



Washington State  
Department of Social  
& Health Services

Research & Data Analysis  
Division



David Mancuso, Ph.D.  
Michael Gilson, Ph.D.  
Barbara Felver, MES, MPA

In collaboration with

Division of Alcohol and  
Substance Abuse

Kenneth D. Stark, Director  
Doug Allen, Acting Director  
Antoinette Krupski, Ph.D.

MARCH 2005

Available online at:  
[www1.dshs.wa.gov/rda/](http://www1.dshs.wa.gov/rda/)  
[www1.dshs.wa.gov/dasa/](http://www1.dshs.wa.gov/dasa/)

REPORT 4.52-37

# 2003 County Profile of Substance Use and Need for Treatment Services: Whatcom County

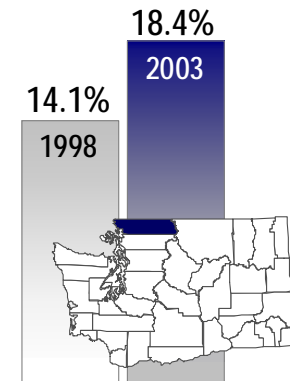
WASHINGTON STATE NEEDS ASSESSMENT HOUSEHOLD SURVEY

This report provides detailed estimates of substance use, the need for substance abuse treatment, and use of substance abuse treatment services in Whatcom County. This report is part of a series of county profiles that update a previous set of reports produced in 1999 based on 1993-94 survey data.

The new county profiles are also complemented by a comprehensive state report that includes more detailed statewide estimates. Each county profile provides estimates of:

- Lifetime, past year, and 30-day substance use by type of substance
- Need for substance abuse treatment both countywide and by demographic subgroup
- Treatment penetration rates both countywide and by demographic subgroup

## Need for Treatment Up Among Whatcom County's Lower-Income Adults



*In Whatcom County, the estimated rate of need for alcohol or drug treatment among adults at or below 200 percent of the federal poverty level is 18.4 percent. Five years ago, the estimate was 14.1 percent.*

## The Washington State Needs Assessment Household Survey (WANAHS)

The WANAHS was a statewide survey of 6,713 adults designed to measure the prevalence of substance use and the need for substance abuse treatment. Data were collected from February 2003 through February 2004. Funding was provided by a grant from the Federal Center for Substance Abuse Treatment.

The Washington State Department of Social and Health Services (DSHS) Research and Data Analysis (RDA) section conducted the project on behalf of the DSHS Division of Alcohol and Substance Abuse (DASA). Telephone interviewing was conducted by Washington State University's Social and Economic Sciences Research Center. The survey achieved a response rate of 50 percent and a cooperation rate of 69 percent.

The WANAHS over sampled young adults, minorities, and lower-income populations to facilitate demographic analyses. The WANAHS sample was weighted to U. S. Census data to provide direct statewide estimates of substance use and the need for substance abuse treatment services. Further details about survey methods are provided in the state report, available electronically at [www1.dshs.wa.gov/rda/](http://www1.dshs.wa.gov/rda/) and [www1.dshs.wa.gov/dasa/](http://www1.dshs.wa.gov/dasa/).

### INSIDE

Substance Use	
<i>Lifetime, Past Year,</i>	
<i>Past 30 Days</i> .....	3
Current Need for Treatment	
<i>County Comparisons</i> .....	4
<i>Demographic Detail</i> .....	5
Treatment Penetration	
<i>County Comparisons</i> .....	6
<i>Demographic Detail</i> .....	7
Technical Notes.....	8

## Population Groups for Analysis

Overall prevalence estimates are provided for three primary populations of interest:

- **All adult household residents:** Household residents aged 18+, regardless of income
- **Adults above 200% FPL:** Household residents aged 18+ living above 200 percent of the federal poverty level
- **Adults at or below 200% FPL:** Household residents aged 18+ living at or below 200 percent of the federal poverty level

Estimates of treatment penetration rates are limited to those adults at or below 200 percent of the federal poverty level who are estimated to be eligible for DASA funded chemical dependency treatment services.

## Measures of Substance Use

The WANAHS measured use of alcohol and different types of illicit drugs. Measures of substance use include having: a) ever used a substance (lifetime use), b) used a substance in the past 12 months, and c) used a substance in the past 30 days.

## Need for Treatment

The household survey also assessed current need for alcohol or drug treatment. Respondents were classified as having a current need for treatment if they met any of the following four conditions:

1. Reported symptoms of lifetime Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) **alcohol or drug abuse or dependence**, reported at least one symptom in the past 12 months, and used alcohol or drugs in the past 12 months. See the Technical Note on page 8 for a description of the DSM-IV substance abuse and dependence criteria.
2. **Received professional alcohol or drug treatment** (excluding detoxification) during the past 12 months.
3. Reported having a **problem with alcohol or drugs** and **used alcohol or drugs regularly** during the past 12 months. Regular alcohol use was defined as having 3 or more drinks at least one day per week. Regular drug use was defined as using marijuana 34 or more times in the past 12 months or as using other illicit drugs 8 or more times in the past 12 months.
4. Reported **heavy use of alcohol or drugs** during the past 12 months. Heavy alcohol use was defined as having 4 or more drinks per drinking day, 3 or more days per week during the past 12 months. Heavy drug use was defined as using any illicit substance 34 or more times during the past 12 months.

## Measuring Treatment and Penetration Rates

To determine treatment use and to estimate treatment penetration, the WANAHS survey data are supplemented by data provided by DASA's Treatment Assessment Report Generation Tool (TARGET). Reporting in TARGET is required for treatment agencies providing public sector contracted or funded treatment services. Thus, TARGET includes data on services provided by or funded by DASA. Clients used to calculate the treatment penetration rate were selected based on the following conditions:

1. Eligible treatment was limited to residential, outpatient, and methadone services. Clients who received detoxification or transitional housing services were not included.
2. Clients had to reside in a personal residence or a group/foster home. The homeless or institutionalized were not included in these client counts.
3. Treatment had to be funded by DASA. Clients who paid for services through private funds or had their treatment paid for by the Department of Corrections or non-DASA state funds were not counted.
4. Clients had to receive treatment services during the 2003 calendar year.

In addition, penetration rates are calculated only for lower-income adults who are estimated to be eligible for DASA funded chemical dependency treatment services. Clients eligible for DASA funded services primarily include adults at or below 200 percent of the federal poverty level who need substance abuse treatment and who do **not** have private health insurance, Basic Health Plan coverage, or military health insurance.

## Method for Estimating County-level Prevalence Rates

To derive county estimates for substance use and the need for substance abuse treatment from the statewide survey, it was necessary to construct a demographically specified population matrix for each county against which the statewide survey-based prevalence rates could be applied. The population matrix contained counts of persons in demographic groups defined by age, sex, race/ethnicity, and poverty status. The population estimates were obtained from 2000 U.S. Census data and adjusted to reflect the population growth to 2003 using estimates from the Office of Financial Management's 2004 Population Trends.

Differences between counties in estimated rates of substance use and need for treatment result from differences in the demography of the counties. For example, counties with higher proportions of young adults will have higher estimated rates of current illicit drug use than counties with lower proportions of young adults, because young adults are more likely to be currently using illicit drugs. This method of developing county prevalence estimates from statewide prevalence rates is called synthetic estimation.

## SUBSTANCE USE | Lifetime, Past Year, Past 30 Days


 Substance Use  
 ADULT HOUSEHOLD RESIDENTS

	Whatcom County						WASHINGTON	
	County Total		Above 200% FPL		At or Below 200% FPL		At or Below 200% FPL	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Alcohol</b>								
Lifetime Use	112,818	88.6%	80,369	92.2%	32,449	80.8%	817,738	77.2%
Past Year Use	93,710	73.6%	67,566	77.5%	26,144	65.1%	618,413	58.4%
Past 30 Day Use	74,138	58.2%	55,034	63.2%	19,104	47.6%	440,971	41.6%
<b>Binge Alcohol<sup>1</sup></b>								
Lifetime Use	87,693	68.9%	62,342	71.5%	25,351	63.1%	609,251	57.5%
Past Year Use	35,313	27.7%	21,627	24.8%	13,686	34.1%	260,631	24.6%
<b>Any Illicit Drug</b>								
Lifetime Use	59,174	46.5%	39,464	45.3%	19,710	49.1%	442,567	41.8%
Past Year Use	14,034	11.0%	6,638	7.6%	7,396	18.4%	134,929	12.7%
Past 30 Day Use	8,294	6.5%	3,844	4.4%	4,450	11.1%	79,743	7.5%
<b>Illicit Drug Other Than Marijuana</b>								
Lifetime Use	37,254	29.3%	24,557	28.2%	12,697	31.6%	298,352	28.2%
Past Year Use	6,848	5.4%	3,250	3.7%	3,598	9.0%	69,548	6.6%
Past 30 Day Use	3,027	2.4%	1,389	1.6%	1,638	4.1%	33,621	3.2%
<b>Marijuana</b>								
Lifetime Use	55,283	43.4%	36,906	42.3%	18,377	45.8%	406,257	38.4%
Past Year Use	11,073	8.7%	4,998	5.7%	6,075	15.1%	101,464	9.6%
Past 30 Day Use	6,520	5.1%	2,843	3.3%	3,677	9.2%	62,007	5.9%
<b>Cocaine or Crack</b>								
Lifetime Use	20,245	15.9%	13,676	15.7%	6,569	16.4%	167,526	15.8%
Past Year Use	1,833	1.4%	599	0.7%	1,234	3.1%	21,261	2.0%
Past 30 Day Use	553	0.4%	173	0.2%	380	0.9%	6,993	0.7%
<b>Stimulant<sup>2</sup></b>								
Lifetime Use	19,331	15.2%	12,812	14.7%	6,519	16.2%	154,148	14.6%
Past Year Use	870	0.7%	203	0.2%	667	1.7%	12,497	1.2%
Past 30 Day Use	295	0.2%	23	0.0%	272	0.7%	4,725	0.4%
<b>Hallucinogen</b>								
Lifetime Use	22,191	17.4%	13,937	16.0%	8,254	20.6%	180,866	17.1%
Past Year Use	1,815	1.4%	436	0.5%	1,379	3.4%	18,030	1.7%
Past 30 Day Use	304	0.2%	53	0.1%	251	0.6%	4,163	0.4%
<b>Heroin</b>								
Lifetime Use	2,288	1.8%	965	1.1%	1,323	3.3%	35,744	3.4%
Past Year Use	135	0.1%	113	0.1%	22	0.1%	713	0.1%
Past 30 Day Use	8	0.0%	0	0.0%	8	0.0%	238	0.0%
<b>Opiates Other Than Heroin</b>								
Lifetime Use	12,201	9.6%	6,697	7.7%	5,504	13.7%	113,977	10.8%
Past Year Use	3,177	2.5%	1,405	1.6%	1,772	4.4%	31,321	3.0%
Past 30 Day Use	1,359	1.1%	602	0.7%	757	1.9%	14,713	1.4%
<b>Tranquilizer</b>								
Lifetime Use	7,573	5.9%	4,456	5.1%	3,117	7.8%	65,925	6.2%
Past Year Use	975	0.8%	478	0.5%	497	1.2%	10,738	1.0%
Past 30 Day Use	329	0.3%	145	0.2%	184	0.5%	4,258	0.4%
<b>Sedative</b>								
Lifetime Use	6,521	5.1%	3,850	4.4%	2,671	6.7%	62,878	5.9%
Past Year Use	2,146	1.7%	1,208	1.4%	938	2.3%	17,699	1.7%
Past 30 Day Use	902	0.7%	675	0.8%	227	0.6%	5,669	0.5%
<b>Cigarette</b>								
Lifetime Use	82,164	64.5%	56,700	65.1%	25,464	63.4%	639,441	60.4%
Past Year Use	28,458	22.4%	14,786	17.0%	13,672	34.1%	324,325	30.6%
Past 30 Day Use	24,794	19.5%	12,229	14.0%	12,565	31.3%	296,158	28.0%
<b>Any Tobacco Product</b>								
Past Year Use	38,665	30.4%	22,298	25.6%	16,367	40.8%	378,238	35.7%

<sup>1</sup> Binge alcohol consumption is defined as 4+ drinks in a day for women and 5+ drinks in a day for men.

<sup>2</sup> Stimulants include methamphetamine and other types of stimulants.

CURRENT NEED FOR TREATMENT | County Comparisons

ALL ADULTS

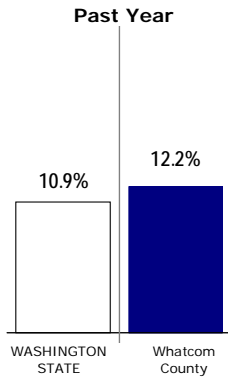
Current Need for Treatment



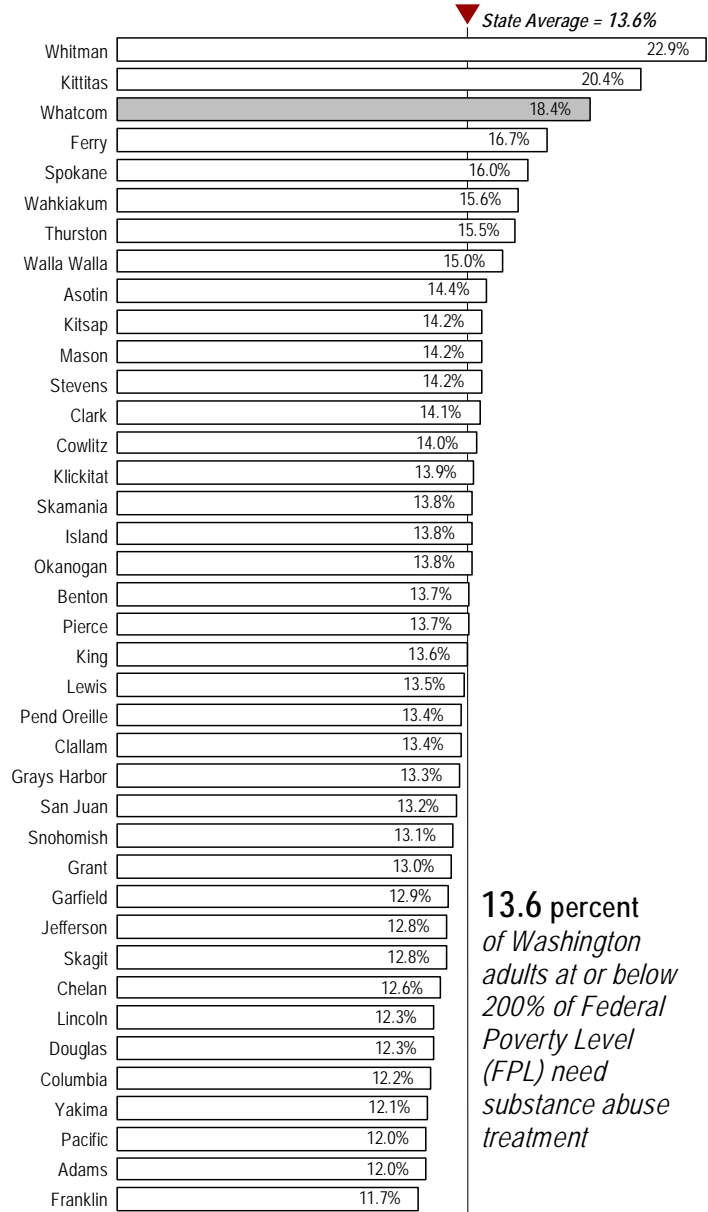
2003  
NEEDS ASSESSMENT

Washington State Household Residents Age 18+

ADULT HOUSEHOLD RESIDENTS



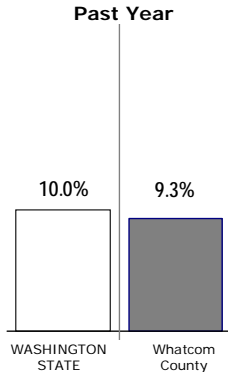
County Ranking Among Adult Household Residents At or Below 200% FPL



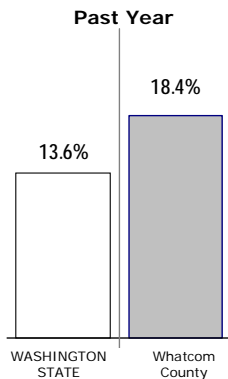
By Income



ADULTS ABOVE 200% FPL



AT OR BELOW 200% FPL



13.6 percent of Washington adults at or below 200% of Federal Poverty Level (FPL) need substance abuse treatment

Current Need for Treatment

The chart above compares county estimates of need for treatment among adult household residents at or below 200 percent of the federal poverty level. Highlights include:

- 24 of 39 counties are within one percent of the state level need for treatment.
- Need for treatment in 8 of 39 counties is more than one percentage point higher than the state average. Estimated need for treatment is highest in Whitman (22.9 percent), Kittitas (20.4 percent), and Whatcom (18.4 percent) counties. Need is higher in these counties because they have a relatively high proportion of young adults (each of the three counties is home to a major university) and need for treatment is higher among younger adults.
- Need for treatment in 7 of 39 counties is more than one percentage point lower than the state average.

## CURRENT NEED FOR TREATMENT | Demographic Detail



## Current Need for Treatment

ADULT HOUSEHOLD RESIDENTS

	Whatcom County						WASHINGTON	
	County Total		Above 200% FPL		At or Below 200% FPL		At or Below 200% FPL	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>TOTAL</b>	<b>15,486</b>	<b>12.2%</b>	<b>8,097</b>	<b>9.3%</b>	<b>7,389</b>	<b>18.4%</b>	<b>144,278</b>	<b>13.6%</b>
<b>Gender</b>								
Male	10,391	16.7%	5,510	12.2%	4,881	28.2%	98,974	21.4%
Female	5,095	7.8%	2,587	6.1%	2,508	11.0%	45,304	7.6%
<b>Age</b>								
18-24	5,509	25.6%	685	22.0%	4,824	26.2%	55,193	25.4%
25-44	6,577	13.9%	4,723	13.3%	1,854	15.7%	62,114	14.1%
45-64	3,086	7.9%	2,494	7.6%	592	9.5%	21,302	9.8%
65+	312	1.6%	194	1.2%	118	3.2%	5,670	3.1%
<b>Race/Ethnicity</b>								
White	13,664	12.1%	7,383	9.2%	6,281	19.1%	107,496	14.6%
Black	119	13.7%	40	11.3%	79	15.4%	5,878	13.0%
Asian	165	5.0%	104	5.0%	61	5.0%	3,116	3.8%
Am Indian/Alaska Native	788	17.5%	209	11.0%	579	22.2%	8,382	21.4%
Nat Hawaiian/P Islander	74	23.2%	1	6.1%	73	24.1%	1,187	18.7%
Hispanic	675	13.0%	360	14.1%	315	11.9%	16,853	11.3%

NOTE: Estimated counts of persons were rounded to the nearest whole number.

## Race/Ethnicity Categories

WANAHS respondents were read a list of five races: White, Black or African American, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander (Nat Hawaiian/P Islander), and Asian. Respondents were asked to indicate whether they considered themselves to belong to one or more of these groups. In a separate question, survey respondents were asked "Are you Hispanic or Latino(a)?" Respondents who indicated they belonged to more than one race or ethnic group were assigned to a single category in the following order:

**Hispanic****American Indian or Alaska Native****Native Hawaiian or Other Pacific Islander** (Nat Hawaiian/P Islander)**Black or African American****White****Asian**

For example, respondents indicating that they were both American Indian and Black were categorized as American Indian. Similarly, respondents indicating they were both Hispanic and White were classified as Hispanic.

Hispanics were listed first, consistent with current U.S. Census conventions, and the subsequent ordering was determined based on an examination of need for treatment patterns among adults reporting two or more races. The state report provides greater race/ethnicity detail than is presented here, including detailed comparisons between multirace respondents and those who reported belonging to a single race group.

It was necessary to use this simplified race/ethnicity classification to calculate the treatment penetration rates that are described on pages 6 and 7. This is because penetration rates are calculated by combining need for treatment estimates with TARGET treatment data and very few TARGET clients are identified as belonging to more than one race.

## TREATMENT PENETRATION | County Comparisons

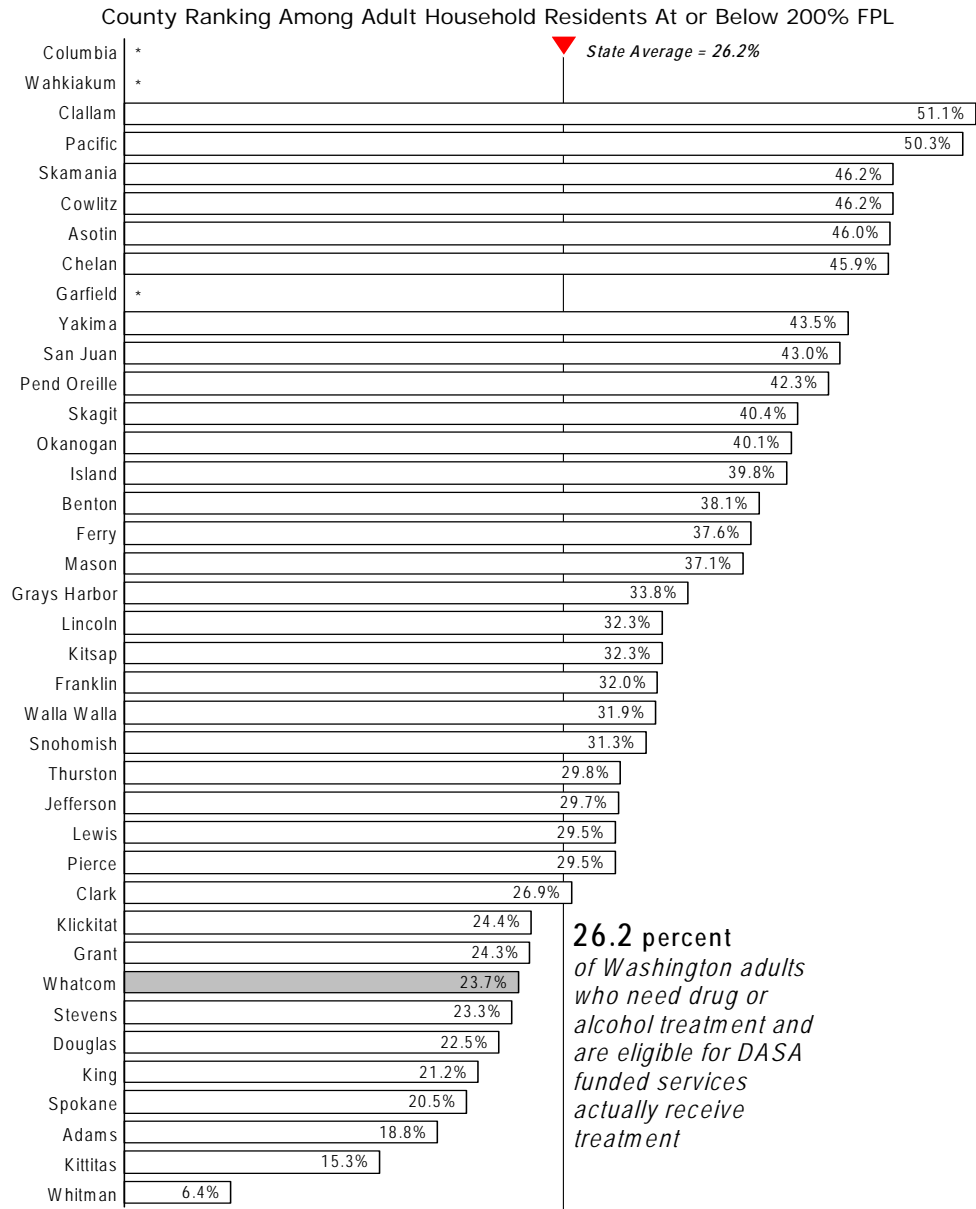
**ADULTS AT OR BELOW 200% FPL**

Treatment Penetration

**2003**

**NEEDS ASSESSMENT**

Washington State Household Residents Age 18+



\*NOTE: Treatment penetration rates are suppressed for counties with 60 or fewer adults estimated to need and be eligible for DASA funded treatment.

### Defining Penetration Rate

Treatment penetration refers to the proportion of DASA eligible adults receiving alcohol or drug treatment among those needing treatment:

$$\text{Treatment Penetration Rate} = \frac{\# \text{ Adult household residents receiving DASA funded treatment}}{\# \text{ Adult DASA eligible household residents needing treatment AND living at or below 200\% FPL}} \times 100$$

Counts of persons receiving DASA treatment were drawn from the TARGET database. The number of county residents currently in need of treatment was obtained from the synthetic estimation process.

## TREATMENT PENETRATION | Demographic Detail



Treatment Penetration  
ADULT HOUSEHOLD RESIDENTS AT OR BELOW 200% FPL

	Whatcom County				WASHINGTON
	Current Need for Tx	Current Need for Tx And Eligible for DASA Funded Services	Clients Served	Tx Penetration Rate	Tx Penetration Rate
<b>TOTAL</b>	<b>7,389</b>	<b>4,249</b>	<b>1,007</b>	<b>23.7%</b>	<b>26.2%</b>
<b>Gender</b>					
Male	4,881	2,793	586	21.0%	22.7%
Female	2,508	1,456	421	28.9%	34.2%
<b>Age</b>					
18-24	4,824	2,602	254	9.8%	18.5%
25-44	1,854	1,119	551	49.2%	34.2%
45-64	592	426	199	46.7%	25.8%
65+	118	102	3	2.9%	3.0%
<b>Race/Ethnicity</b>					
White	6,281	3,425	631	18.4%	26.4%
Black	79	55	20	36.4%	36.8%
Asian	61	37	6	16.2%	20.2%
Am Indian/Alaska Native	579	479	280	58.5%	31.7%
Nat Hawaiian/P Islander	73	38	2	5.3%	20.1%
Hispanic	315	214	68	31.8%	22.0%

\*NOTE: Treatment penetration rates are suppressed for demographic groups with five or fewer adults estimated to be eligible for DASA funded treatment.

#### Defining DASA Eligible Clients

The 2003 treatment penetration rate estimates presented here differ from earlier estimates using the 1993-94 WANAHs. In previous reports, **all** adult household residents living at or below 200 percent of the federal poverty level who needed substance abuse treatment were included in the penetration rate calculation, regardless of their health insurance coverage status. The current report contains a refinement of this procedure. In this report, 2003 treatment penetration rate estimates are primarily based on adults who are estimated to be eligible for DASA funded treatment because they meet the following three criteria:

1. They need substance abuse treatment
2. They live in households at or below 200 percent of the federal poverty level
3. They do **not** have private, Washington Basic Health Plan, or military health insurance

An additional adjustment was made to include a proportion of those who reported that they had private, Washington Basic Health Plan, or military health insurance at the time of the survey, but who were estimated to be eligible for DASA funded treatment at some time within the past 12 months. More information about this adjustment is available in the state report.

The net result of this change in the method for calculating treatment penetration rates is that the 2003 treatment penetration rate estimates are higher than earlier estimates.

DSM is short for the "Diagnostic and Statistical Manual of Mental Disorders" – the American Psychiatric Association guide used by medical practitioners, psychologists, and social workers to classify most mental disorders.

Over the years the DSM criteria have been updated several times. This study uses diagnostic criteria described in the fourth version, and these guidelines are commonly referred to as simply the **DSM-IV Criteria**.

The DSM-IV defines **substance dependence** as a maladaptive pattern of substance abuse, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period:

1. **Tolerance**, as defined by a need for markedly increased amounts of the substance to achieve intoxication or desired effect, or markedly diminished effect with continued use of the same amount of the substance
2. **Withdrawal**, as manifested by the characteristic withdrawal syndrome for the substance, or the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms
3. The substance is often taken in **larger amounts** or over a **longer period** than was intended
4. **Persistent desire or unsuccessful efforts to cut down or control** substance use
5. A great deal of **time is spent in activities necessary to obtain the substance** (e.g., visiting multiple doctors or driving long distances), **use the substance** (e.g., chain-smoking), or **recover from its effects**
6. **Important social, occupational, or recreational activities are given up or reduced** because of substance use
7. The substance **use is continued despite knowledge of having a persistent or recurrent physical or psychological problem** that is likely to have been caused or exacerbated by the substance (e.g., current cocaine use despite recognition of cocaine-induced depression, or continued drinking despite recognition that an ulcer was made worse by alcohol consumption)

The DSM-IV defines **substance abuse** as a maladaptive pattern of substance use leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:

1. Recurrent substance use resulting in a **failure to fulfill major role obligations at work, school, or home**: examples are repeated absences or poor work performance related to substance use, substance-related absences, suspensions, expulsions from school, and neglect of children or household
2. **Recurrent substance use in situations in which it is physically hazardous**, for example driving an automobile or operating a machine when impaired by substance use
3. **Recurrent substance-related legal problems**, such as arrests for substance-related disorderly conduct
4. **Continued substance use despite having persistent or recurrent social or interpersonal problems** caused or exacerbated by the effects of the substance; this may include arguments with spouse about consequences of intoxication, physical fights

In order to meet the criteria for **substance abuse**, the person must **not** meet the criteria for substance dependence for this class of substance.

Funded through grant 6 UR1 TI13452-01 from the Substance Abuse and Mental Health Services Administration Center for Substance Abuse Treatment.

Additional copies of this fact sheet and a comprehensive report with statewide estimates of substance use and need for treatment services are available from the Washington State Department of Social and Health Services Research and Data Analysis Division or the Division of Alcohol and Substance Abuse at:

[www1.dshs.wa.gov/rda/](http://www1.dshs.wa.gov/rda/) or [www1.dshs.wa.gov/dasa/](http://www1.dshs.wa.gov/dasa/)

or through the Washington State Alcohol/Drug Clearinghouse by calling 1-800-662-9111 or 206-725-9696 (within Seattle or outside Washington State), by e-mailing [clearinghouse@adhl.org](mailto:clearinghouse@adhl.org), or by writing to 6535 Fifth Place South, Seattle, Washington 98108-0243.



Washington State  
Department of Social  
& Health Services  
Research and Data Analysis Division  
Report 4.52-37