

Drug Abuse Trends in the Seattle/King County Area: 2012

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INTRODUCTION

Cocaine indicators are down the past several years including police evidence, drug involved deaths, and treatment admissions. First time **heroin** treatment admissions are up, particularly for young adults ages 18-29, with a faster rate of growth outside of King County. Police evidence positive for heroin is up substantially in King County and across much of the state. Heroin involved deaths are up again in 2012, with the increase primarily among those under 30 in King County. **Prescription-type opiate** involved deaths continue to decrease as does police evidence. **Methamphetamine** indicators, including deaths, have increased in the last one to two years. **Marijuana** use is wide spread and treatment admissions have held fairly steady in recent years, approximately half of admissions are under 18 and three-quarters are male, very different demographic characteristics compared to other drugs. Although perceptions of risk associated with marijuana have decreased over the past decade, past month use among tenth graders has remained steady. **MDMA** indicators remain low. **Cannabimimetics** (synthetic cannabis e.g. Spice, K2) and **substituted cathinones** (synthetic drugs related to the plant Khat and colloquially, but incorrectly, called Bath Salts) are occasionally detected in law enforcement evidence. **HIV** incidence and prevalence remain low, **hepatitis C** prevalence among injection drug users is very high (75%), and utilization of syringe exchange is extremely high with over 5,000,000 **syringes** distributed in 2012. **Overdose education/naloxone** programs and resources are increasing and the antidote naloxone/Narcan is now available in multiple types of settings in the county and increasingly statewide.

Data Sources

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

- **Help Line** data for 2012 are provided for all callers from King County. The data are combined from the Recovery Help Line, Crisis line and the Graveyard shift with mentions of specific drugs. A new agency oversees the Recovery Help Line

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and data are not directly comparable to data from prior years. Percentages reported exclude cigarettes and alcohol from the denominator (Exhibit 1).

- **Drug treatment data** were provided by Washington State Department of Social and Health Services (DSHS), Division of Behavioral Health and Recovery, Treatment Report and Generation Tool (TARGET), from 1999 through 2012. Treatment modalities included outpatient, intensive inpatient, recovery house, long-term residential, and opiate substitution admissions. Only admissions paid with public funds are included (Exhibits 2-4).
- **Tenth graders' use of drugs** was documented with the Health Youth Survey with data presented for the entire state for past month use of prescription-type opiates "to get high" as well as alcohol and marijuana. Lifetime use of heroin is reported (no past month measure is available). Data were obtained from www.askHYS.net with data supplied by the WA State Department of Health.
- **Fatal drug overdose data** were obtained from the King County Medical Examiner (KCME), Public Health – Seattle & King County (PHSKC). The other opiates category indicates pharmaceutical opioids, including pharmaceutical morphine where noted and oxycodone, hydrocodone, methadone, and other opioids; however, codeine is excluded. The heroin/opiate category includes heroin, morphine (unless noted to be pharmaceutical), and cases where there was an indication that the death was "heroin related" in the KCME database (Exhibit 5).
- **Data on seized drug samples submitted for analysis** were obtained from the National Forensic Laboratory Information System (NFLIS), DEA for 2009-2012. Drug testing results for local, State and Federal law enforcement seizures in King County were reported (Exhibit 6). A separate dataset was obtained directly from the Washington State Patrol Crime Laboratory with data just from local and state jurisdictions, not Federal, data are from 2001 through 2012 (Exhibit 7). Washington State Patrol Crime Laboratory chemists provide qualitative impressions of drug seizure evidence tested.
- **Data on infectious diseases related to drug use and injection drug use**, including the human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS), were provided by PHSKC. Data on HIV cases (including exposure related to injection drug use) in Seattle/King County (1982 through 2012) were obtained from the "HIV/AIDS Epidemiology Report" (Exhibit 8). Hepatitis C data were obtained from HIV/AIDS Epidemiology Report, First Half 2012: Volume 80. Data for the number of syringes distributed were also provided by PHSKC (Exhibits 9).

DRUG ABUSE PATTERNS AND TRENDS

Cocaine

All indicators point to continued lower levels of cocaine, however use and impacts are still present. Among Help Line callers, 400 mentioned cocaine, lower than the other major drugs of abuse. Police evidence data point to a dramatic drop in evidence positive for cocaine this appears to be due to legal/policy changes as well as generally reduced availability locally, similar to national reports. Crime lab chemists report that most cocaine is also positive for levamisole (a potentially dangerous adulterant). Treatment

admissions for cocaine dropped in King County to levels seen a decade ago, while statewide cocaine admissions dropped to approximately half the number seen a decade ago. In 2012 the vast majority (87%) of people entering treatment for cocaine reported smoking it and most were much older compared to users of other drugs with two-thirds 40 or older. Cocaine involved deaths have been stable at about 50 per year, less than half the peak number seen in 2006.

Heroin

Helpline calls for heroin led all other drug types in 2012, while data are not directly comparable, in 2003 heroin was less common than cocaine, marijuana and methamphetamine whereas it now substantially surpasses each of those drugs. In King County, police evidence positive for heroin increased dramatically in 2011 and again in 2012. The NFLIS dataset including federal seizures along with local seizures indicates heroin as the most common drug detected in 2012. Statewide heroin has also increased dramatically and it has spread geographically across much of the state (see county numbers, rates and maps at <http://adai.uw.edu/pubs/InfoBriefs/ADAI-IB-2013-02.pdf>). Statewide 5% of tenth graders reported ever using heroin in 2012, however the proportion was 23% among those who reported using prescription-type opiates “to get high” in the past month, indicating a strong correlation, though the data are cross-sectional and cannot be used to show causation.

Treatment admissions with heroin as the primary drug in King County increased by approximately a third in 2012 to the highest number since at least 1999. Increases are even more dramatic among those ages 18-29 among whom heroin is now the drug with the most admissions, surpassing even alcohol. Similar patterns and even larger increases are evident statewide. Analyses were also conducted on first time admissions to treatment which are unique individuals, not duplicated like all admissions. Statewide, from 2003 to 2012, 8,606 people entered treatment for the first time and reported their primary drug as heroin. The number per year has more than doubled over this period with all of the increase among those aged 18-29 who constituted 64% of admissions in 2012. Most of the increase is also outside of the Puget Sound region, most notably north of King County and along the west coast of the state though increases are also evident in many Eastern Washington counties (maps and tables are available at the link above). In 2012, in King County, 83% of those admitted to treatment for heroin reported injecting the drug with most of the rest reporting smoking heroin.

Deaths involving heroin totaled 84 in 2012, up from 49 in 2009. All of this increase is attributable to those under the age of 30. Looking into the issue of heroin increases over the past 3 years reveals some interesting issues. Among the 201 heroin involved deaths over the past 3 years a minority, 28% involved only heroin, however among those 30 or younger 49% involved only heroin. Heroin involved deaths are found all across King County, however in suburbs northeast of Seattle almost all of the deaths are among these younger adults. These mortality data are striking, particularly given the relative youth of many decedents recently and the short lag relative to increases in other indicators. Statewide there is some evidence that heroin involved deaths may have begun to increase in the period between 2009 and 2011 compared to the prior decade,

however the classification of heroin in these deaths is less sensitive (data and maps are presented in the report linked to above).

Prescription-type opiates

Indicators for prescription-type opiates have generally declined or been level over the past few years. Note that Washington State has had several policy and legal changes to address opiate prescribing with a notable leveling off in prescriptions for oxycodone, morphine and methadone beginning in 2008 and persisting through at least 2010 according to DEA ARCOS data (not shown). Recovery Help Line calls for prescription pain pills totaled 829 in 2012, second only to heroin. Directly comparable data are not available, but a decade ago the number of calls regarding prescription-type opiates was less than that for marijuana and methamphetamine and similar to heroin. The first significant decline among tenth graders reporting past month use of prescription-type opiates “to get high” was seen in 2012, dropping to a level of 6.0% (+-0.8%) compared to 8.3% (+-1.3%) in 2010.

Police evidence data show a substantial overall decline in evidence positive for prescription-type opiates from a high of 292 in 2007 to 138 in 2012 in local and state evidence. NFLIS data, including federal seizures, show a substantial decline in oxycodone positive evidence from 184 in 2009 to 91 in 2012. Buprenorphine also showed declines from 39 to 15 from 2009-2012, methadone was generally level with 21 reports in 2012. Fentanyl however showed substantial increases from 0 cases in 2009 to 41 in 2012. According to crime lab chemists, fentanyl was “Mostly illicit manufacture...powders or powder residues. Of note, two items had fentanyl mixed with other drugs (one with meth, one with MDMA).” In 2010 OxyContin was reformulated to be crush resistant, the crime lab reports that in 2012 they are seeing “Mostly the newest tablet formulation (OP’s). Very little of the old “OC” version...”. In 2012 extended release oxycodone that is in a crushable form began being sold in Canadian pharmacies, the Washington State crime lab is actively looking for this new form in evidence from Washington and did not find any in evidence tested at the Seattle lab through May 2013.

Almost half of treatment admissions in King County in 2012 for other opiates were under age 30 and it was the only drug for which a majority of admissions were female. Most took other opiates orally (59%), though many reported smoking (27%) and some reported intranasal (9%) or injecting (4%). Treatment admissions with prescription-type as primary totaled 672 in 2012, the smallest number among the major drugs of abuse and fairly comparable to the prior 3 years in King County. Among 18-29 year olds the number of admissions the past 2 years is a third lower than the peak in 2010.

Deaths involving prescription-type opiates continued to decline with 112 deaths in 2012 down from the peak of 164 in 2009. While there are declines among all age groups, the decline is smallest among those age 50 and older for whom there were 60 deaths in 2009 (37% of all prescription-type opiate involved deaths) compared to 50 in 2012 (45% of all prescription-type opiate involved deaths).

Methamphetamine

Recovery Help Line calls for methamphetamine totaled 680 in 2012 and ranked third

among major drugs a substantial drop in ranking compared to the period 5 to 10 years ago. Other indicators all point to increases in methamphetamine in King County over the last one to two years. The lowest number of reports for methamphetamine in police evidence was in 2010 with a more than 50% increase by 2012 though we are well below levels seen in 2001 when there was substantial local manufacturing.

Treatment admissions are up slightly over the last few years, though still at somewhat lower levels compared to the mid-2000's. The majority of methamphetamine users reported smoking (66%) with a substantial minority still injecting (24%). A minority, 42%, were under age 30 at the time of treatment entry.

Deaths involving methamphetamine increased substantially in 2012 to 42, a much higher annual total than typical since 2003 a period during which there have been approximately 20 per year. Deaths have increased across the age span contradicting the idea that simply older users are dying. Comparing 2011 when there were 20 methamphetamine involved deaths with 2012 when there were 42 reveals that the exact same proportion, 50% were single drug deaths; historically methamphetamine has been present as the only drug in a higher proportion than for other drugs. With the general decline in cocaine indicators we explored if "goof balls" heroin and methamphetamine combined were evident in deaths and in 2011 2 of the 20 methamphetamine involved deaths involved heroin compared to 10 of the 42 in 2012. Heroin co-ingestion is therefore not associated with all of the increase in methamphetamine involved deaths, but it appears to play a part.

Marijuana

In 2012 Washington voters passed initiative 502 which legalizes marijuana sales and use for adults, a medical use law was approved by voters in 1998. Many medical marijuana dispensaries are located throughout King County. Illegal grows are predominately indoor in Western Washington and outdoors in Eastern Washington. Law enforcement reports a substantial decline in marijuana seized at the border coming in from Canada.

Tenth graders in the state have reported on past month use of marijuana every two years since 2002 and the rate has held steady at approximately 19%. Over the same period there has been a significant increase in the proportion reporting no/low risk from regular use from 17% (+-2%) to 29% (+-2%).

Among Recovery Help Line callers marijuana was the third most commonly mentioned drug in 2012 with 700 calls by King County residents. Males represented 74% of marijuana treatment admissions in 2012, a higher proportion than for alcohol or any other drug. Youth represented 48% of marijuana admissions, a much higher proportion than for other substances. Marijuana is down slightly in terms of total number of all admissions and down substantially among those ages 18-29, it has dropped below heroin among all ages and young adults.

Police evidence positive for cannabis has dropped dramatically in King County and statewide, most likely as a result of policy, resources, and increases in some field testing for marijuana.

Other drugs of abuse

Benzodiazepines and other sedative medicines continue to be widely used with opioids, heroin or pharmaceutical, and remain a serious risk factor for overdose. Pharmaceutical sedatives are rarely a primary drug of abuse and in drug caused deaths they are almost always in combination with other drugs. Benzodiazepines were present in 69 of 274 deaths in 2012 a number similar to other years. The death data table includes the broader category of prescription-type sedatives which includes benzodiazepines along with barbiturates, muscle relaxants, GHB, and tri-cyclic anti-depressants which were present in 98 of 274 deaths also a generally similar number and proportion as in recent years. The most commonly identified benzodiazepines identified in NFLIS were alprazolam and clonazepam with no major changes in recent years.

MDMA has not been identified in drug caused deaths since 2008 and while still identified in police evidence, numbers are much lower than 5 years ago. Other substances identified in tablets sold as MDMA include BZP and TFMPP and though down from 2009 persist in police evidence.

Cannabimimetics (synthetic drugs with some properties similar to cannabis) persist in the area though it is difficult to get a sense of the prevalence. Testing has improved in the past few years and NFLIS data have identified at least six different cannabimimetics, though never more than 10 reports in any given year.

Methylone and MDPV (synthetic drugs related to the khat plant and its active compound cathinone) are also difficult to determine the prevalence of with small numbers in NFLIS data in 2011 and 2012.

INFECTIOUS DISEASES RELATED TO DRUG USE

HIV/Hepatitis

HIV incidence and prevalence remain relatively low in King County with approximately three-quarters of those infected having an exposure category of men who have sex with men, 5% injection drug use and 9% both exposure categories during 2010-2012. In King County it is estimated that 75% of injection drug users are infected with Hepatitis C. King County has very active syringe exchange/distribution programs that distributed more than 5 million syringes in 2012.

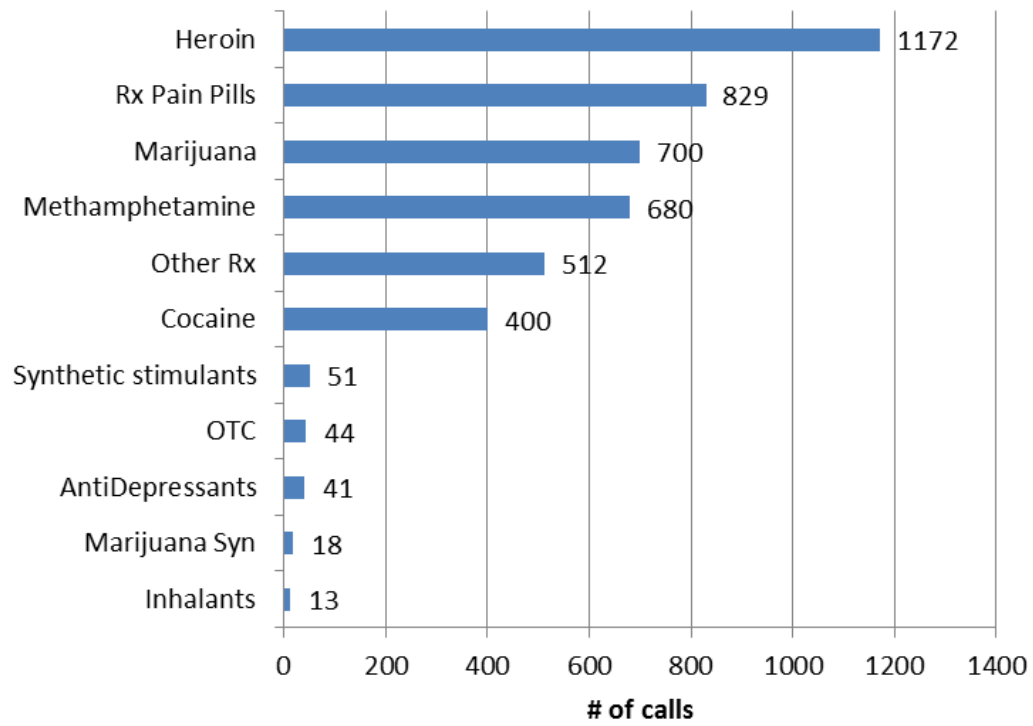
DRUG OVERDOSE PREVENTION EFFORTS

Syringe exchange programs are also providing overdose education and distributing the antidote naloxone/Narcan. In addition a pharmacy in Seattle began directly dispensing the antidote to people at risk for having or witnessing an overdose in 2012; through a collaborative practice agreement with a physician the pharmacists can dispense to a customer who has not seen a health care provider to receive a prescription. Overdose education and resources for medical patients, drug users, the general public, law enforcement and health care providers are available at www.stopoverdose.org . The

website received 2,882 visits from people within Washington of which 1,662 visits were from people living in the Seattle area.

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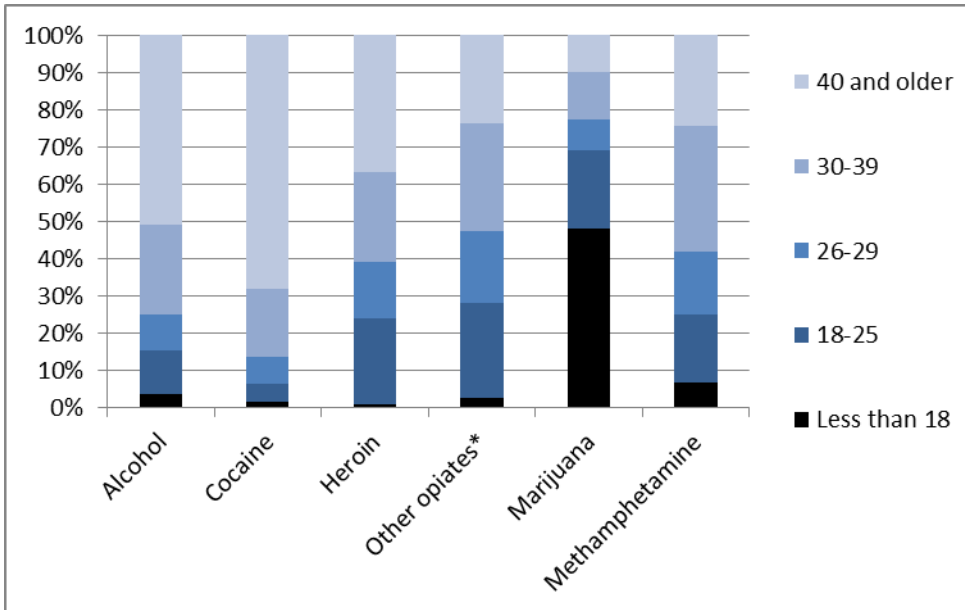
Exhibit 1 King County Callers to the Recovery Help Line, 2012



*Data from the Recovery Help Line, Crisis line and the Graveyard shift with mentions of specific drugs

Exhibit 2- Treatment admissions, King County, 2012 characteristics by primary drug

	Alcohol	Cocaine	Heroin	Other opiates*	Marijuana	Methamphetamine	Other drugs**	Total
Male	2,384	551	1,221	294	1,359	536	158	6,503
Female	1,055	303	843	384	475	419	182	3,661
Route of ingestion								
Inhalation	5	9	32	9	6	7	3	71
Injection	0	16	1,713	29	1	226	19	2,004
Intranasal	0	79	33	60	0	43	6	221
Oral	3,428	10	30	397	24	40	148	4,077
Smoking	4	739	254	183	1,802	636	79	3,697
Other/none provided	2	1	2	0	1	3	1	94
Age at admission								
Less than 18	127	14	23	18	879	64	31	1,156
18-25	405	40	475	172	385	174	56	1,707
26-29	328	64	310	131	157	162	43	1,195
30-39	832	155	500	197	234	323	77	2,318
40 and older	1,747	581	756	160	179	232	133	3,788
Total	3,439	854	2,064	678	1,834	955	340	10,164

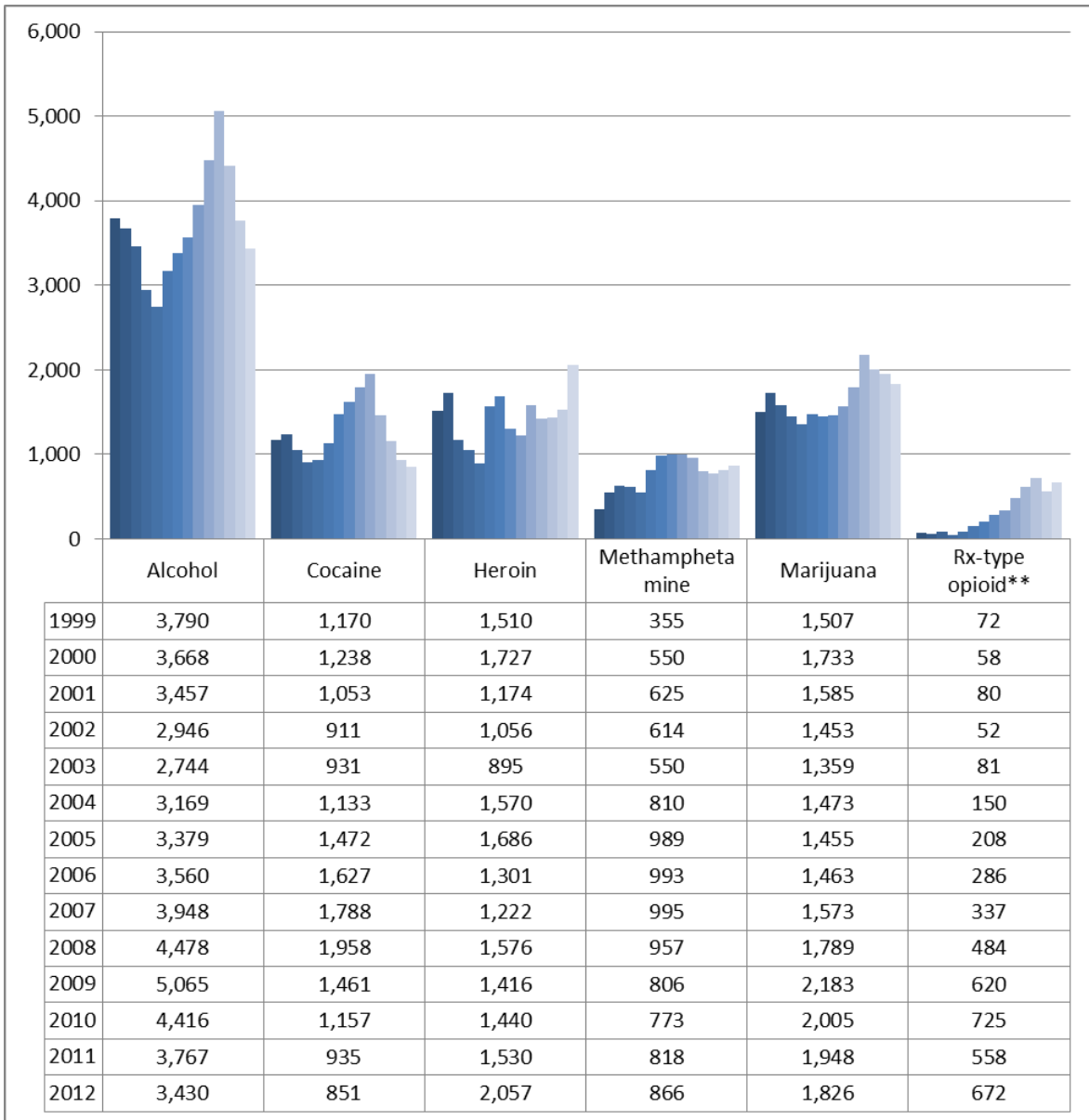


Source: WA Division of Behavioral Health and Recovery

* Other opiates = Other opiates and Oxy/hydrocodone

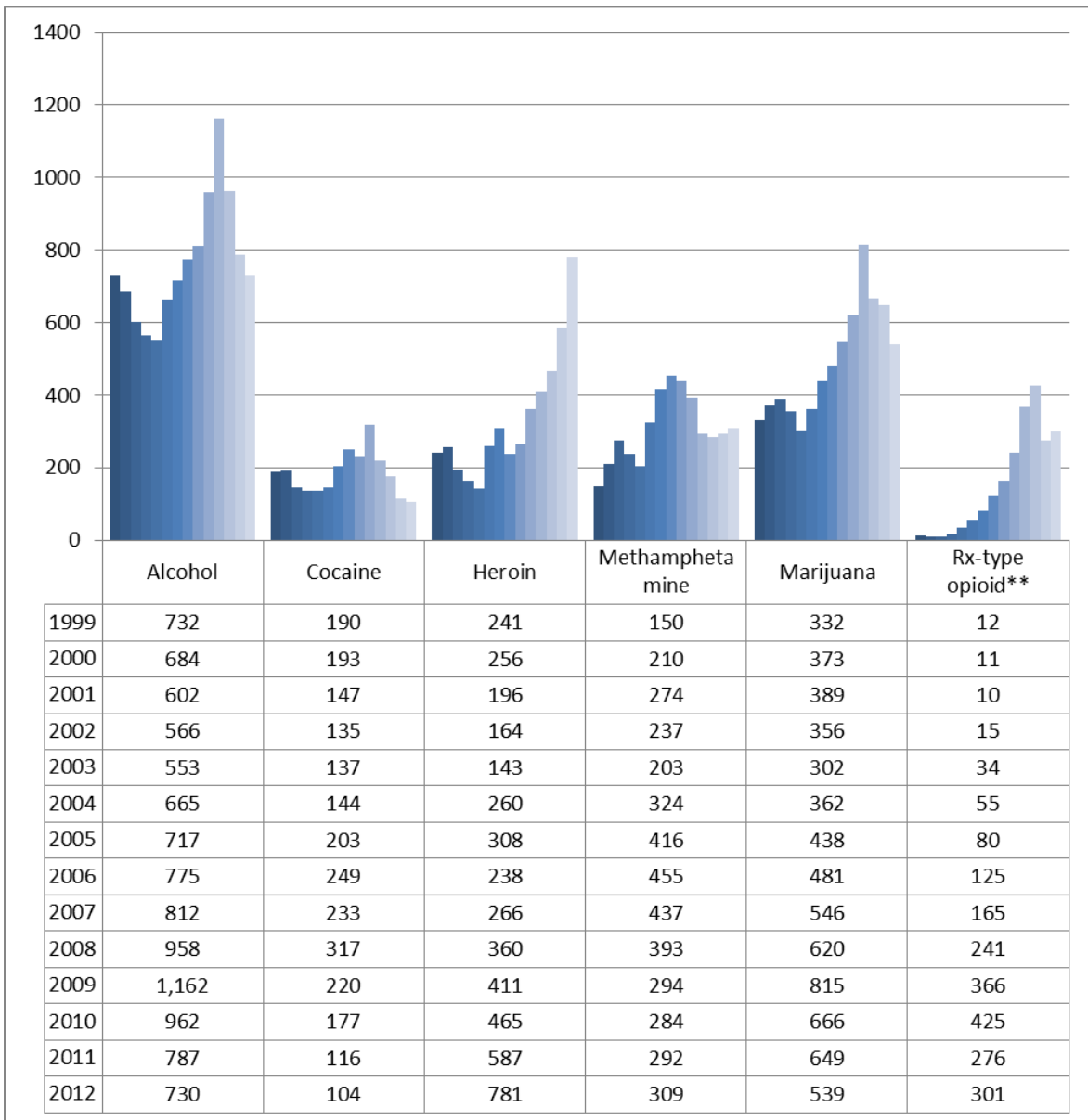
** Other drugs = hallucinogens, inhalants, PCP, benzodiazepines, tranquilizers, other sedatives, prescribed opiate substitute, other the counter

Exhibit 3a Treatment admissions, publicly funded, all modalities, duplicated, King County Residents, Primary Drug, All ages



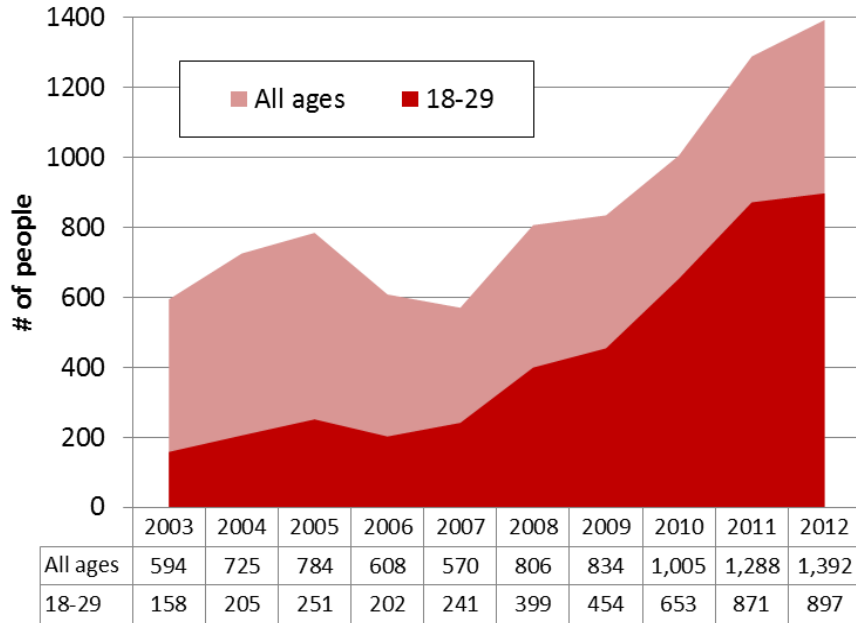
Source: WA Division of Behavioral Health and Recovery

Exhibit 3b Treatment admissions, publicly funded, all modalities, duplicated, King County Residents, Primary Drug, Ages 18-29



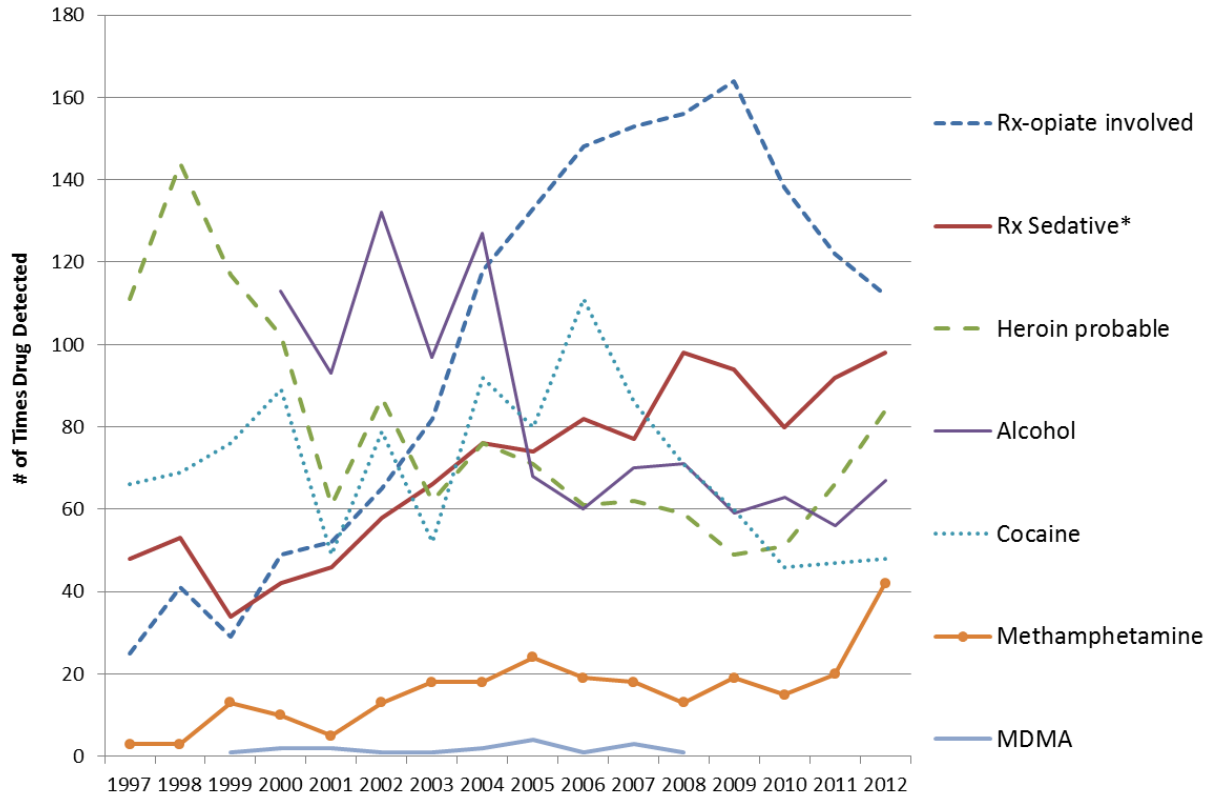
Source: WA Division of Behavioral Health and Recovery

Exhibit 4 Treatment admission for a primary heroin problem, first time admissions for any, All of Washington State



Source: WA Division of Behavioral Health and Recovery

Exhibit 5 Drug caused deaths in King County, WA



# of times drug identified	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
Rx-opiate involved	25	41	29	49	52	65	82	118	133	148	153	156	164	138	122	112	1587
Rx Sedative*	48	53	34	42	46	58	66	76	74	82	77	98	94	80	92	98	1118
Heroin probable	111	144	117	102	61	87	62	76	71	61	62	59	49	51	66	84	1263
Alcohol				113	93	132	97	127	68	60	70	71	59	63	56	67	1134
Cocaine	66	69	76	89	49	79	52	92	80	111	86	71	60	46	47	48	1121
Methamphetamine	3	3	13	10	5	13	18	18	24	19	18	13	19	15	20	42	253
MDMA			1	2	2	1	1	2	4	1	3	1		2			20
TOTAL # DEATHS	179	222	205	217	150	195	186	253	240	286	274	258	254	244	231	274	3668

Source: Public Health- Seattle & King County, King County Medical Examiner

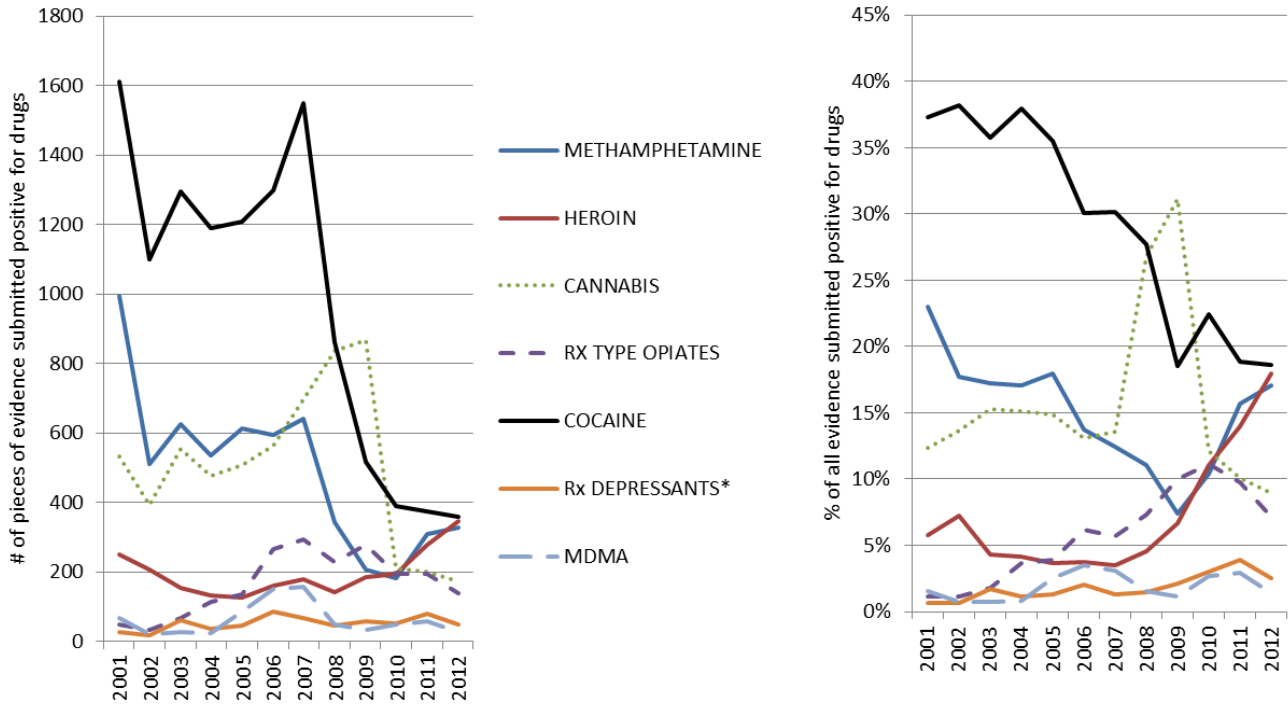
*Benzodiazepine, Barbiturates, Muscle relaxants, GHB, Tri-cyclic anti-depressants

Exhibit 6 Law enforcement evidence seized in King County, WA by Federal, State or Local law enforcement

Drug	2009	2010	2011	2012	Category
COCAINE	644	429	405	421	
METHAMPHETAMINE	332	261	325	422	
HEROIN	239	232	310	430	
CANNABIS	927	224	272	192	
MDMA	81	57	82	22	
PHENCYCLIDINE (PCP)	24	19	19	24	
PSILOCYBINE (Psychedelic mushroom)	3	5	15	10	
PSILOCIN (Psychedelic mushroom)	16	9	7	5	
N-BENZYLPIPERAZINE (BZP)	62	15	15	26	Sold as MDMA
TFMPP	27	6	7	7	Sold as MDMA
ALPRAZOLAM	26	28	30	23	Benzodiazepine
CLONAZEPAM	16	13	17	13	Benzodiazepine
DIAZEPAM	8	5	10	2	Benzodiazepine
LORAZEPAM		4	8		Benzodiazepine
SYNTHETIC CANNABINOID			8		Cannabinoid homolog
AM-1220				1	Cannabinoid homolog
AM-2201			4	10	Cannabinoid homolog
MAM-2201				7	Cannabinoid homolog
JWH-018			1	1	Cannabinoid homolog
JWH-122			1	1	Cannabinoid homolog
JWH-250			1		Cannabinoid homolog
OXYCODONE	184	149	114	91	Rx Opiate
METHADONE	23	11	28	21	Rx Opiate
HYDROCODONE	32	30	27	15	Rx Opiate
BUPRENORPHINE	39	33	25	15	Rx Opiate
FENTANYL		8	10	41	Rx Opiate
HYDROMORPHONE		2	7	3	Rx Opiate
MORPHINE	7	8	7	11	Rx Opiate
CODEINE	6	4	3	4	Rx Opiate
OXYMORPHONE	1		3	1	Rx Opiate
TESTOSTERONE	1		2	7	Steroid
MESTEROLONE	1				Steroid
METHANDROSTENOLONE (METHANDIENONE)	1				Steroid
OXYMETHOLONE		1			Steroid
STANOZOLOL	1			1	Steroid
METHYLONE			4		Substituted Cathinone
METHYLENEDIOXYPYROVALERONE (MDPV)			2	3	Substituted Cathinone
OTHER	421	171	209	435	
TOTAL (Excluding "unknown")	3122	1724	1978	2091	

Source: DEA National Forensic Laboratory Information System. Federal, state and local lab data.

Exhibit 7 Law enforcement evidence seized in King County, WA by State or Local law enforcement



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
METHAMPHETAMINE	995	511	625	536	612	594	640	344	207	182	310	329	5885
HEROIN	250	208	155	131	126	160	180	143	186	193	277	346	2355
CANNABIS	532	394	555	476	506	563	698	835	868	211	200	173	6011
RX TYPE OPIATES	48	32	66	114	134	267	292	227	278	194	193	138	1983
COCAINE	1612	1100	1295	1191	1208	1298	1549	862	516	391	374	358	11754
Rx DEPRESSANTS*	28	19	62	37	45	87	66	45	58	53	78	49	627
MDMA	68	22	27	25	87	152	158	48	32	47	58	27	751
Other Drugs	787	595	839	632	688	1192	1555	610	642	472	490	506	9008
TOTAL	4320	2881	3624	3142	3406	4313	5138	3114	2787	1743	1980	1926	38374

*Rx depressants includes: Benzodizepines, Barbiturates, Muscle Relaxants, GHB, and Zolpidem

Source: WA State Patrol Forensic Laboratory Services Bureau

Exhibit 8 Demographic characteristics of King County residents diagnosed with HIV 1982-2012 and reported through 12/31/2012, by date of HIV diagnosis

	1982-2003		2004-2006		2007-2009		2010-2012 ¹		Trend ²
	No.	%	No.	%	No.	%	No.	%	2004-2012
TOTAL	9,102	100%	972	100%	942	100%	893	100%	
HIV Exposure Category									
Men who have sex with men (MSM)	6,648	76%	602	70%	595	74%	593	77%	up
Injection drug user (IDU)	525	6%	53	6%	32	4%	35	5%	
MSM-IDU	924	11%	90	10%	68	8%	72	9%	
Heterosexual contact ³	572	7%	113	13%	106	13%	63	8%	down
Blood product exposure	97	1%	1	0%	1	0%	0	0%	
Perinatal exposure	27	0%	1	0%	5	1%	6	1%	
SUBTOTAL- known risk	8,793		860		807		769		
Undetermined/other ⁴	309	3%	112	12%	135	14%	124	14%	

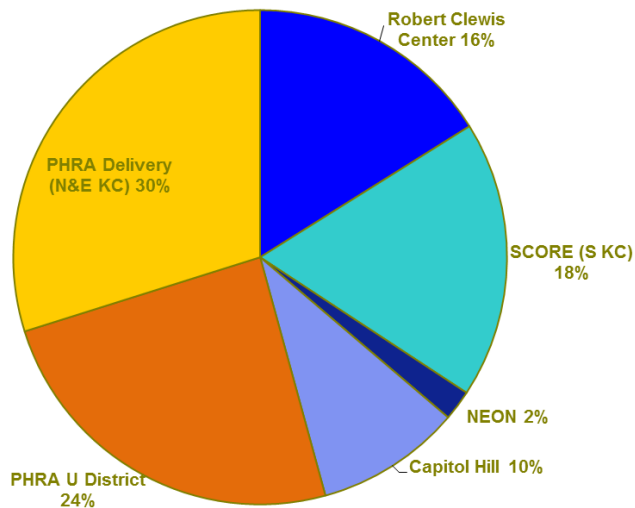
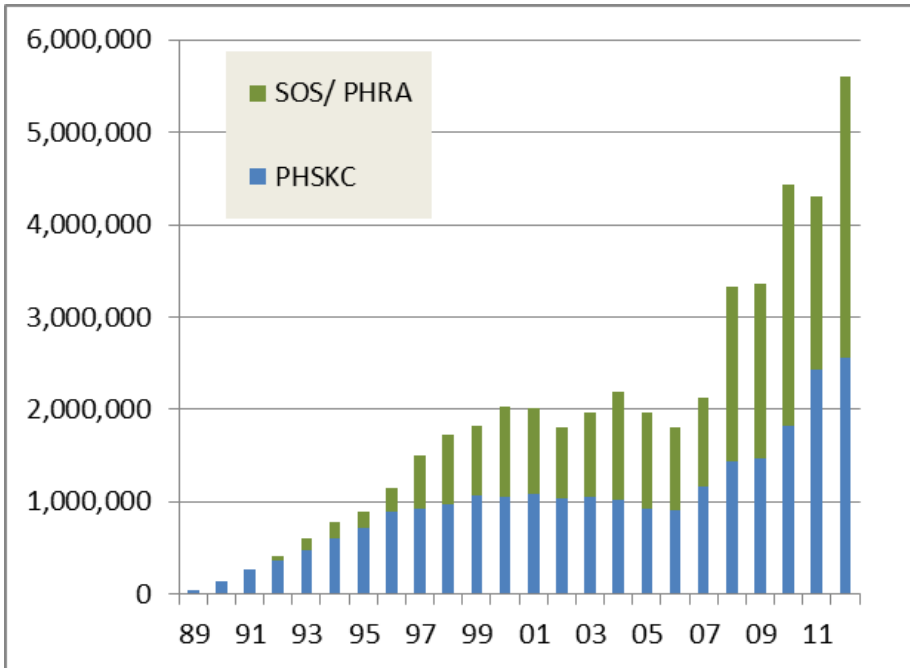
1. Due to delays in reporting, data from recent years are incomplete.

2. Chi-square statistical trends in proportions ($p < .05$) were calculated for cases with known characteristics for the periods 2004-06, 2007-09, and 2010-12.

3. Includes presumed heterosexual cases (females who deny injection drug use but have sex with men not known to be HIV-infected).

4. Includes persons for whom exposure information is incomplete (due to death, refusal to be interviewed, or loss to follow-up), persons exposed to HIV through their occupation, and patients whose mode of exposure remains undetermined.

Exhibit 9 Syringes distributed in King County



SOS= Street Outreach Services
 PHRA= Peoples Harm Reduction Alliance
 Source: Public Health- Seattle & King County (PHSKC)