Recent Drug Abuse Trends in the Seattle-King County Area

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ABSTRACT

Cocaine-related deaths increased to previous high levels in 2002, following a brief decline in 2001, while the number of cocaine ED mentions declined for the first time in several years. The number of heroin-related deaths also increased, following sharp declines observed from mid-2000 through 2001, but ED mentions remained at new lower levels. Overall, drug-related deaths involving 'other opiates' were at their highest levels, with the first substantial decline in ED mentions seen in more than 3 years. Marijuana use was widespread, with recent declines in ED mentions and a leveling off in treatment admissions. Indicators of methamphetamine use were mixed, with an increase in deaths (though still low relative to other drugs); flat levels for treatment admissions, arrestee drug screens and ED mentions; and declines in manufacturing labs and dump sites. MDMA ED mentions continued a steady decline, but they were still well above historical levels. PCP abuse shows recent declines, but it is also well above prior levels. LSD continues its long steady decline in ED mentions, while GHB mentions remained at a low level. Combined, the ED mentions for 'club drugs' accounted for only about 5 percent of ED mentions. Indicators of depressant use remained fairly steady, with relatively high levels of ED mentions and a continued gradual increase in death mentions. HIV infections continued to be relatively low overall but were elevated among certain populations of drug users, including those who are non-IDU methamphetamine users and users of amyl nitrate. Significantly higher rates of HIV infection continued to be found among gay and bisexual male methamphetamine IDUs. Hepatitis B and C continued to have high incidence rates and prevalence levels among IDUs.

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, an increase of 15.2 percent since 1990. 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.

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Data Sources

- **Emergency department (ED) drug mentions data** were derived from the Drug Abuse Warning Network (DAWN), Office of Applied Studies (OAS), Substance Abuse and Mental Health Services Administration (SAMHSA), for 1994 through June 2002. A drug "mention" indicates that the patient identified the substance as something he or she 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 were compiled for King County from January 1, 1992, through December 31, 2002. Alcohol-only and privately funded treatment admissions are excluded, as are admissions to detoxification and transitional housing. Additional data are available from the Washington State Outcomes Project, Opiate Study Sample.

- **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 December 31, 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. 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.

- **Arrestee drug testing data** were obtained from the Arrestee Drug Abuse Monitoring (ADAM) program. As part of the National Institute of Justice's (NIJ's) ADAM program, King County's urinalysis results for 2000 to 2002 are included in the narratives for cocaine, heroin, marijuana, phencyclidine, and stimulants (methamphetamine). All data are for adult male arrestees only.

- **Illegal drug price, purity, production, trafficking, distribution, and availability data** were provided by four sources. Heroin price and purity data for the United States and Seattle are from the Drug Enforcement Administration's (DEA) Domestic Monitor Program (DMP). 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 local DEA intelligence staff. DEA Diversion Control provided data on prescription drug sales to hospitals and pharmacies in 2001. Data from the U.S. Customs Service relating to the seizures for all illegal drugs are included for January 2001, to December 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 the fourth busiest for commercial traffic nationally. Other relevant data are from the 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 2002 are from all Federal, State, and local law enforcement agencies and narcotics task forces in the region, and the Western States Information System (WSIN). 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.

- **Data on infectious diseases related to drug use**, including the human immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS), and hepatitis, were provided by three sources. The Sexually Transmitted Disease (STD) Clinic, Public Health – Seattle & King County (PHSKC) provided data on clients' drug use, health status, and health behaviors for October 2001 to September 2002. The Epidemiology Research Unit, PHSKC, provided findings from two longitudinal cohort studies of Seattle-area drug injectors. Funded by the National Institute on Drug Abuse (NIDA) and conducted by PHSKC, the studies began in 1994 and continued through 2002. Another 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 (July 1999 through June 2002), and the United States (January 1999 through December 2001) are provided

by PHSKC, the 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 Washington State) and October 2002.

- **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 December 2002 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.

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

DRUG ABUSE PATTERNS AND TRENDS

Cocaine/Crack

Cocaine mentions in emergency departments showed their first substantial decline in 3 years. An estimated 1,256 mentions were reported in the first half of 2002 (exhibit 1), a 24-percent decline from the first half of 2001. Cocaine is the most common illegal drug mentioned in emergency departments in Seattle and is second only to alcohol-in-combination among all substances identified.

The number and proportion of treatment admissions for a primary cocaine problem increased slightly in the second half of 2002 to 519 admissions, representing 10 percent of treatment admissions as defined in Data Sources. Cocaine ranks second to marijuana among illegal drugs treated in King County (exhibit 2). Overall cocaine admissions are down over the past 10 years. The age of those being admitted for treatment declined steadily from 1992 to 1999 and remained steady through 2002. Smoking remains the primary route of administration, while injecting decreased as sniffing returned to popularity.

There were 79 deaths involving cocaine in 2002, a substantial increase from the 49 in 2001, but still below the high of 89 in 2000 (exhibit 3). Deaths involving cocaine have fluctuated in number since 1994, with a general upward trend. Of the 30 deaths involving cocaine from July to December 2002, 3 involved cocaine only and the remaining 27 involved multiple drugs, including 11 alcohol-in-combination, 16 heroin/opiate, and 9 prescription opiates.

The number of cocaine seizures by the U.S. Customs Service remained fairly steady from 2001 to 2002, ranging from 19 to 13 per half-year period. At the same time, the amount seized has fluctuated in each of those semi-annual periods, from 5,378 pounds, down to 153 pounds, down further to 37 pounds, and finally back up to 109 pounds in the second half of 2002.

In Seattle, as noted earlier, ADAM data are only available for adult male arrestees. Data for 2002 show that for arrestees tested, 38 percent had positive cocaine urines. This represents an increase from 2000 and 2001 (each 31 percent).

The NW HIDTA reported that the street prices of cocaine were $45–$100 per gram, $450–$800 per ounce, and $14,000–$28,000 per kilogram. Intelligence reports indicate that powder cocaine is increasingly more available in King County and other areas of the State.

Cocaine continues to be the second most common illegal drug mentioned by all callers to the ADHL. It is the most common drug cited by adults—24 percent for 2001 and 2002. For teenagers, cocaine was the third most common drug mentioned, with 69 calls, representing 10 percent of all calls in 2002, similar to 2001.

Heroin

Heroin-related ED visits were level from July 2000 through June 2002 and were lower than the levels reported from 1996 through 1999. In the first half of 2002, there were an estimated 996 mentions of heroin in the ED, ranking heroin below cocaine among illegal drugs (exhibit 1).

A one day census conducted during the Autumn of 2001 and 2002 showed a slight increase in the number of clients in opiate substitution treatment from 2,422 to 2,598. Heroin treatment admissions declined fairly steadily from the first half of 2000 through 2002. The highest number of treatment admissions for heroin as the primary drug of choice occurred in the second half of 1999, (n=961). In the second half of 2002, there were only 393 primary heroin treatment admissions (exhibit 2). During the same period, the proportion of heroin admissions among all treatment admissions decreased from 16 percent to 8 percent. The high level of treatment admissions in recent years was related primarily to the utilization of public funding that had been

underexpended in treatment modalities other than opiate substitution treatment.

Deaths involving heroin/opiate increased to 87 in 2002, up from 61 in 2001 (exhibit 3). Current levels, however, are well below the peak seen from 1995 to 2000, when there were between 102 and 143 deaths involving heroin/opiate each year. In the second half of 2002, heroin/opiate was identified in 39 deaths. Of these deaths, 6 involved heroin/opiate only, 16 involved cocaine, 14 involved alcohol, and 5 involved other opiates. A total of 12 depressants were identified in 9 deaths also involving heroin; diazepam was the most common depressant, identified in 8 of the deaths. Exhibit 4 depicts the rates of heroin-involved deaths per 100,000 population in Seattle-King County from 1989 to 2002. As shown, rates have fluctuated, totaling 5 per 100,000 in 2002.

The primary form of heroin on the streets is Mexican black tar. China white, a common form in Vancouver, British Columbia, and on the east coast of the United States, is virtually nonexistent in the local area according to regional HIDTA and DEA information.

Opiates have been identified in 10 percent of adult male arrestees for each of the years from 2000 to 2002.

Calls to the ADHL in 2002 for heroin represented 12 percent of all drug-related calls, statistically unchanged from 11 percent in 2001. Teens were less likely to call about heroin. Only 2 percent of calls by teens were related to heroin.

Data for heroin seizures by the U.S. Customs Service show only two seizures in the second half of 2002; one was a 16-kilogram seizure and another was a seizure of only 38 grams. There were no seizures in the first half of 2002. In 2001, seizures of heroin by customs officials were infrequent, and the total volume was small compared to the level of use, with 12 seizures totaling 7 pounds. The major trafficking route is believed to involve the interstate highway system from the southwestern United States, once the product has crossed the Mexican border. It is believed there is not much heroin trafficking across the Washington-Canadian border in either direction.

The DEA reports that declining heroin purity was first noted in 2000, and purity has remained at lower levels. The average purity of 14 samples collected by the DMP in Seattle was 10.3 percent during January–June 2001; this is similar to the 12.7 percent purity for the 23 samples collected during all of 2000. All samples for which a country of origin could be determined were found to be Mexican.

Data for King County from the Northwest HIDTA for 2002 showed the following prices for Mexican black tar heroin: $25–$100 per gram, $450–$900 per ounce, $6,000–$10,000 per pound, and $11,500–$20,000 per kilogram.

Other Opiates/Narcotics

For the purposes of this report, "other opiates/ narcotics" include codeine, dihydro-codeine, fentanyl, hydrocodone, methadone, oxycodone, propoxyphene, and the narcotic analgesics/combinations reported in the DAWN ED data.

After 3 years of dramatic increases in narcotic analgesics/combinations ED men-tions, overall levels have declined. A 30-percent decrease to 831 mentions was reported from the first half of 2001 to the first half of 2002. Narcotics "not otherwise specified" made up the largest proportion of these substances, accounting for 259 mentions from January to June 2002, a 57-percent decrease from the comparable time-frame in 2001. Methadone (Dolophine) is the most common narcotic specifically identified, with 160 mentions in the first half of 2002, a significant decline from 305 in the second half of 2001. Mentions for oxycodone (OxyContin and Percodan) did not change from the second half of 2001 to the first half of 2002, this follows a period of continuous increases from January 1999 to December 2001.

Data on the form of methadone seen in the ED from 2000 and 2001 show that tablets were the most common form identified, 73 percent and 68 percent, respectively, followed by liquid at 26 percent and 22 percent. The majority of tablet methadone available locally is from physician prescriptions for pain, while the majority of the available liquid methadone is from opiate substitution treatment clinics.

Available treatment data for prescription opiates are limited to patients seen in opiate substitution treatment clinics from 1998 to 2001 throughout all of Washington State. These data are for private and publicly funded treatment and include persons who mentioned prescription opiates as their primary, secondary, or tertiary drug of choice. Overall, treatment admissions remained steady, with 17 percent of those entering opiate substitution treatment mentioning prescription opiates in 1998 and 15 percent in 2001. Data for those admitted to treatment

for methadone not prescribed to them point to small, decreasing numbers—from 29 people in 1998 to 15 in 2001.

Deaths involving other opiates reached their highest level in at least the past 9 years, with a total of 78 mentions of other opiates in 2002, up from 55 in 2001 and 29 in 1997 (exhibit 3). 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 2002. Oxycodone death mentions leveled off in 2002 after 5 years of steady increases, with 20 mentions in 2002, up from 1 in 1997. Methadone increased significantly to 37 mentions in 2002, up from 24 in 2001. What constitutes a methadone-related death is unclear, however, particularly among methadone-tolerant individuals. Issues of tolerance, potentiation with other drugs, and overlapping therapeutic and lethal dose levels complicate assigning causation in prescription opiate-involved fatalities.

DEA data on sales of prescription opiates to hospitals and pharmacies reveal a 157- percent increase in methadone and a 201- percent increase in oxycodone from 1997 to 2001. At the same time, sales of fentanyl increased 79 percent, and those for hydrocodone (Vicodin and Percocet) increased 47 percent. Sales of codeine decreased 23 percent, and those for meperidine (Demerol) decreased 18 percent during this timeframe. Note that these data for methadone only include prescriptions for pain written by physicians; they do not include methadone provided in opiate substitution treatment clinics.

Data from the opiate study sample of the Washington State Outcomes Project point to substantial prescription opiate use with an average of 5 years of use at the time of treatment entry, compared with 10 years for heroin. A substantial minority, 43 percent, reported at least 6 months of regular use of prescription opiates during their lifetime.

Marijuana

Marijuana continues to be one of the most widely used illicit substances in the area. ADAM data show that 38.5 percent of arrestees tested positive for the drug during 2002, an increase from 35.1 percent in 2001. Marijuana remains the most commonly identified drug among arrestees in King County.

DAWN ED data indicate that marijuana remains the fourth most common substance mentioned (exhibit 1). Approximately 80 percent of the marijuana mentions represented patients who were also using other drugs at the time of the ED visit. This ratio has remained relatively constant over the last 7 years, with a decrease in the first half of 2001 (67 percent), followed by an increase (75 percent) during the second half of 2001. The surge in the number of marijuana mentions has been evident since the first half of 2000 and was maintained through 2001. A 33-percent decline occurred from the first half of 2001 to the first half of 2002, when there were an estimated 579 marijuana mentions.

The proportion of treatment admissions for marijuana was steady from the second half of 2000 through 2002, at 13–14 percent. This is down from the period from January 1998 through June 2000, when marijuana constituted 15–16 percent of admissions. Marijuana continued as the second most common primary reason for drug treatment in the second half of 2002, well below alcohol-in-combination (exhibit 2).

Marijuana continues to be drug most commonly cited among those who called the ADHL, representing one-quarter of the calls. A substantial difference between adults and teens is evident: approximately two-and-one-half times the proportion of teen calls (50 percent) as adult calls (20 percent) concerned marijuana during calendar year 2002. The total number of calls to the ADHL, including those for marijuana, decreased in the second half of 2002 from the first half of 2002.

HIDTA data collected from King County law enforcement show the following prices for marijuana: $10 per gram, $250–$300 per ounce, and $2,300–$4,000 per pound. Price depends on the quality and a variety of other factors, but “BC Bud” from British Columbia, Canada, remains the most common and most expensive of the marijuana varieties available in King County. Cultivation seizures reported to HIDTA for Washington State totaled 317 in 2000 and 401 in 2001.

The U.S. Customs Service reports a large increase in seizures of marijuana, principally at the U.S.-Canada border crossing at Blaine, where Interstate 5 crosses into Canada near Vancouver. Between the first and second halves of 2001, there was a slight increase in the number of marijuana seizures, from 268 to 301, and more than a doubling in the number of pounds of marijuana seized—from 3,342 to 7,519 pounds. This trend in increased marijuana seizures continued, with 408 during the first half of 2002 (totaling 9,811 pounds), but declined in the last half of 2002 to 388 seizures totaling 4,127 pounds. Even with the additional diligence of U.S. Customs at the Canadian border, “Marijuana produced in Washington, Canada

and Mexico is available throughout the state," according to the Northwest HIDTA Threat Assessment (2003).

Stimulants

DAWN ED mentions for amphetamines in Seattle-King County increased from 1998 to 2001, but decreased significantly in the first half of 2002. Methamphetamine mentions peaked at 305 in the first half of 2000 and declined to 186 in the first half of 2002 (exhibit 1). Overall, amphetamines and methamphetamine are mentioned in the ED less frequently than cocaine, heroin, and marijuana. The form and source of amphetamines, prescription or street drug, are unknown.

The number of King County treatment admissions for primary amphetamine and methamphetamine (they are combined in the treatment reporting system) abuse remained stable from January 2000 through December 2002. Treatment admissions constituted 5 to 7 percent of all admissions during this time-frame, up from 2 percent in 1993. They totaled 348 in the second half of 2002 (exhibit 2), and continued to be surpassed by admissions for primary alcohol, cocaine, heroin, and marijuana abuse. During 2001, the rate of methamphetamine treatment admissions per capita was three times lower in King County than throughout the rest of the State.

The proportion of calls to the ADHL that originated in King County regarding methamphetamine decreased from 17 percent in 2001 to 14 percent in 2002, with nearly identical proportions for youth and adults. Methamphetamine was the third most common illegal drug mentioned by both teenaged and adult callers.

The percentage of male arrestees in the Seattle-King County ADAM program who tested positive for methamphetamine remained steady at 11 percent in 2002. This compares to 11 percent in 2001 and 9 percent in 2000.

Methamphetamine was specifically identified in 14 deaths in 2002, a return to the previous high seen in 1999. Nine of these deaths were in the second half of 2002, with three deaths involving methamphetamine only. Other deaths involving methamphetamine included one with gamma hydroxybutyrate (GHB) as the only other drug, one with methylenedioxymethamphetamine (MDMA) as the only other drug, two with cocaine and other drugs, one with methadone, and one with an other opiate. This raises the question as to what is considered a "club drug." From a real world perspective, a "club drug" is any drug used in a club context. Context is not included in medical examiner data, however, and the appearance of methamphetamine in combination with GHB in one death and in another case with MDMA keeps this question open.

Local street prices of methamphetamine in Seattle-King County were $20–$100 per gram, $350–$1,200 per ounce, and $5,000–$15,000 per pound.

The most comprehensive and current source for information on methamphetamine manufacturing is the Washington State Department of Ecology, 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. Statewide data from DOE for 2002 show the first decline to 1,693 incidents, compared with 1,886 in 2001, 1,277 in 2000, and 789 in 1999. It is important to note that this measurement does not account for the amount of methamphetamine manufactured, a more difficult indicator to measure.

Similar to statewide trends, the number of methamphetamine incidents reported in King County decreased in 2002. DOE reported a total of 241 incidents in 2002, compared with 271 in 2001, 231 in 2000, and 107 in 1999, suggesting a return to the level reported in King County during 2000 and sustaining King County's ranking as second in the State for the number of activities associated with methamphetamine manufacturing. The rate of incidents per capita in King County was one-half the State average in 2002. Statewide, most of the areas with decreased methamphetamine incidents in 2002 are the major population centers, while those experiencing increasing methamphetamine incidents tend to be more rural.

Informants report increasing use of "ice" and "glass," converted forms of methamphetamine that have 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.

Methamphetamine seizures by the U.S. Customs Service at the border continue to be infrequent, with 17 seizures (totaling 8 pounds) in 2002 compared to 18 seizures (totaling 3 pounds) in 2001.

Depressants

Barbiturates, benzodiazepines, and other sedative/depressant drugs in this analysis include alprazolam (Xanax), butalbital (Fioricet), chlordiazepoxide (Libri-

um), cyclobenzaprine (Flexeril), diazepam (Val-ium), hydroxyzine pamoate (Vistaril), lorazepam (Ativan), meprobamate (Equanil), oxazepam (Serax), phenobarbital, prometh-azine (Phenergan), secobarbital (Seconal), temazepam (Restoril), triazolam (Halcion), and zolpidem (Ambien).

ED mentions for depressants—anxiolytics, sedatives and hypnotics—show a short-term decline of 32 percent to 594 mentions in the first half of 2002 compared with 871 in the first half of 2001. This level is a return to that last reported in 1999. Over longer periods of time, ED mentions for these drugs tended to fluctuate. Depressants rank below cocaine, heroin, and narcotic analgesics/combinations, and are similar to marijuana in terms of the number of mentions (exhibit 1). The majority of mentions were for benzodiazepines (74 percent).

Deaths involving depressants increased slightly in 2002 to a total of 55 mentions, up from 48 in 2001 (exhibit 3). In the second half of 2002, there were 22 deaths in which depressants were identified, with a total of 29 depressants identified among these decedents. Of the decedents, 16 (73 percent) had taken diazepam (Valium). Other types of drugs identified included cocaine in 6 cases, heroin in 8, alcohol in 8, and other opiates in 10. Depressant-related deaths have varied over time, with a gradual trend upward over the past 8 years.

The ADHL reported data on adult calls related to benzodiazepines, barbiturates, and tranquilizers, which, combined, represented 1 percent of drugs mentioned by callers in 2002.

Hallucinogens and Club Drugs

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, MDMA (ecstasy), GHB, gamma butyrolactone (GBL), ketamine, and nitrous oxide.

ED mentions of MDMA continued to decline steadily. During the first half of 2002, mentions (n=38) decreased from the previous 6 months and 41 percent from the same period in 2001. Overall, ED mentions for MDMA decreased 47 percent from the peak in the last half of 2000 (n=72), the culmination of a 2-year growth period. In a similar trend, GHB mentions (n=18) during this period also decreased from their 2000 high point and declined 31 percent between the first halves of 2001 and 2002. There was only one mention of ketamine in 2001 and only one additional mention through June 2002.

Following a sharp spike in the second half of 2001, PCP mentions returned to a level more typical of the prior 2 years, with 59 mentions in the first half of 2002. Regardless of short-term fluctuations, PCP mentions still remain two to three times higher than the number reported before 2000.

DAWN ED data also indicate a continuing trend in decreasing LSD mentions; only 13 were reported during the first half of 2002, representing a 70-percent decrease since first half 2001. LSD mentions have been declining steadily over the past few years. During this period, as they have historically, ED mentions for all of the drugs combined in these categories constituted 3–4 percent of all DAWN ED illegal drug mentions.

During the second half of 2002, the King County Medical Examiner reported one MDMA-related death, the first involving MDMA in more than a year and the sixth since 1999. Two deaths related to GHB were reported in the last half of 2002, for an annual total of three. These were the first GHB-related deaths in King County, and each involved Caucasian men in their late twenties. Previously reported incidents of GHB and other club drug-related overdoses (non-fatal) among gay and bisexual men in sex clubs have decreased dramatically after a series of prevention, early detection, and medical response trainings were sponsored by Public Health for venue staff.

ADAM data for drugs in this category are limited to PCP. During 2002, 2 percent of male arrestees in Seattle tested positive for PCP; most were younger than 30. This is the same percentage reported for 2001 and is statistically unchanged from 1 percent in 2000.

Calls to the ADHL regarding club drugs (LSD, ecstasy, PCP, hallucinogens and inhalants) dropped 50 percent from 339 in 2001 to 172 in 2002; 60 percent concerned MDMA. Overall, these calls constituted 3 percent of calls concerning illegal drugs in 2002.

Other information concerning patterns of use remains anecdotal. Prices for ecstasy, GHB, PCP, and LSD remained stable from the past year (e.g., a 150–250-milligram tablet of MDMA sells for $20–$30), and ecstasy quality remains inconsistent. Among gay and bisexual men, the blended use of ecstasy, GHB, and amyl nitrite ("poppers"), especially in combination with recreational, non-prescription use of Viagra,

continues as a significant trend in dance and sex venues.

In the last half of 2002, the U.S. Customs Service made 10 seizures of MDMA totaling 83 pounds, including 1 75-pound seizure. This mirrors activity in the first half of 2002, during which 11 seizures totaling 132 pounds (including a single seizure of 110 pounds) were reported. This is the first year that data on MDMA seizures are available.

INFECTIOUS DISEASES RELATED TO DRUG ABUSE

PHSKC estimates there are 15,000–18,000 drug injectors who reside in King County. With the exception of men who have sex with men (MSM) and who are injection drug users (IDUs), the rate of HIV infection among injectors has 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. Infection rates appear to be 2–3 times higher among African-American and Hispanic IDUs than Whites. Among American Indian and Alaska Native IDUs, the rate is 5–6 times higher than for Whites. IDUs who are homeless or unstably housed are about twice as likely to be HIV-positive as are IDUs who are permanently housed. Similarly, out-of-treatment IDUs appear to be twice as likely to be HIV-positive as IDUs who are enrolled in treatment. Recent data from a CDC-funded HIV Incidence Study (HIVIS, 1996–2001) suggest that the rate of new infections among non-MSM/IDUs in King County is less than 0.5 percent per year.

Among methamphetamine-injecting MSM, PHSKC data indicate that up to 47 percent are HIV-positive. Fourteen percent of MSM/IDUs who primarily inject drugs other than methamphetamine are HIV-positive. Prevalence of HIV among non-amphetamine injecting MSM/IDUs is comparable to the rate observed among MSM in general in King County. HIVIS data indicate that 2.5 percent (95 percent, confidence interval: 1.1-4.5) of non-infected MSM/IDUs become infected each year. This is the highest incidence rate of all at-risk populations in King County, accounting for an estimated 20–80 new infections a year.

A high proportion of injection drug users in King County show evidence of exposure to blood-borne viruses other than HIV. Epidemiologic studies conducted among more than 4,000 IDUs by PHSKC's HIV/AIDS Epidemiology Program since 1994 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). Incidence studies indicate that 20 percent of non-infected Seattle-area IDUs acquire HCV each year and 10 percent of IDUs who have not had hepatitis B acquire HBV.

In addition to injection drug use, recent studies conducted by Public Health – Seattle & King County's STD Clinic indicate that non-injection use of methamphetamine, as well as inhalation of poppers (amyl nitrate), may be significant risk factors for HIV acquisition and transmission among men who have sex with men. Among 1,547 MSM who were tested from October 2000 through February 2003, those who reported nitrate use were nearly twice as likely to be HIV-infected, while MSM who reported non-injection use of methamphetamine in the last year were 1.5 times more likely to be infected. These findings, though not as dramatic as the known association between HIV infection and injection drug use among MSM, are reason for concern and action. Previously reported STD Clinic data showed that use of methamphetamine and ecstasy among local MSM was significantly associated with increased number of sex partners and contracting gonorrhea. Together, these data suggest a need for further study of the role drug use is playing in the sexual transmission of HIV among MSM in the Seattle area, and for HIV prevention interventions that specifically target MSM who use drugs by means other than injection.

More detailed information on HIV/AIDS in King County and other counties in the State is presented in exhibit 5.

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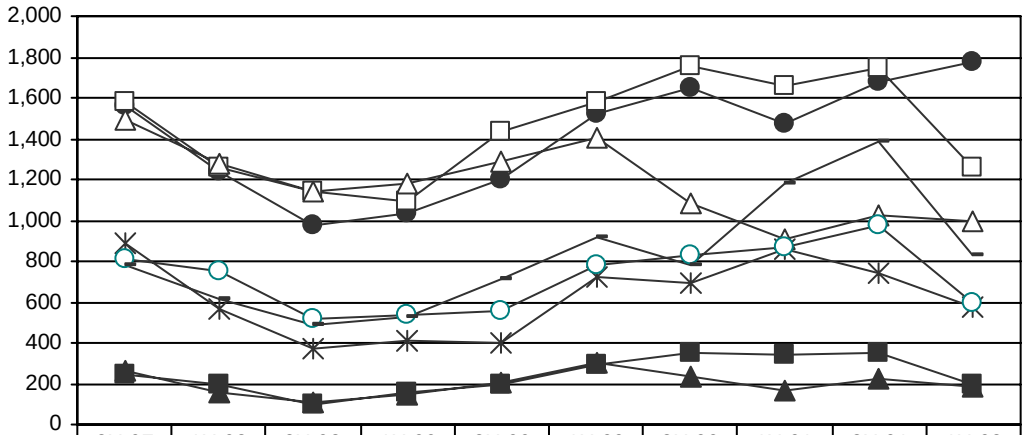
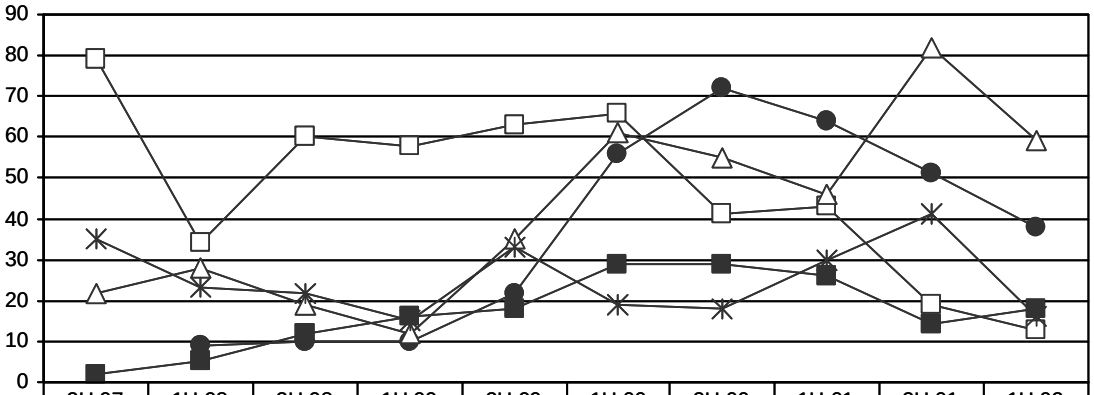
Exhibit 1. Estimated DAWN ED Mentions for Selected Drugs in the Seattle Area: July 1997–June 2002

ED Mentions for Selected Drugs: King and Snohomish Counties



	2H-97	1H-98	2H-98	1H-99	2H-99	1H-00	2H-00	1H-01	2H-01	1H-02
Alcohol-in-combination	1,563	1,242	979	1,031	1,197	1,526	1,646	1,469	1,677	1,773
Cocaine	1,583	1,261	1,139	1,089	1,430	1,584	1,754	1,660	1,750	1,256
Heroin	1,496	1,279	1,142	1,180	1,290	1,403	1,087	903	1,024	996
Marijuana	888	569	366	409	398	723	691	858	738	579
Amphetamines	246	199	93	154	192	291	348	345	354	191
Methamphetamine	267	160	106	150	203	305	235	166	228	186
Depressants	807	756	520	540	552	781	830	871	974	594
Narcotic analgesics/combinations	777	613	491	527	711	919	780	1,179	1,381	831

ED Mentions for "Club Drugs" and Hallucinogens: King and Snohomish Counties



	2H-97	1H-98	2H-98	1H-99	2H-99	1H-00	2H-00	1H-01	2H-01	1H-02
MDMA (ecstasy)	...[1]	9	10	10	22	56	72	64	51	38
LSD	79	34	60	58	63	66	41	43	19	13
PCP	22	28	19	12	35	61	55	46	82	59
Misc. hallucinogens	35	23	22	15	33	19	18	30	41	16
GHB	2	5	12	16	18	29	29	26	14	18

[1] Dots (…) indicate that an estimate with a relative standard error greater than 50 percent has been suppressed.

SOURCE: DAWN, OAS, SAMHSA

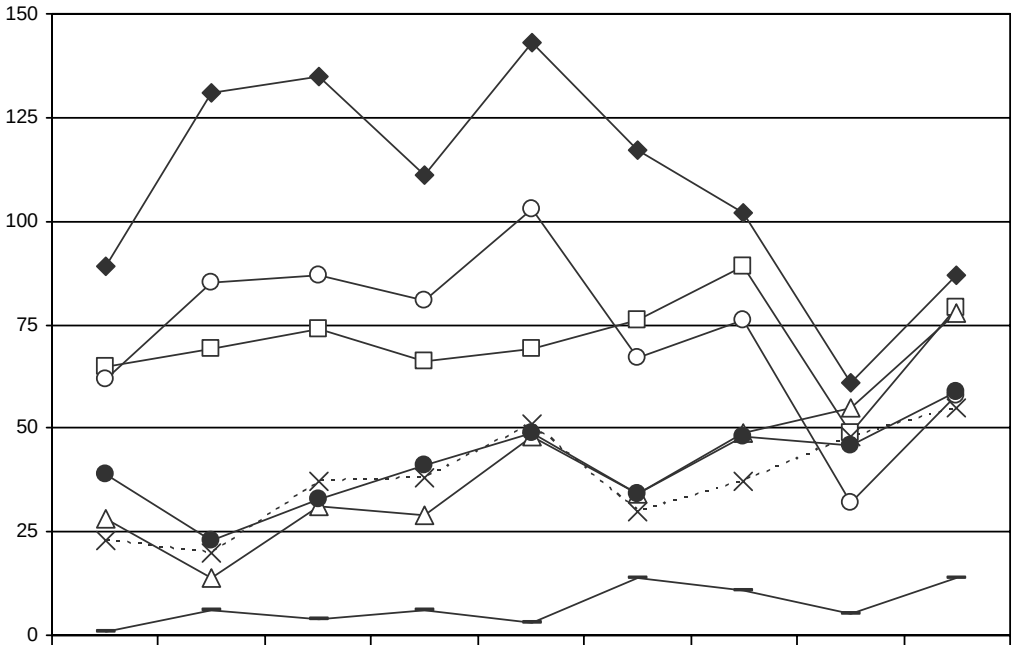
Exhibit 2. Demographic Characteristics of Alcohol/Drug Treatment Admisions[1] in Seattle-King County by Drug and Percent: July–December 2002

Demographic Characteristic	Alcohol-in-Combination		Cocaine		Heroin		Marijuana		Metham-phetamine	
Admissions[2]	1,303		519		393		745		348	
	n	**%**	***n***	**%**	***n***	**%**	***N***	**%**	***n***	**%**
Gender										
Male	949	72.8	309	59.5	240	61.1	545	73.2	193	55.5
Female	354	27.2	210	40.5	153	38.9	200	26.9	155	44.5
Race/Ethnicity										
White	672	51.6	156	30.1	255	64.9	331	44.4	309	88.8
African-American	253	19.4	287	55.3	68	17.3	252	33.8	4	1.2
Hispanic	137	10.5	19	3.7	28	7.1	66	8.9	16	4.6
Asian-American	88	6.8	19	3.7	10	2.5	56	7.5	6	1.7
Native American	127	9.8	22	4.2	17	4.3	34	4.6	10	2.9
Age Group										
17 and younger	92	7.1	9	1.7	3	0.8	370	49.7	42	12.1
18–25	158	12.1	51	9.8	33	8.4	207	27.8	80	23.0
26–34	280	21.5	119	22.9	94	23.9	99	13.3	123	35.3
35 and older	773	59.3	340	65.5	263	66.9	69	9.3	103	29.6
Route of Administration			383	73.8	18	4.6	735	98.7	178	51.2
Smoking			87	16.8	18	4.6	2	0.3	54	15.5
Intravenous			38	7.3	353	89.8	0	0.0	102	29.3
Other/Multiple			7	1.4	1	0.3	6	0.8	14	4.0

[1] Total admissions (*N*=5,179) includes an unduplicated count of admissions to all modalities of service and for all public funding excluding private facilities.
[2] Excludes alcohol only and privately funded treatment admissions, and admissions to detoxification and transitional housing.

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

Exhibit 3. Drugs Identified in Drug-Caused Deaths in Seattle-King County by Number: January 1994–July 2002[1]

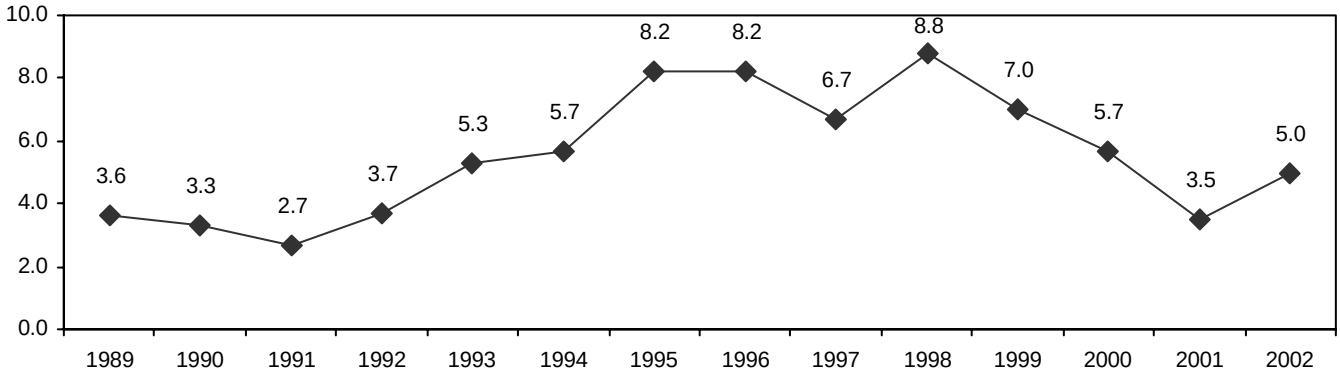


	1994	1995	1996	1997	1998	1999	2000	2001	2002
Heroin/Opiates	89	131	135	111	143	117	102	61	87
Cocaine	65	69	74	66	69	76	89	49	79
Other Opiates	28	14	31	29	48	34	49	55	78
Depressants	23	20	37	38	51	30	37	48	55
Alcohol	62	85	87	81	103	67	76	32	58
Antidepressants	39	23	33	41	49	34	48	46	59
Amphetamines[2]	1	6	4	6	3	14	11	5	14
Total Deaths	158	183	218	179	222	205	219	153	195

[1] More than one drug is often identified per individual drug overdose death; table excludes poison-related deaths.
[2] The amphetamines identification category includes methamphetamine but does not include MDMA.

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

Exhibit 4. Rate[1] of Heroin-Involved Deaths Per 100,000 Population in Seattle-King County: 1989–2002



[1] 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 and King County

Exhibit 5. Demographic Characteristics of Persons With HIV Diagnoses, Including AIDS, in Seattle-King County, Other Washington Counties, Washington State, and the United States: Through June 30, 2002, Data Reported as of October 31, 2002

Totals/Characteristic	King County[2] HIV Including AIDS		Other WA Counties HIV Including AIDS		Washington State HIV Including AIDS		United States[1] AIDS Only	
Cumulative diagnoses of HIV, including AIDS	8,689		4,624		13,313		816,149	
Cumulative HIV or AIDS deaths	3,796		1,952		5,748		467,910	
Number currently living with HIV, including AIDS	4,893		2,672		7,565		348,239	
Case Demographics	**King County[2] HIV Including AIDS 01/2000–12/2002**		**Other WA Counties[2] HIV Including AIDS 01/2000–12/2002**		**Washington State[2] HIV Including AIDS 01/2000–12/2002**		**United States[1] AIDS Only 01/1999–12/2001**	
	n	**%**	***n***	**%**	***n***	**%**	***N***	**%**
Gender								
Male	867	88	447	80	1314	85	92,041	74
Female	118	12	114	20	232	15	31,601	26
Age Group								
12 and younger	2	0	1	0	3	0	–	–
13–19	11	1	10	2	21	1	–	–
20–29	206	21	103	18	309	20	–	–
30–39	463	47	234	42	697	45	–	–
40–49	231	23	146	26	377	24	–	–
50–59	60	6	46	8	106	7	–	–
60 and older	12	1	21	4	33	2	–	–
Race/Ethnicity								
White	616	63	368	66	984	64	36,363	29
Black	224	23	79	14	303	20	60,980	49
Hispanic	101	10	71	13	172	11	24,456	20
Asian	30	3	15	3	45	3	1,197	1
Native American	9	1	17	3	26	2	537	0
Unknown	5	1	11	2	16	1	109	0
Exposure Category								
Male-male sex (MSM)	613	62	251	45	864	56	48,835	39
Injection drug user (IDU)	71	7	99	18	170	11	33,534	27
MSM/IDU	70	7	31	6	101	7	5,789	5
Heterosexual contact	119	12	83	15	202	13	33,027	27
Hemophilia	2	0	0	0	2	0	481	0
Transfusion	4	0	1	0	5	0	1,029	1
Mother at risk/has AIDS	2	0	1	0	3	0	400	0
Undetermined/other	104	11	95	17	199	13	547	0
Total HIV Cases Diagnosed in Last 3 Years	**985**		**561**		**1,546**		**123,642**	

[1] United States HIV data are not currently available in a format consistent with the Washington data. In addition, the AIDS data do not include age distributions by year of diagnosis. The most current available national AIDS data are through December 2001. The U.S. 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 U.S. 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.

[2] These cases were diagnosed with HIV infection between January 2000 and December 2002, and reported to Public Health – Seattle and King County or the Washington Department of Health as of December 31, 2002.

SOURCES: PHSKC, WA State Department of Health, Centers for Disease Control and Prevention