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

Caleb Banta-Green<sup>1</sup>, T. Ron Jackson<sup>2</sup>, Michael Hanrahan<sup>3</sup>, Steve Freng<sup>4</sup>, Susan Kingston<sup>3</sup>, David H. Albert<sup>5</sup>, Ann Forbes<sup>6</sup>, Richard Harruff<sup>7</sup>, Sara Miller<sup>1</sup>

### ABSTRACT

The most noteworthy trends for 2005 in the Seattle area involve increases in prescription-type opiates and methamphetamine. Morbidity and mortality indicators for prescription-type opiates continue to increase; these substances (usually detected in combination with other substances) are the most common drug type identified in drug-involved deaths. Methamphetamine deaths have increased slightly in the past year and substantially over the past several years; however, they remain the least common of the street drugs detected in deaths in the Seattle area. While methamphetamine labs and dump sites continue to decline, treatment admissions continue to increase throughout the State and in the Seattle area. The price of methamphetamine is declining, while the overall purity and the abuse of methamphetamine throughout Washington increases. Methamphetamine use among those entering Statefunded treatment outside of King County is more than double that in the county. Though the trends involving methamphetamine are of interest, it is important to note that both cocaine and heroin have greater health consequences as measured by deaths and ED mentions. Cocaine and heroin morbidity and mortality indicators continue at moderately high levels, as do treatment admissions and law enforcement reports. Marijuana continues to be a major drug used, with substantial production in Washington and Vancouver, Canada, Benzodiazepines and muscle relaxant indicators are fairly low, with continued slight increases; use of these substances appears to be mostly secondary to other drugs. MDMA use continues at relatively low levels. Large seizures by U.S. Customs and the DEA in Washington in 2004 and 2005 indicate that the Northwest appears to be a major transshipment point to parts of the United States. Prevalence of hepatitis B and C remains high in injection drug users, with lower levels of HIV remaining steady.

The authors' affiliations are as follows:

#### Introduction

#### **Area Description**

Located on Puget Sound in western Washington, King County spans 2,130 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 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 Idaho and Montana.

The estimated 2005 population of King County is 1,793,583. King County's population was the 12th largest in the United States in 2000. Of Washington's 6.3 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 75.7 percent White, 10.8 percent Asian/Pacific Islander, 5.5 percent Hispanic, 5.4 percent African-American, 0.9 percent Native American or Alaska Native, 0.5 percent Native Hawaiian and Other Pacific Islander, and 2.6 percent "some other race." Those reporting two or more races constitute 4.1 percent of the population. Income statistics show that 8.0 percent of adults and 12.3 percent of children in the county live below the Federal poverty level, lower than the State averages of 10.2 percent and 15.2 percent, respectively.

#### **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, 2005. 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.

<sup>&</sup>lt;sup>1</sup>Alcohol and Drug Abuse Institute, University of Washington

<sup>&</sup>lt;sup>2</sup>Evergreen Treatment Services

<sup>&</sup>lt;sup>3</sup>HIV/AIDS Program, Public Health – Seattle & King County

<sup>&</sup>lt;sup>4</sup>Northwest High Intensity Drug Trafficking Area

<sup>&</sup>lt;sup>5</sup>Division of Alcohol and Substance Abuse, Washington State Department of Social and Health Services

<sup>&</sup>lt;sup>6</sup>Washington State Alcohol and Drug Help Line

<sup>&</sup>lt;sup>7</sup>Medical Examiner's Office, Public Health – Seattle & King County

- Emergency department (ED) drug data were obtained 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 2005 are presented. Eligible hospitals in the area totaled 22; hospitals in the DAWN sample totaled 22. A total of 24 emergency departments have been selected for inclusion in the sample (some hospitals have more than 1 ED); however, during this period, between 11 and 14 hospitals reported data each month. Data were incomplete, with less than 50 percent complete data for 0-2 of these hospitals in each month (exhibit 1). 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 2005. There are new case types in DAWN Live!, with the most relevant one presented here being 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). Data for 2005 are preliminary. The data include deaths directly caused by licit or illicit drug overdose and exclude deaths caused by antidepressants in isolation and by poisons. Totals may differ slightly from drug death reports published by the King County ME's office, which include fatal poisonings. Because more than one drug is often identified per individual drug overdose death, the total number of drugs identified exceeds the number of actual deaths. Additionally, data from the Washington State Patrol's Forensic Laboratory Services Bureau/"Toxicology Lab" from 2000 to 2005 were examined for substances which either the medical examiner does not report (i.e., marijuana) or which were not detected in any drug-caused deaths (i.e., lysergic acid diethylamide [LSD] and psilocybin). These data are based upon samples submitted by the King County Medical Examiner and indicate whether a substance was present, but not whether it was involved in a death, a ruling made by the Medi-

- cal Examiner based upon multiple sources of information.
- Drug-related Help Line data are from the Washington State Alcohol/Drug Help Line (ADHL), which provides confidential 24-hour telephonebased treatment referral and assistance for Washington State. Data are presented for 2001 to 2005 for calls originating within King County. Data presented are for drugs mentioned. A caller may refer to multiple drugs; therefore, there are more drug mentions than there are calls. The data exclude information on alcohol and nicotine, which account for more than one-half of the calls. The youth category includes person ages 19 and younger. Data are presented primarily for illicit drugs only; prescription drugs have not been coded consistently over time, limiting trend analyses. The large number of unknown drugs in 2001 and 2002 may obscure some trends as well.
- Forensic drug analysis data are from the National Forensic Laboratory Information System (NFLIS), which distributes data from the Washington State Patrol's Toxicology Lab on drug test results on local law enforcement seizures. These data include the top 25 drugs identified in fiscal year (FY) 2003–FY 2005. Data are presented for the Seattle-area lab in comparison to the rest of the State.
- **Heroin price and purity information** was obtained from the Drug Enforcement Administration's (DEA's) Domestic Monitor Program (DMP) for FYs 2000–2005.
- 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 2001–2005.
- 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), acquired immunodeficiency syndrome (AIDS), and hepatitis,

were provided by Public Health-Seattle & King County (PHSKC). Data on HIV cases (including exposure related to injection drug use) in Seattle-King County (2001 through 2005) which were obtained from the "HIV/AIDS Epidemiology Report."

 Key informant interview data are obtained from discussions with treatment center staff, street outreach workers, and drug users.

DRUG ABUSE PATTERNS AND TRENDS

#### Cocaine/Crack

Cocaine remains a major drug of abuse, with substantial treatment admissions, morbidity, and mortality.

Both the number and proportion of treatment admissions involving cocaine as the primary drug of abuse increased between 1999 and 2005, from 1,280 to 1,960 and from 13.0 to 16.2 percent of all admissions, respectively (data not shown, all data refer to 2005, unless specified otherwise in this report). A substantial minority of people (40 percent) entering treatment in 2005 reported using cocaine for the first time prior to the age of 19, lower than the average for all drugs of 69 percent, which is driven primarily by the low ages of onset for alcohol and marijuana (exhibit 2b). Only 1 percent of primary cocaine admissions were among those younger than 18. Females made up 38 percent of admissions, and Whites represented just 33 percent, with 51 percent of primary cocaine admissions being African-Americans. Cocaine is the only drug for which Caucasians do not represent the majority ethnic group in treatment admissions. This may be, in part, because of the large proportion of African-Americans whose entry referral to treatment for cocaine is from the Department of Corrections (DOC) (30.0 percent) relative to the proportion for Caucasians (18.4 percent).

Unweighted ED reports for cocaine totaled 29.2 percent (*n*=4,646) of all major drugs of abuse, the largest proportion of such substances (exhibit 3a). The majority, 82.9 percent, of case types were drug abuse/other, with another 15.4 percent seeking detox or treatment. Nearly two-thirds of cocaine patients were male. Race data were missing for more than one-half of the cases, with African-Americans representing 12.9 percent of reports, nearly double the proportion for this group in drug reports overall. The largest age group was the 35–44-year-olds, followed by those age 45–54. Route of administration data, not shown in exhibit 3a, were missing for three-quarters of cases; Of the documented reports, 7.0 percent reported injecting and 13.6 percent reporting smoking.

Cocaine-involved deaths totaled 81 in 2005, the most of any street/illegal drug (exhibit 4). The rate of cocaine deaths was 4.5 per 100,000 population, within the range of 3.9 to 5.2 since 1997. The median age of cocaine-involved decedents was 42.0 over this time-frame, the same as the average for all major drugs of abuse (exhibit 5). The percentage females was slightly lower than the average, at 22.5 percent. Cocaine-involved deaths were disproportionately African-American (21.3 percent) compared with all other drugs (11.0 percent). Almost all deaths were ruled accidental: 93.4 percent.

Cocaine remains the most commonly mentioned drug among adult callers to the Help Line, representing 31 percent of drugs mentioned (*n*=1,095) (exhibit 6). Among adolescent callers, cocaine remains the third most common drug, with 64 drug mentions (14 percent).

Federal law enforcement seizures of cocaine totaled 521 kilograms in 2005, the largest volume since at least 2001 (exhibit 7). Powder cocaine is reportedly available throughout the State, while crack is available only in the largest cities.

According to the DEA Seattle Field Division, powdered cocaine averaged \$30 per gram, and crack sold for \$20 for 1/10 gram.

Accounting for 38.3 percent of seizures, cocaine was the most common substance identified in the Seattle area in FY 2005 according to NFLIS data on local law enforcement drug seizure testing (exhibit 8). By comparison, for the rest of the State, cocaine accounted for only 19.8 percent of seizures. Although cocaine remained the second most common drug detected in the laboratories statewide, cocaine seizures were substantially lower than methamphetamine seizures (53 percent).

#### Heroin

Heroin is a major drug of abuse with substantial ongoing consequences as indicated by an average daily caseload of 2,565 in opiate substitution treatment programs in 2005. These in-treatment users represent a minority of all users, according to public health estimates. The rate of deaths involving heroin/opiates/morphine has declined somewhat in recent years.

The number and proportion of primary heroin admissions to all modalities of treatment dipped in 2001–2003 but increased again in 2004, and in 2005 there were 2,023 treatment admissions (16.7 percent of admissions for any substance) (exhibit 2b). Treatment

admissions and caseloads are sensitive to funding support, therefore treatment admission trends may well be driven primarily by funding rather than demand. At the end of 2005, 293 people were on the waitlist for methadone treatment managed by the PHSKC needle exchange, a drop from 493 at the end of 2004. This change was likely related to new funding made available for treatment in 2005.

The majority of heroin treatment admissions were to opiate substitution programs, typically methadone replacement therapy. For instance, of the 2,023 heroin admissions in 2005, 1,438 were to opiate substitution programs. The average daily caseload for these programs was 2,565 in 2005, indicating the relatively long lengths of stay. In these programs, the number of admissions for heroin increased slightly from 1,260 to 1,438 from 1999 to 2005, while the proportion of heroin admissions declined from 94.6 percent to 83.2 percent of all admissions. Admissions for prescription-type opiates increased concomitantly from 3.0 to 14.4 percent. Note that these are the only treatment data for which private/self-pay clients are included. A much larger proportion of private/selfpay clients report prescription-type opiates as their primary drug compared with those on public funding. In other words, economic status is correlated with drug of choice.

Unweighted heroin ED reports totaled 2,391, or 15.0 percent of the major substance of abuse reports; 82.5 percent were drug abuse/other case types and 16.5 percent seeking detox or treatment (exhibit 3a). The case type pattern is similar to that for cocaine, marijuana, and methamphetamine. Most reports were for males: 63.1 percent. Race data were missing for 57.0 percent of reports; of the documented cases, 36.6 percent were Caucasian and 4.6 percent were African-American. Only 14 reports of heroin were documented for those younger than 18, with the largest group being those age 35–44, followed by 45–54-year-olds. Of the 57 percent for whom a route of administration was reported, virtually everyone injected.

The rate of heroin/opiate/morphine-involved deaths held steady in 2005 at 4.1 per 100,000 population (n=74), down from a high of 8.4 in 1998 (exhibit 4). Median age for heroin/opiate/morphine-involved deaths was 41.0, slightly lower than the average for all major drugs of abuse (42.0) (exhibit 5). Females represented 19.8 percent of these decedents, the smallest proportion among all prescription and illegal drugs decedents. Most decedents were Caucasian (83.5 percent), and accidental deaths were the most common manner of death (91.7 percent). (A definitive determination of the presence of heroin is often

lacking; the category of heroin/opiate/morphine is the best approximation of heroin deaths, as it excludes all deaths known to involve specific prescription-type opiates.)

Heroin Help Line mentions have remained relatively steady, with 13 percent of adult callers to the ADHL mentioning heroin in 2005 (exhibit 6). Heroin is less frequently mentioned among youth (representing just 4 percent of calls in 2005).

Only 8 kilograms of heroin were seized by Federal law enforcement in Washington State in 2005, the smallest volume in recent years (exhibit 7). Heroin is available throughout much of Washington, according to local law enforcement. According to the DEA, it costs about \$40–\$60 per gram in the Seattle area.

NFLIS results show similar levels of law enforcement seizures for heroin in the Seattle area (5.6 percent) and in the rest of the State (5.2 percent) in FY 2005 (exhibit 8). Although heroin was the fourth most common substance detected in each of these regions, it constitutes a relatively small percentage of the number of seizures compared with cocaine, methamphetamine, and marijuana.

The predominant form of heroin on the streets is Mexican black tar. All DEA DMP buys of heroin that have been positively identified were found to be Mexican in origin. China white, a common form in British Columbia, Canada, and on the east coast of the United States, is uncommon in the local area, according to regional HIDTA and DEA.

Heroin DMP buys by the DEA to establish the local price and purity of street-level heroin yielded a median purity of 10 percent for buys in Seattle (exhibit 9). Comparable data are available since FY 2000, when the median purity was at its peak of 17 percent. It dropped for the next 2 years to about 7 percent, increased to 13 percent in the following 2 years, and then dropped to the 10 percent reported for FY 2005. The price per gram of heroin over this same time went from a low of \$0.56 in FY 2000 to highs in FY 2001 and FY 2002 of almost \$1.30 per gram; it has since remained steady at approximately \$0.90 per gram. Data from the first quarter of FY 2006 (autumn 2005) indicate a median purity of 11 percent.

# Other Opiates/Prescription-Type Opiates

For the purposes of this report, "other opiates/prescription-type opiates" include codeine, dihydrocodeine, fentanyl, hydrocodone (e.g., Vicodin), methadone, oxycodone (e.g., Percocet and OxyContin), propoxyphene (e.g., Darvon), sufentanil, tramadol

(e.g., Ultram), hydromorphone (e.g., Dilaudid), meperidine (e.g., Demerol), pharmaceutical morphine, acetylmethadol, and the "narcotic analgesics/combinations" reported in the DAWN ED data. Source information for methadone, whether pain medication or opiate treatment program, is rarely available.

Indicators of use, abuse, and morbidity and mortality of prescription-type opiates all continue to increase.

Admissions for primary prescription-type opiate use at entry to all modalities of treatment increased from 1.0 to 3.4 percent from 1999 to 2005. Overall, the combined proportion of admissions to private and public pay opiate substitution programs that involved a prescription-type opiate as the primary drug increased from 3.0 to 14.4 percent. This represents an increase from 40 to 250 people in opiate substitution programs (data not shown). A similar number of people reported prescription-type opiates as their secondary or tertiary drug of choice. Among outpatient treatment admissions, the modality with the largest number of admissions in the county, there were 379 mentions of any prescription-type opiate use as one of the top three drugs in 2005. However, in contrast to opiate substitution treatment programs, a larger proportion of people mentioned prescription-type opiates as their secondary or tertiary drug of choice. These data indicate that prescription-type opiates are used by persons entering a range of treatment modalities and that their use may or may not be primary.

In opiate substitution treatment programs, the proportional increase in prescription-type opiates as secondary or tertiary drugs was much smaller than the increase for those reporting them as their primary drug of abuse. This appears to indicate that the use of prescription-type opiates by heroin users has not increased nearly as rapidly as the increase in those using them as their primary drug. However, it could also indicate that some people are switching to prescription-type opiates from heroin as their primary drug.

Demographics of those entering treatment with prescription-type opiates as their primary drug in 2005 indicate that this group of users is older and more often female and White than users of most other drugs of abuse (exhibit 2b). Past analyses have indicated that those using prescription-type opiates primarily have higher incomes.

Unweighted ED data indicate that prescription-type opiates were the second most commonly reported class of drugs in 2005 (exhibit 3b). The two most common types were oxycodone, 849 reports, and methadone, 739 reports. A large proportion of reports are for prescription-type opiates "not otherwise speci-

fied," meaning that it was not clear from the medical record which type was used.

For prescription-type opiates as a general class of drugs, slightly more than one-half of the ED cases were reported as drug abuse/other cases, followed by 16.0 percent adverse reaction, 14.6 percent overmedication, 13.4 percent seeking detox or treatment, and 3.9 percent suicide attempts. The case types differed substantially for oxycodone compared with methadone. Two-thirds of methadone and 38.8 percent of oxycodone cases were drug abuse/other cases. Oxycodone users were more likely to have suicide, seeking detox or treatment, and adverse reaction case types.

The case type information available for ED data is largely unavailable for mortality data. These ED data may shed some light on the motivations for use among drug-involved deaths. In particular, the much higher proportion of oxycodone reports that were related to adverse reactions, 17.2 percent (n=146), compared to 5.8 percent (n=43) for methadone, points to problems ostensibly related to the proper use oxycodone, whereas problems with methadone were more likely related to a motivation of drug abuse.

Approximately one-half of prescription-type opiate ED patients, as well as those for methadone and oxycodone, were female (exhibit 3b). The age distribution for all prescription-type opiates was about one-quarter each in the 45–54 and 35–44 age groups and about 10 percent in the 21–24, 25–29, and 30–34 age groups. Different age distributions were evident for oxycodone and methadone, with oxycodone users making up a larger proportion of both the oldest group (those 65 and older) and those younger than 25. The age distribution for methadone is more similar to that seen for cocaine, heroin, and benzodiazepines. Taken together, these ED data may indicate that methadone is being abused more often than oxycodone among those seen at the ED.

Overall, the number and rate of prescription-type opiate-involved deaths continues to climb, surpassing any other abuse-able drugs (exhibit 4). In 2005, there were 138 prescription-type opiate deaths ruled as drug involved, up from 27 in 1997 (a rate increase from 1.6 to 7.7 per 100,000, adjusting for county population changes over time). Methadone-involved deaths were the most common, totaling 81, up from 67 in 2004 and 47 in 2003. Oxycodone-involved deaths were the next most common, with 32 in 2005, similar to the 33 seen in 2004. These two substances represented 69 percent of prescription-type opiates detected.

The median age of those with prescription-type opiate-involved deaths was 44.0, compared with a median of 42.0 for all major drugs of abuse (exhibit 5). A substantial minority of decedents with prescription-type opiates detected were female, 40.5 percent, compared with an average of 29.2 percent for all drug-involved deaths. A slightly larger proportion were White (86.4 percent) than the average for all drugs. A minority of decedents also had an illegal drug detected, 36.1 percent. Presence of an illegal drug is a reasonable indication that drug abuse was the motivation for using. However, determining other motivations for, or problems with, use are difficult. Accident was the leading manner of death, but suicides were common, at 10.6 percent, as was a ruling of undetermined (9.3 percent).

The relatively large proportion of deaths ruled as "undetermined" is likely due to several factors, including a lack of information on the opiate tolerance status of the individual or their motivations for using (e.g., pain, suicide, substance abuse, or drug treatment in the case of methadone). What constitutes a prescription-type opiate-related death is unclear, particularly among opiate-tolerant individuals. Issues of tolerance, potentiation with other drugs, and overlapping therapeutic and lethal dose levels complicate assigning causation in prescription-type opiate-involved fatalities. The source and form of prescription-type opiates involved in deaths are often undetermined.

Help Line calls regarding prescription-type opiates have been documented differently over time, with OxyContin and "prescription pain pills" added as categories during mid-2003. Adults mentioned prescription pain pills 492 times in 2005. This was more than the 470 mentions for heroin. This is the first year with more calls for prescription pain pills and also more than the 397 mentions for prescription pain pills in 2004. OxyContin was specifically mentioned by 228 adults in 2005, similar to 2004, with 2003 data not comparable due to the shorter timeframe of data collection. Though the numbers are very small, youth mentioned OxyContin more often than prescription pain pills in 2005: 29 and 20 times, respectively. Heroin was mentioned by 19 youth, in comparison.

According to the Northwest HIDTA survey of local law enforcement drug availability perceptions for 2005, prescription-type opiates are commonly available throughout the State, led by oxycodone and hydrocodone.

Three types of prescription-type opiates are among the top 25 substances reported in the FY 2005 NFLIS data: oxycodone, hydrocodone, and methadone (ex-

hibit 8). For the Seattle area, these three substances totaled 4.1 percent, which is only slightly higher than in the rest of the State (3.7 percent of seizures).

#### Methamphetamine/Amphetamine

Stimulants include a range of drugs, such as methamphetamine, which is available almost exclusively as an illicit drug. Amphetamines are primarily prescription drugs: dextroamphetamine (e.g., Dexedrine) for weight control and dl amphetamine (e.g., Adderall) for ADD/ADHD. Another prescription medication for ADD/ADHD is methylphenidate (e.g., Ritalin). MDMA (3,4-methylenedioxymethamphetamine) is a type of methylated amphetamine, however its typical patterns of use led it to be included in the behaviorally based category of drugs discussed below as Club Drugs.

Indicators of the negative consequences of methamphetamine use are increasing, while indicators of local manufacturing appear to be decreasing. Methamphetamine deaths have increased slightly in the past year and substantially over the past several years, however they remain the least common of the street drugs detected in deaths in the Seattle area. While methamphetamine labs and dump sites continue to decline, treatment admissions continue to increase throughout the State. Amphetamine abuse appears to be at low levels.

Treatment admissions for methamphetamine as the primary drug increased from 4.0 percent to 11.1 percent of admissions for all drugs from 1999 to 2005, representing 1,344 people in 2005 (exhibit 2b). Methamphetamine was mentioned as a secondary or tertiary drug of abuse less often, with proportional increases over time somewhat smaller than for methamphetamine as the primary drug of abuse (see exhibit 2a). This seems to indicate that primary methamphetamine use is increasing more quickly than secondary or tertiary use.

A majority (56 percent) of primary methamphetamine users admitted to treatment in 2005 reported first use of the drug prior to age 19, a larger proportion than cocaine (40 percent), prescription-type opiates (38 percent), and heroin (41 percent) (exhibit 2b). Five percent of admissions for methamphetamine were among youth. Though the level of use among youth is much lower than for marijuana and alcohol, it is the highest of the other major drugs of abuse. The proportion female (37 percent) is similar to heroin and cocaine and higher than for alcohol and marijuana. Caucasians represented 82 percent of primary users, a larger proportion than for any other drug. The prevalence of any use of methamphetamine

among those entering State-funded treatment outside of King County is more than double that in the county.

Amphetamines are recorded as a separate drug category from methamphetamine, and primary admissions stayed level at about 0.5 percent, totaling 69 in 2005. Many more reported them as secondary or tertiary drugs of abuse (n=214) in 2005, with no discernable trend over time.

Methamphetamine reports made up 12.1 percent of unweighted ED reports for major drugs of abuse, totaling 1,928 reports in 2005 (exhibit 3a). This is similar to reports for marijuana and lower than reports for heroin and cocaine. The case type distribution was similar to other street drugs, with 82.6 percent of reports for drug abuse/other and 15.9 percent for those seeking detox or treatment.

Seventy percent of methamphetamine reports were for men. Race data were missing for 49 percent of methamphetamine reports, with Caucasians making up 43.9 percent of reports, followed by African-Americans at 3.2 percent. Caucasians represented a higher proportion of patients, relative to African-Americans, than for any other street drug. The age distribution was shifted towards the young adults compared with cocaine and heroin, with 61 percent of methamphetamine patients being age 18–34, compared with 33 and 41 percent for cocaine and heroin, respectively.

Route of administration data were missing for 74 percent of methamphetamine reports; of the reports documented, 13.6 percent reported injecting and 8.5 percent smoking. The relatively high proportion of injectors is in contrast to the general perception of overall use patterns from public health and treatment providers, who indicate most users are smoking methamphetamine. The high proportion of injectors in the ED is likely related to the acuity of problems associated with those who inject and the characteristics of those who receive care at EDs. Treatment data for primary methamphetamine users indicate that 14 percent report recent injecting of any drug and 43 percent report ever injecting any drug; these proportions are higher than for primary cocaine users but much lower than for primary heroin users in 2005.

Methamphetamine-involved deaths continue to increase, totaling 24 in 2005, up from 18 in 2004 and 3 in 1997 (exhibit 4). Those dying with methamphetamine in their system were substantially younger compared with decedents with other drugs, with a median age of 38.5, compared with 42.0 for all major drugs (exhibit 5). A relatively small proportion were

female, 20.6 percent, compared with the overall average of 29.2 percent. A larger proportion were Caucasian, 88.7 percent. Almost all deaths were ruled accidental: 95.3 percent.

Adult mentions of methamphetamine when calling the Help Line totaled 745 (21 percent), second only to cocaine and similar to past years (exhibit 6). Among youth, methamphetamine is the second most commonly mentioned drug after marijuana, representing 16 percent of mentions, similar to previous years.

A category of amphetamine was added to the Help Line data in 2003. There were 39 adult mentions and 1 youth mention of amphetamines in 2005, though there may be underreporting due to an overlapping category of "prescription drugs."

Federal law enforcement seizures of methamphetamine have fluctuated substantially since 2001 and consist of two measurement units, kilograms and dosage units (which are not defined). The number of dosage units seized, 53,199, was far higher in 2005 than in any preceding year, while the number of kilograms seized, 76, was in the general range seen in previous years (exhibit 7).

Prices for methamphetamine ranged from \$20 to \$60 per gram in Seattle during autumn 2005, according to the DEA Seattle Field Division. Ounce prices for "crystal meth"/ice were \$700–\$1,400 per ounce compared with \$350–\$800 per ounce for regular methamphetamine. Ice has a characteristic look and is higher purity.

NFLIS data indicate that methamphetamine was the most common drug seized by law enforcement in Washington, outside of Seattle, in FY 2005 (exhibit 8). It is found at a much lower level in Seattle, where cocaine is the most commonly seized drug. Nearly one-third (31.4 percent) of Seattle-area drug tests were positive for methamphetamine, compared with 53.2 percent of drug tests for the rest of Washington. Combined, methamphetamine and cocaine account for 70 and 73 percent of all seizures in Seattle and Washington State, respectively; this indicates the similar prevalence of illegal stimulants being seized across the State.

Federal law enforcement sources report that less methamphetamine is being manufactured in Washington, but that demand is being met by an increase in supply from Mexico and Mexican groups in California. Additionally, these sources report that the price of methamphetamine has been declining, while the overall purity and the prevalence of crystal methamphetamine throughout Washington has been increasing.

Methamphetamine incidents, a combination of active labs used for manufacturing and dump sites of lab equipment or inactive labs, continued to decline for the State as a whole in 2005. The peak in incidents for the State and the two most populated counties occurred in 2001. In King County, the number of incidents was flat in 2003 and 2004 at around 200, with a decline to 123 in 2005. The surrounding counties of Pierce, Kitsap, and Snohomish all experienced declines in 2005 as well. Overall, the State saw a decline from 1,339 incidents in 2004 to 806 in 2005.

As the number of methamphetamine incidents has declined, the types of incidents has changed. In 2000 84 percent of incidents were laboratories, and 16 percent were dump sites. In 2005, just 43 percent of incidents were laboratories; the remainder were dump sites. Whether this indicates laboratories being better hidden; the long persistence of dump sites in the environment; changes in law enforcement policies, funding, and practices; or other factors is unknown. It is important to note that these incident data do not indicate the manufacturing methods or the quantities manufactured at the site of individual incidents. Reports from law enforcement indicate that "super" labs, those capable of producing large amounts of methamphetamine quickly, represent a small minority of manufacturing labs in the State.

#### Marijuana

Marijuana use is ubiquitous throughout King County and Washington State. It is commonly cited in admissions to drug treatment by youth and adults. Indicator data do not point to substantial morbidity associated with use.

The proportion of admissions for marijuana as the primary drug of abuse varied between 17 and 20 percent, with the number of admissions ranging from about 1,700 to 2,100 between 1999 and 2005, and totaling 2,012 in 2005 (exhibit 2b). About one-half of all admissions involved marijuana as the primary, secondary, or tertiary drug of abuse (exhibit 2a).

Admissions to treatment for which marijuana was the primary drug were more often adolescent and male (exhibit 2b). This group also had the second highest proportion of African-Americans (31) percent, behind cocaine (51 percent) and higher than the average of 23 percent for all substances. This ethnic pattern may be influenced by law enforcement involvement given that 40.2 percent of African-Americans admitted to treatment with a primary marijuana problem

were referred by the DOC, compared with 14.8 percent among Caucasians. Compared with cocaine, this is a higher proportion referred from DOC and a larger differential between ethnicities.

Marijuana ED reports totaled 1,968, representing 12.4 percent of unweighted reports for major substances of abuse in 2005 (exhibit 3a). As with other street drugs, the drug abuse/other case type was most prevalent, 84.3 percent, with 13.9 percent of reports indicating the reason for the visit was seeking detox or treatment. Another 1.6 percent, 32 reports, were recorded as suicide attempts. These suicide case reports are likely indicative of polydrug use and the fact that data are duplicated across drugs, so that the case type may more logically be associated with another substance that was used concomitantly than with marijuana, which has an extremely high lethal dose level (i.e., low lethality).

As with other street drugs, most ED reports are for males, 70.5 percent. Almost one-half of reports did not include race data; of the documented reports, 39.6 percent of reports were for Caucasians and 8.5 percent were for African-Americans, a slightly higher proportion of African-Americans than the average for all major drugs. Marijuana patients included a relatively large proportion of adolescents, 9.2 percent, but the drug was reported by users across the spectrum of ages. Almost all reports with route of administration indicated smoking.

Cannabis is not incorporated into the determination of death by the Medical Examiner, it is however routinely screened for by the State Toxicology Laboratory when testing samples sent by the Medical Examiner. The toxicology data indicate the presence of a substance, *not* whether it contributed to the death. Cannabinoids were detected in 16 percent of deaths for which evidence was sent to the toxicology laboratory from 2000 through 2005.

Help Line callers frequently mentioned marijuana. A smaller proportion of adults than youth mentioned marijuana, 17 percent and 44 percent, respectively (exhibit 6). Marijuana is the most commonly mentioned drug by youth. Mentions appear to have remained steady over time.

Federal law enforcement seizures of marijuana totaled 9,875 kilograms in 2005, down somewhat from the prior 2 years, but much higher than in 2001 and 2002 (exhibit 7). Marijuana is grown throughout much of Washington in indoor and outdoor growing operations. Substantial amounts of marijuana are brought southward across the U.S.-Canadian border, and Mexican grown marijuana is also available.

Cannabis was the third most commonly identified substance in NFLIS data for both the Seattle area and the rest of Washington State in FY 2005 (exhibit 8). In the Seattle area, 15.7 percent of seizures tested positive, compared with 13.9 percent for the rest of the State.

# Club Drugs—LSD, Psychedelic Mushrooms (Psilocybin), MDMA/Ecstasy

Indicator data are notoriously poor for club drugs, given the relatively low level of acute morbidity and mortality associated with these drugs and the infrequency with which individuals are admitted to treatment to address a primary club drug problem. A small increase was seen in the number of MDMA-involved deaths, and law enforcement indicates continuing availability of MDMA throughout the regions. Help Line callers continue to mention MDMA. Large seizures of MDMA at the Canadian border are likely due to increased manufacturing in Canada and the use of the Northwest region as a transshipment point for MDMA.

Treatment data do not list specific club drugs as distinct categories. The category hallucinogens includes MDMA, LSD, and mushrooms (psilocybin). As a primary drug type, this category is rarely cited, with just 0.3 percent (*n*=34) of people admitted to treatment in 2005 citing hallucinogens as their primary drug. However, it was more commonly cited as a secondary or tertiary drug, with another 252 persons mentioning such use in 2005. No substantive trends are evident over time.

Unweighted MDMA ED reports totaled just 143 in 2005, or 0.9 percent of major substances of abuse (exhibit 3a). A relatively large proportion were drug abuse/other case types, with 8.4 percent seeking detox or treatment. Psilocybin and LSD were also rarely reported, with 86 and 27 reports each, respectively.

Four deaths involving MDMA were recorded in 2005, the largest number since at least 1997. Previously, the most recorded in any 1 year was two, in 2004, 2001, and 2000. Among the nine MDMA-involved deaths prior to 2005, all had very similar patterns of drug use, either no other drug or just other stimulants (i.e., cocaine or methamphetamine) and, infrequently, alcohol. Interestingly, three of the four deaths in 2005 involved at least five drugs, including heroin or a prescription-type opiate, some other central nervous system depressant, and other substances. The majority of all 13 MDMA-involved deaths were White, young adults, and males. What this new pattern of use indicates, admittedly in a very small group of users, is unclear.

Psilocybin and LSD have not been reported in any drug-caused deaths, and toxicology laboratory data do not indicate any deaths from any cause in which these substances were detected.

The number of Help Line calls regarding MDMA were at their peak in 2001 for both youth and adults, though the total numbers have never been large (exhibit 6). For adults, the number of mentions in 2005 was 44, similar to the preceding couple of years, representing just 1 percent of drug-related calls. For youth, the percentage of calls involving MDMA has increased to a level similar to the peak in 2001, 8 percent compared with 9 percent, with a smaller percentage in the intervening years. The actual number remains small, with 38 calls in 2005, compared with 24 in 2004. The total number of calls for all drugs by youth residing in King County has declined steadily since 2001.

Law enforcement sources indicate that MDMA has remained readily available in Seattle over the past several years. Meanwhile, the amount seized by Federal law enforcement, particularly at the U.S.-Canadian border, has increased substantially from 30,711 dosage units in 2001 to 1,745,096 in 2005 (exhibit 7). Though Washington ranks number one in Federal seizures throughout the U.S., it is believed that much of the MDMA is being shipped through the State. Also, MDMA is reportedly being produced in Canada, rather than Canada serving as a transshipment point for MDMA manufactured in Northern Europe as in the past.

## Benzodiazepines/Barbiturates

Benzodiazepines and barbiturates appear to be secondary drugs of abuse. They are rarely mentioned as the primary drugs at treatment admission, but they are commonly cited in ED and mortality data.

Just 15 people cited benzodiazepines as their primary drug of abuse at treatment entry in 2005. However, it is more commonly mentioned as a secondary or tertiary drug, with 315 people reporting secondary or tertiary use in 2005. The number reporting any use of benzodiazepines has increased somewhat over time.

Barbiturates are rarely mentioned at treatment entry, whether as primary, secondary, or tertiary drugs, with just 38 people mentioning any use in 2005.

The combined category of benzodiazepines and sedatives totaled 2,112 unweighted ED reports in 2005, representing 7.2 percent of reports for major drugs of abuse (exhibit 3b). Nearly 42 percent of the reports had a case type of drug abuse/other, followed by 23

percent for overmedication, 16 percent for suicide attempts, and 9 percent seeking detox or treatment. The proportion with case types of drug abuse/other is the smallest for any of the major drugs of abuse. Just 45 percent were males, also the smallest proportion for major drugs. A large proportion, 63 percent, were ages 35 and older, similar to prescription-type opiates and older than most other drug types. Virtually all reports indicated consumption via the oral route.

The rate of benzodiazepine-involved deaths was 2.5 deaths per 100,000 population in 2005, similar to 2004 and up from a dip seen from 1999 to 2001 (exhibit 4). The median age was 43.0, slightly higher than for all drug-involved deaths (exhibit 5). A relatively high proportion of females, 42.6 percent, made up such deaths. Caucasians constituted a larger proportion of benzodiazepine-involved deaths than any other class of drugs at 91.6 percent. A relatively large proportion of deaths were ruled as suicides, 16.3 percent, with another 11.0 percent undetermined. Onehalf of deaths also involved an illegal drug, the largest for any substance except alcohol.

The Help Line added a benzodiazepine category in 2003 to differentiate the drugs from the general prescription category in which they were included previously. In 2005, there were 102 adult calls involving benzodiazepines and 5 such youth calls.

HIDTA's survey of local law enforcement agencies indicates that 54 percent reported Valium (diazepam) was available on the street and 38 percent reported Xanax (alprazolam) was available.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE AND INJECTION DRUG USE TRENDS

Data for people diagnosed with HIV infectio 10 7, with trends summarized for 1997–2005. In King County, injection drug users (IDUs) with no other

risk factors represented 6 percent of HIV diagnoses during the period from 2003 to 2005, statistically unchanged since 1997. Men who have sex with men (MSM) and also inject drugs (MSM/IDUs) represented 7 percent of HIV cases, unchanged over time.

Excepting MSM/IDUs, the rate of HIV infection among the 15,000–18,000 injection drug users who reside in King County has remained low and stable over the past 15 years. Various serosurveys conducted in methadone treatment centers and correctional facilities and through street and community-targeted sampling strategies over this period indicate that 4 percent or less of IDUs who are not MSM in King County are infected with HIV.

Syringes exchanged and numbers of encounters have remained high in King County, with 1,958,728 syringes exchanged and more than 53,300 encounters reported in 2005, a similar number of exchanges and somewhat lower number of encounters compared with 2004.

Hepatitis B and C are endemic among Seattle-area injectors. Epidemiologic studies conducted among more than 4,000 IDUs by Public Health's HIV-AIDS Epidemiology Program between 1994 and 1998 reveal that 85 percent of King County IDUs may be infected with hepatitis C (HCV), and 70 percent show markers of prior infection with hepatitis B (HBV). Local incidence studies indicate that 21 percent of non-infected IDUs acquire HCV each year, and 10 percent of IDUs who have not had hepatitis B acquire HBV.

For inquiries concerning this report, please contact Caleb Banta-Green, MPH, MSW, Alcohol and Drug Abuse Institute, University of Washington, 1107 NE 45th St, Suite 120; Seattle, WA 98105, Phone: (206) 685-3919, Fax: (206) 543-5473, E-mail: <calebbg @u.washington.edu>, Web: <a href="http://adai.washington.edu">http://adai.washington.edu</a> or Ron Jackson, MSW, Evergreen Treatment Services, Phone (206) 223-3644, E-mail: <a href="mailto:<a href="mailto:conjack@u.washington.edu">conjack@u.washington.edu</a>.

Exhibit 1. DAWN ED Sample and Reporting Information for King and Snohomish Counties: January–December 2005

Total Eligible Hospitals <sup>1</sup>	No. of Hospi- tals in DAWN Sample	Total EDs in DAWN Sam- ple <sup>2</sup>		No. of EDs Reporting per Month: Completeness of Data (%)			
	Jampie	pie	90–100%	50-89%	<50%		
22	22	24	9-12	0-1	0-2	11-14	

<sup>&</sup>lt;sup>1</sup>Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey

<sup>&</sup>lt;sup>2</sup>Some hospitals have more than one emergency department. SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 5/16/06

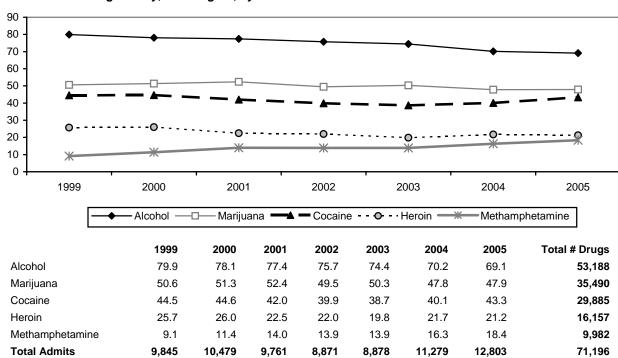


Exhibit 2a. Treatment Admissions<sup>1</sup> for Primary, Secondary, or Tertiary Use of Selected Drugs for Residents of King County, Washington, by Percent: 1999–2005

Exhibit 2b. Demographic Characteristics of King County Treatment Admissions, by Percent and Primary Drug: 2005

Demographic Characteristic	Alcohol	Cocaine	Heroin	Metham- phetamine	Rx Opiates	Marijuana	Overall Percent
≤ 19 1 <sup>st</sup> use	90	40	41	56	38	97	69
Youth	6	1	0	5	3	40	10
Female	27	38	38	37	49	26	33
White	50	33	67	82	79	44	54
African- American	18	51	16	3	7	31	23
Asian/Pacific Islander	4	2	1	2	2	5	3
Native Ameri- can	8	3	4	2	3	3	5
Hispanic	11	5	7	5	4	8	8
Total N	4,108	1,960	2,023	1,344	415	2,012	12,083

<sup>&</sup>lt;sup>1</sup>Data include all ages, all treatment modalities, and Department of Corrections and private pay clients at opiate substitution treatment clinics. Data are duplicated, as many people mention multiple drugs.

SOURCE: Washington State TARGET data system—Structured Ad Hoc Reporting System

Exhibit 3a. ED Reports for Selected Illicit Drugs, by Type of Case, Gender, Race, Age, and Percent (Unweighted<sup>1</sup>): 2005

Drug	Total <sup>2</sup>	Cocaine	Heroin	Marijuana	Meth.	MDMA	LSD
Total N	15,888	4,646	2,391	1,968	1,928	143	27
Total %		29.2%	15.0%	12.4%	12.1%	0.9%	0.2%
Type of Case							
Suicide attempt	2.5%	1.6%	0.9%	1.6%	1.0%	2.1%	3.7%
Seeking detox/treatment	15.2%	15.4%	16.5%	13.9%	15.9%	8.4%	7.4%
Alcohol only (age < 21)	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Adverse reaction	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Overmedication	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Malicious poisoning	0.4%	0.1%	0.0%	0.2%	0.4%	2.1%	0.0%
Accidental ingestion	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Drug Abuse/Other	76.2%	82.9%	82.5%	84.3%	82.6%	87.4%	88.9%
Gender							
Male	10,494	65.5%	63.1%	70.5%	70.4%	67.8%	88.9%
Race							
White	33.7%	24.4%	36.6%	39.6%	43.9%	28.0%	33.3%
Black	7.9%	12.9%	4.6%	8.5%	3.2%	9.8%	0.0%
Hispanic	1.4%	1.3%	0.8%	1.6%	1.7%	0.7%	0.0%
Race/ethnicity NTA <sup>3</sup>	2.0%	1.9%	1.0%	1.9%	2.0%	2.1%	3.7%
Not documented	54.9%	59.5%	57.0%	48.4%	49.1%	59.4%	63.0%
Age							
12–17 years	4.8%	1.1%	0.5%	9.2%	3.7%	16.8%	7.4%
18–20 years	8.1%	3.3%	3.3%	12.1%	8.9%	32.9%	14.8%
21–24 years	10.2%	7.2%	7.3%	15.8%	15.9%	17.5%	40.7%
25–29 years	13.6%	11.5%	14.7%	15.3%	20.9%	18.2%	11.1%
30–34 years	11.9%	11.3%	15.3%	10.9%	15.4%	7.7%	11.1%
35–44 years	30.0%	37.7%	30.8%	23.0%	25.3%	4.9%	11.1%
45–54 years	17.9%	23.1%	23.5%	10.5%	8.6%	2.1%	3.7%
55–64 years	3.2%	4.1%	4.1%	2.6%	1.2%	0.0%	0.0%
65 years and older	0.4%	0.6%	0.4%	0.3%	0.0%	0.0%	0.0%

<sup>&</sup>lt;sup>1</sup>All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data

Completeness: All EDs that reported data for any month. 
<sup>3</sup>NTA=Not tabulated above.

SOURCE: DAWN, OAS, SAMHSA; updated 5/16/2006

<sup>&</sup>lt;sup>2</sup>Total=All DAWN 'major substances of abuse' including several not shown, such as alcohol only and amphetamine; thus Total is more than the sum of data for substances shown.

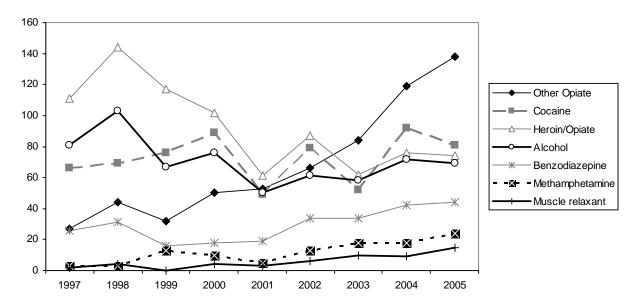
Exhibit 3b. ED Reports for Selected Prescription-Type Drugs, by Type of Case, Gender, Age, and Percent (Unweighted<sup>1</sup>): 2005

			Subcategory	of Rx Opiates
Drug	Benzodiazepine/ Sedative	Rx Opiates	Methadone	Oxycodone
Total N	2,112	3,201	739	849
Type of Case				
Suicide attempt	15.9%	3.9%	1.9%	4.8%
Seeking detox/treatment	9.3%	13.4%	8.7%	22.5%
Alcohol only (age < 21)	0.0%	0.0%	0.0%	0.0%
Adverse reaction	9.4%	16.0%	5.8%	17.2%
Overmedication	22.9%	14.6%	17.1%	16.4%
Malicious poisoning	0.1%	0.1%	0.0%	0.0%
Accidental ingestion	0.6%	0.4%	0.1%	0.4%
Drug Abuse/Other	41.7%	51.7%	66.4%	38.8%
Gender				
Male	44.6%	48.0%	53.3%	48.3%
Race				
White	39.4%	42.6%	31.5%	52.2%
Black	3.0%	3.4%	3.0%	3.2%
Hispanic	0.7%	0.8%	0.3%	0.7%
Race/ethnicity NTA <sup>2</sup>	1.4%	2.3%	1.6%	2.8%
Not documented	55.4%	50.8%	63.6%	41.1%
Age				
12-17 years	3.3%	2.1%	0.4%	2.8%
18-20 years	5.2%	4.7%	2.6%	8.5%
21–24 years	6.8%	9.8%	6.2%	15.4%
25–29 years	10.5%	9.9%	9.7%	9.3%
30-34 years	10.3%	9.7%	10.0%	8.7%
35-44 years	28.5%	24.8%	25.3%	22.0%
45-54 years	22.8%	23.1%	32.7%	17.4%
55-64 years	7.7%	8.4%	9.5%	8.4%
65 years and older	4.0%	6.8%	3.4%	7.1%
Route of Administration				
Oral	34.8%	29.4%	18.7%	44.9%
Injected	0.6%	2.0%	1.2%	0.7%
Inhaled, sniffed, snorted	0.1%	0.4%	0.0%	1.5%
Smoked	0.1%	0.3%	0.1%	0.9%
Other	0.1%	1.4%	0.1%	0.2%
Not documented	64.3%	66.4%	79.8%	51.7%

<sup>&</sup>lt;sup>1</sup>All DAWN cases are reviewed for quality control. Based on this review, cases may be corrected or deleted. Therefore, these data are subject to change.

2NTA=Not tabulated above.
SOURCE: DAWN, OAS, SAMHSA; updated 5/16/2006

Exhibit 4. Drug-Involved Deaths<sup>1</sup> in King County, Washington: 1997–2005



# of Times Drug Identified	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total by Drug
Other Opiate	27	44	32	50	53	66	84	119	138	613
Cocaine	66	69	76	89	49	79	52	92	81	653
Heroin/Opiate	111	144	117	102	61	87	62	76	74	834
Alcohol	81	103	67	76	50	61	58	72	69	637
Benzodiazepine	26	31	16	18	19	34	34	42	44	264
Methamphetamine	3	3	13	10	5	13	18	18	24	107
Muscle Relaxant	2	4	0	4	3	6	10	9	15	53
Total Deaths	177	220	196	213	146	195	186	254	241	1828

<sup>&</sup>lt;sup>1</sup>Data are duplicated, most deaths involve multiple drugs. SOURCE: Public Health-Seattle & King County, Medical Examiners Office

Exhibit 5. Drug-Involved Deaths<sup>1</sup> in King County, by Demographics and Manner of Death: 1997–2005

Demographic/ Manner of Death	All Drugs	Heroin/ Opiate	Cocaine	Alcohol	Rx Opiate	Benzo.	Metham.	Muscle Relax.
# of times identified	1,828	834	653	637	613	264	107	53
Median Age	42.0	41.0	42.0	41.0	44.0	43.0	38.5	44.0
Female (%)	29.2	19.8	22.5	19.0	40.5	42.6	20.6	56.6
Race/Ethnicity (%)								
White	83.1	83.5	72.3	83.2	86.4	91.6	88.7	90.6
African-American	11.0	10.0	21.3	9.4	9.0	4.6	4.7	3.8
Asian/Pacific Islander	1.1	0.4	0.9	1.1	0.7	0.8	1.9	0.0
Native American	2.7	3.1	2.6	4.2	2.5	1.5	1.9	3.8
Hispanic	0.9	1.4	1.2	0.6	0.3	0.4	0.0	0.0
Other/Mixed	1.3	1.6	1.7	1.4	1.1	1.1	2.8	1.9
Manner of Death (%)								
Accident	81.1	91.7	93.4	83.0	80.1	72.7	95.3	58.5
Suicide	10.8	2.6	2.0	9.7	10.6	16.3	0.9	22.6
Homicide	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0
Undetermined	8.0	5.5	4.4	7.2	9.3	11.0	3.8	18.9
Illegal drug present <sup>2</sup> (%)	65.5			66.1	36.1	50.0		34.0

<sup>&</sup>lt;sup>1</sup>Most deaths involve multiple drugs, therefore data are duplicative.
<sup>2</sup>Illegal drugs=heroin/opiate, cocaine, methamphetamine.
SOURCE: Medical Examiner's Office, Public Health- Seattle & King County; analyzed by Alcohol and Drug Abuse Institute, University of Washington

Exhibit 6. Local Law Enforcement Seizure Drug Test Results in Seattle and the State of Washington: FYs 2003–2005

Seattle-Area Lab

Seattle-Area Lab			
	FY 2003	FY 2004	FY 2005
Acetaminophen	0.3	0.2	
Alprazolam	0.3	0.1	0.2
Amphetamine	0.3	0.2	0.2
Buprenorphine			0.1
Caffeine	0.3	0.2	0.0
Cannabinol			
Cannabis	17.2	15.3	15.7
Carisoprodol	0.3		0.1
Cathinone	0.3		0.1
Clonazepam	0.5	0.3	0.5
Cocaine	40.5	40.4	38.3
Codeine	0.2		0.2
Diazepam	0.4	0.3	0.6
Dimethyl Sulfone			0.1
Heroin	5.0	4.7	5.6
Hydrocodone	0.7	0.9	1.1
Hydromorphone		0.1	0.1
Ibuprofen			
Ketamine	0.1		
Lorazepam		0.1	0.2
MDA	0.3	0.3	0.1
MDMA	1.4	1.0	
Methadone	0.4	0.7	1.2
Methamphetamine	27.2	29.4	31.4
Methandrostenolone (Methandienone)	0.1		
Methylphenidate		0.3	0.2
Morphine	0.2	0.3	0.5
Non-Controlled Non-Narcotic Drug	0.3	0.3	
Oxycodone	0.9	1.4	1.8
PCP	0.9	0.6	0.2
Propoxyphene		0.1	
Pseudoephedrine	0.7	0.4	0.5
Psilocin	0.7	0.6	0.3
Psilocybine		0.3	0.3
Sodium Bicarbonate			
Temazepam			0.1
Testosterone			0.1
Zolpidem			0.1
Total of Top 25 (#)	99.25 (3,188)	98.83 (3,454)	100.0 (3,702)
Sub-totals			
Other opiates	2.43	3.55	4.97
Benzodiazepines	1.18	0.93	1.48

WA State Without Seattle-Area Lab

WA State Without Seatt	WA State Without Seattle-Area Lab										
	FY 2003	FY 2004	FY 2005								
Acetaminophen	0.2	0.1	2003								
Alprazolam	0.2	0.1	0.2								
Amphetamine	0.2	0.4	0.2								
Buprenorphine	0.5	0.4	0.5								
Caffeine	0.2	0.2									
Cannabinol	0.2	0.2									
Cannabis	15.5	15.6	13.9								
Carisoprodol	0.2	0.1	0.1								
Cathinone	•	• • •	• • • • • • • • • • • • • • • • • • • •								
Clonazepam	0.3	0.3	0.3								
Cocaine	20.6	18.2	19.8								
Codeine	0.2	0.1	0.2								
Diazepam	0.4	0.3	0.4								
Dimethyl Sulfone			0.1								
Heroin	6.5	4.8	5.2								
Hydrocodone	1.1	1.3	1.3								
Hydromorphone			0.1								
Ibuprofen		0.1	0.1								
Ketamine											
Lorazepam			0.2								
MDA	0.1										
MDMA	0.5	0.5	0.1								
Methadone	0.4	0.6	0.7								
Methamphetamine	47.8	51.7	53.2								
Methandrostenolone (Methandienone)											
Methylphenidate	0.1	0.1	0.1								
Morphine	0.3	0.4	0.4								
Non-Controlled Non-											
Narcotic Drug	0.5	0.7									
Oxycodone	1.2	1.1	1.7								
PCP											
Propoxyphene		0.1	0.1								
Pseudoephedrine	0.8	0.7	0.5								
Psilocin	0.5	0.7	0.5								
Psilocybine	0.3	0.2	0.2								
Sodium Bicarbonate	0.2	0.2									
Temazepam											
Testosterone											
Zolpidem											
Total of Top 25 (#)	98.62 (12,162)	98.63 (11,926)	100.0 (12,309)								
Sub-totals											
Other opiates	3.25	3.51	4.39								
Benzodiazepines	0.85	0.81	1.12								

SOURCE: National Forensic Laboratory Information System

Exhibit 7. Drugs Mentioned in Calls by Adults and Youth to the Alcohol and Drug Help Line (Excluding Nicotine and Alcohol), by Percent: 2001–2005

Nama			Adult					Youth		
Name	2001	2002	2003	2004	2005	2001	2001 2002 2003 2		2004	2005
RX	9.5%	11.0%	5.4%	4.4%	5.2%	4.1%	3.1%	3.0%	2.4%	1.7%
Methadone	2.0%	2.0%	3.2%	3.9%	4.2%	0.5%	0.0%	0.4%	0.0%	0.6%
Other	1.2%	1.3%	2.2%	1.6%	1.8%	0.9%	2.0%	2.5%	1.6%	3.2%
LSD	0.5%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.5%	0.4%
Marijuana	21.0%	20.3%	18.2%	20.5%	17.0%	42.3%	49.6%	52.9%	50.6%	43.5%
Inhalant	0.2%	0.3%	0.1%	0.1%	0.3%	1.0%	1.0%	0.7%	0.2%	2.4%
Unknown	9.1%	11.2%	2.5%	2.1%	4.9%	11.3%	11.0%	3.7%	3.8%	2.6%
Heroin	11.2%	12.3%	16.0%	14.8%	13.2%	1.9%	1.7%	2.5%	3.8%	4.1%
Cocaine	23.5%	23.6%	32.6%	31.6%	30.7%	7.8%	9.7%	9.8%	11.7%	13.8%
Ecstasy	2.5%	1.4%	1.0%	1.2%	1.2%	8.7%	4.9%	3.3%	4.4%	8.2%
Hallucinogens	0.6%	0.6%	0.6%	0.8%	0.3%	3.8%	1.0%	2.5%	1.6%	2.6%
PCP	0.1%	0.1%	0.1%	0.3%	0.1%	0.0%	0.0%	0.4%	0.5%	0.0%
Methamphetamine	18.2%	15.6%	17.9%	18.4%	20.9%	17.0%	15.5%	17.3%	17.7%	16.2%
OTC	0.4%	0.2%	0.3%	0.2%	0.3%	0.6%	0.6%	1.2%	0.9%	0.4%
Total N	4,639	4760	3508	3978	3567	1,162	711	571	547	464

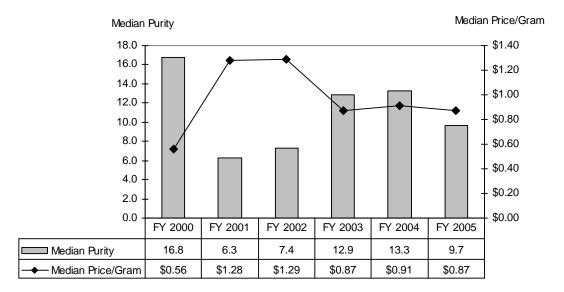
SOURCE: Washington State Alcohol/Drug Help Line

Table 8. Federal-Wide Drug Seizure System (FDSS) Data for Washington State: 2001–2005

Drug	Units	2001	2002	2003	2004	2005
Marijuana	Kilograms	4,105	5,606	10,060	11,581	9,875
Cocaine	Kilograms	123	263	475	318	521
Heroin	Kilograms	15	82	15	36	8
Methamphetamine	Dosage Units	9,908	256	992	450	53,199
	Kilograms	47	41	206	83	76
MDMA	Dosage Units	30,711	79,751	6,641	510,374	1,745,096
	Kilograms	19	0	0	70	3

SOURCE: Northwest High Intensity Drug Trafficking Area

Exhibit 9. Heroin Price and Purity for Seattle: FY 2000-FY 2005



SOURCE: Domestic Monitoring Program, Drug Enforcement Administration

Exhibit 10. Demographic Characteristics of King County Residents Diagnosed, by Date of HIV Diagnosis: 1981-2005

	1981-	-1996	1997-	-1999	2000-	-2002	2003	-2005 <sup>1</sup>	Trend <sup>2</sup>
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	1997-2005
Total	6,765	(100)	1,048	(100)	1,188	(100)	986	(100)	
HIV Exposure Category									
Men who have sex with men (MSM)	5,134	(76)	723	(69)	750	(63)	630	(64)	down
Injection drug user (IDU)	376	(6)	62	(6)	87	(7)	57	(6)	0
MSM-IDU ``	726	(11)	86	(8)	92	(8)	67	(7)	0
Heterosexual contact	227	(3)	68	(6)	149	(13)	89	(9)	up
Blood product exposure	90	(1)	5	(0)	7	(1)	5	(1)	Ö
Perinatal exposure	23	(0)	3	(0)	2	(0)	0	(0)	0
SUBTOTAL- known risk	6,576	` '	947	` '	1,087	` ,	848	. ,	
Undetermined/other <sup>3</sup>	189	(3)	101	(10)	101	(9)	138	(14)	up
Sex & Race/Ethnicity				, ,				. ,	
Male	6,404	(95)	940	(90)	1,040	(88)	878	(89)	0
White male <sup>4</sup>	5,300	(78)	663	(63)	696	(59)	543	(55)	down
Black male <sup>4</sup>	577	(9)	126	(12)	172	(14)	157	(16)	up
Hispanic male	335	(5)	105	(10)	112	`(9)	107	(11)	0
Other male <sup>4</sup>	192	(3)	46	(4)	60	(5)	71	(7)	up
Female	361	(5)	108	(10)	148	(12)	108	(11)	ò
White female⁴	197	(3)	42	`(4)	49	`(4)	28	(3)	0
Black female⁴	110	(2)	55	(5)	70	(6)	63	(6)	0
Hispanic female	23	(0)	4	(0)	15	(1)	10	(1)	0
Other female <sup>4</sup>	31	(0)	7	(1)	14	(1)	7	(1)	0
Race/Ethnicity		. ,		\ /				\ /	
White <sup>4</sup>	5,497	(81)	705	(67)	745	(63)	571	(58)	down
Black <sup>4</sup>	687	(10)	181	(17)	242	(20)	220	(22)	up
Hispanic	358	(5)	109	(10)	127	(11)	117	(12)	0
Asian & Pacific Islander <sup>4</sup>	104	(2)	29	(3)	42	(4)	36	(4)	0
Native American or Alaskan Native⁴	95	(1)	17	(2)	17	(1)	15	(2)	0
Multiple Race <sup>4</sup>	22	(0)	2	(0)	11	(1)	15	(2)	up
Unknown Race⁴	2	(0)	5	(0)	4	(0)	12	(1)	up
Place of Birth <sup>5</sup>		. ,		\ /				\ /	,
Born in U.S. or Territories	6,256	(92)	831	(79)	917	(77)	740	(75)	0
Born outside U.S.	373	(6)	147	(14)	234	(20)	206	(21)	up
Birthplace unknown	136	(2)	70	(7)	37	(3)	40	(4)	down
Age at diagnosis of HIV		\-/		٧٠/		\-/		٧٠/	
0–19 years	125	(2)	20	(2)	18	(2)	8	(1)	0
20–24 years	549	(8)	66	(6)	96	(8)	80	(8)	0
25–29 years	1,369	(20)	181	(17)	168	(14)	127	(13)	down
30–34 years	1,618	(24)	260	(25)	263	(22)	176	(18)	down
35–39 years	1,375	(20)	233	(22)	279	(23)	232	(24)	0
40–44 years	829	(12)	143	(14)	183	(15)	175	(18)	up
45–49 years	472	(7)	74	(7)	90	(8)	104	(11)	up
50–54 years	215	(3)	43	(4)	58	(5)	46	(5)	0
55–59 years	131	(2)	16	(2)	18	(2)	23	(2)	0
60–64 years	47	(1)	4	(0)	9	(1)	7	(1)	0
65 + years	35	(1)	8	(1)	6	(1)	8	(1)	0
Residence		` /		` /				. /	-
Seattle residence	5,887	(87)	878	(84)	966	(81)	756	(77)	down
King Co. residence outside Seattle	878	(13)	170	(16)	222	(19)	230	(23)	up
g 201 100.000.000 Oddillo	, 5.0	\10)				\/		\_0)	~r

<sup>&</sup>lt;sup>1</sup>Due to delays in reporting, data from recent years are incomplete. <sup>2</sup>Statistical trends (p<.05) were identified from the chi-square test for trend, calculated for the periods 1997–99, 2000–02, and 2003–

<sup>05.

\*</sup>Includes persons for whom exposure information is incomplete (due to death, refusal to be interviewed, or loss to follow-up), particularly whose only risk was beterosexual contact and where the risk of the sexual partner.

<sup>&</sup>lt;sup>4</sup>And not Hispanic. The groups Asian, Native Hawaiian, & other Pacific Islanders were grouped due to small cell sizes. All race and ethnicity categories are mutually exclusive. <sup>5</sup>Among cases where country of birth is known

SOURCE- Public Health- Seattle & King County