RECENT DRUG ABUSE TRENDS IN THE SEATTLE-KING COUNTY AREA

T. Ron Jackson, Evergreen Treatment Services
Ellen Silverman and Arnold F. Wrede, Division of Alcohol and Substance Abuse
Washington State Department of Social and Health Services
L. David Murphy, North Rehabilitation Facility
Michael Hanrahan, HIV/AIDS Program, and
Holly Hagan, Epidemiology Research Unit
Richard Harruff, King County Medical Examiner
Public Health - Seattle & King County
Kris Nyrop, Street Outreach Services
Fiona Couper, University of Washington, Washington State Toxicology Laboratory
Steve Freng, Northwest High Intensity Drug Trafficking Area
Nikki Fillipi and Mark McBride, United States Customs

SEATTLE, WASHINGTON

Heroin use continues to have the largest impact of all illicit drugs used in the Seattle area, but recent data suggest a downward trend in heroin use. Indicators of cocaine use have shown a resurgence, after several years of decline, to the higher historical levels. Methamphetamine use appears stable at a level well below heroin and cocaine in Seattle-King County, but is on an upward trend in other areas of the state. Marijuana use remains unchanged. The use of club drugs appears to be widespread not only in the dance parties and club scenes, but in normal recreational and social settings as well.

INTRODUCTION

1. Area Description

Located on Puget Sound in western Washington, King County spans 2,130 square miles, of which the City of Seattle covers 83.8 square miles. The Seattle harbor is the home of the world's 26th busiest container port, handling 1.48 million container units in 2000. The combined ports of Seattle and nearby Tacoma make Puget Sound the second largest combined loading center in the U.S., trailing only Los Angeles-Long Beach, California, and is among the top 10 combined load centers in the world.

King County's population, according to the 2000 Census, is 1.737 million, an increase of 15.2% since 1990, and represents 29 percent of Washington State's 5.9 million total. The County's population is 75.7% white, 11.3% Asian/Pacific Islander, 5.4% African-American, 5.5% Hispanic and 0.9% American Indian or Alaska Native. Those reporting two or more races made up 4.1% of the County's population.

According to the U.S. Census Bureau, the Seattle-Tacoma-Bremerton CMSA ranks 13th in population size for the U.S. The area gained 230,000 people over the last decade.

Over the last decade, adjacent Snohomish and Pierce Counties added 255,000 people combined. The population of King, Pierce, and Snohomish Counties accounts for 51.6% of Washington State's population.

• 2. Data Sources and Time Periods

- **Arrestee Drug Abuse Monitoring System (ADAM)** – As part of the National Institute of Justice's program, King County ADAM results for 2000 are included in the narratives for cocaine, depressants, heroin, marijuana, and stimulants. These are to be considered preliminary data.

- **Drug Abuse Warning Network (DAWN) Emergency Department (ED) mentions** – Exhibit 3 displays DAWN estimated rates (per 100,000 population) for ED mentions for selected drugs from 1988 through 1999.

- **Epidemiology Research Unit** – Two longitudinal cohort studies of Seattle area drug injectors funded by NIDA are conducted by Public Health - Seattle & King County (PHSKC). The studies began in 1994 and continue through 2002.

- **HIV/AIDS Epidemiology Report** – Data displayed in Exhibit 6 on Acquired Immunodeficiency Syndrome (AIDS) cases, including exposure related to injection drug use, in Seattle-King County, other Washington Counties, Washington State and the United States are from PHSKC, Washington State Department of Health and the federal Centers for Disease Control and Prevention.

- **Key Informant Interviews** – Ethnographic studies conducted in the area and interviews with a variety of drug users and other key informants provided data for this report.

- **King County Prosecutor's Management Information System (PROMIS)** – Data on felony marijuana and heroin convictions are from the King County PROMIS database. PROMIS is an automated data system that contains information on prosecutions and convictions for certain controlled substances. Heroin convictions and felony methamphetamine prosecutions from January 1, 1991-2 through December 31, 2000 are shown in Exhibit 5.

- **King County Medical Examiner (ME) database** – Automated information about drug-caused deaths in King County has been available since 1983. Exhibit 1 displays data by calendar quarter from January 1, 1997 through December 31, 2000. The table includes deaths directly caused by licit or illicit drug overdose and excludes deaths due to poisons. Therefore, totals may differ slightly from drug death reports published by the King County ME's office, which include fatal poisonings. Exhibit 2 displays heroin-related overdose death rates for the past 12 years.

- **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 2000 are from all federal, state, and local law enforcement agencies and narcotics task forces in the region, the Western States Information System (WSIN) and the Washington State Department of Ecology.

- **United States Census Bureau** – Data on local population come from the 2000 Census.
- **United State Customs** – Data relating to seizures for illegal drugs for the calendar year 2000.

- **Washington State Department of Social and Health Services' TARGET** – The Department has implemented a statewide alcohol/drug treatment activity data base system and report-generating software called TARGET. Data are compiled for King County from January 1, 1998, through December 31, 2000 and shown in Exhibit 4.
- **The Washington State Survey of Adolescent Health Behaviors** – Data are from Fall 2000. This survey assesses health-related attitudes and behaviors of Washington public school students in Grades 6, 8, 10, and 12. The national counterpart is the Monitoring the Future Study.

DRUG ABUSE TRENDS

1. Cocaine and Crack

Cocaine-related drug deaths in King County, after rising for several consecutive years and then showing a decline in 1997, increased in 1998 to 69 such deaths, 76 in 1999, and further to 89 in 2000 (Exhibit 1). Cocaine was involved in 40.6% of all drug-related deaths in 2000, a ratio that is higher than in the previous six years. Cocaine alone was found in 31 (34.8%) of the individuals whose death was characterized as cocaine-related in 2000. This proportion is a significant increase over that of 1998 and 1999, and is more consistent with the years prior to 1998. The most common other drugs detected in combination with cocaine in the decedents in 2000 were morphine (heroin) and alcohol, consistent with previous years. Eighty-three percent of the cocaine-related drug deaths were male; 70.8% were white; 19% were African-American.

DAWN system reports indicate a slight increase (4%) in the rate per 100,000 in ED mentions for cocaine in 1999 as compared to 1998 (Exhibit 3). This increase in the rate of ED mentions for cocaine came after a surge in 1997 then a decline in 1998.

Admissions to treatment for adults reporting cocaine as their primary drug remained relatively flat between 1998 and the first half of 2000 in terms of their ratio to total admissions; such admissions represent approximately 13% of all treatment admissions during each of those three years. The second half of 2000 saw a slight decline in the ratio of such admissions to the total (Exhibit 4).

ADAM data for 2000 are only available for adult males. Those data indicate that the percentage of male arrestees with cocaine in their urine was 29.1%, 24.8% to 33.7% respectively for the first three quarters in 2000. This is a slight decrease from the previous two years.

Price information for "flake" cocaine is limited to the downtown area of Seattle. The basic unit of sale is a "dime bag," meaning $10 for approximately ¼ of a gram. Weighed grams sell for around $30; 1/8 ounce for $80-$100. Crack prices have remained relatively stable for the last 4-5 years: a 1/10-1/8 gram quantity sells for $20 ("$20 rock"), and a 1/5-1/4 gram quantity sells for $40 ("$40 rock"). These prices are largely unchanged since our last report, but information from users indicate that purity has declined as compared to a year ago. As in the past, Latino gangs control most of the street-level cocaine trade.

In contrast to national trends of declining crack use, there appears to be an increase in crack cocaine smoking in public in the downtown core.

The United States Customs reports 31 seizures of cocaine from Washington ports of entry totaling 148.8 pounds (68,015.7 grams) for 2000.

2. Heroin

Evidence of an increase in heroin use in Seattle and King County was first suggested by a sharp rise in opiate-related deaths in 1995-96. This upward trend appears to have peaked in 1998, with a decline in the rate of such deaths per 100,000 in 1999 and 2000 (Exhibit 2).

The number of heroin-related drug-caused deaths investigated by the Medical Examiner has remained above pre-1995 levels. In 1994, the number of heroin-related deaths was 89, increasing to 131 in 1995 and 135 in 1996. In 1997, the number decreased to 111, but rose to 143 in 1998. In 1999, there were a total of 111, and in 2000, there were 99 heroin-related deaths. That represents 45.2% of all drug-related deaths in King County in 2000. Of the 99 heroin-related decedents, 81 (81.8%) had one or more drugs in addition to heroin in their systems at the time of death, consistent with previous years.

DAWN system reports also indicate that the rate of ED mentions for heroin per 100,000 population increased during the same period (1994-1999). In 1992 and 1993, the rate per 100,000 was 61 and 94, respectively. From 1994 to 1999, the rate remained between a low of 109 in 1995 and the high of 153.5 per 100,000 reported in 1997 (Exhibit 3).

The number of convictions for heroin-related offenses has shown a decline over the past two years, which would seem to parallel the decrease in heroin-related deaths (Exhibit 5). As with the deaths, convictions peaked in 1998 and there was a 21.5% decrease in those convictions between 1998 and 2000.

Seattle-King County admissions to drug treatment for individuals indicating heroin as their primary drug increased again in 2000 (Exhibit 4). In 1998, there were 1,389 treatment admissions for heroin; 1,513 in 1999 and 1,968 admissions for heroin addiction in 2000, representing 20% of all treatment admissions and an increase of 41.7% since 1998. Some of the increase in treatment for heroin use may be attributed to the new mobile methadone program that began enrolling patients in 1999. Demand for drug treatment remains extremely high; for example, at the Seattle needle exchange program a waiting list for methadone treatment vouchers includes more than 500 individuals.

ADAM data showed that opiates were present in 6.9%, 13.5%, and 11.7% of male arrestees for the first three quarters of 2000 respectively. Of the 35 ADAM sites across the country, Seattle is in the top six, along with New York City, Philadelphia, Chicago, and Portland, Oregon for rates of opiate positives.

Informants have noticed a significant increase in the street sale of OxyContin and other synthetic narcotics when heroin is not available. The street price for heroin has remained stable with the principal unit of sale being a "$20 paper". The primary form of heroin available in Seattle, King County is mexican black tar.

The United States Customs reports 19 seizures of heroin from Washington ports of entry

totaling 19.1 pounds (8,943.13 grams) for 2000.

3. Other Opiates

This category includes codeine, fentanyl (Sublimaze, Alfenta, Sufenta & Innovar), hydrocodone (Vicodin, Lortab, Lorcet & Anexsia), hydromorphone (Dilaudid), meperidine (Demerol), methadone, oxycodone (Percodan, OxyContin), pentazocine (Talwin), propoxyphene (Darvon), and raw opium.

The number of drug-related deaths involving opiates other than heroin escalated 72%, from 25 deaths (29 other opiates identified) in 1997 to 43 deaths (48 opiates identified) in 1998 (Exhibit 1), receded to 34 deaths in 1999, and then rebounded again in 2000 to 49 such deaths. Methadone was the other opiate most frequently reported by the ME since January 1998 with 17 cases in 1998, 19 cases in 1999, and 24 in 2000. Of those 24 cases in 2000, 6 (25%) had methadone only in their system at the time of death.

The King County ME recorded 18 deaths involving oxycodone in 1999 as compared to 13 such deaths in 2000. All but 2 of the decedents in 2000 had additional drugs and/or alcohol in their systems at the time of death. Informants describe active street sales of OxyContin and other opiates in the downtown core.

DAWN data indicate that the rates of ED mentions for both oxycodone and hydrocodone have remained relatively stable at a low rate (3.4-6.9 per 100,000) during the period 1991-1999.

4. Marijuana

Cannabinoids in this analysis include marijuana and hashish.

In King County, admissions for individuals indicating marijuana as their primary drug to publicly funded chemical dependency treatment accounted for 11.6% of adult admissions and 72.3% of youth (<18 years old) admissions for the period January 1, 2000 to December 31, 2000. This represents an increase from 1999 (7% adults and 65% youth).

The Washington State Survey of Adolescent Health Behaviors measures drug use. Twelve percent of 8th grade, 21.9% of 10th grade, and 24.4% of 12th grade students used marijuana in the past 30 days. This is compared with national averages of 9.1%, 19.7%, and 21.6% for 8th, 10^{th,} and 12th grades respectively.

The most recent DAWN data indicate that marijuana/hashish mentions are 41.6 per 100,000 population. This is a decrease from 48.6 in 1998. The current rate is consistent with the rates from 1994 through 1996. Marijuana remains fourth among the leading causes of drug mentions in local EDs.

ADAM data for the first three quarters of 2000 showed that marijuana was present in 37.5%, 33.8%, and 43.1% of male arrestees for the first three quarters of 2000 respectively. The trend in the percentage of total marijuana positive urinalyses in male arrestees in the King County ADAM study has been fairly flat over the past three years, ranging from a low of 33% in the third quarter of 1998 to a high of 43.1% in the third quarter of 2000.

Unlike most other illicit drugs available in King County, marijuana is not readily available as a street drug, and what is available is primarily the lower grade, more commercial, product. At present, locally grown marijuana is the variety of choice for the Seattle-King County area. Putatively more potent (in terms of THC content) sinsemilla, grown indoors in British Columbia using hydroponic methods, generally passes through the Seattle area enroute to destinations further south on the west coast.

The principal areas of street sales of marijuana are the downtown core around the Pike Place Market, the University District, and parts of the Central District. The main venues for sale and purchase of marijuana (especially higher grades) are known ("house") connections, or select coffeehouses and bars.

Marijuana prices have followed the downward trend in prices seen for both heroin and cocaine, but are not nearly as pronounced. A gram of sinsemilla, called "bud," sells locally for $15 to $25. Most informants, however, were quick to note that few people except younger students or street buyers would purchase a gram of marijuana. Washington grown marijuana generally sells for $40 to $50 per 1/8 oz. ("an eighth"). Price breaks occur for larger quantities, with ounces selling for $325 to $400, quarter-pounds for $1200 to $1400. Bulk quantities sell for $4,000 to $5,200 per pound and $6,000 to $8,000 per kilogram.

The United States Customs reports 21 seizures of hashish and 523 seizures of marijuana from Washington ports of entry totaling 2,382.1 pounds (1,084,256 grams) for 2000.

5. Stimulants

This category includes amphetamine and methamphetamine ("crystal," "crank," or "speed").

Drug-related deaths in King County involving meth/amphetamine remain stable at low levels. ME data indicate 11 such deaths in 2000, compared to an adjusted final total of 14 in 1999 and an annual average of 4 for the years 1994-98. These fatalities accounted for 5.0% of drug-related deaths in both 1999 and 2000. Nine of the 11 deaths in 2000 involved substances in combination with meth/amphetamine, with one involving MDMA ("Ecstasy"). All decedents were male. Ten were Caucasians and one was African-American; they ranged in age from 21 to 63, with an average age of 35.

DAWN ED mentions for meth/amphetamine in Seattle-King County through June 2000 continued the upward trend first noted in 1999. The rate of mentions per 100,000 population for the period of January through June 2000 was 13.8, a 79% increase from the 7.7 per 100,000 rate reported for the same period in 1999. Overall, meth/amphetamine continued to rank 5th in ED mentions behind cocaine, alcohol in combination, heroin and marijuana, having maintained this ranking for the past four years.

ADAM data for 2000 indicate the percentage of male arrestees in Seattle-King County testing positive for methamphetamine were 9.5%, 13.1%, and 9% respectively for the first three quarters of 2000. These data represent a slight increase from the reported 5%, 9.5%, 10.2%, and 10.5% respectively for the four quarters of 1999.

The number of admissions to publicly funded chemical dependency treatment programs in King County for persons reporting methamphetamine as their primary substance has also shown an increase during the past year, totaling 679 in 2000. This continues a

trend first noted in 1997 when 484 such admissions were reported, indicating an increase of 40% during this three-year period. While methamphetamine admissions to treatment in King County still only account for 7.9% of the treatment total, this too represents an upward trend from past years, although such admissions are far surpassed by those for individuals reporting alcohol, cocaine, heroin, and marijuana as their primary substance.

In keeping with the broader upward trend, indicators of methamphetamine-related activity within the criminal justice system also continue to rise at significant rates. Prosecutions in King County for the manufacture, possession, and distribution of methamphetamine rose to a total of 85 in 2000, re-establishing a trend that was first noted in 1995 (with 46 total filings) and slowed somewhat based on adjusted total filings in 1999. However, the 2000 total represents an increase of 85% since 1995, 20% from 1998 (with 71 total filings).

Seizures of clandestine methamphetamine labs in King County and Washington State show even sharper increases. Documented lab seizures throughout Washington State numbered 831 in 2000, a 60 % increase from 1999; documented lab seizures in King County numbered 120 in 2000 (14% of the statewide total), a 50 % increase from 1999. An additional 618 places statewide were identified by the Washington State Department of Ecology as dump sites, bringing the total number of locations associated with the manufacture of methamphetamine to 1,449 for the year, an 84% increase from 1999. In King County, an additional 111 places were identified as dump sites, bringing the overall total of locations to 231, representing a 115% increase from 1999.

While it is estimated that 65-75% of the methamphetamine in Washington State is transported from Oregon, California and Mexico, ease of access to precursors, the availability of equipment, recipes and locations, and the purity of methamphetamine produced by local clandestine labs contributes to their continuing proliferation. Over half of the labs seized in 2000 were of the "Nazi" type, with ephedrine extraction, red phosphorous and other methods also in use. In total, the NW HIDTA reports that 281.8 kilograms of methamphetamine were seized in 2000, representing a 52% increase from 1999.

Local prices in Seattle-King County and throughout the State of Washington have remained stable in spite of increased availability, ranging from $20 - $60 per gram, $350 - $650 per ounce, and $4,250 - $6,000 per pound in Seattle-King County. Smoking (34%) and intravenous (33.9%) are the most common routes of administration.

Of recent concern is the increasing number of children and adolescents found to be present or in the immediate vicinity of clandestine methamphetamine labs upon the arrival of law enforcement personnel. Statewide, 136 of the 831 documented labs seized in 2000 were the residences for a total of 228 children and adolescents. In Seattle-King County, 19 labs were found to have children and adolescents present. These children have ranged in age from infants to 17 years old, with a mean age of 8. When examined and tested, most are found to have evidence of exposure to precursor chemicals and/or ingestion of methamphetamine. While some communities are beginning to address the needs of these children as well as their impact on pertinent service systems (many parents will permanently lose custody of these children if convicted of manufacture and/or distribution), most are not and may not even be aware of this emerging issue, adding yet another facet

to the broader phenomenon of methamphetamine use.

The United States Customs reports 17 seizures of methamphetamine from Washington ports of entry totaling 5.5 pounds (2,657.73 grams) for 2000.

6. Depressants

Barbiturates, benzodiazepines and other sedative/depressant drugs in this analysis include: alprazolam (Xanax), amobarbital (Amytal), butabarbital, chlordiazepoxide (Librium), choral hydrate (Noctec), clonazepam (Klonopin), diazepam (Valium), flunitrazepam (Rohypnol), flurazepam (Dalmane), gamma-hydroxybutyrate (GHB), glutethimide (Doriden), hydroxyzine pamoate (Vistaril), lorazepam (Ativan), meprobamate (Equanil), methaqualone (Quaalude), midazolam (Versed), oxazepam (Serax), pentobarbital (Nembutal), phenobarbital, promethazine (Phenergan), secobarbital (Seconal), temazepam (Restoril), and triazolam (Halcion).

Data sources reveal depressant use has stabilized over the past two years. The number of deaths involving depressants was nearly equal in 1999 and 2000, totaling 23 (with 24 depressants identified) in 1999 and 24 (with 28 depressants identified) in 2000. These figures represent a marked decrease from 1998, and the number and rate of depressant deaths appear to be returning to 1996-97 levels, with a rate of approximately 1.8 per 100,000 population in King County. Consistent with past trends, 92% of cases in 2000 were white. However, 54% were female compared to a long-term average of 40%. Decedents ranged in age from 20 to 72 years with a mean of 43.

The number of depressant deaths determined to be suicides declined to 13% in 2000. However, the intentionality of death in 25% of such deaths is undetermined. Therefore, the suicide rate may actually be consistent with previous years at approximately 30%. Depressant deaths involving alcohol-in-combination, after decreasing from 40% of the total in 1997 to 33% in 1998 and 27% in 1999, returned to 1997 levels at 38% in 2000. Also of note, benzodiazepines were involved in 71% of the total number of depressant-related deaths during 2000, compared with past rates averaging 60%. The most frequently identified benzodiazepine is diazepam, involved in 38% of all depressant deaths last year.

DAWN ED rates per 100,000 for alprazolam, clonazepam, diazepam, lorazepam, triazolam, and, to a lesser degree, phenobarbital have declined since 1992-94. All of these drugs reached their lowest rate of ED mentions since that previous period in 1999. Diazepam and clonazepam have been consistently the two most frequently mentioned depressants in ED data during that period.

DEA data sources report local street prices for illegally obtained prescription benzodiazepines (primarily diazepam and clonazepam) remain stable at $1 for 5-milligram tablets and $2-4 for 10-milligram tablets.

Informants describe an active street sale of benzodiazepines in the downtown core.

7. Hallucinogens

"Club Drugs" is a general term used for drugs that are popular at nightclubs and all-night dance parties (trance and raves). Included are the hallucinogens (MDMA, LSD, PCP, Ketamine, Psilocybin), GHB and GBL, and the inhalant nitrous oxide. The use of these drugs appears to be widespread not only in the

dance parties and club scenes, but in normal recreational and social use as well. Many users tend to experiment or regularly use a variety of club drugs in combination. Traditionally, ED indicators, treatment admissions, helpline calls and incidences are low or non-existent for these drugs; however, other sources suggest an increase in their use. Club drugs appear also to be a problem in other urban areas within Washington State. These drugs appear in relatively small numbers in drug-related deaths and are usually incidental to the primary cause of death.

In Seattle, 1.4% of ED drug episodes in 1999 involved LSD, while the overall number of ED drug mentions for LSD was < 1%. Such incidences involved primarily younger users, with LSD indicated in 5.5% of drug mentions in patients aged 6-17 years, compared to 0.1% in patients aged 35 years or older. The number of ED drug episodes involving LSD has decreased from 1996 (2.1%). LSD was detected in only 1 homicide case in Seattle-King County in 2000. The United States Customs reports 5 seizures of LSD from Washington ports of entry totaling 0.6 pounds (370.24 grams).

In Seattle, 1.5% of ED drug episodes in 1999 involved PCP. The number of ED drug episodes involving PCP has remained relatively stable over the period of 1996-1999. There were only 2 deaths involving PCP in Seattle-King County 1999 and the same for 2000; co-ingested drugs included alcohol, MDMA and marijuana.

There were no deaths recorded by King County ME involving ketamine in either 1999 or 2000. In a 2000 survey in a substance abuse recovery program in Seattle, of the 71 patients interviewed whose ages were between 14 and 24 years, 14% reported having ever used ketamine while 6% had used this drug in the last 6 months. Similar numbers were reported in 114 patients aged 25 to 50 years, with 11% having ever used ketamine and less than 2% having used this drug in the previous 6 months.

In the same 2000 survey, 44% of patients aged between 14 and 24 years reported having ever used MDMA while 30% had used this drug in the last 6 months. In those aged 25 to 50 years, 45% reported having ever used MDMA while less than 10% had used this drug in the previous 6 months. In 2000, 7 deaths were recorded by King County ME involving MDMA, with the majority involving other drugs such as alcohol, cocaine, marijuana, methamphetamine and PCP. In 1999, MDMA was detected in 4 deaths, 3 of which were also positive for marijuana. The presence of MDMA in each case was incidental to the cause of death. The street sale price of MDMA for one 150 mg to 250 mg tablet is $20 to $30.

There has been a continued increase in local ED mentions where GHB, or its precursor drugs GBL and 1,4-butanediol, were the primary drugs mentioned. In one study of 43 GHB non-fatal overdoses, 16 (37 %) consumed only GHB, 15 (35 %) combined GHB with alcohol, 10 (23 %) with MDMA and 4 (9 %) each with methamphetamine and cocaine. Patients were aged 17-59 years (median 28 years), and 80% were male. A common drug combination involved GHB, alcohol, and MDMA.

Inhalants include any gases or fumes inhaled for the purpose of getting high. Their recreational use is most common among younger adolescents. The most common inhalants used at clubs and parties are nitrous oxide and amyl nitrite. There have been a scattering of calls to help lines and poison control centers in recent years; however, there are relatively few other indicators reflecting the pattern and extent of use.

HIV& AIDS among Injection Drug Users (IDUs)

There are an estimated 10,000 to 15,000 drug injectors in King County. HIV status of IDUs entering methadone treatment was monitored in King County from 1988 through 1999. During this time, HIV prevalence among treatment admits hovered around 2%. More recent serology data obtained from IDUs booked into the King County jail between August 1998 and February 2000 suggests continued stability, with 2% of the IDUs who consented to the survey testing positive for HIV. Previous studies suggested a higher rate of infection among out-of-treatment IDUs compared to IDUs who enter treatment. The recent jail-based study suggests this difference may no longer hold, though differences among races and ethnicities persist. In the drug treatment survey, HIV prevalence was significantly higher among African-American and Native American methadone clients compared to whites (AA 2.5%, NA 4.2%, W 1.5%; $p<0.5$). Also, clients without permanent housing were more likely to be HIV positive than those who were stably housed (3.4% vs. 1.6%; $p<0.5$). Similar differences were observed in the jail sample.

The jail study also affirmed earlier findings regarding the prevalence of risky sex and drug use behaviors among Seattle-area injectors. Of the 560 IDUs interviewed in the jail study, over half reported having more than two sex partners in the past year and over two-thirds of both men and women engaged in unprotected vaginal sex. Eighty percent reported at least daily injecting during the past month and two-thirds reported regularly injecting multiple times a day. Heroin was the most commonly injected drug (82%), followed by heroin and cocaine together (68%), cocaine (64%), and any form of speed, including methamphetamine, (26%). Two-thirds reported multiple shooting partners during the past six months, most of whom were regular shooting partners, friends, or steady sex partners. Sixty-two percent reported injecting with a previously used needle during the last six months, and most had shared cookers and needles to divide up drugs. In addition to injection drug use, survey participants used a variety of non-injected drugs, with crack cocaine being cited most often (69%). The persistence of a high level of risk in Seattle-area injectors is troubling and suggests a potential for increased transmission of HIV and other bloodborne infections among IDUs, their sexual partners and families.

Fortunately, HIV risk appears to be mitigated by a finding that suggests the majority of sharing may occur within small networks. Most study participants reported injecting with "regular shooting partners," steady sex partners, and friends. It is possible that the low prevalence of HIV in the Seattle IDU population observed in this and other studies over the past 12 years may be related to this finding. With low base-line prevalence, sharing beyond usual networks appears insufficient at this time to trigger an increase in the rate of HIV transmission among local IDUs.

As reassuring as this may be, the picture is vastly different for other bloodborne infections, such as hepatitis B and C. Eighty-five percent of IDUs in King County are infected with HCV, and 70% show markers of prior infection with HBV. Recent incidence studies conducted by the HIV/AIDS Epidemiology Program at Public Health – Seattle & King County indicate that 21% of non-infected Seattle-area IDUs acquire HCV each year and 10% of IDU who have not had hepatitis B acquire HBV. This rate of transmission is alarming. HCV is now the

leading cause of liver transplantation in King County and Washington State. With greater baseline prevalence, sharing within narrow networks appears insufficient to stem the rapid spread of these infections.

EXHIBIT 1

SEATTLE-KING COUNTY
QUARTERLY NUMBER OF IDENTIFIED DRUGS IN DRUG-CAUSED DEATHS
JANUARY 1, 1997 – DECEMBER 31, 2000

DRUG(S) IDENTIFIED*	1997				1998				1999				2000			
	1Q	**2Q**	**3Q**	**4Q**	**1Q**	**2Q**	**3Q**	**4Q**	**1Q**	**2Q**	**3Q**	**4Q**	**1Q**	**2Q**	**3Q**	**4Q**
Cocaine	20	17	12	17	9	18	19	23	21	21	24	10	26	25	15	23
Heroin/Morphine	23	37	22	29	16	40	48	39	26	35	35	21	31	35	16	19
Other Opiates	8	8	6	7	7	18	16	7	8	16	5	5	13	13	11	12
Amphetamines [1.]	1	0	3	2	1	0	0	2	1	1	7	5	2	5	1	3
Sedatives/Depressants	7	8	14	9	12	13	11	15	4	9	4	7	7	7	10	4
Alcohol	18	30	19	14	8	33	26	26	18	13	17	19	20	22	19	15
Antidepressants	7	10	12	12	8	16	13	9	6	8	10	10	9	15	9	15
Actual No of Drug Deaths	**45**	**58**	**33**	**43**	**39**	**63**	**67**	**53**	**42**	**61**	**57**	**45**	**61**	**69**	**44**	**45**

* More than one drug may be identified per individual drug overdose death. Table excludes poison-related deaths.
[1.] The amphetamines identification category includes methamphetamine.

SOURCE: King County Medical Examiner

EXHIBIT 2

SEATTLE-KING COUNTY
HEROIN-RELATED DRUG-CAUSED DEATHS: RATE PER 100,000 POPULATION
1989 – 2000

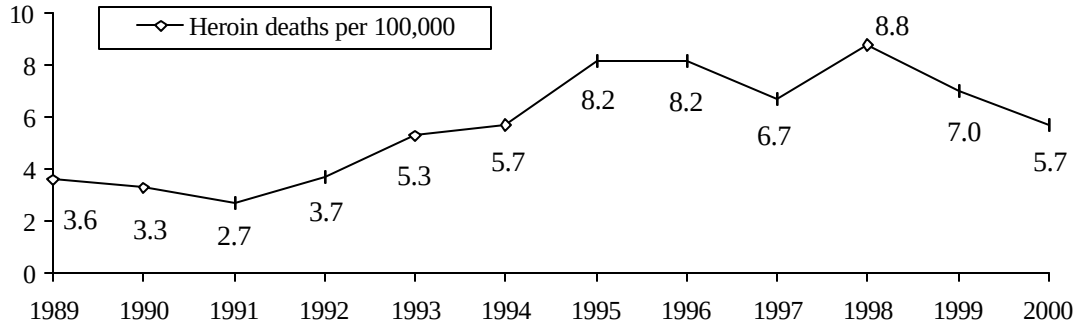
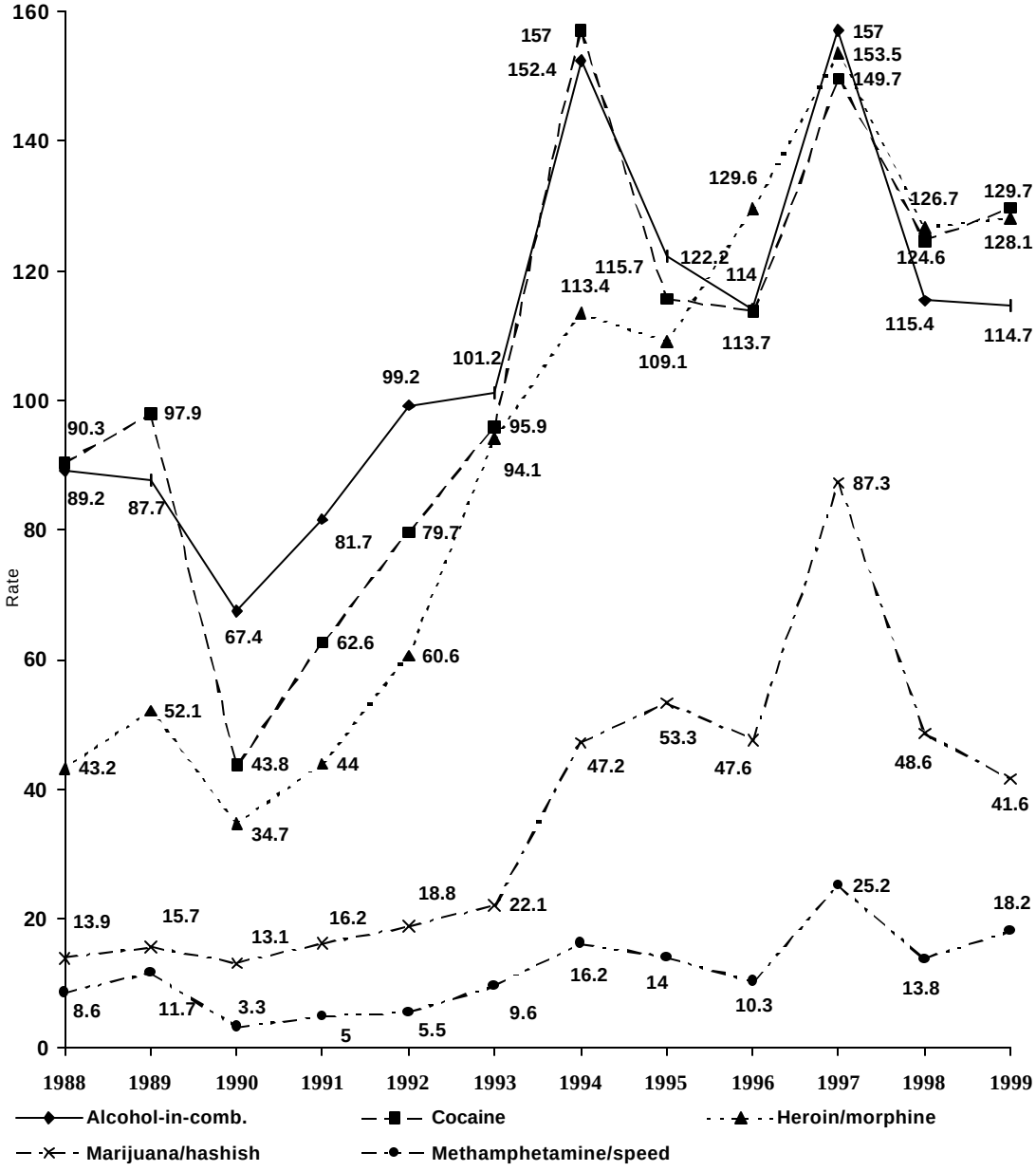


EXHIBIT 3

SEATTLE-KING COUNTY
ESTIMATED RATE (per 100,000 population) ED MENTIONS
1988 - 1999



SOURCE: Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 1999 (3/2000 update)

EXHIBIT 4

SEATTLE-KING COUNTY
HALF-YEARLY DEMOGRAPHIC TRENDS IN ALCOHOL/DRUG TREATMENT ADMISSIONS
JULY 1998 – DECEMBER 2000

Client Profiles	Jan - Jun 1998		Jul - Dec 1998		Jan - Jun 1999		Jul - Dec 1999		Jan - Jun 2000		Jul - Dec 2000*	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
UNDUP ADMITS	3,849	(100)	4,174	(100)	4,664	(100)	4,469	(100)	4,582	(100)	5,660	(100)
GENDER												
Male	2,477	(64)	2,732	(65)	3,042	(65)	2,931	(66)	3,003	(66)	3,797	(67)
RACE/ETHNICITY												
Nat. - American	285	(7)	302	(7)	376	(8)	355	(8)	362	(8)	431	(8)
Afr. - American	834	(22)	909	(22)	1,017	(22)	961	(22)	981	(21)	1,090	(19)
White	2,295	(60)	2,504	(60)	2,786	(60)	2,643	(59)	2,709	(59)	3,525	(62)
Other	435	(11)	459	(11)	485	(10)	510	(11)	530	(12)	614	(11)
AGE												
<14	80	(2)	64	(2)	88	(2)	50	(1)	63	(1)	45	(1)
14 - 18	822	(21)	754	(18)	908	(20)	850	(19)	953	(21)	824	(14)
19 - 20	99	(3)	129	(3)	132	(3)	111	(2)	133	(3)	198	(3)
21 - 40	1,981	(52)	2,207	(53)	2,345	(50)	2,213	(49)	2,231	(49)	2,763	(49)
41 - 65	862	(22)	1,013	(24)	1,177	(25)	1,233	(28)	1,196	(26)	1,811	(32)
65+	5	(<1)	7	(<1)	14	(<1)	12	(<1)	6	(<1)	19	(<1)
ROUTE ADMIN												
Oral	1,815	(47)	2,008	(48)	2,147	(46)	1,963	(45)	1,895	(41)	2,477	(44)
Smoking	1,204	(31)	1,315	(32)	1,489	(32)	1,377	(31)	1,557	(34)	1,621	(29)
Inhaling	23	(<1)	21	(<1)	20	(<1)	18	(<1)	20	(<1)	9	(<1)
Injecting	687	(18)	673	(16)	851	(18)	891	(20)	927	(20)	1,383	(24)
Other	120	(3)	157	(4)	157	(3)	131	(3)	183	(4)	170	(3)
PRIMARY DRUG												
Alcohol	1,733	(45)	1,920	(46)	2,014	(43)	1,922	(43)	1,779	(39)	2,295	(41)
Amphetamines	230	(6)	240	(8)	247	(5)	236	(5)	299	(6)	380	(7)
Cocaine	444	(12)	590	(14)	601	(13)	573	(13)	583	(13)	626	(11)
Hallucinogens	12	(<1)	18	(<1)	15	(<1)	10	(<1)	19	(<1)	13	(<1)
Heroin	581	(15)	559	(13)	725	(16)	788	(18)	834	(18)	1,267	(22)
Marijuana	780	(20)	764	(18)	911	(20)	875	(20)	1,011	(22)	942	(17)
Other	69	(2)	83	(2)	91	(2)	65	(1)	57	(1)	137	(1)

* Counts for the second half of 2000 are preliminary due to delays in data entry.
SOURCE: Washington State TARGET data system - Structured Ad Hoc Reporting System

EXHIBIT 5

SEATTLE-KING COUNTY
HEROIN CONVICTIONS and PROSECUTIONS for METHAMPHETAMINE FELONY OFFENSES
1991 – 2000

CONVICTIONS FOR HEROIN-RELATED OFFENSES					
YEAR	**White**	**African American**	**Native American**	**Asian**	**Total**
	No. (%)	No. (%)	No. (%)	No. (%)	**No. (%)**
1991	520 (42)	702 (56)	17 (1)	8 (<1)	**1,247 (100)**
1992	660 (42)	891 (56)	19 (1)	9 (<1)	**1,579 (100)**
1993	706 (47)	743 (49)	26 (2)	32 (2)	**1,507 (100)**
1994	452 (40)	676 (58)	9 (1)	5 (<1)	**1,142 (100)**
1995	549 (42)	717 (56)	13 (1)	16 (1)	**1,295 (100)**
1996	495 (43)	633 (54)	13 (1)	20 (2)	**1,161 (100)**
1997	382 (52)	318 (44)	13 (2)	14 (2)	**727 (100)**
1998	562 (43)	720 (54)	16 (1)	28 (2)	**1,326 (100)**
1999	517 (41)	713 (56)	13 (1)	28 (2)	**1,271 (100)**
2000	422 (41)	565 (54)	22 (2)	31 (3)	**1,040 (100)**

PROSECUTIONS FOR METHAMPHETAMINE FELONY OFFENSES			
YEAR	**Manufacturing or Dealing**	**Possession**	Total Filings
1992	0	2	**2**
1993	1	5	**6**
1994	7	12	**19**
1995	4	42	**46**
1996	24	39	**64**
1997	42	32	**74**
1998	23	48	**71**
1999	18	40	**58**
2000	42	43	**85**

SOURCE: King County Prosecuting Attorney

EXHIBIT 6

DEMOGRAPHIC CHARACTERISTICS OF REPORTED AIDS CASES:
KING CO., OTHER WASHINGTON COUNTIES, WASHINGTON STATE, & THE UNITED STATES

Case Numbers and Deaths	King County		Other WA Co.		Washington State		United States*	
Cumulative Cases	6,102		3,325		9,427		753,907	
Cumulative Deaths	3,583		1,787		5,370		438,795	
Currently living with AIDS	2,519		1,538		4,057		315,112	
Case Demographics	King County**		Other WA Co.**		Washington State**		United States***	
(last 3 years)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Gender:								
Male	678	(91)	479	(82)	1,157	(87)	108,711	(77)
Female	65	(9)	102	(18)	167	(13)	33,115	(23)
Age:								
<13	1	(<1)	1	(<1)	2	(<1)	902	(1)
13-19	2	(<1)	6	(1)	8	(1)	912	(1)
20-29	111	(15)	94	(16)	205	(15)	18,824	(13)
30-39	355	(48)	238	(41)	593	(45)	60,128	(42)
40-49	203	(27)	159	(27)	362	(27)	42,831	(30)
50-59	57	(8)	62	(11)	119	(9)	13,542	(10)
60+	14	(2)	21	(4)	35	(3)	4,687	(3)
Race/Ethnicity:								
White	509	(69)	423	(73)	932	(70)	45,748	(32)
Black	117	(16)	69	(12)	186	(14)	65,740	(46)
Hispanic	85	(11)	60	(10)	145	(11)	28,323	(20)
Asian	13	(2)	8	(1)	21	(2)	1,176	(1)
Native American	19	(3)	21	(4)	40	(3)	557	(<1)
Unknown	0	(0)	0	(0)	0	(0)	285	(<1)
Exposure Category:								
Male-male sex	462	(63)	251	(43)	713	(54)	49,958	(32)
Injecting drug user	57	(8)	118	(20)	183	(14)	34,578	(24)
IDU & male-male sex	79	(11)	41	(7)	124	(9)	8,897	(6)
Heterosexual contact	34	(5)	69	(12)	101	(8)	23,639	(17)
Hemophilia	5	(1)	5	(1)	8	(1)	558	(<1)
Transfusion	6	(1)	6	(1)	11	(1)	597	(<1)
Mother at risk/has AIDS	1	(<1)	1	(<1)	2	(<1)	870	(1)
Undetermined/other	92	(13)	90	(15)	182	(14)	22,732	(16)
Total Cases (last 3 years)	736	(100)	581	(100)	1,324	(100)	141,829	(100)

* Reported as of 12/31/00 **Data from 10/1/97 through 12/31/00 ***Data from 7/1/97 through 12/31/00.
SOURCE: HIV/AIDS Epidemiology Report, 2nd Half '00. PHSKC, Washington Department of Health, CDC