Recent Drug Abuse Trends in the Seattle-King County Area

Caleb Banta-Green[1], T. Ron Jackson[2], Michael Hanrahan[3], Susan Kingston[3], David H. Albert[4], Steve Freng[5], Ann Forbes[6], Richard Harruff[7], Richard Burt[8] and Hanne Thiede[8]

ABSTRACT

The total number of drug involved deaths increased 36 percent in 2004 due primarily to cocaine, prescriptions opiates and prescription and over-the-counter depressants/anxiolytics/sedatives. Cocaine involved deaths are at their highest level in at least 10 years, with 92 cocaine involved deaths in 2004. Cocaine continues to be the most common illegal drug mentioned in ED reports. Treatment admissions for heroin are beginning to increase along with the increased treatment capacity. Heroin involved deaths totaled 75 in 2004, up a bit from 2003 but well below the peak of 144 in 1998. Deaths and treatment admissions involving prescription opiates continue to rise steadily. Methamphetamine mortality indicators have leveled off in King County, while treatment admissions have begun increasing again. Negative consequences related to prescription stimulants appear low, but the number of prescriptions have increased substantially and anecdotal reports of youth and young adult misuse are common. Marijuana is widely used, particularly by youth. Prescription depressant involved deaths increased substantially. In 2004, 1 in 5 drug related deaths involved the combination of prescription opiates and depressants (and usually other drugs as well). Hepatitis B and C infect the majority of injection drug users (IDU). HIV among IDU is generally low, with the exception of methamphetamine injecting men who have sex with men (MSM).

The authors' affiliations are as follows:
[1] Alcohol and Drug Abuse Institute, University of Washington
[2] Evergreen Treatment Services
[3] HIV/AIDS Program, Public Health – Seattle & King County
[4] Division of Alcohol and Substance Abuse, Washington State Department of Social and Health Services
[5] Northwest High Intensity Drug Trafficking Area
[6] Washington State Alcohol and Drug Help Line
[7] Medical Examiner's Office, Public Health – Seattle & King County
[8] HIV/AIDS Epidemiology, Public Health – Seattle & King County

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.

According to the 2000 census, the population of King County is 1,737,034. King County's population is the 12th largest in the United States. Of Washington's 5.9 million residents, 29 percent live in King County. The city of Seattle's population is 563,374; 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: **to be updated**

- **Emergency department (ED) drug mentions data** were obtained from the DAWN Live system administered by the Drug Abuse Warning Network (DAWN), Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA). Preliminary data for 2004 are presented. A total

of 23 emergency departments have been selected for inclusion in the sample, however during this period between 10-12 hospitals reported data each month. And, data were incomplete with less than 50% complete data for 1-2 of these hospitals in each month. These data are preliminary, meaning that they may change. Data represent drug reports and are not estimates for the reporting area. Data are utilized for descriptive purposes only. Data cannot be compared to DAWN data from 2002 and before, nor can preliminary data be used for comparison with future data. Only weighted data released by OAS may be used for trend analyses. 2004 will be the first year of data weighted, so reasonable trend analyses will not be possible for several years. Available data are for King and neighboring Snohomish Counties combined, Pierce county is part of the statistical sample, but no ED's in Pierce were reporting during 2004. There are new case types in DAWN, with the primary 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 over-medication and seeking detox/treatment. For the sake of clarity 'other' will be referred to as 'drug abuse/other' in this report. Unless specifically stated, data presented are for the drug abuse/other case type.

- **Treatment data** were extracted from the Washington State Department of Social and Health Service 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, 2004. Data are included for all treatment admissions that had any public funding. Department of Corrections (only a few cases) and private pay clients (at methadone treatment programs) are also included. Methadone waiting list data for those seen at syringe exchange are administered and provided by Public Health-Seattle & King County.

- **Drug-related mortality data** were provided by the King County Medical Examiner (ME). Data for 2004 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. Testing is not done for marijuana. 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.

- **Toxicology and DUI data** were provided by the Washington State Patrol's Forensic Toxicology Laboratory for methamphetamine involved cases. Note that the laboratory's identification of a substance in a death is not equivalent to the medical examiner's ruling that a drug was causative in the death. The toxicology lab is reporting on chemical analysis for cases, whereas the ME's office utilizes these data along with their own investigation to make a ruling as to the cause of death. The number of positive toxicology cases for a substance will invariably surpass the number of deaths ruled to be caused by a substance.

- **School drug use survey** data are available from the Seattle Public School's Communities That Care survey for 2002 and 2004. Response rates were 50 percent in 2002 and 60 percent in 2004. Trends cannot be determined from these data.

- **Syringe exchange data** on the number of syringes exchanged and the number of encounters with clients are provided by Public Health-Seattle and King County's HIV/AIDS program.

- **Prescription drug sales** data are extracted from the Drug Enforcement Administration's Automation of Reports and Consolidated Orders System (ARCOS) reports. The data provide retail drug distribution data by zip code, covering primarily sales to hospitals and pharmacies. ARCOS data presented here are for the 3 digit zip codes areas of 980 and 981 which roughly correspond with King County boundaries. The population in these two zip code areas is 1,969,348 compared with 1,737,034 for King County in 2000. Available data report the 'grams of active ingredient' by year, this is complicated to translate into the number of prescriptions or users, so data are reported in terms of proportional change over time.

- **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.

- **Forensic drug analysis data** are from the National Forensic Laboratory Information System (NFLIS), which distributes data from the Washington State Patrol's Toxicology Laboratory on drug test results on local law enforcement seizures. These data include the top 25 drugs identified in FY 2003 and FY 2004. Data are presented for the Seattle area lab in comparison to the rest of the State.

- **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 three sources. One source is "HIV/AIDS Epidemiology Report." Data on HIV and AIDS cases (including exposure related to injection drug use) in Seattle-King County, other Washington counties, Washington State (2001 through 2004) are provided by Public Health-Seattle and King County (PHSKC), the Washington State Department of Health. HIV cases were reported to PHSKC or the Washington Department of Health between 2000 and 2004. The third source of information, on 18-30 year old injecting drug users preferred drugs over time, was provided by the HIV epidemiology unit of PHSKC. These data are based upon four studies conducted from 1994 to 2003; they included the RAVEN (1994-1997), RAVEN II (1998), Kiwi (1998-2002) and DUIT (2002-2003) studies.

- **Drug-related help-line data** are from the Washington State Alcohol/Drug Help Line (ADHL), which provides confidential 24-hour telephone-based treatment referral and assistance for Washington State. Data are presented for January 2001 to December 2004 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. Data are presented primarily for illicit drugs only, prescription drugs have not been coded consistently over time, therefore limiting trend analyses. The large number of unknown drugs in 2001 and 2002 may obscure some trends as well.

- **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

The proportion of treatment admissions involving cocaine (i.e. cocaine was mentioned as the primary, secondary or tertiary drug of abuse at the time of entry into treatment) increased for the first time in several years from 38.7 percent in 2003 to 40.1 percent in 2004 (Exhibit 1a). Those entering treatment were older in 2004 than those entering in 1999, with 22.6 percent ages 45-54 compared with 10.4 percent, respectively (Exhibit 1b). Use is quite low among those under 18, less than three percent in both years. The largest group remained those ages 30-44 with 60 percent in 2004.

Cocaine emergency department (ED) drug reports for all case types totaled 2,725, more than heroin, marijuana and methamphetamine (Exhibit 2b). For cocaine, drug abuse/other represented the largest proportion of case types (89 percent) followed by those seeking detox/treatment (10 percent). Almost two-thirds were male, with almost as many blacks as whites (note substantial missing data), and they were an older group with 38 percent ages 35-44 and 22 perent 45-54. Psychiatric conditions (24 percent) were the predominant complaint, followed by altered mental status (16 percent). Route of administration data were missing for 73 percent of reports, with 13 percent smoking, 10 percent injecting and 2 percent inhaled/sniffed/snorted.

Cocaine was the most common drug mentioned by adults calling the Helpline, 32 percent of calls in 2004 (Exhibit 3). For youth, 12 percent of calls were for cocaine in 2004.

Cocaine was not commonly used by high school seniors in the past 30 days (Exhibit 4). Use levels were 1.7 percent in 2002 and 2.5 percent in 2004 (not significantly different).

Cocaine was the most common substance identified in the Seattle area according to NFLIS data on local law enforcement drug seizure testing (Exhibit 5). Cocaine was the second most common drug detected in the laboratories for the rest of the state, with about half of the level found in the Seattle area lab. Minimal change occurred in the proportion of cocaine positive tests from FY 2003 to FY 2004.

Cocaine involved deaths are at their highest level in at least 10 years, with 92 cocaine involved deaths in 2004 (Exhibit 6a). The most common drugs combined with cocaine included heroin, representing 14 percent of all drug involved deaths, prescription opiates (10 percent) and depressants/sedatives/anxiolytics (9 percent). Twenty one deaths involved

only cocaine in 2004, 23 percent of all cocaine involved deaths. The number and proportion of cocaine only deaths is second only to 2000 when 31 of 89 (35 percent) cocaine involved deaths were due to cocaine only.

Over three quarters of cocaine involved decedents were male, a higher proportion than for all drug deaths (Exhibit 6d). The average age for cocaine of 41.2 was similar to all decedents, and increased from 39.7 to 43.3 from 1997 to 2004. A disproportionate number of decedents were African American, 21 percent, higher than 11 percent for all drugs and much higher than the county's population overall. Almost all deaths, were ruled accidental, 94 percent.

The level of cocaine indicators are disproportionately high for African Americans relative to their representation in King County. Though African Americans represent approximately 5 percent of the county's population they represent 21 percent of cocaine involved deaths, 47 percent of cocaine treatment admissions (Exhibit 1c) and 42 percent of cocaine ED reports. Note that even though African Americans are over represented in the ED (26 percent of reports with race documented) and in treatment (22 percent of admits), their levels of cocaine use are still disproportionately high.

The Seattle DEA field division reports that powder cocaine availability is increasing. They also have noticed increasing availability of crack in smaller communities in Washington State.

Heroin

The proportion of treatment admissions involving any use of heroin increased after several years of decline, from 19.8 percent in 2003 to 21.6 percent in 2004 (Exhibit 1a). Opiate treatment program capacity was substantially increased in the later part of 2004; there were 673 admissions in the first half of 2004 and 997 in the second half. The caseload increased by approximately 200 from January to December of 2004 to a total of 2,536 in public and private pay programs governed by King County. Heroin users are older than other drug users entering treatment on average and they continued to get older during the timeframe from 1999 to 2004; the proportion of those ages 45-54 increased from 27 to 34 percent (Exhibit 1b). An increase was also seen among those ages 55-64, from 3 to 6 percent of admissions involving heroin.

Among those entering opiate substitution treatment, the proportion reporting heroin as their primary drug decreased from 95 to 87 percent from 1999 to 2004 (Exhibit 7).

Heroin/opiate/morphine involved deaths increased in 2004 to 75, only two years had lower numbers since 1997 (Exhibit 6a). (The category of heroin/opiate/morphine is the best approximation of heroin deaths, it excludes all deaths known to involve specific prescription opiates.) Heroin/opiate/morphine combination deaths most commonly involved cocaine (14 percent of all drug involved deaths), alcohol (8 percent), depressant/anxiolytic/sedative (8 percent) and prescription opiates (6 percent) (Exhibit 6e). In 2004, just 15 percent of heroin/opiate/morphine involved deaths had no other drug present, down from 48 percent in 1997.

Heroin/opiate/morphine involved deaths were male 81 percent of the time, the highest proportion for any substance (Exhibit 6d). The average age of 40.6 was slightly lower than for all drugs, and increased substantially from 38.0 to 43.8 from 1997 to 2004. Eighty four percent of decedents were white and 10 percent African American. The vast majority, of deaths were ruled accidental, 92 percent. The average number of drugs involved was 2.1, the same as for all drugs. (Note that heroin/opiate/morphine involved deaths constituted almost half of all deaths, so the averages for all deaths are heavily influenced by these data).

The waiting list for methadone treatment programs (which primarily use methadone) was at 487 at the end of 2004 and 156 by June 2005 (Exhibit 8). Recent increases in treatment capacity have resulted in this decreased number on the waiting list.

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 Vancouver, British Columbia, and on the east coast of the United States, is uncommon in the local area according to regional HIDTA and DEA information.

Historically, DMP data were reported for the Seattle area which included buys in Seattle and Tacoma and just the average purity was reported. Preliminary data for the Seattle area showed a spike in the average purity of heroin for the Seattle area. The Seattle DEA Field Division provided additional detailed data that included the city of purchase as well the purity for each buy. This allowed the computation of medians in addition to averages,. These detailed data revealed that the median heroin purity of DMP buys in the city of Seattle was 14 percent in FY 2004, similar to the

prior year, higher than in FY 2001-2002 and below the 17 percent seen in 2000 (Exhibit 9). Most important are the four purchases in FY 2004 that ranged from 37-46 percent pure, this is a much larger range and higher purity than seen in the prior three years. Follow up discussions with local DEA indicated that these buys were not different than any others, high purity heroin was not being sought. This large a range is potentially dangerous because users may be getting much more potent heroin than they are used to, which, particularly when used in combination with other depressants, could prove deadly. This is a very small number of samples, but it does raise concerns about another potential cause of heroin overdoses.

Heroin drug reports in the DAWN Live system were second only to cocaine among illegal drugs. Ninety percent of heroin reports were of the drug/abuse other case type with almost all of the remaining reports seeking detox/treatment (Exhibit 2a). Sixty percent were male with five times as many whites as blacks, though 60 percent of reports did not have race/ethnicity documented. The group was relatively old with a third ages 35-44 and almost a quarter 45-54. By far the most common chief complaint was abscess/cellulitis/skin/tissue with 39 percent, far higher than for any other substance. Overdose was second with 10 percent of documented complaints. Injection was noted in almost all reports for which the route of administration was documented.

Heroin mentions in calls to the Helpline represented 15 percent of adults and 4 percent of youth (Exhibit 3).

NFLIS results show similar levels of law enforcement seizures for heroin in the Seattle area (5 percent) and the rest of the State (5-7 percent). Heroin was the fourth most common substance detected in each of these regions (Exhibit 5).

Price data for King County from the Northwest HIDTA for 2003 for Mexican black tar heroin include: $30–$150 per gram, $400–$900 per ounce, $8,000–$10,000 per pound, and $16,000–$25,000 per kilogram.

Other Opiates/Prescription Opiates

For the purposes of this report, "other opiates/prescription opiates" include codeine, dihydrocodeine, fentanyl, hydrocodone (e.g. Vicodin), methadone (source, whether pain medication or opiate treatment program is rarely available), oxycodone (e.g. Percocet and OxyContin), propoxyphene (e.g. Darvon), sufentanil, tramadol (e.g. Ultram), hydromorphone (e.g. Dilaudid, Palladone), meperidine (e.g. Demerol) pharmaceutical morphine, acetylmethadol, and the "narcotic analgesics/combinations" reported in the DAWN ED data.

Treatment admissions to any treatment modality increased from 81 to 264 for other opiates as the primary drug from 1999 to 2004. A substantial increase was seen in the 18-29 age group, rising from 16 to 40 percent of other opiate admissions from 1999 to 2004. These numbers are an underestimate as prescription opiate use is often noted as secondary or tertiary to other substances.

Among those entering opiate substitution treatment the proportion reporting prescription opiates as their primary drug increased from 3 to 12 percent (Exhibit 7).

The number of deaths involving prescription opiates continues to increase and has surpassed all other drugs with 118 deaths in which prescription opiates were identified in 2004, up from 84 in 2003 and 29 in 1997 (Exhibit 6a). Eleven deaths in 2004 involved just a prescription opiate, higher than all years except 1998 when there were 12.

Demographics for prescription opioid deaths point to a relatively high proportion of females and a group older than all drugs users on average (Exhibit 6d). This group was also disproportionately white and had a larger average number of total drugs present, 3.0, than for all decedents, 2.1.

Three specific prescription opiates make up the majority of all cases, with methadone present in 57 percent of prescription opiate involved deaths in 2004 (Exhibit 6b). Oxycodone is the next most common, present in more than a quarter of such deaths in 2004. Hydrocodone was present in 14 deaths in 2004, with all of the remaining prescription opiates totaling 33 cases in 2004.

Demographics of Oxycodone and methadone decedents are similar in terms of gender and the average numbers of drugs present (Exhibit 6d). Oxycodone users were older on average, 44.7, compared with 41.4 for methadone and the manner of death was much more often suicide, 22 percent versus 1 percent, respectively.

The most common class of drugs found in combination with prescription opiates in deaths is depressants (Exhibit 6e). This combination was found in 20 percent of all deaths, the highest proportion of any drug combination deaths in 2004.

Fifteen percent of deaths involving a combination of prescription opiates and depressants were determined to be suicides, slightly higher than 11 percent for all drug involved deaths and much lower than the 24 percent for all depressant involved deaths. These differences indicate that this combination is not just part of the commonly seen multiple drug involved suicides, but appear to be accidental deaths from those seeking to get high from this combination. These two classes of drugs are CNS depressants and their effects combine, or potentiate, to create a dangerous physiological state. In 2004, 62 percent of depressant involved deaths also involved a prescription opiate, while 43 percent of all prescription opiate involved deaths also involved a depressant (Exhibit 6c). This drug combination has been common in the past as well.

What constitutes a prescription opiate-related death is unclear, however, particularly among opiate-tolerant individuals. Issues of tolerance, potentiation with other drugs, and overlapping therapeutic and lethal dose levels complicate assigning causation in prescription opiate-involved fatalities. The source and form of prescription opiates involved in deaths are often undetermined.

ED drug reports for prescription opiates totaled 1,956 with the drug abuse/other case type representing the largest proportion (41 percent), followed by overmedication (25 percent) and adverse reaction (21 percent) (Exhibit 2a). Some misclassification of case type may remain, however we believe that the other/drug abuse case type is likely the most accurate category given that all other case types must be ruled out prior to assigning this case type. To understand more about those who are intentionally misusing prescription opiates the drug abuse/other case type is discussed further below.

ED drug reports for the drug abuse/other case type indicate that prescription opiate users were mostly 35-54 years old (58 percent), about half male, most used orally, though some injected, and withdrawal (23 percent) was the most common presenting complaint (Exhibit 2d).

Comparing drug abuse/other ED reports for the two most common prescription opiates, Oxycodone (n=171, 21 percent) and methadone (n=234, 29 percent) revealed a few differences. The most notable difference was the age distribution, with Oxycodone users being younger, 27 percent were 18-29, versus 16 percent of methadone users. Methadone users tended to be on the older end of the scale with 44 percent of methadone users aged 45 and older compared with 26 percent of Oxycodone users. This is the inverse of the pattern seen in deaths with regards to age. Route of ingestion information was missing for a substantial proportion reporting each drug, the most common route was oral for both, with 2 people reporting the inhaled/snorted/sniffed Oxycodone, 0 for methadone, and 6 people reporting they injected methadone, 0 for Oxycodone.

In 2004, 198 calls about adults to the Helpline involved OxyContin, with 9 for youth (Exhibit 3). There were 397 for 'prescription pain pills' for adults in 2004 and 6 for youth. As a point of comparison there were 589 calls about adults use of heroin in 2004. Categorization of calls to the Helpline for other opiates and 'prescription pain pills' has changed over time and categories are not mutually exclusive.

Three types of prescription opiates are among the top 25 substances reported in the NFLIS data: oxycodone, hydrocodone and methadone (Exhibit 5). For the Seattle area these three substances totaled 2 percent in FY 2003 and 3 percent in FY 2004. For the rest of the state about 3 percent of seizures tested positive for these substances in both years.

DEA data on sales of prescription opiates to hospitals and pharmacies in the King County area indicate that methadone sales have steadily increased each year, with a total increase of 359 percent from 1997 to 2003 (Exhibit 10). Note that these data for methadone only include prescriptions for pain written by physicians; they do not include methadone provided in opiate treatment programs. Oxycodone has continued to increase in recent years. Hydromorphone (80 percent), hydrocodone (93 percent), morphine (88 percent) and fentanyl (174 percent) have all increased as well. Codeine and meperidine have both steadily declined, decreasing 27 percent and 30 percent respectively.

Several diverse factors may impact these prescribing patterns: 1) increased advertising and promotion of pharmaceuticals generally, 2) guidelines promoting adequate use of opiates for management of pain released in 1996 by the Washington State Medical Quality Assurance Commission, 3) recent efforts to shift to methadone and morphine as less expensive alternatives to other opiates by Washington State agencies administering publicly financed health care services.

Marijuana

Almost half (47.8 percent) of those admitted to treatment reported current marijuana use (Exhibit 1a). This is a slight decline, however marijuana is still the most commonly reported illegal drug. Those

reporting marijuana as their primary drug are much younger than other drug users overall, with 45 percent of users under 18 in 2004 (Exhibit 1b). However, primary marijuana users are aging, the under 18 age groups represented 63 percent of users in 1999.

Marijuana ED reports totaled 1,160, with 92 percent drug abuse/other case type, followed by 6 percent seeking detox/treatment (Exhibit 2a). Over two-thirds were male, with users much younger than for other illegal drugs, 11 percent aged 12-17 and 42 percent 18-29. Psychiatric condition was reported most commonly (27 percent) followed by altered mental status (20 percent).

Calls to the Helpline for marijuana constituted 51 percent of youth related calls and 21 percent of adult calls in 2004, similar to prior years (Exhibit 3).

Marijuana was the most commonly identified illegal drug used high school seniors. Use in the prior 30 days was reported by 27.0 percent in 2002 and 25.4 percent in 2004 (Exhibit 4).

Cannabis was the third most commonly identified substance in NFLIS data for both the Seattle area and the rest of Washington State (Exhibit 5). In the Seattle area 17 percent and 15 percent of seizures tested positive for cannabis in FY 2003 and FY 2004. Similar levels were seen in the rest of the State, almost 16 percent for both years.

HIDTA data collected from King County law enforcement in 2003 show the following prices for marijuana: $10–$40 per gram, $250–$500 per ounce, and $2,200–$4,000 per pound. Price depends on the quality and a variety of other factors, but “BC Bud” from British Columbia, Canada, is widely available and the most expensive of the marijuana varieties available in King County.

Stimulants

Stimulants includes a range of drugs including methamphetamine which is available almost exclusively as an illicit drug. Amphetamines are primarily prescription drugs, d amphetamine (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).

Prescriptions for stimulant medications are up substantially. DL amphetamine (e.g. Adderall) sales are up 1,108 percent in the King County area from 1997-2003 (Exhibit 11). D amphetamine (e.g. Dexedrine) sales are up 134 percent and methylphenidate sales are up 67 percent over this same period. Note that Adderall was approved by the U.S. FDA in 1996 (i.e. fairly recently), methylphenidate in 1956 and Dexedrine in 1948.

The proportion of Helpline calls related to methamphetamine was 18 percent of both adult and youth calls in 2004 (Exhibit 3). Methamphetamine is the only substance for which youth and adults call in the same proportion. It is the second most common substance for youth and third most common for adult calls, similar to previous years.

The proportion of treatment admissions for King County residents involving methamphetamine (Exhibit 1a) increased in 2004 after several years of stability. Approximately 14 percent of all people entering treatment mentioned methamphetamine as one of the drugs they used between 2001-2003, this increased to 16 percent in 2004.

Treatment data indicate that primary methamphetamine users are much younger than heroin and cocaine users and older than marijuana users overall (Exhibit 1b). Only 5 percent of methamphetamine users were older than 45 in 2004, compared with 24 percent of cocaine, 40 percent of heroin and 3 percent of marijuana users. Methamphetamine users showed the smallest shift in age distribution from 1999 to 2004, with the only group showing any change those aged 45-54 which increased from 3 to 5 percent.

Deaths involving methamphetamine were level in 2003 and 2004 at a new high of 18 per year, up from 3 in 1997 (Exhibit 6a). A high proportion, 39 percent, of methamphetamine deaths involved no other drugs in both of these years. Since 1997 the average age of decedents with methamphetamine involved was 37.9, lower than the average for all drugs (Exhibit 6d). However, the average age in 2004 was 42.8, higher than any previous year.

Deaths involving the category of prescription stimulants totaled 12 for the eight years of detailed data (Exhibit 6a). This is a small number, however it appears to have increased slightly and given the increase in prescriptions for these substances as well as national survey data showing increasing use and misuse these cases were examined. The fact that these data are based on tiny numbers should be kept in mind.

Overall, prescription stimulant involved deaths had the lowest average age for all substances 33.8

compared with 41.6 for all drugs (Exhibit 6d). Whites represented 92 percent of deaths, also the highest of any drug. Cause of death was accident 92 percent of the time, among the highest for all drugs and the average number of drugs was much higher than for any substance, 4.1 compared with 2.1 on average for all drugs. The use patterns of the two prescription stimulants are characterized below.

Amphetamine deaths totaled 6 from 1997 to 2004, with an even distribution over that time. The average age of decedents was 31 (range 22-41). One death involved only amphetamine. The average number of drugs involved was 3.3 All combination deaths included an opiate plus at least one other drug.

Methylphenidate involved deaths also totaled 6 from 1997 to 2004. However 3 were in 2004 and 1 in 2003. Decedents were aged 36.7 on average (range 28-53) and the average number of drugs detected was 5.2. All but one death also involved an opiate of some kind.

New DAWN data indicated that 89 percent of methamphetamine ED reports were due to drug abuse/other and 10 percent were seeking detox/treatment (Exhibit 2a). Seventy percent were male and most users were white. Methamphetamine users were younger than heroin and cocaine users, but older than marijuana users overall. Similar proportions, just under a quarter, of complaints were for psychiatric condition and altered mental status. The next most common complaint was abscess/cellulitis/skin/tissue with 8 percent. Fifteen percent were referred to detox/treatment, a larger proportion than for the other common illegal drugs.

Use of methamphetamine in the past 30 days is relatively low among Seattle high school seniors, 1.1 percent in 2002 and 2.0 percent in 2004 (Exhibit 4).

A category of amphetamine was added to the Helpline data in 2003 (Exhibit 3). There were 18 adult calls and 0 youth calls about amphetamine in 2004, though there may be underreporting due to an overlapping category of 'prescription drugs'.

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.

Anecdotal information from both users and law enforcement indicates that "ice" (crystal methamphetamine) distribution has increased in Seattle and that in some areas of Seattle "ice" has supplanted powder methamphetamine in terms of availability.

DEA reports that crystal methamphetamine is increasingly available and that prices are slowly declining. Regarding purity the DEA reports: "The overall purity of exhibits collected in Washington for the first six months of FY 2004 has averaged 50 percent, up from the average purity of 45 percent seen during FY03 and surpassing the 30 percent seen during FY01 and FY02. Of the DEA offices in Washington, Seattle… exhibits have currently yielded the highest purity at nearly 66 percent."

Methamphetamine incidents, a combination of active labs used for manufacturing and dump sites of lab equipment or inactive labs, decreased for Washington State as a whole in 2004 (Figure 12). The peak in incidents for the State and the two most populace counties was in 2001. In King County the number of incidents remained flat in 2003 and 2004, while Pierce County to the south saw increases, Snohomish County to the north had a slight increase and Kitsap County to the west a bit of a decline. The rate of methamphetamine incidents per 100,000 population was 11 in King County, 77 in Pierce County, 17 Snohomish County, 19 Kitsap County and 23 for Washington State in 2004.

It is important to note that these 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.

NFLIS data indicate that methamphetamine is found in law enforcement seizures at a much lower level in the Seattle area compared with the rest of the State (Exhibit 5). In fiscal year 2004, 29 percent of Seattle area drug tests and 52 percent of drug tests for the rest of Washington were positive for methamphetamine. These data represent slight proportional increases from FY 2003.

Data from the Washington State Patrol's Toxicology laboratory show a more than five-fold increase, from under 100 to over 500, in the number of drivers testing positive for methamphetamine in DUI cases from 1997 to 2004. At the same time the number of deaths in which methamphetamine was identified more than doubled to slightly more than 200 (note that methamphetamine may or may not have been causative in the death).

Depressants

Barbiturates, benzodiazepines, and other sedative/ depressant drugs in this analysis include alprazolam (Xanax), diazepam (Valium), lorazepam (Ativan), clonazepam (Klonopin), temazepam (Restoril), triazolam (Halcion), oxazepam (Serax), butalbital (Fioricet), chlordiazepoxide (Librium), diphenhydramine (Benadryl), hydroxyzine pamoate (Vistaril), meprobamate (Equanil), phenobarbital, promethazine (Phenergan), secobarbital (Seconal), and zolpidem (Ambien).

Depressants are rarely mentioned as a primary drug at intake to drug treatment. Less than one percent of admissions were for benzodiazepines, barbiturates, major tranquilizers and other sedatives. A slight increase appears to have occurred with 20 admissions for these four drug categories as the primary drug at treatment entry in 1999 and 51 in 2004. Key informants reports that these drugs are commonly used to enhance the effects of other drugs and are rarely taken as the primary drug recreationally.

Deaths involving depressants were at the highest level since at least 1997 with 82 in 2004, up from 71 in 2003 (Exhibit 6a). A steady increase has been seen since 1999. As discussed in the other opiate section in detail, the most common co-ingestent was a prescription opiate, 20 percent of deaths in 2004 (Exhibit 6e). Other co-ingestents included cocaine (9 percent), alcohol and heroin/opiate/morphine (both 8 percent).

The oldest group of decedents were those with depressants identified, 43.8 on average (Exhibit 6d). An increase from 41.9 to 45.9 years of age was seen over the span of available data. A relatively large proportion were female, 43 percent. The manner of death was ruled accidental 63 percent of the time and suicide 24 percent. Suicides were more than twice as common with depressants than with any other drug. The average number of drugs identified was 3.3, more than the 2.1 seen on average.

The two most prevalent depressants in 2004 and for the prior seven years were diazepam and diphenhydramine (Exhibit 6b). Diazepam involved deaths totaled 142 from 1997-2004, with 23 in 2004, a bit below the peak of 27 in 2003 and at the higher end of levels seen during this time. Diphenhydramine involved deaths totaled 111 over this same time frame, but showed a clear increase, with a peak of 29 in 2004.

DAWN ED drug reports for depressants (barbiturates, benzodiazepine and anxiolytics/ sedatives/hypnotics) totaled 1,218 for all case types (Exhibit 2a). The most common case type was overmedication (40%) followed by drug abuse/other (28 percent), suicide attempt (16 percent) and adverse reaction (11 percent).

The most common substances in drug abuse/other reports were benzodiazepines (350 of 420 reports, 83 percent) with type-not-specified the most common, followed by alprazolam (n=83), clonazepam (n=58), lorazepam (n=43) and diazepam (n=38). Miscellaneous anxiolytics totaled just 41 reports, diphenhydramine the most common (n=12). Barbiturates totaled 29 cases, the majority with the type not specified.

NFLIS data showed that under 1 percent of exhibits from the Seattle-area lab and the rest of the State were benzodiazepines (i.e., diazepam, and clonazepam), with no change between FY 2003 and FY 2004 (Exhibit 5).

A benzodiazepine category was added to the Helpline data in 2003, there were 81 adult calls and 1 youth call in 2004 (Exhibit 3).

Hallucinogens, Club Drugs, and Dextromethorphan

Hallucinogens include lysergic acid diethylamide (LSD), mescaline, peyote, psilocybin (mushrooms), phencyclidine (PCP), and inhalants. “Club drugs” is a general term used for drugs that are popular at nightclubs and raves, including the hallucinogens, methylenedioxymethamphetamine (MDMA) (ecstasy), gamma hydroxybutyrate (GHB), gamma butyrolactone (GBL), ketamine, and nitrous oxide. Dextromethorphan, commonly found in over-the-counter cough medicines, can have dissociative effects at high dosages.

Research chemicals are another important class of drugs used locally, however few indicator data are currently able to monitor these substances. Limitations in tracking these substances include: a lack of awareness of these substances by many providers, the continually fluctuating substances utilized locally and the multiple, often confusing, names of these substances (e.g. foxy methoxy, 2CB, 2CT7). A community based survey conducted in the summer of 2003 found that 21 percent of subjects surveyed at rave venues in King County had ever used research chemicals.

An important new development involving dextromethorphan occurred in April 2005 in

Whatcom County, Washington, north of Seattle. Two teenage boys, ages 17 and 19, died after consuming dextromethorphan obtained in "wholesale quantities" from a chemical company on the internet, based in Indiana. Three other deaths in the U.S. were also linked to this company, as of this writing the FDA has shut the web page down. These local boys mixed the dextromethorphan in an energy drink and high levels of taurine and caffeine from the drink were detected along with marijuana.

Treatment admissions in which Hallucinogens are mentioned as primary are infrequent, with just 44 in 2004, up from 16 in 1999.

ED reports for all case types totaled 85 for PCP, 91 for ecstasy, 17 for GHB, 23 for LSD, and 53 for psilocybin.

Helpline calls regarding PCP and LSD were infrequent, representing less than one percent of both youth and adult calls (Exhibit 3). Calls involving MDMA have apparently declined in terms of number and proportion since 2001 for both adults and youth, though the large number of calls for unknown substances limits trend analysis. In 2001, MDMA represented 2.5 percent of calls, declining to 1.2 percent of calls in 2004. A similar decline was seen for youth from 8.7 percent in 2001 to 4.4 percent of calls in 2004). The more general term 'hallucinogens' has remained small, but consistent for adults with about 1 percent of calls over time. For youth, hallucinogen related calls appear to have declined from 4 percent to 2 percent of calls.

School survey data indicate that hallucinogens and MDMA are the second most common illicit substances used in the past month following marijuana (Exhibit 4). Hallucinogens, broadly defined, were reported by 2.5 percent of seniors and MDMA by 2.8 percent in 2004.

The combined category of dextromethorphan, MDMA, GHB and PCP was identified in 37 deaths since 1997. This group was younger, 36.3, than for all drugs on average and had the largest proportion of females, 43 percent.

There was 2 MDMA involved death in the 2004. There have been 1-2 MDMA involved deaths since 1999, with none in 1997 or 1998. GHB/GBL involved deaths totaled 3 in 2002 and none have been seen since, and none were noted prior. There were five dextromethorphan involved death in 2004, a decrease from the 10 seen in 2003 which was by far the highest level since at least 1997. PCP deaths totaled 2 in 2004 and 1 in 2002.

According to the NFLIS, MDMA was detected at slightly higher levels in the Seattle area lab than the rest of the State (Exhibit 5). The Seattle area lab reported 1.4 and 1.0 percent of evidence tested positive for MDMA in FY 2003 and FY 2004, while for the rest of the State the levels were 0.5 in each year. Psilocin, the active ingredient in psychedelic mushrooms, was seen at similar levels for each region and in each year, between 0.5-0.7 percent. PCP was not among the top 25 drugs detected in Washington, not including Seattle, while in Seattle it represented a bit less than 1 percent of evidence in each year.

Pill presses, necessary for tableting ecstasy, are still occasionally seized locally according to federal law enforcement sources. Past customs seizure data indicated that much of the MDMA entering Washington was in powder form, suggesting that it was to be used in creating ecstasy tablets.

Federal law enforcement reports that "…crime related to MDMA distribution has increased in areas such as… Seattle because of the introduction of polydrug traffickers distributing MDMA." Additionally, the U.S. Postal Inspection Service reported that Seattle had the third highest MDMA dosages seized in 2003.

Limited availability of LSD was reported by federal law enforcement sources. However, in February 2004 DEA and the Seattle Police Department arrested an individual who had chemicals, glassware and instructions for making LSD.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE AND INJECTION DRUG USE TRENDS

Available data for people diagnosed with HIV infection between 1996-2004 are presented in Exhibit 14. In King County IDU and MSM-IDU both represent 7 percent of recent HIV cases. For Washington State as a whole IDU represent 10 percent and 6 percent MSM-IDU.

Excepting male drug injectors who also have sex with men, 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 14 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 fewer of injecting drug users (IDUs) who are not men who have sex with men (MSM) in King

County are infected with HIV. Data from a CDC-funded HIV Incidence Study (HIVIS 1996-2001), suggest that the rate of new infections among non-MSM/non-IDUs in King County is less than 0.1 percent per year.

Syringes exchanged and numbers of encounters have remained high in King County, with over two million syringes and over 60,000 encounters in 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.

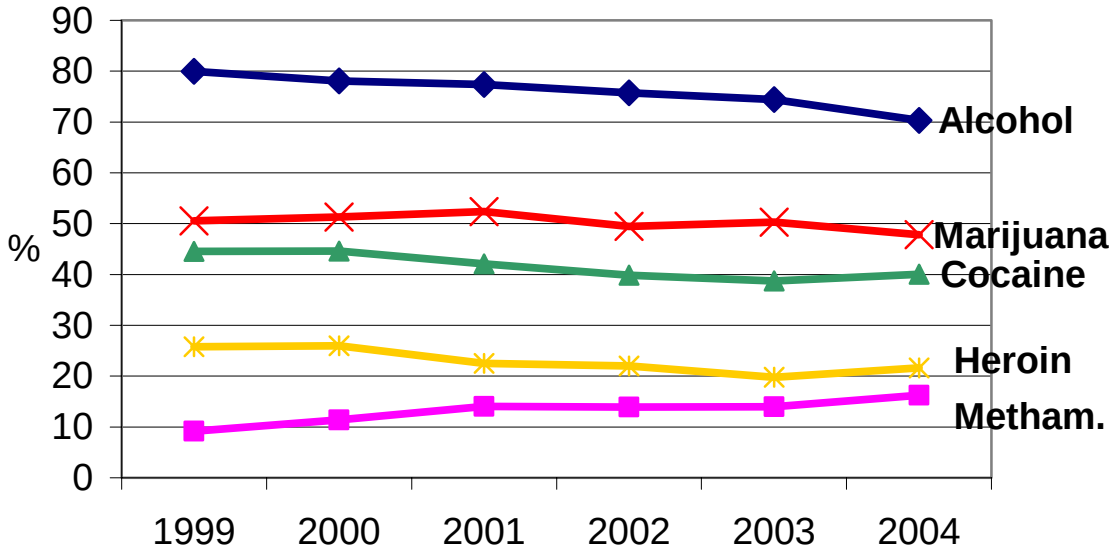
Trends in primary injection drug in Seattle area IDU ages 18-30 participating in 4 studies, 1994 – 2003 (Authored by Richard Burt and Hanne Thiede, Public Health-Seattle & King County)

Four different studies of Seattle area IDU were conducted by Public Health – Seattle & King County from 1994 to 2003: They included the RAVEN (1994-1997), RAVEN II (1998), Kiwi (1998-2002) and DUIT (2002-2003) studies. The four study populations were each recruited by different strategies and there are statistically significant differences among the study populations in age, race, sex and primary injection drug. The data show trends in primary injection drug by year of study enrollment among 18-30 year old IDU who had injected in the six months previous to enrollment (Exhibit 15).

Heroin was the most common primary injection drug in all study populations and in all years. There is a clear increase in the proportion of participants reporting amphetamine as their primary injection drug from 7 percent in 1994 to 32 percent in 2003. The proportion reporting cocaine as their primary drug declined from 19 percent in 1994 to 5 percent in 2004. There does not appear to be a single consistent trend in heroin or speedball use.

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: http://adai.washington.edu or Ron Jackson, MSW, Evergreen Treatment Services, Phone (206) 223-3644, E-mail: ronjack@u.washington.edu.

Exhibit 1a- Treatment Admissions for Primary, Secondary, or Tertiary Use of Selected Drugs, Residents of King County, Washington: January 1999–December 2004



Source: TARGET, Treatment Analyzer, DASA

	1999	2000	2001	2002	2003	2004
Alcohol	79.9	78.1	77.4	75.7	74.4	70.3
Methamphet.	9.1	11.4	14.0	13.9	13.9	16.3
Cocaine	44.5	44.6	42.0	39.9	38.7	40.1
Marijuana	50.6	51.3	52.4	49.5	50.3	47.8
Heroin	25.7	26.0	22.5	22.0	19.8	21.6
# of Admits	9,845	10,479	9,761	8,871	8,879	11,223

Data include all ages, all treatment modalities, department of corrections and private pay clients at opiate substitution treatment clinics.
SOURCE: Washington State TARGET data system—Structured Ad Hoc Reporting System

Exhibit 1b-Age at Treatment Entry by Primary Drug, King County WA 1999–2004

	Cocaine		Alcohol		Marijuana		Heroin		Metham.	
	1999	2004	1999	2004	1999	2004	1999	2004	1999	2004
<18	2.7	2.5	7.7	7.3	62.8	44.9	0.5	0.5	7.4	6.8
18-29	15.6	12.4	20.5	22.6	23.8	**33.2**	16.6	16.8	41.5	39.6
30-44	69.9	60.4	51.9	44.5	11.5	**18.6**	53.0	42.3	48.2	48.4
45-54	10.4	**22.6**	15.9	**20.6**	1.8	2.8	27.2	**34.0**	2.8	5.0
55-64	1.1	2.1	3.6	4.6	0.1	0.5	2.5	5.8	0.0	0.3
65+	0.2	0.1	0.5	0.4	0.0	0.1	0.3	0.7	0.0	0.0

Exhibit 1c- Race by Primary Drug, King County WA 2004

	Alcohol	Cocaine	Heroin	Metham.	Marijuana	Other	Total
# of Admits by Drug	3,912	1,592	2,000	1,109	2,064	572	# of Admits by Race
	%	**%**	**%**	**%**	**%**	**%**	
White	53	37	67	83	46	73	6,280
African American	18	47	17	2	31	9	2,489
Asian/PI	5	2	2	2	4	4	390
Native American	7	2	4	2	3	3	492
Hispanic	10	6	7	5	8	5	877
Multiple Race	3	3	2	3	6	4	354
Other	5	3	2	3	2	3	367
Total	100	100	100	100	100	100	11,249

Exhibit 2a- DAWN ED Sample and Reporting Information: January–December 2004. King and Snohomish Counties*

CEWG Area	Total Eligible Hospitals[1]	No. of Hospitals in DAWN Sample	Total EDs in DAWN Sample[2]	No. of EDs Reporting per Month: Completeness of Data (%)			No. of EDs Not Reporting
				90–100%	50–89%	<50%	
Seattle	22	22	23	8–12	0–2	0–4	10–13

[1]Short-term, general, non-Federal hospitals with 24-hour emergency departments based on the American Hospital Association Annual Survey.
[2]Some hospitals have more than one emergency department.
*Note that the 23 hospitals in the Seattle area sample are in King, Snohomish and Pierce Counties. As of June 2005 none of the four counties in the sample from Pierce county are participating. Therefore, available data are presently just from Snohomish and King Counties.
SOURCE: DAWN *Live!,* OAS, SAMHSA, updated 4/13-4/14, 2005

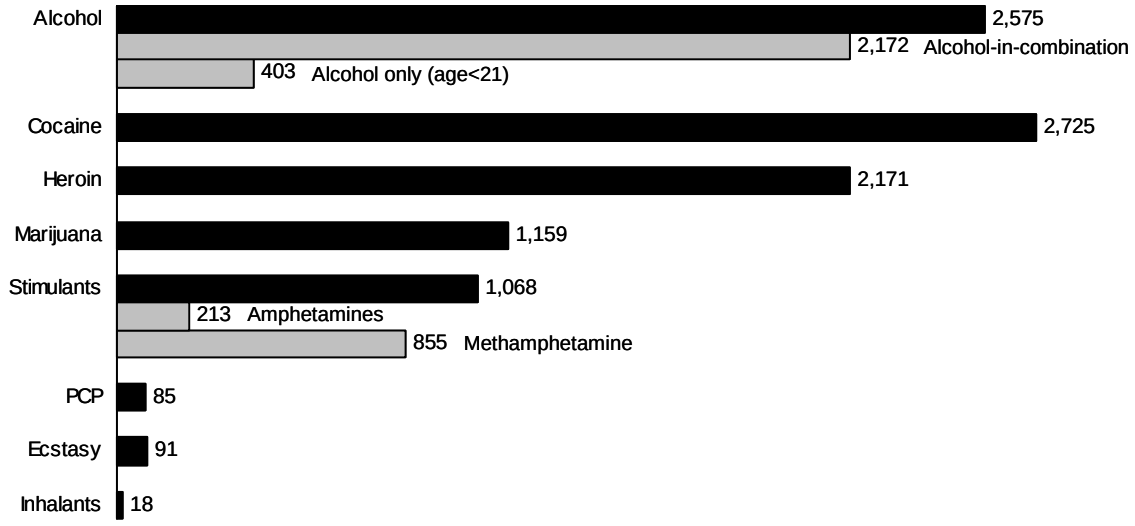
Exhibit 2b- Number of Drug Reports[1] in Drug-Related ED Visits, by Drug Category (Unweighted[2]): King & Snohomish Counties, 2004

		Major Substances of Abuse*	Cocaine	Heroin	Meth	Marijuana	Rx Opiates	Anx/Sed/Hyp
	# of Drug Reports	10002	2725	2171	857	1160	1956	1218
TYPE OF CASE	Suicide attempt	3.7%	1.2%	0.5%	1.2%	2.1%	4.6%	15.9%
	Seeking detox	8.3%	9.9%	9.5%	9.5%	5.8%	8.4%	4.4%
	Adverse reaction	0.8%	0.1%	0.2%	0.0%	0.2%	21.0%	11.2%
	Overmedication	2.5%	0.0%	0.0%	0.0%	0.0%	24.7%	39.8%
	Malicious poisoning	0.1%	0.1%	0.0%	0.0%	0.2%	0.2%	0.1%
	Accidental ingestion	0.1%	0.0%	0.0%	0.0%	0.0%	0.3%	0.7%
	"Drug Abuse"/Other	80.5%	88.7%	89.7%	89.4%	91.8%	40.8%	27.9%
GENDER	Male	64%	64%	60%	70%	69%	47%	41%
RACE/ETHNICITY	White	24%	18%	32%	28%	24%	24%	27%
	Black	9%	15%	6%	4%	9%	4%	2%
	Hispanic	1%	1%	1%	1%	1%	1%	0%
	Race/ethnicity NTA	2%	1%	1%	3%	2%	2%	1%
	Not documented	65%	64%	60%	65%	64%	70%	69%
AGE	12-17	5%	1%	0%	2%	11%	2%	4%
	18-20	9%	3%	3%	13%	15%	5%	3%
	21-24	9%	7%	7%	17%	13%	7%	9%
	25-29	12%	11%	13%	19%	14%	10%	13%
	30-34	14%	14%	16%	13%	14%	10%	12%
	35-44	30%	38%	33%	26%	21%	26%	29%
	45-54	18%	22%	24%	9%	10%	24%	20%
	55-64	3%	3%	3%	1%	2%	8%	6%
	65 and older	1%	0%	0%	0%	1%	8%	3%
CHIEF COMPLAINT	Overdose	8%	5%	10%	4%	5%	18%	33%
	Intoxication	8%	5%	2%	4%	7%	3%	5%
	Seizures	1%	2%	1%	1%	1%	1%	1%
	Altered mental status	16%	16%	9%	23%	20%	15%	15%
	Psychiatric condition	19%	24%	7%	24%	27%	11%	18%
	Withdrawal	3%	2%	5%	2%	2%	12%	5%
	Seeking detox	5%	6%	6%	6%	4%	5%	3%
	Accident/injury/assault	4%	4%	2%	3%	5%	2%	1%
	Abscess/cellulitis/skin/tissue	12%	7%	39%	8%	2%	4%	2%
	Chest pain	4%	6%	2%	5%	4%	2%	1%
	Respiratory problems	3%	4%	3%	2%	3%	3%	2%
	Digestive problems	4%	4%	4%	2%	4%	11%	4%
	Other	13%	15%	11%	16%	16%	16%	11%
	# OF COMPLAINTS	100%	3940	2891	1259	1688	2909	1959
PATIENT DISPOSITION	Discharged home	54%	50%	56%	53%	59%	61%	49%
	Released to police/jail	2%	3%	2%	4%	2%	1%	1%
	Referred to detox/treatment	10%	12%	7%	15%	11%	8%	6%
	Admitted to ICU/Critical care	4%	4%	2%	4%	4%	5%	13%
	Admitted to surgery	2%	1%	6%	1%	0%	0%	0%
	Admitted to chemical dependency/detox	2%	3%	3%	2%	2%	2%	2%
	Admitted to psychiatric unit	4%	6%	2%	5%	5%	3%	8%
	Admitted to other inpatient unit	10%	11%	14%	7%	6%	11%	12%
	Transferred	3%	4%	2%	3%	4%	4%	5%
	Left against medical advice	2%	1%	3%	3%	1%	1%	2%
	Died	0%	0%	0%	0%	0%	0%	0%
	Other	2%	3%	1%	3%	3%	1%	1%
	Not documented	3%	3%	3%	2%	2%	2%	2%
ROUTE OF ADMINISTRATION	Oral	20%	2%	1%	2%	2%	44%	50%
	Injected	18%	10%	61%	18%	0%	3%	1%
	Inhaled, sniffed, snorted	1%	2%	1%	2%	0%	0%	0%
	Smoked	8%	13%	1%	7%	29%	0%	0%
	Other	0%	0%	0%	1%	0%	2%	0%
	Not documented	53%	73%	37%	71%	68%	50%	49%

Source: DAWN Live!, OAS, SAMHSA Updated 5/23/05 These are not estimates or rates.
*Major Substances include all of the illegal drugs as well as amphetamine and GHB
[1]Drug-related ED visits often involve multiple drugs (e.g., both cocaine and heroin may be reported for the same case). Therefore, the number of drug reports will exceed the number of ED visits.
[2]Unweighted data from Seattle hospitals reporting to DAWN.
Data are duplicated, a person may have used multiple drugs. This can lead to odd data such as suicide attempts that appear to involve marijuana.
Meth=methamphetamine

Exhibit 2c- Number of Drug Reports in Drug-Related ED Visits, by Drug Category (Unweighted[1]): 2004 King and Snohomish Counties

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.



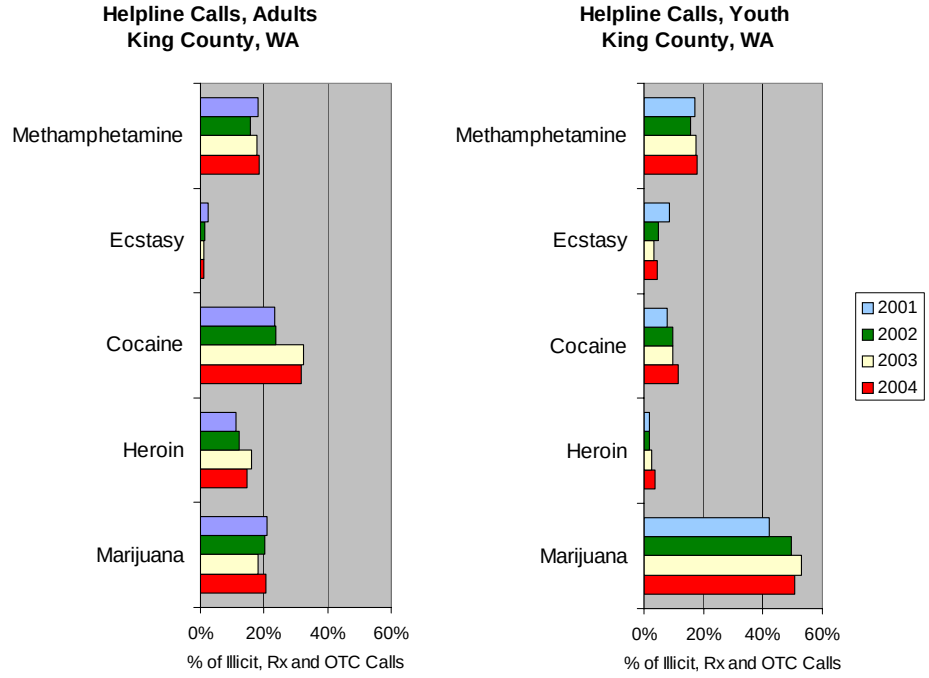
[1]Unweighted data from Seattle hospitals reporting to DAWN.
SOURCE: DAWN *Live!*, OAS, SAMHSA, updated 4/13-4/14, 2005

Exhibit 2d- Characteristics of Drug Abuse/Other Case Type Drug Reports[1] for Prescription Opiates and Depressants (Unweighted[2]): 2004 King and Snohomish Counties

	# of Drug Reports	Rx Opiate n=799	Anx/Sed/Hyp n=340
GENDER	Male	53%	55%
AGE	12-17 years	1%	2%
	18-20 years	4%	3%
	21-24 years	7%	8%
	25-29 years	10%	12%
	30-34 years	13%	14%
	35-44 years	31%	31%
	45-54 years	27%	22%
	55-64 years	8%	6%
	65 years and older	1%	1%
CHIEF COMPLAINT	Overdose	8%	15%
	Intoxication	3%	6%
	Seizures	1%	3%
	Altered mental status	15%	15%
	Psychiatric condition	14%	21%
	Withdrawal	23%	13%
	Seeking detox	0%	0%
	Accident/injury/assault	2%	2%
	Abscess/cellulitis/skin/tissue	4%	1%
	Chest pain	2%	3%
	Respiratory problems	3%	1%
	Digestive problems	9%	4%
	Other	16%	15%
	TOTAL COMPLAINTS	1205	539
PATIENT DISPOSITION	Discharged home	62%	53%
	Released to police/jail	3%	3%
	Referred to detox/treatment	10%	13%
	Admitted to ICU/Critical care	3%	4%
	Admitted to surgery	1%	1%
	Admitted to chemical dependency/detox	2%	1%
	Admitted to psychiatric unit	4%	4%
	Admitted to other inpatient unit	10%	9%
	Transferred	2%	4%
	Left against medical advice	2%	3%
	Died	0%	0%
	Other	1%	1%
	Not documented	2%	4%
ROUTE OF ADMINISTRATION	Oral	33%	32%
	Injected	5%	1%
	Inhaled, sniffed, snorted	0%	0%
	Smoked	0%	0%
	Other	1%	0%
	Not documented	61%	67%

Source: DAWN Live!, OAS, SAMHSA Updated 5/23/05
These are not estimates or rates.
[1]Drug-related ED visits often involve multiple drugs (e.g., both cocaine and heroin may be reported for the same case). Therefore, the number of drug reports will exceed the number of ED visits.
[2]Unweighted data from Seattle area hospitals reporting to DAWN.

Exhibit 3- Helpline Calls, King County Residents 2001- 2004



Source: 24 Alcohol and Drug Helpline

	Adult				Youth			
	2001	2002	2003	2004	2001	2002	2003	2004
	%	%	%	%	%	%	%	%
RX	9.5%	11.0%	5.4%	4.4%	4.1%	3.1%	3.0%	2.4%
Methadone	2.0%	2.0%	3.2%	3.9%	0.5%	0.0%	0.4%	0.0%
Other	1.2%	1.3%	2.2%	1.6%	0.9%	2.0%	2.5%	1.6%
LSD	0.5%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.5%
Marijuana	21.0%	20.3%	18.2%	20.5%	42.3%	49.6%	52.9%	50.6%
Inhalant	0.2%	0.3%	0.1%	0.1%	1.0%	1.0%	0.7%	0.2%
Unknown	9.1%	11.2%	2.5%	2.1%	11.3%	11.0%	3.7%	3.8%
Heroin	11.2%	12.3%	16.0%	14.8%	1.9%	1.7%	2.5%	3.8%
Cocaine	23.5%	23.6%	32.6%	31.6%	7.8%	9.7%	9.8%	11.7%
Ecstasy	2.5%	1.4%	1.0%	1.2%	8.7%	4.9%	3.3%	4.4%
Hallucinogens	0.6%	0.6%	0.6%	0.8%	3.8%	1.0%	2.5%	1.6%
PCP	0.1%	0.1%	0.1%	0.3%	0.0%	0.0%	0.4%	0.5%
Methamphetamine	18.2%	15.6%	17.9%	18.4%	17.0%	15.5%	17.3%	17.7%
OTC	0.4%	0.2%	0.3%	0.2%	0.6%	0.6%	1.2%	0.9%
Total	100%	100%	100%	100%	100%	100%	100%	100%
Total # of Calls	4,639	4760	3508	3978	*1,162*	711	571	547
Newer Drug Categories			#	#			#	#
OxyContin			20	198			16	9
Rx Pain Pills			366	397			16	6
Amphetamine			31	18			2	0
Benzodiazepine			59	81			1	1

Exhibit 4- Drug Use in Prior 30 Days, 12th Graders, Seattle Public Schools, 2002 & 2004

Substance	Prevalence			Response Rate			
				2002		2004	
	2002	2004		%	N	%	N
Alcohol	47.9%	51.1%		51.3%	1287	61.0%	1475
Cigarettes	22.8%	16.1%		52.0%	1305	61.3%	1481
Chewing Tobacco	3.9%	3.2%		51.8%	1301	61.3%	1481
Inhalants	2.1%	1.4%		50.0%	1256	60.0%	1451
Marijuana	27.0%	25.4%		50.7%	1273	60.6%	1464
Hallucinogens	3.6%	2.5%		50.4%	1265	60.5%	1462
Cocaine	1.7%	2.5%		50.4%	1266	60.3%	1457
MDMA - "Ecstasy"	3.4%	2.8%		50.3%	1263	60.4%	1461
Stimulants - "Amphetamines", "Meth"	1.1%	2.0%		49.8%	1250	59.8%	1445

Source: Communities That Care Survey, http://www.seattleschools.org/area/ctc/survey/survey.xml

Exhibit 5- Local Law Enforcement Seizure Drug Test Results in Seattle and the State of Washington: Fiscal Years 2003 and 2004

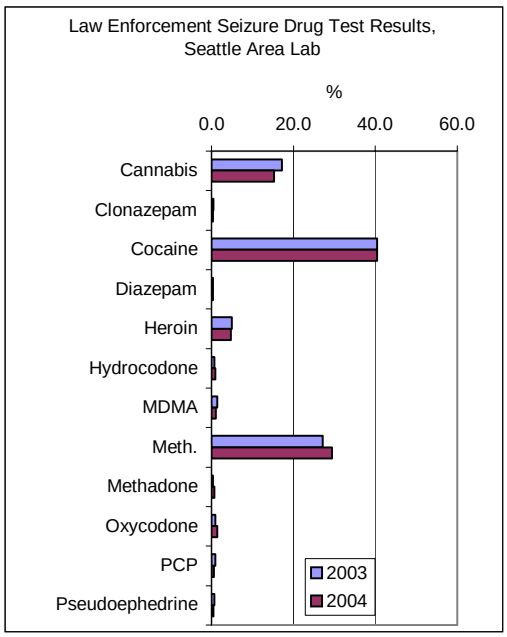
Seattle Area Lab

Substance	FY 2003	FY 2004
Acetaminophen	0.3	0.2
Alprazolam**	0.3	0.1
Amphetamine	0.3	0.2
Caffeine	0.3	0.2
Cannabinol		
Cannabis	17.2	15.3
Carisoprodol	0.3	
Cathinone	0.3	
Clonazepam**	0.5	0.3
Cocaine	40.5	40.4
Codeine*	0.2	
Diazepam**	0.4	0.3
Heroin	5.0	4.7
Hydrocodone*	0.7	0.9
Hydromorphone*		0.1
Ibuprofen		
Ketamine	0.1	
Lorazepam**		0.1
MDA	0.3	0.3
MDMA	1.4	1.0
Methadone*	0.4	0.7
Methamphetamine	27.2	29.4
Methandrostenolone	0.1	
Methylphenidate		0.3
Morphine*	0.2	0.3
Non-Controlled Non-Narcotic Drug	0.3	0.3
Oxy-codone*	0.9	1.4
PCP	0.9	0.6
Propoxyphene*		0.1
Pseudoephedrine	0.7	0.4
Psilocin	0.7	0.6
Psilocybine		0.3
Sodium Bicarbonate		
Total of Top 25 (#)	**99.25**	**98.83**
Sub-totals		
*Other opiates	2.4	3.55
**Benzodiazepines	1.18	0.93

WA State w/o Seattle Area Lab

Substance	FY 2003	FY 2004
Acetaminophen	0.2	0.1
Alprazolam**	0.2	0.2
Amphetamine	0.3	0.4
Caffeine	0.2	0.2
Cannabinol	0.2	
Cannabis	15.5	15.6
Carisoprodol	0.2	0.1
Cathinone		
Clonazepam**	0.3	0.3
Cocaine	20.6	18.2
Codeine*	0.2	0.1
Diazepam**	0.4	0.3
Heroin	6.5	4.8
Hydrocodone*	1.1	1.3
Hydromorphone*		
Ibuprofen		0.1
Ketamine		
Lorazepam**		
MDA	0.1	
MDMA	0.5	0.5
Methadone*	0.4	0.6
Methamphetamine	47.8	51.7
Methandrostenolone (Methandienone)		
Methylphenidate	0.1	0.1
Morphine*	0.3	0.4
Non-Controlled Non-Narcotic Drug	0.5	0.7
Oxy-codone*	1.2	1.1
PCP		
Propoxyphene*		0.1
Pseudoephedrine	0.8	0.7
Psilocin	0.5	0.7
Psilocybine	0.3	0.2
Sodium Bicarbonate	0.2	0.2
Total of Top 25 (#)	**98.62**	**98.63**
Sub-totals		
*Other opiates	3.25	3.51
**Benzodiazepines	0.85	0.81

Illicit drugs italicized
Source: National Forensic Lab Information Systems
Note- Data for cannabinol/cannabis and psilocin/psilocybine may be duplicated.



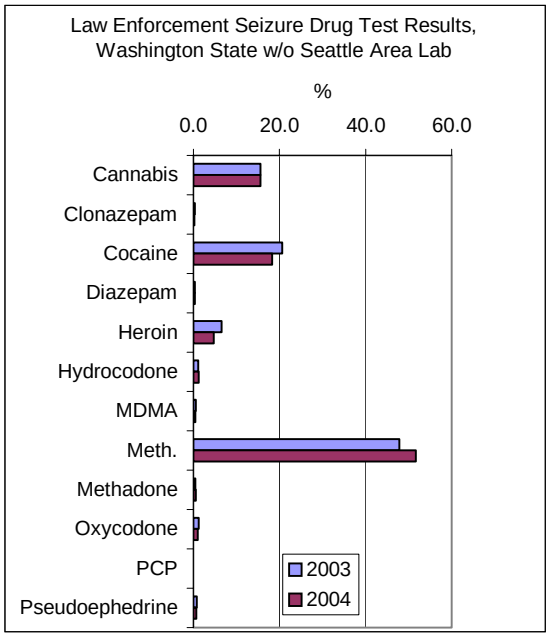
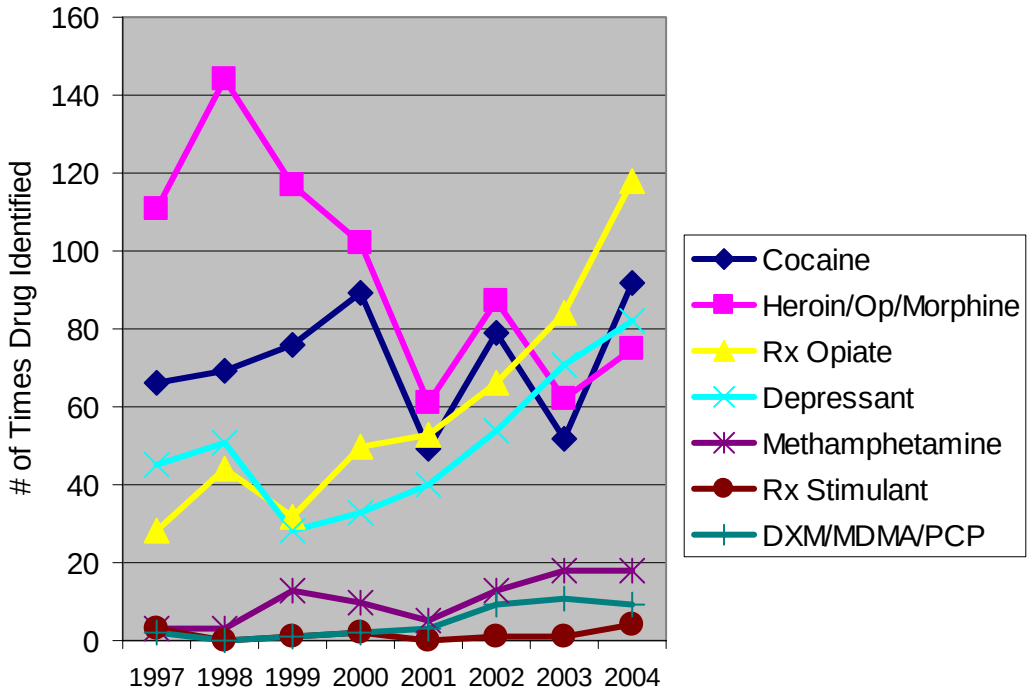


Exhibit 6a- Drug-Involved Deaths in King County, Washington, Related to Illicit and Prescription Drugs: 1997–2004



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

	1997	1998	1999	2000	2001	2002	2003	2004	Total of Each Drug
Cocaine	66	69	76	89	49	79	52	92	572
Heroin/Op/Morphine	111	144	117	102	61	87	62	75	759
Rx Opiate	28	44	32	50	53	66	84	118	475
Depressant	45	51	28	33	40	54	71	82	404
Methamphetamine	3	3	13	10	5	13	18	18	83
Rx Stimulant	3	0	1	2	0	1	1	4	12
DXM/MDMA/PCP	2	0	1	2	3	9	11	9	37
Total # of Deaths	178	219	196	212	145	195	186	253	1584

SOURCE: Medical Examiners Office, Public Health Seattle & King County. Data are duplicated, most deaths involve multiple drugs.

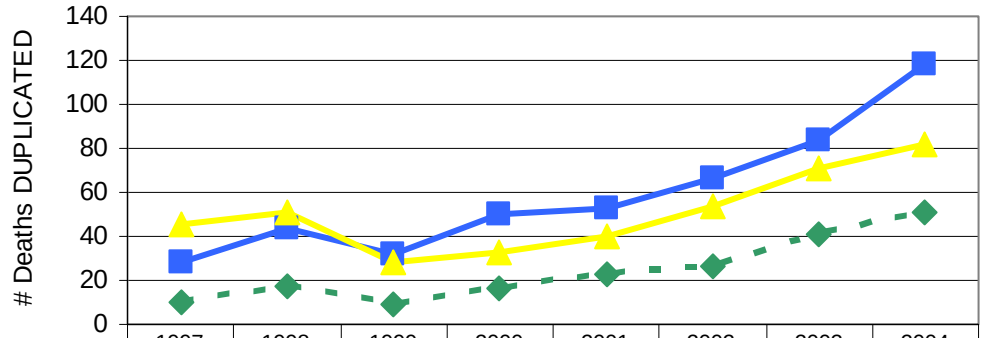
Exhibit 6b- Depressant and Prescription Opiate Involved Deaths in King County, Washington: 1997-2004

	1997	1998	1999	2000	2001	2002	2003	2004	Total # of Rx Opiates
Oxycodone	2	5	4	12	18	20	14	32	107
Methadone	14	20	19	25	24	37	47	67	253
Hydrocodone	0	3	1	1	4	4	12	14	39
Other Rx Opiates	18	21	12	17	13	18	20	33	152
Total # of Rx Opiates	34	49	36	55	59	79	93	146	551
Total # Deaths Involving Rx Opiates	28	44	32	50	53	66	84	118	475

	1997	1998	1999	2000	2001	2002	2003	2004	Total # of Depressants
Diazepam	17	22	10	9	11	23	27	23	142
Diphenhydramine	11	10	7	6	7	16	25	29	111
Promethazine		3	3	3	5	5	9	11	39
Meprobamate	2	5	1	4	6	2	5	7	32
Alprazolam	1	5	1	3	3	4	5	9	31
Cyclobenzaprine		3		1	1	3	8	6	22
Chlordiazepoxide		4	1	2	2	3	4	4	20
Phenobarbital	4	5	3		1		4	3	20
Zolpidem	1		1	1	3	3	3	4	16
Other Depressants	19	10	9	10	12	13	13	17	103
Total # of Depressants	55	67	36	39	51	72	103	113	536
# of Deaths Involving Depressants	45	51	28	33	40	54	71	82	404

SOURCE: Medical Examiners Office, Public Health Seattle & King County.

Exhibit 6c- Combination Depressant and Prescription Opiate Involved Deaths in King County, Washington: 1997-2004



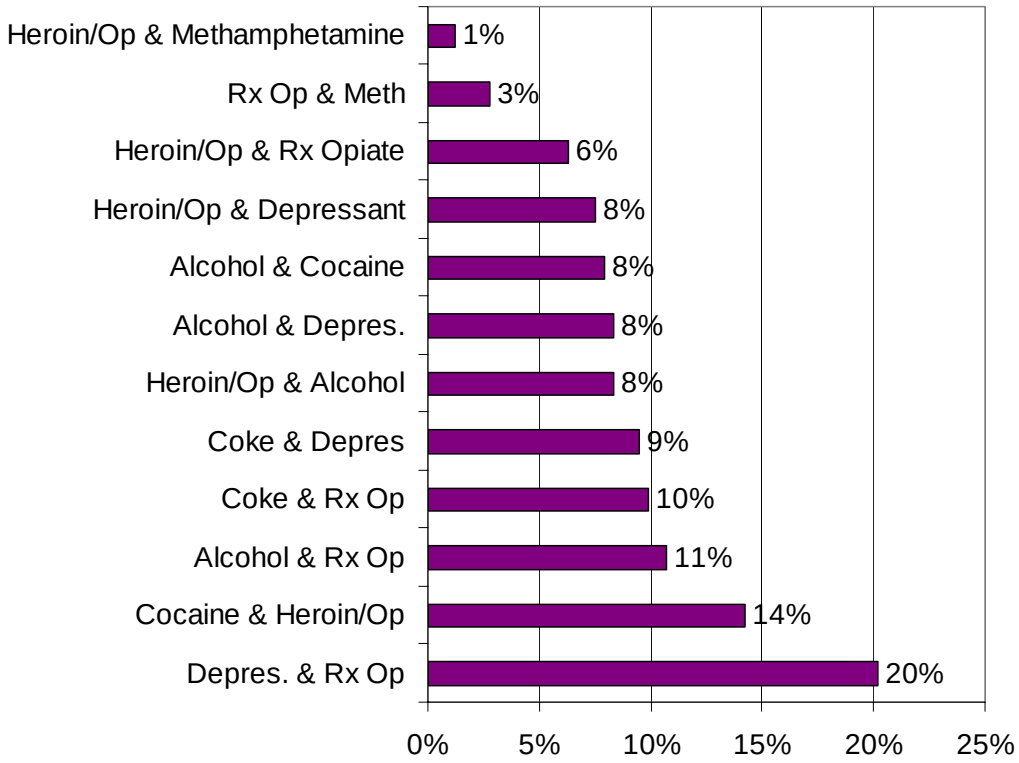
	1997	1998	1999	2000	2001	2002	2003	2004
Combo- Rx Op & Dep	10	17	9	16	23	26	41	51
Rx Opiate	28	44	32	50	53	66	84	118
Depressant	45	51	28	33	40	54	71	82

Exhibit 6d- Demographics of Drug-Involved Deaths in King County, Washington: 1997-2004

	ALL DRUGS	Cocaine	Depressant	Rx Stimulant	Metham.	DXM/MDMA GHB/PCP	Heroin/Op/ Mor	Rx Opiate	Oxycodone*	Methadone*
# of times identified	1584	572	404	12	83	37	759	475	107	253
% Male	71%	78%	57%	75%	80%	57%	81%	58%	60%	61%
Average Age	41.6	41.2	43.8	33.8	37.9	36.3	40.6	43	44.7	41.4
Race/Ethnicity										
White	83%	73%	88%	92%	88%	81%	84%	88%	89%	85%
African Am.	11%	21%	7%	0%	5%	17%	10%	8%	7%	12%
Asian P.I.	1%	1%	1%	0%	2%	0%	0%	1%	1%	1%
Native Am	3%	2%	2%	0%	2%	0%	3%	2%	3%	2%
Hispanic	1%	1%	1%	0%	0%	3%	2%	0%	0%	0%
Other/Multi.	1%	2%	1%	8%	2%	0%	2%	1%	1%	0%
Manner of Death										
Accident	81%	94%	63%	92%	94%	68%	92%	79%	70%	90%
Suicide	11%	1%	24%	0%	1%	11%	2%	11%	22%	1%
Homicide	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Undetermined	9%	5%	14%	8%	5%	22%	6%	11%	8%	9%
Avg. # of Drugs**	2.1	2.4	3.3	4.1	2.3	3.3	2.1	3.0	3.1	2.9

*Note that Oxycodone and Methadone are also included in the Rx Opiate category
** Includes-Cocaine, Heroin/Op/Mor, Rx Opiates, Depressants, Rx Stimulants, Meth., Hallucinogens. Excludes drugs such as NSAIDS and
Source: Medical Examiner, Public Health & Seattle-King County.

Exhibit 6e: Proportion of Deaths Involving at Least 2-Drug-Combinations in 2004 King County



Source: Medical Examiner's Office, Public Health-Seattle & King County
Note that these data are duplicated- a person could have multiple 2-way drug combinations if for example they had used heroin, cocaine, prescription opiate and a depressant.

Exhibit 7- Opiate Substitution Treatment, King County Residents

	1999	2000	2001	2002	2003	2004	Total
Admits	1,333	1,560	1,238	1,175	1,085	1,660	8,051
Discharges	632	924	890	794	633	743	4,616
Primary Drug at Admission (%)							
Heroin	94.6	93.3	92.8	90.4	87.7	86.6	90.9
Prescription Opiates	3.0	6.1	6.5	8.8	11.3	11.6	7.9

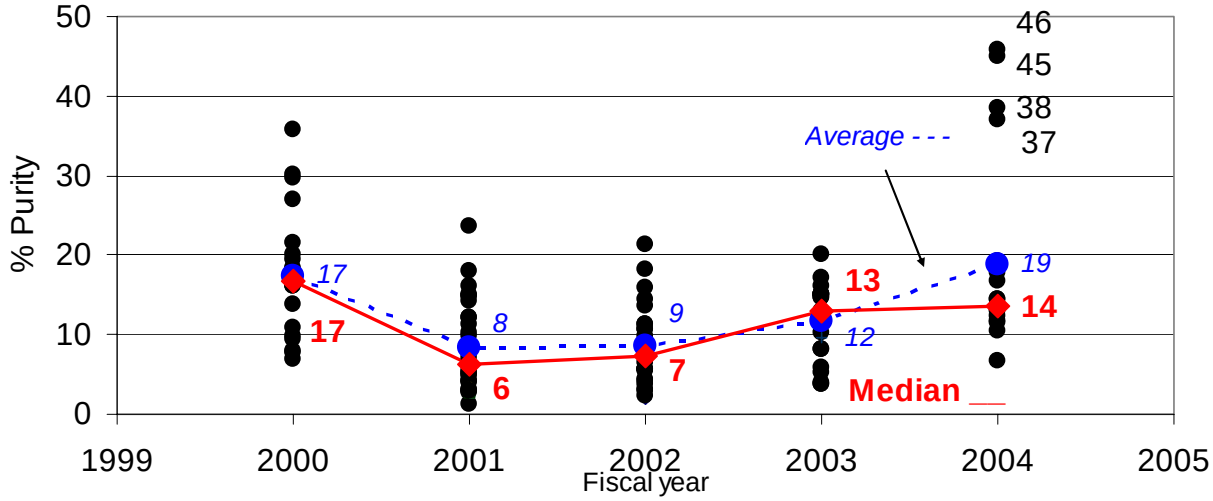
*Note- Treatment Capacity Increased by 350 in 2000 and by **xxx in 2004**
SOURCE: Washington State TARGET data system—Structured Ad Hoc Reporting System Run Date: 05/23/2005

Exhibit 8- Methadone Waiting List, King County Managed by Syringe Exchange Program,

	1997	1998	1999	2000	2001	2002	2003	2004	June 2005
# on Wait List	198	307	548	624	495	663	638	487	156

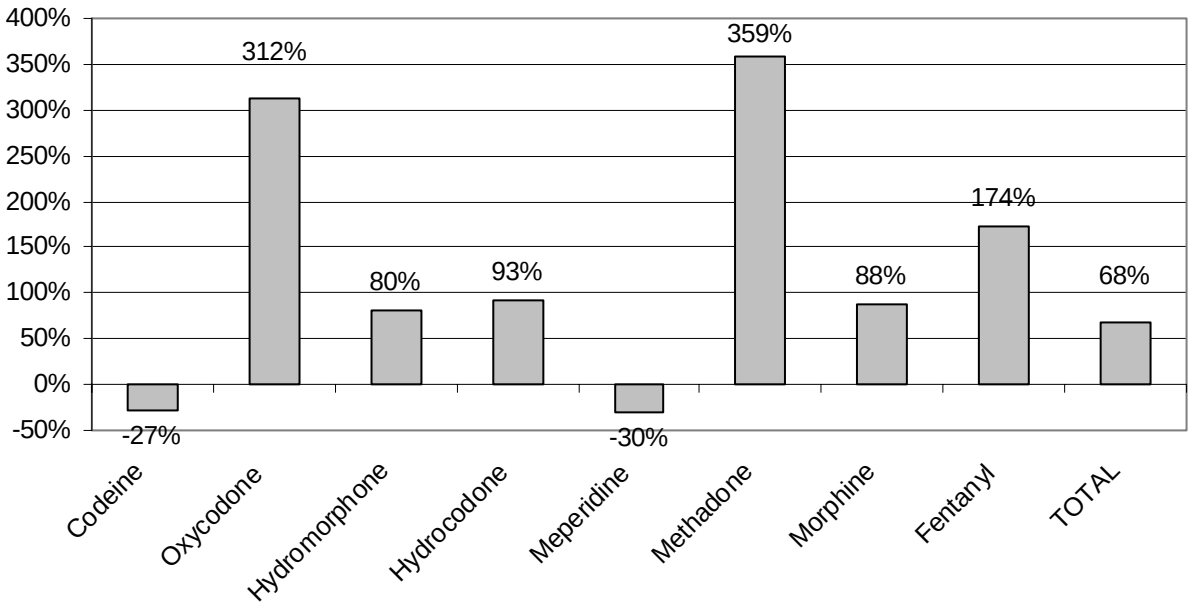
Source: Public Health- Seattle & King County, HIV/AIDS Program
Note- Figures are for the close of each year

Exhibit 9: Heroin Purity, Street Level Purchases in the City of Seattle, Domestic Monitoring Program



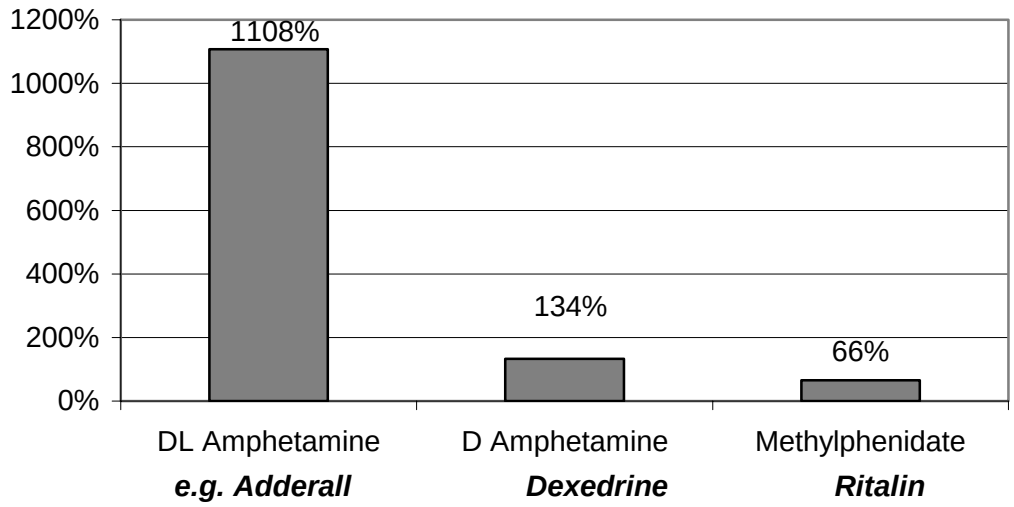
Source: Seattle Drug Enforcement Administration (2005), Used With Permission.
Data differ from national reports due to exclusion of Tacoma data.
Each black dot = 1 purchase. Purchases totaled 124 for 5 years.

Exhibit 10- Prescription Opiates Sold to Hospitals and Pharmacies, King County, WA Area
Percent Change 1997-2003



Source- ARCOS/DEA Data for Zip Codes 980xx and 981xx, which approximates King County boundaries
http://www.deadiversion.usdoj.gov/arcos/retail_drug_summary/index.html

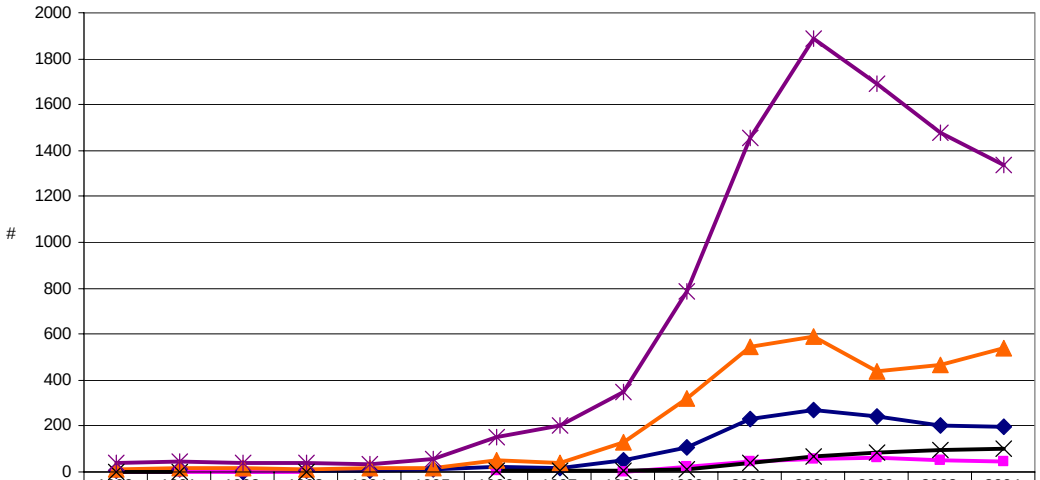
Exhibit 11 Prescription Stimulants Sold to Hospitals and Pharmacies, King County, WA Area
Percent Change 1997-2003



DEA ARCOS, Zip codes 980xx and 981xx, which approximates King County boundaries

http://www.deadiversion.usdoj.gov/arcos/retail_drug_summary/index.html

Exhibit 12- Methamphetamine Labs and Dump Sites, King and Neighboring Counties: 1990–2004



	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
King	6	10	2	7	7	10	23	17	48	107	231	271	241	202	199
Kitsap	1	1	2	1			3		1	21	45	54	60	50	44
Pierce	10	18	18	12	17	17	53	42	129	318	545	589	438	466	541
Snohomish	2	2		2			7	6	5	13	37	69	83	98	101
WA State TOTAL	38	43	40	42	36	54	153	203	349	789	1454	1890	1693	1480	1337

SOURCE: Washington State Department of Ecology

Exhibit 13: Syringes Exchanged and Number of Encounters for King County Syringe Exchanges

	2002	2003	2004
Syringes Exchanged	1,801,151	1,969,522	2,183,150
Encounters	73,752	65,593	63,898
Avg. # Syringes/Encounter	24	30	34

Source: Public Health- Seattle & King County, HIV/AIDS Program
Note- Encounters are duplicated

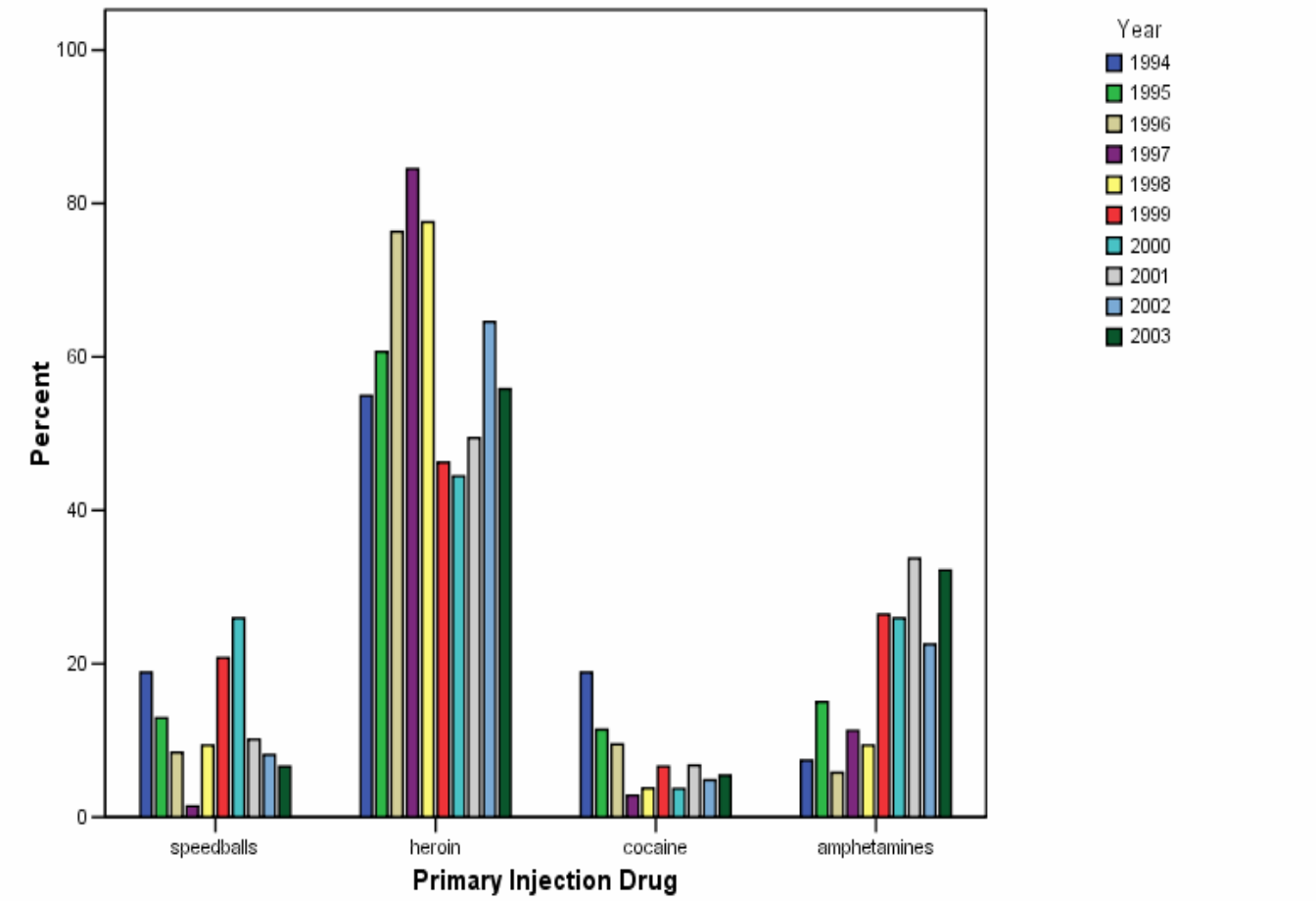
Exhibit 14- New HIV Infections 1996-2004

Demographic Characteristics and year of HIV diagnosis

	King County			WA State		
	2002-2004[1]		Trend[2]	2002-2004[1]		Trend[2]
	No	(%)	1996-2004	No	(%)	1996-2004
TOTAL	1,006	(100)		1,576	(100)	
HIV Exposure Category						
MSM	651	(65)		901	(57)	
IDU	67	(7)		153	(10)	
MSM-IDU	71	(7)		102	(6)	
Hetero contact	109	(11)	**up**	218	(14)	**up**
Blood product exposure	3	(0)		6	(0)	
Perinatal exposure	0	(0)		2	(0)	
Undeterm.	105	(10)		194	(12)	
Sex & Race/Ethnicity						
Male	889	(88)		1,319	(84)	
White Male[4]	571	(57)	**down**	877	(56)	**down**
Black Male[4]	155	(15)	**up**	207	(13)	**up**
Hispanic Male	103	(10)		149	(9)	
Other Male[4]	60	(6)		86	(5)	
Female	117	(12)		257	(16)	
White Female[4]	33	(3)		103	(7)	
Black Female[4]	62	(6)	**up**	95	(6)	
Hispanic Female	8	(1)		25	(2)	
Other Female[4]	14	(1)		34	(2)	
Race/Ethnicity						
White[4]	604	(60)	**down**	980	(62)	**down**
Black[4]	217	(22)	**up**	302	(19)	**up**
Hispanic	111	(11)		174	(11)	
Asian & Pacific Islander[4]	33	(3)		56	(4)	
American Indian/ Alaska Native[4]	21	(2)		40	(3)	
Multi Race[4]	16	(2)	**up**	16	(1)	**up**
Unknown	4	(0)		8	(1)	
Age at diagnosis of HIV						
0-19 years	10	(1)		19	(1)	**down**
20-24 years	72	(7)		129	(8)	**up**
25-29 years	141	(14)	**down**	218	(14)	**down**
30-34 years	191	(19)	**down**	277	(18)	**down**
35-39 years	244	(24)		343	(22)	
40-44 years	173	(17)	**up**	266	(17)	**up**
45-49 years	90	(9)		159	(10)	
50-54 years	47	(5)		84	(5)	
55-59 years	24	(2)	**up**	47	(3)	**up**
60-64 years	8	(1)		18	(1)	
65 + years	6	(1)		16	(1)	

1. Due to delays in reporting, data from recent years are incomplete
2. Statistical trends were identified from the chi-square test for trend, calculated for the periods 1996-98, 1999-2001, and 2002-04.
3. Includes persons for whom exposure information is incomplete (due to death, refusal to be interviewed, or loss to follow-up), patients still under investigation, patients whose only risk was heterosexual contact and where the risk of the sexual partner(s) was (were) undetermined, persons exposed to HIV through their occupation, and patients whose mode of exposure remains undetermined.
4. And not Hispanic. The groups Asian, Native Hawaiian, & other Pacific Islanders were grouped due to small cell sizes. All categories are mutually exclusive

Exhibit 15- Trends in primary injection drug in Seattle area IDU ages 18-30 participating in 4 studies, 1994 – 2003.



Note: The number of cases ranged from 27-333 per year, with an average of 164 in each year.
Speedballs refers specifically to the combination of heroin and cocaine.
Source: Public Health-Seattle & King County, HIV/AIDS Epidemiology Unit