

Drug Abuse Trends in the Seattle/King County Area: 2013

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ABSTRACT

Two key findings for the Seattle area include continued increases in heroin morbidity and mortality as well as increases in methamphetamine availability and consequences. Cocaine use and harms persist in King County according to law enforcement, health, and social service personnel, although indicator data were mixed. Heroin use continued to increase in King County and statewide, with young adults a major population of concern. Methamphetamine positives in police evidence continued to increase for the third year in a row, although they were well below the level of 2001. Approximately one-third of clients who reported any use of methamphetamine at admission also mentioned heroin use, a substantial proportional and numerical increase since 2005. Poison control center data indicate that oxycodone and hydrocodone are the most prevalent pharmaceutical opioids specifically mentioned; oxycodone stands out as the most common in police evidence, and methadone and oxycodone were present in similar numbers of deaths in 2013. The number of treatment admissions with pharmaceutical opioids indicated as the primary problem declined somewhat in 2013. Deaths in which a pharmaceutical opioid was identified increased slightly in 2013, although the number remained 25-percent lower than the peak in 2009. Marijuana use is common, and public consumption appears to have increased following the passage of Initiative 502 in November 2012. The Washington State Patrol reported that THC (tetrahydrocannabinol)-positive DUI (driving under the influence) cases increased by approximately 30 percent in 2013. It is unclear if any changes in enforcement or driver behaviors are responsible for this change or whether it is a true increase in prevalence. In 2013, for the first time, a greater number of pieces of police evidence were identified as positive for methylone than evidence identified as MDMA (3,4-methylenedioxymethamphetamine). Methylone first appeared in substantial numbers among analyzed police evidence in 2011. Media reports and concerns about “Molly” are prevalent, with users believing it is pure MDMA. However, when evidence has been tested, the items thought to be “Molly” were often methamphetamine or methylone.

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Overdose prevention education and take-home naloxone distribution are slowly increasing across Washington through syringe exchanges, clinician prescribing, pharmacies, and jails. The HIV (human immunodeficiency virus) exposure categories for people diagnosed between 2011 and 2013 included 5 percent injection drug users (IDUs) and 9 percent in the combined category of IDU and men who have sex with men.

INTRODUCTION

Data Sources

The primary sources of information used in this report are listed below:

- **Washington State Patrol Crime Laboratory evidence testing data** received at the laboratory between 2001 and 2013 from law enforcement in King County are presented in exhibit 1. Data are based on cases tested through April 2014 and are presented by the year the evidence was received at the laboratory. Statewide data are not shown, but they are referenced in text.
- **Washington Recovery Help Line data** for King County callers from 2012 and 2013 are presented in exhibit 2.
- **Treatment admissions data** for King County residents to publicly funded treatment are included for admissions from 1999 to 2013 in exhibits 3–5. Data are duplicated and are for all modalities of care and were provided by the Washington State Department of Social and Health Services (DSHS), Division of Behavioral Health and Recovery, Treatment Report and Generation Tool.
- **King County Medical Examiner data** on drug-caused deaths from 1997 through 2013 are presented in exhibit 6. The majority of deaths involved multiple drugs, so discussion of drug-specific deaths should be interpreted in the context of understanding that most also involved other drugs or alcohol.
- **Poison control center data** for 2012 and 2013 for pharmaceutical opioids are from the Washington Poison Center.
- **Syringe exchange volume, syringe exchange client survey, and HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome) data** were provided by Public Health – Seattle & King County (PHSKC) and are presented in exhibits 7 and 8. HIV cases diagnosed through December 2013 and reported through May 5, 2014, are included. Analyses of the 2013 syringe exchange survey data were conducted by Emily Cederbaum and students in the Schools of Medicine and Public Health at the University of Washington.
- **Northwest (NW) High Intensity Drug Trafficking Area (HIDTA)’s 2013 Threat Assessment survey** included responses from 28 jurisdictions in Washington to questions on Initiative 502, marijuana legalization, and overdose awareness and prevention programs.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine

Cocaine use and harms persist in King County according to law enforcement, health, and social service personnel, although indicator data were mixed. Police evidence testing positive for cocaine continued to decline substantially in King County (exhibit 1) and across the State of Washington. In King County, cocaine was the third most common illicit drug detected in police evidence in this reporting period, whereas it was the most common drug from 2001 through 2008. Washington Recovery Help Line calls from King County were similar for 2012 and 2013, and cocaine remained the fifth most common illegal drug mentioned (exhibit 2).

The number of treatment admissions with cocaine as the primary drug declined for the fifth straight year in 2013 (exhibit 3). Clients entering treatment with cocaine as their primary drug have been substantially older in the past 15 years. Comparing 1999 to 2013, the proportion age 18–29 at admission declined from 16 to 10 percent; admissions for clients age 30–44 declined from 69 to 35 percent; while clients age 45 and older increased from 12 to 54 percent (data not shown). A relatively small proportion of cocaine admissions were female: 35 percent in 2013 (exhibit 4).

The number of cocaine-involved deaths increased substantially in 2013 to 74 after several years of lower numbers of deaths (exhibit 6). More than one-third of cocaine-involved deaths also involved heroin. Overall, drug-caused deaths involving alcohol or a controlled substance totaled 302 in 2013 (with a rate of 14.8 per 100,000 population), the highest number of drug-caused deaths in King County since at least 1997. The 2013 rate was slightly lower than the highest rate recorded, which was 15.6 per 100,000 in 2006.

Heroin

Heroin use continued to increase in King County and across Washington State, with young adults a major population of concern. Washington State police evidence originating in King County and testing positive for heroin continued to increase in 2013 (exhibit 1). In 2013, heroin and methamphetamine were each identified in 356 pieces of evidence in King County; this is the highest number for heroin since at least 2001.

Heroin-related Recovery Help Line calls originating in King County increased somewhat in 2013 compared with 2012, and heroin remained the most common drug mentioned (exhibit 2). Although earlier Help Line data cannot be directly compared, from 2001 through 2009, heroin was typically the fourth or fifth most common drug mentioned by Help Line callers.

The number of primary heroin treatment admissions continued to increase in 2013 and were second only to alcohol in terms of primary drug indicated at admission (exhibit 3). Young adults age 18–29 were the largest age group among clients entering treatment for heroin (exhibit 4). Among those mentioning heroin as one of their top three drugs, the number and proportion age 18–29 at admission increased from 325 (16 percent) in 1999, to 1,006 (35 percent) in 2013 (data not shown).

The number of heroin-involved deaths continued to steadily increase to 99 in 2013; this was an increase from 49 in 2009 (although below the peak of 144 in 1998) (exhibit 6). The number and

proportion of heroin-involved deaths among those younger than 30 increased from 7 deaths (14 percent) in 2009 to 34 deaths (34 percent) in 2013.

Methamphetamine

The number of methamphetamine-positive items in King County police evidence continued to increase for the fourth year in a row to 356; however, this is below the 995 pieces of evidence testing positive for methamphetamine in 2001 (exhibit 1). Statewide, the 5,780 pieces of evidence testing positive for methamphetamine were the most since 2007. Recovery Help Line calls that originated in King County and mentioned methamphetamine increased substantially as a number and a proportion in 2013 compared with 2012. Methamphetamine rose to the second most common drug mentioned in 2013, up from fourth in 2012 (exhibit 2).

The number of primary methamphetamine treatment admissions have stayed quite consistent at about 800–1,000 per year since 2004 (exhibit 3). Over this time period, the age distribution has also remained quite consistent. The largest group was those age 30–39, with clients age 18–29 making up a slightly smaller proportion. Approximately one-third of clients who reported any use of methamphetamine at admission (not necessarily primary) also mentioned heroin use in 2013, a substantial proportional and numerical increase since 2005. In 2013, one-half of those reporting using both heroin and methamphetamine in the prior month (not necessarily concomitant use) were age 18–29, the age group that largely drove the increase in past-month use of heroin and methamphetamine (exhibit 5). Among illicit drugs, methamphetamine had the highest proportion of primary admissions who were female, at 43 percent (exhibit 4).

Methamphetamine-involved deaths increased slightly in 2013 after a substantial (doubling) of deaths in 2012 (exhibit 6). Concomitant with this increase in methamphetamine-involved deaths during 2012–2013 is a much greater number and proportion of deaths with methamphetamine and heroin present. These heroin-methamphetamine combination deaths tend to be among those in their forties, in contrast to the rise of heroin-methamphetamine treatment admission increases over the past 2 years, which were largely among clients in their twenties and thirties.

Pharmaceutical Opioids

King County police evidence testing positive for pharmaceutical opioids totaled 102 in 2013; this was down from a peak of 292 in 2007 (exhibit 1). Statewide evidence positive for pharmaceutical opioids was also down substantially. Washington Recovery Help Line callers from King County who mentioned pharmaceutical opioids declined somewhat in 2013, when the category ranked third among drugs (exhibit 2).

Poison control center data indicated that oxycodone and hydrocodone were the most prevalent pharmaceutical opioids specifically mentioned, while oxycodone was the most common prescription opioid identified in police evidence. Methadone and oxycodone were present in similar numbers of deaths in 2013. The number of treatment admissions with pharmaceutical opioids indicated as the primary problem declined somewhat in 2013 and were at a level well below alcohol and illicit drugs (exhibit 3). A majority, 60 percent, of admissions were female, a much larger proportion than for any other substance (exhibit 4).

Deaths in which a pharmaceutical opioid was identified increased slightly in 2013, although the number remained 25-percent lower than the peak in 2009 (exhibit 6). Methadone was the most common opioid identified, and its presence has been level during the past 3 years. Fifty-three deaths involved methadone in 2013, compared with the peak of 94 in 2006. Oxycodone-involved deaths peaked at 58 in 2009, declined during the following 3 years, and increased to 48 in 2013.

Marijuana

Marijuana use is common, and public consumption appears to have increased following the passage of Initiative 502 in November 2012, which legalized marijuana for those age 21 and older. Public consumption remains illegal, and some municipalities have authorized small fines for public consumption offenses. King County police evidence for marijuana/cannabis decreased to just 120 pieces of evidence in 2013 from a high of 868 in 2009 (exhibit 1); statewide numbers were also down substantially. These declines in police evidence are believed to be due to a number of factors, including declines in arrests and prosecutions as a result of policy and practice changes. Among the 28 narcotics task forces in Washington surveyed in the NW HIDTA's 2013 Threat Assessment, there was an approximate 50:50 split as to whether their agency had made policy and/or enforcement changes since the passages of Initiative 502 (data not shown).

The Washington State Patrol, Forensic Laboratory Services Bureau, reported that driving under the influence (DUI) cases positive for THC (tetrahydrocannabinol, a psychoactive and impairing component of cannabis) increased by approximately 30 percent in 2013 statewide. It is unclear if changes in police enforcement and/or driver behaviors, such as increases in self-reporting use, are responsible for this change or whether it is a true increase in prevalence.

Marijuana was the fourth most common drug mentioned by King County callers to the Recovery Help Line, similar to the prior year (exhibit 2). Treatment admissions for which marijuana was the primary drug declined for the fourth straight year, to 1,495 admissions in 2013 (exhibit 3). Males constituted 74 percent of admissions for marijuana in 2013, and one-half were younger than 18; these proportions are much higher than for any other substance (exhibit 4).

Synthetic Cannabinoids, Synthetic Cathinones, and MDMA

Synthetic cannabinoids are synthetic chemicals that bind to cannabinoid receptors, although they have different chemical structures than natural cannabinoids and widely varying effects and potency. Police evidence testing at the State crime laboratory shows fairly small numbers for these compounds. Seizures of synthetic cannabinoids peaked in King County in 2012 with 32 samples; this total declined to 6 in 2013. For Washington State, synthetic cannabinoid seizures also reached a peak in 2012 ($n=199$) before declining to 67 in 2013. These numbers are for 19 different compounds that the laboratory specifically reported and do not include nonscheduled, but related, drugs, nor do they include compounds for which a chemical standard was unavailable. King County calls to the Recovery Help Line for synthetic cannabinoids increased slightly from 18 to 27 from 2012 to 2013 (exhibit 2).

Statewide in 2013, a greater number of pieces of police evidence ($n=66$) were positive for the synthetic cathinone methylone (3,4-methylenedioxy-N-methylcathinone) than for MDMA (3,4-methylenedioxymethamphetamine) ($n=55$) for the first time. Methylone first appeared in substantial numbers in 2011. The number of items testing positive for MDMA were down in police evidence

sevenfold from the peak in 2006 and 2007. Another synthetic cathinone, MDPV (3,4-methylenedioxypropylvalerone), appeared and peaked in 2011 with 25 pieces of evidence analyzed; this total declined in 2012 and declined again in 2013 to just 1 piece of evidence positive statewide. In King County, MDMA-positive evidence totaled 16 in 2013, which was a decline from 158 in 2007 (exhibit 1), while methylone totaled 14 in 2013, which was an increase from 0 in 2010. Media reports and concerns about “Molly” are prevalent, with users believing it is pure MDMA. However, when evidence has been tested, it is often identified as methamphetamine or methylone. King County calls to the Recovery Help Line for synthetic stimulants, thought to include these classes of drugs, increased slightly in 2013, although the overall number was quite small (with $n=78$ calls among $n=4,622$ calls for all drugs) (exhibit 2).

OPIATE OVERDOSE PREVENTION

Overdose prevention education and take-home naloxone distribution are increasing across Washington through syringe exchanges, clinician prescribing, pharmacies, and jails. Overdose education is conducted in person and through the www.stopoverdose.org Web site. Awareness of Washington’s 2010 Good Samaritan Overdose and Take-Home Naloxone law is still only modest; among the 28 narcotics task forces surveyed for the 2013 NW HIDTA Threat Assessment, only 3 indicated that officers received training on the law or that they knew of programs providing naloxone to opioid users in their communities. Among heroin injectors responding to the 2013 PHSKC syringe exchange survey, 28 had take-home naloxone in their possession in the prior 3 months.

Infectious disease and overdose risk were examined among heroin users responding to the 2013 PHSKC syringe exchange survey. Sharing of syringes was reported by significantly more people younger than 30 (37 percent) compared with older respondents (20 percent) ($p<0.05$). While the overdose risk was similar across age groups, with one-quarter having had an overdose in the past year, young adults were significantly more likely to have witnessed an overdose, 68 percent, compared with 55 percent for older respondents, and to have had take-home naloxone in the prior 3 months, 37 versus 24 percent ($p<0.05$). Compared with 2009, the proportion of those using methamphetamine by itself doubled to 51 percent, and the proportion using methamphetamine and heroin together increased from 11 to 33 percent.

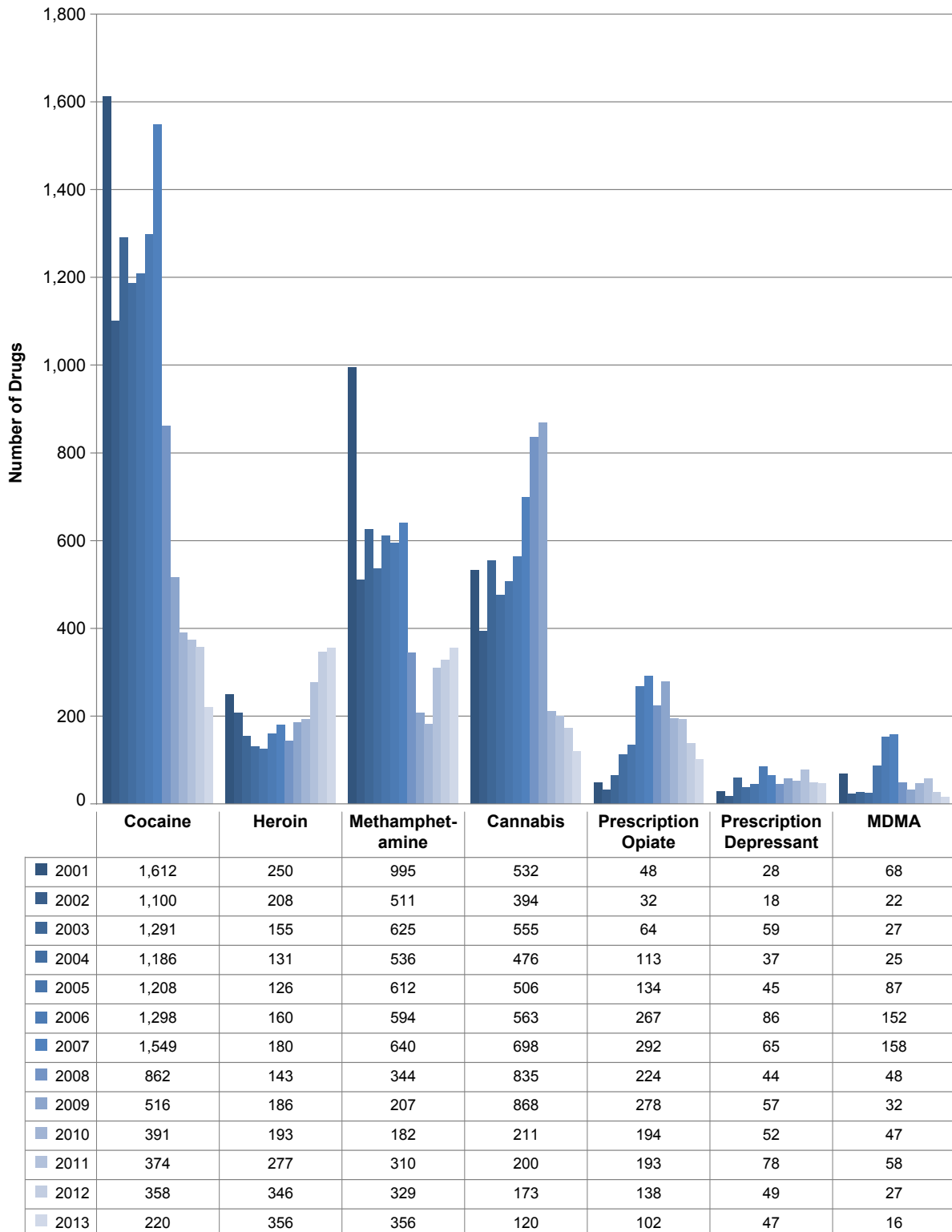
In 2013, 5.7 million clean syringes were distributed by PHSKC and the People’s Harm Reduction Alliance (PHRA) syringe distribution programs, a similar number to the prior year (exhibit 7). PHRA distributed 52 percent of the syringes and had 24 percent of encounters with clients.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

HIV diagnoses by exposure category during 2011–2013 indicate that 5 percent of those diagnosed were injection drug users (IDUs), and another 9 percent were both IDUs and men who have sex with men (exhibit 8). The overall proportions reporting injection drug use have remained fairly steady over time.

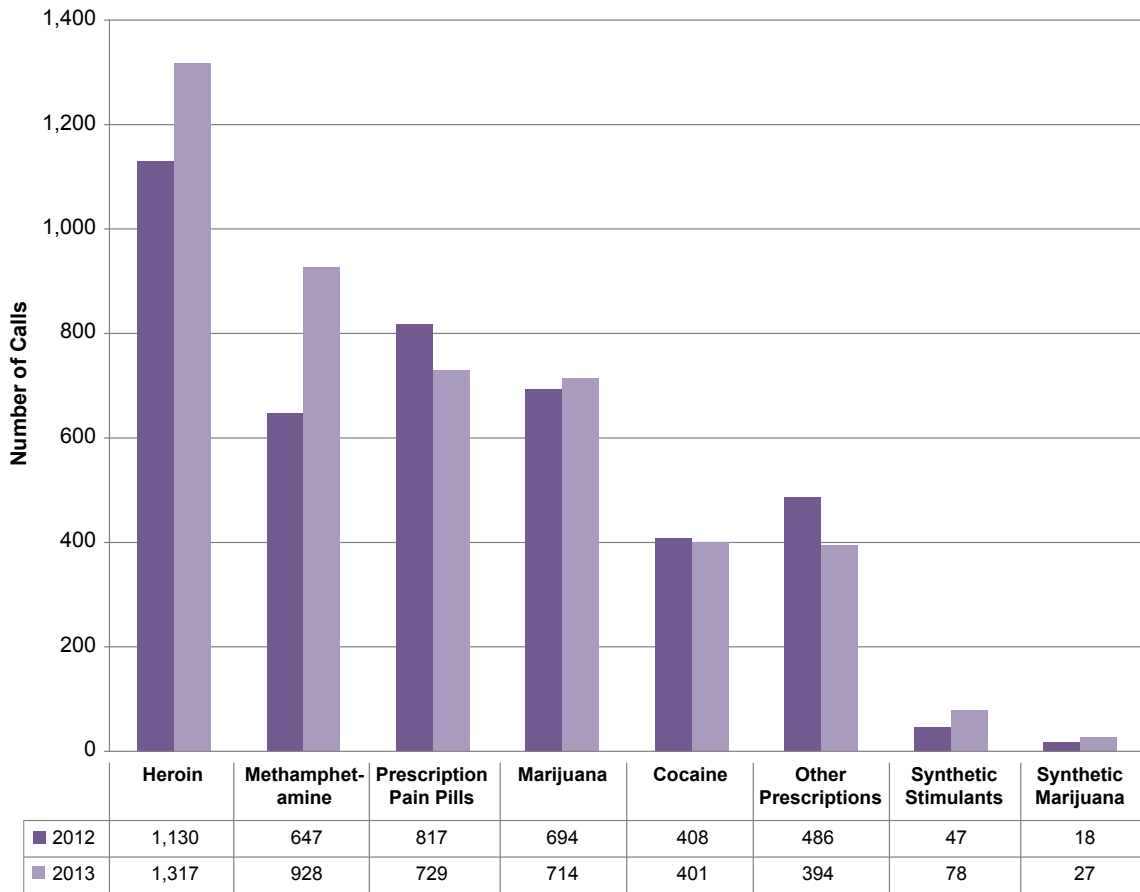
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Exhibit 1. Number of Drugs Identified Among Evidence Seized by Law Enforcement and Submitted to the State Patrol Crime Laboratory, King County (Seattle Area): 2001–2013

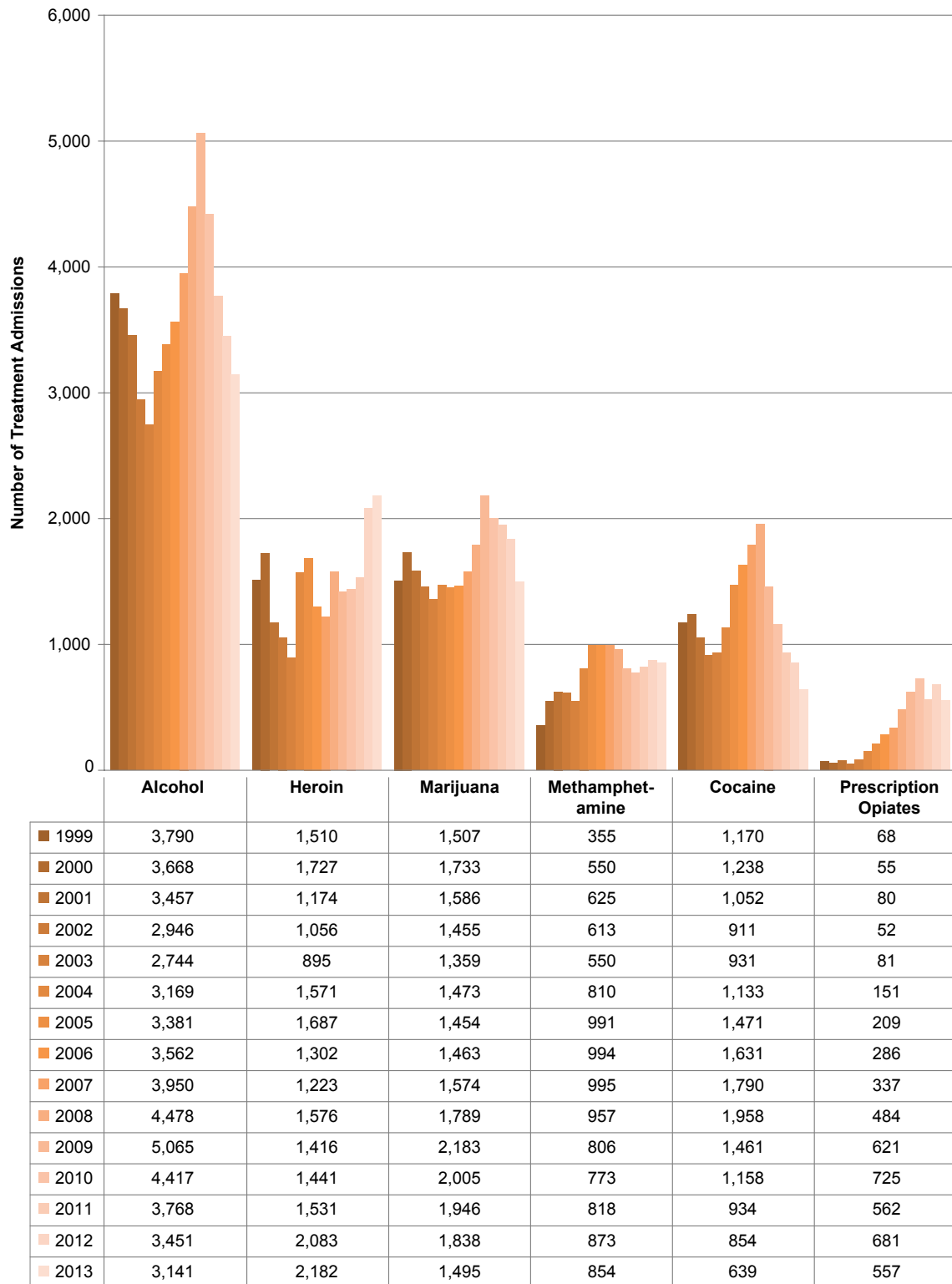


SOURCE: Washington State Patrol Crime Laboratory

Exhibit 2. Number of Calls to the Recovery Help Line, King County (Seattle Area): 2012–2013



SOURCE: Washington Recovery Help Line

Exhibit 3. Number of Treatment Admissions, by Primary Drug of Abuse, King County (Seattle Area) Residents: 1999–2013

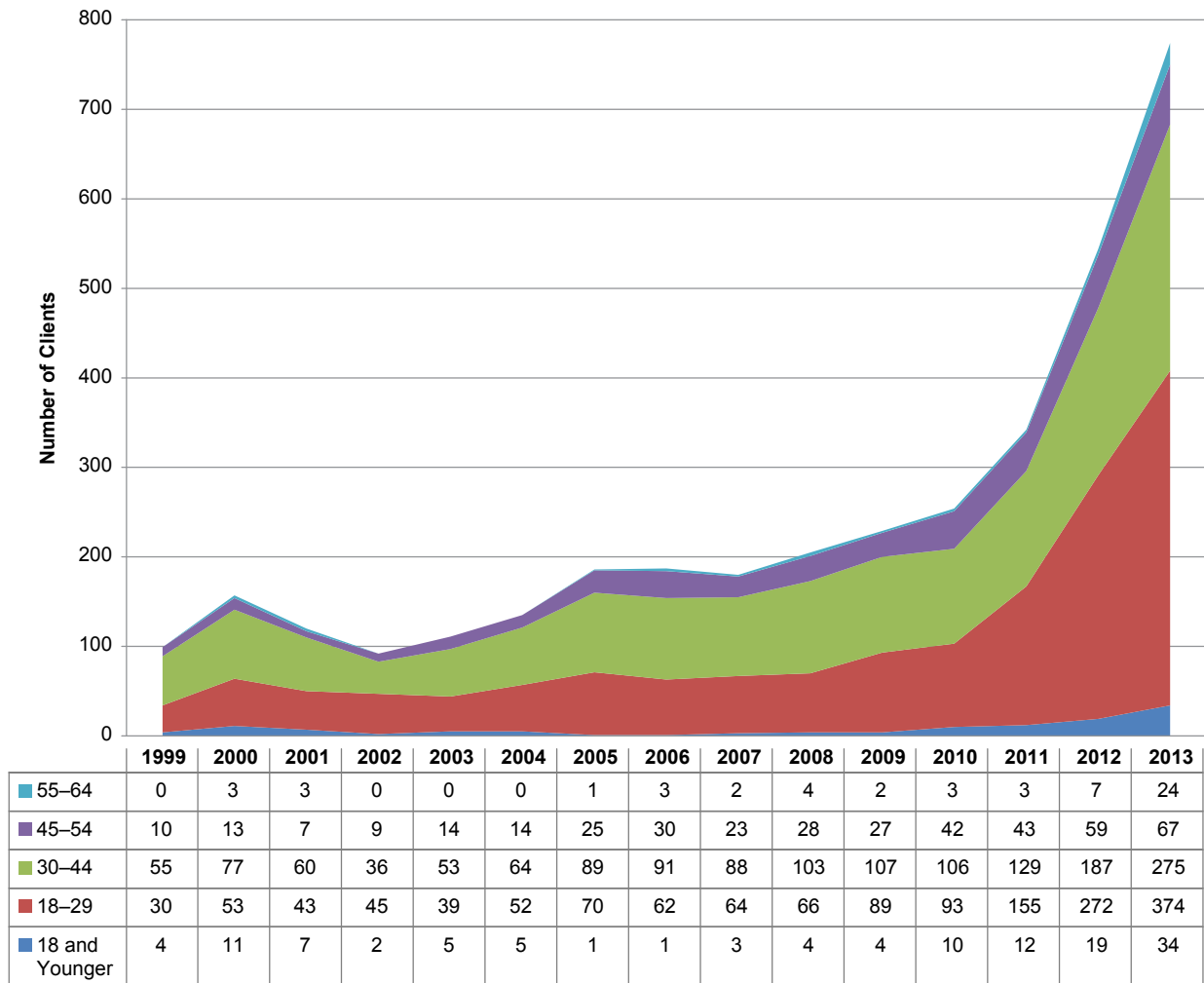
SOURCE: Treatment Report and Generation Tool, Division of Behavioral Health and Recovery, Washington State Department of Social and Health Services

Exhibit 4. Number of Treatment Admissions, by Primary Drug of Abuse and by Age Group and Gender, King County (Seattle Area): 2013

	Alcohol	Cocaine	Heroin	Other Opiates	Marijuana	Methamphetamine	Amphetamine	All Other Drugs	Total
Age Group									
18 and Younger	118	2	37	2	747	66	11	25	1,008
18–25	308	39	450	123	320	147	20	43	1,450
26–29	289	28	364	94	103	130	9	39	1,056
30–39	764	113	533	188	188	314	24	76	2,200
40–49	852	254	418	94	79	148	9	65	1,919
50 and Older	810	203	381	55	57	48	6	64	1,624
Gender									
Male	2,209	416	1,260	224	1,104	484	45	143	5,885
Female	932	223	923	332	390	369	34	169	3,372
Total	3,141	639	2,183	556	1,494	853	79	312	9,257

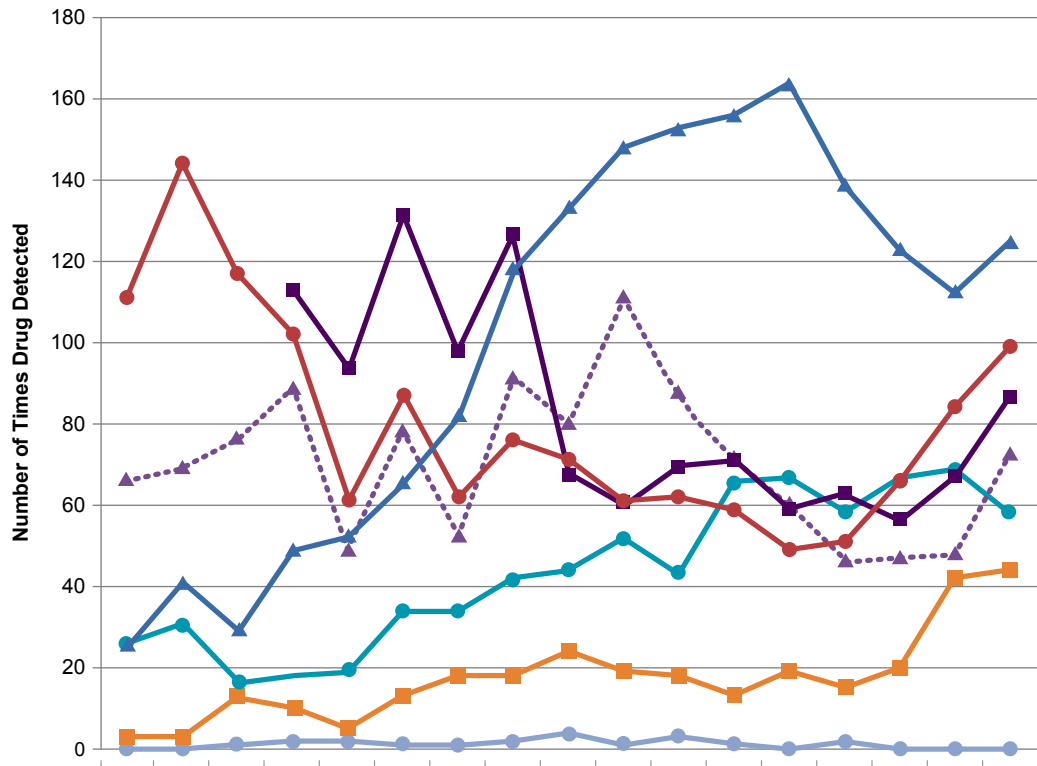
SOURCE: Treatment Report and Generation Tool, Division of Behavioral Health and Recovery, Washington State Department of Social and Health Services

Exhibit 5. Number of Treatment Admissions Among Clients Who Reported Using Heroin and Methamphetamine in the Prior Month, by Age Group, King County (Seattle Area): 1999–2013



SOURCE: Treatment Report and Generation Tool, Division of Behavioral Health and Recovery, Washington State Department of Social and Health Services

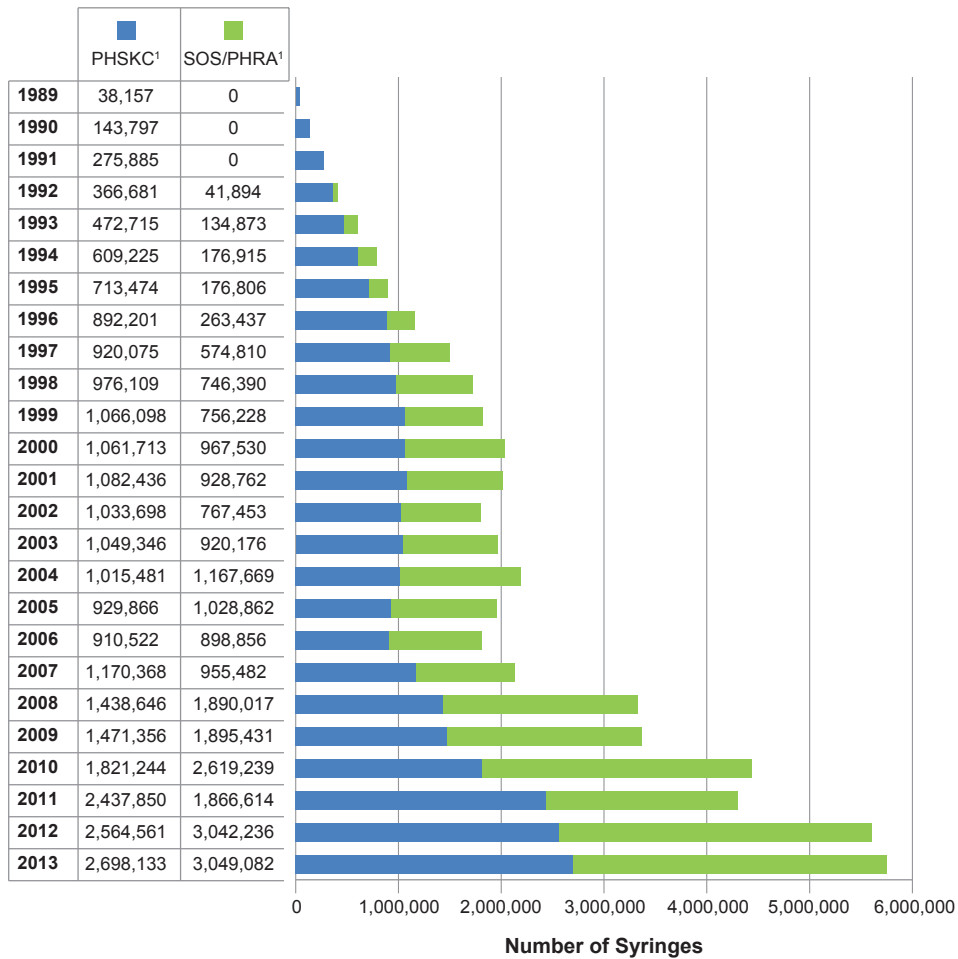
Exhibit 6. Drug-Caused Deaths, by Drug and Number of Times Detected, King County (Seattle Area): 1997–2013



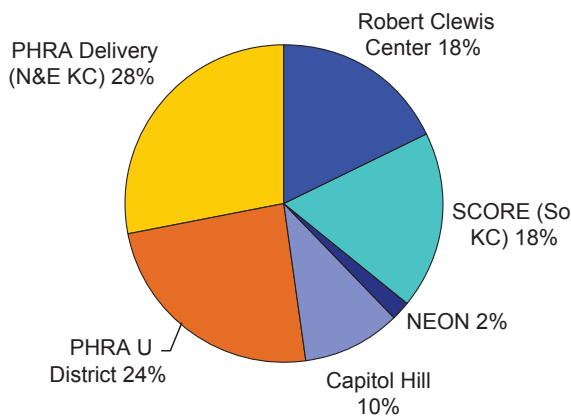
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
—▲— Prescription-Type Opiate	25	41	29	49	52	65	82	118	133	148	153	156	164	138	122	112	125
—●— Heroin Probable	111	144	117	102	61	87	62	76	71	61	62	59	49	51	66	84	99
—■— Alcohol	—	—	—	113	93	132	97	127	68	60	70	71	59	63	56	67	87
—▲— Cocaine	66	69	76	89	49	79	52	92	80	111	86	71	60	46	47	48	74
—●— Benzodiazepine	26	31	16	18	19	34	34	42	44	52	43	66	67	58	67	69	58
—■— Methamphetamine	3	3	13	10	5	13	18	18	24	19	18	13	19	15	20	42	44
—●— MDMA	—	—	1	2	2	1	1	2	4	1	3	1	—	2	—	—	—

SOURCE: King County Medical Examiner

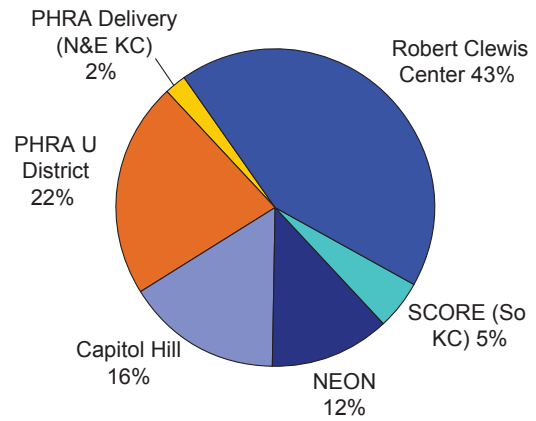
Exhibit 7: Syringe Exchange Volume, Overall and by Site, Seattle: 1989–2013



Syringe Volume by Site 2013



Exchange Encounters by Site 2013



n=31,708

¹SOS=Street Outreach Services; PHRA=Peoples Harm Reduction Alliance; PHSKC= Public Health – Seattle & King County; SCORE=South County Outreach Referral and Exchange; NEON=Needle Exchange and Sex Education Outreach Network; KC=King County
SOURCE: Public Health – Seattle & King County

Exhibit 8. Demographic Characteristics of County Residents Diagnosed From 1982 to 2013 and Reported Through May 5, 2014, by Date of HIV Diagnosis, King County (Seattle Area)

	1982–2004		2005–2007		2008–2010		2011–2013 ¹	
	N	%	N	%	N	%	N	%
TOTAL	6,861	100	938	100	939	100	825	100
HIV Exposure Category²								
Men who have sex with men (MSM)	5,093	74	625	67	682	73	556	67
Injection drug user (IDU)	402	6	52	6	50	5	41	5
MSM-IDU	698	10	103	11	61	6	75	9
Heterosexual contact	582	8	153	16	138	15	139	17
Blood product exposure	62	1	1	<1	1	<1	0	<1
Perinatal exposure	24	<1	4	<1	7	1	13	2
<i>SUBTOTAL- known & estimated risk</i>	<i>6,861</i>		<i>938</i>		<i>939</i>		<i>824</i>	
Sex & Race/Ethnicity³								
<i>Male</i>	6,331	92	827	88	824	88	701	85
White Male	4,851	71	512	55	513	55	430	52
Black Male	694	10	126	13	97	10	101	12
Hispanic Male	486	7	124	13	134	14	102	12
Other Male	300	4	65	7	80	9	68	8
<i>Female</i>	530	8	111	12	115	12	124	15
White Female	217	3	29	3	31	3	23	3
Black Female	219	3	61	7	65	7	72	9
Hispanic Female	45	1	7	1	13	1	12	1
Other Female	49	1	14	1	6	1	17	2
Race/Ethnicity³								
White	5,068	74	541	58	544	58	453	55
Black	913	13	187	20	162	17	173	21
Hispanic	531	8	131	14	147	16	114	14
Asian & Pacific Islander	151	2	49	5	51	5	58	7
Native American or Alaskan Native	78	1	8	1	6	1	3	<1
Multiple Race	119	2	22	2	29	3	22	3
<i>SUBTOTAL- known race & ethnicity</i>	<i>6,860</i>	<i>100</i>	<i>938</i>	<i>100</i>	<i>939</i>	<i>100</i>	<i>823</i>	<i>100</i>
Unknown Race	1	<1	0	0	0	0	2	<1
Place of Birth								
Born in United States or Territories	5,958	89	664	75	675	74	515	67
Born outside United States	759	11	219	25	240	26	248	33
<i>SUBTOTAL- known birthplace</i>	<i>6,717</i>	<i>100</i>	<i>883</i>	<i>100</i>	<i>915</i>	<i>100</i>	<i>763</i>	<i>100</i>
Birthplace unknown	144	2	55	6	24	3	62	8

Exhibit 8 (continued). Demographic Characteristics of County Residents Diagnosed From 1982 to 2013 and Reported Through May 5, 2014, by Date of HIV Diagnosis, King County (Seattle Area)

	1982–2004		2005–2007		2008–2010		2011–2013 ¹	
	N	%	N	%	N	%	N	%
Age at diagnosis of HIV								
19 and Younger	96	1	10	1	33	4	22	3
20–29	1,610	23	233	25	253	27	224	27
30–39	3,086	45	342	36	284	30	263	32
40–49	1,535	22	244	26	228	24	186	23
50–59	439	6	79	8	114	12	103	12
60 and Older	95	1	30	3	27	3	27	3
Residence								
Seattle residence	5,826	85	690	74	655	70	566	69
King County residence outside Seattle	565	8	248	26	284	30	259	31

¹Due to delays in reporting, data from recent years are incomplete.

²Cases with unknown risk categories are distributed in to known categories with a multiple imputation process. Previously about one-quarter of cases were redistributed in a presumed heterosexual category.

³All race and ethnicity categories are mutually exclusive; Asian, Native Hawaiian, & other Pacific Islanders were grouped due to small cell sizes.

SOURCE: Public Health – Seattle & King County