
2006 Snohomish County Arrestee Substance Abuse Study (SCASA II)

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Acknowledgements

Given the necessary abundance of operational protocols and the unique clientele, conducting research with newly booked inmates in a jail setting can be a difficult undertaking. However, just as in 2002-2003 SCASA study, the SCASA II study in 2006 benefited from a high level of arrestee participation. High levels of participation mean the study results are very solid.

The success of the study is due, in large part, to the assistance and support we received from the Snohomish County Department Corrections' officers, staff, and administrators who worked closely with the research team. Their perspective, flexibility, and professionalism permitted us to conduct the project in a safe and efficient manner and to obtain the highest quality data. We thank all who helped us along the way. In particular, we relied heavily on staff working in booking, unit F-3, and classification.

We would like to thank Cammy Hart-Anderson, Alcohol and Drug Coordinator, Snohomish County Human Services Department, Pat Slack, Commander, Snohomish Regional Drug Task Force, and Jim Harms, Community Corrections Commander, Snohomish County Department of Corrections. These three were instrumental in initiating, administrating, and funding the project.

We would like to thank Captain Randy Finsen, Jim Harms, and David Oster, Counseling Supervisor, all from the Snohomish County Department of Corrections, for helping coordinate the logistics of the data collection inside the jail. Their prompt attention to the needs of the project enabled us to finish data collection ahead of schedule.

We owe a special thanks to David Oster and the members of the classification office for identifying and supplying LGAN interviewers with a list of arrestees eligible for interview on each day of data collection and, Mr. Oster in particular, for resolving most day-to-day and technical issues that arose during the course of the project.

Our team of experienced and skilled interviewers conducted the interviews seven days a week in the effort to approach and interview all eligible arrestees. Interviewers utilized a computerized questionnaire and were able to obtain excellent rates of participation from arrestees. Thanks also to Barbara Felver for doing a terrific job producing the final report.

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2006
Snohomish County

Arrestee Substance Abuse Study (SCASA-II)

Executive Summary

Key 2006 Snohomish County Arrestee Substance Abuse (SCASA-II) Findings

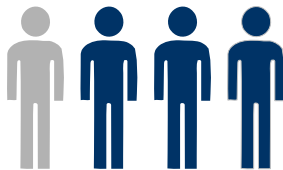
The 2006 Snohomish County Arrestee Substance Abuse, or SCASA-II Study, obtained information on the nature and extent of drug use among recently booked arrestees between June and August 2006. This study is based upon the results of face-to-face computerized interviews and urinalysis tests of 537 male adult arrestees in the Snohomish County Jail.

In this report, many of the findings from the 2006 SCASA-II Study are presented alongside findings from the 2002-2003 SCASA study. Also presented are results from a substantial number of new questions targeting methamphetamine use, markets, and associated activities. A companion report based on interviews and urinalyses from 107 females is available separately.

Key Findings

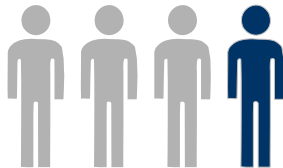
Drug Use: Use of illicit substances (including marijuana, crack or powder cocaine, opiates including heroin, and methamphetamine) remained quite high among the Snohomish County arrestees.

TESTED POSITIVE
Any Substance
3 of 4



- 3 out of 4 (74.8%) Snohomish County arrestees tested positive for **any** illicit substance, over 11% higher than in 2002-2003.

TESTED POSITIVE
Methamphetamine
1 in 4

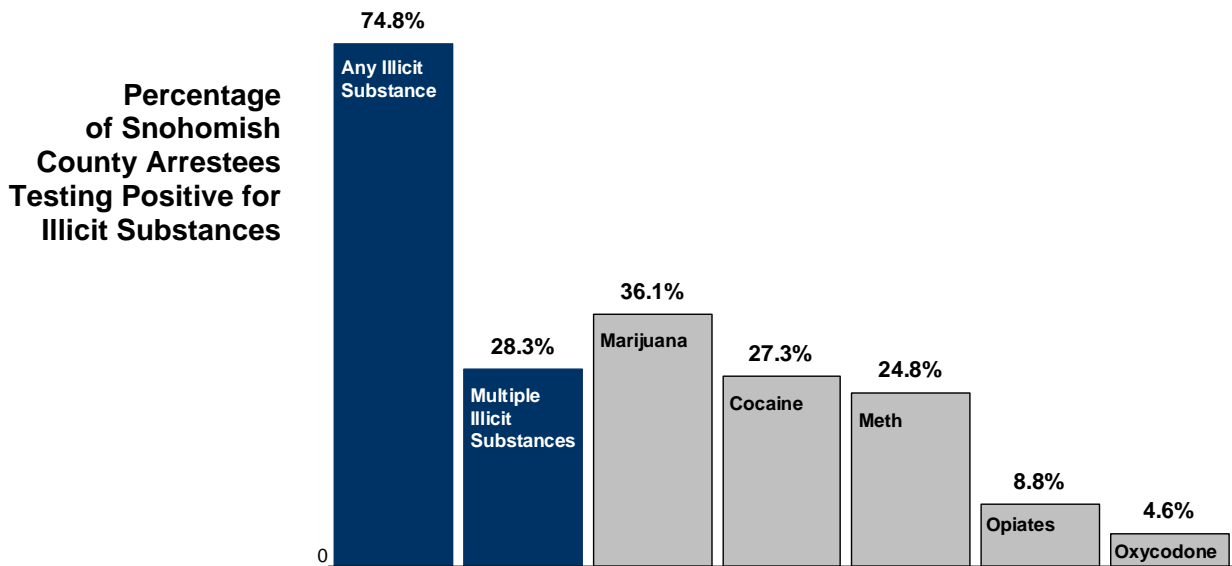


- 1 out of 4 (24.8%) Snohomish County arrestees tested positive for **methamphetamine**, over 5% higher than in 2003-2003.

TESTED POSITIVE
Cocaine
1 in 4

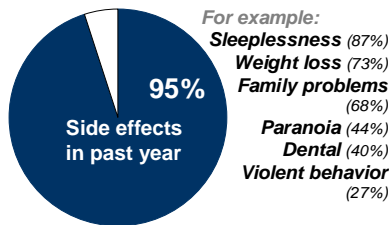


- 1 out of 4 (27.3%) Snohomish County arrestees tested positive for **cocaine**, nearly 9% higher than in 2002-2003.



Methamphetamine Market and Use: This report offers expanded analysis of the characteristics of meth users. This includes a look at general use, consequences, the meth market, and participation in meth-related activities.

Meth caused side effects?
Yes



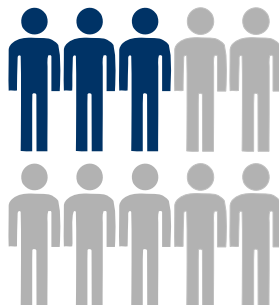
- Nearly all arrestees who used meth during the past year (95.1%) reported experiencing side effects including, but not limited to, sleeplessness (86.7%) and violent behaviors (27.4%).

Obtained meth within Snohomish County?
Yes



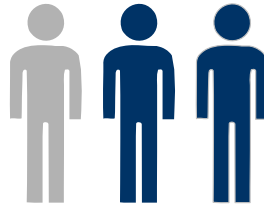
- Most meth-using arrestees booked in Snohomish County obtained meth in Snohomish County (88.2%).

Attempted to get treatment?
3 of 10



- Only about 3 out of 10 arrestees who used meth during the past year ever attempted to get treatment.

Participated in meth-related activity?
2 of 3



- 2 out of 3 arrestees who used meth during the past 30 days participated in a meth-related activity ranging from holding meth or money for others (49.0%) to committing a crime in order to get meth (20.4%).

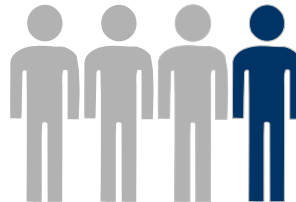
Have a criminal history?
or
Use other drugs more than non-meth users?

On both fronts:
Significantly more likely

- Current meth users were significantly more likely to have a criminal history and engage in other drug use than arrestees that were not current meth users.

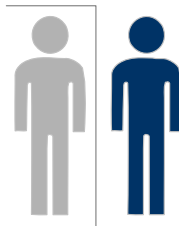
Dependency and Treatment: Most Snohomish County arrestees reported symptoms of chemical dependency. This report offers several methods to estimate need for treatment.

Alcohol dependence?
1 in 4



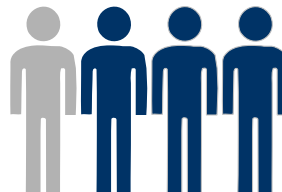
- More than 1 in 4 of all Snohomish County arrestees were likely to be dependent upon alcohol.

Drug dependence?
1 in 2



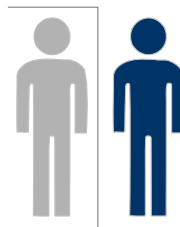
- More than half of all Snohomish County arrestees were likely to be dependent upon drugs.

Said meth caused drug dependence?
3 of 4



- Nearly 3 out of every 4 arrestees who reported using methamphetamine reported that methamphetamine caused drug dependence.

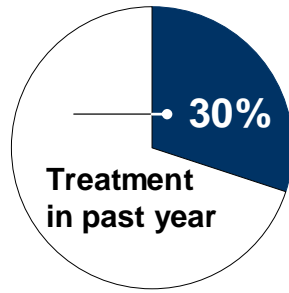
Ever received treatment for drug or alcohol use?
1 in 2



- More than half of Snohomish County arrestees reported receiving some form of treatment for drug or alcohol use at some time in their lives.

Received treatment for drug or alcohol use in past year?

Some

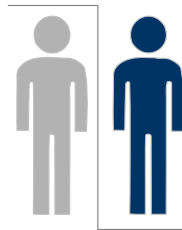


- Roughly 30% of all Snohomish County arrestees reported receiving some form of drug or alcohol treatment during the past year.

Criminal History: Most Snohomish County arrestees reported previous involvement with the criminal justice system. Further, use of illicit substances was associated with greater criminal history.

Previously arrested in past 12 months?

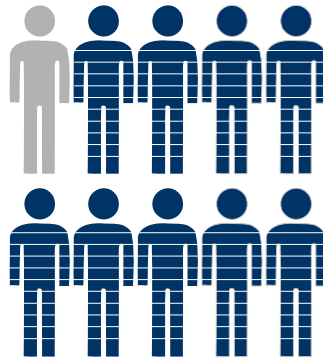
1 in 2



- Over half of all Snohomish County arrestees reported being previously arrested in the past 12 months.

Previously spent at least 24 hours in jail at some point in their life?

9 in 10



- Nearly 90% of Snohomish County arrestees reported spending at least 24 hours in jail at some point in their life before their current arrest.

For heavy substance users . . .

More likely to be arrested in past 12 months?

More arrests in their lifetime?

Spend more time in jail than other arrestees?

Yes

Yes

and

Yes

- Arrestees that reported heavy substance use were more likely to have been arrested in the past 12 months, reported a greater number of arrests across their lifetime, and reported spending more time in jail than arrestees that did not report heavy substance use.



2006
Snohomish County

**Arrestee Substance
Abuse Study
(SCASA-II)**

SECTION I

Introduction

Background

In 2002-2003, Snohomish County commissioned a survey of their inmate population to guide future programming and housing decisions. This study, the Snohomish County Arrestee Substance Abuse (SCASA) Study was modeled largely on the National Institute of Justice's Arrestee Drug Abuse Monitoring (ADAM) program.¹ SCASA examined the nature and extent of drug use among recently booked arrestees. The present study, SCASA-II, was designed to replicate and extend the 2002-2003 study. SCASA-II expands the previous effort in two important ways. First, a substantial new section addressing methamphetamine use and related activities is included in the current study. Second, data were collected from female inmates.

This report presents the results of interviews that were conducted with recently booked male arrestees from June 2006 through August 2006 at the Snohomish County Jail. A total of 578 male arrestees participated in the survey and 537 male interviewees also provided a urine sample that was tested for drug use.

A separate sample of over 100 female interviews and urine tests was collected from August 2006 through September 2006, results of which are provided in a separate report.

Study Protocol

The present study examines the prevalence and types of drug use among recently booked arrestees by conducting a 20 to 30 minute face-to-face survey and collecting a urine specimen for drug testing from arrestees booked into jail within the past 48 hours. The focus on recently booked arrestees ensures that illicit substances are likely to be detectable in the urine samples. Arrestees were promised and received confidentiality in both survey responses and drug testing results.

The study benefited from its use of several interviewers who were experienced in the administration of both the ADAM and SCASA interviews. All interviewers, regardless of previous experience, underwent a two-day training to familiarize them with the instrument and procedures.

¹ Federal budget cuts resulted in the ADAM program being terminated in 2003. Previously, ADAM had operated in 39 metropolitan counties across the country, including both King and Spokane Counties in Washington State. Looking Glass Analytics, the contractor for the SCASA studies, also managed the quarterly ADAM data collection efforts in King and Spokane Counties.

SCASA-II: Survey Content and Mode of Implementation

The present survey replicates the SCASA instrument used in 2002-2003. Both survey instruments contain identical sections on arrestee demographics, frequency of drug use, treatment experience, and risk for substance dependency. In addition, the SCASA-II survey contains a section covering arrestee use of methamphetamine, involvement in the methamphetamine drug market, and involvement in other methamphetamine-related activities. This section was asked of all arrestees who reported using methamphetamine during the past year. The additional methamphetamine questions were culled primarily from San Diego's ongoing Substance Abuse Monitoring (SAM) program.²

As before, the SCASA-II survey was administered by trained interviewers using laptop computers that were loaned to the project by Snohomish County. Computer-aided surveys significantly reduced costs for survey materials and data entry. The core elements of the computerized survey were obtained from researchers in Utah who had programmed most sections of the paper-based ADAM survey instrument for a study among Utah's prison population. This computerized survey was then modified to fit the specific requirements of the SCASA and SCASA-II Study.

Multiple Data Sources

Results from the SCASA-II study presented in this report are obtained from the analysis of three complementary sources of data:

1. Arrestee responses to the computer-aided interviews,
2. Laboratory drug test results from urine specimens, and
3. Inmate demographic and charge information from County electronic booking records.

Each of these sources of data were linked together to form one analytic data set. Thus, information that an arrestee provides in the interview is matched with both the results from their urine sample and information available from county arrest records.

Results from the 2006 SCASA-II survey are compared with the 2002-2003 SCASA survey where appropriate.

SCASA-II Survey Content

- The computer-aided interview contains five main sections. These sections include (1) arrestee demographics; (2) arrestee substance use; (3) substance dependency and treatment history; (4) criminal history; and (5) participation in methamphetamine-related activities. The results presented in this report are designed to mirror those presented from the 2002-2003 survey.

Arrestee Demographics

The questions in this section of the interview seek to describe the arrestee population. Arrestee characteristics such as age, race, and marital status, education, employment, and health insurance

² The SAM methamphetamine addendum was obtained with permission from Dr. Cynthia Burke and has been used in her criminal justice research with the San Diego Association of Governments.

status were obtained. In addition to describing the population surveyed, arrestee demographics will be used for analysis in subsequent sections of the report.

Arrestee Substance Use

Information on arrestee substance use was gathered using two separate research methodologies: self-report by the arrestee and laboratory urinalysis testing. Each of these methodologies offers unique advantages.

- Whereas laboratory results can only indicate recent drug use, self-report data can provide information about patterns of use across the lifespan of the arrestee. The periods of self-report considered in this report are use during the past 30 days, use in the past 12 months, and use during the lifetime of the arrestee.
- Laboratory urinalysis testing provides objective and scientifically verifiable accounts of substance use. This information can also be used to provide an indication of very recent use and of the validity of self-report data.

Substance use questions primarily focus on six commonly used substances: alcohol, marijuana, crack cocaine, powder cocaine, heroin, and methamphetamine.

The urinalysis test detected the presence of 11 different substances:

- Amphetamines
- Methamphetamine
- Barbiturates
- Benzodiazepines
- Cocaine
- Methadone
- Opiates
- Oxycodone
- Phencyclidine (PCP)
- Propoxyphene (e.g., Darvon)
- Marijuana

Arrestee Dependence and Treatment

Alcohol and drug dependency are determined using a brief, standardized set of questions. The battery of questions is designed to allow an approximation of the substance dependence diagnosis from the American Psychiatric Association's Diagnostic and Statistical Manual, Fourth Edition (DSM-IV).

Questions about arrestee treatment focus on treatment experiences during an arrestees' lifetime and treatment during the past year. A wide range of treatment settings were examined from self-help groups to inpatient treatment.

Arrestee Criminal History

Arrestees were asked about their previous lifetime and past year arrests and about time spent in jail or other correctional facilities.

Participation in Methamphetamine Related Activities

Arrestees who reported using methamphetamine during the past year were asked a variety of questions on methamphetamine use, purchase and sale, consequences, treatment experiences, and other associated activities.

Weighting the Interviews for Analysis Using Jail Booking Data

The purpose of the survey is to provide information not simply about the arrestees that were interviewed but about the entire population of arrestees served by Snohomish County. In order to accomplish this, data were weighted according to characteristics of all arrestees booked in Snohomish County. The weights used in Snohomish County are presented in **Appendix A**. All analyses presented in this report other than basic description of the sample utilize weighted data. Because of this practice, the number of arrestees represented by each interview is usually a non-integer value. At times in this report, it may appear that the percentages described are not correct given the number of arrestees responding to a particular item. It should be kept in mind that these apparent discrepancies may be resolved by recalling that each interview has been weighted to represent a certain number of arrestees.

Statistical Analyses Used

The majority of the analyses in this report involve comparing percentages across groups. Statistics like frequencies, percentages, and averages are called **descriptive statistics** because they describe or summarize the data. When we say, for example, that arrestees in Snohomish County reported an average physical health score of 2.8 and an average mental health score of 3.0, we are describing the sample, thus these are descriptive statistics. While these are certainly useful as a way to understand and conceptualize data, another class of statistics, called **inferential statistics**, are also frequently employed in this report. Inferential statistics allow for *inferences* to be made about the entire population based upon the collected sample data. In the case of the example of physical and mental health listed above, an inferential statistic (in this case a one sample t-test) can be used to determine whether or not the self-assessment of physical health by Snohomish County arrestees differs from their self-assessment of mental health. In this specific case, the value of the t-test is indeed significant, $t(574) = 4.87, p < .001$. By applying the correct inferential statistic to the question we are able to state, with a high degree of certainty, that the two scores are significantly different from one another.

A commonly used inferential statistic used in this report is the chi-square (χ^2) test of independence. Given that this statistic is listed throughout the report, **Appendix B** provides a brief description and explanation of the statistic and how it is interpreted.



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SECTION II
Male Arrestee Participation in the SCASA-II Study

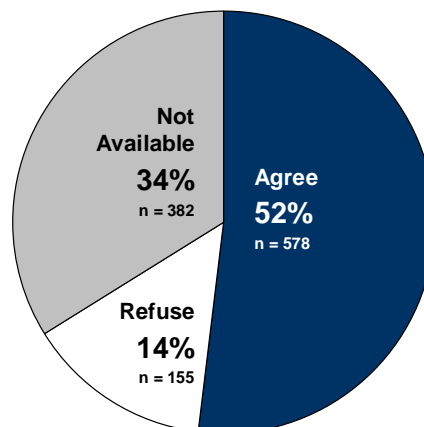
Looking Glass Analytics began interviewing male arrestees on July 14, 2006, with the goal of obtaining 500 interviews and urine samples. The complete sample was achieved after 42 days of interviewing. In all, 578 male arrestees agreed to be interviewed and a final sample of 537 interviews with urine samples was obtained by August 25, 2006. **Appendix C** contains a chart documenting this progress.

The confidence interval around an estimate based on at least 500 interviews is +/- 4 percent or better. That is, one can state with 95% confidence (or a 19 in 20 chance) that the true estimate of the population of all arrestees who would be eligible for this survey lies within +/- 4 percent of the estimate provided. In a survey designed to quantify basic characteristics of a population, such as the SCASA-II, this specificity will be satisfactory for most single item responses (i.e., the percent of arrestees who test positive for methamphetamine) and many two-item cross tabulations (i.e., the percent of arrestees who test positive for methamphetamine by age group).

Over the course of the study, 1115 arrestees were identified from daily booking records as potentially meeting eligibility requirements for study participation. In order to be eligible, arrestees must have been arrested in the past 48 hours and not have been transferred from another institution. Arrestees booked for additional charges while already in custody, arrestees booked and released before they could be approached for interview, or arrestees booked to serve time (i.e., court commitments, weekenders, etc.) were ineligible as well.

Once identified from booking records as potentially meeting eligibility requirements, interviewers attempted to interview the inmate. These efforts were met with the following three outcomes (Figure 2.1): (1) Arrestee agrees to the interview (51.8%), (2) Arrestee refuses to participate (13.9%), and (3) Arrestee is unavailable to participate in the interview (34.3%).

FIGURE 2.1
Interview Status for Those Arrestees Identified as Potentially Meeting Eligibility Requirements
n = 1,115



Arrestees Not Available for Interview

Even if an arrestee is selected as potentially eligible to be interviewed, a number of circumstances exist in correction environments that prohibit interviewers from approaching all potentially eligible arrestees (Table 2.1). Nearly two-thirds of those who could not be approached were due to the release or transfer of the inmate from the facility before the interview could be conducted. Arrestees that cannot be interviewed are considered ineligible.

TABLE 2.1
Reasons Interviewers Were Unable to Approach Arrestees

Reason	N	%
Released	171	44.8
Transferred	66	17.3
Medical Unit/Sick	29	7.6
Arrested > 48 hours ago	29	7.6
Violent/Uncontrollable	16	4.2
Language*	6	1.6
All Other	65	17.0
Total	382	

*Computerized interview was available in an English version only.

- Approximately 62% of unavailable arrestees were due to arrestees being released or transferred before the interview could be conducted.
- In the 2002-2003 study, approximately 66% of unavailable arrestees were due to arrestees being released or transferred before the interview could be conducted.

Arrestee Refusal to Participate

Of the resulting 733 eligible arrestees, 155 of those approached refused to participate in the interview. The result is a solid 79% participation rate. By far, the most commonly stated reason for refusing to participate in the interview was that the arrestee simply did not want to participate ($n = 128, 82.6\%$).

- This pattern was similar to that found in the 2002-2003 Snohomish survey where 91.4% of the refusals were because the arrestee did not wish to participate.
- Characteristics of arrestees that refused to participate in the interview are presented in **Appendix D**.

Arrestee Participation Rate

Participation rates are calculated by dividing the number of arrestees who agree to the interview by the total number of arrestees that interviewers are able to speak with. In 2006, 78.9% of arrestees approached agreed to participate compared to 74.6% in 2003.

TABLE 2.2
Interview Participation Rate:
Comparing the 2006 SCASA-II Study with the 2002-2003 SCASA Study

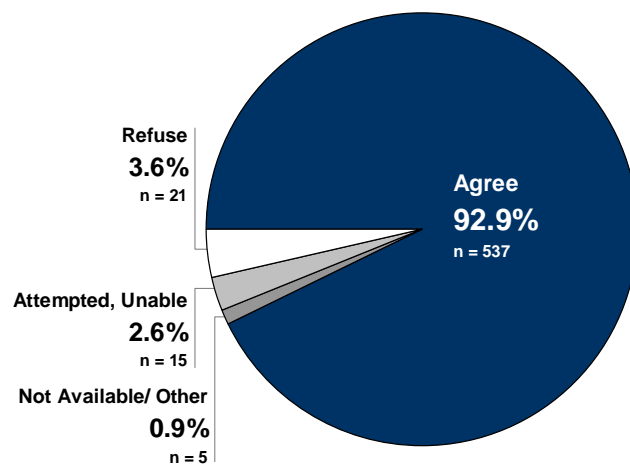
	Snohomish County 2006	Snohomish County 2002-2003
Agree	578	579
Refuse	155	197
Participation %	78.9	74.6

Completing the Interview and Obtaining Urine Samples

A description of the interview procedure was read to arrestees prior to the initiation of the interview. At this time, arrestees were told that they would be asked for a urine sample that would be used for drug testing at the end of the interview.

- The study completion rate (interview/urine provided divided by eligible arrestees) was 73.3%.
- Nearly 93% of arrestees who participated in the interview provided a urine sample (537 urine sample of 578 agree to interview).
- Only 3.6% of all arrestees who agree to participate in the interview refused outright to provide a urine sample.
- 2.6% of all arrestees who agreed to participate in the interview were unable to produce a urine sample.
- In rare instances, arrestees were unable to complete the interview or provide a urine sample due to other reasons (e.g., released, sick, etc.).

FIGURE 2.2
Outcome of Request for Urine Sample in Snohomish County
n = 578





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SECTION III
Demographic Characteristics of Male Arrestees

Demographic characteristics of the male arrestees interviewed in the SCASA-II study are presented in this section. These characteristics are based upon arrestee self report. Many of these variables are cross-tabulated with measures of substance use and abuse later in the report. Comparisons are also made to the 2002-2003 SCASA study where relevant.

Age

In subsequent analyses, results are presented by three primary age groups: 18 to 24, 25 to 34, and 35+. The distribution of arrestee ages for the 2006 SCASA-II study are presented below along with the 2002-2003 SCASA study (Table 3.1).

TABLE 3.1
Age Distribution of Arrestees Participating in Interview

Age Group	Snohomish County 2006 n* = 578	Snohomish County 2002-2003 n* = 567
18-24	28.2%	30.2%
25-34	29.3%	31.7%
35+	42.4%	38.1%

* As weighted data are used for all analyses, Ns are approximate and rounded to the nearest whole number.

- Male arrestees ranged in age from 18 to 70.
- The average age of male arrestees was 32.6 years (SD = 10.4).
- The average age of male arrestees in the 2006 SCASA-II study did not differ significantly from the average age of arrestees surveyed in 2002-2003 (M = 31.8, SD = 9.9).

Race and Ethnicity

Arrestees were asked to describe the race group or groups that described them best from the following list: White, Black or African American, American Indian or Alaska Native, Native Hawaiian or Pacific Islander, Asian, and Other.

Identification of arrestees of Hispanic ethnicity was dependent upon one additional question:

- “Are you of Hispanic or Latino origin or background?”
- Arrestees who indicated “yes” to this question were coded as Hispanic.

- This classification was made even in instances where arrestees endorsed another racial group from the above choices (most commonly this was White). That is, Hispanics are classified as such to their mutual exclusion from other race groups.

The racial composition of the 2006 SCASA-II study was more diverse than the 2002-2003 study (Table 3.2).

TABLE 3.2
Racial Distribution of Arrestees Participating in Interview

Race	Snohomish County 2006 n = 578	Snohomish County 2002-2003 n = 568
White	62.0%	81.9%
African American	11.3%	7.8%
Hispanic	9.6%	5.1%
Other	17.1%	5.2%

- White arrestees represented a smaller proportion of bookings in 2006 compared with 2002-2003.
- The proportion of African-American, Hispanic, and “Other” arrestee races increased in 2006.

Other Ethnic Groups

In addition to the more commonly reported ethnic groups (White, African American, Hispanic), arrestees reported a number of other racial backgrounds (see Table 3.3).

TABLE 3.3
Distribution of Other Racial Groups in Snohomish County

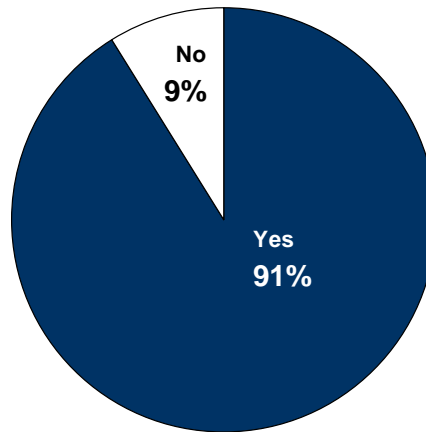
Race	Snohomish County 2006 n = 99	Snohomish County 2002-2003 n = 29
Native American	27.6%	34.5%
Asian American	8.6%	10.7%
Hawaiian/Pacific Islander	8.6%	13.5%
Multiple	35.4%	15.9%
All Others	19.8%	23.5%

- Arrestees reporting multiple races represented the largest proportion (35.4%) of the arrestees coded as “Other.”
- Over 1/4 of arrestees coded as “Other” reported they were Native American.

Country of Birth

- Almost all (91.5%) arrestees reported being born in USA.
- Nearly half of those not born in USA (47.6%) now report being U.S. citizens.

FIGURE 3.1
Percent of Snohomish County Arrestees Born in the United States
n = 577



Residence

Arrestees were asked to indicate the type of residence in which they had lived during the majority of the time during the past month.

TABLE 3.4
Type of Residence During Past 30 Days

Residence Type	Snohomish County 2006 <i>n = 577</i>	Snohomish County 2002-2003 <i>n = 564</i>
House/Apartment	74.5%	85.6%
Residential Hotel	4.0%	3.2%
Hospital	0.4%	0.2%
Jail	1.5%	1.6%
Shelter	0.9%	0.9%
Homeless	17.8%	6.4%
Other	1.0%	2.0%

- Arrestees most commonly reported living in a house or apartment (74.5%).
- Being homeless was the second most frequently reported residence (17.8%) and this proportion was nearly triple what was found in 2002-2003 (6.4%).

Education

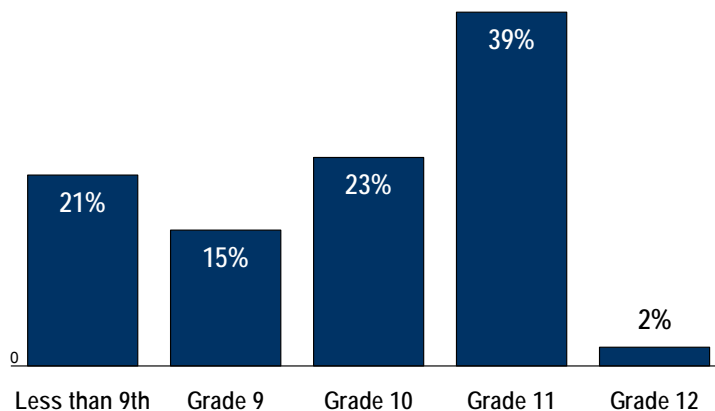
Arrestees were asked to indicate the highest level of education that they had obtained.

TABLE 3.5
Education Level of Arrestees

Education Level	Snohomish County 2006 <i>n = 577</i>	Snohomish County 2002-2003 <i>n = 566</i>
No Degree	29.2%	23.9%
HS/GED	39.2%	41.4%
Vocational/Trade School	7.8%	10.7%
Some College	20.9%	19.7%
Four-Year Degree +	3.0%	4.3%

- Over 2/3 of Snohomish County arrestees had no more than a high school diploma or GED.
- Nearly 3 out of 10 arrestees did not have any degree.

FIGURE 3.2
Highest Grade Completed
Among Snohomish County
Non-High School
Graduates
n = 168



- More than 1 out of 5 arrestees (20.5%) who reported not graduating from high school received less than a ninth grade education.
- Over half of arrestees (58.5%) who reported not graduating from high school reported receiving a tenth grade education or less.

Marital Status

Arrestees were asked to describe their “most recent marital status.”

TABLE 3.6
Most Recent Marital Status

Marital Status	Snohomish County 2006 <i>n = 577</i>	Snohomish County 2002-2003 <i>n = 566</i>
Single, Never Married	62.7%	60.6%
Divorced	16.3%	16.8%
Legally Separated	5.1%	3.9%
Widowed	0.3%	0.7%
Married*	15.6%	18.1%

* Can include common-law marriages.

- Over half of all male arrestees (62.7%) report never being married.
- Marital status of arrestees in the 2006 study was quite similar to marital status in the 2002-2003 study.
- Marital status was not independent of age.³ As shown in Table 3.7, younger arrestees were more likely to be single and older arrestees were more likely to be married and more likely to be divorced.

³ $\chi^2 = 158.6$, *df* = 8, *p* < .001

TABLE 3.7
Marital Status by Age Group in Snohomish County Arrestees (n = 575)

Marital Status	AGE			TOTAL
	18-24	25-34	35+	
Single, Never Married	26.1%	21.4%	15.2%	62.7%
Divorced	0.1%	2.5%	13.7%	16.3%
Legally Separated	0.4%	1.6%	3.1%	5.1%
Widowed	0.0%	0.3%	0.0%	0.3%
Married	1.6%	3.6%	10.3%	15.6%
TOTAL	28.2%	29.5%	42.3%	

Children

Arrestees in Snohomish County were asked to indicate the number of children for whom they had primary care responsibilities.

- Most arrestees (74.8%) reported that they did not have any children.
- Of those arrestees who did have children, the average number of children was two (M = 1.94).

Employment

Arrestees were asked to describe their current work status.

- Over half (53.8%) of arrestees indicated they had full- or part-time employment.
- Nearly one-third (29.4%) were unemployed.

TABLE 3.8
Current Work Status

Type of Work	Snohomish County 2006 n = 577	Snohomish County 2002-2003 n = 564
Full Time (>35 hours/week)	43.7%	37.3%
Part Time	10.1%	13.2%
Military Service	0.4%	0.7%
Seasonal Work Only	1.5%	2.4%
Unemployed	29.4%	34.5%
Disabled	8.8%	6.6%
All Others*	6.0%	5.3%

*Other types of employment included being on strike or involved in another form of labor dispute, retirement, full-time student, and homemaker. In Snohomish County, each of these accounted for less than 1% of total employment status.

Arrestee Income

Arrestees were asked one question about their income. They were asked to provide an estimate of their total income during the past 12 months.

- The median annual income reported among Snohomish County arrestees was \$15,000.
- Income was not independent of race.⁴ Only 12.8% of “Other” race arrestees earned more than \$30,000 – far less than White (35.8%), African-American (31.4%), or Hispanic (34.6%) arrestees.

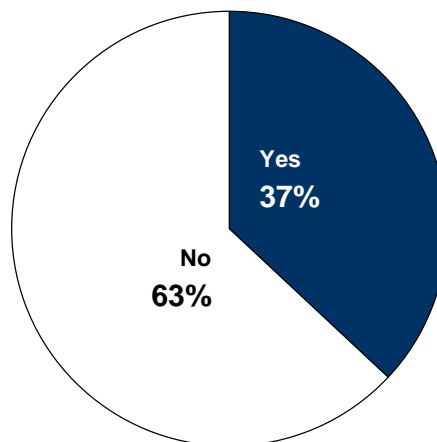
TABLE 3.9
Income Distribution of Snohomish County Arrestees by Race

Annual Income	OVERALL n = 537	Race			
		White n = 342	African American n = 59	Hispanic n = 48	Other n = 88
0 - \$14,999	46.6%	44.8%	53.5%	31.8%	56.6%
\$15,000 - \$29,000	22.0%	19.3%	15.1%	33.6%	30.6%
\$30,000 - \$59,999	23.4%	27.4%	17.2%	28.6%	9.2%
\$60,000	8.0%	8.4%	14.2%	6.0%	3.6%

Arrestee Health Coverage and Health

Arrestees were asked whether they were covered by health insurance, the source of their health coverage, and about their physical and emotional health.

FIGURE 3.3
Percent of Arrestees Reporting Current Health Insurance Coverage



- Close to 2/3 of arrestees in Snohomish County (62.9%) reported not having any health insurance coverage.
- Absence of health coverage was nearly identical to that found in the 2002-2003 study (63.1%).
- Of those arrestees with health insurance, over half received it from their employer (Table 3.10).

⁴ $\chi^2 = 30.2$, $df = 9$, $p < .001$

TABLE 3.10
Sources of Arrestee Health Insurance

Insurance Type	Snohomish County 2006 n = 213	Snohomish County 2002-2003 n = 206
Employer	52.1%	50.2%
State Government	31.3%	30.3%
Individually Purchased	4.1%	8.3%
Disability	5.3%	4.2%
Other	7.3%	6.9%

Physical and Emotional/Mental Health

Arrestees were asked to rate both their general physical and emotional health on 5-point scales (Excellent – 1, Very Good – 2, Good – 3, Fair – 4, Poor – 5).

- Average score for physical health was 2.8.
- Average score for emotional/mental health was 3.0.
- Arrestees reported significantly better physical health than emotional/mental health.⁵

TABLE 3.11
Snohomish County Arrestee Reports of General Physical and Emotional Health

	Physical n = 577	Emotional/Mental n = 575
Excellent	12.1%	12.6%
Very Good	25.0%	13.4%
Good	40.7%	41.5%
Fair	14.2%	21.7%
Poor	8.1%	10.8%

Comparison with 2002-2003 Sample

Appendix E compares the sociodemographic characteristics of the 2006 Snohomish County arrestee population with the 2002-2003 arrestee population.

- The 2006 population is less racially homogeneous than the 2002-2003 sample. In 2006, 62.0% of the population reported their race as “White.” In 2002-2003, 81.9% of the population reported their race as “White.”

⁵ $t(574) = 4.87, p < .001$

Summary of Demographic Characteristics of 2006 Snohomish County Arrestees

- Average age of arrestees was 32.6
- Majority of population was White (62.0%). “Other” race was the second largest category (17.1%).
- Approximately 3 out of 4 (74.5%) of all arrestees live in a house or apartment.
- More than two-thirds (68.4%) of arrestees had no more than a high school or GED and nearly one-third (29.2%) of all arrestees lacked any degree.
- Most arrestees never married (62.7%), and most do not care for any children (74.8%).
- More than half of arrestees (55.9%) reported being employed.
- Majority of arrestees (62.9%) do not have health coverage.



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SECTION IV

Drug Use among Male Arrestees

Information on arrestee drug use is gathered using two different sources of data: laboratory urinalysis testing and arrestee self-report.

An extensive series of questions about arrestee use of alcohol and illicit substances coupled with the urine tests allow this project to examine both recent and historical patterns of substance use.

Among other questions, arrestees were asked to indicate whether they had ever used substances (lifetime use), whether they had used substances in the past year, and whether they had used substances in the past 30 days:

- “Have you ever used any...?”
- “Did you use any _____ in the past 12 months...?”
- “Please tell me your best estimate of the number of days you used _____ during the past 30 days.”

Light and moderate alcohol consumption was **not** of interest. Instead, alcohol use focused on **binge drinking behaviors** – specifically drinking five or more drinks of alcohol (including beer, wine, or any other type of alcohol) on the same day.

Arrestees were asked specifically about five primary illicit substances. While arrestees were asked about the use of “other” substances, the majority of substance use questions focused on the primary five, including:

- **Marijuana or Hashish**
- **Crack or Rock Cocaine**
- **Powder Cocaine**
- **Heroin**
- **Methamphetamine**

Analysis of substance use among arrestees is organized by different substance types. This report presents overall rates of use as well as rates of substance use among different demographic groups. Findings for binge alcohol use are considered first, followed by findings for use of any illicit substance, multiple illicit substances, marijuana, crack cocaine, powder cocaine, heroin, methamphetamine, and “other” illicit substances.

Urinalysis Drug Testing

The Snohomish County project used an immunoassay system; EMIT (Enzyme Multiplied Immunoassay Testing), to screen for the presence of drugs in urine.⁶ EMIT tests have been shown to be one of the most consistently accurate drug testing methods, with greater than 95% accuracy and specificity for most drugs.

An immunoassay is a test that uses antibodies to detect the presence of drugs and other substances in urine. Each immunoassay is designed to detect one particular drug or drug class. In some cases, the EMIT assay detects the drug itself, while in other cases the assay detects the metabolites of the drug. Metabolites are compounds that result from the breakdown of a drug by the body. This is an important distinction to note. For example, there is no specific EMIT assay for heroin. Instead, EMIT detects metabolites common to heroin and other opiates, including codeine. This means that EMIT is general to the opiate group and not specific to heroin.

Drug testing conducted in this project represents a proximal measure of use for most substances. In general, substances must have been used within the past week to be detected. The primary exception to this is in the case of marijuana where the detection period can range up to a month among heavy, chronic users.

- **NOTE:** A positive urine test does **not** mean the arrestee was under the influence at the time of arrest or when committing a crime, only that he had used the substance recently.

TABLE 4.1

Cutoff Values and Detection Period for NIDA-5 Drugs

Drug	Cutoff Value	Typical Detection Period
Marijuana	50 ng/ml	2-4 days 7+ days for frequent user
Cocaine	300 ng/ml	2-3 days
Opiates	300 ng/ml	2-3 days
PCP	25 ng/ml	3-8 days
Methamphetamine	500 ng/ml	2-4 days

TABLE 4.2

Cutoff Values and Detection Period for Other Drugs Tested

Drug	Cutoff Value	Typical Detection Period
Amphetamines	1000 ng/ml	2-4 days
Barbiturates	200 ng/ml	3 days
Benzodiazepines	200 ng/ml	Up to 14 days
Methadone	300 ng/ml	2-4 days
Methaqualone	300 ng/ml	Up to 10 days

NOTE: Detection periods vary; rates of metabolism and excretion are different for each drug and user. Detection periods should be viewed as estimates.

- **Appendix F** contains a brief description of each of these drug types and, in the instance of drug class, lists the drugs that will result in a positive screen.

⁶ All samples were sent to Sterling Reference Laboratories, 624 Martin Luther King Jr. Way, Tacoma, WA 98405.

Substance Use in Past 30 Days

The SCASA survey differs from the ADAM questionnaire in how substance use during the past 30 days is determined. ADAM asks all arrestees to indicate whether or not they have used substances in the past 30 days. The computerized interview used in the SCASA Study does not ask about monthly use of substances when arrestees deny using them during the past year. Arrestees who denied use during the past year were also coded as not using the substance during the past 30 days. Those arrestees who report using a substance during the past year are asked to describe the number of days out of the past 30 that they have used that substance. Any reports of one day or more were coded as positive for use in the past 30 days.

Substance Use in Past Year

Substance use in the past month was elicited by questions asking whether arrestees had used specific substances within the past 12 months. Arrestees were further given an “anchor” month (“that is between now and _____”) to help define the boundary of 12 months for the arrestee.

Lifetime Use of Substances

Lifetime use was elicited by questions asking whether arrestees had **ever** used specific substances.

Using Urinalysis Results to Test Validity of Self-Reports

Results of urinalysis tests were used to validate arrestee self-reports of drug use. **Generally, arrestee reports of drug use appear valid.**

One problem, of course, with using self-reports of drug use behavior is that arrestees may not be telling the truth about their use. Pressures to deny use may be particularly high for arrestees given that they have recently been arrested. Despite reassurances of confidentiality, arrestees may be fearful that admitting to illicit drug use may further complicate their legal difficulties.

It is possible to use results from urinalysis tests to provide a test of the validity of arrestee reports of drug use behaviors. Although not perfect, this test can be accomplished by looking at positive test results and comparing these with responses given by arrestees.

The relative short nature of the drug detection periods means that, in order to be detected, a substance would have to have been used in the past 30 days. By examining the self-reports of past 30-day use among those who tested positive for substances, the number of arrestees that were being truthful can be approximated.

TABLE 4.3

Percent of Arrestees in Snohomish County Who Tested Positive for Substance and Reported Using that Substance in Past 30 Days

Substance	% Agreement
Marijuana (N = 208)	91.4
Cocaine (N = 127)	74.8
Methamphetamine (N = 143)	84.6
Heroin (N = 43)	48.8

- Generally, agreement between self-report and UA results were quite high.
- The highest agreement between self-report and UA results was for marijuana (91.4%). Agreement between self-report and UA results for methamphetamine was similarly high (84.6%).
- Approximately 3/4 of the arrestees (74.8%) who tested positive for cocaine admitted to its use in the past 30 days. As the EMIT test cannot discriminate between crack and powder forms of cocaine this cannot be broken down further.
- The lowest agreement between self-report and UA results was for heroin. As seen in Table 4.3, less than half of those who tested positive for opiates reported using heroin in the past 30 days. This result should be interpreted with caution as the drug screen was not specific for heroin and arrestees could have tested positive for another, non-heroin, opiate (e.g., morphine).
- There are a couple of limitations to this validity check that should be noted.
 - UA results cannot be used to check self-reports of behaviors over longer periods of time. It is reasonable, however, to assume that arrestees would be less likely to admit illegal behaviors committed more recently than to deny more distal substance use.
 - Another limitation is that this test cannot address whether arrestees falsely report substance use. Here, the brief detection period of the various substance works against validation. It is possible that arrestees used a substance within the past 30 days but not within the detection period.

Results of Arrestee Substance Use

Table 4.4 presents overall UA results in a single table. Table 4.5 presents lifetime, past year, and past 30 day use of illicit substances. Tables 4.6 through 4.13 describe the percentage of arrestees who used alcohol and other, illicit, substances by demographic group. These percentages are listed alongside rates found in the previous, 2002-2003 survey. As some categories of demographic groups were quite small, some of the categories of demographic variables were collapsed or excluded in these analyses. The changes made to the demographic variables are:

- **Marital Status:** This variable was reduced to three categories. Divorced and legally separated were combined to form one category. Single, never been married, and married made up the other two categories. Those arrestees who indicated they were widowed were excluded from these analyses.
- **Residence Type:** This variable was collapsed to include just the two largest categories—house/apartment and homeless. Arrestees indicating any other form of residence were excluded from these analyses.
- **Employment Status:** This variable was collapsed to form just two categories—employed and unemployed. Arrestees indicating that they were employed full-time, part-time, or serving in the military were coded as employed. Those arrestees who indicated they were unemployed and looking for work, unemployed and not looking for work, disabled from work, or worked seasonal work only (but currently were not working) were all coded as unemployed. All other arrestees were excluded from these analyses.

Urinalysis Results

Table 4.4 presents urinalysis results by type of substance from the 2006 SCASA-II study. This table also presents 2002-2003 results, indicating where there has been a statistically significant change in the rates.

- The percentage of arrestees testing positive for any illicit drug (74.8%) is significantly higher than what was found in 2002-2003 (63.1%).
- The percentage of arrestees testing positive for cocaine (27.3%) is significantly higher than what was found in 2002-2003 (18.7%).

TABLE 4.4
Percent of Arrestees Testing Positive for Illicit Substances by Survey Year

Substance	Snohomish County 2006	Snohomish County 2002-2003
Any Illicit Drug	74.8*	63.1
Multiple Illicit Drugs	28.3	31.6
Marijuana	36.1	39.9
Cocaine	27.3*	18.7
Opiates	8.8	9.9
Oxycodone	4.6	NA
Methadone	3.9	1.4
Amphetamines	28.4	21.7
Methamphetamine	24.8	19.5
Barbiturates	1.0	0.2
Benzodiazepines	3.9	2.5
PCP	0.0	0.3
Propoxophene	0.5	1.2

* Between study differences statistically significant at $p < .05$.

Self Reports of Drug Use

Table 4.5 presents arrestee self-report of drug use by type of substance and recency of use. Rates from the 2006 SCASA-II study are compared with 2002-2003 results.

Generally, overall use of illicit substances is up from 2002-2003 levels for all substances except for heroin.

These increases were statistically significant for several substances:

- Reported use of multiple illicit substances increased significantly for lifetime (73.5%) and past 30 day use (35.6%).
- Reported use of crack cocaine during the past 12 months (27.0%) and past 30 days (20.7%) was significantly higher than 2002-2003 levels.
- Reported lifetime use of powder cocaine (62.9%) was significantly higher than 2002-2003 rates.
- Reported use of methamphetamine increased significantly for lifetime (56.6%) and past year (36.2%) compared to 2002-2003 levels.

TABLE 4.5
Percent of Arrestees Reporting Illicit Drug Use by Substance Type and Year

Substance	Snohomish County 2006	Snohomish County 2002-2003
Binge Alcohol*		
Lifetime	88.3	90.7
Past 12 Months	62.6	63.8
Past 30 Days	52.2	52.6
Any Illicit Drug		
Lifetime	92.0	89.3
Past 12 Months	75.8	67.5
Past 30 Days	68.0	59.1
Multiple Illicit Drugs		
Lifetime	73.5*	63.8
Past 12 Months	45.9	36.5
Past 30 Days	35.6*	24.7
Marijuana		
Lifetime	89.1	87.6
Past 12 Months	59.5	55.6
Past 30 Days	52.3	47.3
Crack Cocaine		
Lifetime	47.3	40.4
Past 12 Months	27.0*	18.7
Past 30 Days	20.7*	11.3
Powder Cocaine		
Lifetime	62.9*	52.8
Past 12 Months	25.3	21.6
Past 30 Days	17.1	11.3
Heroin		
Lifetime	23.5	22.5
Past 12 Months	9.4	10.9
Past 30 Days	6.8	8.1
Methamphetamine		
Lifetime	56.6*	45.4
Past 12 Months	36.2*	26.5
Past 30 Days	28.9	21.7

*Binge alcohol defined as 5+ drinks on same day. *Between study differences statistically significant at $p < .05$.

Alcohol

Table 4.6 presents a comprehensive account of binge drinking among Snohomish County arrestees. In addition to describing overall rates of alcohol use, this table also describes alcohol use across different demographic groups. The 2002-2003 SCASA data are also presented for comparison.

Below is a summary of the key findings in this table:

- **Over 1/2 of arrestees (52.2%)** reported consuming 5 or more drinks of alcohol on the same day **during the past month**.
- **Approximately 6 out of 10 arrestees (62.6%)** reported consuming 5 or more drinks of alcohol on the same day **during the past 12 months**.
- **Approximately 9 out of 10 arrestees (88.3%)** indicated they had ever drunk 5 or more drinks of alcohol on the same day.

The 2006 overall rates of binge alcohol use did not differ significantly from the 2002-2003 results.

Age

- Rates of binge alcohol use did not differ significantly from the 2002-2003 rates for any of the three age groups.
- Arrestee age was negatively correlated with binge alcohol use during the past 30 days⁷ and during the past year.⁸ That is, **older arrestees were less likely to binge drink than were younger arrestees during either the past month or the past year**. There was no association between age of arrestee and lifetime binge alcohol use.
- This pattern is consistent with the 2002-2003 results.

Race

- Rates of binge alcohol use did not differ significantly from the 2002-2003 rates for any of the four race categories.
- Reports of **lifetime** binge drinking are significantly different among racial groups.⁹ Specifically, Black arrestees were less likely to report lifetime binge drinking than were the other three race categories.

Education

- Arrestee reports of consuming 5 or more drinks on the same day were independent of level of education. This finding was consistent regardless of the time frame of the self-report.
- Arrestee reports of binge alcohol use did not differ by education level from the 2002-2003 rates.

Marital Status

- Arrestee reports of consuming 5 or more drinks in the past year were did not differ significantly between marital status groups.
- Arrestee reports of binge alcohol use did not differ by marital status from the 2002-2003 rates.

⁷ $r = -.10, p < .05$

⁸ $r = -.13, p < .01$

⁹ $\chi^2(3, N = 576) = 17.74, p < .001$

Residence Type

- Binge alcohol use did not differ significantly by housing status.
- Arrestee reports of binge alcohol use did not differ by housing status from the 2002-2003 rates.

Employment Status

- Binge alcohol use did not differ significantly by employment status.
- Arrestee reports of binge alcohol use did not differ by employment status from the 2002-2003 rates.

Income

- Arrestee reports of binge alcohol use **during the past year** was associated with arrestee income.¹⁰ Specifically, arrestees reporting making \$60,000+ reported the lowest levels of binge alcohol use during the past year compared with other income groups.
- Similarly, arrestee reports of **lifetime** binge alcohol use were associated with income level.¹¹ Specifically, arrestees making less than \$15,000 reported the lowest rates of lifetime binge alcohol use.
- Binge alcohol use did not differ from 2002-2003 rates for any of the income groups.

Any Illicit Substance

Table 4.7 presents a comprehensive account of any illicit substance use among Snohomish County arrestees. In addition to describing overall rates of use, this table also describes any illicit substance use across different demographic groups. The 2002-2003 SCASA data are also presented for comparison.

Below is a summary of the findings in this table:

- Almost **3/4 of arrestees** (74.8%) in the Snohomish County jail tested positive for an illicit substance.
 - **Testing positive for any substances was significantly higher than the 2002-2003 rates.** One explanation for at least a portion of this increase is that the current survey tested for Oxycodone whereas the 2002-2003 survey did not.
- Over **2/3 of all arrestees** (68.0%) reported using an illicit substance **during the past 30 days**.
- Over **3/4 of arrestees** (75.8%) reported using an illicit substance **in the past 12 months**.
- Over **90% of arrestees** (92.0%) reported **ever using an illicit substance**.

¹⁰ $\chi^2(3, N = 537) = 9.56, p < .05$

¹¹ $\chi^2(3, N = 510) = 11.49, p < .01$

TABLE 4.6
Percent of Arrestees Using Alcohol by Demographic Groups,
Reporting Period, and Date of Survey

	Past 30 Days		Past Year		Lifetime	
	2006	2002-2003	2006	2002-2003	2006	2002-2003
OVERALL USE	52.2	52.6	62.6	63.8	88.3	90.7
Age						
18-24	58.0	53.0	71.7	69.2	88.3	84.3
25-34	52.1	54.2	62.1	64.9	88.3	91.0
35+	48.4	51.1	56.9	58.5	88.3	95.5
Race						
White	52.8	53.8	62.8	64.8	91.2	92.9
Black	40.8	40.8	52.1	53.3	73.2	76.8
Hispanic	56.4	53.1	71.2	61.7	85.9	79.9
Other	55.0	51.3	64.0	65.6	89.4	85.3
Education						
No Degree	52.4	52.8	69.7	62.9	91.0	86.0
HS/GED	55.6	54.4	61.1	65.7	87.5	91.0
Voc./Trade School	50.4	52.2	57.0	64.2	96.9	96.2
Some College	49.7	51.4	61.2	63.3	84.4	93.1
4 Year Degree +	28.3	41.3	37.9	51.9	78.3	88.6
Marital Status						
Single	55.0	54.2	66.1	68.3	90.2	90.2
Divorced/Separated	43.1	52.8	57.8	58.8	85.6	95.4
Married	53.1	45.5	55.2	52.9	84.2	86.5
Residence Type						
House/Apartment	53.5	50.9	63.5	62.1	88.1	89.8
Homeless	48.7	63.0	61.5	66.3	91.3	95.4
Employment Status						
Employed	54.6	53.5	64.8	63.0	89.8	89.6
Unemployed	50.3	52.4	60.5	64.9	86.9	91.4
Annual Income						
\$0 to \$14,999	49.9	48.4	61.4	61.3	83.6	87.4
\$15,000 - \$29,999	62.3	59.8	72.6	69.3	92.6	92.0
\$30,000-\$59,999	52.3	55.5	61.5	64.7	90.4	95.0
\$60,000+	43.5	50.8	47.3	54.3	97.4	97.5

Alcohol use not tested for with urinalysis assay.
 *Between study differences statistically significant at p < .05.

Age

- Rates of any illicit drug use were significantly higher among older arrestees (35+ years) compared to 2002-2003 rates. This increase was significant for positive urinalysis results, past 30 day use, and past 12 month use. Lifetime use did not significantly increase.
- Arrestee age was not significantly correlated with any illicit drug use.

Race

- Any illicit drug use during the **past 30 days and past year increased significantly among White arrestees** compared with 2002-2003 rates.
- Any illicit drug use during the past 30 days was associated with race.¹² Use of any illicit substance appeared to be largely independent of racial group in the Snohomish County sample. Here, 30 day use was highest among White arrestees (71.7%) and lowest among Hispanic arrestees (49.5%).
- Similarly, any illicit drug use during the past 12 months was associated with race.¹³ Again, use was highest among White arrestees (80.3%) and lowest among Hispanic arrestees (64.1%).
- Lifetime use of any illicit drug was also associated with race.¹⁴ Lifetime use was higher among White arrestees (95.8%) compared with other race categories.

Education

- Arrestee reports of any illicit drug use did not differ by education level from the 2002-2003 rates.
- Positive **urinalysis results were dependent on education level.**¹⁵ That is, positive results differed by levels of education. Those arrestees reporting they had a college education were less likely to test positive for any illicit substance compared to arrestees with other levels of education.
- Similarly, **education level was dependent upon self-reports of any illicit substance use** in both the past 30 days and during the past year.

Marital Status

- Arrestee reports of any illicit drug use did not differ by marital status from the 2002-2003 rates.
- Testing positive for any illicit substance was **not** associated with marital status.
- Self-reports of any illicit substance was associated with marital status for past 30 day use, past year use, and lifetime use. In each of these, the lowest rate of use was reported among married arrestees.

Residence Type

- Rates of any illicit drug use did not differ by housing status from the 2002-2003 rates.
- Testing positive for any illicit drug was associated with housing status.¹⁶ Specifically, homeless arrestees were more likely to test positive for an illicit drug compared to arrestees living in a house or apartment.
- Similarly, homeless arrestees were more likely to report using an illicit drug during the past 30 days, during the past year, and during their lifetime compared to arrestees living in a house or apartment.

¹² $\chi^2(3, N = 576) = 11.12, p < .05$

¹³ $\chi^2(3, N = 576) = 11.46, p < .01$

¹⁴ $\chi^2(3, N = 576) = 18.17, p < .01$

¹⁵ $\chi^2(4, N = 535) = 17.92, p < .01$

¹⁶ $\chi^2(1, N = 491) = 5.56, p < .05$

TABLE 4.7
Percent of Arrestees Using Any Illicit Substance by Demographic Groups,
Reporting Period, and Date of Survey

	Urine		Past 30 Days		Past Year		Lifetime	
	2006	2002-03	2006	2002-03	2006	2002-03	2006	2002-03
OVERALL USE	74.8*	63.1	68.0	59.1	75.8	67.5	92.0	89.3
Age								
18-24	72.8	72.7	72.5	70.9	80.0	78.8	92.8	91.3
25-34	63.3	62.3	64.9	59.5	71.3	69.0	91.0	88.8
35+	71.2*	55.9	67.2*	49.2	76.1*	57.1	92.2	88.1
Race								
White	72.4	63.4	71.7*	59.7	80.3*	68.5	95.8	91.1
Black	69.6	62.8	66.3	56.4	68.0	64.4	85.9	84.3
Hispanic	61.0	53.3	49.5	50.3	64.1	54.6	84.7	68.4
Other	63.0	68.7	66.1	61.3	71.1	67.6	86.5	89.0
Education								
No Degree	72.6	70.2	72.0	73.2	79.2	77.7	90.8	91.3
HS/GED	72.8	65.4	71.2	61.1	80.9	71.7	95.4	92.3
Voc./Trade School	58.9	64.7	65.9	52.8	67.4	57.0	87.7	89.1
Some College	67.7	54.4	62.6	47.4	71.1	54.7	90.8	83.5
4 Year Degree +	30.4	37.6	29.3	29.4	29.3	54.1	79.3	76.4
Marital Status								
Single	71.6	68.7	71.0	66.0	87.8	73.7	94.0	90.8
Divorced/Separated	67.1	55.0	69.8	50.5	77.5	60.5	90.3	89.1
Married	63.3	52.0	52.3	45.4	60.5	53.4	86.3	84.1
Residence Type								
House/Apartment	66.6	62.8	63.5	57.0	71.5	66.0	90.7	88.4
Homeless	77.2	79.0	82.1	78.2	88.4	79.4	97.1	100.0
Employment Status								
Employed	64.6	58.9	61.3	51.3	69.7	60.8	90.1	85.9
Unemployed	75.0	68.3	77.3	67.6	83.5	74.3	94.7	92.5
Annual Income								
\$0 to \$14,999	72.6	62.0	76.9	66.7	84.3*	71.7	94.6	90.5
\$15,000 - \$29,999	64.8	67.2	63.4	59.1	69.3	69.5	87.1	90.1
\$30,000-\$59,999	71.4	64.0	63.4	51.9	72.6	61.5	92.8	88.1
\$60,000+	59.8	48.9	54.6	40.1	59.4	50.6	82.2	86.5

In order to be detected in urinalysis assay, most substances must have been used within past week.
 *Between study differences statistically significant at $p < .05$.

Employment Status

- Rates of any illicit drug use did not differ by employment status from the 2002-2003 rates.
- A significantly higher percentage of unemployed arrestees tested positive for an illicit drug compared with those arrestees who were employed.¹⁷

¹⁷ $\chi^2(1, N = 519) = 7.04, p < .01$

- Similarly, a significantly higher percentage of unemployed arrestees reported using an illicit drug during the past 30 days, during the past year, and during their lifetime compared to employed arrestees.

Income

- Any illicit drug use during the past year increased significantly from 2002-2003 rates among arrestees making less than \$15,000 during the past year.
- Testing positive for an illicit drug was not associated with income group.
- Arrestee reports of using any illicit substance **during the past 30 days**¹⁸ and **during the past year**¹⁹ were associated with income level. In each of these cases, substance use was lowest among arrestees who made \$60,000 or more during the past year.

Multiple Illicit Substances

Table 4.8 presents a comprehensive account of multiple illicit substance use among Snohomish County arrestees. In addition to describing overall rates of use, this table also describes multiple illicit substance use across different demographic groups. The 2002-2003 SCASA data are also presented for comparison.

Below is a summary of the findings in this table:

- Nearly **3 out of 10 arrestees (28.3%) tested positive for more than one substance.**
- Overall use of multiple illicit drugs was not significantly different than 2002-2003 rates.
- **More than 1 out of 3 arrestees (35.6%) reported using more than one illicit substance during the past 30 days.**
- **Nearly half (45.9%) of arrestees reported using multiple illicit substances during the past 12 months.**
- **Almost 3 out of 4 (73.5%) arrestees reported ever using multiple illicit substances.**

Age

- A significantly **higher percentage of arrestees aged 35+ reported using multiple illicit drugs** during the past 30 days, during the past year, and during their lifetime compared to 2002-2003 arrestees.
- **Age was positively correlated with lifetime use** of multiple illicit drugs.²⁰ That is, older arrestees were more likely to report using multiple illicit drugs than were younger arrestees.

Race

- **White arrestees reported significantly higher 30 day use** of multiple illicit drugs (36.5%) and higher lifetime use of multiple illicit drugs (79.2%) compared with 2002-2003 white arrestees.

¹⁸ $\chi^2(3, N = 537) = 15.02, p < .01$

¹⁹ $\chi^2(3, N = 537) = 19.97, p < .01$

²⁰ $r = .15, p < .01$

- Lifetime reports of using multiple substances was dependent upon race.²¹ **White arrestees were more likely to report ever using multiple substances** than were other arrestees.

Education

- **Past 30 day use** of multiple illicit drugs was **significantly higher among arrestees with “some college” education** (40.5%) compared to 2002-2003 arrestees.
- Lifetime use of multiple illicit drugs was significantly higher among arrestees with a high school or GED (75.2%) compared to 2002-2003 arrestees.
- Use of multiple illicit drugs was not associated with level of education.

Marital Status

- Single arrestees reported significantly higher use of multiple illicit drugs both during the past 30 days (35.9%) and during their lifetime (71.2%) compared to 2002-2003 rates.
- Use of multiple illicit drugs was not associated with marital status.

Residence Type

- Use of multiple illicit drugs was **not** significantly different from 2002-2003 rates by housing status.
- **Homeless arrestees reported significantly higher rates** of past 30 day, past 12 month, and lifetime use of multiple illicit drugs compared with arrestees living in a house or apartment.
- Testing positive for multiple substances was not associated with housing status.

Employment Status

- A significantly higher percentage of unemployed arrestees reported using drugs during the past 30 days (48.6%) compared to 2002-2003.
- Unemployed arrestees were more likely to test positive for multiple illicit drugs than were arrestees who were employed.
- Similarly, unemployed arrestees were more likely to report using multiple illicit drugs during the past 30 days, during the past year, and during their lifetime compared with employed arrestees.

Income

- Arrestees making less than \$15,000 during the past year reported higher past 30 day use of multiple illicit drugs (42.2%) and higher lifetime use of multiple illicit drugs (78.0%) compared with arrestees in 2002-2003.
- Past 30 day, past year, and lifetime use of multiple illicit drugs were all associated with arrestee income. Generally, lower-income arrestees reported higher rates of multiple illicit drug use.

²¹ $\chi^2(3, N = 576) = 15.99, p < .01$

TABLE 4.8
Percent of Arrestees Using Multiple Illicit Substances by Demographic
Groups, Reporting Period, and Date of Survey

	Urine		Past 30 Days		Past Year		Lifetime	
	2006	2002-03	2006	2002-03	2006	2002-03	2006	2002-03
OVERALL USE	74.8*	63.1	68.0	59.1	75.8	67.5	92.0	89.3
Age								
18-24	28.9	31.2	32.0	24.2	44.8	36.5	63.8	51.0
25-34	23.8	36.1	35.5	26.0	45.8	42.6	68.8	68.3
35+	26.2	27.9	38.0*	24.0	46.6*	31.3	83.3*	70.1
Race								
White	27.7	34.0	36.5*	26.6	48.5	39.4	79.2*	68.0
Black	29.7	20.0	41.6	16.2	46.5	24.8	66.6	40.9
Hispanic	21.8	15.7	24.0	11.4	30.7	17.1	60.2	40.8
Other	21.1	25.5	34.7	20.2	44.2	27.7	65.2	54.1
Education								
No Degree	28.0	32.7	36.2	33.3	49.3	44.2	72.6	66.2
HS/GED	26.8	35.2	35.7	23.8	45.3	36.6	75.2*	62.0
Voc./Trade School	17.0	38.0	30.7	26.9	39.9	37.3	79.2	75.6
Some College	29.0	21.9	40.5*	18.5	48.0	31.4	72.9	61.1
4 Year Degree +	79.3	16.0	6.6	9.8	19.8	15.5	51.1	55.4
Marital Status								
Single	28.4	34.4	35.9*	25.7	46.8	38.9	71.2*	60.8
Divorced/Separated	24.1	27.5	40.4	27.1	49.8	39.1	78.3	77.3
Married	20.3	24.1	27.9	19.1	37.2	25.7	75.4	60.8
Residence Type								
House/Apartment	23.9	30.9	30.0	22.4	36.6	32.8	70.0	61.5
Homeless	32.6	47.6	56.6	45.5	66.3	61.8	84.7	92.1
Employment Status								
Employed	20.2	28.4	24.3	17.7	35.8	28.9	66.4	56.0
Unemployed	32.1	35.1	48.6*	33.1	57.3	44.7	81.6	71.8
Annual Income								
\$0 to \$14,999	30.6	31.2	42.2*	27.9	53.1	40.0	78.0*	65.0
\$15,000 - \$29,999	19.9	29.3	32.2	18.8	43.3	33.4	62.9	58.8
\$30,000-\$59,999	24.4	33.7	27.3	28.7	34.8	37.5	73.2	74.0
\$60,000+	25.8	37.5	30.9	25.5	45.2	28.6	82.0	64.6

In order to be detected in urinalysis assay, most substances must have been used within past week.
 *Between study differences statistically significant at $p < .05$.

Marijuana

Table 4.9 presents a comprehensive account of marijuana use among Snohomish County arrestees. In addition to describing overall rates of use, this table also describes marijuana use across different demographic groups. The 2002-2003 SCASA data are also presented for comparison.

Below is a summary of the findings in this table:

- **More than 1 out of 3** (36.1%) of all arrestees **tested positive** for marijuana.
- **Over half** (52.3%) of all arrestees reported using marijuana in the **past 30 days**.
- **Nearly 6 out of 10** (59.5%) arrestees reported using marijuana in the **past 12 months**.
- **Nearly 9 out of 10** arrestees (89.1%) reported **lifetime use** of marijuana.

Age

- **Age was negatively correlated** with testing positive for marijuana,²² past 30 day marijuana use,²³ and past year marijuana use.²⁴ That is, younger arrestees were more likely to report using marijuana than were older arrestees. (NOTE: No correlation was found between age of arrestee and lifetime use of marijuana.)
- Rates of marijuana use did **not** differ significantly from the 2002-2003 rates for any of the three age groups.

Race

- Use of marijuana was largely independent of arrestee race. The only exception is in reports of lifetime use. Reports of **lifetime marijuana use** are significantly different between racial groups.²⁵ White arrestees (92.9%) reported higher lifetime marijuana use than did other arrestees.
- Rates of marijuana use did **not** differ significantly from the 2002-2003 rates for any of the four race groups.

Education

- Rates of marijuana use did not differ significantly from the 2002-2003 rates by level of education.
- Past 30 day use of marijuana²⁶ and past year use of marijuana²⁷ were both associated with arrestee education. In both cases, arrestees with a college degree were less likely to use marijuana.

Marital Status

- Testing positive for marijuana, past 30 day marijuana use, and past year use of marijuana were all associated with marital status. Consistently, single arrestees reported higher rates of marijuana use compared with other arrestees.
- Rates of marijuana use did not differ significantly from the 2002-2003 rates by marital status.

²² $r = -.22, p < .001$

²³ $r = -.19, p < .001$

²⁴ $r = -.20, p < .001$

²⁵ $\chi^2(3, N = 575) = 13.87, p < .01$

²⁶ $\chi^2(3, N = 574) = 15.09, p < .01$

²⁷ $\chi^2(3, N = 575) = 23.67, p < .01$

TABLE 4.9
Percent of Arrestees Using Marijuana by Demographic Groups, Reporting Period, and Date of Survey

	Urine		Past 30 Days		Past Year		Lifetime	
	2006	2002-03	2006	2002-03	2006	2002-03	2006	2002-03
OVERALL USE	36.1	39.9	52.3	47.3	59.5	55.6	89.1	87.6
Age								
18-24	55.5	56.5	66.2	64.3	72.9	74.4	92.0	91.3
25-34	29.6	40.9	52.1	47.0	61.4	55.9	86.8	86.3
35+	27.3	25.4	43.3	34.0	49.4	40.2	88.9	85.6
Race								
White	36.7	39.3	52.8	47.3	60.9	55.9	92.9	89.4
Black	23.8	46.4	51.7	49.7	56.8	57.7	82.6	84.3
Hispanic	42.9	31.4	42.7	37.5	53.2	44.6	81.4	63.0
Other	38.5	47.7	56.2	53.6	60.1	57.9	84.2	87.4
Education								
No Degree	39.2	51.2	57.6	62.1	63.4	68.0	88.5	89.6
HS/GED	37.9	40.6	55.9	49.4	65.5	59.3	92.1	89.3
Voc./Trade School	23.2	40.6	38.3	39.8	40.4	49.7	85.2	89.1
Some College	34.8	31.1	48.2	36.9	55.9	42.5	88.1	84.0
4 Year Degree +	14.1	10.1	18.7	9.8	18.7	24.7	73.8	71.5
Marital Status								
Single	40.4	47.3	57.2	54.3	64.3	63.0	91.0	89.9
Divorced/Separated	28.4	25.8	49.1	36.9	57.6	45.8	86.5	86.8
Married	27.7	29.7	38.0	34.9	44.2	40.3	85.1	80.2
Residence Type								
House/Apartment	36.0	41.2	49.0	46.7	56.7	54.8	87.9	86.4
Homeless	36.1	44.6	64.6	55.1	69.1	63.9	94.7*	100.0
Employment Status								
Employed	33.9	39.8	46.8	43.2	54.5	52.7	88.0	84.4
Unemployed	36.9	40.3	58.9	52.7	65.7	59.2	90.8	90.4
Annual Income								
\$0 to \$14,999	38.8	38.8	58.4	49.3	65.5	54.6	91.8	87.9
\$15,000 - \$29,999	34.1	44.9	54.6	48.5	60.0	61.8	85.1	88.6
\$30,000-\$59,999	35.7	37.8	46.7	47.8	55.6	51.8	90.8	86.6
\$60,000+	26.9	24.5	31.3	30.0	41.3	36.9	87.2	89.7

In the case of heavy use, marijuana use may be detected for a period of up to one month.
 *Between study differences statistically significant at $p < .05$.

Residence Type

- Homeless arrestees were more likely to use marijuana during the past 30 days, during the past year, and during their lifetime compared with arrestees who lived in a house or apartment.

- Rates of marijuana use did not differ significantly from the 2002-2003 rates by housing status except for lifetime use among homeless arrestees. In 2002-2003 100% of homeless arrestees reported having used marijuana and in the present study only 94.7% of homeless arrestees reported lifetime use of marijuana.

Employment Status

- Unemployed arrestees were more likely to use marijuana during the past 30 days and during the past year compared with employed arrestees.
- Rates of marijuana use did not differ significantly from the 2002-2003 rates by employment status.

Income

- Past 30 day use²⁸ and past year use²⁹ of marijuana were both associated with arrestee income. In both cases, arrestees making \$60,000 or more during the past year were less likely to report using marijuana compared with other arrestees.

Crack Cocaine

Table 4.10 presents a comprehensive account of crack cocaine use among Snohomish County arrestees. In addition to describing overall rates of use, this table also describes crack use across different demographic groups. Results of urine tests for cocaine can be found in the next section on Powder Cocaine. The 2002-2003 SCASA data are also presented for comparison.

Below is a summary and discussion of the findings in this table:

- **Over 1 in 5 (20.7%)** of all arrestees reported using crack cocaine **during the past 30 days**.
- **More than 1 in 4 (27.0%)** of all arrestees reported using crack **during the past 12 months**.
- **Lifetime use** of crack cocaine was reported by near half (47.3%) of all arrestees.

Age

- Arrestee age was positively correlated with past 30 day use³⁰, past year use³¹, and lifetime use of crack cocaine.³² That is, **older arrestees were more likely to use crack cocaine than were younger arrestees**.
- Past 30 day, past year, and lifetime use of crack cocaine all **increased among arrestees aged 35+** compared with 2002-2003 rates.

²⁸ $\chi^2(3, N = 535) = 13.13, p < .01$

²⁹ $\chi^2(3, N = 536) = 10.48, p < .05$

³⁰ $r = .22, p < .001$

³¹ $r = .24, p < .001$

³² $r = .26, p < .001$

Race

- Crack cocaine use was largely **not** associated with arrestee race. One exception was in the case of lifetime crack cocaine use.³³ **White arrestees were more likely to report ever using** crack cocaine compared to arrestees from all other racial groups.
- Reports of **lifetime** crack cocaine use are lowest among Hispanics (31.5%).
- Past 30 day, past year, and lifetime use of **crack cocaine increased among White arrestees** compared to 2002-2003 rates.

Education

- Crack cocaine use was **not** associated with level of education.
- Past 30 day use among arrestees with a high school degree or GED increased significantly from the 2002-2003 rates.

Marital Status

- Past year³⁴ and lifetime use³⁵ of crack cocaine were associated with marital status. In each case, **use was highest among arrestees that were divorced/separated.**
- Past 30 day use of crack cocaine was significantly higher among single arrestees compared with 2002-2003 rates.

Residence Type

- Crack cocaine use was significantly **higher among homeless arrestees** than arrestees living in a house or apartment. This result held for past 30 day use, past year use, and lifetime use.
- Rates of crack cocaine use did **not** differ significantly from the 2002-2003 rates by residence type.

Employment Status

- Crack cocaine use was significantly **higher among unemployed arrestees** compared to employed arrestees. This result held for past 30 day use, past year use, and lifetime use.
- Past 30 day crack cocaine use increased significantly among employed and unemployed arrestees compared with 2002-2003 rates.

Income

- Past 30 day, past year, and lifetime crack cocaine use were all associated with arrestee income. In each case, crack cocaine use was highest among arrestees who reported making less than \$15,000 during the past year.
- Past 30 day and past year crack cocaine use increased among arrestees making less than \$15,000 compared with 2002-2003 rates.

³³ $\chi^2(3, N = 576) = 14.48, p < .01$

³⁴ $\chi^2(2, N = 573) = 8.01, p < .05$

³⁵ $\chi^2(2, N = 573) = 8.68, p < .05$

TABLE 4.10
Percent of Arrestees Using Crack Cocaine by Demographic Groups,
Reporting Period, and Date of Survey

	Past 30 Days		Past Year		Lifetime	
	2006	2002-2003	2006	2002-2003	2006	2002-2003
OVERALL USE	20.7	11.3	27.0	18.7	47.3	40.4
Age						
18-24	8.5	6.4	14.4	12.7	30.1	24.8
25-34	15.0	8.9	17.3	20.4	38.0	45.6
35+	32.7*	17.3	42.2*	22.3	65.1*	48.5
Race						
White	20.7*	11.1	28.9*	19.6	53.2*	43.1
Black	27.1	15.9	31.1	20.0	38.2	31.8
Hispanic	13.6	4.2	17.5	4.2	31.5	15.3
Other	20.4	14.2	23.0	18.1	40.5	34.6
Education						
No Degree	17.9	13.0	26.1	22.3	48.1	43.0
HS/GED	22.6*	10.9	27.3	17.8	48.6	38.3
Voc./Trade School	28.0	17.2	32.0	27.3	53.4	59.0
Some College	19.7	7.2	26.5	13.9	44.6	38.1
4 Year Degree +	10.6	9.8	23.8	9.8	23.8	9.8
Marital Status						
Single	18.9*	10.1	23.7	18.5	43.0	37.3
Divorced/Separated	27.8	19.2	36.7	26.0	58.3	53.6
Married	16.5	6.7	25.7	12.3	48.6	35.8
Residence Type						
House/Apartment	15.8	10.4	21.1	16.5	40.8	37.8
Homeless	35.6	17.6	43.9	39.3	66.5	63.0
Employment Status						
Employed	14.9*	6.7	19.9	12.9	39.0	33.7
Unemployed	28.3*	16.6	36.4	24.6	56.5	45.4
Annual Income						
\$0 to \$14,999	27.7*	12.4	36.8*	23.6	55.7	42.4
\$15,000 - \$29,999	16.4	8.5	20.3	14.1	36.5	36.8
\$30,000-\$59,999	13.4	11.6	16.8	13.7	45.0	36.4
\$60,000+	18.0	14.3	22.2	17.4	40.1	45.5

Urinalysis could not differentiate crack from powder cocaine.
 Urinalysis results for cocaine are included in Powder Cocaine table.
 *Between study differences statistically significant at p < .05.

Powder Cocaine

Table 4.11 presents a comprehensive account of powder cocaine use among Snohomish County arrestees. In addition to describing overall rates of use, this table also describes use across different demographic groups. The 2002-2003 SCASA data are also presented for comparison.

Below is a summary and discussion of the findings in this table:

- **Over 1 in 4** (27.9%) of all arrestees **tested positive for cocaine**.³⁶
- **More than 1 in 6** (17.1%) of all arrestees reported using powder cocaine during the **past 30 days**.
- **1 in 4** (25.3%) of all arrestees reported using powder cocaine during the past year.
- **Nearly 2 out of 3** (62.9%) of all arrestees indicated lifetime use of powder cocaine.

Age

- Age was positively correlated with testing positive for cocaine.³⁷ That is, **older arrestees were more likely to test positive for cocaine than were younger arrestees**.
- Similarly, age was positively correlated with lifetime use of powder cocaine.³⁸ That is, **older arrestees were more likely to report lifetime use of powder cocaine than were younger arrestees**.
- Age was not correlated with past 30 day use or past year use of cocaine.
- Lifetime use of powder cocaine increased significantly among arrestees aged 18 to 24 compared to 2002-2003 rates.

Race

- **Testing positive for cocaine was associated with arrestee race**.³⁹ Black arrestees (49.3%) tested positive for cocaine at nearly twice the rate as any other race category.
- Similarly, past 30 day use, past year use, and lifetime use of powder cocaine were all associated with race. **Past 30 day use was highest among Black arrestees** (32.8%) as was past year use (38.5%). However, **lifetime use was highest among White arrestees** (68.1%).
- **Lifetime use of powder cocaine among White arrestees (68.1%) increased** significantly from 2002-2003 rates.

Education

- **Past 30 day use of powder cocaine was associated with arrestee education**.⁴⁰ Past 30 day use was highest among arrestees with “some college” education (25.1%) and lowest among arrestees with a college degree (0%).
- **Past 30 day use of powder cocaine increased significantly among arrestees with “some college”** (25.1%) compared with 2002-2003 levels.

Marital Status

- **Lifetime use of powder cocaine was associated with marital status of arrestees**.⁴¹ Lifetime use was higher among arrestees who were divorced/separated (71.9%) compared to other arrestees.

³⁶ A positive urinalysis test could result from use of either crack or powder cocaine.

³⁷ $r = .20, p < .001$

³⁸ $r = .14, p < .01$

³⁹ $\chi^2(3, N = 537) = 18.63, p < .001$

⁴⁰ $\chi^2(4, N = 575) = 9.96, p < .05$

⁴¹ $\chi^2(2, N = 573) = 6.36, p < .05$

- **Lifetime powder cocaine use increased significantly among single arrestees (59.2%)** compared with 2002-2003 rates.

TABLE 4.11

Percent of Arrestees Using Powder Cocaine by Demographic Groups, Reporting Period, and Date of Survey

	Urine		Past 30 Days		Past Year		Lifetime	
	2006	2002-03	2006	2002-03	2006	2002-03	2006	2002-03
OVERALL USE	27.9	18.7	17.1	11.3	25.3	21.6	62.9	52.8
Age								
18-24	14.1	10.1	13.2	10.4	25.4	21.5	52.7*	38.4
25-34	23.3	18.0	18.0	10.2	26.6	22.7	58.0	56.0
35+	39.4	26.3	19.0	12.9	24.4	20.7	72.9	61.6
Race								
White	25.9	17.4	16.4	11.7	25.2	23.0	68.1*	55.9
Black	49.3	34.0	32.8	10.3	38.5	12.5	51.2	35.2
Hispanic	22.6	14.1	15.3	8.6	22.0	15.9	56.2	36.9
Other	20.0	19.5	10.2	8.6	19.1	18.0	55.2	45.8
Education								
No Degree	23.1	16.7	14.6	15.8	25.2	27.7	60.5	49.1
HS/GED	28.5	19.6	16.3	9.5	24.1	18.9	63.9	51.4
Voc./Trade School	26.1	19.1	15.0	13.7	23.7	21.5	63.8	62.5
Some College	33.2	17.8	25.1*	9.7	32.1	21.1	65.6	57.9
4 Year Degree +	11.4	22.2	0	4.9	0	15.5	51.1	40.0
Marital Status								
Single	24.2	18.0	15.3	12.2	24.9	23.1	59.2*	48.3
Divorced/Separated	35.2	23.6	22.5	13.8	28.5	23.1	71.9	65.8
Married	27.5	14.8	16.4	4.8	22.7	14.6	63.7	52.6
Residence Type								
House/Apartment	25.5	18.0	17.5*	9.7	25.1	19.0	59.0	49.5
Homeless	31.7	21.5	15.6	20.3	23.6	33.6	73.1	82.9
Employment Status								
Employed	22.5	14.1	12.5	6.5	21.6	15.9	55.0	45.9
Unemployed	33.2	24.3	22.1	17.2	29.8	28.4	72.6*	58.8
Annual Income								
\$0 to \$14,999	30.6*	17.7	18.1	12.2	26.6	24.4	67.1*	53.0
\$15,000 - \$29,999	20.9	18.7	13.2	11.1	26.1	16.7	57.5	47.6
\$30,000-\$59,999	24.2	22.6	18.4	9.8	25.2	24.6	61.6	59.0
\$60,000+	33.6	24.8	21.3	14.8	26.1	28.5	77.2	66.9

Urinalysis results do not differentiate between Crack and Powder Cocaine use. Urinalysis results in this table contain both. In order to be detected in urinalysis assay, cocaine must have been used within past 2-3 days.

*Between study differences statistically significant at $p < .05$.

Residence Type

- **Lifetime use of powder cocaine was significantly higher among homeless arrestees** compared with arrestees who lived in a house or apartment.⁴²
- **Past 30 day use of powder cocaine increased significantly among arrestees living in a house or apartment (17.5%)** compared with 2002-2003 rates.

Employment Status

- **Unemployed arrestees were more likely to test positive for cocaine** than were employed arrestees.⁴³
- Similarly, **unemployed arrestees were more likely to report past 30 day use, past year use, and lifetime use of powder cocaine** compared with employed arrestees.
- **Lifetime use of powder cocaine increased significantly among homeless arrestees (72.6%)** compared with 2002-2003 rates.

Income

- Testing positive for cocaine was **not** associated with arrestee income.
- Similarly, past 30 day, past year, and lifetime use of powder cocaine was **not** associated with arrestee income.
- **Testing positive for cocaine increased significantly among arrestees making less than \$15,000** compared with 2002-2003 rates.
- **Lifetime use of powder cocaine increased significantly among arrestees making less than \$15,000** compared with 2002-2003 rates.

Heroin

Table 4.12 presents a comprehensive account of heroin use among Snohomish County arrestees. In addition to describing overall rates of use, this table also describes use across different demographic groups. The 2002-2003 SCASA data are also presented for comparison.

Below is a summary and discussion of the findings in this table:

- **Approximately 1 in 11 (8.8%)** of all arrestees tested positive for opiates.⁴⁴
- **Approximately 1 in 15 (6.8%)** of all arrestees reported using heroin **during the past 30 days**.
- **Nearly 1 in 10 (9.4%)** of all arrestees reported using heroin **during the past year**.
- **Nearly 1 in 4 (23.5%)** of all arrestees reported lifetime use of heroin.
- Overall use of heroin among arrestees did **not** change significantly from 2002-2003 rates.

Age

- Testing positive for opiates was **not** correlated with arrestee age.

⁴² $\chi^2(1, N = 532) = 6.97, p < .01$

⁴³ $\chi^2(1, N = 519) = 7.49, p < .01$

⁴⁴ The urinalysis assay detects opiates, not heroin. While the vast majority of opiate use is heroin, opiate use can also include other substances (e.g., morphine).

- However, arrestee age was positively correlated with past 30 day use⁴⁵, past year use⁴⁶, and lifetime use of heroin.⁴⁷ That is, **older arrestees were more likely to use heroin than were younger arrestees.**
- Rates of heroin use did **not** differ significantly from the 2002-2003 rates for any of the three age groups.

Race

- Lifetime heroin use was associated with arrestee race.⁴⁸ **Lifetime use was highest among White arrestees (28.6%) and lowest among Hispanic arrestees (7.7%).**
- Rates of heroin use did **not** differ significantly from the 2002-2003 rates for any of the four race categories.

Education

- Testing positive for opiates was **not** associated with arrestee education.
- Similarly, past 30 day use, past year use, and lifetime use of heroin were **not** associated with arrestee education.
- Rates of heroin use did **not** differ significantly from the 2002-2003 rates by arrestee education.

Marital Status

- Lifetime use of heroin was associated with arrestee marital status.⁴⁹ **Lifetime use of heroin was higher among separated/divorced arrestees (34.2%) compared to single (20.9%) and married arrestees (20.3%).**
- Rates of heroin use did **not** differ significantly from the 2002-2003 rates by arrestee marital status.

Residence Type

- **Lifetime heroin use was higher among homeless arrestees⁵⁰ (33.7%) compared with arrestees who lived in a house or apartment (18.9%).**
- Rates of heroin use did **not** differ significantly from the 2002-2003 rates by arrestee residential type.

Employment Status

- Testing positive for opiates was **not** associated with arrestee employment status.
- However, **unemployed arrestees were significantly more likely to report past 30 day, past year, and lifetime use of heroin** compared to employed arrestees.
- Rates of heroin use did **not** differ significantly from the 2002-2003 rates by arrestee employment status.

⁴⁵ $r = .14, p < .01$

⁴⁶ $r = .09, p < .05$

⁴⁷ $r = .21, p < .001$

⁴⁸ $\chi^2(3, N = 576) = 15.92, p < .01$

⁴⁹ $\chi^2(2, N = 573) = 9.63, p < .01$

⁵⁰ $\chi^2(1, N = 532) = 10.66, p < .01$

Income

- Testing positive for opiates was **not** associated with arrestee income.
- However, past 30 day use, past year use, and lifetime use of heroin were all associated with arrestee income. **Arrestees making less than \$15,000 during the past year were more likely to use heroin than were other arrestees.**
- Rates of heroin use did **not** differ significantly from the 2002-2003 rates by arrestee income level.

TABLE 4.12
Percent of Arrestees Using Heroin by Demographic Groups, Reporting Period, and Date of Survey

	Urine		Past 30 Days		Past Year		Lifetime	
	2006	2002-03	2006	2002-03	2006	2002-03	2006	2002-03
OVERALL USE	8.8	9.9	6.8	8.1	9.4	10.9	23.5	22.5
Age								
18-24	5.7	5.7	2.6	2.7	5.7	4.5	13.4	11.2
25-34	9.4	10.8	5.4	8.0	8.7	12.0	18.2	27.8
35+	10.5	12.4	10.5	12.6	12.4	15.0	34.0	27.2
Race								
White	10.3	11.5	6.9	9.3	10.4	12.5	28.6	25.3
Black	11.7	0.0	11.9	2.2	11.9	2.2	19.8	4.4
Hispanic	5.1	1.4	2.3	0.0	3.6	1.5	7.7	7.1
Other	3.2	7.4	5.4	5.5	7.3	7.1	16.6	20.2
Education								
No Degree	7.2	10.1	6.7	7.1	9.2	10.7	22.8	22.6
HS/GED	10.7	9.3	7.8	7.8	10.1	10.6	23.1	24.1
Voc./Trade School	6.9	5.0	6.6	6.5	6.6	10.5	25.9	23.1
Some College	7.7	12.3	4.9	9.3	9.8	10.9	26.2	18.1
4 Year Degree +	7.1	16.0	6.6	14.7	6.6	14.7	12.1	25.3
Marital Status								
Single	8.2	11.6	5.4	8.0	8.2	9.8	20.9	21.8
Divorced/Separated	9.2	9.0	11.3	10.5	13.9	17.4	34.2	28.7
Married	10.3	2.9	6.1	4.7	8.2	5.1	20.3	16.4
Residence Type								
House/Apartment	8.9	9.5	5.5	7.0	7.2	9.0	18.9	18.5
Homeless	6.8	12.1	7.2	21.1	12.7	24.9	33.7	60.2
Employment Status								
Employed	6.7	7.5	3.0	5.6	4.7	7.0	13.2	18.3
Unemployed	10.9	12.5	11.6	10.8	15.5	15.3	36.6	27.1
Annual Income								
\$0 to \$14,999	11.1	10.5	10.5	8.7	13.3	12.9	32.1	23.0
\$15,000 - \$29,999	5.6	5.8	6.9	4.0	9.1	5.0	20.6	19.1
\$30,000-\$59,999	9.4	9.6	2.7	8.8	3.3	11.3	16.5	19.3
\$60,000+	2.8	21.1	2.6	11.5	9.9	14.6	17.8	31.7

The urinalysis assay detects opiates, not heroin. While the vast majority of opiate use is heroin, opiates use can also include other substances (e.g., morphine). In order to be detected in urinalysis assay, opiates must have been used within past 2 to 3 days.

* Between study differences statistically significant at $p < .05$.

Methamphetamine

Table 4.13 presents a comprehensive account of methamphetamine use among Snohomish County arrestees. In addition to describing overall rates of use, this table also describes use across different demographic groups. The 2002-2003 SCASA data are also presented for comparison.

Below is a summary and discussion of the findings in this table:

- **Approximately 1 in 4 (24.9%)** of all arrestees **tested positive for methamphetamine**.
- **Nearly 3 out of 10 (28.9%)** of all arrestees used methamphetamine **during the past 30 days**.
- **Over 1 in 3 (36.2%)** of all arrestees used methamphetamine **during the past 12 months**.
- **Over half (56.6%)** of all arrestees reported lifetime use of methamphetamine.

While these estimates are higher than those found in 2002-2003, **overall rates of methamphetamine use were not significantly different than the 2002-2003 rates of use**.

Age

- Arrestee age was negatively correlated with testing positive for methamphetamine.⁵¹ That is, **younger arrestees were more likely to test positive for methamphetamine compared with older arrestees**.
- However, arrestee age was **not** correlated with past 30 day, past year, and lifetime use of methamphetamine.
- **Past year use of methamphetamine increased significantly among arrestees aged 35+** (34.4%) compared with 2002-2003 rates. Similarly, **lifetime use of methamphetamine increased significantly among arrestees aged 35+** (59.2%) compared with 2002-2003 rates

Race

- Testing positive for methamphetamine was associated with arrestee race.⁵² **White arrestees (29.8%) were most likely to test positive for methamphetamine** and Black arrestees (8.5%) were least likely to test positive for methamphetamine.
- Similarly, past 30 day use, past year use, and lifetime use of methamphetamine were all associated with arrestee race. In each case, **use was highest among White arrestees**.
- Use of **methamphetamine increased among White arrestees compared with 2002-2003 rates**. This was true for past 30 day use (33.8%), past year use (42.9%), and lifetime use (66.5%).

Education

- Testing positive for methamphetamine was associated with arrestee education. **Positive tests were highest among arrestees with no degree (31.8%)** and lowest among arrestees with a college degree (0%).

⁵¹ $r = -.10, p < .05$

⁵² $\chi^2 (3, N = 537) = 15.41, p < .01$

- **Methamphetamine use during the past 30 days, the past year, and lifetime were all associated with arrestee income.** In each case, use was lowest among arrestees with a college degree.
- **Testing positive for methamphetamine increased significantly among arrestees with no educational degree (31.8%)** compared with 2002-2003 rates.
- **Past year use of methamphetamine increased among arrestees with a high school or GED (39.9%)** compared with 2002-2003. Similarly, **lifetime use increased among arrestees with a high school or GED (57.7%)** compared with 2002-2003.

Marital Status

- Lifetime use of methamphetamine was associated with marital status.⁵³ Specifically, **lifetime use was lower among married arrestees (42.1%)** compared with single (58.9%) or divorced/separated arrestees (61.1%).
- Lifetime use increased among single arrestees (58.9%) compared with 2002-2003 rates.

Residence Type

- **Homeless arrestees (39.9%) were significantly more likely to test positive for methamphetamine** than arrestees living in a house or apartment (20.4%).⁵⁴
- Similarly, **homeless arrestees were significantly more likely to report past 30 day use (38.6%), past year use (45.3%), and lifetime use (79.6%) of methamphetamine** compared with arrestees living in a house or apartment.
- Methamphetamine use did **not** differ significantly from the 2002-2003 rates by residence type.

Employment Status

- **Unemployed arrestees (29.7%) were significantly more likely to test positive for methamphetamine** than were employed arrestees (20.6%).⁵⁵
- Similarly, **unemployed arrestees were more likely to report past 30 day use (38.6%), past year use (45.3%), and lifetime use (65.3%) of methamphetamine** compared with employed arrestees.
- **Past 30 day use, past year use, and lifetime use of methamphetamine among unemployed arrestees all increased** compared with 2002-2003 rates.

Income

- Testing positive for methamphetamine was not associated with arrestee income.
- However, past 30 day, past year, and lifetime use of methamphetamine were all associated with arrestee income. In each case, use was higher among arrestees reporting lower levels of income.

⁵³ $\chi^2(2, N = 573) = 9.50, p < .01.$

⁵⁴ $\chi^2(1, N = 490) = 15.84, p < .001.$

⁵⁵ $\chi^2(1, N = 519) = 5.70, p < .05.$

- Lifetime use of methamphetamine increased significantly among arrestees making less than \$15,000 (66.0%) compared with 2002-2003 rates.

TABLE 4.13
Percent of Arrestees Using Methamphetamine by Demographic Groups,
Reporting Period, and Date of Survey

	Urine		Past 30 Days		Past Year		Lifetime	
	2006	2002-03	2006	2002-03	2006	2002-03	2006	2002-03
OVERALL USE	24.9	19.5	28.9	21.7	36.2	26.5	56.6	45.4
Age								
18-24	28.3	21.4	29.1	23.6	37.3	29.3	54.0	42.5
25-34	26.6	23.4	31.0	25.6	37.8	30.9	55.3	53.6
35+	21.1	14.6	27.2	16.8	34.4*	20.6	59.2*	41.1
Race								
White	29.8	21.6	33.8*	23.8	42.9*	29.0	66.5*	49.6
Black	8.5	6.1	16.1	10.3	17.8	12.5	29.0	18.3
Hispanic	16.3	11.1	10.4	13.0	20.1	15.9	35.2	28.6
Other	22.8	15.6	29.5	12.3	32.9	17.7	50.8	35.1
Education								
No Degree	31.8*	17.1	34.0	27.9	40.9	32.7	62.7	55.3
HS/GED	24.4	24.3	31.3	22.1	39.9*	26.3	57.7*	43.0
Voc./Trade School	19.4	20.9	22.8	19.0	26.8	23.6	63.8	49.8
Some College	21.3	14.2	22.6	16.9	29.5	23.4	49.6	41.8
4 Year Degree +	0.0	5.3	6.6	9.8	13.2	14.7	13.2	19.6
Marital Status								
Single	27.7	20.2	30.1	23.5	38.4	29.0	58.9*	45.6
Divorced/Separated	22.1	17.5	32.7	18.8	37.7	22.6	61.1	48.9
Married	17.4	18.7	18.7	19.4	25.4	23.3	42.1	40.4
Residence Type								
House/Apartment	20.4	18.5	20.8	19.3	27.7	23.9	49.2	42.8
Homeless	39.9	33.5	52.4	47.6	62.3	51.4	79.6	74.8
Employment Status								
Employed	20.6	18.2	21.0	18.1	28.0	22.2	49.3	38.9
Unemployed	29.7	20.5	38.6*	25.2	45.3*	30.2	65.3*	51.1
Annual Income								
\$0 to \$14,999	25.6	19.5	36.0	27.0	44.5	31.5	66.0*	50.3
\$15,000 - \$29,999	25.9	19.7	25.2	17.7	31.2	21.8	50.1	39.4
\$30,000-\$59,999	24.4	18.9	22.9	17.1	28.0	23.2	51.4	46.5
\$60,000+	10.4	24.5	14.8	29.6	21.7	33.3	43.7	44.7

In order to be detected in urinalysis assay, methamphetamine must have been used within past 2-4 days.
*Between study differences statistically significant at $p < .05$.

Frequency of Substance Use in Past 30 Days

Thus far, self-report of substance use has been limited to whether or not an arrestee has used a substance. Information also exists about the frequency of substance use. The next table examines the average number of days that arrestees reported using substances during the past month.

TABLE 4.14
Average Number of Days of Substance Use by Arrestees
that Report Using Substances

Substance	Snohomish County 2006		Snohomish County 2002-2003	
	<u>N</u>	<u>M</u>	<u>N</u>	<u>M</u>
Alcohol	305	9.1	292	8.5
Marijuana	310	13.7	268	12.9
Crack Cocaine	105	10.0	63	14.1
Powder Cocaine	92	5.1	60	8.1
Heroin	34	15.5	40	13.2
Methamphetamine	174	14.8	109	13.0

- The number of days that substances were used did not differ significantly from days reported in the 2002-2003 survey.

Other Illicit Substances

Arrestees were asked whether they had used other illicit substances:

“Not including alcohol and these five drugs, have you ever used any other drug, not counting drugs for which you have a prescription or over the counter drugs?”

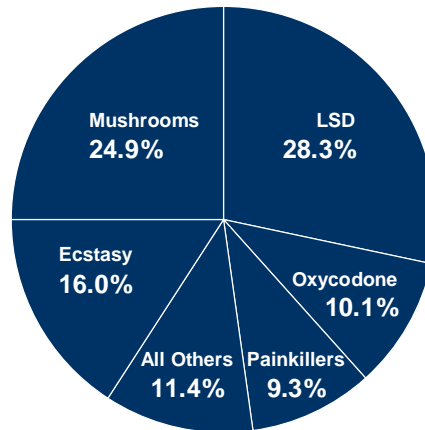
Those arrestees who indicated that they had used other illicit substances were asked to indicate the drug that they used **most often**.

Lifetime Use of “Other” Substances

Among all arrestees (N = 576) who responded to questions about the use of “other” substances:

- 4 out of 10 arrestees (39.7%) reported lifetime use of “other” substance use.
- Hallucinogenic drugs, specifically LSD and mushrooms, represent the two most frequently reported substances and account for over half (53.2%) of “other” substances.
- Among arrestees who had ever used “other” substances, ecstasy was cited by arrestees as the substance most frequently used in over 16% of the cases.
- Reports of use of Oxycodone (10.1%) more than doubled from 2002-2003 (4.7%) levels.
- A significant proportion (11.4%) of “other” substances reported by those indicating lifetime use were not easily classified into one category. These included a wide variety of substances from inhalants, stimulants, depressants, and illicit prescription drug use.

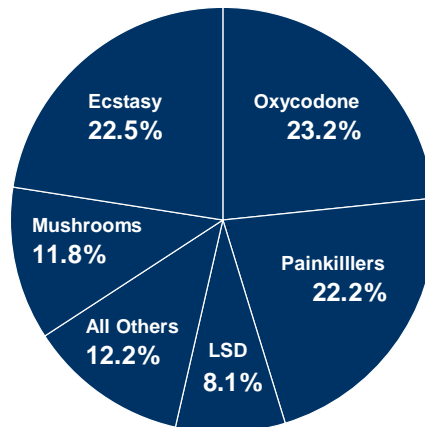
FIGURE 4.1
“Other” Substances Most Frequently Reported



Use of “Other” Substances in Past Year

- Among Snohomish County arrestees responding to questions about the use of other illicit substances during the past year (N = 576), 13.9% indicated that they had used “other” substances during the past year.
- Among those who reported using other illicit substances in the past year, Oxycodone (23.2%) has replaced LSD as the substance reported to be most frequently used.
- Ecstasy (22.5%) and painkillers (22.2%) were also reported with high frequency. among those using “other” drugs in the past 12 months.
- Use of LSD (8.1%) and mushrooms (11.8%) was considerably lower among arrestees reporting use of “other” substances during the past 12 months compared with those who had reported only lifetime use of “other” drugs.

FIGURE 4.2
Most Commonly Used “Other” Substances Used by Arrestees in the Past Year

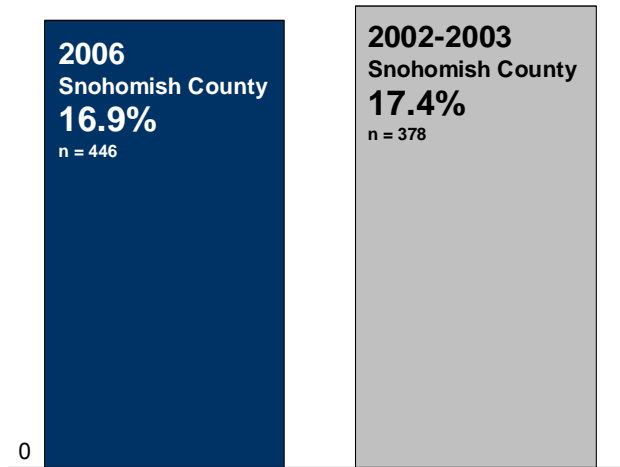


Needle Use

Due to health issues, of particular concern to many communities is the use of needles among drug users. Figure 4.15 indicates the percentage of arrestees who ever injected drugs.

- Over one out of six (16.9%) arrestees reported ever injecting drugs. Rates of needle use were quite similar to that found in the 2002-2003 survey.

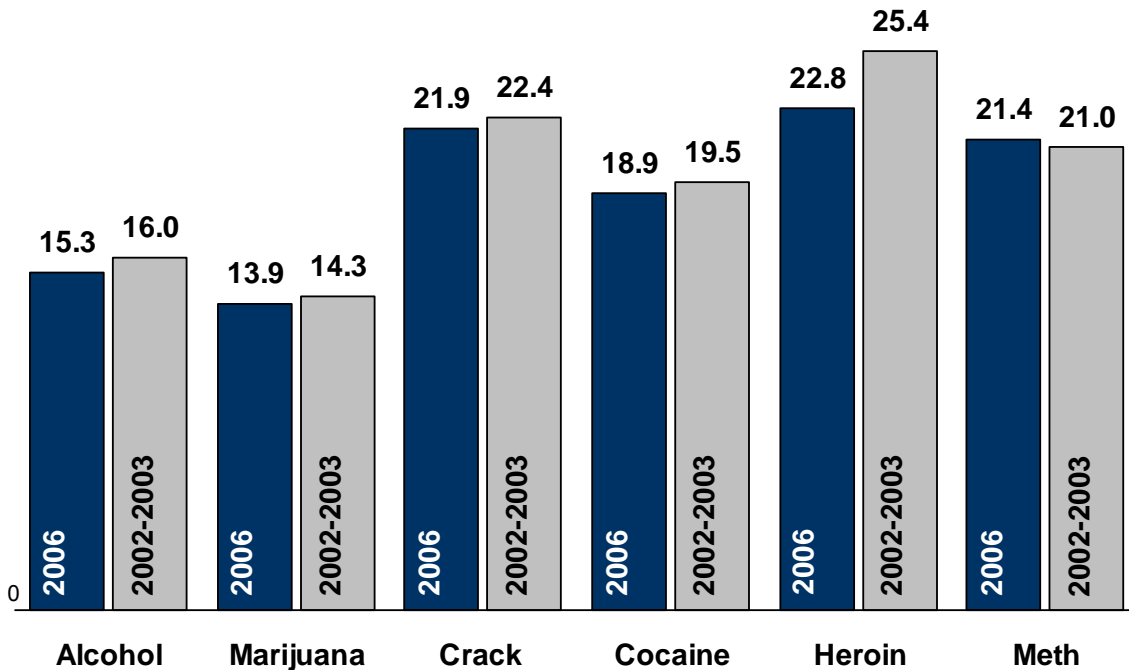
FIGURE 4.3
Percent of Arrestees
Indicating They Had Ever
Injected Drugs in Order to
Get High



Age of Substance Use Initiation

Arrestees who indicated that they had ever used a substance were subsequently asked about the age at which they first used the substance.

FIGURE 4.4
Age of First Substance Use by Substance and Survey Year



- Age of first marijuana use and age of first alcohol binge precedes that of the other drugs.
- Age of first use of substance did not differ significantly between dates of the survey.



2006
Snohomish County

Arrestee Substance Abuse Study (SCASA-II)

SECTION V

Methamphetamine – Market and Use Addendum

The 2006 SCASA-II survey contained additional, methamphetamine specific, questions focusing on:

- General use and practices
- Consequences and effects
- How arrestees obtain methamphetamine
- Treatment experiences
- Methamphetamine-related activities

Much of the survey content used in this section was obtained, with permission, from San Diego’s Substance Abuse Monitoring (SAM) program.⁵⁶ Additional content was obtained from input from Snohomish Correctional staff.

Given the focus of these questions, the addendum was asked only of those arrestees that indicated they had used methamphetamine during the past 12 months. Some questions focused upon methamphetamine use during the past month and these were further limited to those who had indicated past 30 day use.

What is Methamphetamine?

Methamphetamine (Methadrine): one of the many amphetamine derivatives. Methamphetamine is closely related chemically to amphetamine, but the central nervous system (CNS) effects of methamphetamine are greater. The CNS actions that result from taking even small amounts of methamphetamine include increased wakefulness, increased physical activity, decreased appetite, increased respiration, hypothermia, and euphoria. Other CNS effects include irritability, insomnia, confusion, tremors, convulsions, anxiety, paranoia, and aggressiveness. Hypothermia and convulsions can result in death.

Methamphetamine is made easily in clandestine laboratories with relatively inexpensive over-the-counter ingredients that contain the requisite precursor chemicals. These factors combine to make methamphetamine a drug with high potential for widespread abuse.

Methamphetamines have received considerable notoriety in the press in recent years, in part due to the ready availability of precursor chemicals and the toxic waste produced by its manufacture in clandestine “Meth Labs.” A number of steps have been put into place to restrict access to these ingredients, including tighter regulations on over-the-counter cold and asthma medications containing ephedrine or pseudoephedrine. It remains to be seen whether these actions have significantly impacted the methamphetamine problem.

The methamphetamine problem is the target of an aggressive campaign by the Washington State Attorney General’s Office (<http://www.atg.wa.gov/oaam/index.shtml>)

SOURCE: Much of this information was obtained from *The 2003 Washington State Needs Assessment Household Survey* (<http://www1.dshs.wa.gov/rda/research/4/52/default.shtm>).

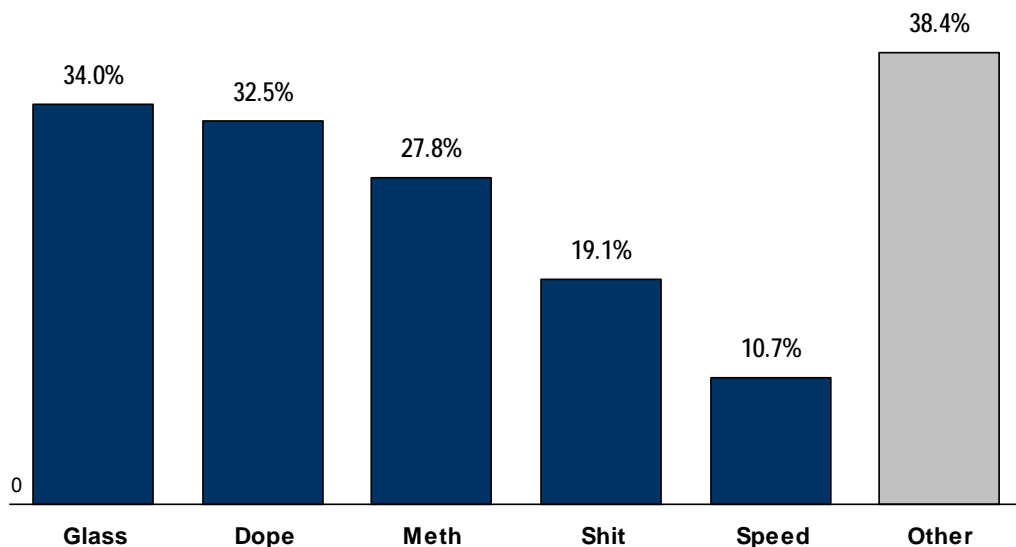
⁵⁶ SANDAG recently produced a report using SAM data, *Methamphetamine Use by Adult and Juvenile Arrestees in 2005*. This report provides an interesting comparison at the extent of the methamphetamine problem in San Diego (<http://www.signonsandiego.com/news/metro/images/061030methstudy.pdf>).

General Use and Practice

What Names Do Arrestees Use for Methamphetamine?

Snohomish County arrestees refer to methamphetamine by many names. Figure 5.1 describes the terms most frequently used. Arrestees were permitted to list more than one term so these exceed one-hundred percent.

FIGURE 5.1
Frequent Terms Used by Snohomish County Arrestees to Describe Methamphetamine
n = 204



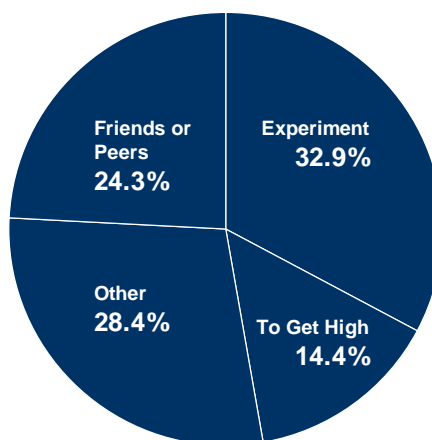
The most frequently used “other” term was “*Shards.*”

Why Do Arrestees Start to Use Methamphetamine?

Arrestees were asked to select the one reason that best described why they first tried meth. The most frequently given reason for first trying meth was **to experiment** (32.9%). The second most frequently given reason was because their **friends were using the drug** (24.3%).

- All “Other” reasons, with the exception of “**to get more energy**” (6.7%), were given by less than 5% of the arrestees.

FIGURE 5.2
Reasons Cited
for Starting
Methamphetamine
Use
n = 168

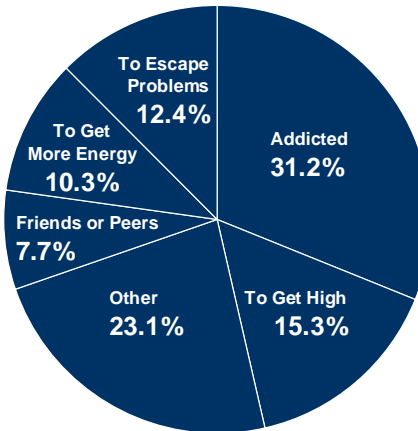


Why Do Arrestees Continue to Use Methamphetamine?

Arrestees were also asked to select the one reason that best described why they continued to use meth. The most common reason given by arrestees for continuing to use methamphetamine was that they were **addicted** (31.2%).

- Other common reasons included wanting **to get high** (15.3%), wanting **to escape problems** (12.4%), and **to get more energy** (10.3%).

FIGURE 5.3
Reasons for Continuing Methamphetamine Use
n = 159

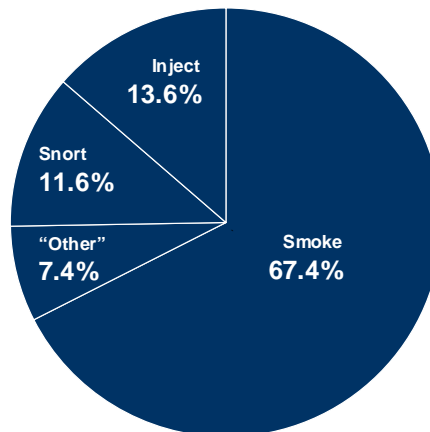


How Do Arrestees Use Methamphetamine?

Methamphetamine can be used in a number of different ways. Figure 5.4 describes the method that arrestees most frequently used meth.

- Approximately **two-thirds** (67.4%) of arrestees reported that they usually **smoked methamphetamine**.
- **Injection** (13.6%) and **snorting** (11.6%) were also reported with some frequency.

FIGURE 5.4
How Arrestees Use Methamphetamine
n = 202



How Much Methamphetamine Do Arrestees Use?

Arrestees were asked to describe the amount of meth that they used on days that they used meth. Table 5.1 describes the extent of methamphetamine use among arrestees. The data indicate that heavy meth use is quite common among Snohomish County arrestees.

- Among arrestees who used methamphetamine, **over one out of four arrestees (26.1%) reported using 2 or more grams of meth per day**. The median daily quantity used was 1 gram.
- **Nearly one-third (29.8%) of arrestees who used methamphetamine reported typically using 6+ times on a day that they used**. The median number was 4 times per day.

Nearly one out of four (23.1%) of arrestees who used methamphetamine during the past month reported using **every day**.

TABLE 5.1

Arrestee Report of Quantity and Frequency of Methamphetamine Use

	Extent of Methamphetamine Use (Percent among past-month meth users)
Quantity Meth Used on Meth-using Days	
Less than .5 Gram	26.8
.5 to 1 Gram	18.1
1 to 2 Grams	29.1
2+ Grams	26.1
Times Used Per Day	
1 or 2 Times	31.1
3 to 5 Times	39.1
6+ Times	29.8
Longest "Run" Past Month*	
1 to 2 Days	24.4
3 to 7 Days	36.2
8 to 29 Days	16.3
30 Days	23.1

* The "longest run" was asked only of those arrestees who indicated they had used methamphetamine during the past 30 days.

Was Methamphetamine Used at Work or School?

Nearly half (46.1%) of all arrestees who reported using methamphetamine during the past year indicated that they had used just before or while at work or school.

- Jobs worked while high on methamphetamine were varied and included construction, mechanics, and sales.

Consequence and Effects of Methamphetamine

Methamphetamine use results in a number of potentially serious side effects and is associated with deleterious health. Table 5.2 describes the proportion of arrestees who reported common side effects.

- **Nearly every arrestee (95.1%) that used meth during the past year reported a side effect.**
- The most commonly reported side effect was **sleeplessness (86.7%)**.

- More than half of arrestees who reported using methamphetamine during the past year reported **weight loss** (72.6%), **family problems** (67.9%), **legal problems** (61.0%), and **financial problems** (57.5%) that they attributed directly to methamphetamine.
- **Dental problems were reported by 39.7%** of past year methamphetamine users.
- **Over one out of four (27.4%) of arrestees** who reported using methamphetamine during the past year **reported violent behavior**.

TABLE 5.2
Proportion of Arrestees Reporting Side Effects from Methamphetamine Use by Recency of Use⁵⁷

Side Effects of Methamphetamine Use		
	Any Past Year Use n = 214	Any Past Month n = 169
Any Symptom	95.1	95.8
Sleeplessness	86.7	87.6
Weight Loss	72.6	73.4
Family Problems	67.9	71.0
Legal Problems	61.0	65.2
Financial	57.5	60.0
Work Problems	45.7	49.3
Paranoia	44.0	46.2
Dental	39.7	39.0
Hallucinations	39.3	39.6
Violent Behavior	27.4	27.0
Skin Problems	24.6	23.6
Other Problems	21.3	20.6

NOTE: Reports of side effects were lower among those few arrestees who indicated that they had **not** used any meth during the past month.

Obtaining Methamphetamine

Arrestees were asked where they typically bought or received methamphetamine. As part of this series of questions, arrestees were shown a map of Snohomish County with cities and towns labeled (See Figure 5.5). Arrestees who indicated that they typically bought methamphetamine within Snohomish County were asked to indicate on the map where they typically received the meth. As Table 5.3 shows, **most arrestees (50.4%) indicated that they typically obtained methamphetamine within the city of Everett.**

- Most arrestees (78.5%) typically obtained methamphetamine indoors.
- Most arrestees (88.2%) obtained methamphetamine within Snohomish County.

⁵⁷ NOTE: The two columns in this table are **not** mutually exclusive. All arrestees who reported that they had used methamphetamine in the past month are included in the “past year” column.

FIGURE 5.5
Where Arrestees Obtained Methamphetamine

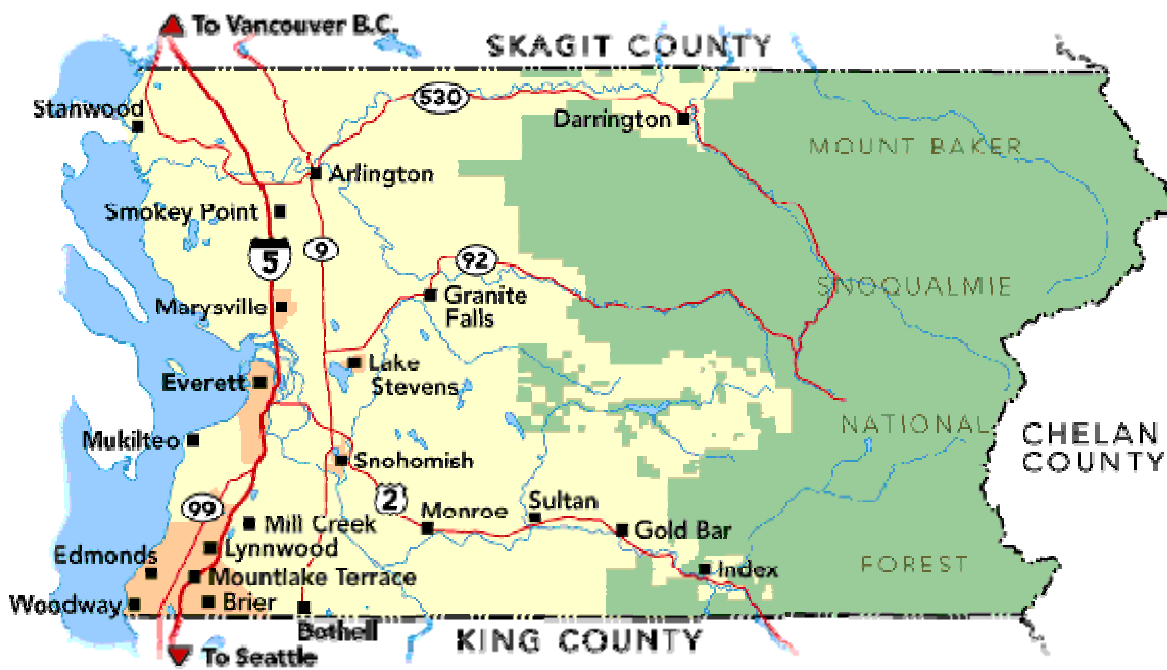


TABLE 5.3
Arrestee Reports of Where Methamphetamine Was Typically Obtained
n = 162

	Percent
Everett	50.4
Marysville	6.7
Lynnwood	5.5
Monroe	5.2
Granite Falls	5.0
Arlington	4.8
Lake Stevens	4.5
All Others*	17.9

What was Your Main Source for Methamphetamine?

Frequently, substance users will report having a “main source” that they use to obtain drugs. Table 5.4 describes characteristics of arrestees’ main source for methamphetamine.

- **2 out of 5 arrestees** (42.1%) who used methamphetamine during the past year reported that they **had a main source**. Similarly, **2 out of 5 arrestees** (42.6%) who had used methamphetamine during the past year **purchased from someone that they did not know**.
- 1 out of 3 arrestees (33.2%) indicated that they had known their main source for less than 6 months. 1 out of 3 (36.5%) indicated that they had used their main source for over one year.

- Most arrestees (70.1%) indicated that they did not purchase other drugs from their main source.
- Most arrestees (80.7%) reported that their **main source was White**.
- 3 out of 4 arrestees (76.0%) indicated that their **main source was male**.
- Roughly half (48.8%) of arrestees indicated that they would buy from another dealer if their main source was not available.

Roughly **1 out of 4 arrestees (25.9%) reported that, during the past year, they had carried a weapon with them when they went to get meth.**

TABLE 5.4
Arrestee Reporting on Main Source for Methamphetamine
n = 83

	Percent
Length of Time Used	
Less than 6 Months	33.2
6 Months to 1 year	30.4
Over 1 Year	36.5
Buy Other Drugs from Source	
No	70.1
Yes	29.9
Ethnicity of Main Source	
White	80.7
Black	1.4
Hispanic	10.4
Asian/Pacific Islander	2.3
American Indian/Alaska Native	2.9
Other	2.4
Gender of Main Source	
Male	76.0
Female	24.0

Purchasing Methamphetamine in Past Month

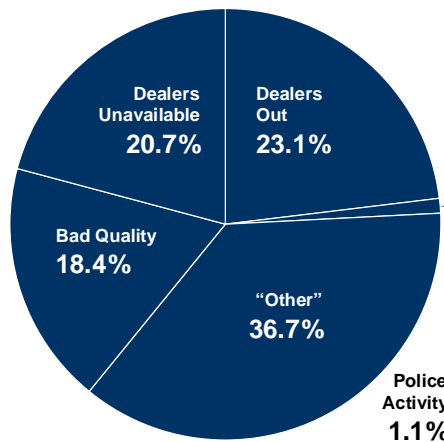
Among arrestees that reported using meth during the past month, nearly two-thirds (64.6%) reported paying cash for meth during the past month. Of these:

- 15.2% reported paying less than \$20 the last time they bought meth.
- 36.1% reported paying between \$20 and \$50 the last time they bought meth.
- 23.8% reported paying between \$50 and \$100 the last time they bought meth.
- **24.9% reported paying more than \$100** the last time they bought meth.
- 41.1% reported that they shared this meth with others.

Among arrestees that reported using meth during the past month, less than half (42.4%) reported problems that prevented them from getting any. Arrestees who reported that problems had prevented them from getting any meth were subsequently asked about the last time they had a problem getting meth. Figure 5.6 describes the problems obtaining meth. Among those that had problems obtaining meth:

- 23.1% said that dealers did not have any.
- 20.7% said that no dealers were available.
- 18.4% said that dealers did not have the quality that they wanted.
- **Only 1.1% reported that police activity kept them from their dealer.**

FIGURE 5.6
Reasons Why Arrestees Were Unable to Obtain Methamphetamine
n = 63



One third (33.8%) of arrestees who were unable to get meth reported obtaining a substitute instead.

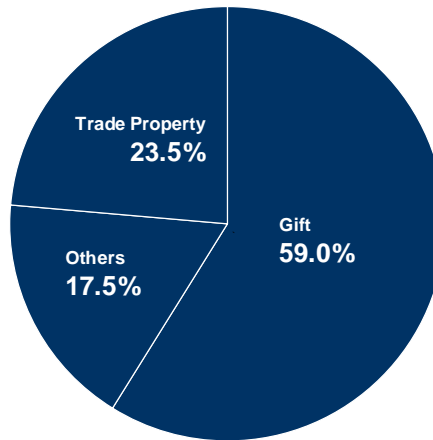
- Over half (53.3%) reported this was alcohol.
- Half (46.7%) reported obtaining another illicit drug.

Obtaining Methamphetamine without Paying Cash

Figure 5.7 describes arrestees’ participation in the non-cash methamphetamine market. Among arrestees who reported using meth during the past 30 days, more than 3 out of 4 (79.7%) reported obtaining meth without paying any cash for it. Arrestees reported receiving meth for the following reasons:

- They **received it as a gift** (59.0%).
- Arrestees traded **property or merchandise for meth** (23.5%).
- Arrestees received on **credit and were to pay for it later** (6.5%).

FIGURE 5.7
How Arrestees
Obtained
Methamphetamine in
the Past Month
Without Paying Cash
n = 128



Quality, Price, and Availability of Methamphetamine

One indicator of how well efforts to combat the meth problem have fared is to look at the availability of the drug. Law enforcement agencies and regulations limiting the availability of precursor drugs can both make it more difficult for arrestees to obtain meth. If efforts have reduced the availability of meth we would expect to see a decline in availability and quality. Conversely, tighter supplies should result in higher prices. Table 5.5 describes arrestee’s access to meth.

- **1 out of 2 arrestees (50.1%) reported that the quality was worse than last year, while only 1 out of 4 (25.1%) reported that quality was better.**
- **1 out of 3 arrestees (38.4%) reported that the price of meth was higher than last year while only 1 out of 5 (20.5%) reported that the price was lower.**
- **Less than 1 out of 5 arrestees (17.6%) reported that meth was less available than last year, while 1 out of 3 arrestees (32.6) reported that meth was more available**

TABLE 5.5
Arrestees’ Access to Methamphetamine

	Percent
Quality of Methamphetamine (n = 186)	
Worse than 1 Year Ago	50.1
Same as 1 Year Ago	24.8
Better than 1 Year Ago	25.1
Price of Methamphetamine (n = 180)	
Higher than 1 Year Ago	38.4
Same as 1 Year Ago	41.1
Lower than 1 Year Ago	20.5
Availability of Methamphetamine (n = 188)	
Less Available than 1 Year Ago	17.6
Same as 1 Year Ago	49.9
More Available than 1 Year Ago	32.6

Treatment for Methamphetamine

Proportion Receiving Treatment

Less than **3 out of 10** (29.1%) arrestees who used methamphetamine during the past year **attempted to get treatment for their meth use**. The most commonly given reasons for not seeking treatment included:

- Don't want treatment; arrestee can **"quit on own"** (40.9%)
- Don't want treatment; arrestee **doesn't want to quit** (16.4%)
- Want or **plan to get treatment** (15.6%)
- Arrestee **cannot afford treatment** (8.3%)
- Arrestee doesn't think treatment is available or **doesn't know how to get treatment** (5.6%)

Types of Treatment Used

Approximately **3 out of 4** (74.6%) arrestees who tried to get into treatment during the past year **actually received treatment**. Arrestees reported receiving the following forms of treatment:⁵⁸

- Residential (in-patient) treatment (55.8%)
- Out-patient (27.9%)
- Jail or prison program (7.9%)
- Self-help group (3.2%)

Just **over half** (56.2%) of those arrestees who got into a treatment program **completed treatment**.

- More than a quarter of those who did not complete treatment indicated that they had been **kicked out of the program** (26.3%).
- **Almost a quarter** (23.8%) of those who had not completed treatment indicated that they were either **still in the program or that their program had not yet started**.

Methamphetamine Related Activities

A major concern about methamphetamine is the illegal activities that accompany its use. Table 5.6, below, describes arrestee participation in meth-related activities during the past 30 days. Among arrestees who had used meth during the past month:

- Nearly two out of three arrestees (65.7%) **reported participating in at least one meth-related activity during the past month**
- Nearly **half** (49%) **reported holding meth or meth money**
- Nearly **half** (48.4%) **acted as a middleman for a dealer**

⁵⁸ If an arrestee indicated that they had participated in more than one form of treatment they were asked to describe the type of treatment that they had most recently used.

- One out of three (34.3%) **transported meth** and nearly one out of three (31.1%) **sold meth**
- One out of five (20.4%) **committed a crime** in order to obtain methamphetamine

Arrestees Dealing Meth

More than half (56.4%) of all arrestees who used meth during the past year reported that they had also sold methamphetamine during the past year. Among these arrestees who had dealt meth:

- One out of three (33.2%) reported that they dealt in other Washington counties besides Snohomish
- 3 out of 5 (59.8%) reported that they dealt exclusively in Snohomish County
- Among those arrestees who sold meth during the past year, 7 out of 10 (71.5%) reported that demand for meth had increased compared to a year ago.

TABLE 5.6
Arrestee Participation in Meth-Related Activities⁵⁹

Recency of Methamphetamine Use		
	Any Past Year Use n = 211	Any Past Month n = 167
Any Meth Related Activity	56.0	65.7
Hold Meth or Money	41.8	49.0
Act as Middleman	40.8	48.4
Transport Meth	29.5	34.3
Sell Meth	24.9	31.1
Commit Crime to Get	16.7	20.4
Other Activities	5.2	5.8
Make Meth	3.1	3.9

NOTE: Despite not using meth during the past 30 days, some arrestees did report participating in meth-related activities during the past 30 days. However, as might be expected, these arrestees were considerably less likely to participate in these activities.

Manufacturing Methamphetamine

Another major concern about methamphetamine is the ease with which people can make or “cook” the drug. The process and chemicals used during the making of the drug create hazardous environmental conditions.

- Only 13.3% of arrestees who used meth during the past year reported **ever** cooking or helping to cook meth.

⁵⁹ NOTE: The two columns in this table are **not** mutually exclusive. All arrestees who reported that they had used methamphetamine in the past month are included in the “past year” column.

TABLE 5.7
Proportion of Arrestees That Have Cooked Methamphetamine
n = 209

	Percent
Ever Cooked or Helped Cook Meth	13.3
Cooked Meth	8.7
Got Chemicals	7.0
Find Cooking Location	8.3
Got Cooking Equipment	6.2
Cut or Packaged Meth	7.7
Other	2.0
Cooked in Past Year	3.5
Cooked in Past Month	1.4

Methamphetamine and Children

Another significant concern surrounding methamphetamine use is children’s exposure to the drug. The next section looks at the prevalence of use and cooking among arrestees with children. We also asked arrestees directly whether they or someone else in their household had used or cooked meth in front of children.

- **1 in 5 arrestees (21.9%) who used meth during the past year** reported that they **had children living with them** most of the time during the past month.
- **1 in 10 arrestees (9.6%) who used meth during the past year** reported **using meth in front of their own or other children**.

Characteristics of Current Meth Users

The last table in this section, Table 5.8, contrasts arrestees who reported using methamphetamine during the past 30 days with those arrestees who reported they did not use meth during the past 30 days. Comparisons were made across demographic characteristics, criminal justice history, and substance abuse history. This table contains data from all male arrestees that participated in the survey.⁶⁰

Demographic Characteristics

- Current meth users were significantly more likely to be White (77.0%) compared with arrestees who were not current meth users.
- Current meth users were significantly less likely to be Black (2.8%), employed (41.1%), or live in a house or apartment (64.5%) compared with arrestees who were not current meth users.

⁶⁰ As noted in the table, some arrestees refused to answer some items or some items did not apply to all arrestees (e.g., No age of first use when arrestee reports never using a substance). Because of this, the sample size varied across items.

Criminal History

Current meth users were more likely to have previous criminal history than arrestees who were not current meth users. Specifically:

- Current meth users were significantly more likely to have ever been previously arrested (84.2%) or arrested during the past year (77.5%) compared with arrestees who were not current meth users.
- Current meth users were significantly more likely to have spent at least 24 hours in jail (96.0%) compared with arrestees who were not current meth users.
- Current meth users were significantly more likely to be presently booked on a felony charge (58.6%) compared with arrestees who were not current meth users.

Substance Use History

Current meth users were more likely to use other substances than arrestees who were not current meth users. Specifically:

- Current meth users reported significantly younger ages of first use for binge alcohol (15.1 years), marijuana (13.4 years), crack cocaine (21.4 years), and powder cocaine (18.4 years) compared with arrestees who were not current meth users.
- Current meth users were significantly more likely to test positive for multiple illicit drugs (45.4%), report ever using multiple illicit drugs (98.3%), report using multiple illicit drugs during the past year (88.0%), and report using multiple illicit drugs during the past 30 days (80.5%) compared with arrestees who were not current meth users.
- Current meth users were significantly more likely to report ever using marijuana (97.1%), to report using marijuana during the past year (81.0%), and report using marijuana during the past 30 days (73.6%) compared with arrestees who were not current meth users.
- Current meth users were significantly more likely to report ever using crack cocaine (66.1%), to report using crack cocaine during the past year (36.2%), and report using crack cocaine during the past 30 days (26.4%) compared with arrestees who were not current meth users.
- Current meth users were significantly more likely to report ever using powder cocaine (82.8%), to report using powder cocaine during the past year (35.1%), and to report using powder cocaine during the past 30 days (24.3%) compared with arrestees who were not current meth users.
- Current meth users were significantly more likely to report ever using heroin (36.8%) and to report using heroin during the past year (14.4%) compared with arrestees who were not current meth users.

TABLE 5.8
Comparison of Current Methamphetamine Users and Non-Methamphetamine Users

	Current Meth User ^a	NOT Current Meth User ^b
Demographic Characteristics		
White	77.0%*	64.0%
Black	2.8%*	7.0%
Employed	41.1%*	62.4%
Live in House or Apartment	64.5%*	87.1%
Have Children	21.8%	24.8%
Criminal History		
Previously Arrested	94.2%*	85.4%
Arrested Past Year	77.5%*	53.0%
Prior time in Jail	96.0%*	86.2%
Current Felony	58.6%*	33.8%
Substance Use History		
Age First Binge Alcohol	14.6*	15.6
Age First Marijuana Use	13.0*	14.4
Age First Crack Use	20.4*	23.0
Age First Powder Cocaine Use	17.8*	19.7
Age First Heroin Use	22.5	23.1
Multiple Drug Use		
Positive for Multiple Drugs	45.4%*	18.5%
Ever Used Multiple Drugs	98.3%*	62.3%
Used Multiple Drugs Past Year	88.0%*	28.0%
Used Multiple Drugs Past 30 Days	80.5%*	15.5%
Marijuana Use		
Positive for Marijuana	39.8%	38.9%
Ever Used Marijuana	97.1%*	87.5%
Used Marijuana Past Year	81.0%*	53.4%
Used Marijuana Past 30 Days	73.6%*	45.7%
Crack Cocaine Use		
Ever Used Crack Cocaine	66.1%*	37.0%
Used Crack Cocaine Past Year	36.2%*	19.8%
Used Crack Cocaine Past 30 Days	26.4%*	14.8%
Powder Cocaine Use		
Positive for Cocaine (Pwdr. or Crk.)	24.1%	23.9%
Ever Used Powder Cocaine	82.8%*	54.0%
Used Powder Cocaine Past Year	35.1%*	21.0%
Used Powder Cocaine Past 30 Days	24.3%*	12.5%
Opiates Use		
Positive for Opiates	7.8%	8.2%
Ever Used Heroin	36.8%*	16.8%
Used Heroin Past Year	14.4%*	6.5%
Used Heroin Past 30 Days	8.6%	4.8%

* Rates among current meth users significantly different than non-current meth users ($p < .05$). ^a Sample size ranged from 152 to 174 except for age of first use variables where N was 63 (age of first heroin use) to 168 (age of first marijuana use). ^b Sample size ranged from 380 to 400 except for age of first use variables where N was 67 (age of first heroin) to 352 (age of first binge alcohol). ^c

A positive EMIT for cocaine does not distinguish between crack and powder cocaine. ^d A positive test for opiates does not distinguish heroin from other opiates (e.g., morphine).



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SECTION VI

Substance Dependence and Need for Treatment among Arrestees

In addition to collecting data about arrestee substance use, information was also collected about arrestee substance abuse and dependence. The UNCOPE measure (described below) was used to determine whether an arrestee was at risk for dependence on alcohol or drug use, separately.

Questions about arrestee treatment focus on treatment experiences during an arrestees' lifetime and treatment during the past year. A wide range of treatment settings were examined from self-help groups to inpatient treatment.

Classifying Dependence on Drugs and Alcohol: The UNCOPE Scale

Drug and Alcohol dependence were assessed using the UNCOPE measure. Briefly, this measure consists of 12 questions (six for alcohol and six for drug) which screen for dependence by assessing the following dimensions:

- Use
- Neglect of responsibilities
- Wanting to Cut down on use
- Objection from others
- Preoccupation with substance
- Emotional discomfort.

The measure allows for an approximation of the clinical substance dependence diagnosis described in the DSM-IV. In this study, we use a threshold of three or more affirmative responses out of six to categorize a respondent as having a risk of alcohol dependence or drug dependence. For a more complete description of this measure including the specific questions asked and psychometric properties of the scale, please see **Appendix G**.

Table 6.1 lists the percentage of arrestees that endorsed each of the UNCOPE items.

- Only arrestees who indicated consuming 5 or more drinks on the same day during the past 12 months were asked UNCOPE items pertaining to alcohol use.
- Only arrestees who indicated they used illicit substances during the past 12 months were asked UNCOPE items pertaining to drug use.
 - Arrestees who reported not using alcohol during the past 12 months were coded as **not** being dependent on alcohol.
 - Arrestees who reported not using any drugs during the past 12 months were coded as **not** being dependent on drugs.

TABLE 6.1
Percent of Snohomish County Arrestees Endorsing UNCOPE Items

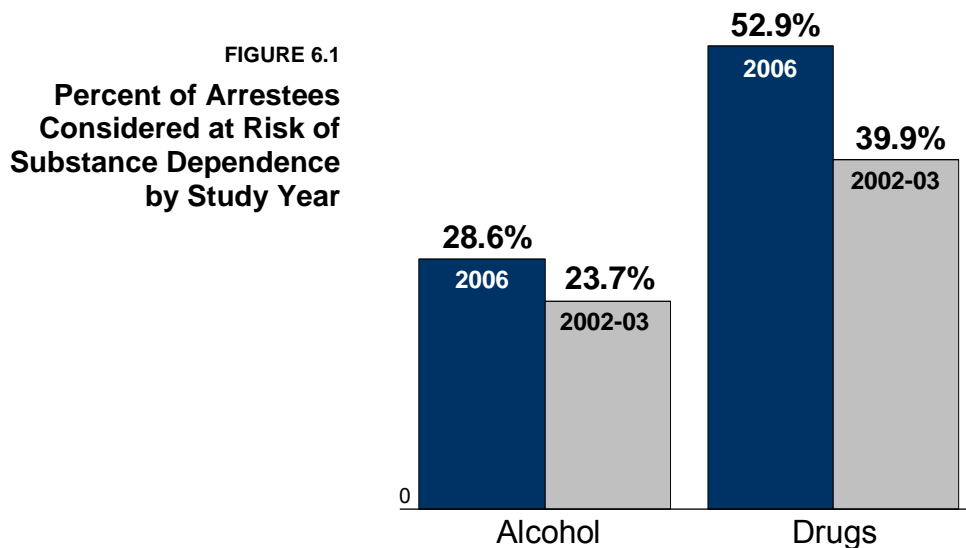
UNCOPE Item	Alcohol		Drugs	
	2006 n = 360	2002-2003 n = 358	2006 n = 446	2002-2003 n = 379
Use	36.2	32.6	52.8	50.2
Neglect	36.0	30.7	59.4	53.0
Cut down	50.9	42.2	72.2	65.1
Objection	34.2	34.9	55.2	51.8
Preoccupation	36.4	28.4	57.8	50.1
Emotional	61.5*	47.9	66.2*	54.9

*Between study differences statistically significant at $p < .05$.

- A positive response to 3 or more UNCOPE items indicates risk for dependence.
- Arrestees considered to be at risk for dependence on alcohol ($n = 161$) endorsed an average of 4.61 UNCOPE items.
- Arrestees considered to be at risk for dependence on drugs ($n = 310$) endorsed an average of 4.82 UNCOPE items.

Figure 6.1 presents the percentage of arrestees that met the UNCOPE criteria for risk of dependence on alcohol and drugs. The 2006 SCASA-II rates are presented alongside the 2002-03 rates.

- A significantly higher percentage of arrestees met the UNCOPE criteria risk of dependence for drugs in 2006 compared with 2002-03 rates.



Frequency of Dependence

Table 6.2 presents a comprehensive account of risk of alcohol and drug dependency among Snohomish County arrestees. In addition to describing overall rates of risk for dependency, this table also describes dependency across different demographic groups. The 2002-2003 SCASA data are also presented for comparison.

Below is a summary and discussion of the findings presented in this table:

- **Over 1 in 4 of all arrestees (28.6%) met the UNCOPE criteria for risk of alcohol dependence.**
- **Over half of all arrestees (52.9%) met the UNCOPE criteria for risk of illicit drug dependence.**
- **Risk of drug dependence increased significantly from the 2002-2003 rates.**

Age

- Neither risk of alcohol nor drug dependence was correlated with arrestee age.
- **Risk of drug dependency increased among arrestees aged 35+ compared with 2002-2003 results.**

Racial Groups

- Risk of dependence on drugs was associated with arrestee race.⁶¹ **Rates of risk for drug dependency were lowest among Hispanic arrestees (29.1%).**
- Risk for alcohol dependence was **not** associated with arrestee race.
- **Risk of drug dependency increased significantly among White arrestees (56.5%) compared with 2002-03 results (42.0%).**

Education Level

- Arrestees at risk for alcohol or drug dependency did **not** differ by level of education.
- Risk for drug dependency increased significantly among arrestees with “some college” education (52.3%) compared with 2002-03 results (30.5%).

Marital Status

- Risk for drug dependence was associated with marital status.⁶² **Risk for drug dependence was higher among single arrestees (56.7%) and lowest among married arrestees (42.4%).**
- Risk for alcohol dependence was **not** associated with marital status.
- **Risk for drug dependence increased significantly among single arrestees (56.7%) compared with 2002-03 rates (41.4%)**

Residence Type

- **Risk for drug dependence was significantly higher among homeless arrestees⁶³ (72.6%) compared to those who lived in a house or apartment (47.3%).**
- Risk for alcohol dependence did **not** differ by residence type.

⁶¹ $\chi^2(3, N = 575) = 14.40, p < .01$

⁶² $\chi^2(2, N = 573) = 6.65, p < .05$

⁶³ $\chi^2(1, N = 532) = 21.21, p < .001$

TABLE 6.2
Percent of Arrestees at Risk for Alcohol or Drug Dependence
by Demographic Groups and Reporting Period

	Alcohol		Drugs	
	2006	2002-2003	2006	2002-2003
OVERALL RISK	28.6	23.7	52.9*	39.9
Age				
18-24	26.3	19.4	56.1	43.1
25-34	26.0	25.2	52.7	41.0
35+	31.8	25.9	51.0*	36.5
Race				
White	27.8	23.1	56.5*	42.0
Black	25.1	20.4	51.7	31.6
Hispanic	29.6	31.8	29.1	23.1
Other	33.2	29.9	54.1	36.3
Education				
No Degree	34.7	26.1	55.3	42.7
HS/GED	24.5	22.4	54.5	42.9
Voc./Trade School	33.8	25.6	49.1	39.7
Some College	27.4	24.4	52.3*	30.5
4 Year Degree +	15.5	14.7	23.8	40.0
Marital Status				
Single	27.5	22.5	56.7*	41.4
Divorced/Separated	29.4	29.1	49.4	40.1
Married	32.6	21.0	42.4	35.2
Residence Type				
House/Apartment	28.0	22.2	47.3	38.4
Homeless	30.6	33.7	72.6	53.4
Employment Status				
Employed	27.5	18.9	42.3	32.6
Unemployed	30.7	28.3	66.8*	48.2
Annual Income				
\$0 to \$14,999	28.8	26.7	63.7*	45.2
\$15,000 - \$29,999	29.4	17.3	47.4	37.0
\$30,000-\$59,999	31.2	25.8	43.3	36.0
\$60,000+	22.4	22.0	33.8	39.1

* Between study differences statistically significant at $p < .05$.

Employment

- Risk for drug dependence was significantly higher among unemployed arrestees⁶⁴ (66.8%) compared to those with jobs (42.3%).
- Risk for alcohol dependence was not associated with employment status.

⁶⁴ $\chi^2 (1, N = 559) = 33.16, p < .001$

- **Risk for drug dependence increased significantly among unemployed arrestees** (66.8%) compared with 2002-03 rates (48.2%).

Income

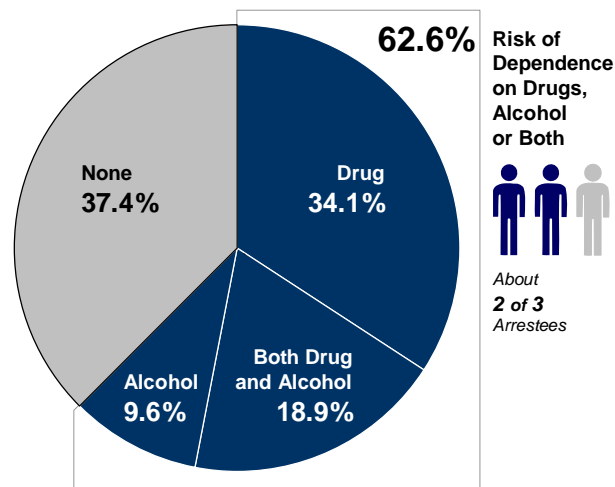
- Risk for drug dependence was associated with arrestee income. **Risk for drug dependence was highest among arrestees making less than \$15,000 during the past year (63.7%).**
- **Risk for drug dependence increased significantly among those arrestees making less than \$15,000** during the past year (63.7%) compared with 2002-03 rates (45.2%).

Co-Morbidity of Risk for Alcohol and Drug Dependence

Risk of dependence upon one type of substance does not preclude risk of dependence upon another. Figure 6.2 describes the proportion of Snohomish County arrestees who are not considered at risk of dependence upon any substance as well as those who are at risk of dependence upon alcohol only, drugs only, and both drugs and alcohol.

- Well over half (62.6%) of arrestees were considered at risk for dependence upon either alcohol or drugs.
- Nearly a third of all arrestees who are considered at risk of dependence upon a substance were at risk of dependence upon both alcohol and drugs (or 18.9% of all arrestees).

FIGURE 6.2
Percentage of Snohomish County Arrestees Considered at Risk of Dependence Upon Substances
n = 575

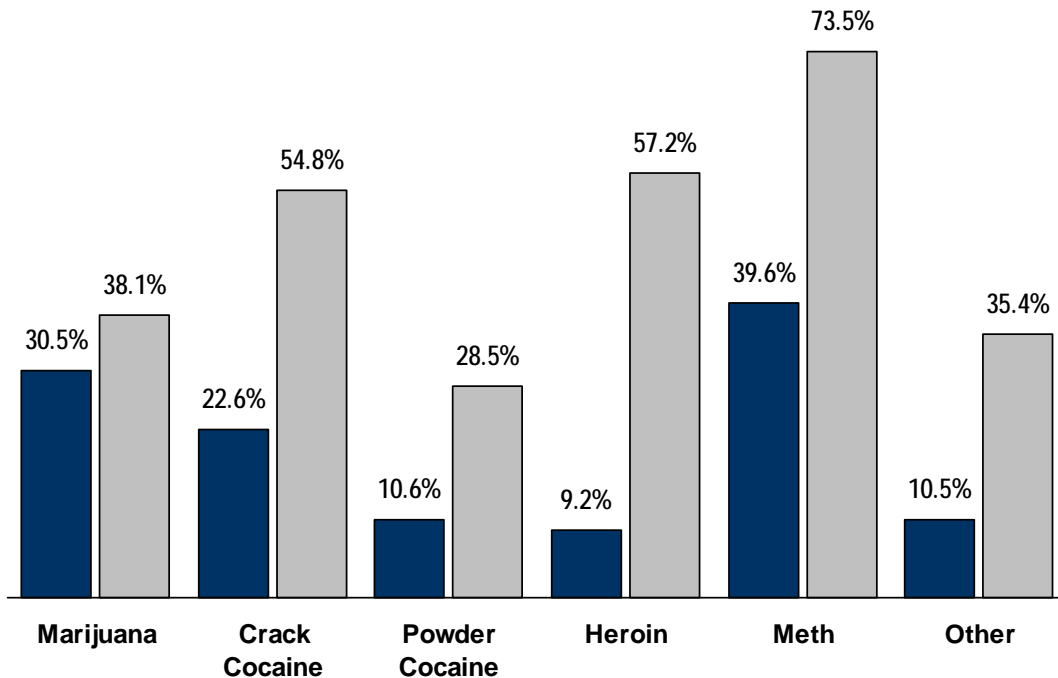


Arrestee Association of Substances with Dependency Symptoms

Arrestees who gave an affirmative response to any of the UNCOPE items when asked about drug use were subsequently asked to indicate all substances that produced these symptoms. As some substances were far more commonly used than other substances (e.g., marijuana vs. heroin), symptoms associated with a particular substance are also presented as a proportion of arrestees reporting use of the particular substance during the past year.

FIGURE 6.3

**Arrestee Reports of Substances That Caused UNCOPE Symptoms:
All Reported Associations (dark bars), and the
Proportion of Reported Associations among Arrestees That Reported
Using the Substance During the Past 12 Months (gray bars)**



- As arrestees were free to choose more than one substance, the totals in the above chart exceed 100%.

All Reports of Drugs Causing UNCOPE Symptom

- Methamphetamine was the drug most frequently cited as causing a symptom of dependence (39.6%).
- Marijuana (30.5%) was the second most frequently cited by arrestees as causing symptoms of dependence.
- Crack cocaine was cited by over 1 in 5 (22.6%) of all arrestees indicating an UNCOPE symptoms.

Reports as Proportion Using Specific Substances

- Nearly 3 out of 4 past-year methamphetamine users (73.5%) reported that this substance caused an UNCOPE symptom.
- Over half of arrestees who used crack cocaine (54.8%) or heroin (57.2%) in the past 12 months indicated that these substances caused an UNCOPE symptom.
- About one third of arrestees who used marijuana (30.5%) or “other” drugs (35.4%) in the past 12 months indicated that these substances caused an UNCOPE symptom.
- Over 1 in 4 (28.5%) of arrestees who used powder cocaine in the past 12 months reported that this substance caused an UNCOPE symptom.

Arrestee Treatment Experiences

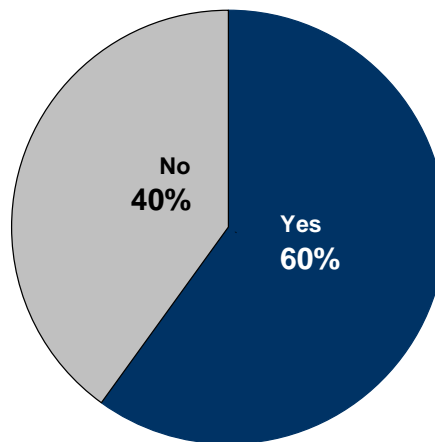
Snohomish County arrestees were asked a series of questions about their experiences, if any, with substance abuse treatment programs. Arrestees were asked to differentiate between the types of treatment utilized.

Analyses in this section have two primary focuses. First, an effort is made to describe the proportion of arrestees receiving any treatment and the types of treatment received. Second, an effort is made to examine the relationship between need for treatment and treatment received.

Ever Utilized Substance Treatment

- As shown in Figure 6.4, more than half of Snohomish County arrestees reported ever being in some form of drug or alcohol treatment.
- These rates are quite similar to 2002-03 when 57% of arrestees indicated they had ever received drug or alcohol treatment.

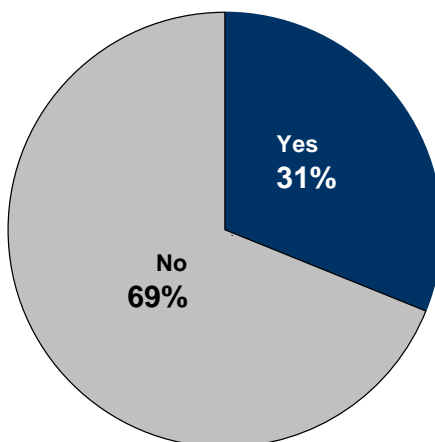
FIGURE 6.4
Percentage of
Snohomish County
Arrestees Ever in Drug or
Alcohol Treatment
n = 555



Substance Treatment in Past Year

Less than one-third of Snohomish County arrestees (30.5%) reported receiving **any** treatment for drug or alcohol use during the past 12 months.

FIGURE 6.5
Percentage of
Snohomish County
Arrestees Indicating
Drug or Alcohol
Treatment During the
Past Year
n = 555



Treatment Received in Past Year by Demographic Groups

Table 6.3 presents a comprehensive account of past year substance abuse treatment among Snohomish County arrestees. In addition to describing the overall treatment rate, this table also describes past year treatment across different demographic groups. The 2002-2003 SCASA data are also presented for comparison.

Below is a summary of the findings in this table:

TABLE 6.3
Percent of Arrestees Using Heroin by Demographic Groups, Reporting Period, and Date of Survey

	2006	2002-2003
OVERALL USE	30.5	28.9
Age		
18-24	24.0	22.9
25-34	28.8	19.7
35+	36.1	40.8
Race		
White	31.9	30.7
Black	23.6	14.4
Hispanic	24.6	28.5
Other	33.2	19.6
Education		
No Degree	27.4	19.6
HS/GED	32.3	31.8
Voc./Trade School	36.3	24.7
Some College	31.2	36.1
4 Year Degree +	15.5	31.4
Marital Status		
Single	27.6	22.2
Divorced/Separated	41.7	41.2
Married	27.2	38.3
Residence Type		
House/Apartment	29.5	28.4
Homeless	30.7	35.1
Employment Status		
Employed	26.1	26.1
Unemployed	36.0	31.4
Annual Income		
\$0 to \$14,999	36.4	31.2
\$15,000 - \$29,999	23.1	20.3
\$30,000-\$59,999	27.7	35.2
\$60,000+	32.3	45.5

Types of Treatment Used in Past Year

Arrestees were asked a number of questions to identify the different types of treatment they may have utilized in the past year.

- These analyses are based only upon arrestees who reported ever using treatment

Detoxification

Often, the first form of “treatment” for chemical dependency is detoxification. It should be noted that arrestees who indicated that they had received detoxification could have received this as part of a more expansive treatment program.

- Over 3 out of 10 arrestees (30.5%) reported receiving drug or alcohol treatment during the past year.
- The overall proportion of arrestees receiving treatment did not differ significantly from that reported in 2002-03.

Age

- Arrestee age was correlated with past year treatment.⁶⁵ That is, **older arrestees were more likely to have received treatment during the past year** than were younger arrestees.
- Rates of drug or alcohol treatment did **not** differ by age from those reported in 2002-03.

Race

- Past year treatment was **not** associated with arrestee race.
- Past year treatment rates did **not** differ significantly from the 2002-2003 rates for any of the four race categories.

Education

- Past year treatment was not associated with arrestee education.
- Past year treatment rates did **not** differ significantly from the 2002-2003 rates by level of education.

Marital Status

- Past year treatment was associated with marital status.⁶⁶ **Divorced or separated arrestees were more likely to have received treatment during the past year** (41.7%) than single (27.6%) or married arrestees (27.2%).
- Past year treatment rates did **not** differ significantly from the 2002-2003 rates by level of education.

Residence Type

- There was no association between receiving treatment during the past year and residence type.

⁶⁵ $r = .10, p < .05$

⁶⁶ $\chi^2(2, N = 551) = 8.76, p < .05$

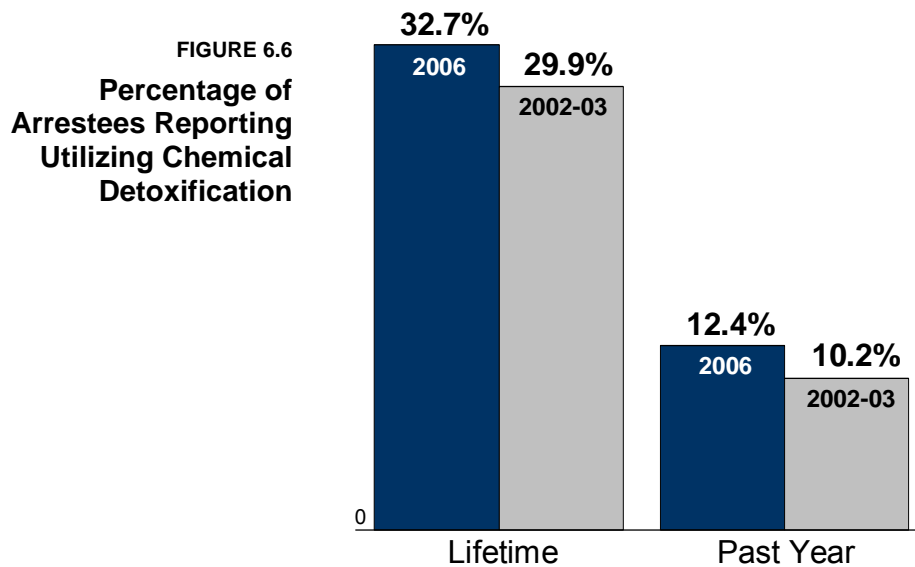
- Past year treatment rates did **not** differ significantly from the 2002-2003 rates by residence type.

Employment Status

- Unemployed arrestees were more likely to have received treatment during the past year (36.0%) than were employed arrestees (26.1%).⁶⁷
- Past year treatment rates did **not** differ significantly from the 2002-2003 rates by employment status.

Annual Income

- Past year treatment was **not** associated with level of arrestee income.
- Past year treatment rates did **not** differ significantly from the 2002-2003 rates by level of arrestee income.
- Figure 6.6 shows that about one-third of arrestees (32.7%) had ever received “detox” during their lifetime, and about 1 in 8 arrestees (12.4%) had received detox in the past 12 months.
- Among those arrestees reporting entering a detox facility in the past year, they reported spending an average of 9.9 days.

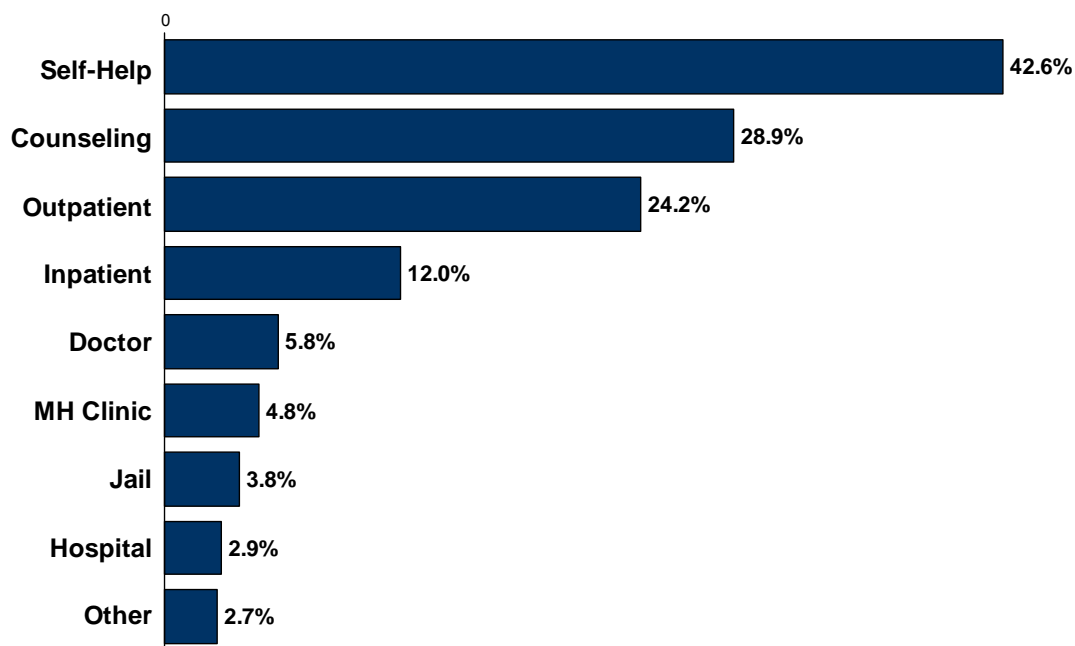


Treatment Programs

Figure 6.7 refers to treatment programs that occur in a number of different settings from self-help groups to inpatient treatment.

⁶⁷ $\chi^2(1, N = 539) = 6.13, p < .05$

FIGURE 6.7
Arrestee Reports of Types of Treatment Received for Chemical Dependency in Past 12 Months
 n = 332



- Nearly half (49.3%) of those who reported ever receiving any treatment reported **not** using any treatment during the past year.
- 41.1% of arrestees who reported receiving treatment during the past year reported using only 1 form of treatment
- Half of arrestees who reported receiving treatment during the past year (50.8%) reported using 3 or more forms of treatment.
- Self-help, professional counseling, outpatient treatment, and inpatient treatment accounted for the majority of all treatment during the past 12 months. Among arrestees reporting receiving these treatments:
 - The average time spent in self-help groups was 51.4 days.
 - The average number of times admitted to outpatient treatment was 2.3 admits.
 - The average amount of time spent in inpatient treatment was 26.5 nights.
- Past year treatment among arrestees who had health insurance (35.0%) was **not** significantly different from the proportion of arrestees who did not have health insurance and received treatment (27.9%).

Assessing Need for Treatment

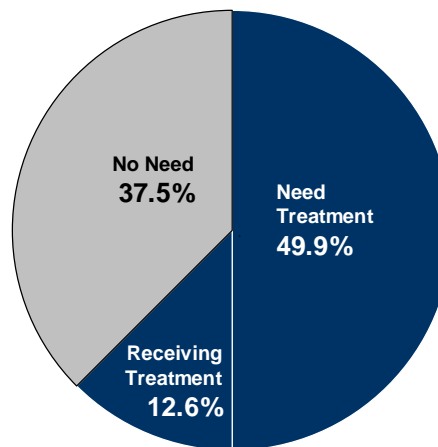
Three separate sets of analyses were conducted to attempt to address the issues of unmet substance treatment needs. Each has its strengths and limitations, and it is hoped that by providing all three, a better picture of need for treatment can be obtained. The three methods presented here are:

1. A straight-forward analysis that looks at the arrestees' risk of dependence and presence of past year treatment.
2. Arrestees' urinalysis results and presence of past year treatment.
3. Reports of "heavy" substance use in the past 30 days and presence of past year treatment.

Using UNCOPE to Determine Need

The first method of approaching this question utilizes the UNCOPE measure to classify arrestees as either at risk for alcohol or drug dependence or not. Arrestee participation in treatment during the past twelve months can be examined comparatively as a crude measure of treatment needs that are being met. In these analyses, *only formal outpatient or inpatient drug or alcohol treatment were considered*. Figure 6.8 describes the results using this technique.

FIGURE 6.8
Need for Treatment
Based on Classification
as at Risk for Alcohol or
Drug Dependence
n = 573



There are three outcomes possible from using this technique. If an arrestee does not meet the UNCOPE criteria for risk of alcohol or drug dependence they, regardless of whether or not the reported receiving treatment, do not need treatment.

- In this analysis, **37.5% of the arrestees do not need of treatment.**

If an arrestee is considered at risk of alcohol or drug dependence **and** reports receiving inpatient or outpatient treatment, they can be classified as having their treatment needs met.

- **12.6% of arrestees were considered at risk of alcohol or drug dependence and reported receiving inpatient or outpatient treatment in the past 12 months and thus fit in this category.**

The last possibility, using this technique, is that an arrestee is considered at risk for alcohol or drug dependence but does not report receiving any treatment in the past 12 months. This segment of the arrestee population can be classified as having unmet treatment needs.

- **Nearly half of all arrestees (49.9%) were considered at risk for alcohol or drug dependence and did not report receiving any treatment.**
- This group represents unmet treatment need.

The strength of using this technique is that it relies upon UNCOPE to approximate substance dependence. The UNCOPE measure has a demonstrated validity and it is likely that arrestees classified as being at risk for dependence using this measure do indeed need treatment.

The weakness of this technique is that it considers that arrestees who report receiving *any* inpatient or outpatient treatment during the past 12 months have their treatment needs met. Given that little is known about the extent and success of the treatment experiences, this assumption is not warranted and the end result is that this analysis provides a rather conservative estimate of the need for treatment in the Snohomish County facility. This methodology argues that 49.9% represents a good number to start with in terms of discussion of unmet treatment needs. Actual need could be considerably higher.

Using Urinalysis Results to Determine Need

Another possible method of measuring treatment need among Snohomish County arrestees is to examine the proportion of arrestees testing positive for illicit substances that do not report receiving any treatment.

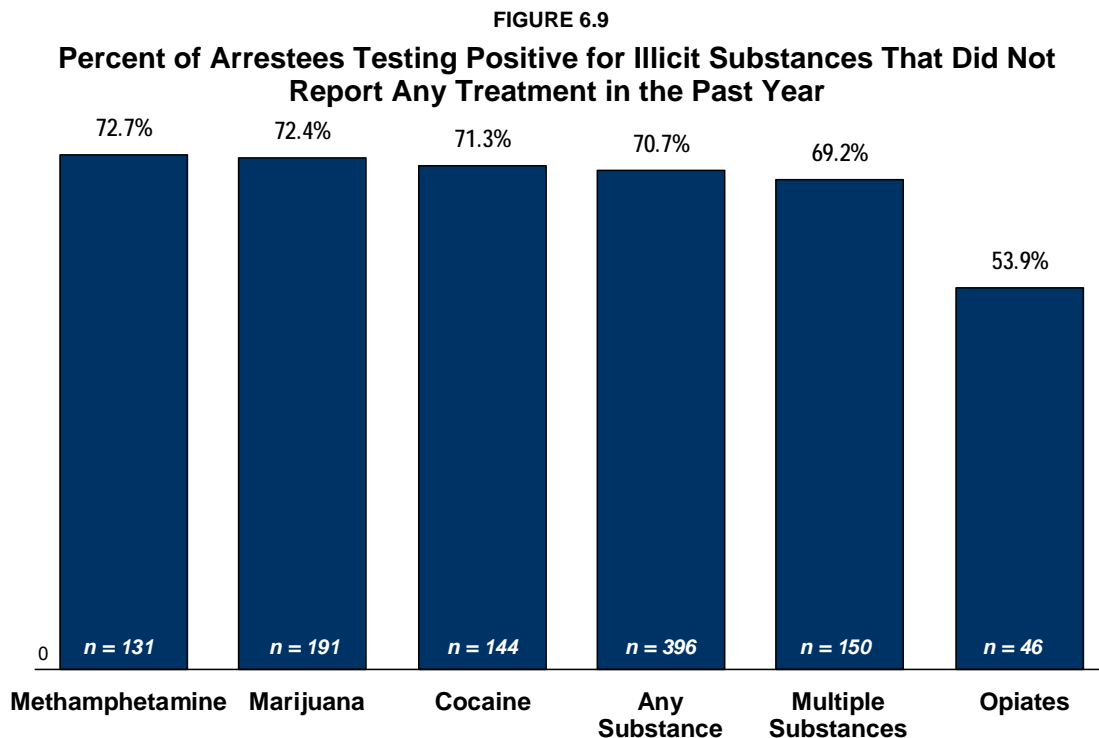


Figure 6.9 presents the percentage of positive urinalysis results for different illicit substances where the arrestee reported not receiving **any** treatment during the past 12 months. What is immediately evident from this chart is that, regardless of substance type, the majority of arrestees who test positive have **not** participated in any substance treatment.

- Arrestees who tested positive for opiates were the most likely to have received treatment in the past year. Still, over half (53.9%) did not receive treatment during the past year.

This method is not recommended as a means to determine treatment need given the limits of the survey information. Clearly, testing positive for a substance does not mean that an arrestee is dependent upon that substance. Again, receiving some form of treatment does not mean that treatment needs are met.

What this figure does show is that a high percentage of arrestees who use drugs do not receive any treatment. The urinalysis results used here represent the most objective measure of recent substance use available in this interview.

- It should also be noted that another limitation of this technique is the lack of testing for alcohol use.

“Heavy” Substance Use to Determine Needs

Another technique that can be employed to determine treatment need is to examine the proportion of arrestees who report heavy substance use and do not report receiving any treatment.

- “Heavy” use represents substance use that occurs more than three days per week or more than 13 days per month. This level of use is the highest level of use assessed on the NIJ ADAM questionnaire.

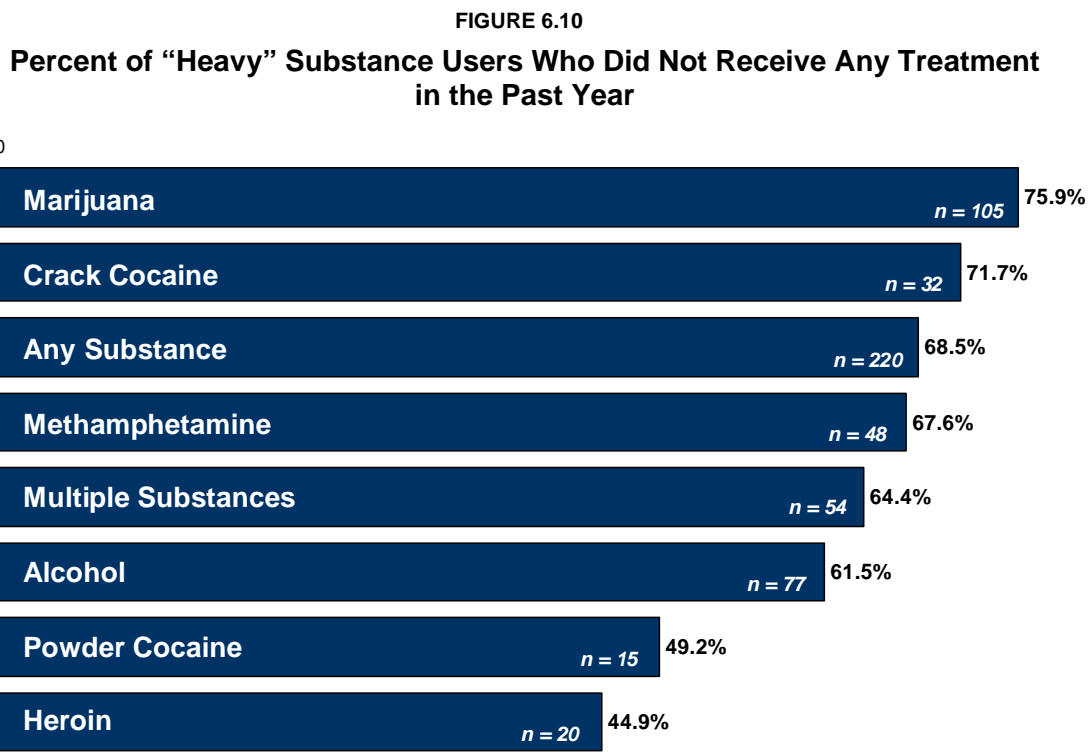


Figure 6.10 describes the proportion of heavy substance users who did not receive any treatment during the past year. As in the previous analysis, regardless of substance type, the majority of heavy users do not report receiving any treatment.⁶⁸

- Nearly two-thirds (64.4%) of arrestees who were heavy users of 2 or more substances did not report any treatment.

The advantage of this analysis over the previous analysis is that, here, use of a particular substance is not an isolated event and represents a chronic and heavy pattern of use. Again, however, it would be hard to argue that heavy use is sufficient to demonstrate dependence. While heavy use may not represent dependence, it does indicate a pervasive pattern of use and is more characteristic of chronic use than recreational use.

⁶⁸ Exceptions are powder cocaine (49.2%) and heroin (44.9%). These also represent the two smallest numbers of arrestees and as such the estimates are less reliable.



Criminal History and Substance Use among Arrestees

This section of the report describes the criminal histories of arrestees in the Snohomish County Jail, examines criminal histories by demographic groups, and examines the relationship between criminal history and substance use. Table 7.1 describes arrestees’ reports of times arrested in the past 12 months.

TABLE 7.1
Snohomish County Arrestee Reports of Times Arrested in Past Year
n = 574

Arrests in Past 12 Months	Percent
No Previous Arrests	41.4
1 to 2 Previous Arrests	33.4
3+ Previous Arrests	25.2

- Over half (58.6%) of arrestees had been arrested in the past 12 months.
- Reports of the number of arrests in the past year ranged from 0 to 30.
- The average number of arrests during the past 12 months was 2.16.

Table 7.2 below describes arrestees’ reports of times arrested during their lifetime.

TABLE 7.2
Snohomish County Arrestee Reports of Times Arrested in Lifetime
n = 574

Previous Arrests	Percent
No Previous Arrests	11.5
1 to 3 Previous Arrests	24.3
4 to 10 Previous Arrests	29.3
11+ Previous Arrests	34.9

- Most arrestees (88.5%) had been arrested prior to their current arrest.
- More than one-third of arrestees (34.9%) indicated that they had been arrested more than 10 times during their lifetime.
- Reports of number of lifetime arrests ranged from 0 to 97.
- The average number of lifetime arrests was 11.79.

Table 7.3 below describes arrestees’ reports of number of days spent in jail during their lifetime.

TABLE 7.3
Snohomish County Arrestee Reports of Times Spent In Jail or Other
Correctional Facility During Their Lifetime
n = 547

Time in Jail	Percent
No Time in Jail	10.7
1 to 30 Days	20.8
30 Days to 6 Months	18.1
6 Months to 1 Year	11.2
Over 1 Year	39.3

Demographic Characteristics and Criminal History

Table 7.4 looks at arrestee criminal history by different demographic groups. The table also includes alcohol and drug dependence. For this table, the three variables that were described above (arrested in past year, arrested in lifetime, time spent in jail) were transformed to dichotomous yes/no variables. Thus, the percentages listed in the table describe the percent that had that form of criminal history.

Below is a summary and discussion of the findings in this table.

Arrested in Past Year

- Arrestee age was negatively correlated with being arrested in the past year.⁶⁹ That is, **younger arrestees were more likely to have been arrested in the past year** than older arrestees.
- Arrestee race was associated with arrests in the past year.⁷⁰ **Hispanic arrestees (40.8%) were the least likely to have been arrested in the past year** compared with other race categories.
- Being arrested in the past year was associated with arrestee education.⁷¹ **Only 9.6% of arrestees with a 4 year degree had been arrested in the past year.**
- Being arrested in the past 12 months was associated with marital status.⁷² **Married arrestees (36.7%) were the least likely to report having been arrested in the past year.**
- **Homeless arrestees (72.7%) were more likely to have been arrested in the past 12 months** than arrestees who lived in a house or apartment (53.8%).⁷³
- **Unemployed arrestees (66.0%) were significantly more likely than employed arrestees (55.1%) to report having been previously arrested in the past 12 months.**⁷⁴

⁶⁹ $r = -.12, p < .01$

⁷⁰ $\chi^2(3, N = 574) = 20.98, p < .001$

⁷¹ $\chi^2(4, N = 574) = 36.73, p < .001$

⁷² $\chi^2(1, N = 571) = 26.51, p < .001$

⁷³ $\chi^2(1, N = 530) = 12.17, p < .001$

⁷⁴ $\chi^2(1, N = 557) = 11.29, p < .001$

- **Arrestees considered to be at risk for dependence on alcohol** (67.9%) were significantly more likely than arrestees not at risk for dependence on alcohol (55.1%) to have been arrested in the past 12 months.⁷⁵
- **Arrestees considered to be at risk for dependence on drugs** (71.1%) were significantly more likely than arrestees not at risk for dependence on drugs (44.7%) to report having been arrested in the past 12 months.⁷⁶

Ever Arrested

- Arrestee age was **positively correlated** with lifetime arrests. That is, **older arrestees were more likely to have ever been arrested** than younger arrestees.⁷⁷
- No significant relationship was found between race and lifetime arrests.
- Level of education was associated with lifetime arrests.⁷⁸ **College graduates (47.0%) were the least likely to report having been previously arrested.**
- Marital status was **not** associated with lifetime arrests.
- **Homeless arrestees** (94.4%) were more likely than arrestees who lived in a house or apartment (86.3%) to have been previously arrested.⁷⁹
- **Unemployed arrestees** were significantly more likely than employed arrestees to report having ever been previously arrested.⁸⁰
- **Arrestees considered to be at risk for dependence on alcohol** were significantly more likely to have ever been arrested compared with arrestees not considered to be at risk for dependence on alcohol.⁸¹
- **Arrestees considered to be at risk for dependence on drugs** were more likely to have been previously arrested than arrestees not considered to be at risk for dependence on drugs.⁸²

Ever in Jail

- Arrestee age was **not** associated with having ever spent time in jail.
- No significant relationship was found between arrestee race and ever spending 24 hours in jail.
- Level of education was associated with having spent time in jail.⁸³ **College graduates (52.5%) were the least likely to have spent 24+ hours in jail.**
- Marital status was **not** associated with whether an arrestee had spent 24+ hours in jail.
- **Homeless arrestees** (95.5%) were significantly more likely to report having spent 24+ hours in jail than arrestees who lived in a house or apartment.⁸⁴

⁷⁵ $\chi^2(1, N = 573) = 7.97, p < .01$

⁷⁶ $\chi^2(1, N = 574) = 41.23, p < .001$

⁷⁷ $r = .10, p < .05$

⁷⁸ $\chi^2(4, N = 574) = 30.59, p < .001$

⁷⁹ $\chi^2(1, N = 530) = 5.14, p < .05$

⁸⁰ $\chi^2(1, N = 557) = 4.65, p < .05$

⁸¹ $\chi^2(1, N = 573) = 5.47, p < .05$

⁸² $\chi^2(1, N = 574) = 13.29, p < .001$

⁸³ $\chi^2(4, N = 574) = 28.90, p < .001$

TABLE 7.4

Percent of Snohomish County Arrestees Arrested in Past Year, Ever Arrested, and Ever Jailed by Demographic Characteristics and Reporting Period

n = 547

	Arrested in Past Year		Ever Arrested		Ever 24+ Hours in Jail	
	2006	2002-2003	2006	2002-2003	2006	2002-2003
OVERALL USE	58.6	54.5	88.5	86.8	89.3	86.3
Age						
18-24	65.5	60.6	81.3	75.3	84.2	76.0
25-34	58.1	57.5	92.1	91.2	92.1	91.8
35+	54.5	47.2	90.8	92.8	90.8	90.0
Race						
White	58.1	54.4	89.8	87.4	90.6	87.0
Black	50.4	60.0	87.5	85.7	87.5	83.1
Hispanic	40.8	47.2	80.8	82.0	81.6	78.0
Other	75.7	55.5	88.9	83.7	90.5	87.2
Education						
No Degree	67.6	57.5	91.3	83.5	92.1	84.8
HS/GED	64.6	53.3	89.7	89.8	92.0	88.5
Voc./Trade School	51.8	58.8	88.9	92.3	88.9	94.0
Some College	44.4	51.9	88.2	85.8	85.9	85.1
4 Year Degree +	9.6*	51.9	47.0	68.3	52.5	59.0
Marital Status						
Single	65.6	57.7	88.4	84.6	89.5	85.1
Divorced/Separated	53.1	56.0	90.8	96.5	90.8	94.2
Married	36.7	43.1	85.3	83.4	86.6	80.9
Residence Type						
House/Apartment	53.8	52.1	86.3	85.3	86.8	84.6
Homeless	72.7	72.1	94.4*	100.0	95.5*	100.0
Employment Status						
Employed	51.8	48.0	85.6	82.8	86.1	82.5
Unemployed	66.0	60.6	91.5	90.5	92.7	90.3
Alcohol Dependence						
Not At Risk	55.1	51.2	86.7	84.2	87.2	83.7
At Risk	67.9	65.7	93.6	96.4	94.7	95.4
Drug Dependency						
Not At Risk	44.7	46.9	83.4	84.0	84.1	82.3
At Risk	71.1	66.3	93.1	91.9	94.1	93.0

Substance Dependency was determined by UNCOPE measure.
*Between study differences statistically significant at $p < .05$.

⁸⁴ $\chi^2(1, N = 530) = 6.23, p < .05$

- **Unemployed arrestees** (92.7%) were significantly more likely to report having spent 24+ hours in jail than employed arrestees.⁸⁵
- **Arrestees considered to be at risk for dependence on alcohol** (94.7%) were significantly more likely than arrestees not considered to be at risk for dependence on alcohol to report having spent 24+ hours in jail.⁸⁶
- **Arrestees considered to be at risk for dependence on drugs** (94.1%) were significantly more likely than arrestees not considered to be at risk for dependence on drugs to report having spent 24+ hours in jail.⁸⁷

Criminal History and Heavy Substance Use

Table 7.5 examines the relationship between prior criminal history and heavy substance use. This data here show a remarkably consistent pattern – any heavy substance use is associated with greater criminal history. The 2002-2003 SCASA data are also presented for comparison.

TABLE 7.5
Percent of Arrestees Reporting Previous Arrests and Time in Jail
by Heavy Substance Use

	Any Heavy Substance Use		No Heavy Substance Use	
	2006	2002-2003	2006	2002-2003
Arrests in Past Year				
No Arrests	30.5	29.3	7.6	7.4
1 or 2 Arrests	57.1	44.8	18.3	9.5
3 + Arrests	62.3	54.6	21.8	16.6
Lifetime Arrests				
No Arrests	28.4	20.8	8.1	1.5
1 to 3 Arrests	29.6	30.7	9.0	6.8
4 to 10 Arrests	50.4	45.0	19.8	10.0
11+ Arrests	63.5	48.3	16.7	17.9
Time in Jail				
No Jail Time	25.3	15.7	6.9	0.0
1 Day to 1 Month	29.0	32.5	7.2	7.9
1 to 6 Months	51.8	42.5	17.3	13.3
6 to 12 Months	49.8	45.4	9.1	13.8
Over 1 Year	60.4	53.6	21.3	12.2

NOTE: Heavy use indicates substance use during 13 or more days/month. Substances included alcohol, marijuana, crack cocaine, powder cocaine, heroin, and methamphetamine.

The results from this table are quite clear – arrestees who reported heavy substance use were also more likely to report more arrests in the past year, more lifetime arrests, and greater time spent in jail. These patterns were the same as those found in the 2002-2003 study.

⁸⁵ $\chi^2(1, N = 557) = 6.12, p < .05$

⁸⁶ $\chi^2(1, N = 573) = 6.88, p < .01$

⁸⁷ $\chi^2(1, N = 574) = 15.14, p < .001$

Below is a summary and discussion of the findings in this table.

Arrests in Past Year

Arrestees reporting heavy substance use reported a greater number of arrests during the past year:

- Number of arrests in past year was associated with any heavy substance use.⁸⁸ “Heavy” substance users were also more likely to report three or more arrests in the past year.
- Number of arrests in past year was associated with multiple heavy substance use.⁸⁹ “Heavy” users of multiple substances were also more likely to report three or more arrests in the past year.

Lifetime Arrests

Arrestees reporting heavy substance use also reported a greater number of arrests during their lifetime:

- Number of lifetime arrests was associated with any heavy substance use.⁹⁰ Nearly two-thirds (63.5%) of arrestees who reported 11+ lifetime arrests reported “heavy” use of a substance.
- Number of lifetime arrests was associated with heavy use of multiple substances.⁹¹

Jail Time

Arrestees reporting heavy substance use also reported spending a greater amount of time in during their lifetime:

- Time spent in jail was associated with any “heavy” substance use.⁹² Over half (60.4%) of arrestees who reported “heavy” substance use reported having spent over one year in jail.
- Time spent in jail was associated with heavy use of multiple substances.⁹³

Criminal History and Heavy Use of Methamphetamine

Table 7.6 describes the relationship between heavy methamphetamine use and prior criminal history. The results indicate that arrestees who report heavy methamphetamine use were also more likely to report more arrests in the past year, more lifetime arrests, and greater time spent in jail.

Below is a summary and discussion of the findings in this table.

Arrests in Past Year

- Heavy methamphetamine use was associated with number of arrests in the past year.⁹⁴ Heavy methamphetamine users were roughly four times as likely to report 3+ arrests in the past year (21.2%) than no arrest in the past year (5.5%).

⁸⁸ $\chi^2(2, N = 574) = 47.31, p < .001$

⁸⁹ $\chi^2(2, N = 574) = 17.37, p < .001$

⁹⁰ $\chi^2(3, N = 574) = 48.77, p < .001$

⁹¹ $\chi^2(3, N = 574) = 9.96, p < .05$

⁹² $\chi^2(4, N = 574) = 44.48, p < .001$

⁹³ $\chi^2(4, N = 574) = 18.32, p < .001$

Lifetime Arrests

- Heavy methamphetamine use was associated with number of arrests in the past year.⁹⁵ Heavy methamphetamine users were roughly seven times as likely to report 11+ lifetime arrests (21.2%) than no previous arrests (3.2%).

Jail Time

- Heavy methamphetamine use was associated with time spent in jail.⁹⁶ Heavy methamphetamine users were roughly nine times as likely to report spending over a year in jail (19.9%) than no jail time (2.3%).

TABLE 7.6
Percent of Arrestees Reporting Previous Arrests and Time in Jail
by Heavy Methamphetamine Use

	Heavy Methamphetamine Use
Arrests in Past Year	
No Arrests	5.5
1 or 2 Arrests	18.7
3 + Arrests	21.2
Lifetime Arrests	
No Arrests	3.2
1 to 3 Arrests	6.1
4 to 10 Arrests	15.0
11+ Arrests	21.9
Time in Jail	
No Jail Time	2.3
1 Day to 1 Month	5.2
1 to 6 Months	18.8
6 to 12 Months	12.2
Over 1 Year	19.9

NOTE: Heavy methamphetamine use is defined as use during 13 or more days/month.

Criminal History and Urinalysis Results

Table 7.7 examines the relationship between prior criminal history and testing positive for illicit substances. With the exception of marijuana, testing positive for illicit substances was generally associated with greater criminal history.

Below is a summary and discussion of the findings in this table.

Marijuana

Testing positive for marijuana was **not** significantly related to number of arrests in past year, number of arrests during their lifetime, or time spent in jail.

⁹⁴ $\chi^2(2, N = 573) = 24.08, p < .001$

⁹⁵ $\chi^2(3, N = 573) = 24.43, p < .001$

⁹⁶ $\chi^2(4, N = 573) = 23.33, p < .001$

Cocaine

Testing positive for cocaine was associated with criminal history. (Note: EMIT testing for cocaine cannot differentiate between crack and powder cocaine.)

- Testing positive for cocaine was significantly associated with number of arrests in past year.⁹⁷ Arrestees testing positive for cocaine also reported a greater number of arrests during the past year.
- Testing positive for cocaine was significantly associated with number of arrests during the lifetime of the arrestee.⁹⁸ Arrestees that tested positive for cocaine also reported a greater number of arrests during their lifetime.
- Testing positive for cocaine was significantly associated with time spent in jail.⁹⁹ Arrestees that tested positive for cocaine also reported a greater number of days spent in jail.

Opiates

EMIT testing for opiates includes an entire class of substances (e.g., including morphine) rather than just heroin. However, the majority of positive tests for opiates are heroin.

- Testing positive for opiates was only significantly associated with number of lifetime arrests.¹⁰⁰ Arrestees that tested positive for opiates also reported a greater number of lifetime arrests.

TABLE 7.7
Percent of Arrestees Testing Positive for Illicit Substances
by Prior Arrest History and Time Spent in Jail

	Marijuana	Cocaine	Opiates	Methamphetamine
Arrests in Past Year				
No Arrests	35.5	20.4	7.1	17.2
1 or 2 Arrests	38.4	26.6	9.8	27.5
3 + Arrests	33.7	39.1	9.8	33.5
Lifetime Arrests				
No Arrests	35.5	11.8	1.8	13.5
1 to 3 Arrests	37.5	16.1	5.3	18.3
4 to 10 Arrests	37.3	28.4	10.3	26.8
11+ Arrests	34.1	38.5	11.8	31.2
Time in Jail				
No Jail Time	31.1	15.1	5.6	12.2
1 Day to 1 Month	30.3	19.4	4.1	13.2
1 to 6 Months	45.5	16.4	6.6	35.3
6 to 12 Months	41.7	44.5	8.5	29.5
Over 1 Year	34.2	34.0	12.7	27.9

⁹⁷ $\chi^2(2, N = 533) = 15.06, p < .001$

⁹⁸ $\chi^2(3, N = 533) = 27.73, p < .001$

⁹⁹ $\chi^2(4, N = 533) = 27.51, p < .001$

¹⁰⁰ $\chi^2(2, N = 533) = 8.40, p < .05$

Methamphetamine

Testing positive for methamphetamine was consistently associated with criminal history.

- Testing positive for methamphetamine was significantly associated with number of arrests in past year.¹⁰¹ Arrestees testing positive for methamphetamine also reported a greater number of arrests during the past year.
- Testing positive for methamphetamine was significantly associated with number of arrests during the lifetime of the arrestee.¹⁰² Arrestees testing positive for methamphetamine also reported a greater number of lifetime arrests.
- Testing positive for methamphetamine was significantly associated with time spent in jail.¹⁰³ Arrestees testing positive for methamphetamine also reported a greater number of days spent in jail.

Severity of Criminal Charges and Urinalysis Results

The next section examines the relationship between severity of criminal charges (felony vs. misdemeanors) obtained from county booking records, and testing positive for illicit substances.

County arrest records could be matched to 536 of the 537 arrestees that provided a urine specimen (99.8%). The severity of charges is described below (Table 7.8). In the case that an arrestee had multiple charges that included both a felony and a misdemeanor, they were classified by the more serious, felony, charge.

TABLE 7.8
Charge Severity of Arrestees That Provided Urine Specimen
n = 536

Charge Group	Percentage
Felony (n = 224)	41.8
Misdemeanor (n = 312)	58.2

Table 7.9 describes the percentage of arrestees charged with misdemeanors and felonies that tested positive for illicit substances.

Below is a summary and discussion of the findings in this table.

- Significantly more arrestees facing felony charges tested positive for multiple illicit substances (33.5%) than arrestees facing misdemeanor charges (24.5%).¹⁰⁴
- Significantly more arrestees facing felony charges tested positive for methamphetamine (34.8%) than arrestees facing misdemeanor charges (17.3%).¹⁰⁵
- No significant relationship was found between charge severity and testing positive for any illicit drug, marijuana, cocaine, or opiates.

¹⁰¹ $\chi^2(2, N = 533) = 13.16, p < .01$

¹⁰² $\chi^2(3, N = 533) = 11.64, p < .01$

¹⁰³ $\chi^2(4, N = 533) = 19.76, p < .001$

¹⁰⁴ $\chi^2(1, N = 536) = 5.29, p < .05$

¹⁰⁵ $\chi^2(1, N = 536) = 21.46, p < .001$

TABLE 7.9
Percent of Arrestees Testing Positive for Illicit Substances by Charge Severity
n = 536

Substance	Felony	Misdemeanor
Any Illicit Substance	78.4	71.9
Multiple Illicit Substances	33.5*	24.5
Marijuana	35.3	36.5
Cocaine	29.9	25.4
Opiates†	10.7	7.4
Methamphetamine	34.8*	17.3

†The urinalysis assay detects opiates, not heroin. While the vast majority of opiate use is heroin, opiates use can also include other substances (e.g., morphine). * $p < .05$.



2006
Snohomish County

**Arrestee Substance
Abuse Study
(SCASA-II)**

SECTION VIII

**Summary and
Suggestions for
Further Investigation**

Project Summary

The results presented in this report represent the efforts of 43 days of interviews conducted between June and August 2006. This data collection effort progressed quite well as interviewers were able to obtain participation from a high number of arrestees. This report also contains data from the 2002-2003 SCASA report and the current results are frequently compared with this previous study.

Data collected in Snohomish County included arrestee information on demographic characteristics, drug use, treatment history, and criminal background. An additional component focusing upon methamphetamine markets and use was added to the 2006 survey. Most of the arrestees who participated in the interview also agreed to provide a urine sample that was subsequently tested for evidence of illicit drug use.

Future Directions for Investigation

It is our hope that the information presented in this report will be of considerable use. There are, however, a number of additional topics or considerations that were not included in this study and may be worthy of further consideration should future time and budgets permit.

Briefly, these are:

- **Expanded Market and Use for Drugs Other than Methamphetamine:** Due to time considerations and additional programming requirements, information on the drug markets for drugs other than methamphetamine was not included in the Snohomish County interview. These data include such items as: (1) whether drugs were paid for with cash or with other forms of payment; (2) how much was paid for drugs; (3) how the arrestee contacted the person who sold them drugs (e.g., phone, work); (4) where drugs were obtained (e.g., house or apartment, park); (5) how frequently drugs were purchased; (6) amount of drug that was obtained; (7) frequency of purchases; (8) any impediments to obtaining desired substance; and, (9) how substance was used (e.g., smoked, snorted, injected).
- **Arrestees Booked in Other Jails:** Only arrestees booked into the Snohomish County Jail were considered in the current study. These arrestees represent about 75% of jail bookings in the County. Jails in Lynnwood and Marysville account for most of the remaining 25% of bookings. A project designed to collect information on arrestees booked into the other local jails would offer a more complete picture of drug use and abuse among arrestees across the entire county and provide meaningful information to the local jail administration.

- **Youth in Juvenile Detention:** Juvenile experience with drug use and abuse is likely very different than that of adults. A similar study of juveniles could provide important quantification of juvenile substance abuse, activities related to substance abuse, treatment experience, and other information.
- **Additional Topical Addenda:** SCASA II made special use of targeted methamphetamine addenda to gather information specific to methamphetamine users. Additional survey addenda have been developed to examine domestic violence, firearm use and attitudes, mental health, etc. Local issues may arise that would benefit from such knowledge in the future.
- **Larger Sample Size:** While 500 interviews is sufficient for addressing many questions, more data allows for more detailed analyses. In some instances in this report, variable categories were collapsed or omitted from some analyses because they did not contain sufficient numbers to be of use (e.g., arrestee housing). Further, in some instances behaviors are relatively rare – for example, roughly 9% of arrestees tested positive for opiates (heroin). This means that the sample of 500 is reduced to less than 50 when one is interested in characteristics of heroin users. When the sample is further disaggregated to examine heroin use among specific groups (e.g., by race) one is left with smaller numbers. As the sample size becomes smaller, it is increasingly at risk for being influenced by a single arrestee who is not representative of the population. Increasing the sample size would allow for greater confidence when considering relatively rare behaviors.

APPENDICES



2006
Snohomish County



Arrestee Substance Abuse Study (SCASA-II)

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APPENDIX A

Weighting of Snohomish County Arrestee Sample

Actual Sample Surveyed

Age Group	White	African American	Hispanic	Other	TOTAL
18 to 24	174	18	19	14	225
25 to 34	124	10	12	14	160
35 +	163	15	6	9	193
TOTAL	461	43	37	37	578

Sample Weights

In order to ensure that the sample interviewed reflects the population served by Snohomish County, the surveyed sample was compared with booking records during the same time period (July 14 to August 25) in terms of age and race. Data were stratified into three age groups and four racial categories. The survey sample stratification is reflected in the table above and the booking population is reflected in the table below.

Age Group	White	African American	Hispanic	Other	TOTAL
18 to 24	546	93	48	58	745
25 to 34	527	98	69	69	763
35 +	833	176	51	57	1,117
TOTAL	1,906	367	168	184	2,625

Weights were assigned based upon the relative representation of the 12 (3 Age Groups × 4 Races) groups. Weights of less than 1.0 indicate that the surveyed population contained a relatively greater proportion of that segment of the booking population (e.g., Hispanics aged 18 to 24). Weights greater than 1.0 indicate that the survey underrepresented a particular segment of the booking population (e.g., African Americans aged 35 and over).

Weights were calculated for each arrestee surveyed through the application of this simple formula:

$$\frac{[(\text{Age Group Booked} * \text{Race Group Booked}) / (\text{Age Group Surveyed} * \text{Race Group Surveyed})]}{(\text{Total Number Bookings} / \text{Total Number Surveyed})}$$

e.g., For white arrestees between the ages of 18 and 24, the weight was derived from the following calculation: $[(546)/(174)] / (2625/578) = 0.69$

The weights used in this report are listed in the table below:

Age Group	White	African American	Hispanic	Other
18 to 24	0.69	1.14	0.56	0.91
25 to 34	0.94	2.16	1.27	1.09
35 +	1.13	2.58	1.87	1.39

APPENDIX B

Chi-Square Test of Independence

A simple example will be used to explain the logic behind the chi-square test of independence.

If you flip a “fair” coin it is reasonable to **expect** that the coin would come up heads 50% of the time and tails 50% of the time. Of course, flipping a coin rarely turns out the *exact* result that is expected. A realistic result of flipping a coin 100 times might be that you **observe** 45 heads and 55 tails. Observed frequencies and expected frequencies are presented in the table below:

	Heads	Tails	Total
Observed	45	55	100
Expected	50	50	100

The chi-square test of independence is concerned with the extent observed frequencies deviate from expected frequencies. From the sample (in the above example the sample is 100 coin tosses) we can *infer* to the overall population whether or not observed frequencies are significantly different from expected frequencies—perhaps indicating a trick coin that does not randomly land as heads or tails.

The chi-square is expressed with the following general notation: $\chi^2(df, \underline{N}) = X, p$.

- df = degrees of freedom. In the chi-square statistic $df = (\# \text{ of Rows} - 1) * (\# \text{ of Columns} - 1)$
- \underline{N} = number in sample
- X = value of chi-square statistic
- p = probability value

We can fill in some of the values from the information available in the above table.

- Our degrees of freedom $(2-1)*(2-1) = 1$
- $N = 100$ (tosses of the coin)

We must perform a calculation to obtain X . A simplified formula for calculating the chi-square statistic is:

$$\chi^2 = \sum [(O - E)^2 / E]$$

- O = the observed frequency in each category
- E = the expected frequency in each category

Using this formula, we obtain the value of $\chi^2 = [(45-50)^2 / 50] + [(55-50)^2 / 50] = 1$

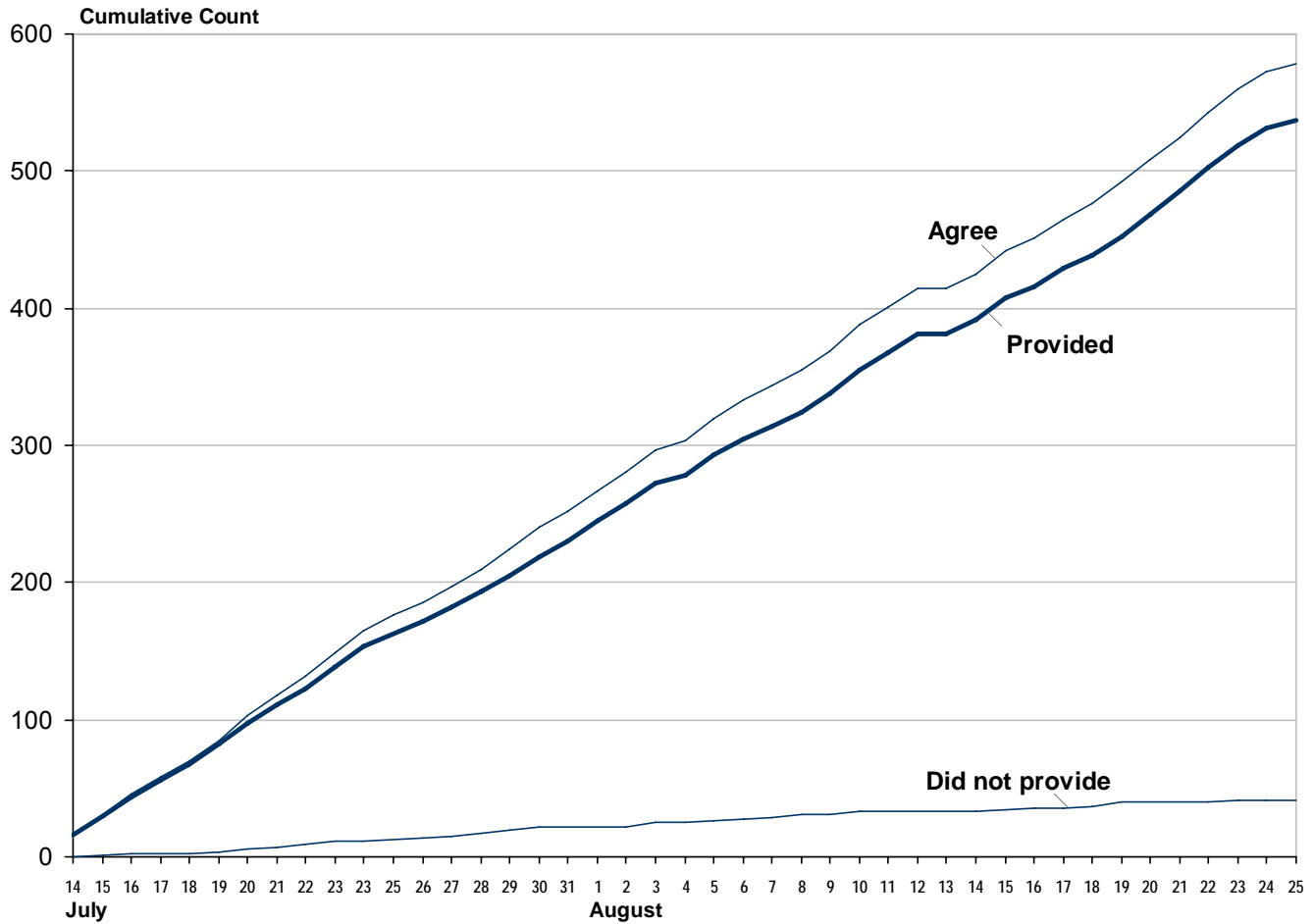
We must consult a table of the χ^2 distribution to obtain the p value. In this case, the value is 0.32.

Based upon the work done in this sample, we can say that the observed result of the coin tosses were not significantly different than the expected results, $\chi^2(1, \underline{N} = 100) = 1.00, p = .32$.

- By convention, when $p < .05$ we say that the result is statistically significant.
- It is important to remember that just because a test statistic is statistically significant it does not mean that a practical and meaningful difference exists. A statistically significant result of a 10% difference between two groups may be more important for some questions than for others. It is the responsibility of the policy maker to determine whether a statistically significant result has practical implications.

APPENDIX C

Cumulative Arrestee Participation in Study Across Days of Interviews



	July														August							
	14	15	16	17	18	19	20	21	22	23	23	25	26	27	28	29	30	31	1	2	3	4
Agree	16	31	46	58	70	85	103	118	132	149	165	176	186	197	210	224	241	252	267	280	297	303
Provided	16	30	44	56	68	82	97	111	123	138	153	163	172	182	193	205	219	230	245	258	272	278
Did Not Provide	0	1	2	2	2	3	6	7	9	11	12	13	14	15	17	19	22	22	22	22	25	25

	August																					
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Agree	319	333	343	355	369	388	401	414	414	425	442	451	465	476	492	508	525	543	560	572	578	578
Provided	293	305	314	324	338	355	368	381	381	392	408	416	429	439	452	468	485	503	519	531	537	537
Did Not Provide	26	28	29	31	31	33	33	33	33	33	34	35	36	37	40	40	40	40	41	41	41	41

APPENDIX D

Characteristics of Arrestees Who Participated and Those Who Refused

Of the 733 arrestees approached for the interview, 578 (78.9%) agreed to participate in the interview. This appendix, using data obtained solely from county records, describes the characteristics of the arrestees that refused to participate.

Characteristics of Arrestees Refusing and Agreeing to Interview Obtained from County Records (N = 733)

Arrestee Characteristic	Refused Interview n = 155	Agreed to Interview n = 578
Age		
18 to 24	21.9%	38.9%
25 to 34	32.3%	27.7%
35 +	45.8%	33.4%
Race		
White	72.3%	79.8%
Black	12.3%	7.4%
Hispanic	9.7%	6.4%
Other	5.8%	6.4%
Charge Severity		
Felony	37.4%	41.2%
Misdemeanor	62.6%	58.8%

NOTE: These data are based upon county records and *not* self-report. Thus, it is possible that figures described here may differ somewhat from those provided elsewhere in the report.

- Rates of refusal were associated with arrestee age.¹⁰⁶ Specifically, younger arrestees were more likely to participate than were older arrestees.
- Rates of refusal did not differ between racial groups.¹⁰⁷
- Severity of charges was not associated with arrestee participation.¹⁰⁸

¹⁰⁶ $\chi^2(2, N = 733) = 16.1, p < .05$

¹⁰⁷ $\chi^2(3, N = 733) = 6.2, p = .10$

¹⁰⁸ $\chi^2(1, N = 732) = 0.7, p = .39$

APPENDIX E

Sociodemographic Characteristics of Arrestees Interviewed in the 2006 Snohomish County Arrestee Substance Abuse (SCASA-II) Study Compared with the 2002-2003 Sample

SCASA Survey Year	Age (%)					
	Under 20	21-25	26-30	31-35	36+	Mean Age
2006 SCASA-II (n = 578)	12.6	20.8	13.4	12.5	40.7	32.6
2002-2003 SCASA (n = 568)	13.0	20.8	14.3	16.4	35.4	31.8

SCASA Survey Year	Race/Ethnicity (%)					
	White	Black	Hispanic	Other	Employed (%)	H.S. Diploma (%)
2006 SCASA-II (n = 578)	62.0	11.3	9.6	17.1	55.9	70.8
2002-2003 SCASA (n = 568)	81.9	7.8	5.1	5.2	51.2	76.1

APPENDIX F

List of Drugs and Drug Classes Detected

Amphetamines

A group of stimulant drugs that increase activity in the central nervous system. Drugs that will result in an amphetamine-positive screen include:

- Amphetamine
- Methamphetamine
- Methylenedioxyamphetamine (MDA)
- Methylenedioxymethamphetamine (MDMA)

Barbiturates

The barbiturate screen detects related drugs in the barbiturate drug group, a class of depressants that affect the central nervous system. The EMIT screen detects metabolites of this drug group. While it is most efficient at detecting secobarbital, the assay also detects other commonly used barbiturates including phenobarbital.

Benzodiazepines

A class of tranquilizers that include a variety of drugs such as valium and klonopin. In addition to detecting the common metabolite of oxazepam, the EMIT assay detects the presence of a number of drugs including:

- Rohypnol
- Halcion
- Lorazepam
- Diazepam

Cocaine

The primary metabolite of cocaine is benzoylecgonine, and this is easily identified in a urine specimen. The EMIT assay for cocaine is specifically designed to detect benzoylecgonine.

Marijuana

Delta-9-tetrahydrocannabinol, or THC, is the primary psychoactive ingredient in marijuana. Practically no THC is excreted in the urine; the EMIT assay relies on a number of metabolites to indicate marijuana use.

Methadone

Methadone is a narcotic analgesic. Methadone is a synthetic narcotic unrelated to morphine, but similar in effect. The EMIT assay is specific to methadone.

Methaqualone

Introduced in 1965 under the name “Quaalude” as a barbiturates substitute. The EMIT assay detects:

- Methaqualone
- Macloqualone

Opiates

A broad class of drugs that include heroin, morphine, codeine, and semisynthetic derivatives of morphine. In addition to the substances mentioned, the EMIT assay also detects:

- Dihydrocodeine
- Hydrocodone
- Hydromorphone
- Levallorphan

Oxycodone

A potent and addictive opioid analgesic medication synthesized from thebaine. This drug is a specific subclass of opiates and is typically not detectable at normal levels of use, requiring a separate test. Common forms of oxycodone include Percodan, Percocet, and OxyContin.

Phencyclidine (PCP)

A general anesthetic introduced in the 1950s that has become a major drug of abuse because of its potent psychological and behavioral effects. Previously available under such street names as “angel dust” and “hog.” In addition to PCP, the EMIT assay also detects a number of metabolites.

Propoxyphene

A narcotic analgesic used for pain relief and includes the trade name of the drug Darvon. The EMIT assay detects:

- Propoxyphene
- Norpropoxyphene

APPENDIX G

Alcohol and Drug Dependence

The Snohomish County interview uses the UNCOPE measure to assess the likelihood of dependence on alcohol and drugs (Zywiak, Hoffmann, Floyd, 1999).

The UNCOPE consists of 12 questions (six alcohol and six drug) which screen for dependence by assessing:

- **U**se
- **N**eglect of responsibilities
- Wanting to **C**ut down on use
- **O**bjection from others
- **P**reoccupation with substance
- **E**motional discomfort.

Two or more positive responses (out of six) indicate abuse or possible dependence. Four or more positive responses strongly indicate dependence.

- For the analyses in this report, a cut score of three is used and labeled “risk for dependence”. This cut score is consistent with that used in ADAM reports and has been supported by an NIJ validity study.

Using a cut score of two produces sensitivities in clinical populations for alcohol, cocaine, and marijuana of 93%, 94%, and 82%, respectively.¹⁰⁹ Specificities for this cut-off are 97%, 99%, and 97%, respectively.¹¹⁰

The following are the 12 UNCOPE questions:

Alcohol	Drugs
In the last 12 months, did you spend more time using drinking than you intended?	In the last 12 months, did you spend more time using drugs than you intended?
Did you neglect some of your usual responsibilities because of using alcohol?	Did you neglect some of your usual responsibilities because of using drugs?
Did you want to cut down on your drinking?	Did you want to cut down on your drug use?
In that last 12 months, did anyone object to your alcohol use?	In that last 12 months, did anyone object to your drug use?
Did you frequently find yourself thinking about drinking?	Did you frequently find yourself thinking about using drugs?
Did you use alcohol to relieve feelings such as sadness, anger, or boredom?	Did you use drugs to relieve feelings such as sadness, anger, or boredom?

¹⁰⁹ Sensitivity is the proportion of dependent individuals (true positives) correctly identified as being dependent (positives).

¹¹⁰ Specificity is the proportion of nondependent individuals (true negatives) correctly identified as not being dependent (negatives).

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