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**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; 1999 saw an increase in methamphetamine-related deaths, most of which involved other drugs as well. Marijuana use remains unchanged. Regarding HIV infection among IDUs, local studies in drug treatment agencies indicate a seroprevalence of 1-4% among heroin and cocaine injectors; HIV seroprevalence is 47% among gay and bisexual men who inject methamphetamine.*

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**ABSTRACT**

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; 1999 saw an increase in methamphetamine-related deaths, most of which involved other drugs as well. Marijuana use remains unchanged. Regarding HIV infection among IDUs, local studies in drug treatment agencies indicate a seroprevalence of 1-4% among heroin and cocaine injectors; HIV seroprevalence is 47% among gay and bisexual men who inject methamphetamine.

# INTRODUCTION

## 1. AREA DESCRIPTION

Located on Puget Sound in western Washington, King County spans 2,130 square miles. The Seattle Harbor is the world's 26th busiest container port, handling 1.544 million container units in 1998. 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. The top 10 international trading partners for the Puget Sound area and the State of Washington include Japan, Canada, China, South Korea, Taiwan, Hong Kong, United Kingdom, Thailand, Singapore and Germany.

King County's estimated 1999 population is 1.677 million which represents nearly 30 percent of Washington State's 5.757 million total and, according to the U.S. Census Bureau, comprises the nation's 12th largest county. The County's population is 83% white, 10% Asian/Pacific Islander, 6% African American and 1% American Indian; 3% of the County's residents are of Hispanic origin. Nearly 23% of King County's population is age 17 years and under; 26% are age 18 to 34 years; 33% are age 35 to 54 years and 18% are age 55 years and older. Nearly 96% of adult residents have completed high school or GED equivalent, and 45% are college graduates.

## 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 incorporated and unincorporated King County. Population estimates for 1999, published on June 30, are referenced in the Area Description.

Key Informant Interviews - A series of targeted interviews were conducted with representatives of U.S. Customs Service (Nick Fillipi) and the regional office of the Drug Enforcement Administration (Richard Bek). Ethnographic studies conducted in the area provided interview data as well.

King County Medical Examiner (ME) data base - Automated information about drug-caused deaths in King County has been available since 1983. Exhibit 1 displays data by calendar quarter from January 1, 1996 through December 31, 1999. 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.

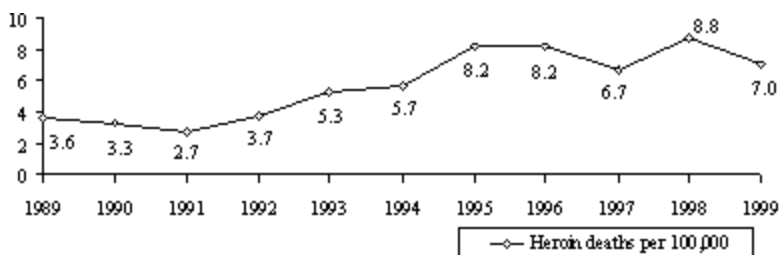
<b>EXHIBIT 1</b>																
<b>SEATTLE-KING COUNTY</b>																
<b>Quarterly Number of Identified Drugs in Drug-Caused Deaths</b>																
<b>JANUARY 1, 1995 - December 31, 1999</b>																
<b>DRUGS IDENTIFIED*</b>	<b>1996</b>				<b>1997</b>				<b>1998</b>				<b>1999</b>			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Cocaine	21	17	17	19	20	17	12	17	9	18	19	23	21	21	24	10
Heroin/Morphine	34	40	28	33	23	37	22	29	16	40	48	39	26	35	35	21
Other Opiates	7	8	10	6	8	8	6	7	7	18	16	7	8	16	5	5
Amphetamines <sup>1</sup>	1	1	1	1	1	0	3	2	1	0	0	2	1	1	7	5
Sedatives/ Depressants	9	11	7	10	7	8	14	9	12	13	11	15	4	9	4	7
Alcohol	26	25	17	19	18	30	19	14	18	33	26	26	18	13	17	19
Antidepressants	6	8	7	12	7	10	12	12	8	16	13	9	6	8	10	9
Actual Number of Drug Deaths	55	57	50	56	45	58	33	43	39	63	67	53	42	61	57	44

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

<sup>1</sup>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 - 1999**



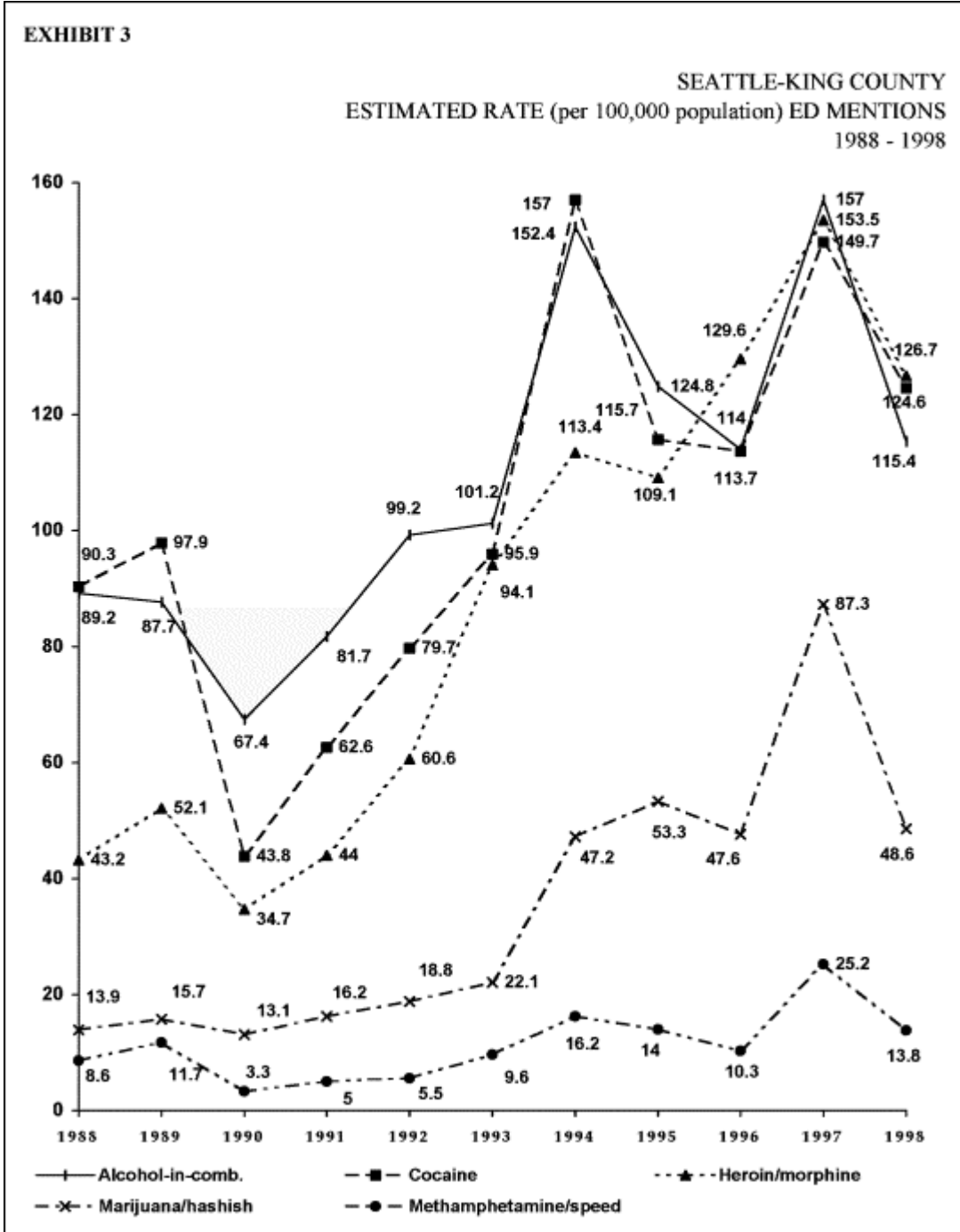
SOURCE: King County Medical Examiner

### EXHIBIT 3

#### SEATTLE-KING COUNTY

#### 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 1998.



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 July 1, 1997, through December 31, 1999 and shown in Exhibit 4.

**EXHIBIT 4  
SEATTLE-KING COUNTY  
Half-Yearly Demographic Trends in  
Alcohol/Drug Treatment Admissions  
JULY 1997 - DECEMBER 1999**

Client Profiles	Jul - Dec 1997		Jan - Jun 1998		Jul - Dec 1998		Jan - Jun 1999		Jul - Dec 1999	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
<b>UNDUP ADMITS</b>	3,559	-100	3,849	-100	4,174	-100	4,664	-100	4,380	-100
<b>GENDER</b>										
Male	2,275	-63	2,477	-64	2,732	-65	3,042	-65	2,858	-65
<b>RACE/ETHNICITY</b>										
Nat. - American	271	-8	285	-7	302	-7	376	-8	350	-8
Afr. - American	812	-23	834	-22	909	-22	1,017	-22	949	-22
White	2,107	-59	2,295	-60	2,504	-60	2,786	-60	2,584	-60
Other	369	-10	435	-11	459	-11	485	-10	497	-11
<b>AGE</b>										
<14	75	-2	80	-2	64	-2	88	-2	49	-1
14 - 18	704	-20	822	-21	754	-18	908	-20	845	-19
19 - 20	111	-3	99	-3	129	-3	132	-3	103	-2
21 - 40	1,864	-53	1,981	-52	2,207	-53	2,345	-50	2,153	-49
41 - 65	797	-22	862	-23	1,013	-24	1,177	-25	1,218	-29
65+	8	(<1)	5	(<1)	7	(<1)	14	(<1)	12	(<1)
<b>ROUTE ADMIN</b>										
Oral Smoking	1,636	-46	1,815	-47	2,008	-48	2,147	-46	1,963	-45
Inhaling	1,094	-31	1,204	-31	1,315	-32	1,489	-32	1,377	-31
Injecting	20	-1	23	(<1)	21	(<1)	20	(<1)	18	(<1)
Other	120	-3	120	-3	157	-4	157	-3	131	-3
<b>PRIMARY DRUG</b>										
Alcohol	1,574	-44	1,733	-45	1,920	-46	2,014	-44	1,869	-43
Amphetamines	208	-6	230	-6	240	-8	247	-5	229	-5
Cocaine	457	-13	444	-12	590	-14	601	-13	566	-13
Hallucinogens	14	(<1)	12	(<1)	18	(<1)	15	(<1)	10	(<1)
Heroin	577	-16	581	-15	559	-13	725	-16	787	-16
Marijuana	676	-19	780	-20	764	-18	911	-20	853	-20
Other	53	-2	69	-2	83	-2	94	-2	66	-2

\*Counts for the second half of 1999 are preliminary due to delays in data entry.

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

**King County Prosecutor's Management Information System (PROMIS)** - Data on felony marijuana and heroin convictions are from the King County PROMIS data base. 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 through December 31, 1999 are shown in Exhibit 5.

**EXHIBIT 5  
Felony Heroin Convictions  
1991 - 1999**

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

Felony Methamphetamine Prosecutions			
YEAR	Manufacturing or Dealing	Possession	Total Case Filings
1991	4	3	<b>7</b>
1992	0	2	<b>2</b>
1993	1	5	<b>6</b>
1994	7	12	<b>19</b>
1995	5	42	<b>47</b>
1996	24	40	<b>64</b>
1997	45	32	<b>77</b>
1998	22	53	<b>75</b>
1999	35	45	<b>80</b>
SOURCE: King County Prosecuting Attorney			

**HIV/AIDS Epidemiology Report** - Data displayed in Exhibit 6 (Exhibit 6 is in Adobe .PDF format - see note at top of page) 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 and Spokane County ADAM results for 1999 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 1993 through October 6, 1999, are included in the narratives on cocaine 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). Cocaine was involved in 37.3% of all drug-related deaths in 1999, a ratio is consistent with 1998. Cocaine alone was found in 13 (17.1%) of the individuals whose death was characterized as cocaine-related in 1999. This proportion is an increase over that of 1998 and is more consistent with the years prior to 1998. The remaining 63 had some other drug, including alcohol, detected through post-mortem toxicology. The most common other drug detected in combination with cocaine was morphine (heroin), being found in 69.7% of these deaths. In 52 (68.4%) of these deaths the determined route of administration for both the cocaine and heroin was intravenous, suggesting the possibility of the injection of "speedballs." Seventy nine percent of the cocaine-related drug deaths were male, continuing a decrease from the previous three years; 24% were African-American.

DAWN system reports indicate a decline in the rate per 100,000 in ED mentions for cocaine in 1998. This decrease in the rate of ED mentions for cocaine came after a surge in 1997. The rate per 100,000 for 1998 (124.6) was a 16.8% decrease as compared to 1997 (Exhibit 3).

Admissions to treatment for adults citing cocaine as their primary drug remained relatively flat between 1997 and 1999 in terms their ratio to total admissions; such admissions represent approximately 13% of all treatment admissions during each of those three years. There was a 12.9% increase in such admissions from 1998 to 1999 (Exhibit 4).

ADAM data for 1999 show that, similar to 1998, 33.4% of male and 48.2% of female arrestees had cocaine in their urine. Also consistent with 1998, the percentage of arrestees testing positive for cocaine was greatest among African-Americans with 47.1% of the males and 67.1% of the females testing positive.

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 slightly in 1999, as compared to 1998, with 68,018 grams seized at various ports of entry. There were 31 such seizures and the average amount of cocaine seized (2,194 grams), while slightly lower than 1998, was still significantly higher than at any time during the past 6 years.

## 2. Heroin

There are several indications that an increase in heroin use in Seattle and King County first observed in 1996 and 1997 continued in 1998, and that while the number of such deaths declined in 1999, these deaths continue at an unacceptably high level.. This rise in heroin use is suggested by data from several independent sources. First, the number of opiate-related deaths investigated by the King County Medical Examiner's office reached an all-time high in 1998 and decreased only somewhat in 1999. Secondly, data from two epidemiologic studies of injection drug users suggest that new study recruits and young injectors continue to be highly likely to report heroin as their primary drug. Heroin prosecutions and convictions remain elevated and demand for treatment for heroin dependence remains extremely high. Only the rate of ED mentions decreased in 1998. Each of these data sources has limitations and by itself cannot be used to reliably suggest trends. However, because it is unlikely that the same source of bias is responsible for the apparent rise in heroin use in all data sources, the relative consistency among the indicators makes it more plausible that the maintenance of the increase seen in previous years is real.

The trend in the number of heroin-related drug-caused deaths continues to rise. Between 1994 and the end of 1999, the King County Medical Examiner's Office reported 723 investigated drug-caused deaths in which morphine (a metabolite of heroin) was detected. 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 111 heroin-related deaths investigated by the Medical Examiner's Office. The increase seen in heroin-related deaths did not appear to occur for cocaine or amphetamine-related deaths until 1999. Consistent with previous years, multiple drugs, including alcohol, were present in over 80% of the heroin-related deaths with cocaine as the most common other drug.

On the other hand, DAWN system reports indicate a decline in the rate per 100,000 in ED mentions for heroin in 1998. This decrease in the rate of ED mentions for heroin came after a surge in 1997. The rate per 100,000 for 1998 (126.7) was a 17.5% decrease as compared to 1997 (Exhibit 3).

Two longitudinal cohort studies of Seattle area drug injectors are conducted by the Epidemiology Research Unit, Public Health – Seattle & King County with funding from the National Institute on Drug Abuse. There have been approximately 4200 injection drug users enrolled in the study since recruitment began in 1994. Beginning in 1998, follow-up was continued on approximately one third of original study subjects, in addition to recruitment of an additional 400 drug injectors.

The epidemiology study data suggest that heroin use increased in 1998, particularly in younger injectors. The proportion of new study recruits reporting heroin as their primary injection drug increased from 61% in 1994 to 75% in 1997, 87% in 1998, and 86% in 1999. Among injectors younger than 20, the proportion reporting heroin increased from 78% to 100% in 1998. (There were no new recruits younger than 20 in 1999, so the continuation of a trend in that group could not be estimated.) In the 20-29 age group, the increase was somewhat smaller, from 75% to 84% in 1998, and 80% in 1999. These studies will continue to recruit new subjects through 2000, so that we may examine this in the future. Another intervention study with young injectors will also carry out recruitment through 2002.

The number of convictions for heroin-related offenses also increased in 1998, and declined slightly in 1999. In 1999 there were 1,271 heroin convictions, compared to 1,326 for all of 1998, a decrease of 4%. Consistent with past years, convictions among African-Americans (56% of total) are disproportionate to local census demographics (6% of total). Although prosecution and conviction data cannot be directly interpreted as indicators of actual prevalence of use in the underlying community, it can be useful when the trends mirror those



in other data sources.

Urinalysis data from the ADAM study with King County adults arrested in 1999 indicate that opiates were present in 20.3% of female and 13.9% of male arrestees who agreed to urine testing. Because these data have only been available since mid-1998, and because they can only be collected from those who agree to participate in the screening, they are extremely limited in relevance to heroin use trends.

Seattle-King County drug treatment admissions for those who use primarily heroin increased in 1999. In 1998, there were 1140 treatment admissions for heroin, and in 1999, there were 1512 which is a 24.6% increase. A mobile methadone program began in 1999, but did not begin to admit patients until early fall. Each year, the increase has sought to meet an underlying high, unmet demand, rather than being an indicator of increases in heroin use. For example, demand for drug treatment at the Seattle needle exchange program has remained high for many years, and the waiting list has grown to over 500.

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). Thirty three such deaths in 1999. The annual rate of other opiate deaths increased from 1.5 per 100,000 population in King County in 1997 to 2.6 in 1998 then back to 2.0 for 1999. Methadone was the other opiate most frequently reported by the ME since January 1998 (17 cases in 1998 and 19 cases in 1999). Forty five percent of the of "other opiate" decedents in 1999 were females; this is consistent with the past several years. Also consistent with previous years the preponderance (84.8%) of these decedents were white. Decedents ranged in age from 20 to 59 years old with a mean age of 42.1. Twenty one percent of other opiate cases involved alcohol-in-combination with BACs ranging from .02 to .35 gm/100 ml of blood and a mean BAC of 0.13 gm/100 ml of blood.

The King County ME recorded 5 deaths involving fentanyl in 1998 and 2 in 1999. 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, 1991-1998. Propoxyphene mentions (3.9-1.9 per 100,000) have been declining during that same period.

The U.S. Customs Service (USCS) seized nearly 53,500 grams (approx. 118 lbs.) of raw opium last year at Seattle-Tacoma International Airport in mail parcels destined for Alaska. Another 13,273 grams were seized this year (through September 30, 1999) from other ports-of-entry in mail parcels destined for Washington State. USCS routinely seized raw opium concealed in mail parcels destined to the Pacific Northwest in the early 1990s. After conducting some controlled deliveries, only one or two such cases per year were reported locally from 1994 through 1997 for a total of 531.1 grams of opium seized by USCS over the period.

## 4. Marijuana

Cannabinoids in this analysis include marijuana and hashish.

In King County for 1999, marijuana accounted for 19.5% of adult, public drug treatment admissions, which was an increase over the 15% ratio experienced in 1998. Demographic data for 1999 for such clients have remained relatively consistent with data from the previous three years.

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. In 1999, 39.0% of the 782 male arrestees agreeing to participate tested positive for marijuana; this percentage is slightly higher than that for cocaine/crack (33.4%). Urinalysis results for the 222 female prisoners screened in 1999 showed a positive rate of 28.4% though this was well below the percentage for cocaine/crack (48.2%). A higher percentage of urinalyses positive for marijuana occurred among younger (15-25 year olds) arrestees. The trend in the percentage of total marijuana positive urinalyses in the King County ADAM study has been fairly flat over the past two years with a 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. These rates are similar to the percentages for marijuana in the Spokane ADAM study.

The most recent DAWN data (Exhibit 3) show a 48.6% decrease in the rate of marijuana mentions in emergency departments during 1998 as compared to 1997. This decrease represents a return to the rate for marijuana ED mentions experienced in Seattle-King County during the period 1994-1996.

Marijuana remains the most widely used illegal drug in both King County and Washington State. Throughout the Seattle-King County area the most commonly found grades of marijuana continue to be either high-grade, locally grown (indoor) sinsemilla or indica or low-grade commercially grown marijuana from the southwestern United States or Mexico. Areas of eastern Washington are increasingly becoming a source of locally purchased and consumed marijuana.

While there were significant increases in cannabis seizure rates from 1997 to 1998, data from the U.S. Customs Service (USCS) for 1999 (through October 6th) indicate a decrease in both the number and average weight of such seizures. In 1999 the USCS reported 431 seizures as compared to 853 in 1998. In addition, average weight of seizures in 1999 was 5.6 lbs. as compared to 34 lbs. in 1998.

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. 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 have remained at a relatively low level over the last five years (Exhibit 1). Medical Examiner data indicate that there were 11 such deaths in 1999, compared to six deaths for 1997 and 1998 combined. These deaths in 1999 comprise 5.7% of the drug-related fatalities in King County. Seven of these 11 deaths involved drugs in addition to methamphetamine. The decedents were mostly (80%) men and ranged in age from 24 to 54 years.

DAWN ED mentions rate per 100,000 in Seattle-King County for methamphetamine declined sharply in 1998, hitting its second lowest level in the last 5 years (Exhibit 3). The rate of such mentions is approximately one-tenth of the rates for heroin, cocaine, and alcohol in combination.

ADAM data for 1999 indicate male arrestees in Seattle with urine samples positive for methamphetamine fluctuated from a low of 5.5% in the first quarter to a high of 16.7% in the fourth quarter. The overall rate for 1999 was 9.5% among males and 9.0% among females; most of testing positive were white. These rates contrast with ADAM data from Spokane in Eastern Washington in which methamphetamine positive urine results ranged from 17.8% to 32.3% during the same period.; 20.1% of the male and 26.6% of the female arrestees in Spokane tested positive for methamphetamine.

In 1999, King County prosecuted 80 methamphetamine felonies, a mild increase from 75 in the previous year.

Admissions to publicly funded treatment in King County of individuals claiming methamphetamine as their primary substance have increased over the last 7 years with the most dramatic increases occurring between 1993-95 and 1997-98. The ratio of these admissions to all admissions moved from 2.2% in the first half of 1993 to 5.2% in 1999. The rate of these admissions has been relatively flat over the past year. The increase in King County is much less than the trend for stimulant admissions for all Washington State over those same seven years. In King County admissions for the first half of 1999 were 54.4% males and 90.2% whites. Native Americans represented 5.8% of admissions, Hispanics, 2.3%, and African-Americans and Asian-Americans represented less than 3% of the admissions. For all of these groups, this is an under-representation in terms of local demographics. Forty-two percent of those seeking treatment were between the ages of 26-34; those older than 35 represented 28% of admissions. These age ratios have been relatively stable over the last seven years.

Data suggest that methamphetamine is becoming a more significant problem in rural eastern and southern Washington and Puget Sound outside of Seattle and King County. For example, the highest number of methamphetamine treatment admissions came, in order, from Pierce, Clark, Spokane and King Counties. Lewis County, a predominately rural county in south central Washington, had the highest treatment admission rate of 249.3 per 100,000 population. This compares to Pierce County with a rate of 156.7 and King County with a rate of 28.4, which is well below the median of the state's counties.

In 1999 the Department of Ecology cleaned up 789 methamphetamine labs, a 226% increase from 1998 and a number greater than 1995 - 1998 totals combined. Of these 789 labs, 40% were found in Pierce County, 14% in King County and 11% in Thurston County. Lab clean-up responses in Benton County skyrocketed 543% in 1999 from the previous year with Grays Harbor and Spokane Counties also seeing increases of over 300%. In 1999 Washington State Patrol seized 582 methamphetamine labs statewide (not including King and Pierce

Counties), with 84% located in Western Washington. While only 60 labs were seized in King County, this number represents a 40% increase from the previous year.

Sources at Washington State Patrol, King County Sheriff's Department and the DEA all report the emergence of new methamphetamine production trends in 1999. Over the past few years, approximately three-quarters of locally manufactured methamphetamine had been produced from red phosphorus. Over this past year, however, more manufacturers have adopted the "Nazi method" of production, a quicker cook process that utilizes the more volatile and toxic precursors anhydrous ammonia (agricultural fertilizer) and lithium (battery strips). This new method allows for smaller, more mobile labs that are able to produce higher quantities in a shorter amount of time. At present, it is estimated that one-half of local methamphetamine labs use this method.

The exponential increase in local or "home" production of methamphetamine seems to confirm DEA and HIDTA accounts of decreasing consumer preference for less pure Mexican imported product. This local "lithium speed" is commonly reported by users to produce higher levels of paranoia, psychosis and generally "unpredictable behavior." These labs themselves are also more volatile, resulting in higher numbers of lab fires and explosions.

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. Youth workers in Seattle's University and Capitol Hill neighborhoods also report disturbing increases in the number of youth who are "mega-dosing" pseudoephedrine cold tablets and mixing heroin with methamphetamine, causing concerns of potential overdose.

## 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), butobarbital, pentobarbital (Nembutal), phenobarbital, secobarbital (Seconal), promethazine, (Phenergan), and choral hydrate (Noctec).

Data sources are mixed in regard to the trends and indicators of depressant use for the period including January, 1999 through mid-September, 1999. The most significant change from 1998 data entails a marked decrease in the number of deaths involving depressants. Death rates (Exhibit 1) remained relatively constant from 1993 through 1995 (averaging 19 cases with 20 depressants identified), with a 63.2% increase noted in 1996 (31 cases with 37 depressants identified). This higher rate was maintained in 1997 (32 cases with 38 depressants identified), and then increased 34.5% in 1998 (43 cases with 51 depressants identified). There were 20 depressant-related deaths in 1999. The number and rate of depressant deaths has, therefore, fallen to 1993-95 levels, with an estimated 1999 rate of approximately 1.2 per 100,000 population in King County. The demographics of the decedents has, however, remained relatively unchanged from previous reporting periods, with 93% white, 40% female, an age range from 22 to 67 years, and a mean age of 41 years.

A trend first noted in 1998 concerning depressant-related deaths has also continued into this reporting period, involving the concomitant injection of heroin and a depressant, typically diazepam. A total of 5 such cases have been identified to date in 1999, representing 25% of the depressant-related deaths. The number of deaths determined to be suicides (9) in 1999 was 45% of the total depressant-related deaths. Deaths involving depressants and alcohol-in-combination, having decreased from 40% of the total in 1997 to 33% in 1998, and remained

stable in 1999 with a rate of 35%, with a mean BAC of 0.12gm/100ml of blood (range of .02 to .26). Benzodiazepines were involved in 65% of the total number of depressant-related deaths in 1999, with diazepam specifically identified in 40% of the deaths.

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 1991-98 with the peaks occurring 1992-94 and a decline since that time. 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.

Anecdotal accounts of the overuse of GHB continue to be received from ED staff throughout the area as previously reported, with incidents of intoxication and incapacitation occurring at a rate of 2-3 per week.

## **7. Hallucinogens**

Hallucinogenic drugs such as lysergic acid diethylamide (LSD), psilocybin mushrooms, and MDMA (Ecstasy) continue to appear in area reports involving primarily younger users. The drugs turn up frequently at local concerts or "raves." Consistent with past history, treatment admissions remain low for these drugs.

As these drugs appear in relatively small numbers in traditional sources of data such as arrests, drug-related deaths and treatment admissions, more work needs to be done to better assess the use trends in the Seattle area.

## **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 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.

Combined drug use and sexual risk behaviors among men who have sex with men are a continuing concern in King County. The Health Department recently completed data collection for Phase 2 of the multi-site CDC-sponsored Young Men's Survey (YMS). This summary includes preliminary results for King County; data collection is still underway in other locations. YMS is a study of the prevalence of HIV, hepatitis A and B, and sexual and drug-use behaviors in young men who have sex with men. Phase 1 of this study included 15-22 year old men; results were summarized in the June, 1999 Drug Abuse Trends report. Phase 2 includes young men aged 23-29.

The Young Men's Survey is an anonymous cross-sectional probability sampling survey that utilizes multi-stage sampling techniques to recruit young men at community venues that are frequented by young men who have sex with men (MSM). Between December 1998 and February 2000, 469 23-29 year old MSM completed the survey. Of these, 93% considered themselves gay (85%) or bisexual (8%). The median number of lifetime male sex partners was about 19 and about 38% reported four or more male sex partners in the past six months. Ninety-nine percent reported drinking alcohol and 63% said they had had sex while under the influence of alcohol. Marijuana was the most commonly reported drug ever used (77%), followed by hallucinogens (45%), MDMA ["ecstasy"] (41%), amyl or butyl nitrite ["poppers"] (40%), cocaine or crack (36%), methamphetamine (33%), ketamine ["Special K"] (15%) and GHB (11%).

In the last 6 months, 52% had used marijuana, 24%, MDMA, 22% "poppers", 18% methamphetamine, 16% crack or cocaine, and 13% hallucinogens. Five percent reported injection of illicit drugs sometime in their life and 2% reported injecting in the last 6 months. Twenty-one percent said that alcohol or drug use had caused problems with their family, social relationships, jobs, school, financial or legal situation, and 14% percent reported that they had received counseling or treatment for drug or alcohol use. HIV seroprevalence in this study was 5%, compared to 2% in the 15-22 year old group surveyed in Phase 1. Nineteen percent had serological markers (anti-HBc) for infection with hepatitis B and 2% had evidence of active infection (HBsAg). Twenty-eight percent had antibodies to hepatitis A either as a result of infection or immunization.

These data show a lower rate of injection drug use among the 23-29 year old group of MSM than was reported by 15-22 year old MSM in Phase 1 of the Young Men's Survey (5% vs. 13% ever injected; 2% vs. 5% injected within the past 6 months). The 23-29 group also reported lower rates of recent use of marijuana, methamphetamine, LSD and cocaine. However, the older group reported higher rates for both lifetime and recent use of "ecstasy" and "poppers."

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