



Chapter 2

Prevalence of Alcohol and Drug Use in Washington State

Nearly Half of Washington State's Adult Household Residents Have Used Illicit Drugs In Their Lifetime

This chapter describes the prevalence of alcohol and drug use among Washington State adult household residents. We first report statewide lifetime, past-year, and 30-day substance use patterns. We then describe demographic differences in substance use patterns for selected substances. Where possible, we compare estimates from the 2003 survey with estimates from the 1993-94 household survey, and indicate which changes over time are statistically significant.

Most (88.0 percent) adult household residents report drinking alcohol during their lifetime. Lifetime use of alcohol is more common among higher-income adults (91.4 percent) than among lower-income adults (77.2 percent).

The 2003 estimate of lifetime alcohol use (88.0 percent) is lower than was found in the 1993-94 survey (92.8 percent). However, it is important to note that the 2003 survey asked about alcohol use in a different manner than the 1993-94 survey. The current survey contains a clause in the lifetime alcohol question, not found in the 1993-94 survey, instructing respondents to discount instances where they "only had a sip or two from a drink." The more restrictive wording of the question may account for the lower reported lifetime alcohol use in the 2003 survey.

Nearly half (45.2 percent) of adult household residents report using an illicit drug during their lifetime. The most frequently used illicit substance is marijuana (42.2 percent).

Lifetime marijuana use is more common among higher-income adults (43.4 percent), compared to lower-income adults (38.4 percent). In contrast, lifetime use of heroin and other non-heroin opiates is more common among lower-income adults compared to higher-income adults (see table below).

Overall, lifetime use of illicit drugs is up significantly from the levels reported in the 1993-94 Washington Needs Assessment Household Survey. With regard to specific types of drugs, the 2003 survey found significantly higher lifetime use of powder or crack cocaine, hallucinogens, and non-heroin opiates.

Stimulants are a notable exception to this pattern of increased lifetime drug use. Lifetime stimulant use decreased from 1993-94 levels. However, this decrease is significant only among lower-income adults.

Ten-year comparisons of rates of use of tranquilizers and inhalants are not possible because use of these substances was not measured in the 1993-94 survey.

TEN-YEAR COMPARISON

Lifetime Substance Use: 1993-94 to 2003 Change

ALL ADULT HOUSEHOLD RESIDENTS

	Alcohol	Any Illicit Drug	Marijuana	Cocaine or Crack	Stimulant	Hallucinogen	Heroin	Other Opiates	Tranquilizer	Sedative	Inhalant
2003	88.0%	45.2%	42.2%	15.8%	14.5%	16.6%	1.7%	8.7%	5.4%	5.0%	4.2%
1993-94	92.8%	41.6%	39.9%	13.0%	17.0%	13.0%	1.6%	6.3%	N/A	5.0%	N/A
Difference	(-4.8%)	+3.6%	+2.3%	+2.8%	(-2.5%)	+3.6%	+0.1%	+2.4%	N/A	+0.0%	N/A

ADULTS ABOVE 200% FPL

	Alcohol	Any Illicit Drug	Marijuana	Cocaine or Crack	Stimulant	Hallucinogen	Heroin	Other Opiates	Tranquilizer	Sedative	Inhalant
2003	91.4%	46.3%	43.4%	15.7%	14.4%	16.4%	1.2%	8.0%	5.2%	4.8%	4.1%
1993-94	94.6%	42.5%	40.9%	13.1%	16.0%	12.3%	1.4%	6.7%	N/A	4.9%	N/A
Difference	(-3.2%)	+3.8%	+2.5%	+2.6%	(-1.6%)	+4.1%	(-0.2%)	+1.3%	N/A	(-0.1%)	N/A

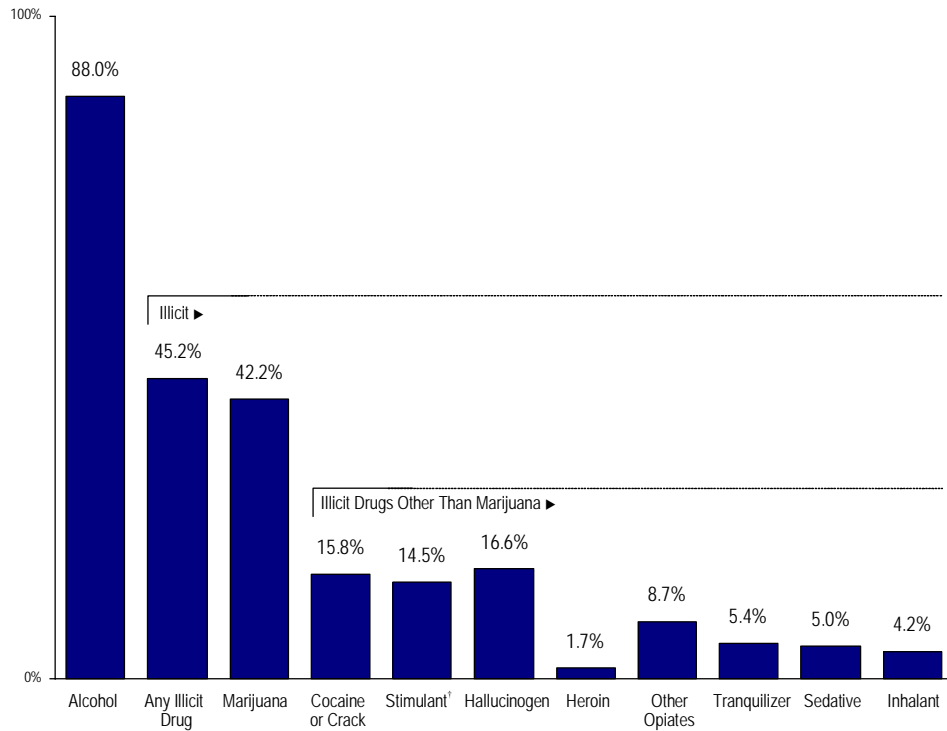
ADULTS AT OR BELOW 200% FPL

	Alcohol	Any Illicit Drug	Marijuana	Cocaine or Crack	Stimulant	Hallucinogen	Heroin	Other Opiates	Tranquilizer	Sedative	Inhalant
2003	77.2%	41.8%	38.4%	15.8%	14.6%	17.1%	3.4%	10.8%	6.2%	5.9%	4.6%
1993-94	87.3%	38.7%	36.9%	12.4%	19.9%	15.3%	2.2%	5.0%	N/A	5.3%	N/A
Difference	(-10.1%)	+3.1%	+1.5%	+3.4%	(-5.3%)	+1.8%	+1.2%	+5.8%	N/A	+0.6%	N/A

Bold type indicates statistical significance at $p < .05$

2003 SURVEY ESTIMATES

ALL ADULTS
 Lifetime Substance Use
 2003
 NEEDS ASSESSMENT
 Washington State Household Residents Aged 18+



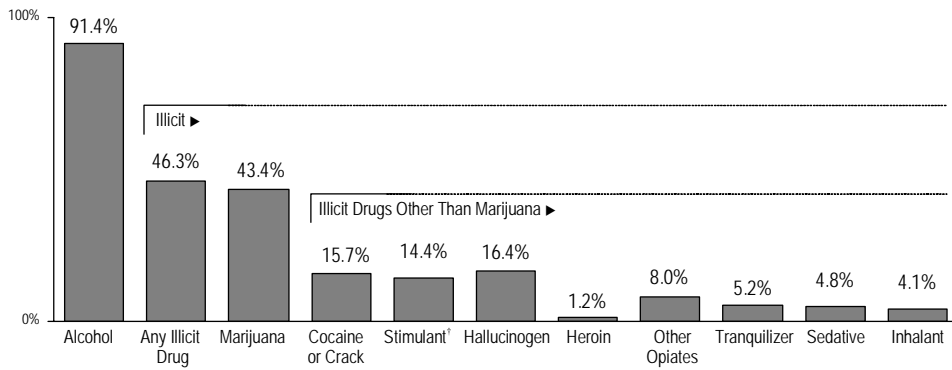
By Income

Household Income

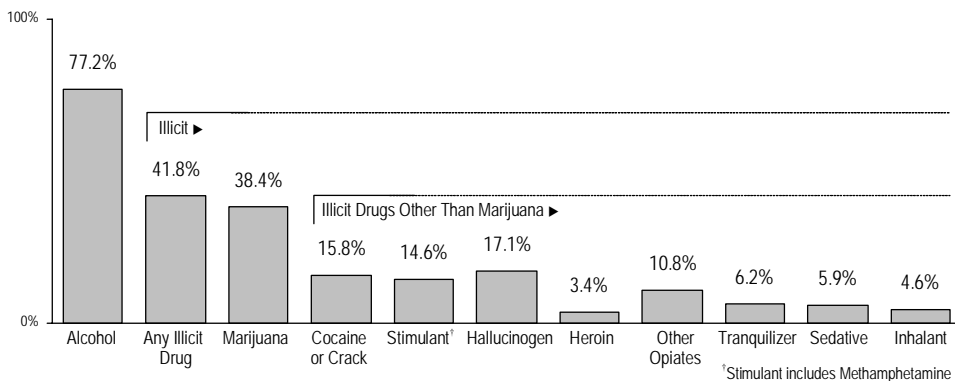
200% Poverty

ABOVE
 AT OR BELOW

Adults Above 200% FPL



Adults At Or Below 200% FPL



†Stimulant includes Methamphetamine

Past Year Non-Heroin Opiate and Sedative Use Has Increased

Nearly 3 out of 4 (72.9 percent) adult household residents used alcohol during the past year. Past year alcohol use is considerably higher among adults above 200 percent of the federal poverty level (77.5 percent), compared to adults at or below 200 percent of federal poverty level (58.4 percent).

One in 10 adult household residents (9.6 percent) used an illicit substance during the past year. Marijuana was most frequently used (7.4 percent), followed by non-heroin opiates (2.0 percent) and sedatives (1.5 percent).

In contrast to the pattern for lifetime drug use, lower-income adults were *more* likely to use illicit drugs in the past year (12.7 percent), compared to adults above 200 percent of the federal poverty level (8.7 percent). Past year drug use among lower-income adults was also higher for each specific substance, with the exception of heroin.

Comparing 2003 Use To 1993-94 Estimates

Overall, estimates of past year use of any illicit drug were very similar in the 1993-94 survey (9.7 percent) and the 2003 survey (9.6 percent). However, closer examination reveals that, while past year illicit drug use declined slightly among higher-income adults, past year illicit drug use increased among lower-income adults from 10.1 percent in 1993-94 to 12.7 percent in 2003.

There were also significant changes in the use of stimulants, non-heroin opiates, and sedatives. Past year stimulant use declined from 1.8 percent of all adult household residents in 1993-94 to 0.5 percent in 2003. This decline is significant among both adults above and adults at or below 200 percent of the federal poverty level.

While past year stimulant use is down from 1993-94 levels, past year use of non-heroin opiates and sedatives is up. The overall rate of past year non-heroin opiate use quadrupled from 0.5 percent in 1993-94 to 2.0 percent in 2003. Past year sedative use more than doubled from 0.6 percent in 1993-94 to 1.5 percent in 2003.

Increases in past year use of non-heroin opiates and sedatives were found for both higher income and lower income adults, although the increase in sedative use among adults at or below 200 percent of the federal poverty level did not attain statistical significance.

The 1993-94 survey did not ask about past year use of alcohol, therefore, ten-year comparisons are not available. In addition, changes in the use of tranquilizers and inhalants could not be estimated because use of these substances was not measured in the 1993-94 survey.

TEN-YEAR COMPARISON

Past Year Substance Use: 1993-94 to 2003 Change

ALL ADULT HOUSEHOLD RESIDENTS

	Alcohol	Any Illicit Drug	Marijuana	Cocaine or Crack	Stimulant	Hallucinogen	Heroin	Other Opiates	Tranquilizer	Sedative	Inhalant
2003	72.9%	9.6%	7.4%	1.1%	0.5%	0.9%	0.1%	2.0%	0.7%	1.5%	0.2%
1993-94	N/A	9.7%	9.0%	1.6%	1.8%	1.3%	0.1%	0.5%	N/A	0.6%	N/A
Difference	N/A	(-0.1%)	(-1.6%)	(-0.5%)	(-1.3%)	(-0.4%)	+0.0%	+1.5%	N/A	+0.9%	N/A

ADULTS ABOVE 200% FPL

	Alcohol	Any Illicit Drug	Marijuana	Cocaine or Crack	Stimulant	Hallucinogen	Heroin	Other Opiates	Tranquilizer	Sedative	Inhalant
2003	77.5%	8.7%	6.7%	0.8%	0.3%	0.6%	0.1%	1.7%	0.6%	1.5%	0.2%
1993-94	N/A	9.6%	8.9%	1.3%	1.6%	1.2%	0.0%	0.5%	N/A	0.5%	N/A
Difference	N/A	(-0.9%)	(-2.2%)	(-0.5%)	(-1.3%)	(-0.6%)	+0.1%	+1.2%	N/A	+1.0%	N/A

ADULTS AT OR BELOW 200% FPL

	Alcohol	Any Illicit Drug	Marijuana	Cocaine or Crack	Stimulant	Hallucinogen	Heroin	Other Opiates	Tranquilizer	Sedative	Inhalant
2003	58.4%	12.7%	9.6%	2.0%	1.2%	1.7%	0.1%	3.0%	1.0%	1.7%	0.3%
1993-94	N/A	10.1%	9.0%	2.2%	2.5%	1.6%	0.3%	0.5%	N/A	1.1%	N/A
Difference	N/A	+2.6%	+0.6%	(-0.2%)	(-1.3%)	+0.1%	(-0.2%)	+2.5%	N/A	+0.6%	N/A

Bold type indicates statistical significance at $p < .05$

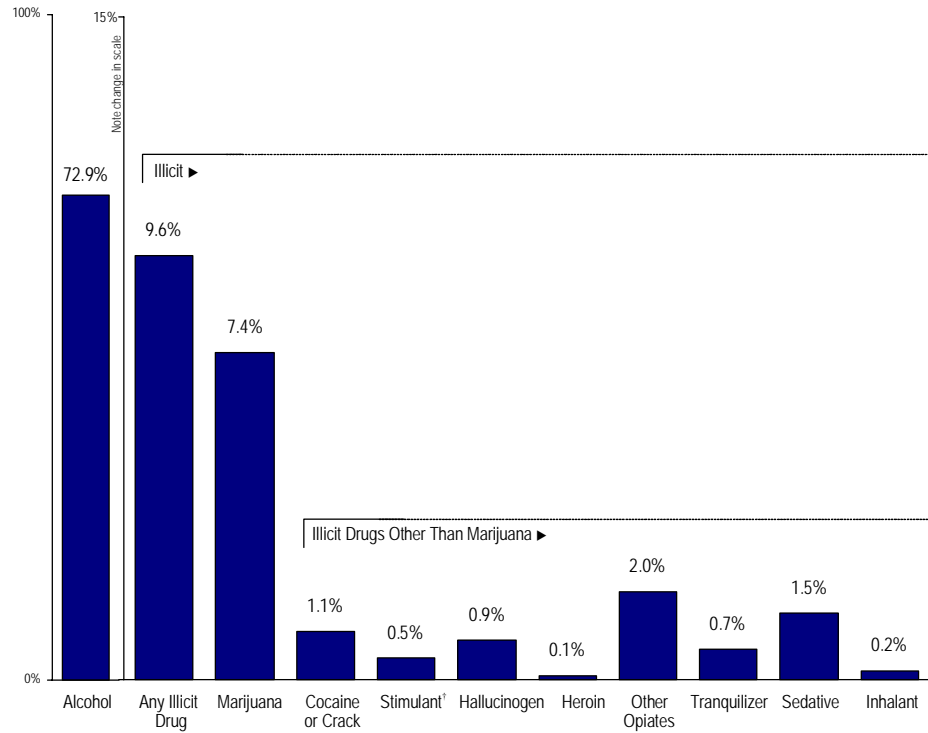
2003 SURVEY ESTIMATES

ALL ADULTS

Past Year Substance Use



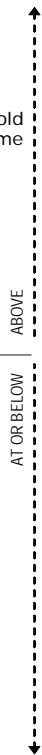
Washington State Household Residents Aged 18+



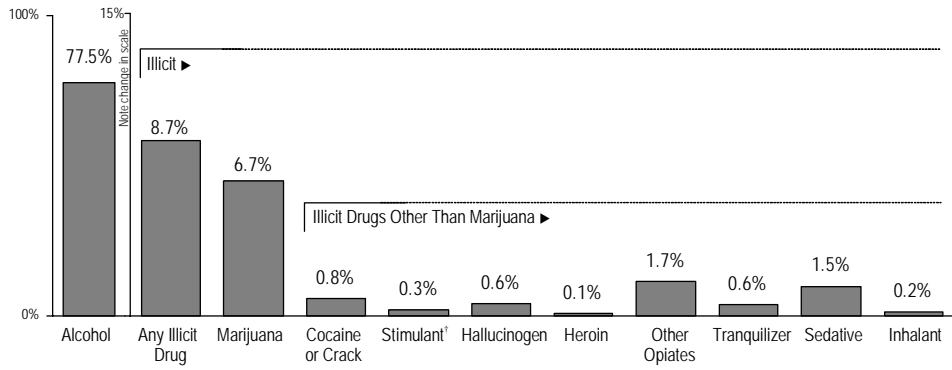
By Income

Household Income

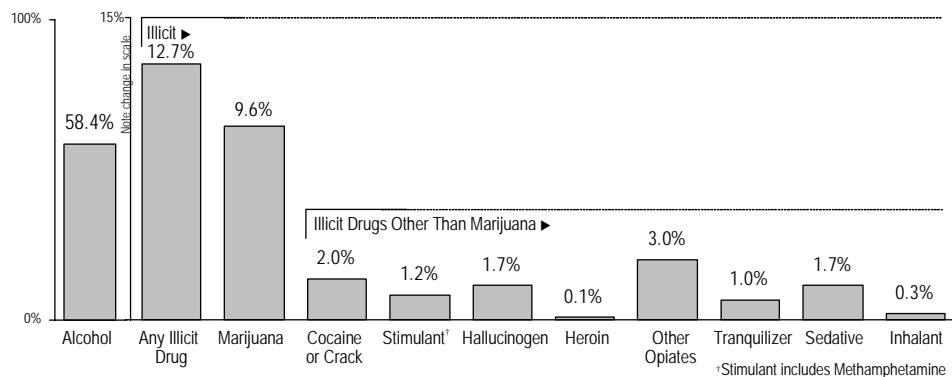
200% Poverty



Adults Above 200% FPL



Adults At Or Below 200% FPL



[†]Stimulant includes Methamphetamine

Past 30 Day Non-Heroin Opiate and Sedative Use Has Increased

Over half (57.9 percent) of adult household residents used alcohol during the past 30 days. Alcohol use during the past 30 days is higher among adults above 200 percent of the federal poverty level (63.0 percent) than adults at or below 200 percent of the federal poverty level (41.6 percent).

About 1 in 20 (5.6 percent) adult household residents used an illicit substance during the past 30 days. Marijuana (4.3 percent) was the most frequently used illicit substance during the past month, followed by non-heroin opiates (0.9 percent) and sedatives (0.8 percent).

Adults at or below 200 percent of the federal poverty level were *more* likely to use an illicit drug (7.5 percent) during the past 30 days than adults above 200 percent of the federal poverty level (5.0 percent).

Past month drug use among adults at or below 200 percent of the federal poverty level is also higher for each of the substances, with the exception of heroin, sedatives, and inhalants.

Comparing 2003 Use To 1993-94 Estimates

Past 30 day rates of alcohol use were similar from 1993-94 (56.9 percent) to 2003 (57.9 percent). Past 30-day use rates of any illicit drug increased slightly from 1993-94 (4.7 percent) to 2003 (5.6

percent). However, this increase was not statistically significant. Closer examination again reveals significant changes in the use of stimulants, non-heroin opiates, and sedatives.

Past month stimulant use is down from 0.8 percent of all adult household residents in 1993-94 to only 0.1 percent in 2003. This decline is also significant among adults at or below 200 percent of the federal poverty level but not significant for adults above 200 percent of the federal poverty level.

Non-heroin opiate use during the past 30 days (0.9 percent) is significantly higher when compared with 1993-94 estimates (0.1 percent). Significant increases from 1993-94 rates of non-heroin opiate use were found for both adults above 200 percent of the federal poverty level and adults at or below 200 percent of the federal poverty level.

Sedative use during the past 30 days (0.8 percent) increased significantly from 1993-94 levels (0.1 percent). This increase was not statistically significant among adults at or below 200 percent of the federal poverty level.

Ten-year comparisons of rates of use of tranquilizers and inhalants are not possible because use of these substances was not measured in the 1993-94 survey.

TEN-YEAR COMPARISON

30 Day Substance Use: 1993-94 to 2003 Change

ALL ADULT HOUSEHOLD RESIDENTS

	Alcohol	Any Illicit Drug	Marijuana	Cocaine or Crack	Stimulant	Hallucinogen	Heroin	Other Opiates	Tranquilizer	Sedative	Inhalant
2003	57.9%	5.6%	4.3%	0.4%	0.1%	0.2%	0.0%	0.9%	0.2%	0.8%	0.1%
1993-94	56.9%	4.7%	4.5%	0.5%	0.8%	0.2%	0.1%	0.1%	N/A	0.1%	N/A
Difference	+1.0%	+0.9%	(-0.2%)	(-0.1%)	(-0.7%)	+0.0%	(-0.1%)	+0.8%	N/A	+0.7%	N/A

ADULTS ABOVE 200% FPL

	Alcohol	Any Illicit Drug	Marijuana	Cocaine or Crack	Stimulant	Hallucinogen	Heroin	Other Opiates	Tranquilizer	Sedative	Inhalant
2003	63.0%	5.0%	3.9%	0.3%	0.0%	0.1%	0.0%	0.7%	0.2%	0.8%	0.1%
1993-94	60.8%	4.2%	4.2%	0.5%	0.6%	0.2%	0.0%	0.1%	N/A	0.0%	N/A
Difference	+2.2%	+0.8%	(-0.3%)	(-0.2%)	(-0.6%)	(-0.1%)	+0.0%	+0.6%	N/A	+0.8%	N/A

ADULTS AT OR BELOW 200% FPL

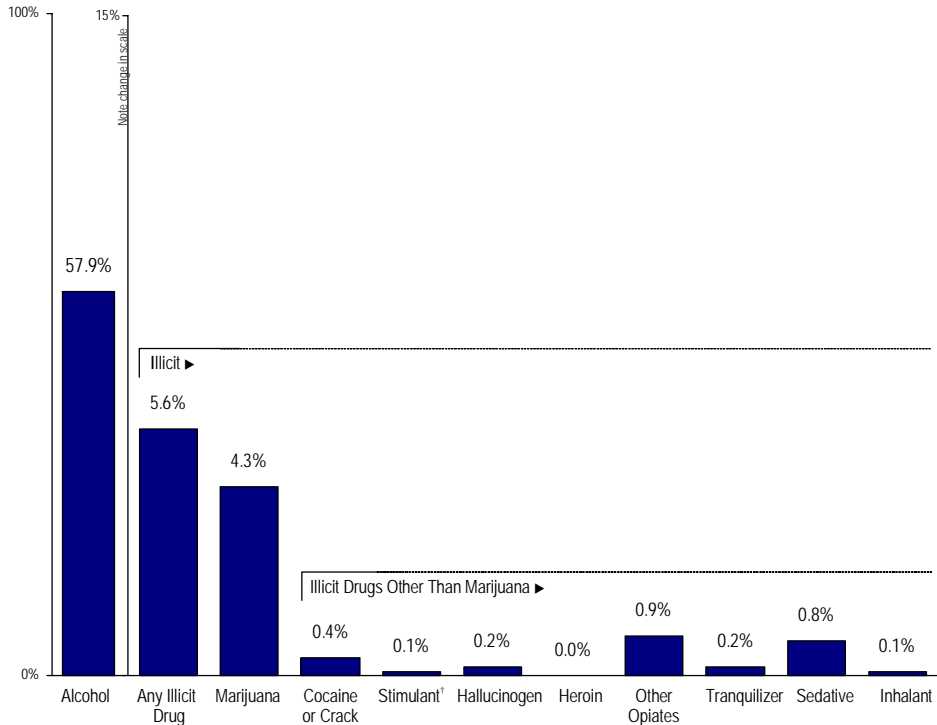
	Alcohol	Any Illicit Drug	Marijuana	Cocaine or Crack	Stimulant	Hallucinogen	Heroin	Other Opiates	Tranquilizer	Sedative	Inhalant
2003	41.6%	7.5%	5.9%	0.7%	0.4%	0.4%	0.0%	1.4%	0.4%	0.5%	0.1%
1993-94	45.1%	6.0%	5.5%	0.5%	1.7%	0.2%	0.3%	0.2%	N/A	0.3%	N/A
Difference	(-3.5%)	+1.5%	+0.4%	+0.2%	(-1.3%)	+0.2%	(-0.3%)	+1.2%	N/A	+0.2%	N/A

Bold type indicates statistical significance at p < .05

ALL ADULTS
Past 30 Day Substance Use



Washington State Household Residents Aged 18+



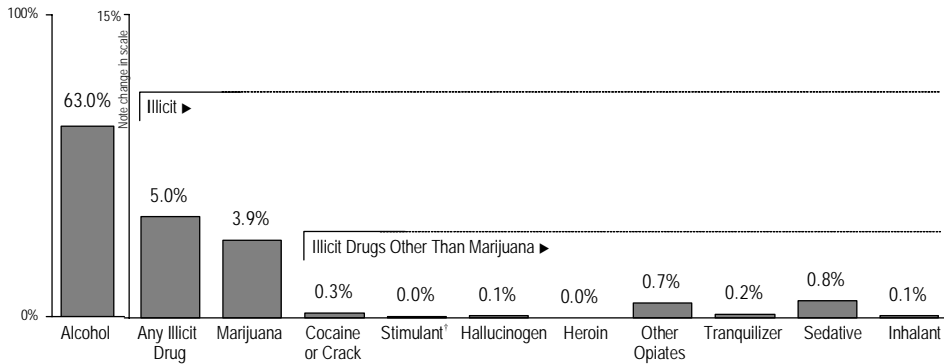
By Income

Household Income

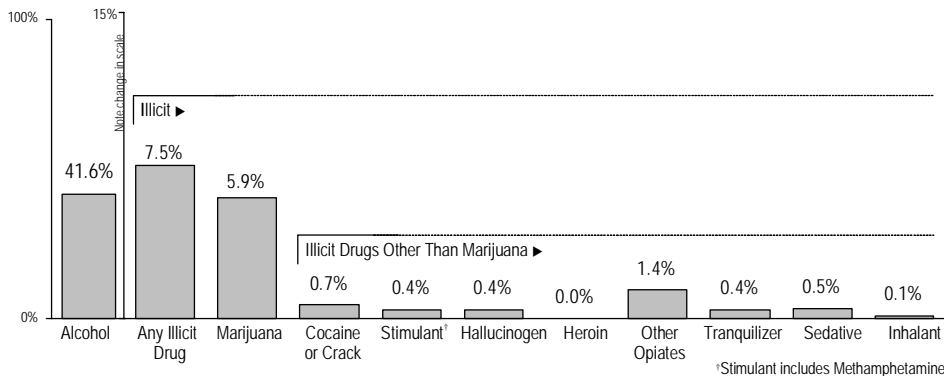
200% Poverty



Adults Above 200% FPL



Adults At Or Below 200% FPL



†Stimulant includes Methamphetamine

Current Stimulant Users Predominantly Use Methamphetamine

The previous sections detailing lifetime, past year, and past 30 day substance use contained measures of stimulant use that combined methamphetamine with other types of stimulants. In this section we distinguish between the use of methamphetamine and other stimulants.

NOTE: Although cocaine has stimulant properties, it is considered separately and is *not* included as a member of the class of stimulants presented in this report.

Recent Stimulant Use More Likely To Be Methamphetamine

The charts on the facing page show the proportion of stimulant users using methamphetamine. Among adult household residents who have used stimulants in their lifetime, 42 percent have used methamphetamine, alone or in addition to other stimulants, while 58 percent have only used other types of stimulants.

In contrast, adults who have used stimulants more recently are much more likely to be using methamphetamine:

- 68 percent of adult residents using stimulants in the past year used methamphetamine in the past year.
- 82 percent of adult residents using stimulants in the past month used methamphetamine in the past month.

This pattern holds true for both higher and lower-income adults:

- Among adult stimulant users in higher-income households, only 39 percent of those who ever used stimulants have ever used methamphetamine. In contrast, 91 percent of past 30 day stimulant users were using methamphetamine in the past month.
- Among lower-income adults, about 80 percent of past month and past year stimulant users were using methamphetamine, compared to only 53 percent of lower-income adults who have ever used stimulants in their lifetime.

DEFINITIONS

Distinguishing Between Methamphetamine and Other Stimulants

OTHER STIMULANTS – Stimulants affect the central nervous system (CNS) serving to increase alertness and physical activity. The more widely abused forms include amphetamine and methamphetamine. However, the abuse of methylphenidate (Ritalin) is on the rise among youth and young adults (Johnston, O'Malley, Bachman, & Schulenberg, 2003; <http://www.dea.gov/>). Other stimulants include Khat and methcathinone. Street terms for stimulants include "Uppers" and "Speed."

METHAMPHETAMINES – (Methadrine) is one of the many amphetamine derivatives. Methamphetamine is closely related chemically to amphetamine, but the 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. Street terms for methamphetamine include: "Meth", "Crystal Meth", "Ice", "Glass", "Crank", and "Poor Man's Cocaine."

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.

CLOSEUP

Adults Reporting Stimulant Use

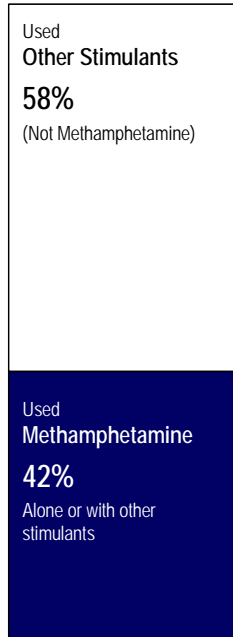
What type of stimulants were used?



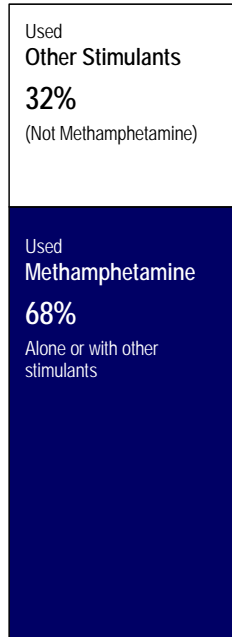
NEEDS ASSESSMENT

Washington State Household Residents Age 18+

Lifetime Use...



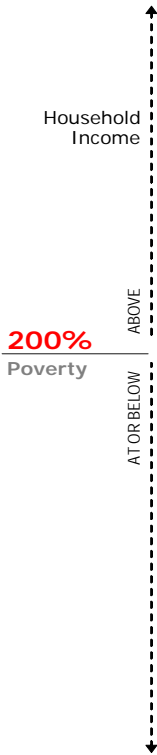
Past Year Use...



30 Day Use...

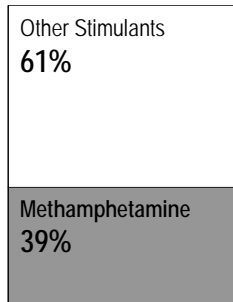


By Income

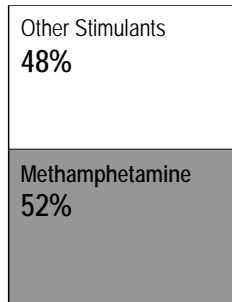


Adults Above 200% FPL

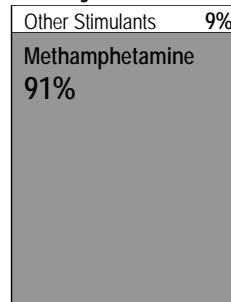
Lifetime Use...



Past Year Use...

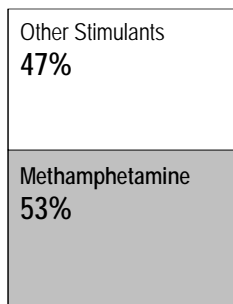


30 Day Use...

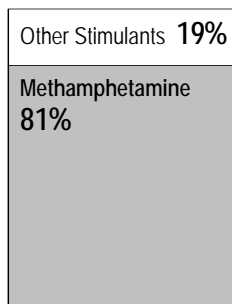


Adults At or Below 200% FPL

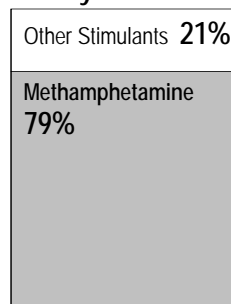
Lifetime Use...



Past Year Use...



30 Day Use...



One in Four Adults Report Binge Drinking in Past Year

Moderate or occasional alcohol use is common, with nearly 9 in 10 adults reporting ever drinking alcohol, and almost 3 in 4 adults consuming alcohol in the past year. This section focuses on more intense and potentially problematic alcohol use by examining the prevalence of two measures of heavier alcohol use: binge drinking and “bender” drinking. These terms are defined in the box below.

Binge Drinking Common, Regardless of Income

About two-thirds (67.8 percent) of the adult population reported ever engaging in binge drinking behavior. Lifetime binge drinking is more common among higher-income adults (71.0 percent) than among lower-income adults (57.5 percent).

The prevalence of past year binge drinking is considerably lower, with 1 in 4 (25.9 percent) of the total adult household population engaging in this behavior in the past 12 months. Additionally, differences between adults above 200 percent of the federal poverty level and adults at or below 200 percent of the federal poverty level disappear when binge drinking is limited to the past year.

“Bender” Drinking More Common Among Lower-Income Adults

“Bender” drinking, or drinking heavily for multiple days in a row, occurs with less frequency. Only 6.1 percent of the total adult household population ever engaged in “bender” drinking behavior.

“Bender” drinking is much more common among lower-income adults. Adults at or below 200 percent of the federal poverty level are twice as likely to have ever engaged in “bender” drinking (9.8 percent) than adults above 200 percent of the federal poverty level (4.9 percent). The direction of this poverty effect is opposite to that found when any alcohol consumption or binge drinking is considered.

Past year “bender” drinking occurred in 1.1 percent of the overall adult household population. Adults at or below 200 percent of the federal poverty level were more than three times as likely to engage in “bender” drinking (2.5 percent), compared to higher-income adults (0.7 percent).

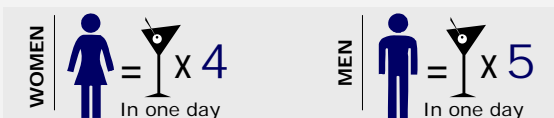
DEFINITIONS

What is a binge? What is a “bender”?

BINGE DRINKING – The term “binge drinking” refers to the **consumption of five or more drinks on the same day for men or four or more drinks on the same day for women.**

A standard “drink” is defined as:

- A shot of hard liquor
- A 5 ounce glass of wine
- A 12 ounce can of beer



This binge drink definition is intended to measure the consumption of a sufficiently large amount of alcohol to place the drinker at increased risk of experiencing alcohol-related problems and to place others at risk of experiencing secondhand effects.

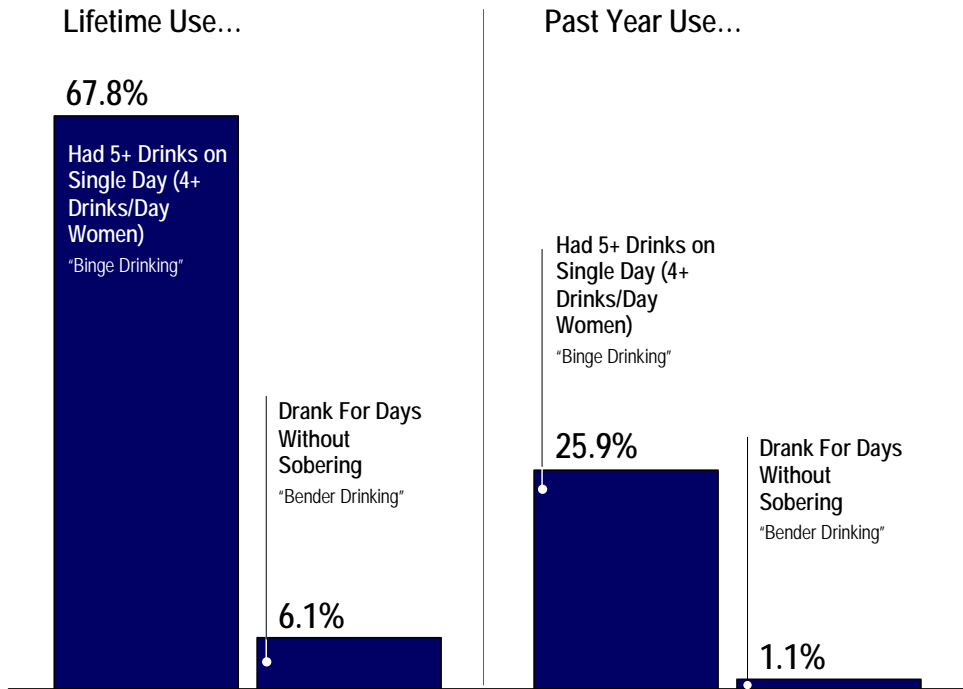
Gender specific cut points are used to account for gender differences in problem levels associated with alcohol intake. Research consistently demonstrates that women experience alcohol-related problems at lower drink levels than do men even after controlling for body mass differences.

This measure is used extensively in population-based research including in the National Survey on Drug Use and Health (NSDUH).

BENDER DRINKING – The term “bender drinking” refers to a **prolonged period of intoxication or excessive heavy drinking that can last for days or weeks.**

Respondents who endorsed the following survey item were defined as engaging in “bender” drinking: **“Have you ever gone on binges where you kept drinking for a couple of days or more without sobering up?”**

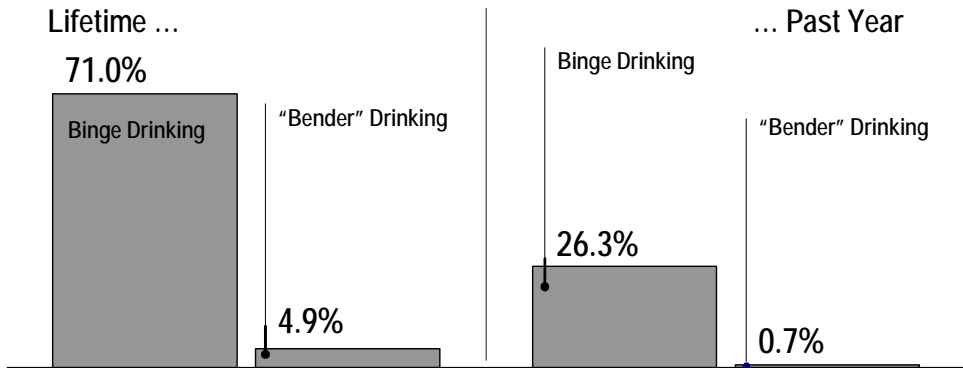
ALL ADULTS
Heavy Alcohol Use
 2003
NEEDS ASSESSMENT
 Washington State Household Residents Age 18+



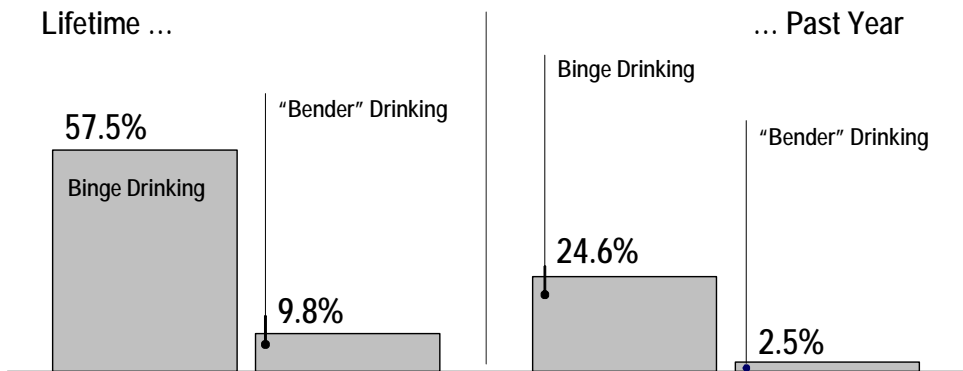
By Income

Household Income
 ABOVE
 200% Poverty
 AT OR BELOW

Adults Above 200% FPL



Adults At or Below 200% FPL



Multiple Drug Use Is More Common Among Lower-Income Adults

This section describes the prevalence of multiple substance use, including the use of illicit drugs and alcohol and the use of multiple illicit drugs. In this analysis we use the higher “binge drinking” threshold of alcohol use, rather than “any” alcohol use. Binge drinking is the consumption of five or more drinks on the same day for men or four or more drinks on the same day for women.

Illicit Drug Use and Binge Drinking

Twenty-nine percent of the adult household population either used an illicit drug or engaged in binge drinking during the past year. The chart on the facing page separates this group into three mutually exclusive components: binge drinking only, illicit drug use only, and both binge drinking and illicit drug use.

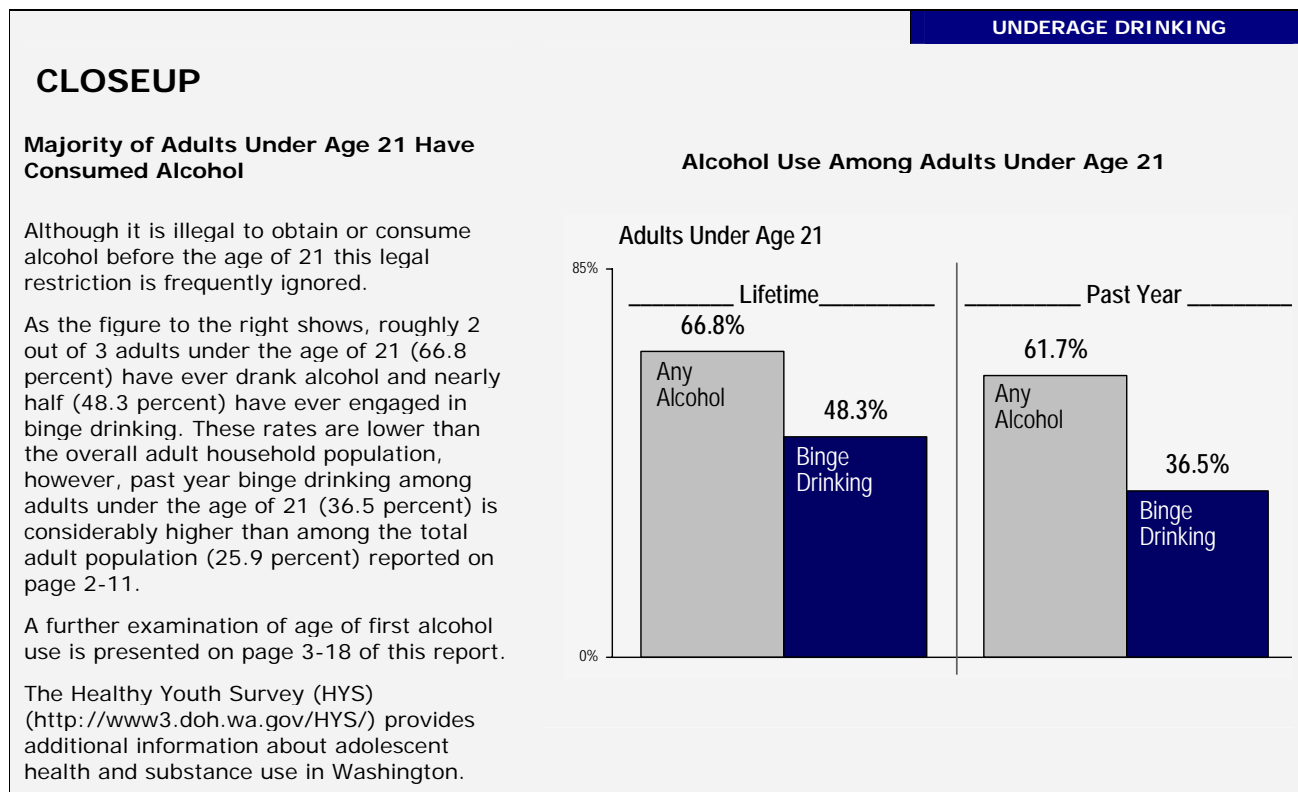
- The majority of past year use consisted of binge drinking only.
- Overall, 6.5 percent of all adults used illicit substances *and* engaged in binge drinking during the past year.

- A higher percentage of adults at or below 200 percent of the federal poverty level both used an illicit drug *and* engaged in binge drinking (8.5 percent).

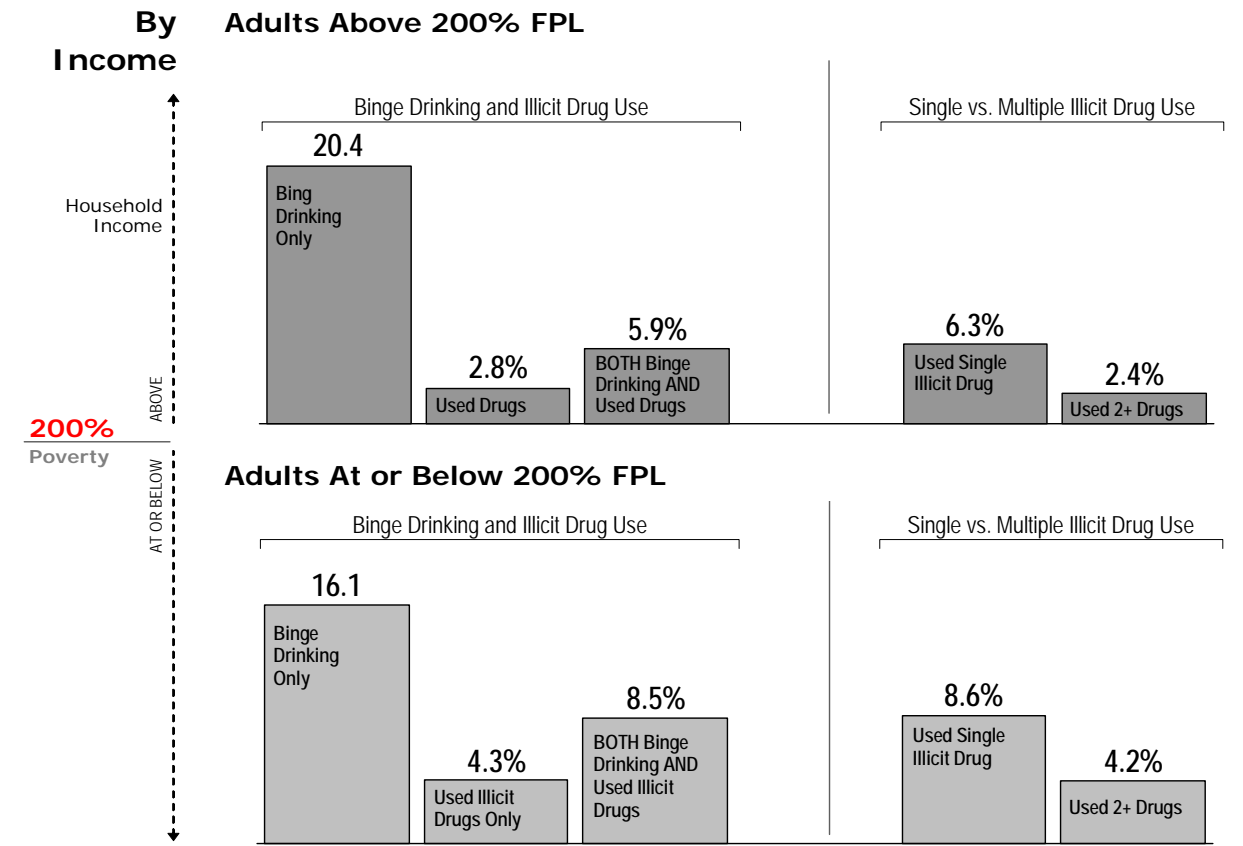
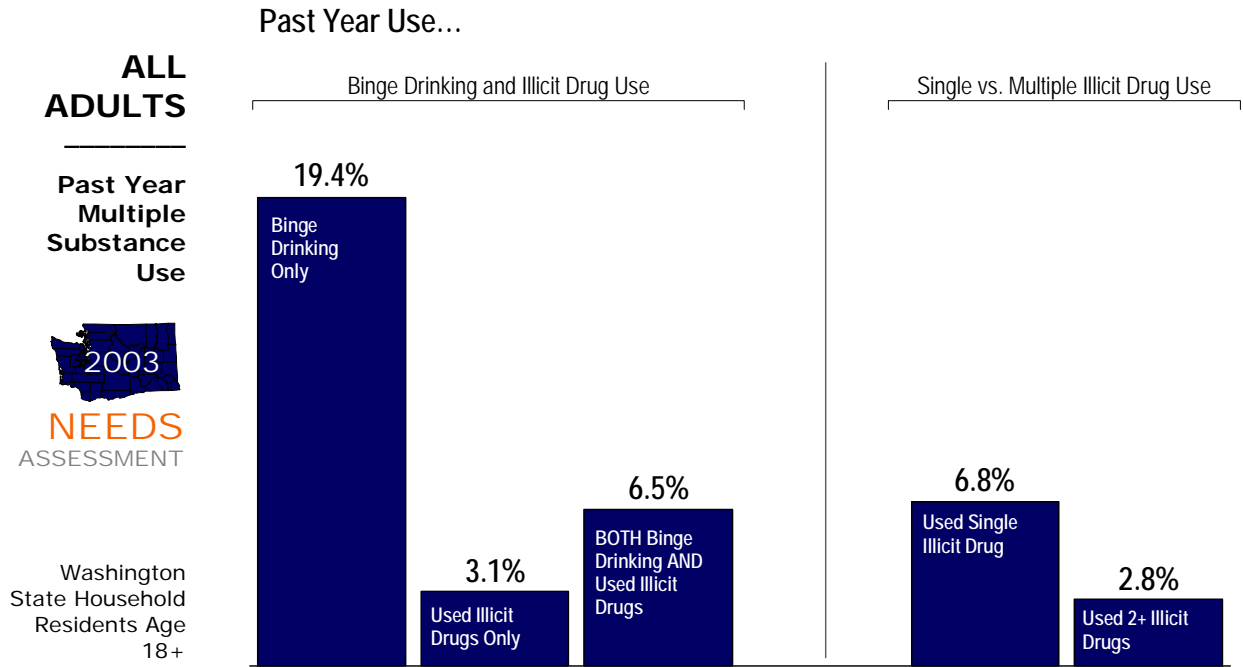
Use of Multiple Illicit Drugs

The chart on the facing page also describes the percentage of adults using multiple illicit substances in the past year, separating past year illicit drug use into two mutually exclusive components, single drug use and multiple drug use.

Most adults using drugs in the past year used a single illicit substance; only 2.8 percent of the overall adult household population used two or more illicit substances during the past year. Among adults living at or below 200 percent of the federal poverty level, a higher proportion (4.2 percent) used two or more illicit substances in the past year. Past year use of multiple illicit drugs was nearly twice as high among lower income adults compared with those living above 200 percent of the federal poverty level (2.4 percent).



2003 SURVEY ESTIMATES



Binge Drinking Is More Common Among Younger Adults, Males

This section describes how the prevalence of past year binge drinking (5+ drinks in a day for males, 4+ drinks in a day for females) varies by gender, age, and region of residence.

Overall, approximately 1 in 4 adult household residents engaged in binge drinking during the past year. This figure was slightly higher for adults above 200 percent of the federal poverty level (26.3 percent), compared with lower income adults (24.6 percent).

Males were more likely than females to engage in binge drinking. About 1 in 3 males (32.5 percent) engaged in binge drinking during the past year. For females, the rate was about 1 in 5 (19.7 percent). This pattern holds for both higher income and lower income adults.

The likelihood of engaging in binge drinking during the past year was strongly associated with age, with younger adults much more likely

to engage in binge drinking than were older adults.

Almost half (45.2 percent) of adults between the ages of 18 and 24 binge drank in the past year. In contrast, only 6.2 percent of adults aged 65 and older binge drank in the past year. This pattern was consistent regardless of poverty status.

Among young adults age 18 to 24, Those at or below 200 percent of the federal poverty level were slightly more likely to binge drink (46.9 percent), compared young adults above 200 percent of the federal poverty level (43.9 percent).

Binge drinking occurs with similar frequency, regardless of whether adults reside in an urban or rural county.

DRINKING IMPAIRMENT

Impairment Due to Binge Drinking

The definition of binge drinking was developed in part to provide a measure of alcohol consumption that places the drinker at an increased risk for experiencing alcohol-related consequences. The extent of impairment produced by alcohol consumption depends upon an individual's blood alcohol content (BAC). BAC is dependent upon a number of factors beyond the quantity of alcohol consumed. The charts below estimate BAC and the level of impairment given the number of drinks consumed, gender, and body weight. The binge drinking definition corresponds with significant impairment and meets or exceeds Washington State's legal definition of intoxication (BAC=.08).

MEN
Approximate Blood Alcohol Percentage

Drinks	Body weight in pounds								
	100	120	140	160	180	200	220	240	
0	.00	.00	.00	.00	.00	.00	.00	.00	Only safe driving limit
1	.04	.03	.03	.02	.02	.02	.02	.02	Impairment begins
2	.08	.06	.05	.05	.04	.04	.03	.03	Driving skills significantly affected & Possible criminal penalties
3	.11	.09	.08	.07	.06	.06	.05	.05	
4	.15	.12	.11	.09	.08	.08	.07	.06	
5	.19	.16	.13	.12	.11	.09	.09	.08	Legally intoxicated & Criminal penalties
6	.23	.19	.16	.14	.13	.11	.10	.09	
7	.26	.22	.19	.16	.15	.13	.12	.11	
8	.30	.25	.21	.19	.17	.15	.14	.13	
9	.34	.28	.24	.21	.19	.17	.15	.14	
10	.38	.31	.27	.23	.21	.19	.17	.16	

Subtract .01% for every 40 minutes of drinking.
One drink is 1.25 oz of 80 proof liquor, 12 oz. of beer, or 5 oz. of table wine.

WOMEN
Approximate Blood Alcohol Percentage

Drinks	Body weight in pounds								
	100	120	140	160	180	200	220	240	
0	.00	.00	.00	.00	.00	.00	.00	.00	Only safe driving limit
1	.05	.05	.04	.03	.03	.03	.02	.02	Impairment begins
2	.10	.09	.08	.07	.06	.05	.05	.04	Driving skills significantly affected & Possible criminal penalties
3	.15	.14	.11	.10	.09	.08	.07	.06	
4	.20	.18	.15	.13	.11	.10	.09	.08	
5	.25	.23	.19	.16	.14	.13	.11	.10	Legally intoxicated & Criminal penalties
6	.30	.27	.23	.19	.17	.15	.14	.12	
7	.35	.32	.27	.23	.20	.18	.16	.14	
8	.40	.36	.30	.26	.23	.20	.18	.17	
9	.45	.41	.34	.29	.26	.23	.20	.19	
10	.51	.45	.38	.32	.28	.25	.23	.21	

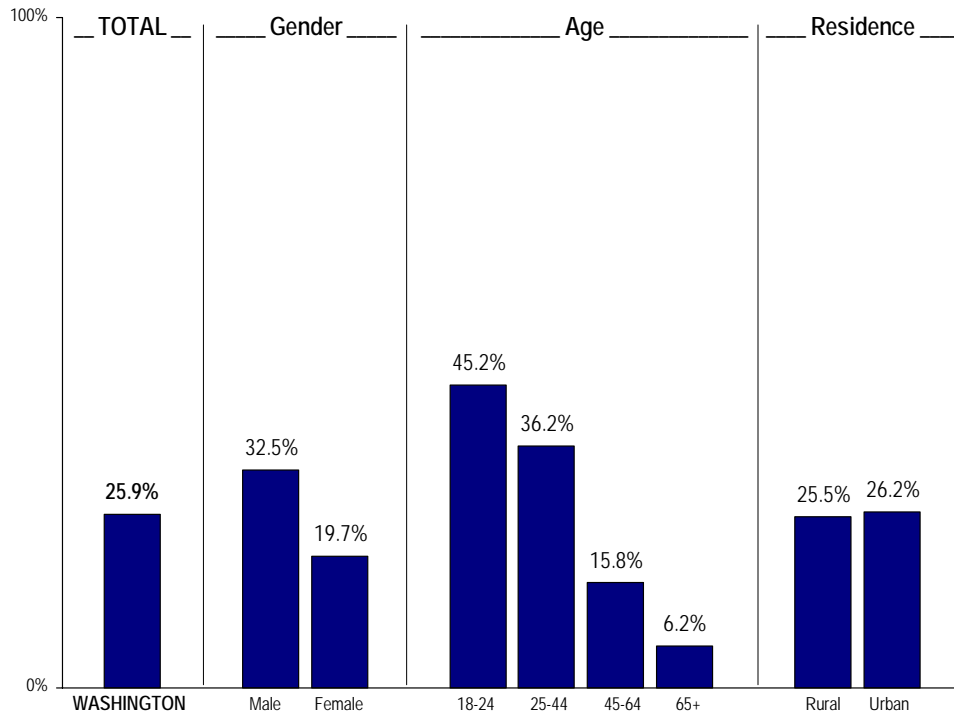
Subtract .01% for every 40 minutes of drinking.
One drink is 1.25 oz of 80 proof liquor, 12 oz. of beer, or 5 oz. of table wine.

Source: U.S. Department of Health and Human Services and SAMHSA's National Clearinghouse for Alcohol and Drug Information (<http://www.health.org/nongovpubs/bac-chart/>).

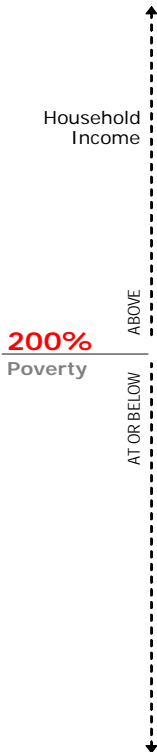
2003 SURVEY ESTIMATES

ALL ADULTS
Past Year Binge Drinking

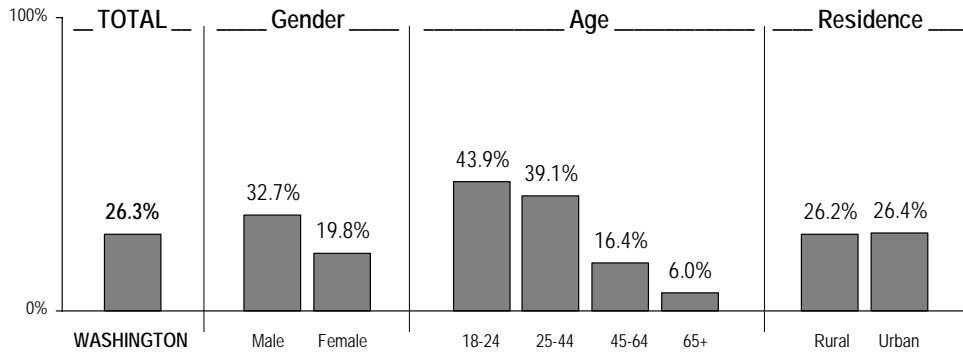
2003 NEEDS ASSESSMENT
 Washington State Household Residents Age 18+



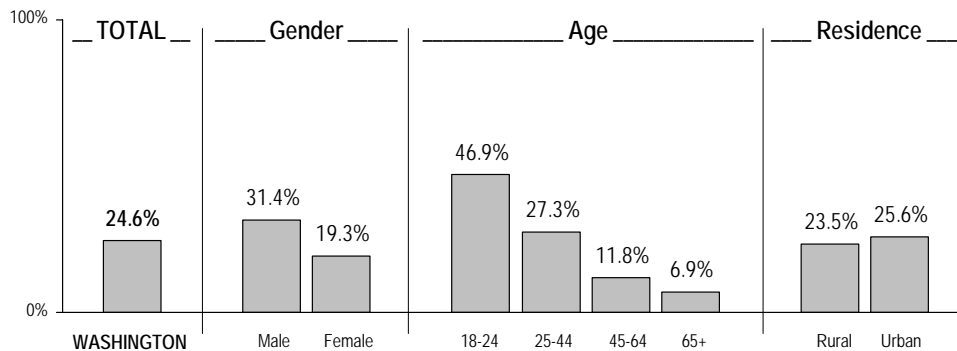
By Income



Adults Above 200% FPL



Adults At Or Below 200% FPL



Asians and African-Americans Least Likely to Binge Drink

This section describes how the prevalence of past year binge drinking varies by race and ethnicity. Asian adults reported the lowest prevalence of past year binge drinking (12.5 percent). African-American adults also reported low rates of past year binge drinking (17.2 percent).

Binge Drinking Highest Among Multirace Adults

Adults who reported belonging to more than one non-Hispanic race group reported the highest rate of past year binge drinking (34.1 percent).

Among Asians and Hispanics, poverty status is strongly related to the prevalence of binge drinking. Asians above 200 percent of the federal poverty level were more than twice as likely to binge drink when compared with Asians at or below 200 percent of the federal poverty level (15.1 percent vs. 7.3 percent).

Similarly, Hispanics above 200 percent of the federal poverty level were half again as likely to binge drink when compared with Hispanics at or

below 200 percent of the federal poverty level (34.1 percent vs. 22.9 percent).

While there was a general tendency for rates of past year binge drinking to be higher among adults above 200 percent of the federal poverty level, Whites and American Indian or Alaska Natives did not follow this pattern. White and American Indian or Alaska Native adults who were at or below 200 percent of the federal poverty level were slightly more likely to engage in past year drinking behavior (27.0 percent and 29.6 percent, respectively) than were those above 200 percent of the federal poverty level (26.6 percent and 27.2 percent, respectively).

DEMOGRAPHIC DETAIL OF PAST YEAR USE

Additional Demographic Detail Available in Appendix Tables

Due to space considerations, demographic differences in past year substance use are limited to a few selected substances. These substances are supplemented by a more comprehensive appendix detailing demographic differences for alcohol use, illicit substance use, and tobacco use. Appendix A includes three tables. The first table describes demographic differences among all adult household residents, the second is limited to those above 200 percent of the federal poverty level, and the third describes those at or below 200 percent of the federal poverty level.

Ten year comparisons are not included in these tables. If additional information about the 1993-94 WANAHS report is desired, the full report is available online at: <http://www1.dshs.wa.gov/rda/research/4/25/40.shtm>.

2003 SURVEY ESTIMATES

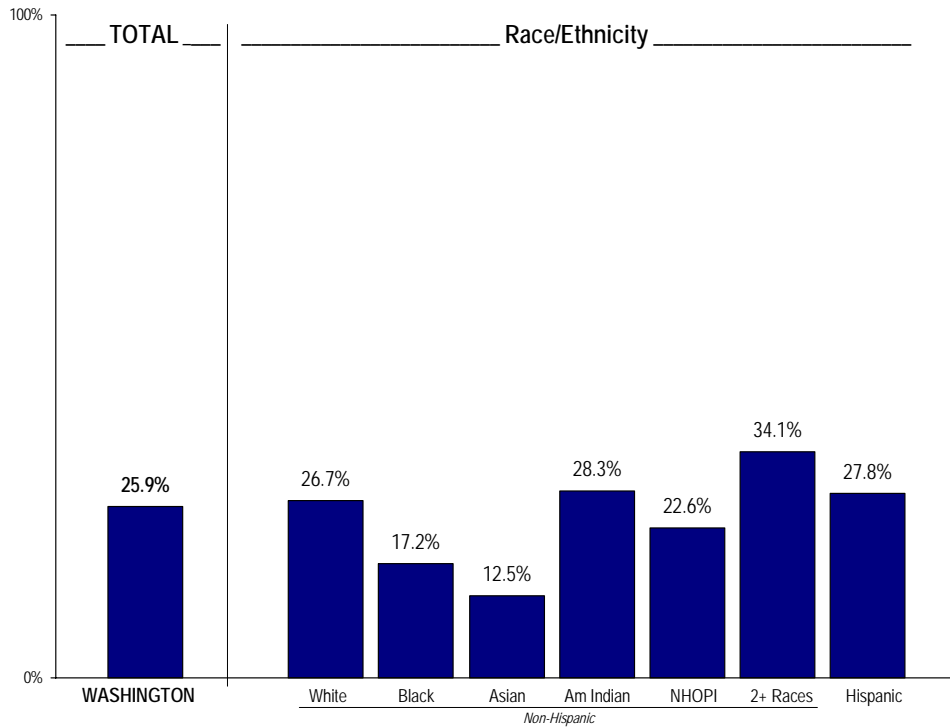
ALL ADULTS

Past Year Binge Drinking

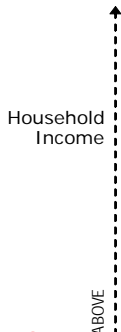


2003 NEEDS ASSESSMENT

Washington State Household Residents Age 18+

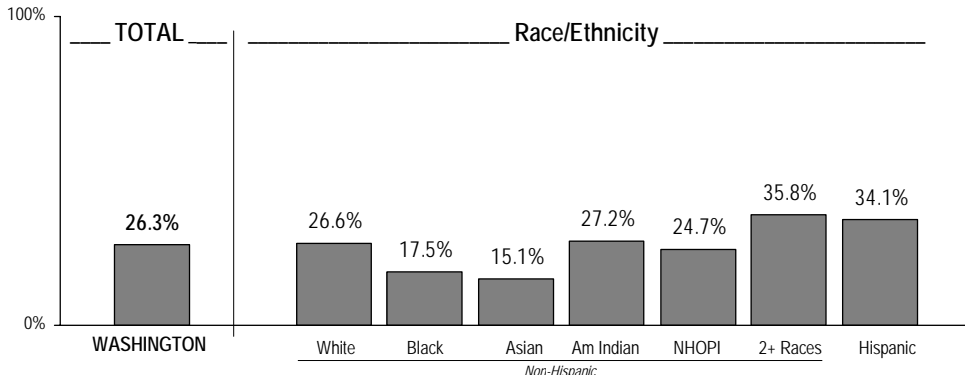


By Income

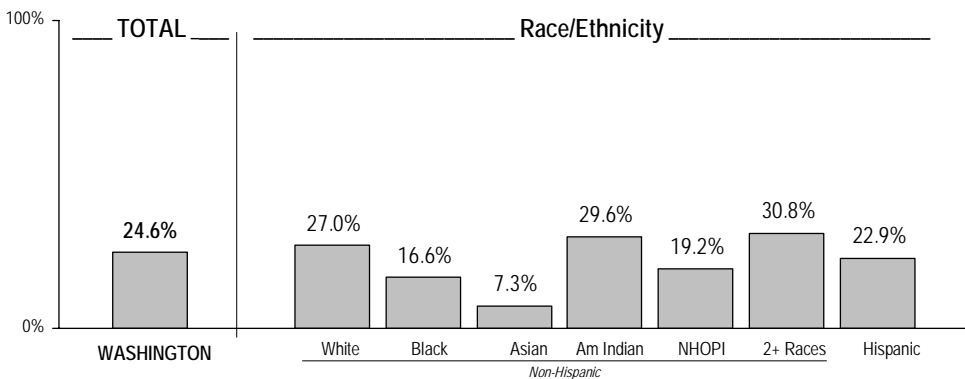


200% Poverty

Adults Above 200% FPL



Adults At Or Below 200% FPL



One in Five Women with Children Engaged in Binge Drinking During Past Year

This section describes how the prevalence of **past month** drinking and **past year** binge drinking varies among pregnant and parenting women. As discussed in the box below, lower-income women who are currently pregnant are much more likely to report drinking alcohol in the past 30 days, compared to higher-income pregnant women.

Classifying Pregnant and Parenting Women

Women under the age of 51 were asked whether or not they were currently pregnant or had given birth in the past year. Women aged 51 and older were not asked these questions and were classified as not currently pregnant and not giving birth in the past year. In addition, all respondents were asked whether they had children living in their household for whom they had primary care responsibilities. Overall, 2.4 percent of women were classified as currently pregnant, 4.9 percent were classified as having given birth in the past year, and 38 percent were classified as having

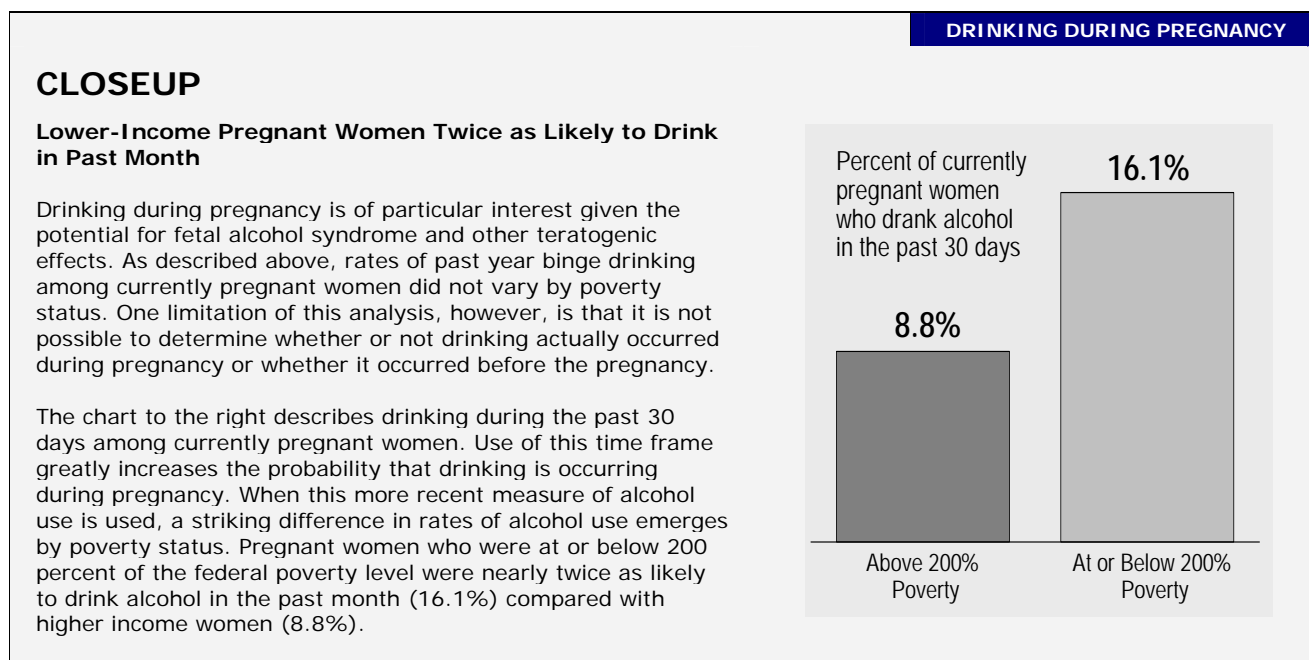
children in the household for whom they had primary care responsibilities.

Binge Drinking Rates Similar For Pregnant, non-Pregnant Women

Prevalence of past year binge drinking among currently pregnant women (18.6 percent) is nearly as high as binge drinking among women that are not currently pregnant (19.7 percent). Rates of binge drinking were similar across poverty status.

Rates of binge drinking were somewhat lower among women who had given birth during the past year (14.3 percent) compared with those who had not (19.9 percent). Again, this pattern held regardless of poverty status.

Rates of past year binge drinking were slightly higher among women with children (21.6 percent) than women without children (18.4 percent). This pattern held regardless of poverty status.



CLOSEUP

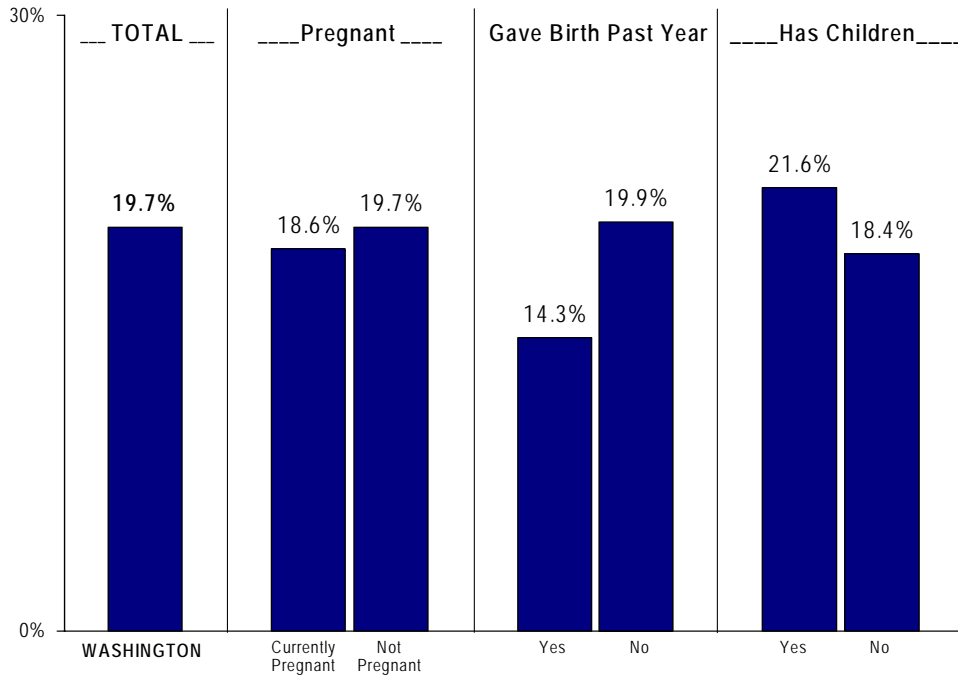
Pregnant and Parenting Women: Binge Drinking



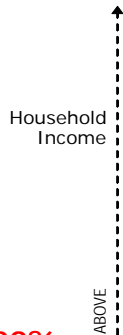
NEEDS ASSESSMENT

Washington State Household Residents

Past Year Binge Drinking

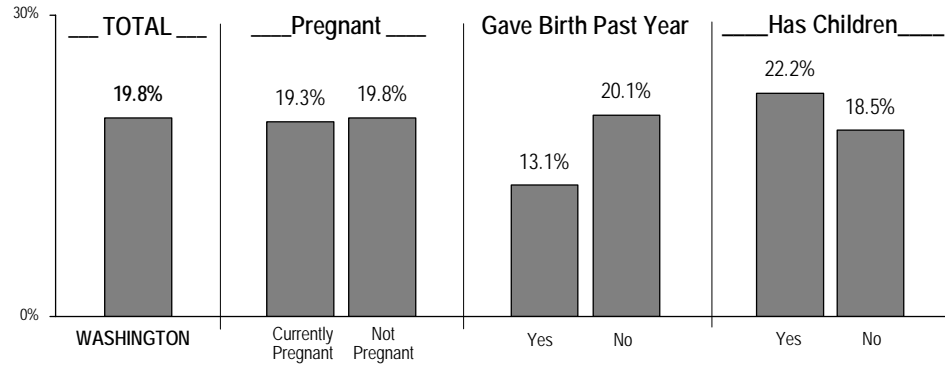


By Income

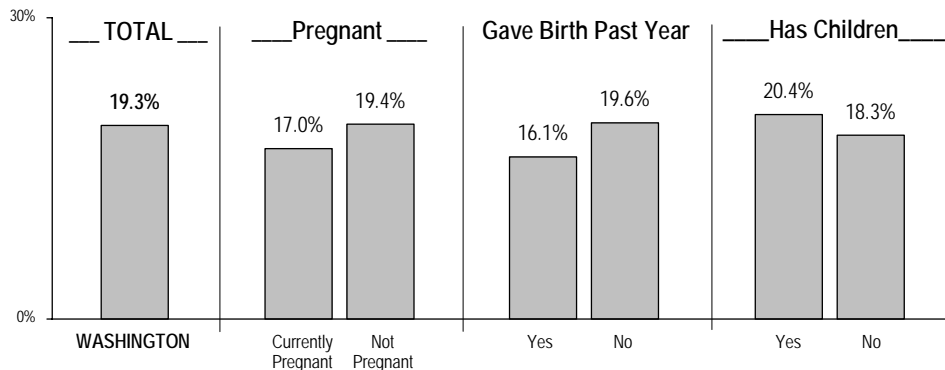


200% Poverty

Past Year Binge Drinking - Women Above 200% FPL



Past Year Binge Drinking - Women At Or Below 200% FPL



Use of Illicit Drugs Is More Common Among Men, Young Adults, and Urban Residents

This section describes changes in the prevalence of past year illicit drug use between 1993-94 and 2003. In addition, variations by gender, age, and region are presented.

Ten-Year Comparison

The overall rate of past year illicit drug use remained consistent from 1993-94 to 2003, with about 1 in 10 adult household residents using drugs in the past year. However, several significant changes in illicit drug use patterns emerge when gender, age, and regional differences are considered.

Significantly more adults aged 45 to 64 reported using an illicit substance during the past year in 2003 (5.0 percent) compared with those adults aged 45 to 64 in 1993-94 (2.4 percent).

Among adults living at or below 200 percent of the federal poverty level, however, a number of statistically significant differences are noted between 1993-94 and 2003 rates. Specifically, in 2003 significantly higher rates of past year drug use were noted for:

- Males

- Adults aged 45 to 64
- Adults residing in rural counties

2003 Survey Estimates

The charts on the facing page present 2003 rates of past year any illicit drug use by gender, age, and region of residence. These charts show that males, regardless of poverty status are more likely to use an illicit substance in the past year.

Past year use of any illicit substance is strongly associated with age – younger adults are much more likely to use an illicit substance in the past year than are older adults. Adults aged 18 to 24 were the most likely to use any illicit substance in the past year (23.8 percent) and rates of past year drug use decrease steadily with age.

Less than one percent of adults aged 65 and older used any illicit substance in the past year. The relationship between past year drug use and age is similar regardless of poverty status.

Adults residing in urban counties, regardless of poverty status, were more likely to use an illicit substance during the past year than adults residing in rural counties.

TEN-YEAR COMPARISON

Past Year Any Illicit Drug Use: 1993-94 to 2003 Change

ALL ADULT HOUSEHOLD RESIDENTS

	WASHINGTON TOTAL	Gender		Age				Residence	
		Male	Female	18-24 yrs	25-44 yrs	45-64 yrs	65+ yrs	Rural	Urban
2003	9.6%	12.2%	7.2%	23.8%	12.7%	5.0%	0.8%	7.7%	11.2%
1993-94	9.7%	13.2%	6.4%	29.4%	12.4%	2.4%	0.0%	7.2%	10.8%
Difference	(-0.1%)	(-1.0%)	+0.8%	(-5.6%)	+0.3%	+2.6%	+0.8%	+0.5%	+0.4%

ADULTS ABOVE 200% FPL

	WASHINGTON TOTAL	Gender		Age				Residence	
		Male	Female	18-24 yrs	25-44 yrs	45-64 yrs	65+ yrs	Rural	Urban
2003	8.7%	10.6%	6.7%	21.5%	12.7%	4.4%	0.7%	6.6%	10.2%
1993-94	9.6%	13.4%	5.7%	32.4%	12.4%	2.2%	0.0%	7.7%	10.3%
Difference	(-0.9%)	(-2.8%)	+1.0%	(-10.9%)	+0.3%	+2.2%	+0.7%	(-1.1%)	(-0.1%)

ADULTS AT OR BELOW 200% FPL

	WASHINGTON TOTAL	Gender		Age				Residence	
		Male	Female	18-24 yrs	25-44 yrs	45-64 yrs	65+ yrs	Rural	Urban
2003	12.7%	17.8%	8.8%	27.0%	12.6%	8.6%	1.2%	10.8%	14.6%
1993-94	10.1%	12.5%	8.2%	23.5%	12.4%	3.6%	0.0%	6.3%	12.7%
Difference	+2.6%	+5.3%	+0.6%	+3.5%	+0.2%	+5.0%	+1.2%	+4.5%	+1.9%

Bold type indicates statistical significance at p < .05

2003 SURVEY ESTIMATES

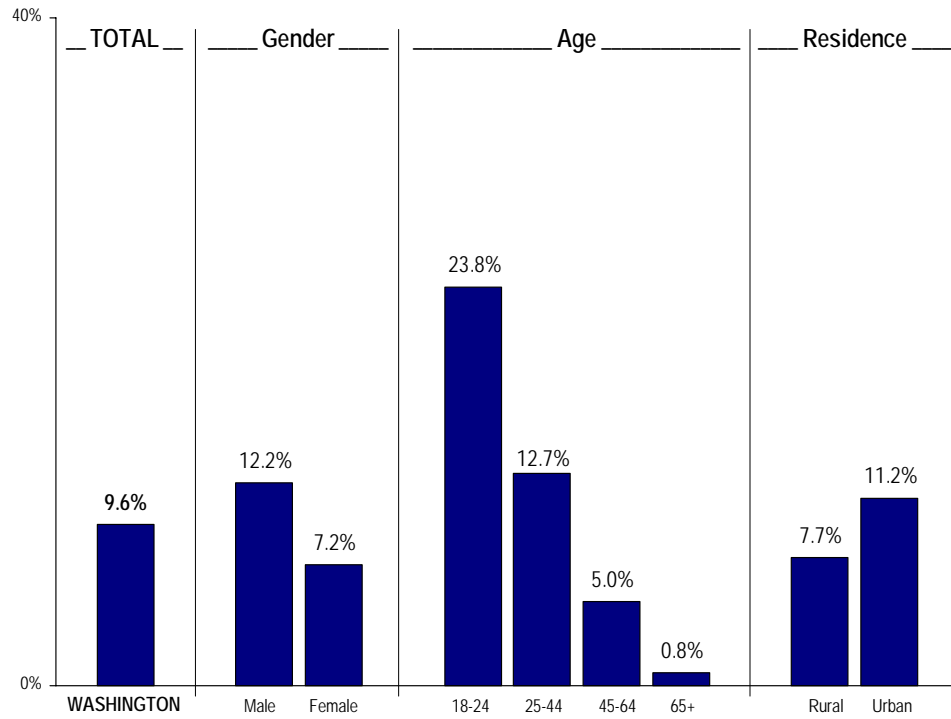
ALL ADULTS

Past Year Illicit Drug Use



NEEDS ASSESSMENT

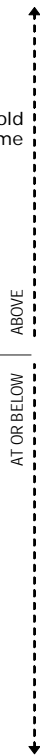
Washington State Household Residents Age 18+



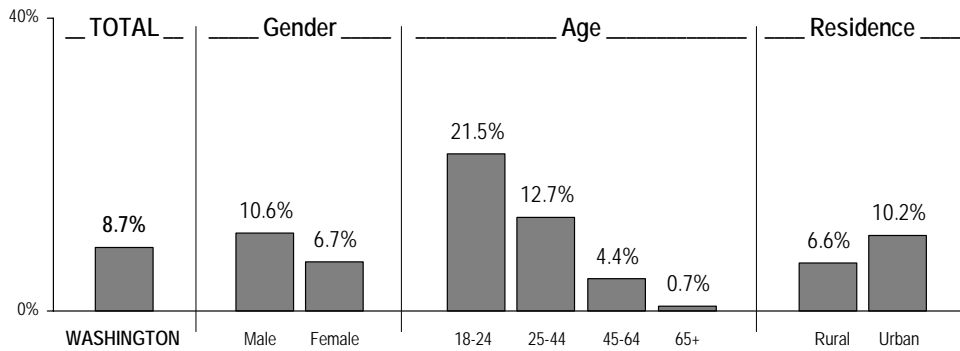
By Income

Household Income

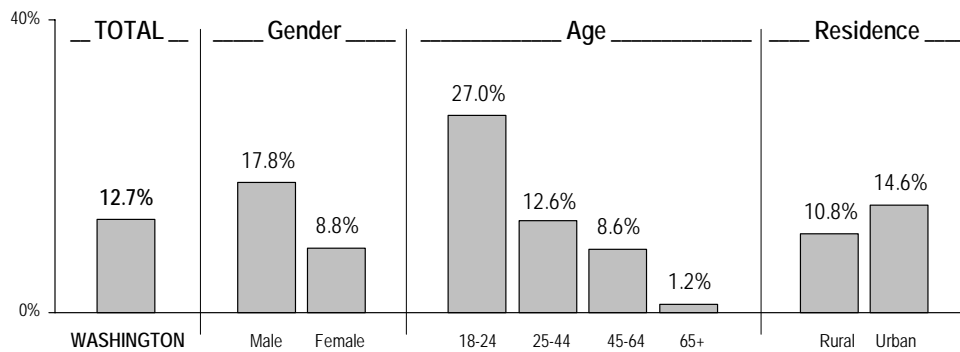
200% Poverty



Adults Above 200% FPL



Adults At Or Below 200% FPL



Past Year Illicit Drug Use Highest Among Multirace Adults, Lowest Among Asians

This section describes the prevalence of any illicit substance use during the past year by racial and ethnic groups. First, comparisons with 1993-94 rates are presented where available. Next, variations among 2003 rates are described.

Ten-Year Comparisons

The table below compares past year use of any illicit substance by racial or ethnic group in 2003 with 1993-94 rates. Significant changes from 1993-94 include:

- In 2003, about twice as many Hispanics used an illicit substance in the past year compared to 1993-94.
- A significantly greater proportion of Asians reported past year drug use in 2003 than in 1993-94.

The increase in estimated drug use among Asians since 1993-94 is particularly striking given that

Native Hawaiian and Pacific Islander (NHOPI) adults were shifted from the Asian group to a separate race group in the reported estimates for 2003.

2003 Survey Estimates

The charts on the facing page present rates of past year any illicit drug use by racial and ethnic groups.

Past year use of any illicit substance was highest among adults that reported belonging to more than one non-Hispanic racial group (18.6 percent) and lowest among Asians (4.2 percent).

Overall, more adults at or below 200 percent of the federal poverty level used an illicit substance during the past year, however, this relationship was not consistent across racial groups. Past year use of any illicit substance was actually higher among Blacks, Asians, and Hispanics that were above 200 percent of the federal poverty level.

TEN-YEAR COMPARISON

Past Year Any Illicit Drug Use: 1993-94 to 2003 Change

ALL ADULT HOUSEHOLD RESIDENTS

	WASHINGTON TOTAL	Race/Ethnicity						
		White	Black	Asian	American Indian	NHOPI*	2+ Races	Hispanic
2003	9.6%	9.6%	11.3%	4.2%	12.0%	8.1%	18.6%	11.0%
1993-94	9.7%	10.2%	10.8%	2.4%	14.5%	N/A	N/A	5.6%
Difference	(-0.1%)	(-0.6%)	+0.5%	+1.8%	(-2.5%)	N/A	N/A	+5.4%

ADULTS ABOVE 200% FPL

	WASHINGTON TOTAL	Race/Ethnicity						
		White	Black	Asian	American Indian	NHOPI*	2+ Races	Hispanic
2003	8.7%	8.4%	12.0%	4.5%	8.6%	4.8%	16.4%	13.3%
1993-94	9.6%	10.0%	9.8%	2.5%	13.7%	N/A	N/A	6.6%
Difference	(-0.9%)	(-1.6%)	+2.2%	+2.0%	(-5.1%)	N/A	N/A	+6.7%

ADULTS AT OR BELOW 200% FPL

	WASHINGTON TOTAL	Race/Ethnicity						
		White	Black	Asian	American Indian	NHOPI*	2+ Races	Hispanic
2003	12.7%	14.0%	10.0%	3.6%	16.5%	13.7%	22.9%	9.3%
1993-94	10.1%	11.0%	12.5%	2.4%	15.4%	N/A	N/A	4.6%
Difference	+2.6%	+3.0%	(-2.5%)	+1.2%	+1.1%	N/A	N/A	+4.7%

Bold type indicates statistical significance at $p < .05$. *The 1993-94 survey did not separately identify Native Hawaiian or other Pacific Islanders, instead they were included with Asians.

2003 SURVEY ESTIMATES

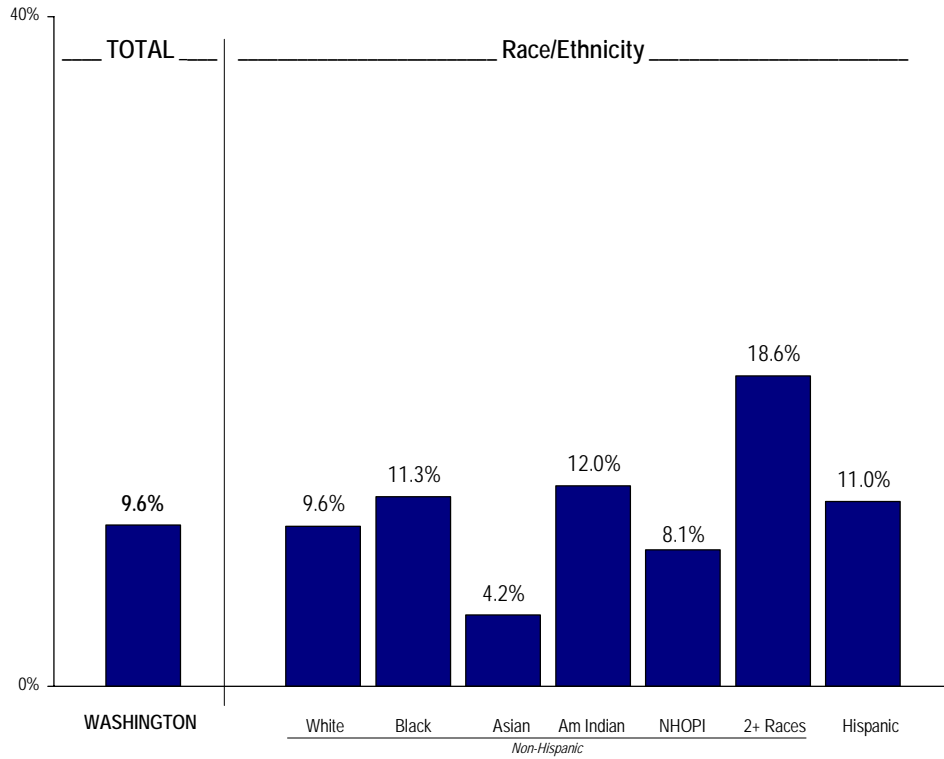
ALL ADULTS

Past Year Illicit Drug Use



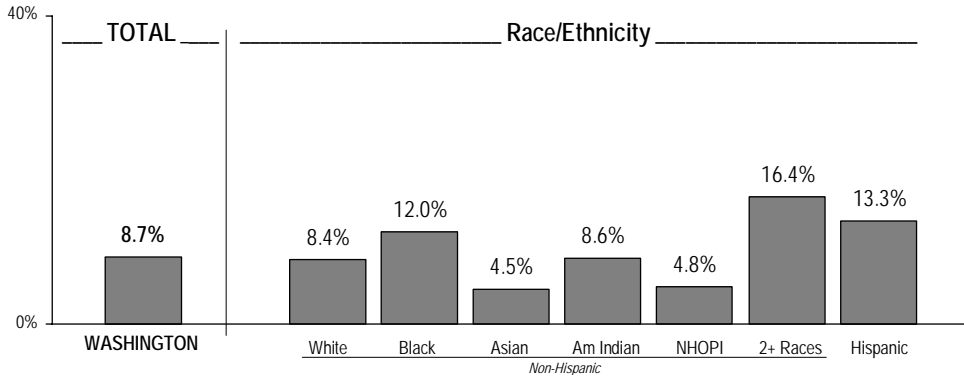
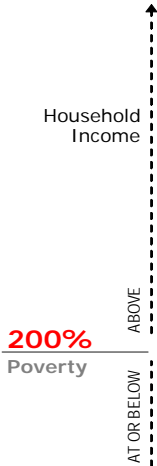
NEEDS ASSESSMENT

Washington State Household Residents Age 18+

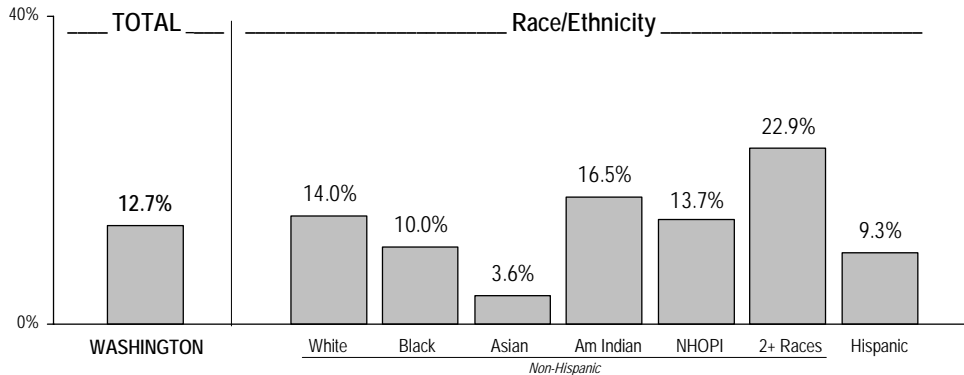


By Income

Adults Above 200% FPL



Adults At Or Below 200% FPL



Past Year Illicit Drug Use Higher Among Lower-Income Pregnant Women

This section reports the prevalence of **past year** use of any illicit drugs among pregnant and parenting women. Results show that, in some cases, rates of any illicit drug use are higher for pregnant and parenting women compared with other women.

Overall, past year illicit drug use among currently pregnant women (7.6 percent) was about the same as among women who were not currently pregnant (7.2 percent). However, pregnant women at or below 200 percent of the federal poverty level were much more likely to report past year illicit drug use (11.4 percent), compared to pregnant women above this poverty threshold (5.7 percent).

Rates of past year illicit drug use were higher among women who had given birth during the past year (11.6 percent) than among women that had not given birth (7.0 percent). The prevalence of drug use here differs by poverty status. Among women above 200 percent of the federal poverty level, illicit drug use was more common among those women who gave birth during the past year (14.1 percent) compared with those who had not (6.3 percent). Among women at or below 200 percent of the federal poverty level, giving birth in the past year had little relationship with past year drug use.

DRUG USE DURING PREGNANCY

CLOSEUP

Teratogenic Properties of Illicit Drugs

Like alcohol, illicit drugs can cross into the placenta and adversely affect development, especially if introduced into the mother's body in large quantities over a prolonged period of time. While it is often difficult to separate teratogenic effects from social and environmental correlates of specific substance abuse, a large number of studies have successfully linked specific illicit substances, including marijuana, to compromised fetal development.

Exposure to drugs *in utero* may cause the following: spontaneous abortion, premature birth, low birth weight, damage to the central nervous system, mild to severe withdrawal symptoms, congenital physical malformations, stillbirth, fetal strokes, upper respiratory infections, respiratory abnormalities, visual, auditory, and/or motor impairments, and significantly increased risk of Sudden Infant Death Syndrome (Brick, 2004; Free, Russell, Mills, & Hathaway, 1990; Hoegerman et al, 1990; Jessup, 1990; Kronstadt, 1989; O'Connor, Kilbride, & Hayen, 1993; Robins & Mills, 1993; Vega et al., 1993).

Drug use during pregnancy may lead to infants being born suffering from substance withdrawal. For example, maternal use of heroin, methadone, methamphetamine, or phencyclidine may produce a neonatal withdrawal syndrome characterized by increased muscle tone, tremors, and a high-pitched cry. Prenatal exposure to drugs may also affect an infant's behavior at birth, thereby interfering with their ability to interact with their environment, to respond to stimuli, and to interact appropriately with the mother or caretaker (Chasnoff & Lowder, 1999).

It is particularly difficult to identify the effects of a single illicit drug on perinatal outcome because the lifestyle associated with the use of any illicit drug usually includes co-use of other drugs (i.e., tobacco, alcohol, other psychoactive drugs).

CLOSEUP

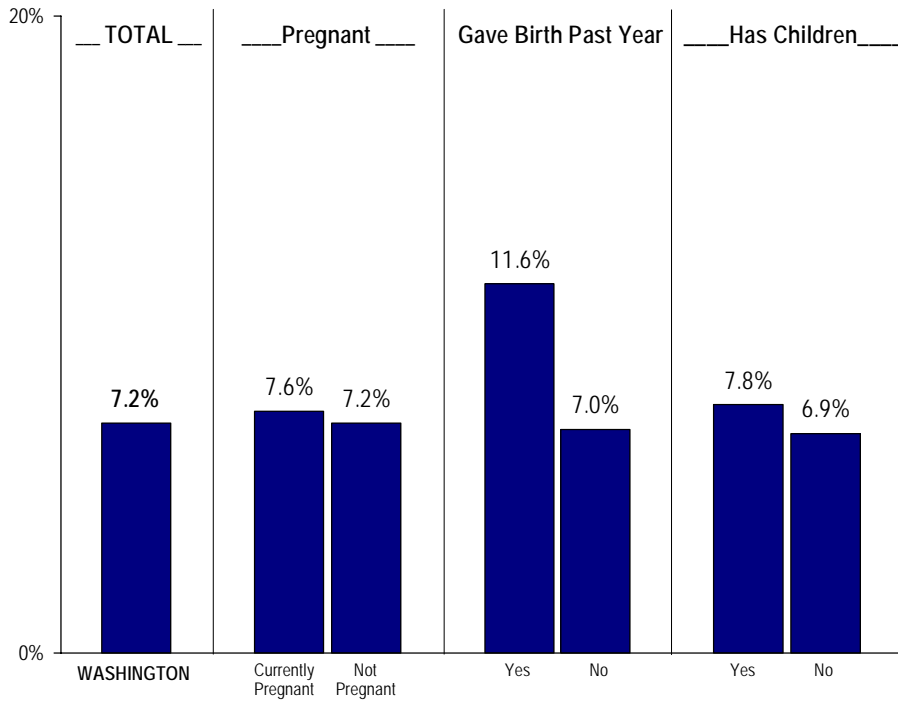
Pregnant and Parenting Women: Illicit Drug Use



NEEDS ASSESSMENT

Washington State Household Residents

Past Year Illicit Drug Use



By Income

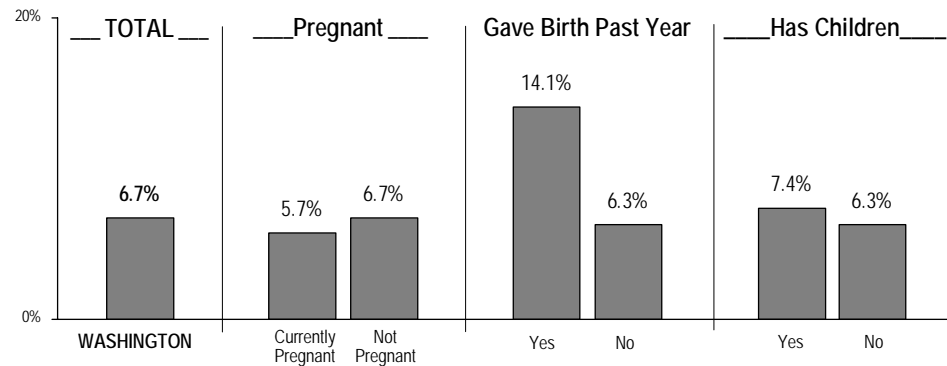
Household Income

200% Poverty

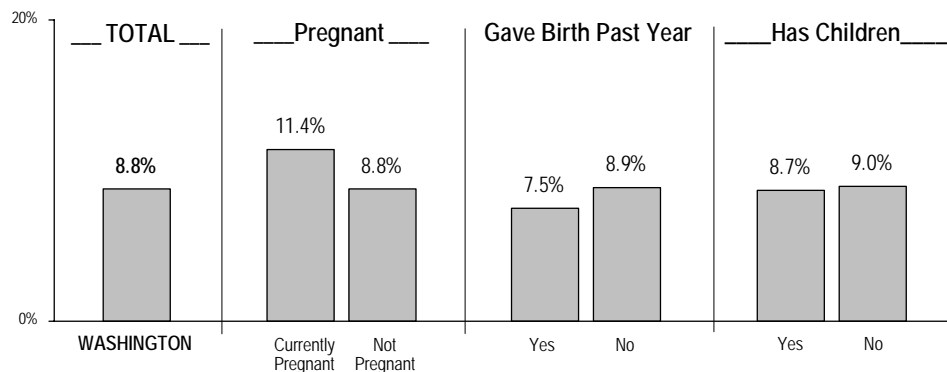
ABOVE

AT OR BELOW

Past Year Illicit Drug Use – Women Above 200% FPL



Past Year Illicit Drug Use – Women At Or Below 200% FPL



Past Year Use of Non-Heroin Opiates on Rise, Particularly Among Males and Adults in Poverty

This section describes the prevalence of past year non-heroin opiate use by gender, age, and region. This includes non-medical use of such medications as OxyContin and methadone. First, past year 2003 rates are compared with 1993-94 rates. Next, the variations in 2003 estimates are discussed.

Ten-Year Comparison

The overall rate of non-heroin opiate use increased significantly from just 0.5 percent in 1993-94 to 2.0 percent in 2003. Non-heroin opiate use has increased across virtually all of the demographic groups listed in the table below. Particularly noteworthy changes include:

- Use among all males increased by a factor of five – from 0.6 percent to 3.0 percent.
- Use among adults at or below 200 percent of the federal poverty level increased by a factor of six – from 0.5 percent to 3.0 percent.
- Use among adults aged 18 to 24 did not increase for those above 200 percent of the federal poverty level (3.6 percent for both), however, among those aged 18 to 24 at or below 200 percent of the federal poverty level use increased from 0.1 percent to 7.4 percent.

2003 Survey Estimates

The charts on the facing page present 2003 past year non-heroin opiate prevalence rates. These charts show that males, regardless of poverty status, are more likely to use non-heroin opiates in the past year.

Past year use of non-heroin opiates is also strongly associated with age. Younger adults aged 18 to 24 are much more likely (5.2 percent) to use non-heroin opiates than are older adults. The association between past year non-heroin opiate use and age is consistent regardless of poverty status. It is interesting to note that adults who are *both* in poverty and who are aged 18 to 24 appear to be at the greatest risk for using non-heroin opiates.

Little difference in the use of non-heroin opiates was found between adults residing in rural or urban counties.

TEN-YEAR COMPARISON

Past Year Non-Heroin Opiate Use: 1993-94 to 2003 Change

ALL ADULT HOUSEHOLD RESIDENTS

	WASHINGTON TOTAL	Gender		Age				Residence	
		Male	Female	18-24 yrs	25-44 yrs	45-64 yrs	65+ yrs	Rural	Urban
2003	2.0%	3.0%	1.1%	5.2%	2.9%	0.8%	0.0%	1.7%	2.3%
1993-94	0.5%	0.6%	0.4%	2.4%	0.5%	0.0%	0.0%	0.8%	0.4%
Difference	+1.5%	+2.4%	+0.7%	+2.8%	+2.4%	+0.8%	+0.0%	+0.9%	+1.9%

ADULTS ABOVE 200% FPL

	WASHINGTON TOTAL	Gender		Age				Residence	
		Male	Female	18-24 yrs	25-44 yrs	45-64 yrs	65+ yrs	Rural	Urban
2003	1.7%	2.6%	0.8%	3.6%	3.0%	0.6%	0.0%	1.4%	2.0%
1993-94	0.5%	0.7%	0.3%	3.6%	0.3%	0.0%	0.0%	1.1%	0.3%
Difference	+1.2%	+1.9%	+0.5%	+0.0%	+2.7%	+0.6%	+0.0%	+0.3%	+1.7%

ADULTS AT OR BELOW 200% FPL

	WASHINGTON TOTAL	Gender		Age				Residence	
		Male	Female	18-24 yrs	25-44 yrs	45-64 yrs	65+ yrs	Rural	Urban
2003	3.0%	4.5%	1.8%	7.4%	2.6%	1.6%	0.1%	2.8%	3.1%
1993-94	0.5%	0.4%	0.6%	0.1%	1.0%	0.1%	0.0%	0.1%	0.8%
Difference	+2.5%	+4.1%	+1.2%	+7.3%	+1.6%	+1.5%	+0.1%	+2.7%	+2.3%

Bold type indicates statistical significance at $p < .05$

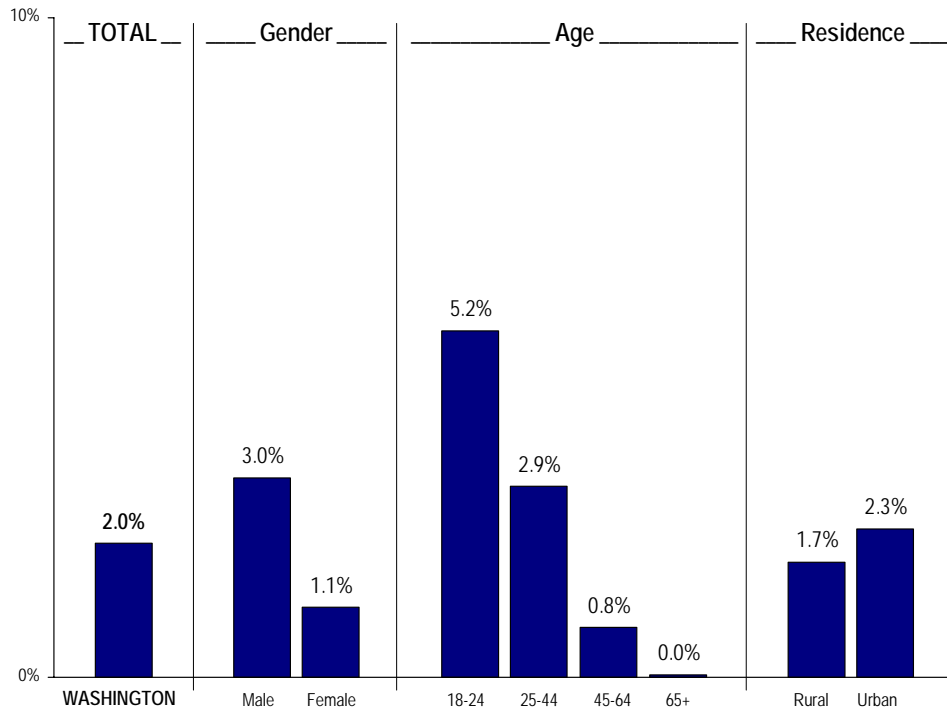
2003 SURVEY ESTIMATES

ALL ADULTS

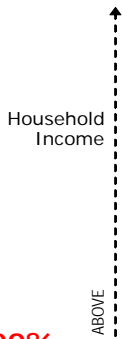
Past Year Non-Heroin Opiate Use



Washington State Household Residents Age 18+

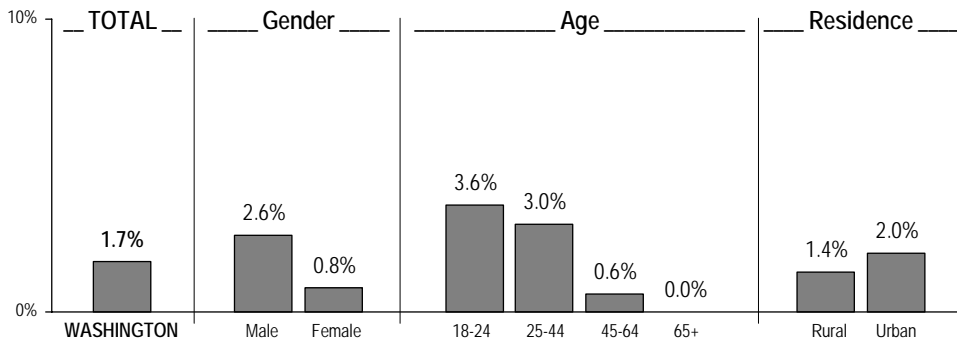


By Income

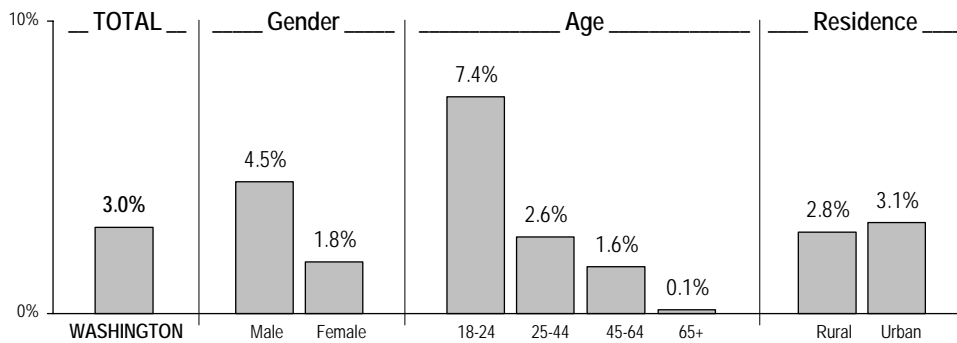


200% Poverty

Adults Above 200% FPL



Adults At Or Below 200% FPL



Increases in Non-Heroin Opiate Use Are Significant Among Whites, Asians, and Hispanics

This section describes the prevalence of past year non-heroin opiate use by race. The table below examines racial and ethnic differences in past year opiate use, comparing 1993-94 rates with 2003 rates. Next, variations within 2003 estimates are presented.

Ten-Year Comparison

Non-heroin opiate use increased in the total adult household population across all racial and ethnic groups. Statistically significant increases included:

- Non-heroin opiate use among Whites paralleled the overall change in the state rates, increasing from 0.5 percent to 2.0 percent.
- Use among Asians increased from 0.1 percent to 0.8 percent.
- Hispanics experienced the largest growth in non-heroin opiate use, increasing from 0.7 percent to 2.8 percent.

Among adults above 200 percent of the federal poverty level, statistically significant increases in rates of past year non-heroin opiate use were found in only two groups, Whites and Hispanics. Rates among both of these groups nearly tripled.

Among adults at or below 200 percent of the federal poverty level, the increase in rates of non-

heroin opiate use attained statistical significance for all racial or ethnic groups with one exception. Among American Indian or Alaska Natives the rate more than doubled from 2.0 percent in 1993-94 to 4.5 percent in 2003, however, this did not quite achieve statistical significance ($p = .07$).

2003 Survey Estimates

The charts on the facing page present rates of past year non-heroin opiate use by racial and ethnic groups. Use was highest among adults indicating they belonged to more than one racial group (4.2 percent) and lowest among Asians (0.8 percent) and Blacks (1.1 percent).

Among adults above 200 percent of the federal poverty level, Hispanics (3.7 percent) followed by multirace (3.2 percent) were the two groups with the highest rates of non-heroin opiate use.

Among adults at or below 200 percent of the federal poverty level, non-heroin opiate use was highest among residents indicating that they belonged to more than one racial group (6.3 percent), Native Hawaiian or Pacific Islanders (5.3 percent), and American Indians or Alaska Natives (4.5 percent).

TEN-YEAR COMPARISON

Past Year Non-Heroin Opiate Use: 1993-94 to 2003 Change

ALL ADULT HOUSEHOLD RESIDENTS

	WASHINGTON TOTAL	Race/Ethnicity						
		White	Black	Asian	American Indian	NHOPI*	2+ Races	Hispanic
2003	2.0%	2.0%	1.1%	0.8%	2.2%	2.6%	4.2%	2.8%
1993-94	0.5%	0.5%	0.3%	0.1%	1.3%	N/A	N/A	0.7%
Difference	+1.5%	+1.5%	+0.8%	+0.7%	+0.9%	N/A	N/A	+2.1%

ADULTS ABOVE 200% FPL

	WASHINGTON TOTAL	Race/Ethnicity						
		White	Black	Asian	American Indian	NHOPI*	2+ Races	Hispanic
2003	1.7%	1.7%	0.7%	0.6%	0.5%	0.9%	3.2%	3.7%
1993-94	0.5%	0.5%	0.4%	0.1%	0.6%	N/A	N/A	1.3%
Difference	+1.2%	+1.2%	+0.3%	+0.5%	(-0.1%)	N/A	N/A	+2.4%

ADULTS AT OR BELOW 200% FPL

	WASHINGTON TOTAL	Race/Ethnicity						
		White	Black	Asian	American Indian	NHOPI*	2+ Races	Hispanic
2003	3.0%	3.2%	1.9%	1.1%	4.5%	5.3%	6.3%	2.0%
1993-94	0.5%	0.5%	0.1%	0.1%	2.0%	N/A	N/A	0.2%
Difference	+2.5%	+2.7%	+1.8%	+1.0%	+2.5%	N/A	N/A	+1.8%

Bold type indicates statistical significance at $p < .05$. *The 1993-94 survey did not separately identify Native Hawaiian or other Pacific Islanders, instead they were included with Asians.

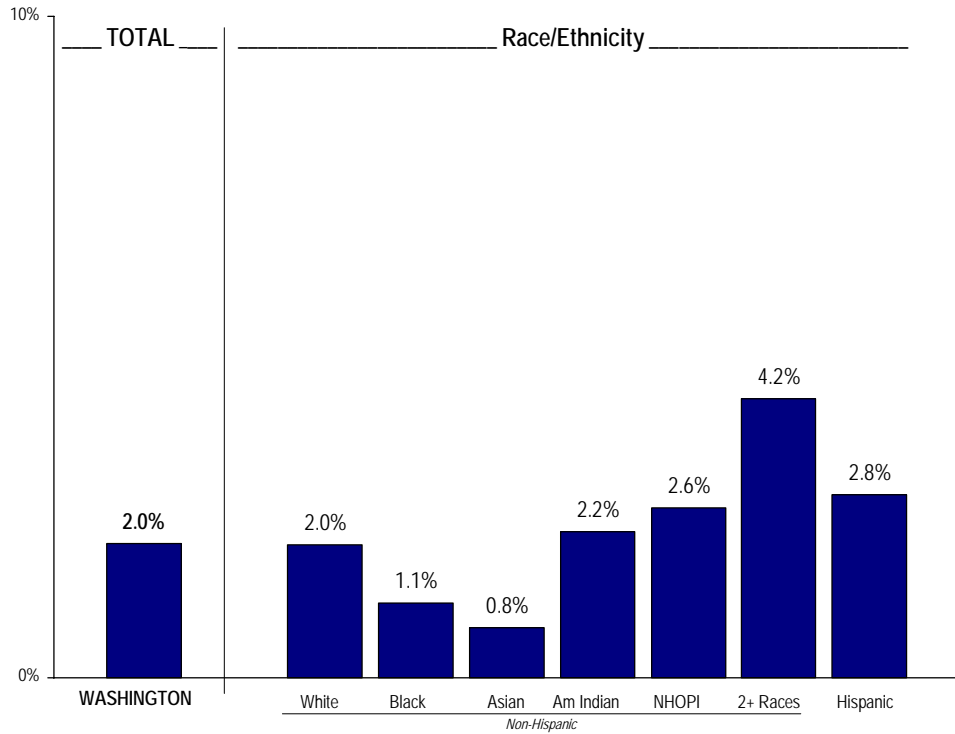
2003 SURVEY ESTIMATES

ALL ADULTS

Past Year Non-Heroin Opiate Use



Washington State Household Residents Age 18+



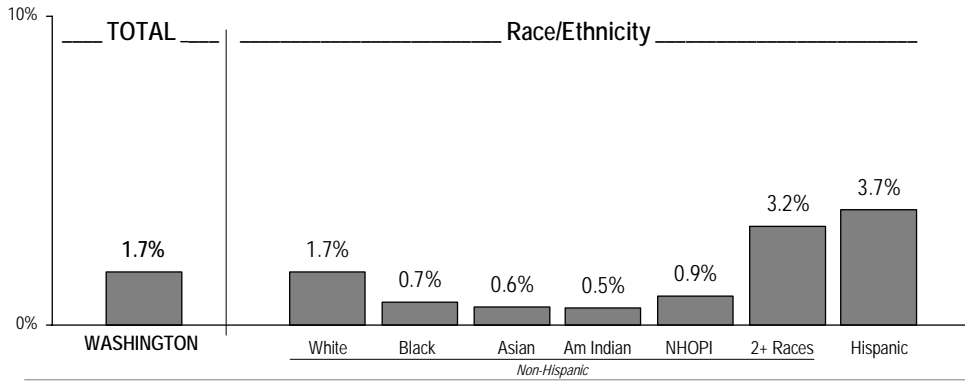
By Income

Household Income

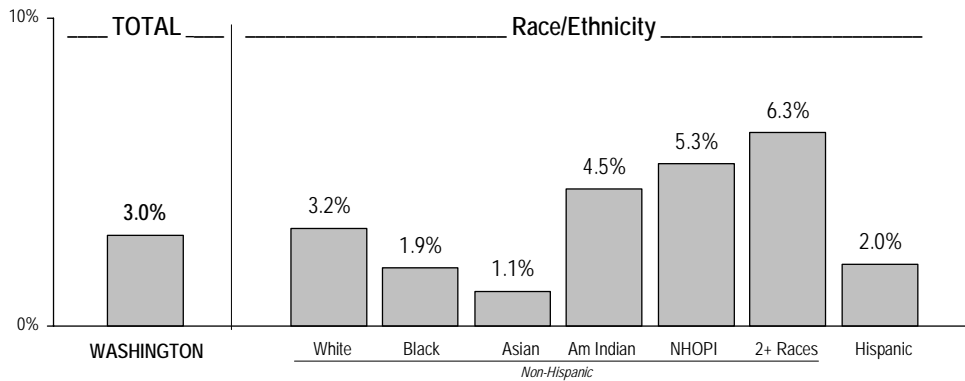
200% Poverty

ABOVE
AT OR BELOW

Adults Above 200% FPL



Adults At Or Below 200% FPL



Stimulant Use Declined From 1993-94 Levels

This section describes the prevalence of past year stimulant use by gender, age, and region of residence. First, 2003 rates are compared with 1993-94 rates. Next, variations in the 2003 estimates are discussed.

Ten-Year Comparison

The overall rate of past year stimulant use declined significantly from 1.8 percent in 1993-94 to 0.5 percent in 2003. Stimulant use declined for most of the demographic characteristics described in the table below. Specific changes worthy of mention include:

- Use among all males dropped by about a factor of four – from 2.5 percent to just 0.6 percent.
- Use among all adults aged 18 to 24 dropped from 6.3 percent to 1.7 percent.
- Stimulant use among males above 200 percent of the federal poverty level declined from 2.3 percent to 0.3 percent.

2003 Survey Estimates

The charts on the facing page present rates of past year stimulant use in 2003. Stimulant use was more common among adults at or below 200 percent of the federal poverty level (1.2 percent) than among adults above this poverty threshold (0.3 percent).

These charts also show that stimulant use occurs with similar prevalence among both males and females with the exception of adults living at or below 200 percent of the federal poverty level. Among these lower-income adults, males were twice as likely to use stimulants (1.6 percent) than were females (0.8 percent).

Past year use of stimulants occurred most frequently among adults aged 18 to 24 (1.7 percent), and use rates tend to decline with age.

Little difference in stimulant use was noted between adults residing in rural or urban counties.

TEN-YEAR COMPARISON

Past Year Stimulant Use: 1993-94 to 2003 Change

ALL ADULT HOUSEHOLD RESIDENTS

	WASHINGTON TOTAL	Gender		Age				Residence	
		Male	Female	18-24 yrs	25-44 yrs	45-64 yrs	65+ yrs	Rural	Urban
2003	0.5%	0.6%	0.4%	1.7%	0.6%	0.2%	0.1%	0.4%	0.6%
1993-94	1.8%	2.5%	1.1%	6.3%	2.0%	0.5%	0.0%	1.7%	1.8%
Difference	(-1.3%)	(-1.9%)	(-0.7%)	(-4.6%)	(-1.4%)	(-0.3%)	+0.1%	(-1.3%)	(-1.2%)

ADULTS ABOVE 200% FPL

	WASHINGTON TOTAL	Gender		Age				Residence	
		Male	Female	18-24 yrs	25-44 yrs	45-64 yrs	65+ yrs	Rural	Urban
2003	0.3%	0.3%	0.3%	1.2%	0.5%	0.0%	0.0%	0.1%	0.4%
1993-94	1.6%	2.3%	0.8%	6.3%	1.8%	0.4%	0.0%	1.7%	1.5%
Difference	(-1.3%)	(-2.0%)	(-0.5%)	(-5.1%)	(-1.3%)	(-0.4%)	+0.0%	(-1.6%)	(-1.1%)

ADULTS AT OR BELOW 200% FPL

	WASHINGTON TOTAL	Gender		Age				Residence	
		Male	Female	18-24 yrs	25-44 yrs	45-64 yrs	65+ yrs	Rural	Urban
2003	1.2%	1.6%	0.8%	2.4%	0.9%	1.2%	0.4%	1.2%	1.1%
1993-94	2.5%	3.3%	1.8%	6.3%	2.8%	0.8%	0.0%	1.8%	2.9%
Difference	(-1.3%)	(-1.7%)	(-1.0%)	(-3.9%)	(-1.9%)	+0.4%	+0.4%	(-0.6%)	(-1.8%)

Bold type indicates statistical significance at p < .05

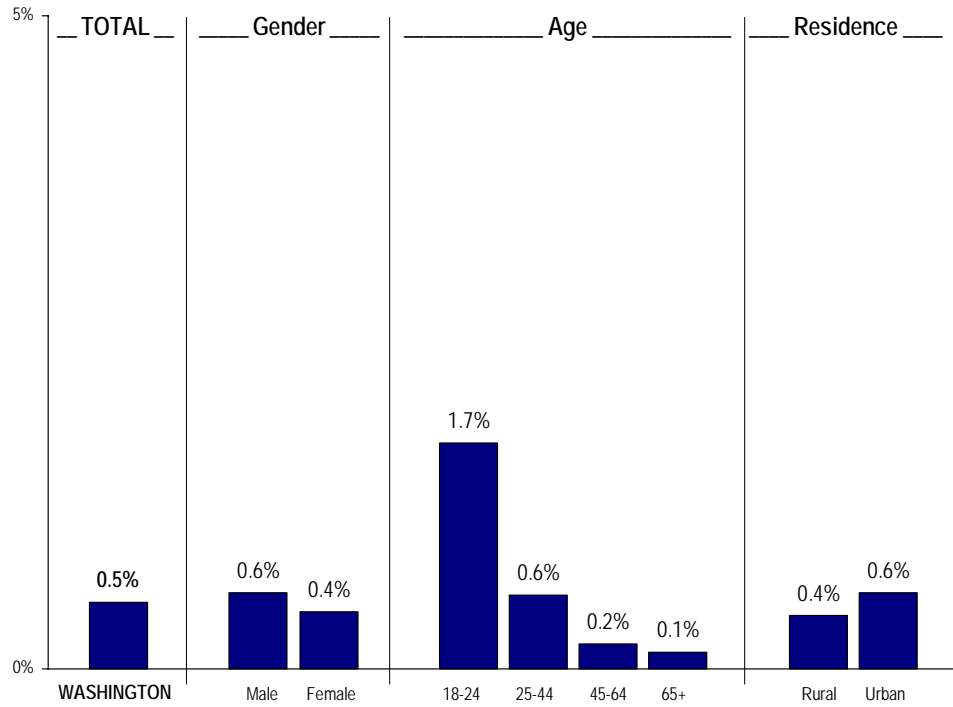
ALL ADULTS

Past Year Stimulant Use



NEEDS ASSESSMENT

Washington State Household Residents Age 18+



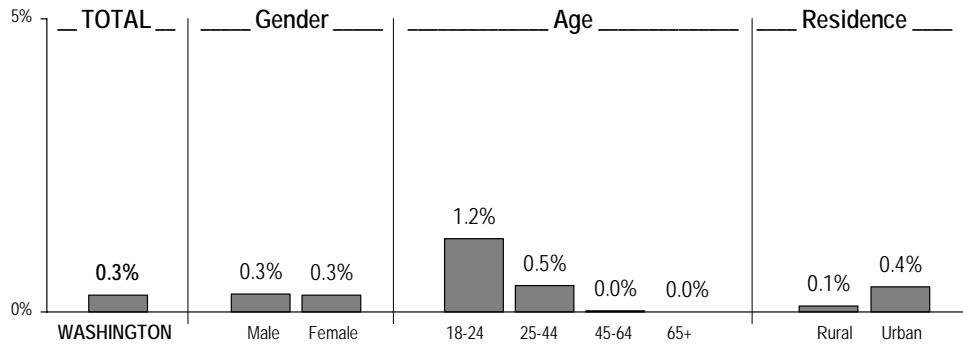
By Income

Household Income

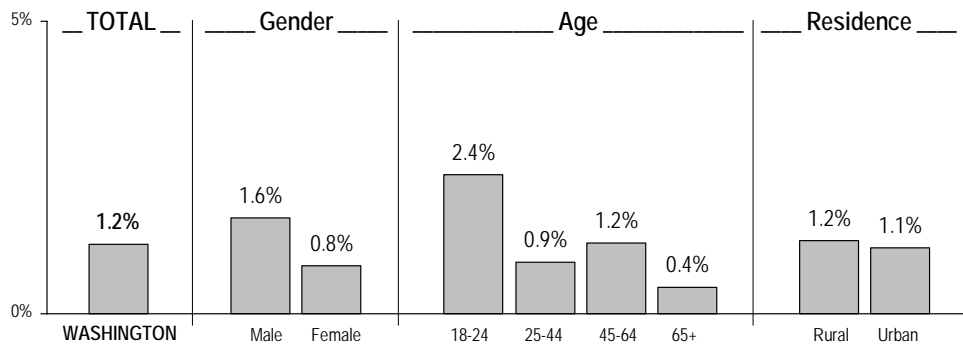
200% Poverty

ABOVE
AT OR BELOW

Adults Above 200% FPL



Adults At Or Below 200% FPL



¹Stimulant includes Methamphetamine

Stimulant Use Highest Among American Indians and Multirace Adults

This section presents the prevalence of past year stimulant use by racial and ethnic groups. First, comparisons between 2003 rates and 1993-94 rates are presented. Next, variations in 2003 rates are discussed.

Ten-Year Comparison

The table below shows that stimulant use was down from 1993-94 levels among all groups except Asians. Use among Asians increased from 0.1 percent in 1993-94 to 0.3 percent, however, this was not statistically significant. The only statistically significant change among total adult household residents was among Whites who decreased from 1.9 percent in 1993-94 to 0.4 percent in 2003.

Among adults above 200 percent of the federal poverty level, stimulant use dropped significantly for two groups:

- Use of stimulants among whites declined from 1.9 percent in 1993-94 to 0.4 percent.
- Among American Indians or Alaska Natives use declined from 3.0 percent 1993-94 to 1.4 percent.

Among adults at or below 200 percent of the federal poverty level, the decline in stimulant use

was significant only among Hispanics, where use dropped from 2.0 percent in 1993-94 to 0.4 percent in 2003.

2003 Survey Estimates

The charts on the facing page present 2003 rates of past year stimulant use by racial and ethnic groups. Stimulant use was highest among residents indicating they belonged to two or more races (1.6 percent) and American Indians or Alaska Natives (1.4 percent). Prevalence rates for the other racial groups were each under 1.0 percent.

Among adults above 200 percent of the federal poverty level, stimulant use was highest among Hispanics (1.5 percent).

Among Adults at or below 200 percent of the federal poverty level, stimulant use was highest among adults reporting they belonged to two or more races (3.2 percent) and American Indians or Alaska Natives (3.0 percent).

It is interesting to note that, while rates of stimulant use were higher for lower-income adults, rates of use among Hispanics, Asians, and Blacks were higher for those that were *above* 200 percent of the federal poverty level.

TEN-YEAR COMPARISON

Past Year Stimulant Use: 1993-94 to 2003 Change

ALL ADULT HOUSEHOLD RESIDENTS

	WASHINGTON TOTAL	Race/Ethnicity						
		White	Black	Asian	American Indian	NHOPI*	2+ Races	Hispanic
2003	0.5%	0.4%	0.6%	0.3%	1.4%	0.3%	1.6%	0.9%
1993-94	1.8%	1.9%	1.4%	0.1%	3.0%	N/A	N/A	1.5%
Difference	(-1.3%)	(-1.5%)	(-0.8%)	+0.2%	(-1.6%)	N/A	N/A	(-0.6%)

ADULTS ABOVE 200% FPL

	WASHINGTON TOTAL	Race/Ethnicity						
		White	Black	Asian	American Indian	NHOPI*	2+ Races	Hispanic
2003	0.3%	0.2%	0.7%	0.4%	0.2%	0.0%	0.8%	1.5%
1993-94	1.6%	1.7%	1.5%	0.1%	1.9%	N/A	N/A	1.1%
Difference	(-1.3%)	(-1.5%)	(-0.8%)	+0.3%	(-1.7%)	N/A	N/A	+0.4%

ADULTS AT OR BELOW 200% FPL

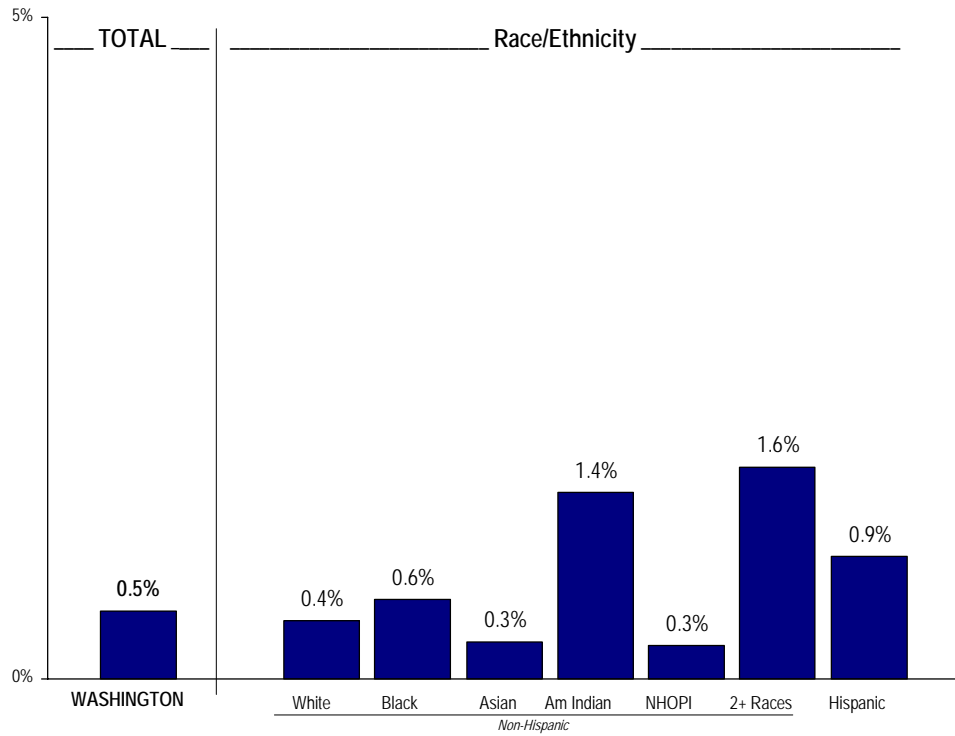
	WASHINGTON TOTAL	Race/Ethnicity						
		White	Black	Asian	American Indian	NHOPI*	2+ Races	Hispanic
2003	1.2%	1.4%	0.3%	0.0%	3.0%	0.7%	3.2%	0.4%
1993-94	2.5%	2.7%	1.2%	0.1%	4.2%	N/A	N/A	2.0%
Difference	(-1.3%)	(-1.3%)	(-0.9%)	(-0.1%)	(-1.2%)	N/A	N/A	(-1.6%)

Bold type indicates statistical significance at $p < .05$. *The 1993-94 survey did not separately identify Native Hawaiian or other Pacific Islanders, instead they were included with Asians.

2003 SURVEY ESTIMATES

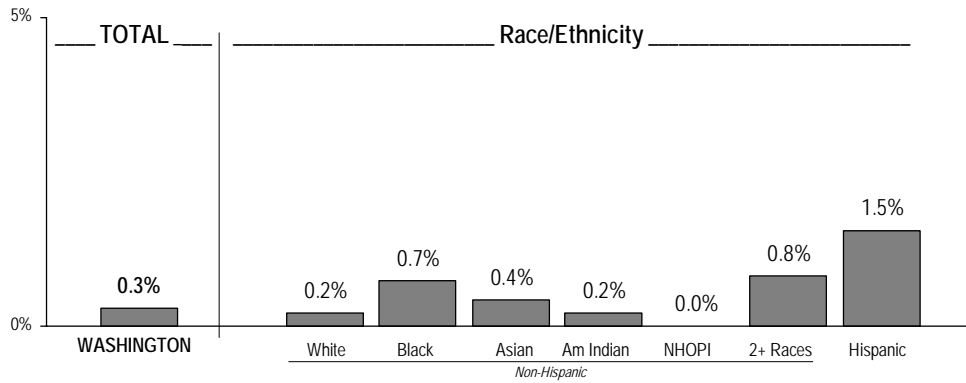
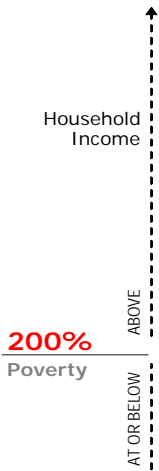
ALL ADULTS
 Past Year Stimulant Use
 2003
NEEDS ASSESSMENT

Washington State Household Residents Age 18+

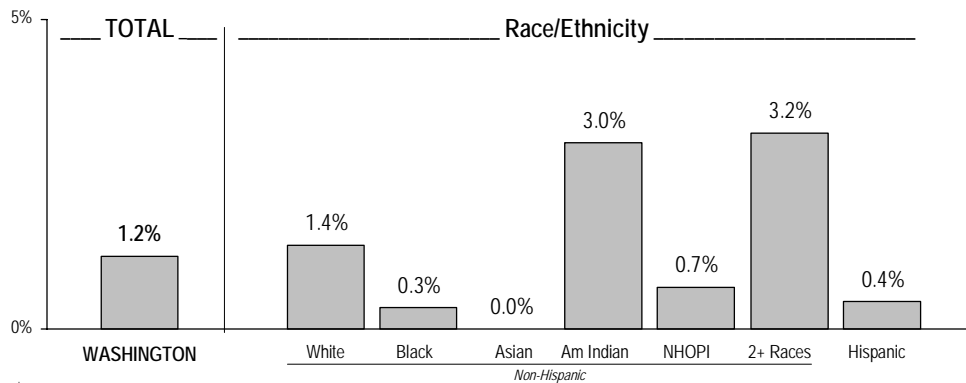


By Income

Adults Above 200% FPL



Adults At Or Below 200% FPL



*Stimulant includes Methamphetamine

Lifetime Injection Drug Use Higher Among Males, Urban Residents

This section describes the prevalence of **lifetime** injection drug use by gender, age and region. Respondents indicating they had ever used any type of illicit substance were asked about their use of injection drugs: “Have you ever injected any drug in order to get high, even just once?”

While it is tempting to infer that injection drug use is indicative of heroin use, it is not possible from these data to determine what substance was being injected. A number of illicit substances other than heroin (e.g., methamphetamine) can also be injected.

The charts on the facing page present 2003 lifetime injection drug rates. The charts show that lifetime injection drug use is about twice as common (2.9 percent) among adults living at or below 200 percent of the federal poverty level,

compared with higher-income adults (1.4 percent).

Regardless of poverty status, males are more likely than females to use injection drugs. Lifetime injection drug use is somewhat higher among adults living in urban counties (2.2 percent) than among those residing in rural counties (1.2 percent). This pattern is found regardless of poverty status.

Among adults living at or below 200 percent of the federal poverty level, lifetime injection drug use is most common among adults aged 45 to 64 (7.4 percent).

INJECTION RISKS

CLOSEUP

Significant Health Risks Associated with Injecting Illicit Drugs

Injection or intravenous (IV) drug use involves injecting a drug directly into the bloodstream. This method can be used for heroin, stimulants, cocaine, and, less often, certain benzodiazepines. This method can make the user feel that they are getting the most out of the drug and produce a more intense “rush” compared with other methods.

The most serious health risk of injecting drugs results from sharing injection devices (e.g., syringe, needle, filter, spoon, and water) as these can spread the HIV virus and hepatitis. Injecting drugs can also lead to a host of other infections and to abscesses. Injecting drugs can cause a “shake” or “cotton fever.” A shake or cotton fever is caused by bacteria entering the bloodstream during injection and the risk of this is increased with dirty and blunt needles. Infections may also be caused by the leakage of drugs out of veins during the injection (extravasation) and tissue death (necrosis) due to toxic materials in drugs.

Drugs that are not properly dissolved may introduce solid masses into the bloodstream and these can lead to blood clots, blocked veins, and embolisms.

Source: Much of this material was obtained from the King County Health Department (<http://www.metrokc.gov/health/apu/menuhr.htm>) and StreetWorks (<http://www.streetworks.ca/pro/srhealthifidu.html>), a harm reduction program.

2003 SURVEY ESTIMATES

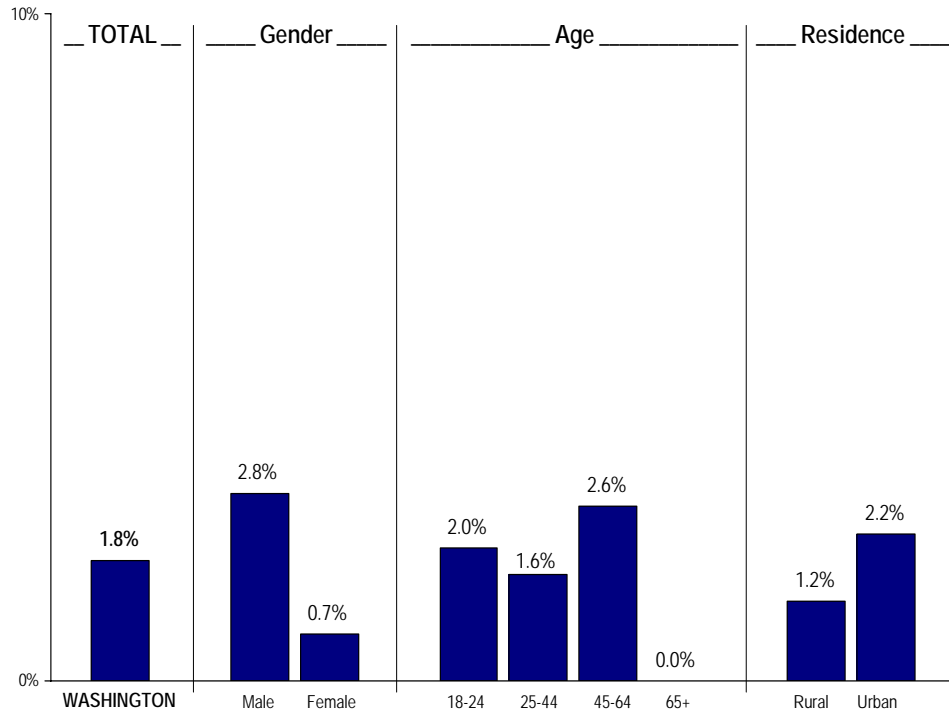
ALL ADULTS

Lifetime Injection Drug Use



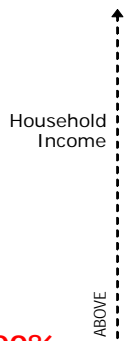
NEEDS ASSESSMENT

Washington State Household Residents Age 18+

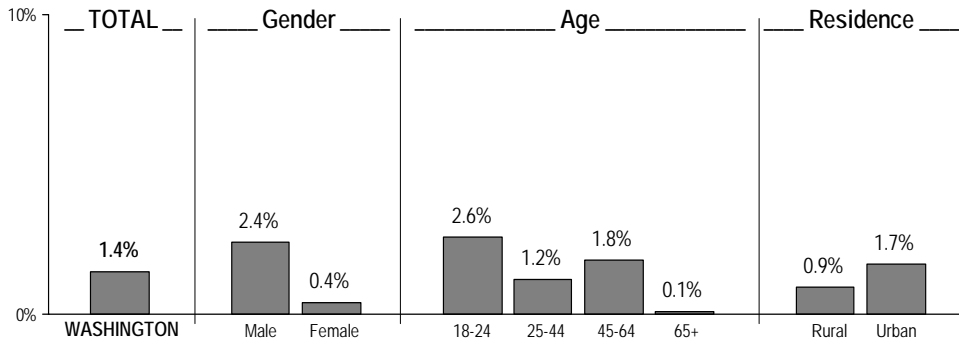


By Income

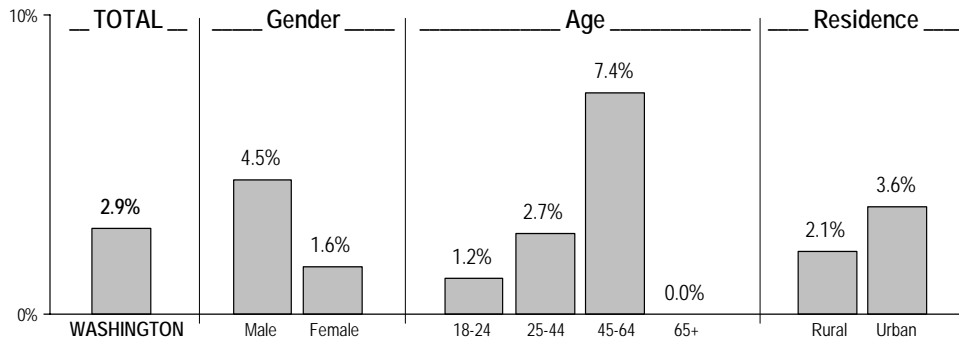
Adults Above 200% FPL



200% Poverty



Adults At Or Below 200% FPL



Injection Drug Use Highest Among American Indians and Multirace Adults

This section describes the prevalence of **lifetime** injection drug use by race and ethnicity. As shown in the charts on the facing page, lifetime injection drug use is highest among American Indians and Alaska Natives (6.2 percent).

Adults self-identifying themselves as belonging to two or more non-Hispanic races also used injection drugs at higher rates (4.5 percent). Among this population, poverty seems to play an important role. Lifetime injection drug use was much higher among multirace adults living at or below 200 percent of the federal poverty level (8.8 percent) than among multirace adults above 200 percent of the federal poverty level (2.3 percent).

Lifetime prevalence rates of injection drug use were lowest among Asians (0.2 percent) and Native Hawaiian or Pacific Islanders (0.5 percent).

Poverty status played an important role in rates of lifetime injection drug use among every race except American Indians and Alaska Natives. Among all other racial or ethnic groups, lifetime injection drug use was more common for those living at or below 200 percent of the federal poverty level.

NEEDLE EXCHANGE PROGRAMS

CLOSEUP

Needle exchange programs are a component of a larger treatment strategy called *harm reduction*. The harm reduction perspective posits that it is unrealistic to expect substance use to be eliminated and that considerable benefit may be derived from efforts directed at getting users to adopt safer behaviors. For injection drug users (IDUs), harm reduction programs emphasize needle exchange programs.

Needle or syringe exchange programs began in Holland in the 1970s in response to a hepatitis outbreak. One of the first openly operating needle exchange programs in the U.S. began in Tacoma during the late 1980s. Needle exchange is a public health program viewed by many as an important component of a comprehensive effort to reduce the spread of HIV/AIDS and other blood-borne infections. Nationally, injection drug use is linked to almost one third of all AIDS cases and one-half of hepatitis C cases.

Needle exchange programs provide new, sterile syringes in exchange for used, contaminated syringes. Needle exchange programs also help drug users access drug treatment and health care and provide important risk reduction information. Other services may include:

- HIV/AIDS education, testing, counseling, and crisis intervention
- Screening for tuberculosis, hepatitis B, hepatitis C, and other infections
- Distribution of alcohol swabs to prevent abscesses and other bacterial infections
- Distribution of condoms to prevent sexual transmission of HIV and other sexually transmitted diseases
- Safe disposal of contaminated equipment

Needle exchange programs have been shown to be an effective way to link some hard-to-reach IDUs with important public health services. Studies have also found that needle exchange programs do not encourage drug use among program participants and do not recruit first-time drug users. In 1997 the National Institutes of Health Consensus Panel on HIV Prevention stated:

"An impressive body of evidence suggests powerful effects from needle exchange programs... Can the opposition to needle exchange programs in the United States be justified on scientific grounds? Our answer is a simple and emphatic no. Studies show reduction in risk behavior as high as 80% with estimates of a 30% or greater reduction of HIV in IDUs."

In 2000, a survey by The International Center for the Advancement of Addiction Treatment found that Washington state is a leading provider of needle exchange programs, ranking behind only California in the number of exchange programs offered and number of syringes exchanged. Currently, needle exchange is available in 12 counties across the State (ADAI Research Brief, 2004).

Source: Much of this information was provided by the Department of Health and Human Services Center for Disease Control and Prevention (Academy for Educational Development, 2000).

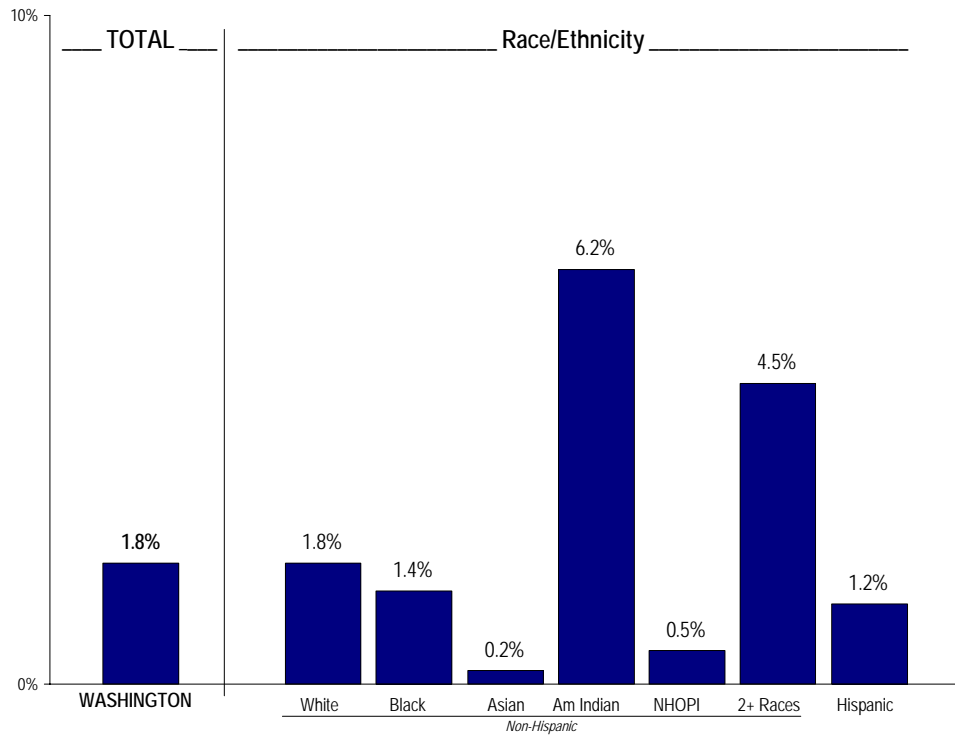
2003 SURVEY ESTIMATES

ALL ADULTS

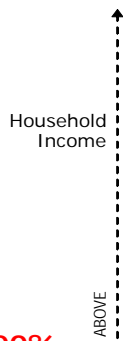
Lifetime Injection Drug Use



Washington State Household Residents Age 18+

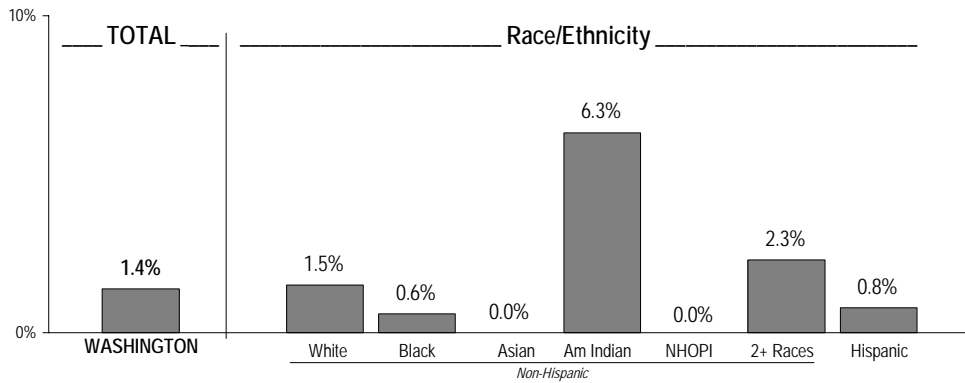


By Income

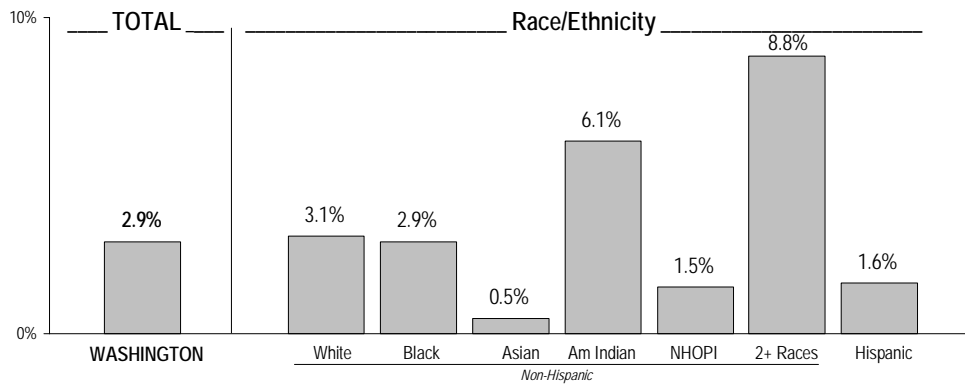


200% Poverty

Adults Above 200% FPL



Adults At Or Below 200% FPL



Examining The Demographics Of Substance Use In A Multivariate Framework

Thus far, estimates of substance use rates by different demographic characteristics have considered each characteristic in isolation from the others. While this information is useful, it does not account for the possibility that differences in some demographic dimensions may in fact be due to the effect of another underlying demographic factor.

For example, racial and ethnic group substance use rates have been presented without controlling for differences in age or poverty status that may help account for the observed differences in use rates. To better identify the separate influence of demographic variables on substance use, we examine past year binge drinking and any illicit drug use in a multivariate framework.

The chart below and on the facing page present odds ratios derived from logistic regression models.

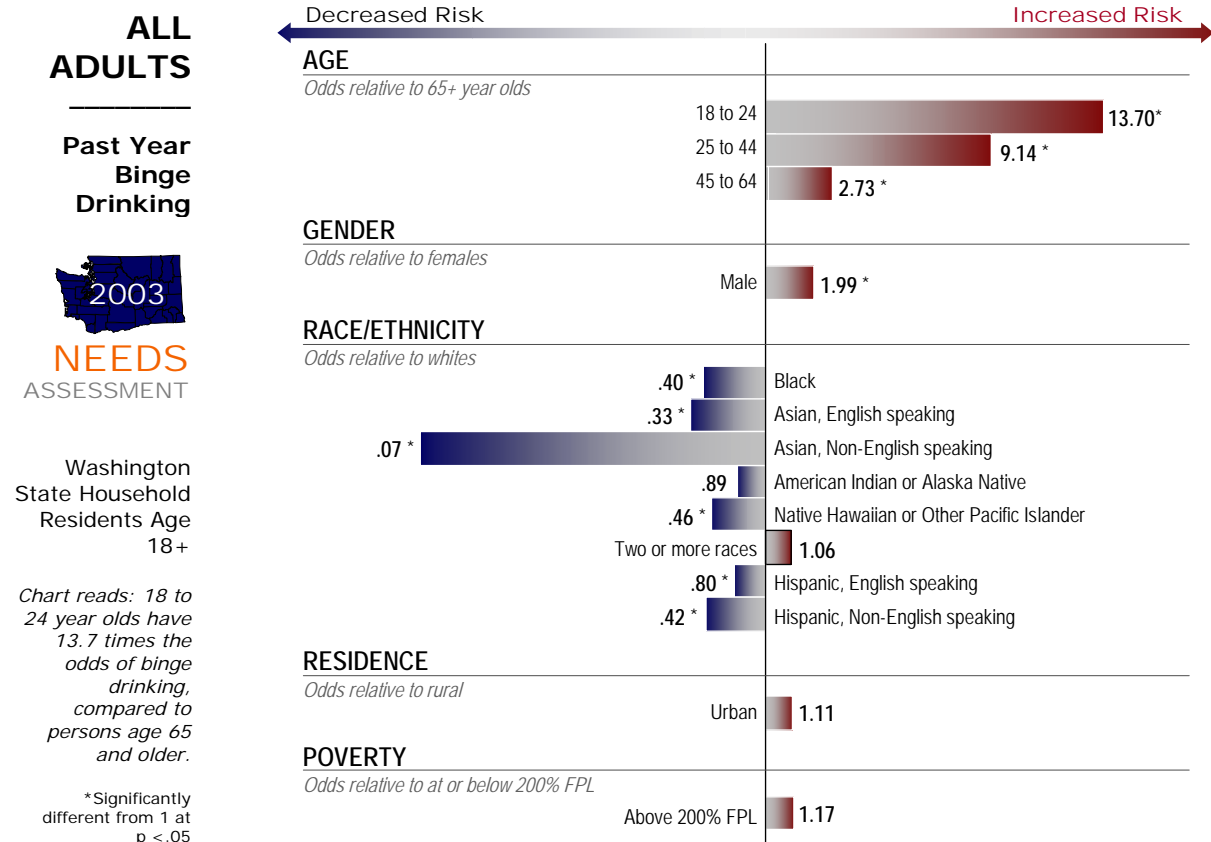
Binge Drinking

The odds of binge drinking in the past year decline significantly with age. Young adults aged 18 to 24 were nearly 14 times as likely to engage in binge drinking during the past year compared to adults aged 65 and above. Compared to women, men were twice as likely to engage in binge drinking during the past year.

American Indian and Alaska Natives and adults reporting two or more non-Hispanic races (multiracial) did not differ significantly from Whites in frequency of past year binge drinking. All other racial and ethnic groups were significantly less likely to engage in binge drinking during the past year, when compared to Whites. The largest effect by far was found for Asians who do not speak English. The effects of region of residence and poverty status were not statistically significant.

2003 SURVEY ESTIMATES

Odds Ratios Associated With Past Year Binge Drinking



Washington State Household Residents Age 18+

Chart reads: 18 to 24 year olds have 13.7 times the odds of binge drinking, compared to persons age 65 and older.

*Significantly different from 1 at p < .05

Any Illicit Drug Use

Past year use of any illicit drug (including marijuana) declines with age. Young adults aged 18 to 24 were 38 times more likely to use an illicit drug use in the past year compared to adults aged 65 and above. Compared to women, men had 1.8 times the odds of illicit drug use in the past year.

Blacks, American Indian and Alaska Natives, and English speaking Hispanics did not differ from Whites in the frequency of past year illicit drug use. Asians, Native Hawaiian or Other

Pacific Islanders, and non-English speaking Hispanics were all significantly less likely to use an illicit drug during the past year, compared to Whites. Adults reporting two or more races were significantly more likely to use an illicit drug.

Adults residing in urban counties were significantly more likely to use an illicit drug during the past year. Adults living above 200 percent of the federal poverty level were significantly less likely to use an illicit drug during the past year.

2003 SURVEY ESTIMATES

Odds Ratios Associated With Any Illicit Drug Use

ALL ADULTS

Past Year Illicit Drug Use



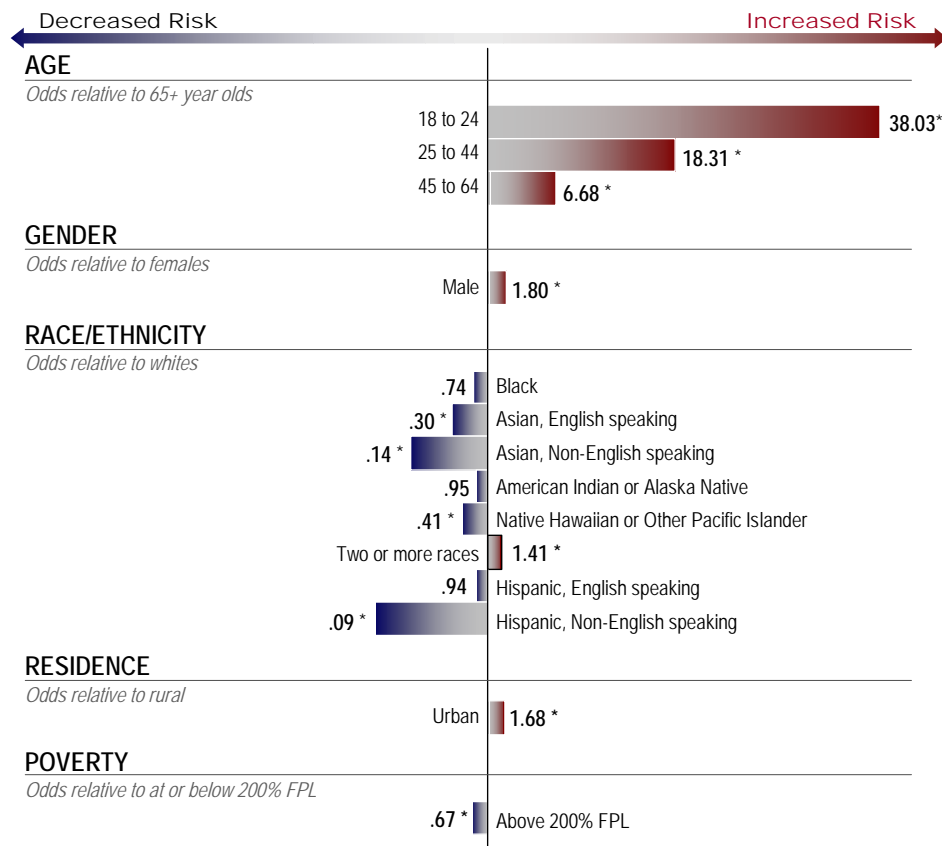
2003

NEEDS ASSESSMENT

Washington State Household Residents Age 18+

Chart reads: 18 to 24 year olds have 38 times the odds of using any illicit drug compared to persons 65 and older

*Significantly different from 1 at p < .05



INTERPRETING ODDS RATIOS

The odds of an event is the number of times it occurred (a) divided by the number of times it didn't (b), or a/b. This contrasts with the probability of an event which is the number of times it occurred divided by the number of times it could have occurred, or a/a+b. The odds ratio is the ratio of the odds of an event in one group divided by the odds in another group (the "reference" group).

An odds ratio of 1 indicates no difference between the groups being compared. An odds ratio of less than 1 would mean that having that characteristic indicates a smaller chance of experiencing that event. Alternately, having an odds ratio greater than 1 indicates a greater chance of experiencing that event. The odds ratio has a lower bound at 0, but no upper limit. It is important to realize this when comparing the relative magnitudes of odds ratios. For example, an odds ratio of 10 may sound more impressive than an odds ratio of 0.1; however, these represent effects that are identical in size (in the opposite direction). Odds ratios less than 1 can be expressed in the same scale as odds ratios greater than 1 simply by taking their inverse.

Binge Drinking, Any Illicit Drug Use Higher Among Adults Reporting Two or More Races

This section examines the aspects of race and substance use in more detail. The charts on the facing page describe the prevalence of past year binge drinking and any illicit drug use among adults reporting one race and among adults endorsing two or more races. For example, adults reporting that they are White alone are compared with adults reporting that they were White in combination with one or more other races.

The 2+ Race categories contain duplicate counts, in that adults indicating that they are White and Black are included in both the White 2+ Race category and the Black 2+ Race category.

Adults endorsing two or more races consistently reported both higher rates of past year binge drinking and any illicit drug use than adults endorsing a single race.

Binge drinking and any illicit drug use differences between adults reporting a single race and those reporting two or more races were smallest among American Indians and Alaska Natives. The tendency for multirace adults to report higher rates of substance use was particularly strong among African Americans, Asians, and Native Hawaiian or Other Pacific Islanders.

We also examined whether the observed higher rates of substance use among multirace adults could be explained by underlying differences in age (i.e., a tendency for adults reporting two or more races to be younger than those reporting a single race). However, we found that differences between single race and multirace adults in age-adjusted rates of substance use were similar to the unadjusted differences reported here (not reported in a separate exhibit).

		DEFINING RACE
Multiracial Classification		
Survey respondents were read a list of five separate races: White, Black or African American, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and Asian. Respondents were instructed to indicate whether they considered themselves to belong to each of these groups. Respondents indicating two or more of these racial groups were classified as belonging to a multirace (2+ Races) group.		
Survey respondents were asked about Hispanic ethnicity in a separate question, "Are you Hispanic or Latino(a)?" Respondents indicating that they were Hispanic were classified as such, regardless of whether they indicated more than one racial category.		
Multiracial Combinations		
<p>494 survey respondents were classified as belonging to 2+ races.</p> <p><i>These respondents all indicated that they were not Hispanic and endorsed 2 or more races.</i></p> <p><i>The different multiracial groups endorsed by respondents are identified at right, in descending order of frequency.</i></p>	White + American Indian/Alaska Native	219
	White + Black	70
	White + Asian	57
	White + Native Hawaiian/Pacific Islander	27
	Black + American Indian/Alaska Native	25
	Asian + Native Hawaiian/Pacific Islander	23
	White + Black + American Indian/Alaska Native	18
	Asian + American Indian/Alaska Native	9
	Black + Asian	8
	White + Asian + Native Hawaiian/Pacific Islander	7
	White + American Indian/Alaska Native + Native Hawaiian/Pacific Islander	6
	Black + Native Hawaiian/Pacific Islander	5
	Multirace*	5
	American Indian/Alaska Native + Native Hawaiian/Pacific Islander	3
	American Indian/Alaska Native + Other (unspecified)	3
	White + Black + Asian	2
	Asian + Other (unspecified)	2
White + Black + Asian + American Indian/Alaska Native	2	
All Others	3	
TOTAL	494	
* Five respondents reported their race as "multirace"; however, they failed to endorse any specific racial groups.		

2003 SURVEY ESTIMATES

CLOSEUP

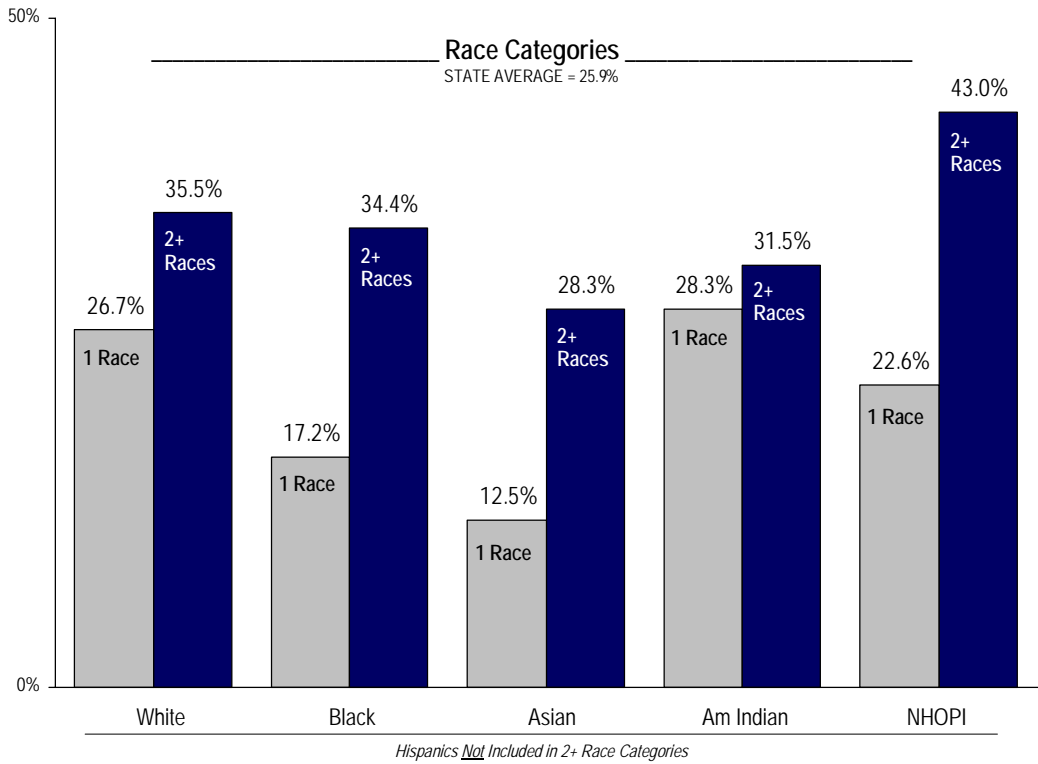
Multiracial Comparisons:
Binge Drinking



NEEDS ASSESSMENT

Washington State Household Residents Age 18+

Past Year Binge Drinking



CLOSEUP

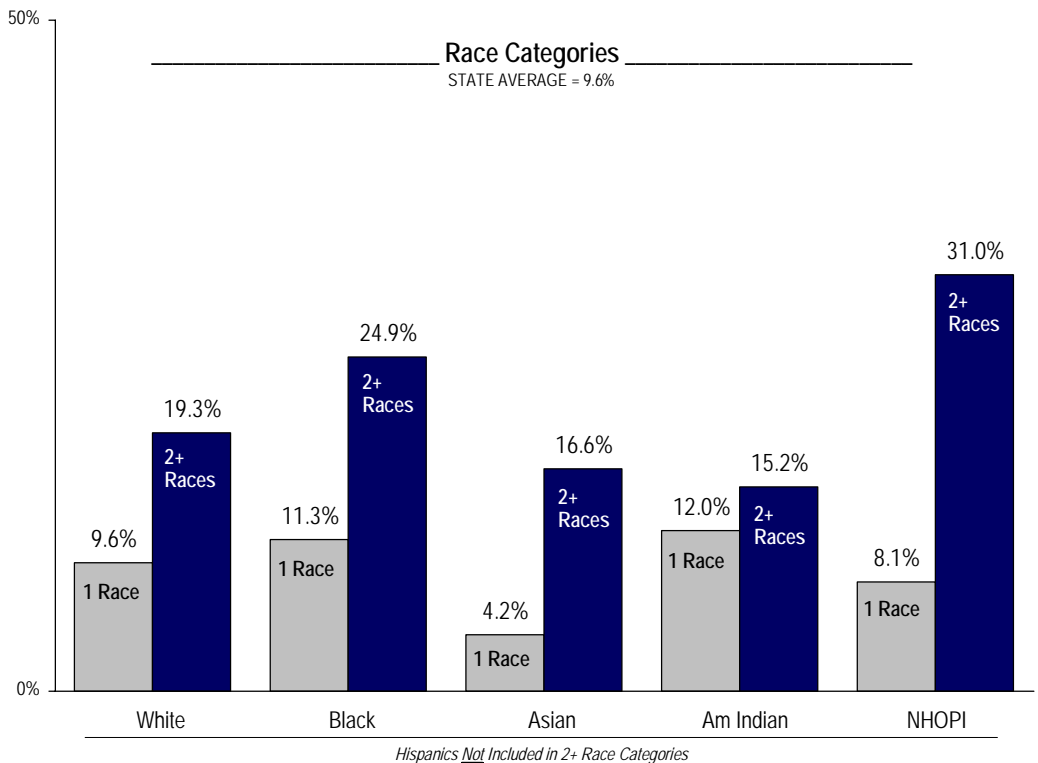
Multiracial Comparisons:
Illicit Drug Use



NEEDS ASSESSMENT

Washington State Household Residents Age 18+

Past Year Any Illicit Drug Use



Asians And Hispanics: Past Year Binge Drinking, Drug Use More Common Among English Speakers

Charts below examine rates of past year binge drinking and illicit drug use among Asians and Hispanics. Comparisons are made between those who completed the interview in English and those completing the interview in another language. The survey was offered in Russian, Spanish, Chinese, Korean, and Vietnamese for respondents who did not speak English.

Among Asians and Hispanics, respondents completing the interview in English reported higher rates of past year binge drinking and illicit drug use.

Among Hispanics

- Roughly 3 out of 10 Hispanics interviewed in English engaged in binge drinking during the past year. Among Hispanics who did not speak English, the number binge drinking in the past year was less than 2 out of 10.
- Hispanics who spoke English were seven times as likely to use an illicit drug (14.7 percent) as Hispanics who did not speak English (1.9 percent).

Among Asians

- Asians surveyed in English were more than six times as likely to report past year binge drinking (14.9 percent), compared to Asians surveyed in another language (2.3 percent).
- Asians who spoke English (4.8 percent) were more than twice as likely to report past year illicit drug use, compared to Asians who did not speak English (1.8 percent).

Country of Origin for Asians Not Born in U.S.

Vietnam	214
China, Taiwan, Hong Kong	196
South Korea	154
Philippines	79
Japan	42
India	21
Cambodia	20
Thailand	13
Canada	7
Laos	7
Indonesia	6
All Others or Unknown	29
TOTAL	809

2003 SURVEY ESTIMATES

CLOSEUP

Past Year Use

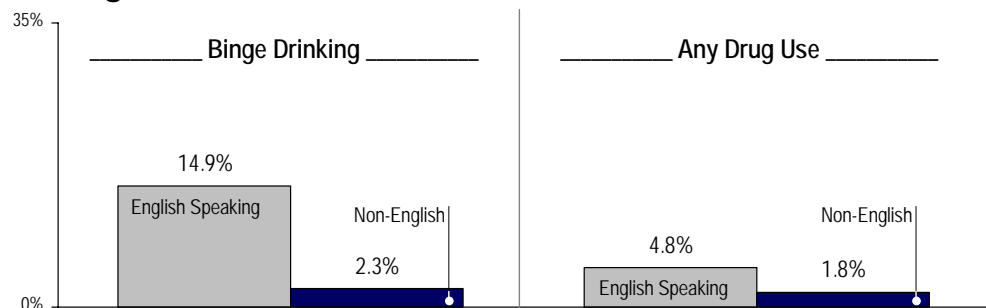
Asian and Hispanic Adults



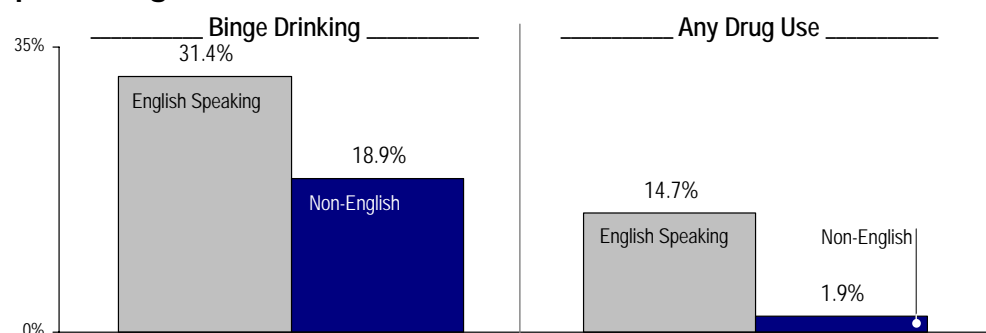
NEEDS ASSESSMENT

Washington State Household Residents Age 18+

Asian Origin



Hispanic Origin



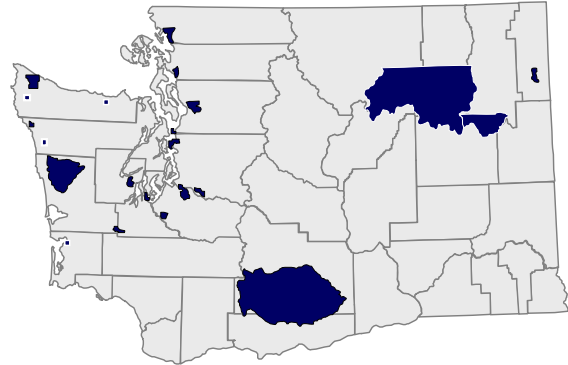
Illicit Drug Use Varies Among American Indians by Reservation Status

The table below describes the prevalence of past year binge drinking and any illicit substance use among American Indian and Alaska Natives residing on or near reservations and those residing off reservation.* These residents were also classified as residing in either rural or urban counties. All non-Hispanic respondents that endorsed American Indian or Alaska Native, regardless of whether or not they indicated any other races, were included in this analysis.

Past year binge drinking and any illicit drug use followed a similar pattern – in rural regions use was higher on/near reservations, in urban regions use was lower on/near reservations.

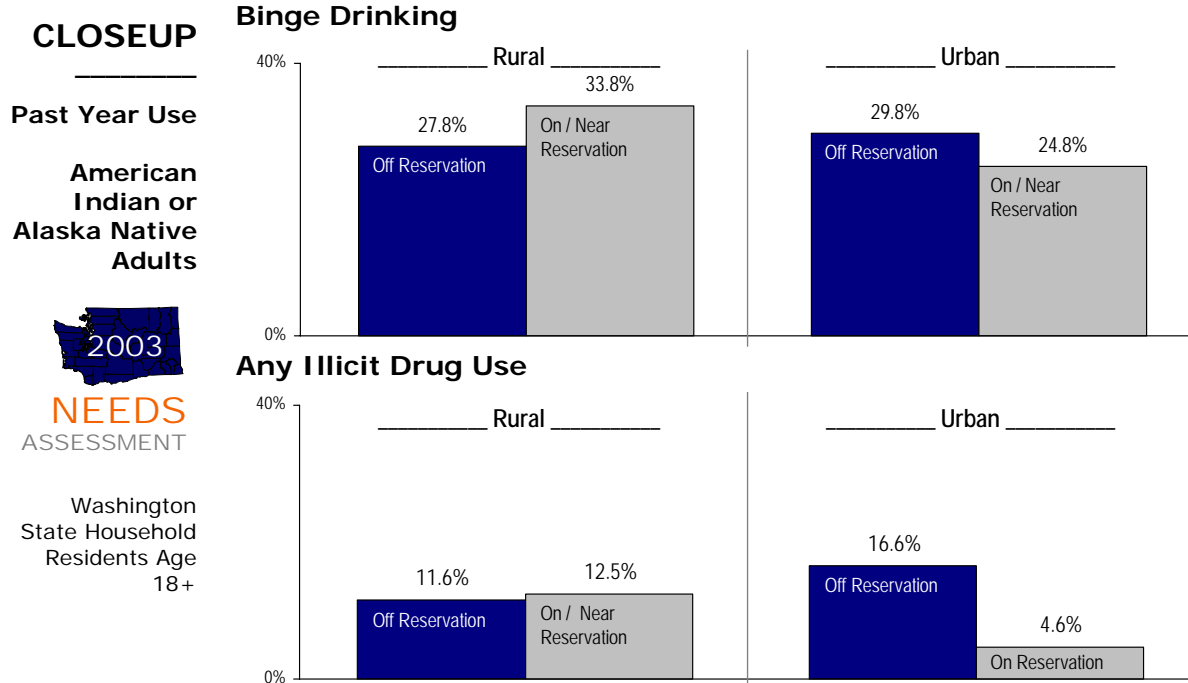
The rate of past year drug use among American Indian or Alaska Natives residing in an urban region is worth further note. Use among those who resided off-reservation (16.6 percent) was over three and a half times as likely compared to use among those residing on or near a reservation (4.6 percent).

Washington's American Indian Reservations



Dark shaded areas indicate reservation lands.

2003 SURVEY ESTIMATES



*Reservation status was determined by respondent zip codes. Respondents living in a zip code that contained a reservation were classified as living on or near a reservation. Respondents that lived in a zip code that did not contain a reservation were classified as living off reservation.

