

Recent Drug Abuse Trends in the Seattle-King County Area

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ABSTRACT

Cocaine-related deaths have increased to previous high levels in 2002, following a brief decline in 2001 of both deaths and Emergency Department mentions related to cocaine. Heroin-related deaths have also increased following sharp declines observed from mid-2000 through 2001; ED mentions are also higher than the previous year. Overall, drug related deaths and ED mentions for other opiates are at their highest levels, surpassing the number of ED mentions for heroin for the first time. Marijuana use is widespread with recent increases in ED mentions and treatment admissions. Indicators of methamphetamine use have plateaued, including treatment admissions and manufacturing site seizures. PCP ED mentions remain at new higher levels, MDMA and GHB indicators remain elevated and LSD use has continued a long trend downward; however, these 'club drugs' ED mentions make up only about 5 percent of ED mentions. Treatment admissions for hallucinogens and club drugs continue at very low levels. Indicators of depressant use remain fairly steady with relatively high levels of ED mentions and low levels of treatment admissions. Among men who have sex with men seen recently at the county STD clinic, the use of either MDMA or methamphetamine is significantly associated with risky sexual behaviors and contracting STDs. Injection drug users, including those who also engage in male-male sex, constitute 14 percent of newly diagnosed HIV infections in recent years. Hepatitis C may infect up to 85 percent of IDU in King County.

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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 to the south, northward to Canada, passing through King County. 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, an increase of 15.2 percent since 1990. King County is the twelfth largest county in the U.S. 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, 5.4 percent African-American, 0.9 percent Native American or Alaska Native, 0.5 percent Native Hawaiian and Other Pacific Islander, and 2.6 'some other race.' Those reporting two or more races constitute 4.1 percent of the population with 5.5 percent reporting their ethnicity as Hispanic. Income statistics show that the 8.0 percent of adults and 12.3 percent of children live below the federal poverty level, lower than the state averages of 10.2 percent and 15.2 percent respectively.

Data Sources

- **Arrestee drug testing data** were obtained from the Arrestee Drug Abuse Monitoring (ADAM) Program. As part of the National Institute of Justice's ADAM program, King County's urinalysis results for January through December 2001 are included in the narratives for cocaine, heroin, marijuana, stimulants (methamphetamine) and club drugs (PCP). Provisional, unweighted data for the first half of 2002 are provided as well; note that this data will change some when sampling weights are applied. All data are for adult, male arrestees only.
- **Drug related emergency department (ED) data** were derived from Drug Abuse Warning Network (DAWN) emergency department data. DAWN estimated rates per 100,000 population for ED mentions for selected drugs from 1994 through December 2001 were accessed from the Substance Abuse and Mental Health Services Administration, Office of Applied Studies (SAMHSA, OAS). Drug 'mentions' indicate that the patient identified the substance as something they had recently taken; it may or may not have been the reason for the ED visit. Available data are for King and neighboring Snohomish counties combined.
- **Treatment admissions data** were extracted from the Washington State Department of Social and Health Services' Treatment and Assessment Report Generation Tool (TARGET). TARGET is the department's statewide alcohol/drug treatment activity database system and report-generating software. Data are compiled for King County from January 1, 1999, through June 30, 2002. Data for all substance abuse related treatment admissions are included; this contrasts with previous CEWG reports where admissions for alcohol-only were excluded. Only the primary drug at time of treatment admission is available. Data on private pay and Department of Corrections clients, as well as those receiving detoxification services, are excluded.
- **Illegal drug price, purity, production, trafficking, distribution and availability data** were provided by four sources: 1) Heroin price and purity data for the United States and Seattle come from the Drug Enforcement Administration's (DEA) Domestic Monitor Program. Data presented are from the first half of 2001, the most current data available. Qualitative data for the first half of 2002 were provided by DEA intelligence staff. DEA Diversion Control provided data on prescription drug sales to hospitals and pharmacies in 2001.

2) Data from the U.S. Customs Service relating to the seizures for all illegal drugs are included for January 1, 2001, to June 30, 2002. The majority of customs seizures are at the Blaine, Washington border crossing, where Interstate 5 crosses the northern border of the state and into Canada near Vancouver. This is the third busiest Canadian border crossing for passengers and fourth for commercial traffic nationally.

3) Northwest High Intensity Drug Trafficking Area (NW HIDTA). Pursuant to its designation by the Office of National Drug Control Policy, the NW HIDTA produces a Threat Assessment for the region on an annual basis. Data for 1998 through 2001 are from all Federal, State, and local law enforcement agencies and narcotics task forces in the region, and the Western States Information System (WSIN).

4) Washington State Department of Ecology (DOE)- the most comprehensive and current source of methamphetamine production data is now 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.

- **Drug related mortality data** were provided by the King County Medical Examiner (ME). Information about drug-caused deaths in King County is presented by half year from January 1, 1994, through June 30, 2002. The data include deaths directly caused by licit or illicit drug overdose and exclude deaths caused by poisons. Therefore, 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. Note that more than one drug is often identified per individual drug overdose death, and as a result, the total number of drugs identified exceeds the number of actual deaths.
- **Infectious diseases related to drug use including HIV/AIDS and hepatitis** data are provided by three sources.
 - 1) STD Clinic, Public Health-Seattle & King County- Data on clients drug use, health status and health behaviors are available for October 2001 to September 2002.
 - 2) Epidemiology Research Unit, Public Health – Seattle & King County. Two longitudinal cohort studies of Seattle area drug injectors are conducted by Public Health - Seattle & King County (PHSKC), with funding from the National Institute on Drug Abuse (NIDA). The studies began in 1994 and continue through 2002.
 - 3) "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 (July 1999 through June 2002) and the United States (January 1999 through December 2001), are provided by Public Health – Seattle & King County (PHSKC), Washington State Department of Health, and the Federal Centers for Disease Control and Prevention (CDC). HIV cases were reported to PHSKC or the Washington Department of Health between September 1999 (when HIV reporting was first implemented in WA State) and October 2002.
- **Key informant interview data** are obtained from discussions with treatment center staff, street outreach workers, and with drug users.
- **Washington State Alcohol/Drug Help Line (ADHL)** provides confidential 24-hour telephone-based treatment referral and assistance for Washington State. Data are presented for January 2001 to June 2002 for calls originating within King County. Data presented are for drugs mentioned, and since a caller may refer to multiple drugs, there are more drug mentions than there are calls. The data exclude information on alcohol and nicotine, which account for over half of the calls. In the first half of 2002 there were 2,724 calls, of which 86 percent were about adults.
- **The Washington State Poison Center** operates a 24-hour hotline. Data are presented for King County, and multiple substances may be recorded for each call. Many of the calls are due to serious or unusual situations reported by health care facilities. Only a minority of all poisonings or exposures are reported to the Poison Center; these data do not approximate prevalence data. Calls requesting only general information are not included in these data.

DRUG ABUSE PATTERNS AND TRENDS

Cocaine and Crack

The rate of ED mentions for cocaine increased 23 percent between 1999 and 2001 – from 130 per 100,000 to 160 per 100,000. – making it the most commonly cited illegal drug in ED visits. In 2001, 62 percent of ED mentions were male. Of those whose race/ethnicity was known, 57 percent were white, 37 percent were African American, and 5 percent were Hispanic, consistent with previous years. The majority ranged in age from 26 to 44. From 1999-2001 significant increases occurred in mentions across all ages. Over the eight year period from 1994 to 2001, significant increases were seen for those age 45-54, (168 percent), and among those age 55 and older, (161 percent). This corresponds with anecdotal reports that cocaine users represent an aging cohort. Dependence was cited most often for those whose reasons for using the drug were known. Only 30 percent of visits to the ED involving cocaine were for cocaine alone in 2001. Of these single drug episodes, the most common reasons for the visit included chronic effects (23 percent), unexpected reaction (16 percent), and accident/injury (16 percent).

Admissions to drug treatment for adults reporting cocaine as their primary drug have declined by 1 percent each year since 1999. The first half of 2002 was virtually identical to the preceding half-year period (exhibit 2). In the first half of 2002, cocaine admissions represented 12 percent of total treatment admissions.

There were 49 mentions of cocaine in drug-involved deaths in the first half of 2002 (Exhibit 3), accounting for 48 percent of all drug-related deaths. This is the second highest number of deaths since 1994; in the first half of 2001 there were 51 cocaine-related deaths. Thirteen of the 102 reported drug-related deaths were for cocaine alone. The drugs most commonly seen in combination with cocaine are heroin, other opiates, and alcohol, consistent with previous years. The average age of the decedents was 42 with a range from 25 to 57 years of age. Seventy-one percent (35) of the decedents whose deaths were cocaine-related were white, 18 percent (9) were African American, 6 percent (3) were Native American, and the remaining two deaths were coded as 'other'. The proportion of African Americans is similar to that seen in 1999 and 2000, and higher than the 8 percent, (4 deaths), for 2001. Eighty-one percent of decedents with cocaine identified were male, similar to previous years. All but one of the deaths were determined to be accidental; the cause of the remaining case was undetermined.

In the first half of 2002, there were 13 reports of cocaine seizures by US customs totaling 36.8 pounds (16.7 kilograms). The number of seizures is down slightly, with many fewer pounds seized. Most notably, a single seizure of over two tons was made in the first half of 2001.

In Seattle, ADAM data are only available for adult, male arrestees. Provisional data are available for the first two quarters of 2002. For this time period, 36 percent of male arrestees tested positive for cocaine. These data show an increase in cocaine positives compared to 2000 (31 percent) and 2001 (31 percent).

The NW HIDTA reports that the street cost of cocaine is roughly \$30 per gram, \$500 – 900 per ounce, and \$14,000 - \$24,000 per kilogram. Intelligence reports indicate that powder cocaine is increasingly more available in King County as well as other areas of the state.

Of the 535 exposures to street drugs reported to the Washington State Poison Center for King County, 54 were exposures to cocaine in 2001. Trend data are not yet available.

Cocaine continues to be the second most common illegal drug mentioned by all callers to the Helpline. It is the most common drug cited by adults -- 24 percent for the first half of 2002 -- the same as for all of 2001. For teenagers it is the fourth most common drug mentioned, with 37 calls representing ten percent of all calls for the first half of 2002, a slight higher proportion than in 2001.

Heroin

Heroin ED mentions have remained fairly steady from July 2000 through December 2001 at a level lower than that seen from 1996 though the first half of 2000. Ages of those reporting heroin use have remained constant since 1994, with those under 18 representing one percent of ED visits, 18-25 years making up 11 percent, 26-34 year olds making up 26 percent, and those over 35 constituting 62 percent in of heroin-related ED visits 2001. The only significant long-term trend is an increase in those over age 45-54 -- up 92 percent since 1994. Heroin is the only major drug for which the majority of ED visits are due to use of a single drug. In 2001, 61 percent of those who mentioned heroin had used only that drug. The main reasons for these single drug visits were chronic effects (53 percent) followed by overdose (16 percent) and withdrawal (11 percent). The vast majority reported dependence as their motivation for using. Heroin is the second most commonly cited illegal drug, following cocaine.

Forty-eight heroin-related deaths were reported in the first half of 2002, a substantial increase from the 27 and 34 deaths for the second and first halves of 2001 respectively. The age range was 21 to 73 with an average of 41, similar to previous years. Race/ethnicity of decedents included six African Americans, three Native Americans, two 'other' and 37 Caucasians. This racial distribution has been relatively constant since 1999, with the exception of 2001 when only one African American died from heroin-related causes. The proportion of heroin-only deaths has declined from 1999 to 2001 and remained steady into the first half of 2002. There were 49 deaths due to heroin alone in 1999, 42 percent of heroin involved deaths, with 41 deaths (41 percent) in 2000, 16 deaths (26 percent) in 2001, and 13 of 48 deaths in the first half of 2002 ,(27 percent).

The primary form of heroin on the streets is Mexican black tar. China White, a common form in Vancouver B.C. and on the East coast, is virtually non-existent in the local area according to regional HIDTA and DEA.

The number and proportion of treatment admissions for heroin increased in the first half of 2002 to 661 admissions, 16 percent of all admissions in the county, up from 606 admissions, 14 percent, in the previous half year. Admissions are down overall from a recent peak in the second half of 1999 through 2000, that peak was due primarily to the utilization of public funding that had been under expended.

ADAM data for the first half of 2002 shows a slight decline in the proportion of new arrestees testing positive for heroin, based upon provisional data. The 8 percent for the first half of 2002 compares with 10 percent for 2001 and 2000.

Calls to the Alcohol/Drug Help Line in the first half of 2002 for heroin represent 9.6 percent of all drug related calls, unchanged from 2001. Teens were less likely to call about heroin; only 2 percent of calls by teens were related to heroin compared to 11 percent for adults, these proportions have been consistent for the past year and a half.

Numbers of heroin seizures by U.S. Customs were unavailable for the first half of 2002. Seizure of heroin by customs officials is infrequent and the total volume small compared to the level of use, with 12 seizures totaling seven pounds in 2001. The major trafficking route is believed to involve the interstate highway system from the Southwestern U.S. once the product has crossed the Mexican border. There is not thought to be much heroin trafficking across the Washington-Canadian border in either direction.

DEA reports that declining heroin purity was first noted in 2000 and has remained at lower levels. The average purity of 14 samples collected by the DEA's Domestic Monitoring Program (DMP) in Seattle was 10.3 percent during January to June of 2001; this is similar to the 12.7 percent purity for the 23 samples collected during all of 2000. This relative consistency in purity is supported by anecdotal information from

HIDTA, though there are occasional reports of high quality heroin at local needle exchanges. Of the samples tested, 11 were identified as Mexican, the origins of two samples were unidentifiable and one sample was insufficient to test. According to the DEA, the average price per milligram pure was \$2.69 during the first half of 2001 compared with \$1.15 for 2000. Local informants noted that the DMP reported prices appear higher and the purity lower than what they are seeing.

The most current data from Seattle DEA, from the first half of 2001, finds that a gram of black tar heroin sells for \$50-\$100 with 0.10 of a gram selling for \$20-\$50. Local informants report that heroin is selling for \$20 for a fifth of a gram in the Downtown core. In the Capitol Hill neighborhood, a densely populated neighborhood adjacent to downtown, a gram sells for \$50. Buying larger quantities has become less expensive over the last several years. In 1998 an '8 ball' (equivalent to an eighth of an ounce or approximately 3.5 grams) sold for \$175, whereas in 2001 it sold for between \$100 and \$125.

Other Opiates/Narcotics

For the purposes of this report "other opiates/narcotics" include codeine, dihydrocodeine, fentanyl, hydrocodone, methadone, oxycodone, and propoxyphene.

Deaths involving other opiates reached their highest level in at least the past 9 years, with a total of 31 mentions of other opiates associated with 26 deaths in the first half of 2002 (Exhibit 3). Decedents ranged in age from 19 to 75, with an average age of 41. Oxycodone and methadone were the two most commonly identified drugs in deaths related to other opiate use during the last several years, constituting 75 percent of other opiates identified from 1999 to 2001. In the first half of 2002, oxycodone was identified 13 times and methadone 14 times; combined these represented 87 percent of all other opiates identified. Two deaths involved both oxycodone and methadone. 2002 data reflect a continued increase of oxycodone-associated deaths -- from 4 in 1999 to 18 in 2001. Deaths in which methadone is identified continue at a relatively constant rate, however, what constitutes a methadone-related death is unclear, particularly in methadone-tolerant individuals. Efforts are underway to better understand the role that methadone may be playing in deaths. It is unknown how many deaths are among those receiving methadone for opiate substitution treatment, versus those who have obtained either a legal prescription or have illegally obtained the drug. Of the four other cases involving prescription opiates, two involved codeine, one fentanyl and one hydrocodone (e.g. 'Vicodin').

Increases in ED mentions for all 'narcotic analgesics' have been significant with an increase from an estimated rate of 64 per 100,000 in 1999 to 120 per 100,000 in 2001. The 2001 rate of narcotic analgesic mentions is equivalent to 2,560 ED visits, ranking narcotic analgesics ahead of heroin for the first time. Oxycodone/combinations (e.g. Oxycontin) mentions increased significantly in recent years, doubling from 1999 to 2000 and increasing another 52 percent from 2000 to 2001. Methadone followed a similar trend with a significant increase from 1999 to 2000, 77 percent, followed by a 92 percent increase the following year to an estimated rate of 28 per 100,000 in 2001. Hydrocodone and its combinations (e.g. 'Vicodin' and 'Percocet') increased significantly between 1999 and 2000, with similar levels in seen 2001. Codeine/combinations have decreased 74 percent since 1994, with steady levels from 1998 through 2001. (Data note- DAWN includes what is considered for this report to be 'other opiates' as well as other substances within their 'narcotic analgesic' category; the 'narcotic analgesic not otherwise specified' sub-category includes over half of the mentions, limiting the accuracy of this data.)

The category of 'narcotic analgesics, not otherwise specified' was the fifth most common single-drug-only ED visit type, with 354 such visits estimated for 2001. The most common reasons for visiting the ED among these single drug users included chronic effects (22 percent), accident injury (15 percent), withdrawal (13 percent), unexpected reaction (11 percent) and overdose (10 percent). The primary reason for using was dependence (58 percent) and suicide (7 percent).

The Help Line reported 38 calls related to methadone for the first half of 2002, representing less than two percent of calls. The proportion of calls was similar to the previous year. In 2002, all of the calls were from adults; in the prior year only a half dozen calls were from teens.

Treatment data point to low levels of treatment demand for other opiates with such admissions representing approximately one percent of all treatment admissions according to reports on the primary drug of admission (Exhibit 2). There was a decrease from 54 to 29 clients admitted to treatment for other opiates from the second half of 2001 to the first half of 2002.

According to local DEA, hydrocodone is the most commonly diverted narcotic. This is due in large part to its status as a Schedule III drug under the Controlled Substances Act, as opposed to oxycodone which is a more tightly restricted Schedule II narcotic. Note that hydrocodone in its pure form is Schedule II, but in combination with other medications, for example when combined with acetaminophen (e.g. 'Vicodin'), it is Schedule III.

Washington State was well above the national average in hospital purchases of hydrocodone, oxycodone, Oxycontin, methadone, codeine, morphine and hydromorphone according to the DEA during 2001. Pharmacy purchases are well above average for morphine, oxycodone and Oxycontin. King County is above the State average in hospital purchases for oxycodone, Oxycontin, morphine and hydromorphone, not surprising since King County is also the location of the Pacific northwest's regional trauma center and most major hospitals, where these drugs are likely to be administered. The drug with the highest rate of purchases was oxycodone. Hospital purchases averaged 455 grams per 100,000 residents in Washington compared to 217 grams per 100,000 residents nationally. Pharmacy purchases were 473 grams per 100,000 in the state compared to 333 per 100,000 nationally. Data are available from the DEA on the amount of Oxycontin distributed in Washington State, primarily to hospitals and pharmacies, from January 1997 through March 2001. These data point to a roughly 1,600% increase in Washington and a 1,300% increase nationally during this timeframe.

Methadone was also dispensed at higher levels in the State than nationally, with an average of 118 grams per 100,000 residents for Washington hospitals compared with 49 per 100,000 nationally in 2001. Methadone dispensed through opiate substitution clinics is not included in this DEA data, indicating that virtually all of this methadone is being prescribed for pain management. Almost all methadone dispensed for 'take home' dosing by opiate substitution treatment centers is in liquid form as opposed to the tablet form prescribed for pain management.

Informants report that most methadone sold on the street in the Seattle area is in tablet form, suggesting that its source may be prescriptions for pain management. Street cost of methadone in this form is approximately fifty cents per milligram,

An issue that will continue to be explored is to what degree recent indicator data point to abuse of other opiate medications versus an increase in their legitimate prescription by physicians in an attempt to better manage pain, a condition that has historically been under-medicated.

Marijuana

Marijuana continues to be one of the most widely used illicit substances. Provisional ADAM data for the first half of 2002 shows that 43 percent of arrestees tested positive for marijuana. This compares with 35 percent for 2001 and 38 percent during 2000. Marijuana remains the drug most commonly identified in urinalysis tests of arrestees in King County. This points to its popularity as well as the fact that marijuana can be detected in urine tests far longer than other drugs.

DAWN ED data indicate that marijuana remains the third most common illegal substance mentioned (Exhibit 1). A surge in the rate of marijuana mentions that has been evident since the first half of 2000 has been maintained through 2001. A significant increase, 80 percent, in marijuana mentions was seen from 1999 to 2001. Seventy one percent of those who mention marijuana were also using other drugs at the time of the ED visit. This ratio has remained relatively constant over the last seven years. Reasons for using given by those who had used only marijuana included psychic effects (33 percent) and dependence (20 percent). Reasons for visiting the ED included chronic effects (29 percent) and unexpected reaction (21 percent).

Marijuana mentions are up significantly for all age groups when comparing 2001 to 1999 and 2001 to 1994, except for 26-34 year olds from 1994 to 2001. In the short term, during 2001, Emergency Department mentions declined by 41 percent for those age 12 –17; for ages 18 - 25 the decline was 42 percent; and for ages 26 - 29 years, the decline was 31 percent. The 35 and older age group are the most likely to mention marijuana during an ED visit, comprising 37 percent of the ED mentions during this period. Young adults are no longer the most likely age group to mention marijuana use, with approximately 30 percent of marijuana mentions among those age 18-25 a decline from the last several years. Teenagers comprise approximately 15 percent of ED mentions with fluctuations year to year. ED mentions among older adults - those 35 and older -- have historically decreased with increasing age; however, in 2001 this age group represented the largest proportion of marijuana mentions for the first time since at least 1994.

Treatment admissions for marijuana increased in the first half of 2002 compared with the second half of 2001 from 819 (19.5 percent) to 845 (20.5 percent) (Exhibit 2). This continues a trend that began in 1996. Marijuana remains the second most common reason for drug treatment for the first half of 2002, with alcohol representing 40 percent of admissions. Youth dominate marijuana treatment admissions; approximately two-thirds of youth treatment admissions have been for marijuana in recent years.

Marijuana continues as the drug most commonly cited among those who called the Alcohol/Drug Help Line, representing one quarter of calls. A substantial difference between adults and teens is evident: more than twice the proportion of calls were about teens (49 percent) compared to adults (21 percent). The percentage of calls citing marijuana declined slightly from 27 to 25 between the second half of 2001 to the first half of 2002.

HIDTA data collected from local, state and federal law enforcement show the following prices for various forms and sources of marijuana: one pound of Mexican \$500-\$700, one pound of domestic \$2,400-\$3,200, one pound of 'BC Bud' from British Columbia, Canada \$2,800-\$3,000, and 100 starter plants \$1,500 (according to local police). Cultivation seizures reported to HIDTA for Washington State totaled 317 in 2000 and 401 in 2001; in King County there were 24 seizures in 2000 and 12 in 2001.

Customs reports continued large increases in seizures of marijuana, principally at the U.S.-Canadian border crossing at Blaine, where Interstate 5 crosses into Canada near Vancouver. In the first half of 2002 there were 408 seizures compared with 301 and 268 for the second and first halves of 2001, respectively. A substantial increase in quantity seized was seen between the first and second halves of 2001, from 3432 to 7519 pounds, largely due to the increased border security following the terrorist attacks during September of 2001. This increase continued in the first half of 2002 when 9811 pounds was seized as the heightened border security was maintained. The number of large seizures increased substantially following the terrorist attacks and continued into 2002 with 19 seizures of over 100 pounds from January to June. The largest seizure, 1,475 pounds, was identified in January 2002, from a commercial truck.

Stimulants

DAWN ED mentions for amphetamine and methamphetamine in Seattle-King County increased during the period of July through December, 2001, reversing the downward trend reported for the first half of 2001 and returning to a rate similar to that of 2000. Overall, the level of methamphetamine use in 2001 was the same as 1999, a rate of 18 per 100,000. In 2000, the rate was 27 per 100,000 -- the highest since at least 1994. Overall, amphetamine and methamphetamine rank fifth and sixth among all illegal drugs. (Note: A categorization problem is suspected due to high levels of amphetamine mentions that do not correspond to other indicator data or anecdotal reports. Mis-categorization of methamphetamine as amphetamine is suspected in other data sources as well.)

Almost half of methamphetamine related ED visits were for methamphetamine alone (47 percent) in 2001. The primary reasons for using among this group included dependence (40 percent) and psychic effects (38 percent). Reasons for the ED visit included unexpected reactions (32 percent) and chronic effects (24 percent).

The number of King County treatment admissions for persons reporting amphetamine and methamphetamine as their primary substances remained stable during the first half of 2002, continuing at a level similar to that of 2001. Methamphetamine admissions accounted for 8.9 percent of the total King County treatment admissions for the first half of 2002, compared to 8.7 percent of such admissions in 2001, 6.8 percent in 2000, and 4.9 percent in 1999, and continued to be surpassed by those for persons reporting alcohol, cocaine, heroin and marijuana as their primary substance. During 2001, the rate of methamphetamine treatment admissions per capita was three times lower in King County than throughout the rest of the state. Persons reporting amphetamine as their primary substance have consistently accounted for 0.7-1.0 percent of the total King County treatment admissions.

The majority of calls to the poison center related to street drugs were for amphetamines and methamphetamine (59 percent). A specific category for methamphetamine was added two years ago but is rarely used.

Data from Public Health- Seattle & King County's STD clinic indicate that among men who have sex with men (MSM) methamphetamine use is significantly associated with increased number of sexual partners, contracting gonorrhea, having a new HIV diagnosis, having pre-existing HIV, transmitting HIV and acquiring HIV. Overall, lifetime methamphetamine use among those seen at the clinic was reported by 8.7 percent of MSM compared with 1.7 percent of heterosexual men ($p < 0.0001$). Use of methamphetamine by MSM injection drug users has been noted for over a decade in the Seattle area.

The proportion of calls to the Alcohol/Drug Help Line that originated in King County regarding methamphetamine decreased from 18.9 percent for the first half of 2001 to 14.9 percent to the first half of 2002. Methamphetamine was third among illegal drugs mentioned by those calling about teenagers and adults.

The percentage of male arrestees in Seattle-King County (ADAM) testing positive for methamphetamine continued to increase according to provisional data available for 2002. Data for the first half of 2002 showed that 14.4 percent of the arrestees tested positive for methamphetamine (60 of the 416 tested). This compares to 11 percent in 2001 and nine percent in 2000.

Four deaths involving methamphetamine and one involving amphetamine were recorded in King County for the first half of 2002, equaling the number reported for all of 2001. This may represent a return to the levels reported for 2000 (11) and 1999 (14) although the total remains relatively small and has not changed much since 1995. In 2002, the decedents' ages ranged from 26 to 40, with an average age of 34. This is similar to

the average age of 36 during 1999 to 2001 and lower than the average age of those who died of heroin and cocaine related causes, who averaged 41 to 42 years of age at death in recent years.

Local prices of methamphetamine on the street in Seattle-King County and throughout the State of Washington have remained stable in spite of increasing availability, ranging from \$20 - \$60 per gram, \$350 - \$650 per ounce and \$4,250 - \$6,000 per pound in Seattle-King County.

In keeping with past years, law enforcement sources estimate that 65-75 percent of the methamphetamine available in Washington State is transported from Oregon, California and Mexico. The quantities involved in this commerce are suggested by a recent investigation in Pierce County, directly south of King County, that dismantled an organization that was trafficking approximately 100 kilograms of methamphetamine per month. Further indication of the level of this activity is provided by the U.S. Customs Service, reporting the seizure of 8.45 pounds of methamphetamine at five land, maritime, and commercial air ports of entry during the first half of 2002, compared to the seizure of 0.97 pound of methamphetamine during the first half of 2001.

Nonetheless, ease of access to precursor ingredients (increasingly imported from Canada), the availability of equipment, recipes and locations, and the purity of methamphetamine produced by local clandestine labs continue to sustain their prevalence in Washington State and King County. Due to state and national changes in reporting protocols, the source and scope of the data quantifying clandestine labs changed in 2002. The most comprehensive and current source of this data is now 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. DOE data for the period of January through October of 2002 suggests that the proliferation of clandestine labs in Washington State stabilized in 2002, at a level that indicates a slight decrease from 2001. A total of 1,567 methamphetamine incidents have been reported during January through November, 2002, compared to 1,886 for all of 2001, 1,449 for 2000 and 789 in 1999. Although 2002 would thus be the first period in seven years to show a decrease in methamphetamine incidents, it will likely exceed the 2000 total and will continue to rank Washington State third in the nation for methamphetamine manufacturing activity as measured by the number of labs and dump sites seized. It is important to note that this measurement does not account for the amount of methamphetamine manufactured, a more difficult indicator to measure.

Similarly, the number of methamphetamine incidents reported in King County appears to have stabilized in 2002. DOE reports a total of 223 incidents for the period of January through November, 2002 (14 percent of the statewide total), compared to 271 in 2001 (9 percent of the statewide total), 231 in 2000 (16 percent of the statewide total) and 107 in 1999 (13 percent of the statewide total), suggesting a return to the level reported in King County during 2000 and sustaining King County's ranking second in the state for the number of activities associated with methamphetamine manufacturing. However, the rate of incidents per capita in King County was half the state's average in 2001.

Informants report increasing use of 'ice' and 'glass', converted forms of methamphetamine, with higher purity. Anecdotal reports supported by treatment data dating back to 1994 suggest that users are increasingly smoking methamphetamine as opposed to using it in other ways.

Depressants

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

ED mentions for 'anxiolytics, sedatives and hypnotics' were at a low point in 1999 and have since returned to previous higher levels. In 2001, the rate of 86 mentions per 100,000 residents placed depressants below cocaine, heroin, and narcotic analgesics and just above marijuana in terms of number of mentions. The majority of mentions were for benzodiazepines (73 percent).

For the first half of 2002 there were 20 deaths in which depressants were identified, with a total of 26 depressants identified among these decedents. Depressant-related deaths vary greatly over time with a gradual trend upward over the past seven years. All of the deaths involved multiple substances with other opiates the most common, identified in 11 of the 20 deaths. Demographics included 60 percent female, average age of 45, and 80 percent Caucasian, similar to the past three years when 57 percent were female, the average age was 43, and 87 percent were Caucasian. Depressants are the only drug for which the majority of decedents are female.

The Help Line reported data on adult calls related to benzodiazepines, barbiturates and tranquilizers, which combined represented less than one percent of drugs mentioned by callers.

Treatment data point to relatively few admissions for tranquilizers, barbiturates, benzodiazepines and other sedatives or hypnotics. Combined, these substances accounted for 24 admissions in the first half of 2002, 37 admissions in 2001, 12 in 2000 and 24 in 1999, never making up more than 0.5 percent of all admissions. Of this group, tranquilizers have shown the only substantial change; there have been 32 treatment admissions for tranquilizer use between July 2001 and June 2002, compared to 9 for the prior two and a half years.

Hallucinogens and Club Drugs

Hallucinogens include lysergic acid diethylamide (LSD), mescaline, peyote, psilocybin (mushrooms), and phencyclidine (PCP). "Club drugs" is a general term used for drugs that are popular at nightclubs and raves, including the hallucinogens, MDMA (Ecstasy), GHB, GBL, ketamine, and nitrous oxide.

Recent short-term trends point to a slight decline in ED mentions of MDMA, with a statistically significant decrease of 17 percent between the first and second halves of 2001. Longer-term trends reveal a significant increase in MDMA from 1999 to 2001, from a very low base rate of two mentions per 100,000 to five per 100,000. In 1994, there were only two mentions of MDMA across the two county reporting area, compared with 115 in 2001. In 2001, 59 percent of MDMA mentions were among males, similar to 2000. Caucasians represented the majority of MDMA mentions, though missing data were substantial for race/ethnicity. The largest proportion of mentions are among those age 18-25, followed by 12-17 year olds and 26-34 year olds. In 2001, two-thirds of ED visits involving MDMA also involved other drugs. The most common reason for visiting the ED among those who had used only MDMA was an unexpected reaction, with the most common reason mentioned for taking the drug being psychic effects.

GHB mentions have shown a pattern similar to MDMA mentions, with a peak in 2000 and a lower number of mentions, 40 in 2001. The age distribution of GHB users is different than MDMA, with GHB mentions most common among those age 26-34 and no mentions among those under age 18. The majority are Caucasian and male. A majority, 55 percent, of GHB related ED visits were single drug episodes.

PCP mentions increased 78 percent from the first half to the second half of 2001, to 82 mentions. PCP mentions by ED patients have increased significantly (148 percent) since 1999, and have also increased significantly since 1994. Slang terms for various combinations of PCP with other drugs, often combined with marijuana cigarettes, include 'shermans', 'wet', 'fry' and 'embalming fluid' (embalming fluid refers to the use of embalming fluid to dissolve the PCP; no psychoactive effects are known to be caused by the embalming fluid itself). During 2001, 25 percent of those who mentioned using PCP also mentioned using

marijuana; this is lower than the 43 percent reported nationally. A small proportion, 23 percent, of ED visits were for PCP used by itself.

DAWN ED data indicate a 75 percent decrease in LSD mentions from 1994 to 2001, from a rate of 11 per 100,000 to 3 per 100,000. Almost half, 46 percent, of LSD visits were single drug episodes. ED mentions of psychedelic mushrooms increased fifty percent from 1999 to 2001, returning to levels not seen since 1994. (Note that psychedelic mushrooms constituted all of the 'miscellaneous hallucinogen' category in 2001 and the majority of such mentions for all available data.) In 2001, 42 percent of ED visits for psychedelic mushrooms involved no other drugs. There was only one mention of ketamine in 2001.

While there have been some significant changes in the ED mentions for club drugs it is important to bear in mind that MDMA, GHB, PCP, ketamine, psychedelic mushrooms and LSD combined only constitute 5 percent of all emergency department drug mentions for 2001.

The King County Medical Examiner reports one 'club drug' death during the first half of 2002, that of a 29-year old Caucasian male due to acute GHB intoxication; this was the only substance identified. This is the first time that GHB has been identified in a death in King County. Between 1999 and 2001 there were five 'club drug'-related deaths, all involving MDMA. Of these MDMA related deaths, three involved only MDMA, one also involved methamphetamine and the other cocaine.

ADAM data for drugs in this category are limited to PCP. Provisional data for the first half of 2002 shows 2 percent (n=9) of arrestees tested positive for PCP. Two percent of adult male arrestees tested positive in 2001 for PCP, similar to the 1 percent reported in 2000.

Treatment admissions for hallucinogens, inhalants, and PCP during the first half of 2002 (n=15) remained consistent with previous six-month periods according to TARGET data. Anecdotal reports from treatment professionals indicate increasing numbers of youth and adult clients who report histories of hallucinogen and club drug use at assessment, but they rarely characterize this use as problematic.

Calls to the Helpline regarding 'club drugs' made up 3.7 percent of all calls regarding illegal drugs in the first half of 2002 (n=102), with seventy calls about MDMA specifically. A higher proportion of youth called about ecstasy, 6.6 percent, compared with 1.9 percent for adults.

Other sources of information concerning patterns of club drug use are mostly anecdotal. Prices for ecstasy, GHB, PCP and LSD have remained stable over the last year (e.g. a 150-250 tablet of MDMA selling for \$20-\$30). The injection of pure MDMA powder (as opposed to dissolved ecstasy tablets) is becoming more popular among methamphetamine and cocaine injectors, although product availability is inconsistent. In April 2002, managers of two gay sex clubs in Seattle reported an unusual spike in near-fatal drug interactions and overdoses among customers. Ten incidents involving combinations of GHB, alcohol, methamphetamine, and nitrous oxide were reported; normally, one incident per month is the average for both clubs combined.

A number of massive 'raves' are produced in Seattle every year. The Seattle Fire Department reports six large raves in the last two years with attendance ranging from 5,400 to 12,500 people. According to the Seattle Police Department, at a rave in June of 2002, 8,700 people were in attendance, 29 were arrested, and 864 MDMA pills were seized along with other drugs including mushrooms, diazepam/Valium and marijuana.

United States customs made 11 seizures of MDMA totalling 132 pounds, with one seizure of 110 pounds from a commercial flight. This is first year that data on MDMA seizures are available.

DEA reports no significant cases involving trafficking or manufacturing in 'club drugs' in Washington State. GHB manufacturing labs have been found in Oregon, often in combination with methamphetamine labs. In September 2002, arrests were made in a case involving internet sales of GBL from Canada to the United States including locations in Oregon and Seattle. GBL is metabolized by the body and converted into GHB.

A significant relationship between MDMA use and increased risk for sexually transmitted behaviors in MSM was seen among clients at Public Health-Seattle & King County's STD clinic. MSM report using MDMA at almost double the rate of heterosexual men, 15.8 percent compared to 8.2 percent, during the period of October 2001 to September 2002 ($p < 0.0001$). Among MSM, there are significant associations between MDMA use and a higher number of sexual partners, contracting gonorrhea, and engaging in behaviors that increase the risk of contracting HIV.

HIV, AIDS and Hepatitis among Injection Drug Users

There are an estimated 12,000-15,000 injection drug users (IDU) who live in Seattle and King County. While there are distinct differences among races, overall prevalence of HIV among non-MSM IDU in King County appears to have remained low and stable over the past 14 years. Various sero-surveys conducted in methadone treatment centers, correctional facilities, and through street and community-targeted sampling strategies over this period yield an HIV prevalence estimate of 1-2 percent among King County's non-MSM IDU population. Treatment-based surveys, conducted from 1988 through 1999, indicate significant variance in HIV-infection rates among IDU of color compared to whites. The infection rate among African-American and Hispanic IDU was 2-3 times higher, and the rate among American Indian and Alaska Native IDU was 5-6 times higher than that observed among white IDU. No positive cases were found among Asian or Pacific Islander IDU who entered treatment. Treatment clients who did not have permanent housing were significantly more likely to be HIV positive than those who were stably housed (3.4 percent vs. 1.6 percent; $p < 0.5$).

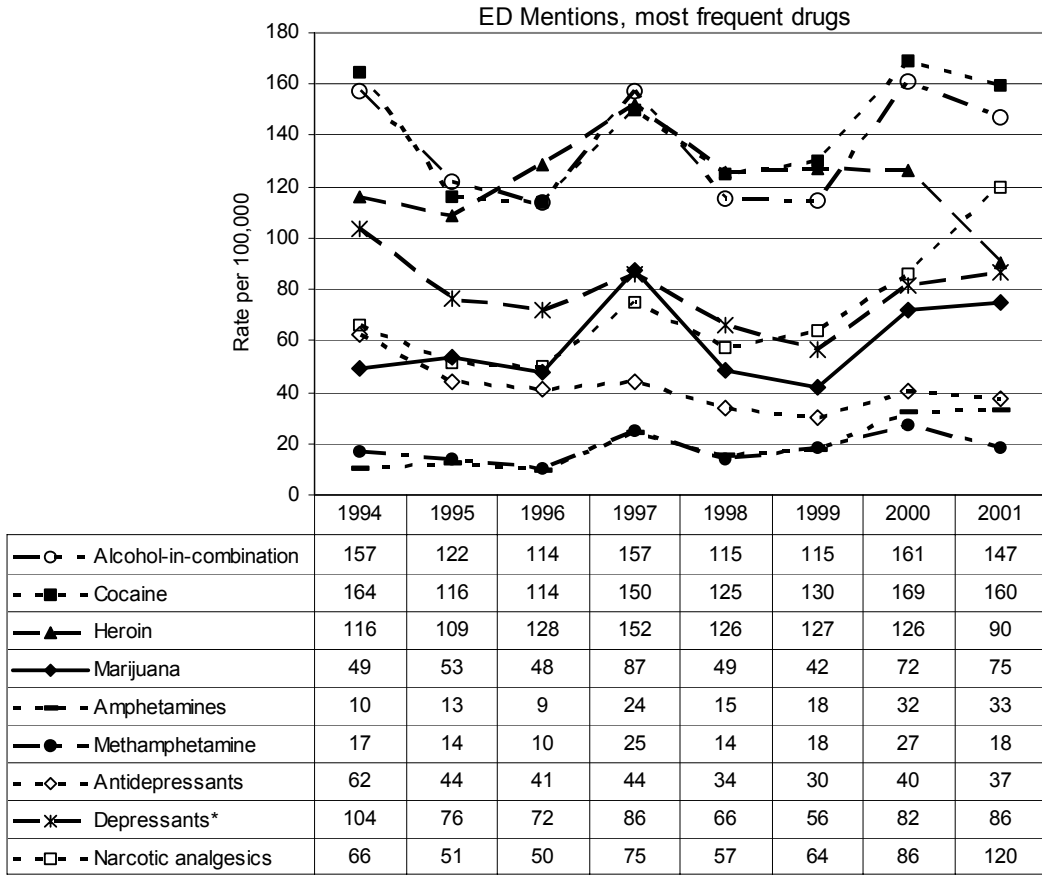
The rate of HIV infection among the roughly 3,000 male IDU in King County who have the dual risk of same sex encounters is estimated at 47 percent for those who primarily inject methamphetamine and 14 percent for those who primarily inject other drugs. The infection rate among non-methamphetamine injecting MSM/IDU is comparable to the HIV prevalence estimate for all MSM in the Seattle area.

As noted in prior sections of this report, Public Health- Seattle & King County STD clinic data point to significant increased risk among MSM of contracting STD's, including HIV, among those who use methamphetamine or MDMA compared to those MSM who report never having used these drugs.

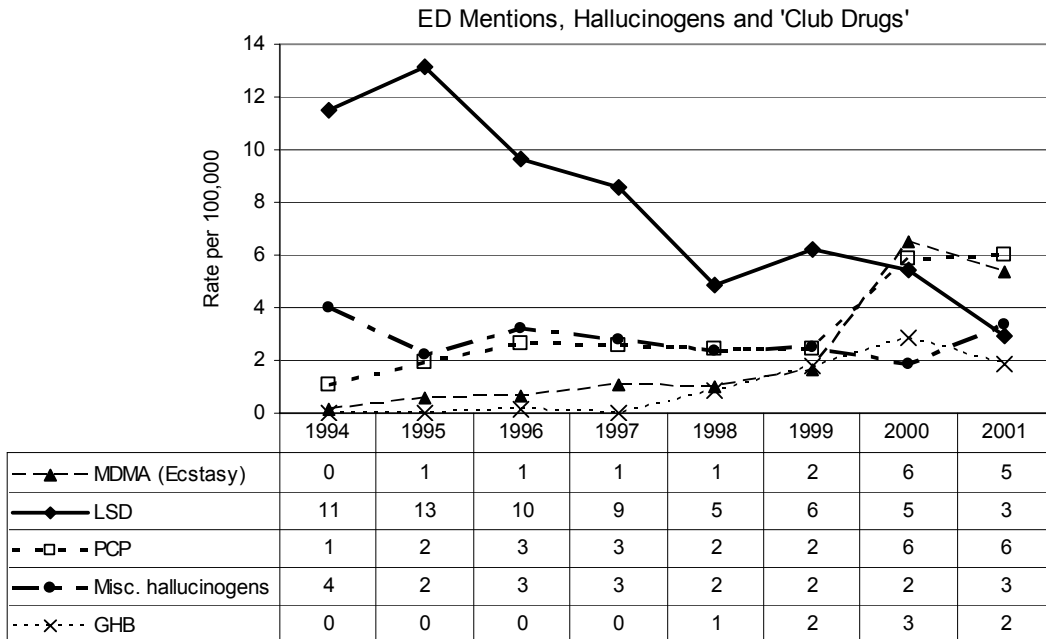
Although overall HIV prevalence among IDU in King County is relatively low, a high proportion of this population shows evidence of previous exposure to other blood-borne viruses. Epidemiologic studies conducted among over 4,000 IDU by Public Health's HIV/AIDS Epidemiology Research Unit since 1994 reveal that 85 percent of King County IDU may be infected with hepatitis C (HCV) and 70 percent show markers of prior infection with hepatitis B (HBV). Incidence studies indicate that 21 percent of non-infected Seattle-area IDUs acquire HCV each year and 10 percent of IDU who have not had hepatitis B acquire HBV. The HIV incidence rate among IDU in these studies was estimated to be less than 0.5 percent per year. High prevalence and alarming transmission rates for HBV and HCV suggest that injection risk behaviors persist, creating potential for future spread of HIV among IDU in King County.

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Exhibit 1. Estimated Rates of Emergency Room Mentions , Seattle Area, 1994-2001

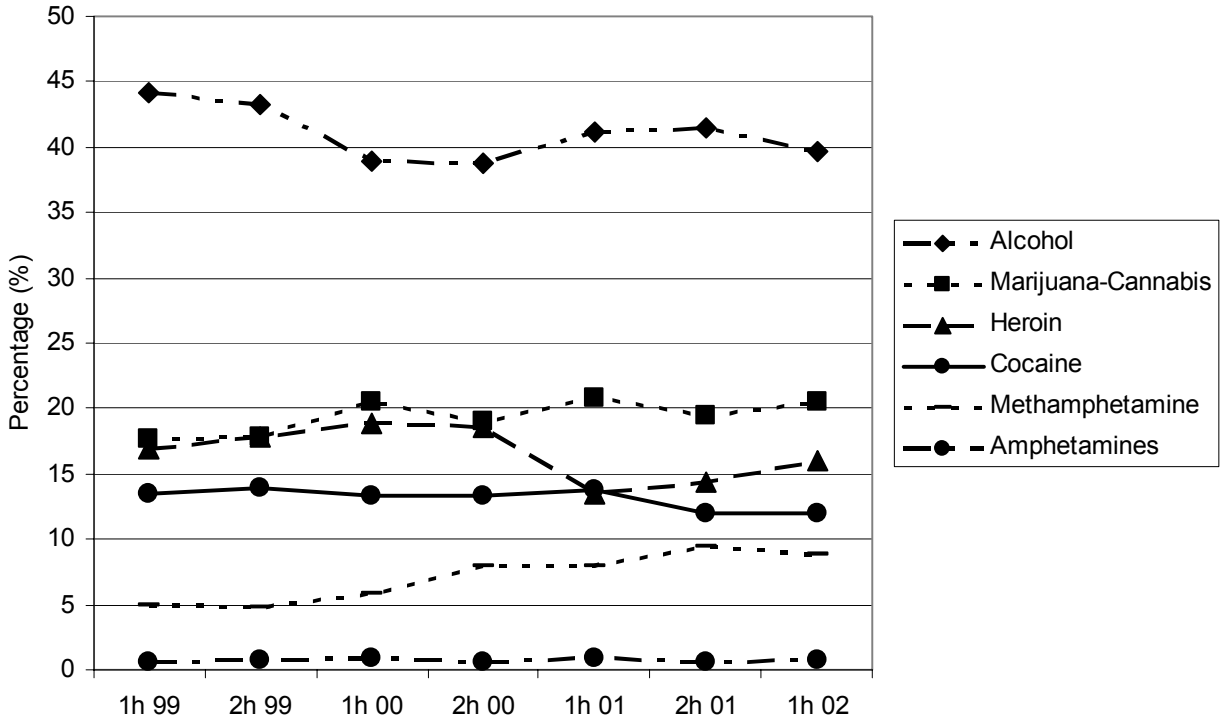


*Barbiturates, benzodiazepines, misc. anxiolytics, sedatives and hypnotics SAMHSA, Office of Applied Studies



SAMHSA, Office of Applied Studies

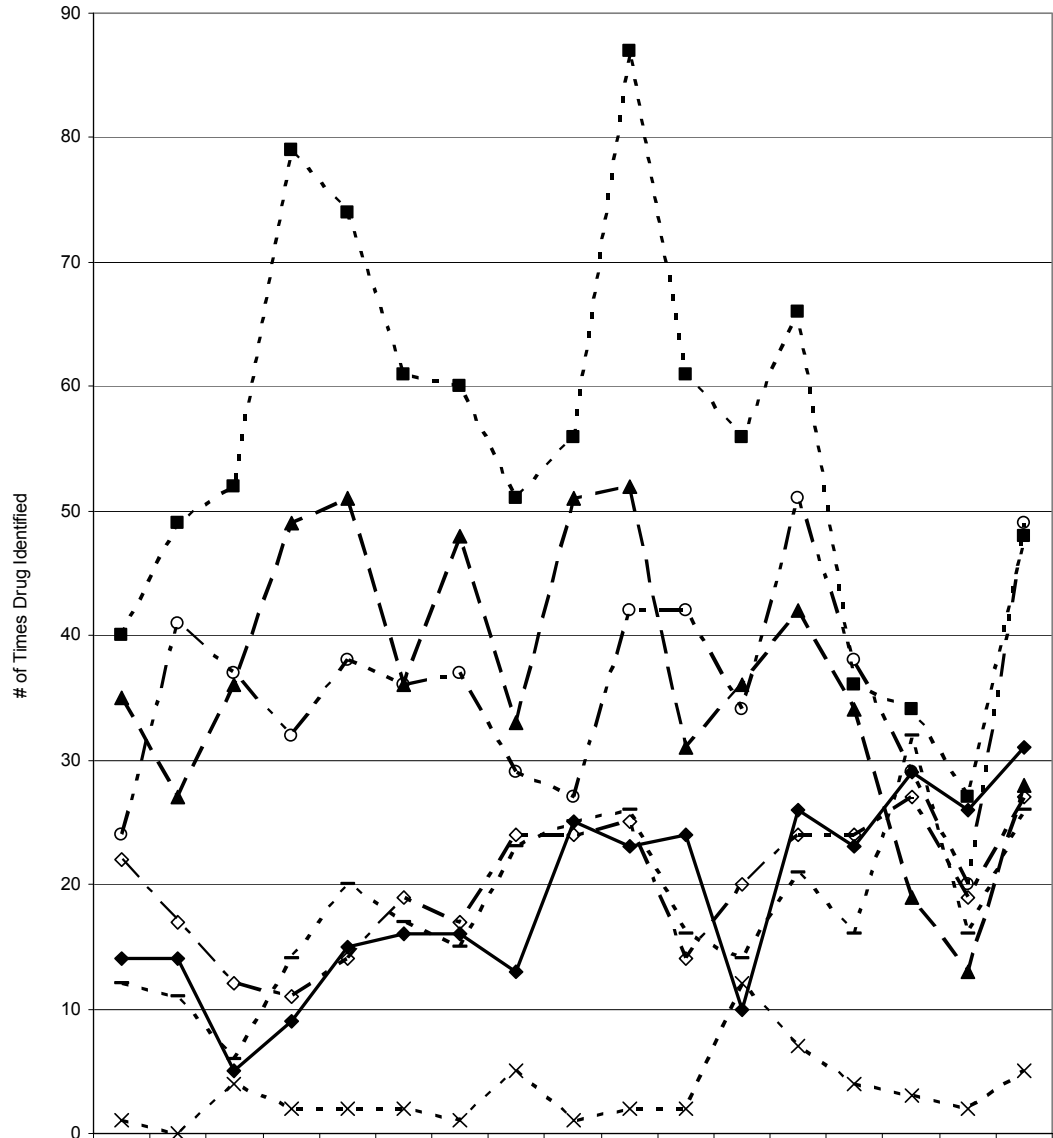
Exhibit 2. Half-Yearly Trends in Alcohol/Drug Treatment Admissions: Seattle-King County, January 1999 - June 2002



Description	1h 99		2h 99		1h 00		2h 00		1h 01		2h 01		1h 02	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Alcohol	1910	44.2	2331	43.3	2130	38.9	1935	38.8	1951	41.2	1745	41.5	1635	39.7
Amphetamines	28	0.7	39	0.7	52	1.0	30	0.6	46	1.0	28	0.7	28	0.7
Heroin	732	16.9	956	17.8	1032	18.9	929	18.6	636	13.4	606	14.4	661	16.0
Marijuana	763	17.6	958	17.8	1119	20.4	948	19.0	986	20.8	819	19.5	845	20.5
Cocaine	583	13.5	752	14.0	731	13.4	666	13.4	649	13.7	501	11.9	495	12.0
Methamphetamine	212	4.9	260	4.8	317	5.8	392	7.9	379	8.0	394	9.4	366	8.9
Other Opiates	43	1.0	40	0.7	36	0.7	40	0.8	41	0.9	54	1.3	29	0.7
Other Drugs	55	1.3	46	0.9	58	1.1	46	0.9	50	1.0	61	1.4	61	1.5
Totals:	4326	100.0	5382	100.0	5475	100.0	4986	100.0	4738	100.0	4208	100.0	4120	100.0

* Primary substances includes duplicated admissions to treatment
 ** Alcohol includes alcohol alone and in combination with other drugs
 Counts for the first half of 2002 are preliminary because of delays in data entry.
 Source: Washington State TARGET data system—Structured Ad Hoc Reporting System

Exhibit 3. Drugs Identified in Drug-Caused Deaths in Seattle-King County: January, 1994 – June, 2002



	1994 H1	1994 H2	1995 H1	1995 H2	1996 H1	1996 H2	1997 H1	1997 H2	1998 H1	1998 H2	1999 H1	1999 H2	2000 H1	2000 H2	2001 H1	2001 H2	2002 H1
-■- Heroin	40	49	52	79	74	61	60	51	56	87	61	56	66	36	34	27	48
-○- Cocaine	24	41	37	32	38	36	37	29	27	42	42	34	51	38	29	20	49
-▲- Alcohol	35	27	36	49	51	36	48	33	51	52	31	36	42	34	19	13	28
-◆- Other Opiates	14	14	5	9	15	16	16	13	25	23	24	10	26	23	29	26	31
-▤- Depressants	12	11	6	14	20	17	15	23	25	26	16	14	21	16	32	16	26
-◇- Antidepressants	22	17	12	11	14	19	17	24	24	25	14	20	24	24	27	19	27
-x- Amphetamines	1	0	4	2	2	2	1	5	1	2	2	12	7	4	3	2	5
Total Deaths	75	83	81	102	112	106	103	76	102	120	103	102	130	89	86	67	102

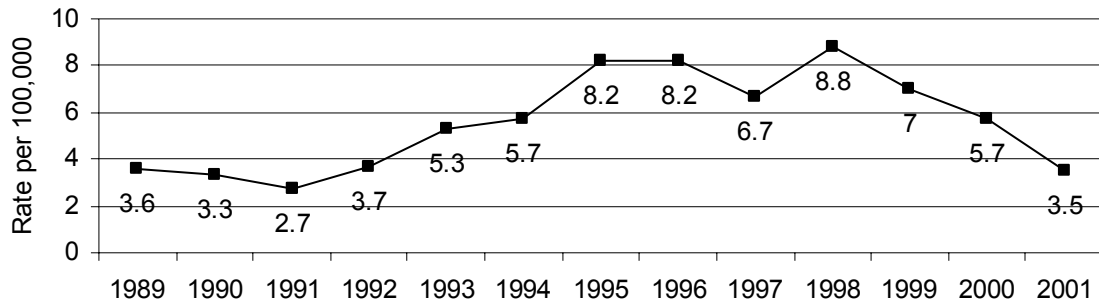
More than one drug is often identified per individual drug overdose death.

Table excludes poison-related deaths.

*The amphetamines identification category includes methamphetamine, it does not include MDMA.

Source Medical Examiner, Public Health-Seattle & King County

Exhibit 4: Rate of Heroin-Involved Deaths per 100,000 Population in Seattle-King County 1989–2001



*Note that rates from 2000 onward are calculated using the 2000 census population, prior years are calculated using the 1990 census, except for 1989.
Source Medical Examiner, Public Health-Seattle & King County

Exhibit 5. Demographic characteristics of HIV diagnoses, including AIDS, in Seattle-King County, other WA counties, WA state, and the US: Cumulative through June 30, 2002, data reported as of October 31, 2002

Case Numbers & Deaths	King County HIV including AIDS		Other WA Counties HIV including AIDS		Washington State HIV including AIDS		United States* AIDS only	
Cumulative Diagnoses	8,632		4,599		13,231		816,149	
Cumulative Deaths	3,774		1,939		5,713		467,910	
Currently Living	4,858		2,660		7,518		348,239	
Case Demographics (last 3 years)	King County**		Other WA Counties**		Washington State**		United States***	
	Number	%	Number	%	Number	%	Number	%
Gender:								
Male	934	88%	516	80%	1,450	85%	92,041	74%
Female	123	12%	126	20%	249	15%	31,601	26%
Age:								
<13	4	0%	1	0%	5	0%	---	
13-19	12	1%	12	2%	24	1%	---	
20-29	219	21%	123	19%	342	20%	---	
30-39	496	47%	270	42%	766	45%	---	
40-49	249	24%	162	25%	411	24%	---	
50-59	65	6%	52	8%	117	7%	---	
60+	12	1%	22	3%	34	2%	---	
Race/Ethnicity:								
White	673	64%	423	66%	1,096	65%	36,363	29%
Black	234	22%	85	13%	319	19%	60,980	49%
Hispanic	107	10%	84	13%	191	11%	24,456	20%
Asian	29	3%	18	3%	47	3%	1,197	1%
Native American	8	1%	21	3%	29	2%	537	0%
Unknown	6	1%	11	2%	17	1%	109	0%
Exposure Category:								
Male-male sex	672	64%	285	44%	957	56%	48,835	39%
Injecting drug user	78	7%	115	18%	193	11%	33,534	27%
IDU & male-male sex	74	7%	38	6%	112	7%	5,789	5%
Heterosexual contact	121	11%	94	15%	215	13%	33,027	27%
Hemophilia	2	0%	-	0%	2	0%	481	0%
Transfusion	5	0%	1	0%	6	0%	1,029	1%
Mother at risk/has AIDS	3	0%	1	0%	4	0%	400	0%
Undetermined/other	102	10%	108	17%	210	12%	547	0%
Total HIV Cases diagnosed in last 3 years	1,057	100%	642	100%	1,699	100%	123,642	100%

* US data are limited to AIDS cases only, reported through 12/31/2001

** Diagnosed between 7/1/1999 and 6/30/2002, reported through 10/31/2002

*** AIDS cases only, diagnosed between 1/1/1999 and 12/31/2002, reported through 12/31/2002

Age distribution by year of diagnosis is not available for US AIDS cases.

Sources: Public Health - Seattle & King County, WA State Department of Health, Centers for Disease Control and Prevention

Technical note

The US data do not show specific incidence estimates for hemophilia or transfusion cases for 2000 and 2001, these numbers were interpolated from earlier incidence data.

The US data do not show specific incidence estimates for subdivisions of pediatric cases.

Therefore the pediatric cases were redistributed by sex and race, and assumed to be perinatal.