THE 2009 NEW JERSEY HOUSEHOLD SURVEY ON DRUG USE AND HEALTH

Conducted for:

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Conducted by:

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PROJECT OVERVIEW AND BACKGROUND

The 2009 New Jersey Household Survey on Drug Use and Health was commissioned by the Division of Mental Health and Addiction Services (DMHAS) with funding from the U.S. Department of Health and Human Services, Center for Substance Abuse Treatment (CSAT), to assess the prevalence of legal and illegal substance use and identify the need and demand for substance abuse treatment. Administration of the survey was carried out by the Bloustein Center for Survey Research (BCSR), Bloustein School of Planning and Public Policy at Rutgers, the State University of New Jersey. In addition to developing reliable state and county-level estimates of prevalence, need and demand, the 2009 New Jersey Household Survey also sought to explore the lives, substance use patterns and general health of New Jersey veterans. A stratified random sample of 14,678 households was selected and adult members with the most recent birthdays were interviewed between October, 2008 and May, 2009.

TREATMENT NEED IN NEW JERSEY 1993 TO 2009

- Total treatment need, defined as the number of adults residing in the state that abused or were dependent on alcohol or illicit drugs[1] in the 12 months prior to their interview, grew from 7.5% of adults in 1993 to 9.5% in 1998 to 11.1% in 2003 before declining to 9.4% in 2009.
- Among 18 to 25 year olds, treatment need fell from 23% in 2003 to 19% in 2009.

SUBSTANCE USE, ABUSE AND DEPENDENCE 1998 TO 2009

- **Alcohol** use among New Jersey adult residents steadily declined from 1998 to 2003 to 2009 whether *lifetime* use (91% to 87% to 83%, respectively), *past year* use (75% to 73% to 69%), or use in the *last 30 days* (59% to 58% to 54%).
- The prevalence of the clinical symptoms[2] of **alcohol** *only* abuse or dependence, rose from 7.4% (lifetime)[3] in 1998 to 9.1% (past year) in 2003 before decreasing to 7.8% (past year) in 2009
- *Lifetime* **illicit drug** use increased slightly from 30% in 1998 to 32% in 2003-09.
- The prevalence of the clinical symptoms of abuse of or dependence on **illicit drugs** *only* was .9% both in 1998 and 2003 but declined to .7% in 2009

[1] "Illicit drugs" describes both illegal drugs and deliberate misuse of prescribed medications.
[2] The clinical symptoms are defined in the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV).
[3] Past year estimates were not reported in 1998.

SUBSTANCE ABUSE AND DEPENDENCE IN 2009

- LIFETIME. About 6% of the New Jersey population met the DSM-IV criteria for dependence[4] on alcohol or illicit drugs at some time during their lives. This includes 5% who were dependent on alcohol alone and less than 1% who were dependent on drugs alone or who met the lifetime criteria for dependence on both drugs and alcohol in combination.
- PAST YEAR[5]. A total of 9% of the population either abused or were dependent on drugs and/or alcohol, including 8% who abused or were dependent on alcohol alone, and less than 1% each who abused or were dependent on either drugs alone or both alcohol and drugs in the 12 months prior to the survey interview.
- GENDER. Males (14%) were significantly more likely than females (5%) to abuse or be dependent on alcohol, drugs or both alcohol and drugs in the past year.
- RACE/ETHNICITY. Whites (10%) were slightly more likely to show the symptoms of substance abuse or dependence in the past year than Blacks (9%), Hispanics (8%), or Asians (6%).
- AGE. Among 18 to 25 year olds, the use of alcohol steadily declined from 58% in 1998, to 56% in 2003, to 49% in 2009.
- In 2009, persons aged 21-25 had the highest overall prevalence of abuse or dependence (19%) in the past 12 months, followed by the 18-20 and 26-34 age groups (15% each).
- Among New Jersey's 18-25 year-olds, the prevalence of abuse or dependence on alcohol alone (16%) was one percent *lower* than it was for their national counterparts (17%). For all substances, that is, alcohol or drugs, the difference was three percent (18% vs. 21%, respectively). However among persons 26 and older, New Jersey prevalence slightly *exceeded* national prevalence whether one compares the rates for alcohol alone (8% vs. 6%) or for alcohol or drugs (9% vs. 7%).
- OTHER. The past year prevalence of abuse or dependence for those who never married (16%), were unemployed (14%), or made $100,000 or more (14%) exceeded statewide prevalence (9%).
- Mercer County showed the highest prevalence of substance abuse or dependence (14%), while Burlington (7.0%) Hudson (6.9%) and Passaic (6.6%) counties reported the lowest.
- The prevalence of substance abuse or dependence was 9%-10% regardless of municipality type.[6] However, alcohol accounted for 70% to 90% of it in all areas.

ALCOHOL: PATTERNS OF USE

- FREQUENCY AND AMOUNTS. About 10% of residents consumed alcohol almost daily (27% averaged 3 or more drinks on days they drank (5% reported binge drinking)[7] at some time in their lives, and 0.3% reported binge drinking past 30 days.
- AGE OF ONSET. More than 8-in-10 (84%) drinkers started before 21 years of age.

[4]excluding respondents who were substance abusers but did not meet clinical standards of dependence
[5]The survey asked respondents to describe their substance use in the 12 months prior to the interview.
[6]That is, whether urban, suburban, rural or ex-urban.
[7] Binge drinking is defined as drinking for two or more days straight without sobering up.

- New Jersey residents aged 18-25 were less likely to have drunk alcohol in the last 30 days (49%) than their national counterparts (61%)
- Hunterdon, Morris, and Bergen counties had the highest prevalence of current drinkers (68%, 64%, and 64%, respectively) and Cumberland and Salem counties had the lowest (42%). By municipal type, exurban areas (59%) had the highest prevalence of current drinking; followed by large (56%) and small (55%) area suburbs and finally, urban centers (44%).

ILLICIT DRUGS: PATTERNS OF USE

- New Jersey residents reported lower lifetime (32% vs. 49%), past year (7% vs. 14%), and past 30 day illicit drug use rates (4% vs. 8%) than Americans nationwide, regardless of age or type of drug abused.
- Both Morris (9%) and Somerset (9%) counties had the highest prevalence of illicit drug use in the past year while Passaic (4%) and Warren (4%) counties had the lowest. Variation in past year illicit drug use by municipality type was small (6%-7%).
- LIFETIME. The proportions of residents using specific drugs were: marijuana (30.2%), prescription or medicinal drug abuse (13.5%)[8] , cocaine and crack (11.5%) hallucinogens[9] (8.3%), and heroin (1.4%).
- Lifetime use of marijuana among NJ residents increased from 25% to 30% between 1998 and 2003, remained at that level in 2009, and in each survey was more prevalent than lifetime use of any other illegal drug.
- Psychotherapeutic drugs are FDA-controlled substances available only by prescription. The lifetime proportion of survey respondents reporting use of prescription drugs for non-medical purposes equals approximately 8.6% (569,503 residents), or less. Resident adults reported lifetime use of such drugs for non-medical purposes as follows: a) non-heroin opiates, like Oxycontin or Percocet (4.8%), b) sedatives (3.1%), c) tranquilizers (2.9%), and d) methamphetamines (2.4%). Notably, psychotherapeutic drugs were the second most frequently reported drug abused, behind only marijuana (30%).
- PAST YEAR. The proportions using specific drugs were: marijuana (4.8%), prescription drug abuse (2.3%), cocaine/crack (.6%), hallucinogens (.6%) and heroin, (less than .1%).
- Interestingly, past year rates of marijuana use among residents 18 to 25 years old declined by 1% from 1998 to 2003 (19% to 18%) through 2009.
- PAST 30 DAYS. The proportions using specific drugs were: marijuana (2.7%), prescription drug abuse (1.4%), cocaine/crack (0.2%), hallucinogens (0.2%) and heroin (less than 0.1%).
- In the past 30 days, marijuana was the drug most frequently used by respondents aged 18-25 at both the state (11%) and the national (17%) levels followed by abuse of prescription drugs (4% and 6%, respectively).
- In 2009, the prevalence of marijuana use among 18 to 25 year olds at the national level was 2.83 times the prevalence of prescription drug abuse. In New Jersey, marijuana use was **2.75**

[8] *Stimulants, pain killers and other opiates, sedatives or sleeping pills, tranquilizers, and methamphetamine* because it can be made from pseudo-ephedrine taken from medicine prescribed or sold over-the-counter.
[9] LSD, PCP, ecstasy, other club drugs

times the abuse of prescription medications, a difference from the national multiple of .08.

- Marijuana was also the drug most frequently used in the past 30 days among those aged 26 and older in both New Jersey (2%) and the nation (4%) Less than 2% in either sample reported use of any other illicit drug, although, among those other drugs, prescription drug abuse was used by 1.1% in New Jersey and by 1.9% at the national level compared to use by less than 1% for all other drugs.
- In 2009, the prevalence of marijuana use among New Jersey residents aged 26 and older was **1.8** times the prevalence of prescription drug abuse. At the national level for this age cohort, the multiple was 2.1.

POLY-DRUG USE

- LIFETIME. About 14% of all state residents reported ever using two or more drugs.
- PAST YEAR. About 2% reported using more than one drug in the past year and was most prevalent among 18-20 year-olds (9%), followed by 21-25 year olds (5.6%).
- Among residents that ever used marijuana, 44% reported ever using another illicit drug, compared to just 3% of residents that never used marijuana. Thus, marijuana users were 15 times more likely than non users to become poly-drug users. Specifically, among lifetime marijuana users, 32% reported lifetime use of cocaine, 23.2% abused prescription drugs and 21% reported use of hallucinogens. By comparison, just 2.3% of non-marijuana users ever abused prescription drugs and use of either cocaine or hallucinogens was .5%.

AGE OF ONSET

- Among marijuana users, 43% reported the age of onset between 15 and 17, and this proportion falls to 27% reporting age of onset between 18 and 20, and to 8% reporting onset between the ages of 21 and 25.
- Among prescription drug abusers, 29% first abused prescription drugs between 18 and 20 years of age, falling to 19% reporting onset between 21 and 25.

AGE OF ONSET AND POLY-DRUG USE

- Most importantly, the earlier the age of first marijuana use, the greater the likelihood of ever using other drugs. For onset at age 14 or younger, 69% became poly-drug users. If onset occurred at age 15 or older, only 39% became poly-drug users.

ACCESS TO TREATMENT AMONG THOSE IN NEED

- In 2009, among New Jersey residents meeting clinically-defined criteria for substance abuse or dependence in the past year, 17% reported ever attending an AA or NA meeting in their lifetimes, and 7% reported doing so in the past year. Only 13% reported ever receiving any formal treatment, and just 4% received any formal treatment in the past year.
- Treatment access for persons with either illicit drug problems only (10.3%) or problems with both alcohol and drugs (9%) was about four times greater than it was for residents with only alcohol problems (2.4%).
- When respondents with a treatment need who did not receive treatment in the past year were asked what challenges they may have experienced attempting to get treatment, the barriers

selected most often were that they: 1) could handle their problem use by themselves (53%), 2) enjoyed using and were not ready to stop using (41%), and 3) had never tried to access treatment (35%). The barriers selected least often were: 1) distance to treatment (.3%) 2) lack of child care (1.0%) and 3) wait times for admission (3.5%).

- At both state and national levels, 18-25 year-olds with treatment need demonstrated approximately the same past year rates of treatment access (7%). However, among those aged 26 and older, state residents were substantially less likely than all Americans aged 26 and over to have received past year specialty addiction treatment (3% vs. 12%).

TOBACCO USE

- TREND. From 1998 to 2003 to 2009, overall decreases were seen in the past year use of cigarettes (23%, 24% and 20%, respectively) and cigars (11%, 7%, 6%). Chewing tobacco and pipe use was 2% or less in all survey years.
- More than half of residents (53%) smoked cigarettes in their lifetime, 20% smoked cigarettes in the past year and 17% smoked cigarettes in the past 30 days; about 13% smoked cigarettes daily in the last 30 days and 6% smoked a pack or more per day.
- About 25% of all New Jersey residents had used a tobacco product other than cigarettes in the previous 12 months, including: the 20% (above) who smoked cigarettes, 6% who smoked cigars, 2% who used chewing tobacco, and 1% who smoked a pipe.
- Atlantic (27%), Cape May (24%), and Cumberland (24%) counties had the highest proportion of residents currently smoking cigarettes, while Bergen (11%) Somerset (12%), Hunterdon (12%), and Middlesex (13%) had the lowest. By municipal type, there was little variation, with the highest proportion of smoking found in the urban centers (19%) and the lowest prevalence in the small area suburbs (16%).
- In 2009, far fewer New Jersey residents reported smoking cigarettes in their lifetimes than did Americans nationwide (53%, NJ vs. 70%, Nation). Smaller differences were reported with respect to past year (20% vs. 30%) and past 30 day use (17% vs. 26%).
- New Jersey residents aged 21-25 reported the highest prevalence of current[10] smoking (27%) and the prevalence of current smoking declined with age dropping to 18% among 35 to 49 year olds and 13% among those aged 50 and over. In contrast, the practice of heavy smoking[11] among current smokers increased with age, rising from 31% among 21 to 25 year olds to 40.1% among those 50 and older.
- About 36% of current smokers had their first cigarette by age 14, while 37% smoked for the first time between ages 15 and 17, and 73% smoked "part or all" of their first cigarette by age 18.
- Most importantly, the earlier the age of onset, the greater the likelihood of reporting current heavy smoking. For instance, 46% of those with smoking onset by age 14 reported heavy smoking in the past 30 days, but 34% with onset at age 21 or older reported current heavy smoking.

GAMBLING

[10] "Current" refers to "smoking at least one cigarette in the past 30 days."
[11] Heavy smoking is defined as smoking a pack (20 cigarettes) per day or more in the last 30 days.

- About 67% of New Jersey residents have gambled at some time in their lives. Buying lottery tickets was the most frequent form of gambling, with 58% of New Jersey residents purchasing at least one ticket and about 15% purchasing tickets more than 20 times during the year they gambled the most. About 38% of New Jersey residents reported casino gambling while 19% gambled in other forms besides the lottery.
- About 2% of New Jersey residents reported experiencing one or more problems related to gambling at some time during their lives and just 1% reported experiencing those problems in the past year.
- Most importantly, persons reporting a gambling problem at some time in their lives were significantly more likely than those with no problem to have smoked in the last 30 days (38% vs. 17%), to meet the criteria for substance abuse or dependence in the last year (28% vs. 9%), to have drank heavily in the last 30 days (17% vs. 5%), and to have used an illicit drug in the past year (16% vs. 6%).

NEW JERSEY VETERANS

- Ten percent of New Jersey residents have ever served in our nation's military, including 9.6% who are veterans and 0.4% still in active service. Exactly 2.5% of residents have ever served in a combat zone where they received hostile fire.
- New Jersey combat (5%) and non-combat (5%) veterans were less likely than males with no military service (8%) to report current heavy drinking; likewise for past year cigarette use (19%, 15% vs. 24%) and lifetime illicit drug use (31%, 31% vs. 39%).
- Still (20%) of Iraq/Afghanistan combat veterans drank heavily in the last 30 days compared to 5% or less among veterans from other wars. Similarly, Iraq/Afghanistan combat veterans had the highest rate of lifetime drug use (54%) of all combat veteran groups: Vietnam (42%) Persian Gulf (35%) Korean War (10%) and World War II (2%).

CHAPTER 1 INTRODUCTION AND BACKGROUND

A. PROJECT OVERVIEW AND BACKGROUND

As health care reform alters the interfaces of the health care industry, accurate measurements of need, demand, cost, and availability of resources take on ever increasing importance. The 2009 New Jersey Household Survey on Drug Use and Health was commissioned by the Division of Addiction Services (DAS), now merged and known as the Division of Mental Health and Addiction Services (DMHAS), to promote an integrated and rational approach to resource allocation for prevention, early intervention, treatment, and recovery support services. Specifically, the study focuses on assessing the prevalence of legal and illegal substance use and identifying the need and demand for substance abuse treatment services statewide.

The study was funded by DMHAS and administered by the Bloustein Center for Survey Research, Bloustein School of Public Policy at Rutgers, the State University of New Jersey.

B. SURVEY OBJECTIVES

Obtaining reliable substance abuse treatment need estimates is critical to the state's ability to promote a rational planning and resource allocation process. As the state shifts to local and county-based planning, accurate sub-state estimates of substance abuse prevalence and treatment need are especially important to an effective local planning process. In order to better support local planning efforts, the 2009 New Jersey Household Survey incorporates a sample size adequate for generating reliable state and county-level estimates of prevalence, need and demand.

The 2009 telephone household survey included six main objectives, namely to:

1. Assess the level of use of alcohol, tobacco and other drugs and estimate the need and demand for treatment services among the household population in New Jersey.
2. Study correlates of substance use, abuse or dependence to help planners and policy makers make informed decisions regarding future interventions.
3. Compare 2009 study findings with those of the 2003 and 1998 surveys.
4. Create county estimates of substance use and dependence in addition to statewide estimates.
5. Assess barriers to accessing treatment services in the state.
6. Assess substance abuse treatment needs of U.S. military veterans residing in New Jersey, with special consideration of those returning from Iraq and Afghanistan.

C. LITERATURE REVIEW

Telephone surveys have proven cost-effective for some social science research because the vast majority of American households now have telephones (98.2% in New Jersey and 97.7% nationally in March, 2009). The current rate of households with telephones compares favorably with earlier rates. According to the U.S. Bureau of the Census, in 1990, 96 percent of all households in the Northeast Region of the United States had a telephone. Thirty years earlier in 1960, only 84 percent of households reported having a telephone. By 1970, the proportion had increased to 90 percent, and by 1980, this figure was 94 percent (Census, 1990, U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census.) This continuing improvement in the proportion of households with telephones suggests that the use of the telephone network as a sampling frame may afford better telephone access to the housed poor than was previously the case. Among the many advantages of conducting surveys by telephone over traditional face-to-face surveys are reduced transportation and other costs, quicker completion of surveys, the ability to closely monitor interviewers, the possibility of minimizing data entry errors by the use of computer programs and the ease with which data are accessed even while the survey is still in progress (Mulry-Liggan and Chapman, 1982; Frey 1989).

These apparent advantages, however, have been overshadowed recently by limitations on the number of people that may actually be reached via traditional telephone samples based on landlines exclusively, resultant from the proliferation of cell phones and cell phone only households. The current *landline* phone rate for New Jersey households is 90.2%, higher than the national average of 83.0% but still 8% lower than the aforementioned 98.2% total (Survey Sampling, Inc., 2009). The growing number of homes which fall into the cell phone only category has made it prudent to supplement landline samples with a sample of households that rely on cell phones as their only phone. A 2009 CDC report stated that, as of 2007, 14.7% of households in the country and 8.0% of households in New Jersey are now reliant solely on cell phones and have no landline.[12] Later data from the same authors have placed national level cell phone only estimates at 17.5% in early 2008 and 22.7% in early 2009, suggesting that New Jersey rates may have risen as well.

Studies also indicate serious limitations on the types of information that can be reliably collected by telephone. While useful for surveying socially accepted behaviors, the use of telephones for gathering information on sensitive (or illegal or socially unacceptable) behaviors has been shown to be poor compared to face-to-face interviews. In a comparative study done in New Jersey between a self-administered survey and a telephone survey, for example, Aquilino and LoSciuto (1990) found that the telephone survey selected more affluent minorities and provided lower estimates for use of substances than the self-administered survey. This finding is consistent with differences observed in telephone access and drug use patterns by income (Belinfante, 2000). Gfroerer and Hughes (1991) evaluated the merits of telephone surveys for the study of illicit drugs and found that households with telephones reported much less use of illicit drugs (9.4%) compared to those without telephones (24.9%). Households with telephones under-reported use of marijuana by about 35% and cocaine by about 55% compared to surveys conducting face-to-face interviews. Johnson, Hougland and Clayton (1989) also found

[12] "Wireless Substitution: State-level Estimates From the National Health Interview Survey, January-December 2007" by Stephen J. Blumberg, Julian V. Luke, Gestur Davidson, Michael E. Davern, Tzy-Chyi Yu and Karen Soderberg. Division of Health Interview Statistics, National Center for Health Statistics, Centers for Disease Control. http://www.cdc.gov/nchs/data/nhsr/nhsr014.pdf

underestimation of substance use (including tobacco and illegal drugs) by university students when telephone survey data were compared with in-person interviews.

D. LIMITATIONS OF THE DATA

Because of the limitations noted above, it is likely that illicit drug use was seriously under-reported in the current survey. In addition to the social undesirability of admitting illicit drug use and the difficulty of reaching drug-using populations by telephone, telephone surveys are also limited by the problem of measuring a relatively rare behavior. These problems often yield estimates that are inconsistent with treatment surveillance data. The current New Jersey telephone survey, for example, generated an estimate of 4,560 current adult heroin users in the state, yet the number of clients admitted to New Jersey treatment agencies for heroin addiction numbered 19,506 in 2008 and 21,164 in 2009.

Estimates of the use of licit substances, such as cigarettes and alcohol, however, tend to be substantially more accurate. For example, the current New Jersey survey found an overall past 12 month need for alcohol alone treatment of 7.8%, which translates to an approximate estimate of 517,637 adult New Jersey residents. In 2009, 17,099 New Jersey residents actually sought treatment for alcohol alone. Given that people needing treatment for alcohol problems alone are the *least* likely to seek treatment (in the range of 2%-3%) these alcohol estimates prove to be much more accurate[13].

E. SUMMARY OF THE RESEARCH METHODOLOGY

The Sample

The population under study was New Jersey adult residents (18 years old or above). Therefore all statements made in the report refer to either New Jersey's total adult population or some adult subpopulation (Readers should refer to Table D-A in Appendix D for Census figures/survey estimates on the New Jersey adult population and subgroups). The original design called for interviewing a random sample of 675 adults from each county for a total of 14,165 adults in the state, supplemented with a sample of randomly selected, screened and verified households that rely on cell phones. Because of the cost of cell phone interviews, the sample was limited to 501 statewide. Those 501 were randomly selected and then allocated to each county based on respondent self-report in the interview.

A sample of this size was expected to produce a statewide estimate of substance abuse treatment need with a margin of error of $\pm$ 0.8 percentage points at 95% confidence interval; within each county, a sample size of about 700 residents produces an approximate margin of error of $\pm$ 3.7 percentage points (Kish, 1965). The actual sample size (e.g., the number of interviews researchers were able to successfully complete) was 14,678, with county totals ranging from a low of 678 in Salem County to a high of 723 in Camden County.

Weighting

[13] More information on treatment seeking behavior is available in Chapter 5 of this report. Specifically, Figure 5.5 shows that just 2.4% of those with a need for treatment of an alcohol problem sought treatment.

The data collected for the study was weighted to represent the adult population using 2007 U.S. Census estimates for New Jersey's adult population with regard to age, gender, race, ethnicity and county of residence. The exact weighting procedure is illustrated in Appendix B of this report.

Survey Instrument

The questionnaire used in the study represents a combination of the core questions from the CSAT-sponsored State Needs Assessment Program (STNAP) Survey Core Protocol Questionnaire with questions relating to barriers to substance abuse treatment, compulsive gambling and veterans added by DAS in consultation with Bloustein. The specific topics included in the survey are:

- Lifetime experiences with tobacco use.
- Lifetime experiences with alcohol use.
- Lifetime experiences with non-medical use of drugs.
- Treatment history for substance use and barriers to treatment.
- Desired treatment services.
- Gambling experiences and treatment history.
- Basic demographic information.

The final version of the survey instrument was programmed into a Computer-Assisted Telephone Interview, or CATI, system. The CATI interviews were administered between October, 2008 and May, 2009 by professional and experienced interviewers who were trained and monitored by the BCSR research staff. Interviews were conducted in either English or Spanish, based upon the participant's preference. A more comprehensive description of the research methodology is included in Appendix A.

F. REPORT ORGANIZATION

This report is organized into nine chapters. Following the Introduction, Chapters 2 and 3 examine usage of alcohol and both illicit and non-medical use of prescription or over-the-counter drugs, respectively, with a focus on frequency, quantity and age of first use of these substances. Chapter 4 explores usage of tobacco, with a particular focus on cigarette use. Chapter 5 explores past experiences with alcohol and/or drug treatment and provides statewide estimates of alcohol and drug treatment need and demand. Information on compulsive gambling is reported in Chapter 6. Chapter 7 explores the substance use patterns and overall health of New Jersey Veterans. Chapter 8 provides county-level and municipality type information on alcohol, tobacco and drug use. Chapter 9 compares findings from 1998, 2003, and 2009 as well as comparing the current survey to the 2008 national household survey findings reported by the Substance Abuse and Mental Health Services Administration (SAMHSA) from their report entitled "Results From the 2008 National Survey on Drug Use and Health: National Findings." Finally, Chapter 10 draws conclusions and describes policy implications from 18 years of household surveys in New Jersey.

Most of these chapters also include a set of tables presenting "demographic breakdowns" of substance use behaviors -- that is, the different frequencies of responses given by various sub-groups of the population regarding their use of the different substances examined. Typically,

these differences are reported by gender, age, race/ethnicity, education, income, marital status and employment status. When comparing responses of sub-groups of the population, readers must note that the number of study participants in some groups is small which results in larger standard error estimates and wider confidence intervals for the resulting percentages.

This report is accompanied by appendices providing more detailed information about the survey methodology (Appendix A)**,** as well as a description of the study weighting process (Appendix B) and the study survey instrument (Appendix C). More detailed demographic breakdowns of the behaviors of interest were compiled and provided in a separate volume. In addition to Table D-A referencing Census and Survey estimates of various adult sub-populations, Appendix D includes 10 additional tables providing more detailed demographic breakdowns of the substance abuse items. County breakdowns are also presented for some of the required tables. A Technical Appendix has also been provided which includes weighted frequency distributions for all questions in the survey (Chapter 1); statewide results for a set of key dependent variables by core independent variables as produced through WesVar (Chapter 2); and countywide results in SPSS tables for the same key dependent variables (Chapter 3).

G. **PROFILE OF STUDY PARTICIPANTS**

Demographic Characteristics

Table 1-1 presents an overview of the demographic characteristics of survey participants. These distributions are important to keep in mind when reviewing any sub-group results from the survey. As county, gender, age, and race/ethnicity were part of the weighting scheme utilized in this study, these variables closely match the U.S. Census information for New Jersey 2007 as reported in the American Communities Survey.

The data indicate that survey participants were 48% male and 52% female. With respect to age, 12% of residents were between the ages of 18 and 25, 13% were between ages 26 and 34, 33% between ages 35 and 49, and 42% were age 50 or older. The two questions on race[14] and ethnicity were combined to produce a "Race/ethnicity" variable. Those who identified themselves as non-Hispanic on the ethnicity variable were classified according to their primary self-reported racial category (either non-Hispanic White, non-Hispanic Black or Asian). Those who self-identified as Hispanic, however, were classified as Hispanic, regardless of self-reported racial category. Overall, 66% of study participants were White, 13% were Black, 14% were Hispanic, 5% were Asian, and 2% were of some other race. Further, nearly 23% of all New Jersey residents were born outside of the United States.

Table 1-1: Demographic Characteristics

Demographics		**NJ Sample* (n=14,678)**
Gender	Female	52.3%
	Male	47.7
Age	18 to 25	12.0
	26 to 34	12.6
	35 to 49	33.0
	50 and older	42.3
Race Ethnicity	White	66.0
	Black	12.5
	Hispanic	14.4
	Asian	5.0
	Other	2.2
Born in the U.S.	No	22.8
	Yes	77.2
Education	Less than high school	11.8
	High school graduate	32.2
	Some college	21.7
	College graduate	34.4
Employment Status	Employed full time	50.5
	Employed part time	12.9
	Unemployed	8.2
	Retired/Disabled	21.0
	Homemaker	5.2
	Student	2.2
Household Income	Under $25,000	15.7
	$25-49,999	16.2
	$50-79,999	20.7
	$80-99,999	9.7
	$100,000 and over	37.6
Marital Status	Married or living as	60.9
	Never married	22.4
	Divorced/Separated	9.3
	Widowed	7.3
Size of Household	One	12.4
	Two	27.0
	Three	19.9
	Four or more	40.7

* Percentages exclude refusals for each demographic question. Overall, 28% refused to report on income, 2% refused on age, 1% on race, employment and marital status and less than 1% on all other questions.

With respect to education, most residents had a high school education or better, with only 12% reporting that they failed to complete high school or obtain a GED. About 32% had a high school diploma only, 22% reported having some college, and 34% were college graduates. In terms of employment status, about 2-in-3 worked either full-time (51%) or part-time (13%), 8%

[14] People who considered themselves multiple race origin were classified according to the race they mentioned first.

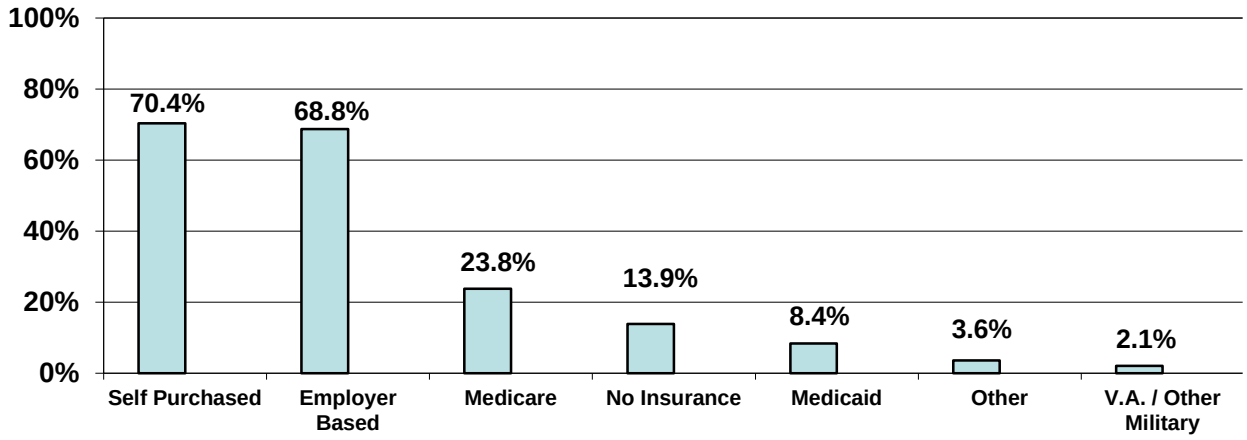
were unemployed, 21% were retired or disabled, 5% were homemakers, and 2% were students. New Jersey residents reported a wide distribution of income, with about 32% having an annual household income of less than $50,000, and 38% earning $100,000 or more per year.

In terms of marital status, a majority was married or living as married (61%), 22% never married, 9% were divorced or separated, and 7% were widowed. Only 12% of residents reported living in a single-person household. Twenty-seven percent lived in a two-person household, 20% in a three-person household, and 41% lived in a household with four or more people.

Mental and Physical Health

Survey participants were also asked questions about their health insurance, health status and use of medical services in the past 12 months. Approximately 14% of New Jersey residents reported having no health insurance (Figure 1-1). About 70% reported self-paying for some or all of their insurance and 69% had insurance that was paid through their employer.

Figure 1-1: Sources of Medical Insurance: NJ Residents[15]

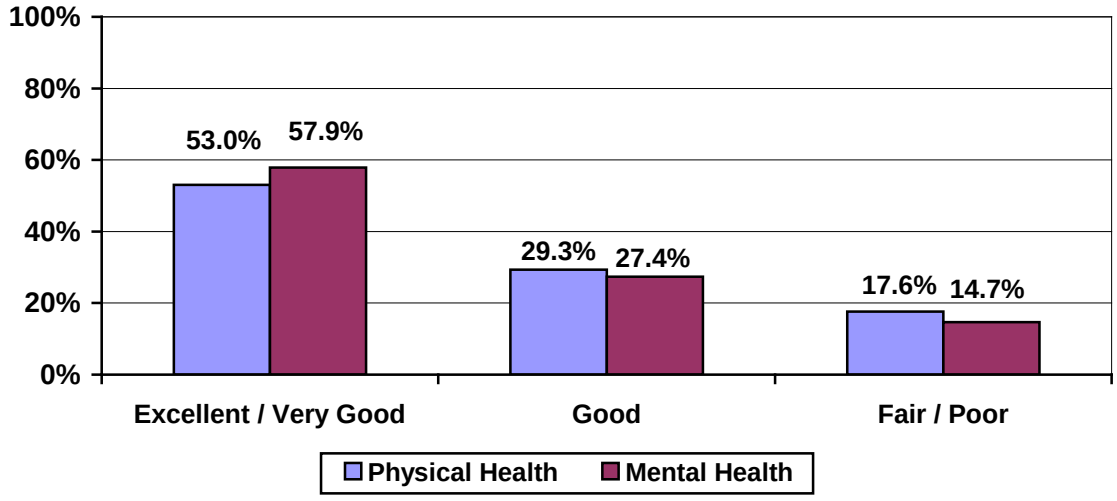


Twenty four percent reported their insurance was through Medicare, 8% had Medicaid and about 2% were insured through the Veteran's Administration or some other military source.

Overall, New Jersey residents gave comparable ratings of their mental and physical health (Figure 1-2). Thus, 53% reported that their physical health was excellent or very good and 58% reported experiencing excellent or very good mental health. Similarly, just 18% rated their physical health as only fair or poor and only 15% reported fair or poor mental health.

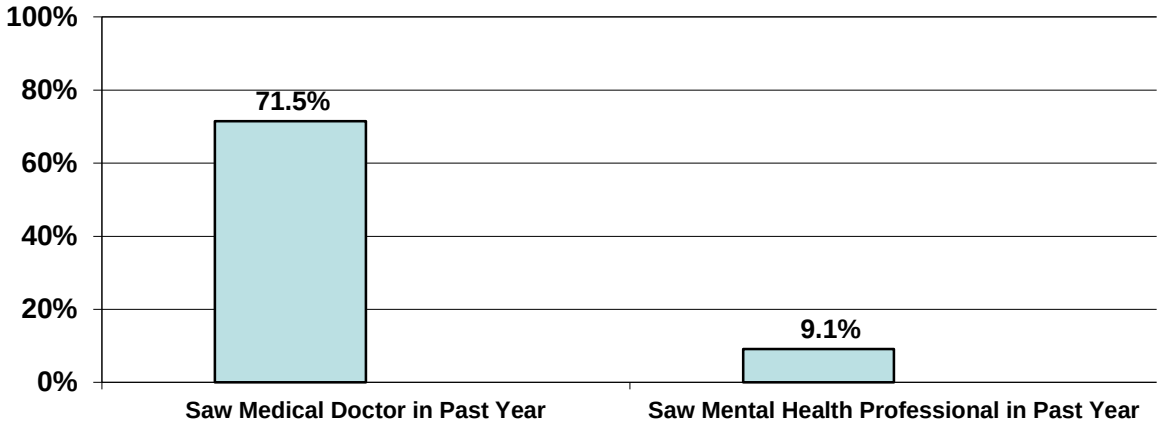
[15] Percentages do not add up to 100% because respondents may report more than one type of insurance.

Figure 1-2: Physical and Mental Health Status Self Ratings: NJ Residents



However, utilization rates of medical versus mental health services differed substantially (Figure 1-3). More than 7-in-10 New Jersey residents (72%) reported at least one visit to a medical doctor in the previous year, compared to less than 1-in-10 residents (9%) who reported visiting a mental health professional. Moreover, 35% of residents reported making three or more physician visits in the previous year, and 16% reported six or more visits. In contrast, only 6% reported three or more visits to a mental health professional in the previous year and just 3% noted six or more visits.

Figure 1-3: Receipt of Medical Care in the Past 12 Months: NJ Residents



CHAPTER 2

ALCOHOL

A. INTRODUCTION

This chapter begins by providing information on overall use of alcohol, including current and lifetime prevalence of alcohol use, the frequency and quantity of alcohol consumed, and characteristics of current and heavy drinkers. Trends in age of first alcohol use are presented and relationships between alcohol use and the use of cigarettes and illicit drugs are examined. For the purpose of this report the following definitions are used:[16]

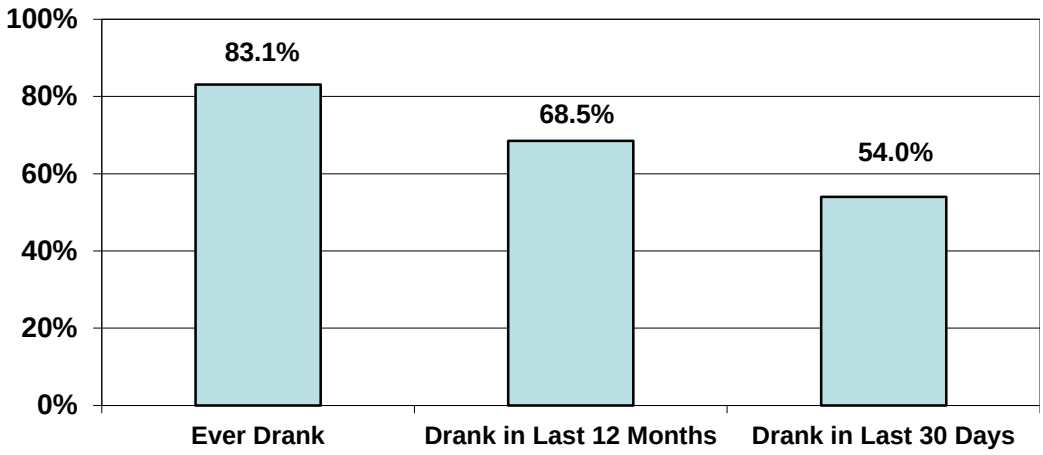
Current Use: At least one drink in the last 30 days (including heavy and binge drinking).
Heavy Use: Five or more drinks on the same day on at least 4 days in the past 30 days.
Binge Use: Drinking for two or more days straight without sobering up

B. ALCOHOL USE, FREQUENCY AND QUANTITY

Overview

- Most residents (83%) had at least one drink of alcohol in their life, including 69% who consumed alcohol in the past year and 54% who drank in the past 30 days (Figure 2-1).

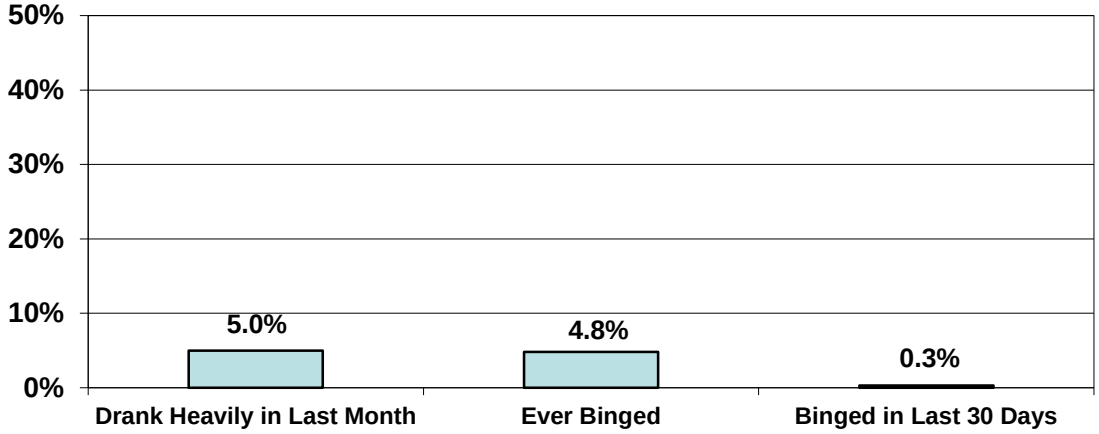
Figure 2-1: Alcohol Consumption: NJ Residents



- Despite the fact that the majority of New Jersey residents had drunk alcohol in their lifetimes, the past year and in the past 30 days, just 5% of residents reported drinking heavily in the past 30 days (Figure 2-2). Also, only 5% reported binge drinking at some time in their lives and less than 1% engaged in binge drinking in the last 30 days.

[16] Our definition of "current use" is comparable to that used in the National Survey on Drug Use and Health: Department of Health and Human Services. However, the National Survey definitions differ from ours with respect to "heavy use" (defined in the National Survey as drinking 5+ drinks in a row on 5 or more days in the last 30 days) and "binge use" (defined in the National Survey as drinking 5+ drinks in a row on at least 1 day in the last 30).

Figure 2-2: Frequency of Heavy and Binge Drinking: NJ Residents



C. DEMOGRAPHIC CHARACTERISTICS OF CURRENT AND HEAVY ALCOHOL USERS: NJ RESIDENTS (Table 2-1)

Gender and Age

- Males were substantially more likely than females to be current drinkers (60% vs. 49%) and to drink heavily (8% vs. 3%) (Table 1-1).

- While only 35% of residents aged 18-20 reported current drinking, this percentage increased substantially at the legal drinking age of 21, with 58% of those aged 21-25 reporting that they currently drink. Of those over age 21, current drinking was least prevalent in the 50 and older group, with 52% reporting alcohol use in the past 30 days.

- The highest proportion of heavy alcohol users (15%) was also found in the 21-25 year-old age group. However, those aged 18-20 were second in prevalence of heavy drinking (12%). The lowest proportion of heavy drinkers was the 50 and older group (2%).

Race/Ethnicity

- Whites, by far, reported the highest prevalence of current alcohol use (62%), followed by Blacks (39%), Hispanics (38%), and Asians (35%).

- However, with respect to heavy drinking, a comparable percentage of Whites and Hispanics reported heavy consumption in the last 30 days (6%). About 4% of Blacks reported drinking heavily and Asians reported the lowest prevalence, at about 1%.

- Substantial variation in alcohol use was found within the Hispanic population according to the respondent's country of origin (Figure 2-3). Thus, Cubans reported the highest prevalence of current drinking (49%) and Mexicans the lowest (29%). Central/South

Americans and Cubans had the highest prevalence of heavy drinking (7% each), while the lowest prevalence was found among Mexicans and Puerto Ricans (5% each).

Marital Status

- The highest prevalence of current[17] drinking was reported by married residents (59%), followed by those who were never married (50%), divorced or separated (48%), and widowed (37%).

- Although married residents were the most likely to be current drinkers, they were among the least likely to drink heavily, with only 4% reporting heavy use. The highest prevalence of heavy use was among those who never married (10%), followed by those who were divorced or separated (5%) and widowed (1%).

Education, Employment and Income

- The prevalence of current drinking increased with educational attainment being reported by 31% of those having less than a high school education, 48% of high school graduates, 56% of those with some college, and 67% of college graduates. Although college graduates drank more frequently than the less educated, they were the least likely of all groups to drink heavily (3%).

- Residents who were employed were more likely than the unemployed to be current drinkers (60% vs. 48%), but less likely to drink heavily (6% vs. 10%).

Table 2-1: Characteristics of Current and Heavy Alcohol Users

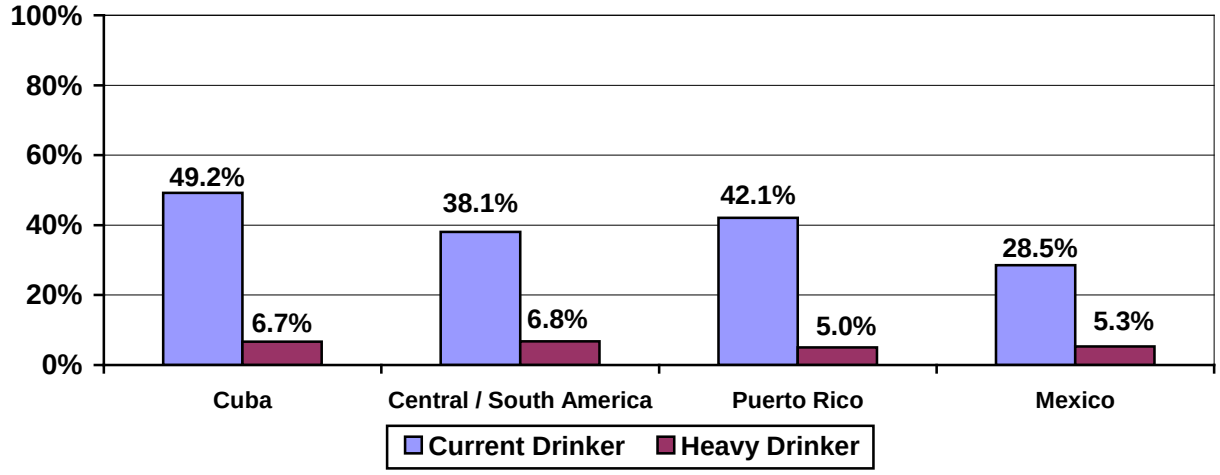
Demographics		**Proportion of Residents Who Drank in Last 30 Days** ***(n=8,268)***	**Proportion of Residents Who Drank Heavily** ***(n=595)***
New Jersey Total Population		***54.0%***	***5.0%***
Gender	Males	59.8	7.6
	Females	48.7	2.7
Age	18-20	35.4	11.9
	21-25	57.5	14.6
	26-34	56.5	6.7
	35-49	59.3	5.3
	50+	51.6	2.2
Race/ Ethnicity	White	62.1	5.6
	Black	39.4	3.5
	Hispanic	38.3	5.5
	Asian	35.3	0.9
Marital Status	Married	58.6	3.8
	Never Married	50.0	9.6
	Divorced/Sep.	48.2	5.0
	Widowed	36.6	1.3
Education	Less than H.S.	30.6	5.7
	H.S. Grad.	47.5	5.0
	Some College	55.9	7.4
	College Grad.	67.1	3.4
Employment Status	Employed FT/PT	60.3	5.7
	Unemployed	47.9	9.6
Income	Under $25,000	34.1	4.5
	$25,000-49,999	45.3	4.7
	$50,000-79,999	56.4	6.3
	$80,000-99,999	62.6	7.7
	$100,000 and over	71.1	5.8

- The prevalence of current drinking was found to increase with increasing income. Thus, only 34% of those who earned less than $25,000 a year were current drinkers, compared

[17] "Current" drinking refers to drinking "in the last 30 days." Also, "current" drinkers drank "in the last 30 days."

to 71% of those earning $100,000 and over. However, heavy drinking was somewhat more comparable across all income groups (5% to 8% of each group).

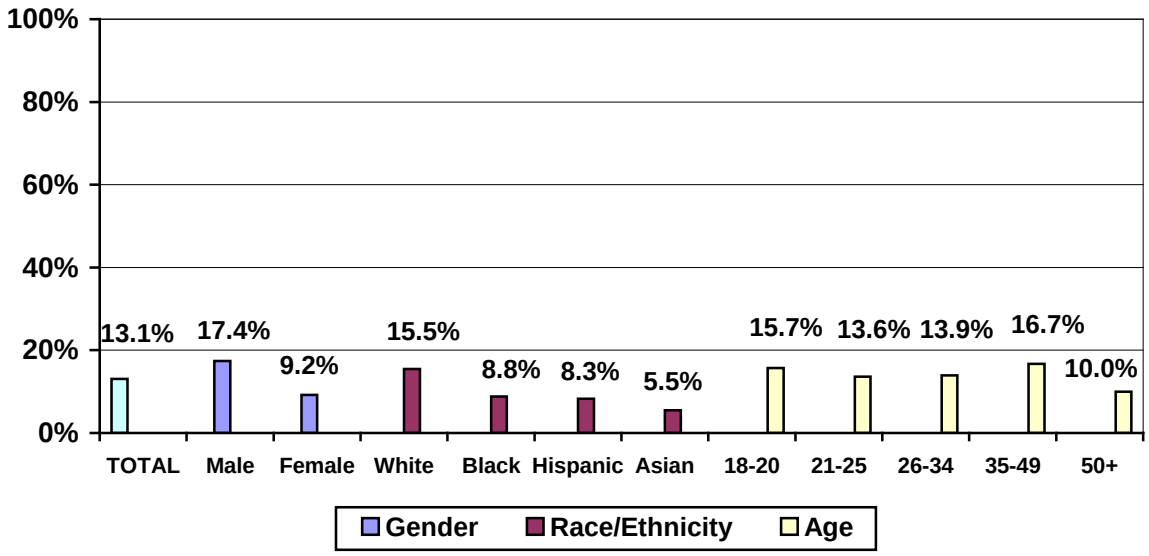
Figure 2-3: Current and Heavy Drinkers by Place of Origin: NJ Hispanics



D. EARLY ALCOHOL USE (AGE 14 OR UNDER)

- Thirteen percent of all residents reported drinking alcohol before the age of 15 and males were more likely than females to initiate early alcohol use (17% vs. 9%) (Figure 2-4).
- Whites were the most likely of all racial/ethnic groups to report early alcohol use (16%); followed by Blacks (9%), Hispanics (8%), and Asians (6%).
- Early initiation of alcohol use was reported most frequently by those aged 35-49 (17%) and those under age 21 (16%). Residents aged 50 and above reported the lowest prevalence of early alcohol use (10%).

Figure 2-4: Prevalence of Early Alcohol Use (by Age 14) by Gender, Age, and Race/Ethnicity: NJ Residents

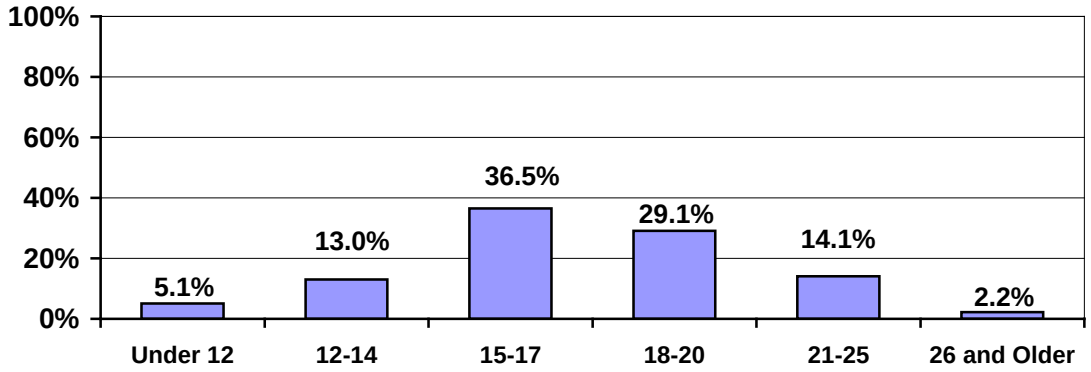


E. TRENDS IN DRINKING AMONG CURRENT DRINKERS

Age of First Use: Current Drinkers (Figure 2-5)

- Over 8-in-10 residents who drank in the last 30 days reported that they were less than 21 years of age (the legal New Jersey drinking age) the first time they drank (84%) (Figure 2-5). About 18% of drinkers initiated alcohol use before the age of 15, 37% first used between the ages of 15 and 17, and 29% reported first use between the ages of 18 and 20.

Figure 2-5: Age of First Alcohol Use: Current Drinkers

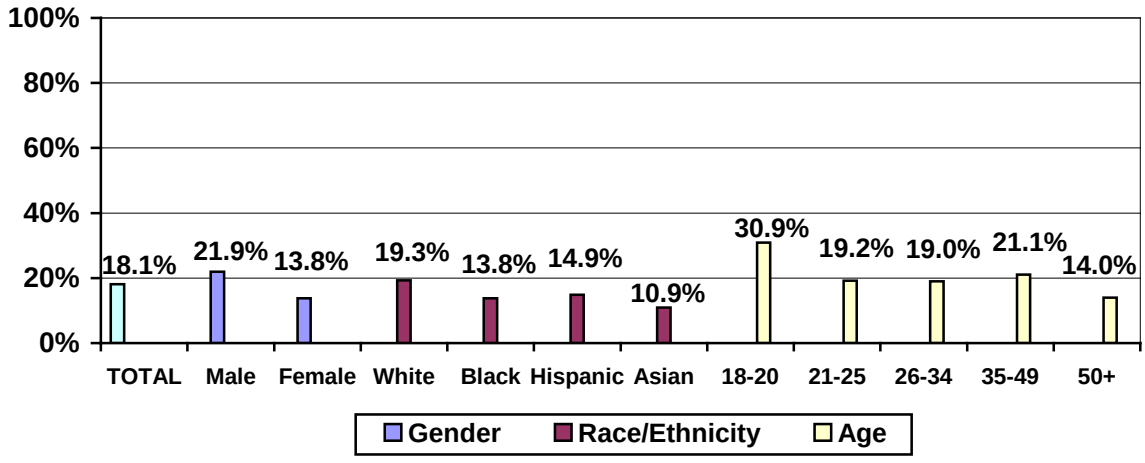


Demographic Characteristics of Early Alcohol Users: Current Drinkers

- Among New Jersey residents who drank in the last 30 days, those reporting alcohol use before age 15 were more likely to be male than female (22% vs. 14%) and more likely to be White (19%) than Hispanic (15%), Black (14%), or Asian (11%) (Figure 2-6).

- Current drinkers aged 18-20 (31%) were substantially more likely to report early alcohol use than those aged 21-34 (19%), 35-49 (21%), and those aged 50 and above (14%).

Figure 2-6: Prevalence of Early Alcohol Use (by Age 14) by Gender, Age and Race/Ethnicity: Current Drinkers

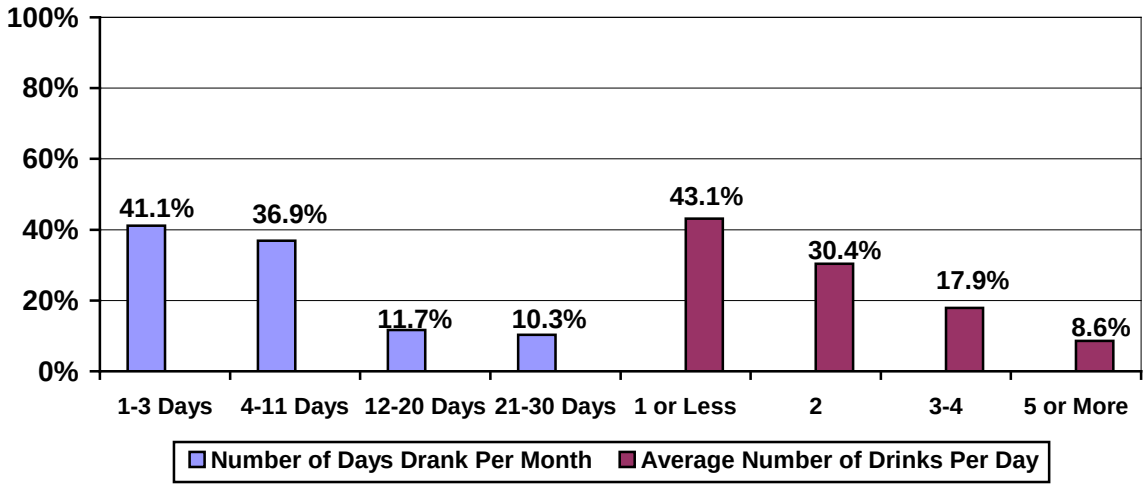


Frequency and Quantity of Use: Current Drinkers

- Among the 54% of New Jersey residents who drank in the last 30 days, 41% reported drinking on three days or less (Figure 2-7). However, 10% consumed alcohol almost every day (21-30 days out of the month).

- Forty-three percent of New Jersey residents who drank in the last 30 days reported having only 1 drink or fewer per day, 30% reported having 2 drinks per day, 18% had 3-4 drinks per day, and 9% averaged 5 or more drinks per day.

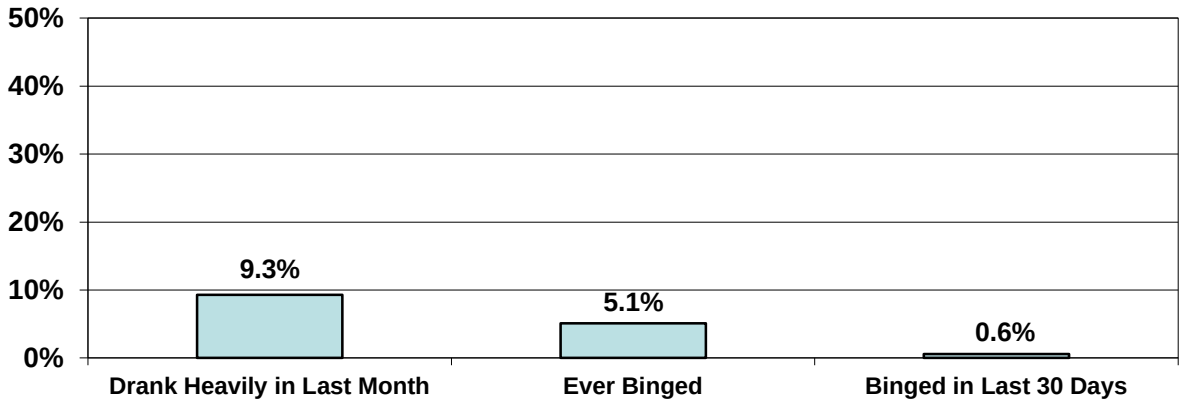
Figure 2-7: Frequency and Quantity of Alcohol Use In Last 30 Days: NJ Drinkers



Heavy and Binge Drinking: Current Drinkers

- Nine percent of current drinkers reported drinking heavily in the past 30 days. (Figure 2-8). About 5% also reported binge drinking at some time in their lives; however, less than 1% said they engaged in binge drinking in the last 30 days.

Figure 2-8: Frequency of Heavy and Binge Drinking: Current Drinkers

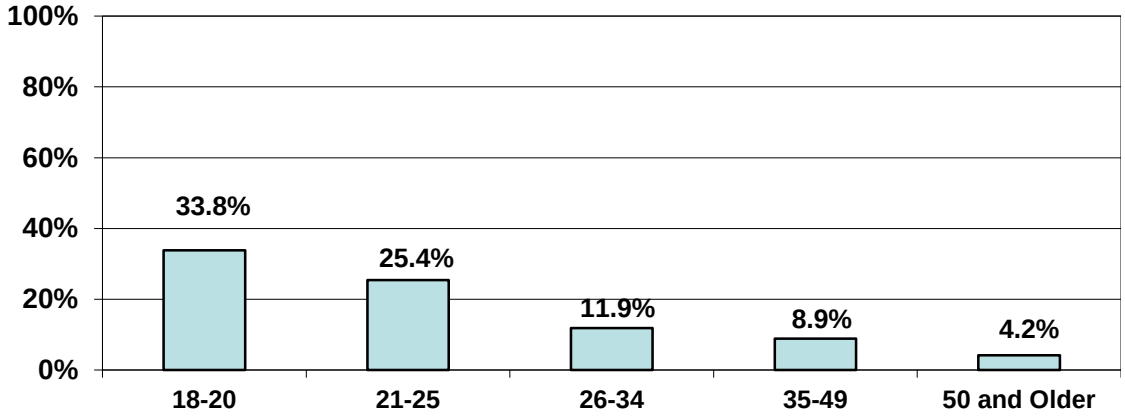


Demographic Characteristics of Heavy Drinking: NJ Current Drinkers

- When heavy drinking trends were examined among New Jersey residents who drank in the last 30 days, several trends emerged which differed from those observed in the overall sample, the most striking of which were with respect to age, race/ethnicity and education.

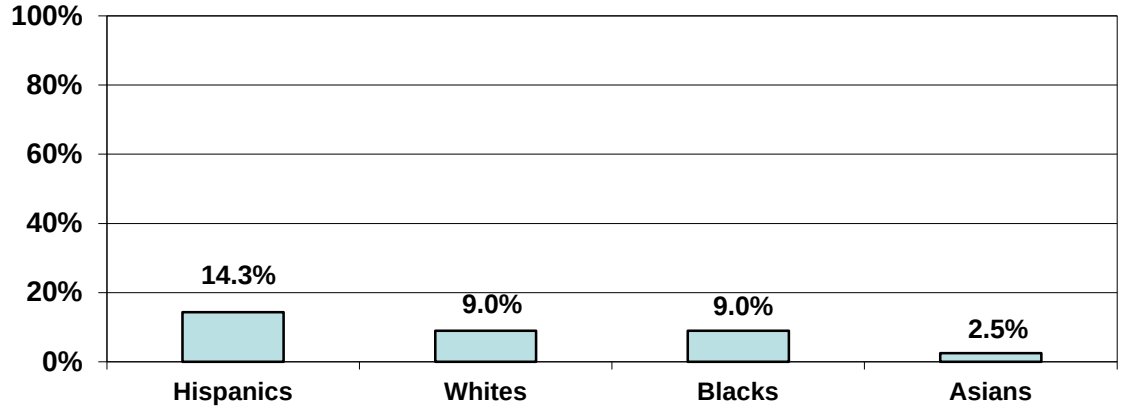
- Although residents under age 21 were the l**e**ast likely of all age groups to be current drinkers, those that did drink reported the highest prevalence of heavy drinking (34%) of all groups (Figure 2-9). Heavy drinking decreased substantially as age increased, with those in the 50 and older age group having the lowest prevalence (4%).

Figure 2-9: Heavy Drinkers by Age: NJ Current Drinkers



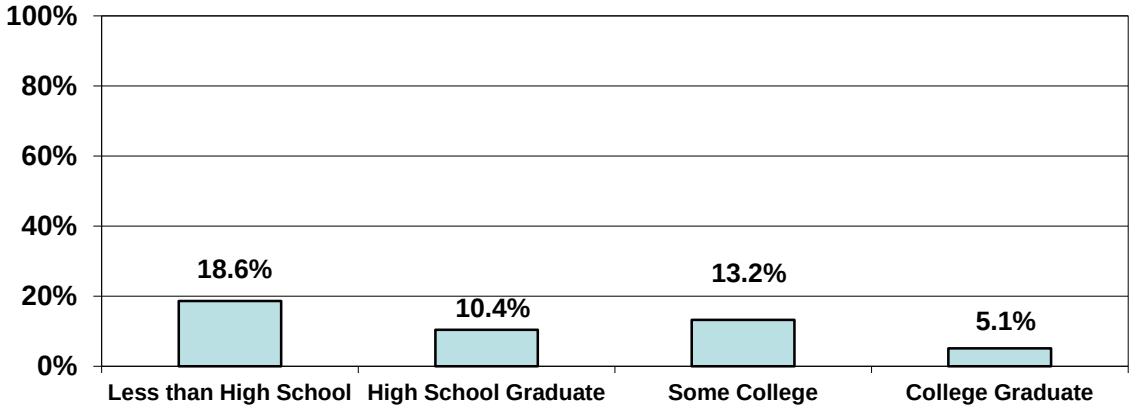
- Although, among drinkers, Hispanics were comparable to Blacks in their rates of current drinking they reported the highest prevalence of heavy drinking of all racial/ethnic groups (14%) (Figure 2-10). Whites and Blacks had comparable heavy drinking rates (9%) and Asian drinkers had the lowest prevalence of all groups (3%).

Figure 2-10: Heavy Drinkers by Race/Ethnicity: NJ Current Drinkers



- Although residents with less than a high school education were substantially less likely to drink than those with more education, those at the lowest education level who did drink were the most likely to drink heavily (19%) (Figure 2-11). Among drinkers, college graduates reported the lowest prevalence of heavy drinking (5%).

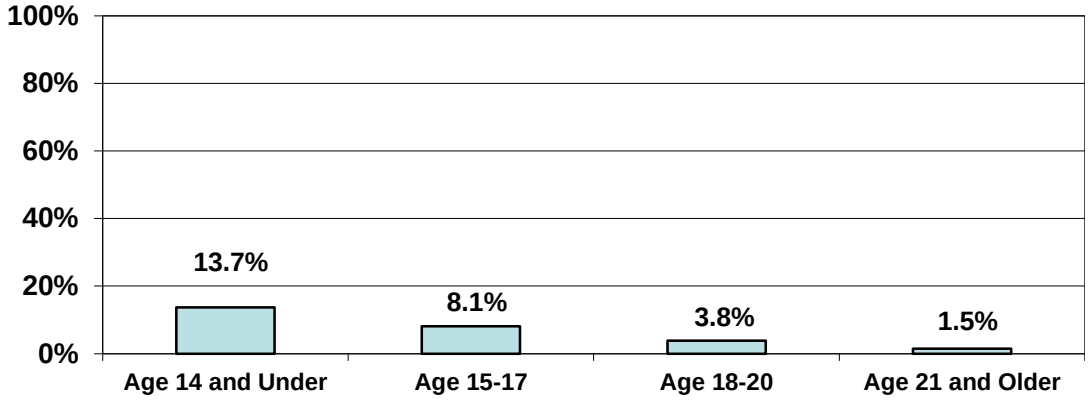
Figure 2-11: Heavy Drinking By Education: NJ Current Drinkers



F. RELATIONSHIP OF HEAVY DRINKING TO AGE OF FIRST ALCOHOL USE,

- The earlier the age at which residents reported having their first drink, the greater their current prevalence of heavy drinking (Figure 2-12). Thus, 14% of residents who had their first drink by age 14 reported drinking heavily in the last 30 days, compared to 8% of those who first drank between ages 15 and 17, 4% of those who drank between ages 18 and 20, and just 2% of those who started drinking at age 21 or older.

Figure 2-12: Heavy Alcohol Use by Age of First Drink



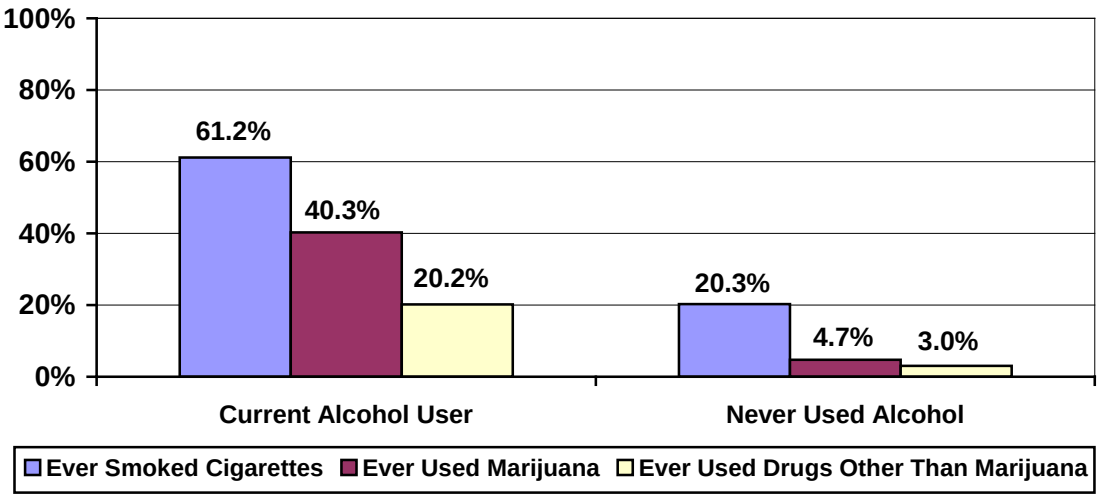
G. RELATIONSHIP OF ALCOHOL USE, AND AGE OF FIRST USE, TO USE OF TOBACCO AND ILLICIT DRUGS

Alcohol Use and Its Relationship to Tobacco and Illicit Drug Use (Figure 2-13)

- Current use of alcohol was highly related to the use of tobacco (Figure 2-13). Thus, 61% of current alcohol users had smoked cigarettes in their lifetime, compared to only 20% of residents who had never used alcohol.

- Compared to those who never drank, current alcohol users also reported a substantially higher prevalence of lifetime marijuana use (40% vs. 5%) and lifetime use of illicit drugs other than marijuana (20% vs. 3%).

Figure 2-13: Use of Cigarettes and Illicit Drugs among Alcohol Users and Residents Who Never Used Alcohol



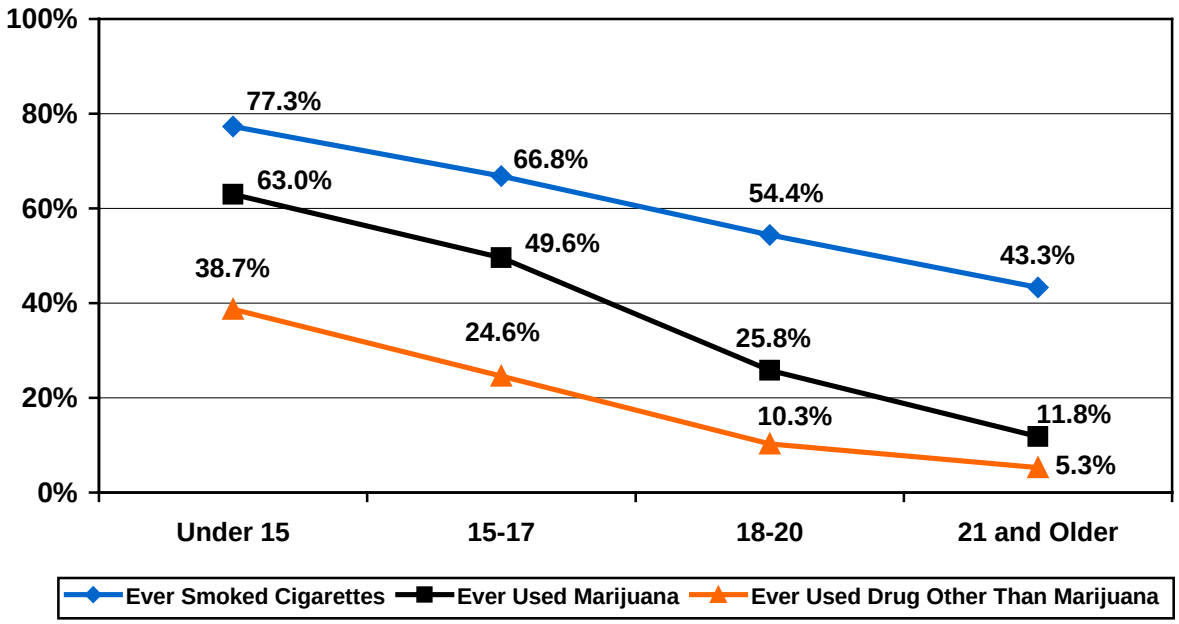
Relationships between Age of First Alcohol Use and Use of Tobacco and Illicit Drugs (Figure 2-14)

- The prevalence of cigarette and illicit drug use was substantially higher among drinkers who initiated alcohol use at an early age than it was among drinkers who were late initiators (Figure 2-14). Thus, the highest proportion of lifetime cigarette smoking was found among those who had their first drink before age 15 (77%). Smoking prevalence decreased with increasing age of first use of alcohol; dropping to 67% among those who first drank at age 15-17, 54% among those who first drank at age 18-20, and 43% among those first drinking at age 21 or older.

- Similar trends were found for marijuana use, with the highest lifetime use of marijuana being reported by those who started drinking before age 15 (63%). Marijuana use fell to 50% among those initiating alcohol use between ages 15-17, 26% among those who first drank between ages 18-20, and 12% among those who started drinking at age 21 or older.

- Lifetime use of illicit drugs other than marijuana also increased as the age of alcohol initiation decreased, being reported by 39% of those drinking before age 15, 25% of those drinking between 15-17, 10% of those drinking between 18 and 20, and 5% of those who started drinking at age 21 or older.

Figure 2-14: Use of Tobacco and Illicit Drugs by Age of First Drink



CHAPTER 3

ILLICIT DRUG USE

In this chapter, an overview of the prevalence of illicit drug use and the characteristics of illicit drug users is presented. Relationships between marijuana use and the use of other illicit drugs are also examined. The survey questioned state residents on their use of 13 different drugs: marijuana, powdered cocaine, crack cocaine, heroin, non-prescribed pain relievers or other opiates, non-prescribed stimulants, methamphetamine, hallucinogens, such as PCP or LSD, non-prescribed tranquilizers, non-prescribed sedatives or sleeping pills, ecstasy, other club drugs and non-prescribed steroids. Over-the-counter medications and the legitimate, prescribed use of any of these substances are not included. The lifetime prevalence of each substance is presented first. In the remaining analyses, these drugs are grouped into the same major categories utilized in the National Household Survey. These are as follows:

1. Marijuana.
2. Cocaine: Powdered cocaine and crack cocaine.
3. Hallucinogens: LSD/PCP, Ecstasy, and other club drugs.
4. Heroin.
5. Psychotherapeutics: All the prescription-type drugs, including stimulants, pain relievers and other opiates, sedatives or sleeping pills, and tranquilizers. Methamphetamine is included in this category as a form of stimulant.

Because few residents acknowledged using any illicit drugs in the last 30 days, the analysis also included those who reported using illicit drugs in the last 12 months. The following definitions are used in this chapter:

Current Users: one or more illicit drugs in the last 30 days.
Recent Users: Used one or more illicit drugs in the last 12 months.
Multiple Drug Users: Used two or more illicit drugs in lifetime.

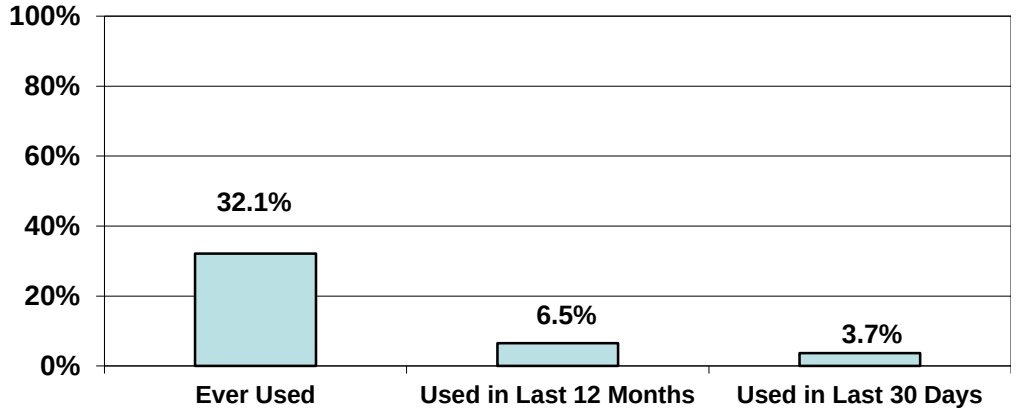
A. PREVALENCE OF ILLICIT USE

Prevalence of Illicit Drug Use and Timeframes for Use

Thirty-two percent, or 2,130,063, New Jersey residents reported that they had used one or more illicit drugs at some time in their lives (Table 3.1 and Figure 3-1). Seven percent, or 431,321, reported using one or more illicit drugs in the last 12 months, while 4%, or 245,521, reported using one or more illicit drugs in the last 30 days.

Table 3.1 Resident Adult Population Estimates for Illicit Drug Use	
TOTAL NEW JERSEY RESIDENT ADULTS, 2009	**N** = 6,622,131
RESIDENTS REPORTING EVER (LIFETIME) ILLICIT DRUG USE	**n** = 2,130,063
RESIDENTS REPORTING PAST YEAR ILLICIT DRUG USE	**n** = 431,321
RESIDENTS REPORTING PAST 30 DAY ILLICIT DRUG USE	**n** = 245,521

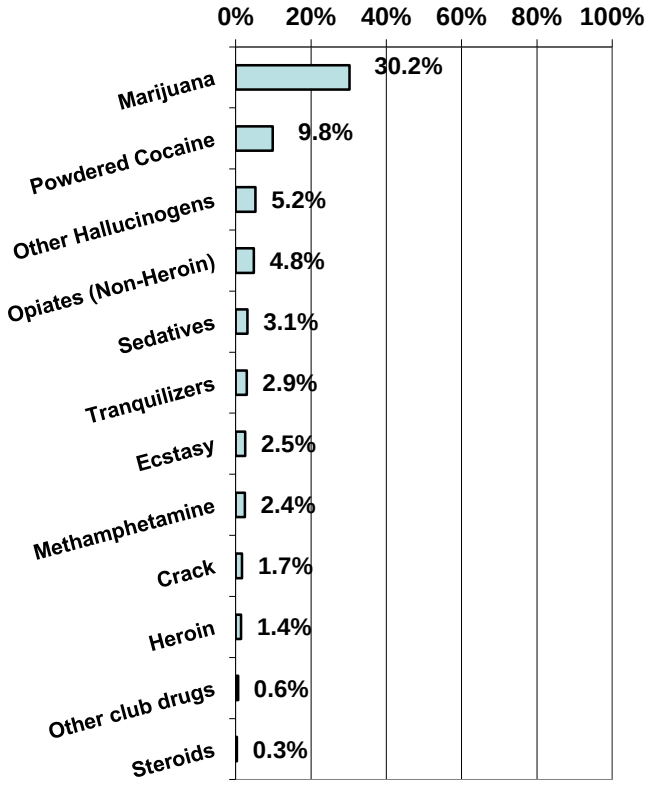
Figure 3-1: Use of Illicit Drugs: NJ Adult Residents



Lifetime Use of Illicit Drugs by Type of Drug

- The most prevalent drug used by residents was marijuana, with 30% reporting lifetime use (Figure 3-2). Next in frequency was powdered cocaine (10%). Lifetime use of hallucinogens, like LSD, PCP, and lifetime use of opiates other than heroin were each reported by about 5% of residents. Three percent or fewer of New Jersey residents reported lifetime use of the remaining drugs, with club drugs other than ecstasy, and non-prescribed steroids being reported with the lowest frequency (less than 1%).
- However, by grouping "psycho-therapeutic" drugs[18] including non-heroin opiates, like Oxycontin or Percocet, sedatives, tranquilizers and stimulants like methamphetamines, the rate of prescription drug abuse is estimated to be 8.6%.

Figure 3-2: Lifetime Use of Illicit Drugs by Drug Type: NJ Residents



Past 12 Month and Past 30 Day Drug Use, By National Drug Categories

Using the aforementioned National Household Survey drug categories, and looking at illicit drug use in the last 12 months and last 30 days:

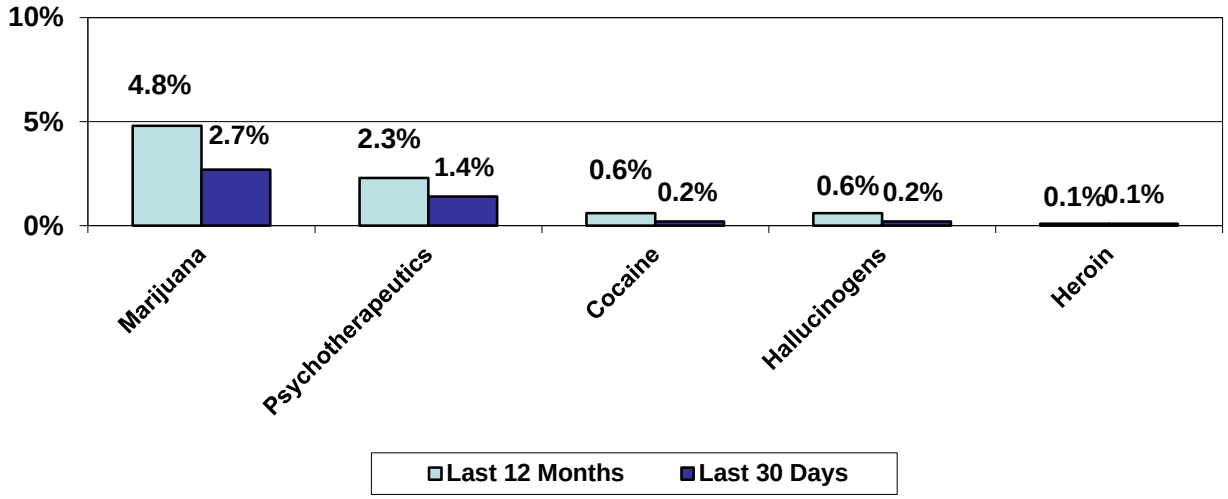
- Marijuana remains the most frequently reported substance used, with nearly 5%, or 318,514

[18]Psychotherapeutics are defined as all prescription-type drugs, including stimulants, pain relievers and other opiates, sedatives or sleeping pills, and tranquilizers. Methamphetamine is included as a form of stimulant.

reporting its use in the last 12 months, and 3%, or 191,108 reporting past 30 day use (Figure 3-3).

- Psychotherapeutics is the second most frequently used drug, being reported by 2%, or 152,621 residents, in the last 12 months and 1%, or 76,311 residents, in the last 30 days. Use of cocaine and hallucinogens were each reported by about 1% in the last 12 months, and by less than 1% in the last 30 days. Past 12 month and 30 day use of heroin was reported by less than 1% for both time periods.

Figure 3-3: Use of Illicit Drugs in Last 12 Months and Last 30 Days by Category of Drug: NJ Residents



B. DEMOGRAPHIC CHARACTERISTICS OF RECENT USERS OF ANY ILLICIT DRUG, MARIJUANA, AND PSYCHOTHERAPEUTICS AMONG ALL RESIDENTS

Gender, Age, and Race/Ethnicity

- Males were more likely than females to have used all types of drugs in the past year (8% vs. 5%), including marijuana (7% vs. 3%), and psychotherapeutics (3% vs. 2%) (Table 3-1).
- The use of all categories of drugs decreased substantially with increasing age, with 18-20 year-olds reporting the highest frequency of use (25%) and those 50 and older the lowest use (3%). By specific drugs, among 18-20 year-olds, 24% reported past year use of marijuana and 7% reported past year use of psychotherapeutics. In contrast, among those 50 and older, just 1% reported using marijuana and 1% reported psychotherapeutics.
- By race/ethnicity, Blacks reported a slightly higher prevalence of use of any illicit substance (8%) relative to Whites (7%), Hispanics (5%), and Asians (2%). By drug type, Blacks reported the highest use of marijuana (6% vs. 5% for Whites, 3% for Hispanics, and 2% for Asians) and Whites reported the highest use of psychotherapeutics (3% vs. 2% for Hispanics, 1% for Blacks, and 0.1% for Asians).

Marital Status, Education, Employment, and Income

- By marital status, those who never married reported the highest prevalence of the use of all substances (15% vs. 5% of separated/divorced residents, 4% of married residents, and 2% of widowed residents). This difference was especially apparent with respect to marijuana use as

reported by 12% of those who never married, compared to 3% of married residents, 3% of divorced or separated residents, and less than 1% of those widowed.

- Those with just some college education reported the highest use of all illicit substances (10% vs. 6% for those in all other educational categories). By specific substance, about 7% of those with some college reported marijuana use compared to 5% of those with less than a high school education and 4% of those who were either high school or college graduates. Similarly, 4% of those with some college education reported use of psychotherapeutic drugs compared to 2% of those at all other educational levels.
- New Jersey residents who were unemployed reported a prevalence of illicit drug use double that of residents employed full or part-time (14% vs. 7%). Higher use was also reported by the unemployed for both marijuana (11% vs. 5%) and psychotherapeutics (6% vs. 2%).

Table 3-2: Characteristics of Recent Users of Any Illicit Drug, Marijuana, and Psychotherapeutics: NJ Residents [19]

Demographics		Any Illicit Drug (n=680)	Marijuana (n=459)	Psycho-Therapeutics (n=272)
New Jersey Total Population		***6.5%***	***4.8%***	***2.3%***
Gender	Males	8.3	6.6	2.7
	Females	4.8	3.3	2.0
Age	18-20	25.2	23.5	7.1
	21-25	18.1	14.3	7.1
	26-34	9.5	7.8	3.0
	35-49	5.2	3.8	1.6
	50+	2.7	1.3	1.4
Race/ Ethnicity	White	6.9	5.2	2.8
	Black	8.4	6.4	1.4
	Hispanic	4.5	2.9	2.1
	Asian	1.8	1.7	0.1
Marital Status	Married	4.2	2.9	1.5
	Never Married	14.8	12.4	5.2
	Divorced/Sep.	5.1	3.2	1.9
	Widowed	1.6	.3	1.0
Education	Less than H.S.	5.7	4.5	2.4
	H.S. Grad.	5.7	4.3	1.7
	Some College	9.6	7.2	3.9
	College Grad.	5.5	4.0	1.9
Employment Status	Employed FT/PT	6.9	5.3	2.3
	Unemployed	14.3	10.7	5.7
Income	Under $25,000	4.3	2.7	1.9
	$25,000-49,999	6.9	5.3	2.4
	$50,000-79,999	7.4	5.5	2.5
	$80,000-99,999	8.0	6.0	2.8
	$100,000 +	7.4	5.6	2.8

Overall, those earning $25,000 or more per year were more likely (7%-8%) than those earning less than that (4%) to report past year use of any illicit drug. Similarly, past year marijuana use was higher for all other income groups (5%-6%) than among those earning less than $25,000 (3%). Approximately 2%-3% of all income groups reported use of psychotherapeutics.

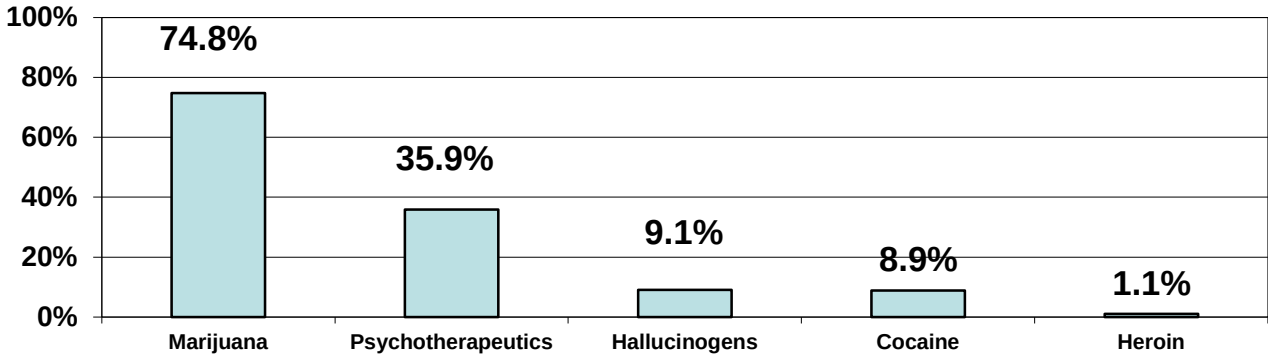
[19] Please note that some individuals may have used BOTH marijuana and psychotherapeutics in the past year, hence summing these totals adds to more than the total of any illicit drug users in the past year.

C. PAST YEAR ILLICIT DRUG USERS: DRUGS USED AND CHARACTERISTICS OF USERS

Types of Drugs Used in Twelve Months Preceding Interview: "Past Year"

- Among past year drug users, marijuana was the most frequently used drug by far (75%) (Figure 3-4). Psychotherapeutics was next in prevalence, reported by 36% of recent users. Hallucinogens and cocaine were each used by 9% of users, while heroin was used by only 1%.

Figure 3-4: Drugs Used in Last 12 Months by Category of Drug: NJ Illicit Drug Users



Demographic Characteristics of Users by Drug Type: Marijuana and Psychotherapeutics[20]

- Among past year drug users, males were more likely to use marijuana than females (79% vs. 68%) (Table 3-3). However, females were more likely than males to use psychotherapeutic drugs (41% vs. 33%).

- In terms of past year drug users, those in the 18-20 year-old age group were the most likely (93%) and those in the 50 and above age group the least likely (48%) to use marijuana. However, those aged 50 and over were the most likely of all age groups to use psychotherapeutic drugs (52% vs. 28%-39% for the other age categories).

- There was considerable diversity of drug use by race/ethnicity among past year drug users. In general, Asian substance users had the highest prevalence of marijuana use (96%) and the lowest prevalence of psychotherapeutics (4%). Hispanic substance users were the most likely to use psychotherapeutics (46%) and the least likely to use marijuana (66%). Black and White substance users had comparable rates of marijuana use (75%); however Whites were more likely to use psychotherapeutics than Blacks (40% vs. 16%).

[20]Heroin, cocaine, and hallucinogens have been excluded from the demographic analysis because of the small number of users of these substances. For information on the demographic characteristics of users of heroin, cocaine, and hallucinogens refer to the Capture/Recapture analysis included on the Division of Mental Health and Addiction Services website. http://www.state.nj.us/humanservices/das/news/reports/other/

Demographic Characteristics of Past Year Drug Users

- In general, unmarried drug users reported higher rates of the use of both substances than drug users who were currently married. Thus, drug users who were never married reported the highest use of marijuana (84% vs. 68% among married users, 64% among the divorced/separated, and 17% among the widowed). Widowed users reported the highest use of psychotherapeutics (60% vs. 35%-38% for all other marital groups).

- By educational status, those with less than a high school education reported slightly higher use of marijuana (78% vs. 72%-75% for other educational groups) and psychotherapeutics (42% vs. 30%-40% for other groups).

- With respect to employment, unemployed drug users reported slightly higher use of psychotherapeutics than employed users (40% vs. 34%). However, both employment types had comparative rates of marijuana use (74% vs. 76%).

Table 3-3: Demographic Characteristics of Past Year Drug Users by Type of Substance Used

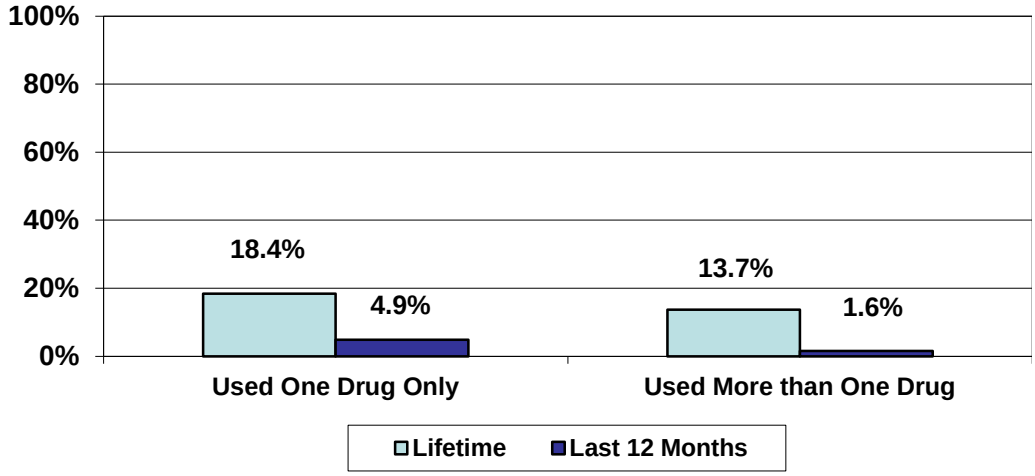
Demographics		**Proportion of Recent Users Who Used: Marijuana (*n=459*)**	**Proportion of Recent Users Who Used: Psycho-therapeutics (*n=272*)**
All Recent Users		***74.8 %***	***35.9%***
Gender	Male	79.3	32.8
	Female	67.9	40.7
Age	18-20	92.5	28.0
	21-25	79.6	39.1
	26-34	80.4	31.1
	35-49	73.9	30.6
	50+	47.8	52.3
Race/ Ethnicity	White	74.8	40.0
	Black	74.9	16.4
	Hispanic	66.3	46.2
	Asian	96.0	4.0
Marital Status	Married	68.0	35.7
	Never Married	83.6	35.2
	Divorced/Sep.	63.8	38.3
	Widowed	17.4	60.3
Education	Less than H.S.	78.2	42.3
	H.S. Grad.	75.3	30.3
	Some College	75.2	40.4
	College Grad.	72.7	34.5
Employment Status	Employed FT/PT	76.1	33.5
	Unemployed	74.1	39.8
Income	Under $25,000	61.6	44.5
	$25,000-49,999	78.0	35.2
	$50,000-79,999	74.7	33.5
	$80,000-99,999	75.0	34.6
	$100,000 and over	76.0	37.9

D. MULTIPLE DRUG USE

Prevalence: All Residents (Figure 3-5)

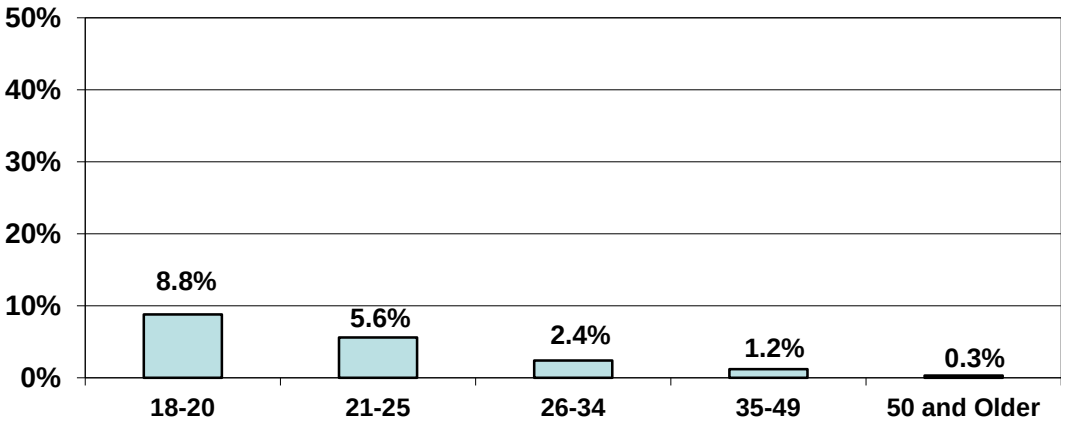
- About 18% of all New Jersey residents reported using only one drug during their lives, while 14% reported using two or more drugs (Figure 3-5). Five percent of New Jersey residents reported using only one drug in the last 12 months, compared to 2% who used two or more.

Figure 3-5: Multiple Drug Use in Lifetime and the Last 12 Months: NJ Residents



- The highest prevalence of multiple drug use in the last 12 months was reported by 18-20 year-olds (9%) (Figure 3-6). Use of multiple drugs decreased with age, as just 1% or fewer of those 35 and older reported the use of more than one drug in the past year.

Figure 3-6: Use of Multiple Drugs in Past 12 Months by Age: NJ Residents

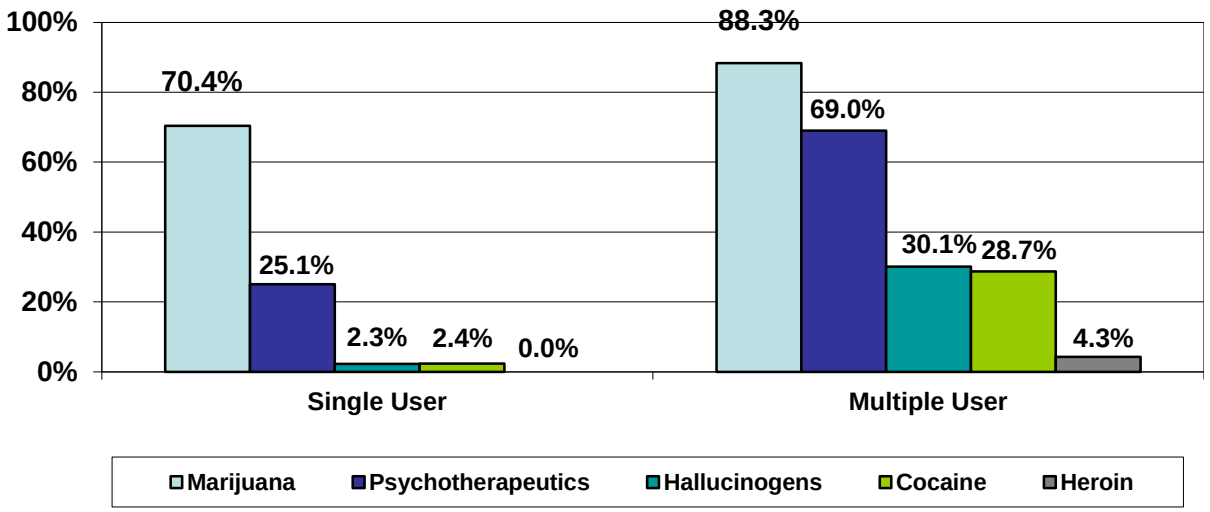


Drugs Used by Single and Multiple Drug Users (Figure 3-7)

- Among past year users who used only one drug, marijuana (70%) and psychotherapeutics (25%) were the primary drug of choice. Only 2% or fewer of single users used cocaine, hallucinogens or heroin (Figure 3-7).

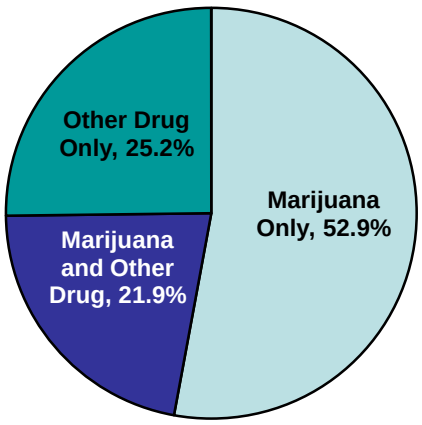
- Past year users of multiple drugs, however, used a variety of substances; with 88% using marijuana, 69% psychotherapeutics, 30% hallucinogens, 29% cocaine, and 4% heroin.

Figure 3-7: Drugs Used in Last 12 Months by Category of Drug: NJ Illicit Drug Users



- When the use of marijuana alone and in combination with other substances is examined; 53% reported using marijuana only in the last 12 months, 22% used marijuana and one or more other drugs, and 25% used only drugs other than marijuana (Figure 3-8).

Figure 3-8: Drugs Used in Last 12 Months: NJ Illicit Drug Users

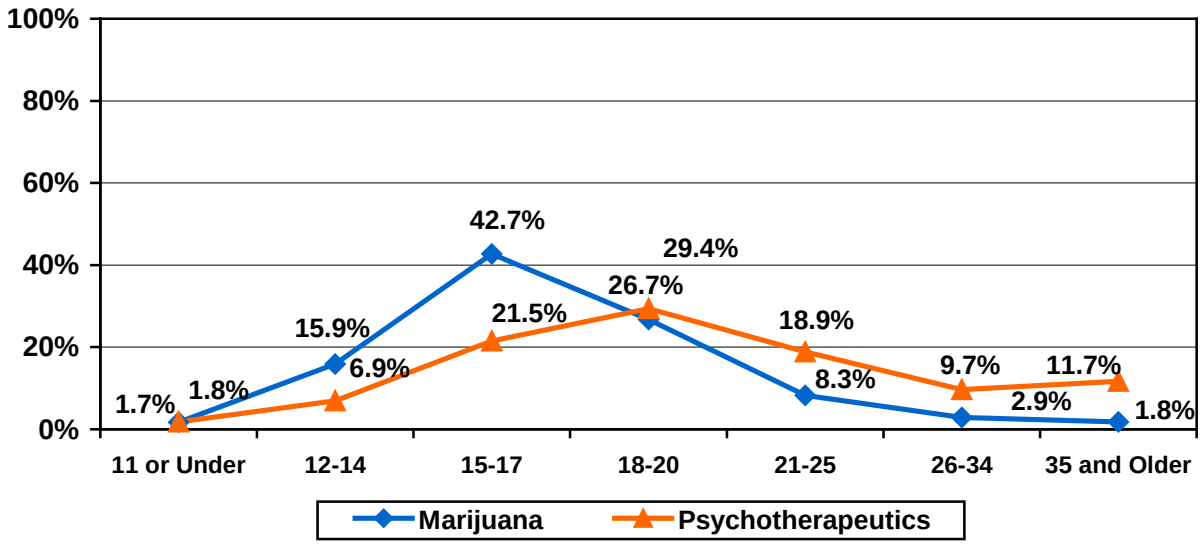


Age of First Use of Illicit Drugs among Those Who Ever Used Drugs (Figure 3-9)

- Of the two major drug types respondents reported using (marijuana and psychotherapeutics),[21] marijuana was used at the earliest age, peaking in first use among residents between the ages of 15 and 17 (43%) (Figure 3-9). First use of marijuana declined substantially after this, with 27% reporting first use between 18 and 20, 8% between 21 and 25, and less than 3% after age 26.

- The first use of psychotherapeutics, however, peaked between the ages of 18 and 20, with 29% reporting first use in the late teens. After age 20, initiation of psychotherapeutic drugs declined to 19% among 21-25 year-olds, 10% among 26-34 year-olds, and to 12% among those aged 35 and older.

Figure 3-9: Age of First Use of Selected Drugs: NJ Lifetime Illicit Drug Users

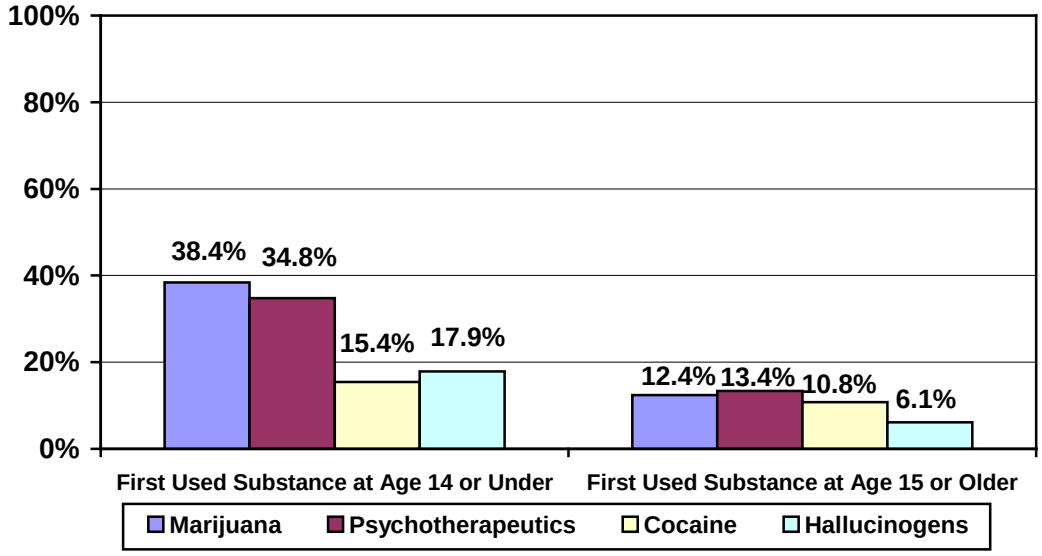


Relationship between Age of First Drug Use and Frequency of Use (Figure 3-10)

- In general, the younger the age at which users of illicit drugs initiated use, the more likely they were to use them frequently[22] (Figure 3-10). For example, 38% of marijuana users and 35% of psychotherapeutic drug users who initiated use of these substances at or before age 14 were frequent users, compared to only 12% and 13% of marijuana and psychotherapeutic users, respectively, who initiated use after age 14. Similar patterns exist for cocaine and hallucinogen use, with frequent use occurring among 15% of cocaine and 18% of hallucinogen users who initiated use before age 14 compared to 11% of cocaine and 6% of hallucinogen users who initiated use after age 14.

[21] In this and all subsequent sections pertaining to illicit drug use, we exclude heroin, cocaine, and hallucinogens from the analyses due to the low number of respondents reporting use of these substances.
[22] Frequent use is defined as use on 12 or more days in the last 30 days in which they were used.

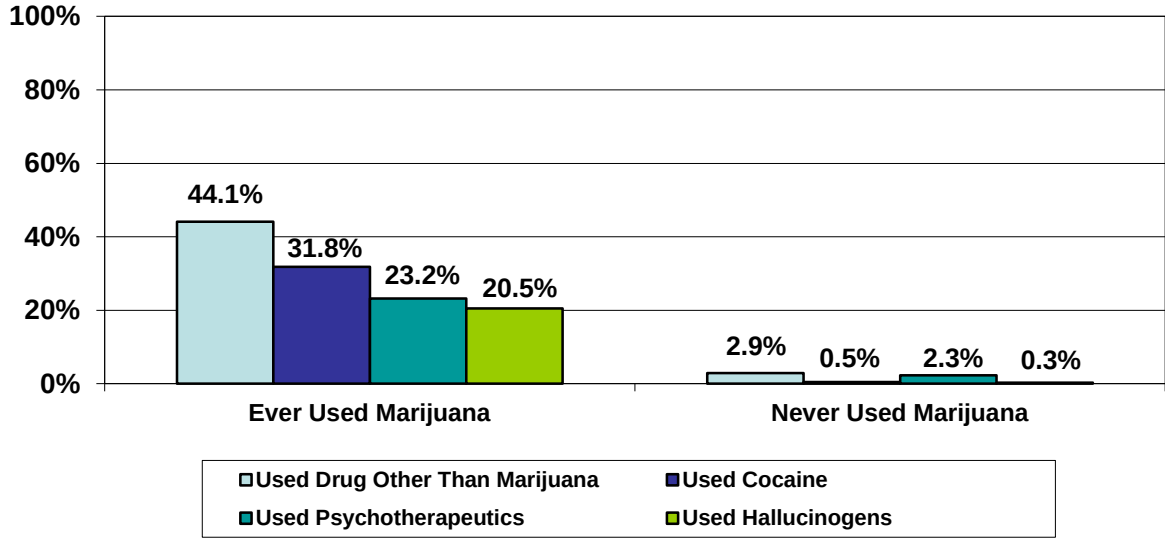
Figure 3-10: Percent Who Used Selected Drugs on 12 Days or More during the Last 30 Days by Age of First Use: NJ Lifetime Illicit Drug Users



Relationship between Marijuana Use and the Use of Other Drugs (Figure 3-11)

- New Jersey residents who had used marijuana in their lifetime were substantially more likely than those who had not used marijuana to report lifetime use of any other drug (44% vs. 3%), cocaine (32% vs. 1%), psychotherapeutics (23% vs. 2%), and hallucinogens (21% vs. 2%) (Figure 3-11).

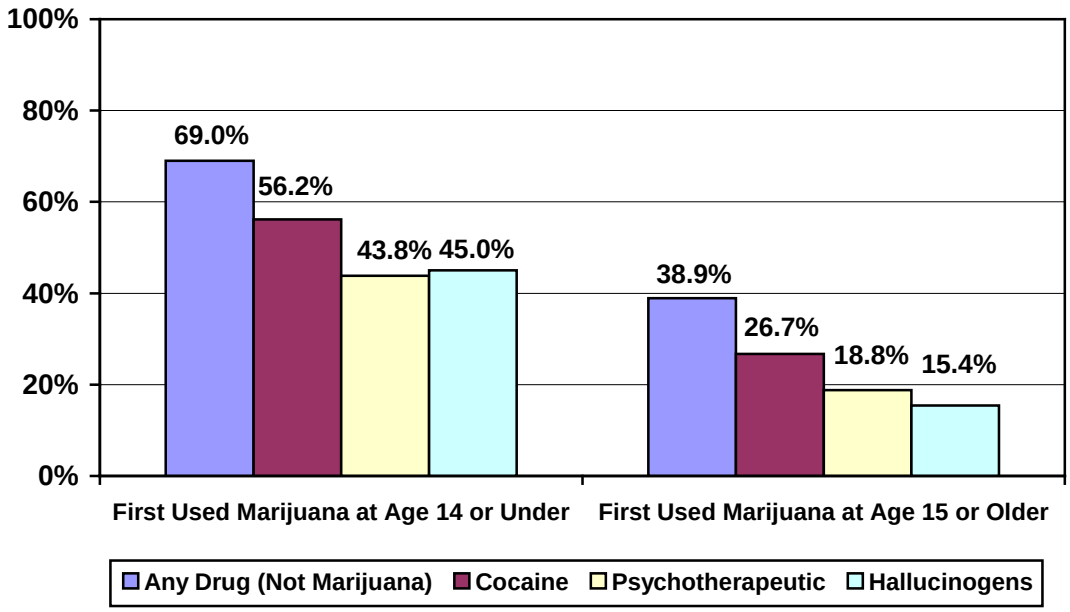
Figure 3-11: Lifetime Use of Illicit Drugs Other than Marijuana by Lifetime Marijuana Use: NJ Residents



- The younger the age at which residents first used marijuana, the greater their likelihood of also using other drugs (Figure 3-12). Thus, 69% of those who first used marijuana at

age 14 or younger reported using some other drug in their lifetimes, including 56% who used cocaine, 44% who used psychotherapeutics, and 45% who used hallucinogens. In contrast, among marijuana users who first used the drug at age 15 or older, only 38% used some other drug, including 27% who used cocaine, 19% who used psychotherapeutics, and 15% who used hallucinogens.

Figure 3-12: Lifetime Use of Illicit Drugs Other Than Marijuana by Age of First Marijuana Use: NJ Residents



CHAPTER 4

TOBACCO

A. INTRODUCTION

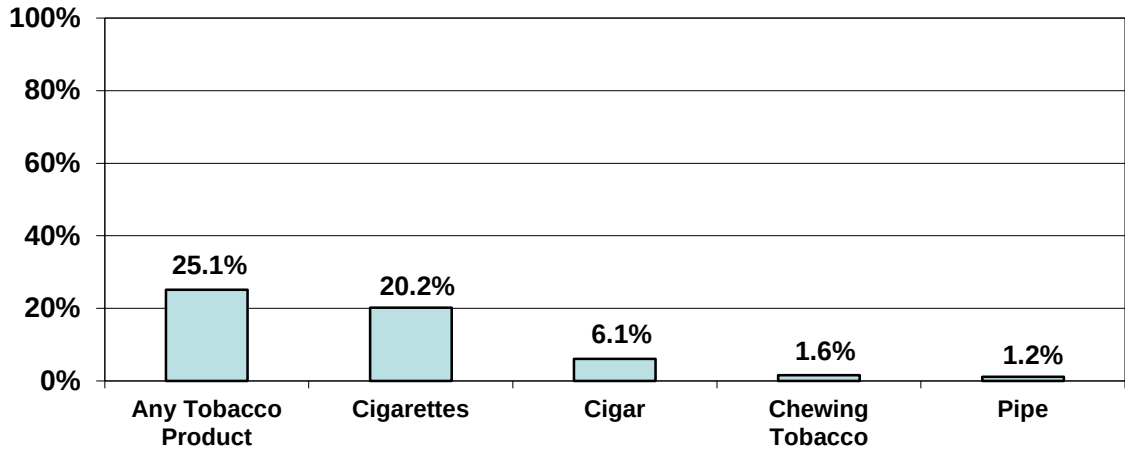
In this chapter, the focus is on the prevalence of tobacco use with a primary emphasis on cigarettes, which far surpass other tobacco products in their prevalence of use. The chapter presents an overview of the use of all tobacco products in the previous year. It then provides more specific information on the timeframes during which New Jersey adults have smoked cigarettes, their frequency and quantity of use, and a description of the demographic characteristics of New Jersey smokers. Also examined in this chapter are the age of first cigarette use and the relationship between cigarette use, age of first use and the use of alcohol, marijuana and other illicit drugs. For the purpose of this report, the following definitions are used:

Current Use: Smoking at least one cigarette in the last 30 days.
Daily Use: Smoking at least one cigarette per day in the last 30 days.
Heavy Use: Smoking a pack (20 cigarettes) per day or more in the last 30 days.

B. OVERVIEW OF TOBACCO USE IN THE PREVIOUS YEAR (FIGURE 4-1)

- About 25% of all New Jersey residents had used a tobacco product in the previous 12 months (Figure 4-1).
- Cigarettes were the most frequently used product by far, with 20% reporting their use in the last year. Six percent of state residents smoked cigars, 2% used chewing tobacco, and 1% smoked a pipe in the last year.

Figure 4-1: Use of Tobacco Products in Last 12 Months by Type of Product: NJ Residents

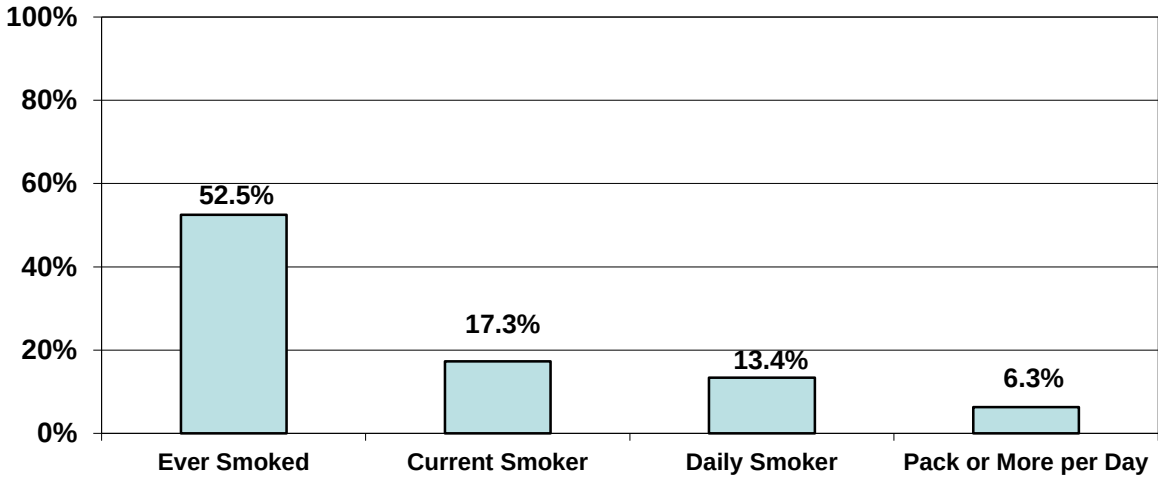


C. OVERVIEW OF CIGARETTE USE: TIMEFRAMES, FREQUENCY, AND QUANTITY OF USE

Prevalence Overall (Figure 4-2)

- More than half of residents (53%) smoked cigarettes in their lifetime and about 1-in-6 (17%) smoked cigarettes in the last 30 days (Figure 4-1). In the last 30 days, 13% of New Jersey residents smoked daily and 6% smoked a pack or more per day.

Figure 4-2: Patterns of Cigarette Use, Lifetime, and Past 30 Days: NJ Residents



D. CHARACTERISTICS OF CURRENT AND HEAVY SMOKERS (TABLE 4-1)

Gender and Age

- Men were slightly more likely than women to smoke currently (19% vs. 16%) and to smoke heavily (8% vs. 5%) (Table 4-1).

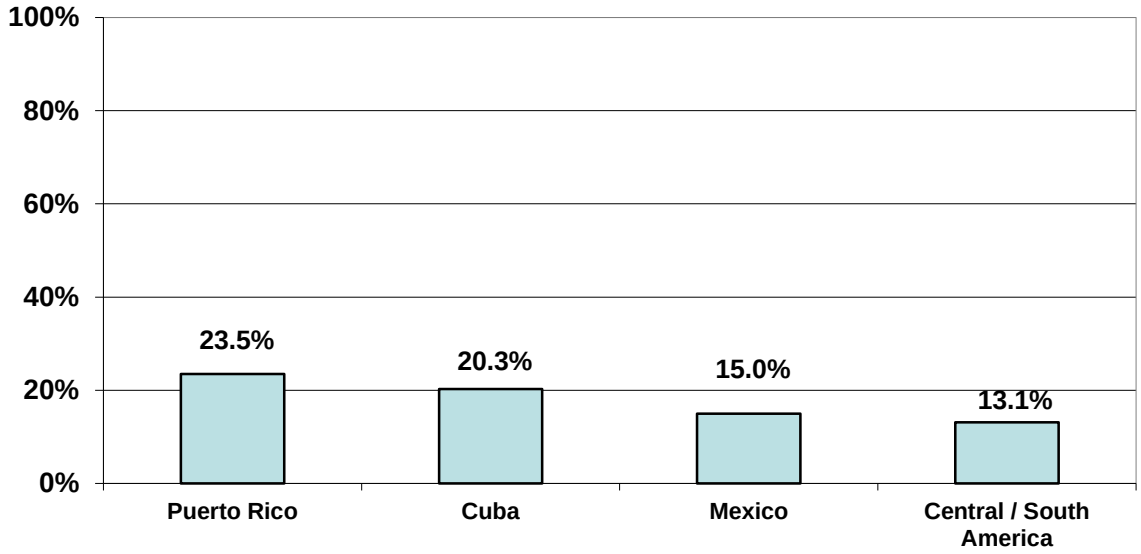
- The highest prevalence of current smoking (27%) and heavy smoking (8%) was found among New Jersey residents aged 21-25. The prevalence of current smoking was slightly lower among young adults in the 18-20 and 26-34 year-old age range (23% each) and 6%-7% of residents in those two age groups reported heavy smoking. After age 34, current smoking decreased with age, dropping to 18% among 35-49 year-olds and to 13% among those aged 50 and over. Residents aged 50 and over also had the lowest prevalence of heavy smoking of all age groups (5%).

Race/Ethnicity

- Blacks (20%) were more likely to smoke currently than Whites (18%), Hispanics (15%), and Asians (6%). However, Whites (8%) were more likely to smoke heavily than Hispanics (5%), Blacks (4%), and Asians (1%).

- Among the different Hispanic ethnic groups, Puerto Ricans were the most likely to be current smokers (24%), followed by Cubans (20%) (Figure 4-3). Residents from Mexico and Central or South America reported the lowest smoking rate, with only 15% and 13% respectively, saying they had smoked in the last 30 days.

Figure 4-3: Cigarette Smoking in the Last 30 Days by Place of Origin: NJ Hispanics



Marital Status

- The highest prevalence of current smoking was found among those who were never married (26%) and by those who were divorced or separated (23%). Widowed residents had the lowest current smoking rate of all groups (12%).

- Heavy smoking was most prevalent among divorced and separated residents (10%) and by those who were never married (8%). Those who were married and widowed reported a prevalence of 5% and 4%, respectively.

Education, Employment, and Income

- Current smoking was inversely related to education, with those at the lowest education level, non-high school graduates, being the most likely to smoke (25%) and those at the highest level, college graduates, being the least likely (9%).

- Residents at higher education levels were less likely to smoke heavily, with only 2% of college graduates reporting heavy smoking compared to 11% of residents with less than a high school education.

- The unemployed were substantially more likely than employed residents to both currently smoke (27% vs. 18%) and to smoke heavily (9% vs. 6%).

- Residents at the highest income level were less likely than those making less money to be current smokers (13%) or to smoke heavily (5%). The highest prevalence of current smoking was found among those earning $25,000-$49,999 (24%), and the highest prevalence of heavy smoking was among those earning $25,000-$49,000 (9%).

Table 4-1: Proportion of Current and Heavy Smokers: NJ Residents

Demographics		Smoked in Last 30 Days (n=2189)	Smoked Pack per Day in Last 30 Days (n=804)
New Jersey Total Population		***17.3%***	***6.3%***
Gender	Males	19.3	8.2
	Females	15.5	4.5
Age	18-20	23.4	6.1
	21-25	27.3	8.4
	26-34	22.8	7.1
	35-49	18.2	7.1
	50+	13.1	5.2
Race/ Ethnicity	White	18.0	7.5
	Black	20.3	4.0
	Hispanic	15.4	4.6
	Asian	6.1	1.3
Marital Status	Married	13.9	5.3
	Never Married	26.3	8.0
	Divorced/Sep.	22.8	10.2
	Widowed	11.9	4.3
Education	Less than H.S.	25.4	10.5
	H.S. Grad.	20.5	9.2
	Some College	22.3	6.6
	College Grad.	8.5	1.9
Employment Status	Employed FT/PT	17.5	5.8
	Unemployed	27.2	9.0
Income	Under $25,000	22.2	6.7
	$25,000-49,999	24.4	8.8
	$50,000-79,999	20.8	8.5
	$80,000-99,999	18.9	7.9
	$100,000 and over	13.3	4.9

E. EARLY CIGARETTE USE (BY AGE 14)

Prevalence

- About 16% of all residents reported smoking a cigarette by age 14 (Figure 4-4).

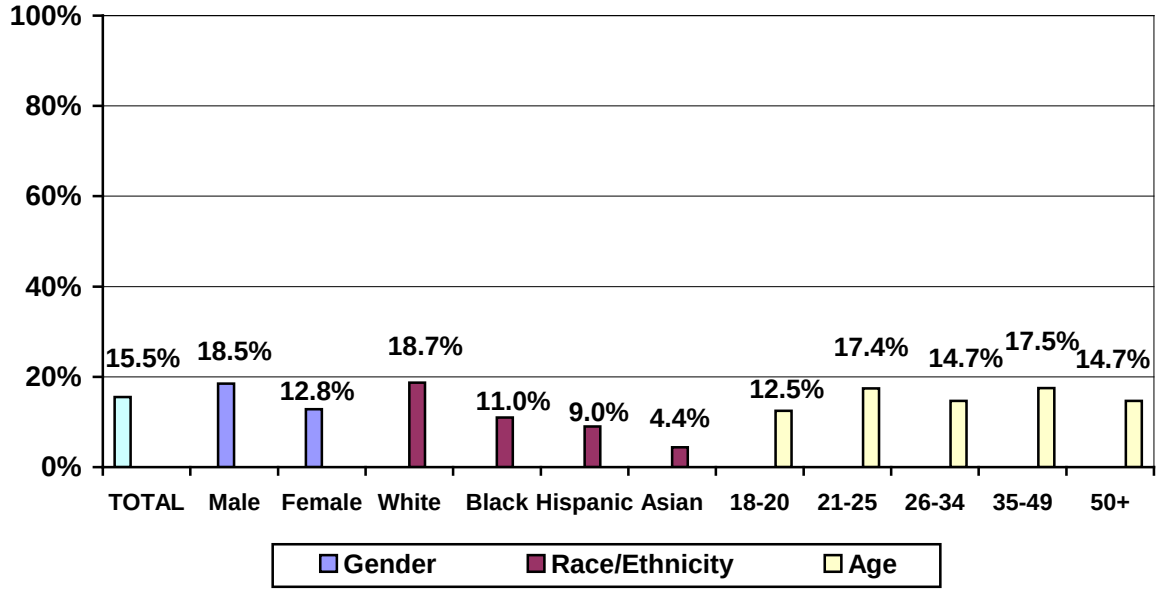
Demographic Characteristics

- Males were more likely than females to initiate cigarette use by age 14 (19% vs. 13%).

- Across racial/ethnic groups, Whites were the most likely (19%) and Asians the least likely (4%) to have smoked by age 14. Blacks and Hispanics were about equally likely to report early cigarette use (11% and 9%, respectively).

- The youngest group of residents, aged 18-20, were the least likely to report early cigarette use (13%). The prevalence of early smoking ranged between 15%-18% among residents in other age groups.

Figure 4-4: Prevalence of Early Smoking (by Age 14) by Gender, Race/Ethnicity, and Current Age: NJ Residents



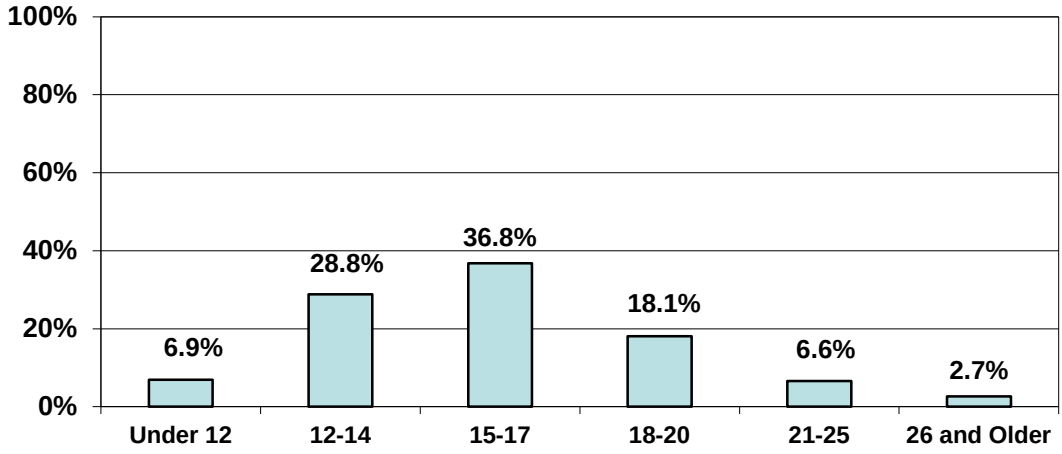
F. CURRENT SMOKERS

Age of Initiation (Figure 4-5)

- Although it is illegal for merchants to sell cigarettes to persons under age 18 in New Jersey, about 73% of current smokers reported smoking "part or all" of their first cigarette before age 18, with 36% reporting first cigarette use at age 14 or younger and 37% reporting first use between the ages of 15 and 17 (Figure 4-5).

- Only 27% of smokers initiated cigarette use at age 18 or older and just 3% smoked their first cigarette after the age of 25.

Figure 4-5: Age of First Cigarette Use: NJ Current Smokers



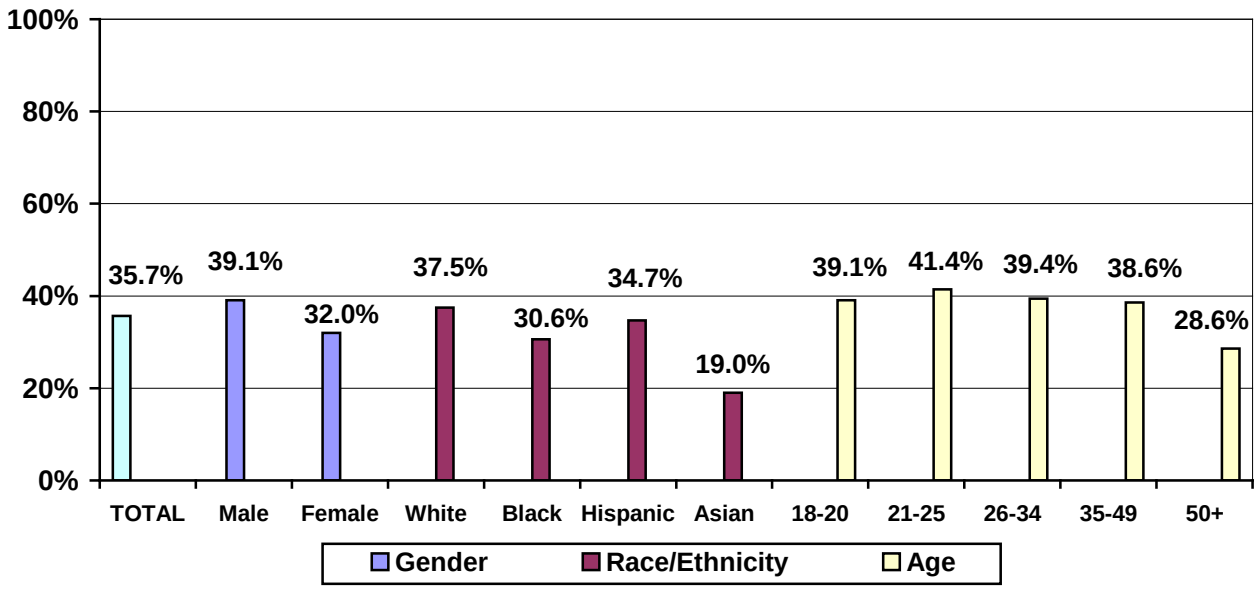
Demographic Characteristics of Early Smokers (by Age 14): Current Smokers (Figure 4-6)

- As figure 4-5 depicts, 36% of residents smoked a cigarette by the age of 14, including 7% who smoked before age 12 and 29% who first smoked between 12 and 14 (Figure 4-6).

- Among New Jersey residents who smoked in the last 30 days, those reporting cigarette use before age 15 were more likely to be male (39%) than female (32%) and more likely to be White (38%) than Hispanic (35%), Black (31%) or Asian (19%).

- Among smokers aged 18-49, there was little variation in early smoking, with 39%-41% of smokers in this age group reporting their first cigarette before age 15. However, among smokers aged 50 and over, just 29% reported early cigarette use.

Figure 4-6: Prevalence of Early Cigarette Use (by Age 14) by Gender, Age, and Race/Ethnicity: NJ Current Smokers

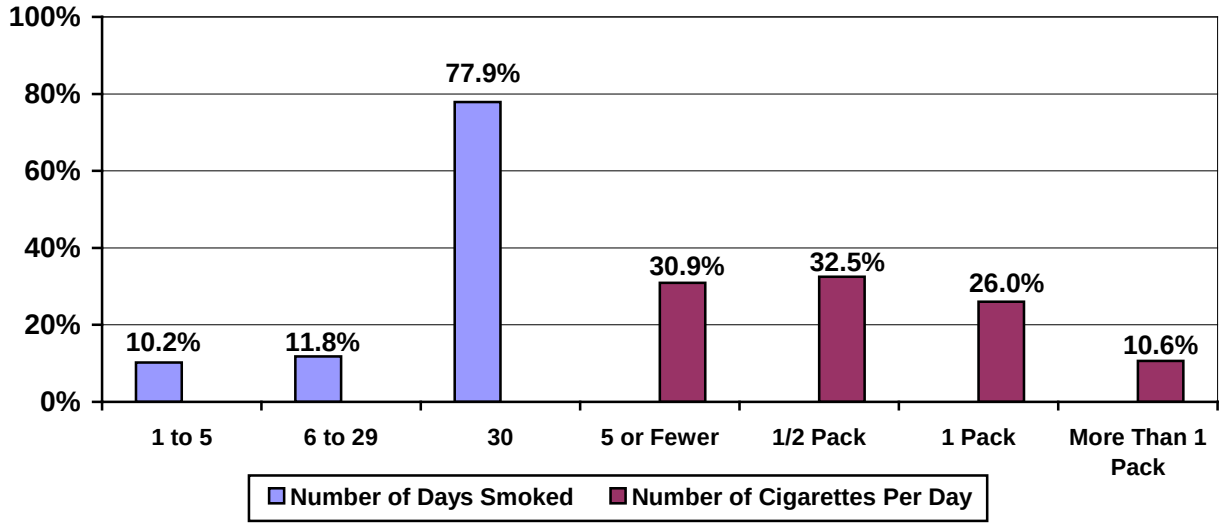


Frequency and Quantity of Use (Figure 4-7)

- About 78% of current smokers reported smoking daily in the last 30 days (Figure 4-7).

- Additionally, among smokers, 37% reported averaging a pack or more per day, 33% averaged a half pack per day, and 31% averaged 5 cigarettes or less per day in the last 30 days.

Figure 4-7: Frequency and Quantity of Cigarette Use in Last 30 Days: NJ Current Smokers

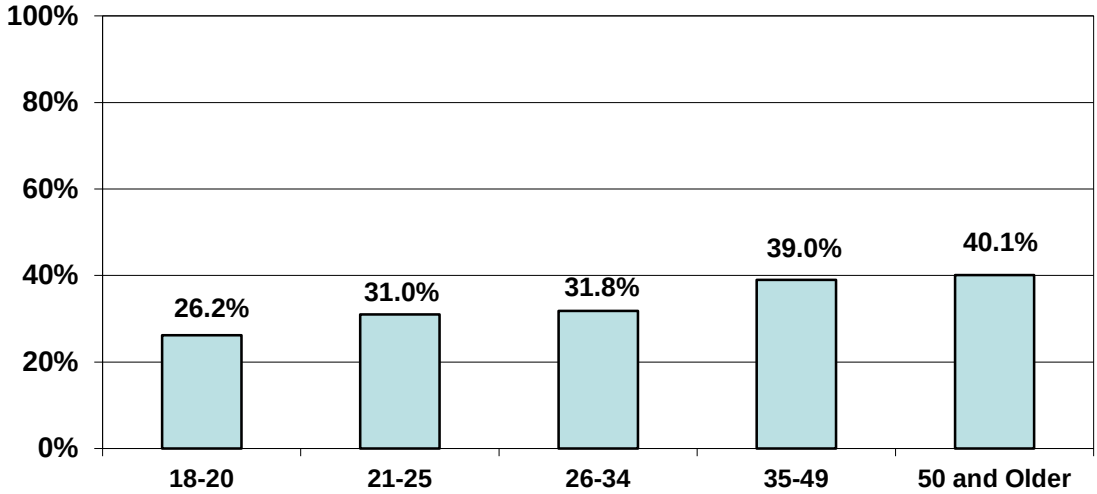


Characteristics of Heavy Smokers

- When characteristics of heavy smokers were examined among New Jersey residents who smoked in the last 30 days, several trends emerged which differed from those observed for the sample as a whole. The most striking differences were found with respect to age, race/ethnicity, and marital status.

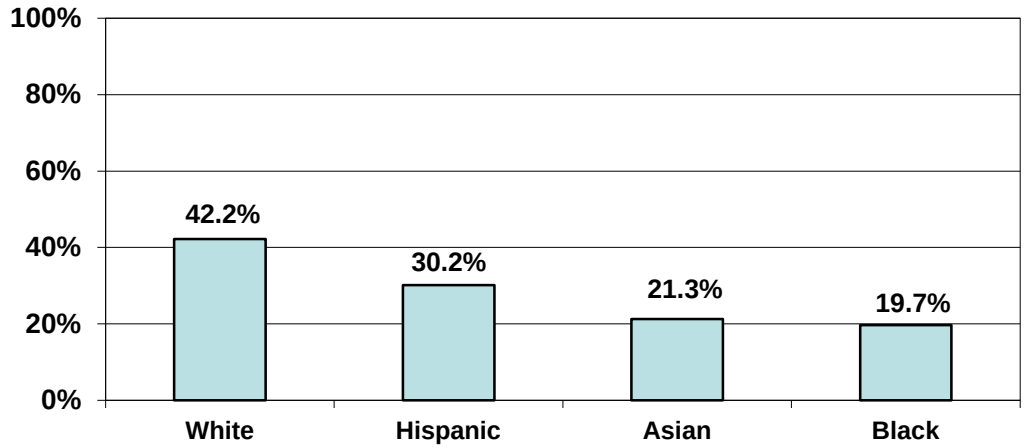
- Among smokers, the probability of heavy smoking increased with age (Figure 4-8). Thus, although older residents were less likely than younger residents to be current smokers, those older residents who smoked were substantially more likely to smoke heavily. Forty percent of smokers in the oldest age group smoked a pack or more per day, compared to 26% of those in the youngest group.

Figure 4-8: Heavy Smoking by Age: NJ Current Smokers



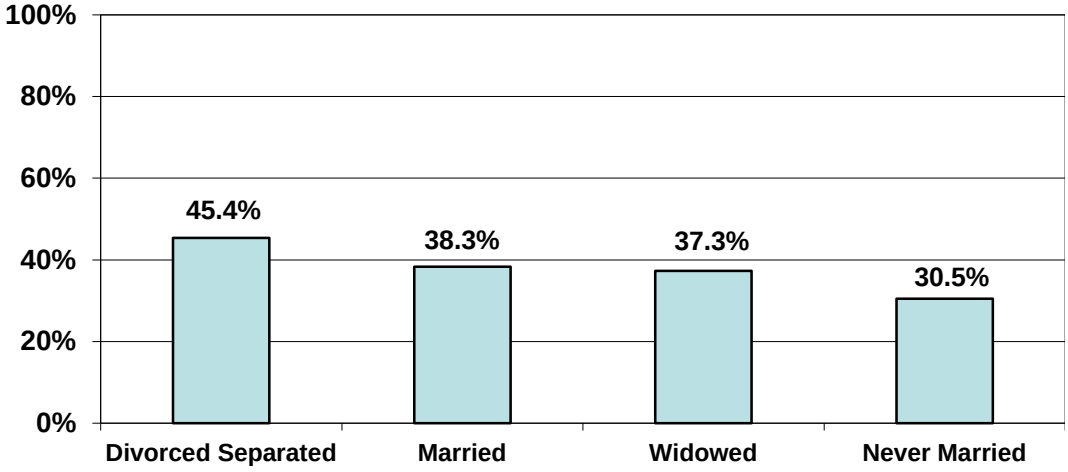
- While Whites were somewhat less likely than Blacks to smoke currently, White smokers were substantially more likely than smokers from other racial/ethnic groups to smoke heavily (42% vs. 30% of Hispanics, 21% of Asians, and 20% of Blacks) (Figure 4-9).

Figure 4-9: Heavy Smoking by Race/Ethnicity: NJ Current Smokers



- Residents who were never married were the most likely of all marital groups to smoke currently but, when they did smoke, were significantly less likely to smoke heavily (Figure 4-10). Thus, only 31% of never married smokers smoked a pack or more per day, compared to 45% of divorced/separated smokers and 38% of married smokers.

Figure 4-10: Heavy Smoking by Marital Status: NJ Current Smokers

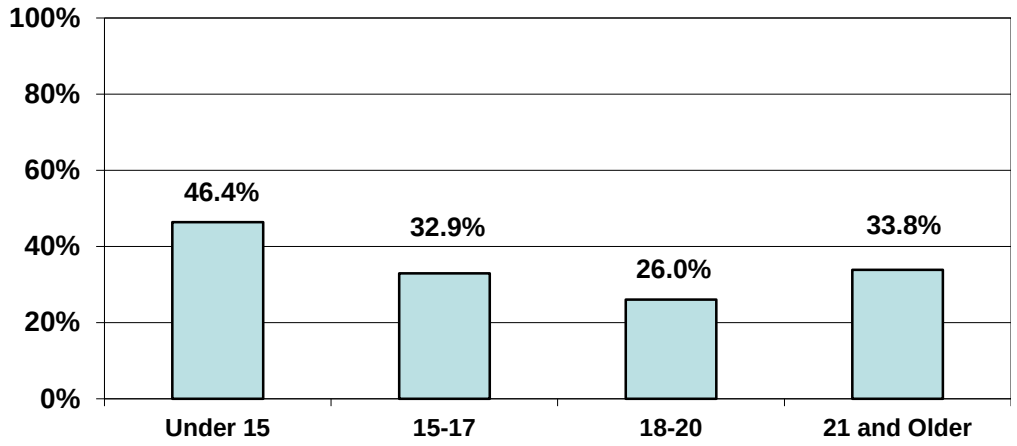


Relationship of Heavy Smoking to Age of First Cigarette (Figure 4-11)

- Smokers who had their first cigarette before age 15 were substantially more likely to be heavy smokers than those who initiated cigarette use at a later age (Figure 4-11). Thus, 46% of those who smoked before age 15 were heavy smokers, compared to 33% of those

initiating between ages 15 and 17 and 26% of those initiating between ages 18 and 20. Among those who had their first cigarette at age 21 or older, however, the proportion of heavy smokers was somewhat higher, at 34%.

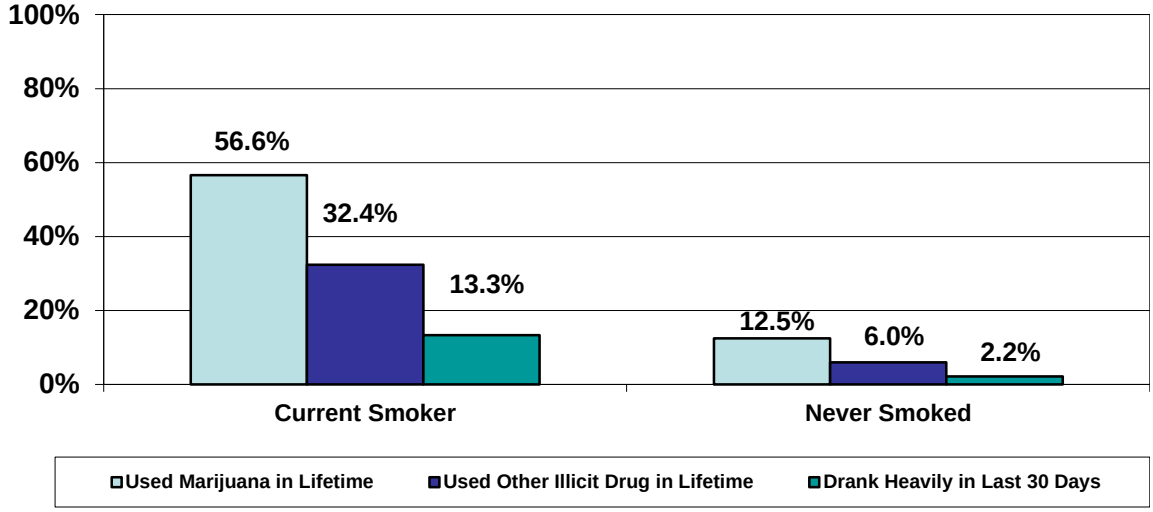
Figure 4-11: Heavy Smoking by Age of First Cigarette: NJ Current Smokers



G. RELATIONSHIP OF SMOKING AND AGE OF FIRST CIGARETTE TO USE OF ALCOHOL AND ILLICIT DRUGS

- Current smoking was highly related to the use of alcohol and illicit drugs (Figure 4-12). Thus, 57% of current smokers used marijuana in their lifetimes, compared to just 13% of residents who never smoked. Similarly, current smokers reported a substantially higher prevalence of lifetime use of drugs other than marijuana (32% vs. 6%) and heavy drinking in the past 30 days (13% vs. 2%).

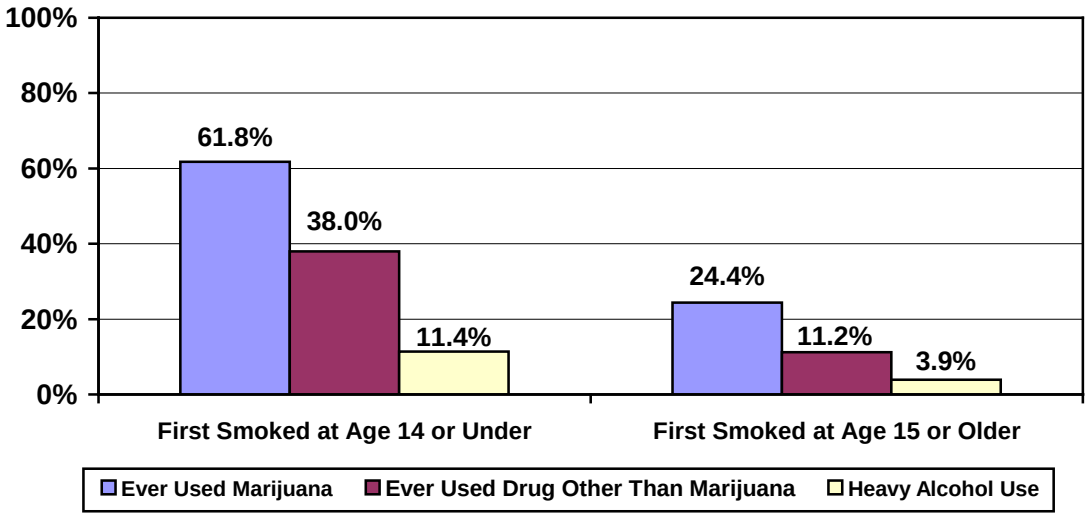
Figure 4-12: Heavy Drinking and Illicit Drug Use Among NJ Current Smokers and Residents Who Never Smoked



- A striking difference was found between those who first smoked a cigarette before the age of 15 and those who first smoked at age 15 or older in terms of heavy use of alcohol as well as lifetime use of marijuana and drugs other than marijuana (Figure 4-13). Thus, a higher prevalence of heavy drinking was found among those who smoked their first cigarette before age 15 (11%) than those smoking at age 15 or older (4%).

- Lifetime use of marijuana and drugs other than marijuana stood at 62% and 38%, respectively, for those who smoked a cigarette before age 15. Those numbers fell to 24% and 11%, respectively, for those who first smoked at age 15 or older.

Figure 4-13: Heavy Drinking and Illicit Drug Use by Age of First Cigarette



CHAPTER 5

SUBSTANCE ABUSE, DEPENDENCE AND TREATMENT ACCESS

This chapter presents information on the prevalence of alcohol/drug abuse and dependence in the New Jersey population. It also describes patterns of addiction treatment utilization, including levels of treatment access among those in need, population differences in access, types of treatment obtained, and payment sources. Dependence on alcohol and drugs were assessed using questions based on criteria specified in the Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV) (American Psychiatric Association, 1994). Dependence questions measure such behaviors as continued use in the face of medical and mental health problems, tolerance, withdrawal, and attempts to cut down or refrain from use. Questions pertaining to abuse relate to problems experienced in the workplace, at home or school, conflicts with family or other social relationships, and legal difficulties relating to substance use. Thus, questions pertaining to dependence reflect a higher level of problem severity than those pertaining to abuse. Persons were classified as only abusing a substance if they met the aforementioned standards of abuse but did not also meet the criteria for dependence. Classification of drug abuse or dependence was made if the person met the appropriate criteria for at least one drug. The following definitions are used in this chapter:

Treatment Need: A person was classified as having a need for treatment if they met the criteria for abuse of, or dependence on, alcohol or drugs in the last 12 months.

Formal Treatment: Formal addiction treatment includes all interventions other than self-help groups (e.g. Alcoholics Anonymous or Narcotics Anonymous). Hospital inpatient, detoxification, residential and outpatient rehabilitation programs are all considered formal treatment; and formal treatment can be provided not only by substance abuse treatment agencies, but also by mental health clinics, private therapists, prison treatment programs, and private MD's.

A. PREVALENCE OF ABUSE AND DEPENDENCE

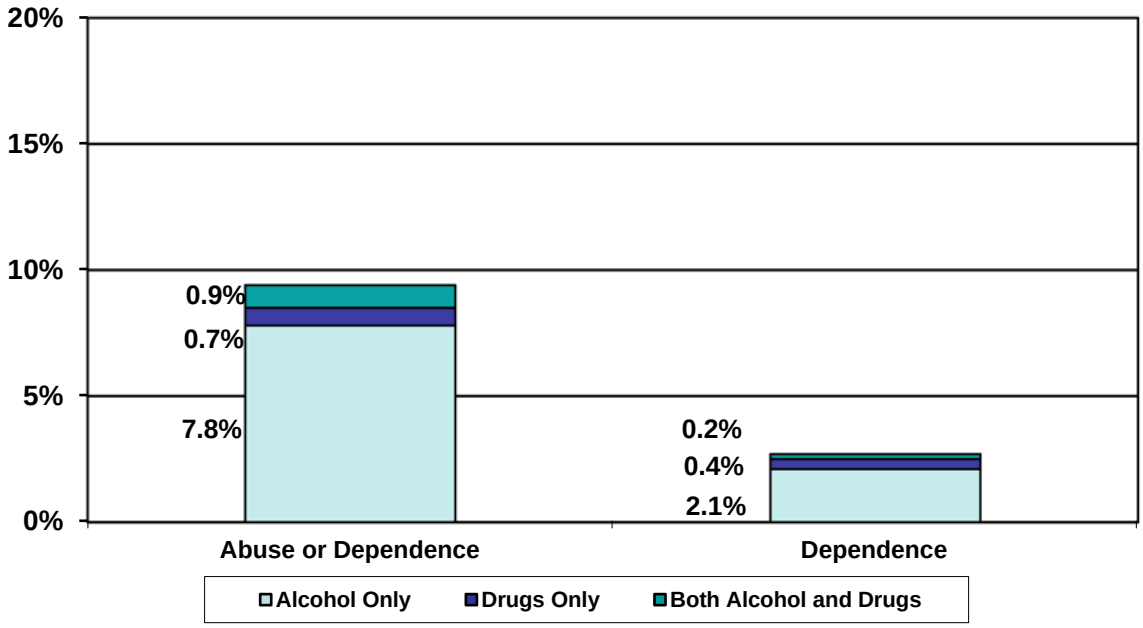
General Population

- About 6.3% of the New Jersey population met the criteria for dependence on alcohol or illicit drugs at some time during their lives. This includes 5.4% who were dependent on alcohol alone, 0.4% who were dependent on drugs alone, and 0.5% who met the lifetime criteria for dependence on both drugs and alcohol.

- Of the 2.7% of the population who met the criteria for substance dependence in the last 12 months, 2.1% were dependent on alcohol alone, 0.4% was dependent on drugs alone, and 0.2% was dependent on both.

- In the last 12 months a total of 9.4% of the population either abused or were dependent on drugs and/or alcohol, including 7.8% who abused or were dependent on alcohol alone, 0.7% who abused or were dependent on drugs alone, and 0.9% who abused or were dependent on both substances (Figure 5-1).

Figure 5-1: Abuse and Dependence in the Last 12 Months: NJ Residents



Comparison of New Jersey Substance Abusers with Overall State Population

- Males were more likely than females to abuse or be dependent on alcohol and/or drugs in the past year (14% vs. 5%) (Table 5-1). This gender disparity was also apparent with respect to abuse or dependence on alcohol alone (12% vs. 4%) (Figure 5-2).

- Whites (10%) had a slightly higher prevalence of substance abuse/dependence than Blacks (9%), Hispanics (8%), and Asians (6%). There was little difference across groups with respect to illicit drug abuse/dependence (3% or less of all groups met abuse/dependence criteria for drugs or drugs and alcohol) (Figure 5-2). Whites, however, were more likely than other racial/ethnic groups to have problems with alcohol alone (9% vs. 5%-6% for other groups).

- Persons aged 21-25 had the highest prevalence of abuse/dependence (19%), followed by residents aged 18-20 and 26-34 (15% each). The prevalence of abuse and dependence was lower among 35-49 year-olds (10%) and those 50 and over (6%). Persons aged 21-25 and 26-34 had the highest prevalence of alcohol problems alone (13% vs. 9% for those aged 18-20 and 35-49, and 5% for persons 50 or older) (Figure 5-2); however, those in the 18-20 (7%) and 21-25 (6%) year-old age groups had the highest prevalence of drug problems alone or in combination with alcohol.

Table 5-1: Characteristics of New Jersey Residents Who Met Criteria for Substance Abuse or Dependence

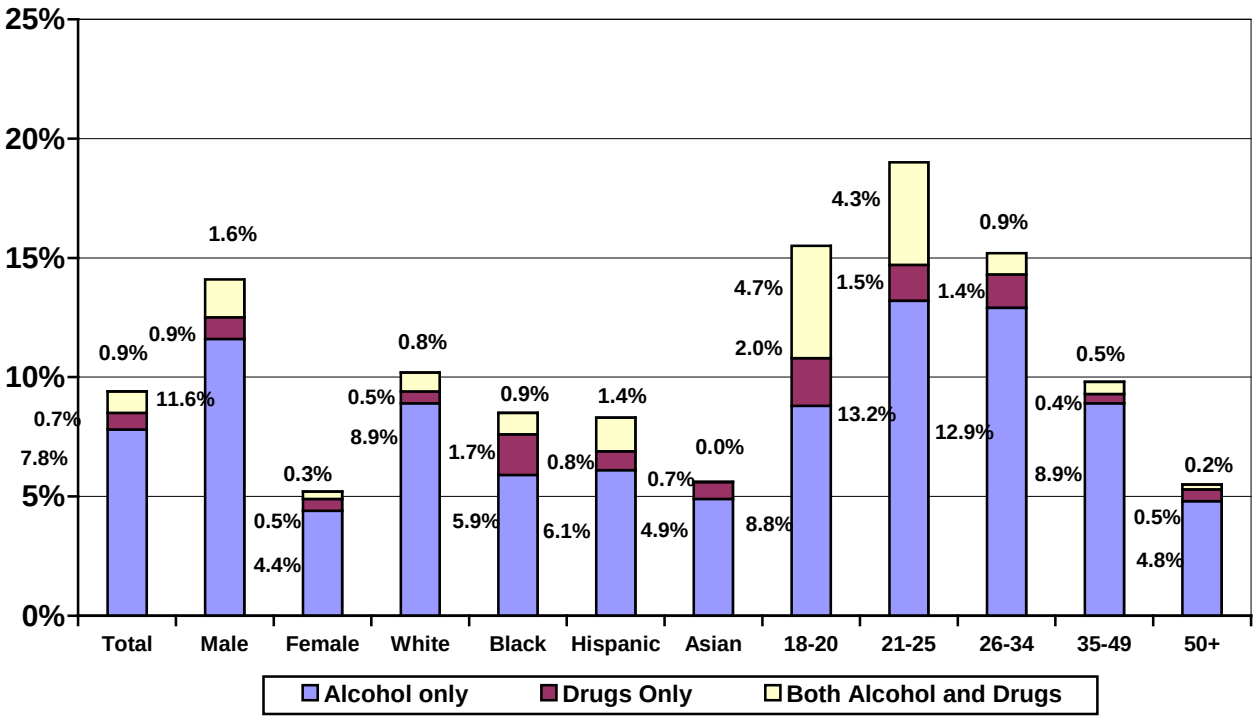
Demographics		**Proportion of New Jersey Population Needing Treatment (n=1170)**
New Jersey Total Population		***9.4%***
Gender	Males	14.1
	Females	5.1
Age	18-20	15.4
	21-25	18.9
	26-34	15.3
	35-49	9.8
	50+	5.5
Race/ Ethnicity	White	10.2
	Black	8.6
	Hispanic	8.2
	Asian	5.6
Marital Status	Married	8.3
	Never Married	15.7
	Divorced/Sep.	7.0
	Widowed	2.6
Education	Less than H.S.	7.8
	H.S. Grad.	7.4
	Some College	12.3
	College Grad.	10.1
Employment Status	Employed FT/PT	10.7
	Unemployed	14.3
Income	Under $25,000	7.5
	$25,000-49,999	9.4
	$50,000-79,999	10.0
	$80,000-99,999	10.6
	$100,000 and over	13.6

- Persons who never married had the highest prevalence of abuse and dependence (16%); followed by those who were married (8%), divorced or separated (7%), and widowed (3%).

- Persons who were unemployed had a slightly higher prevalence of abuse or dependence than those working full or part-time (14% vs. 11%).

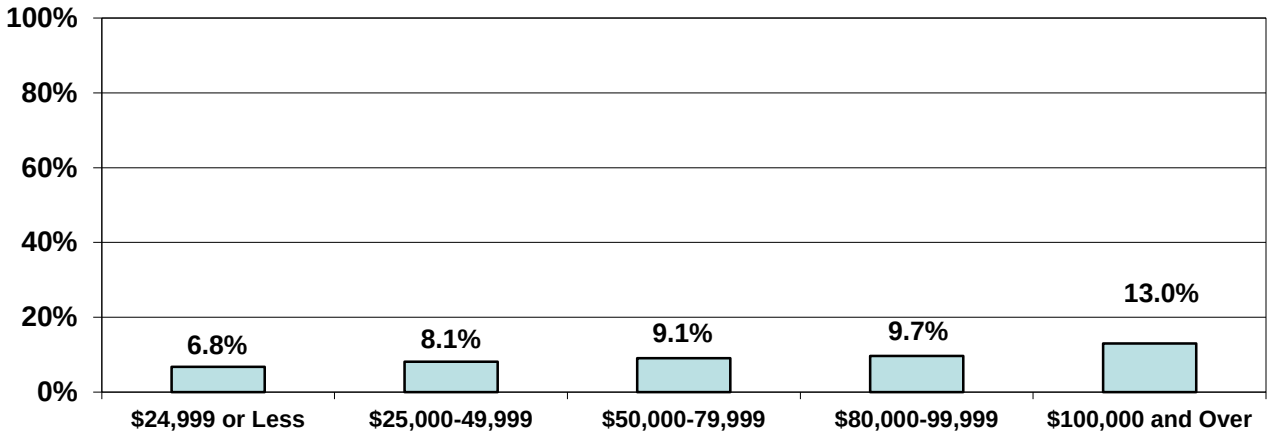
- Substance abuse/dependence was higher among those with only some college (12%) and college graduates (10%) than those with less than high school (8%) or high school only education (7%).

Figure 5-2: Abuse or Dependence in the Last 12 Months by Gender, Race/Ethnicity, and Age: NJ Residents



Substance abuse and dependence also increased with increasing income, rising from 8% of those earning less than $25,000 per year to 14% of those earning $100,000 and over (Table 5-1). These differences were almost all attributable to alcohol, as there was no substantial variation across income groups with respect to drug abuse or dependence. Thus, 7% of those earning less than $25,000 per year compared to 13% of those earning $100,000 and over abused or were dependent on alcohol alone (Figure 5-3).

Figure 5-3: Abuse of, or Dependence on, Alcohol Alone in the Last 12 Months, by Income: NJ Residents



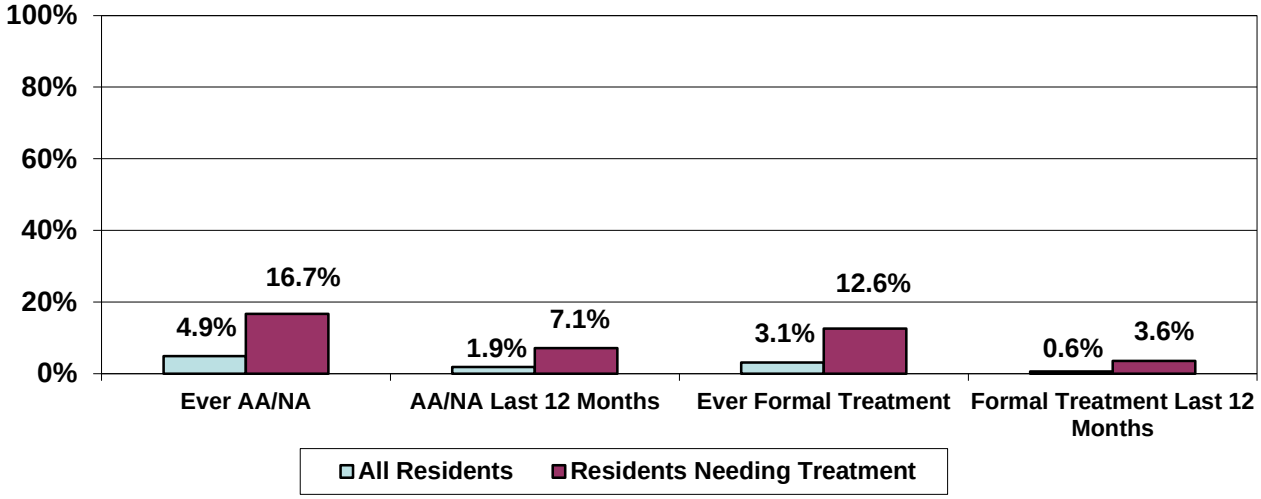
B. TREATMENT ACCESS AND UTILIZATION PATTERNS

Prevalence of Treatment: Among the Population as a Whole and Those in Need

- At some point during their lifetime 5% of New Jersey residents report having attended a self-help group, such as Alcoholics or Narcotics Anonymous (AA and NA), and 3% reported enrollment in some type of formal substance abuse treatment (Figure 5-4). In the last 12 months, less than 2% reported attending AA/NA or formal treatment.

- Among residents who had substance abuse problems serious enough to warrant treatment, only 13% reported receiving any formal treatment in their lifetimes and just 4% received formal treatment in the past year. A somewhat higher proportion of those in need attended AA or NA in their lifetimes (17%) and in the previous year (7%).

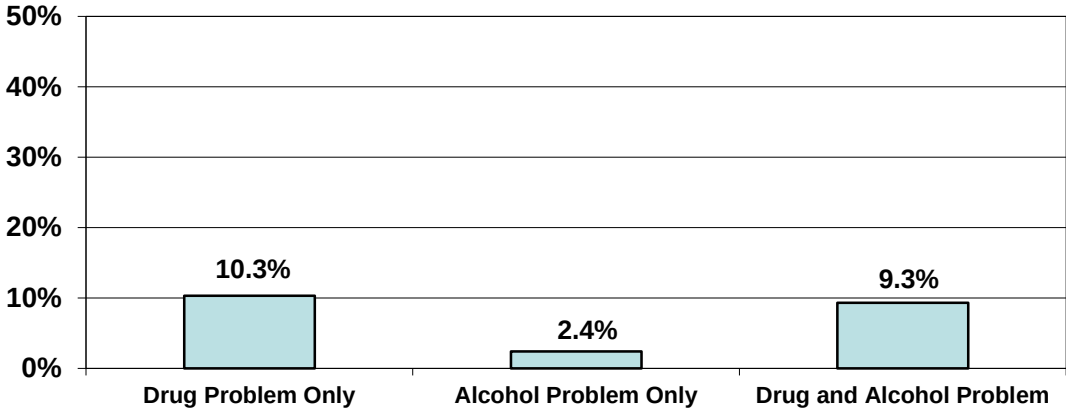
Figure 5-4: Lifetime and Past Year Receipt of AA/NA or Formal Treatment: All NJ Residents and Residents Needing Treatment



Treatment Access by Type of Problem

- When past year access to treatment was examined by type of substance abuse problem, persons who abused or were dependent on alcohol alone were found to have the lowest likelihood of accessing formal treatment of all problem groups (Figure 5-5). Thus, only 2% of problem alcohol users received treatment in the past year. In contrast, persons who abused or were dependent on drugs or had alcohol and drug problems in combination reported higher levels of treatment (9%-10%).

Figure 5-5: Past Year Receipt of Formal Treatment by Type of Substance Problem: NJ Residents Needing Treatment



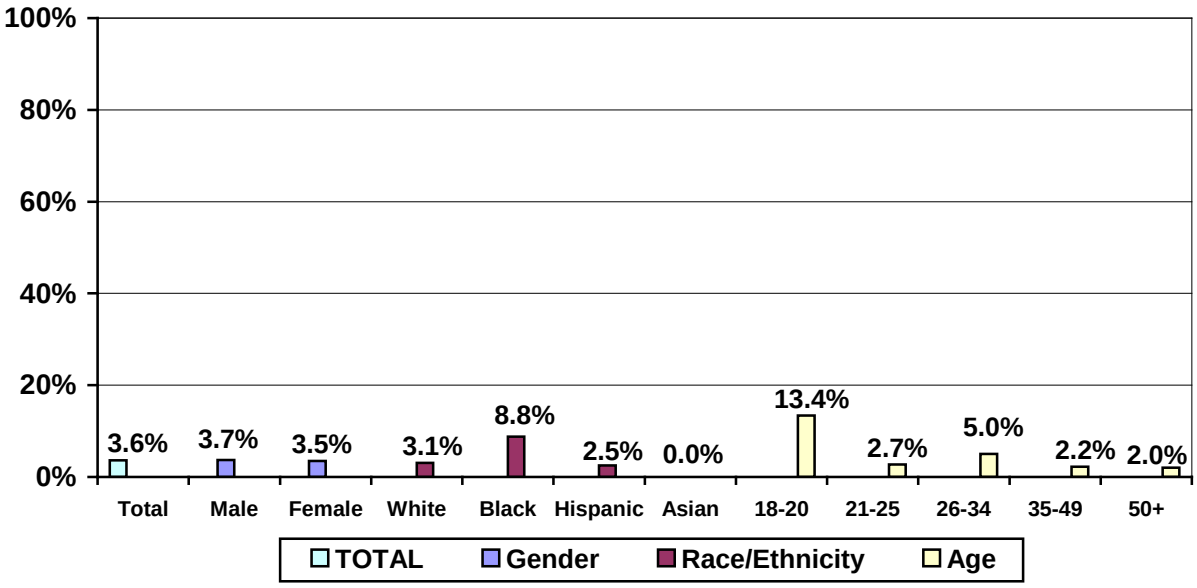
Treatment Access among Residents Needing Treatment by Age, Gender, and Race/Ethnicity (Figure 5-6)

- Among residents who needed treatment, there was little gender difference in access, with about 4% of both males and females entering treatment in the past year (Figure 5-6).

- Nine percent of Black residents who needed treatment received it in the last year, a substantially higher proportion than the treatment access rates of Whites (3%), Hispanics (3%), and Asians (0%).

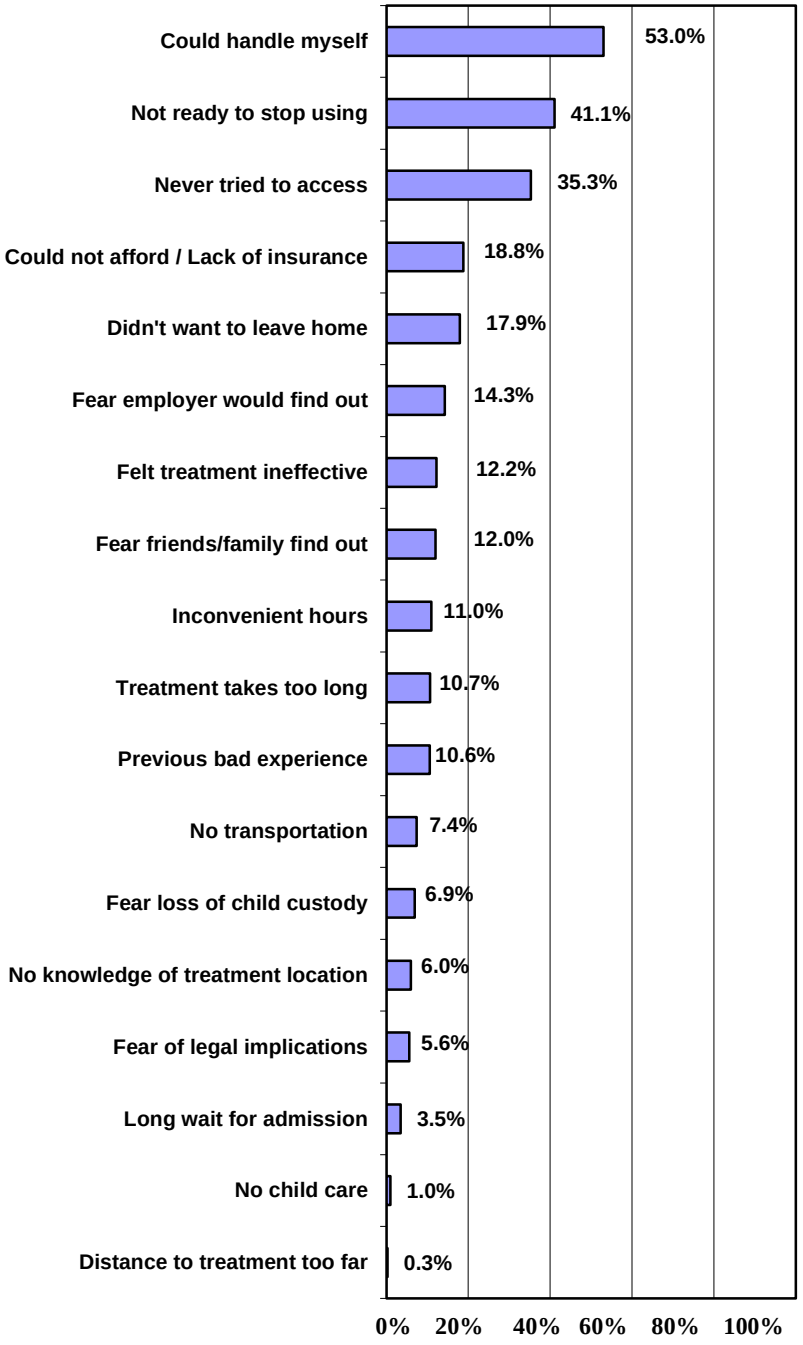
- By age, those in the 18-20 year-old age group were the most likely (13%) and those in the 35 and older age group the least likely (2%) to access treatment in the past year.

Figure 5-6: Past Year Formal Treatment by Gender, Age, and Race/Ethnicity: NJ Residents Who Needed Treatment



Barriers to Treatment[23]

Figure 5-7: Barriers to Treatment among Residents Needing, but Not Receiving, Treatment in Last 12 Months



- Among residents who needed but failed to access treatment in the last 12 months, the primary barrier was perceived lack of need (Figure 5-7). Thus, 53% of residents reported that they could handle the problem themselves, 41% said they were not ready to stop using, and 35% said they never attempted to seek treatment.

- Other barriers to care included lack of financial resources or insurance (19%), a reluctance to leave home to participate in residential programs (18%), fear that an employer (14%) or one's friends and family would find out (12%), perceived ineffectiveness of treatment (12%) as well as inconvenient clinic hours, duration of treatment or previous bad experiences (11% each).

- Fewer residents reported barriers such as lack of transportation (7%), fear of losing child custody (7%), inability to locate a center (6%), fear of legal implications (6%), long waits for admission (4%), lack of child care (1%), and treatment being too far to travel (<1%).

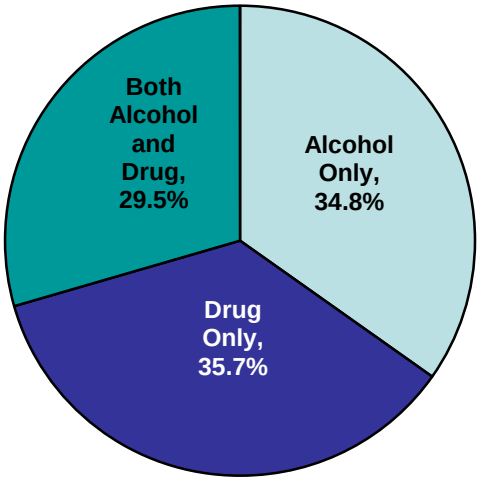
- When child care issues were examined by gender, women were more likely than men to report child care problems (3.5% vs. 0.0%) but less likely to mention fear of losing custody (4.8% vs. 7.6%).

[23] Respondents were permitted to select multiple barriers; thus, results do not sum to 100%.

Treatment Type, Setting, and Payment Sources

- Among residents who received formal treatment in the previous year, 35% were treated for alcohol problems alone, 36% for drug problems alone, and 30% for both alcohol and drug problems (Figure 5-8).

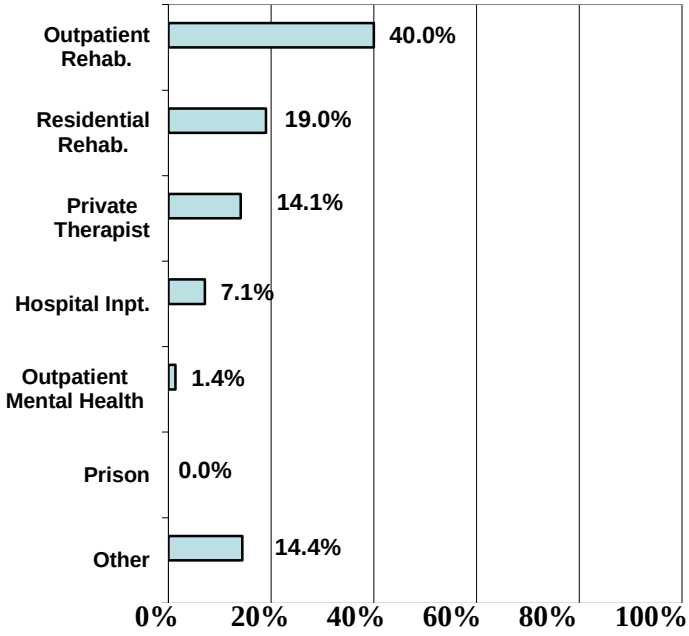
Figure 5-8: Type of Formal Treatment Received: NJ Residents Treated in Last 12 Months



- Treatment was most frequently provided in outpatient substance abuse treatment clinics (40%), followed by residential rehabilitation programs (19%) or at a private therapist's office (14%) (Figure 5-9). Only 7% received treatment as hospital inpatients and just 1% in outpatient mental health clinics. No treated residents reported prison care.

- Among those treated in the past year, public funding[24] (50%) and self-payment (36%) represented the most frequently reported sources of funding (Figure 5-10).

Figure 5-9: Setting of Last Treatment Episode: NJ Residents Treated in Last 12 Months

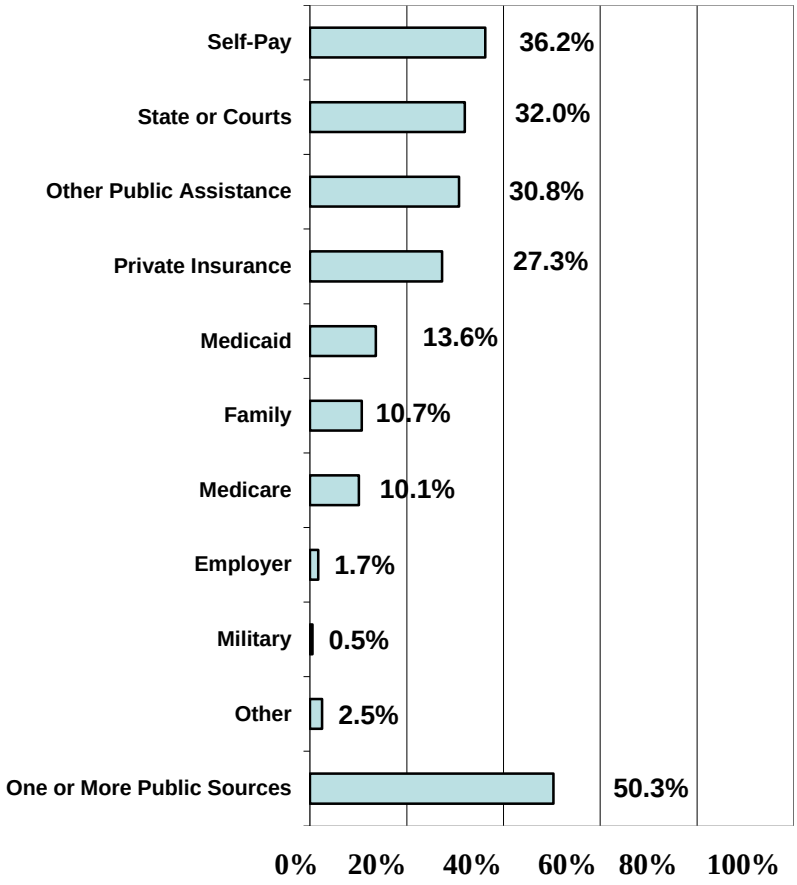


[24] Public funding includes the sum total of Medicaid, Medicare, General Assistance, drug courts, the military or other public sources. Also, please note that multiple responses were permitted, thus totals do not sum to 100%.

- Other cited sources include the state or courts (32%), other public assistance (31%), private insurance (27%), Medicaid (14%), family member assistance (11%), and Medicare (10%).

- Funding sources cited by very few treated New Jersey residents included their employer (2%), the military (1%), and some other source (3%).

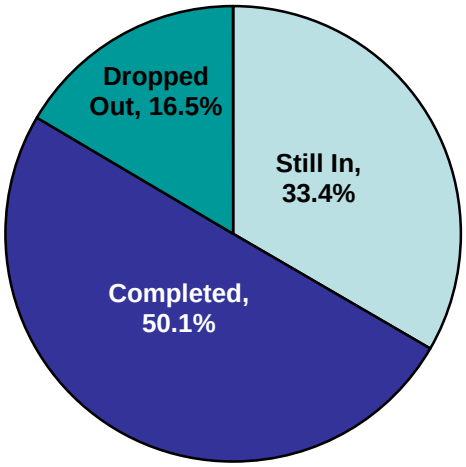
Figure 5-10: Sources of Payment for Treatment: NJ Residents Treated In Last 12 Months



Treatment Outcomes

- Of those who entered treatment in the past year, 50% said they completed the program, 33% were still in treatment, and 17% dropped out (Figure 5-11).

Figure 5-11 Outcome of Last Treatment Episode: NJ Residents Treated in Last 12 Months



CHAPTER 6: GAMBLING

This chapter presents information on the prevalence of gambling among New Jersey residents and examines relationships between gambling and the use of tobacco, alcohol and drugs. In addition to questioning state residents about the type and frequency of gambling, the questionnaire included questions pertaining to gambling-associated behaviors that may be indicative of a gambling problem. These include such behaviors as spending a lot of time thinking of ways to raise money for gambling, planning bets or studying odds in the place of other activities, spending increasing amounts of money on gambling, trying to quit or cut down, using gambling to relieve a bad mood, being in financial trouble as a result of gambling, having problems with family, friends or work because of gambling or engaging in illegal activity to raise money for gambling. For the purpose of this report, the following definitions are used:

Problem Gambling: Reporting at least one of the above problems.
Frequent Gambling: Gambling 20 times or more in a year.

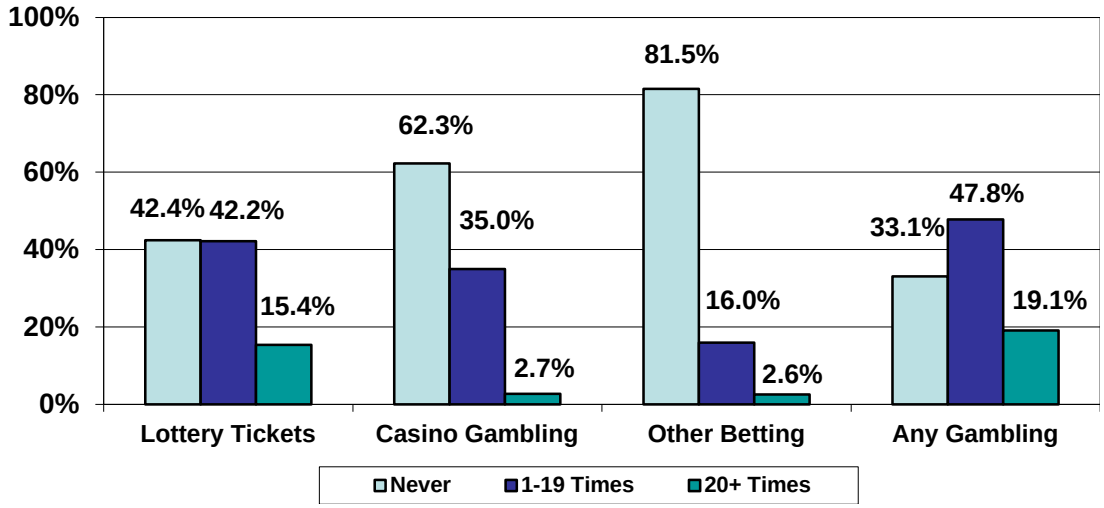
A. PREVALENCE AND FREQUENCY

Types of Gambling (Figure 6-1)

- About 67% of New Jersey residents report having gambled at some time in their lives; with 48% saying they gambled less than 20 times during the year they gambled the heaviest, and 19% saying they gambled more than 20 times during that year (Figure 6-1).

- Buying lottery tickets was the most frequent form of gambling, with 58% of New Jersey residents claiming to have bought at least one ticket. About 42% purchased tickets fewer than 20 times and 15% purchased tickets more than 20 times during the year they gambled the most. About 38% of New Jersey residents have engaged in casino gambling and about 19% engaged in other forms of gambling.

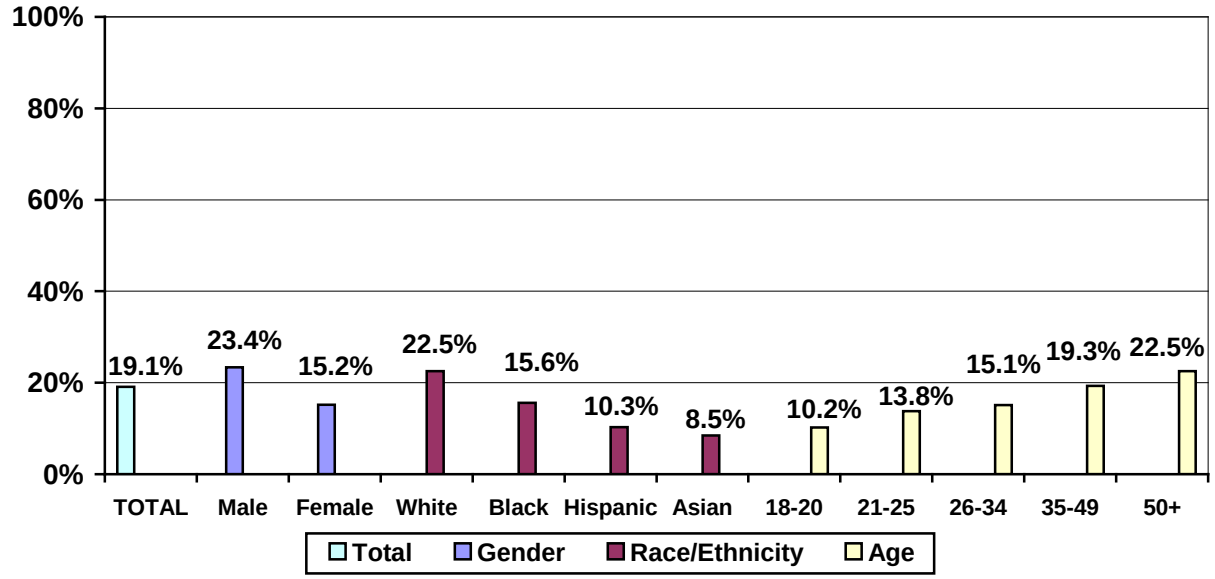
Figure 6-1: Gambling Frequency during Year of Heaviest Gambling: NJ Residents



Age, Gender, and Race/Ethnicity (Figure 6-2)

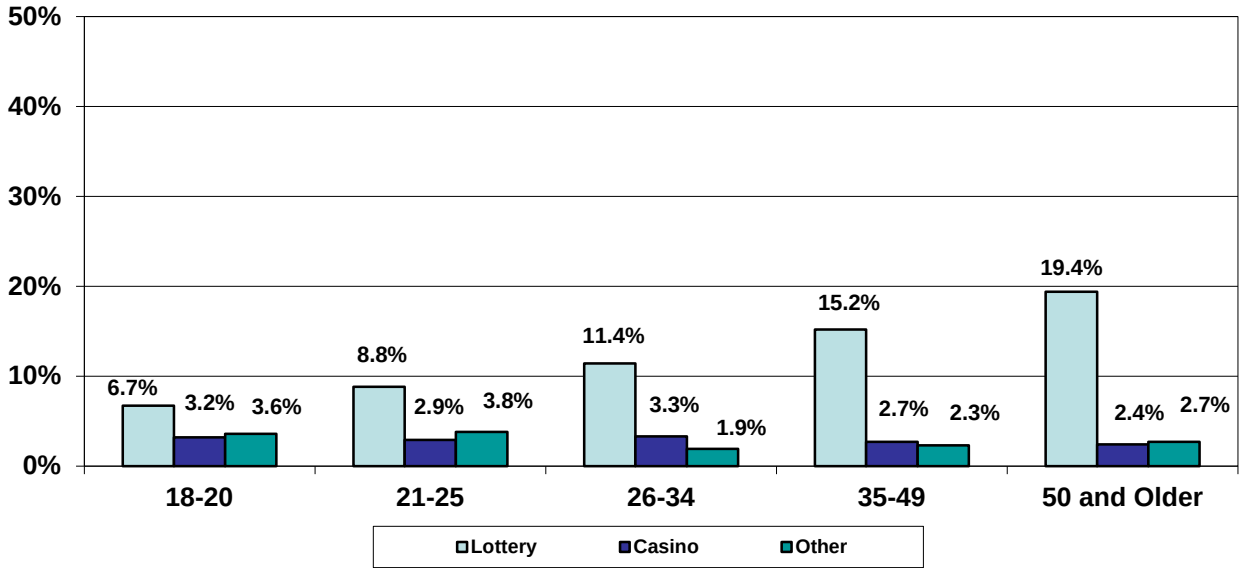
- Nineteen percent of New Jersey residents had engaged in any form of gambling 20 times or more during their heaviest gambling year (Figure 6-2).
- Men were more likely to have engaged in frequent gambling than women (23% vs. 15%).
- Whites (23%) were more likely to have gambled frequently during the year that they gambled the heaviest than Blacks (16%), Hispanics (10%), and Asians (9%).
- Frequent gambling generally increased with age, as 23% of residents aged 50 and over reported frequent gambling compared to just 10% of those 25 and under.

Figure 6-2: Characteristics of Persons Who Gambled 20+ Times during Year of Heaviest Gambling: NJ Residents



- The most pronounced age difference in frequent gambling pertained to the purchase of lottery tickets, with 19% of those aged 50 and over reporting frequent ticket purchases compared to only 7% of those aged 18-20 (Figure 6-3, next page).

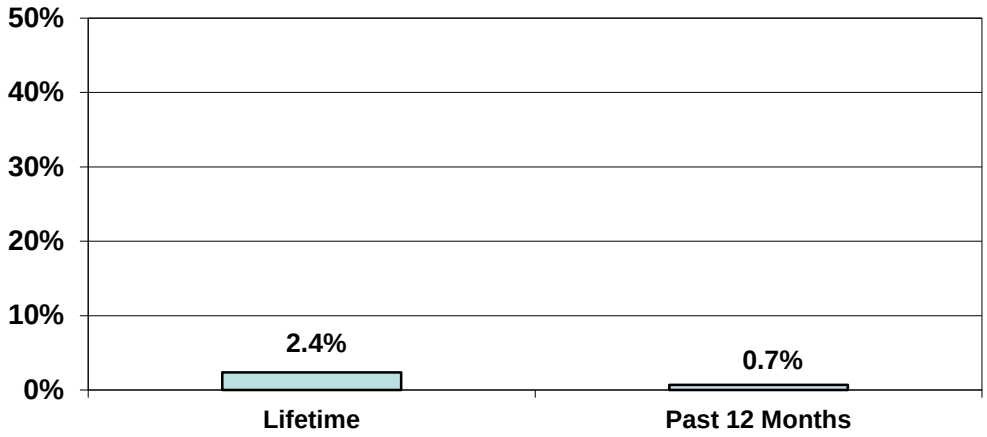
Figure 6-3: Gambling 20+ Times during Year of Heaviest Gambling, by Age and Type of Gambling: NJ Residents



Problem Gambling

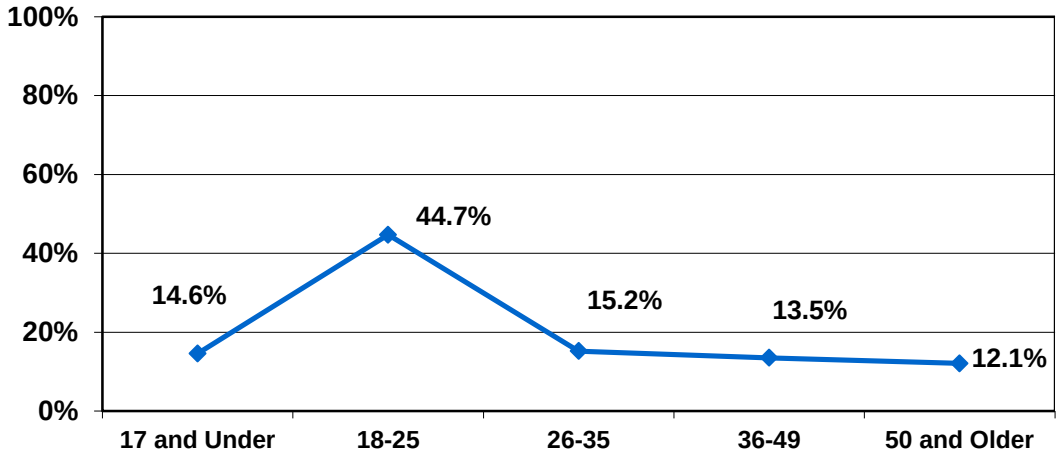
- About 2% of New Jersey residents reported experiencing one or more problems related to gambling at some time during their lives and about 1% reported experiencing those problems in the past year (Figure 6-4).

Figure 6-4: Prevalence of Problem Gambling: NJ Residents



- Among persons who reported experiencing gambling problems, a majority said the onset of the problem occurred before the age of 26, including 15% who first experienced issues before age 18 and 45% who said initial problems appeared between the ages of 18 and 25 (Figure 6-5). However, the onset of gambling problems did not appear to cease completely at a certain age; instead 15% of those with a problem reported the onset occurring between the ages of 26 and 35, 14% said it occurred between 35 and 49, and 12% said they first experienced an issue after the age of 50.

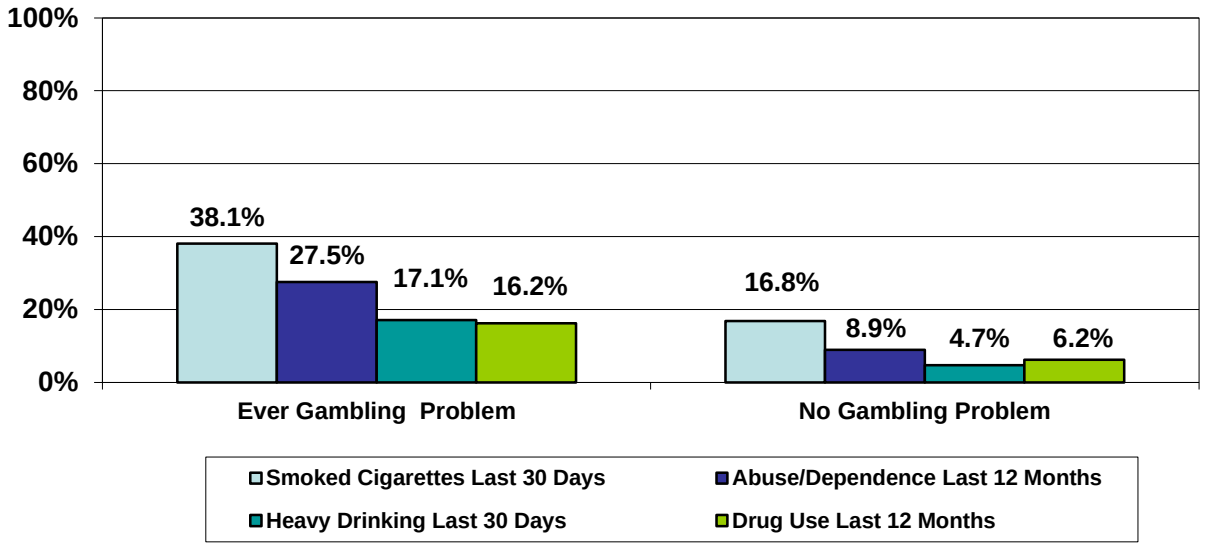
Figure 6-5: Age of First Gambling Problem: NJ Residents with Gambling Problem



Gambling, Cigarettes, Alcohol, and Drug Use (Figure 6-6)

- Persons having a gambling problem in their lifetime were significantly more likely than those with no problem to have smoked in the last 30 days (38% vs. 17%), to meet the criteria for substance abuse or dependence in the last year (28% vs. 9%), to have drank heavily in the last 30 days (17% vs. 5%), and to have used an illicit drug in the past year (16% vs. 6%) (Figure 6-6).

Figure 6-6: Problem Gambling and the Use of Tobacco, Alcohol and Drugs: NJ Residents



CHAPTER 7

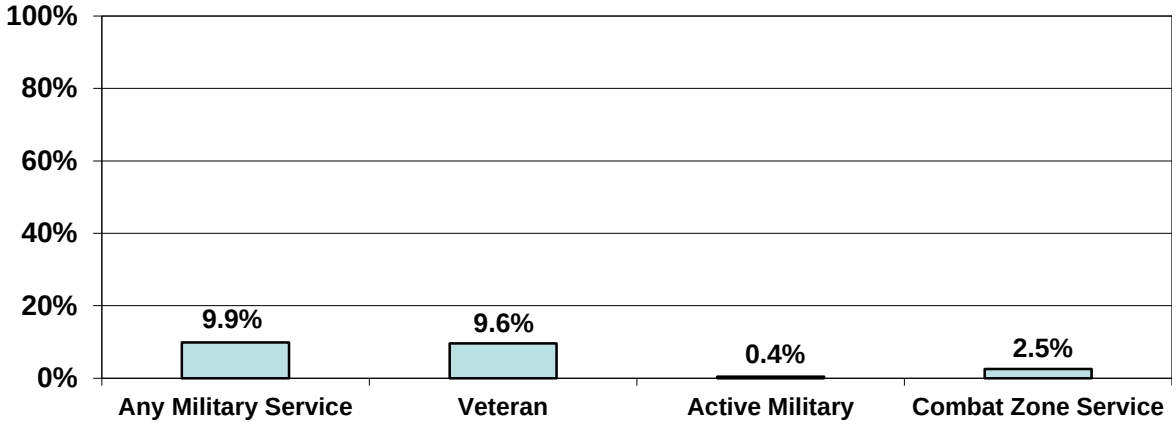
SUBSTANCE USE BY NEW JERSEY VETERANS

A special module was added to New Jersey's 2003 Survey to examine the psychological and behavioral affects of the September 11, 2001 World Trade Center terrorist attacks on New Jersey residents. Since September 11, our nation has been engaged in conflicts in Iraq and Afghanistan as part of a global effort to counteract terrorism. As of December, 2009, the United States had deployed over 2,000,000 troops to Iraq and Afghanistan, including nearly 800,000 who deployed more than once[25]. The psychological impact of deployment to these war zones has been well-documented, with studies showing high rates of stress-related disorders, depression, and alcohol problems in returning troops. Moreover, studies of veterans from past wars have documented similar adverse psychological consequences. In this chapter, health and substance use issues affecting New Jersey veterans are examined, exploring differences in health status between veterans and non-veterans, and differences across period of service.

Military Service Histories of New Jersey Residents (Figure 7-1)

- Ten percent of New Jersey residents have served in our nation's military, including 9.6% who are veterans and 0.4% still in active service (Figure 7-1). Approximately 3% of residents served in a combat zone or location where they received hostile fire.

Figure 7-1: Military Service History: New Jersey Residents

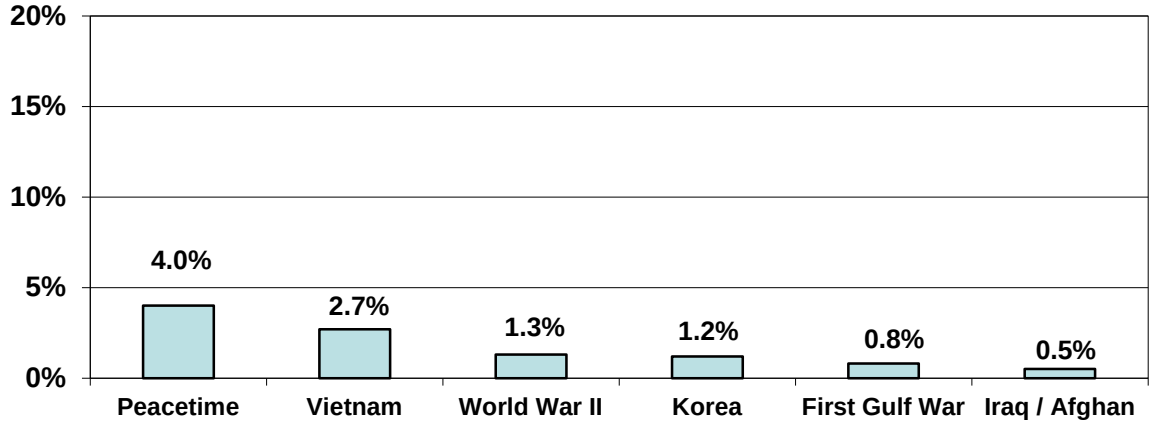


Proportion of New Jersey Residents with Military Service, by Service Era

- Four percent of New Jersey residents contributed their military service during peacetime, 3% served in Vietnam and 1% served during World War II, Korea or the first Gulf War. Less than 1% served in Iraq or Afghanistan (Figure 7-2).

[25] *Marine Corps Times, December 18, 2009,* http://www.marinecorpstimes.com/news/2009/12/military_deployments_121809w/

Figure 7-2: Military Service Era: New Jersey Residents

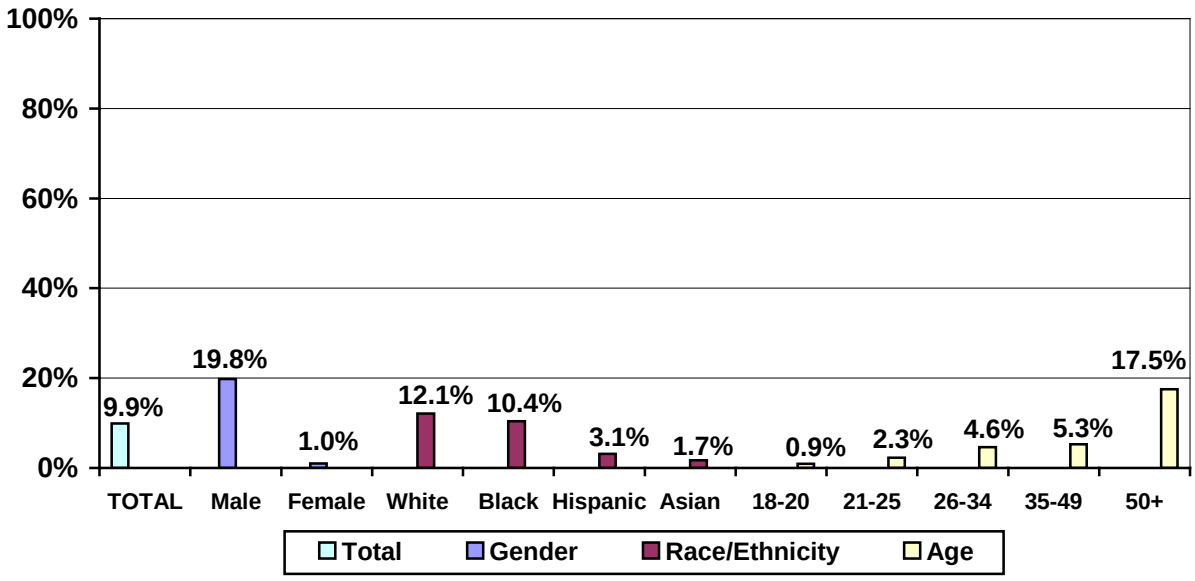


NOTE: Veterans may have served in more than one service era.

Proportion of New Jersey Residents with Military Service, by Demographic Characteristics

- By gender, nearly 20% of males compared to just 1% of females has served in the U.S. armed forces (Figure 7-3).
- Military service is most prevalent among Whites (12%) and Blacks (10%). Only 3% of Hispanics and 2% of Asians have a history of military service.
- By age, less than 3% of those under age 25 have served in the military. Those aged 50 and over contributed the highest proportion to the military, with 18% reporting previous or current service. Approximately 5% of those aged 26-49 report military service.

Figure 7-3: Military Service Across Demographic Groups: New Jersey Residents



Demographic Comparison of New Jersey Veterans with Overall State Population

Table 7-1: Demographic Characteristics

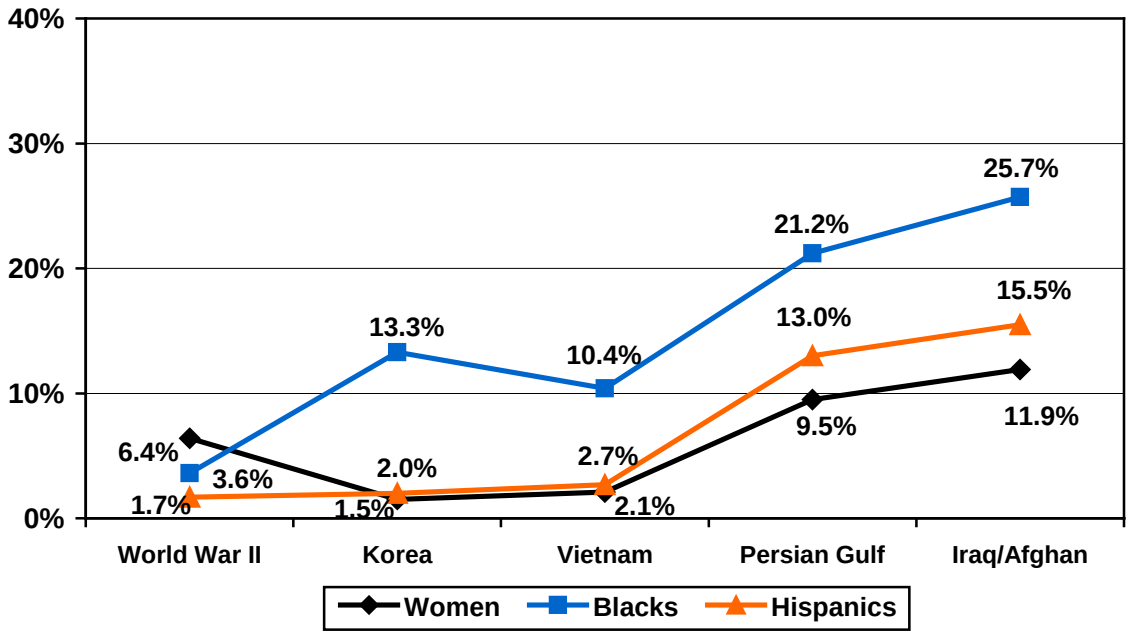
Demographics		NJ Sample (n=14,678)	Military Service (n=1,534)
Gender	Female	52.3%	5.3
	Male	47.7	94.7
Age	18 to 25	12.0	2.1
	26 to 34	12.6	5.8
	35 to 49	33.0	17.7
	50 and older	42.3	74.4
Race/ Ethnicity	White	66.0	79.7
	Black	12.5	13.0
	Hispanic	14.4	4.5
	Asian	5.0	0.9
	Other	2.2	1.9
Born in the U.S.	No	22.8	5.4
	Yes	77.2	94.6
Education	Less than high school	11.8	8.9
	High school graduate	32.2	38.5
	Some college	21.7	23.1
	College graduate	34.4	29.5
Employment Status	Employed full time	50.5	38.4
	Employed part time	12.9	6.9
	Unemployed	8.2	4.8
	Retired/Disabled	21.0	48.9
	Homemaker	5.2	0.4
	Student	2.2	0.6
Household Income	Under $25,000	15.7	13.4
	$25-49,999	16.2	17.2
	$50-79,999	20.7	24.6
	$80-99,999	9.7	9.7
	$100,000 and over	37.6	35.1
Marital Status	Married or living as	60.9	70.5
	Never married	22.4	11.7
	Divorced/Separated	9.3	8.5
	Widowed	7.3	9.3
Size of Household	One	12.4	14.9
	Two	27.0	44.2
	Three	19.9	15.8
	Four or more	40.7	25.1

- Table 7-1 compares the New Jersey veteran population to the population as a whole. Veterans more likely than residents to be male (95% vs. 48%) and over the of 50 (74% vs. 42%). Veterans also more likely to White (80% vs. 66%), about as likely to be Black (13% each), and likely to be Hispanic (5% vs. 14%) or Asian vs. 5%).
- Veterans are more likely than the overall population be U.S. born (95% 77%).
- With respect to education, veterans are more likely to have completed high school than New Jersey residents (39% vs. 32%). However, veterans somewhat less likely than all residents to have a college degree (30% vs. 34%).
- New Jersey veterans are significantly more likely to be disabled or retired (49% vs. 21%) and less likely to be employed full time (38% vs. 51%).
- The income distribution among New Jersey veterans is roughly comparable to that of the population as a whole.
- State veterans are more likely than the overall population to be married (71% vs. 61%) and to live in households containing two or fewer residents (59% vs. 39%).

Women and Minorities in the New Jersey Veteran Population, Historical Trends

- There is a clear trend towards greater representation of women and minorities among New Jersey's veteran population when examined by era of military service (Figure 7-4).
- Women represented only 6% of the veterans who served during World War II and just 2% of those who served during Korea and the Vietnam War. After Vietnam, however, the proportion of women increased to 10% of Persian Gulf veterans and 12% of those serving during the Iraq and Afghanistan conflicts.
- Similar trends can be seen for Blacks and Hispanics. Thus, the proportion of Black veterans increased from 4% in World War II to 13% in the Korean War, 10% during Vietnam, 21% in the Persian Gulf, and 26% of those serving during the Iraq and Afghanistan wars. Similarly, the proportion of Hispanic veterans rose steadily from 2% in World War II and Korea to 3% during Vietnam, 13% in the Persian Gulf, and 16% of those serving in Iraq and Afghanistan.

Figure 7-4 Representation of Women and Racial/Ethnic Minorities among Military Veterans by War Era



Comparison of Residents with Military Service to Residents with no Military Service on Selected Health Indicators[26]

Physical and Psychological Health

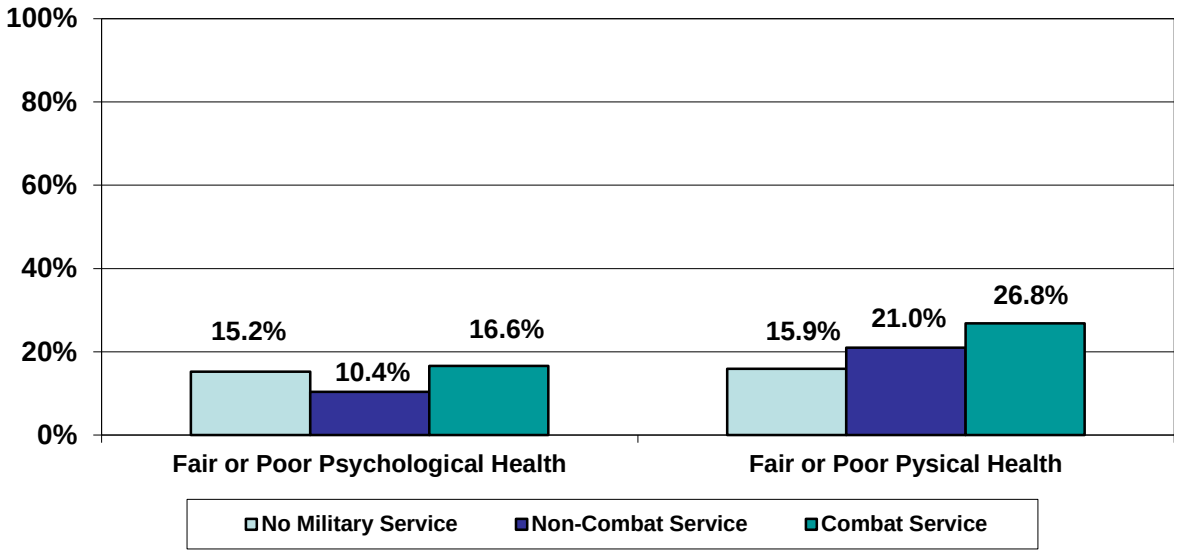
- In general, non-combat veterans had somewhat better psychological health than either combat veterans or non-veterans (Figure 7-5). Veterans with no combat exposure were least likely (10%) and veterans with combat exposure the most likely (17%) to report fair

[26] All comparisons between New Jersey veterans and the New Jersey population as a whole are based on males only. The low number of females with military service in our sample prevented comparable comparisons with female residents. Comparisons within the veteran population across war eras, however, include both males and females.

or poor psychological health. About 15% of male residents with no military service reported fair or poor psychological health.

- With respect to physical health, male residents with no military service were at an advantage over both veteran groups, with combat veterans reporting the worst physical health of all groups. Thus, 16% of non-veterans, compared to 21% of non-combat veterans and 27% of combat veterans reported fair or poor physical health.

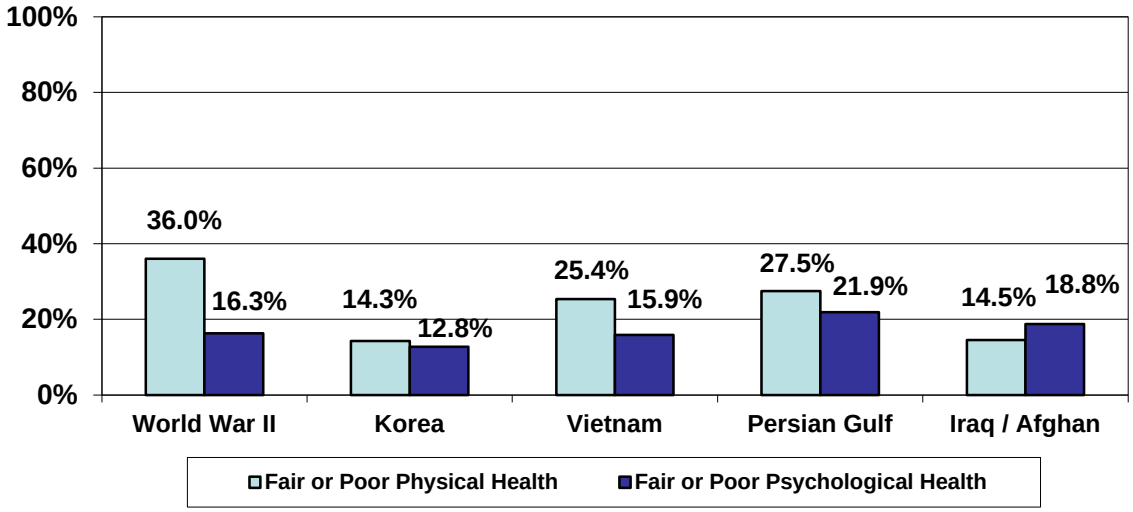
Figure 7-5: Self-Reported Psychological and Physical Health Status by Military History: New Jersey Males



- When physical and psychological health is examined among combat veterans by war era, substantial differences in health ratings emerge (Figure 7-6). Older veterans from World War II report the worst physical health of all groups (36% report fair or poor health) followed by Persian Gulf veterans (28%), Vietnam veterans (25%), Iraq and Afghanistan veterans (15%), and Korean War veterans (14%).

- In terms of psychological status, veterans from the Persian Gulf War and from Iraq and Afghanistan are the most likely to report fair or poor mental health (22% and 19%). Korean War veterans are the least likely to report fair or poor mental health (13%), while approximately 16% of both World War II and Vietnam veterans rate their mental health as fair or poor.

Figure 7-6: Physical and Psychological Health among NJ Combat Veterans by War Era

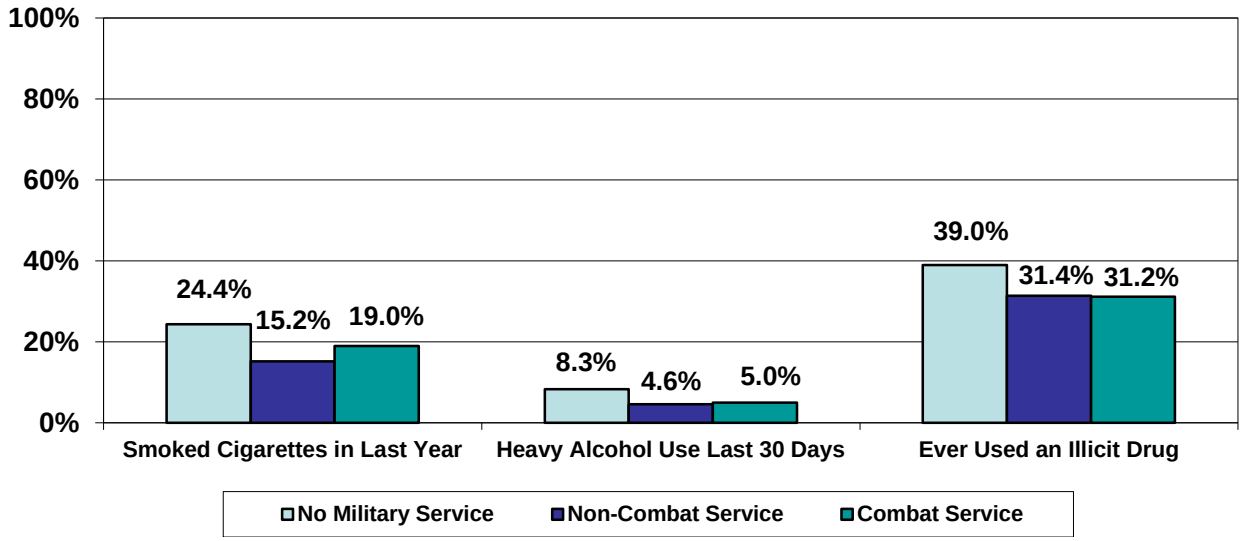


Substance Use

- In terms of substance use, both types of veteran groups reported lower past 12 month use of cigarettes and alcohol than non-veterans (Figure 7-7). Thus, 24% of non-veterans smoked cigarettes, compared to 19% of combat veterans and 15% of non-combat veterans. Similarly, 8% of non-veterans drank heavily in the last 30 days, compared to about 5% of both combat and non-combat veterans.

- Non-veterans were also more likely to report lifetime use of illicit drugs (39%) than both combat and non-combat veterans (31% each).

Figure 7-7: Substance Use by Military History: New Jersey Males

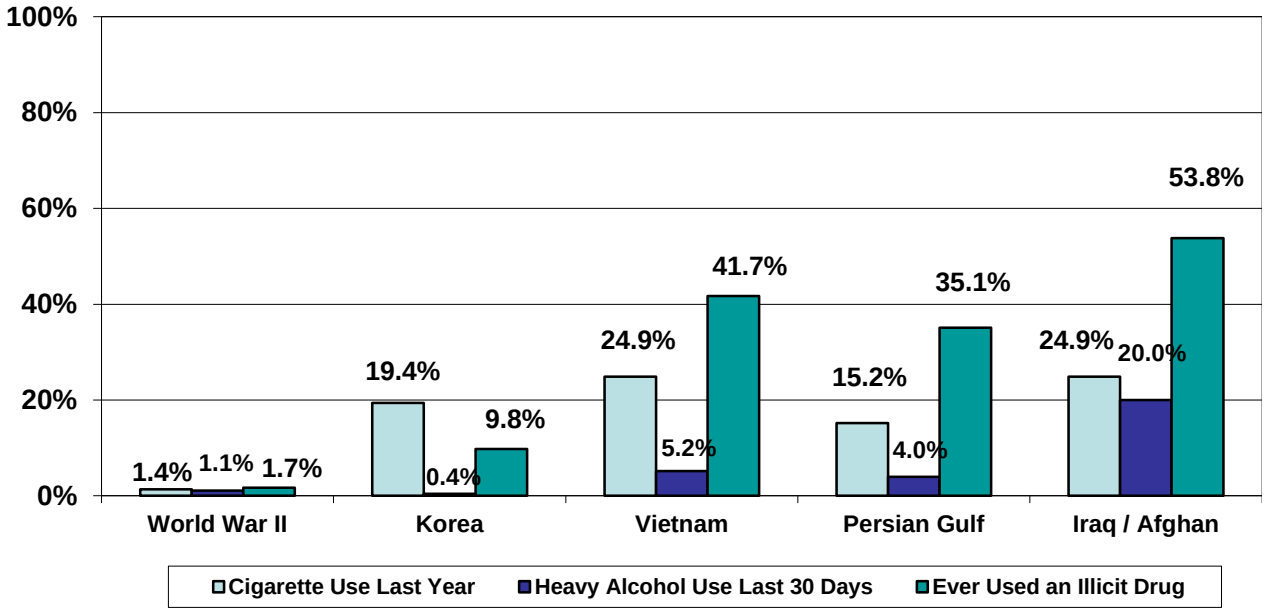


- A comparison of combat veterans across war eras shows significant differences in substance use (Figure 7-8). In terms of alcohol use, 20% of Iraq/Afghanistan combat

veterans drank heavily in the last 30 days compared to 5% or less of combat veterans from other war eras. Similarly, Iraq/Afghanistan combat veterans had the highest rates of lifetime drug use of all combat veteran groups; with 54% of Iraq/Afghanistan veterans reporting illicit drug use in their lifetimes, compared to 42% of Vietnam veterans, 35% of Persian Gulf veterans, 10% of Korean War veterans, and 2% of World War II veterans.

- In terms of cigarettes, Iraq/Afghanistan and Vietnam combat veterans reported the highest rate of past 12 month use (25%). Korean combat veterans were next in smoking prevalence (19%) followed by Persian Gulf (15%), and World War II veterans (1%).

Figure 7-8: Cigarette, Alcohol, and Drug Use among NJ Combat Veterans by War Era



- While substance abuse/dependence, treatment need and access to care are central themes of this report, unfortunately the sample size of New Jersey Veterans who have a treatment need is too small to investigate these issues among the state's military population in a meaningful or reliable manner.

CHAPTER 8

REGIONAL VARIATIONS IN SUBSTANCE USE AND GAMBLING

A. INTRODUCTION

This chapter examines regional differences in the prevalence of smoking, alcohol use, illicit drug use, substance abuse/dependence and problem gambling. Data are reported by county as well as by municipal category. The municipal categories used in this report were developed by the Bloustein Center for Survey Research, Rutgers University, and use zip codes to organize residential areas into four types of communities based on population, location, population density and land area. These categories are Historical Urban Centers, Suburban - Small Area, Suburban - Large Area, and Exurban and are described as follows:

1. *Historical Urban Centers* – This category includes areas with populations greater than 79,000 and population densities greater than 8,000 persons per square mile. Six of New Jersey's traditionally largest cities are included here: Newark, Jersey City, Paterson, Elizabeth, Trenton, and Camden.

2. *Suburban - Small Area* – This category encompasses small, densely concentrated suburbs and areas surrounding the urban centers. This generally includes areas with populations over 15,000 and either population densities greater than 5,000 persons per square mile or land areas less than 11 square miles. This category also includes more densely packed, smaller population areas, such as municipalities with population densities over 8,000 and land areas of less than 5 square miles.

3. *Suburban - Large Area* – This municipal type includes large land mass, less densely populated suburban areas characterized by populations greater than 15,000 and either a density below 5,000 persons per square mile or a land area greater than 11 square miles.

4. *Exurban* – This category includes smaller suburban or town areas farther from the urban centers. This generally encompasses areas with populations below 15,000, population densities below 5,000 persons per square mile and land areas less than 11 square miles.

B. SMOKING

- Cigarette smoking in New Jersey was most prevalent in the southern counties, with eight of the ten counties with the highest smoking prevalence located in the southern part of the state (Figure 8-1). Atlantic (27%), Cape May, and Cumberland (24% each) counties had the highest proportion of residents who currently smoke cigarettes. In contrast, the four counties with the lowest prevalence of smoking, Bergen (11%) Somerset, Hunterdon (12% each), and Middlesex (13%), were located in the central or northern portion of the state.

- By municipal type, the highest proportion of residents who smoke was found in the historical urban centers (19%) and the lowest prevalence was found in the smaller area suburbs (16%) (Figure 8-2).

Figure 8-1: Past 30 Day Cigarette Smoking by County

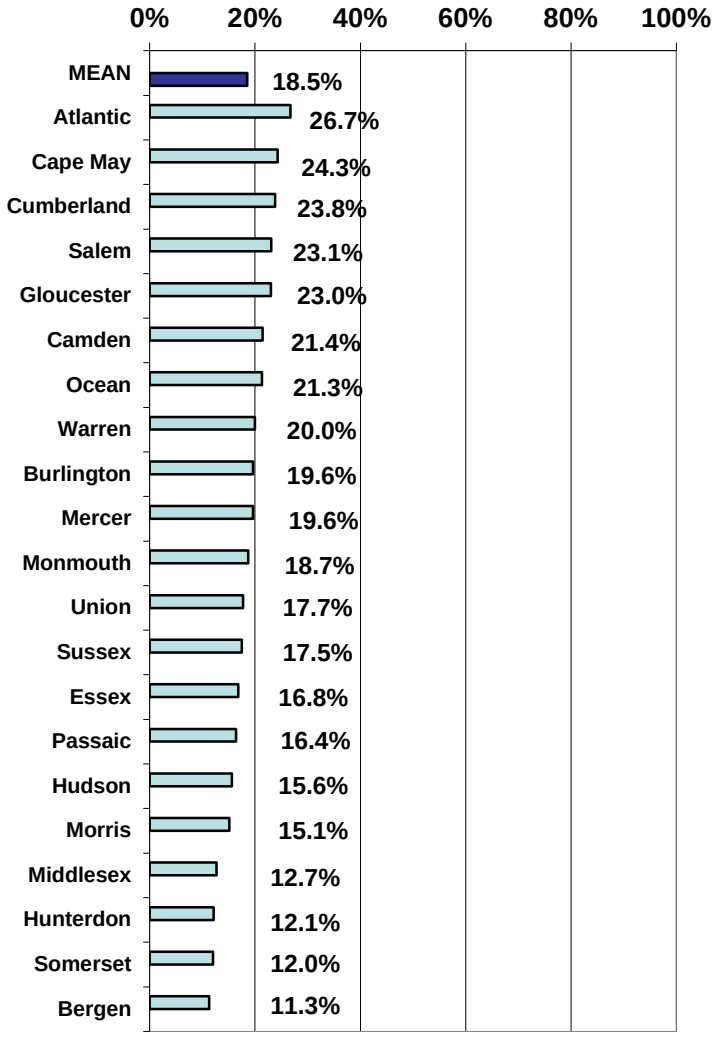
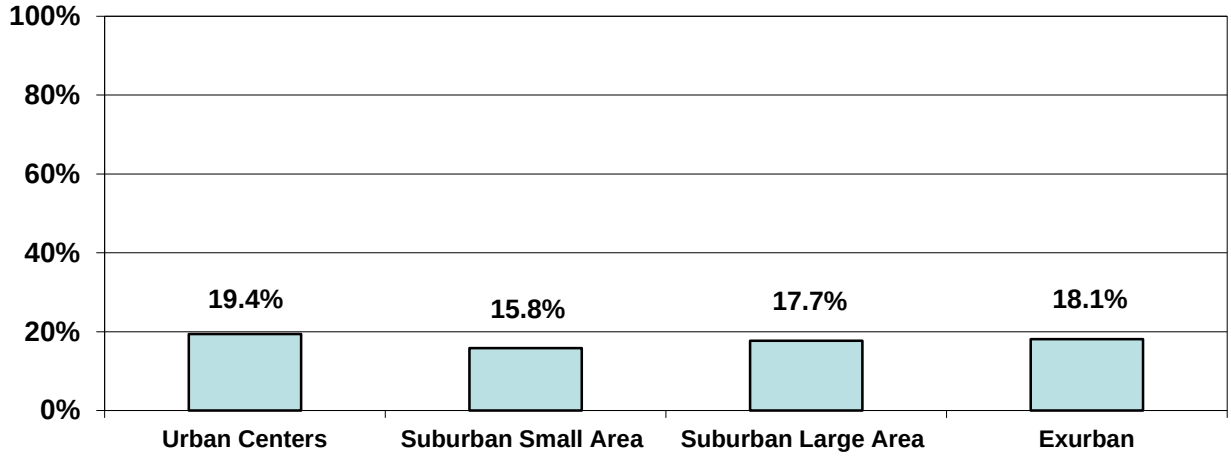


Figure 8-2: Past 30 Day Cigarette Smoking by Regional Category



C. ALCOHOL USE

- Overall, alcohol use varied substantially by county (Figure 8-3), ranging almost 30 percent from lowest to highest (Figure 8-1). Interestingly, Hunterdon (68%), Morris (64%), and Bergen (64%) counties had the highest prevalence of current drinkers but were among the five counties with the lowest prevalence of smokers. Conversely, Cumberland and Salem counties had the lowest prevalence of current drinkers (42% each) but ranked in the top four counties for prevalence of current smokers.

- At the regional level, the negative relationship between alcohol and cigarette use is less clear (Figure 8-4). While urban centers had the highest smoking rate (19%) and the lowest proportion of residents who drank, exurban areas had both the second highest smoking rate (18%) and the highest drinking rate. Both large and small suburban areas showed similar rates of drinking (55%-56%).

Figure 8-3: Past 30 Day Alcohol Use by County

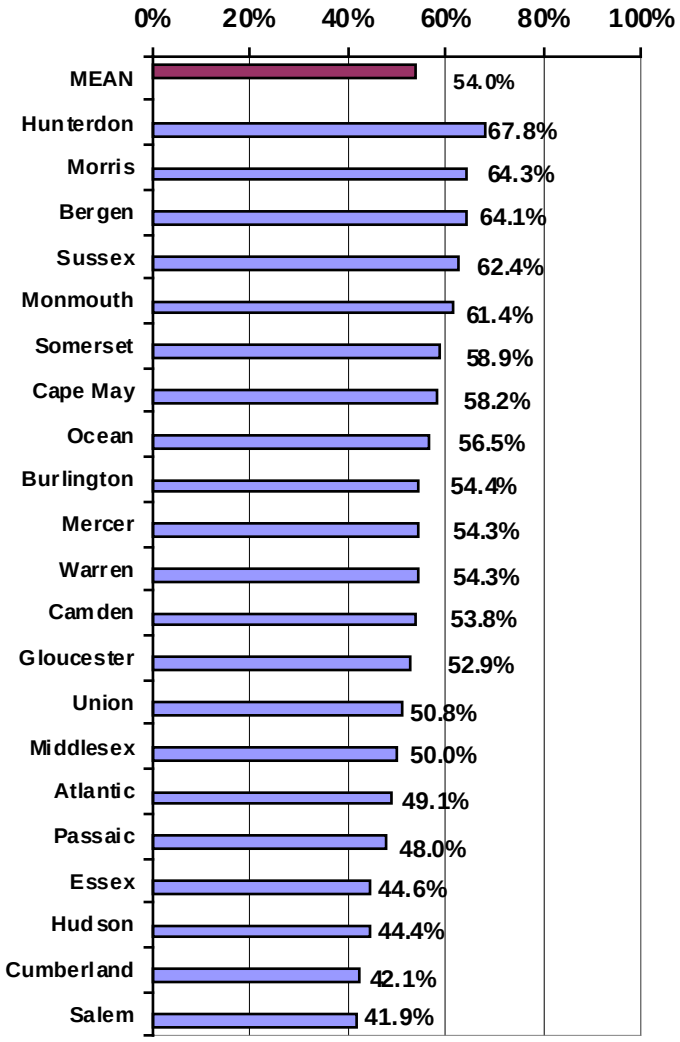
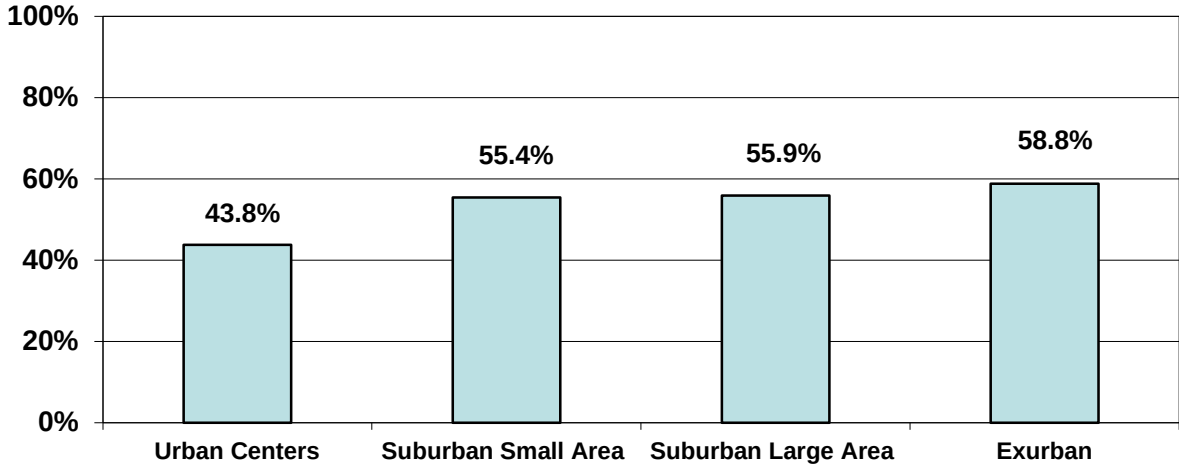


Figure 8-4: Past 30 Day Alcohol Use by Regional Category



D. ILLICIT DRUG USE

- The highest prevalence of past year illicit drug use was found in Morris and Somerset counties (9% each) (Figure 8-5). However, half of all New Jersey counties attained a percentage of at least 7% and the counties with the lowest reported rates of illicit drug use, Passaic and Warren, were not far behind (4% each).

Figure 8-5: Past Year Use of One or More Illicit Drugs by County

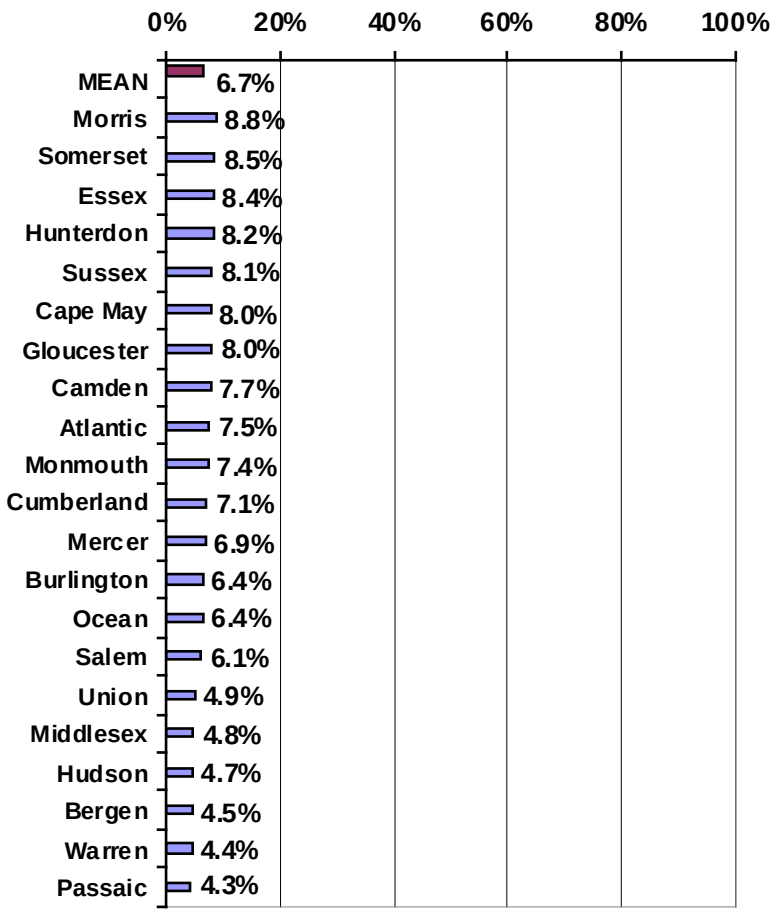
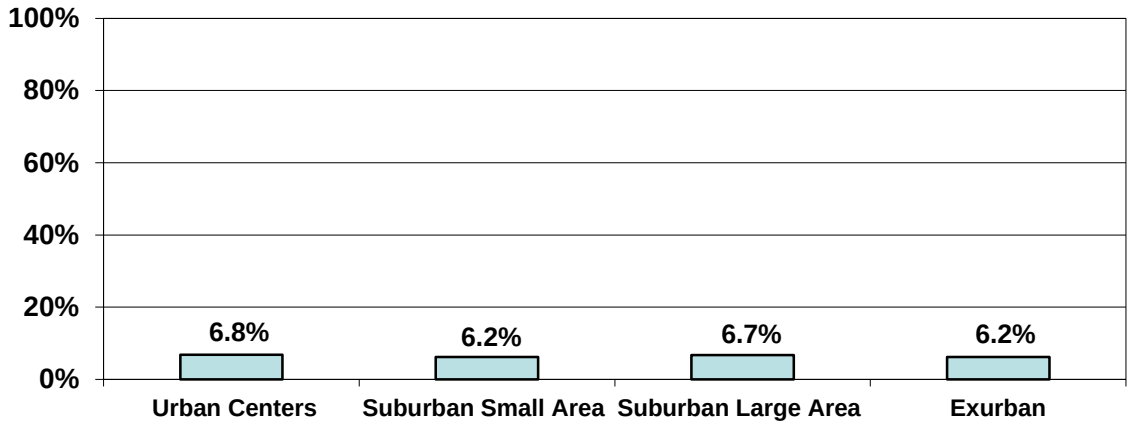


Figure 8-6: Past Year Illicit Drug Use by Regional Category



- There was little variation in illicit drug use by municipal type, with reported use ranging from 6%-7% (Figure 8-6).

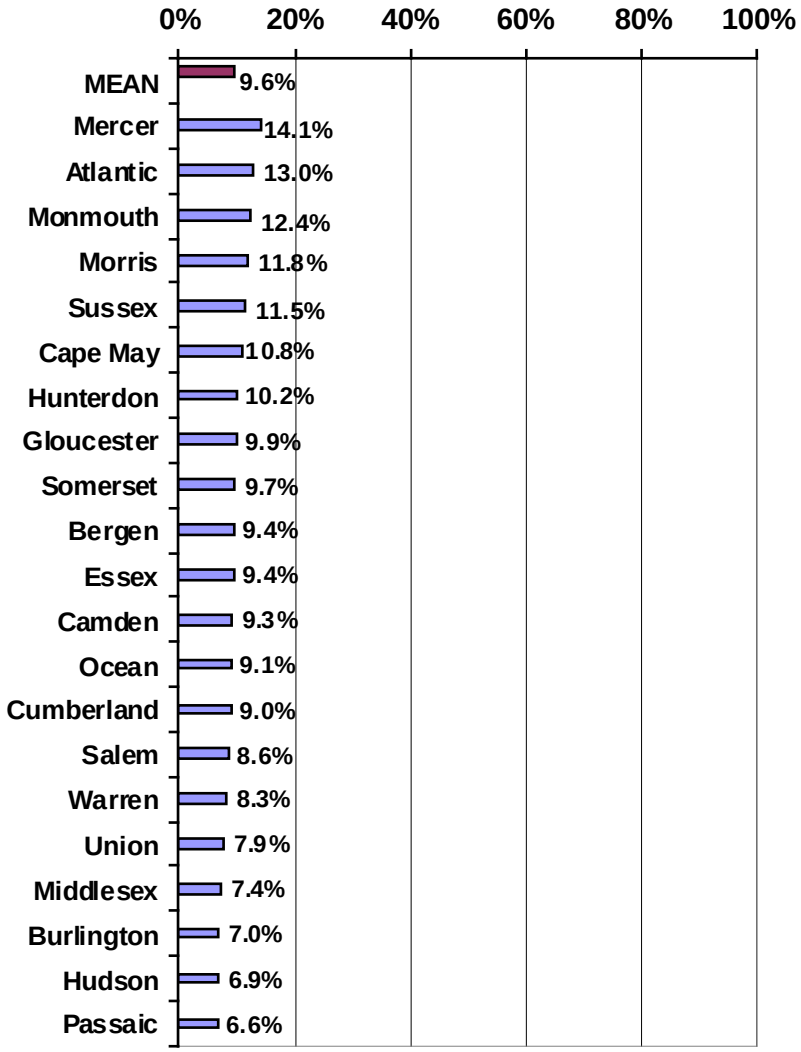
E. SUBSTANCE ABUSE AND DEPENDENCE

Variation by County

- Mercer County (14%) had the highest rate of residents meeting the criteria for substance abuse or dependence[27] on any substance of all New Jersey counties (Figure 8-7). Following behind Mercer were Atlantic (13%), Monmouth (12%), and Morris (12%) counties.

- Passaic, Burlington, and Hudson counties had the lowest prevalence of substance abuse or dependence (7% each), with rates that were approximately half that of Mercer County.

Figure 8-7: Abuse and Dependence in Past Year by County



Variation by Municipal Type

- Very little variation was found with regards to the proportion of residents with substance abuse/dependence problems by municipal type; with each type having rates of about 9%-10% (Figure 8-8).

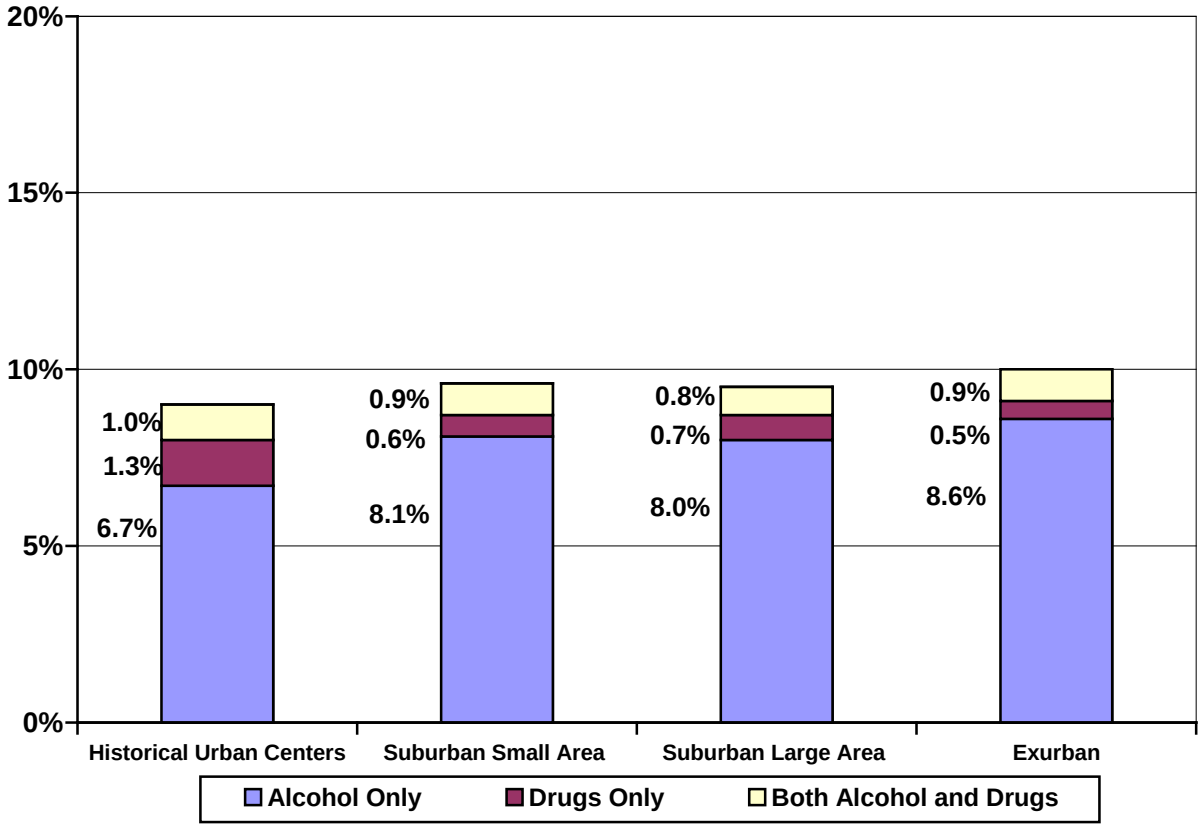
- Alcohol accounted for the majority of abuse/dependence problems in all areas. Exurban areas (9%) had the highest percentage of problems with alcohol alone, followed very closely by suburban small and large areas (8% each), and historical urban centers (7%).

[27] Please note that the total prevalence for counties in Figure 8-7 includes the sum of alcohol alone, drug alone and co-occurring alcohol and drug problems, whereas those presented for regional category in Figure 8-8 present them separately.

- The only municipal type having rates of drug abuse and dependence only that exceeded 1% was historical urban centers.

- In terms of substance abuse of both alcohol and drugs, all municipal types had rates of around 1% each.

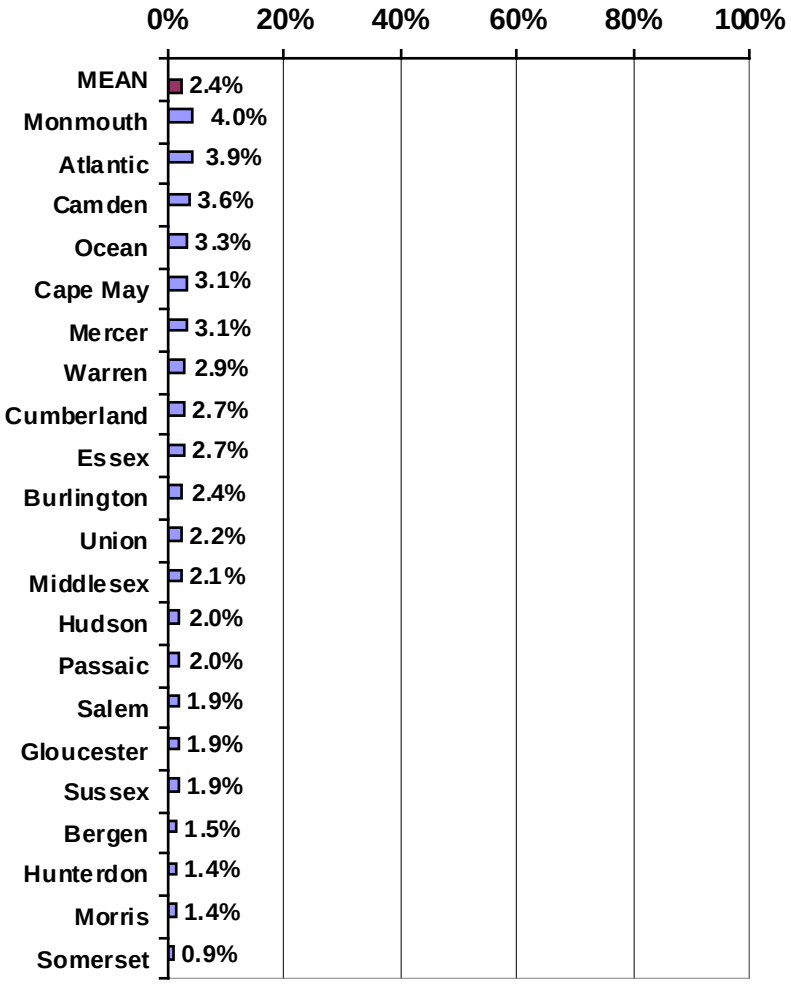
Figure 8-8: Past Year Substance Abuse and Dependence by Regional Category



F. GAMBLING

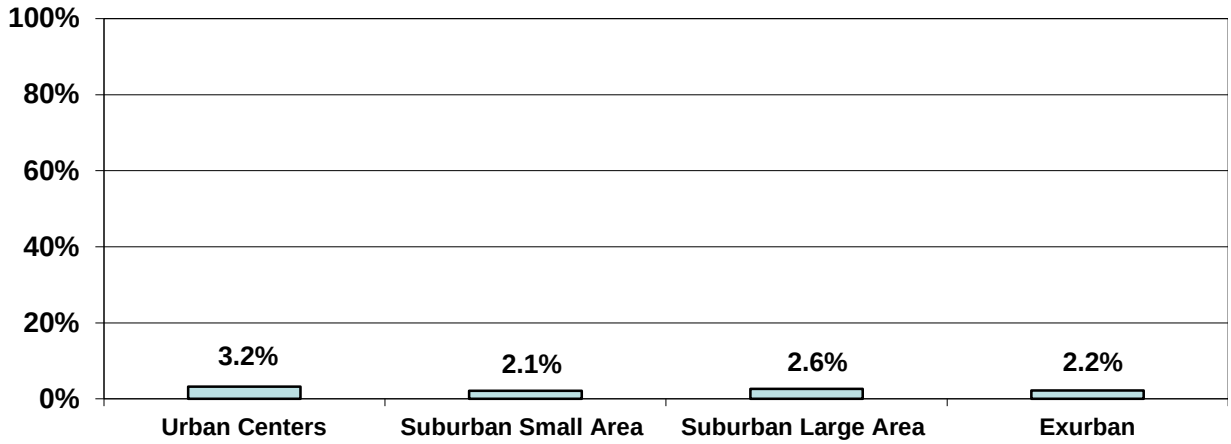
- In terms of lifetime prevalence of gambling problems there was little difference across counties. Monmouth, Atlantic and Camden counties (4% each) had the highest prevalence and Somerset, Morris, and Hunterdon counties had the lowest (1% each) (Figure 8-9).

Figure 8-9: One or More Problems with Gambling in Lifetime by County



- There was also little difference across municipal type in the prevalence of gambling problems, with all municipal types having rates of between 2%-3% (Figure 8-10).

Figure 8-10: One or More Problems with Gambling in Lifetime by Regional Category



CHAPTER 9

SUBSTANCE ABUSE TRENDS: NEW JERSEY AND THE NATION

A. INTRODUCTION

This chapter compares the 2009 New Jersey Household Survey on Drug Use and Health to comparable data from the 1998 and 2003 New Jersey surveys. Comparisons focus on the use of cigarettes, alcohol, and illicit drugs both overall and by demographic group. Because the methodology used to develop treatment need estimates changed after the 1998 survey, cross-year comparisons of abuse and dependence are presented only for 2003 and 2009.

This chapter also compares 2009 New Jersey data to the 2008 National Survey on Drug Use and Health (NSDUH). These comparisons focus on the use of cigarettes, alcohol and illicit drugs, the prevalence of abuse and dependence, and the relative access to substance abuse treatment of persons in need of treatment. These latter comparisons are possible because the current New Jersey survey employed an abuse and dependence calculation method comparable to that used in the 2003 National Household Survey[28]. However, because of age differences in the samples[29] all comparisons are provided by age. Selected comparisons by race/ethnicity and gender are provided; however, alcohol use comparisons with national data are limited since the 2008 NSDUH focused its alcohol use analysis on underage youth (less than 21 years of age).

B. NEW JERSEY TRENDS: 1998, 2003, and 2009

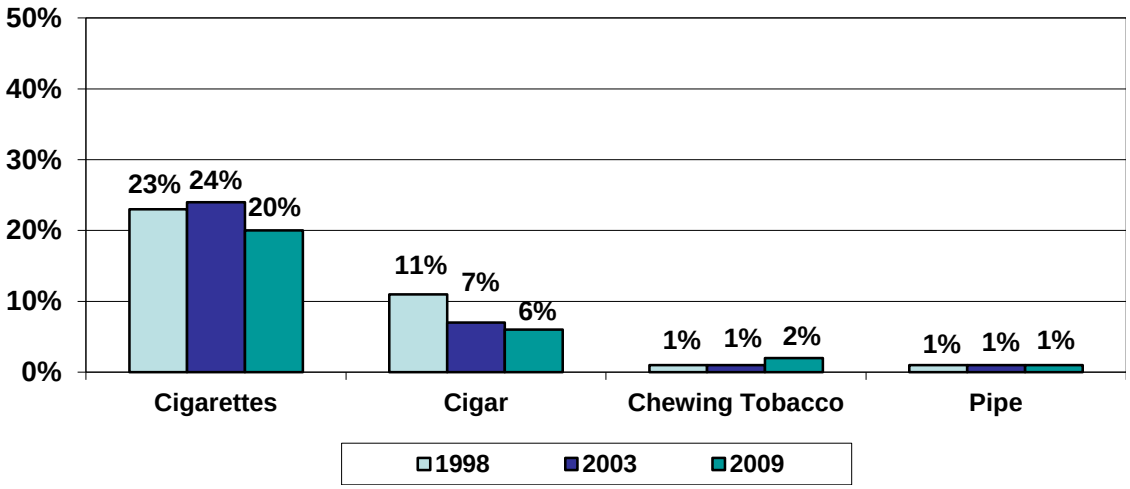
Tobacco Use

- Between 1998, 2003, and 2009 overall decreases were seen in the past year use of cigarettes (23% to 24% to 20%, respectively) and cigars (11% to 7% to 6%) (Figure 9-1). Chewing tobacco and pipe use remained low in all years ($\leq$ 2% for all survey years).

[28] While the methods are comparable, there are small differences between the state and national calculations that we have no reason to believe would substantially affect cross-survey comparisons. In 2000, SAMHSA added additional criteria for alcohol and marijuana dependence not utilized in the state calculations which require the use of these substances on 6 or more days in the past 12 months. Also, SAMHSA defines "treatment need" as meeting criteria for abuse or dependence OR receiving treatment in the past year, whereas the state's definition requires meeting abuse or dependence criteria only. New Jersey did not modify its definitions to be consistent with SAMHSA's in order to preserve comparability of the state survey data across years. We do not believe these definitional differences would substantially change state prevalence estimates. Although the New Jersey survey does not contain the data elements necessary to replicate the SAMHSA definition of abuse/dependence, a re-analysis of state data using the SAMHSA definition of treatment need elevated the state's current need estimate by .02%, which is well within the margin of error.

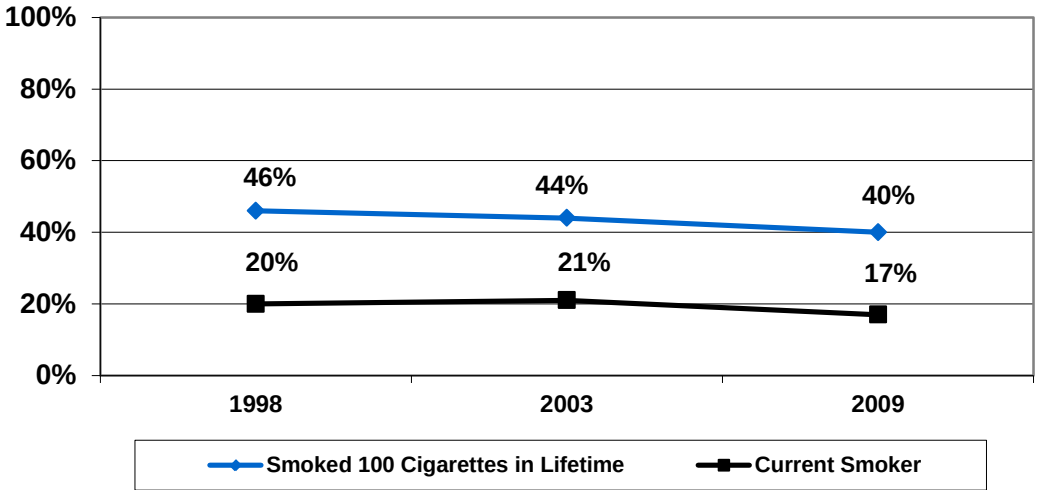
[29] National Household Survey included ages 12 and older; respondents to the New Jersey survey were 18 and older.

Figure 9-1: Tobacco Use, Last 12 Months: New Jersey, 1998, 2003, and 2009



- Overall decreases were also seen between 1998, 2003, and 2009 in the proportion reporting that they had smoked 100 or more cigarettes in their lifetimes (46% to 44% to 40%) and those currently smoking (20% to 21% to 17%) (Figure 9-2).

Figure 9-2: Cigarette Use, Lifetime and Past 30 Days: New Jersey, 1998, 2003, and 2009



Demographic Characteristics

- Cigarette smoking among men remained stable at the 19% level in 2009, after dropping slightly from 21% to 19% between 1998 and 2003 (Table 9-1). Women, in contrast, experienced a sharp decrease in cigarette use, dropping from 23% in 2003 to 16% in 2009. This drop followed an increase from 19% to 23% between 1998 and 2003.

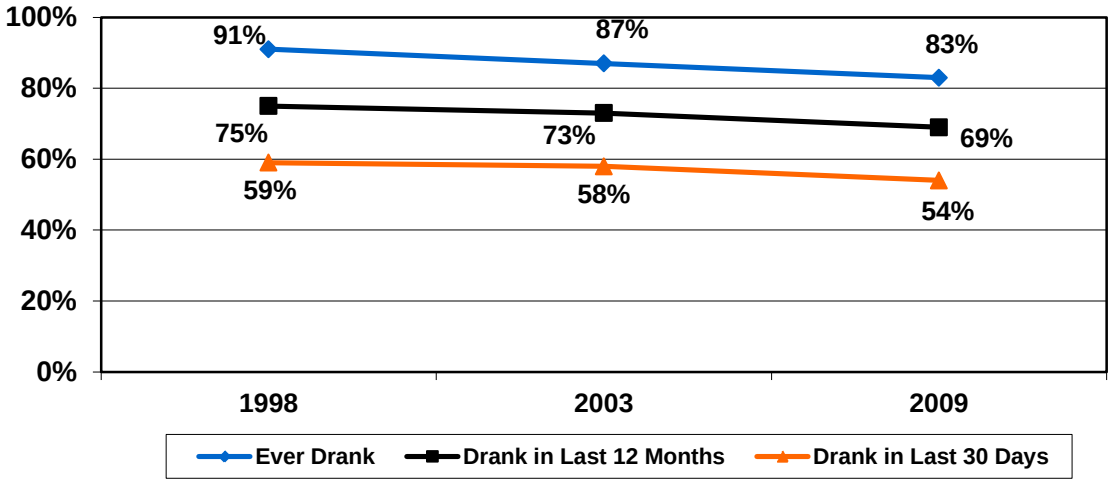
- Current smoking in all age groups decreased in 2009, dropping to 26% among 18-25 year-olds, to 23% among 26-34 year-olds, to 18% among 35-49 year-olds, and to 13% among those aged 50 and older. This marked a rebound from prior increases seen between 1998 and 2003 among 18-25 year-olds (29% to 32%), 26-34 year-olds (21% to 25%), and those aged 50 and older (14% to 16%).

- Cigarette smoking also decreased in all racial groups in 2009, despite a previous rise between 1998 and 2003 among Blacks (18% to 24%), Hispanics (17% to 21%), and Asians (10% to 13%). Only Whites saw a decrease in smoking during that period (22% to 21%). Between 2003 and 2009 smoking decreased to 18% among Whites, to 20% among Blacks, to 15% among Hispanics, and to 6% among Asians.

Alcohol Use

- Alcohol use among New Jersey residents experienced a steady decline from 1998 to 2003, and 2009, including lifetime use (91% to 87% to 83%), past year use (75% to 73% to 69%), and use in the last 30 days (59% to 58% to 54%) (Figure 9-3).

Figure 9-3: Alcohol Use, Lifetime, Past Year, Past 30 Days: New Jersey, 1998, 2003, 2009



- Both genders experienced an overall decrease in current alcohol use between 1998, 2003, and 2009 (Table 9-1). Use among men dropped from 66% to 65% to 60%, and use among women went from 52% up to 53% in 2003 and then back down to 49% in 2009.

- All age groups also saw overall declines over the survey years, including 18-25 year-olds (58% to 56% to 49%), 26-34 year-olds (63% to 60% to 57%), 35-49 year-olds (64% to 62% to 59%), and those aged 50 and older (53% to 56% to 52%)

- Overall, current drinking either decreased or remained stable among all racial/ethnic groups over the survey years, including Whites (65% to 65% to 62%), Blacks (39% to 43% to 39%), Hispanics (49% to 44% to 38%), and Asians (40% to 39% to 35%).

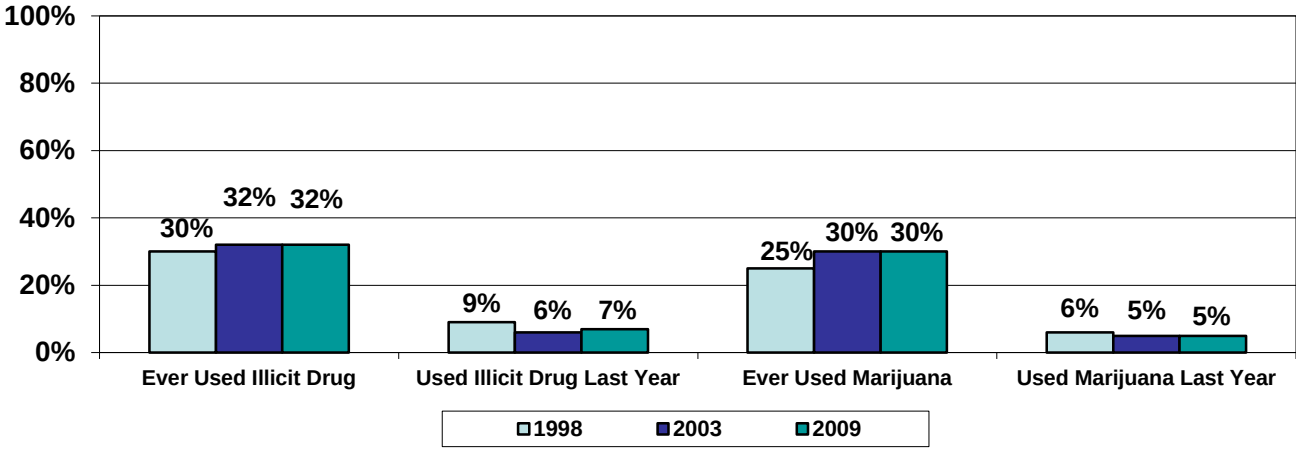
Table 9-1 Past year Use: Cigarettes and Alcohol, 1998, 2003, and 2009: New Jersey Residents

Demographics		Smoked Last 30 Days			Drank Last 30 Days		
		1998	2003	2009	1998	2003	2009
Gender	Males	21%	19%	19%	66%	65%	60%
	Females	19%	23%	16%	52%	53%	49%
Age	18-25	29%	32%	26%	58%	56%	49%
	26-34	21%	25%	23%	63%	60%	57%
	35-49	22%	22%	18%	64%	62%	59%
	50+	14%	16%	13%	53%	56%	52%
Race/ Ethnicity	White	22%	21%	18%	65%	65%	62%
	Black	18%	24%	20%	39%	43%	39%
	Hispanic	17%	21%	15%	49%	44%	38%
	Asian	10%	13%	6%	40%	39%	35%

Illicit Drug Use

- There was little change over the years in the lifetime use rate of any drug (30%-32%); however lifetime use of marijuana increased from 25% to 30% between 1998 and 2003 and remained at that level in 2009 (Figure 9-4). Past-year use stayed somewhat stable across all years for both marijuana (5%-6%) and any illicit drug (6%-9%).

Figure 9-4: Lifetime and Past Year Use of Any Illicit Drug and Marijuana: New Jersey, 1998, 2003, and 2009



- There was little change in past year marijuana use by sex; rates among both men (6%-9%) and women (3%-4%) remained somewhat stable across all years (Table 9-2).

- Past year use across age groups also remained relatively stable, with residents in the 26-34 year-old (8%) and 50 and older (1%) age groups experiencing no change across all survey years and the remaining age groups experiencing variation of no more than 2%.

- Little variation was observed across racial/ethnic lines as well, with no racial or ethnic group experiencing a change of more than 2% in past year use across all survey years.

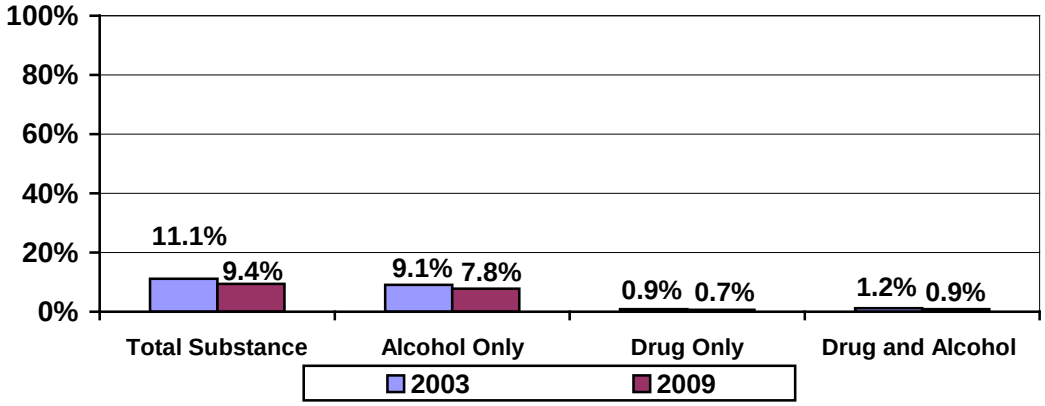
Table 9-2 Past Year Users of Marijuana, 1998, 2003, and 2009: New Jersey Residents

Demographics		Used Marijuana Last 12 Months		
		1998	2003	2009
Gender	Males	9%	6%	7%
	Females	4%	3%	3%
Age	18-25	19%	18%	18%
	26-34	8%	8%	8%
	35-49	6%	3%	4%
	50+	1%	1%	1%
Race/ Ethnicity	White	7%	5%	5%
	Black	7%	6%	6%
	Hispanic	4%	4%	3%
	Asian	2%	3%	2%

Substance Abuse and Dependence

- Rates of substance abuse and dependence in New Jersey decreased between 2003 and 2009, including abuse or dependence of any substance (11.1% to 9.4%), alcohol alone (9.1% to 7.8%), drugs alone (0.9% to 0.7%), and alcohol and drugs in combination (1.2% to 0.9%) (Figure 9-5).

Figure 9-5: New Jersey Substance Abuse or Dependence, 2003 and 2009: Last 12 Months



- Between 2003 and 2009, a slight reduction in abuse and dependence was seen for males (16.3% to 14.1%), while females remained more stable (6.5% to 5.1%) (Table 9-3).

- By age, reductions were found among 18-20 year-olds (20.7% to 15.4%) and 21-25 year-olds (22.5% to 18.9%), while those aged 26-34 (14.5% to 15.3%), 35-49 (11.5% to 9.8%) and 50 and older (6.4% to 5.5%) remained somewhat stable.

- By race/ethnicity, a slight reduction in abuse/dependence occurred among Whites (12.6% to 10.2), while rates remained stable in all other racial/ethnic groups.

Table 9-3 Substance Abuse and Dependence, 2003 and 2009: NJ Residents

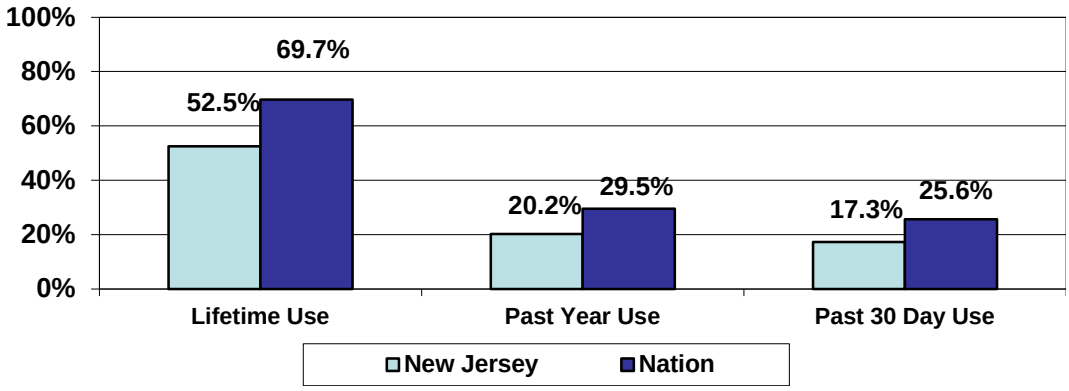
Demographics		Substance Abuse Dependence	
		2003	2009
Gender	Males	16.3%	14.1%
	Females	6.5%	5.1%
Age	18-20	20.7%	15.4%
	21-25	22.5%	18.9%
	26-34	14.5%	15.3%
	35-49	11.5%	9.8%
	50+	6.4%	5.5%
Race/ Ethnicity	White	12.6%	10.2%
	Black	8.9%	8.6%
	Hispanic	8.0%	8.2%
	Asian	4.8%	5.6%

C. NEW JERSEY (2009) AND THE NATION (2008)

Tobacco Use

- In 2009, far fewer New Jersey residents reported smoking cigarettes in their lifetimes than did Americans nationwide (53% vs. 70%) (Figure 9-6). Smaller differences were reported with respect to past year (20% vs. 30%) and past 30 day use (17% vs. 26%).

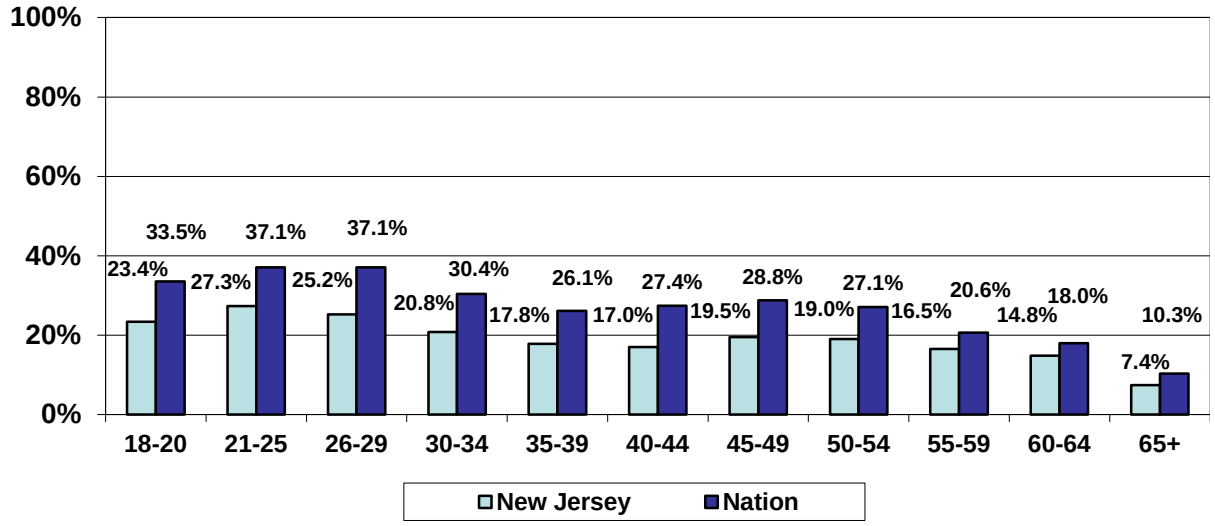
Figure 9-6 Use of Cigarettes in Lifetime, Last 12 Months, and Last 30 Days among Persons Aged 18 or Older: New Jersey (2009) and the Nation (2008)



Age

- New Jersey residents in all age groups were less likely to smoke than Americans nationwide; with the largest differences found for those aged 18-20 (23% vs. 34%) and 21-25 (27% vs. 37%) and the smallest found for those aged 65 and older (7% vs. 10%) (Figure 9-7).

Figure 9-7: Past 30 Day Cigarette Use, by Detailed Age Categories: New Jersey (2009) and the Nation (2008)



Gender, Race/Ethnicity, Employment, and Education (Table 9-4)

- When comparing state residents to their national counterparts, both New Jersey men (19% vs. 28%) and women (16% vs. 23%) were less likely to smoke (Table 9-4).

- Respondents in all New Jersey racial/ethnic groups were less likely to be current smokers than their national counterparts, including Whites (18% vs. 27%), Blacks (20% vs. 28%), Hispanics (15% vs. 21%), and Asians (6% vs. 13%).

- New Jersey residents of all education levels were less likely than members of comparable national groups to currently smoke; by the largest margins for high school graduates (21% vs. 31%) and those with less than high school (25% vs. 34%) and smaller margins for those with some college (22% vs. 27%) and college graduates (9% vs. 14%).

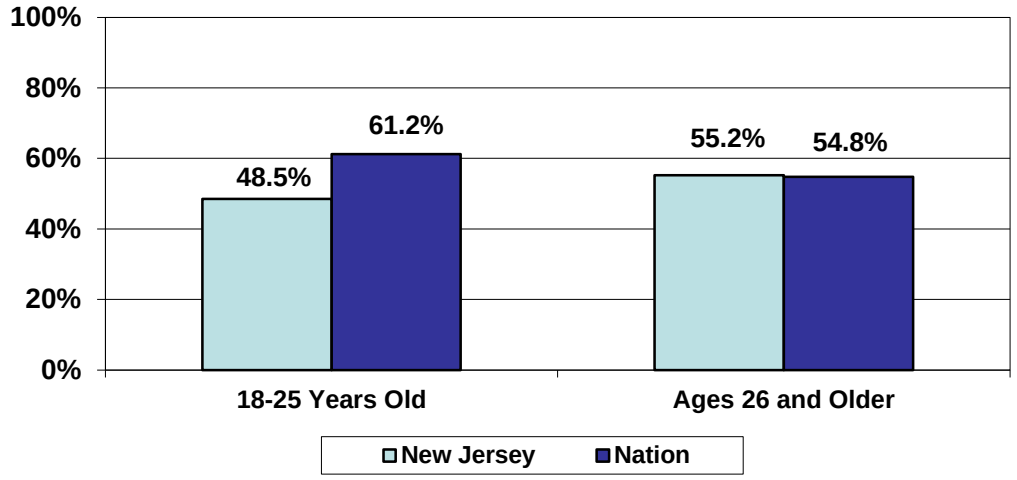
- For all employment groups New Jersey residents reported lower rates of smoking than Americans nationwide, including the unemployed (27% vs. 43%) as well as for both those employed part time (18% vs. 24%) and full time (17% vs. 27%).

Table 9-4: Past 30 Day Use of Cigarettes among Persons Aged 18 or Older by Demographic Characteristics: New Jersey (2009) and the Nation (2008)

Demographics		New Jersey (n=14,678)	Nation (n=46,190)
Total		*17.3%*	*25.6%*
Gender	Males	19.3%	28.4%
	Females	15.5%	23.0%
Race/Ethnicity	White	18.0%	26.6%
	Black	20.3%	27.8%
	Hispanic	15.4%	21.1%
	Asian	6.1%	12.7%
Education	Less than H.S.	25.4%	34.4%
	H.S. Grad.	20.5%	30.6%
	Some College	22.3%	26.6%
	College Grad.	8.5%	14.0%
Employment	Employed FT	17.3%	27.2%
	Employed PT	18.1%	23.8%
	Unemployed	27.2%	43.0%

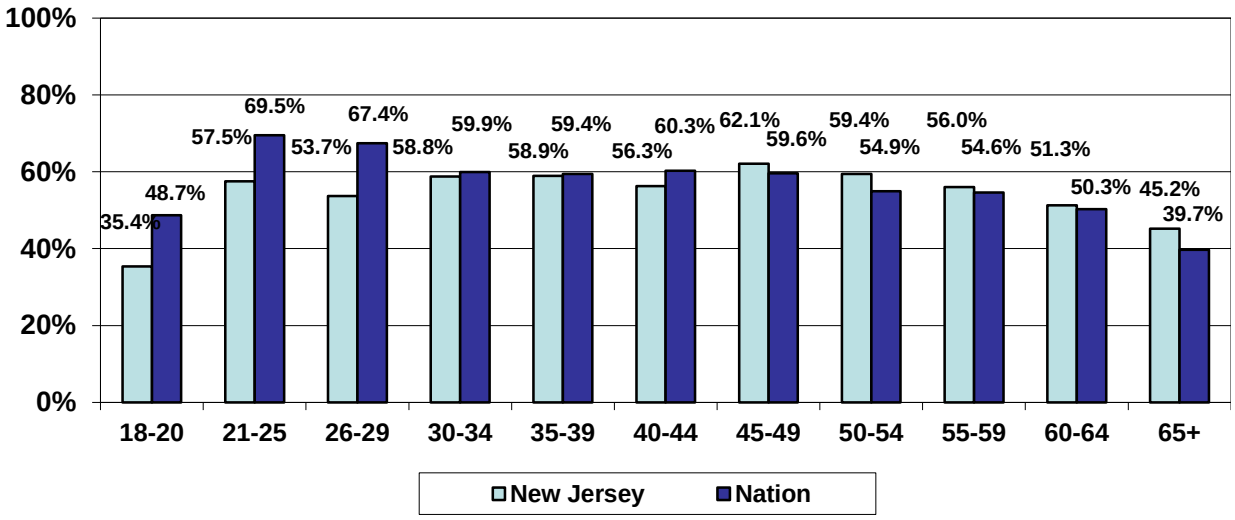
- New Jersey residents aged 18-25 were less likely to have drank alcohol in the last 30 days than their national counterparts (49% vs. 61%), although, state and national residents aged 26 and older had comparable rates of current drinking (55% each) (Figure 9-8).

Figure 9-8: Past 30 Day Alcohol Use by Age: New Jersey (2009) and the Nation (2008)



- New Jersey residents under the age of 30 were much less likely to report current drinking than those nationally, including those aged 18-20 (35% vs. 49%), 21-25 (58% vs. 70%), and 26-29 (54% vs. 68%) (Figure 9-9). Residents in New Jersey and the nation aged 30-34, 35-39, and 40-44 reported comparable drinking rates (56%-60%). However, after age 44, New Jersey residents were slightly more likely than all Americans to be current drinkers, especially after the age of 65 (45% vs. 40%).

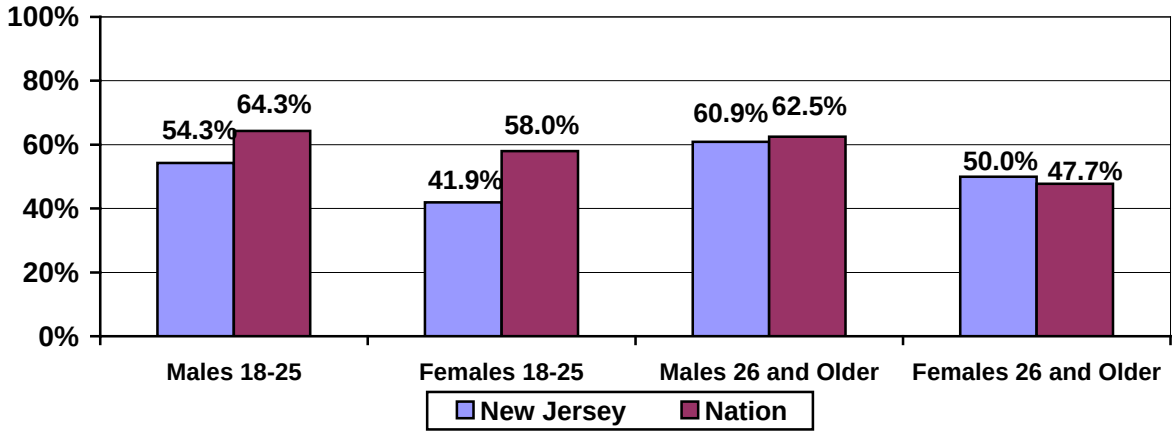
Figure 9-9: Past 30 Day Alcohol Use by Age: New Jersey (2009) and the Nation (2008)



Gender

- New Jersey men (54%) and women (42%) aged 18-25 were less likely than national men (64%) and women (58%) of that age to drink (Figure 9-10). However, current drinking rates of both genders were comparable, nationally and in the state, after age 25.

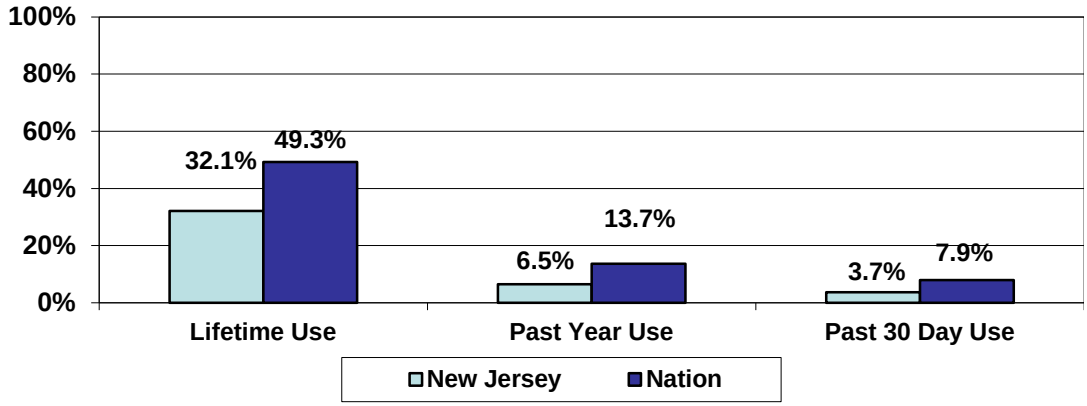
Figure 9-10: Past 30 Day Alcohol Use by Gender: New Jersey (2009) and the Nation (2008)



Illicit Drug Use

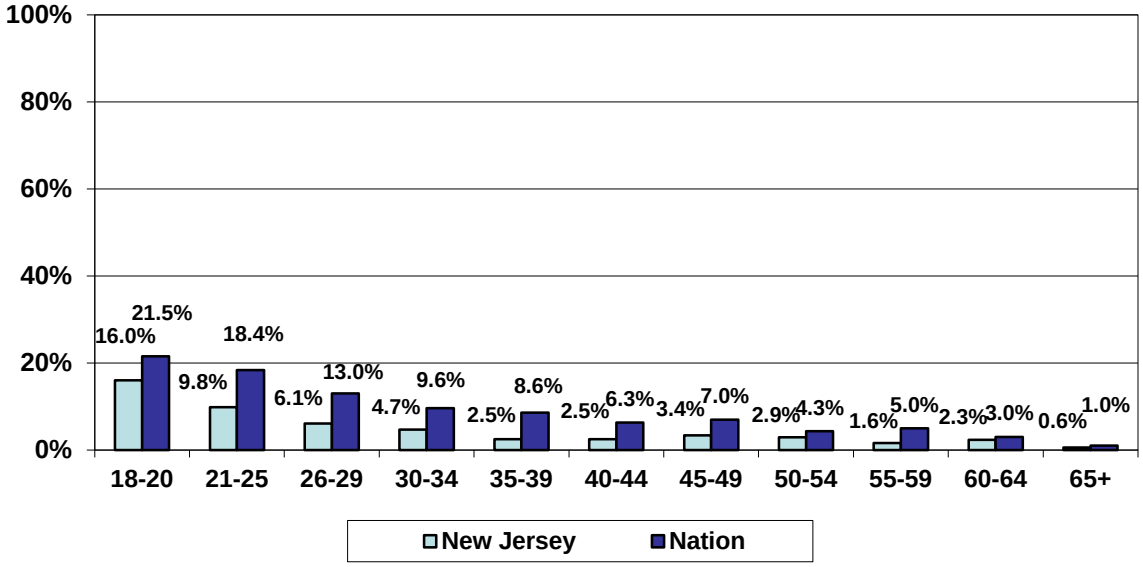
- New Jersey residents reported lower lifetime (32% vs. 49%), past year (7% vs. 14%), and past 30 day illicit drug use rates (4% vs. 8%) than Americans nationwide (Figure 9-11)[30].

Figure 9-11: Use of Any Illicit Drug in Lifetime, Last 12 Months, and Last 30 Days Among Persons Aged 18 or Older: New Jersey (2009) and the Nation (2008)



- New Jersey residents of all age groups reported lower illicit drug use rates than their national counterparts with the largest margins for those under the age of 30, especially those between 18-20 (16% vs. 22%), 21-25 (10% vs. 18%), and those 26-29 (6% vs. 13%) (Figure 9-12).

Figure 9-12: Past 30 Day Use of Any Illicit Drug, by Detailed Age Categories: New Jersey (2009) and the Nation (2008)



[30] State and national differences in reported use may relate, in part, to differences in data collection utilized by the two surveys: the New Jersey survey interviewed all respondents by telephone; the National Survey conducted in-home interviews using audio computer-assisted self-interviewing for sensitive questions, such as those about illicit drug use. Self-interviewing techniques have been shown to elicit higher self-reporting of sensitive behaviors.

Gender, Race/Ethnicity, Education, and Employment (Table 9-5)

- New Jersey residents of both genders were less likely to have used drugs in the past 30 days than all Americans, including men (8% vs. 16%) and women (5% vs. 12%) (Table 9-5).

- State racial/ethnic groups were also less likely to use in the past 30 days, including Whites (7% vs. 14%), Blacks (8% vs. 17%), Hispanics (5% vs. 11%), and Asians (2% vs. 7%).

- State residents of all education levels were less likely than those nationwide to report drug use in past 30 days, with the largest margin being reported for high school graduates and those with less than a high school education (6% each vs. 14% each).

- New Jersey residents of each employment type reported lower rates of drug use in the past 30 days than all Americans by about a 2-1 margin, including the unemployed (14% vs. 29%), and those working part time (10% vs. 18%) and full time (6% vs. 14%).

Table 9-5: Past-Year Use of Any Illicit Drug among Persons Aged 18 or Older by Demographic Characteristics: New Jersey (2009) and the Nation (2008)

Demographics		**New Jersey (n=14,678)**	**Nation (n=46,190)**
Total		***6.5%***	***13.7%***
Gender	Males	8.3%	16.1%
	Females	4.8%	11.5%
Race/Ethnicity	White	6.9%	13.9%
	Black	8.4%	16.8%
	Hispanic	4.5%	11.3%
	Asian	1.8%	7.2%
Education	Less than H.S.	5.7%	13.5%
	H.S. Grad.	5.7%	14.4%
	Some College	9.6%	16.1%
	College Grad.	5.5%	10.9%
Employment	Employed FT	6.2%	14.4%
	Employed PT	9.8%	18.1%
	Unemployed	14.3%	29.8%

Types of Drugs Used in Past 30 Days (Table 9-6)

- In the past 30 days, marijuana was the drug used most among respondents aged 18-25 in both New Jersey and the nation (11% and 17%), followed by psychotherapeutics (4% and 6%), cocaine, heroin, and hallucinogens ($\leq$ 1% for all).

- Marijuana was also the drug most frequently used in the past 30 days among those aged 26 and older in New Jersey and the nation (2% and 4%). Just 2% or fewer of state or national respondents in this age group reported past 30 day use of any other substance.

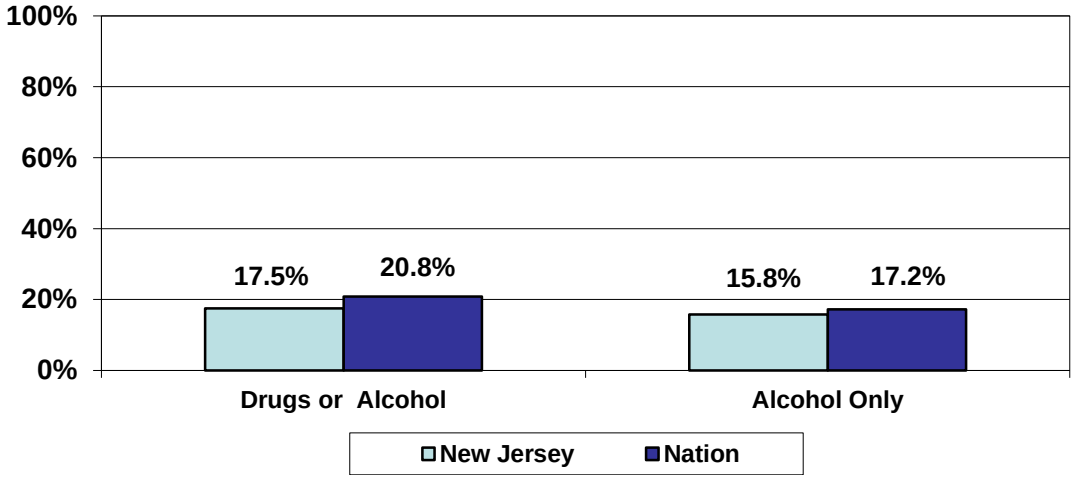
Table 9-6: Types of Illicit Drugs Used in the Past 30 Days among Persons Aged 18-25 and 26 and Older: New Jersey (2009) and the Nation (2008)

	New Jersey (n=14,678)		Nation (n=46,190)	
Age	***18-25***	***26+***	***18-25***	***26+***
Marijuana*[31]	10.5%	1.7%	16.5%	4.2%
Cocaine (including crack)	0.2%	0.2%	1.5%	0.7%
Heroin	0.1%	0.0%	0.2%	0.1%
Hallucinogens	1.1%	0.0%	1.7%	0.1%
Psychotherapeutics	3.7%	1.1%	5.9%	1.9%

Substance Abuse and Dependence

- Among 18-25 year-olds, New Jersey residents were slightly less likely than their national counterparts to report symptoms of abuse or dependence on both drugs or alcohol (18% vs. 21%) and alcohol alone (16% vs. 17%) (Figure 9-13).

Figure 9-13: Past Year Abuse of or Dependence on Drugs or Alcohol versus Alcohol Only among 18-25 Year-olds: New Jersey (2009) and the Nation (2008)



- Among persons 26 and older, New Jersey residents slightly exceeded the national rates of abuse and dependence on any substance (9% vs.7%) and alcohol alone (8% vs. 6%) (Figure 9-14).

[31] The NHSDUH marijuana drug category also includes hashish.

Figure 9-14: Past Year Abuse of or Dependence on Drugs or Alcohol versus Alcohol Only Among Those 26 and Older: New Jersey (2009) and the Nation (2008)

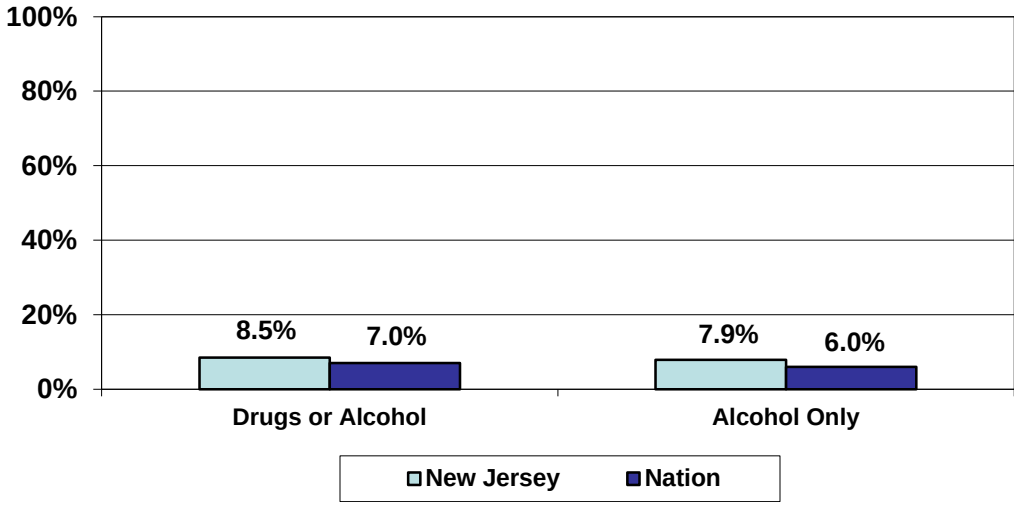
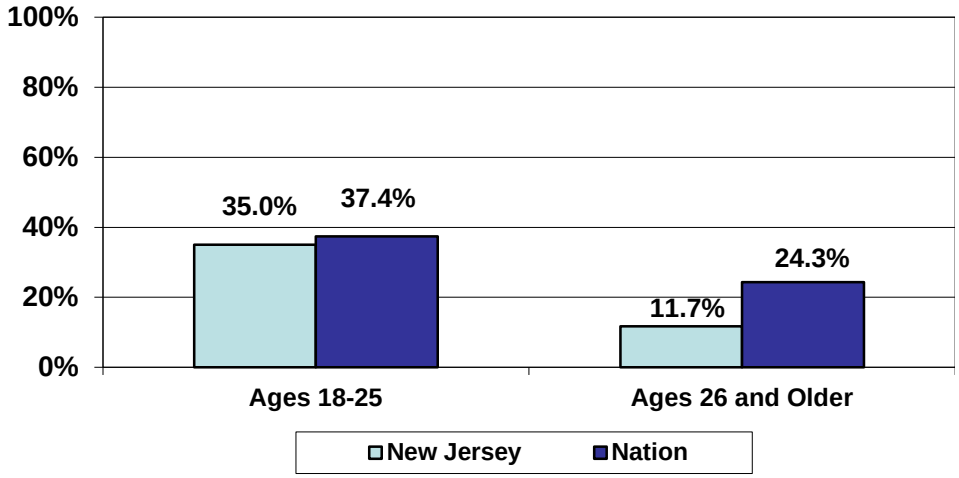


Figure 9-15: Past Year Abuse of or Dependence on Drugs among Residents Who Abused or Were Dependent on Drugs or Alcohol, by Age: New Jersey (2009) and the Nation (2008)

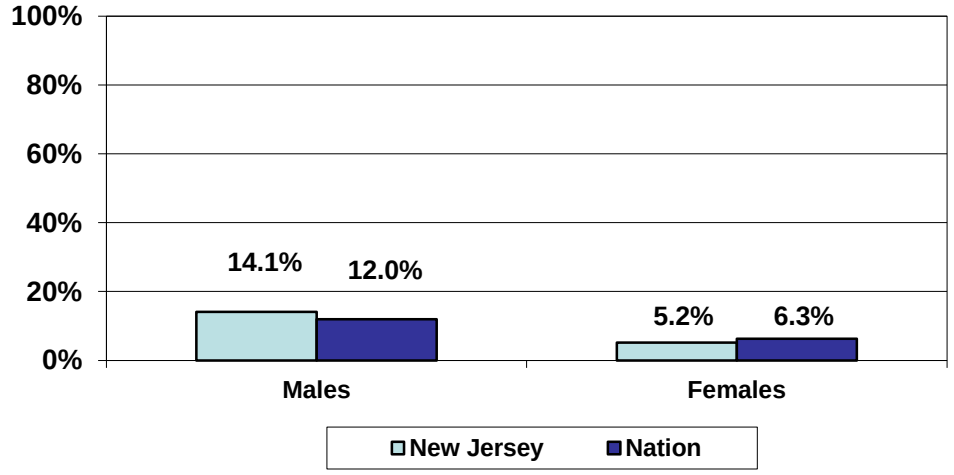


- Among persons with symptoms of abuse or dependence, state residents were less likely than their national counterparts to abuse or be dependent on drugs, both among 18-25 year-olds (35% vs. 37%) and, even more so, among those 26 and older (12% vs. 24%).

Gender

- By gender, at both the New Jersey and national levels, men (14% vs. 12%) and women (5% vs. 6%) reported comparable rates of abuse or dependence (Figure 9-16).

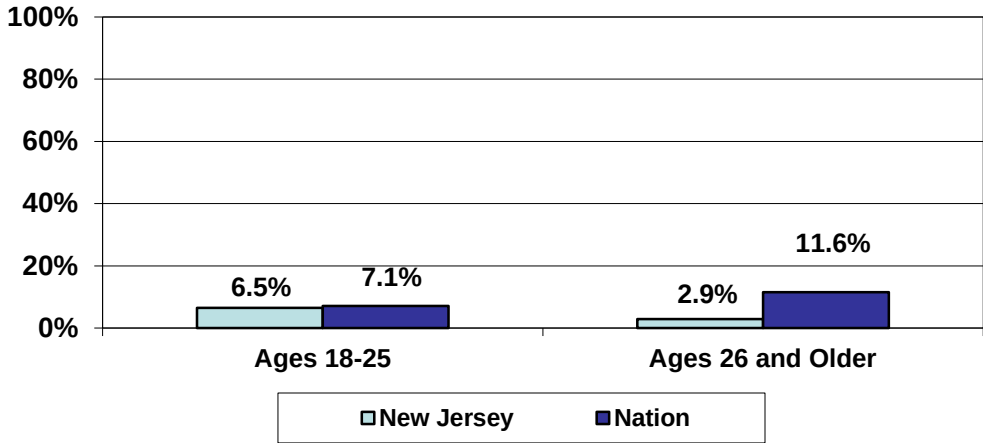
Figure 9-16: Past Year Drug or Alcohol Abuse or Dependence among Residents Aged 18 and Older by Gender: New Jersey (2009) and the Nation (2008)



Access to Substance Abuse Treatment

- Among 18-25 year-olds with a treatment need, New Jersey and national level residents had comparable past year rates of treatment access (7% each) (Figure 9-17). However, among those with a need aged 26 and older, state residents were substantially less likely than all Americans to have received past year specialty addiction treatment (3% vs. 12%).

Figure 9-17: Percentage Who Received Treatment in Past Year among Persons Who Needed Treatment by Age: New Jersey (2009) and the Nation (2008)



CHAPTER 10
CONCLUDING REMARKS

The 2009 New Jersey Household Survey on Drug Use and Health marks the 5th time in 23 years that the Division of Mental Health and Addiction Services has measured the prevalence of substance use, abuse, and dependency among state residents in order to assess the need for both prevention and treatment services. Over the years, the survey's methodology and focus have evolved along with changes in survey administration technology. A brief overview of these developments is detailed below:

A. The 1986 survey was conducted in-person, utilizing a random sample of 1,212 New Jersey residents between the ages of 18 and 34. The survey focused primarily on alcohol, drugs, cigarette use, and other related problems.

B. The 1993 survey was the first of three sponsored by the Federal State Treatment Needs Assessment Program (STNAP). It was conducted via telephone using a random sample of 3,026 residents aged 18 and older, which resulted in a margin of error (MOE) of $\pm$1.8%. That year, the survey topics included gambling, treatment history, and pregnancy.

C. In 1998, DMHAS increased the survey sample size: 4,266 with MOE $\pm$ 1.5%.

D. In 2003, the number of completed interviews increased again, this time to 14,660, producing a statewide margin of error of $\pm$ 0.8%. The larger sample design allowed for approximately 700 completed interviews per county, producing county level estimates with MOE of $\pm$ 3.8% The survey covered roughly the same topics as the 1998 effort, however the special section on substance use during pregnancy was replaced by an exploration of the impacts of the 2001 World Trade Center attacks on substance use, abuse, and dependence.

E. In 2009, the number of completed interviews remained nearly identical at 14, 678. The MOE for the statewide sample remained $\pm$.8%. From each county, 25 interviews were allocated to a special statewide sample of 525 residents who were interviewed on their cell phones because they had no land line telephone service in their homes. County samples completed 675 interviews with MOE of $\pm$ 3.8%.

F. In 2009, the questionnaire included a special section that assessed the needs of Veterans returning from Iraq and Afghanistan. Additionally, a set of questions in the treatment history chapter inquired about obstacles or barriers to obtaining treatment for those in need.

G. DAS expanded the utility of the household survey by presenting results at the county level in direct support of county comprehensive planning needs assessments. At the county level, survey results are compared to both the statewide results and the county level survey results from 2003.

Figures 10.1 through 10.5 report 16 years of DAS household survey data regarding substance use, abuse, dependence, and treatment history.[32]

Substance Use: Alcohol, Marijuana, and other Illicit Drugs

[32]The 1986 survey sampled persons 18-34 years of age and interviewed them in-person. The results are not comparable to those of later surveys that sampled persons 18 and older and interviewed them by telephone.

Table 10.1 depicts alcohol and marijuana use over the years. It shows a gradual decline of 8.5% in *past year* use of alcohol among New Jersey adults, occurring from1993 (77.0%) to 2009 (68.5%). The estimated proportion of adults 18 years of age or older who report having used marijuana during the past year is less than one-tenth of the estimated proportion using alcohol. However, unlike alcohol use, the rate of adults reporting past year marijuana use has fluctuated between 4.5% and 7.0% across the years.

Figure 10.1: Past Year Alcohol and Marijuana Use, 1993 to 2009

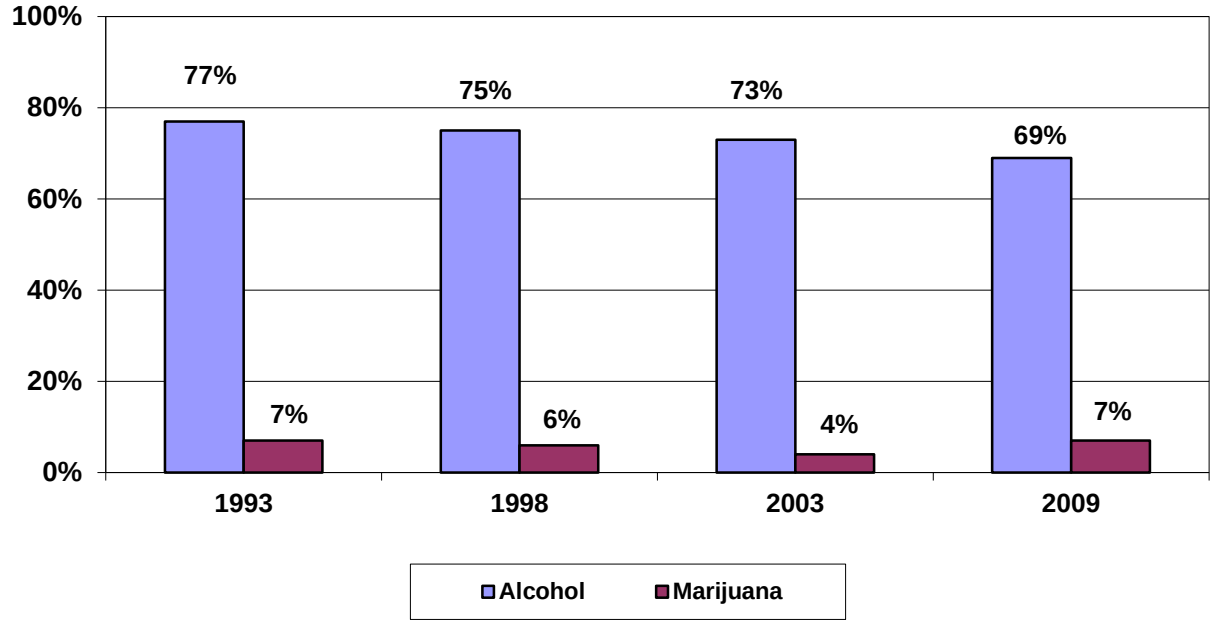
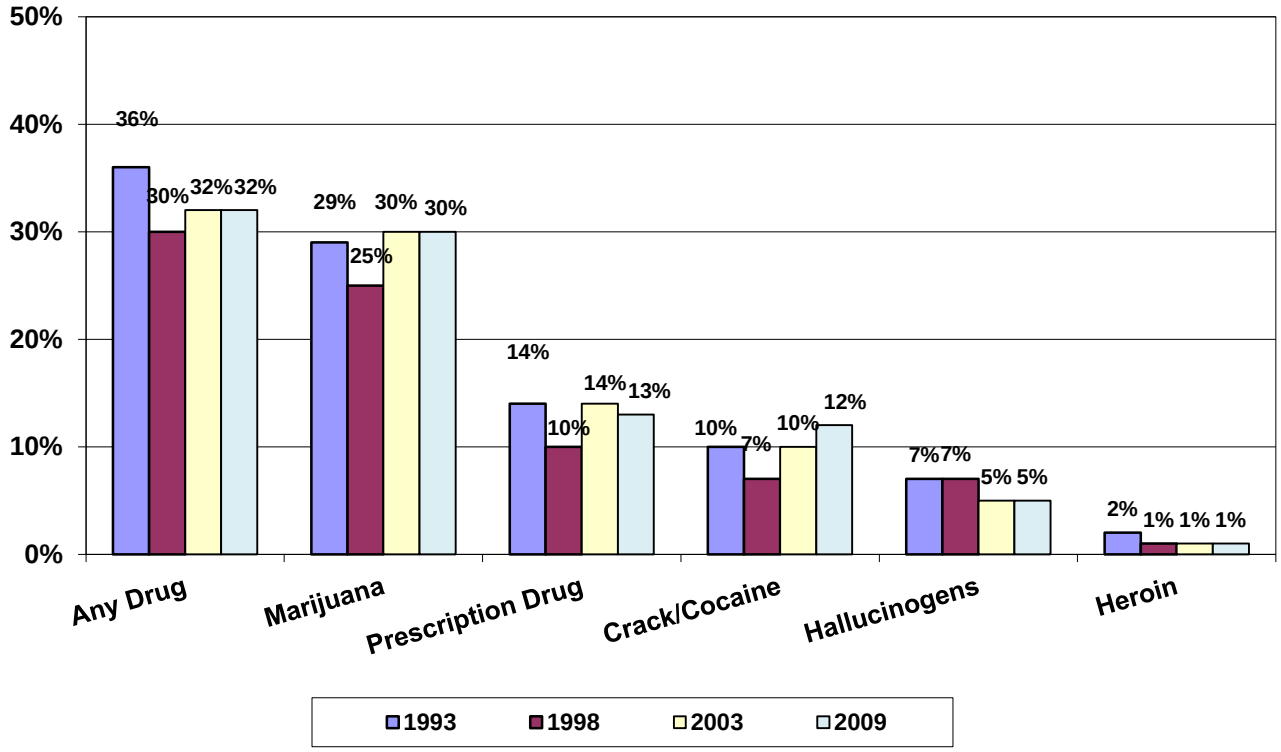


Figure 10.2 presents lifetime rates of use for any illicit drug, along with data on the use of five individual illicit drugs; including marijuana, use of prescription drugs for non-medical purposes, cocaine/crack, hallucinogens, and heroin. These tend to be higher than past year or past thirty day use rates across all DMHAS surveys. Presumably, respondents fear disclosure of current or past year use of illegal substances more than lifetime use; thus, lifetime use rates are the preferred indicators of present conditions.

The results demonstrate that, lifetime use of any illicit drug has fallen slightly from 36.0% in 1993 to a range of 30.0% to 32.0% between 1998 and 2009 for a net change of-4.0%. However, individually, the lifetime use rates of all five drugs have varied only slightly with net changes in the range of ±1.0% to 2.0%.

Figure 10.2: Lifetime Illicit Drug Use by Drug Type, 1993 to 2009



Treatment Need

As shown in Figure 10.3, from 1993 to 2009, total treatment need ranged from 7.5% to 11.2%. Interestingly, alcohol treatment appeared to comprise the bulk of overall total treatment need during the survey years. In 1993, the household survey report did not report abuse of or dependence on drugs only based on the findings of the household survey. Instead, using the two sample capture-recapture model of admissions for drug abuse, it estimated total drug treatment need to be 2.8% of the adult population.[33] In 1993, alcohol treatment need was 2.5 times this estimated total drug treatment need.

In 1998, treatment need for drug use was reported based solely on results from the household survey. Treatment need stemming from use of drugs alone was 0.9% and dual treatment needs stemming from use of both drugs and alcohol rose slightly from 0.6% in 1993 to 1.2%. These rates remained unchanged in 2003 but fell off slightly in 2009 to 0.7% and 0.9%, respectively. However, treatment need related exclusively to alcohol use rose from 6.8% in 1993 to 7.4% in 1998 to 9.1% in 2003 and then fell off to 7.8% in 2009. [34] Still, the dominance of alcohol treatment need compared to drug use-related treatment need continued to grow.

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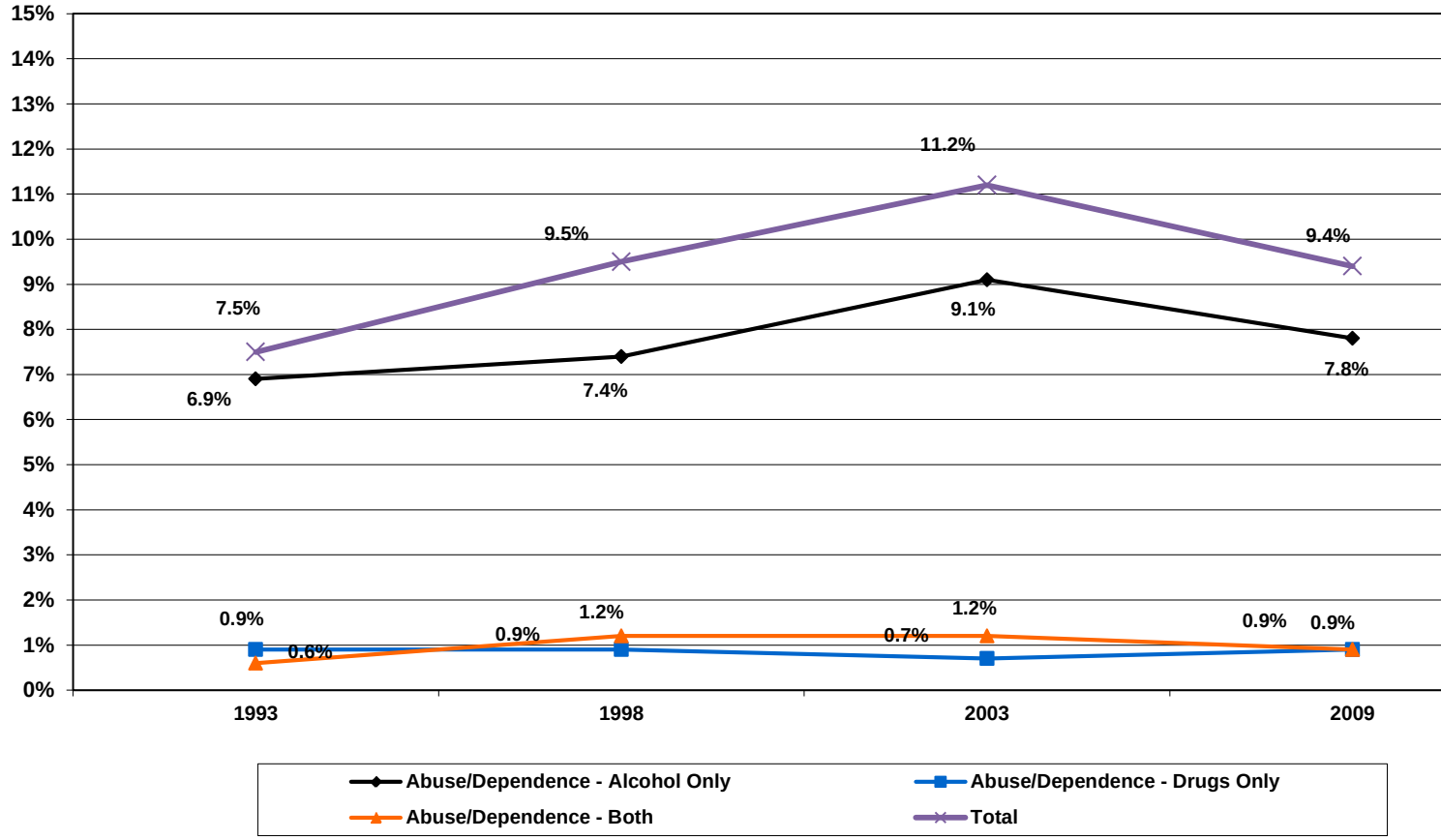
[33]The 1993 reported drug treatment need is derived from drug admissions data rather than the household survey and is not, strictly speaking, comparable to the 1998 reported drug treatment need.

[34]This pattern seems to follow the national economic cycle. As the nation recovered from the slump of 1992, alcohol treatment need rates appear to have accelerated, peaking in 2003 and falling off in the recession of 2008. This would be consistent with the observation that alcohol use rises with household income level (see Table 2-1, p.10. supra).

Figure 10.3: New Jersey Treatment Need, 1993 to 2009



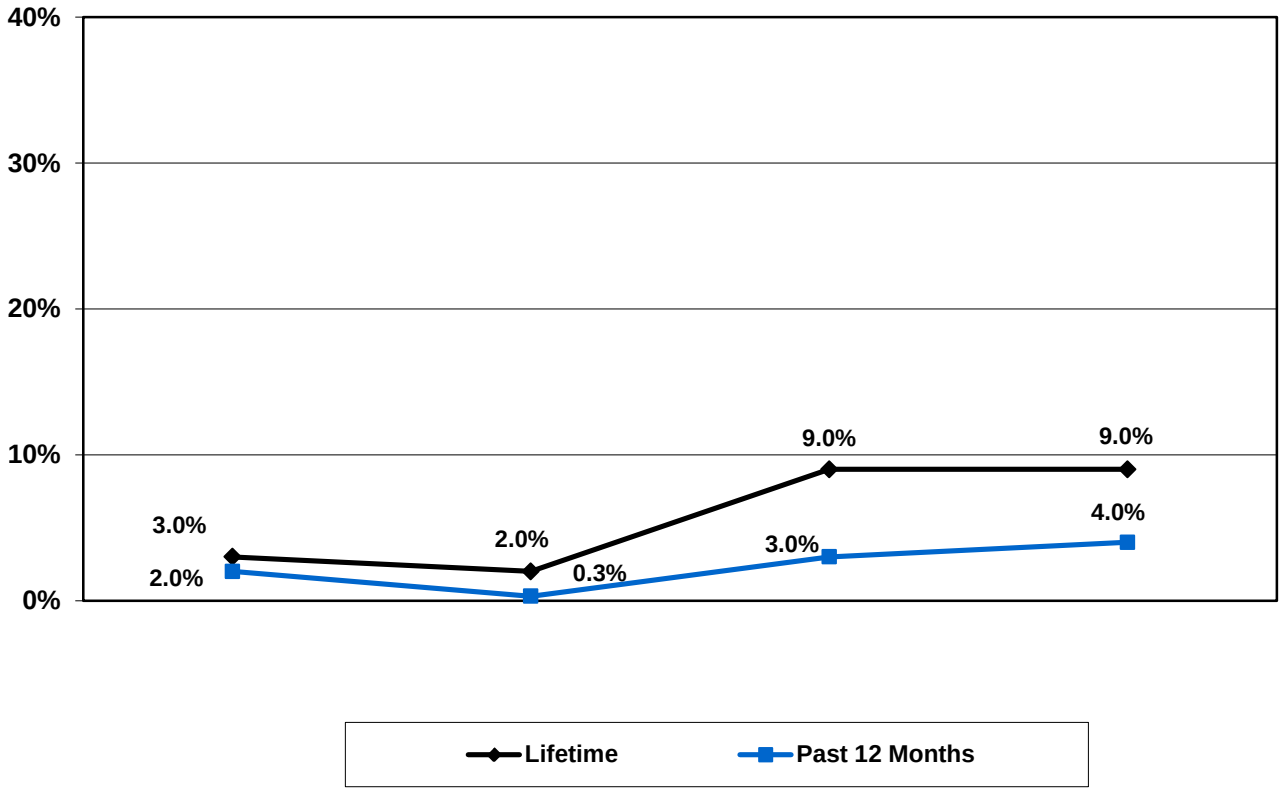
Treatment Access

Figure 10.4 presents lifetime and past year treatment access for respondents that were considered to be in need of treatment.

As expected, reported lifetime treatment rates are higher than those reported for past year receipt of treatment. Both show an overall increase between 1998 and 2009. The increase in lifetime treatment access was 4.5 times its lowest point in 1998; the increase in past year treatment access was 10 fold. These apparent changes in treatment access may be partially explained by the shift of services from high cost residential to lower cost, more widely dispersed, outpatient settings that began during the 1990s and increased in volume during the 2000s.[35]

[35] In 1992, 68,491 New Jersey residents were admitted to substance abuse treatment. Nearly half, (48.0%) were admitted to residential treatment; by 1998, of 57,079 admissions 41%were for residential treatment. Conversely, outpatient admissions rose from 52% in 1992 to 59% in 1998. , fell off to 56% in 2001, but rose to 62.9% by 2009. Source: ADADS, NJSAMS.

Figure 10.4: Treatment Access, Among those with Treatment Need, 1993 to 2009



What DAS' Population-Based Surveys Reveal

The three most general and reliable findings from the New Jersey Household Survey Series are that:

1) Substance use rates have remained relatively constant,

2) Treatment need increased substantially over time until 2003 but, in 2009 returned to the 1998 level, and

3) Access to treatment has improved dramatically since 1998. Improved access to treatment suggests that public policies promoting treatment access probably should be sustained and further developed.

Perhaps, an additional significant finding is that, even taking under-reporting of illegal drug use into account, treatment need related to alcohol abuse and dependence is probably several times larger than treatment need related to drug abuse or dependence. This last finding contrasts sharply with treatment admission patterns which are dominated by admissions for illicit drug abuse and dependence.[36]

[36] Source: NJSAMS, 2010, Treatment Admissions Overview. Table of state totals demonstrates that 34% of admissions were for alcohol and 64% were admissions for other drugs. http://www.state.nj.us/humanservices/das/news/Substance%20Overview/Atl-11.pdf.