid Analgesics [excluding methadone]* (T40.4)—may include drugs such as tramadol and fentanyl; *Other and Unspecified Narcotics* (T40.6)

Benzodiazepines: (T42.4)

Benzodiazepines AND Any Opioids (T42.4 AND T40.0-T40.4, or T40.6)

Benzodiazepines AND Heroin (T42.4 AND T40.1)

Psychostimulants:

Cocaine (T40.5); *Psychostimulants with Abuse Potential [excluding cocaine]* (T43.6) (e.g., amphetamines, caffeine, MDMA, methamphetamine, and methylphenidate)

Cannabis (derivatives): (T40.7)

‡Percent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified: Among drug overdose (poisoning) deaths, deaths that mention the type of drug(s) involved are defined as those including at least one ICD-10 MCOD in the range T36-T50.8. See [Overview & Limitations](#) section for more information about this statistic.

SUP = Suppressed: Counts and Rates are suppressed for subnational data representing 0–9 deaths. **UNR = Unreliable:** Rates are Unreliable when the death count <20.

SOURCE: Adapted by the NDEWS Coordinating Center from data taken from the Centers for Disease Control and Prevention, National Center for Health Statistics, Multiple cause of death 1999-2014, available on the CDC WONDER Online Database, released 2015. Data compiled in the Multiple cause of death 1999-2014 were provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved between December 2015 - May 2016, from <http://wonder.cdc.gov/mcd-icd10.html>

Table 6a: Drug Reports* for Items Seized by Law Enforcement in the *Denver Metro Area*^ in 2015
DEA National Forensic Laboratory Information System (NFLIS)
Number of Drug-Specific Reports and Percent of Total Analyzed Drug Reports

Drug Identified	Number (#)	Percent of Total Drug Reports* (%)
Total Drug Reports*	9,179	100.0%
METHAMPHETAMINE	2,771	30.2%
COCAINE	1,499	16.3%
CANNABIS	1,493	16.3%
HEROIN	1,427	15.5%
NON-CONTROLLED NON-NARCOTIC DRUG	514	5.6%
OXYCODONE	174	1.9%
ALPRAZOLAM	125	1.4%
3,4-METHYLENEDIOXYMETHAMPHETAMINE (MDMA)	115	1.3%
AMPHETAMINE	81	0.9%
HYDROCODONE	80	0.9%
3,4-METHYLENEDIOXYAMPHETAMINE (MDA)	61	0.7%
PSILOCIN	50	0.5%
3,4-METHYLENEDIOXYETHYLCATHINONE (ETHYLONE)	48	0.5%
CLONAZEPAM	48	0.5%
MORPHINE	47	0.5%
ACETAMINOPHEN	44	0.5%
DIAZEPAM	43	0.5%
LYSERGIC ACID DIETHYLAMIDE (LYSERGIDE)	43	0.5%
PSILOCYBIN/PSILOCYN	42	0.5%
KETAMINE	41	0.4%
BUPRENORPHINE	31	0.3%
AB-CHMINACA (N-[(1S)-1-(AMINOCARBONYL)-2-METHYLPROPYL]-1-(CYCLOHEXYLMETHYL)-1H-INDAZOLE-3-CARBOXAMIDE)	24	0.3%
ETHANOL	18	0.2%
METHADONE	18	0.2%
AB-PINACA	16	0.2%
LORAZEPAM	16	0.2%
DEXTROSE	15	0.2%
TRAMADOL	15	0.2%
DIMETHYLTRYPTAMINE (DMT)	14	0.2%
MAB-CHMINACA (ADB-CHMINACA)	11	0.1%
HYDROMORPHONE	10	0.1%
TESTOSTERONE	10	0.1%
2-(4-iodo-2,5-dimethoxyphenyl)-N-(2-methoxybenzyl)ethanamine (25-I-NBOME)	9	< 0.1%
XLR-11 (1-(5-fluoropentyl-1H-3-yl)(2,2,3,3-tetramethylcyclopropyl)methanone)	9	< 0.1%
ZOLPIDEM	9	< 0.1%
DIACETAMIDE	8	< 0.1%
FENTANYL	8	< 0.1%
GAMMA HYDROXY BUTYRATE	8	< 0.1%
LACTOSE	8	< 0.1%
METHYLPHENIDATE	8	< 0.1%
OXYMORPHONE	7	< 0.1%
5-FLUORO AMB	6	< 0.1%
INOSITOL	6	< 0.1%
LISDEXAMFETAMINE	6	< 0.1%
NALOXONE	6	< 0.1%
ALPHA-METHYLTRYPTAMINE	5	< 0.1%

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
CARISOPRODOL	5	< 0.1%
DOXYLAMINE	5	< 0.1%
PHENYLIMIDOTHIAZOLE ISOMER UNDETERMINED	5	< 0.1%
SUCROSE	5	< 0.1%
CODEINE	4	< 0.1%
CYCLOBENZAPRINE	4	< 0.1%
DEXMETHYLPHENIDATE	4	< 0.1%
METHANDROSTENOLONE (METHANDIENONE)	4	< 0.1%
PSEUDOEPHEDRINE	4	< 0.1%
TEMAZEPAM	4	< 0.1%
AB-FUBINACA	3	< 0.1%
ALPHA-PYRROLIDINOPENTIOPHENONE (ALPHA-PVP)	3	< 0.1%
MESCALINE	3	< 0.1%
NANDROLONE	3	< 0.1%
1,4-BUTANEDIOL	2	< 0.1%
4-FLUOROAMPHETAMINE (4-FA)	2	< 0.1%
4-HYDROXY-N-METHYL-N-ETHYLTRYPTAMINE (4-HO-MET)	2	< 0.1%
BOLDENONE	2	< 0.1%
BUPROPION	2	< 0.1%
CLONIDINE	2	< 0.1%
CLORAZEPATE	2	< 0.1%
DIBUTYLONE (BETA-KETO-N,N-DIMETHYL-1,3-BENZODIOXYLBUTANAMINE; BK-DMBDB)	2	< 0.1%
DIMETHYLSULFONE	2	< 0.1%
IBUPROFEN	2	< 0.1%
LYSERGIC ACID	2	< 0.1%
METHOXETAMINE (MXE; 2-(3-METHOXYPHENYL)-2-(ETHYLAMINO)CYCLOHEXANONE)	2	< 0.1%
MITRAGYNINE	2	< 0.1%
N-METHYL-3,4-METHYLENEDIOXYCATHINONE (METHYLONE)	2	< 0.1%
P-FLUOROFENTANYL	2	< 0.1%
PROMETHAZINE	2	< 0.1%
STANOZOLOL	2	< 0.1%
TRENBOLONE	2	< 0.1%
2-(4-CHLORO-2,5-DIMETHOXYPHENYL)-N-(2-METHOXYBENZYL)ETHANAMINE (25-C-NBOME)	1	< 0.1%
2,5-DIMETHOXYAMPHETAMINE (2,5-DMA)	1	< 0.1%
2-FLUOROMETHAMPHETAMINE	1	< 0.1%
4-BROMO-2,5-DIMETHOXYPHENETHYLAMINE (2C-B)	1	< 0.1%
5-HYDROXYTRYPTAMINE (5-HT)	1	< 0.1%
5-MAPB (1-(BENZOFURAN-5-YL)-N-METHYLPROPAN-2-AMINE)	1	< 0.1%
6-MAPB (1-(BENZOFURAN-6-YL)-N-METHYLPROPAN-2-AMINE)	1	< 0.1%
ADB-FUBINACA (N-(1-AMINO-3,3-DIMETHYL-1-OXOBUTAN-2-YL)-1-(4-FLUOROBENZYL)-1H-INDAZOLE-3-CARBOXAMIDE)	1	< 0.1%
ASPIRIN	1	< 0.1%
BUTYLONE (B-KETO-N-METHYLBENZO-DIOXYLPROPYLAMINE)	1	< 0.1%
CHLORDIAZEPOXIDE	1	< 0.1%
CLONAZOLAM	1	< 0.1%
DOCUSATE	1	< 0.1%
EPHEDRINE	1	< 0.1%
ETIZOLAM	1	< 0.1%
GAMMA HYDROXY BUTYL LACTONE	1	< 0.1%
JWH-018 (1-PENTYL-3-(1-NAPHTHOYL)INDOLE)	1	< 0.1%
LAMOTRIGINE	1	< 0.1%

Drug Identified	Number (#)	Percent of Total Drug Reports* (#)
METHASTERONE	1	< 0.1%
METHOCARBAMOL	1	< 0.1%
METHORPHAN	1	< 0.1%
METHYLTESTOSTERONE	1	< 0.1%
N,N-DIALLYL-5-METHOXYTRYPTAMINE (5-MEO-DALT)	1	< 0.1%
N-BENZYLPIPERAZINE (BZP)	1	< 0.1%
N-HYDROXY-3,4-METHYLENEDIOXYAMPHETAMINE	1	< 0.1%
NICOTINE	1	< 0.1%
OXYMETHOLONE	1	< 0.1%
PHENAZEPAM	1	< 0.1%
PHENCYCLIDINE	1	< 0.1%
PHENOBARBITAL	1	< 0.1%
PHENTERMINE	1	< 0.1%
PHENYLEPHRINE	1	< 0.1%
PHENYLPROPRIONATE	1	< 0.1%
PREDNISONE	1	< 0.1%
PROPOXYPHENE	1	< 0.1%
SALVINORIN-A	1	< 0.1%
SENNOSIDES	1	< 0.1%
SERTRALINE	1	< 0.1%
TRAZODONE	1	< 0.1%
VALDECOXIB	1	< 0.1%

NOTES:

^**Denver Metro Area:** Includes the following 9 counties of the NDEWS Denver Metro catchment area: Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson. Note that this 9 county catchment area is different than that previously reported for the NFLIS Denver Metro area, which only included 3 counties (Arapahoe, Denver, and Jefferson Counties).

Additional Note About Reporting Labs: The Aurora Police Department laboratory's last reported data is July 2014, following the migration to a new LIMS.

***Drug Report:** Drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database. The time frame is January to December 2015.

The NFLIS database allows for the reporting of up to three drugs per item submitted for analysis. The data presented are a total count of first, second, and third listed reports for each selected drug item seized and analyzed.

Source: Adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Diversion Control Division, Drug and Chemical Evaluation Section, Data Analysis Unit. Data were retrieved from the NFLIS Data Query System (DQS) on May 18, 2016.

**Table 6b: Drug Reports* for Items Seized by Law Enforcement in the *Denver Metro Area*^ in 2015
DEA National Forensic Laboratory Information System (NFLIS)**

Drug Reports* by Select Drug Categories of Interest

Number of Drug-Specific Reports, Percent of Analyzed Drug Category Reports**, & Percent of Total Analyzed Drug Reports

NPS Category Drug Identified	Number (#)	Percent of Drug Category** (%)	Percent of Total Reports (%)
Total Drug Reports*	9,179	100.0%	100.0%
Opioids Category	1,833	100.0%	20.0%
Heroin	1,427	77.9%	15.5%
Narcotic Analgesics	399	21.8%	4.3%
OXYCODONE	174	9.5%	1.9%
HYDROCODONE	80	4.4%	0.9%
MORPHINE	47	2.6%	0.5%
BUPRENORPHINE	31	1.7%	0.3%
METHADONE	18	1.0%	0.2%
TRAMADOL	15	0.8%	0.2%
HYDROMORPHONE	10	0.5%	0.1%
FENTANYL	8	0.4%	< 0.1%
OXYMORPHONE	7	0.4%	< 0.1%
CODEINE	4	0.2%	< 0.1%
MITRAGYNINE	2	0.1%	< 0.1%
P-FLUOROFENTANYL	2	0.1%	< 0.1%
PROPOXYPHENE	1	< 0.1%	< 0.1%
Narcotics	7	0.4%	< 0.1%
NALOXONE	6	0.3%	< 0.1%
METHORPHAN	1	< 0.1%	< 0.1%
Synthetic Cannabinoids Category	71	100.0%	0.8%
AB-CHMINACA (N-[(1S)-1-(AMINOCARBONYL)-2-METHYLPROPYL]-1-(CYCLOHEXYLMETHYL)-1H-INDAZOLE-3-CARBOXAMIDE)	24	33.8%	0.3%
AB-PINACA	16	22.5%	0.2%
MAB-CHMINACA (ADB-CHMINACA)	11	15.5%	0.1%
XLR-11 (1-(5-FLUOROPENTYL-1H-3-YL)(2,2,3,3-TETRAMETHYLCYCLOPROPYL)METHANONE)	9	12.7%	< 0.1%
5-FLUORO AMB	6	8.5%	< 0.1%
AB-FUBINACA	3	4.2%	< 0.1%
ADB-FUBINACA (N-(1-AMINO-3,3-DIMETHYL-1-OXOBUTAN-2-YL)-1-(4-FLUOROBENZYL)-1H-INDAZOLE-3-CARBOXAMIDE)	1	1.4%	< 0.1%
JWH-018 (1-PENTYL-3-(1-NAPHTHOYL)INDOLE)	1	1.4%	< 0.1%
Synthetic Cathinones Category	56	100.0%	0.6%
Synthetic Cathinones	54	96.4%	0.6%
3,4-METHYLENEDIOXYETHYLCATHINONE (ETHYLONE)	48	85.7%	0.5%
ALPHA-PYRROLIDINOPENTIOPHENONE (ALPHA-PVP)	3	5.4%	< 0.1%
DIBUTYLONE (BETA-KETO-N,N-DIMETHYL-1,3-BENZODIOXOLYLBUTANAMINE; BK-DMBDB)	2	3.6%	< 0.1%
BUTYLONE (B-KETO-N-METHYLBENZO-DIOXYLPROPYLAMINE)	1	1.8%	< 0.1%
Synthetic Cathinones (Hallucinogen)	2	3.6%	< 0.1%
N-METHYL-3,4-METHYLENEDIOXYCATHINONE (METHYLONE)	2	3.6%	< 0.1%

NPS Category Drug Identified	Number (#)	Percent of Drug Category** (%)	Percent of Total Reports (%)
Tryptamines Category	23	100.0%	0.3%
DIMETHYLTRYPTAMINE (DMT)	14	60.9%	0.2%
ALPHA-METHYLTRYPTAMINE	5	21.7%	< 0.1%
4-HYDROXY-N-METHYL-N-ETHYLTRYPTAMINE (4-HO-MET)	2	8.7%	< 0.1%
5-HYDROXYTRYPTAMINE (5-HT)	1	4.3%	< 0.1%
N,N-DIALLYL-5-METHOXYTRYPTAMINE (5-MEO-DALT)	1	4.3%	< 0.1%
Phenethylamines (2C Series) (H) Category	11	100.0%	0.1%
2-(4-iodo-2,5-dimethoxyphenyl)-N-(2-methoxybenzyl)ethanamine (25-I-NBOME)	9	81.8%	< 0.1%
2-(4-chloro-2,5-dimethoxyphenyl)-N-(2-methoxybenzyl)ethanamine (25-C-NBOME)	1	9.1%	< 0.1%
4-bromo-2,5-dimethoxyphenethylamine (2C-B)	1	9.1%	< 0.1%
Piperazines Category	1	100.0%	< 0.1%
Piperazines (Stimulant)	1	100.0%	< 0.1%
N-benzylpiperazine (BZP)	1	100.0%	< 0.1%

NOTES:

^Denver Metro Area: Includes the following 9 counties of the NDEWS Denver Metro catchment area: Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson. Note that this 9 county catchment area is different than that previously reported for the NFLIS Denver Metro area, which only included 3 counties (Arapahoe, Denver, and Jefferson Counties).

Additional Note About Reporting Labs: The Aurora Police Department laboratory's last reported data is July 2014, following the migration to a new LIMS.

***Drug Report:** Drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs, and included in the NFLIS database. The time frame is January to December 2015.

****Selected Drug Categories:** Opioids, Synthetic Cannabinoids, Synthetic Cathinones, 2C Phenethylamines, Piperazines, and Tryptamines are drug categories of current interest to the NDEWS Project because of the recent increase in their numbers, types, and availability.

The NFLIS database allows for the reporting of up to three drugs per item submitted for analysis. The data presented are a total count of first, second, and third listed reports for each selected drug item seized and analyzed.

Source: Adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Diversion Control Division, Drug and Chemical Evaluation Section, Data Analysis Unit. Data were retrieved from the NFLIS Data Query System (DQS) on May 18, 2016.

National Drug Early Warning System (NDEWS) Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2016: Overview and Limitations About Data Sources

The *Overview and Limitations About Data Sources*, written by Coordinating Center staff, provides a summary and a detailed description of the limitations of some of the national data sources used this report, including indicators of substance use, treatment, consequences, and availability.

Area Description Indicators

American Community Survey (ACS): Population Estimates, by Demographic and Socioeconomic Characteristics

Overview and Limitations

Data on demographic, social, and economic characteristics are based on 2010–2014 American Community Survey (ACS) 5-Year Estimates. The U.S. Census Bureau’s ACS is a nationwide survey designed to provide communities with reliable and timely demographic, social, economic, and housing data on an annual basis. Although the main function of the decennial census is to provide counts of people for the purpose of congressional apportionment and legislative redistricting, the primary purpose of the ACS is to measure the changing social and economic characteristics of the U.S. population. As a result, the ACS does not provide official counts of the population in between censuses. Instead, the Census Bureau’s Population Estimates Program will continue to be the official source for annual population totals, by age, race, Hispanic origin, and sex.^a

The ACS selects approximately 3.5 million housing unit addresses from every county across the nation to survey. Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error (MOE). The values shown in the table are the margin of errors. The MOE can be interpreted roughly as providing a 90% probability that the interval defined by the estimate minus the MOE and the estimate plus the MOE (the lower and upper confidence bounds) contains the true value.^a

Sources

Data Sources: Adapted by the NDEWS Coordinating Center from data from the American Community Survey; 2010–2014 American Community Survey 5-Year Estimates; Tables DP02, DP03, and DP05; using American FactFinder; <http://factfinder2.census.gov>; Accessed on [5/24/2016]; U.S. Census Bureau.

Overview/Methods/Limitations Sources: ^aAdapted by the NDEWS Coordinating Center from U.S. Census Bureau, *A Compass for Understanding and Using American Community Survey Data: What General Data Users Need to Know*. U.S. Government Printing Office, Washington, DC, 2008. Available at: <https://www.census.gov/library/publications/2008/acs/general.html>

Substance Use Indicators

National Survey on Drug Use and Health (NSDUH): Substance Use Among Population 12 Years or Older

Overview and Limitations

NSDUH is an ongoing survey of the civilian, noninstitutionalized population of the United States aged 12 years or older that is planned and managed by the Substance Abuse and Mental Health Administration's (SAMHSA) Center for Behavioral Health Statistics and Quality (CBHSQ). Data is collected from individuals residing in households, noninstitutionalized group quarters (e.g., shelters, rooming houses, dormitories) and civilians living on military bases. In 2012–2014, NSDUH collected data from 204,048 respondents aged 12 years or older; this sample was designed to obtain representative samples from the 50 states and the District of Columbia.^a

The **substate estimates** are derived from a hierarchical Bayes model-based small area estimation procedure in which 2012–2014 NSDUH data at the substate level are combined with local area county and census block group/tract-level data from the area to provide more precise estimates of substance use and mental health outcomes. [See [2012–2014 NSDUH Methods Report](#) for more information about the methodology used to generate substate estimates]. Comparable estimates derived from the small area estimation procedure were also produced for the 50 states and the District of Columbia. We present these estimates for Maine and Texas. Because these data are based on 3 consecutive years of data, they are not directly comparable with the annually published state estimates that are based on only 2 consecutive years of NSDUH data.^a

Substate regions were defined by officials from each of the 50 states and the District of Columbia and were typically based on the treatment planning regions specified by the states in their applications for the Substance Abuse Prevention and Treatment Block Grant (SABG) administered by SAMHSA. There has been extensive variation in the size and use of substate regions across states. In some states, the substate regions have been used more for administrative purposes than for planning purposes. The goal of the project was to provide substate-level estimates showing the geographic distribution of substance use prevalence for regions that states would find useful for planning and reporting purposes. The final substate region boundaries were based on the state's recommendations, assuming that the NSDUH sample sizes were large enough to provide estimates with adequate precision. Most states defined regions in terms of counties but some defined them in terms of census tracts. Estimates for 384 substate regions were generated using the 2012–2014 NSDUH data. Substate regions used for each SCS are defined in the Notes sections of Tables 2a and 2b.^a

Notes about Data Terms

Estimated percentages are based on a survey-weighted hierarchical Bayes estimation approach, and the 95% prediction (credible) intervals are generated by Markov Carlo techniques.

95% Confidence Interval (CI) provides a measure of the accuracy of the estimate. It defines the range within which the true value can be expected to fall 95% of the time.

Estimated # is the estimated number of persons aged 12 years or older who used the specified drug or are dependent on/abuse a substance; the estimated number of persons using/dependent on a particular drug was calculated by multiplying the prevalence rate and the population estimate from Table C1 of the NSDUH report.

The population estimate is the simple average of the 2012, 2013, and 2014 population counts for persons aged 12 years or older.

Binge Alcohol is defined as drinking five or more drinks on the same occasion on at least 1 day in the past 30 days.

Use of Illicit Drug Other Than Marijuana is defined as any illicit drug other than marijuana and includes cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

Substance Use Disorder in Past Year: Persons are classified as having a substance use disorder in the past 12 months based on responses to questions that meet the criteria specified in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

Sources

Data Sources: Adapted by the NDEWS Coordinating Center from data provided by the Substance Abuse and Mental Health Services Administration (SAMHSA), Substate Estimates of Substance Use and Mental Disorders from the *2012–2014 National Surveys on Drug Use and Health: Results and Detailed Tables*. Rockville, MD. 2014. Available at: <http://www.samhsa.gov/data/population-data-nsduh/reports?tab=38>; Accessed on [8/5/2016].

Overview/Methods/Limitations Sources: ^aAdapted by the NDEWS Coordinating Center from Substance Abuse and Mental Health Services Administration (SAMHSA), *2012–2014 National Surveys on Drug Use and Health: Guide to Substate Tables and Summary of Small Area Estimation Methodology*. Rockville, MD 2016. Available at: <http://www.samhsa.gov/data/sites/default/files/NSDUHsubstateMethodology2014/NSDUHsubstateMethodology2014.html>; Accessed on [8/5/2016].

Youth Risk Behavioral Survey (YRBS): Substance Use Among Student Populations

Overview and Limitations

The Youth Risk Behavior Surveillance System (YRBSS) was designed to enable public health professionals, educators, policy makers, and researchers to 1) describe the prevalence of health-risk behaviors among youths, 2) assess trends in health-risk behaviors over time, and 3) evaluate and improve health-related policies and programs. YRBSS also was developed to provide comparable national, State, territorial, and large urban school district data as well as comparable data among subpopulations of youths (e.g., racial/ethnic subgroups) and to monitor progress toward achieving national health objectives. The YRBSS monitors six categories of priority health risk behaviors among youth and young adults: 1) behaviors that contribute to unintentional injuries and violence; 2) tobacco use; 3) alcohol and other drug use; 4) sexual behaviors that contribute to unintended pregnancy and sexually transmitted infections; 5) unhealthy dietary behaviors; and 6) physical inactivity.^a We have included selected drug and alcohol survey questions from the YRBSS.

One component of the Surveillance System is the school-based Youth Risk Behavior Survey (YRBS) which includes representative samples of high school students in the nation, States, tribes, and select large urban school district across the country. The ongoing surveys are conducted biennially; each cycle begins in July of the preceding even-numbered year (e.g., in 2010 for the 2011 cycle) when the questionnaire for the upcoming year is released and continues until the data are published in June of the following even-numbered year (e.g., in 2012 for the 2011 cycle).^a

For States and large urban school districts, the YRBSs are administered by State and local education or health agencies. Each State, territorial, tribal, and large urban school district YRBS employs a two-stage, cluster sample design to produce a representative sample of students in grades 9–12 in its jurisdiction. All the data presented in these tables are based on weighted data. Weighted results are representative of all students in grades 9–12 attending public schools in each jurisdiction. According to CDC, “weighted results mean that the overall response rate was at least 60%. The overall response rate is calculated by multiplying the school response rate times the student response rate.”^a

Limitations. All YRBS data are self-reported, and the extent of underreporting or overreporting of behaviors cannot be determined, although there have been studies that demonstrate that the data are of acceptable quality.

The data apply only to youths who attend school and, therefore, are not representative of all persons in this age group. Nationwide, in 2009, approximately 4% of persons aged 16–17 years were not enrolled in a high-school program and had not completed high school.^b The NHIS and Youth Risk Behavior Supplement conducted in 1992 demonstrated that out-of-school youths are more likely than youths attending school to engage in the majority of health-risk behaviors.^c

Local parental permission procedures are not consistent across school-based survey sites. However, in a 2004 study, the CDC demonstrated that the type of parental permission typically does not affect prevalence estimates as long as student response rates remain high.^d

Notes about Data Terms

Binge Alcohol use is defined as having five or more drinks of alcohol in a row within a couple of hours on at least 1 day during the 30 days before the survey.

Sources

Data Sources: Adapted by the NDEWS Coordinating Center from data provided by Centers for Disease Control and Prevention (CDC), 1991–2013 High School Youth Risk Behavior Survey Data. Available at <http://nccd.cdc.gov/youthonline/>. Accessed on [3/12/2015].

Overview/Methods/Limitations Sources: Adapted by the NDEWS Coordinating Center from:

^a*Methodology of the Youth Risk Behavior Surveillance System— 2013* Report in the Centers for Disease Control and Prevention (CDC) *March 1, 2013 Morbidity and Mortality Weekly Report (MMWR)*; 62(1). Available at <http://www.cdc.gov/mmwr/pdf/rr/rr6201.pdf>. Accessed on [4/10/2015].

^bChapman C, Laird J, Ifill N, KewalRamani A. Trends in high school dropout and completion rates in the United States: 1972–2009 (NCES 2012–006). Available at <http://nces.ed.gov/pubs2012/2012006.pdf>. Accessed on [2/11/2013].

^cCDC. Health risk behaviors among adolescents who do and do not attend school—United States, 1992. *MMWR* 1994;43:129–32.

^dEaton DK, Lowry R, Brener ND, Grunbaum JA, Kann L. Passive versus active parental permission in school-based survey research: does type of permission affect prevalence estimates of self-reported risk behaviors? *Evaluation Review* 2004;28:564–77.

Treatment for Substance Use Disorders

Treatment Admissions Data from Local Data Sources

Overview and Limitations

Drug treatment admissions data provide indicators of the health consequences of substance misuse and their impact on the treatment system.^a Treatment admissions data can provide some indication of the types of drugs being used in geographic areas and can show patterns of use over time. However, it is important to note that treatment data only represent use patterns of individuals entering treatment programs and the availability of particular types of treatment in a geographic area will also influence the types of drugs being reported. Also, most sites report only on admissions to publicly funded treatment programs; thus, information on individuals entering private treatment programs may not be represented by the data. It should also be noted that each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.^b

Treatment admissions data are made available to the NDEWS Coordinating Center by the NDEWS Sentinel Community Epidemiologist for each SCS. Calendar year 2015 treatment admissions data were available for 10 of 12 SCSs. Calendar Year 2015 data were not available for the Chicago Metro SCS; Fiscal Year 2015 for Chicago (not entire Chicago metro area) is provided. No treatment data for the Atlanta Metro SCS was available for 2015. See below for site-specific information about the data.

Site-Specific Notes about 2015 Treatment Data and Sources of the Data

❖ **Atlanta Metro**

Data Availability: Calendar year 2015 treatment data are not available for the Atlanta Metro SCS.

Catchment Area: Includes residents of: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Morgan, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton counties.

Notes & Definitions:

Admissions: includes admissions to publicly-funded programs.

Marijuana/Synthetic Cannabinoids: the data do not differentiate between marijuana and synthetic cannabinoids.

Source: Data provided to the Atlanta Metro NDEWS SCE by the Georgia Department of Human Resources.

❖ **Chicago Metro**

Data Availability: Only fiscal year data are available at this time.

Catchment Area: Data were only available for residents of Chicago, not for the entire Chicago MSA.

Notes & Definitions:

Admissions: Includes admissions to publicly funded programs. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

Declines in overall treatment admissions are due to several factors, including budget cuts and changes in providers and payers that affect the reporting of these data (e.g., the expansion of Medicaid under the ACA to cover some forms of drug treatment).

Prescription Opioids: Includes oxycodone/hydrocodone, nonprescription methadone, and other opiates.

Source: Data provided to the NDEWS Chicago SCE by the Illinois Department of Substance Use.

❖ **Denver Metro**

Catchment Area: Includes admissions data for residents of Adams, Arapahoe, Boulder, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson counties.

Notes & Definitions:

Admissions: Includes admissions to all Colorado alcohol and drug treatment agencies 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 nonprescription methadone and other opiates and synthetic opiates.

MDMA: Coded as “club drugs,” which are mostly MDMA.

Other Drugs/Unknown: Includes inhalants, over-the-counter, and other drugs not specified.

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).

❖ **King County (Seattle Area)**

Notes & Definitions:

Admissions: Includes admissions to all modalities of care in publicly funded programs. 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 oxycodone/hydrocodone, nonprescription methadone, and other opiates.

Source: Data provided to the King County (Seattle Area) NDEWS SCE by the Washington State Department of Social and Health Services (DSHS), Division Behavioral Health and Recovery, Treatment Report and Generation Tool (TARGET).

❖ **Los Angeles County**

Notes & Definitions:

Admissions: Includes all admissions to programs receiving any public funds or to programs providing narcotic replacement therapy, as reported to the California Outcomes Monitoring System (CalOMS). An admission is counted only after all screening, intake, and assessment processes have been completed, and all of the following have occurred: 1) the provider has determined that the client meets the program admission criteria; 2) if applicable, the client has given consent for treatment/recovery services; 3) an individual recovery or treatment plan has been started; 4) a client file has been opened; 5) the client has received his/her first direct recovery service in the facility and is expected to continue participating in program activities; and 6) in methadone programs, the client has received his/her first dose. 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 drug categories labeled “oxycodone/OxyContin” and “other opiates or synthetics.”

Source: Data provided to the Los Angeles NDEWS SCE by the California Department of Health Care Services, Mental Health Services Division, Office of Applied Research and Analysis, CalOMS (2013 and 2014 data) and the California Department of Drug and Alcohol Programs (2011 and 2012 data).

❖ **Maine**

Notes & Definitions:

Admissions: includes all admissions to programs receiving State funding.

Source: Data provided to the Maine NDEWS SCE by the Maine Office of Substance Abuse.

❖ **New York City**

Notes & Definitions:

Non-Crisis Admissions: Includes non-crisis admissions to outpatient, inpatient, residential, and methadone maintenance treatment programs licensed in the state.

Crisis Admissions: Includes detox admissions to all licensed treatment programs in the state. 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 nonprescription methadone, buprenorphine, other synthetic opiates, and OxyContin.

Benzodiazepines: Includes benzodiazepines, alprazolam, and rohypnol.

Synthetic Stimulants: Includes other stimulants and a newly created category, synthetic stimulants (created in 2014).

Source: Data provided to the New York City NDEWS SCE by the New York State Office of Alcoholism and Substance Abuse Services (OASAS), Client Data System accessed May 2016 from Local Governmental Unit (LGU) Inquiry Reports.

❖ **Philadelphia**

Notes & Definitions:

Admissions: Includes admissions for uninsured and underinsured individuals admitted to any licensed treatment programs funded through the Philadelphia Department of Behavioral Health and Intellectual disAbility Services (DBHIDS). Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

2015 Data: Pennsylvania expanded Medicaid coverage under the Affordable Care Act and more than 100,000 additional individuals became eligible in 2015. As individuals who historically have been uninsured become insured, the number of individuals served through the BHSI (Behavioral Health Special Initiative) program has declined; thus treatment admissions reported by BHSI declined from 8,363 in 2014 to 4,810 in 2015. However, similar patterns of substance use were observed among those seeking treatment in 2014 and in 2015.

Methamphetamine: Includes both amphetamines and methamphetamine.

Other Drugs: May include synthetics, barbiturates, and over-the-counter drugs. Synthetic Stimulants and Synthetic Cannabinoids are not distinguishable from “Other Drugs” in the reporting source.

Source: Data provided to the Philadelphia NDEWS SCE by the Philadelphia Department of Behavioral Health and Intellectual disAbility Services (DBHIDS), Office of Addiction Services, Behavioral Health Special Initiative.

❖ **San Francisco County**

Notes & Definitions

Admissions: Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

Source: Data provided to the San Francisco NDEWS SCE by the San Francisco Department of Public Health, Community Behavioral Health Services Division.

❖ **Southeastern Florida (Miami Area)**

Catchment Area: Includes the three counties of the Miami MSA—Broward, Miami-Dade, and Palm Beach counties.

Notes & Definitions:

Admissions: Includes all admissions to programs receiving any public funds. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

2011–2013: Data for Palm Beach County is not available for 2011–2013, therefore, 2011–2013 only includes data for Broward and Miami-Dade counties.

Source: Data provided to the Southeastern Florida NDEWS SCE by the Florida Department of Children and Families and the Broward Behavioral Health Coalition.

❖ Texas

Notes & Definitions:

Admissions: Includes all admissions reported to the Clinical Management for Behavioral Health Services (CMBHS) of the Department of State Health Services (DSHS). Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

Methamphetamine: Includes amphetamines and methamphetamine.

Synthetic Cannabinoids: DSHS collects data on “other Cannabinoids,” which may not include all the synthetic cannabinoids.

Females: Calculated using formula “1 minus Male %.”

Source: Data provided to the Texas NDEWS SCE by the Texas Department of State Health Services (DSHS).

❖ Wayne County (Detroit Area)

Notes & Definitions:

Admissions: Admissions whose treatment was covered by Medicaid or Block Grant funds; excludes admissions covered by private insurance, treatment paid for in cash, and admissions funded by the Michigan Department of Corrections. Each admission does not necessarily represent a unique individual because some individuals are admitted to treatment more than once in a given period.

Synthetic Stimulants: Includes amphetamines and synthetic stimulants; data suppressed to protect confidentiality.

Source: Data provided to the Wayne County (Detroit Area) NDEWS SCE by the Michigan Department of Health and Human Services, Bureau of Behavioral Health and Developmental Disabilities, Division of Quality Management and Planning, Performance Measurement and Evaluation Section.

Sources

Data Sources: Adapted by the NDEWS Coordinating Center from data provided by NDEWS SCEs listed above.

Overview/Methods/Limitations Sources: Adapted by the NDEWS Coordinating Center from:

^aNational Institute on Drug Abuse; National Institutes of Health; U.S. Department of Health and Human Services, *Assessing Drug Abuse Within and Across Communities, 2nd Edition*. 2006. Available at: <https://www.drugabuse.gov/publications/assessing-drug-abuse-within-across-communities>

^bNational Institute on Drug Abuse; National Institutes of Health; U.S. Department of Health and Human Services, *Epidemiologic Trends in Drug Abuse, Proceedings of the Community Epidemiology Work Group, Highlights and Executive Summary, June 2014*. Available at: <https://www.drugabuse.gov/sites/default/files/cewgjune2014.pdf>

Consequences of Drug Use Indicators

Drug Overdose (Poisoning) Deaths

Overview and Limitations

The multiple cause-of-death mortality files from the National Vital Statistics System (NVSS) (queried from the CDC WONDER Online Database) were used to identify drug overdose (poisoning) deaths. Mortality data are based on information from all death certificates for U.S. residents filed in the 50 states and the District of Columbia. Deaths of nonresidents and fetal deaths are excluded. The death certificates are either 1) coded by the states or provided to the CDC's National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative Program; or 2) coded by NCHS from copies of the original death certificates provided to NCHS by the respective state registration office. Each death certificate contains a single underlying cause of death, up to 20 additional multiple causes, and demographic data.¹ ([Click here for more information about CDC WONDER Multiple Cause of Death data](#))

The drug-specific poisoning deaths presented in the 2016 National Drug Early Warning System (NDEWS) reports are deaths that have been certified "as due to acute exposure to a drug, either alone or in combination with other drugs or other substances" (Goldberger, Maxwell, Campbell, & Wilford, p. 234)² and are identified by using the World Health Organization's (WHO's) *International classification of diseases, 10th Revision* (ICD-10)³ **underlying cause-of-death** codes X40–X44, X60–X64, X85, and Y10–Y14. Drug-specific poisoning deaths are the subset of drug overdose (poisoning) deaths with drug-specific **multiple cause-of-death** codes (i.e., T-codes). For the definitions of specific ICD-10 codes, see the section titled **Notes About Data Terms**. Each death certificate may contain up to 20 causes of death indicated in the multiple cause-of-death (MCOD) field. Thus, the total count across drugs may exceed the actual number of dead persons in the selected population. Some deaths involve more than one drug; these deaths are included in the rates for each drug category.

As stated in its report, *Consensus Recommendations for National and State Poisoning Surveillance*, the Safe States Injury Surveillance Workgroup on Poisoning (ISW7)^a identified the limitations of using mortality data from NVSS to measure drug poisoning deaths:

^a The Safe States Alliance, a nongovernmental membership association, convened the Injury Surveillance Workgroup on Poisoning (ISW7) to improve the surveillance of fatal and nonfatal poisonings. Representation on the ISW7 included individuals from the National Center for Injury Prevention and Control (NCIPC), the National Center for Health Statistics (NCHS) at the Centers for Disease Control and Prevention (CDC), the Substance Abuse and Mental Health Services Administration (SAMHSA), the Council of State and Territorial Epidemiologists (CSTE), the American Association of Poison Control Centers (AAPCC), the Association of State and Territorial Health Officials (ASTHO), the Society for the Advancement of Injury Research (SAVIR), state health departments, academic centers, the occupational health research community, and private research organizations.

Several factors related to death investigation and reporting may affect measurement of death rates involving specific drugs. At autopsy, toxicological lab tests may be performed to determine the type of legal and illegal drugs present. The substances tested for and circumstance in which tests are performed vary by jurisdiction. Increased attention to fatal poisonings associated with prescription pain medication may have led to changes in reporting practices over time such as increasing the level of substance specific detail included on the death certificates. Substance-specific death rates are more susceptible to measurement error related to these factors than the overall poisoning death rate. ([The Safe States Alliance, p. 63](#))⁴

Warner et al.⁵ found that there was considerable variation in certifying the manner of death and the percentage of drug intoxication deaths with specific drugs identified on death certificates and that these variations across states can lead to misleading cross-state comparisons. Based on 2008–2010 data, Warner et al.⁵ found that the percentage of deaths with an “undetermined” manner of death ranged from 1% to 85%. Comparing state-specific rates of “unintentional” or “suicidal” drug intoxication deaths would be problematic because the “magnitude of the problem will be underestimated in States with high percentages of death in which the manner is “undetermined.”⁵ The drug overdose (poisoning) deaths presented in the NDEWS tables include the various manner of death categories: unintentional (X40–X44); suicide (X60–X64); homicide (X85); or undetermined (Y10–Y14).

Based on 2008–2010 data, Warner et al.⁵ found that the percentage of drug overdose (poisoning) deaths with specific drugs mentioned varied considerably by state and type of death investigation system. The authors found that in some cases, deaths without a specific drug mentioned on the death certificate may indicate a death involving multiple drug toxicity. The **Percent of Drug Overdose (Poisoning) Deaths with Drug(s) Specified** statistic is calculated for each NDEWS SCS catchment area so the reader can assess the thoroughness of the data for the catchment area. This statistic is defined as drug poisoning deaths with at least one ICD-10 multiple cause of death in the range T36–T50.8.

Notes About Data Terms

Underlying Cause of Death (UCOD): The CDC follows the WHO’s definition of *underlying cause of death*: “[T]he disease or injury which initiated the train of events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury.” Underlying cause of death is selected from the conditions entered by the physician on the cause-of-death section of the death certificate. When more than one cause or condition is entered by the physician, the underlying cause is determined by the sequence of condition on the certificate, provisions of the ICD, and associated selection rules and modifications. ([Click here for more information about CDC WONDER Multiple Cause of Death data](#))

Specific ICD-10 codes for *underlying cause of death*³ ([Click here to see full list of WHO ICD-10 codes](#))

X40: Accidental poisoning by and exposure to nonopioid analgesics, antipyretics, and antirheumatics.

X41: Accidental poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs, not elsewhere classified.

X42: Accidental poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified.

X43: Accidental poisoning by and exposure to other drugs acting on the autonomic nervous system.

X44: Accidental poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances.

X60: Intentional self-poisoning (suicide) by and exposure to nonopioid analgesics, antipyretics, and antirheumatics.

X61: Intentional self-poisoning (suicide) by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs, not elsewhere classified.

X62: Intentional self-poisoning (suicide) by, and exposure to, narcotics and psychodysleptics [hallucinogens], not elsewhere classified.

X63: Intentional self-poisoning (suicide) by and exposure to other drugs acting on the autonomic nervous system.

X64: Intentional self-poisoning (suicide) by and exposure to other and unspecified drugs, medicaments, and biological substances.

X85: Assault (homicide) by drugs, medicaments, and biological substances.

Y10: Poisoning by and exposure to nonopioid analgesics, antipyretics, and antirheumatics, undetermined intent.

Y11: Poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs, not elsewhere classified, undetermined intent.

Y12: Poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified, undetermined intent.

Y13: Poisoning by and exposure to other drugs acting on the autonomic nervous system, undetermined intent.

Y14: Poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances, undetermined intent.

Multiple Cause of Death: Each death certificate may contain up to 20 *multiple causes of death*. Thus, the total count by “any mention” of cause in the *multiple cause of death* field may exceed the actual number of dead persons in the selected population. Some deaths involve more than one drug; these deaths are included in the rates for each drug category. ([Click here for more information about CDC WONDER Multiple Cause of Death data](#))

Drug-specific ICD-10 T-codes for *multiple cause of death*³

([Click here to see full list of WHO ICD-10 codes](#))

Any Opioids (T40.0–T40.4 or T40.6) [T40.0 (Opium) and T40.6 (Other and Unspecified Narcotics)]

Heroin (T40.1)

Methadone (T40.3)

Natural Opioid Analgesics (T40.2)

Please note the ICD-10 refers to T40.2 as *Other Opioids*; CDC has revised the wording for clarity:

<http://www.cdc.gov/drugoverdose/data/analysis.html>

Synthetic Opioid Analgesics (T40.4)

Please note the ICD-10 refers to T40.4 as *Other Synthetic Narcotics*; CDC has revised the wording for clarity: <http://www.cdc.gov/drugoverdose/data/analysis.html>

Cocaine (T40.5)

Psychostimulants with Abuse Potential [excludes cocaine] (T43.6)

Cannabis (derivatives) (T40.7)

Benzodiazepines (T42.4)

Percentage of Drug Overdose (Poisoning) Deaths with Drug(s) Specified: Percentage of drug overdose (poisoning) deaths that mention the type of drug(s) involved, by catchment area. This statistic is defined as drug poisoning deaths with at least one ICD-10 multiple cause of death in the range T36–T50.8.

Population (used to calculate rates): The population estimates used to calculate the crude rates are bridged-race estimates based on Bureau of the Census estimates of total U.S., state, and county resident populations. The year 2010 populations are April 1 modified census counts. The year 2011–2014 population estimates are bridged-race postcensal estimates of the July 1 resident population. [Click here for more information about CDC WONDER Multiple Cause of Death data](#))

Age-Adjusted Rate: Age-adjusted death rates are weighted averages of the age-specific death rates, where the weights represent a fixed population by age. They are used to compare relative mortality risk among groups and over time. An age-adjusted rate represents the rate that would have existed had the age-specific rates of the particular year prevailed in a population whose age distribution was the same as that of the fixed population. Age-adjusted rates should be viewed as relative indexes rather than as direct or actual measures of mortality risk. The rate is adjusted based on the age distribution of a standard population allowing for comparison of rates across different sites. The year “2000 U.S. standard” is the default population selection for the calculation of age-adjusted rates. ([Click here for more information about CDC WONDER Multiple Cause of Death data](#))

5-Year Percent Change: Change in age-adjusted rate between 2010 and 2014.

Suppressed Data: As of May 23, 2011, all subnational data representing 0–9 deaths are suppressed (privacy policy). Corresponding subnational denominator population figures are also suppressed when the population represents fewer than 10 persons. ([Click here for more information about CDC WONDER Multiple Cause of Death data](#))

Unreliable Data: Estimates based on fewer than 20 deaths are considered unreliable and are not displayed. ([Click here for more information about CDC WONDER Multiple Cause of Death data](#))

Sources

Data Sources: Adapted by the NDEWS Coordinating Center from data taken from the Centers for Disease Control and Prevention, National Center for Health Statistics, *Multiple cause of death 1999–2014*, available on the CDC WONDER Online Database, released 2015. Data compiled in the *Multiple cause of death 1999–2014*

were provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved between December 16, 2015 and February 9, 2016, from <http://wonder.cdc.gov/mcd-icd10.html>

Overview/Methods/Limitations Sources: Adapted by the NDEWS Coordinating Center from:

¹Center from Centers for Disease Control and Prevention, National Center for Health Statistics. (2015). *Multiple cause of death 1999–2014*. Retrieved December 16, 2015, from <http://wonder.cdc.gov/wonder/help/mcd.html>

²Goldberger, B. A., Maxwell, J. C., Campbell, A., & Wilford, B. B. (2013). Uniform standards and case definitions for classifying opioid-related deaths: Recommendations by a SAMHSA consensus panel. *Journal of Addictive Diseases*, 32, 231–243.

³World Health Organization (WHO). (2016). *International statistical classification of diseases and related health problems 10th Revision*. Retrieved March 14, 2016, from <http://apps.who.int/classifications/icd10/browse/2016/en>

⁴The Safe States Alliance. (2012). *Consensus recommendations for national and state poisoning surveillance*. Atlanta, GA: Injury Surveillance Workgroup 7.

⁵Warner, M., Paulozzi, L. J., Nolte, K. B., Davis, G. G., & Nelson, L.S. (2013). State variation in certifying manner of death and drugs involved in drug intoxication deaths. *Acad Forensic Pathol*, 3(2),231–237.

Availability Indicators

Drug Reports from the National Forensic Laboratory Information System (NFLIS)

Overview and Limitations

NFLIS systematically collects results from drug analyses conducted by state and local forensic laboratories. These laboratories analyze controlled and noncontrolled substances secured in law enforcement operations across the United States. The DEA describes NFLIS as:

“a comprehensive information system that includes data from forensic laboratories that handle the Nation’s drug analysis cases. The NFLIS participation rate, defined as the percentage of the national drug caseload represented by laboratories that have joined NFLIS, is currently over 97%. Currently, NFLIS includes 50 State systems and 101 local or municipal laboratories/laboratory systems, representing a total of 277 individual laboratories. The NFLIS database also includes Federal data from DEA and U.S. Customs and Border Protection (CBP) laboratories.”^a

Limitations. NFLIS includes results from completed analyses only. Drug evidence secured by law enforcement but not analyzed by laboratories is not included in the NFLIS database.

State and local policies related to the enforcement and prosecution of specific drugs may affect drug evidence submissions to laboratories for analysis.

Laboratory policies and procedures for handling drug evidence vary. Some laboratories analyze all evidence submitted to them, whereas others analyze only selected case items. Many laboratories do not analyze drug evidence if the criminal case was dismissed from court or if no defendant could be linked to the case.^a

Notes about Reporting Labs

Reporting anomalies were identified in several NDEWS SCSs in 2015 and are described below:

- ❖ **Denver Metro Area:** The Aurora Police Department laboratory’s last reported data are from July 2014, following the migration to a new laboratory information management system (LIMS).
- ❖ **San Francisco County:** The San Francisco Police Department (SFPD) laboratory has been closed since 2010; however, beginning in January 2012, the Alameda Sheriff Department laboratory began reporting their SFPD cases to NFLIS. All available data from the SFPD were included in the counts.
- ❖ **Texas:** The Austin Police Department laboratory closed, and no data were provided for 2015. The Houston Forensic Science Government Corporation (formerly Houston Police Department Crime Lab) lab was added in April 2014 and has been reporting data since then.

Notes about Data Terms

Drug Report: Drug that is identified in law enforcement items, submitted to and analyzed by federal, state, or local forensic labs and included in the NFLIS database. This database allows for the reporting of up to three drug reports per item submitted for analysis. The data presented are a total count of first, second, and third listed reports for each selected drug item seized and analyzed.

For each site, the NFLIS drug reports are based on submissions of items seized in the site's catchment area. The catchment area for each site is described in the Notes section below each table. The time frame is January–December 2015. Data were queried from the DEA's NFLIS Data Query System (DQS) on May 18, 2016 using drug item submission date.

Five new psychoactive substance (NPS) drug categories and Fentanyl are of current interest to the NDEWS Project because of the recent increase in their numbers, types, and availability. The five NPS categories are: synthetic cannabinoids, synthetic cathinones, piperazines, tryptamines, and 2C Phenethylamines.

Other Fentanyls are substances that are structurally related to fentanyl (e.g., acetylfentanyl and butyrl fentanyl).

A complete list of drugs included in the Other Fentanyl category that were reported to NFLIS during the January to December 2015 timeframe includes:

3-METHYLFENTANYL

ACETYL-ALPHA-METHYLFENTANYL

ACETYLFENTANYL

Beta-HYDROXYTHIOFENTANYL

BUTYRYL FENTANYL

P-FLUOROBUTYRYL FENTANYL (P-FBF)

P-FLUOROFENTANYL

Sources

Data Sources: Adapted by the NDEWS Coordinating Center from data provided by the U.S. Drug Enforcement Administration (DEA), Office of Diversion Control, Drug and Chemical Evaluation Section, Data Analysis Unit. Data were retrieved from NFLIS Data Query System (DQS) May 18, 2016.

Overview/Methods/Limitations Sources: ^aAdapted by the NDEWS Coordinating Center from U.S. Drug Enforcement Administration (DEA), Office of Diversion Control. (2016) *National Forensic Laboratory Information System: Midyear Report 2015*. Springfield, VA: U.S. Drug Enforcement Administration. Available at: https://www.nflis.deadiversion.usdoj.gov/DesktopModules/ReportDownloads/Reports/NFLIS_MidYear2015.pdf