# Substance Use, Substance Use Disorders, and Need for Treatment among Washington State Adults

Findings from:

the 1993-1994 Washington State Needs Assessment Household Survey

the 1994 Arrestee Estimates of Substance Abuse Need for Treatment Study

# **December 96**

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Substance Use, Substance Use Disorders, and Need for Treatment in Washington State Adults. Findings from: the 1993-1994 Washington State Needs Assessment Household Survey and the Arrestee Estimates of Substance Abuse Need for Treatment Study

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The 1993-1994 WANAHS and the 1994 ARREST studies were supported by the Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, under Contract #270-92-0017

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# Acknowledgments:

Many individuals have contributed to the successful completion of this report. Sharon Estee, now Research Manager at the Washington State Department of Health's Center for Health Statistics, was project director during the first year of the project. We are grateful for her major contributions toward initial project establishment and staffing, questionnaire development, project approval from the state's Human Research Review Board, and actual implementation of the questionnaire in the field.

Professional staff at Washington State University's Social and Economic Research Center (SESRC) deserve great credit for organizing the collection of all household survey data, developing translated versions of the survey, and managing a complex sampling strategy. John Tarnai, Associate Director of SESRC, Rosie Pavlov, Project Supervisor, Keith Onken, MATI programmer, Chris Frigon, data manager, Thom Allen, Interviewer Supervisor, and all the interviewers contributed substantial time and effort to the successful completion of the project.

Collaborative work with William McAuliffe, Director, and Richard LaBrie, Senior Scientist, with the National Technical Center on Substance Abuse at Harvard University was instrumental in designing of a set of core questions on substance abuse, dependence, and treatment history allowing Washington's data to be integrated into and consistent with a larger national database.

Finally, Chris Williams served as study director for the ARREST study. Penny Larson, Chris Pannell, and Dawn Biddison conducted most of the interviews. Staff at the King County Jail, Yakima County Jail, Whatcom County Jail, and the King County Youth Detention Facility were most helpful in ensuring private and safe procedures for interviewing arrestees.

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# Summary of Results from the 1993-1994 Washington State Needs Assessment Household Survey (WANAHS) and the Arrestee Estimates of Substance Abuse Need for Treatment Study (ARREST)

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In October 1992, the Division of Alcohol and Substance Abuse (DASA) and the Office of Research and Data Analysis (ORDA) in Washington State's Department of Social and Health Services (DSHS) were awarded a three-year contract by the federal Center for Substance Abuse Treatment to conduct studies that would help the state assess the need for state-funded substance abuse treatment services. Most of the contract was devoted to a telephone survey of over 7,000 Washington households, called the Washington State Needs Assessment Household Survey (WANAHS). The telephone survey was complemented by face-to-face interviews with 599 adults arrested and held in booking facilities in three Washington counties (King, Whatcom and Yakima).

## **Key Policy Findings**

There are five key findings for policy which are drawn from the two studies:

- Except for stimulants, the lifetime and thirty-day drug and alcohol use of Washington adults was similar to those of national and Western Region adults. Stimulant use (including methamphetamines) was much higher in Washington than elsewhere (page 7).
- Rates of current need for substance abuse treatment varied widely across age, ethnic and gender subgroups (page 31).
- Statewide, only **21%** of the adults in households who needed substance abuse treatment during the past year and were probably poor enough to qualify for publicly-funded treatment received such treatment (page 40).
- This 21% was not uniform across the state. In some counties, **60%** or more of those who were likely to need state-funded substance abuse treatment received it, while in other counties, the equivalent percentage was under **11%** (pages 40 and 41).
- Persons who were arrested and held in three Washington State booking facilities (King County, Whatcom County, and Yakima County jails) had self-reported substance abuse and dependence rates which, depending on the demographic subgroup, were from two to more than ten times the rates for similar persons in households (see pages 48 and 49).





The primary goals for conducting the household survey were:

- To estimate and compare statewide sociodemographically-specific prevalence rates of: substance use, abuse, and dependence, need and demand for substance abuse treatment services, and risk for substance abuse;
- To develop reliable estimates similar to the statewide estimates listed above for all 39 Washington counties, counties constituting Washington's substate planning areas for alcohol and drug treatment services; and
- To analyze the rates of co-existing problems which complicate treatment such as physical and mental disabilities or difficult life circumstances and risks.

### **Questions This Section Will Answer**

For all adults living in Washington State households and for subgroups among those adults, results from the WANAHS will answer the following questions:

- How many and what percent used alcohol or marijuana even once in their lifetime or during the past thirty days?
- How many and what percent used "hard drugs" (cocaine, heroin, other opiates, hallucinogens, stimulants or sedatives) for "non-medical" reasons at least once in their lifetime or during the past 12 months?
- How many and what percent currently need substance abuse treatment?
- How many and what percent of persons at or below the 200% poverty level who currently need substance abuse treatment received state-funded treatment?

### Survey Description and Data Collection

The database of survey respondents comes from a telephone survey of adults in over 7,000 Washington State households. The interview was conducted by trained interviewers from the Public Opinion Laboratory at the Social and Economic Sciences Research Center (SESRC), Washington State University. The survey covered disability status, recency and frequency of substance use, DSM-III-R<sup>1</sup> substance abuse and dependence, substance abuse treatment history and treatment need, risk factors associated with problem use (such as family history, attitudes toward use, causes of stress in daily lives, etc.), and DSM-III-R depression, generalized anxiety disorder, mania, and psychosis.

The structured interview was developed by researchers at ORDA and DASA and included items and scales from the widely used Diagnostic Interview Schedule (DIS). Consultation and technical assistance were provided by professors and their associates at four major research universities, including William McAuliffe at the National Technical Center on Substance Abuse at Harvard University, Ronald Kessler at the University of Michigan, John Tarnai at Washington State University, and Richard Catalano and David Hawkins at the University of Washington.

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<sup>&</sup>lt;sup>1</sup> DSM-III-R criteria for psychoactive substance abuse and dependence and other mental disorders are detailed in the *Diagnostic and Statistical Manual of Mental Disorders (Third Edition-Revised)*, 1987, American Psychiatric Association, Washington, DC.



A stratified sampling design generated oversamples of persons in poverty, rural residents, women, and members of four minority ethnic and racial groups (Hispanics of all races, and non-Hispanic African Americans, Asians, and American Indians). Adults were randomly chosen within the household by interviewing the one with the most recent birthday. The survey was implemented over a fourteen month period, September 1993 through October 1994, to control for seasonal effects in responses.

Considerable efforts were made to encourage survey respondents to participate, leading to a response rate of 72% (eligible households producing a completed interview) and a cooperation rate of 85% (eligible adults actually contacted completing an interview). The interview was conducted in seven different languages: English, Spanish, Japanese, Korean, Mon-Khmer, Vietnamese, and Chinese (both Cantonese and Mandarin dialects).

### Future Research

Future WANAHS reports are expected to include:

- Detailed analysis among subgroup intersections (e.g. differences between Hispanic males and Hispanic females or differences between urban women living above 200% of the federal poverty level and urban women living below the 200% federal poverty level);
- Assessment of co-morbidity of substance abuse with mental illness and other disabilities; and
- Evaluation of the relationship of risk and protective factors to substance abuse.

### **Additional Information**

For more detail on either the WANAHS or the ARREST study, including additional prevalence rates not presented in this report and technical information on research design, sampling design, and confidence intervals, please contact the project director, Dr. Joseph Kabel, at (360) 902-0729 or the project manager, Dr. Elizabeth Kohlenberg, at (360) 902-0731. Either person may also be contacted at the Office of Research and Data Analysis, Department of Social and Health Services, PO Box 45204, Olympia, WA, 98504-5204.

The *County Profiles on Substance Use, Abuse, and Need for Treatment* (ORDA, 1995) provide county-level estimates for various measures of substance use, abuse, and need for treatment (based upon the WANAHS) and compare the need for treatment with actual treatment used by the household populations in each county. The profiles, a twelve page report for each county, are available from the Division of Alcohol and Substance Abuse, PO Box 45330, Olympia, WA 98504-5330, (360) 438-8097.



### Developing Statewide Estimates of Substance Use and Need for Treatment Services

This report analyses people's current and past use of alcohol or drugs and the consequences and conditions of their substance use. Answers to survey questions are presented separately with respect to general patterns of use and combined into a measure of past year need for substance abuse treatment. WANAHS estimates of substance use, abuse and dependence, and treatment need are developed for many different population subgroups, based on demographic, social, economic, and geographic characteristics.

Most graphical presentations in this report contain estimated prevalence rates (in percentage form). For many of the rates presented, the estimated number of persons associated with the rates may be found in Tables 1 and 2 on pages 44 and 45.

In calculating the statewide estimates, each interview was weighted to reflect its probability of selection in the survey. The probability of selection is inversely proportional to the size of the population subgroup<sup>2</sup> to which the respondent belongs. Interview weights were calculated based upon the respondent's age, sex, race/ethnicity, poverty status, and urban/rural location. These weights also adjust for refusal bias, and for the exclusion of persons living in non-telephone households. Persons without telephones and refusers are "represented" in the survey database by persons with telephones who completed an interview AND are of the same age, sex, race/ethnicity, poverty status, and urban/rural location.

Since the two percent of the population living in institutions and group quarters (such as prisons, hospitals, shelters, or dormitories) cannot be interviewed privately by telephone, they were not eligible for the survey and are not included in the results. It should be noted that although rates for institutionalized persons and those living in group quarters will be different than rates for adults living in households, their relatively small sizes (2% of the total population) would make them unlikely to significantly influence overall state rates.

<sup>2</sup> County-level age by sex by race/ethnicity by poverty status population estimates for calendar year 1994 were produced by the Office of Research and Data Analysis, Washington State Department of Social and Health Services, and are used to determine the population-based weights for each interview. The estimation process involved several steps. County-level age by sex by race/ethnicity population estimates for 1994 were compiled using demographic data purchased from Claritas, Inc. These estimates then were adjusted, controlling to official 1994 county-level age by sex by race/ethnicity totals released by the Washington State Office of Financial Management. County-level age by sex by race/ethnicity population proportions of persons living above and below 200% of the federal poverty level were carried forward from 1990 census data (Summary Tape File 4C) and applied to the 1994 population subgroups to add poverty status to the 1994 population estimates.



### State to National Comparisons<sup>1</sup>

Washington rates can be compared to western regional<sup>2</sup> and national estimates (see chart below). Although "statistically" significant differences between Washington rates and national rates cannot be tested for, it appears that lifetime and past-30 day use of most substances are comparable to regional and national estimates. An exception may be use of stimulants where lifetime and past-30 day use seem to be much higher in Washington than in the region or nation.



Source for national and regional data: National Household Survey on Drug Abuse: Population Estimates 1994 Substance Abuse and Mental Health Services Administration, Public Health Service, U.S. Department of Health and Human Services. Source for state data: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS. <sup>1</sup>All estimates shown are for persons age 18 years or older and living in households. <sup>2</sup>Includes Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.





## Analysis of Substance Use among Population Subgroups in Washington State

In Washington State as in the nation, substance use varies considerably across population subgroups. The following categories were examined because research studies or DASA treatment data suggested that they would be associated with varying levels of substance use, abuse and need for treatment.

Sociodemographic Categories and their <i>Population Subgroups</i>						
Parental Use	Poverty Status					
<ul> <li>Parents with Reported Problem Use: All adults who said that their parents "got drunk or high often" OR "used alcohol or drugs soon after getting up in the morning" OR "got arrested for drinking and driving'.</li> <li>Parents with No Reported Problem Use: All adults who said their parents did none of the above.</li> </ul>	<ul> <li>Below 200% FPL includes adults living in households with a total income at or below 200% of the Federal Poverty Level. (Approximately \$30,000 for a family of four in 1994).</li> <li>Above 200% FPL includes all adults living in households with a total household income greater than 200% of the Federal Poverty Level</li> </ul>					
Insurance Status	Geographic Location					
<i>Some Insurance:</i> At least some medical expenses were covered by a private insurer or plan, a government health insurance program, or some other insurance source	<b>Urban:</b> King, Pierce, Snohomish, Kitsap, Clark, and Spokane Counties. County distinctions were based upon population density, percent of persons living in census-defined urban places, and percent of persons employed in agriculture, forestry or fishing.					
<b>No Insurance:</b> No coverage of any medical expenses	Rural: All other counties					
Marital Status	Employment Status During Previous Week					
Divorced or Separated Widowed	Employed Full time or on active military duty. Employed Part time					
Married Single and Never Married	<b>Not in Labor Force:</b> Retired OR full-time homemaker OR full-time student					
	time student.					
Education	Race/Ethnicity					
Less than High School: No high school diploma or GED High School: High school degree or GED AND no additional college or training Some College: High school degree or GED AND some college schooling or occupational training AND no 4-year degree. College Graduate: Earned a 4-year college degree (BA, BS) or higher.	<ul> <li>Hispanic: Hispanic origin regardless of their race</li> <li>White: All non-Hispanic persons who said they were White.</li> <li>Asian: All non-Hispanic persons who said they were Asian.</li> <li>African-American: All non-Hispanic persons who said they were Black or African-American.</li> <li>American Indian: All non-Hispanic persons who said they were American Indian or Alaska Native.</li> </ul>					
Gender	Age when Interviewed					
Men	18 to 29					
Women	30 to 54					
	55 and older					



### Statistical Significance of Subgroup Differences

The tables and charts which follow present rates of drug and alcohol use and need for treatment across the population subgroups defined in the table on the previous page. They are mostly bivariate analyses. In other words, they present the effect of a single respondent characteristic (such as age, gender, poverty status or marital status) upon a single measure of substance use or need for treatment. This is the best way to begin examining subgroup variation.

However, since each respondent has many characteristics, these effects are interrelated. For example, young adults (18 to 29 years old) have higher alcohol use rates than older persons, and single never-married persons have higher rates than married persons. However, since young adults are more likely than older adults not to have ever been married, many of the same people contribute to the high rates in both categories. Future reports will analyze the multivariate interactions and interrelationships between respondent characteristics and substance use, abuse and need for treatment.

To aid in interpreting the material presented, it is important to determine if subgroups are "statistically significantly" different from one another. To provide such insight, rates for comparison subgroups are statistically evaluated against rates for a reference subgroup<sup>3</sup> within the same category (for example, comparing female use to the use of males, 18-29 year old use to the use of 30-54 year olds, or the use of single and never married persons to the use of married persons). A statistically significant difference between groups occurs when the prevalence rate for a comparison group and its reference group are different by more than the amount expected from random variation.

In the charts and tables, comparison subgroups that are significantly different than their reference group are marked with one or two asterisks. A single asterisk suggests that there is a nine in ten chance that the comparison group uses more or less than the reference group (.10 significance level). A double asterisk suggests that there is a nineteen in twenty chance that the comparison group uses more or less than the reference group (.05 significance level). Both cases provide strong evidence of a true difference between subgroups. The prevalence percentages for reference groups are always depicted in bold italics on the graphs.

<sup>&</sup>lt;sup>3</sup> Since the dependent variables are binary (the person does or does not use a substance, is or is not in need of treatment and so forth), logistic regressions were used to analyze relationships between population subgroups and dependent variables. Statistical tests of significance and variance estimation for the regressions were performed in SUDAAN, a software package designed for analysis of complex survey data and for surveys using complicated sampling designs such as the WANAHS. SUDAAN is distributed through the Research Triangle Institute, Research Triangle Park, NC.



### Lifetime Use of Alcohol among Population Subgroups

93% (3,532,839 in 1994) of all Washington State adults living in households had at least one drink of alcohol during their lives. This is somewhat higher than the comparable national rates of 88.5% as reported in the 1994 National Household Survey on Drug Abuse. In Washington State, some population subgroups reported lower lifetime use:

- Ethnic groups reporting LOWER lifetime alcohol use than White non-Hispanics included Asian non-Hispanics (72%), Hispanics (85%), and African-American non-Hispanics (88%).
- Other factors associated with LOWER rates of lifetime alcohol use were: being widowed (81%), not finishing high school (84%), being 55 years of age or older (87%), being poor (87%), not being in the labor force (87%), and being female (91%).

Some individual characteristics were not associated with significant differences in lifetime alcohol use rates. These included rural-urban residence, insurance coverage, and having parents with problem alcohol or drug usage.

### Alcohol Use During the Past 30 Days among Population Subgroups

About 57% (2,146,562 in 1994) of Washington State adults living in households had one or more drinks of alcohol during the 30 days prior to the interview. This is slightly higher than the national rate of 53%. Subgroup analyses revealed variations similar to those seen in national surveys:

- Men reported HIGHER rates of 30-day use (63%) than women (50%).
- All four minority racial and ethnic groups reported LOWER 30-day alcohol use rates than White non-Hispanics (59%). Rates were 38% for Asians, 44% for American Indians, 46% for African-Americans, and 47% for Hispanics.
- Other factors associated with LOWER rates of 30-day alcohol use were: being widowed (33%), being 55 years of age or older (48%), being poor (44%), not being in the labor force (45%), or having only a high school degree (53%).

Again, some characteristics were not associated with significant differences in 30 day usage. These included rural-urban residence, insurance status and having parents with problem drug or alcohol usage.



# Being Age 55 or Older, Female, or of Minority Racial/Ethnic Status are Associated with LOWER Lifetime and Past 30-Day Alcohol Use Rates.

### Lifetime Use of Alcohol



### Past 30 Day Use of Alcohol Percent of Adults in Households



Note: Lifetime Use of Alcohol means having had at least one drink of alcohol at least once in their life.

Note: Past 30 day Use of Alcohol means having had at least one drink of alcohol during the past 30 days.

Note: Starred groups are "statistically" significantly different from their reference group. p<.10\*, p<.05\*\*.

Note: For each population subgroup shown in the graphs above, Table 1 on page 44 provides: a) the number of interviews (sample size): b) the total Washington

adult household population (percentage denominator), and c) the number of adults represented by each bar (percentage numerator).

Source: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS.

# Being Poor, Not in the Labor Force<sup>1</sup>, or Having No High School Diploma are Associated with LOWER Lifetime and 30-Day Alcohol Use Rates.









Note: Lifetime Use of Alcohol means having had at least one drink of alcohol at least once in their life. Note: Past 30 day Use of Alcohol means having had at least one drink of alcohol during the past 30 days. Note: Starred groups are "statistically" significantly different from their reference group. p<.10\*, p<.05\*\*. Note: For each population subgroup shown in the graphs above, Table 1 on page 44 provides: a) the number of interviews (sample size): b) the total Washington adult household population (percentage denominator), and c) the number of adults represented by each bar (percentage numerator). Source: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS. <sup>1</sup>Not in Labor Force means Not Employed AND either Retired, OR a Fulltime Homemaker, OR a Fulltime Student.



# Being Widowed is Associated with LOWER Lifetime and 30-Day Alcohol Use Rates.

### Lifetime Use of Alcohol



Past 30 Day Use of Alcohol



Note: Lifetime Use of Alcohol means having had at least one drink of alcohol at least once in their life. Note: Past 30 day Use of Alcohol means having had at least one drink of alcohol during the past 30 days. Note: Starred groups are "statistically" significantly different from their reference group. p<.10\*, p<.05\*\*. Note: For each population subgroup shown in the graphs above, Table 1 on page 44 provides: a) the number of interviews (sample size): b) the total Washington adult household population (percentage denominator), and c) the number of adults represented by each bar (percentage numerator).

Source: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS.



### Lifetime Use of Marijuana among Population Subgroups

41% (1,558,470 in 1994) of all Washington State adults living in households had used marijuana or hashish at least once during their lives. This is somewhat higher than the comparable national rate of 36% (reported in the 1994 National Household Survey on Drug Abuse). In Washington State, some population subgroups reported significantly different lifetime marijuana use:

- Ethnic groups with LOWER reported lifetime rates of marijuana use included Asians (17%) and Hispanics (30%).
- LOWER rates of lifetime marijuana use were also associated with: being widowed (5%), being 55 years of age or older (8%), not being in the labor force (20%), not finishing high school (27%), and living in a rural county (35%).
- HIGHER lifetime marijuana use rates were associated with being single or never married (58%), having parents with drug or alcohol use problems (58%), and being American Indian (55%).

Individual characteristics which were not associated with significant differences in lifetime marijuana use rates included gender, poverty status, and being insured.

### Past 30-Day Use of Marijuana among Population Subgroups

Only 4.8% (181,958 in 1994) of all Washington State adults living in households had used marijuana or hashish at least once during the 30 days prior to the telephone interview. Again, this is slightly higher than the national rate of 4.2% (reported in the 1993 National Household Survey on Drug Abuse). In Washington, subgroup variation in past 30 day marijuana use is more pronounced than for lifetime use :

- Age and gender were more strongly associated with 30-day marijuana use than with lifetime use. Men and young adults under thirty had HIGHER 30-day use rates (7.1% of men and 11.7% of young adults respectively) than their reference categories.
- On the other hand, ethnic differences were less pronounced than for lifetime use: only Asians (1.3%) and Hispanics (1.9%) were significantly different (LOWER) from the White non-Hispanic use rate of 5.1%.
- Not being in the labor force was associated with LOWER 30-day marijuana use rates (2.0%).
- HIGHER rates of past 30 day marijuana use were associated with being single or never married (13.1%), not being insured (10.6%), having parents with drug or alcohol use problems (8.7%) and being divorced or separated (6.9%).

Two characteristics were not associated with past 30-day marijuana use rates: poverty status and educational level.



# Being Age 55 or Older, Asian, Hispanic or Female are Associated with LOWER Lifetime and Past 30-Day Marijuana Use Rates.

### Lifetime Use of Marijuana



### Past 30 Day Use of Marijuana

Percent of Adults in Households



Note: Lifetime Use of Marijuana means having used marijuana at least once in their life.

Note: Past 30 day Use of Marijuana means having used marijuana at least once during the past 30 days.

Note: Starred groups are "statistically" significantly different from their reference group. p<.10\*, p<.05\*\*.

Note: For each population subgroup shown in the graphs above, Table 1 on page 44 provides: a) the number of interviews (sample size): b) the total Washington adult household population (percentage denominator), and c) the number of adults represented by each bar (percentage numerator).

Source: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS.

# Not Being in the Labor Force<sup>1</sup> is Associated with LOWER Lifetime and Past 30-Day Marijuana Use Rates.









Note: Lifetime Use of Marijuana means having used marijuana at least once in their life.

Note: Past 30 day Use of Marijuana means having used marijuana at least once during the past 30 days.

Note: Starred groups are "statistically" significantly different from their reference group. p<.10\*, p<.05\*\*.

Note: For each population subgroup shown in the graphs above, Table 1 on page 44 provides: a) the number of interviews (sample size): b) the total Washington adult household population (percentage denominator), and c) the number of adults represented by each bar (percentage numerator). Source: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS. <sup>1</sup>Not in Labor Force means Not Employed AND either Retired, OR a Fulltime Homemaker, OR a Fulltime Student.



Being Single and Never Married, Divorced or Separated, or Having Parents with Reported Drug or Alcohol Problems are Associated with HIGHER Lifetime and Past 30-Day Marijuana Use Rates.

### Lifetime Use of Marijuana



### Past 30 Day Use of Marijuana

Percent of Adults in Household



Note: Lifetime Use of Marijuana means having used marijuana at least once in their life.

Note: Past 30 day Use of Marijuana means having used marijuana at least once during the past 30 days.

Note: Starred groups are "statistically" significantly different from their reference group. p<.10\*, p<.05\*\*.

Note: For each population subgroup shown in the graphs above, Table 1 on page 44 provides: a) the number of interviews (sample size): b) the total Washington

adult household population (percentage denominator), and c) the number of adults represented by each bar (percentage numerator).

Source: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS.

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## Use of "Hard Drugs"

In the WANAHS, respondents were asked if they had used any of the drugs listed in the table below in a non-medical way. The interview added the following sentence: "By 'non-medical' I mean using a drug not prescribed by a doctor or in a way a doctor did not intend, like to get high or to see what it feels like." Each drug grouping below was asked about separately. The results are reported together because the use rates are too small to examine subgroup use for each substance separately.

Hard Drugs (used without prescriptions to get high or experiment) as Described to WANAHS Respondents						
Sedatives	" Tranquilizers or barbiturates"	Stimulants	"Speed, methamphetamines, or preludin"			
Cocaine	"Cocaine or crack including speedballs made from cocaine and heroin"	Hallucinogens	"LSD, PCP, Ecstasy, or drugs like that."			
Heroin	"Heroin including speedballs made from cocaine and heroin"	Other Opiates	"Opiates other than heroin such as codeine, Demerol, morphine, Percodan, Methadone, or drugs like that"			

## Lifetime Use of Hard Drugs among Population Subgroups

24% (916,643 in 1994) of all Washington State adults living in households had used at least one hard drug at least once during their lives. Subgroup use varied:

- HIGHER rates of lifetime hard drug use were reported by people who were: single or never married (40%), American Indians (39%), the children of parents with drug or alcohol problems (38%), or persons who are divorced or separated (32%).
- LOWER rates of lifetime hard drug use were reported by people who were: widowed (2.5%), 55 or older (3.9%), Asian (8.5%), Hispanic (18%), not in the labor force (11%), or living in rural counties (19%).

Gender, poverty status, education, and being insured were not associated with lifetime hard drug use.

## Past Year Use of Hard Drugs among Population Subgroups

4.3% (162,386 in 1994) of all Washington State adults living in households had used at least one hard drug at least once during the past year.

- HIGHER rates of past year hard drug use were reported by people who were: single or never married (12.7%), or divorced or separated (6%).
- LOWER rates of past year hard drug use were reported by people who were: 55 or older (0.03%), Asian (1.5%), not in the labor force (1.5%), or living in rural counties (2.3%).

Gender, poverty, education, parents with problem use, and being insured were not associated with past year hard drug use.



Persons Who Were Age 55 or Older, or Asian Reported LOWER Rates of Both Lifetime and Past Year Hard Drug Use. HIGHER Lifetime Hard Drug Use was Reported by American Indians. HIGHER Past Year Hard Drug Use was Reported by Young Adults Under 30.



### Past 12 Month Use of Hard Drugs

15 11.9%\*\* 5.8% 5.2% 4.5% 4.3% 3.1% 3.0% 2.8% 3.0% 1.5%\* 0.03%\*\* 0 Washington 18-29 yrs 30-54 yrs 55 + yrs Female Male White Afr. Amer. Asian Amer. Ind. Hispanic

Percent of Adults in Households

Note: Lifetime Use of a Hard Drug means having used a hard drug at least once in their life.

Note: Past 12 Month Use of a Hard Drug means having used a hard drug at least once during the past 12 months.

Note: Starred groups are "statistically" significantly different from their reference group.  $p < .10^*$ ,  $p < .05^{**}$ .

Note: For each population subgroup shown in the graphs above, Table 1 on page 44 provides: a) the number of interviews (sample size): b) the total Washington

adult household population (percentage denominator), and c) the number of adults represented by each bar (percentage numerator).

Source: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS,

## Persons Who Were Not in the Labor Force<sup>1</sup> Reported LOWER Rates of Lifetime and Past Year Use of Hard Drugs.









Note: Lifetime Use of a Hard Drug means having used a hard drug at least once in their life.

Note: Past 12 Month Use of a Hard Drug means having used a hard drug at least once during the past 12 months.

Note: Starred groups are "statistically" significantly different from their reference group.  $p<.10^*$ ,  $p<.05^{**}$ .

Note: For each population subgroup shown in the graphs above, Table 1 on page 44 provides: a) the number of interviews (sample size): b) the total Washington adult household population (percentage denominator), and c) the number of adults represented by each bar (percentage numerator). Source: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS.

<sup>1</sup>Not in Labor Force means Not Employed AND either Retired, OR a Fulltime Homemaker, OR a Fulltime Student.



People Who Were Divorced or Separated, Single and Never Married, Lived in Urban Counties, or had Parents with Problem Drug or Alcohol use Reported HIGHER Lifetime Use of Hard Drugs. All but the Last Condition Were also Associated with HIGHER Past Year Hard Drug Use Rates.

### Lifetime Use of Hard Drugs



### Past 12 Month Use of Hard Drugs

Percent of Adults in Household



Note: Lifetime Use of a Hard Drug means having used a hard drug at least once in their life.

Note: Past 12 Month Use of a Hard Drug means having used a hard drug at least once during the past 12 months.

Note: Starred groups are "statistically" significantly different from their reference group. p<.10\*, p<.05\*\*.

Note: For each population subgroup shown in the graphs above, Table 1 on page 44 provides: a) the number of interviews (sample size): b) the total Washington

adult household population (percentage denominator), and c) the number of adults represented by each bar (percentage numerator).

Source: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS.



# **Substance Use Disorder**

# Substance Use Disorder



### Substance Abuse, Dependence and Disorder among Population Subgroups

Prevalence rates of general substance use provide one level of understanding about drug and alcohol use in Washington. For evaluating treatment needs, however, it is important to know the respondent's view of the consequences of his or her substance use. Therefore, the household survey incorporated items and scales from the widely used Diagnostic Interview Schedule (DIS) to assess the substance-related diagnoses of the American Psychiatric Association's Diagnostic and Statistical Manual, Third Edition - Revised (DSM-III-R). DSM-III-R lifetime and past 18 month measures of substance abuse and substance dependence were obtained. These measures are based on the symptoms below:

DSM III-R Symptoms of Substance Abuse and Dependence						
Substance is often taken in larger amounts or over a longer period than the person intended.	Marked tolerance or markedly diminished effect with continued use of same amount.					
Persistent desire or one or more unsuccessful attempts to cut down or control substance use.	Substance often taken to relieve or avoid withdrawal symptoms.					
Great deal of time spent in activities necessary to get the substance, taking the substance or recovering from its effects.	Important social, occupational or recreational activities given up or reduced because of substance use.					
Frequent intoxication or withdrawal when expected to fulfill major role obligations or when use is physically hazardous.	Continued use despite knowledge of having a persistent or recurrent social, psychological or physical problem.					
Characteristic withdrawal symptoms						

Lifetime DSM-III-R Dependence: A person is diagnosed with lifetime dependence if:

- 1. they have ever had three or more symptoms of dependence or abuse, AND
- 2. at least two of those symptoms lasted a month or more or occurred repeatedly over a longer period of time.

Lifetime DSM-III-R Abuse: A person is diagnosed with lifetime abuse if:

- 1. they do not have a lifetime DSM-III-R diagnosis of substance dependence; AND
- 2. they have ever continued substance use despite having recurrent social, occupational, psychological or physical problems exacerbated by it OR used repeatedly in situations where use is physically hazardous (determined from a subset of questions used to assess dependence symptoms); AND
- 3. at least one symptom lasted a month or more or occurred repeatedly over a longer period of time.

**Lifetime Substance Use Disorder:** A person is diagnosed with a lifetime substance use disorder if they meet the criteria for either lifetime DSM-III-R abuse or lifetime DSM-III-R dependence.

Past 18 Month Substance Use Disorder: A person is diagnosed with a past 18 month substance use disorder if:

- 1. they have a diagnosis of lifetime dependence or abuse; AND,
- 2. they have used a substance in the last 18 months; AND,
- 3. they have experienced a DSM-III-R abuse or dependence symptom in the past 18 months.

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# Substance Use Disorder

### Substance Use Disorders in Washington State Adults, Controlling for Poverty Status

The graphs below show lifetime and past 18 month substance disorder rates among adults living above and below 200% of the Federal Poverty Level. The first and second pairs of bars in each graph distinguish two groups: those who are dependent on or abusing alcohol and those who are dependent on or abusing one or more of the following illicit drugs (marijuana, cocaine, hallucinogens, heroin, other opiates, sedatives and stimulants). The final pair in each graph shows the total number of persons with either alcohol or drug disorders – in other words, shows the percent of persons with any substance abuse disorder.

The lifetime rates shown below are similar to rates found in the national Epidemiological Catchment Area studies of the 1980's. Those studies used DSM III measures, and found lifetime alcohol disorder rates of 13.5%, drug disorder rates of 6.1%, and combined alcohol and drug rates of 16.7%<sup>4</sup>.

### Percent of Adults with a Lifetime and Past 18-Months DSM-III-R Substance Use Disorder, all Adults and Adults at or below 200% of the Federal Poverty Level, in Washington State Households



<sup>4</sup>Regier et al 1990. "Co-morbidity of Mental Disorders with Alcohol and Other Drug Abuse (Results from the ECA Study). <u>Journal of</u> the American Medical Association 264:19, pp. 2511-2518.



# **Current Need for Treatment**



# **Current Need for Treatment**

### **Defining Current Need for Treatment**

There were 399,383 adults in Washington State households who were defined as currently in need of substance abuse treatment. These included people who met the following conditions:

- 1. Persons who had a past 18 month substance use disorder. About 74% of those in current need of treatment were in this group.
- 2. Persons who did not meet the first condition but who reported that they have "had a problem or felt addicted to alcohol or drugs" AND were drinking or using "regularly" during the past 18 months. "Regular" use means they drank 3 or more drinks per drinking day at least 1 to 2 times a week, OR, during the past 18 months, used marijuana 50 times or more, OR used any other illicit drug 10 times or more. About 10% of those in current need of treatment were in this group.
- 3. Persons who did not meet the first two conditions but who received licensed residential or outpatient treatment services (excluding detoxification or assessment) during the past 12 months. About 2% of those in current need of treatment were in this group.
- 4. Persons who did not meet the first three conditions but who were using drugs or alcohol heavily during the past 18 months. "Heavy" use means they drank an average of 4 drinks per drinking day at least 3 to 4 times per week OR used any illicit drug 50 times or more during the past 18 months. About 14% of those in current need of treatment were in this group.



### **Current Need for Treatment Among Population Subgroups in Washington State**

10.5% (399,383 in 1994) of all Washington State adults living in households had a current need for drug and/or alcohol treatment. Population subgroups varied as to their need for treatment.

- Some subgroups had much LOWER rates of current treatment need than their comparison groups. These included people who were: Asian (2.8%), not in the labor force (5.9%), female (6.1%), Hispanic (7.2%), or children of parents with no drug or alcohol problems (7.8%).
- Other groups had HIGHER rates of current treatment need. These included people who were: young adults aged 18 to 29 (22%), single and never married (22%), divorced or separated (18%), or American Indians (17%).
- Some characteristics did not distinguish subgroups with more or less current treatment need. These included poverty status, educational level, rural-urban residence, and insurance status.

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Persons Who Were Female, Asian, or Hispanic Had LOWER Rates of Current Need for Substance Abuse Treatment. Persons Who Were Under 30 or Were American Indians Had HIGHER Rates of Current Need for Substance Abuse Treatment.

### **Current Need for Treatment**

Percent of Adults in Households



Note: for definition of Current Need for Treatment see page 30.

Note: Starred groups are "statistically" significantly different from their reference group. p<.10\*, p<.05\*\*.

Note: For each population subgroup shown in the graphs above, Table 1 on page 44 provides: a) the number of interviews (sample size): b) the total Washington adult household population (percentage denominator), and c) the number of adults represented by each bar (percentage numerator).

Source: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS.

## Persons Who Were Not in the Labor Force<sup>1</sup> Had LOWER Rates of Current Need for Substance Abuse Treatment.



### **Current Need for Treatment**



Poverty Poverty 7

Note: for definition of Current Need for Treatment see page 30.

Note: Starred groups are "statistically" significantly different from their reference group. p<.10\*, p<.05\*\*.

Note: For each population subgroup shown in the graphs above, Table 1 on page 44 provides: a) the number of interviews (sample size): b) the total Washington adult household population (percentage denominator), and c) the number of adults represented by each bar (percentage numerator).

Source: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS.

<sup>1</sup>Not in Labor Force means Not Employed AND either Retired, OR a Fulltime Homemaker, OR a Fulltime Student.



Persons Who Were Single and Never Married, Divorced or Separated, or Had Parents With Alcohol or Drug Use Problems Had HIGHER Rates of Current Need for Substance Abuse Treatment.

### **Current Need for Treatment**

Percent of Adults in Household



Note: for definition of Current Need for Treatment see page 30.

Note: Starred groups are "statistically" significantly different from their reference group. p<.10\*, p<.05\*\*.

Note: For each population subgroup shown in the graphs above, Table 1 on page 44 provides: a) the number of interviews (sample size): b) the total Washington adult household population (percentage denominator), and c) the number of adults represented by each bar (percentage numerator). Source: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS.

# **Current Need for Treatment**

### Demographic Differences in Current Need for Treatment, Controlling for Poverty Status

Most people who use DASA treatment services have incomes below 200% of the Federal Poverty Level. Therefore, to evaluate how well DASA is serving its possible clients, it is important to examine need for treatment in that below-poverty subgroup.

Persons above and below poverty have very similar overall rates of current need for treatment (10.3% to 11.1% respectively). However, beneath that seeming similarity in rates lie differences in the distribution of need across other sociodemographic categories. The chart on the following page breaks the sample into two groups, those above and those at or below the 200% of the Federal Poverty Level (about \$30,000 for a family of four) and shows how, within each group, need for treatment is associated with other demographic characteristics.

The resulting differences and similarities are interesting in themselves. They also show why multivariate analyses will be necessary to understand more about the way these characteristics interact.

- Some demographic characteristics have consistent effects both above and below poverty. Women and Asians have LOWER rates of current treatment need in both above and below poverty groups.
- Young adults living above poverty have significantly HIGHER rates of need for substance abuse treatment than their middle-aged counterparts (23% to 8% respectively). On the other hand, poor young adults have lower treatment need rates, and are not significantly different than their poor, middle-aged counterparts aged 30 to 54 (19% to 12%).
- Non-poor American Indians do not have significantly different rates of treatment need from non-poor White non-Hispanics (13% to 11% respectively). Yet, poor American Indians have much HIGHER need for treatment than their White non-Hispanic counterparts (21% to 12% respectively).
- Hispanics who are not poor have very similar treatment need rates as their White non-Hispanic counterparts (10% to 11% respectively). However, poor Hispanics have much LOWER rates of treatment need than poor White non-Hispanics (5% to 12% respectively)



Women and Asians Had Lower Treatment Need Rates in Both Above and Below Poverty Samples. On the Other Hand, the Distribution of Need for Treatment Varied Between Poor and Not Poor Samples for Most Other Demographic Characteristics.

Current Need for Treatment for Adults ABOVE 200% of the Federal Poverty Level Percent of Adults in Households



Current Need for Treatment for Adults AT OR BELOW 200% of the Federal Poverty Level Percent of Adults in Households



Note: for definition of Current Need for Treatment see page 30.

Note: Starred groups are "statistically" significantly different from their reference group. p<.10\*, p<.05\*\*.

Note: For each population subgroup shown in the graphs above, Table 1 on page 44 provides: a) the number of interviews (sample size): b) the total Washington adult household population (percentage denominator), and c) the number of adults represented by each bar (percentage numerator).

Source: 93-94 WANAHS, Division of Alcohol and Substance Abuse and Office of Research and Data Analysis, DSHS.



# **Comparing Use of Treatment to Need for Treatment**

# **Comparing Use of Treatment** to Need for Treatment



### Developing County Estimates of Current Need for Treatment from Statewide Numbers

Even 7,000 interviews statewide will not produce enough interviews in each county for reliable direct estimates, so synthetic estimates of treatment need were created for counties. Synthetic estimation applies the subgroup rates from a large area survey to the same subgroups living in smaller areas, and then sums those rates to produce an overall estimate.

An example may help to clarify this process. Suppose we want to develop an estimate of the overall need for treatment in King County. We begin by estimating the treatment need of a specific King County population subgroup – such as young poor Hispanic women – by multiplying the number of young poor Hispanic women living in King County (obtained from the population estimates) by the rate of treatment need among young poor Hispanic urban women (obtained from the household survey). Each other sociodemographic subgroup (such as older poor Hispanic women, older non-poor Hispanic women, young poor Asian women and so forth) is estimated similarly, by multiplying the King County population by the corresponding urban rate from the household survey. To obtain the total persons needing treatment in King County, the subgroup-specific totals of persons needing treatment in King County are summed.

Synthetic estimates improve our knowledge of local variation when two conditions apply:

- 1. the subgrouping variables which are used really do distinguish between groups of people who differ reliably in the characteristic which is to be estimated; and
- 2. the county populations vary in their subgroup structures and the subgroup structuring variables can be obtained independently.

The prior pages have shown that age, gender, race/ethnicity, urban and rural residence and poverty status all have meaningful impacts upon substance use, abuse, dependence and need for treatment. So the use of those variables in constructing county-specific estimates of use of alcohol and drugs and need for alcohol and drug treatment is justified.



# Comparing Use of Treatment to Need for Treatment

### Treatment Use Rates by County

A "Treatment Use Rate" compares persons who needed treatment to persons who used treatment over a given time period. To compare DASA-funded treatment with estimated need, the estimate of need was broken into two groups: those who were above 200% of the Federal Poverty Level, and those who were at or below 200% of the Federal Poverty Level (FPL). The DASA Treatment Use Rate was then defined as:

**DASA Treatment Use Rate** =  $\frac{\# \text{ of county residents using DASA-funded residential or outpatient treatment}}{\# \text{ of county residents needing treatment AND living at or below 200% FPL}} * 100$ 

Counts of persons using DASA treatment were drawn from DASA's management information system, TARGET. Only persons receiving at least one outpatient or residential treatment service between July 1993 and June 1994 were counted. Persons receiving more than one treatment service were only counted once.

Since homeless persons and those who live in institutions are not part of the population denominator, they were not included in the treatment numerator either. In other words, this Treatment Use Rate applies only to county residents living in households or very small group homes (approximately 86% of all DASA clients). Later reports will address use and need in non-household populations.

Counts of people who used treatment, the estimated number of persons who needed treatment, and the "DASA Treatment Use Rate" (use of treatment as a percent of those needing it) are presented for all Washington counties in the following table, chart and map.

Statewide, Only 21% of Adults in Washington State Households Who Needed Substance Abuse Treatment During the Past Year and Were Poor Enough to be Likely to Qualify for Publicly-Funded Substance Abuse Treatment Received Such Treatment.

County	Percent of Adults with a Current Need	Number of Adults with a Current Need for Treatment	Percent of Adults Living Below 200% FPL with a Current Need for Treatment	Number of Adults Living Below 200% FPL with a Current Need for Treatment	One-year Total of Adult DASA Patients Using Treatment	Lise Rate -	# of county adults using DASA-funded residential or outpatient treatment =	
County	for Treatment					Use Kate -		
ADAMS	7.6%	713	5.9%	227	109	48.0%		
ASOTIN	8.7%	1,165	7.8%	351	178	50.7%	Columbia	116%
BENTON	8.9%	7,773	7.3%	1,567	575	36.7%	Garfield 60	%
CHELAN	8.2%	3,378	6.7%	965	447	46.3%	San Juan 54%	
CLALLAM	8.6%	3,901	8.1%	1,118	290	25.9%	Okanogan 51%	
CLARK	11.6%	22,836	13.8%	6,383	902	14.1%	Acotin 51%	
COLUMBIA	7.2%	211	5.6%	69	80	115.9%	Adams 48%	
COWLITZ	9.0%	5,597	7.7%	1,383	468	33.8%	Chelan 46%	
DOUGLAS	8.4%	1,714	6.6%	429	99	23.1%	Eranklin 46%	
FERRY	10.6%	491	11.2%	206	91	44.2%	Wahkiakum 45%	
FRANKLIN	7.5%	2,047	5.7%	665	306	46.0%	Ferry 44%	
GARFIELD	8.3%	142	6.8%	35	21	60.0%	Skagit 44%	
GRANT	8.0%	3,334	6.7%	1,166	380	32.6%	Walla Walla 42%	
<b>GRAYS HARBOR</b>	9.0%	4,346	8.3%	1,415	390	27.6%	Yakima 42%	
ISLAND	9.2%	4,322	8.1%	949	170	17.9%	Benton 37%	
JEFFERSON	8.3%	1,520	7.7%	451	232	51.4%	Lincoln 35%	
KING	11.0%	132,030	12.7%	28,647	5,895	20.6%	Cowlitz 34%	
KITSAP	11.5%	16,688	14.3%	4,687	556	11.9%	Skamania 33%	
KITTITAS	8.9%	1,861	8.7%	766	125	16.3%	Grant 33%	
KLICKITAT	8.8%	1,081	7.9%	379	95	25.1%	Grays Harbor 28%	
LEWIS	8.7%	3,866	7.3%	1,138	276	24.3%	Clallam 26%	
LINCOLN	8.4%	565	7.6%	171	59	34.5%	Thurston 26%	
MASON	8.7%	2,694	8.1%	761	145	19.1%	Whatcom 25%	
OKANOGAN	8.6%	2,148	7.9%	901	460	51.1%	Pend Oreille 25%	
PACIFIC	8.0%	1,215	6.9%	409	32	7.8%	Klickitat 25%	
PEND OREILLE	8.6%	630	7.5%	218	55	25.2%	Lewis 24%	
PIERCE	11.3%	50,345	13.2%	15,440	2,772	18.0%	Douglas 23%	
SAN JUAN	8.0%	758	7.2%	145	78	53.8%	Stevens 23%	
SKAGIT	8.8%	5,711	7.5%	1,295	568	43.9%	WA State 21%	
SKAMANIA	9.3%	601	7.7%	161	53	32.9%	King 21%	
SNOHOMISH	11.9%	43,389	14.2%	9,155	1,784	19.5%	Snonomish 19%	
SPOKANE	11.9%	32,757	14.7%	12,743	1,350	10.6%	Piana 19%	
STEVENS	9.2%	2,144	8.5%	743	168	22.6%	Island 10%	
THURSTON	8.8%	11,694	7.9%	2,480	640	25.8%	Kittitas	
WAHKIAKUM	8.5%	224	6.8%	53	24	45.3%	Clark 14%	
WALLA WALLA	8.2%	2,802	6.9%	810	344	42.5%	Kitsan 12%	
WHATCOM	9.3%	9,536	8.7%	2,602	663	25.5%	Spokane 11%	
WHITMAN	9.7%	2,558	10.1%	1,192	109	9.1%	Whitman 9%	
YAKIMA	8.0%	10,888	6.7%	3,812	1,601	42.0%	Pacific 8%	
WA STATE	10.5%	399,383	10.5%	106,087	22,590	21.3%		

Source: WANAHS 93-94, Office of Research and Data Analysis, DSHS, and TARGET, Division of Alcohol and Substance Abuse, DSHS.

Among Adults in Washington State Households, the USE of Publicly Funded Treatment Relative to the NEED for Publicly Funded Treatment Tended to be Lower in Urban Counties and in Counties with Concentrations of Young Adults.



FIGURE 29

(for data descriptions and county values, see column 7 or 8 in the table to the left)



# Additional Tables on Substance Use and Need for Treatment

# Estimated Number of Persons with Substance Use and Need for Treatment





# Estimated Number of Persons Living Above and At or Below the 200% Federal Poverty Level With a Current Need for Treatment

		Current Need for Treatment					
Analysis Groups	State Population	Above	e Poverty	Below Poverty			
		Survey		Survey	vey		
		Sample	Population	Sample	Population		
Washington State	3,798,667	3221	293,276	3717	106,106		
Females	1,949,418	2007	85,224	2506	33,278		
Males	1,849,249	1214	208,053	1211	72,828		
18-29 yrs	847,758	573	137,402	1002	49,358		
30-54 yrs	989,532	1876	120,730	1708	52,312		
55+ yrs	1,961,377	772	35,144	1007	4,436		
White, non-Hispanic	3,301,256	1063	274,041	585	92,799		
African American, non-Hispanic	102,397	564	4,559	593	2,447		
Asian, non-Hispanic	183,998	647	3,463	662	1,697		
American Indian, non-Hispanic	52,624	456	3,649	716	5,322		
Hispanic, all races	158,392	491	7,563	1161	3,843		
Rural County	1,167,319	1149	72,017	1691	28,846		
Urban County**	2,631,348	2072	221,259	2026	77,260		

\*Not employed AND retired OR a full time homemaker OR a full time student.

\*\*"Urban" is King, Pierce, Spokane, Kitsap, Snohomish, and Clark counties. "Rural" is all other counties.

\*\*\*"Hard Drugs" are Sedatives, Cocaine, Heroin, Stimulants, Hallucinogens, Other Opiates.



# **Substance Use Disorder in Arrestees**

# Substance Use Disorder in Arrestees

# Preliminary Results from the 1994-1995 Arrestee Estimates of Substance Abuse Treatment Need Study (ARREST)

Along with the WANAHS, the ARREST study was funded by the federal Center for Substance Abuse Treatment to obtain estimates of substance use, substance use disorders, and the need for treatment services among arrestees. Previous studies in metropolitan jails elsewhere in the country have shown elevated rates of substance use among arrested persons brought to booking facilities and provide support for increased treatment and prevention efforts in such settings.

The ARREST study improves on such previous studies in several ways. First, to develop a better indicator of treatment need, a clinically-based measure of recent substance use disorder was obtained in addition to basic recency and frequency measures of substance use. Second, adult interviews were conducted in the King County, Whatcom County, and Yakima County jails to include arrestee populations from non-metropolitan jails. Third, where sample size allows, analyses by age, gender, race/ethnicity, type of crime, and jail site are planned. Finally, laptop computers used for data entry allowed for a more complex questionnaire structure and real-time error checking while conducting the interview.

Between November 1994 and March 1995, 454 adult male arrestees were interviewed across the three county jails about their use of substances. A total of 145 adult female arrestees were interviewed in the King County and Yakima County jails, and 100 male and 68 female juveniles were interviewed in the King County juvenile detention facility. Of the arrestees approached for participation, 78% of adult arrestees and 94% of juvenile arrestees completed interviews. A forthcoming report will describe this study in detail.

Preliminary results from this survey are consistent with findings in other state and national surveys in which arrestees typically show much higher rates of substance use than the general population. As an example, rates of problem use among adult male and adult female arrestees are compared to rates of problem use among adult males and females in the general population using the variable past 18 month substance use disorder (see charts on next page). Across subgroups and locations, rates for adult male arrestees are two to eight times higher than rates for adult males in the household population. The same measure for adult female arrestees is five to fifteen times higher than for adult females in the household population.



Persons Who are Arrested and Held in Booking Facilities Have Self-Reported Substance Abuse and Dependence Rates which, Depending on the Demographic Subgroup, Range from Two to Fifteen Times the Rates for Similar Persons in Households.



Source: 1993-1994 Washington State Needs Assessment Household Survey and 1994-1995 ARREST Study, Office of Research and Data Analysis and Division of Alcohol and Substance Abuse, DSHS.

Note: for the definition of Past 18-month Substance Use Disorder, see page 26.

