Recent Drug Abuse Trends in the Seattle-King County Area 2007

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Summary

Cocaine continues to be a major drug of abuse with substantial associated morbidity and mortality. Cocaine involved drug caused deaths totaled 86, down from a high of 111 in 2006 and remain second only to prescription type opiates. Treatment admissions with cocaine as the primary drug are second after alcohol and continue to be disproportionately African American. Cocaine is the most common abuse-able drug, licit or illicit, reported in area emergency departments. Cocaine is the most common drug submitted for testing by local law enforcement in King County, with lower proportions seen in the surrounding counties.

Heroin involved drug caused deaths have been relatively level the past 5 years with 65 in 2007. Treatment admissions have declined slowly overall as has the proportion of heroin clients in methadone maintenance treatment (MMT) as primary prescription type opiate users have entered MMT in higher numbers. Heroin is the second most common illicit drug reported in E.D.'s at half the level of cocaine.

Prescription type opiate involved drug caused deaths increased slightly in 2007 to 151, showing the slowest increase in 7 years. The majority, 84%, of opioid involved drug caused death also involved at least one other substance. Methadone continues to be the most common type followed by oxycodone. Buprenorphine, a prescription-type opiate used for pain and increasingly for opiate substitution drug treatment, was identified for the first time in a poly-drug caused death involving alcohol and several prescription sedative medications. Treatment admissions where prescription type opiates were primary leveled off in 2007 after several years of increases. Eighteen to 25 year olds were the largest age group among primary prescription type opiate users, with 35% of admissions. Prescription type opiate E.D. reports totaled 3,109 in 2007, third after cocaine and alcohol. Oxycodone was reported slightly more often than methadone in E.D.'s.

Methamphetamine use appears to be more common in the areas of King County outside of Seattle proper. Drug caused deaths with methamphetamine have remained steady since 2003, with 18 in 2007. Methamphetamine primary treatment admissions have remained level with about 11% of all admissions from 2005 to 2007. Methamphetamine incidents (a combination of labs and dump sites) totaled 42 in King County, down from 63 the previous year and the peak of 271 in 2001. Statewide numbers are down substantially as well. Law enforcement reports that "ice" is commonly available and the majority comes from Mexico.

Marijuana was the primary drug in 16% of all treatment admissions, similar to recent years. Thirty eight percent of people admitted in 2007 for marijuana were under the age of 18, down substantially compared to several years prior. E.D. reports for marijuana totaled 1,660, third among illegal drugs behind cocaine and heroin. Indoor marijuana grow operations in Western Washington and outdoor grows in Eastern Washington are reported by law enforcement to be pervasive.

MDMA morbidity and mortality remain low with a total of 3 drug caused deaths involving MDMA and 127 E.D. reports in 2007. Washington State appears to be a major transshipment point for MDMA manufactured in and transported out of British Columbia, Canada.

HIV prevalence remains low. From 2005 to 2007 injection drug users represented 4% of new diagnoses reported and men who have sex with men and were IDU's another 8%; these proportions are unchanged from previous years. A total of 2,125,850 syringes were exchanged at eight different locations throughout King County in 2007.

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Area Description

Located on Puget Sound in western Washington, King County spans 2,126 square miles, of which the city of Seattle occupies 84 square miles. The combined ports of Seattle and nearby Tacoma make Puget Sound the second largest combined cargo loading center in the United States. Seattle-Tacoma International Airport, located in King County, is the largest airport in the Pacific Northwest. The Interstate 5 corridor runs from Tijuana, Mexico, in the south, passes through King County, and continues northward to Canada. Interstate 90's western terminus is in Seattle; it runs east over the Cascade Mountain range, through Spokane, and across the U.S. to Boston.

The estimated 2006 population of King County is 1,826,732. King County's population was the 12th largest in the United States in 2000. Of Washington's 6.4 million residents, 29 percent live in King County. The city of Seattle's population was 569,101 as of 2003; the suburban population of King County is growing at a faster rate than Seattle itself.

The county's population is 76.2 percent White, 12.9 percent Asian/Pacific Islander, 5.9 percent African-American, 1.0 percent Native American or Alaska Native, 0.6 percent Native Hawaiian and Other Pacific Islander. Additionally, 6.7 percent are of Hispanic ethnicity. Those reporting two or more races constitute 3.4 percent of the population. Income statistics show that 10 percent of persons in the county live below the Federal poverty level, lower than the state average of 11.6 percent.

Data Sources

Information for this report was obtained from the sources described below:

- Treatment data were extracted from the Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse's Treatment and Assessment Report Generation Tool (TARGET) via the Treatment Analyzer system. TARGET is the department's statewide alcohol/drug treatment activity database system. Data were compiled for King County residents from January 1, 1999, through December 31, 2007. Data are included for all treatment admissions that had any public funding. Department of Corrections (DOC) and private pay clients (at methadone treatment programs) are also included. Treatment data are for King County residents admitted to any modality of care between 1999 and 2007. Note that it is difficult to determine trends in race due to the increasing use of the categories 'multiple race' and 'other'. Also, any injection drug use in the prior 30 days is reported for 2007, with changes in reporting procedures over time precluding trend analyses. The hallucinogen category appears to be predominately MDMA.
- Emergency department (ED) drug data are from the Drug Abuse Warning Network (DAWN) Live! system administered by the Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). Preliminary, unweighted data for 2007 are presented, based on an update accessed on May 13, 2008. Eligible hospitals in the area totaled 23; hospitals in the DAWN sample totaled 23. A total of 25 emergency departments have been selected for inclusion in the sample (some hospitals have more than 1 ED). During 2007, between 10 and 11 hospitals reported data each month. Data were incomplete, with less than 50 percent complete data for 0-4 of these hospitals in each month. These data are preliminary, meaning that they may change. Data represent drug reports, are unweighted, and are not estimates for the reporting area. Data are utilized for descriptive purposes only. Available data are for King and neighboring Snohomish Counties combined; Pierce County is part of the statistical sample, but no EDs in Pierce were reporting during 2007. The most relevant case type presented here is the "other" case type, which includes "all ED visits related to recreational use, drug abuse, drug dependence, withdrawal, and any misuse" not classified in other categories, such as overmedication and seeking detox/treatment. For the sake of clarity, "other" will be referred to as "drug abuse/other" in this report.

- **Drug-related mortality data** were provided by the King County Medical Examiner (ME) through 2007. The data include deaths directly caused by licit or illicit drug overdose and exclude deaths caused by antidepressants and other non-abuseable drugs in isolation. Totals may differ slightly from drug death reports published by the King County ME's office, which include fatal poisonings such as those due to carbon monoxide or acetaminophen. Documentation of alcohol in deaths has changed over the years precluding definitive statements about the role of alcohol in trends for drug caused deaths. Because more than one drug is usually identified in drug overdose deaths, the total number of drugs identified far exceeds the number of actual deaths.
- Forensic drug analysis data are from the Washington State Patrol's Toxicology Laboratory solid state chemistry unit and represent drug test results on local law enforcement seizures. Data are presented for King, Snohomish and Pierce counties from October 2006 through September 2007. These data are based on the county where the drug was seized and are not comparable to previous years data presented in earlier reports.
- Law enforcement data were provided by the Northwest High Intensity Drug Trafficking Area (HIDTA) officials and include the Federal-wide Drug Seizure System (FDSS), which tallies all Federal law enforcement drug seizures in the State of Washington (e.g., Drug Enforcement Administration and U.S. Customs) for calendar years 2001–2007 as well as the NW HIDTA's survey of local law enforcement seizures for 2007.
- **Methamphetamine production data** are from the Washington State Department of Ecology (DOE), which is mandated to respond to and document all "Methamphetamine Incidents," including operating labs, dump sites, and other sites associated with the manufacture of methamphetamine.
- Data on infectious diseases related to drug use and injection drug use, including the human immunodeficiency virus (HIV) were provided by Public Health-Seattle & King County (PHSKC). Data on HIV cases diagnosed in Seattle-King County were available from 1981 through 2007.
- **Key informant data** were obtained from discussions with treatment center staff, street outreach workers, and drug users.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine involved drug caused deaths declined to 86 in 2007, from a peak of 111 in 2006 (Exhibit 1). Cocaine remains second only to prescription type opiates. The overall trend for cocaine mortality is up over the past 7 years, with substantial inter-year variability.

Treatment admissions with cocaine as the primary drug are second only to alcohol and continue to be disproportionately African American (Exhibit 2). Primary cocaine treatment admissions have been steady at about 17% of admissions from 2005-2007, but are up compared to the prior 6 years. The age composition of patients has changed substantially with an increase from 31% to 58% of patients age 40 and older. The most common secondary drug is alcohol, reported by approximately half of clients, unchanged over time. Among primary alcohol users 22% reported cocaine as secondary in 2007. The use of cocaine and alcohol concomitantly produces the unique substance cocaethylene which has a unique and desired euphoric effect. The second most common drug mentioned was marijuana, by about 20% of patients, also unchanged. Past 30 day injection of any drug was reported by just 5% of primary cocaine users, similar to the total proportion who reported heroin as their secondary drug at 6% (most heroin is injected in the area).

Cocaine was the most common drug reported in area E.D. reports, totaling 4,401 and more than double the number for heroin (Exhibit 4). Cocaine is the most common drug identified in testing of

law enforcement evidence for King County, (42% of submissions, n=1,673), and is present at somewhat lower levels in the surrounding counties (FY 2007). Most cocaine involved drug caused deaths also involve other drugs. In 2007, 79% involved other drugs, similar to most prior years, except for 2006 when 39% of cocaine involved deaths had no other drug present.

Heroin/opiate involved drug caused deaths have been relatively level the past 5 years with 65 in 2007 (Exhibit 1). Heroin/opiate drug caused deaths involved other drugs in 83% of deaths in 2007, similar to prior years.

Heroin primary treatment admissions are down proportionately from 20% to 12% of all treatment admissions to all modalities of care during the period from 1999 to 2007 (Exhibit 2). The number of admissions declined from 1,962 to 1,478 despite an increase in methadone maintenance treatment (MMT) capacity, and average caseload, due to the increasing number and proportion of primary prescription type opiate users entering MMT. These MMT numbers include clients served at private pay facilities who are much more likely to be primary prescription type opiate users. Heroin primary clients continue to be mostly White, with Blacks somewhat over represented compared to the overall demographics of the county with 16% of admissions in 2007. Cocaine has remained the most common secondary drug at 50% with prescription type opiates the most common secondary drug in 2007 at 10%, up from 4% in 1999. Methamphetamine as secondary has increased from 1% to 6%. The age composition of primary heroin users has shifted since 1999 with increases in both younger and older groups. Specifically there was a change from 17% of clients being under the age of 30 to 23%, a slight decline in the proportion in their 30's from 32% to 26% in 2007, a substantial decrease among those in their 40's from 41% to 27% and a large increase among those aged 50 and older from 10% to 23%. This likely indicates the continued aging of an older cohort and the apparent emergence of a younger cohort of users.

Heroin E.D. reports, all case types, totaled 2,172, the second most common illegal drug and somewhat less than the 2,396 reports for prescription type opiates for the case types of seeking detox, overmedication and other/drug abuse (Exhibit 4, note sub-total for prescription type opiates not shown in exhibit). Purity data from the DEA indicate that the average purity of street purchases in Seattle and Tacoma from December 2006 through July 2007 was 12%, similar to prior years. However, there was significant variability with a median of 10% and a range from 0% to 62% purity. The use of unexpectedly high purity heroin could result in overdoses.

Heroin is relatively infrequent in local law enforcement seizures compared to other major drugs of abuse. In fiscal year 2007, 5% of tests on substances seized in King County tested positive for heroin, similar to Snohomish County and a bit more than Pierce County (Exhibit 5). The generally low level was similar across these adjacent counties, all of which have large metropolitan centers.

The growth in **primary prescription type opiate** use is significant statistically and in terms of the overall drug abuse scene. There are some indications of a slowing of the rate of increase across indicators of prescription type opiate abuse, but morbidity and mortality indicators are at high levels. Treatment admissions are at a level disproportionately low compared to other indicators among the available data sources, this may be due to the lack of data on private pay treatment for non MMT modalities. Private pay MMT clients are much more likely to be primary prescription type opiate users, it is possible this pattern is also present among those receiving private pay non-MMT treatment. The lack of information about the full population receiving drug treatment may represent a particularly large blind spot when it comes to prescription drugs.

Drug caused deaths with prescription type opiates involved totaled 151 in 2007, up slightly from 2006, and up substantially from 1997 when there were 22 (Exhibit 1). The majority of prescription type opiate involved drug caused deaths had methadone present, with oxycodone being the second

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most common type of opioid. In 2007, 84% of these deaths involved multiple drugs, a somewhat smaller proportion than in recent years.

A poly drug caused death occurred in the first half of 2007 in King County, WA in which buprenorphine, alcohol and several prescription sedatives were detected. This is the first known case of a drug caused death in which buprenorphine was detected. Note that toxicological testing for buprenorphine is not routinely done and must be specifically requested. The patient was receiving buprenorphine for opiate addiction treatment.

A recently completed analysis of methadone involved deaths throughout Washington State between 2001 and 2004 in which methadone was listed on the death certificate (n=627) found that 5% of decedents were currently in a methadone maintenance drug treatment program (either for- or not-for-profit clinics) and that an additional 5% had been in a program at sometime in the prior three years. Washington State does not yet have a universal, electronic prescription monitoring program, so others sources are not systematically available.

Prescription type opiate primary users increased as a proportion of all treatment admissions from 1% to 4% from 1999 to 2007, an increase in absolute numbers from 87 to 511 (Exhibit 2). 2007 was the first year in which there was not an increase in the proportion since 2002. The proportion of females declined somewhat to 45% in 2007, though this is still the highest proportion of females among the major drugs of abuse. The proportion of Whites reporting primary prescription type opiate use increased from 67% to 79%.

A striking change in the age distribution of primary prescription type opiate users has occurred over the past 9 years, with the largest group being those under the age of 30 at 56% in 2007, up from 16% in 1999. The proportion reporting heroin as secondary was 12%, cocaine 15%, 'other' 9% (a category including benzodiazepines), alcohol 14% and marijuana 18%. Trends in secondary drugs are not discernable due to small numbers in earlier years.

Prescription type opiates totaled 3,109 for all E.D. case types (Exhibit 4), with 2,396 reports total for the case types of seeking detox, overmedication and other/drug abuse (data not shown). Among these three case types oxycodone (n=633) and methadone (n=613) predominated with an additional 250 reports for hydrocodone. The distribution of case types varied across these three drugs with 72% of methadone reports of the other/drug abuse case type compared to 60% and 47% for oxycodone and hydrocodone respectively. Note, that though currently unavailable, DAWN reports for prescription type opiates have involved other drugs in combination in a majority of cases. Buprenorphine reports totaled 19, with 5 seeking detox and 14 other/drug abuse.

Testing of local law enforcement evidence indicates that the combined class of opioids represented 7% of tests conducted (n=297) (Exhibit 5). The most common substances identified include oxycodone (n=144), hydrocodone (n=72) and methadone (n=51). The proportion of prescription type opiates was lower in Pierce County and higher in Snohomish County. According to the NW HIDTA, diverted prescription type opiates are generally available throughout most of Washington.

Methamphetamine use is more prevalent outside of the urban core of Seattle and is used throughout much of Washington State. Drug caused deaths with methamphetamine present have remained relatively steady over the past 6 years, with 18 such deaths in 2007 (Exhibit 1). A substantial minority of drug caused deaths with methamphetamine involve no other drugs: 44% in 2007. The proportion of methamphetamine only drug caused deaths is higher in the previous three years than the several years prior. The median age for methamphetamine only deaths was 42.5, higher than those in which other drugs were also present, 37.0, during the past 11 years.

Methamphetamine primary treatment admissions as a proportion of all admissions increased from 4% (n=390) in 1999 to 11% (n=1,367) in 2007, with the proportion remaining steady from 2005 to 2007

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(Exhibit 2). Methamphetamine users are disproportionately White, though Whites have declined from 90% to 80% of admissions (coding issues preclude trend analyses). The main change in age distribution is an increase in those age 40 and older from 9% to 22% from 1999 to 2007. The proportion under age 30 is relatively large at 45% compared to cocaine at 15% and heroin at 23%, but smaller than for marijuana and prescription type opiates. Recent injection drug use was reported by just 12% of primary methamphetamine clients in 2007. The most common secondary drug of abuse was marijuana at 34%, followed by alcohol at 26% and cocaine at 13% in 2007, similar to prior years.

Methamphetamine E.D. reports for all case types totaled 924 at less than a quarter the level of cocaine, lower than heroin and cocaine, but much more common than MDMA and PCP (Exhibit 4).

Methamphetamine positive drug seizures by local law enforcement are more prevalent in the counties surrounding King County, though they still constituted 16% (n=658) of tests in King County (Exhibit 5). Newly available Domestic Monitoring Program (DMP) data from the DEA indicate that there was enormous variability in the purity of methamphetamine, most of which they report was crystal/ice. From November 2006-September 2007 local DEA made 33 street level buys in 12 different cities throughout Washington, reporting an average purity of 59% and a range of 0-99%.

Methamphetamine incidents (a combination of labs and dump sites) totaled 42 in King County, down from 63 the previous year and the peak of 271 in 2001 (Exhibit 6). Statewide number are down substantially as well. Law enforcement reports that "ice" is commonly available and the majority comes from Mexico. Data from the Federal Drug Seizure System indicate an upturn in methamphetamine seizures, totaling 97 kilograms in 2007, after a steady decline from the 206 kilograms seized in 2003.

Marijuana was reported as the primary drug of abuse by 16% of clients, similar to the prior year, but down from 20% in 2003. The absolute number of admissions was 2,016 in 2007, up from 1,665 in 1999 (Exhibit 2). Female primary marijuana users made up the smallest proportion of admissions among all drugs at 23%, down from an already low level of 29% in 1999. From 1999 to 2007 the proportion of Whites declined from 58% to 42% while the proportions for Blacks increased from 21% to 31%. These low and declining proportions of females and Whites may be related to the relatively high and increasing proportion of criminal justice referrals among marijuana cases detailed in the June 2006 Seattle Area CEWG report. These demographic changes may also be related to the dramatic changes in the ages of those entering treatment with marijuana as primary which had been predominately youth with 63% of clients under 18 in 1999. This proportion dropped to 38% in 2007. The factors driving this change are unclear, but appear to be due in part to declines in youth referrals associated with fewer social services staff in area schools. Some shifts in secondary drugs of abuse have occurred with a decline in alcohol to 57% and increases for cocaine, up to 11%, and methamphetamine up to 7%. These shifts are likely driven by the changes in age composition of treatment admittees. Marijuana is the most common secondary drug of abuse among those reporting alcohol as primary at 32%.

Marijuana E.D. reports totaled 1,660 for all case types, lower than heroin and cocaine, but more common than methamphetamine (Exhibit 4).

Marijuana was the second most common drug in tests of local law enforcement seizures from King County with 19% (n=754) (Exhibit 5). Marijuana was the most common substance in Pierce County, 34% (n=606) and second in Snohomish County, 25% (n=272). Indoor marijuana grow operations in Western Washington and outdoor grows in Eastern Washington are reported by law enforcement to be pervasive. Federal drug seizures for marijuana totaled 2,121 kilograms in 2007, down compared to previous years.

Hallucinogens are relatively uncommon in drug caused deaths. Mortalities involving MDMA remain infrequent with three in 2007 and a total of 17 since 1997 (Exhibit 1). The average age for MDMA involved deaths is much younger than for fatalities overall: 26 compared with 42. Poly drug deaths are the norm with MDMA, 82% of deaths since 1997. Dextromethorphan was present in 7 drug caused deaths in 2007, a level similar to previous years. Of the 46 deaths with dextromethorphan since 1997 every one has involved multiple drugs, half of them involving cocaine, heroin and/or methamphetamine. The average age of dextromethorphan involved drug caused deaths was 42. There was one PCP involved death in 2007, with a total of 4 since 1997. Every PCP case involved other drugs, and decedents averaged just 28 years of age. No deaths with the presence of LSD or psilocin/psilocybin (psychedelic mushrooms) have been reported in the past decade.

Hallucinogens are infrequently mentioned as a primary drug of abuse though the numbers have increased from 16 to 77 from 1999 to 2007 (Exhibit 2). Despite these small numbers some important trends are evident. The proportion of Blacks increased from 0% to 22% and the proportion under 18 declined from 63% to 16%. While the majority of primary hallucinogen users reported marijuana as secondary in 1999, the most common secondary drug was cocaine in 2007 with 38%. The proportion reporting recent IDU was high at 35%. In sum, treatment data indicate a very different group of hallucinogen users that is more likely to be Black, older and an IDU compared to years past.

A total of 127 E.D. reports involved MDMA, similar to PCP with 114, but much lower than for other drugs of abuse (Exhibit 4). Of the 127 reports 22% were ages 12-17, 23% were ages 18-20, 20% were ages 21-24 and 17% were ages 25-29; an age distribution much younger than other major drugs of abuse. Of the 114 PCP reports, the modal group was 25-29 year olds at 26%, with another 23% aged 35-44; overall, an older group than those reporting MDMA use. (Note that the majority of race data are missing in DAWN.)

Testing of local law enforcement evidence indicates that MDMA is more common in Seattle-King County than the surrounding counties, but that it is still present in about 3% of tests in Snohomish and Pierce counties (Exhibit 5). For evidence obtained in King County, there were 249 MDMA positive tests (6%) with 31 tests positive for psilocin/psilocybin, and 22 positive for PCP. There were also 4 positive tests for foxy-methoxy, a research chemical, which has been present for several years in the Seattle area. LSD was detected once. Washington State appears to be a major transshipment point for MDMA manufactured in and transported out of British Columbia, Canada

Benzodiazepines were present in 16% (n=43) of drug caused deaths in 2007, a proportion similar to the prior 6 years (Exhibit 1). Ninety nine percent of all benzodiazepine involved drug caused deaths were poly drug. Muscle relaxants, another class of drugs with sedating effects, were present in 4% of cases in 2007, also similar to previous years. Eighty three percent of muscle relaxant involved deaths were poly drug.

Benzodiazepines and sedatives are mentioned twice as often as secondary drugs than as primary drugs among those entering treatment (Exhibit 2, data not shown for primary drug use). Prescription type opiate primary users are the most likely to report secondary use of prescription type sedatives.

The combined category of anxiolytics, sedatives and hypnotics totaled 2,090, two-thirds the level of prescription type opiates (Exhibit 4); this category includes benzodiazepines and barbiturates. Muscle relaxant E.D. reports totaled 249 (data not shown).

Law enforcement seizures of benzodiazepines are uncommon, totaling 2% of all seizures in King County in 2007 (Exhibit 5).

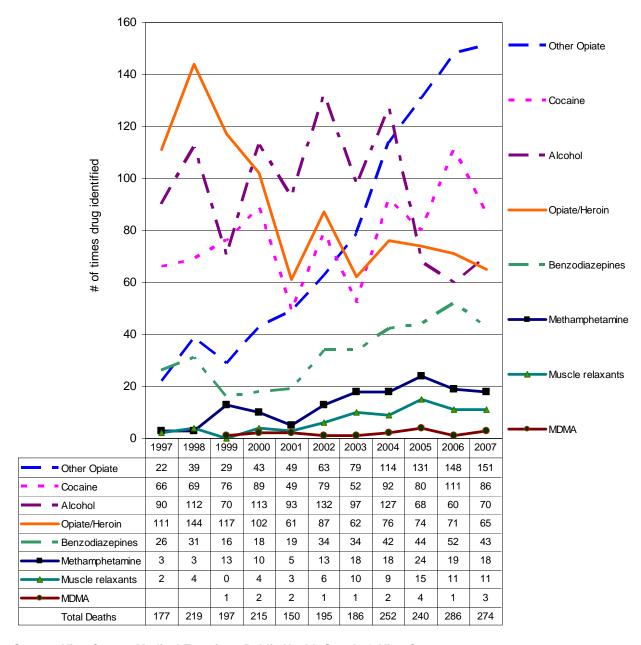
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Infectious diseases related to drug use

HIV prevalence remains low overall in King County and relatively low among injection drug users. Injection drug users represented 4% of new HIV diagnoses between 2005 and 2007 (Exhibit 7), statistically unchanged from prior years. Men who have sex with men and injected drugs totaled 8% of cases in 2005 and 2007, also statistically unchanged.

The syringe exchanges throughout King County provided 2,125,850 syringes in 2007 through nine different venues. This volume has been relatively steady since 1999.

Exhibit 1. Drug Caused Deaths in King County, WA



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

Exhibit 2. Drug Treatment Admissions in King County, 1999 compared to 2007

| Primary Drug | Alco | ohol | Coc | aine | Her | oin | Methar | nphet. | Mariju | uana | Halluci | nogen | Rx type | opiates | To | tal |
|------------------------------|-------|-------|-------|-------|-------|-------|--------|--------|--------|-------|---------|-------|---------|---------|-------|--------|
| | 1999 | 2007 | 1999 | 2007 | 1999 | 2007 | 1999 | 2007 | 1999 | 2007 | 1999 | 2007 | 1999 | 2007 | 1999 | 2007 |
| Gender | | | | | | | | | | | | | | | | |
| Male | 73% | 72% | 57% | 64% | 58% | 64% | 55% | 62% | 71% | 77% | 75% | 64% | 49% | 55% | 6,561 | 8,495 |
| Female | 27% | 28% | 43% | 36% | 42% | 36% | 45% | 38% | 29% | 23% | 25% | 36% | 51% | 45% | 3,283 | 3,981 |
| Ethnicity | | | | | | | | | | | | | | | | |
| White | 59% | 50% | 39% | 36% | 71% | 68% | 90% | 80% | 58% | 42% | 88% | 52% | 67% | 79% | 5,929 | 6,642 |
| African American | 18% | 18% | 49% | 47% | 16% | 16% | 3% | 3% | 21% | 31% | 0% | 29% | 6% | 7% | 2,114 | 2,857 |
| Asian/PI | 4% | 5% | 2% | 3% | 1% | 1% | 1% | 3% | 5% | 4% | 6% | 5% | 15% | 3% | 295 | 469 |
| Native American | 9% | 8% | 3% | 3% | 3% | 4% | 3% | 3% | 5% | 4% | 6% | 4% | 8% | 4% | 602 | 612 |
| Hispanic | 7% | 10% | 4% | 5% | 5% | 7% | 3% | 4% | 6% | 10% | 0% | 6% | 3% | 3% | 609 | 977 |
| Multiple Race | 1% | 5% | 1% | 4% | 1% | 3% | 0% | 4% | 1% | 7% | 0% | 3% | 0% | 3% | 88 | 556 |
| Other | 2% | 4% | 2% | 3% | 2% | 2% | 0% | 3% | 2% | 2% | 0% | 1% | 1% | 2% | 207 | 363 |
| Age | | | | | | | | | | | | | | | Total | |
| Less than 18 | 8% | 8% | 3% | 2% | 1% | 1% | 7% | 2% | 63% | 38% | 63% | 16% | 0% | 4% | 1,510 | 1,313 |
| 18-25 | 12% | 13% | 5% | 7% | 8% | 12% | 22% | 24% | 18% | 28% | 25% | 27% | 5% | 35% | 1132 | 2106 |
| 26-29 | 9% | 9% | 11% | 6% | 8% | 10% | 19% | 19% | 6% | 10% | 0% | 16% | 11% | 18% | 882 | 1,264 |
| 30-39 | 36% | 24% | 51% | 27% | 32% | 26% | 42% | 33% | 9% | 15% | 13% | 16% | 36% | 22% | 3,200 | 3,005 |
| 40-49 | 27% | 30% | 27% | 43% | 41% | 27% | 8% | 19% | 3% | 7% | 0% | 13% | 30% | 12% | 2,434 | 3,212 |
| 50+ | 9% | 16% | 4% | 15% | 10% | 23% | 1% | 3% | 1% | 2% | 0% | 13% | 18% | 10% | 686 | 1576 |
| Intravenous Drug Use any | | | | | | | | | | | | | | | | |
| substance past 30 days | | | | | | | | | | | | | | | | |
| Yes | | 2% | | 5% | | 70% | | 12% | | 1% | | 35% | | 14% | | 1,560 |
| No | | 98% | | 95% | | 30% | | 88% | | 99% | | 65% | | 86% | | 10,916 |
| Secondary Substance | | | | | | | | | | | | | | | | |
| Alcohol | 0% | 0% | 57% | 47% | 19% | 10% | 32% | 26% | 72% | 57% | 13% | 18% | 25% | 14% | 2,483 | 2,842 |
| Cocaine | 27% | 22% | 0% | 0% | 50% | 50% | 13% | 13% | 5% | 11% | 13% | 38% | 15% | 15% | 2,293 | 2,307 |
| Heroin | 3% | 1% | 9% | 6% | 0% | 0% | 3% | 4% | 1% | 1% | 0% | 4% | 17% | 12% | 288 | 357 |
| Methamphetamines | 3% | 4% | 3% | 5% | 1% | 6% | 0% | 0% | 4% | 7% | 0% | 6% | 1% | 3% | 242 | 558 |
| Marijuana | 33% | 32% | 19% | 20% | 7% | 7% | 38% | 34% | 0% | 0% | 63% | 19% | 5% | 18% | 1,999 | 2,630 |
| Amphetamines | 1% | 1% | 1% | 1% | 1% | 2% | 2% | 1% | 1% | 3% | 0% | 1% | 0% | 2% | 94 | 202 |
| Hallucinogens | 1% | 1% | 0% | 1% | 0% | 0% | 2% | 1% | 2% | 2% | 0% | 0% | 0% | 0% | 69 | 119 |
| Rx type opiates | 1% | 2% | 0% | 1% | 4% | 10% | 0% | 2% | 0% | 2% | 0% | 4% | 2% | 9% | 125 | 408 |
| Prescribed opiate substitute | 0% | 0% | 0% | 0% | 1% | 2% | 0% | 0% | 0% | 0% | 0% | 1% | 5% | 4% | 34 | 89 |
| None | 16% | 24% | 3% | 12% | 3% | 4% | 3% | 13% | 4% | 9% | 0% | 3% | 10% | 9% | 852 | 1,864 |
| Other | 2% | 1% | 1% | 1% | 3% | 3% | 3% | 2% | 2% | 3% | 0% | 5% | 14% | 9% | 199 | 273 |
| Tobacco | 14% | 10% | 6% | 5% | 12% | 5% | 4% | 4% | 10% | 4% | 6% | 0% | 6% | 5% | 1,095 | 822 |
| Unknown | 1% | 0% | 1% | 0% | 0% | 0% | 1% | 0% | 0% | 0% | 6% | 0% | 0% | 0% | 71 | 5 |
| Total | 4,307 | 4,564 | 1,279 | 2,154 | 1,962 | 1,478 | 390 | 1,367 | 1,665 | 2,016 | 16 | 77 | 87 | 511 | 9,844 | 12,476 |

Rx-type opiates = Other opiates, oxy/hydro-codone or non-Rx methadone

Other = Other, barbiturates, benzodiazepines, inhalants, major tranquilizers, Other sedatives, over the counter or PCP Several categories with low numbers are excluded and therefore the total is more than the the sum of the data elements presented.

IDU data from 1999 not comparable with 2007 so excluded

Public pay plus private pay OST and Dept. of Corrections clients

Prescribed opiate substitute is not clearly defined

Outpatient, Intensive Inpatient, Recovery House, Long-Term Residential and Opiate Substitution Admissions

King County Residents

Source: DSHS, DASA, TARGET

DAWN ED Sample and Reporting Information for King and Snohomish Counties: January-Exhibit 3. December 2007

| Total Eligible Hospitals ¹ | No. of Hospitals in DAWN Sample | Total EDs in DAWN Sample ² | No. o | No. of EDs Not Reporting | | |
|--|---------------------------------------|---------------------------------------|---------|-----------------------------|------|-------|
| | DAWN Gample | Jampie | 90–100% | 50-89% | <50% | |
| 23 | 23 | 25 | 6-10 | 0-2 | 0-4 | 14-15 |

¹Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey. ²Some hospitals have more than one emergency department. SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 5/13/08

Exhibit 4 DAWN ED Reports by Drug Type, All Case Types: January-December 2007

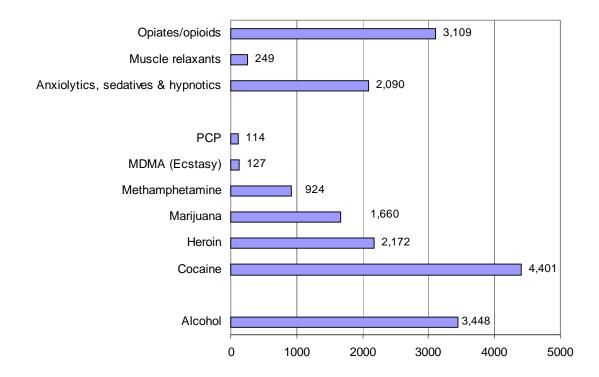


Exhibit 5 Local Law Enforcement Drug Seizure Test Results FY 2007

| Ochotono | KINO OO | LINITY | DIEDOE O | OUNTY | SNOHOMISH COUNTY | | | |
|-------------------|-------------|--------|----------|---------------|---------------------|-------|--|--|
| Substance | KING COUNTY | | | PIERCE COUNTY | | | | |
| COCAINE | 1673 | 41.6% | 513 | 28.7% | 251 | 22.7% | | |
| CANNABIS | 754 | 18.7% | 606 | 33.9% | 272 | 24.6% | | |
| METHAMPHETAMINE | 658 | 16.3% | 429 | 24.0% | 337 | 30.4% | | |
| MDMA | 249 | 6.2% | 50 | 2.8% | 29 | 2.6% | | |
| HEROIN | 189 | 4.7% | 60 | 3.4% | 54 | 4.9% | | |
| OXYCODONE * | 144 | 3.6% | 30 | 1.7% | 56 | 5.1% | | |
| HYDROCODONE * | 72 | 1.8% | 21 | 1.2% | 21 | 1.9% | | |
| METHADONE * + | 51 | 1.3% | 5 | 0.3% | 14 | 1.3% | | |
| CLONAZEPAM # | 23 | 0.6% | 9 | 0.5% | 5 | 0.5% | | |
| DIAZEPAM# | 21 | 0.5% | 6 | 0.3% | 7 | 0.6% | | |
| PSILOCIN | 19 | 0.5% | 1 | 0.1% | 14 | 1.3% | | |
| ALPRAZOLAM # | 17 | 0.4% | 10 | 0.6% | 6 | 0.5% | | |
| PHENCYCLIDINE | 22 | 0.5% | 6 | 0.3% | | 0.0% | | |
| MORPHINE * | 20 | 0.5% | 5 | 0.3% | 1 | 0.1% | | |
| AMPHETAMINE | 16 | 0.4% | 4 | 0.2% | 4 | 0.4% | | |
| PSILOCYBINE | 12 | 0.3% | 2 | 0.1% | 10 | 0.9% | | |
| METHYLPHENIDATE | 10 | 0.2% | 3 | 0.2% | 3 | 0.3% | | |
| BUPRENORPHINE * + | 8 | 0.2% | 3 | 0.2% | 3 | 0.3% | | |
| LORAZEPAM# | 7 | 0.2% | 5 | 0.3% | 1 | 0.1% | | |
| CODEINE * | 4 | 0.1% | 3 | 0.2% | 5 | 0.5% | | |
| Other | 57 | 1.4% | 15 | 0.8% | 14 | 1.3% | | |
| TOTAL | 4026 | 100% | 1786 | 100% | 1107 | 100% | | |

Source: National Forensic Laboratory Information System, Data submitted by WSP Toxicology Lab, Solid State Chemistry

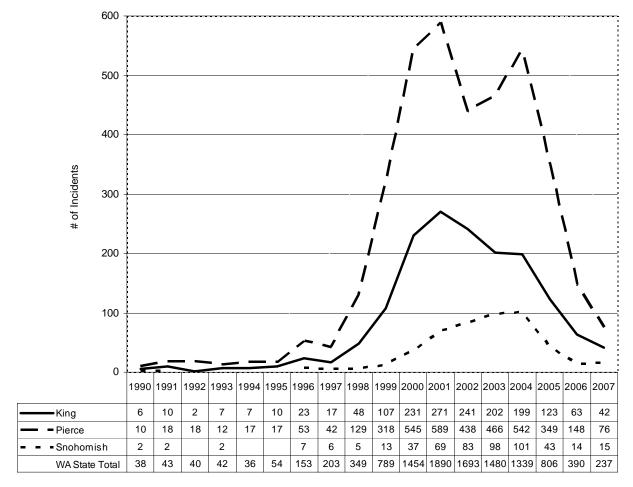
Source: U.S. D.O.J., DEA, National Forensic Laboratory Information System

^{*} Rx Type Opiate

[#] Benzodiazepine

⁺ May be used for opiate substitution treatment or other medical indications

Exhibit 6 Methamphetamine Incidents Reported to the Washington State Department of Ecology



Source: Washington State Department of Ecology

Exhibit 7. Demographic characteristics of King County residents diagnosed 1981-2007

| | 1981-1998 | | 1999- | 2001 | 2002 | -2004 | 2005-2007 ¹ | | Trend ² |
|--|--|-------|-------|---------|-------|-------|------------------------|-------|--------------------|
| | No. | (%) | No. | (%) | No. | (%) | No. | (%) | 1999-2007 |
| TOTAL | 7,420 | (100) | 1,160 | (100) | 1,097 | (100) | 965 | (100) | |
| HIV Exposure Category | | | | | | | | | |
| Men who have sex with men (MSM) | 5,578 | (75) | 764 | (66) | 718 | (65) | 591 | (61) | down |
| Injection drug user (IDU) | 415 | (6) | 80 | (7) | 68 | (6) | 42 | (4) | |
| MSM-IDU | 779 | (10) | 83 | (7) | 87 | (8) | 80 | (8) | |
| Heterosexual contact | 275 | (4) | 134 | (12) | 108 | (10) | 54 | (6) | down |
| Blood product exposure | 93 | (1) | 9 | (1) | 3 | (0) | 2 | (0) | |
| Perinatal exposure | 22 | (0) | 5 | (0) | 0 | (0) | 0 | (0) | |
| SUBTOTAL- known risk | 7,162 | | 1,075 | | 984 | | 769 | | |
| Undetermined/other ³ | 258 | (3) | 85 | (7) | 113 | (10) | 196 | (20) | |
| Sex & Race/Ethnicity | | | | | | | | | |
| Male | 6,984 | (94) | 1,021 | (88) | 977 | (89) | 8 <i>4</i> 9 | (88) | |
| White Male⁴ | 5,689 | (77) | 702 | (61) | 625 | (57) | 526 | (55) | down |
| Black Male ⁴ | 655 | (9) | 158 | (14) | 166 | (15) | 137 | (14) | |
| Hispanic Male | 412 | (6) | 106 | (9) | 118 | (11) | 116 | (12) | up |
| Other Male ⁴ | 228 | (3) | 55 | (5) | 68 | (6) | 70 | (7) | up |
| Female | 436 | (6) | 139 | (12) | 120 | (11) | 116 | (12) | uр |
| White Female ⁴ | | . , | | . , | | | | . , | |
| Black Female ⁴ | 230 | (3) | 45 | (4) | 33 | (3) | 32 | (3) | |
| | 141 | (2) | 74 | (6) | 66 | (6) | 67 | (7) | |
| Hispanic Female | 26 | (0) | 14 | (1) | 8 | (1) | 6 | (1) | |
| Other Female ⁴ | 39 | (1) | 6 | (1) | 13 | (1) | 11 | (1) | |
| Race/Ethnicity | | | | | | | | | |
| White ⁴ | 5,919 | (80) | 747 | (64) | 658 | (60) | 558 | (58) | down |
| Black ⁴ | 796 | (11) | 232 | (20) | 232 | (21) | 204 | (21) | |
| Hispanic | 438 | (6) | 120 | (10) | 126 | (11) | 122 | (13) | |
| Asian & Pacific Islander ⁴ | 127 | (2) | 35 | (3) | 35 | (3) | 55 | (6) | up |
| Native American or Alaskan Native4 | 106 | (1) | 14 | (1) | 22 | (2) | 7 | (1) | |
| Multiple Race⁴ | 32 | (0) | 9 | (1) | 22 | (2) | 14 | (1) | |
| Unknown Race⁴ | 2 | (0) | 3 | (0) | 2 | (0) | 5 | (1) | |
| Place of Birth | | (0) | | (0) | _ | (0) | | (1) | |
| Born in U.S. or Territories | 6,764 | (91) | 898 | (77) | 857 | (78) | 686 | (71) | down |
| Born outside U.S. | 480 | (6) | 207 | (18) | 224 | (20) | 209 | (22) | up |
| Birthplace unknown | 176 | (2) | 55 | (5) | 16 | (1) | 70 | (7) | up |
| Age at diagnosis of HIV | 1 | (-/ | | (-) | | (-/ | | (- / | 7- |
| 0-19 years | 138 | (2) | 21 | (2) | 9 | (1) | 10 | (1) | |
| 20-24 years | 578 | (8) | 95 | (8) | 89 | (8) | 106 | (11) | up |
| 25-29 years | 1,466 | (20) | 172 | (15) | 151 | (14) | 138 | (14) | - GP |
| 30-34 years | 1,774 | (24) | 259 | (22) | 211 | (19) | 178 | (18) | down |
| 35-39 years | 1,530 | (21) | 267 | (23) | 257 | (23) | 173 | (18) | down |
| 40-44 years | 924 | (12) | 174 | (15) | 190 | (17) | 146 | (15) | uo |
| 45-49 years | 528 | (7) | 94 | (8) | 95 | (9) | 105 | (11) | up |
| 50-54 years | 248 | (3) | 51 | (4) | 52 | (5) | 46 | (5) | - |
| 55-59 years | 141 | (2) | 17 | (1) | 27 | (2) | 34 | (4) | up |
| 60-64 years | 51 | (1) | 4 | (0) | 9 | (1) | 18 | (2) | up |
| 65 + years | 42 | (1) | 6 | (1) | 7 | (1) | 11 | (1) | ~~ |
| Residence | 1 | \ '/ | | ٧٠/ | | V · / | | 1.1 | |
| Seattle residence | 6,415 | (86) | 960 | (83) | 847 | (77) | 714 | (74) | down |
| King Co. residence outside Seattle | 1,005 | (14) | 200 | (17) | 250 | (23) | 251 | (26) | up |
| g - 51 105.001.00 0 0 10100 0 0 0 1110 | .,500 | 1. 1/ | _00 | (. ,) | _50 | (=0) | | (=0) | ۳۲ |

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

5. Among cases where country of birth is known. Reported through 12/31/2007, by date of HIV diagnosis

Source: Public Health- Seattle & King County

^{2.} Statistical trends (p < .05) were identified from the chi-square test for trend, calculated for the periods 1998-2000, 2001-03, and 2004-06.

3. Includes persons for whom exposure information is incomplete (due to death, refusal to be interviewed, or loss to follow-up), patients still under

^{4.} And not Hispanic. The groups Asian, Native Hawaiian, & other Pacific Islanders were grouped due to small cell sizes. All race and ethnicity