Drug Abuse Trends in the Seattle/King County Area: 2009

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ABSTRACT

Cocaine persists as a major drug of abuse and is the second most common illegal drug detected in evidence from criminal cases in King County. Drug treatment admissions and fatal drug overdoses involving cocaine declined in 2009; however, the general perception is that use remains high in the area. Levamisole, a toxic adulterant, continues to be present in the majority of cocaine seized by law enforcement in the County. **Heroin** use also remains endemic in the county. Treatment admissions and overdoses involving heroin were down slightly in 2009 compared to 2008, and remain more common in Seattle compared to the rest of the county. Young adult use of heroin increased over the past decade. In 2009, 29% (n=471) of heroin users entering drug treatment were between the ages of 18 and 29, compared with 17% (n=326) in 1999. Heroin related treatment admissions to non-methadone maintenance treatment as well as calls to the Help Line increased at a faster rate outside of King County from 2005 to 2009. **Pharmaceutical opioid** (e.g. Vicodin, OxyContin, and methadone) use, misuse and abuse have increased substantially over the last decade and indicators suggest that some abusers are transitioning to heroin and that heroin use may be expanding across the State. The relative youth of those entering treatment is an indication of a young age of onset of use. In 1999 there were 14 (16%) treatment admissions for pharmaceutical opioids among those aged 18-29 and this increased to 451 (61%) in 2009. Pharmaceutical opioid involved drug caused deaths continued to increase in 2009 and are by far the most common substance identified in deaths; the vast majority, 83%, of deaths involved at least one additional drug. A substantial minority of heroin users (39%) reported they were "hooked on prescription-type opiates" before they began using heroin in a May 2009 syringe exchange survey in King County. **Marijuana** use and growing are prevalent throughout the county and state. Marijuana continues as the most common substance identified by youth entering drug treatment. Among adults, marijuana is now the third most common drug mentioned at treatment admission and the number of admissions has more than doubled over the past decade. **Methamphetamine** treatment admissions have remained essentially flat among adults since 2005, while they have declined substantially among youth since 2005. Fatalities involving methamphetamine totaled 18 in 2009, similar to recent years. **MDMA** use remains low; there were no fatalities in 2009. However, MDMA shipment through Washington from Canada is common with approximately 4,800,000 MDMA tablets seized in 2009. BZP and TFMPP remain common adulterants in MDMA tablets according to chemists at the Washington State Crime Laboratory. **HIV** diagnoses among those whose exposure category was injection drug use decreased significantly from 2001-2003 to 2007-2009.

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INTRODUCTION

Data Sources

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

- **Drug trafficking data** were obtained from the Drug Enforcement Administration (DEA). Seattle Field Division Quarterly Trends in the Traffic Reports. Domestic Monitoring Program (DMP) heroin purchase data (edited versions) were also utilized and data specific to Seattle were extracted and analyzed. 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.

- **Drug overdose data** were obtained from the King County Medical Examiner (KCME), Public Health – Seattle & King County. 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 is an indication that the death is "heroin related" in the KCME database.

- **Data on seized drug samples submitted for analysis** were obtained from the National Forensic Laboratory Information System (NFLIS), DEA. Drug testing results for local, State and Federal law enforcement seizures in King County are reported. Washington State Patrol Crime Laboratory chemists attended the local CEWG meeting and provided their qualitative impressions of drug seizure evidence they tested. These analytical tests are the basis of NFLIS data.

- **Emergency department (ED) drug report data** were obtained from the Drug Abuse Warning Network (DAWN) *Live!*, Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA), for January to June 2009. Data for the second half of 2009 are unavailable from SAMHSA. Data were accessed 12/10/2009. Data completeness was as follows: out of 25 eligible EDs, 14 to 19 of the EDs reported basically complete data (90 percent or greater) each month, and 3 to 7 reported no data.

- **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 2009. Treatment modalities included outpatient, intensive inpatient, recovery house, long-term residential, and opiate substitution admissions. Department of Corrections and private-pay admissions for opiate substitution were included.

- **Data on infectious diseases related to drug use and injection drug use (IDU)**, including the human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS), were provided by Public Health – Seattle & King County (PHSKC). Data on HIV cases (including exposure related to IDU) in Seattle/King County (2001 through 2009) were obtained from the "HIV/AIDS Epidemiology Report."

- **The Washington State Alcohol/Drug Help Line** provided data from 2001 through 2009. Data are separated by whether the call was about youth or adults. In 2009 the hours of operation of the Help Line were reduced substantially with a concomitant decrease in the number of calls.

- **Data on opioid overdose as well as syringe using characteristics were obtained by PHSKC** during the last week of April and first week of May of 2009 at King County syringe exchanges. Anonymous data were collected for program evaluation purposes. A total of 477 unduplicated surveys were analyzed.

King County population statistics

The total population of King County was 1,884,324 in 2008 of which 76% were white, 6% black, 1% American Indian/Alaskan Native, 13% Asian, 1% Pacific Islander and 3% multi-racial. Hispanic ethnicity was reported by 7% of the county's population. Data reported by region are based upon Public Health – Seattle & King

County's four region reporting system based upon 5-digit zip codes. The four regions are Seattle (population 556,124 in 2008), North (168,385), East (458,154) and South (707,678). The total population of the county increased 10% from 1999 to 2008.

Cocaine

Deaths involving cocaine continued to decline from a peak in 2006 (Exhibit 1), however cocaine is the most common illegal drug detected in deaths. African Americans are over represented in cocaine involved deaths (Exhibit 3). Those in their 40's are the largest group dying from drug overdoses involving cocaine (Exhibit 3). Since 1997 the number dying in their 30's has declined while the number dying who were age 50 and older has increased substantially (data not shown). Only one in four deaths with cocaine involves no other drug. The most commonly detected drugs in cocaine involved deaths include pharmaceutical opioids, heroin/opiate, and alcohol. Seattle has the highest rate of cocaine involved deaths; the eastern part of King County has the lowest rate.

Treatment admissions for which cocaine was the primary drug of choice were uncommon for youth (Exhibit 4). For adults they were the second most common substance following alcohol, which has been the case since 2006 (Exhibit 5). Overall there has been a substantial increase in cocaine admissions for adults from 1999 to 2009. In 2009, 37% of cocaine admissions were female, a decline in the proportion since 1999 (data not shown). While there has been a slight increase in the number of female cocaine admissions, the number of men has almost doubled. In 2009, 52% of cocaine treatment admissions were for blacks, which is disproportionate to the 6% of the County's population that is black, but similar to the proportion entering treatment over the prior decade. Those in their 40's represented 44% of admissions in 2009, with the trend over the past decade indicating an increasing age at admission. The rate of treatment admission for cocaine was by far the highest for Seattle residents; south county residents had half the rate of admissions and residents of other regions had far lower rates of treatment admission. Admission rates have remained low for north and east county residents, but have increased substantially for Seattle and south county residents over the past decade. Referrals to treatment from court/probation have consistently been the referral source for about 1 in 5 admissions since 1999.

Youth related calls to the Help Line for information or referral related to cocaine are uncommon and appear to have declined in recent years (Exhibit 8). For adults cocaine has consistently been a drug of concern with 8% of calls in 2009.

Changes in local law enforcement policies appear to have resulted in substantial declines in cocaine submissions for analytical testing. This is reflected in NFLIS data which show a substantial decline in the total number of pieces of evidence testing positive for any drug and a decline in positive tests for cocaine for evidence seized in King County from 2007 to 2009 (Exhibit 9).

Levamisole is an adulterant increasingly found in cocaine in the U.S... From April through November 2009, PHSKC investigated and reported on 10 cases of cocaine-associated agranulocytosis in King County. Local quantitative data are unavailable as the Washington State Patrol's Crime Lab does not document the presence of levamisole in cocaine, nor does it report it to the NFLIS system as it is not a controlled substance. However, according to chemists in the Seattle lab most cocaine tested that has been seized in King County does have levamisole in it. Cocaine was the most common drug detected in 2007 with more than double the number for marijuana, but by 2009 marijuana increased slightly and cocaine declined to well below the number for marijuana.

Cocaine was the most common illegal drug in DAWN Emergency Department (ED) reports in the first half of 2009 (Exhibit 10).

Heroin

Overdoses with heroin/opiates present continue to decline (Exhibit 1). Whites are somewhat over represented in deaths (Exhibit 3). Women make up 25% of heroin/opiate involved deaths (Exhibit 3) and while the number of women who have

died with heroin/opiate detected has remained virtually flat since 1997, the number of men has declined substantially (data not shown). The largest proportion of deaths among those under 30 involved heroin compared to the other drugs of abuse. Deaths rarely involved just heroin/opiate (14%) and the average number of drugs present was 2.7. The most common other drugs detected included cocaine, pharmaceutical opioids, SSRI anti-depressants, and alcohol. The heroin/opiate involved death rate was approximately three times higher in Seattle than in the three other regions of the county.

Heroin treatment admissions are largely to opiate substitution programs in King County. Treatment admissions tend to be for a year or more so average caseload is an important measure along with the number of admissions to treatment. The average caseload for King County residents in opiate substitution treatment was 2,903 for 2009 (data not shown). This compares with average caseloads of 2,146 in 2004 and 1,705 in 1999. These numbers also include the increasing number of people addicted to pharmaceutical opioids.

Youth treatment admissions to any modality for heroin remain uncommon (Exhibit 4). Adult admissions totaled 1,631 in 2009 (Exhibit 5) with annual numbers of admissions fluctuating substantially due to large changes in capacity when a new opiate substitution treatment clinic opens. No obvious trends in admissions for heroin since 1999 in terms of total numbers are evident. Females represented 39% of those entering treatment for heroin in 2009, generally similar to prior years (Exhibit 6). In 2009 29% (n=471) of heroin users were between the ages of 18 and 29, compared with 17% (n=326) in 1999. African Americans are somewhat over represented in treatment admissions for heroin compared to the proportion of the population of King County that they represent, 11% versus 6% respectively. The rate of treatment admission for heroin is far higher in Seattle than for any other region of the county, with the south and north regions having similar rates, about a third of that for Seattle, and the east side even lower still. Court and probation referrals are uncommon for those entering treatment for heroin addiction.

To examine large scale geographic trends in heroin use we reviewed data on admissions to non-opiate substitution treatment (OST) for King County compared to the rest of the state. Heroin use has long been considered urban phenomena and OSTs are located in the most metropolitan areas of the state, so examining non-OST admissions for heroin provides insight into those seeking non-medication assisted treatment which is more likely to be used in less metropolitan areas. Comparing 2005 to 2009, the number of treatment admissions, the rate of treatment admissions (data not shown), and the proportional increase in admissions were all larger for the areas of Washington State outside of King County (Exhibit 7). This indicates a large and growing problem with heroin across the State as indicated by drug treatment admissions.

Help Line calls about heroin for adolescents remain uncommon with 24 calls (5%) in 2009. Adult calls about heroin increased slightly as a proportion of all calls in 2009 with 545 calls (7%). Help Line calls about heroin for those outside of King County indicate a 64% increase in the proportion of all calls between 2005 and 2009, a numerical increase from 410 to 917. This increase is much larger than that seen in King County and parallels the geographic findings for heroin-related treatment admissions.

NFLIS drug seizure test results for heroin remained relatively low in 2009, much lower than cocaine and marijuana and slightly lower than methamphetamine and the combined category of pharmaceutical opioids (Exhibit 9).

Heroin is the second most common illegal drug reported in the DAWN ED data for the first half of 2009 (Exhibit 10).

The purity of “street level” heroin purchased in Seattle for the DEA’s domestic monitoring program averaged 3.9% in 2009 (3.4% median). The highest purity was 16.1% and while this is still relatively low purity, unknown and fluctuating purity represents a risk for overdose. In 2008 heroin purity was 8.5% on average (8.0% median).

In a May 2009 syringe exchange survey in King County a substantial minority of heroin users (39%) reported they were “hooked on

prescription-type opiates" before they began using heroin. These data are the first to address this issue after years of anecdotal reports from local service providers about the transition from pharmaceutical opioids to heroin that they have been seeing among young adults.

Serious opioid overdoses (heroin and/or pharmaceutical) within the prior year were reported by 16% of syringe exchange survey respondents, with 41% reporting they had witnessed a serious overdose in the prior year. Emergency medical help was summoned by calling 911 during 61% of the most recently witnessed overdoses.

Other Opiates

Pharmaceutical opioid involved deaths continue to increase and far surpass any other substances in overdose deaths. Methadone is the most common opioid detected though it has declined since 2006 (Exhibit 2). Oxycodone, conversely, continues to increase. Almost half of pharmaceutical opioid involved deaths were among women and while the number of male deaths has remained flat since 2005 the number of women continues to rise; no single factor seems to underlie this gender difference in the temporal trend. Those over 50 represent the largest proportion of those dying with pharmaceutical opioids, though deaths have increased substantially for all age groups since 1997. Single drug deaths involving pharmaceutical opioids are uncommon and 25% of deaths involve an illegal drug as well. The most common drugs detected in addition to pharmaceutical opioids are benzodiazepines and SSRI anti-depressants. The death rate is higher in the southern and northern parts of the county and is lowest on the east side.

Youth treatment admissions for a primary problem with pharmaceutical opioids were uncommon in 2009, though there is an increase from 1999 when there were none (Exhibit 4). Adult admissions increased substantially with a total of 719 in 2009 (Exhibit 5). Almost half of pharmaceutical opioid addicted persons entering treatment were female in 2009 (Exhibit 6), a decline in the proportion from previous years during which women often represented the majority of clients (data not shown). Clients are very young, with 40% ages 18-25 in 2009. Almost three quarters are white, a proportion slightly lower than in prior years. The region of residence with the highest rate of treatment admissions was the south region, followed by the north, Seattle, and the east side. Admissions to non-OST treatment for pharmaceutical opioids increased substantially for both King County and the rest of the State from 2005 to 2009 (Exhibit 7).

To get a sense of the minimum total treatment admissions for opioid addiction a combined category of heroin and pharmaceutical opioids is created to which another category "prescribed opioid substitute" is added, this last category is usually included in "other" because it is not possible to differentiate heroin from pharmaceutical addiction. This combined category in 2009 totaled 2,501 (Exhibit 5) second only to alcohol.

Drug treatment admissions data presented here are a substantial underreport of all opioid related admissions (pharmaceutical and/or heroin) as only a small proportion of Suboxone OST data are available. Suboxone is an opiate substitution medication prescribed by physicians out of their offices as compared with methadone maintenance treatment which must be dispensed at stand alone clinics. Suboxone is minimally documented in public data sets as only a small proportion of Suboxone treatment is covered by public funding. For instance, in State Fiscal Year 2009, 389 patients received public funding for Suboxone, while the potential treatment capacity based upon the number of physicians who have been trained was 16,230 as of April 2010; note that the number of actual patients receiving Suboxone in Washington State is unknown, but is likely much lower than the theoretical capacity.

Youth Help Line calls about pharmaceutical opioids increased from 1% to 15% of calls from 2001 to 2009 (Exhibit 8). The most common type of opioid specifically identified is OxyContin. Adult Help Line calls increased from 2% to 18% of all calls with 1,381 in 2009; as with youth the most common substance identified is OxyContin. Pharmaceutical opioids are now second only to alcohol as the reason for

Help Line calls for adults. The increase in pharmaceutical opioid related calls for King County and the rest of the state from 2005 to 2009 was nearly identical with a more than 100% increase in calls for both regions.

The combined category of pharmaceutical opioids totaled 281 in the test results reported by NFLIS for King County drug seizures in 2009 (Exhibit 9). Oxycodone was most common with 180 positive tests, followed by buprenorphine (39), hydrocodone (32) and methadone (23). Pharmaceutical opioids used "non-medically" totaled 2,229 in the first half of 2009 in area EDs (Exhibit 10). This number is larger than for any illegal drug and is second only to alcohol with 2,585 reports.

Methamphetamine

Methamphetamine deaths have continued at a low level since 2002 (Exhibit 1). Most are white males and the median age is 45.5 years. Half of deaths involve just methamphetamine, a much higher proportion than for other drugs. The most common other drugs are pharmaceutical opioids and cocaine. Mortality rates are highest in Seattle and the south end of the county, though the numbers overall are low.

Youth methamphetamine treatment admissions peaked in 2004 at 75 and declined to 24 in 2009 (Exhibit 4). Adult admissions have remained steady at about 1,300 annually since 2005 (Exhibit 5). One third of admissions were among those in their 30's and 43% were female in 2009. The proportion of females has steadily declined over the years (data not shown). Three-quarters of admissions were white, down from 90% in 1999. Methamphetamine treatment admission rates were highest in the south region and Seattle and much lower in the north and east regions, consistent with prior years.

Youth related calls to the Help Line regarding methamphetamine have dropped substantially since 2001, from 189 (10%) to 16 (3%) in 2009 (Exhibit 8). Adult calls have also declined, but less dramatically from 786 (7%) to 403 (5%) over the same period.

NFLIS results indicate a substantial drop in the number of drug seizures testing positive for methamphetamine from 658 in 2007, to 315 in 2008 and 292 in 2009 (Exhibit 9).

A total of 536 reports for methamphetamine were made to the DAWN ED system from January to June 2009, making it the fourth most common illegal drug reported (Exhibit 10) at about one third the level of cocaine reports.

Marijuana

Marijuana continues as the most common primary drug among youth entering drug treatment (Exhibit 4). The number and rate of treatment admissions among adults has more than doubled since 1999. While the number of Whites and females entering treatment has remained flat since 1999, there have been substantial increases among males, blacks, and Hispanics (data not shown). Much of the increase in the rate of admissions has been in the south region of the county where the rate has doubled since 1999 and surpassed Seattle in 2007. Probation/court made the referral to treatment for 29% of admissions for marijuana in 2009, a similar proportion to prior years, but the highest proportion for any drug in 2009. It is suspected that many of these referrals may be due to positive drug tests among those on probation.

Marijuana is the reason for one in three adolescent calls to the Help Line, consistent with prior years (Exhibit 8). Adult calls for marijuana represent a smaller proportion, slightly less than one in ten calls, also similar to prior years.

Drug seizure tests as reported by NFLIS for marijuana increased slightly from 2007 to 2009 and with the dramatic decline in cocaine positives, marijuana was the most common drug detected in 2009 (Exhibit 9). Marijuana was the third most common illegal drug reported in area EDs in the first half of 2009 (Exhibit 10).

Marijuana continues to be grown throughout Washington State with indoor grow operations predominating in Western Washington and outdoor grows in Eastern Washington according to the Northwest High Intensity Drug Trafficking Areas group. There are connections between growers and traffickers in British Columbia, Canada and Washington State. There may be a

relocation of growers from Canada to Washington in order to reduce seizures by border patrol. In fiscal year 2009 4,184 pounds of marijuana were seized compared with 21,842 pounds in fiscal year 2003.

Benzodiazepines

Benzodiazepines are rarely used as a sole drug of abuse. An exemplar of this is mortality data in which only 2% of deaths with benzodiazepines involved no other drugs (Exhibit 3). Benzodiazepines are now the second most common drug detected (Exhibit 1). Alprazolam (e.g. Xanax) is the most common benzodiazepine detected followed by diazepam (e.g. Valium) (Exhibit 2). Half of decedents are female, most are white, and 39% are age 50 or older. Illegal drugs are present in 24% of deaths along with benzodiazepines. The most common other substances are a pharmaceutical opioid, present in 78% of cases. The death rate is highest in the northern part of the county and lowest in Seattle.

Benzodiazepines are rarely a primary drug of abuse as indicated by treatment admissions or calls to the Help Line. However, adult Help Line calls about benzodiazepine have increased from 33 in 2001 to 98 in 2009 (Exhibit 8).

Benzodiazepines are rarely found in law enforcement drug seizure tests with just 50 in 2009 of which 26 were alprazolam and 15 were clonazepam (Exhibit 9).

"Non-medical" use of benzodiazepines reported in the DAWN ED data totaled 1,020 during the first half of 2009, a number similar to marijuana and less than half that of pharmaceutical opioids (Exhibit 10).

MDMA, Club Drugs, Other Hallucinogenic Drugs and PCP

MDMA was not detected in any drug overdose deaths in 2009. There have been between 1 and 4 MDMA involved deaths annually from 1999 to 2008. Hallucinogenic drugs are uncommon as a primary drug of abuse among those entering drug treatment. Ecstasy calls to the Help Line have declined substantially for youth, from 101 (6%) in 2001 to 9 (2%) in 2009 with the initial drop in calls occurring in 2002 (Exhibit 8). Adult Help Line calls about Ecstasy have declined more slowly to 26 (<1%) in 2009. Other hallucinogens were less commonly reported than Ecstasy during Help Line calls.

NFLIS drug seizure tests for MDMA totaled 249 and decreased substantially in 2008 to 56 with a similar total of 66 in 2009 (Exhibit 9). BZP (1-benzylpiperazine) is increasingly detected in what appears to be MDMA. There were 0 BZP positives in 2007, 41 in 2008 and 62 in 2009. TFMPP is often found in combination with BZP as the substances together are meant to replicate MDMA (TFMPP is not reported to NFLIS as it is not a controlled substance). PCP is consistently detected in a small number of drug seizure tests, with 24 in 2009. MDMA was identified in 77 reports in area EDs in the first half of 2009 and PCP in 113 (Exhibit 10).

According to Washington State Patrol Crime Lab chemists, PCP is most often submitted in the form of a yellowish liquid comprised of the drug dissolved in ether.

The Northwest High Intensity Drug Trafficking Area group reports that a substantial volume of MDMA is being manufactured in British Columbia and transported through Washington State. In 2008 2.2 million dosage units and 67kg of MDMA were seized at the Canadian border entering Washington; in 2009 the totals were 4.8 millions dosage units and 164kb.

Drug test results on tablets purported to be Ecstasy at raves in British Columbia contained many different things according to the BC Drug Surveillance and Intelligence Working Group. Some contained just MDMA, at various levels of purity. Some contained BZP and TFMPP, but no MDMA, while other tablets contained various combinations of ketamine, caffeine, or methamphetamine, sometimes with MDMA, sometimes not.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

HIV

HIV diagnoses among those whose exposure category was injection drug use decreased significantly from 2001-2003 to 2007-2009

(Exhibit 11). The proportion whose exposure category was men who have sex with men and are injection drug users (MSM-IDU) did not change significantly. The total number of new syringes distributed via King County syringe exchanges surpassed 3,200,000 in 2009 similar in volume to 2008.

Data collected at the 2009 syringe exchange survey by PHSKC indicate that 95% had ever received an HIV test and 41% had in the prior 6 months. Two-thirds reported daily injection. During the prior three month period 21% reported sharing syringes and 42% had shared other drug using equipment.

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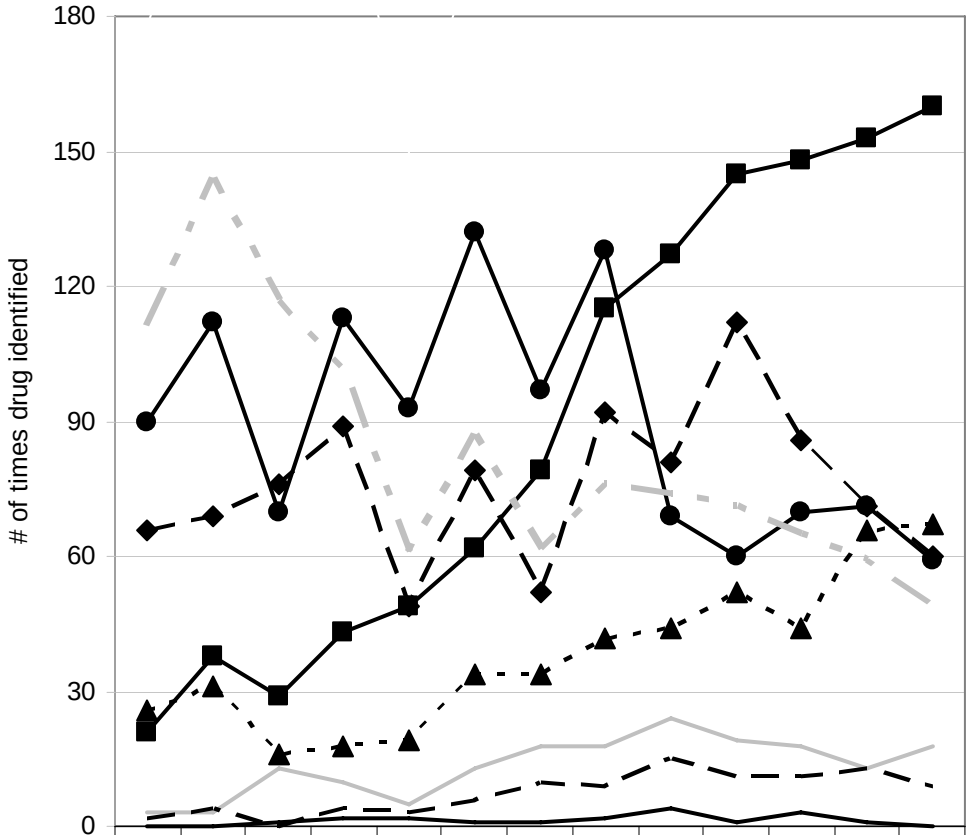
Exhibit 1. Number of Drug-Caused Deaths for Selected Drugs[1], King County (Seattle) Washington: 1997–2009

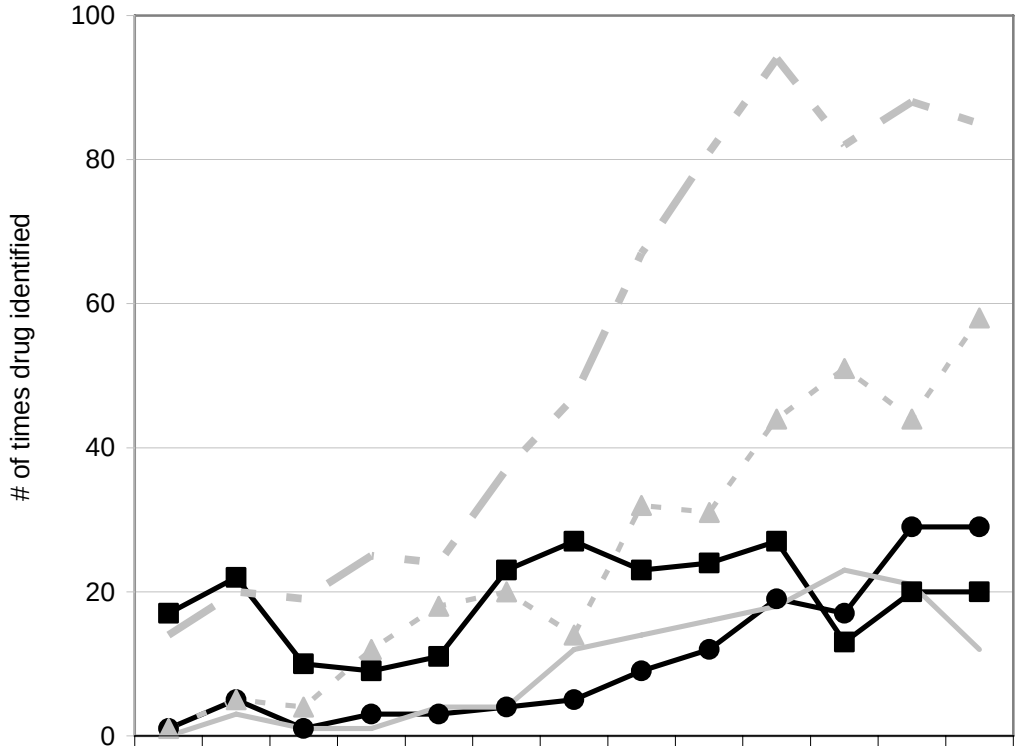


	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Other Opiate	21	38	29	43	49	62	79	115	127	145	148	153	160
Alcohol	90	112	70	113	93	132	97	128	69	60	70	71	59
Cocaine	66	69	76	89	49	79	52	92	81	112	86	71	60
Benzodiazepine	26	31	16	18	19	34	34	42	44	52	44	66	67
Heroin/Opiate	111	144	117	102	61	87	62	76	74	71	65	59	49
Methamphetamine	3	3	13	10	5	13	18	18	24	19	18	13	18
Muscle relaxant	2	4	0	4	3	6	10	9	15	11	11	13	9
MDMA	0	0	1	2	2	1	1	2	4	1	3	1	0
TOTAL DEATHS	178	221	197	215	150	195	186	253	241	287	273	256	253

[1]Other opiates includes pharmaceutical opioids, including pharmaceutical morphine where noted, and excludes codeine. Heroin/opiate includes heroin, morphine (unless noted to be pharmaceutical), and cases where there is an indication that the death is "heroin related" in the King County Medical Examiner database.

SOURCE: King County Medical Examiner, Public Health—Seattle and King County

Exhibit 2. Number of Drug-Caused Deaths for Selected Pharmaceutical Drugs, King County (Seattle) Washington: 1997–2009



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Diazepam	17	22	10	9	11	23	27	23	24	27	13	20	20
Alprazolam	1	5	1	3	3	4	5	9	12	19	17	29	29
Oxycodone	1	5	4	12	18	20	14	32	31	44	51	44	58
Methadone	14	20	19	25	24	37	47	67	81	94	82	88	85
Hydrocodone	0	3	1	1	4	4	12	14	16	18	23	21	12

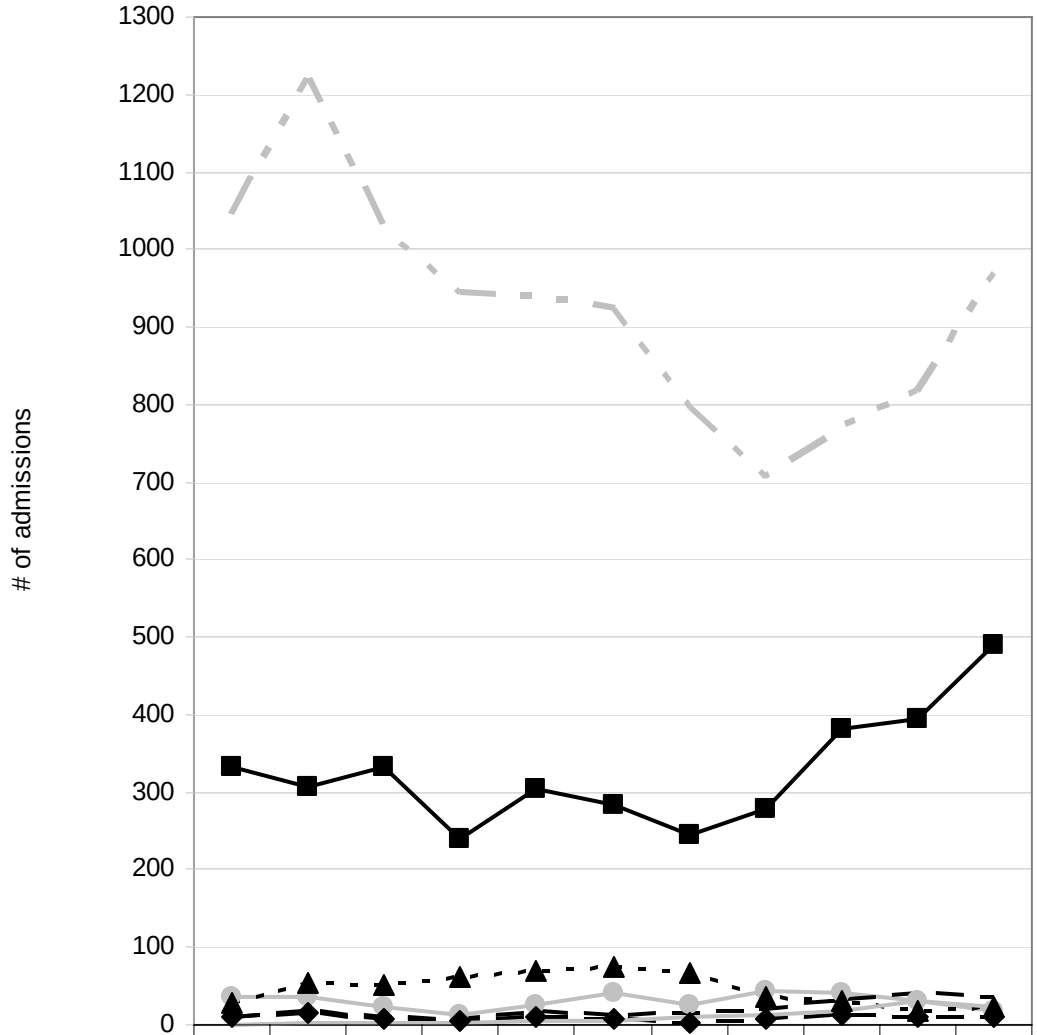
SOURCE: King County Medical Examiner, Public Health—Seattle and King County

Exhibit 3. Number and Percentage of Drug-Caused Deaths, by Gender, Ethnicity, Age, Manner of Death, Other Drugs, and Region King County (Seattle), Washington: CY 2009

	Alcohol	Cocaine	Heroin/ Opiate	Rx Opiate	Metham-phetamine	Benzo-diazepine	All Deaths
% Female	34%	28%	25%	48%	17%	49%	40%
Race							
White	91.4%	80.7%	91.7%	90.5%	88.9%	92.2%	87.9%
African American	6.9%	17.5%	8.3%	8.2%	5.6%	6.3%	9.7%
Asian	0%	0%	0%	0%	0%	0%	1.6%
Native American	1.7%	1.8%	0%	0%	0%	1.6%	.8%
Other							
Median Age (Range)	47.0 (20-68)	45.0 (22-67)	45.0 (13-67)	47 (15-93)	45.5 (28-68)	47.0 (20-75)	46.0 (13-93)
Age category							
<30	6.8%	10.0%	18.4%	11.3%	5.6%	14.9%	12.6%
31-40	27.1%	23.3%	14.3%	23.1%	27.8%	22.4%	22.5%
41-50	33.9%	35.0%	34.7%	28.8%	33.3%	23.9%	30.4%
>50	32.2%	31.7%	32.7%	36.9%	33.3%	38.8%	34.4%
Manner of Death							
Accident	86.4%	96.7%	100.0%	90.6%	100.0%	89.6%	89.3%
Suicide	11.9%	.0%	0%	6.9%	0%	9.0%	7.9%
Undetermined	1.7%	3.3%	0%	2.5%	0%	1.5%	2.8%
% Single Drug	14%	25%	14%	17%	50%	2%	27%
Average # of drugs present	2.8	2.6	2.7	2.7	1.9	3.3	2.4
Illegal Drug*	36%	100%	100%	25%	100%	24%	41%
Other drugs							
Alcohol	100%	23%	20%	18%	11%	15%	23%
Cocaine	24%	100%	37%	16%	17%	12%	24%
Heroin/Opiate	17%	30%	100%	11%	11%	15%	19%
Rx Opiate	48%	43%	37%	100%	33%	78%	63%
Methamphetamine	3%	5%	4%	3%	100%	0%	7%
Benzodiazepine	17%	13%	20%	33%	0%	100%	27%
Muscle relaxants	3%	2%	0%	4%	0%	6%	4%
SSRI anti-depressants	31%	17%	31%	34%	11%	39%	31%
King County Region Rate per 100,000 population & *number*							
North	3.6 *6*	3.6 *6*	1.8 *3*	10.1 *17*	0.6 *1*	7.1 *12*	12.5 *21*
East	2.0 *9*	0.7 *3*	1.7 *8*	5.0 *23*	0.2 *1*	3.5 *16*	7.6 *35*
South	2.4 *17*	3.3 *23*	1.8 *13*	10.7 *76*	1.1 *8*	3.4 *24*	14.7 *104*
Seattle	4.9 *27*	5.0 *28*	4.5 *25*	7.9 *44*	1.4 *8*	2.7 *15*	16.7 *93*
Total	3.1 *59*	3.2 *60*	2.6 *49*	8.5 *160*	1.0 *18*	3.5 *67*	13.4 *253*
Total number drugs [deaths]	59	60	49	160	18	67	253
% of deaths	23%	24%	19%	63%	7%	26%	100%

* Cocaine, heroin/opiate, methamphetamine, and MDMA.
SOURCE: King County Medical Examiner, Public Health—Seattle and King County

Exhibit 4. Number of Youth Drug Treatment Admissions, by Primary Drug of Abuse for Selected Drugs, King County (Seattle), Washington: 1999–2009



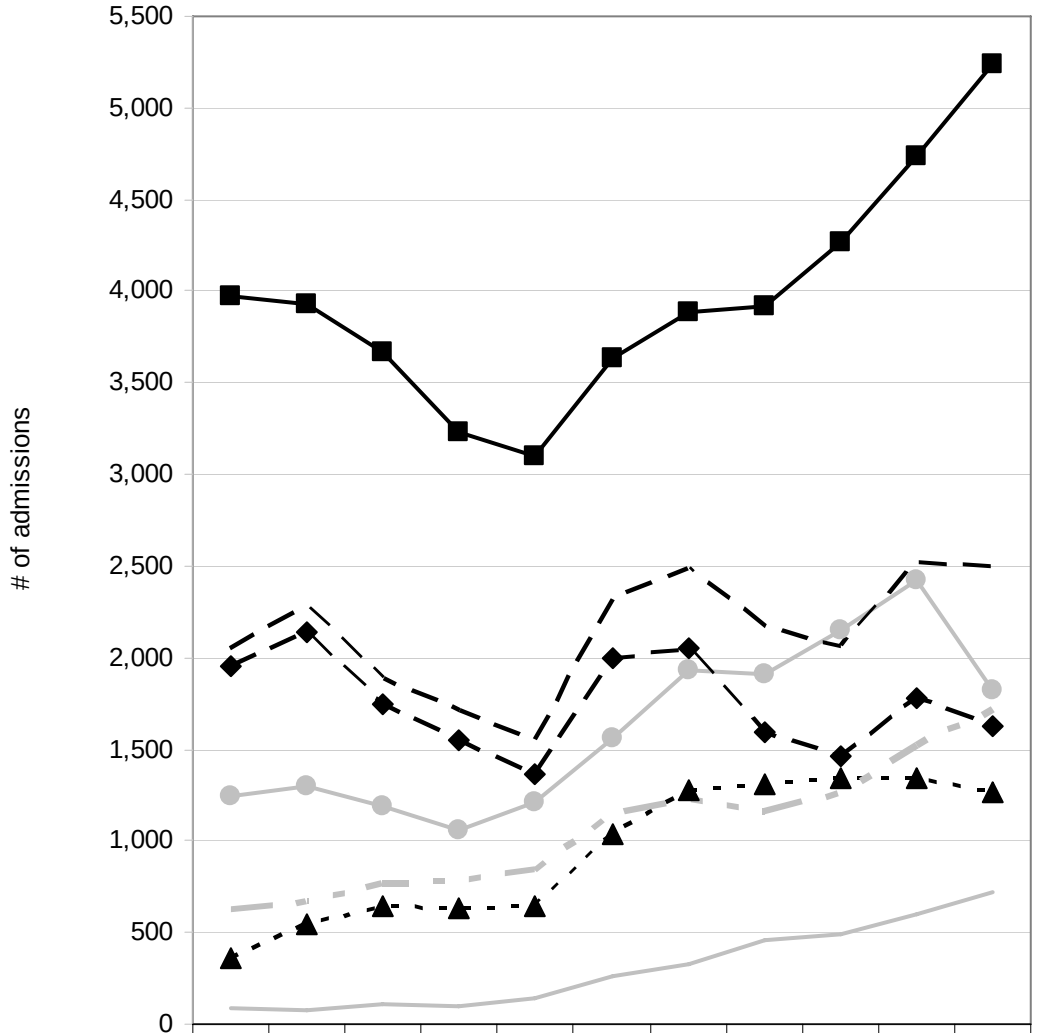
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Alcohol	333	306	333	240	304	284	246	278	383	394	489
Cocaine	35	35	24	14	25	40	27	45	42	32	19
Heroin	10	15	9	6	11	9	2	9	14	11	10
Methamphetamines	29	55	52	61	70	75	68	36	31	18	24
Marijuana	1,045	1,221	1,027	943	938	924	797	707	770	817	971
Rx-Type Opioids	0	2	2	2	5	4	10	12	18	30	23
All Opioids- Heroin & Rx*	10	17	11	8	18	13	15	21	33	42	35

Rx-Type Opioids includes Oxy/Hydrocodone, Non-Rx methadone, and Other opiates

All opioids combines Heroin, Rx-Type Opioids and "prescribed opiate substitute"

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

Exhibit 5. Number of Adult Drug Treatment Admissions, by Primary Drug of Abuse for Selected Drugs, King County (Seattle), Washington: 1999–2009



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Alcohol	3,974	3,928	3,671	3,226	3,104	3,637	3,884	3,922	4,266	4,731	5,236
Cocaine	1,244	1,296	1,187	1,055	1,206	1,558	1,933	1,912	2,146	2,425	1,827
Heroin	1,952	2,138	1,746	1,548	1,364	1,994	2,054	1,590	1,464	1,784	1,631
Methamphetamines	361	546	639	637	647	1,034	1,282	1,309	1,342	1,339	1,265
Marijuana	620	662	760	780	845	1,141	1,222	1,154	1,257	1,512	1,715
Rx-Type Opioids	87	77	104	93	139	261	327	453	491	595	719
All Opioids- Heroin & Rx*	2054	2279	1890	1711	1553	2329	2493	2169	2064	2526	2501

Rx-Type Opioids includes Oxy/Hydrocodone, Non-Rx methadone, and Other opiates

All opioids combines Heroin, Rx-Type Opioids and "prescribed opiate substitute"

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

Exhibit 6. Number and Percentage of Drug Treatment Admissions for King County (Seattle), Washington Residents, by Gender, Age, Drug, and Region of Residence: CY 2009

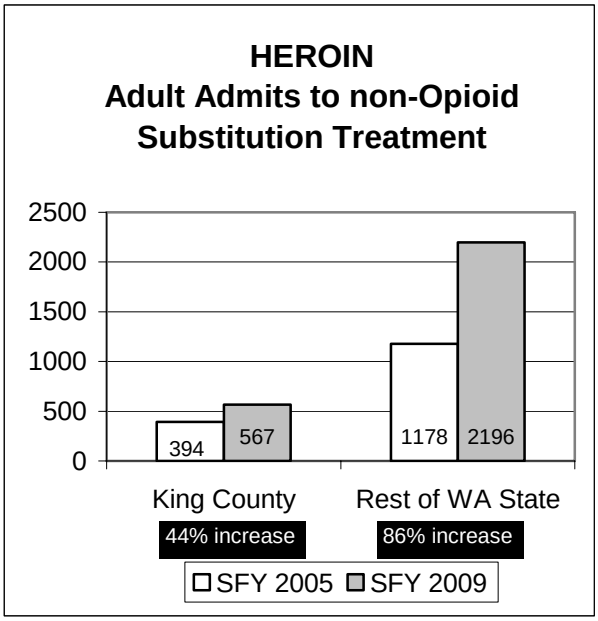
	Alcohol		Cocaine		Heroin		Rx-type opiates		Marijuana		Metham-phetamine		Other*		Total	
Female	1,593	29%	539	37%	606	39%	337	47%	614	26%	386	43%	255	45%	4,330	33%
Age							0						0			
17 and younger	498	9%	14	1%	20	1%	31	4%	1,075	45%	28	3%	59	10%	1,725	13%
18-25	750	14%	92	6%	285	19%	288	40%	665	28%	157	17%	103	18%	2340	18%
26-29	475	9%	130	9%	186	12%	152	21%	186	8%	165	18%	85	15%	1,379	11%
30-39	1,139	21%	330	23%	353	23%	130	18%	257	11%	299	33%	112	20%	2,620	20%
40-49	1,565	29%	638	44%	392	25%	77	11%	142	6%	214	24%	99	18%	3,127	24%
50-59	870	16%	220	15%	264	17%	41	6%	64	3%	34	4%	91	16%	1,584	12%
60-69	118	2%	19	1%	36	2%	3	0%	2	0%	4	0%	13	2%	195	2%
70 and above	11	0%	0	0%	2	0%	0	0%	1	0%	0	0%	2	0%	16	0%
Recent I.V. Drug Use	141	3%	71	5%	1,137	74%	80	11%	20	1%	153	17%	55	10%	1,657	13%
Ethnicity																
White	2,620	48%	412	29%	1,103	72%	529	73%	970	41%	691	77%	349	62%	6,674	51%
African American	956	18%	744	52%	171	11%	34	5%	623	26%	38	4%	54	10%	2,620	20%
Asian/PI	327	6%	47	3%	19	1%	19	3%	104	4%	30	3%	43	8%	589	5%
Native American	375	7%	42	3%	32	2%	43	6%	61	3%	23	3%	13	2%	589	5%
Hispanic	521	10%	78	5%	100	7%	33	5%	321	13%	42	5%	54	10%	1,149	9%
Multiple Race	482	9%	100	7%	79	5%	52	7%	264	11%	64	7%	36	6%	1,077	8%
Other	145	3%	20	1%	34	2%	12	2%	49	2%	13	1%	15	3%	288	2%
Region of residence, rate of admissions per 100,000 population																
East	107.4		12.7		24.0		18.1		48.0		17.7		…		238.6	
North	168.1		36.2		60.6		37.4		95.0		34.4		…		452.5	
Seattle	456.9		191.1		174.4		30.6		161.5		84.3		…		1134.3	
South	313.7		87.2		56.9		55.0		187.8		90.3		…		827.2	
Total**	302.5		97.6		86.7		39.2		141.9		68.1		…		766.1	
Total Admissions	5,426	100%	1,443	100%	1,538	100%	722	100%	2,392	100%	901	100%	564	100%	12,986	100%

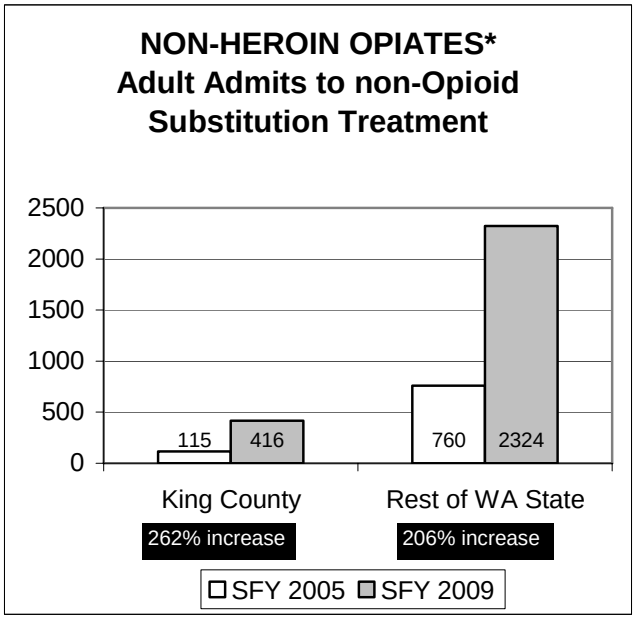
*Other includes: Hallucinogens, None, Barbiturates, Benzodiazepines, Inhalants, Major Tranquilizers, Other sedatives, Over-the-counter, phencyclidine (PCP), Other, Unknown, Prescribed opioid substitute.

** 3% of clients did not report a residential zip code within King County though they identified themselves as King County residents

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

Exhibit 7: Treatment admissions to non-opiate substitution treatment King County vs. rest of WA State 2005 & 2009 by primary drug





* Includes non-Rx methadone, oxycodone, other opiates and "prescribed opiate substitute"
SOURCE: Washington State Division of Behavioral Health and Recovery, Treatment Report and Generation Tool

Exhibit 8. Calls to the Alcohol/Drug Help Line

TEENS- KING COUNTY

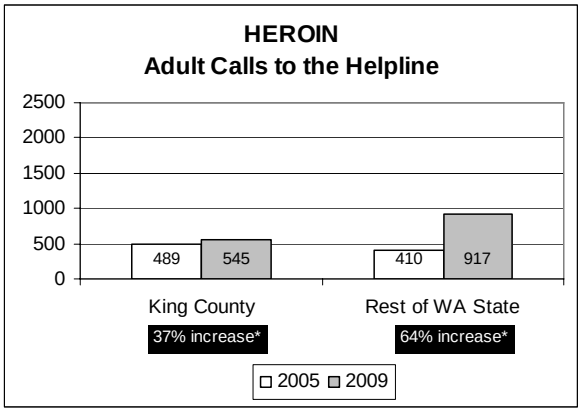
Substance	2001		2002		2003		2004		2005		2006		2007		2008		2009*	
Alcohol	652	36%	405	36%	288	32%	288	33%	207	28%	234	28%	279	31%	205	30%	161	33%
Cocaine	91	5%	69	6%	56	6%	64	7%	64	9%	74	9%	70	8%	40	6%	19	4%
Marijuana	491	27%	353	31%	302	34%	277	32%	202	28%	250	30%	268	30%	217	32%	153	32%
Heroin	22	1%	12	1%	14	2%	21	2%	19	3%	29	3%	38	4%	36	5%	24	5%
Methamphetamine	189	10%	104	9%	99	11%	97	11%	78	11%	74	9%	64	7%	30	4%	16	3%
Rx Opioids	10	1%	11	1%	27	3%	32	4%	52	7%	76	9%	67	8%	87	13%	72	15%
Benzodiazepine	0	0%	1	0%	1	0%	1	0%	5	1%	1	0%	2	0%	1	0%	1	0%
Ecstasy	101	6%	35	3%	19	2%	24	3%	38	5%	43	5%	36	4%	17	3%	9	2%
Other**	258	14%	135	12%	84	9%	70	8%	68	9%	66	8%	68	8%	47	7%	29	6%
Total	1814	100%	1125	100%	890	100%	874	100%	733	100%	847	100%	892	100%	680	100%	484	100%

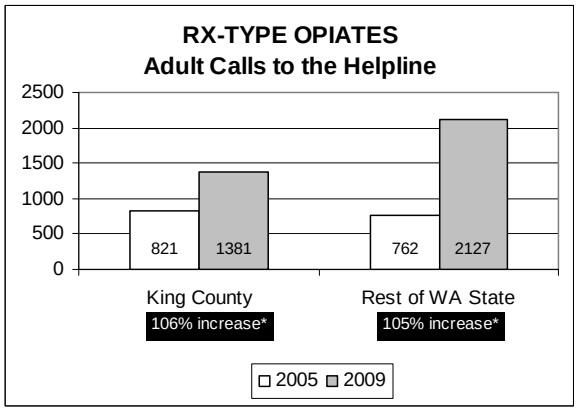
Rx Opioids	2001		2002		2003		2004		2005		2006		2007		2008		2009*	
Methadone	6	0%	0	0%	2	0%	0	0%	3	0%	4	0%	2	0%	3	0%	2	0%
OxyContin	0	0%	0	0%	1	0%	16	2%	29	4%	49	6%	37	4%	50	7%	47	10%
RX pain pills	4	0%	11	1%	24	3%	16	2%	20	3%	23	3%	28	3%	34	5%	23	5%

ADULTS- KING COUNTY

Substance	2001		2002		2003		2004		2005		2006		2007		2008		*2009**	
Alcohol	6220	57%	6596	58%	6103	57%	5763	53%	4595	48%	5382	47%	4988	50%	5301	52%	3868	50%
Cocaine	1088	10%	1124	10%	1198	11%	1301	12%	1159	12%	1426	13%	1120	11%	902	9%	602	8%
Marijuana	972	9%	967	9%	939	9%	971	9%	810	8%	908	8%	829	8%	877	9%	530	7%
Heroin	521	5%	584	5%	575	5%	595	5%	489	5%	594	5%	519	5%	518	5%	545	7%
Methamphetamine	786	7%	668	6%	726	7%	785	7%	871	9%	941	8%	694	7%	592	6%	403	5%
Rx Opioids	259	2%	392	3%	525	5%	769	7%	821	9%	1134	10%	1111	11%	1410	14%	1381	18%
Benzodiazepine	33	0%	44	0%	60	1%	81	1%	107	1%	121	1%	92	1%	114	1%	98	1%
Ecstasy	117	1%	69	1%	53	0%	63	1%	82	1%	72	1%	58	1%	45	0%	26	0%
Other**	863	8%	912	8%	546	5%	492	5%	604	6%	772	7%	512	5%	374	4%	330	4%
Total	10859	100%	11356	100%	10725	100%	10820	100%	9538	100%	11350	100%	9923	100%	10133	100%	7783	100%

Rx Opioids	2001		2002		2003		2004		2005		2006		2007		2008		2009*	
Methadone	94	1%	93	1%	114	1%	157	1%	152	2%	199	2%	180	2%	212	2%	170	2%
OxyContin	0	0%	0	0%	21	0%	205	2%	257	3%	401	4%	397	4%	573	6%	664	9%
RX pain pills	165	2%	299	3%	390	4%	407	4%	412	4%	534	5%	534	5%	625	6%	547	7%



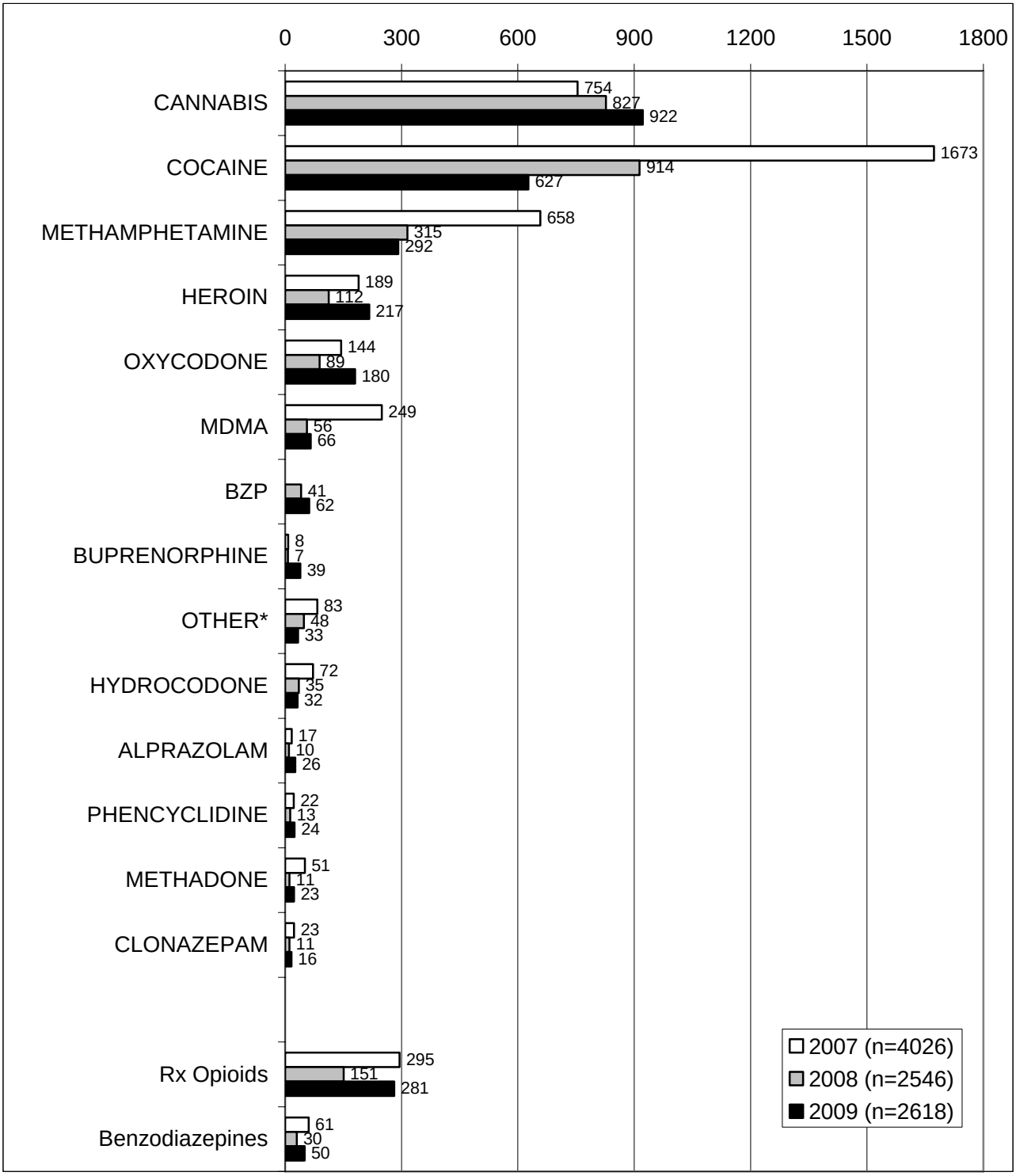


*This metric is used because of the large decrease in the total number of calls in 2009 which corresponds to a substantial decrease in Help Line funding and hours of operation

**Other= Amphetamine, Antidepressant, Barbiturates, Hallucinogens, Inhalant, LSD, over-the-counter, Other, Rx, Stimulant, Unknown, Tranquilizers, PCP

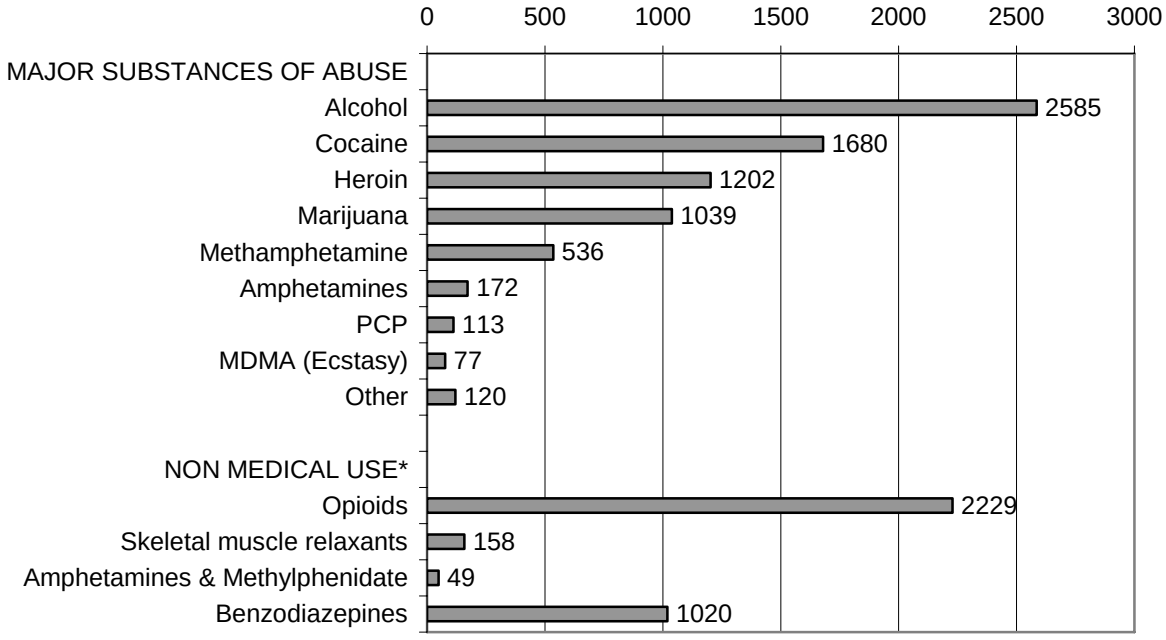
SOURCE: Washington State Alcohol/Drug Help Line

Exhibit 9. Number and Percentage of Law Enforcement Drug Seizure Tests, by Drug, for King County (Seattle), Washington: 2007–2009



SOURCE: NFLIS, DEA, with data provided by the Washington State Patrol Crime Laboratory

Exhibit 10. Number of DAWN ED Reports, by Drug, in King (Seattle), Snohomish, and Pierce (Tacoma) Counties, Washington: January-June 2009



SOURCE: DAWN *Live!*, OAS, SAMHSA, Accessed 12/10/2009

Exhibit 11. Demographic characteristics of King County residents diagnosed 1982-2009 by date of HIV diagnosis (reported through 12/31/2009)

	1982-2000		2001-2003		2004-2006		2007-2009[a]		Trend[b]
	No.	%	No.	%	No.	%	No.	%	2001-2009
TOTAL	**8,100**	**100%**	**1,064**	**100%**	**988**	**100%**	**909**	**100%**	
HIV Exposure Category[d]									
Men who have sex with men (MSM)	6,025	77%	687	69%	610	70%	552	74%	up
Injection drug user (IDU)	459	6%	68	7%	53	6%	28	4%	down
MSM-IDU	829	11%	84	8%	87	10%	62	8%	
Heterosexual contact[c]	416	5%	156	16%	115	13%	99	13%	
Blood product exposure	93	1%	4	0%	1	0%	1	0%	
Perinatal exposure	27	0%	0	0%	1	0%	5	1%	
SUBTOTAL- known risk	*7,849*	*100%*	*999*	*100%*	*867*	*100%*	*747*	*100%*	
Undetermined/other[d]	251	N/A	65	N/A	121	N/A	162	N/A	N/A
Residence									
Seattle residence	6,971	86%	822	77%	735	74%	628	69%	down
King Co. residence outside Seattle	1,129	14%	242	23%	253	26%	281	31%	up

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

b Chi-square statistical trends ($p < .05$) were calculated for cases with known characteristics for the periods 2001-03, 2004-06, and 2007-09.

c Includes presumed heterosexual cases (females who deny injection drug use but have had sexual intercourse with a man whose HIV status or HIV risk behaviors are unknown).

d Cases with undetermined risk, race/ethnicity, or place of birth are not included in percent or trend calculations.

SOURCE: Public Health—Seattle and King County, "HIV/AIDS Epidemiology Report"