

---

# Drug Abuse Trends in the Minneapolis/St. Paul Metropolitan Area April 2017

Carol Falkowski  
Drug Abuse Dialogues  
St. Paul, Minnesota

---

## ABSTRACT

*The far-reaching consequences of heroin and methamphetamine abuse and addiction maintained a stronghold in the Minneapolis/St. Paul metropolitan area in 2016. From 2015 to 2016, opiate-related overdose deaths rose 57.7 percent in Hennepin County (from 97 to 153), and in Ramsey County rose 32 percent (from 47 to 62). Deaths involving fentanyl contributed to these increases. A record-high 17.3 percent of admissions to addiction treatment programs were for heroin in 2016. Methamphetamine (meth) accounted for 15.6 percent of total treatment admissions in 2016, and again surpassed admissions at the height of the statewide meth epidemic in 2005. In 2016 cocaine-related deaths increased in both Ramsey and Hennepin County. Exposures declined for synthetic cannabinoids (THC homologs), "bath salts" (substituted cathinones), "research chemicals" (2-CE analogs), and MDMA in 2016.*

## Data Sources

This report analyzes quantitative trends in substance abuse in the St. Paul/Minneapolis, Minnesota metropolitan area, using the most recent data obtained from the following sources:

**Mortality data** on drug-related accidental overdose deaths are from the Ramsey County Medical Examiner and the Hennepin County Medical Examiner (through 2016). Hennepin County cases include accidental overdose deaths in which drug toxicity or mixed drug toxicity was the cause of death and those in which the recent use of a drug was listed as a significant condition contributing to the death. Ramsey County cases include cases in which drug toxicity or mixed drug toxicity was the cause of death. See exhibits 1, 2 and 3.

**Addiction treatment data** are from the Drug and Alcohol Abuse Normative Evaluation System, Minnesota Department of Human Services from programs located in the metropolitan counties of Anoka, Dakota, Hennepin, Ramsey and Washington. See exhibits 4, 5 and 6.

**Crime laboratory data** are from the National Forensic Laboratory Information System (NFLIS), U.S. Drug Enforcement Administration (DEA). All federal, state and local laboratory data are included in the total number of drug items seized as primary, secondary or tertiary drugs in the 7-

county metropolitan area including the counties of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington. See exhibits 7 and 8.

**Poison Center data** are reported to the Minnesota Poison Control System. See exhibits 9 and 10.

**Prescription drug data** are from the Minnesota Prescription Monitoring Program, Minnesota Board of Pharmacy. Exhibit 11.

## Drug Abuse Trends

### HEROIN AND OTHER OPIATES

Opiate-related overdose deaths escalated in Hennepin County and Ramsey County in 2016. See exhibit 1.

In 2016 in Hennepin County there were 153 accidental opiate-related deaths, compared with 97 in 2015, a 57.7 percent increase. The decedents ranged from stillborn to age 66. Of these deaths, 86 (56.2 percent) were attributed to toxicity from a single drug, and the remainder due to mixed drug toxicity. Of the 153 total opiate-related deaths: 76 involved heroin, 39 involved fentanyl, 32 involved methadone, and 19 involved oxycodone. Twenty-five cases involved methamphetamine in combination with an opiate, and 15 cases involved cocaine in combination with an opiate.

Throughout the country in recent years very potent synthetic fentanyl has been increasingly identified in street drugs (mostly heroin, but also cocaine and methamphetamines) and in counterfeit pills sold on the black market (mostly painkillers, but also anti-anxiety medications). Due to its high potency, fentanyl-related overdose deaths have likewise escalated.

Thirty-nine of the opiate-related deaths in Hennepin County in 2016 involved fentanyl, compared with 9 in 2015. Thirteen of these deaths (33.3 percent) cited fentanyl toxicity alone as the cause of death, while the remainder involved mixed drug toxicity in which one of the drugs was fentanyl. The other drugs involved are listed in exhibit 2.

While it is not uncommon for addicts to intentionally and simultaneously administer multiple drugs, these findings also suggest the distinct possibility that in some cases fentanyl was an unexpected, added ingredient in local illicit substances sold as heroin, cocaine, methamphetamine, and oxycodone - possibly unbeknownst to the sellers and/or end-users. In short, it is likely that some addicts unknowingly purchased substances that contained fentanyl, which consequently contributed to their sudden demise. Counterfeit pills believed to be pain medication that in reality, contained fentanyl, were implicated in the overdose death of Prince in the Minneapolis/St. Paul metropolitan area in 2016.

Two opiate-related deaths in Hennepin County in 2016 were due to U-47700 toxicity, and three deaths were due to furanyl fentanyl toxicity. Both are emerging, novel synthetic opioids. Although these substances purportedly mimic the effects of pharmaceutical opioids, like fentanyl they are typically manufactured in clandestine labs overseas. Therefore the identity and purity are largely unknown. In response to the imminent threat to public health and safety posed by U-47700 and furanyl fentanyl, the U.S. Drug Enforcement Administration (DEA) placed both into Schedule I of the Controlled Substances Act in November 2016.

In 2016 in Ramsey County there were 62 accidental opiate-related deaths, compared with 47 in 2015, a 32 percent increase. See exhibit 1. The decedents ranged in age from 19 to 64 years. Of

these deaths, 25 (40.3 percent) were attributed to toxicity from a single drug, and the remainder due to mixed drug toxicity. Of these 62 opiate-related deaths: 13 involved heroin, 17 involved fentanyl, 18 involved methadone, and 5 involved oxycodone. Thirteen involved cocaine in combination with opiates and 7 involved methamphetamines in combination with opiates.

In 2016 in Ramsey County, 17 deaths involved fentanyl, compared with 3 in 2015. Of these deaths, 6 were due to fentanyl toxicity alone (35.3 percent) and 11 were mixed drug toxicity deaths in which one of the drugs was fentanyl. The other drugs included cocaine, heroin, oxycodone, methadone and amphetamines.

Four drug overdose deaths in the Minneapolis/St. Paul metropolitan area that occurred from January 30 to February 17, 2017 were attributed to carfentanil toxicity. An additional death was in the non-metro town of Faribault, Minnesota. The decedents ranged in age from 23 to 43 years. Investigations into an additional five deaths with possible carfentanil involvement are pending. Authorities disclosed the decedents' histories of opioid addiction, from which it is assumed that they used a substance believed to be an opioid that contained carfentanil, a veterinary drug that is 10,000 times more potent than morphine and used to sedate large animals, such as elephants.

Almost one quarter (24.9 percent) of admissions to addiction treatment programs cited heroin or other opiates as the primary substance of abuse in 2016. Among treatment admissions, this opiate category outnumbered any other drug category except alcohol (37.3 percent of total admissions). Exhibit 5. Heroin accounted for a record-high 17.3 percent of total treatment admissions in 2016, compared with 3.3 percent in 2000. Other opiates (prescription opioids and opium) were the primary substance reported by 7.6 percent of total treatment admissions in 2016, compared with 1.4 percent in 2000. See exhibit 6.

Regarding law enforcement seizures of heroin, in 2016 (first half), 8.4 percent of total drug reports in the 7-county metropolitan area included heroin, compared with 11.3 percent nationally.

Opium is often concealed in packages or suitcases that are shipped or transported from Asia to the Twin Cities and surrounding areas, for smoking within the local Hmong community. In March 2016 a woman attempting to smuggle 33.5 pounds of opium in her luggage was apprehended at the Minneapolis-St. Paul International Airport. In May 2016 authorities seized 70 pounds of opium hidden in bags of tealeaves in the luggage of three Minnesota women arriving at Chicago's O'Hare International Airport on a flight that originated in Bangkok.

Heroin exposures reported to the Minnesota Poison Control System increased markedly from 2015 to 2016, rising from 204 to 326 (a 59.8 percent increase). Hydrocodone and oxycodone exposures fell slightly. Exhibit 10. Hydrocodone with acetaminophen was the most frequently prescribed drug reported on the Minnesota Prescription Monitoring Program. In December 2016 it accounted for 13.5 percent of all prescriptions reported, compared with 15.3 percent in December 2014. See exhibit 11.

## COCAINE

Cocaine-related deaths grew in both Hennepin and Ramsey County in 2016. See exhibit 1.

In Hennepin County accidental cocaine-related deaths increased 30 percent (from 26 to 34) from 2015 to 2016. See exhibit 1. The age of decedents ranged from stillborn to age 63. Of these 34 deaths in 2016, 13 listed cocaine toxicity as the cause of death and 21 cited recent cocaine use as a significant condition contributing to the death. One case also involved methamphetamine.

Ramsey County reported 6 cocaine-related deaths in 2015 and 10 in 2016, two of which also involved methamphetamines. The decedents ranged in age from 23 to 59 years.

Cocaine-related treatment admissions remained unchanged and accounted for 4.6 percent of treatment admissions in 2016. See exhibit 4. The majority of cocaine-related treatment admissions (63.2 percent) were for crack cocaine, 60.1 percent were African-American, and 68 percent were age 35 and older. See exhibit 6.

Law enforcement seizures of cocaine in the 7-county metropolitan area remained stable and accounted for 21 percent of drug reports in 2016 (first half). Exhibit 8.

## METHAMPHETAMINE AND OTHER STIMULANTS

Methamphetamine-related deaths declined in both Hennepin and Ramsey County in 2016, although treatment admissions and drug seizures continued to rise.

There were 15 methamphetamine-related deaths in Hennepin County in 2016 compared with 17 in 2015. See exhibit 1. This includes 8 cases where it was the cause of death and 7 in which recent methamphetamine use was listed as a significant condition contributing to the death. These deaths include three stillborn and a 6 day-old newborn. The oldest decedent was 64.

In Ramsey County in 2016 there were 5 methamphetamine-related deaths, compared with 8 in 2015. The decedents ranged in age from 29 to 50 years.

Methamphetamine-related treatment admissions, increasing since 2009, accounted for a record-high 15.6 percent of total treatment admissions in 2016, exceeding the level reached at the height of the statewide methamphetamine epidemic in 2005. Of these 3,468 admissions, smoking was the most common route of administration (62.3 percent), 75.2 percent were White, and 22.8 percent were age 25 or less. Exhibit 6.

Methamphetamine was identified in 41.2 percent of seizures by law enforcement in the 7-county metropolitan area in 2016 (first half) compared with 21 percent nationally. Exhibit 7.

MDMA (3,4-methylenedioxymethamphetamine), also known as ecstasy, is consumed for its stimulant and mild hallucinogenic properties. There were 10 MDMA exposures reported to the Minnesota Poison Control System in 2016. See exhibit 9.

Methylphenidate (Ritalin®) a prescription medication used in the treatment of attention deficit hyperactive disorder, is used nonmedically to increase alertness and suppress appetite. In December 2016, 5.3 percent of prescriptions reported to the Minnesota Prescription Monitoring Program were for methylphenidate HCL, and 9.8 percent were for dextroamphetamine/amphetamine. See exhibit 11.

## MARIJUANA

In 2016, 14.6 percent of admissions to addiction treatment programs involved marijuana as the primary substance problem, compared with 15.1 percent in 2015. Of these 3,254 admissions, 22.5 percent were younger than 18, and 35.7 percent were age 18–25. Among law enforcement seizures in the 7-county metropolitan area, cannabis was identified in 14.2 percent of the drug reports in 2016 (first half), compared with 26.4 percent nationally.

Synthetic cannabinoids (THC homologs, cannabimimetics) refer to synthetically produced chemicals that are sprayed onto dried herbal mixtures, and smoked to mimic the effects of THC, the active

ingredient in plant marijuana. From 2015 to 2106, reported exposures involving THC homologs fell from 223 to 83. Exhibit 9.

## HALLUCINOGENS AND OTHER SYNTHETICS

LSD (lysergic acid diethylamide) known as "acid," is a synthetic, long-acting hallucinogen, often sold as saturated, tiny pieces of paper, known as "blotter acid." The Minnesota Poison Control System reported 44 LSD exposures in 2016, compared with 39 in 2015. Exhibit 9.

Synthetic or substituted cathinones, sold as "bath salts," are consumed for effects similar to MDMA. Because the actual ingredients are unknown, the effects are unpredictable and can include paranoid delusions, psychosis, and an agitated state known as "excited delirium." The peak year for bath salt exposures reported to the Minnesota Poison Control System was 2011 with 144. In 2016 there were 7 exposures.

Another emerging cathinone is "Flakka" (alpha-pyrrolidinopentiophenone or *alpha*-PVP). Its use, most notably in Broward County, Florida has been linked to violent outbursts, fatalities and heart attacks. In Minnesota there were 2 Flakka exposures reported in 2015 and none in 2016.

2CE phenethylamine (2,5-dimethoxy-4-ethylphenylethylamine) and related analogs are sold online as so-called "research chemicals." 2CE analog exposures fell from 5 in 2015 to 1 in 2016.

The death of a 39 year-old male in Hennepin County in 2016 was due to toxicity from phencyclidine (PCP), also known as "angel dust," a dissociative drug.

## ALCOHOL AND TOBACCO

Acute alcohol toxicity was the cause of death for 19 decedents in Hennepin County in 2016, and acute alcohol intoxication was listed as a significant contributing condition in 65 additional deaths. Alcohol accounted for 37.3 percent total admissions to addiction treatment programs in 2016. See exhibit 6. Of these 8,971 admissions, over half (60.8 percent) were age 35 and older. Tobacco smoking remained prevalent among patients in addiction treatment programs, and ranged from a high of 82.6 percent among heroin admissions, to a low of 59.8 percent among alcohol admissions.

*This page is intentionally left blank*

Exhibit 1

Drug abuse-related deaths by county by year: 2006 - 2016

SOURCE: Hennepin County Medical Examiner and Ramsey County Medical Examiner, 2017.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>HENNEPIN COUNTY</b>											
Methamphetamine	8	6	9	6	9	7	14	16	11	17	15
Cocaine	48	59	21	10	25	28	18	28	12	26	34
Opiates	69	67	84	77	65	84	84	132	102	97	153
<b>RAMSEY COUNTY</b>											
Methamphetamine	6	7	5	7	4	3	7	8	6	8	5
Cocaine	13	11	10	11	7	6	3	9	5	6	10
Opiates	27	39	31	36	27	36	45	37	42	47	62

Exhibit 2

Fentanyl toxicity-involved deaths:  
Hennepin County 2016

Drugs of toxicity	Total # of fentanyl deaths = 39
Fentanyl alone	13
Fentanyl and heroin	7
Fentanyl and methamphetamine	4
Fentanyl, heroin, methadone	3
Fentanyl fentanyl	3
Fentanyl and cocaine	2
Fentanyl, heroin, cocaine	2
Fentanyl, heroin, methamphetamine	1
Fentanyl, heroin, methadone, methamphetamine	1
Fentanyl and oxycodone	1
Fentanyl and opiate	1
Fentanyl and morphine	1

SOURCE: Hennepin County Medical Examiner, 2017.

Exhibit 3

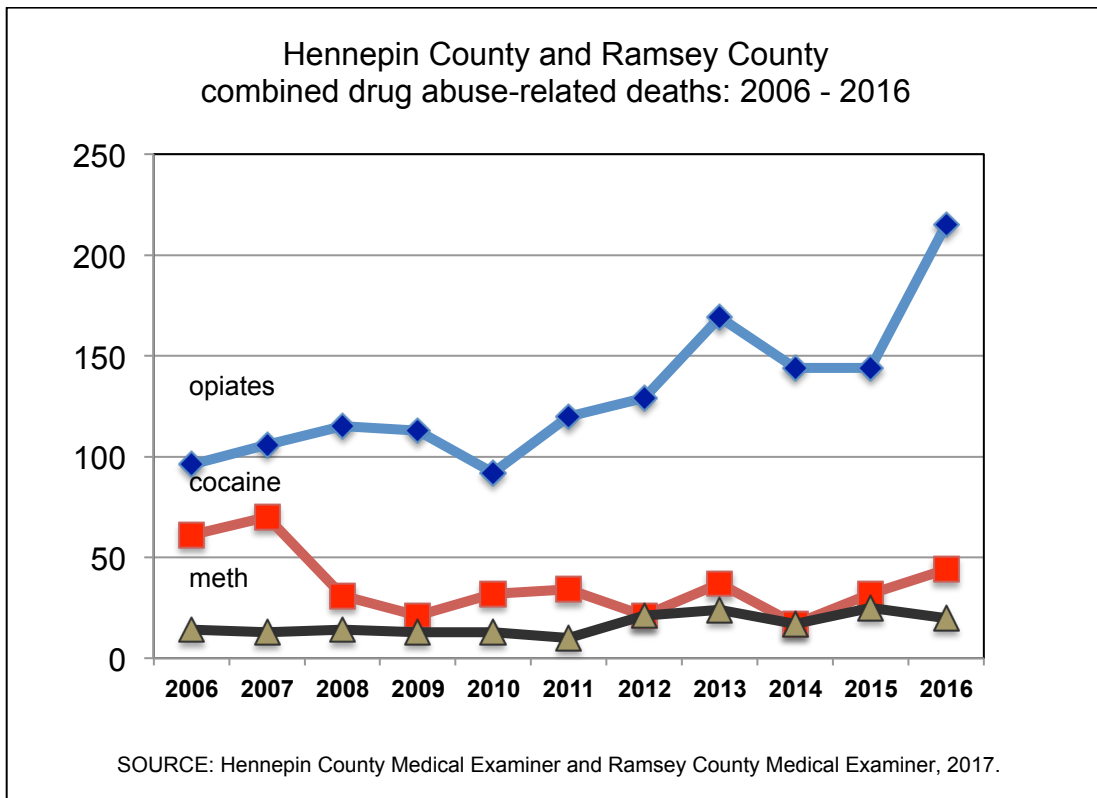




Exhibit 4

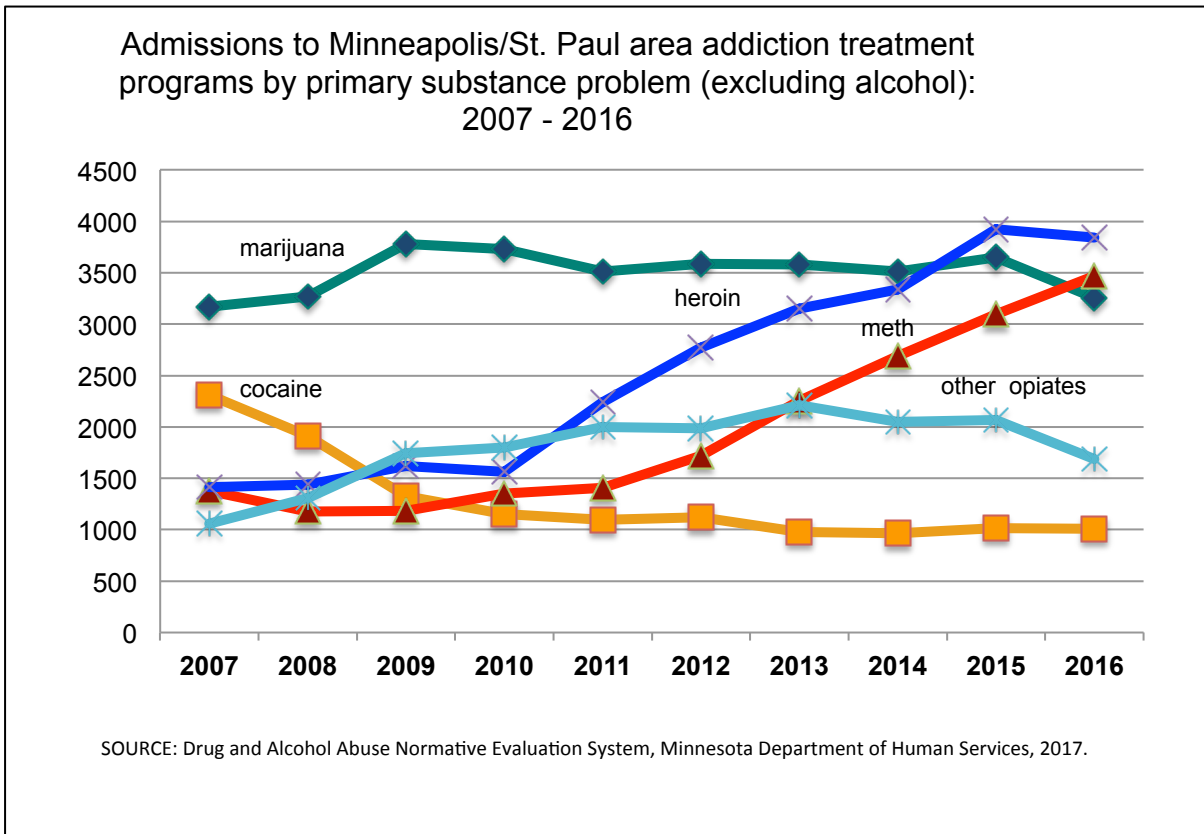


Exhibit 5

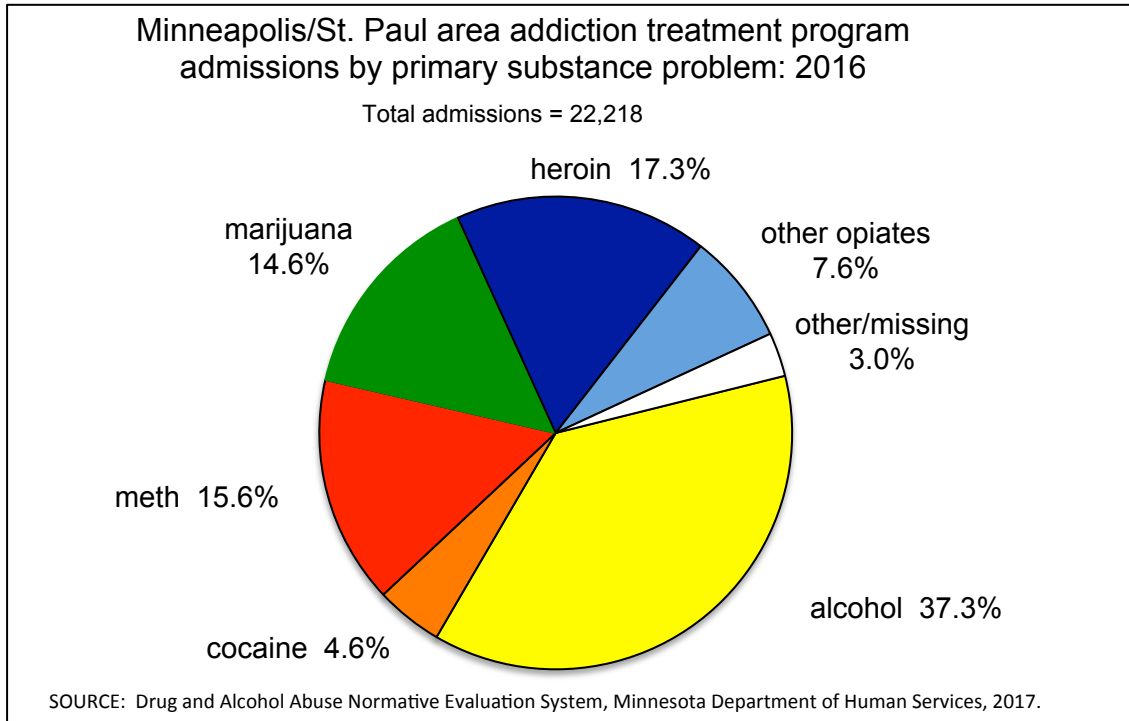


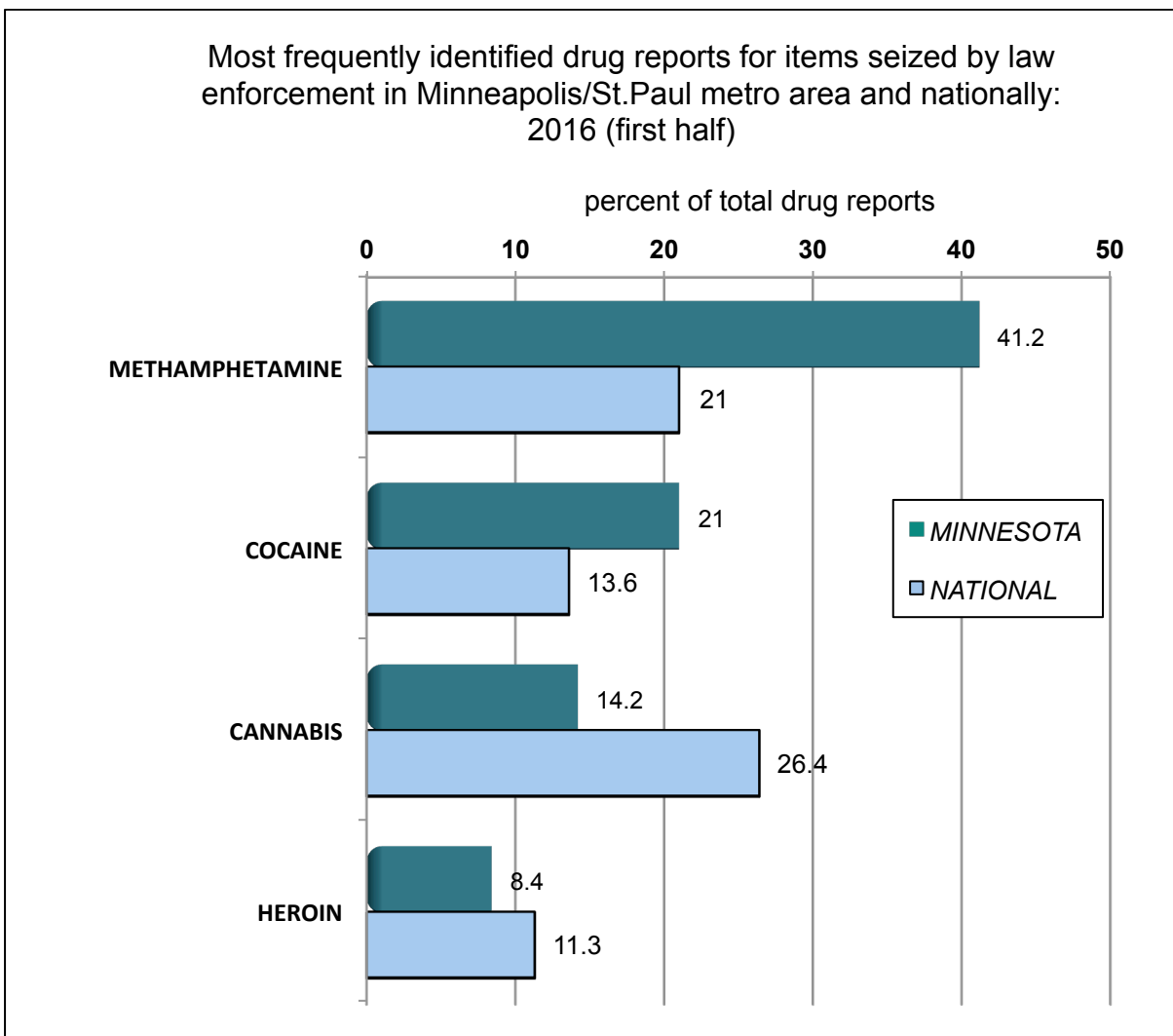
Exhibit 6

Characteristics of admissions to Minneapolis/St. Paul area addiction treatment programs by primary substance problem: 2016

<b>TOTAL ADMISSIONS</b>	<b>ALCOHOL</b>	<b>MARIJUANA</b>	<b>COCAINE</b>	<b>METH</b>	<b>HEROIN</b>	<b>OTHER OPIATES</b>
22,218	8,289 37.3%	3,254 14.6%	1,012 4.6%	3,468 15.6%	3,841 17.3%	1,686 7.6%
<b>GENDER</b>						
% MALE	67.7	76.8	65.2	66.1	63.9	53.3
% FEMALE	32.3	23.2	34.8	33.9	36.1	46.7
<b>RACE/ETHNICITY</b>						
% WHITE	68.9	46.1	25.2	75.2	62.3	73.0
% AFRICAN AM	17.4	34.7	60.1	4.0	17.0	8.8
% AM INDIAN	3.1	3.1	2.8	5.2	10.6	7.9
% HISPANIC	5.4	8.6	6.0	6.9	5.3	4.0
% ASIAN/PACIFIC ISL	1.7	1.4	1.4	5.1	1.1	2.6
% OTHER	3.4	6.1	4.5	3.5	3.7	3.8
<b>AGE</b>						
% 17 AND UNDER	0.9	22.5	0.4	1.4	0.3	0.8
% 18 - 25	12.6	35.7	10.0	21.4	31.7	20.0
% 26 - 34	25.7	24.4	19.8	38.7	35.7	37.4
% 35 +	60.8	17.4	69.9	38.5	32.3	41.7
<b>ROUTE OF ADMINISTRATION</b>						
% ORAL/MULTIPLE	100	1.5	-	3.8	0.7	66.2
% SMOKING		98.5	63.2	62.3	10.4	5.0
% SNORTING		-	35.8	8.6	24.6	19.7
% INJECTION		-	1.0	25.3	64.4	9.0
<b>% CURRENT SMOKERS</b>	59.8	66.0	76.1	78.7	82.6	72.4

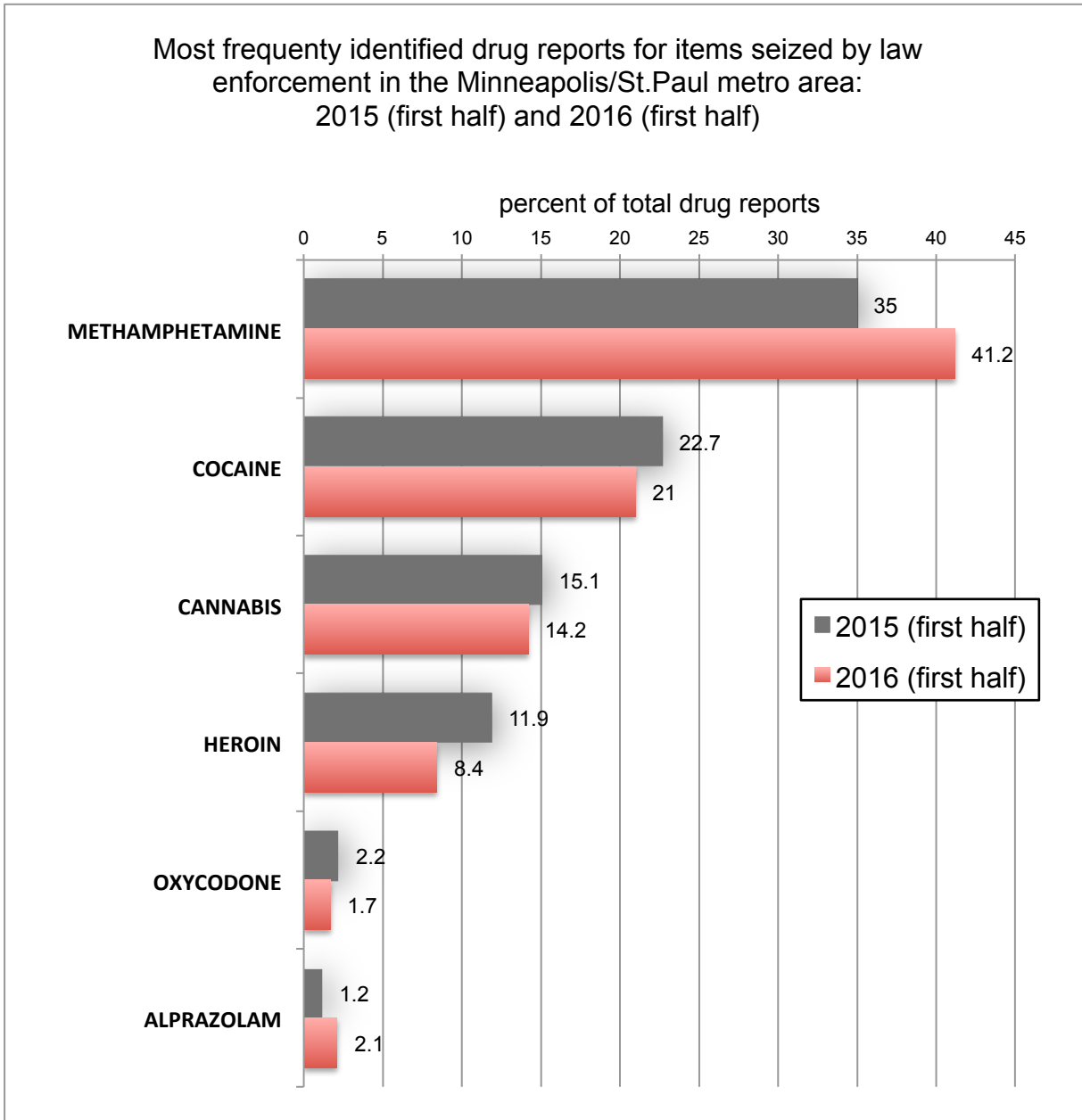
SOURCE: Drug and Alcohol Abuse Normative Evaluation System, Minnesota Department of Human Services, 2017. Unknown primary drug = 286 (1.3%). All other primary drugs = 382 (1.7%).

Exhibit 7



SOURCE: National Forensic Laboratory Information System (NFLIS), U.S. Drug Enforcement Administration (DEA) according to location of seizure. All federal, state and local laboratory data are included in the total number of drug items seized as primary, secondary or tertiary drugs in the 7-county Minneapolis/St. Paul metro area including the counties of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington in January through June 2016. Total drug reports January through June 2016 = 1,905 (7-county Minneapolis/St. Paul metro area) and 741,224 (total U.S.).

Exhibit 8



SOURCE: National Forensic Laboratory Information System (NFLIS), U.S. Drug Enforcement Administration (DEA). Presents all federal, state and local laboratory data are included in the total number of drug items seized as primary, secondary or tertiary drugs in the 7-county Minneapolis/St. Paul metro area including the counties of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington in January through June 2015 and January through June 2016. Total drug reports analyzed = 1,804 in January through June 2015 and 1,905 in January through June 2016.

Exhibit 9

Selected synthetic drug exposures: 2010 - 2016

	THC homologs	Bath Salts	2CE analogs	MDMA	LSD
2010	28	5	10	26	9
2011	149	144	23	24	7
2012	157	87	24	19	15
2013	110	50	35	19	45
2014	102	21	15	65	31
2015	223	20	5	19	39
2016	83	7	1	10	44

SOURCE: Minnesota Poison Control System, Hennepin County Medical Center, 2017.

Exhibit 10

Selected opioid exposures: 2010 - 2016

	2010	2011	2012	2013	2014	2015	2016
Hydrocodone	621	655	713	605	557	355	342
Oxycodone	580	575	636	579	610	519	505
Heroin	52	78	127	147	156	204	326

SOURCE: Minnesota Poison Control System, Hennepin County Medical Center, 2017.

Exhibit 11

Top prescriptions dispensed in Minnesota:  
December 2014, December 2015 and December 2016

	December 2014		December 2015		December 2016	
	# Rx	% of total Rx	# Rx	% of total Rx	# Rx	% of total Rx
Hydrocodone/Acetaminophen	113,656	15.3	107,006	14.9	87,962	13.5
Dextroamphetamine/Amphet	59,063	7.9	62,781	8.7	63,870	9.8
Oxycodone HCL	62,919	8.4	61,131	8.5	57,735	8.8
Tramadol HCL	60,773	8.2	57,152	8.0	50,537	7.7
Lorazepam	50,407	6.8	49,900	6.9	44,841	6.9
Oxycodone/Acetaminophen	55,703	7.5	54,119	7.5	43,101	6.6
Zolpidem Tartrate	46,758	6.3	44,831	6.2	38,503	5.9
Methylphenidate HCL	35,254	4.7	35,607	5.0	34,911	5.3
Clonazepam	38,798	5.2	38,123	5.3	34,084	5.2
Alprazolam	32,362	4.3	32,288	4.5	29,360	4.5

SOURCE: Prescription Monitoring Program Monthly Reports, December 2014, December 2015 and December 2016. Total prescriptions dispensed and reported in December 2014 = 740,706, in December 2015 = 718,083 and in December 2016 = 653,900.

*With inquiries regarding this report contact Carol Falkowski, CEO, Drug Abuse Dialogues, St. Paul, Minnesota at: [carol.falkowski@gmail.com](mailto:carol.falkowski@gmail.com). Report available online at: <http://www.drugabusedialogues.com>*