

Alcohol and Other Drug Use Prevalence: 2012 Survey of Orange County Adults



Orange County Health Care Agency

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TABLE OF CONTENTS

EXECUTIVE SUMMARY i

I. Introduction 1

II. Alcohol Use in Orange County 6

Alcohol Use Prevalence 6

Alcohol Problem Risk Indicators 13

III. Drug Use in Orange County18

Illicit Drug Use Prevalence20

Marijuana21

Cocaine23

Heroin24

Hallucinogens25

Methamphetamine27

Club Drugs28

Prescription Drug Misuse Prevalence29

Prevalence of Nonmedical Use of Prescription Drug Types31

IV. Drinking and Driving32

Drinking and Driving Prevalence32

Drinking and Driving Frequency33

Demographic Profile of Drinking Drivers34

Subjective Threshold for Drinking and Driving35

Drinking-Driving Perceptions35

V. Community Concerns38

High Priority Community Concerns38

Other Community Concerns38

Demographic Differences in Level of Concern39

Importance of Parent-Child Discussions Regarding AOD41

VI. Comparisons of AOD Use Prevalence Rates42

Alcohol Use43

Marijuana Use45

Cocaine Use48

Heroin Use50

Methamphetamine Use52

Illicit Drug Use53

Nonmedical Use of Prescription Drugs54

VII. Appendix56

Comparison of AOD Use Prevalence Rates: US, CA and OC56

Detailed Tables Comparing 2002 and 2012 AOD Use Prevalence Rates57

Executive Summary

In 2012, the Orange County Health Care Agency (OCHCA) conducted a survey to assess the prevalence of alcohol and other drug (AOD) use among Orange County adults (aged 18 and older). This survey, and a similar one conducted in 2002, provides an in-depth view of past and current substance use among Orange County adults. Data from these two surveys help tell the story of drug behaviors, identify differences among various age and population groups and recognize issues and trends.

Orange County residents tend to have comparable, and in many cases, much lower rates of AOD use compared to national and state levels, with just a few exceptions. Although these data are overall favorable, the Health Care Agency continues to take a proactive approach to improve and sustain healthy behaviors among the residents of Orange County.

The 2012 Survey of Alcohol and Other Drug Use among Orange County adults was conducted during the period of April 5, 2012 through August 24, 2012. Survey results presented in this report are based on a total of 2,928 telephone interviews completed with a randomly selected sample of Orange County residents aged 18 and older. Hispanic and Vietnamese residents were oversampled to ensure adequate representation of these ethnic groups.

Following are key findings of the survey.

Alcohol Use

Alcohol use among Orange County adults was consistently related to gender and ethnic background. Fewer women than men said they have consumed alcohol at each time period, while prevalence of use is higher among White adults than all other ethnic groups identified. Alcohol use prevalence generally increased with age and peaked in the 45-64 year age range.

Socio-demographic status, as measured by level of education and income, also showed a consistent relationship to alcohol use prevalence, with the more affluent and educated adults reporting higher levels of use than those of lower income and educational status.

Drinking-Driving Behavior

Among past year drinkers, 10% reported having driven on a least one occasion in the past year when they had too much to drink.

The biggest deterrent to prevent future drinking-driving behavior was fear of hurting someone, which was reported by 60% of adults surveyed. This was a particularly important factor for women.

Drug Use

The 2012 survey included questions on the use of six illicit drug types (marijuana, cocaine, heroin, hallucinogens, methamphetamines, and club drugs) and the nonmedical use of four classes of prescription drugs (pain relievers, tranquilizers, stimulants, and sedatives). Non-medical use or misuse of prescription drugs was defined for respondents as either using prescription drugs that were not prescribed for them personally or by taking them more often than prescribed just to obtain a particular feeling.

Illicit Drugs

Overall, 34% of Orange County adults (approximately 773,000) reported having used one or more of six illicit drugs in aggregate during their lifetime. An estimated 5% (or 105,000) reported use of an illicit drug within the past 30 days.

Marijuana – was by far the illicit drug most commonly used, with lifetime use reported by 33% of adults or 758,000, use in the past year by 8% (181,000), and use during the past 30 days by an estimated 4.5% of the adult population (103,000 adults).

Cocaine – While an estimated 13% or 301,000 Orange County adults reported use of cocaine in their lifetime, only 1% (or 20,500) reported use in the past year and even fewer in the past month—7,300 (less than 0.5%). Demographic analyses were limited to respondents reporting lifetime use of cocaine, as subsamples for other usage timeframes were too small to yield reliable prevalence estimates.

Heroin – Lifetime use of heroin was reported by an estimated 1% of the Orange County adult population, about 33,000 adults. Demographic analyses were limited to respondents reporting lifetime use of heroin, as subsamples for other usage timeframes were too small to yield reliable prevalence estimates.

Prescription Drugs

Adults’ nonmedical use of four different classes of prescription drugs was assessed: pain relievers, tranquilizers, stimulants and sedatives. An estimated 6% of the County’s adult population, or 145,000, reported having misused any prescription drug at least once in their lifetime. During the past year, nonmedical use of any prescription drug was reported by approximately 53,000 adults, a prevalence rate of 2%, while an estimated 18,000 (1%) reported prescription drug misuse within the past month.

Comparison of AOD Use Prevalence Rates: US, CA and OC

Alcohol use prevalence was lower in Orange County than in California or the nation as a whole. Specifically, 47% of Orange County adults, compared with 55% of California adults and 56% of US adults reported consuming alcohol in the prior month.

Past month use of any type of illicit drug in Orange County (5%) was lower than for California (10%) and the US (9%).

Comparison between 2002 and 2012

Misuse of prescription drugs during the previous month declined from 2% in 2002 to 1% in 2012, with decreases primarily in use of pain relievers, tranquilizers and sedatives.

Prescription pain relievers continued to be abused by more adults in Orange County than other prescription drugs, despite a notable decline in use since 2002. Specifically, in 2012, 2% of adults reported past-year abuse of pain relievers, compared with 0.5% of adults reporting abuse of tranquilizers or stimulants, and less than 0.1% reporting abusing sedatives in the past year.

I. Introduction

The Orange County Health Care Agency is dedicated to protecting and promoting the optimal health of individuals, families, and our diverse communities. The Agency’s services fall into five broad categories — Behavioral Health Services, Administrative & Financial Services, Correctional Health Services, Medical Services, and Public Health Services.

The Health Promotion Division of Public Health Services was established with a mission “to build the capacity of individuals, organizations, and communities in Orange County to promote optimal health and prevent disease, disability, and premature death.” A major thrust of this mission involves the work of the Alcohol and Drug Education and Prevention Team (ADEPT) in developing a comprehensive, evidence-based system of alcohol and other drug (AOD) prevention services for Orange County. A central task in this ongoing development effort is conducting scientific research that can provide reliable, prevention-relevant information on the current dimensions of AOD use in Orange County.

This report presents the findings of the 2012 survey of alcohol and other drug use among Orange County adults aged 18 and older. The 2012 survey report represents a ten-year follow up to a similar study conducted in 2002 and thus provides an assessment of changes in adult AOD use and related risk factors over the past decade.

National and California State Alcohol and Illicit Drug Use Trends: 2002 - 2012

*Nationwide Trends.*¹ According to the annual National Survey on Drug Use and Health (NSDUH) conducted by the Substance Abuse and Mental Health Services Administration, rates of past-month illicit drug use in the United States increased in the decade between 2002 and 2012 (from 8.3% to 9.2%). The increase was largely due to an increase in marijuana use (from 6.2% to 7.3%), while use prevalence for other illicit drugs, such as cocaine, hallucinogens, and non-medical use of prescription drugs showed no change or declined slightly. Past-month alcohol use rates remained largely unchanged between 2002 and 2012 (50.5% vs. 52.1%), as did binge drinking rates (22.8% to 23.0%). However, rates of self-reported past-year drinking-driving behavior (i.e., DUI) declined between 2002 and 2012 (from 14.2% to 11.2%).

California Trends.^{1,2} Alcohol and illicit drug use trends in California between 2002 and 2012 were similar to national trends. Rates of past-month illicit drug use increased (from 9.0% to 11.0%) from 2002 to 2012, largely due to increases in marijuana use (6.8% to 9.1%). In contrast, rates of past-month alcohol use in California remained fairly constant (51.0% in 2002, 49.6% in 2012), as did binge drinking rates (21.3% and 20.8%, respectively).

¹Substance Abuse and Mental Health Services Administration, Results from the 2012 National Survey on Drug Use and Health: Summary of National Findings, NSDUH Series H-46, HHS Publication No. (SMA) 13-4795. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2013.

²Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health: Comparison of 2002-2003 and 2010-2011 Model-Based Prevalence Estimates (50 States and the District of Columbia).

*Demographic Variations in Use Prevalence Rates.*¹ Nationally, illicit drug use rates are highest among 18-25 year olds, but have also increased in the 50-59 year age group, at least partly due to higher rates of drug use among the aging baby boom cohort.³ Alcohol and illicit drug use rates are consistently lower over time for persons of Asian descent than for other ethnic groups, and binge drinking rates are consistently higher for men than women.

Orange County Population

Based on Census 2010 data, Orange County is home to over 3 million people, of whom nearly 2.3 million are aged 18 years and older. Orange County is the third largest county in California, trailing only Los Angeles and San Diego, and the sixth largest county in the United States.⁴ The county’s population growth is projected to continue at an increasingly slower rate, reaching more than 3.3 million by 2050.⁵

Orange County is a racially and ethnically diverse region: 45% of Orange County residents self-identify as Non-Hispanic White, followed by 34% Hispanic and 17% Asian/Pacific Islander (API). Slightly less than 2% of residents are African American, another 2% are two or more races, and the remaining 0.5% are American Indian/Alaska Native or any other single race. Among Orange County residents at least five years of age, 45% speak a language other than English at home. Of those, the majority speak Spanish (60%) followed by Asian/Pacific Islander languages (28%) or other Indo-European languages (9%).¹

The trend toward an increase in the older adult population in Orange County continues. Projections from 2010 through 2030 anticipate a 90% increase in the older adult population (65 years and older), compared to a 9% increase among all ages. As a result of this growth, the proportion of the population that is 65 years and older will increase from 12% in 2010 to 24% in 2050.²

³Office of Applied Studies, OAS Data Review: An Examination of Trends in Illicit Drug Use among Adults Aged 50 to 59 in the United States, (Rockville, MD: Substance Abuse and Mental Health Services Administration, August 2009).

⁴U.S. Census Bureau, American Community Survey, 2010.

⁵California Department of Finance: P-1, Summary Population Projections by Race/Ethnicity and by Major Age Groups, 2010-2060

Methodology

Data collection for the 2012 Survey of Alcohol and Other Drug Use among Orange County Adults was conducted by the Survey Research Group, a division of the Public Health Institute, Sacramento, California under a contract with the County of Orange Health Care Agency (HCA), Alcohol and Drug Education and Prevention Team (ADEPT).

Interviewing Process

Interviewing for the survey began April 5, 2012 and was completed August 24, 2012. Trained interviewers following standardized procedures developed by Survey Research Group staff and the Centers for Disease Control and Prevention.⁶ Interviews were conducted during weekday business hours, weekday evenings, and on weekends, and were conducted in English, Spanish, and Vietnamese languages according to respondent preference. The average interview conducted in English was completed in 20 minutes. Average interview times for interviews conducted in Spanish (21 minutes) and Vietnamese (23 minutes) were slightly longer.

Using a computer-assisted telephone interviewing (CATI) system, interviewers read questions as they were displayed on a computer screen. Responses were keyed directly into the computer. Automatic data editing and coding programs prevented invalid responses from being entered and greatly increased the accuracy and speed of data entry.

Sample Selection

Telephone numbers (sample) for the 2012 Orange County Alcohol and Other Drugs Survey were purchased from the commercial sampling firm Marketing Systems Group – Genesys (MSG). This company provides samples to all states for the national Behavioral Risk Factor Surveillance System, as well as for the California Health.

Interview Survey. The sample was selected using a random-digit-dial approach for the landline, cell phone, and Vietnamese oversample portions of the project. Vietnamese adults were oversampled in this study because they represent the largest segment of the Asian/Pacific Islander population in Orange County, and are often targeted for prevention services.

Landline random-digit-dial sample was randomly generated within residential area codes and exchanges from a database containing all residential landlines in Orange County, including both listed and unlisted numbers. Cellular random-digit-dial sample was randomly generated within thousand series blocks dedicated to providing cellular service. The sample was pulled from a database that contains all cellular-dedicated thousand series blocks in the country and restricted to cellular blocks mapped to individual switch center locations in or near Orange County.

Oversampling was employed to reach more Vietnamese respondents than would have been reached using a typical landline or cell phone random-digit-dial approach. Using a landline random-digit-dial approach, block groups expected to have a high proportion of Vietnamese respondents were chosen and then telephone exchanges from these block groups were oversampled. The block groups chosen for high incidence of Vietnamese predominantly corresponded to ZIP codes located in Westminster and Garden Grove, CA.

⁶Centers for Disease Control and Prevention (1998). Behavioral Risk Factor Surveillance System User’s Guide. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.

Once a household was reached, all persons residing in the household aged 18 and older were eligible to participate. If more than one member of the household was eligible, one person was selected using a Kish method.⁷ If the person selected was not available, an appointment was made to conduct the interview at a different time or on another day. Once a respondent was selected no other household member could be selected, even if it was not possible to obtain an interview from the selected respondent. Standardized procedures were followed for calling back numbers that rang with no answer or gave a busy signal, or for encouraging selected respondents who were reluctant to participate.

Completed Surveys

Overall, 2,928 surveys were completed. Of these, 148 are partial completions, which are surveys that were completed up to the end of the drug cluster section questions. The table below describes the race/ethnicity of respondents for completed and partially completed surveys.

Completions and Partial Completions by Race/Ethnicity

Race/Ethnicity	Completed Surveys	Partial Completions	Total
Asian/Pacific Islander	703	65	768
Vietnamese	562	56	618
Hispanic/Latino	629	43	672
White/Caucasian	1,358	35	1,393
Other race/ethnicity	90	5	95
Total	2,780	148	2,928

Weighting Procedures

In survey research, weighting is used to compensate for the fact that persons with certain characteristics are not as likely to respond to the survey. There are many respondent characteristics that are likely to be related to the propensity to respond: age, education, race/ethnicity, gender, place of residence.

The weighting process involves computing and assigning a weight to each survey respondent to more accurately represent the population from which the sample was drawn. In the present study, a multi-stage weighting process was employed in which a final weight was created by using iterative proportional fitting (also called raking or sample balancing) for use in data analysis. The final weight adjusts for both probability of selection and variability in sex, age, race/ethnicity, and source of interview (cell phone versus landline) between the sample and the population.

A more detailed description of the weighting procedures may be found in the technical report prepared by the Survey Research Group, Public Health Institute. Please contact ADEPT for further information.

⁷Kish, L (1995). Survey Sampling. New York: John Wiley and Sons, Inc., pp. 398-401.

Data Analysis

Although the overall number of persons in the survey sample is quite large for purposes of statistical inference, subgroup analyses (e.g., demographic groups) can lead to prevalence estimates that are statistically unreliable. Reliability of an estimate depends on the actual un-weighted number of respondents in a category, not the weighted number. For analytic purposes, this report follows a rule recommended by the Centers for Disease Control & Prevention (CDC) of not reporting prevalence estimates for subgroups in which there were fewer than 50 respondents or the 95% confidence interval width was greater than 20. All prevalence estimates shown in this report meet these reliability standards.

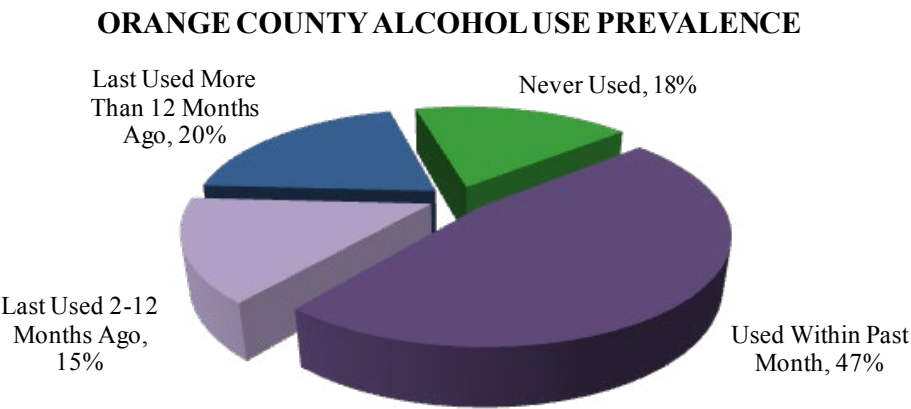
For all analyses, Vietnamese adults are included in the Asian/Pacific Islander (API) group. When reliable estimates were available, prevalence rates are also presented for Vietnamese adults.

II. ALCOHOL USE IN ORANGE COUNTY

This chapter presents survey findings related to the use or consumption of alcoholic beverages.

Alcohol Use Prevalence

In total, 82% (or approximately 1,862,000) of Orange County’s adult population reported having used alcohol on at least one occasion during their lifetime. About 62% (or 1,406,000) of the County’s adults reported consuming an alcoholic beverage in the past year, including an estimated 1,063,000, or 47% of the County’s adults, who had one or more alcoholic beverages during the past month.



Prevalence by Demographic Groups

The following table shows the prevalence of current (past 30 days), past year, and lifetime (ever used) alcohol use by various demographic categories.

Alcohol use among Orange County adults was consistently related to gender and ethnic background. Fewer women than men said they have consumed alcohol at each time period, while prevalence of use was higher among White adults than all other ethnic groups identified. Alcohol use prevalence generally increased with age and peaked in the 45-64 year age range.

Socio-demographic status, as measured by level of education and income, also showed a consistent relationship to alcohol use prevalence, with the more affluent and educated adults having reported higher levels of use than those of lower income and educational status.

PREVALENCE OF ALCOHOL USE BY DEMOGRAPHIC GROUPS

All Adults	% Used in Past 30 Days 47%	% Used in Past Year 62%	% Ever Used 82%
Gender			
Male	53%	69%	88%
Female	41%	55%	76%
Age			
18-24	41%	63%	71%
25-34	50%	65%	82%
35-44	42%	58%	81%
45-54	52%	64%	86%
55-64	50%	65%	87%
65+	45%	56%	83%
Race/Ethnicity			
Asian/Pacific Islander	36%	49%	59%
Vietnamese	28%	35%	46%
Hispanic	35%	50%	76%
White	59%	73%	92%
Education			
Some High School or Less	21%	35%	69%
High School	42%	57%	79%
Some College	48%	66%	85%
College Grad+	57%	71%	86%
Income			
<\$40,000	28%	43%	71%
\$40-59,999	49%	63%	84%
\$60,000+	63%	78%	91%
Acculturation			
Hispanic - less acculturated	22%	39%	72%
Hispanic - more acculturated	52%	66%	84%
Vietnamese - less acculturated	23%	29%	40%
Vietnamese - more acculturated	39%	52%	61%

In addition, among respondents who self-identified as Hispanic or Vietnamese, drinking prevalence rates are shown for individuals who can be characterized as being either “less acculturated” (preferred to be interviewed in Spanish or Vietnamese language) or “more acculturated” (preferred to be interviewed in English language). Within both ethnic groups, alcohol use was more prevalent among those who were more acculturated.

Profile of Current Alcohol Users

Community problems related to alcohol use are most commonly linked to patterns of current (past 30 days) use. Accordingly, for prevention purposes, it is instructive to examine the characteristics of Orange County adults who are most likely to be current drinkers. As noted previously in this section, 47% (or about 1,063,000) of Orange County’s adults had one or more alcoholic beverages during the past month. However, the likelihood of having had a drink differed considerably on a wide variety of socio-demographic characteristics.

The table below illustrates some of the salient differences among key demographic groups and also shows differences based on the age at which an individual reported having had an initial experience with alcohol.

- Those who were **more likely** to have consumed alcohol in the past 30 days were persons who were more *affluent, men, college graduates*, self-identified as *White*, and *had their first drink before the age of 18*.
- In contrast, those who were **less likely** to have consumed alcohol in the past 30 days were persons who were *less acculturated Vietnamese or Hispanic, women, Asian or Pacific Islander (API) descent*, individuals with low levels of *educational attainment*, those with annual household incomes *below \$40,000*, and those who were *18-24 or 35-44 years old*.

PAST 30-DAY ALCOHOL USERS		
Demographics	Above-Average Likelihood	Below-Average Likelihood
Gender	▪ Male (53%)	▪ Female (41%)
Age	▪ 45 – 54 yrs old (52%)	▪ 18 - 24 yrs old (41%) ▪ 35 - 44 yrs old (42%)
Education	▪ College Grad + (57%)	▪ Some High School or less (21%)
Income	▪ \$60,000+ (63%)	▪ Under \$40,000 (28%)
Race/Ethnicity	▪ White (59%)	▪ API (36%) ▪ Vietnamese (28%) ▪ Hispanic (35%)
Age of First Drink	▪ 12 – 17 yrs (65%) ▪ 18– 20 yrs (59%)	▪ 21+ yrs (43%)
Acculturation		
Hispanic		▪ Less acculturated (22%)
Vietnamese		▪ Less acculturated (23%)

Alcohol Consumption Patterns

Survey respondents who reported any use of alcohol were asked how often they consumed alcoholic beverages (frequency) and the number (quantity) of drinks they typically consumed on drinking occasions.

Past 30-Day Consumption Frequency

Past 30-day Orange County alcohol users reported drinking alcoholic beverages on an average of 6.6 days per month, or about once every four and a half days.

Consistent with their lower likelihood of consuming alcohol in the past 30 days, women reported drinking on fewer days than men – 6.0 days versus 7.1 days, respectively. The following table shows that frequency of alcohol consumption increased gradually with age up to age 64, after which fully one in ten residents aged 65 and older reported having one or more drinks daily. There was considerable variation in frequency of drinking by ethnicity, with Vietnamese adults reporting they consumed alcohol on the fewest number of days per month (4.0) while White adults reported drinking most frequently at 7.5 days per month.

Percentages reported in the table below are based on past 30-day users only.

PAST 30-DAY ALCOHOL CONSUMPTION FREQUENCY													
# Days	Total	Gender		Age						Race/Ethnicity			
		Male	Female	18-24	25-34	35-44	45-54	55-64	65+	API	Vietna- mese	His- panic	White
1-2	40%	34%	48%	38%	43%	38%	44%	47%	29%	54%	63%	51%	35%
3-4	18%	19%	17%	18%	16%	23%	17%	14%	20%	25%	19%	17%	17%
5-7	13%	15%	11%	22%	16%	13%	10%	10%	12%	2%	4%	12%	15%
8-14	13%	15%	10%	11%	13%	17%	11%	12%	11%	9%	8%	9%	15%
15-24	11%	11%	9%	11%	12%	8%	12%	8%	13%	9%	2%	10%	11%
25-29	2%	2%	2%	0%	0%	0%	4%	4%	6%	0%	0%	0%	3%
30 days	3%	3%	3%	0%	0%	2%	3%	6%	10%	1%	4%	2%	4%
Mean # days	6.6	7.1	6.0	5.2	5.5	5.6	6.8	6.9	9.8	4.8	4.0	5.0	7.5

Number of Drinks Per Occasion In Past Month

In addition to past 30-day alcohol consumption frequency, typical per-occasion quantity estimates were obtained in terms of the usual number of drinks consumed on the days residents drank. The number of drinks per drinking occasion differed substantially by gender, age, and ethnic background:

- Males reported consuming an average of 2.9 drinks per drinking occasion compared with 1.7 among females
- The reported number of drinks per drinking occasion declined with age through age 64, but increased moderately after age 65.
- Hispanics reported consuming the highest number of drinks per drinking occasion and one in five Hispanics reported having five or more drinks per occasion.

USUAL NUMBER OF DRINKS PER DRINKING OCCASION IN PAST 30 DAYS

# Drinks	Total	Gender		Age						Race/Ethnicity			
		Male	Female	18-24	25-34	35-44	45-54	55-64	65+	API	Vietna- mese	His- panic	White
One	43%	33%	55%	24%	27%	37%	46%	59%	63%	47%	58%	27%	46%
Two	30%	28%	32%	27%	31%	32%	33%	32%	23%	28%	28%	26%	32%
Three	12%	14%	8%	9%	15%	18%	13%	7%	5%	11%	12%	17%	11%
Four	6%	10%	2%	16%	11%	7%	2%	2%	4%	1%	1%	10%	6%
Five or more	9%	15%	3%	24%	16%	6%	6%	0%	5%	13%	1%	20%	5%
Mean # drinks per occasion	2.4	2.9	1.7	3.7	2.6	2.3	2.1	1.6	2.2	2.6	1.6	3.3	2.0

In addition to gender and age, the amount of alcohol usually consumed also differed by other demographic variables. Those who reported consuming an above-average number of drinks per drinking occasion were more likely to be young (18-24 years), unmarried residents, had not attended college, and those who had their first drink before age 12. In contrast, a below-average number of drinks per occasion was reported by those who were aged 55-64, were divorced or widowed, and had some college or more.

PER-OCCASION ALCOHOL CONSUMPTION

Demographics	Above-Average		Below-Average	
		Avg. # Drinks		Avg. # Drinks
Gender	▪ Male	2.9	▪ Female	1.7
Age	▪ 18 - 24 yrs old	3.7	▪ 55 - 64 yrs old	1.6
Education	▪ High School or less	3.1	▪ College Grad	2.0
Income	▪ Under \$40,000	2.9		
Marital Status	▪ Living w/Partner	3.4	▪ Widowed	1.9
	▪ Never Married	3.2	▪ Divorced	1.9
Race/Ethnicity	▪ Hispanic	3.3	▪ Vietnamese	1.6
Age at First Drink	▪ <12 yrs	3.7	▪ 21+ yrs	1.9

Total Drinks In Past 30 Days

Estimates of the total number of drinks consumed during the past month were created by multiplying the number of drinking occasions by the usual number of drinks consumed. On average, Orange County residents who consumed alcohol in the past month had 16.0 drinks. However, there are significant differences in the total number of drinks consumed between men versus women and by age. The following table shows:

- Men reported drinking nearly twice as many drinks as women (20.1 vs. 11.0, respectively)
- 29% of residents aged 18–24 and 23% of adults 65+ had 30 or more drinks per month — this may be attributable to younger residents drinking on fewer days than older residents, but consuming more drinks per occasion. In contrast, while older residents consumed fewer drinks per occasion, they drank more often.
- Consistent with earlier alcohol consumption findings related to ethnic background, White and Hispanic adults totaled the highest number of drinks in the past month (16.4 and 17.0 drinks, respectively), while Vietnamese adults reported having the fewest total drinks (6.5).

TOTAL DRINKS IN PAST 30 DAYS													
# Drinks in Past Month		Gender		Age						Race/Ethnicity			
		Male	Female	18-24	25-34	35-44	45-54	55-64	65+	Vietna-API	His-mese	panic	White
	Total												
1-4	42%	31%	54%	37%	35%	37%	45%	55%	41%	55%	74%	42%	39%
5-9	17%	18%	16%	15%	18%	29%	15%	9%	13%	17%	3%	16%	17%
10-19	14%	15%	12%	9%	15%	10%	15%	16%	14%	11%	12%	13%	15%
20-29	11%	13%	7%	10%	18%	10%	9%	7%	9%	8%	7%	11%	11%
30+	17%	23%	11%	29%	13%	14%	16%	13%	23%	9%	5%	18%	18%
Mean	16.0	20.1	11.0	24.1	14.8	13.7	14.8	12.9	18.9	12.4	6.5	17.0	16.4

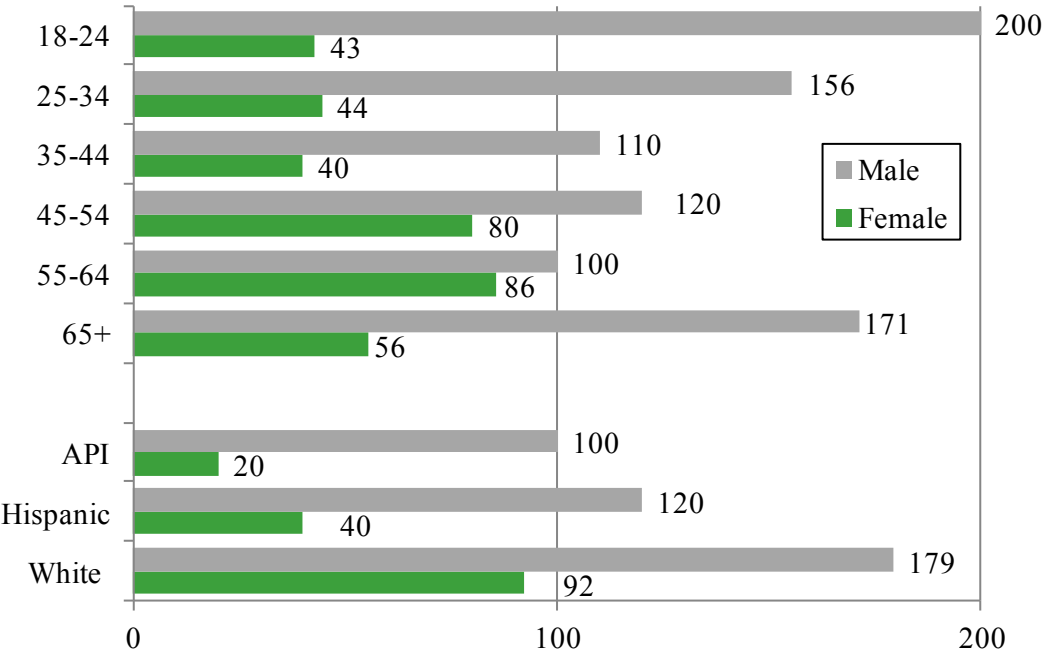
Additional analyses were performed to determine which demographic segments among male and female respondents account for disproportionately more or less consumption compared with their proportionate representation in the total population.

The following graph illustrates these findings, showing the dramatic differences in total monthly consumption between men and women — across age groups and ethnic background. The relationships shown are based on an index created by dividing the percent of total monthly drinks accounted for by individual population segments by the percent of Orange County’s population represented by that individual segment. Thus, a score of “100” would mean that a segment accounts for the same proportion of total drinks as its proportion of population. Scores above “100” indicate disproportionately high consumption and scores below “100” indicate disproportionately low consumption relative to population.

The population segment who consumed the greatest number of drinks per month were men aged 18-24 (index score = 200), followed by White males (index score = 179) and men aged 65+ (index

score = 171). This signifies that these population groups consumed twice (or nearly twice) as many drinks as would be expected, given their representation in the population. In contrast, Asian/Pacific Islander and Hispanic females and women aged 18-44 were the segments with the lowest monthly alcohol consumption relative to their presence in the population. Total consumption by Asian/Pacific Islander males and men aged 55–64 was equal to their population levels. Conversely, all segments of the female population were below their male counterparts, and below 100, signifying that women consumed fewer drinks than would be expected, given the proportion of the population they represent.

TOTAL MONTHLY ALCOHOL CONSUMPTION INDEX



Alcohol Problem Risk Indicators

The age at which individuals initiate use of alcohol is a well-documented indicator of risk for later alcohol problems. That is, the potential for experiencing problems with alcohol later in life is greater among those who start drinking at a younger age compared to those who delay their first drink until they are more mature.

Another alcohol problem risk indicator is “binge drinking,” generally defined as the consumption of 5 or more alcoholic beverages on one occasion for males, and 4 or more drinks for females. Extensive research has demonstrated that binge drinking is associated with a wide range of adverse health effects, unintentional injuries (e.g., motor vehicle crashes, falls, near-drowning), and other consequences that have especially high social and economic costs (e.g., homicide, assault, domestic violence, rape, child abuse, unintended pregnancy, and child neglect).

Age Of First Drink

The age at which Orange County’s adults reported having consumed their first alcoholic beverage was clearly related to respondents’ current age and gender.

- The prevalence of having an initial alcoholic beverage experience under age 18 was considerably higher among Orange County’s younger adults than among those aged 65 years and older. Half of the county’s adults aged 18–24 had their first alcoholic beverage before they turned 18, compared to only a third of those aged 65 and older (32%).
- One out of seven Orange County adults (14%) had an alcoholic beverage before age 15 and four of ten (42%) had their first drink before age 18. Research from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) has shown that the likelihood of developing an alcohol use disorder in adulthood is about 50 percent higher for persons who start drinking before 15 than for those who did not drink until 18 or older
- On average, males had their first alcoholic beverage at age 17.5. In contrast, females deferred their initial experience with alcohol by almost 2 years, until they were 19.4 years old, on average.

AGE OF FIRST DRINK									
# Drinks	Total	Gender		Age					
		Male	Female	18-24	25-34	35-44	45-54	55-64	65+
% Under 12	2%	2%	1%	1%	2%	2%	1%	2%	3%
% Under 13	4%	6%	2%	5%	4%	3%	4%	4%	5%
% Under 14	8%	11%	5%	8%	8%	7%	11%	6%	6%
% Under 15	14%	17%	10%	12%	12%	13%	21%	12%	11%
% Under 16	22%	24%	19%	18%	20%	24%	28%	19%	16%
% Under 17	34%	40%	28%	37%	33%	37%	41%	32%	23%
% Under 18	43%	48%	37%	50%	42%	45%	47%	41%	32%
Mean Age (yrs)	18.4	17.5	19.4	17.4	18.1	18.5	18.2	18.7	19.4

Binge Drinking Prevalence

Binge drinking behavior was also explored among Orange County residents by having past 30-day users report on the number of days during the past 30 days that they had 5 or more drinks (males) or 4 or more drinks (females) on the same occasion — that is, within a couple of hours. **Overall, one-quarter (26%) of Orange County’s past 30-day drinkers reported at least one binge drinking episode in the past month.** Of those, 21% reported 1-4 binge drinking episodes in the past 30 days, while 5% reported binge drinking on 5 or more occasions during the past month (frequent binge drinking). Based on population, this latter finding suggests that there are about 53,000 frequent binge drinkers among the county’s adults.

As was the case with total drinks per month, males and those aged 18–24 were much more likely to engage in binge drinking than females and those aged 35 or older. Binge drinking showed an age-related decrease, with infrequent bingeing decreasing after 18-24 years, and further decreasing after age 54. Although frequent binge drinking decreased slightly after the college years, the biggest and most stable decline was after age 34.

Also of note is the 2.3 average number of past-month binge drinking episodes among Hispanics. As will be shown in a later section of this chapter, the vast majority of binge drinking occasions among the county’s Hispanic population were accounted for by males.

PREVALENCE OF PAST-MONTH BINGE DRINKING EPISODES (AMONG PAST 30-DAY USERS)													
# Days	Total	Gender		Age						Race/Ethnicity			
		Male	Female	18-24	25-34	35-44	45-54	55-64	65+	Vietna-API	His-mese	His-panic	White
0 days	74%	65%	85%	42%	62%	75%	76%	91%	92%	82%	92%	57%	79%
1 - 4 days	21%	27%	14%	45%	29%	22%	22%	7%	4%	13%	8%	38%	16%
5+ days	5%	8%	1%	13%	9%	3%	2%	2%	3%	5%	0.2%	5%	5%
Mean # Days	1.7	2.1	1.1	2.6	2.3	1.5	1.2	0.8	1.5	1.5	0.3	2.3	1.5

Profile of Frequent Binge Drinkers and Binge Drinkers

The frequent binge drinker profile differed from the profile of past 30-day drinkers and Orange County’s population at large.

- Almost nine out of ten frequent binge drinkers were men (87%)
- Almost two-thirds of all frequent binge drinkers were aged 18 – 34 (64%), double the proportion of this age group in the population at large
- Binge drinkers were predominantly either White or Hispanic and
- More than three-fourths (79%) of frequent binge drinkers had attended college or were college graduates

PROFILE OF BINGE DRINKERS

	Frequent Binge Drinkers (5+ episodes)	Binge Drinkers (1-4 episodes)	Used Alcohol Past 30 days	% of Orange County Adult Population
Gender				
Male	87%	71%	55%	49%
Female	13%	29%	45%	51%
Age				
18-24	29%	25%	12%	13%
25-34	35%	27%	19%	18%
35-44	10%	18%	17%	19%
45-54	10%	22%	22%	20%
55-64	6%	5%	15%	14%
65+	10%	3%	15%	15%
Mean Age	35.7	36.6	45.5	
Race/Ethnicity				
Asian/Pacific Islander	14%	8%	13%	19%
Black	5%	0.2%	1%	2%
Hispanic	22%	39%	20%	29%
White	59%	47%	62%	48%
Bi-Racial	0.03%	3%	3%	2%
Other	0%	3%	1%	0.4%
Education				
Some High School or Less	7%	12%	7%	16%
High School	14%	21%	16%	19%
Some College	43%	25%	28%	32%
College Grad+	36%	42%	49%	33%

Binge Drinking By Gender and Race/Ethnicity

Additional analyses of binge drinking behavior were conducted to aid in identifying particular demographic segments that may be targeted in binge-drinking prevention efforts. Specifically, past-month binge drinking behavior was analyzed by gender within the three largest ethnic groups in the County: Whites, Hispanics, and Asian/Pacific Islanders (API). As shown below, there was a disproportionate percentage of White males and Hispanic males among past-month binge drinkers. Notably, the proportion of Hispanic males who were binge drinkers (31%) was more than double their proportion in the population (15%).

	Percent of Past-Month Binge Drinkers	Percent of Adult OC Population
White Males	35%	24%
Hispanic Males	31%	15%
White Females	17%	25%
API Males	8%	9%
Hispanic Females	7%	15%
API Females	1%	10%

III. DRUG USE IN ORANGE COUNTY

Obtaining data on the use of drugs other than alcohol among Orange County residents was one of the major goals of this survey, as reliable information relating to the prevalence of drug use among adults is not readily available. Consequently, the survey included questions on the use of six illicit drug types and the nonmedical use of four classes of prescription drugs, as follows:

Illicit Drugs	Prescription Drugs
3 Marijuana	3 Pain Relievers
3 Cocaine	3 Tranquilizers
3 Heroin	3 Stimulants
3 Hallucinogens	3 Sedatives
3 Methamphetamine	
3 Club Drugs	

Drug use prevalence data were obtained by first asking each survey participant whether they had ever used any of the drugs within a particular drug cluster (e.g., marijuana, cocaine, or heroin). Respondents who indicated any prior usage of a substance within the drug cluster were then asked a series of questions to determine which drug(s) they had used and how recently their use had occurred. This questioning sequence was then repeated for the next drug cluster which included hallucinogens, methamphetamine, or club drugs. Finally, each respondent's experience with prescription drugs was also explored with a general question to determine whether they had ever misused various types of prescription drugs either that were not prescribed for them personally or by taking them more often than prescribed just to obtain a particular feeling. Again, respondents who indicated prior nonmedical use of a particular drug type were asked additional questions to determine the time frame of that usage. In this way, the broad-based nature of the initial questioning about drug use served as a “warm-up” and was presumed to be less threatening than if questions about specific substances were asked directly.

Usage prevalence data were collected for each of the ten substances listed above for three different time frames:

- Ever Used (lifetime)
- Used in Past Year
- Used in Past 30 Days

The following table provides an overall summary of these prevalence rates, along with the estimated number of Orange County adults who used those substances.

SUMMARY OF DRUG USE PREVALENCE IN ORANGE COUNTY

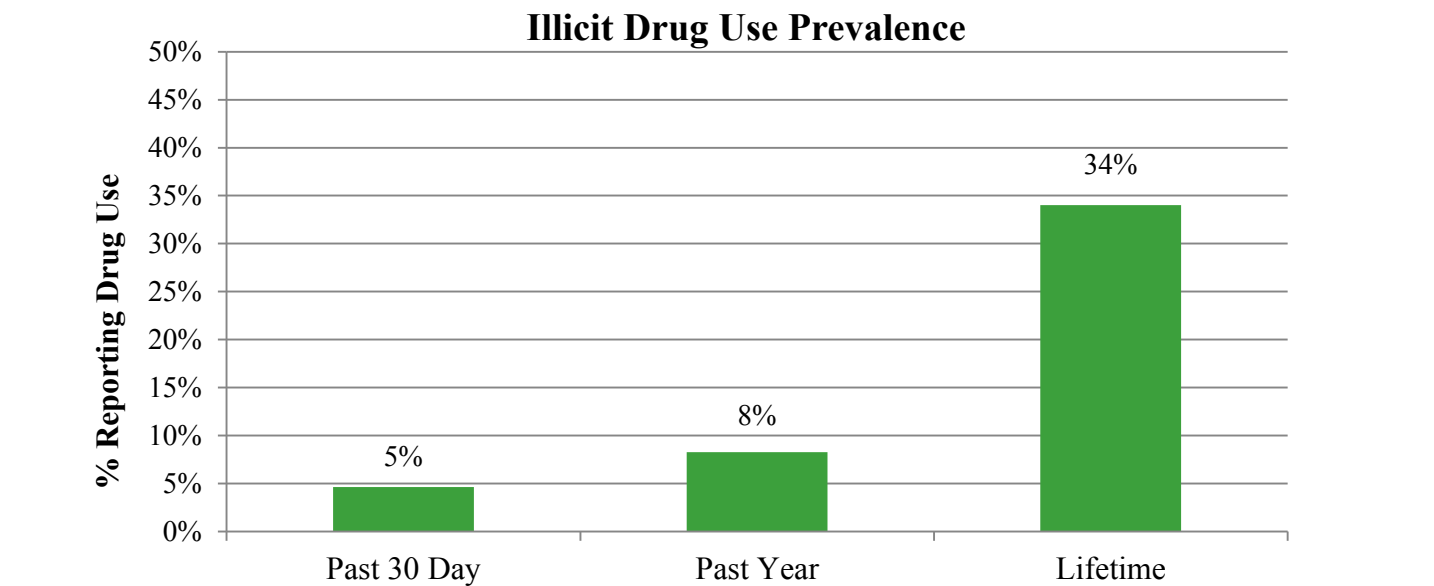
	Ever Used		Used in Past Year		Used in Past 30 Days	
	%	#	%	#	%	#
Used Illicit Drugs	34%	773,000	8%	188,000	5%	105,000
Marijuana	33%	758,000	8%	181,000	4.5%	103,000
Cocaine	13%	301,000	1%	20,500	0.3%	7,300
Heroin	1%	33,000	0.4%	9,700	0.1%	1,800
Hallucinogens	9%	212,000	0.4%	9,400	0.1%	2,400
Methamphetamine	6%	142,000	1%	13,000	0.1%	2,300
Club Drugs	4%	84,000	0.4%	8,400	0.1%	2,400
Misused Prescription Drugs	6%	145,000	2%	53,000	1%	18,000
Pain Relievers	5%	125,000	2%	38,000	0.4%	9,100
Tranquilizers	2%	51,000	0.5%	12,000	0.1%	1,400
Stimulants	2%	45,000	0.5%	12,000	0.5%	12,000
Sedatives	1%	33,500	0.02%	500	0.02%	500

In addition, users of each substance were asked to report their age at the time they first used that substance.

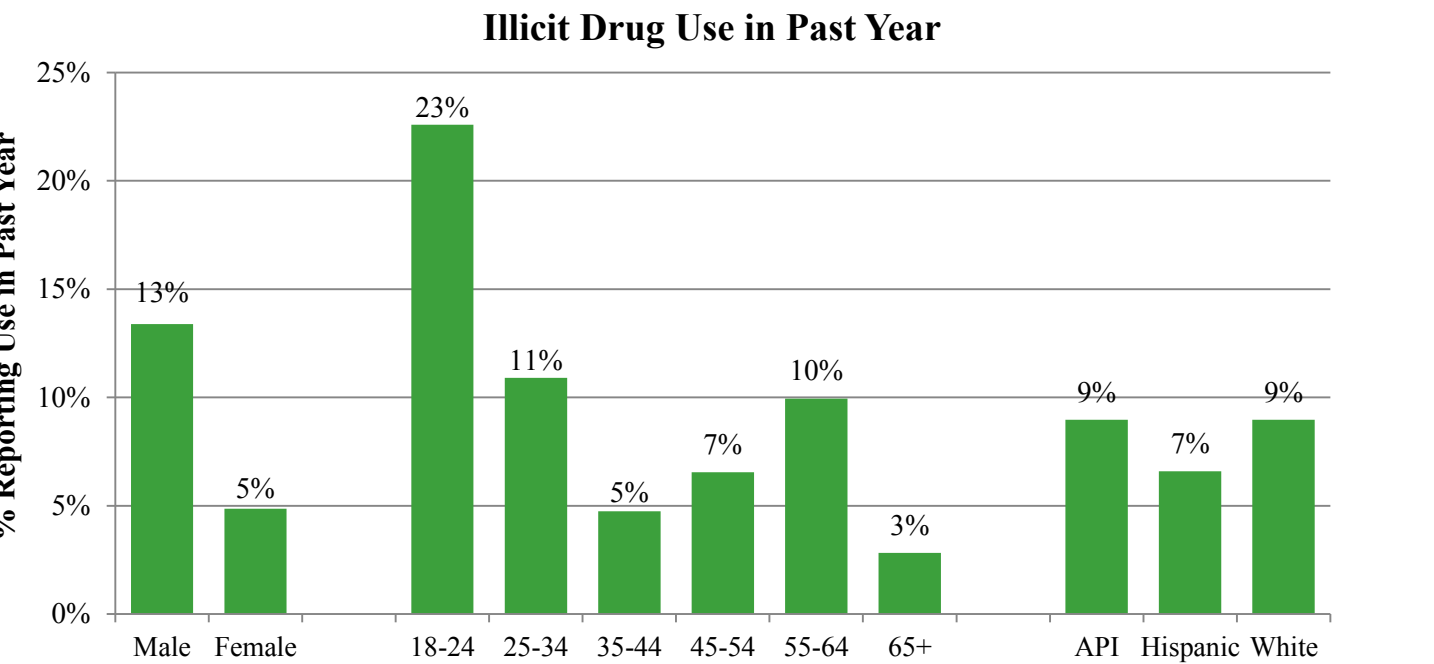
The following sections of this chapter present the prevalence rates first for illicit drugs as an aggregate category and then for each of the six specific illicit drugs. Demographic variations in drug use also are reported for those timeframes of usage with a subsample sufficiently large to yield a reliable prevalence estimate. Next, the prevalence rates for prescription drugs as a category are presented, followed by the rates for each of the four prescription drug subsamples and timeframes which yielded a reliable prevalence estimate.

Illicit Drug Use Prevalence

Overall, 34% of Orange County adults (or approximately 773,000) reported having used one or more illicit drugs on at least one occasion during their lifetimes and 8% (an estimated 188,000) reported use of an illicit substance during the past year. Within the adult population, 5% (an estimated 105,000) reported use of an illicit drug within the past 30 days.

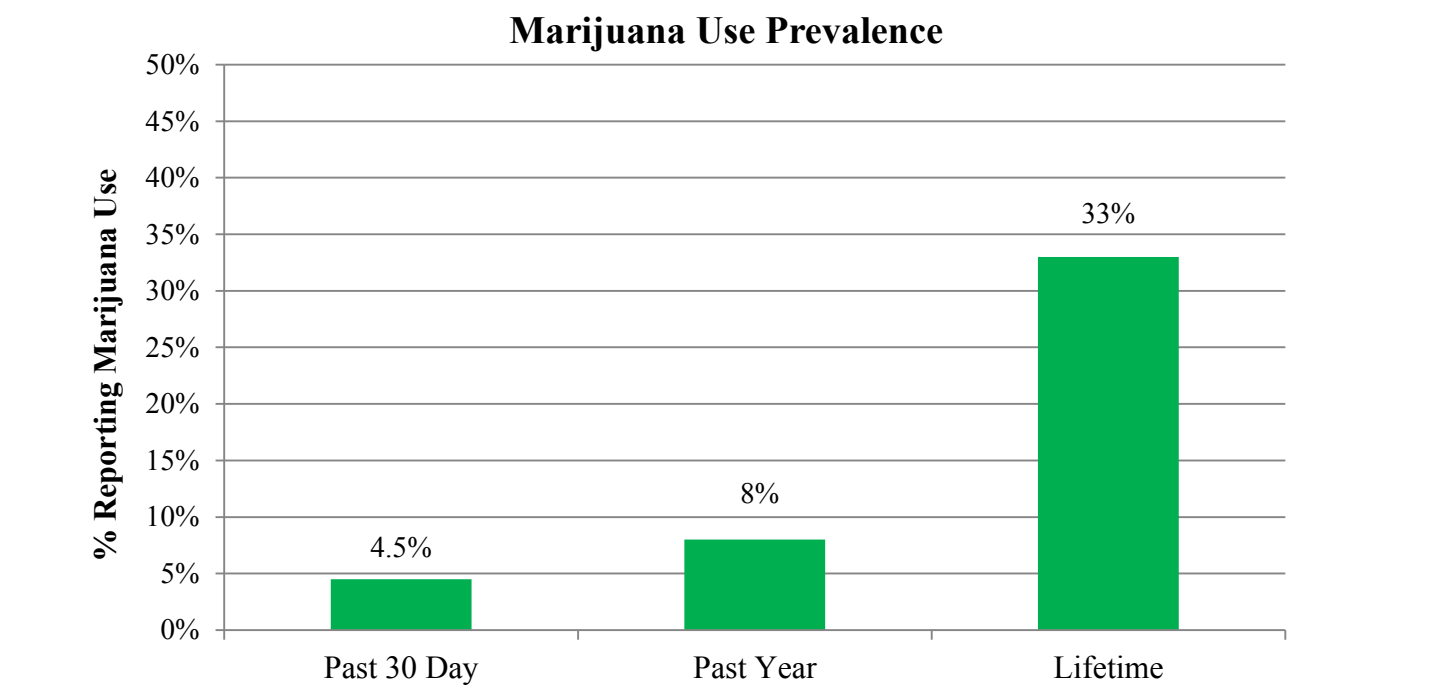


As shown in the demographic chart below, reported use of illicit drugs in the past year by Orange County adults is most prevalent among men and young adults aged 18-24, while reported use is rather evenly distributed across the County’s three major ethnic groups.



Marijuana

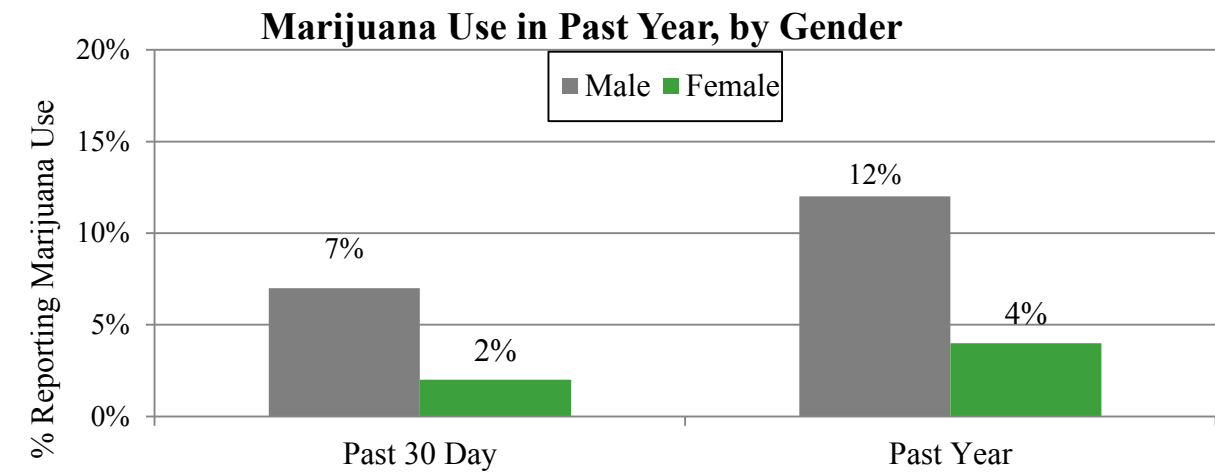
Marijuana was by far the illicit drug most commonly used by Orange County adults, with lifetime use reported by 33% (or approximately 758,000 adults), past year use reported by 8% (or 181,000 adults), and past 30-day use reported by 4.5% (or an estimated 103,000 adults).



Demographic variations in marijuana use

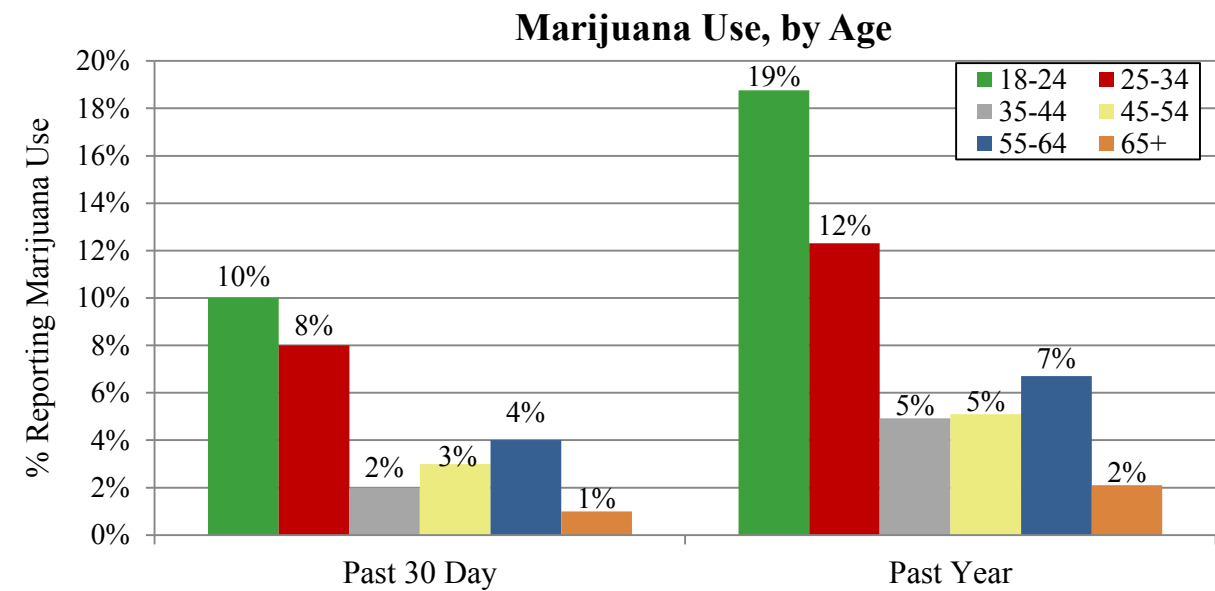
Reported use of marijuana was consistently higher among men than women:

- Among both past-year and past 30-day marijuana users, men outnumber women by a ratio of 3 to 1



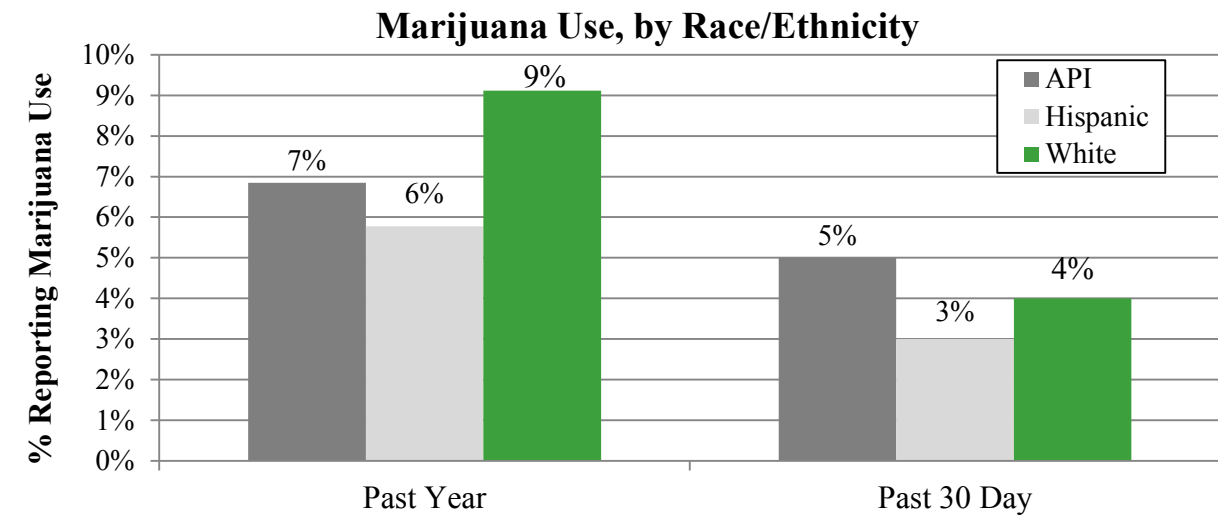
Recent marijuana use is most prevalent among adults under aged 35, with that age group using at a rate of approximately 3 times that of adults aged 35 and older.

- Notably, however, there is an uptick in the past year and past 30-day prevalence rates for adults in the 45-64 age range, before declining at age 65+



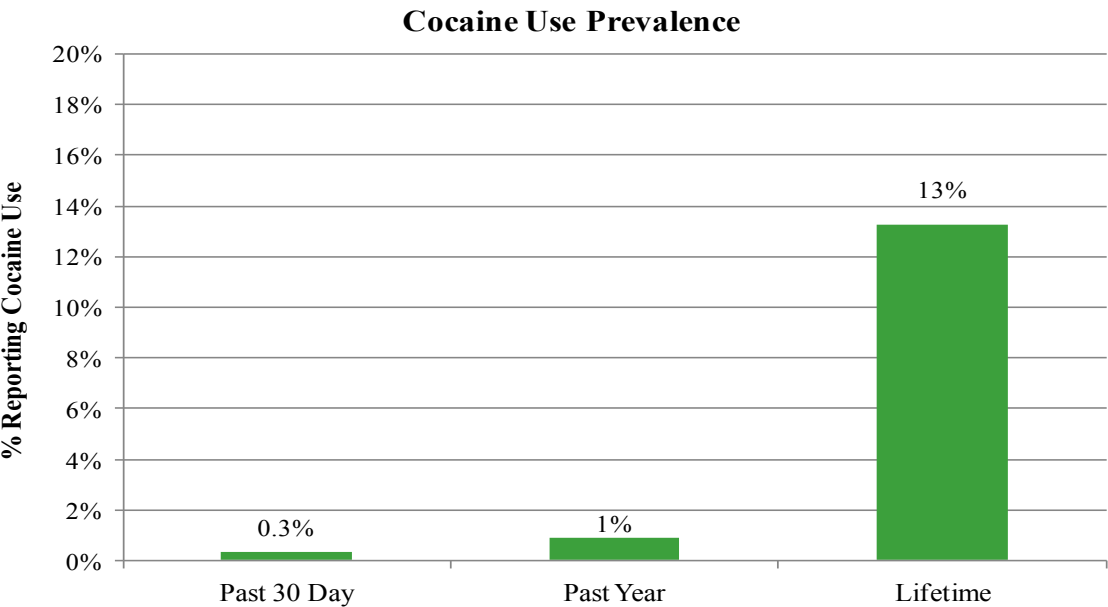
Whites were more likely to report past year marijuana use, while Asian/Pacific Islanders (API) were more likely to report past 30-day use.

- Past year prevalence: White 9%, Asian/Pacific Islander 7%, Hispanic 6%
- Past 30-day prevalence: Asian/Pacific Islander 5%, White 4%, Hispanic 3%



Cocaine

While an estimated 301,000 Orange County adults (13%) reported use of cocaine in their lifetime, only 20,500 (1%) reported use in the past year and even fewer in the past month—7,300 (less than 0.5%).



Demographic variations in cocaine use

While the number of respondents reporting lifetime use of cocaine was sufficient for demographic analysis, the sample size for the past year and past 30-day time frames were not large enough

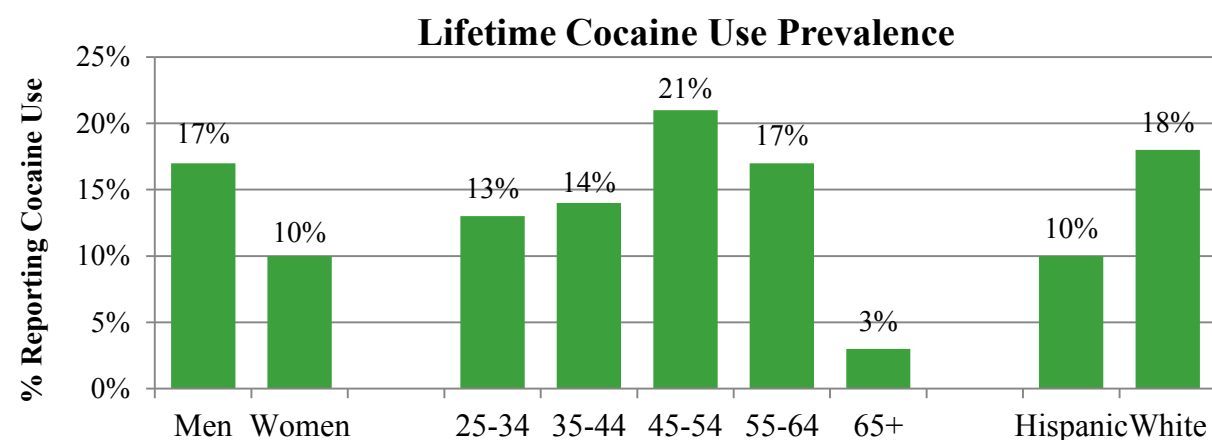
Drug Use in Orange County

to yield reliable prevalence estimates for the various demographic segments. Thus, demographic analyses of cocaine users were limited to respondents reporting lifetime use of cocaine.

Men were considerably more likely than women to have reported cocaine use in their lifetime (17% of men vs. 10% of women) and in the past year (2% of men, <0.5% of women).

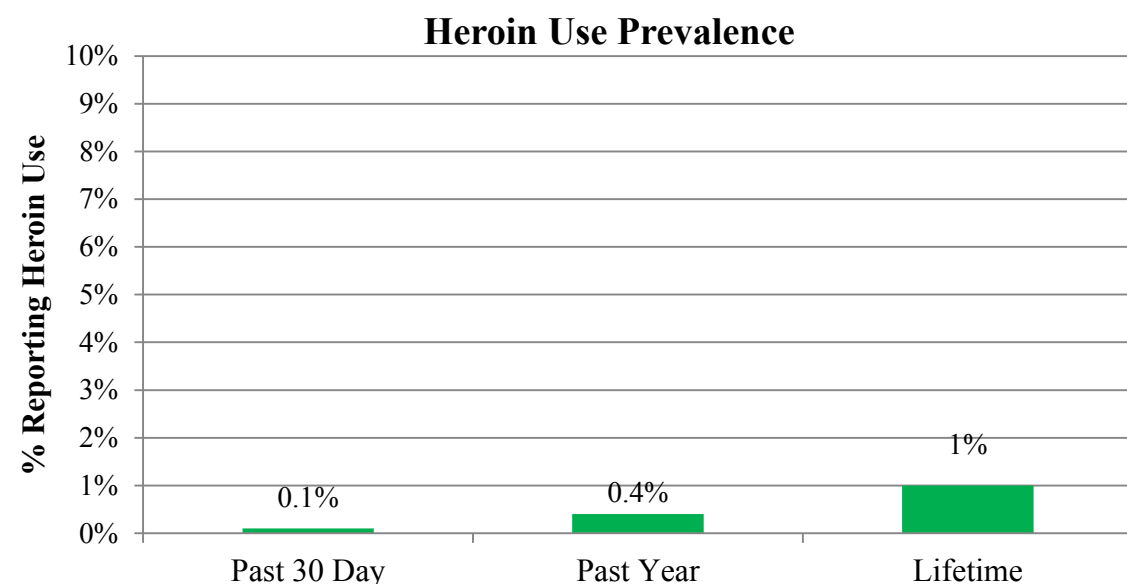
The peak age-related prevalence rate of lifetime use (21%) was reported by adults aged 45-54 and those aged 55-64 (17%), age cohorts that may have initiated use during the 1980s when cocaine use was widespread among young adults.

Lifetime use of cocaine was more commonly reported by Whites (18%) than Hispanics (10%). The Asian/Pacific Islander subsample for lifetime cocaine use was too small to yield a reliable prevalence estimate.



Heroin

Lifetime use of heroin was reported by an estimated 33,000 adults, about 1% of the Orange County adult population. Comparatively, only 0.4% (or an estimated 9,700 adults) reported using heroin in the past year, and 0.1% (or approximately 1,800 adults) used heroin in the past month.



Drug Use in Orange County

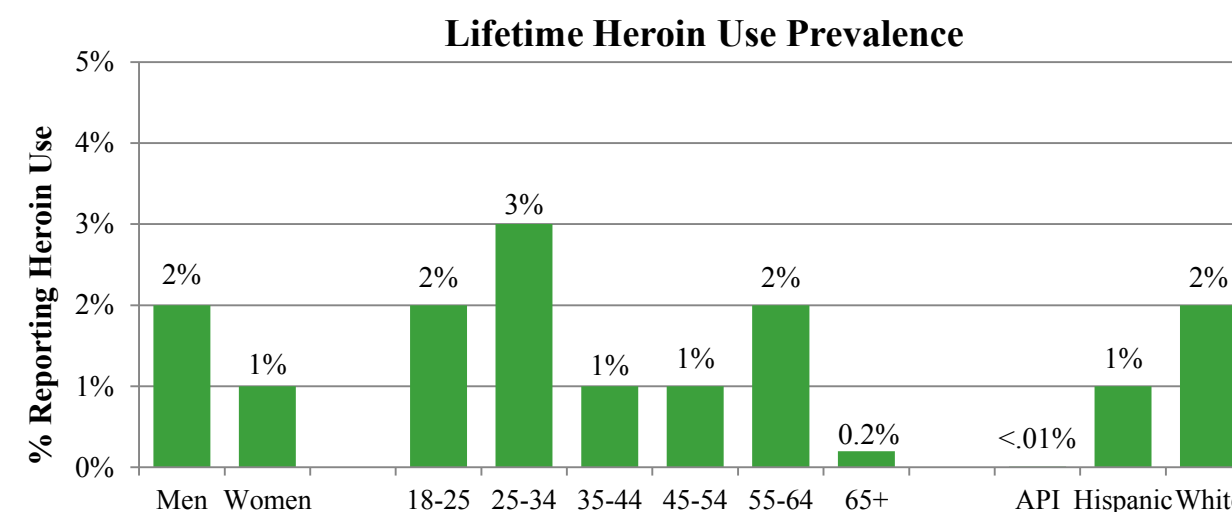
Demographic variations in heroin use

Sample sizes for past year and past 30-day heroin use were insufficient to conduct demographic analysis. Therefore, demographic comparisons were limited to respondents reporting lifetime use of heroin.

As is the case with virtually all types of illicit drug use, men were twice as likely as women to have reported use of heroin in their lifetime (2% to 1%).

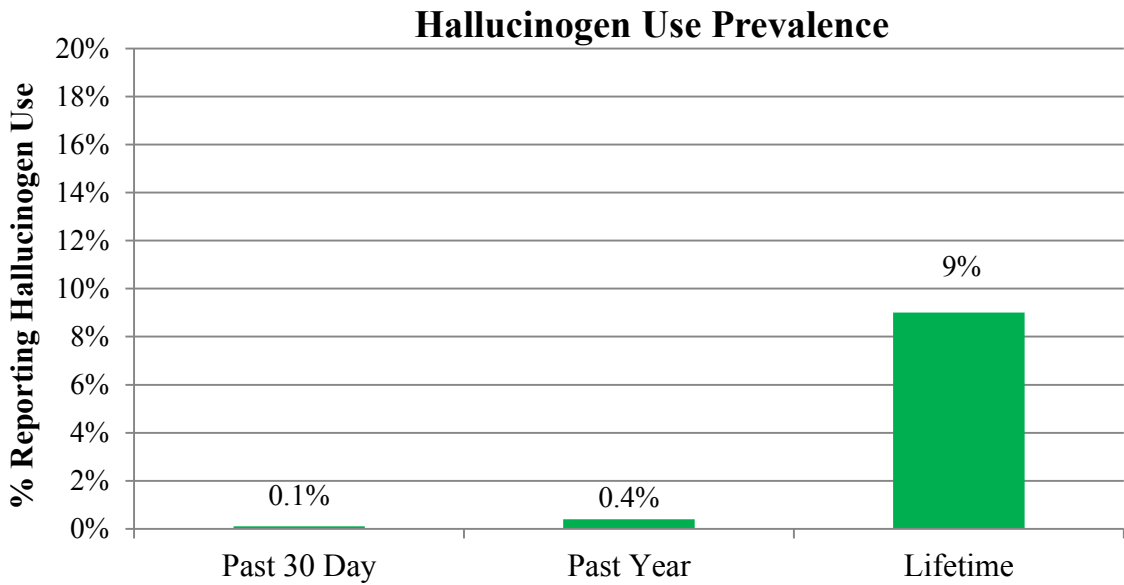
Prevalence rates for reported lifetime use of heroin were highest among 25-34 year olds (3%) and lowest for 65+ year olds (0.2%).

White respondents reported a 2% prevalence rate of lifetime heroin use, double the reported rate of 1% by Hispanics. The reported rate of lifetime use of heroin among Asian/Pacific Islander adults was almost non-existent.



Hallucinogens

Reported use of hallucinogenic substances such as LSD, PCP, and psilocybin mushrooms by Orange County adults ranged from a lifetime-use estimate of 212,000 (9% prevalence rate), to an estimated 9,400 (0.4%) past-year users and 2,400 (0.1%) who reported use in the past 30 days.



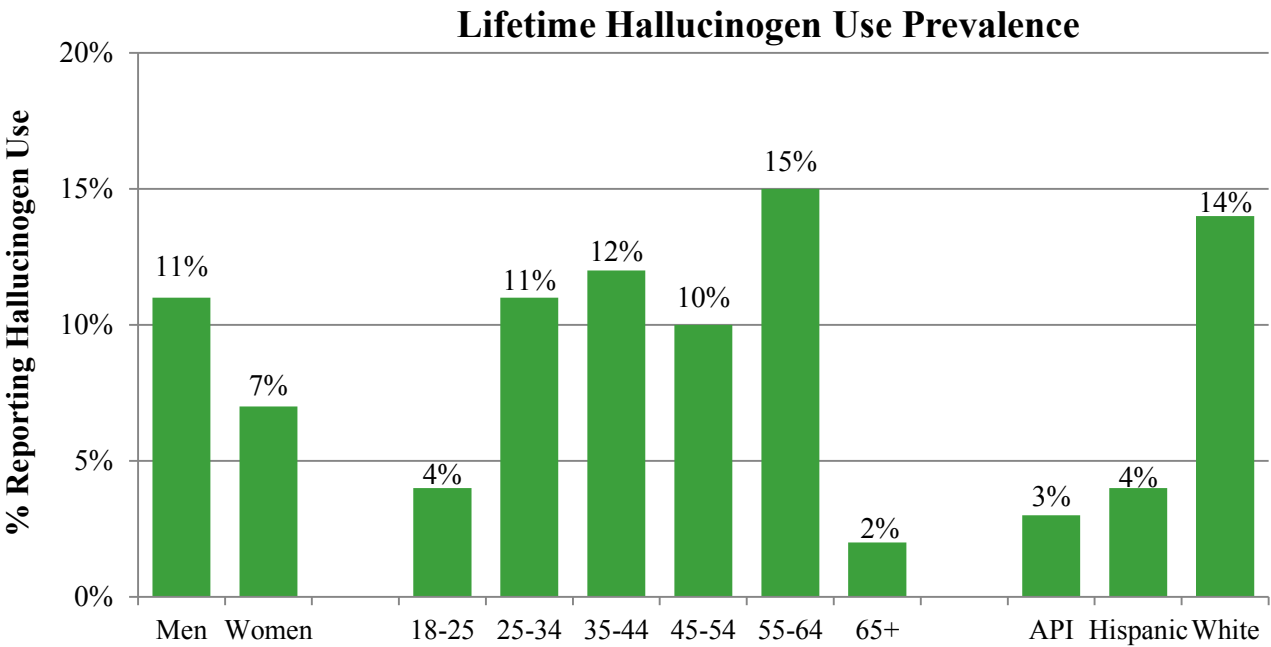
Demographic variations in hallucinogen use

Due to small sample sizes for past year and past 30-day hallucinogen use, demographic analyses were limited to respondents reporting lifetime use of hallucinogens.

Men were one and a half times more likely than women to have reported using hallucinogens in their lifetime (11% vs. 7%).

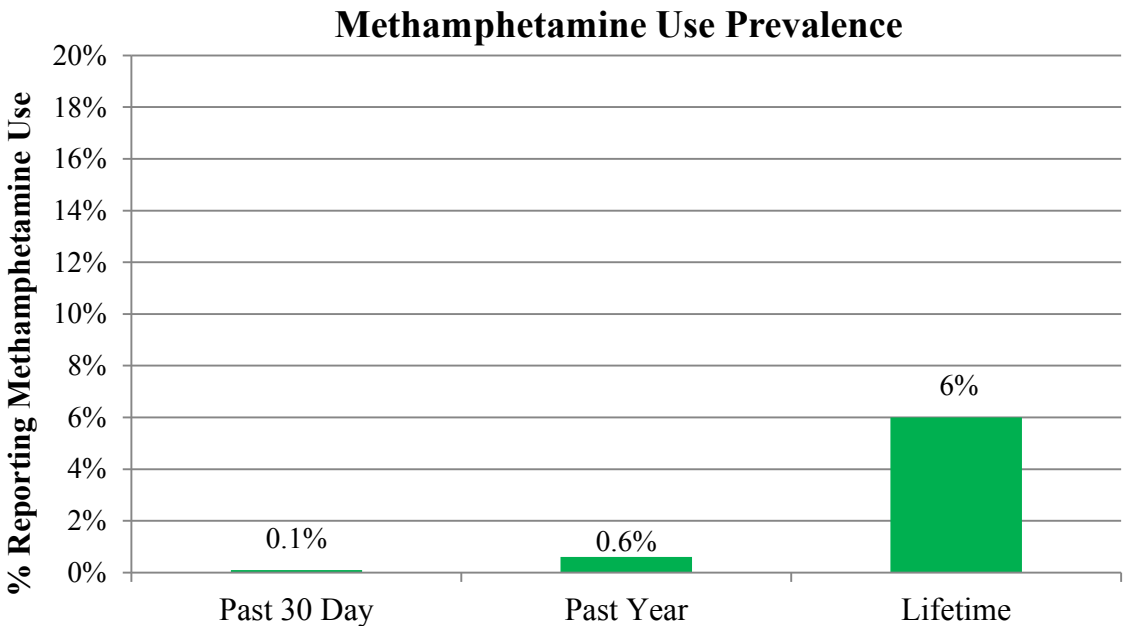
Reported lifetime use was most prevalent among adults in the 55-64 age range, which is consistent with the peak time period for use of hallucinogens in the 1960s and 1970s.

Reported lifetime users of hallucinogens were predominately White (14%) compared to Hispanics (4%) and Asian/Pacific Islanders (3%).



Methamphetamine

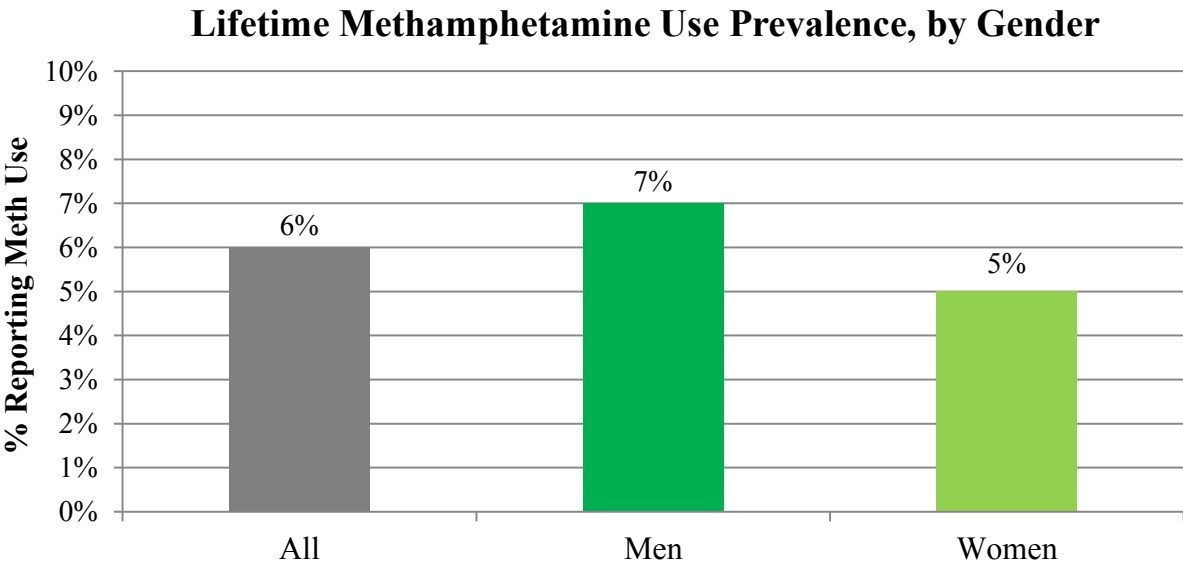
An estimated 142,000 adults (6%) reported using methamphetamine in their lifetime, with 13,000 (or 0.6%) reporting having used in the past year and 2,300 (or 0.1%) within the past 30 days.



Demographic variations in methamphetamine use

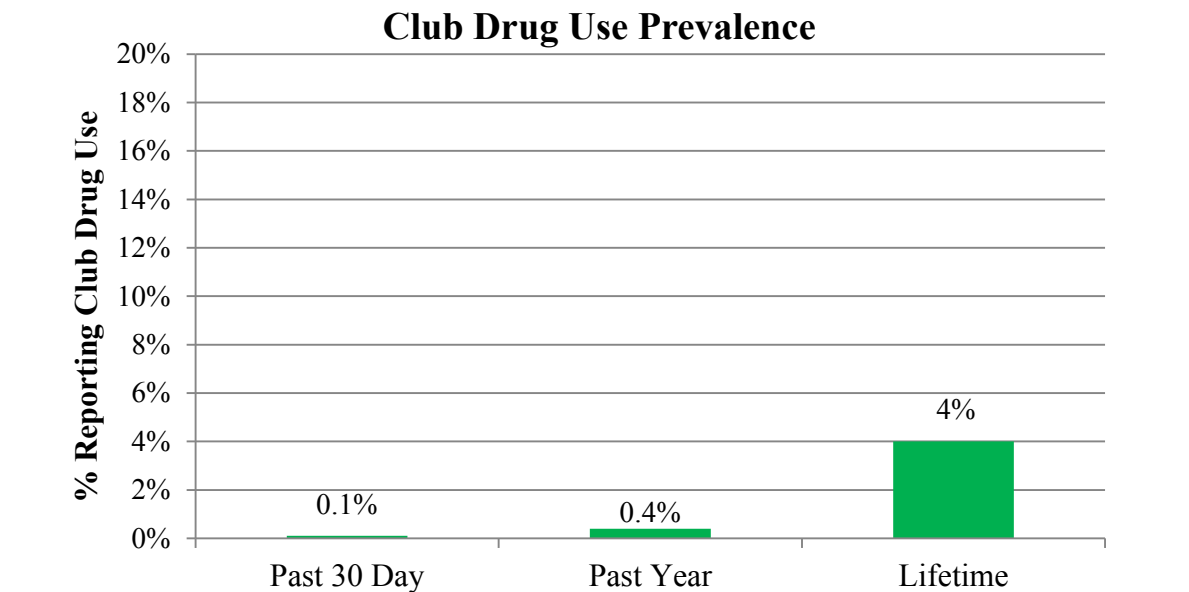
Due to small sample sizes for past year and past 30-day use, and small sample sizes for certain demographic groups, demographic analyses were limited to respondents reporting lifetime use of methamphetamine by gender.

As with all other drugs assessed in the present survey, adult men were more likely than women to have reported lifetime use of methamphetamine (7% vs. 5%).



Club Drugs

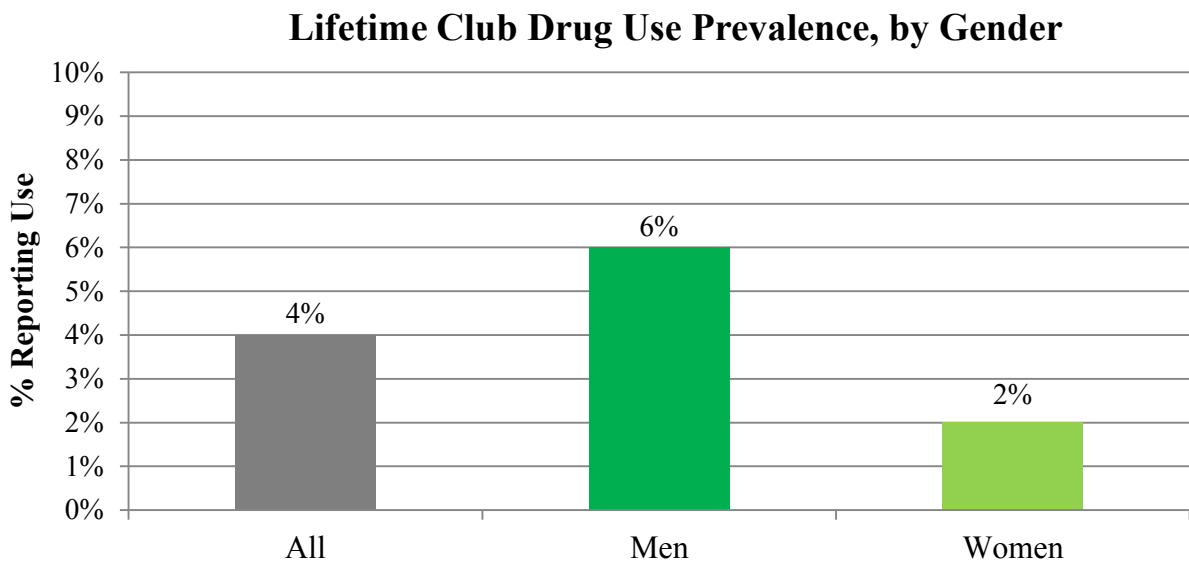
Lifetime use of club drugs, a loosely-defined category of drugs associated with dance clubs and raves, was reported by an estimated 84,000 Orange County adults (or 4%), by 8,400 adults in the past year (or 0.4%) and by an estimated 2,400 (or 0.1%) within the past 30 days.



Demographic variations in club drugs use

Due to small sample sizes for past year and past 30-day use, and small sample sizes for certain demographic groups, demographic analyses were limited to respondents reporting lifetime use of club drugs by gender.

Adult men were three times more likely to have reported use of club drugs in their lifetime than were adult women (6% to 2%).



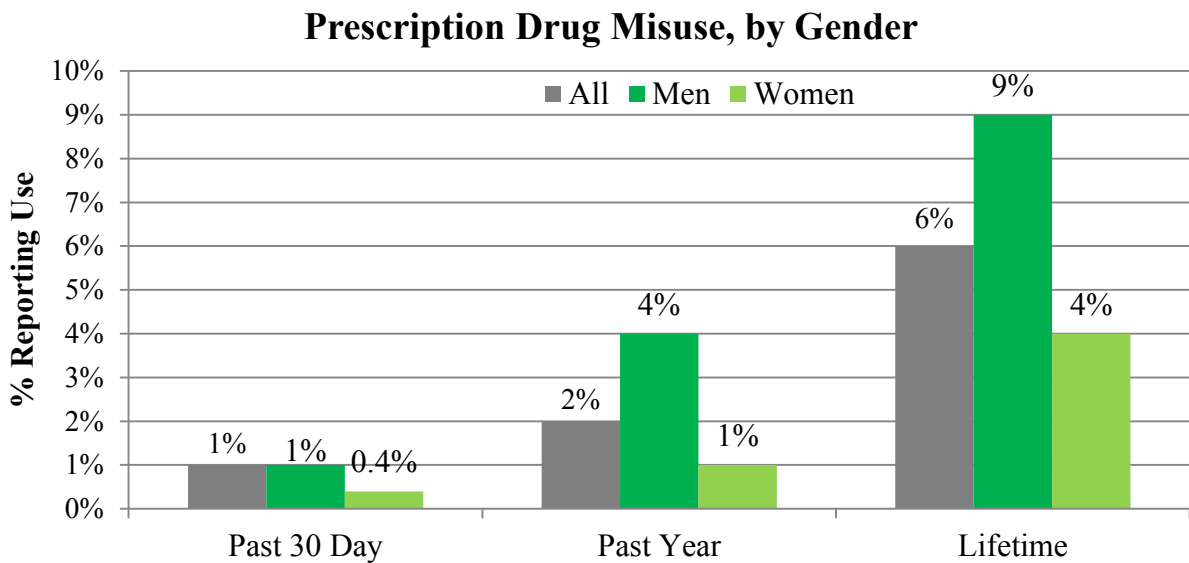
Prescription Drug Misuse Prevalence

Adults’ nonmedical use of four different classes of prescription drugs was assessed in this survey: pain relievers, tranquilizers, stimulants, and sedatives. An estimated 145,000 or 6% of the county’s adult population reported having misused a prescription drug at least once in their lifetime. During the past year, nonmedical use of a prescription drug was reported by approximately 53,000 adults, a prevalence rate of 2%, while an estimated 18,000 (1%) reported prescription drug misuse within the past month.

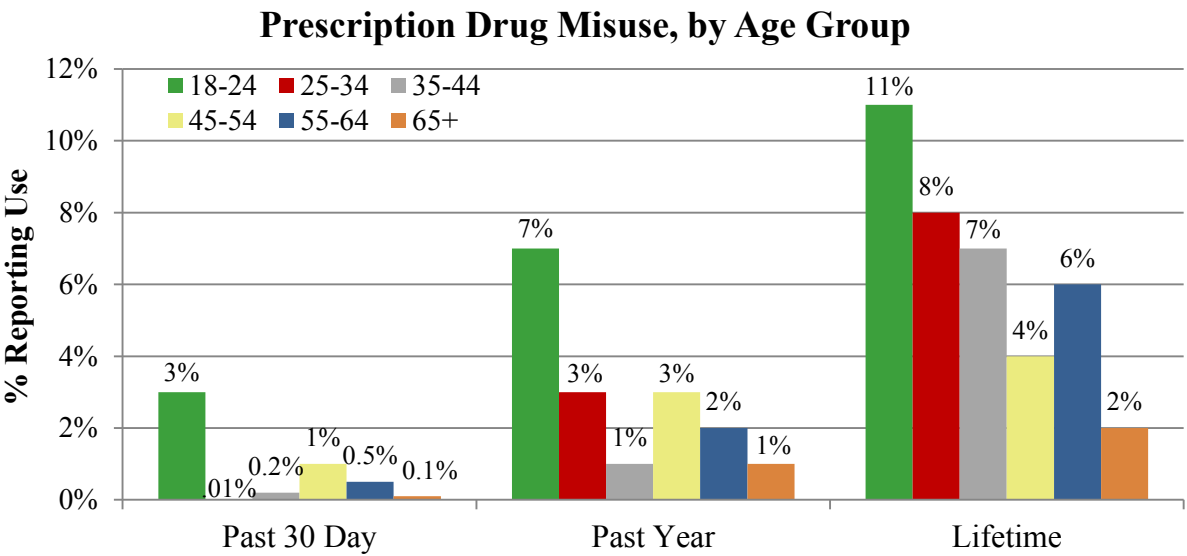
Demographic variations in nonmedical use of prescription drugs

Although the number of respondents reporting nonmedical use of any prescription drug was sufficient for demographic analysis, the sample size for each of the four classes of prescription drugs was not large enough to yield reliable prevalence estimates for the various demographic segments. Therefore, the following demographic analyses represent reported misusers of prescription drugs *in aggregate*.

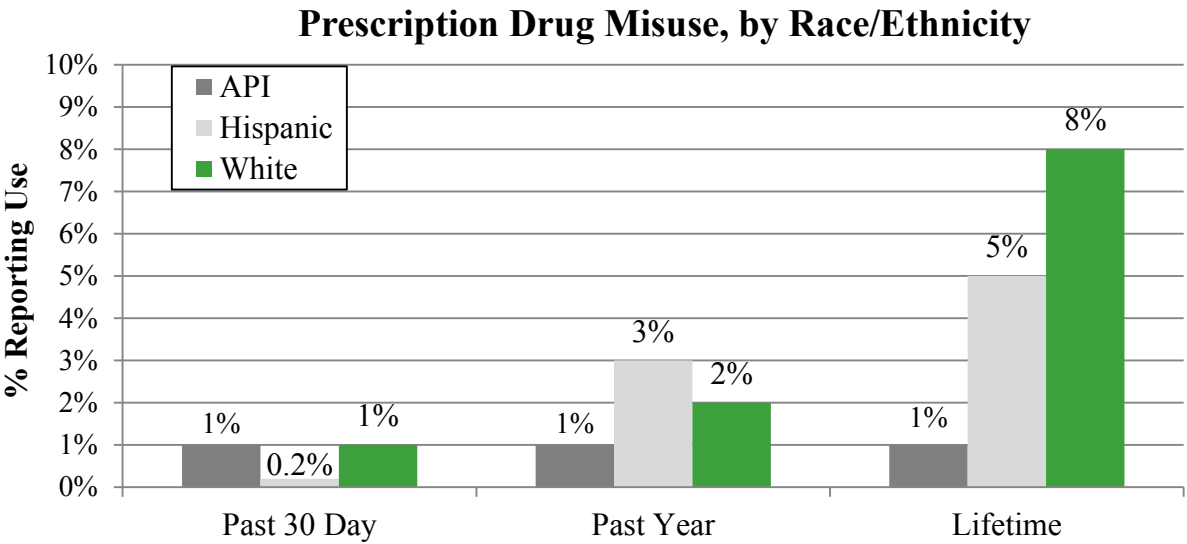
Gender differences. The prescription drug misuse prevalence rate for males was much greater than the rate for females: lifetime, by a factor of 2+; past year, by a factor of 4; and past month, by a factor of 2.



Age differences. Reported nonmedical use of prescription drugs was consistently highest in the 18-24 year age group across all three timeframes. Rates of misuse generally declined with age, except for slight upticks in lifetime rates for the 55-64 year age group, and in past year/past month rates for the aggregate 45-64 year age range.

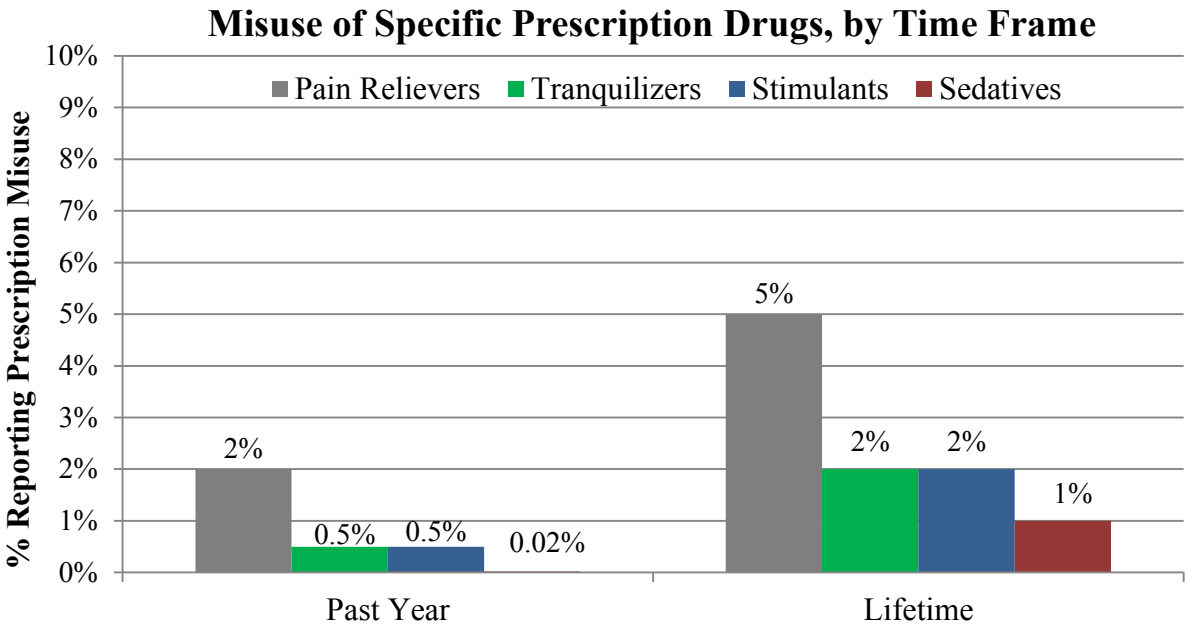


Ethnic differences. There was no consistent pattern of ethnic differences in rates of prescription drug misuse across the three usage timeframes. Lifetime rates were highest among Whites, while Hispanics reported the highest rate of past year misuse, but the lowest rate of past month misuse.



Prevalence of Nonmedical Use of Prescription Drug Types

While the number of adults reporting misuse of each of the four prescription drug types—pain relievers, tranquilizers, stimulants, and sedatives—yielded reliable prevalence estimates for all timeframes, the lifetime and past year rates provide the most stable basis for comparison of prescription drug misuse by drug type. These prevalence rates are presented below in a composite graph showing past-year misuse rates, as well as lifetime misuse rates of the four prescription drug types.



Nonmedical use of prescription pain relievers such as Vicodin™, Percocet™, and OxyContin™ was by far the most commonly reported type of prescription drug misuse across both lifetime and past-year timeframes (estimated 125,000 and 38,000, respectively). Indeed, the estimated number of misusers of prescription pain relievers among Orange County adults was roughly equal to the estimated number of misusers of all other prescription drug types combined. This finding is quite consistent with the many other reports documenting the increase in the non-medical use of prescription pain relievers in virtually all sectors of the country.

The prevalence rate of reported misuse of both tranquilizers and stimulant-type prescription drugs was approximately the same at 2% lifetime (approximately 50,000 adults) and 0.5% in the past year (about 12,000 adults), while reported misuse of sedative-type prescription drugs was the least prevalent, with only 1% of all Orange County adults reporting ever misusing sedatives (an estimated 33,500 adults).

Half of all adults who reported ever misusing stimulants or tranquilizers, and 40% of those who reported ever misusing prescription pain relievers, had misused those substances in the past year. However, only 2% of those who reported ever misusing sedatives had done so in the past year.

IV. DRINKING AND DRIVING

Several items in the survey were devoted to assessing a major threat to public health and safety, specifically, alcohol-impaired driving. Questions about drinking and driving were asked only of adults who reported consuming alcohol either within the past year or within the past 30 days. Prevalence rates and other drinking/driving findings were calculated separately for these two alcohol user populations.

Drinking and Driving Prevalence

Approximately 34,000 or 3% of the 1,063,000 past 30-day alcohol users reported having driven a motor vehicle on at least one occasion in the past 30 days after they “had perhaps too much to drink.” When cross-referenced with survey data on the frequency of drinking and driving, this group of current alcohol users accounted for approximately 42,000 episodes of drinking and driving in the past month, a figure that translates into about 1,400 episodes per day.

Similarly, among the 1,406,000 past year alcohol users, approximately 140,500 or 10% reported having driven when they had too much to drink at least once in the past year. This cohort of past year alcohol users (which includes past 30-day users) accounted for approximately 361,000 drinking and driving episodes over the previous 12 months, or nearly 1,000 episodes each day.

Note: Because adults who are current alcohol users generally drink more frequently than past year users, on any given day they are more likely to be drinking and driving and therefore would account for more episodes of drinking and driving per day.

DRINKING AND DRIVING PREVALENCE/EPIISODES		
	Past 30-Day Users	Past Year Users
Drinking/Driving Prevalence		
Total # drinkers	1,063,000	1,406,000
# drove when had too much to drink	34,000	140,500
Prevalence rate (%)	3%	10%
Drinking/Driving Episodes		
# Past month	42,000	30,000
# Past year	504,000	361,000
# Per day	1,400	1,000

Drinking and Driving Frequency

Adults who drove after they had too much to drink in the past 30 days reported doing so an average of 1.2 times, while those who drank and drove at least once in the past year reported this behavior 2.5 times on average. Consistent with the higher prevalence of drinking and driving among Orange County males, men were more likely to drink and drive (5% of men vs. 1% of women in the past 30 days; 13% of men vs. 6% of women in past year), and reported drinking and driving more frequently on average than females, 2.7 times/year vs. 2.1 times/year.

The two age groups that most frequently reported driving after they had too much to drink in the past year were 25-34 year-olds (3.0 times) and 55-64 year-olds (3.1 times). In contrast, while the 18-24 year old age group reported drinking and driving the least often in the past year (1.8 times), this age group also reported the highest rate of drinking and driving (17% prevalence). This suggests that young adults are more likely as a group to engage in risky behavior, as opposed to older adults who are less likely to engage in high-risk behavior, but those older adults who do tend to do so more often. Whites reported the highest average frequency of drinking and driving over the past 12 months (2.6 times), followed by Hispanics (2.3 times).

FREQUENCY OF DRINKING AND DRIVING				
	Past 30 Days		Past Year	
	%	Mean Number of Times	%	Mean Number of Times
Gender				
Male	5%	-	13%	2.7
Female	1%	-	6%	2.1
Age				
18-24	4%	-	17%	1.8
25-34	7%	-	9%	3.0
35-44	3%	-	11%	2.3
45-54	2%	-	10%	2.7
55-64	2%	-	8%	3.1
65+	1%	-	6%	2.4
Race/Ethnicity				
Asian/Pacific Islander	*	-	5%	1.9
Hispanic	5%	-	12%	2.3
White	3%	-	11%	2.6
Overall	3%	1.2	10%	2.5

- averages are statistically unreliable
* prevalence <0.5%

Demographic Profile of Drinking Drivers

Drinking and driving is much more commonplace among Orange County males, as nearly three times as many men (74%) as women (26%) reported having driven in the past year when they had too much to drink. This gender difference is even more marked among those who reported driving after drinking too much during the past month, with males outnumbering females by a ratio of nearly eight to one (88% vs. 12%).

The age breakdown of those who reported drinking and driving shows that 18-24 year-olds are greatly overrepresented among adults who drank and drove in the past year, while the 25-34 age group is disproportionately represented among those who drank and drove in the past month. Conversely, older adults are under-represented in both drinking-driving timeframes.

Ethnically, drinking and driving is reportedly most prevalent among Whites and least prevalent among Asian/Pacific Islanders, while Hispanics are represented among drinking drivers in close approximation to their proportion of the Orange County adult population.

PROFILE OF THOSE WHO DRANK AND DROVE IN PAST YEAR			
	% of Those Who Drank and Drove in Past Year	% of Those Who Drank and Drove in Past 30 Days	% of Orange County Adult Population
Gender			
Male	74%	88%	49%
Female	26%	12%	51%
Age			
18-24	23%	13%	13%
25-34	18%	39%	18%
35-44	19%	18%	19%
45-54	20%	15%	20%
55-64	12%	10%	14%
65+	8%	6%	15%
Race/Ethnicity			
Asian/Pacific Islander	7%	2%	19%
Hispanic	27%	36%	29%
White	66%	62%	48%

Subjective Threshold for Drinking and Driving

All California drivers are routinely informed by the Department of Motor Vehicles of the blood alcohol concentration (BAC) levels associated with various numbers of drinks consumed, at the time when either a driver license or vehicle registration is issued. These BAC charts are intended to provide guidelines for drivers on the drink-limits for safe driving in reference to the relative risk of being arrested for impaired driving. The generally accepted safe-driving limit for a 150-169 lb. driver, for example, is 2 standard drinks within a two-hour period.

As a measure of survey respondents’ subjective limit or threshold for safe driving, adults who drank within the past year were asked “After how many drinks do you consider yourself unsafe to drive?”

ESTIMATED NUMBER OF DRINKS CAN CONSUME BEFORE SHOULD NOT DRIVE													
# Drinks	Total	Gender		Age						Race/Ethnicity			
		Male	Female	18-24	25-34	35-44	45-54	55-64	65+	Vietna- API	His- mese	panic	White
One	36%	30%	43%	30%	25%	41%	39%	38%	42%	43%	36%	36%	36%
Two	29%	24%	34%	21%	28%	30%	29%	34%	29%	22%	23%	21%	34%
Three	19%	23%	15%	25%	19%	16%	19%	19%	20%	15%	21%	17%	20%
Four or more	16%	23%	8%	24%	28%	13%	12%	10%	8%	19%	19%	25%	11%
Mean	2.5	3.1	1.9	3.3	3.5	2.3	2.2	2.1	2.0	2.7	2.5	3.2	2.1

On average, Orange County adults reported their drink limit at 2.5 drinks, a close approximation of the recommended threshold for safe driving. However, more than one-third of respondents (35%) reported they could have 3 or more drinks before considering themselves unsafe to drive, a level of consumption that entails considerable risk of impairment and arrest for driving under the influence. Moreover, the above findings suggest that certain segments of the adult population are at heightened risk of alcohol-impaired driving based on their drink limit estimates; these include:

- Males—46% reported their limit at 3 or more drinks
- Younger adults ages 18—34 (nearly half reported their limit at 3 or more drinks)
- Hispanics—fully one-fourth (25%) reported they could have 4 or more drinks
- Nearly 1 in 5 (19%) API and Vietnamese adults reported that they could safely consume 4 or more drinks before driving

Drinking-Driving Perceptions

In addition to assessing drinking-driving behavior, the survey also asked a series of questions to assess adults’ perceptions of the drinking-driving problem in Orange County. These questions included:

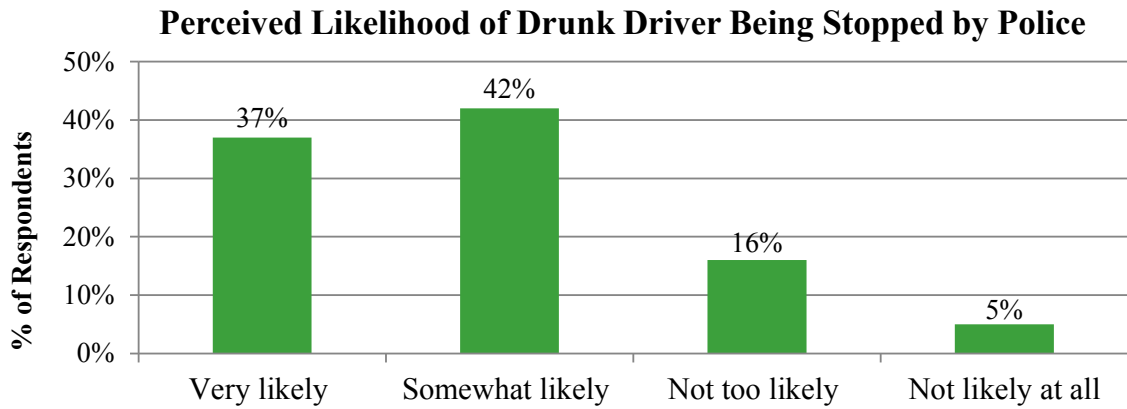
- How much is drinking-driving by others a threat to the safety of you and your family?
- How likely is someone who has had too much to drink to be stopped by police?
- What would have the greatest influence on reducing how often you drink and drive?

Perceived Threat

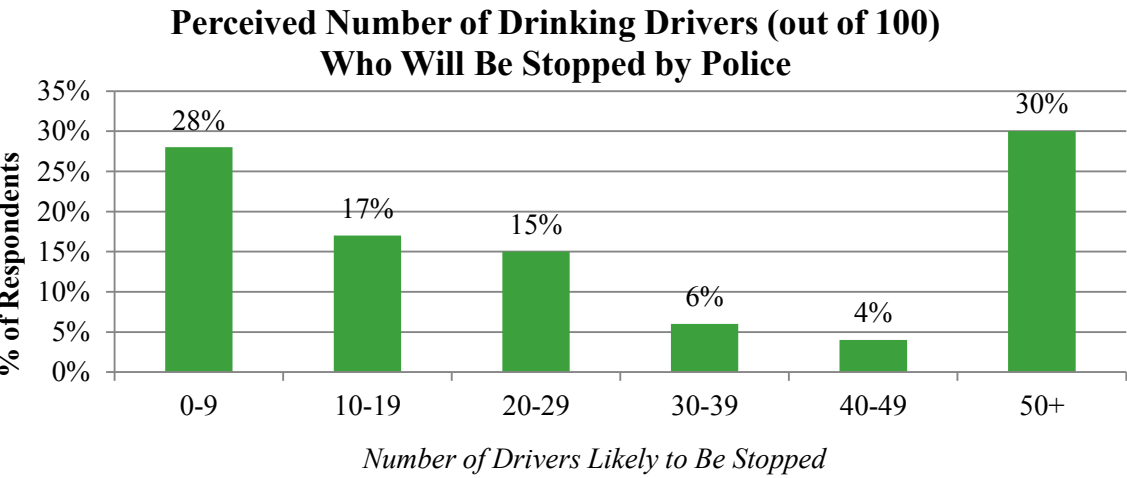
There was a strong consensus that drinking and driving poses a major threat to the personal safety of Orange County residents, with 96% of survey respondents indicating it was either a great threat (81%) or a moderate threat (15%). More women perceived drinking-driving as a great threat than did men (85% to 78%), while decidedly fewer White respondents (71%) rated it as a great threat than did those of other ethnic backgrounds (89%-92%).

Perceived Likelihood of Police Stop

The perceived likelihood of someone who has had too much to drink being stopped by police was assessed in two ways. First, respondents were asked to give a qualitative answer with reference to a 4-point scale ranging from “very likely” to “not at all likely.” As shown in the graph below, the vast majority of adults (79%) rated the likelihood of a police stop as either very likely (37%) or somewhat likely (42%). However, 1 in 5 adults thought it was not likely that an impaired driver would be stopped by police.



A second measure asked respondents to give a more quantitative answer to the following question: “Suppose there are 100 people who are drinking and driving, how many of them do you think will get stopped by the police?” The results for this question are displayed in the graph following.

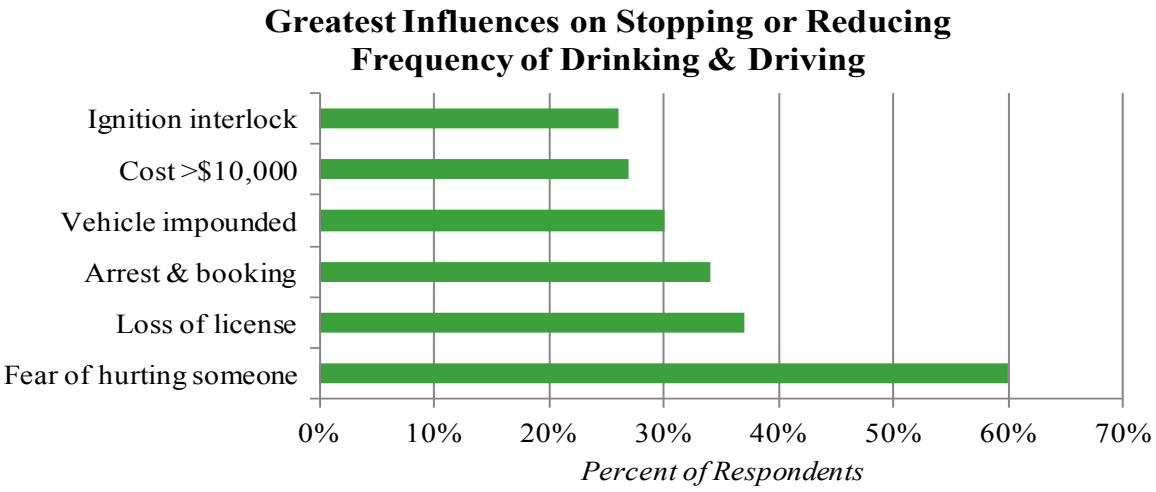


On average, Orange County adults predicted that 29 out of every 100 drivers who had been drinking would be stopped by police, a rather optimistic estimate. Although 30% of adults predicted that 50 or more drinking drivers would be stopped by police, this was offset by the 28% of respondents who estimated that fewer than 10 drinking drivers would be stopped.

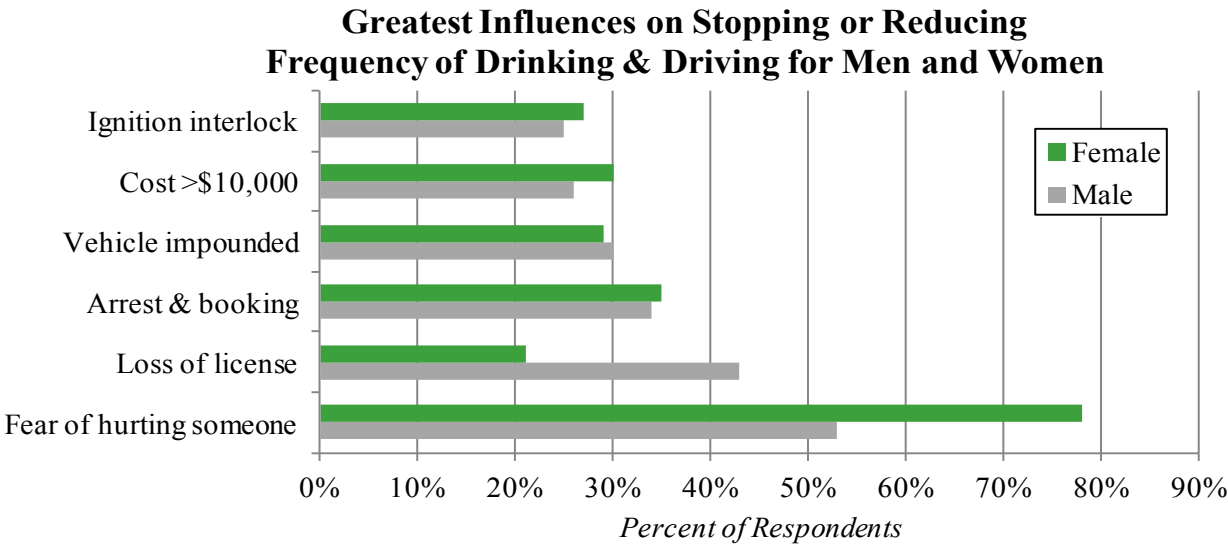
The total number of DUI arrests made in Orange County in 2010 was approximately 16,000. The discrepancy between the number of drinking-driving incidents that result in an arrest and the estimates of between 360,000 and 500,000 annual episodes of drinking and driving presented earlier in this section emphasizes the significant threat that drinking and driving poses to the health and safety of all Orange County residents.

Perceived Influence on Drinking-Drivering

Lastly, survey respondents were asked to indicate which of six predetermined factors would have the greatest influence on preventing or reducing how often they would drink and drive. The tabulated results for all respondents are shown below, indicating that the most commonly reported factor is the *fear of hurting someone*, followed by the *loss of driver license and arrest and booking*.



Analysis of these data by gender reveals that women are much more likely than men to be influenced by the fear of hurting someone, while men assigned greater weight to the loss of their driver license as an influencing factor.



V. COMMUNITY CONCERNS

Residents also indicated how concerned they are about each of nine issues related to alcohol and other drugs in terms of their impact on the health and safety of people in the community. A “0-10” rating scale was used, with a “0” rating meaning not at all concerned and a “10” rating meaning extremely concerned. A complete listing of these nine issues and their mean ratings accompanies the tabulated results presented in this section.

High Priority Community Concerns

People driving under the influence of alcohol or drugs emerged as the issue of greatest concern — consistent with 81% of residents stating that drinking and driving by other people is a “great threat” to personal safety.

Three other issues for which high levels of concern were reported relate to the behavior of young people — *using illegal drugs, engaging in binge drinking, and attending parties where alcohol and drugs are available.*

Relatively high community-concern ratings also were given to *adults engaging in heavy drinking or alcohol abuse*, as well as to *the amount of criminal activity related to the use of alcohol and other drugs.*

Other Community Concerns

Three other issues were given moderately high ratings as community concerns. These issues are:

- Adults using illegal drugs
- People misusing prescription drugs
- The amount of advertising and promotion sponsored by the alcohol industry

COMMUNITY CONCERNS	
COMMUNITY CONCERNS (0 = Not at All Concerned – 10 = Extremely Concerned)	Mean Rating
People driving under the influence of alcohol or drugs	8.9
Young people using illegal drugs	8.6
Young people binge drinking (drinking 5+ drinks at a time)	8.3
Young people attending parties where alcohol and drugs are available	8.3
Adults engaging in heavy drinking or alcohol abuse	8.3
Amount of criminal activity related to use of alcohol and other drugs	8.3
Adults using illegal drugs	8.0
People misusing prescription drugs	7.6
Amount of advertising and promotion sponsored by alcohol industry	6.6

Demographic Differences in Level of Concern

The overall level of concern expressed about these issues differed by gender, age and race/ethnicity.

Women expressed consistently greater concern about each of the nine issues than men. The average rating of concern given these nine issues was 8.5 among women, considerably higher than the 7.7 average by men. The concern showing the greatest discrepancy between men and women was with regard to alcohol-related advertising and promotion, with women being much more concerned (7.2) than men (5.9).

COMMUNITY CONCERNS by GENDER			
COMMUNITY CONCERNS (0 = Not at All Concerned – 10 = Extremely Concerned)	Mean Rating	Gender	
		Male	Female
2 Young people using illegal drugs	8.6	8.2	9.0
3 Young people binge drinking (drinking 5+ drinks at a time)	8.3	8.3	8.9
4 Young people attending parties where alcohol and drugs are available	8.3	7.8	8.7
5 Adults engaging in heavy drinking or alcohol abuse	8.3	7.9	8.6
6 Amount of criminal activity related to use of alcohol and other drugs	8.3	8.0	8.6
7 Adults using illegal drugs	8.0	7.6	8.4
8 People misusing prescription drugs	7.6	7.2	7.9
9 Amount of advertising and promotion sponsored by alcohol industry	6.6	5.9	7.2
Overall Average Concern	8.1	7.7	8.5

Ratings of concern about AOD issues generally increased with age, with the 18-24 and 25-34 age groups both reporting an overall average rating of 7.8 compared to an overall rating of 8.5 expressed by those aged 65 and over. **A notable exception is the high level of concern (9.1) reported by the youngest age group (18-24) regarding the issue of people driving under the influence of alcohol or drugs.** Apparently these young adults are aware of the prevalence of drinking and driving among their age peers and are expressing their concern accordingly.

Concerns about the behavior of young people seem to become more salient around age 35, with those 35 and older being more concerned than those younger than 35. It is possible that adults aged 35 and older are more likely to have children and therefore are more focused on the behavior of young people, or simply that younger adults are less concerned about their behavior and the behavior of their peers.

COMMUNITY CONCERNS BY AGE							
COMMUNITY CONCERNS (0 = Not at All Concerned – 10 = Extremely Concerned)		Age					
		Mean Rating	18- 24	25- 34	35- 44	45- 54	55- 64 65+
1	People driving under the influence of alcohol or drugs	8.9	9.1	8.7	8.9	8.9	8.9 9.0
2	Young people using illegal drugs	8.6	7.8	8.3	8.9	8.8	8.7 8.9
3	Young people binge drinking (drinking 5+ drinks at a time)	8.3	8.2	8.1	8.7	8.8	8.9 9.0
4	Young people attending parties where alcohol and drugs are available	8.3	7.4	7.8	8.7	8.5	8.6 8.7
5	Adults engaging in heavy drinking or alcohol abuse	8.3	8.1	7.9	8.4	8.2	8.4 8.7
6	Amount of criminal activity related to use of alcohol and other drugs	8.3	8.4	8.3	8.2	8.3	8.3 8.4
7	Adults using illegal drugs	8.0	7.8	7.7	8.3	8.0	7.9 8.5
8	People misusing prescription drugs	7.6	7.6	7.3	7.7	7.5	7.6 7.8
9	Amount of advertising and promotion sponsored by alcohol industry	6.6	5.9	6.2	7.1	6.5	6.7 7.1
Overall Average Concern		8.1	7.8	7.8	8.3	8.2	8.2 8.5

In terms of ethnic background, Hispanics reported the greatest overall concern across the nine AOD issues (8.7), while Whites reported the lowest average rating of 7.8. Compared to Whites, each of the other ethnic groups expressed appreciably greater concern about criminal activity related to alcohol and other drugs.

Vietnamese adults, in general, seem to be more concerned about issues related to alcohol and drug use compared with their Asian/Pacific Islander counterparts.

COMMUNITY CONCERNS BY RACE/ETHNICITY					
COMMUNITY CONCERNS (0 = Not at All Concerned – 10 = Extremely Concerned)		Mean Rating	Race/Ethnicity		
			Vietna- API	His- mese	panic White
1	People driving under the influence of alcohol or drugs	8.9	8.8	9.3	9.1 8.8
2	Young people using illegal drugs	8.6	8.5	9.0	9.0 8.4
3	Young people binge drinking (drinking 5+ drinks at a time)	8.3	8.6	8.9	8.9 8.4
4	Young people attending parties where alcohol/drugs are available	8.3	8.3	8.7	8.9 7.9
5	Adults engaging in heavy drinking or alcohol abuse	8.3	8.1	8.4	8.7 8.0
6	Amount of criminal activity related to use of alcohol and other drugs	8.3	8.6	8.8	8.8 7.9
7	Adults using illegal drugs	8.0	8.2	8.7	8.6 7.6
8	People misusing prescription drugs	7.6	7.4	7.5	8.0 7.3
9	Amount of advertising and promotion sponsored by alcohol industry	6.6	6.4	6.7	7.9 5.9
Overall Average Concern		8.1	8.1	8.4	8.7 7.8

Importance of Parent-Child Discussions Regarding AOD

A final survey question asked respondents for their opinion on the importance of parents talking to their children about the risks associated with using alcohol and other drugs. As shown below, there was near unanimity that such discussions are extremely important.

IMPORTANCE OF PARENTS TALKING TO CHILDREN ABOUT RISKS OF USING ALCOHOL AND OTHER DRUGS	
Extremely Important	93%
Fairly Important	6%
Somewhat Important	1%
Not at all Important	*

There were no significant demographic differences in ratings regarding the importance of parents talking to their children about using alcohol or other drugs.

VI. Comparisons of AOD Use Prevalence Rates

This chapter presents comparisons of the 2012 AOD use prevalence rates with the results of the Orange County survey conducted in 2002. For public health purposes, prevalence rates for past 30-day use of substances provide the most meaningful point of comparison across this 10-year interval, and are presented where available. However, for most substances past 30-day prevalence rates were not reliable, therefore, lifetime and/or past year prevalence rates are presented as they provide the only reliable basis for 2002 and 2012 comparisons.

Comparisons from 2002 to 2012 were calculated as “percent change.” It is calculated as follows: %Change = [(2012 value – 2002 value) / 2002 value]*100. Rather than being a simple difference between two values, it instead represents the magnitude of change relative to the 2002 baseline, regardless of the actual percentages being compared. This allows us to make better comparisons of “how much change” occurred over the past decade, across alcohol and other drugs and across demographic groups.

At the same time, caution must be exercised when interpreting exceptionally large percent change values that represent differences between two rather low prevalence rates. While a change from a 1% to a 2% prevalence rate represents a 100% change, that interpretation must be qualified by the fact that the baseline value was very low – the so-called “floor effect” – and the end value is still within the low range.

Statistical comparisons between 2002 and 2012 were not made due to differences in weighting methodology. In 2002, post-stratification was used, in which all weighted variables were adjusted for simultaneously. In 2012, a raking methodology was necessary due to the inclusion of a cell phone sample. Using a raking approach, each weighted variable was adjusted for individually. For more information on raking vs. post-stratification weighting procedures, see <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6122a3.htm>.

Detailed tables showing the 2012 and 2002 prevalence rates for each substance by lifetime, past year, and past 30 days are provided in the appendix to this report. Also contained in the appendix is a table comparing the 2012 AOD use prevalence rates for Orange County adults with comparable rates for the United States and for California.

Alcohol Use

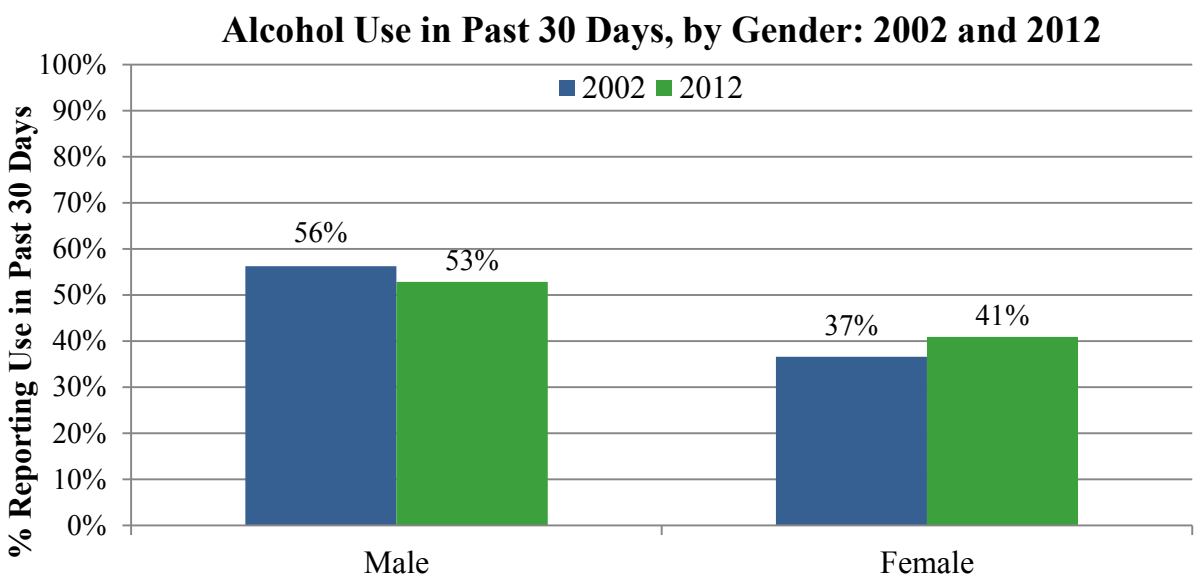
Overall, past 30-day alcohol use rates remained stable, with 46% of adults using alcohol in the previous month in 2002 compared with 47% who were past-month alcohol users in 2012.

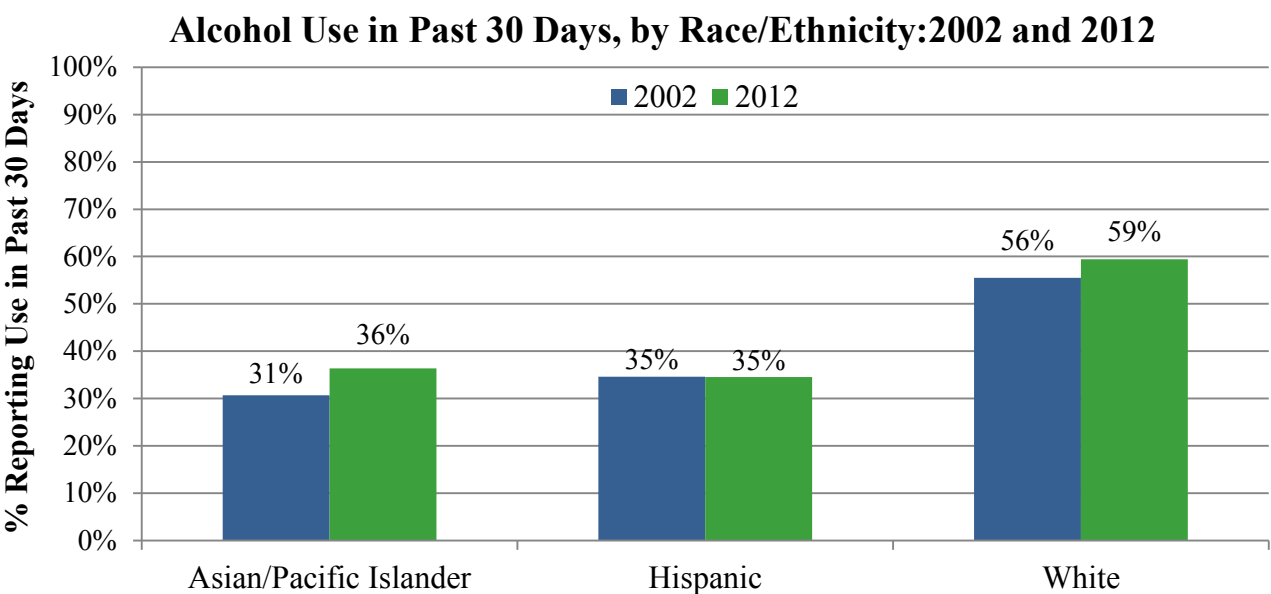
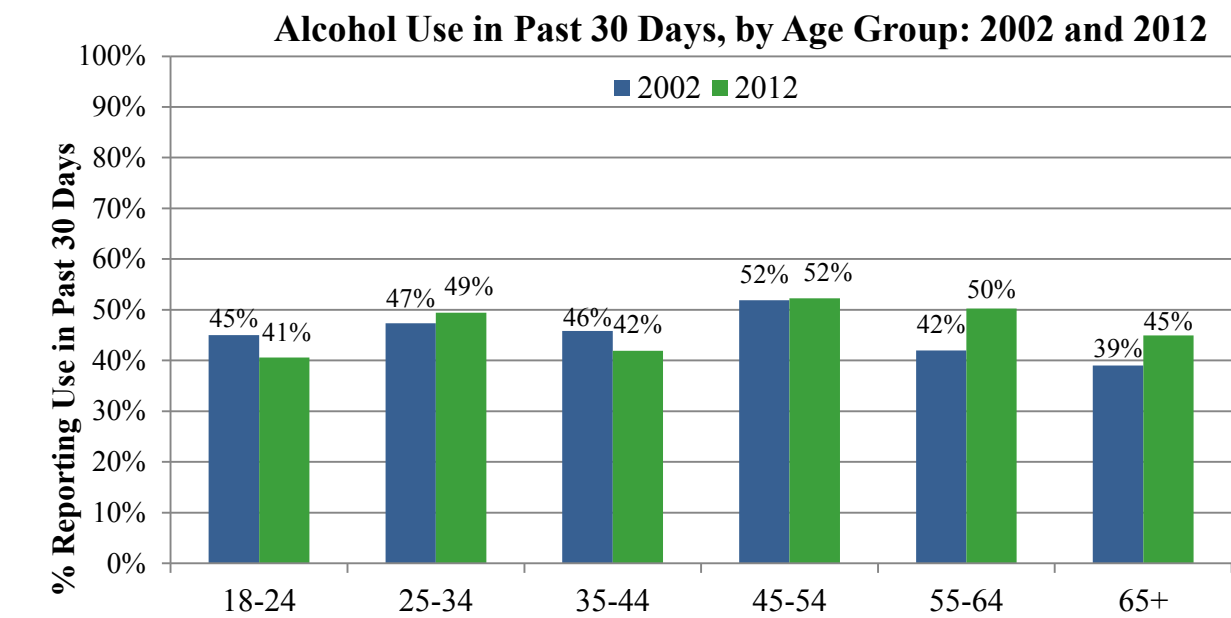
PAST 30 DAYS ALCOHOL USE: 2002-2012

	Gender		Age						Race/Ethnicity			
	Male	Female	18-24	25-34	35-44	45-54	55-64	65+	API	Hispanic	White	Total
2002	56%	37%	45%	47%	46%	52%	42%	39%	31%	35%	56%	46%
2012	53%	41%	41%	49%	42%	52%	50%	45%	36%	35%	59%	47%
%Change	-5%	11%	-9%	4%	-9%	0%	19%	15%	16%	0%	5%	2%

The largest increases reported in past-month alcohol use between 2002 and 2012 were among persons aged 55-64 (19%), persons age 65+ (15%), and Asian/Pacific Islander adults (16%). In contrast, the 18-24 and 35-44 age groups showed the greatest decreases in past-month alcohol use over the same time period (-9%). Whereas men showed a small decrease in past-month alcohol use over the 10-year period (-5%), women showed a moderate increase (11%).

These 2002 and 2012 comparisons by demographic segments are shown graphically on the following pages.





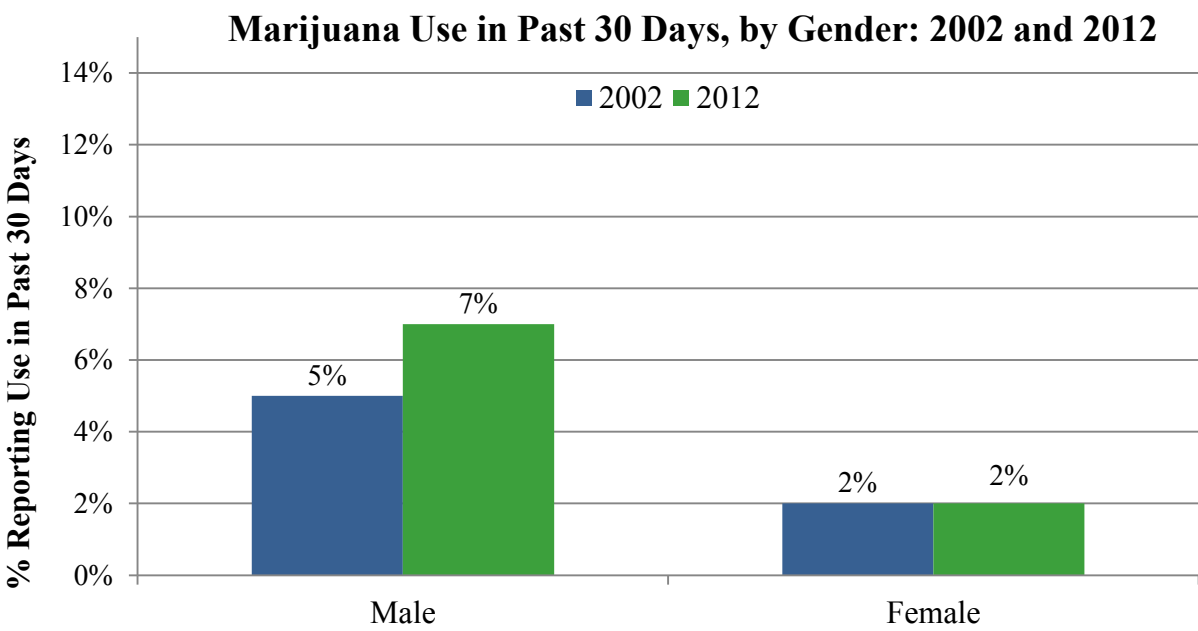
Marijuana Use

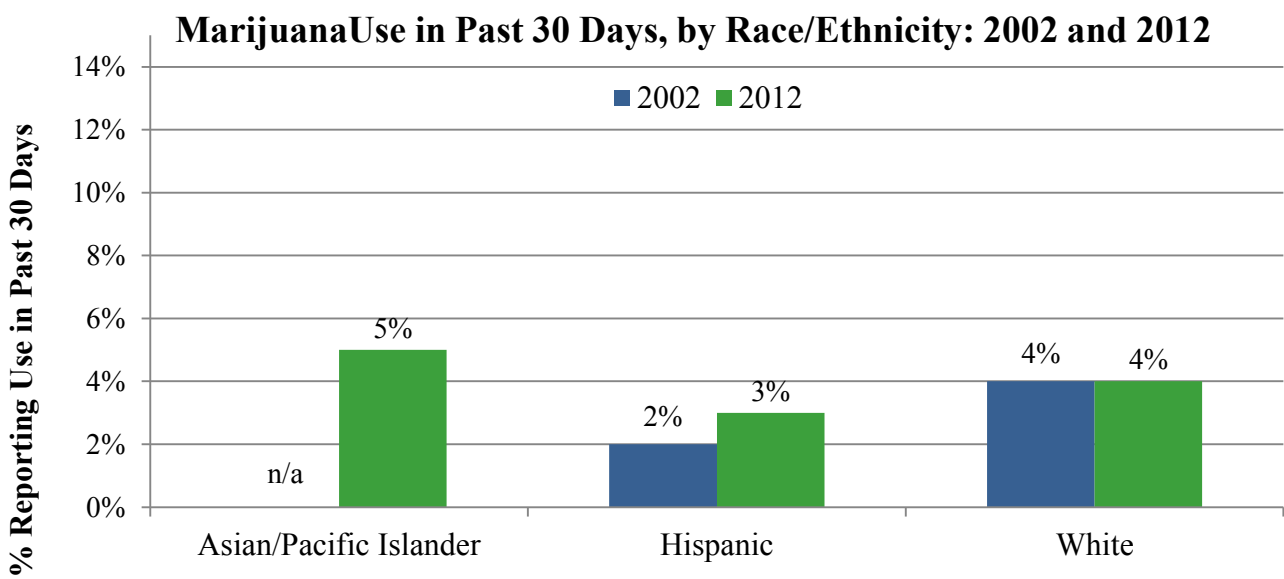
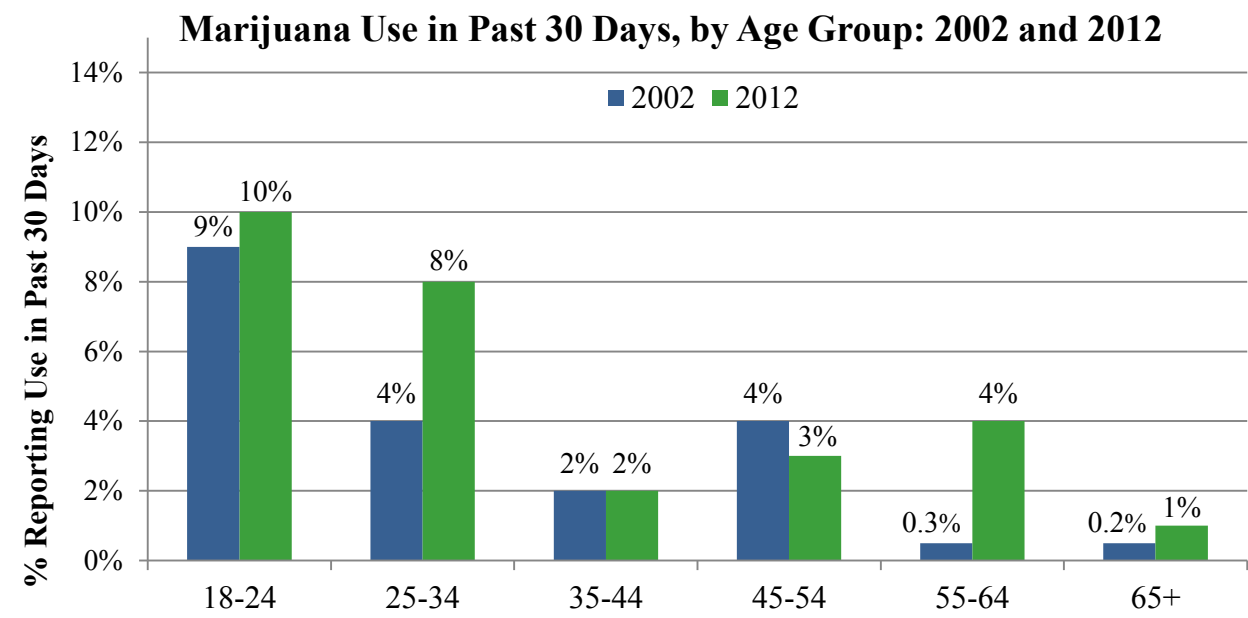
Overall, past 30-day marijuana use increased by 67% between 2002 and 2012 (from 3% to 5% of all adults).

PAST 30 DAYS MARIJUANA USE: 2002 - 2012												
	Gender		Age						Race/Ethnicity			
	Male	Female	18-24	25-34	35-44	45-54	55-64	65+	API	Hispanic	White	Total
2002	5%	2%	9%	4%	2%	4%	0.3%	0.2%	--	2%	4%	3%
2012	7%	2%	10%	8%	2%	3%	4%	1%	5%	3%	4%	5%
%Change	40%	0%	11%	100%	0%	-25%	1233%	400%	--	50%	0%	67%

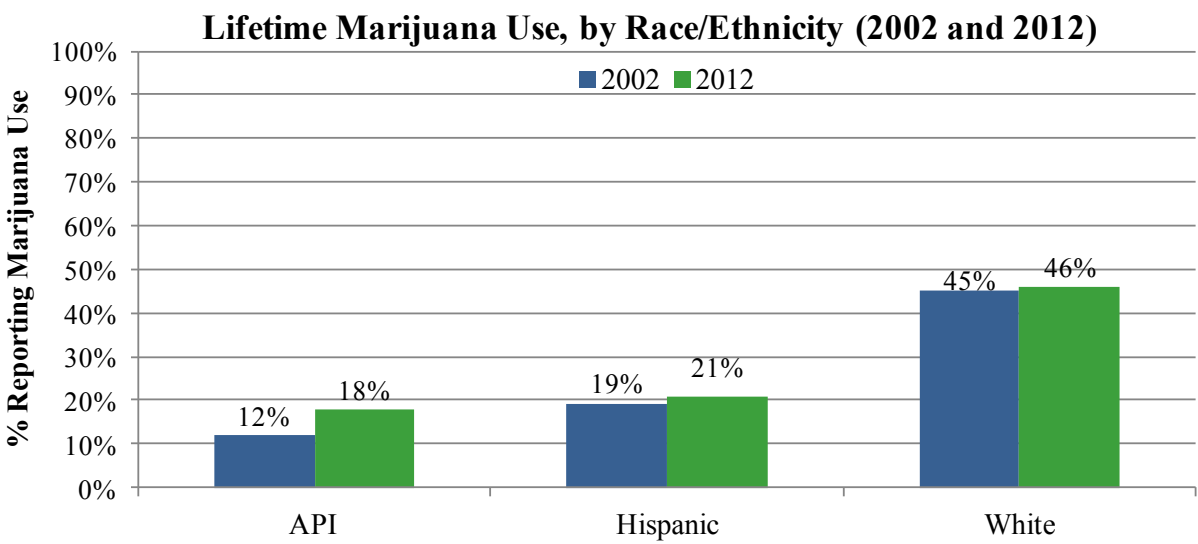
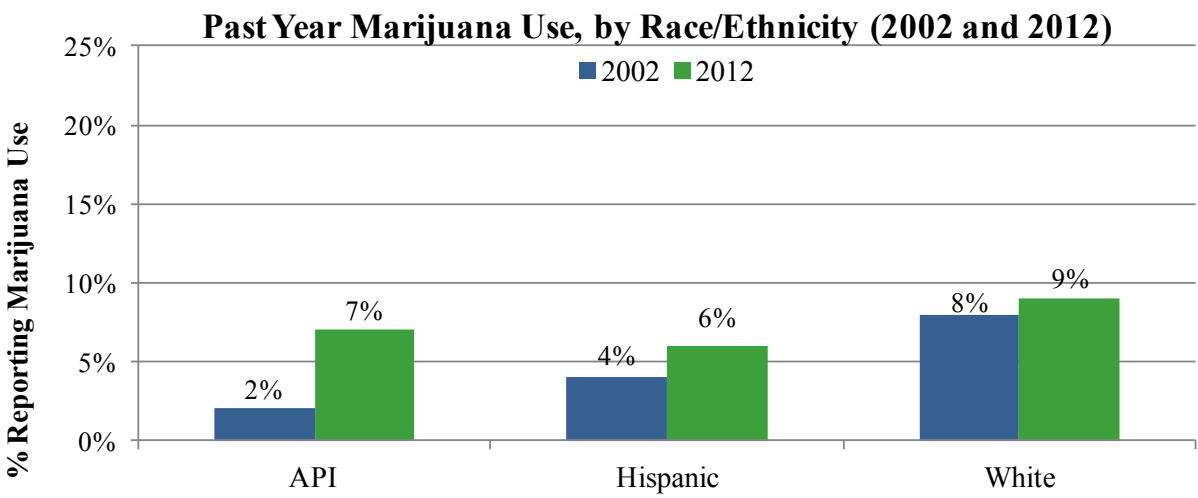
The largest increases reported in past-month marijuana use between 2002 and 2012 were among men (40%), persons aged 25-34 (100%), 55-64 (1,233%), and 65+ (400%) years, and among Hispanic adults (50%). The only decrease in past-month marijuana use over the 10-year period was among the 45-54 age group (-25%).

These 2002 to 2012 comparisons by demographic segments are shown graphically on the following pages.





Because the 30-day use estimate for API in 2002 was unstable, it precludes any comparison of past month use rates for this ethnic group. However, when past year and lifetime rates are examined (see graphs below), it appears that rates of marijuana use are definitely on the rise among API adults.



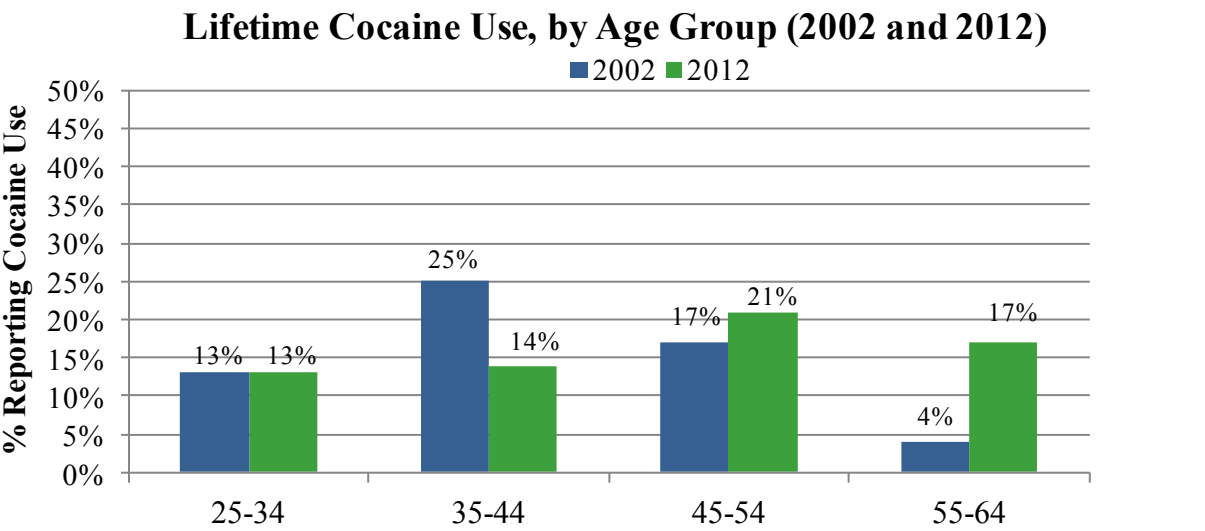
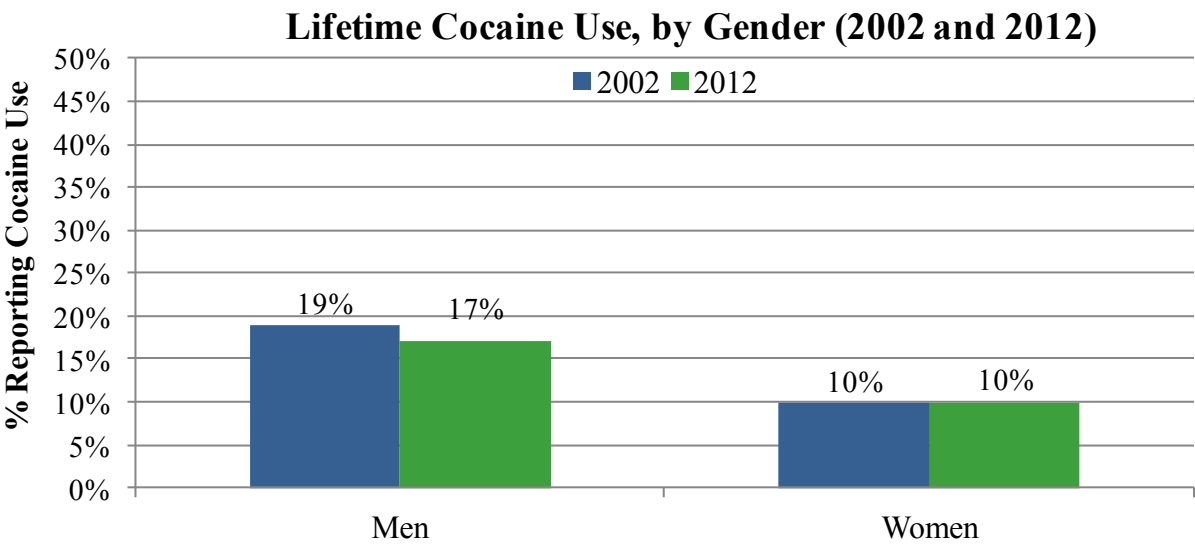
Cocaine Use

Overall, the lifetime rate of cocaine use was fairly stable between 2002 and 2012, with a slight decrease from 14% to 13%.

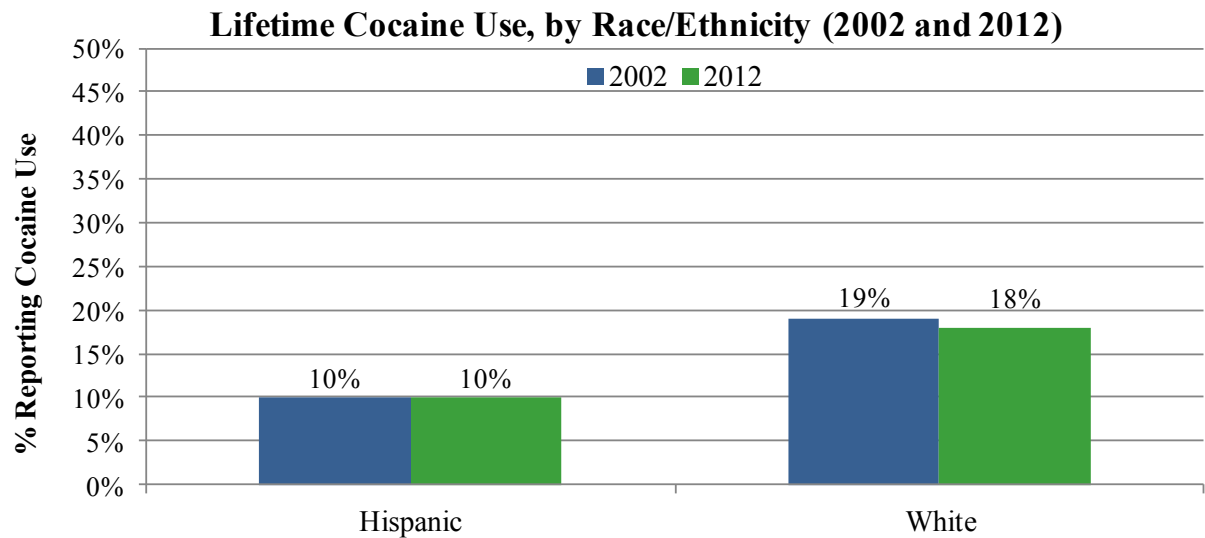
LIFETIME COCAINE USE: 2002 - 2012									
	Gender		Age				Race/Ethnicity		
	Male	Female	25-34	35-44	45-54	55-64	Hispanic	White	Total
2002	19%	10%	13%	25%	17%	4%	10%	19%	14%
2012	17%	10%	13%	14%	21%	17%	10%	18%	13%
%Change	-11%	0%	0%	-44%	24%	325%	0%	-5%	-7%

Reported lifetime use of cocaine among men decreased by -11% between 2002 (19%) and 2012 (17%), but remained unchanged for women (10%). Among age groups, lifetime use decreased considerably from 2002 to 2012 in the 35-44 age group (-44%), but increased correspondingly in both the 45-54 age group (24%) and the 55-64 group (325%), marking the aging of the peak-lifetime-usage cohort over the ten year interval. There was a slight decrease in both lifetime and past year use of cocaine among Whites, while these usage rates remained unchanged among Hispanics.

These 2002 to 2012 comparisons by demographic segments are graphically depicted on the following pages.



It is interesting to note the above symmetry between the prevalence rates for 45-54 year-olds in 2002 and 55-64 year-olds in 2012, suggesting that the 17% of users in 2002 may have aged into the 17% of who responded in 2012.



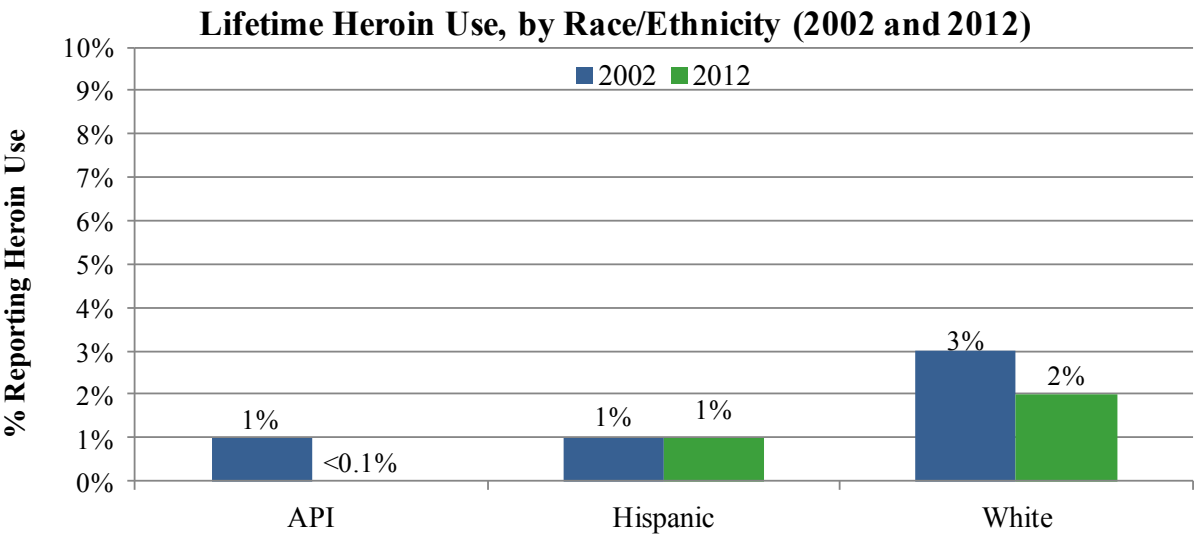
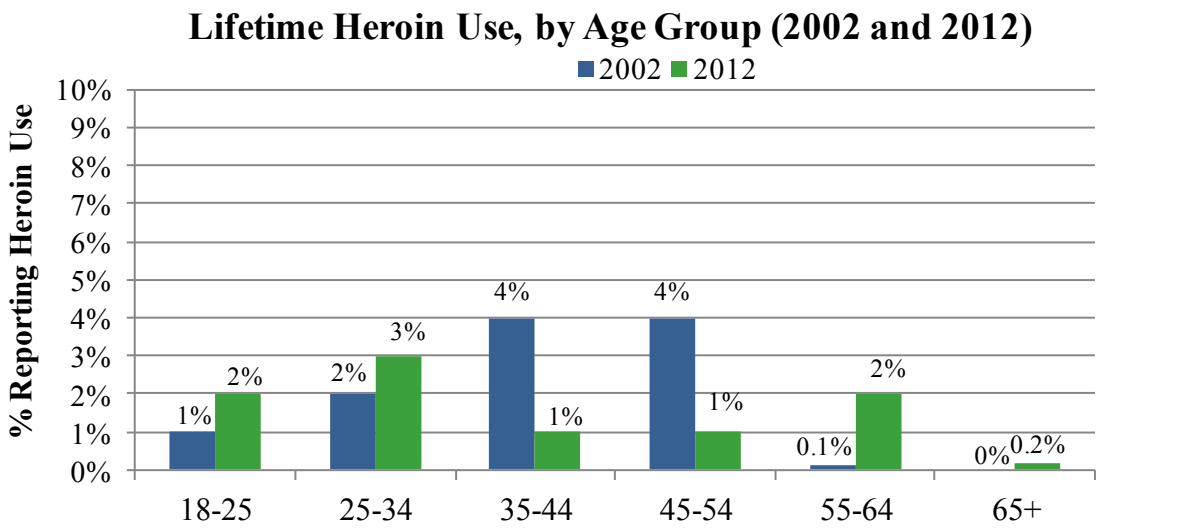
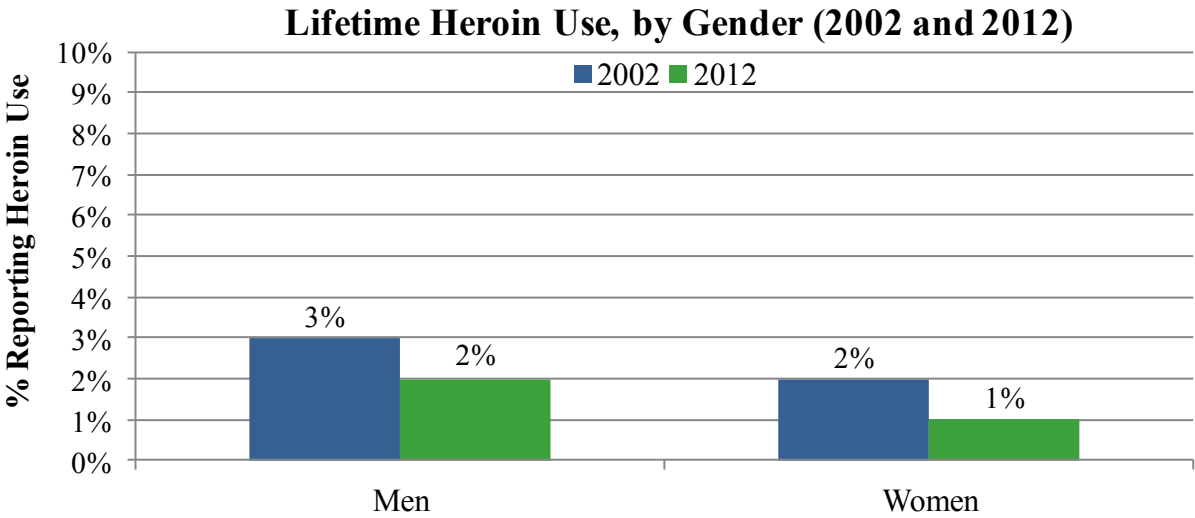
Heroin Use

Overall, lifetime heroin use rates remained low, decreasing by half from 2% in 2002 to 1% in 2012.

LIFETIME HEROIN USE: 2002 - 2012												
	Gender		Age						Race/Ethnicity			
	Male	Female	18-24	25-34	35-44	45-54	55-64	65+	API	Hispanic	White	Total
2002	3%	2%	1%	2%	4%	4%	0.1%	0%	1%	1%	3%	2%
2012	2%	1%	2%	3%	1%	1%	2%	0.2%	<0.1%	1%	2%	1%
%Change	-33%	-50%	100%	50%	-75%	-75%	1900%	*	*	0%	-33%	-50%

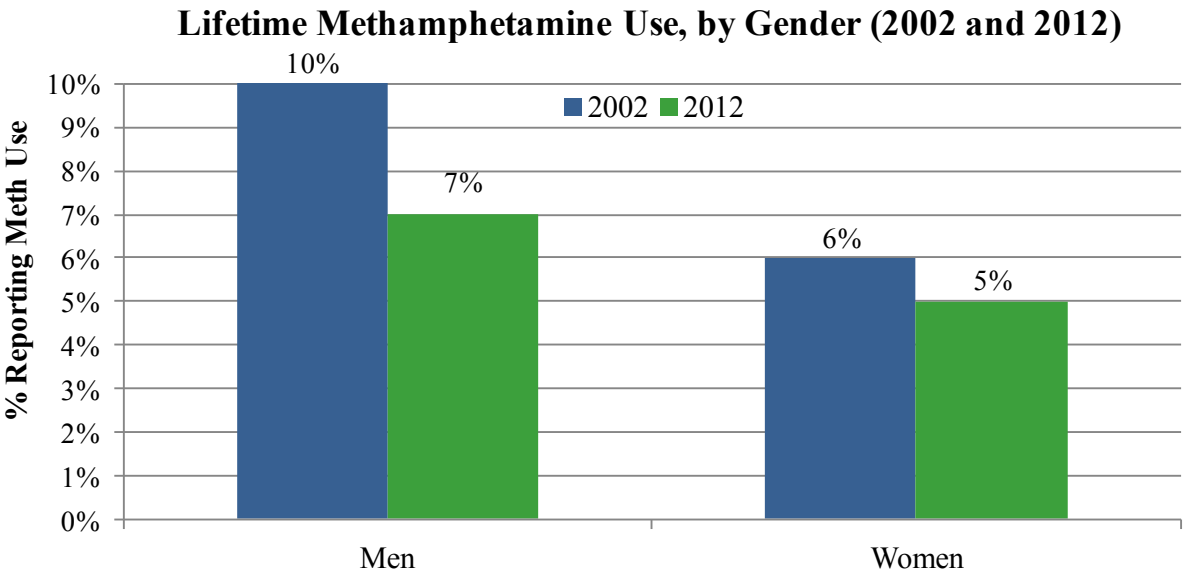
*%Change distorted due to very small rate or 0% rate in one of the years.

Comparisons of reported use of heroin between 2002 and 2012 were limited to lifetime rates as the only reliable estimates. These comparisons by demographic segments reveal a mixture of increases and decreases in rates of lifetime use between 2002 and 2012. The reported rates for both genders decreased, while the two youngest and two oldest age cohorts reported increases in lifetime use of heroin. Adults aged 35-54 reported decreasing lifetime rates. Reported lifetime heroin rates decreased for Whites, but remained unchanged for Hispanic adults. It should be noted that all lifetime prevalence rates of heroin use were of very low magnitude, thus small differences between 2002 and 2012 can yield relatively large change scores. These 2002 to 2012 comparisons by demographic segments are graphically depicted on the following pages.



Methamphetamine Use

Overall, the reported lifetime prevalence of methamphetamine use decreased by 25% between 2002 and 2012. This decrease was most evident in the lifetime rates for men, which declined from 10% in 2002 to 7% in 2012, a 30% decrease. Lifetime rates for women also declined, but only by 17% (6% to 5%). Other demographic breakouts for methamphetamine use were not possible due to small cell sizes.



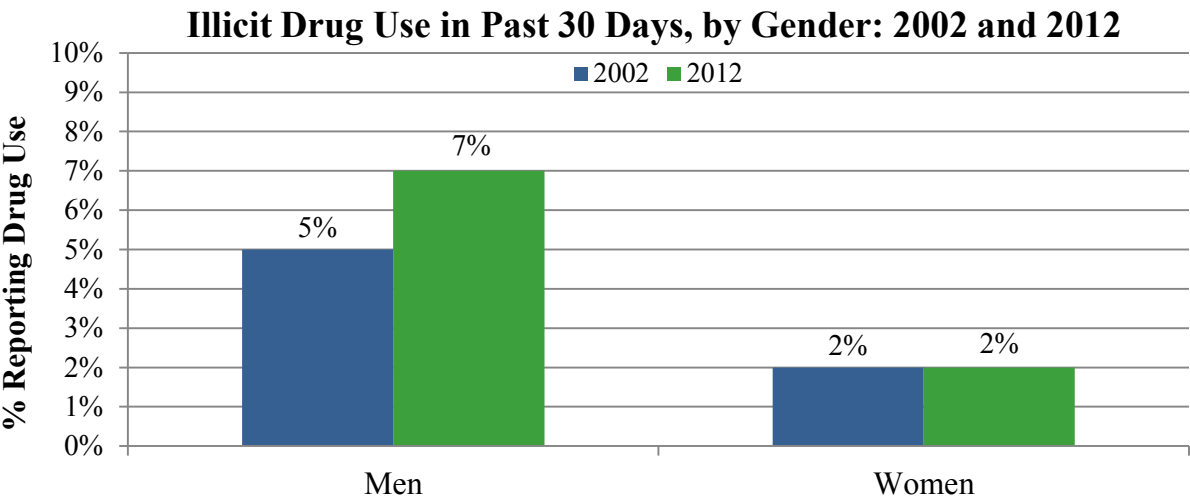
Illicit Drug Use

In addition to presenting data on trends in use of specific types of drugs, this section focuses on trends in overall illicit drug use between 2002 and 2012. The phrase “use of any illicit drug” includes use of at least one of the six types of illicit drugs assessed in the study (i.e., marijuana, cocaine, heroin, hallucinogens, methamphetamine, or club drugs).

Overall, past 30-day use of any illicit drug increased slightly from 3% in 2002 to 5% in 2012.

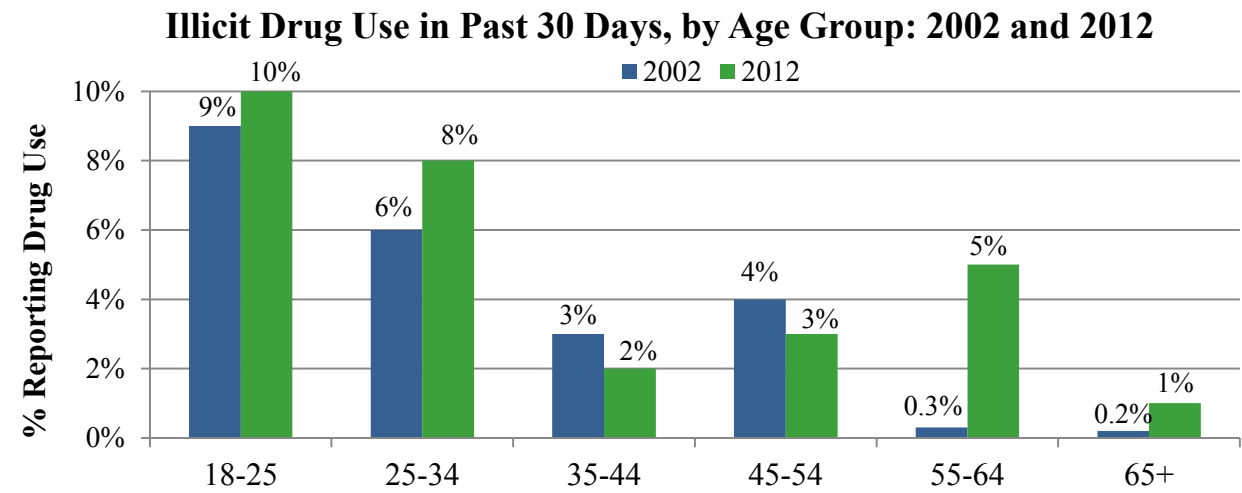
PAST 30 DAYS ILLICIT DRUG USE: 2002 - 2012												
	Gender		Age						Race/Ethnicity			
	Male	Female	18-24	25-34	35-44	45-54	55-64	65+	API	Hispanic	White	Total
2002	5%	2%	9%	6%	3%	4%	0.3%	0.2%	1%	2%	5%	3%
2012	7%	2%	10%	8%	2%	3%	5%	1%	5%	2%	4%	5%
%Change	40%	0%	11%	33%	-33%	-25%	1567%	400%	400%	0%	-20%	45%

The prevalence of reported use of any illicit drug in the past 30 days increased by 40% among men between 2002 and 2012, but remained unchanged among women.

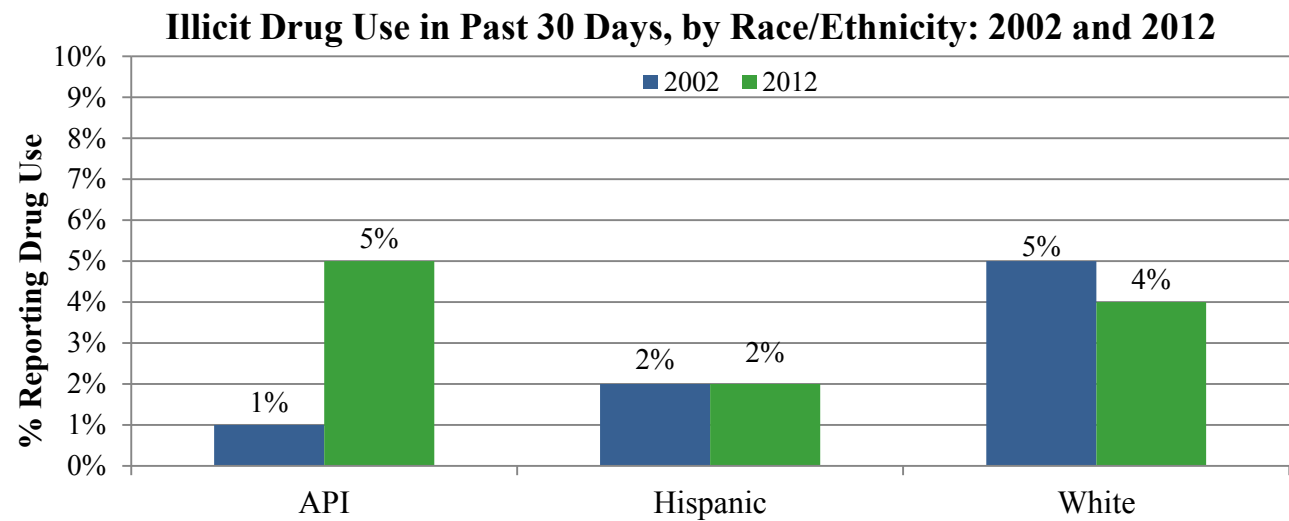


Analysis of the differences between 2002 and 2012 in reported current use of illicit drugs by age reveals increased illicit drug use among both the youngest and the oldest age cohorts. While the oldest groups showed the greatest percent increases in past-month use of illicit drugs, young adults continued to report the highest rates of past-month illicit drug use. In contrast, reported rates of any illicit drug use among the two middle age groups decreased between 2002 and 2012, by 33% among 35-44 year olds and by 25% among those aged 45-54.

Comparisons of AOD Use Prevalence Rates



Lastly, Asian/Pacific Islander respondents reported a much higher rate of illicit drug use in 2012 (5%) compared to the 2002 rate (1%), a quadrupling increase that parallels the reported increase in marijuana use by API adults. Over the same time span, White adults showed a 20% decrease in reported use of any illicit drug, while the prevalence rate for Hispanics remained stable at 2%.



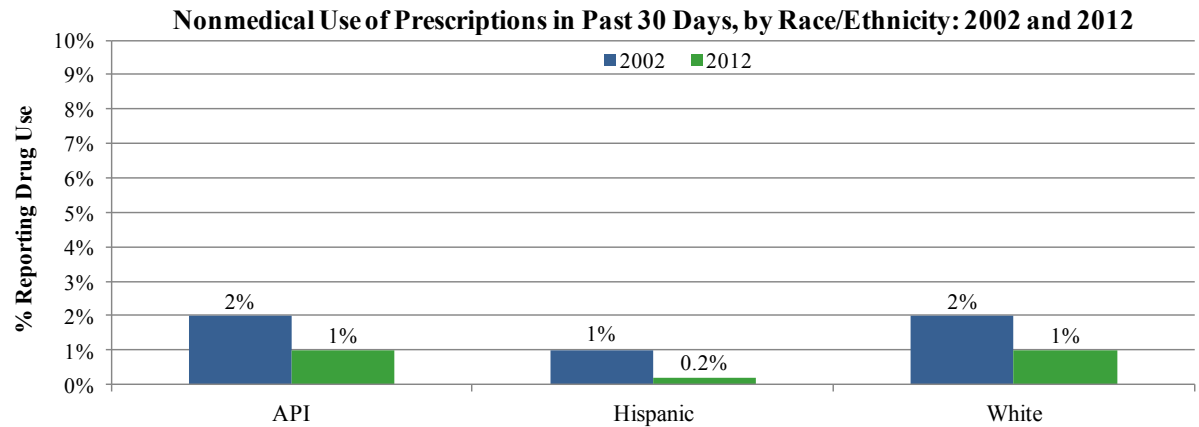
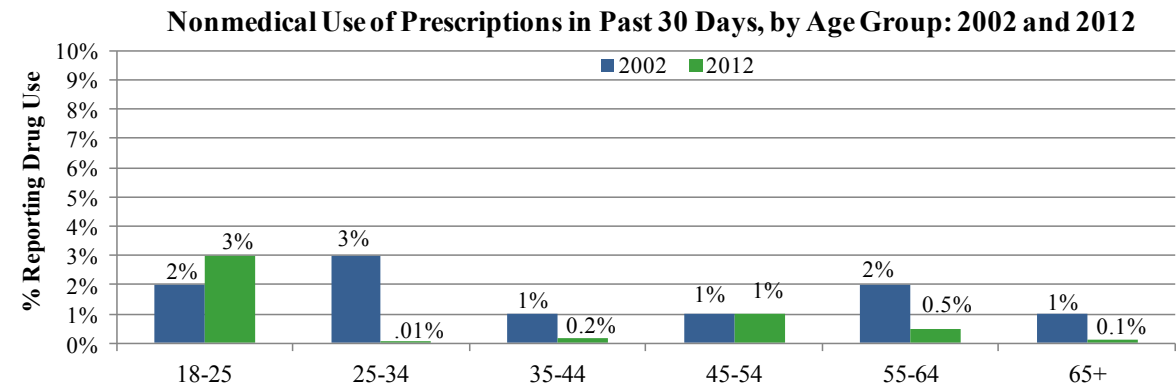
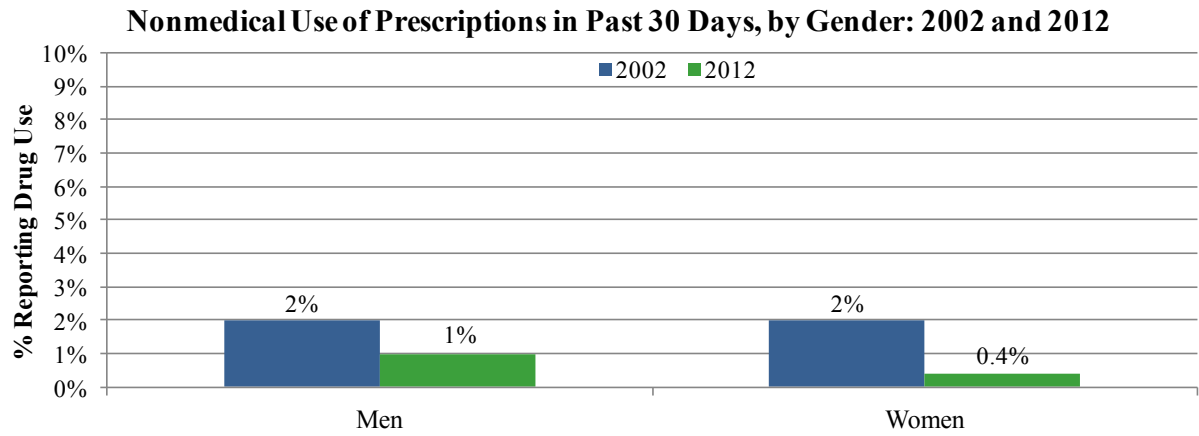
Nonmedical Use of Prescription Drugs

Overall, past 30-day nonmedical use of prescription drugs remained low over the past decade, decreasing from 2% in 2002 to 1% in 2012.

PAST 30 DAYS NONMEDICAL USE OF PRESCRIPTION DRUGS: 2002 - 2012											
	Gender		Age						Race/Ethnicity		
	Male	Female	18-24	25-34	35-44	45-54	55-64	65+	API	Hispanic	White
2002	2%	2%	2%	3%	1%	1%	2%	1%	2%	1%	2%
2012	1%	0.4%	3%	.01%	0.2%	1%	0.5%	0.1%	1%	0.2%	1%
%Change	-50%	-80%	50%	-100%	-80%	0%	-75%	-90%	-50%	-80%	-50%

Comparisons of AOD Use Prevalence Rates

With the sole exception of the 18-24 year-old age cohort, reported nonmedical use of any prescription drug in the past 30 days decreased or remained the same for all other demographic segments between 2002 and 2012. Conversely, there was a 50% increase among 18-24 year olds, rising from a rate of 2% in 2002 to 3% in 2012.



VII. APPENDIX

Comparison of AOD Use Prevalence Rates: US, CA and OC

The table below provides a comparison of AOD use prevalence rates among Orange County adults with available data at both the national and state levels. With few notable exceptions, Orange County residents tend to have comparable and, in many cases, much lower rates of AOD use. For example, about 35% of OC adults report lifetime use of illicit drugs compared to 49% nationwide.

While the prevalence of alcohol use in OC is somewhat comparable to that of available national and state data, the reported rate of binge drinking in the past month among OC adults is only half the U.S. and California rates. Similarly, the prevalence of nonmedical use of prescription drugs, which has been characterized in recent years as a national epidemic, is appreciably lower among OC adults than among adults nationwide. One exception is the higher prevalence of OC adults’ lifetime and past-year use of methamphetamine compared to national use rates. This continues a pattern of relatively high meth use among OC adults that was noted in the 2002 survey, although the prevalence of past-month meth use reported by OC adults was less than the U.S. rate.

COMPARISON OF SUBSTANCE USE PREVALENCE RATES¹: US, CA, OC

Substance	Lifetime Use			Past Year Use			Past Month Use		
	United States ²	Calif-ornia ³	Orange County ⁴	United States ²	Calif-ornia ³	Orange County ⁴	United States ²	Calif-ornia ³	Orange County ⁴
Illicit Drugs⁵	49%	na	34%	14%	na	8%	9%	10%	5%
Marijuana	45%	na	33%	11%	14%	8%	7%	8%	4.5%
Cocaine	16%	na	13%	2%	2%	1%	0.6%	na	0.3%
Heroin	2%	na	1%	0.2%	na	0.4%	0.1%	na	0.1%
Hallucinogens	15%	na	9%	1.5%	na	0.4%	0.3%	na	0.1%
Methamphetamine	5%	na	6%	0.4%	na	0.6%	0.2%	na	0.1%
Club Drugs/Ecstasy ⁶	6%	na	4%	1%	na	0.4%	0.2%	na	0.1%
Rx/Psychotherapeutics	21%	na	6%	6%	na	2%	2%	na	1%
Pain Relievers	14%	na	5%	4%	5%	2%	2%	na	0.4%
Tranquilizers	9%	na	2%	2%	na	0.5%	1%	na	0.1%
Stimulants	9%	na	2%	1%	na	0.5%	0.4%	na	0.5%
Sedatives	3%	na	1%	0.2%	na	<0.1%	0.1%	na	<0.1%
Alcohol	87%	na	82%	70%	na	62%	56%	55%	47%
Binge Drinking	na	na	na	na	na	na	24%	25%	12%

¹ All prevalence estimates are rates for the respective adult populations aged 18 years and older
² Source: 2011 National Survey on Drug Use and Health
³ Source: State Estimates of Substance Use From the 2009-10 National Survey on Drug Use and Health
⁴ Source: Orange County Health Care Agency 2012 Alcohol and Other Drug Use Survey
⁵ “Illicit Drugs” includes prescription drugs used non-medically
⁶ Comparison of OC prevalence with US prevalence rate should be interpreted with caution as the OC rate reflects use of “Club Drugs” collectively, including Ecstasy, Rohypnol, and Ketamine (Special K), while the US rate reflects use of Ecstasy only.
“na” indicates data not available

Detailed Tables Comparing 2002 and 2012 AOD Use Prevalence Rates

The following tables provide comparisons between prevalence rates for 2002 and 2012 for each time frame. The first three tables show overall rates for alcohol, and each illicit and prescription drug. The last three tables show rates by demographic groups for those substances for which reliable data were available.

OC DRUG USE PREVALENCE 2002 and 2012 (Past 30 Days)

	2002		2012	
Alcohol	961,000	46%	1,063,000	47%
Marijuana	71,000	3%	103,000	4.5%
Cocaine	7,500	0.4%	7,300	0.3%
Heroin	1,800	0.1%	1,800	0.1%
Hallucinogens	2,900	0.1%	2,400	0.1%
Methamphetamine	16,000	1%	2,300	0.1%
Club Drugs	6,700	0.3%	2,400	0.1%
Pain Relievers	31,000	1%	9,100	0.4%
Tranquilizers	9,400	0.5%	1,400	0.1%
Stimulants	6,000	0.3%	12,000	0.5%
Sedatives	2,000	0.1%	500	0.02%
Illicit Drugs	79,000	4%	105,000	5%
Rx Drug Misuse	35,000	2%	18,000	1%

OC DRUG USE PREVALENCE 2002 and 2012 (Past Year)

	2002		2012	
Alcohol	1,274,000	61%	1,406,000	62%
Marijuana	131,500	6%	181,000	8%
Cocaine	29,000	1%	20,500	1%
Heroin	4,100	0.2%	9,700	0.4%
Hallucinogens	7,800	0.4%	9,400	0.4%
Methamphetamine	21,600	1%	13,000	0.6%
Club Drugs	21,300	1%	8,400	0.4%
Pain Relievers	65,600	3%	38,000	2%
Tranquilizers	21,600	1%	12,000	0.5%
Stimulants	7,200	0.3%	12,000	0.5%
Sedatives	9,700	0.5%	500	0.02%
Illicit Drugs	152,000	7%	188,000	8%
Rx Drug Misuse	71,000	3%	53,000	2%

OC DRUG USE PREVALENCE 2002 and 2012 (Lifetime)				
	2002		2012	
Alcohol	1,768,000	85%	1,862,000	82%
Marijuana	697,000	34%	758,000	33%
Cocaine	300,000	14%	301,000	13%
Heroin	43,000	2%	33,000	1%
Hallucinogens	218,000	10%	212,000	9%
Methamphetamine	163,000	8%	142,000	6%
Club Drugs	98,000	5%	84,000	4%
Pain Relievers	135,000	6%	125,000	5%
Tranquilizers	78,000	4%	51,000	2%
Stimulants	45,000	2%	45,000	2%
Sedatives	45,000	2%	33,500	1%
Illicit Drugs	722,000	35%	773,000	34%
Rx Drug Misuse	148,000	7%	145,000	6%

2002 and 2012 OC PREVALENCE RATES BY GENDER, AGE, & RACE/ETHNICITY (PAST 30 DAYS)														
	Alcohol		Marijuana		Cocaine		Halluci- nogens		Metham- phetamine		Rx Drug Illicit Drugs		Misuse	
	2002	2012	2002	2012	2002	2012	2002	2012	2002	2012	2002	2012	2002	2012
Gender														
Male	56%	53%	5%	7%	0.6%	0.5%	0.3%	0.2%	1%	0.1%	5%	7%	2%	1%
Female	37%	41%	2%	2%	0.1%	0.2%	0%	0%	0.2%	0.07%	2%	2%	2%	0.4%
Age														
18-24	45%	41%	9%	10%	-	-	-	-	-	-	9%	10%	2%	3%
25-34	47%	49%	4%	8%	-	-	-	-	-	-	6%	8%	3%	0.01%
35-44	46%	42%	2%	2%	1%	0%	0%	0%	-	-	3%	2%	1%	0.2%
45-54	52%	52%	4%	3%	0%	0.2%	0%	0%	-	-	4%	3%	1%	1%
55-64	42%	50%	0.3%	4%	0%	0%	0%	0%	-	-	0.3%	5%	2%	0.5%
65+	39%	45%	0.2%	1%	-	-	-	-	-	-	0.2%	1%	1%	0.05%
Race/Ethnicity														
API	31%	36%	-	5%	-	-	-	-	-	-	1%	5%	2%	1%
Hispanic	35%	35%	2%	3%	0.3%	0.3%	-	-	-	-	2%	2%	1%	0.2%
White	56%	59%	4%	4%	0.5%	0.1%	-	-	-	-	5%	4%	2%	1%
Total	961,000	1,063,000	71,000	103,000	7,500	7,300	2,900	2,400	16,000	2,300	79,000	105,000	35,000	18,000
	46%	47%	3%	5%	0.4%	0.3%	0.1%	0.1%	1%	0.1%	4%	5%	2%	1%

- Prevalence estimate was statistically unreliable

2002 and 2012 OC PREVALENCE RATES BY
GENDER, AGE, & RACE/ETHNICITY (PAST YEAR)

	Alcohol		Marijuana		Cocaine		Halluci-nogens		Metham-phetamine		Illicit Drugs		Rx Drug Misuse	
	2002	2012	2002	2012	2002	2012	2002	2012	2002	2012	2002	2012	2002	2012
Gender														
Male	70%	69%	10%	12%	2%	2%	0.4%	1%	2%	1%	11%	12%	4%	4%
Female	53%	55%	3%	4%	1%	0.3%	0.3%	0.2%	1%	0.3%	4%	4%	3%	1%
Age														
18-24	62%	63%	19%	19%	-	-	-	-	-	-	20%	20%	6%	6%
25-34	61%	65%	9%	12%	-	-	-	-	-	-	12%	12%	5%	3%
35-44	62%	58%	4%	5%	1%	0.4%	0%	<0.01%	-	-	5%	5%	3%	1%
45-54	66%	64%	5%	5%	0.2%	0.4%	0%	0.01%	-	-	5%	5%	2%	2%
55-64	60%	65%	1%	7%	0%	0%	0%	0%	-	-	1%	7%	3%	1%
65+	48%	56%	1%	2%	-	-	-	-	-	-	1%	2%	2%	0.5%
Race/Ethnicity														
API	45%	49%	3%	7%	-	-	-	-	-	-	4%	7%	3%	1%
Hispanic	52%	50%	5%	6%	1%	1%	-	-	-	-	5%	5%	2%	3%
White	70%	73%	8%	9%	2%	1%	-	-	-	-	9%	9%	4%	2%
Total	1,274,000	1,406,000	131,500	181,000	29,000	20,500	7,800	9,400	21,600	13,000	152,000	188,000	71,000	53,000
	61%	62%	6%	8%	1%	1%	0.4%	0.4%	1%	1%	7%	8%	3%	2%

- Prevalence estimate was statistically unreliable

2002 and 2012 OC PREVALENCE RATES BY
GENDER, AGE, & RACE/ETHNICITY (LIFETIME)

	Alcohol		Marijuana		Cocaine		Halluci-nogens		Metham-phetamine		Illicit Drugs		Rx Drug Misuse	
	2002	2012	2002	2012	2002	2012	2002	2012	2002	2012	2002	2012	2002	2012
Gender														
Male	91%	88%	39%	39%	19%	17%	14%	11%	10%	7%	41%	40%	8%	9%
Female	79%	76%	28%	28%	10%	10%	7%	7%	6%	5%	29%	29%	7%	4%
Age														
18-24	80%	71%	37%	34%	-	-	-	-	-	-	40%	35%	9%	11%
25-34	82%	82%	36%	38%	13%	13%	-	-	-	-	36%	40%	8%	8%
35-44	85%	81%	41%	31%	25%	14%	15%	12%	-	-	43%	31%	10%	7%
45-54	91%	86%	43%	38%	17%	21%	14%	10%	-	-	43%	39%	6%	4%
55-64	89%	87%	24%	41%	4%	17%	3%	15%	-	-	25%	42%	5%	6%
65+	75%	83%	8%	16%	-	-	-	-	-	-	8%	17%	4%	2%
Race/Ethnicity														
API	62%	59%	12%	18%	-	-	-	-	-	-	13%	19%	7%	1%
Hispanic	79%	76%	19%	21%	10%	10%	-	-	-	-	22%	21%	4%	5%
White	94%	92%	45%	46%	19%	18%	-	-	-	-	46%	46%	9%	8%
Total	1,768,000	1,862,000	697,000	758,000	300,000	301,000	218,000	212,000	163,000	142,000	722,000	773,000	148,000	145,000
	85%	82%	34%	33%	14%	13%	10%	9%	8%	6%	35%	34%	7%	6%

- Prevalence estimate was statistically unreliable

