

Drug Abuse Trends in the Seattle/King County Area: 2011

Caleb Banta-Green¹, T. Ron Jackson², Steve Freng³, Michael Hanrahan⁴, Geoff Miller⁸, Steve Reid⁶, John Ohta⁶, Mary Taylor⁷, Richard Harruff⁸, David Albert⁹ and Robyn Smith¹⁰

INTRODUCTION

Cocaine indicators are down consistently and substantially over the past several years including deaths, treatment admissions and Help Line calls. The reasons for this decline are unknown, though may have to do in part with decreased availability due to growing and distribution issues. First time **heroin** treatment admissions are up, particularly for young adults ages 18-29, with a faster rate of growth outside of King County. **Prescription-type opiate** involved deaths declined for the second year, treatment admissions declined for the first time. The waitlist for opiate substitution treatment increased after a few years of decline. **Methamphetamine** abuse and indicators appear to have plateaued at a somewhat lower rate than the peak several years ago. **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. **MDMA** indicators remain low. **Cannabinoid homologs** (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; utilization of syringe exchange is extremely high with over 4,000,000 **syringes** distributed in 2011.

Data Sources

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

- **Help Line** data for the second half of 2011 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 Help Line and data are not directly comparable to data from prior years. Percentages reported exclude cigarettes and alcohol from the denominator (Exhibit 1).
- **Drug trafficking data** were obtained from the Drug Enforcement Administration (DEA) Seattle Field Division Quarterly Trends in the Traffic Reports. Domestic

¹The author is affiliated with the Alcohol and Drug Abuse Institute, University of Washington.

²The author is affiliated with Evergreen Treatment Services.

³The author is affiliated with the Northwest High Intensity Drug Trafficking Area.

⁴The author is affiliated HIV/AIDS Epidemiology, Public Health – Seattle and King County.

⁵The author is affiliated with the Washington State Patrol Crime Laboratory.

⁶The author is affiliated with the Ryther Child Center and the University District Youth Center.

⁷The author is affiliated with the King County Drug Courts.

⁸The author is affiliated with the Seattle and King County Medical Examiner's Office, Public Health.

⁹The author is affiliated with the Division of Behavioral Health and Recovery, Washington State Department of Social and Health Services.

¹⁰The author is affiliated with the Washington Recovery Help Line.

Monitoring Program (DMP) heroin purchase data (edited versions) were also utilized. Data were also obtained from the Threat Assessment Report produced by the Northwest High Intensity Drug Trafficking Area (NW HIDTA) program, which included survey data from local law enforcement throughout the State of Washington. DEA STRIDE data for Washington state for heroin purity are reported (Exhibit 2).

- **Ambulance data on non-fatal opioid overdoses** were obtained from the Seattle Fire Department's Medic 1 unit for every other month in 2011 for cases in the City of Seattle (Exhibit 3).
- **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 2011. Treatment modalities included outpatient, intensive inpatient, recovery house, long-term residential, and opiate substitution admissions. As opposed to prior reports, non-publicly funded admissions, mostly methadone maintenance treatment were not included due to changes in state requirements for MMT to report to the TARGET system, resulting in under-reporting the prior few years. (Exhibit 4). Prescription monitoring program data provide a count of the number of people receiving medication assisted treatment with buprenorphine. A separate analysis was conducted to look at first time admissions to treatment, these analyses used fiscal year data June-July. Data are for those who had never entered publicly funded treatment in WA State before and whose primary drug was reported to be heroin (Exhibit 5). A waiting list for opiate substitution treatment is managed by Public Health- Seattle and King County (Exhibit 6).
- **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 (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 7).
- **Data on seized drug samples submitted for analysis** were obtained from the National Forensic Laboratory Information System (NFLIS), DEA for 2009-2011. 2011 data are considered preliminary. Data reported differ somewhat in their inclusion criteria from that in prior CEWG reports, therefore data from this report should not be directly compared with prior reports. Drug testing results for local, State and Federal law enforcement seizures in King County were reported. A Washington State Patrol Crime Laboratory chemist provided qualitative impressions of drug seizure evidence tested e.g. OxyContin® old versus new formulation. These analytical tests are the basis of NFLIS data (Exhibit 8).
- **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 2011) were obtained from the "HIV/AIDS Epidemiology Report." Data for the number of syringes exchanged/distributed were also provided by PHSKC (Exhibits 9 and 10).

DRUG ABUSE PATTERNS AND TRENDS

Cocaine

Cocaine involved deaths are down substantially with 47 in 2011 compared to the peak of 111 in 2006. In 2011, 24 decedents were age 50, or over a similar proportion as in 2006; cocaine deaths declined across all age groups. Other drugs were often involved in deaths. Other opiates were the most common substance also present in 38% of deaths, compared to 17% with benzodiazepines, 15% with alcohol, 26% with heroin and 0% with methamphetamine.

Help Line calls about cocaine represented 12% of calls, 6th place out of drugs reported. Though not directly comparable with older data, it appears that the number and proportion of calls for cocaine peaked in 2006 and has steadily declined since.

Drug treatment admissions for cocaine as the primary drug have decreased substantially in recent years, while other major drugs of abuse have remained flat, except for alcohol admissions which have also declined. In 2011 there were 934 cocaine primary admissions, half the level of 2008. The decline in admissions is evident across all age groups. Those ages 40 and older remain the largest group entering treatment in 2011.

Cocaine was the most common drug detected in law enforcement evidence in 2011 with 405 of 1,978 reports. This appears similar to 2010 and lower than in 2009.

Heroin

Serious opiate overdoses to which the Seattle Fire Department Medic1 responded were determined to involve heroin in 43% of cases of which 6% also involved a prescription-type opiate; an average of 45 cases per month in 2011 involved opiates of any kind. Median age was 33, mean was 38, younger than for prescription-type-opiate involved cases. Other abuse-able drugs were noted in 44% of cases as being consumed or at the scene of the overdose. Paramedics administered naloxone (opiate antidote) in 65% of cases.

Heroin involved drug deaths increased slightly in 2011, the only drug category to increase last year with a total of 66 heroin-probable involved deaths compared to 51 in the prior year. The number is far smaller than the total of 144 heroin-probably involved deaths in 1998, but other indicators suggest that the number of heroin users may be higher and it is possible that the lower level of deaths is more closely linked to the substantially lower purity heroin (see below for details) than the number of users. A total of 21 heroin-probable involved decedents were age 30 or younger, the largest number and percentage (32%) since 2000. Alcohol and benzodiazepines were the most common drugs detected in heroin-probable involved deaths with each involved in 16 (24%) of deaths, followed by cocaine in 18%, other opiates in 17%, and methamphetamine in 3%.

Heroin purity appears to have been generally declining since 1994 when the STRIDE data indicate a median purity of 31% and a mean of 39%. Preliminary data for 2011 indicate a median purity of 5% and a mean of 10%, similar to the prior three years. The mean value is consistently higher than the median value meaning the data are skewed. Specifically this means that some heroin samples are much higher purity than the average; for example, in 2011 the maximum purity was 43%, fourfold higher than the mean purity. This range in purity represents a significant risk for drug overdose. Local domestic monitoring program data indicate a similar low mean and median purity for heroin: of note, a significant minority of cases tested are also positive for another opiate that is biologically active (6-monoacetylmorphine) so the effective purity in terms of total opiate impact is higher than that when just heroin purity is reported.

The total number of heroin treatment admissions has remained relatively flat from 1999 to 2011, though the number of admissions per year is heavily impacted by treatment capacity changes, most notably methadone maintenance treatment. While the main trend in heroin treatment admissions used to be an aging cohort, there appears to be a young replacement cohort. In 2011, of 1,523 treatment admissions 582 were ages 18-29 and 597 were 40 or older. A separate analysis was conducted to look at first time admissions to treatment, these analyses used fiscal year data (June-July) as opposed to calendar year data above. Data are for those who had never before entered publicly funded treatment in WA State and whose primary drug was reported to be heroin. King County total admissions show no obvious patterns; however for those ages 18-29 the number of treatment admissions was much higher in fiscal years 2009 through 2011 than in previous years. State totals indicate a similar temporal pattern with a recent and substantial increase in young adult admissions, with 820 of 1,295 first-time admissions in fiscal year 2011 for those ages 18-29. These data indicate that there is a substantial growth in young adult treatment admissions in Washington State and the rate of growth is higher outside of King County. See the prescription-type opiates section for a discussion of buprenorphine/Suboxone treatment. The waitlist for opiate substitution treatment increased after a few years of decline.

Heroin was mentioned as the drug of concern by 23% of callers to the Help Line, the highest proportion for any drug and a higher proportion than in previous years.

Evidence submitted by law enforcement has increasingly tested positive for heroin in recent years according to WA State Patrol Crime Lab chemists and in 2011 there 310 reports for heroin up from 232 and 239 in 2010 and 2009 respectively. Despite some rumors on the street, to date no single piece of evidence has tested positive for both heroin and fentanyl.

Prescription-type opiates

Non-fatal overdoses to which Seattle Fire Department responded that involved prescription-type opiates in 2011 represented 42% of cases of which 6% also involved heroin (opiate type was not documented in 15% of cases). On average they were older than heroin involved cases with a median age of 41 and a mean of 43. Most, 63%, were male. Other abuse-able drugs were explicitly noted in 44% of cases. Naloxone (opiate

antidote) was administered by paramedics in 42% of cases. An average of 45 cases per month were determined to be overdoses involving some form of opiate.

Deaths involving prescription-type opiates declined for the second year in a row to 120 deaths from a peak of 161 in 2009. Deaths are down for all age groups, though those over 50 still represent the largest group. In 2011 benzodiazepines were the most common drug detected concurrent to prescription-type opiates, being present in 42% of deaths involving prescription-type opiates. Alcohol was present in 18%, cocaine in 15%, heroin-probable in 9% and methamphetamine in 4%.

Callers to the Help Line indicated prescription-type opiates were an issue in 16% of calls, a much lower proportion than in recent years.

Treatment admissions for primary prescription-type opiate abuse declined in 2011 for the first time, after many years of substantial increases. The largest group of admissions are for young adults with 311 ages 18-29 out of 656 total admissions; the majority are female as opposed to all other drug categories. Treatment data for buprenorphine/Suboxone are severely limited because most treatment is not paid for with public funds and therefore information on the majority (estimated to be at least 90%) of people using this form of medication assisted treatment is not tracked by state data systems. However, limited, aggregated data from the newly implemented prescription drug monitoring program can be obtained. To determine the scale of treatment admissions the number of unique persons on buprenorphine during March of 2012 were obtained. For those ages 18-29, there were 2,189 clients. Unknown is what are the opioids of choice (heroin and/or pharmaceuticals) and whether they are injection drug users.

Positive tests for prescription-type-opiates in law enforcement evidence appear to have declined somewhat in 2011 with a total of 224, down from 292 in 2009. Oxycodone is by far the most common type of opioid detected. According to a crime lab chemist they still see a mix of old and new form OxyContin® (oxycodone is the generic drug which is reported to NFLIS). In April 2012 police arrested two men in Seattle and found large quantities of fentanyl powder as well as other drugs, cash and weapons.

Methamphetamine

Deaths involving methamphetamine totaled 20 in 2011, a similar level seen since 2002. Methamphetamine involved deaths were relatively evenly spread across age groups with no notable trends over time. Methamphetamine was more often the only drug involved in deaths compared to other substances which more often had co-ingestants identified. Other drugs most commonly identified include prescription-type-opiates in 25%, benzodiazepines in 15%, with alcohol and heroin-probable in 10% of cases and 0% with cocaine.

The number of admissions to treatment for a primary methamphetamine problem has held steady the past three years at approximately 800 per year, somewhat lower than the peak of approximately 1,000 per year from 2005-2008. The ages of methamphetamine users entering treatment are fairly well spread across the age span with approximately

equal numbers 18-29, 30-39 and 40 and older, much younger than cocaine users as a comparator.

Methamphetamine represented the drug of concern for 14% of Help Line callers, somewhat higher than prior years.

Methamphetamine has been the second most commonly detected drug in law enforcement evidence from King County over the past three years.

Marijuana

Treatment admissions for marijuana were down slightly in 2011 to 1,944 compared to the peak of 2,183 in 2009. Almost half of admissions were among those under 18 years of age. Three-quarters of admissions were for males, a far larger proportion than any other substance.

The NW HIDTA Threat Assessment reports that large indoor grow operations for marijuana persist in western Washington and outdoor grows are prevalent in eastern Washington.

Marijuana evidence submitted by law enforcement for testing has declined steeply from the 927 reports in 2009 to 224 in 2010 and 272 in 2011.

Marijuana was mentioned by 16% of Help Line callers, similar to prior years.

Other drugs of abuse

Among Help Line callers there were low levels of calls for other drugs including: 21 calls (2%) for synthetic stimulants such as synthetic-cathinones and 5 calls (0.4%) for cannabinoid homologs. Synthetic-cathinones (colloquially called “Bath Salts”, which they are not) were detected in 6 pieces of law enforcement evidence in 2011, not having been reported previously which may be due to prior testing limitations. Cannabinoid homologs (e.g. Spice, K2) were detected in 15 pieces of evidence in 2011, recent improvements for testing these compounds have been implemented. Other quantifiable data on these compounds are difficult to obtain.

Less than one percent of treatment admissions from 1999 to 2011 were for prescription-type-sedatives. There have been slow, steady increases, but the absolute numbers are small. Such drugs are more likely a secondary or tertiary drug of abuse and often used in combination with other drugs. Benzodiazepines were detected in 65 pieces of law enforcement evidence in 2011, similar to prior years.

PCP is uncommon as a primary drug of abuse at treatment entry with just 33 admissions in 2011, similar to the prior 3 years and up somewhat from earlier years. The 19 pieces of law enforcement evidence testing positive for PCP in 2011 are typical of prior years.

No drug caused deaths were found to involve MDMA in 2011 after two such deaths in 2010. MDMA was present in 82 pieces of law enforcement evidence in 2011, similar to

prior years. Two compounds often in tablets sold as MDMA, but which seldom contain MDMA, are BZP and TFMPP. The presence of both of these compounds in law enforcement evidence has declined over the past three years parallel to Canadian regulatory changes restricting access to these compounds.

INFECTIOUS DISEASES RELATED TO DRUG USE

HIV

For the period 2009-2011 the categories of MSM-IDU and IDU combined to account for 12% of new HIV infections. There were no significant changes for either category for the period 2003-1022. Utilization of syringe exchange is extremely high with over 4,000,000 syringes distributed in 2011.

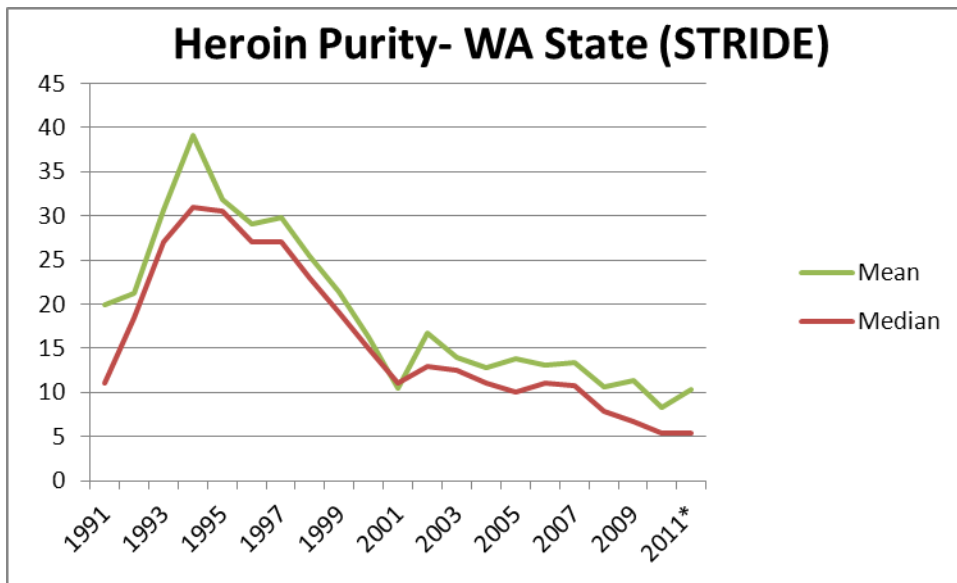
For inquiries concerning this report, contact Caleb Banta-Green, M.S.W., M.P.H, Ph.D., Alcohol and Drug Abuse Institute, University of Washington, 1107 N.E. 45th Street, Suite 120, Seattle, WA 98105, Phone: 206-685-3919, Fax: 206-543-5473, E-mail: calebbg@u.washington.edu

Exhibit 1. King County Callers to Help Line

	Second Half 2011	
	TOTAL	% of drugs
Heroin	277	23%
Rx Pain Pills	197	16%
Marijuana	195	16%
Methamphetamine	174	14%
Other Rx	157	13%
Cocaine	151	12%
Cocaine Syn (synthetic stimulants e.g. bath salts)	21	2%
AntiDepressants	17	1%
OTC	15	1%
Inhalants	9	1%
Marijuana Syn (e.g. K2, spice)	5	0%
Total	1218	221%

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

Exhibit 2. Purity of Heroin tested by DEA and reported in the STRIDE system for seizures/evidence collected in WA State



*Data for 2011 are preliminary

Exhibit 3. Seattle Medic One, Serious Opiate Overdoses in sample of 2011 cases*

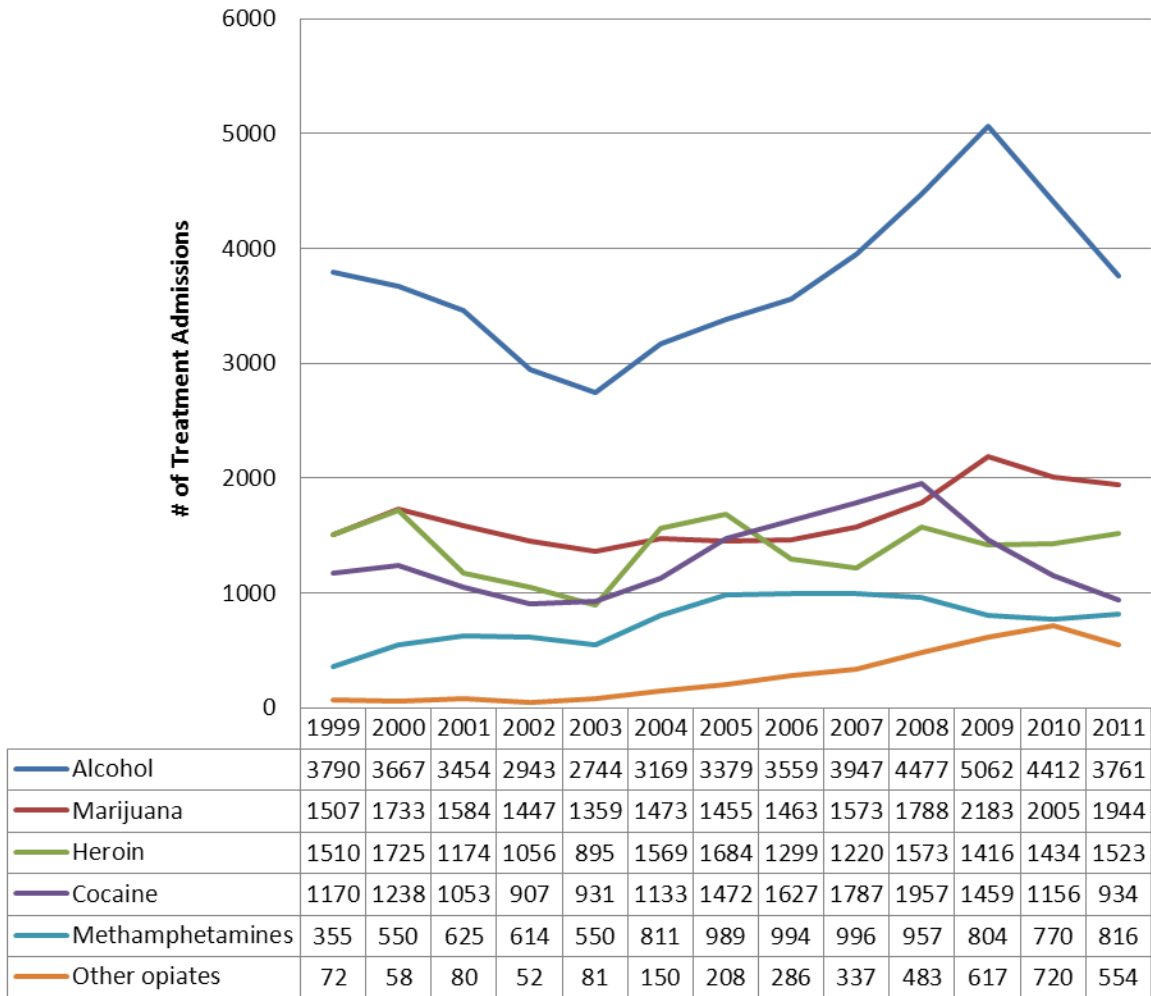
Serious opiate overdoses (n=268)**			
	n	mean	median
Age	258	41.1	40 (range 18-90)
	n	#	%
Gender	267		
Male		194	72.7
Female		73	27.2
Type of opiate involved	268		
Not documented		40	14.9%
Heroin only		100	37.3%
Rx opiates only		112	41.8%
Heroin + Rx opiates		16	6.0%
Other abuse-able drug involved***	268		
Suspected/med list/history		110	41.0%
Not documented		158	59.0%
Narcan administered (paramedic)	267		
Yes		145	54.3%
No		122	45.7%
Narcan administered (bystander)	268		
Yes		2	0.7%
Not documented		264	98.5%

*Cases pulled for Feb/Apr/Jun/Aug/Oct/Dec 2011

**Incident reports initially screened by Medic One staff, subsequently screened for opioid involvement and abstracted by UW staff

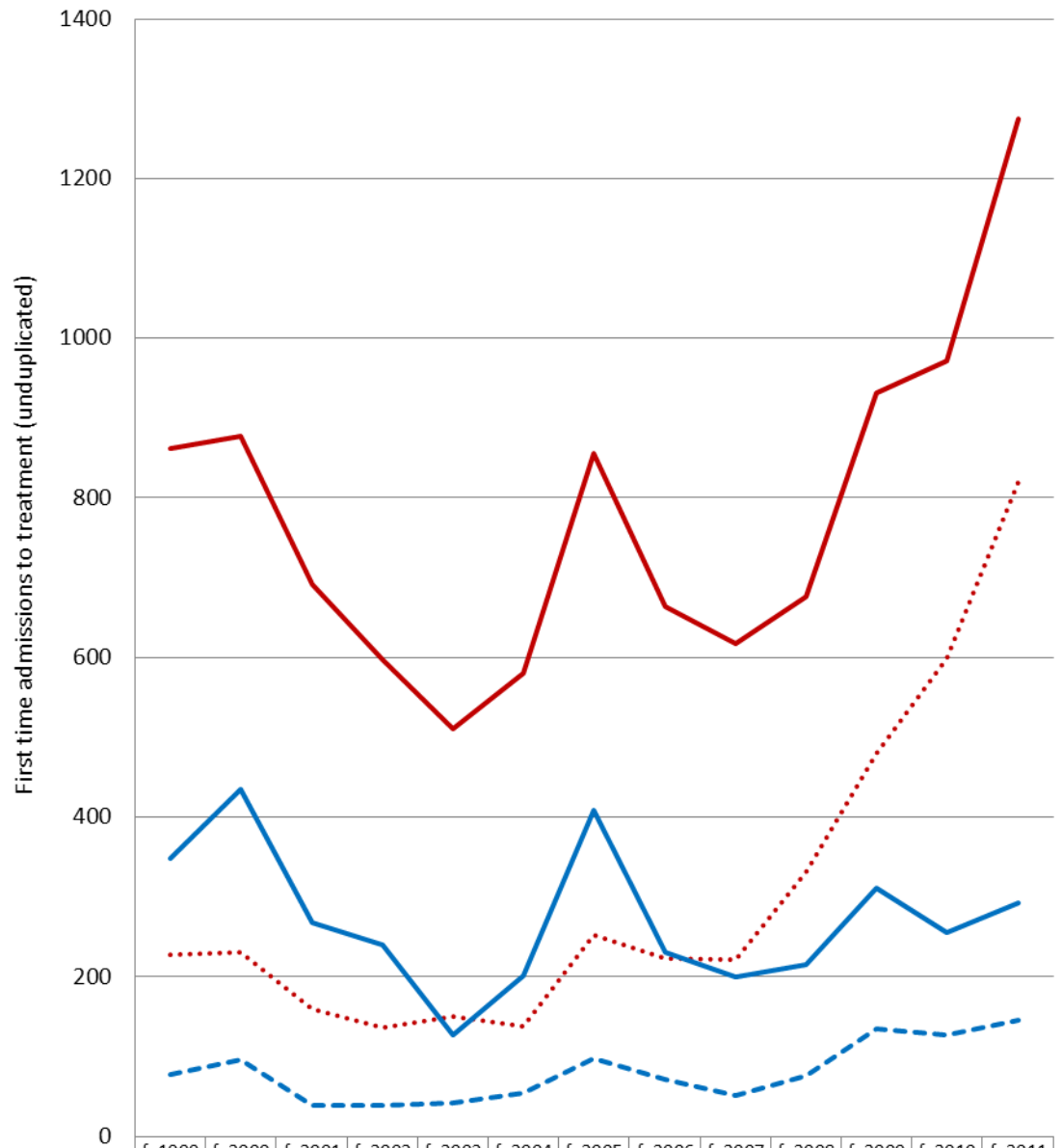
***One or more of the following is involved: alcohol, cocaine, amphetamine, benzodiazepine, muscle relaxant

Exhibit 4. Treatment admissions, publicly funded, all modalities, duplicated, King County Residents, Primary Drug



Source: WA Division of Behavioral Health and Recovery

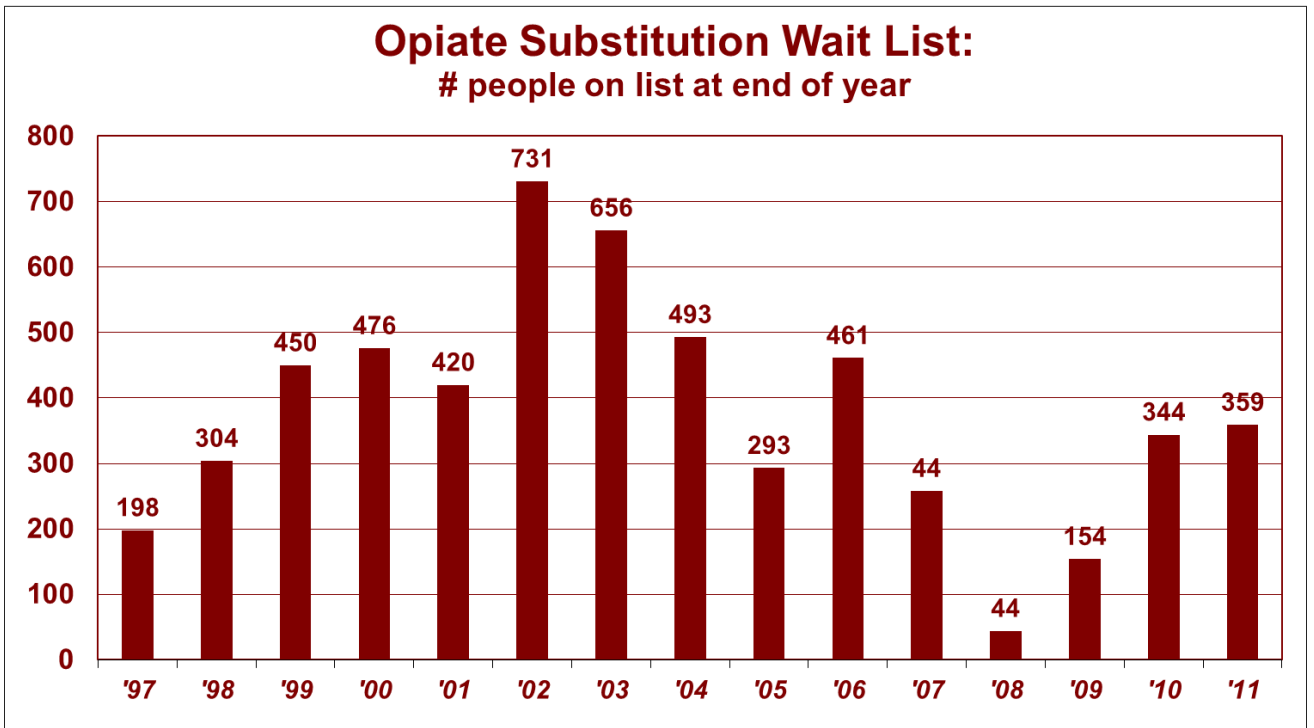
Exhibit 5. Treatment admission for a primary heroin problem, first time admissions for any drug to publicly funded treatment, all modalities of care



	fy1999	fy2000	fy2001	fy2002	fy2003	fy2004	fy2005	fy2006	fy2007	fy2008	fy2009	fy2010	fy2011
— WA State Total	862	878	691	597	511	580	856	664	617	676	932	971	1275
..... WA State ages 18-29	227	230	159	137	150	138	252	223	221	332	479	599	820
— King County Total	349	435	268	240	127	202	409	231	199	216	311	255	293
- - - King County ages 18-29	77	96	39	39	42	55	98	71	52	76	135	127	145

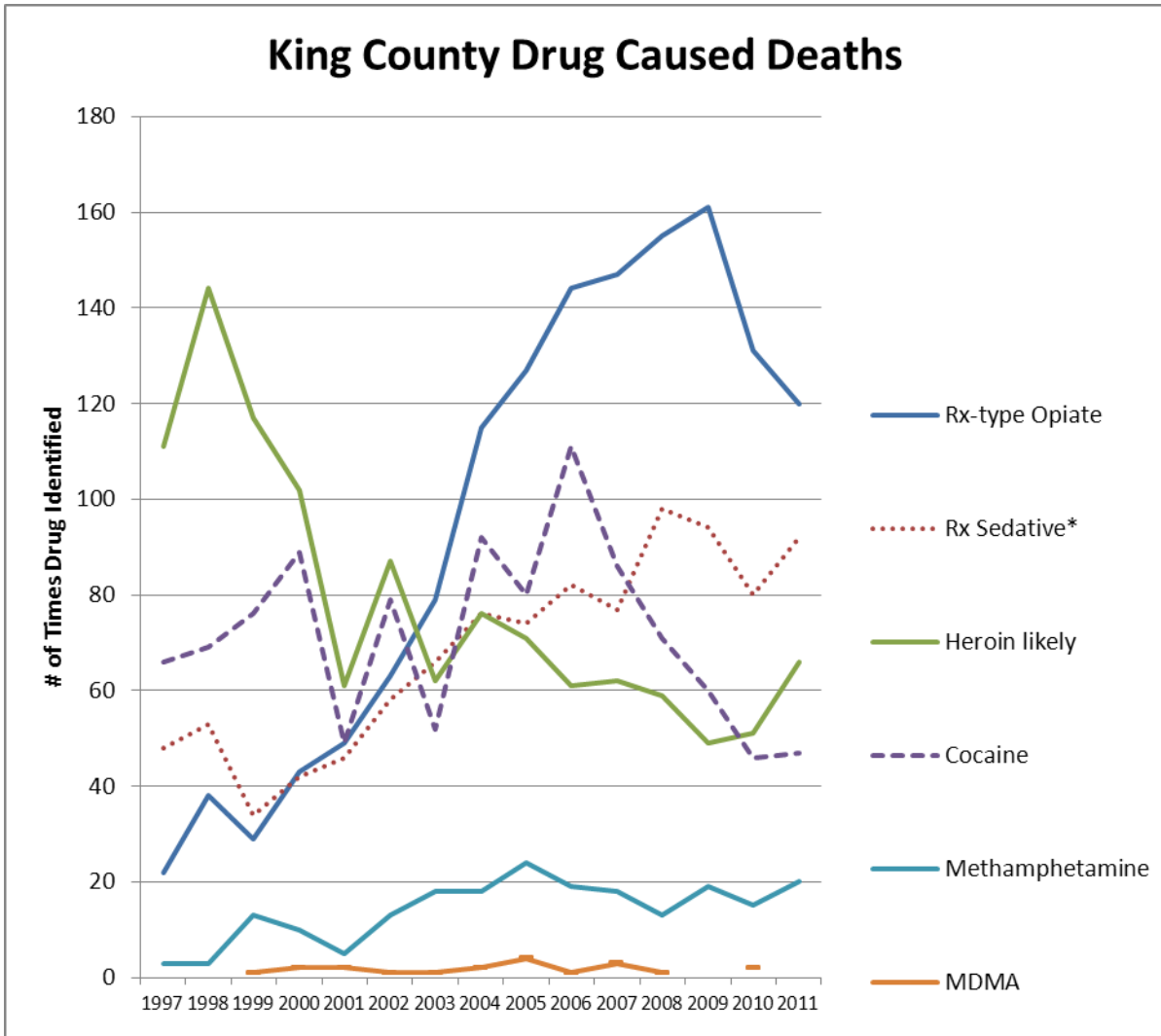
Source: WA Division of Behavioral Health and Recovery

Exhibit 6. Opiate substitution wait list managed by Public Health- Seattle and King County's Syringe Exchange Program



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

Exhibit 7. Drug caused deaths in King County, WA



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Total
Rx-type Opiate	22	38	29	43	49	63	79	115	127	144	147	155	161	131	120	1423
Rx Sedative	48	53	34	42	46	58	66	76	74	82	77	98	94	80	92	1020
Heroin likely	111	144	117	102	61	87	62	76	71	61	62	59	49	51	66	1179
Cocaine	66	69	76	89	49	79	52	92	80	111	86	71	60	46	47	1073
Methamphetamine	3	3	13	10	5	13	18	18	24	19	18	13	19	15	20	211
MDMA			1	2	2	1	1	2	4	1	3	1		2		20
Total	179	222	205	220	152	195	186	253	240	286	274	258	255	245	231	3401

*Benzodiazepines, Barbiturates, Tricyclic antidepressants, muscle relaxants, GHB

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

Exhibit 8. Law enforcement evidence seized in King County, WA Results of chemical analysis

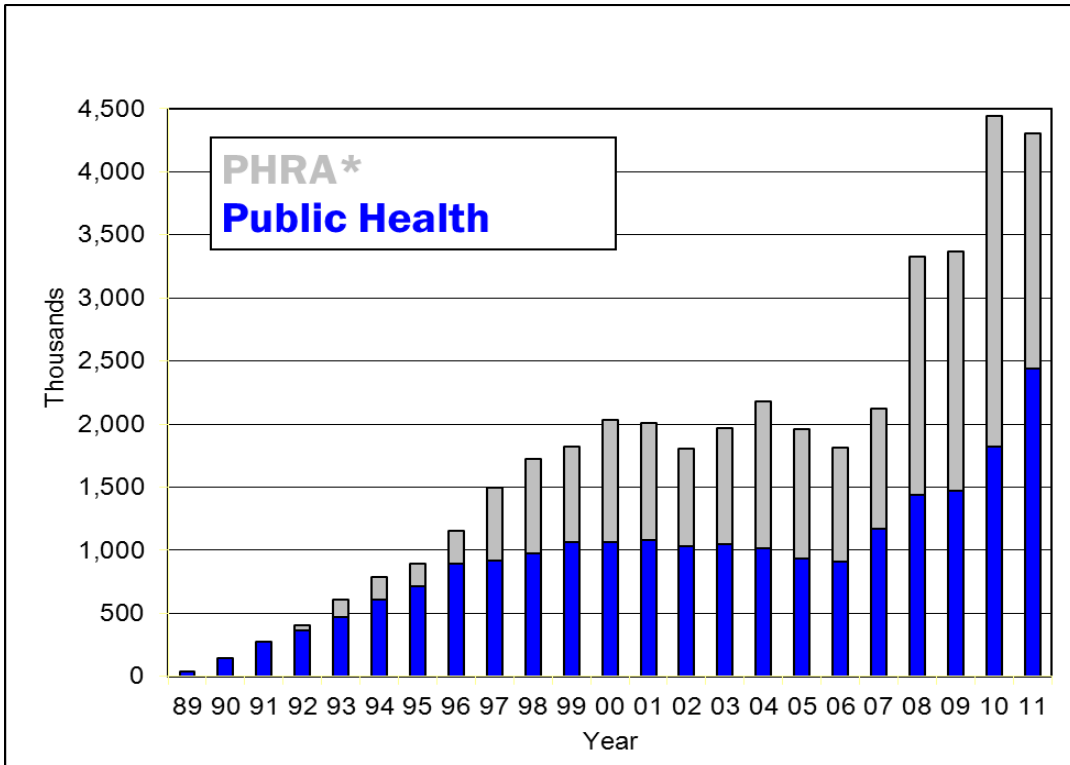
BaseDescription	2009	2010	2011	Category
COCAINE	644	429	405	
METHAMPHETAMINE	332	261	325	
HEROIN	239	232	310	
CANNABIS	927	224	272	
MDMA	81	57	82	
PHENCYCLIDINE (PCP)	24	19	19	
PSILOCYBINE (Psychedelic mushroom)	3	5	15	
PSILOCIN (Psychedelic mushroom)	16	9	7	
N-BENZYLPIPERAZINE (BZP)	62	15	15	Sold as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

Source: DEA National Forensic Laboratory Information System

Exhibit 9. Demographic characteristics of King County residents diagnosed 1982-2010 and reported through 12/31/2011, by date of HIV diagnosis

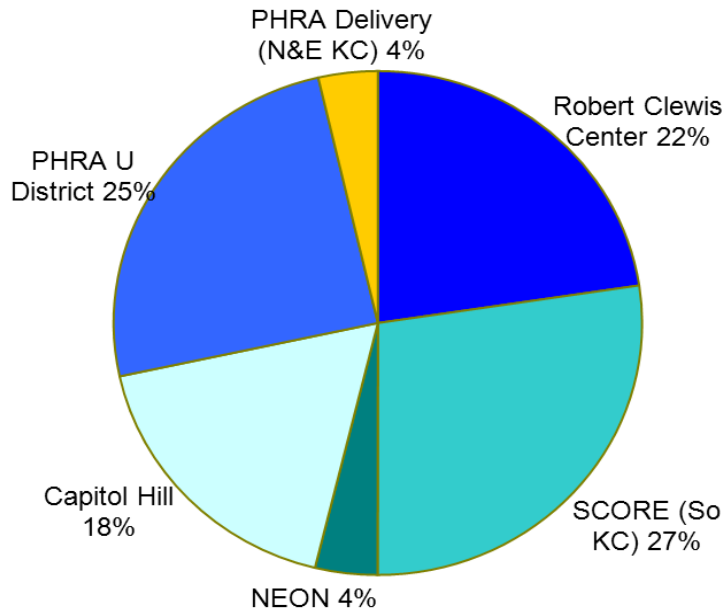
	1982-2002		2003-2005		2006-2008		2009-2011 ^a		Trend ^b
	No.	%	No.	%	No.	%	No.	%	2003-2011
TOTAL	8,773	100%	1,012	100%	951	100%	882	100%	
HIV Exposure Category									
Men who have sex with men (MSM)	6,424	76%	641	70%	589	73%	603	78%	up
Injection drug user (IDU)	509	6%	53	6%	39	5%	31	4%	
MSM-IDU	906	11%	80	9%	75	9%	62	8%	
Heterosexual contact ^c	524	6%	135	15%	104	13%	70	9%	down
Blood product exposure	96	1%	2	0%	1	0%	0	0%	
Perinatal exposure	27	0%	0	0%	3	0%	8	1%	
<i>SUBTOTAL- known risk</i>	<i>8,486</i>	<i>100%</i>	<i>911</i>	<i>100%</i>	<i>811</i>	<i>100%</i>	<i>774</i>	<i>100%</i>	
Undetermined/other ^d	287	3%	101	10%	140	15%	108	12%	N/A
Sex & Race/Ethnicity^e									
Male	8,164	93%	895	88%	828	87%	779	88%	
White Male	6,440	73%	564	56%	501	53%	492	56%	
Black Male	836	10%	155	15%	117	12%	102	12%	down
Hispanic Male	564	6%	111	11%	128	13%	125	14%	up
Other Male	324	4%	65	6%	82	9%	60	7%	
Female	609	7%	117	12%	133	14%	103	12%	
White Female	271	3%	28	3%	48	5%	31	4%	
Black Female	233	3%	70	7%	66	7%	56	6%	
Hispanic Female	42	0%	10	1%	7	1%	7	1%	
Other Female	63	1%	9	1%	12	1%	9	1%	
Place of Birth									
Born in U.S. or Territories	7,807	91%	757	77%	670	74%	643	76%	down
Born outside U.S.	744	9%	225	23%	238	26%	205	24%	up
<i>SUBTOTAL- known birthplace</i>	<i>8,551</i>	<i>100%</i>	<i>982</i>	<i>100%</i>	<i>908</i>	<i>100%</i>	<i>848</i>	<i>100%</i>	
Birthplace unknown	222	3%	30	3%	43	5%	34	4%	N/A
Age at diagnosis of HIV									
0-19 years	149	2%	8	1%	21	2%	26	3%	up
20-29 years	2,278	26%	206	20%	257	27%	250	28%	up
30-39 years	3,944	45%	428	42%	317	33%	264	30%	down
40-49 years	1,807	21%	283	28%	229	24%	209	24%	down
50-59 years	487	6%	73	7%	93	10%	108	12%	up
60+ years	108	1%	14	1%	34	4%	25	3%	up
Residence									
Seattle residence	7,497	85%	754	75%	691	73%	629	71%	down
King Co. residence outside Seattle	1,276	15%	258	25%	260	27%	253	29%	up

Exhibit 10. Syringes distributed in King County



*Peoples Harm Reduction Alliance

Syringe volume by site 2011



Sources: Public Health- Seattle & King County