
RECENT DRUG ABUSE TRENDS IN THE SEATTLE-KING COUNTY AREA

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Heroin use continues to have the largest impact of all illicit drugs used in the Seattle area and available data suggest that a new level of endemic heroin use has been established. 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 use 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 world's 26th busiest container port, handling 1.54 million container units in 1999. The combined ports of Seattle and nearby Tacoma make Puget Sound the second largest combined load center in the U.S., trailing only Los Angeles-Long Beach, California, and are among the top 10 combined load centers in the world.

King County's estimated 2000 population is 1.685 million, an increase of 11.8% since 1990, and represents 29 percent of Washington State's 5.8 million total. The County's population is 80% white, 10% Asian/Pacific Islander, 5.5% African American, 3.5% Hispanic and 1% American Indian.

According to the U.S. Census Bureau, King County is the nation's 12th largest county with a population density of 792.8 people per square mile. It gained an estimated 178,000 people over the last decade. For the same period, according to the Washington State

OFM, adjacent Snohomish and Pierce Counties added 148,000 people combined. These three counties accounted for nearly half of the state's total growth during the 1990s.

2. Data Sources and Time Periods

- **Washington State Office of Financial Management (OFM)** - Data on population estimates are from the Washington State OFM/Forecasting Division. These data are used to depict recent population estimates for the City of Seattle and King County. Population estimates for 2000, published on June 30, are referenced in the Area Description.
- **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 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 September 30, 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 11 years.
- **Drug Abuse Warning Network (DAWN) quarterly 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 the Public Health - Seattle & King County (PHSKC). The studies began in 1994 and continue through 2002.
- **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 June 30, 2000 and shown in Exhibit 4.
- **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 September 30, 2000 are shown in Exhibit 5.
- **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 Public Health - Seattle & King County (PHSKC), Washington State Department of Health and the Centers for Disease Control and Prevention.

- **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.
- **United States Customs Service** – Data from the USCS’ Illicit Drug Seizures in Washington State, January 1 through September 30, 2000, are included in the narratives on cocaine, heroin and marijuana.
- **United States Department of Justice Drug Enforcement Administration** – Data from the DEA’s Domestic Monitoring Program on heroin purity for the period 1996 through the second quarter of 1999 are included in the narrative on heroin.

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 and further to 76 in 1999 (Exhibit 1). There have been 62 such deaths, including one perinatal death, through September 30, 2000. Cocaine has been involved in 37.8% of all drug-related deaths through the third quarter, 2000, a ratio that is consistent with the previous two years. Cocaine alone was found in 20 (32.2%) of the individuals whose death was characterized as cocaine-related through September 30, 2000. This proportion is a big 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 two percent of the cocaine-related drug deaths were male; 18% 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 (Exhibit 4).

ADAM data is only available for males for the first three quarters of 2000. Those data indicate that the percentage of male arrestees with cocaine in their urine ranged from 24.6% to 33.7%. 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 reports from users indicate that purity has declined as compared to a year ago. As in the past, most of the street level cocaine trade is controlled by Latino gangs.

As reported by the USCS, seizures of cocaine coming into Washington State decreased

significantly through October 1, 2000 with 26 seizures of cocaine totaling 9,081 grams. This compares to 1999 in which 68,018 grams were seized at various ports of entry. Of these 26 seizures only three were at or greater than 1000 grams; 17 were of amounts less than 4 grams.

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 (Exhibit 2). Available data indicate that this increase has not continued, but that the rate of heroin use has stabilized at levels higher than when the increase was first observed. Several data sources were used to estimate trends in heroin use, including case reports from the King County Medical Examiner's office, drug treatment admissions reported to Washington State Department of Social and Health Services, heroin convictions reported by the King County Prosecutor, and data from local epidemiologic studies that include drug users.

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 through September, 2000, there have been 82 heroin-related deaths. Although the numbers of deaths in which heroin or morphine metabolites were detected have remained high since 1995, the proportion of all drug-caused deaths in which opiates were detected has decreased steadily since that year. As a proportion of all drug-related deaths investigated by the Medical Examiner, heroin-related deaths rose to 72% in 1995 and have declined to 50% in 2000. This would suggest an overall increase in drug use in the

community since 1994, and that the number of heroin deaths each year has not fallen below 100 since the increase was first observed.

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 109 in 1995 and 153.5 per 100,000 in 1997 (Exhibit 3). Thus, the pattern observed for heroin-deaths – stabilization at a rate higher than pre-1994 – is borne out by the DAWN data as well.

The number of convictions for heroin-related offenses has not shown a clear trend over this time period (Exhibit 5). This may be due to the fact that arrest and conviction are influenced by factors other than underlying use.

Seattle-King County admissions for heroin drug treatment increased again in 2000 (Exhibit 4). In 1998, there were 1,140 treatment admissions for heroin; the number increased to 1,512 in 1999 and as of June, 2000 there were 834. If the rate of these admissions remains the same throughout 2000, this would represent a 10% increase over 1999 and a 37% increase over 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 treatment includes more than 500 individuals. Therefore, much like data on arrest and conviction, changes in drug treatment admissions over time are probably not reflective of changes in underlying use.

Two epidemiologic studies have been carried out in Seattle-King County since 1994 by the

Epidemiology Research Unit, with funding from the National Institute on Drug Abuse and the Centers for Disease Control and Prevention. These studies have enrolled large samples of injection drug users, totaling more than 4,400 individuals. During each year of study enrollment, there has been an increase in the proportion that report heroin as their primary injected drug. In 1994, only 61% reported heroin as their primary drug, compared to 75% in 1997, 87% in 1988 and 86% in 1999. No new recruitment took place in 2000, but a new study of young injectors will begin recruitment next year, and these trends will be more closely examined in younger injectors.

Urinalysis data from the ADAM study with King County adults arrested during the study's first five quarters (3Q98 – 3Q99) indicate that opiates were present in an average of 19.5% of female and 16.1% of male arrestees who agreed to urine testing. During that period opiate positive rates appeared to be slightly lower for African-American arrestees (16.5% for women, 14.6% for men) than for White arrestees (21.1% for women, 18.1% for men). ADAM data for the first three quarters of 2000 are limited to male arrestees and show that opiates were present in 10.8% of those arrestees.

Local heroin price and purity, as measured by the DEA's Domestic Monitoring Program, have been relatively stable over the past several years.

3. Other Opiates

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

The number of drug-caused deaths involving opiates other than heroin escalated 72 percent from 25 deaths (29 other opiates identified) in 1997 to 43 deaths (48 opiates identified) in 1998 (Exhibit 1) and receded to 34 such deaths in 1999. There have been 31 such deaths through the third quarter of 2000. Methadone was the other opiate most frequently reported by the ME since January 1998 with 17 cases in 1998, 19 cases in 1999, and 17 cases through the third quarter, 2000. Of those 17 cases in 2000, 5 (29%) had methadone only in their system at the time of death.

The King County ME recorded 5 deaths involving fentanyl in 1998, 2 in 1999 and none through the third quarter, 2000. None were reported in 1997 and very few in previous years.

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. Propoxyphene mentions (3.9-1.3 per 100,000) have been declining during that same period.

4. Marijuana

Cannabinoids in this analysis include marijuana and hashish.

In King County, admissions for individuals claiming marijuana as their primary drug to publicly funded chemical dependency treatment accounted for 8% of adult admissions and 69% of youth (<18 years old) admissions for the period January 1, 2000 to June 30, 2000. This represents a small change in such admissions in 1999 (7% adults and 65% youth).

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.

Another indicator of local use patterns is data collected from the King County ADAM project, which conducts urine drug testing on consenting incarcerated adults at the King County Jail. Data from this project in 2000 are limited to males and show a positive rate ranging from 33.8% to 43.1% during the first three quarters. 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 33.0% in the third quarter of 1998 to a high of 42.2 in the third quarter of 1999.

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 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 between \$325 to \$400, quarter-pounds for \$1200 to \$1400. Bulk quantities sell for between \$4,000 to \$5,200 per pound and \$6,000 to \$8,000 per kilogram.

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. Medical Examiner data indicate 8 such deaths through September 30, 2000, compared with 11 total deaths in 1999. These fatalities comprise only 5.0% of drug-related deaths in 2000. Each involved substances in combination with methamphetamine. All the decedents were male, with half of them between the ages of 22 and 30.

DAWN emergency department mentions in Seattle-King County for methamphetamine rated 18 per 100,000 in 1999, a slight increase from the previous year. Methamphetamine ranked 5th in ED mentions behind cocaine, heroin, alcohol in combination, and marijuana. This ranking has remained unchanged over the last few years.

ADAM data for 2000 indicate the percentage of male arrestees in Seattle testing positive for methamphetamine were 9.5%, 13%, and 9.0% for Quarters 1, 2, and 3, respectively. These rates are following a similar level and pattern to 1999 quarterly figures.

Admissions to publicly funded treatment in King County of individuals claiming methamphetamine as their primary substance remain stable. Methamphetamine admissions for January – June, 2000 accounted for 6% of total admissions, a rate that has remained relatively constant since 1998 and remains eclipsed by alcohol, cocaine, heroin, and marijuana admission rates.

While other trend indicators remain stable, law enforcement and clandestine lab response efforts are increasing significantly. Methamphetamine prosecutions in King County have been steadily increasing each year. Seventy-one methamphetamine felonies have been prosecuted through the third quarter this year, with a projected year-end total of 90. Methamphetamine-related prosecutions show a 12.5% increase over 1999 totals and a 20% increase over 1998. In the first half of this year, U.S. Customs agents seized 6.1 pounds of methamphetamine at various points of entry into Washington state.

In only nine months the Department of Ecology has already exceeded last year's total number of lab responses by 33% (789 in 1999); 1,050 labs have been cleaned up, with year-end projections reaching 1,200. Of these 1,050 labs, 39% were found in Pierce County, 16% in King County and 9% in Thurston County, all similar to 1999 percentages. Rural manufacture of methamphetamine continues to remain consolidated in the above-referenced Puget Sound counties, in Spokane County (Eastern Washington) and within a cluster of "I-5 corridor" counties south and west of King County including Benton, Lewis, Grays Harbor, and Kitsap Counties.

According to sources at Northwest HIDTA (High Intensity Drug Trafficking Area), the predominate manufacturing method still used in most rural counties is the traditional red

phosphorous method. In King and Pierce Counties, however, the quicker-cook "Nazi" method" is most prevalent, contributing to the higher percentages of lab responses in these counties. With lithium and anhydrous ammonia as its precursors, this method allows for smaller, more mobile labs that are able to produce higher quantities in a shorter amount of time.

Local prices in both Seattle and Eastern Washington cities still remain stable at \$20 - \$30 per ¼ gram, despite growing inconsistencies in quality and purity. Smoking remains the most prevalent administration route, although intravenous injection is popular among certain sub-groups in the urban core of Seattle.

In May, 2000, the Governor's Council on Substance Abuse released its first report on methamphetamine, including recommendations for increased education and prevention, long-term drug treatment, and improved, cross-systems collaboration between treatment, health, child welfare, justice, and law enforcement. The group also recommended the development of a statewide database to synthesize local data for more accurate trends analysis and outcome evaluation.

6. Depressants

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

(Amytal), butabarbital, pentobarbital (Nembutal), phenobarbital, secobarbital (Seconal), promethazine (Phenergan), and choral hydrate (Noctec).

Data sources reveal several notable changes regarding the trends and indicators of depressant use for the period including January, 2000 through September, 2000. The number of deaths involving depressants, totaling 23 (with 30 depressants identified) for this period, will likely exceed the number for 1999 (24 total); the 1999 data, however, described a marked decrease in the number of deaths involving depressants in comparison with previous years. Death rates remained relatively constant from 1993 through 1995 (averaging 19 cases with 20 depressants identified), and then nearly doubled in 1996 (37 cases with 44 depressants identified). This higher rate was maintained in 1997 (38 cases with 46 depressants identified), but increased 34% in 1998 (51 cases with 60 depressants identified). Depressant-related deaths in 1999 then decreased 53% from those reported in 1998. The number and rate of depressant deaths would, therefore, appear to be returning to 1996-97 levels, which represented a rate of approximately 1.8 per 100,000 population in King County. The demographics of the decedents in 2000 to date have also changed somewhat. Consistent with past trends, 91% were white; however, 52% were female (compared to a long-term average of 40%), with the ages ranging from 22 to 72 years, resulting in an increase in the mean age from 41 to 46 years.

The number of deaths determined to be suicides appears to have remained constant during this reporting period at 30% of the total. Deaths involving depressants and alcohol-in-combination, having decreased from 40% of the total in 1997 to 33% in 1998 and 27% in 1999, have increased slightly to 30% to date. Also of note, benzodiazepines

were involved in 48% of the total number of depressant-related deaths during this year to date, compared with past rates averaging 60%, with diazepam specifically identified in 26% of the deaths, a percentage approximately one-half that of past reports.

DAWN ED rates per 100,000 for alprazolam, clonazepam, diazepam, lorazepam, triazolam and, to a lesser degree, phenobarbital show a bell-shaped curve during the period 1991-99 with the peaks occurring 1992-94 and a decline since that time. All of these drugs reached their lowest rate of mentions over the past 9 years 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.

7. Hallucinogens

Please see Special Report: Club Drugs.

HIV & AIDS among Injection Drug Users (IDUs)

There are an estimated 10,000 to 15,000 drug injectors in King County. Continued monitoring of HIV status among IDUs who enter drug treatment shows a low and stable pattern of infection. Cumulative reported HIV prevalence among treatment admits from 1988 through 1998 is 1.9%. Males have significantly higher prevalence than females (2.1% vs. 1.4%; $p < 0.05$) due to higher infection rates among men who have sex with

men (MSM, 16.7%). Methadone treatment clients of African-American or Native-American background have significantly higher HIV prevalence compared to white clients (AA 2.6%, NA 4.2%, W 1.5%; $p < 0.05$). Clients without a permanent address are more likely to be HIV positive than those with a permanent address (3.4% vs. 1.6%; $p < 0.05$). Data collected between 1994 and 1997 by a longitudinal cohort study of Seattle area drug injectors which has been conducted by the Epidemiology Research Unit, Public Health – Seattle & King County, showed a two-fold increase in HIV infections among IDUs who were not in drug treatment compared to in-treatment IDUs. The same study estimated HIV seroprevalence among local MSM who inject methamphetamine to be 47%. This is the highest rate of infection of any risk group in the Seattle area.

Special Report: Club Drugs

“Club Drugs” is a general term used for drugs that are popular at nightclubs and all-night dance parties (trance and raves). Included in this section are the hallucinogens (MDMA, LSD, PCP, Ketamine, Psilocybin), GHB and GBL, and inhalants (nitrous oxide). Methamphetamine is another popular club drug and is covered in the stimulants section. 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 to also be a problem in other urban areas outside of Seattle and King County. These drugs appear in relatively small numbers in drug-

related deaths and are usually incidental to the primary cause of death.

Hallucinogens

Hallucinogens include, but are not limited to, MDMA (3,4-methylenedioxymethamphetamine), LSD (lysergic acid diethylamide), PCP (phencyclidine), Ketamine, and Psilocybin mushrooms. Other less common hallucinogens include MDA, MDE, MDEA, PMA, DMT and 2C-T-7, and are not included in any detail in this report. Traditionally, treatment admissions for hallucinogens are low (< 1 %) in Seattle-King County.

MDMA (Ecstasy)

MDMA has stimulant and mild hallucinogenic properties and is a tan, brown or white powder usually found in tablet form. Common street names include E, X, XTC, love drug, hug drug, adam, and roll, or the tablets are named after the image imprinted on them. A single dose is one tablet which contains 50-150 mg MDMA, and sells for \$20-30 per dose, or as low as \$15 if bought from friends. Drug quality can vary significantly, and MDMA tablets are often cut with other drugs such as caffeine, ephedrine, MDA, MDE, dextromethorphan and PMA (a potentially lethal adulterant). MDMA is predominantly ingested orally and onset of desired effects is within 20-30 mins. Effects peak around 2-3 hrs., although some users find the effects last shorter than this. MDMA is often used in combination with other drugs such as LSD (“candy flippers”) to increase the duration of effects.

In a recent survey in a substance abuse recovery program in Seattle, 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 (N=71). 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 (N=114). In those aged over 25 years, the primary drug used most often was alcohol or methamphetamine. In another study, 17 patients admitted to an ED in Seattle over several months with drug intoxication, tested positive for MDMA. Almost all of the patients were concurrently using other drugs such as GHB (8), alcohol (7), marijuana (2), and methamphetamine. Patients were aged 15-28 years (median 23 years), and 82% were male.

From January, 1999 to October, 2000, 14 drivers arrested for driving under the influence of drugs in Washington State tested positive for MDMA. These drivers were observed driving erratically and at high speeds, were frequently involved in collisions, and were often driving home from all-night dance parties. The majority of these drivers were male, aged 18-25 years. During this same period of time, 7 decedents tested positive for MDMA in Washington (6 in King Co.), with the majority involving other drugs such as alcohol (5), cocaine (2), marijuana, methamphetamine and PCP.

LSD

LSD, the model hallucinogen, is known as acid, microdots, blotter or paper acid, window pane, panes, tabs, trips, 'cid, Sandoz, and barrels. It is orally ingested and onset of effects occur within 20-30 mins., peak at 2-4 hrs., and last usually 6-8 hrs. LSD is a clear colorless liquid that is usually applied to small ($\frac{1}{4}$ " squares of paper, stickers, sugar cubes, candy and drinks, or stored in small dropper bottles. LSD also comes in tablet form, gelatin sheets/shapes, and powder. Squares or "tabs" usually contain 30-100 micrograms of LSD, and a single tab dose generally costs \$3-5. In Seattle, liquid LSD in bottles appears to be common and is often given to friends in single doses, e.g., a drop on their hands, for

free. A vial of liquid LSD can cost ~\$80. The liquid is usually water-based and potency can vary. Furthermore, experienced users in Seattle consider the liquid not as high quality as the microdots (tablet form) or blotter paper. Users often need to take up to 100-150 micrograms for a "good high."

LSD is not routinely tested for in Washington State, and was detected in only 1 homicide case in Seattle-King County in 2000. The lower potency of LSD available nowadays, compared to in the 1960-70s, may provide a possible reason for the relatively low ED indicators, treatment admissions and related-deaths. 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.

PCP (and analogs)

PCP is a dissociative anesthetic and is a clear yellowish liquid or white crystalline powder. It also comes in tablet and capsule form and is commonly known as Angel Dust, elephant, hog, dips, peace pill, TicTac, tranq, SuperKools, Sherms, Fry and Amp. The liquid (1-3 mg.) is frequently added to cigarettes, marijuana or mint leaves then smoked, or it can be ingested orally (2-6 mg.), snorted or administered intravenously. Tablets can sell for \$5-15, vials of liquid for \$1-3, and dipped cigarettes up to \$20 each. Onset of effects following smoked PCP is within seconds, and within 1-5 mins. if given intravenously. Effects peak within 15-30 mins. and last 4-6 hrs.

In Seattle, 1.5% of ED drug episodes in 1999 involved PCP, while the overall number of ED drug mentions for all ages was approximately 1%. From January, 1999 to October, 2000,

there were 17 PCP-related driving under the influence cases in Washington State, 8 of which occurred in Seattle-King County. Fourteen of these drivers also tested positive for marijuana, 2 for alcohol and 1 for MDMA. Over the same period, there were 11 deaths involving PCP in Washington State, 5 of which occurred in King County. The cause of death in these 11 cases included homicide (7), suicide (3) and 1 involved a traffic fatality. Ten of these deaths also involved other drugs such as marijuana (8), alcohol (4), cocaine (2) and MDMA.

Ketamine

Ketamine (Ketalar, Ketaject) is structurally related to PCP and is a dissociative anesthetic for animals and humans. Ketamine is a clear liquid or white crystalline powder and is commonly known as K, Special K, Super K, Jet, Vitamin K, and Cat Valium. It is usually stolen from veterinarian offices, or comes from diverted pharmaceutical products. Similar to PCP, Ketamine can be added to cigarettes or marijuana and smoked. It can also be snorted (15-200 mg.), injected intramuscularly (25-125 mg.), and taken orally (75-300 mg.). The onset of effects is within seconds if smoked, 1-5 mins. if injected, 5-15 mins. if snorted, and within 10-30 mins. if orally ingested. Effects generally only last 30-45 mins. if injected, 45-60 mins. if snorted, and 1-2 hrs. if taken orally. The drug is often re-administered. Its physical effects are similar to PCP and its visual effects are similar to LSD.

In a recent survey in a substance abuse recovery program in Seattle (as cited earlier in this section), 14% of patients aged between 14 and 24 years reported having ever used ketamine while 6% had used this drug in the last 6 months (N=71). Similar numbers were reported in patients aged 25 to 50 years, with 11% having ever used ketamine and <2% had used this drug in the previous 6 months

(N=114). From January to October, 2000, 3 decedents tested positive for ketamine in Washington State, however the drug findings were incidental to the primary cause of death. Methamphetamine was also detected in 1 of the deaths, while fentanyl and meperidine were present in another.

Psilocybin

Psilocybin mushrooms are brown or tan in color with a golden crown, and can be grown indoors or outdoors. The mushrooms are swallowed, or capsules containing the powder are ingested. Common names include “shrooms”, magic mushrooms, psilocybin, cubes, and liberty caps. Dose and prices can vary and have not been verified for this report. The onset of effects is within 20-60 mins. and lasts 3-6 hrs. If the mushrooms are chewed and held in the mouth, the onset of effects can be reached sooner. Information regarding the prevalence of psilocybin did not show up in traditional ED indicators and treatment admissions, however, anecdotal accounts suggest that this drug is still a popular hallucinogen. Additionally, psilocybin is not routinely tested for in Washington State.

GHB, GBL and 1,4-BD

GHB (gamma-hydroxybutyrate) is a depressant taken for its intoxicating, euphoric, sedative, and supposed muscle-enhancing properties. The precursor drugs GBL (gamma-butyrolactone) and 1,4-BD (1,4-butanediol) are converted into GHB by the body, and are taken as GHB substitutes. Common street names for GHB include liquid X, liquid XTC, water, G, G-caps, VitaG and easylay; names for GBL include 2(3H) furanone dihydro, RenewTrient, Blue Nitro, Jolt, Verve, and ReActive; and names for 1,4-BD include tetramethylene glycol, Thunder, FX, Serenity, InnerG, and pine needle extract.

GHB itself is a Schedule I substance and is a white powder or clear liquid. GBL and BD

are not scheduled and are clear liquids. The liquids are often colored to distinguish them from water and can be flavored to mask the taste. Capsules containing GHB powder have also been reported. GHB and its precursors can be purchased over the internet and at bars, parties, and gymnasiums. GHB is often clandestinely made and street purity is often unknown. Recreational doses are at least 1 capful of liquid or 1 tsp. of powder, which is equivalent to at least 2.5g. Prices are generally \$5-10 per dose. Quarts of GBL or BD are reported to be available commercially for \$75-125. GHB is ingested orally and effects occur within 10-20 mins. Peak effects are seen at 40 mins. and last 2-4 hrs.

There has been a continued increase in local ED mentions where GHB was the primary drug 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. Users would often take MDMA to get stimulated, then take GHB to counteract the stimulant effects of MDMA when they wanted to “come down.”

From January to October, 2000, there were 12 GHB-related driving under the influence (DUI) cases in Washington State. Only 1 case tested positive for an additional drug (marijuana). All of these drivers had either taken GHB recreationally or for bodybuilding purposes, and had not been to an all-night dance party, etc. Several sexual assault victims have presented to several Seattle-King Co. hospitals with symptoms similar to the administration of GHB, but due to its rapid elimination only one sexual assault case has tested positive for GHB to date. Additionally,

only one GHB-related death has been reported in Washington State.

Inhalants

Inhalants include any gases or fumes inhaled for the purpose of getting high. Their recreational use is most common among younger adolescents, primarily because many inhalants are readily available, inexpensive and legal. The most common inhalants used at clubs and parties are nitrous oxide and amyl nitrite. Nitrous oxide is a clear anesthetic gas known as N₂O, nitrous, laughing gas and “hippie crack.” It is obtained from hospitals, and purchased from retailers most commonly in the form of whipped cream charges, which are then cracked into a balloon for inhalation. Nitrous charges cost \$0.5 – \$1.5 per cartridge and balloons at parties can sell for \$3-5 a balloon. There have been a scattering of calls regarding inhalants to help lines and poison control centers in recent years, however, there are relatively few other indicators reflecting their true popularity.

EXHIBIT 1

SEATTLE-KING COUNTY
 QUARTERLY NUMBER OF IDENTIFIED DRUGS IN DRUG-CAUSED DEATHS
 JANUARY 1, 1997 – SEPTEMBER 30, 2000

DRUG(S) IDENTIFIED*	1997				1998				1999				2000		
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q ²
Cocaine	20	17	12	17	9	18	19	23	21	21	24	10	26	25	11
Heroin/Morphine	23	37	22	29	16	40	48	39	26	35	35	21	31	34	17
Other Opiates	8	8	6	7	7	18	16	7	8	16	5	5	11	12	8
Amphetamines ¹	1	0	3	2	1	0	0	2	1	1	7	5	2	3	1
Sedatives/Depressants	7	8	14	9	12	13	11	15	4	9	4	7	7	7	7
Alcohol	18	30	19	14	18	33	26	26	18	13	17	19	20	20	17
Antidepressants	7	10	12	12	8	16	13	9	6	8	10	10	9	14	3
Actual No. of Drug Deaths	45	58	33	43	39	63	67	53	42	61	57	45	60	67	37

* More than one drug may be identified per individual drug overdose death. Table excludes poison-related deaths.

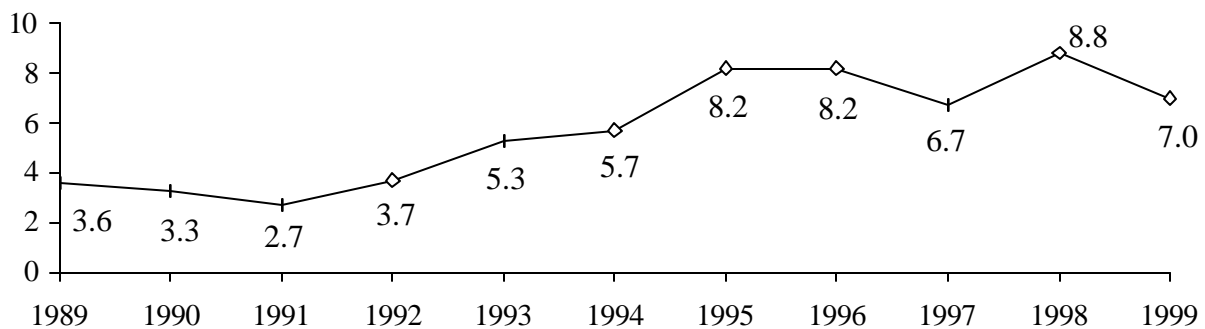
1 The amphetamines identification category includes methamphetamine.

2 The Third Quarter, 2000 data are preliminary as some cases are still under investigation.

SOURCE: King County Medical Examiner

EXHIBIT 2

SEATTLE-KING COUNTY
 HEROIN-RELATED DRUG-CAUSED DEATHS: RATE PER 100,000 POPULATION
 1989 - 1999

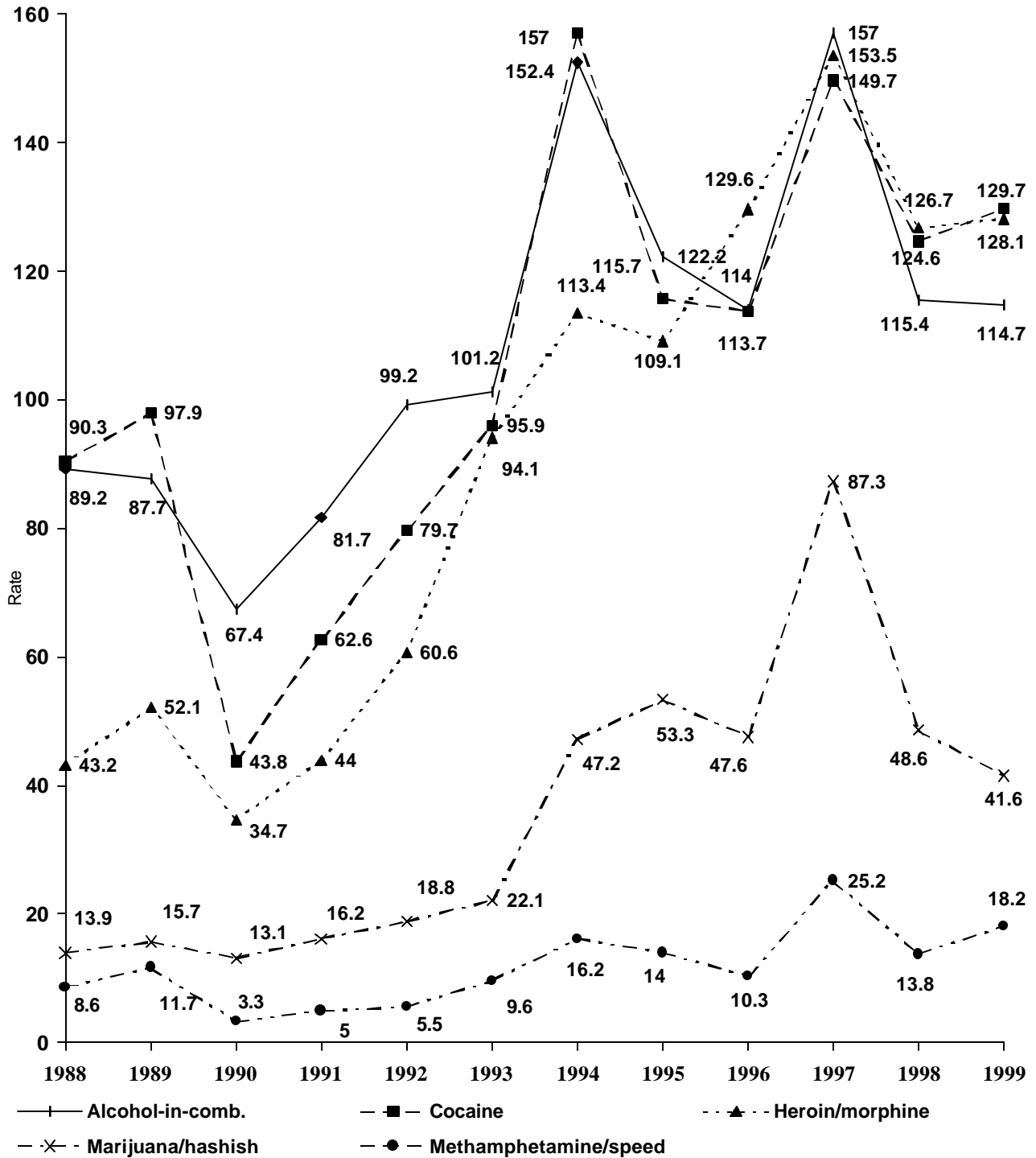


SOURCE: King County Medical Examiner

—◇— Heroin deaths per 100,000

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
 JANUARY 1998 – JUNE 2000

Client Profiles	Jan - Jun 1998		Jul - Dec 1998		Jan - Jun 1999		Jul - Dec 1999		Jan - Jun 2000	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
UNDUP ADMITS	3,849	(100)	4,174	(100)	4,664	(100)	4,469	(100)	4,582	(100)
GENDER										
Male	2,477	(64)	2,732	(65)	3,042	(65)	2,931	(66)	3,003	(66)
RACE/ETHNICITY										
Nat. - American	285	(7)	302	(7)	376	(8)	355	(8)	362	(8)
Afr. - American	834	(22)	909	(22)	1,017	(22)	961	(22)	981	(21)
White	2,295	(60)	2,504	(60)	2,786	(60)	2,643	(59)	2,709	(59)
Other	435	(11)	459	(11)	485	(10)	510	(11)	530	(12)
AGE										
<14	80	(2)	64	(2)	88	(2)	50	(1)	63	(1)
14 - 18	822	(21)	754	(18)	908	(20)	850	(19)	953	(21)
19 - 20	99	(3)	129	(3)	132	(3)	111	(2)	133	(3)
21 - 40	1,981	(52)	2,207	(53)	2,345	(50)	2,213	(49)	2,231	(49)
41 - 65	862	(22)	1,013	(24)	1,177	(25)	1,233	(28)	1,196	(26)
65+	5	(<1)	7	(<1)	14	(<1)	12	(<1)	6	(<1)
ROUTE ADMIN										
Oral	1,815	(47)	2,008	(48)	2,147	(46)	1,963	(45)	1,895	(41)
Smoking	1,204	(31)	1,315	(32)	1,489	(32)	1,377	(31)	1,557	(34)
Inhaling	23	(<1)	21	(<1)	20	(<1)	18	(<1)	20	(<1)
Injecting	687	(18)	673	(16)	851	(18)	891	(20)	927	(20)
Other	120	(3)	157	(4)	157	(3)	131	(3)	183	(4)
PRIMARY DRUG										
Alcohol	1,733	(45)	1,920	(46)	2,014	(43)	1,922	(43)	1,779	(39)
Amphetamines	230	(6)	240	(8)	247	(5)	236	(5)	299	(6)
Cocaine	444	(12)	590	(14)	601	(13)	573	(13)	583	(13)
Hallucinogens	12	(<1)	18	(<1)	15	(<1)	10	(<1)	19	(<1)
Heroin	581	(15)	559	(13)	725	(16)	788	(18)	834	(18)
Marijuana	780	(20)	764	(18)	911	(20)	875	(20)	1,011	(22)
Other	69	(2)	83	(2)	94	(2)	65	(1)	57	(1)

* Counts for the first 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(2) – 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*	418 (41)	553 (54)	21 (2)	30 (3)	1,022 (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	20	51	71
1999	21	41	62
2000*	37	34	71

* Data for 2000 are through September 30, 2000.

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	5,968		3,234		9,202		733,374	
Cumulative Deaths	3,540		1,767		5,307		430,441	
Currently living with AIDS	2,428		1,467		3,895		302,933	
Case Demographics	King County**		Other WA Co.**		Washington State**		United States***	
(last 3 years)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
<u>Gender:</u>								
Male	672	(91)	490	(82)	1,162	(87)	117,105	(77)
Female	64	(9)	108	(18)	172	(13)	34,837	(23)
<u>Age:</u>								
<13	1	(<1)	1	(<1)	2	(<1)	1,089	(1)
13-19	2	(<1)	6	(1)	8	(1)	971	(1)
20-29	109	(15)	102	(17)	211	(16)	20,675	(14)
30-39	353	(48)	250	(42)	603	(45)	65,339	(43)
40-49	198	(27)	165	(28)	363	(27)	45,095	(30)
50-59	58	(8)	55	(9)	113	(8)	13,911	(9)
60+	15	(2)	19	(3)	34	(3)	4,862	(3)
<u>Race/Ethnicity:</u>								
White	505	(69)	435	(73)	940	(70)	49,498	(33)
Black	114	(15)	72	(12)	186	(14)	69,692	(46)
Hispanic	81	(11)	60	(10)	141	(11)	30,680	(20)
Asian	15	(2)	10	(2)	25	(2)	1,216	(1)
Native American	21	(3)	21	(4)	42	(3)	563	(<1)
Unknown	0	(0)	0	(0)	0	(0)	296	(<1)
<u>Exposure Category:</u>								
Male-male sex	462	(63)	261	(44)	723	(54)	54,021	(36)
Injecting drug user	57	(8)	117	(20)	174	(13)	38,070	(25)
IDU & male-male sex	79	(11)	42	(7)	121	(9)	9,430	(6)
Heterosexual contact	34	(5)	67	(11)	101	(8)	24,713	(16)
Hemophilia	5	(1)	5	(1)	10	(1)	636	(<1)
Transfusion	6	(1)	8	(1)	14	(1)	649	(<1)
Mother at risk/has AIDS	1	(<1)	1	(<1)	2	(<1)	1,003	(1)
Undetermined/other	92	(13)	97	(16)	189	(14)	23,423	(15)
Total Cases (last 3 years)	736	(100)	598	(100)	1,334	(100)	151,945	(100)

* Reported as of 12/31/99 **Data from 7/1/97 through 6/30/00
SOURCES: PHSKC, Washington Department of Health, CDC

***Data from 1/1/97 through 12/31/99