

State of Connecticut

Adolescent Substance Abuse Treatment Needs Assessment: The 1995 Adolescent Alcohol and Drug Use School Survey

**Prepared for the
Connecticut Department of Mental Health and Addiction Services**

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Executive Summary

In Spring 1995, the University of Connecticut Alcohol Research Center conducted a statewide survey of alcohol and other drug use in a random sample of 7th to 12th graders in public schools in Connecticut. The Adolescent Alcohol and Drug Use School (AADUS) Survey was part of a statewide substance abuse treatment needs assessment project conducted by the State Department of Mental Health and Addiction Services (DMHAS). This project was one of a “family of studies” funded by the Center for Substance Abuse Treatment (CSAT) to estimate the need for substance abuse treatment among adults and adolescents in Connecticut. The major objectives of the AADUS Survey were:

- To estimate the prevalence of alcohol and other drug use in the Connecticut school population, as well as the problems associated with substance use;
- To study changing trends in adolescent substance abuse in Connecticut, since 1989, when the last statewide school survey was conducted;
- To identify the sociodemographic characteristics of adolescents with substance abuse; and
- To assist state and regional planning of treatment and prevention services.

A total of 3,995 students participated in the AADUS Survey. The following highlights summarize the major findings described in this report:

- Use of psychoactive substances is widely prevalent among Connecticut's adolescent school population. Alcohol, tobacco and marijuana are the most popular substances among all grade levels, with the use of other substances relatively low.
- From 1989 to 1995, marijuana smoking and inhalant use increased among most students, especially 7th and 8th graders. Among junior high school students -- both male and female -- there were also significant increases in cigarette smoking; 20% of boys and 25% of girls in junior high school currently smoke cigarettes.
- Drinking alcohol has decreased since 1989, most notably among the senior high school population. However, the rates of use are still high; one-third of 7th-8th graders and one-half of 9th-12th graders currently drink, that is, have used alcohol in the past 30 days.
- Compared to their peers nationwide and to those in the Northeast region of the United States, Connecticut's students report higher rates of use of cigarettes, alcohol, and marijuana.
- Junior high school students in 1995 initiated their use of alcohol, marijuana and inhalants a full year earlier than their peers in 1989.
- Patterns of substance use differ according to age, gender, racial/ethnic background and community type. The rates of drug use are comparable among boys and girls in junior high school, but at the senior high school level boys have higher rates of use overall. Drug use typically increases with grade level. In general, suburban students report higher rates of substance use than urban students in school. White and Hispanic students report more use of

drugs -- both legal and illegal -- than Black students, with Hispanic students reporting more current use of illicit drugs.

- A minority of students report regular (i.e., six or more times per month) use of cigarettes, alcohol and marijuana, although the proportion of regular users increases dramatically from junior high to senior high school. One-in-five high school students smokes cigarettes on a regular basis. Regular use of marijuana remained relatively constant between 1989 and 1995 overall, although it did increase among high school boys. On a positive note, regular use of alcohol among high school students decreased from 1989 to 1995.
- Fifteen percent of junior high school students report being drunk on alcohol during the previous 30 days; twice as many (34%) of the senior high school students drank to intoxication at least once in the past month. Most (75%) of regular drinkers report being drunk three or more times in the past 30 days.
- More than one-fourth of junior and senior high school students who drink or use drugs report that they do so after school. Seven percent of 7th and 8th graders and 15% of 9th through 12th graders report that they have used drugs before school.
- Home is the most common place for adolescent substance use to take place; 47% of junior high school users and 61% of senior high school users report that they drink or use drugs at home.
- Despite laws against sale of cigarettes to minors, 53% of junior high and 81% of senior high school smokers obtain their cigarettes from stores. Although friends are the most common source of cigarettes and alcohol, many students look closer to home -- more than half of junior high students who use tobacco and alcohol obtain those substances in their own homes, often without their parents' permission.
- The most frequently cited reasons for using alcohol are "liking the taste" and "to have a good time." Students also say they use alcohol "to feel good" and "to feel less tense." Intoxication is an end in itself for one-in-two high school boys who drink. The positive effects of feeling good and having "a good time" are primary reasons for use of other drugs. Almost half of junior high students use drugs out of curiosity.
- Concern about health is the major reason students cite for not using alcohol or drugs.
- Although drinking to intoxication regularly is considered harmful by most students, 24% of junior high school and 41% of senior high school students feel drinking to intoxication "once or twice" has few harmful consequences. There is considerable tolerance of casual marijuana use; 36% of 7th and 8th graders and 54% of 9th through 12th graders feel there is little or no harm in using marijuana once or twice.
- Problem behaviors associated with alcohol and other drug use are widely reported, especially among students who are regular substance users. In particular, drinking (or drug use) and

driving are common, most often occurring when the student is a passenger and the driver has been drinking or using drugs (reported by 40% of all high school students and by 80% of regular users). One-in-five students in senior high school reports that they have driven a car after using psychoactive substances; more than one-in-two regular substance users has done so. Seventeen percent of all high school students have attended class “stoned” or “high” at least once; 63% of regular users have been high in school.

- Almost one-in-ten (9%) of senior high school students give evidence of sufficient involvement with drugs and alcohol to warrant a more detailed diagnostic evaluation. Approximately 6%, or an estimated 6,701 9th through 12th graders statewide, are likely candidates for some form of substance abuse treatment intervention, which could range from brief counseling in school to more intensive treatment.
- Four percent of junior high students (an estimated 2,714 7th and 8th grade students statewide) also could benefit from further evaluation for substance abuse treatment, a finding that suggests that prevention efforts need to be intensified in this younger population.
- There are no differences between boys and girls in estimated rates of treatment need. There are, however, differences by racial/ethnic background: Hispanic students appear to have the highest rates of treatment need, followed by White students and then Black students.
- Most (78%) students in need of substance abuse intervention do not feel that they have a problem. Only one-third of the substance-abusing students have received help from professional sources, including doctors, community programs, or counselors. Friends are the most frequently cited source of help for youth in need of treatment.
- Student substance abuse is strongly associated with school problems, anti-social or dangerous behaviors, and suicidal ideation. Regular substance users, especially those considered to be in need of a treatment evaluation, report problems such as school suspensions, failing grades, theft, carrying weapons, and suicide attempts at rates two to three times that of students overall.
- The majority of junior high and senior high school students have participated in a special class about drugs or had lectures or discussions about drugs in their regular classes. Although most students report positive influences from their drug education programs, the perceived effectiveness of the programs decreases among students in the upper grades.

The findings from the Adolescent Alcohol and Drug Use School Survey document the widespread use of licit and illicit drugs among secondary school students in this state. The disturbing increases in substance abuse, especially among younger students who are initiating substance use at earlier ages, are likely to portend further increases in student use in the next few years.

The findings regarding the need for substance abuse treatment among public school students are of particular concern. It is estimated that almost one-in-ten senior high school

students should receive a diagnostic evaluation for substance abuse, with half likely to need a treatment referral. Yet, most of these adolescents have not received treatment for their substance abuse. This unmet need for substance abuse treatment can be addressed through earlier identification with appropriate and timely referral to intervention services.

The findings suggest that treatment and prevention efforts should be considered synergistic rather than discrete for this population. Although adolescent substance use seems to be increasing both in Connecticut and nationally, it is not valid to conclude that current prevention and treatment efforts have failed. The declining trends in alcohol use among secondary school students suggest that prevention has had an impact on this aspect of substance use. Further, it is likely that adolescent substance abuse could be worse if current prevention efforts were not in place. These data also highlight the need to assess the prevalence of use and treatment needs of students not currently enrolled in Connecticut's school system. Differential dropout rates by various subgroups of the population, such as urban and minority youth, are likely to affect the rates of substance abuse observed among youth in school.

The margin of error is always a concern in survey research, and the figures presented here can be expected to vary slightly. However, the impact of such error is minimal in these statewide data. The margin of error is estimated to vary between 2% and 6%. At the upper end, estimates of 50% might actually be in the range of 47% to 53%. Smaller estimates are subject to less uncertainty, so that estimates of 5% can be expected to actually be between 4% to 6%.

In future reports connected with this needs assessment project, we intend to explore the treatment and prevention implications of these findings, and make recommendations regarding the future directions of survey research. It is important to note that without continued use and improvement of such data gathering mechanisms, policy and program generation would likely suffer. Findings regarding the patterns, prevalence rates, and problems associated with substance abuse among Connecticut's students will help members of the DMHAS and other state agencies, as well as community-based programs and the schools, to plan and implement appropriate substance abuse prevention and treatment services for these youth.

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Introduction

The use of psychoactive substances, such as alcohol, tobacco and other drugs, has been a major defining feature of adolescent development since the late 1960s (Cohen, 1969). Most of what we know about adolescent substance use comes from school-based surveys of students. School surveys serve four major purposes. First, school surveys provide basic information about the dimensions of substance use and abuse as a public health problem. Second, school surveys provide valuable information about the causes of substance abuse and the consequences that may result from experimentation as well as regular use. Third, school surveys chart trends in substance use and abuse, including the introduction and use of new substances, and measure changes over time. Finally, school surveys can be used to estimate the need for prevention and treatment interventions.

These four areas of inquiry--prevalence estimation, causal mechanisms, changing trends, and program planning, are often combined in regional, statewide, or national surveys conducted with representative samples of the in-school population. The statewide school surveys conducted in Connecticut in 1989 and 1995 were designed to serve all of these functions.

In 1988 the State Legislature authorized funding for the first statewide survey of primary and secondary school students in Connecticut (Special Act No. 88-76). The study was implemented in 1989 by the Connecticut Alcohol and Drug Abuse Commission (CADAC) in cooperation with the University of Connecticut Alcohol Research Center (UConn ARC). Although six years have passed since the first statewide survey, the state continues to recognize the need for reliable, standardized information to effectively address the extent and consequences of substance abuse by adolescents. The most recent Statewide Service Delivery Plan for Substance Abuse Treatment Services noted that "quantitative data does not exist on a statewide basis to determine the clinical need for additional resources" (CADAC, 1990, p. viii). To address this need the State Department of Mental Health and Addiction Services (DMHAS) contracted with the UConn ARC to conduct a second statewide school survey. The Adolescent Alcohol and Drug Use School Survey (AADUS) was designed as a component of the statewide Substance Abuse Treatment Needs Assessment Project, which was funded by the Center of Substance Abuse Treatment (CSAT) to estimate the number of people in the state in need of treatment for alcohol and other drug abuse. In addition, the AADUS Survey was designed to be comparable to the 1989 statewide school survey to monitor trends in tobacco, alcohol and drug use prevalence in Connecticut's student population.

The 1995 survey was administered to students included in a random stratified sample of schools statewide. The self-administered survey instrument measured the prevalence, consequences, and correlates of alcohol and other drug use by Connecticut's public school students in grades 7 through 12. This was the first time statewide data were collected to estimate treatment needs for the adolescent school population. Although this report focuses primarily on the findings from the 1995 statewide survey, comparisons of the major findings from the 1995 survey are described in relation to changing trends since 1989 (Babor, et. al, 1989; Babor, et. al, 1990).

The specific objectives of the 1995 survey were:

- To estimate the prevalence of alcohol and other drug use among the Connecticut school population;
- To study trends in incidence and prevalence based on the previous school survey (1989);
- To examine the causes, correlates, and problems related to substance use in the student population, especially among high risk adolescents.
- To assist state planning of prevention and treatment programs by estimating the need for alcohol and other substance abuse services among the adolescent student population;

Methodology

Sampling Procedures

The 3,995 respondents for the statewide survey were sampled from the population of 7th through 12th graders enrolled in public schools in Connecticut at the time of the survey. The general features of the 1995 sample design followed the approach used in the 1989 survey. A multi-stage sampling procedure was used to assure proportional representation in terms of town and grade level. English, Health, or Social Studies classes were the basic sampling units within schools because they are required of all students, and they frequently permit stratification on the basis of academic achievement.

It was anticipated that the statewide sample would comprise approximately 7,500 students. Because the actual yield of the Spring administration fell short of the target number, the survey was administered a second time during the Fall of 1995 in those few schools in the sample which had expressed willingness to participate at that time of year. The total number of students participating in the survey was 3,995, representing a 53% response rate. Although the sample was not as large as originally intended, this did not adversely affect the representativeness of the data. The sample still permitted breakdowns of results for different subgroups within the total sample (e.g. by gender, grade level, and planning region) and provides more than enough statistical power to conduct rigorous analyses of the data.

Forty-seven percent of the respondents were male. The sample was distributed over the six grade levels as follows: 7th graders (21%), 8th graders (21%), 9th graders (19%), 10th graders (13%), 11th graders (14%), and 12th graders (11%). Seventy percent of the respondents were White, 15% were Black, and 7% were Hispanic. The distribution of students across the five planning districts closely approximated the distribution of the student population statewide according to the State Department of Education's enrollment data.

The Survey

With minor modifications, the survey instrument is similar to the self-report questionnaire developed for the previous statewide school survey in Connecticut (Babor & Del Boca, 1989) which was itself modeled after student survey instruments used previously in New York State

studies (Barnes & Welte, 1986; Kandel, Davies, Karus & Yamaguchi, 1986), and nationally (Johnston, O'Malley & Bachman, 1995).

Content - The survey was designed to measure the following content areas: demographic characteristics, the use of alcohol, tobacco, illicit and prescription drugs, occasions of use, reasons for use, reasons for not using or not using more, perceptions of harm from substance use, problems associated with substance use, personality correlates, adjustment and school problems, perceived need for treatment services, attitudes about alcohol and other drugs, use and perceptions of prevention and intervention programs, and perceived sources of help.

The survey included the Personal Experience Screen Questionnaire (PESQ) which was designed as a brief screening tool to identify adolescents in need of "assessment referral;" that is, to suggest who should be referred to a more systematic diagnostic assessment (Winters & Henly, 1988).

Format - Students recorded their answers directly on the questionnaire. This "direct transcription" approach made the questionnaire easier and faster to complete for students at all grade levels and more convenient for staff to check and edit. All instructions and questions were written to produce an acceptable level of readability for junior high and high school students according to the Flesch Readability Formula (Flesch, 1948). According to this formula, we developed a survey that was "fairly easy" to read. A Spanish translation of the questionnaire and instructions was prepared for students more comfortable in that language.

Validity - Assurances of anonymity and confidentiality provided incentives for honest reporting. The survey included a number of items designed to detect inconsistent response patterns. Students who provided grossly inconsistent data (n=7) were excluded from the analyses. The survey will likely provide a good estimate of substance use by Connecticut secondary school students. Prior survey research indicates that respondents are usually willing to admit illegal or socially undesirable forms of behavior. However, it is likely that the survey will underestimate rates of alcohol consumption and drug use among all state youth (Kandel, 1978). A major reason is that school dropouts, who are more likely to be serious substance abusers, were not included in the survey. Absentees represent an additional source of bias. However, the survey design provided methods for dealing with this common problem including teachers re-administering the survey with students who were originally absent. Regardless of the success of procedures to eliminate bias due to absenteeism and other factors, it needs to be emphasized that generalizations about substance use based on the survey can only be made to the youth population attending school. Future surveys are planned that have the goal to document the differences of adolescents who are not enrolled in regular school programs.

Approval Process

The statewide survey was jointly sponsored by DMHAS and the State Department of Education (SDE). The State Department of Education planned to conduct a similar statewide survey, the Youth Behavior Risk Survey (YBRS), in the Spring of 1995. The investigators at

UConn ARC and SDE coordinated the sample selection of the two surveys so that the schools would not be overburdened and so that no students would be asked to participate in both surveys.

To conduct the survey, it was necessary to secure permission from the school administrators, their respective school boards, and in some cases from parents. After approvals were obtained from participating school systems, UConn ARC field staff contacted the school principals to establish a liaison (most often a substance abuse program coordinator or guidance counselor) within each of the schools to help coordinate and implement the survey. Field staff worked with the liaison to build support and cooperation from teachers and school personnel, instructed the liaison in the recruitment and training of school staff to administer the survey, answered questions about the survey arising from parents and other concerned parties, established procedures to assure that parental permissions were obtained where required, dropped off and picked up the questionnaires from the schools, recorded any problems or peculiarities in the collected questionnaires, and worked with the liaison to implement procedures for following up students absent from class on the day of the survey.

Survey Administration

Questionnaires were completed during regularly scheduled class sessions. Prior to distributing the questionnaires, the purpose and potential uses of the survey were explained to students, and a standard set of directions for completing the survey were read. Students were told that their participation in the survey was completely voluntary and anonymous. They were instructed (in oral and written form) not to write their names or other identifying information on the questionnaires. Students personally deposited their completed questionnaires in a container that was sealed and signed by the survey administrator after all questionnaires were complete. The sealed questionnaires were removed from the classroom by the liaison. The questionnaires, still in their sealed containers, were picked up by UConn field staff on the day of the survey.

Confidentiality

Numerous precautions were taken to protect anonymity and confidentiality. Students were instructed not to put personal identifying information on the forms themselves. Numerical codes were used for individual questionnaires and for other variables that may provide identifying information regarding the sample strata. Completed forms were placed in sealed containers and removed quickly from school premises so that no one outside of the research staff could have access to raw data forms. Additionally, specific codes for class or school were not entered into computer files. Finally, although we recognize that particular communities may be interested in learning the survey results for their specific school systems, all reports and presentations are restricted to aggregated data at the state, regional or community-type levels of analysis.

Data Processing

To minimize error as data were prepared for analysis, extensive data cleaning and verification procedures were employed. Preliminary error checking and data cleaning were conducted by the field team members. Detailed written instructions were provided to guide an

initial review of missing data, mis-coded answers, written comments and missing identification information. Once preliminary data cleaning was completed by the field staff team, survey data were key entered into computer files by a commercial data processing firm. Double key punch data entry was used to guarantee 99.9% accuracy. This second, independent key entry process automatically checked the initial and second verification values for inconsistencies, which were then corrected by consulting the original questionnaire forms. After the data were returned to UConn, they were checked again using additional data cleaning procedures.

Data Analysis

Sample characteristics were compared with the population of students enrolled in Connecticut during the 1994-95 school year to determine how closely the sample represented the demographic composition of the state. Some slight shortfalls in sampling were noted and corrected through statistical weighting. Hispanic students were slightly under-represented in the sample, while there were an excess of Black females and 12th grade males in comparison with the state enrollment. Weighting corrects these minor variations in grade, race and ethnicity and gender without distorting the findings. Table 1 shows the distribution of the unweighted and weighted sample. The demographics of the weighted sample reflect the characteristics of the total student population.

Data analysis first focused on lifetime and current substance use among junior and senior high school students statewide. *Lifetime use* counts those who report they have ever used a substance at least once. *Recent or current use* is defined as reported use of any substance in the last 30 days. For the most part, the analysis focused on current behavior. The rates of use were compared to the 1989 survey data to identify trends in substance use. The statewide rates of use were also compared to national and regional data on student substance use as reported by the Monitoring the Future Study (Johnston et al., 1995). Group differences in substance use prevalence rates were examined by grade level, gender, racial/ethnic background and community type. Regional comparisons according to the five regional planning areas as defined by Connecticut's Office of Policy and Management (OPM) were done to facilitate sub-state planning efforts.

Subsequent analyses examined the context, attitudes, and behaviors surrounding alcohol and other drug use. The reasons for using or not using alcohol and other drugs, the frequency of use, rates of intoxication, sources for obtaining substances, and other substance-related problem behaviors were investigated. Particular attention was paid to *regular use*, defined as use of a substance six or more times in the past month, as a possible indication of more serious involvement with psychoactive drugs resulting in more substance-related problems.

The relationship between treatment and prevention issues requires estimates of both types and amount of service need, as well as a measurement of the effectiveness of current prevention efforts, before conclusions can be made. Treatment need analyses included self-perceived need for treatment, reports of symptomatic behavior, and PESQ ratings. The Personal Experiences Screen Questionnaire (PESQ) was used to determine how many adolescents may require further assessment for substance abuse. The PESQ's Problem Severity scale identifies those students

who need professional diagnostic evaluation. These youth report behaviors that are characteristic of abusive substance use. It also differentiates those youth who are likely to require treatment services. The PESQ has been shown in previous studies to correlate highly with other formal diagnostic instruments (Winters & Henly, 1988). Reported use of treatment services were tabulated to determine what proportion of the student population identified to be in need of treatment have actually received help for their substance abuse, as well as the proportion likely to have unmet need for treatment.

It should be noted that survey data of this sort are subject to margins of error. The estimates presented may vary from the actual numbers because of measurement error. This becomes especially important in those instances in which data are described across many categories, such as community type or Service Delivery Area. As the data are examined in greater detail, the sample sizes become smaller and the estimates become somewhat less stable. Larger sample sizes provide more accurate estimates. This survey collected information from approximately 4,000 students in order to ensure the greatest certainty in the results. This is about 2.5 times the number of respondents (N=1,500) required for a simple random sample with an error tolerance of 2%, using a 95% confidence interval. The margin of error in this study is estimated to vary between 2% to 6%. At the upper end, estimates of 50% might actually be in the range of 47% to 53%. Smaller estimates are subject to less uncertainty, so that estimates of 5% can be expected to actually be between 4% to 6%.

In practice, the impact of such error is minimal, especially in light that the smallest estimates are subject to the least degree of possible error. Standard error of measurement does not prevent the figures provided from being a reliable measurement of the substance use involvement of Connecticut's student population.

Findings

The findings discussed below are based on the weighted data from the 1995 Adolescent Alcohol and Drug Use School (AADUS) Survey. *Junior high school* refers to grades 7 and 8 and *senior high school* refers to students in grades 9 through 12. The majority of findings are presented by grade level and gender. Tables supporting the findings can be found in the Appendix.

Prevalence of Substance Use

Table 2 shows both lifetime and recent prevalence rates of tobacco, alcohol, marijuana and other illicit and prescription drug use by gender and grade level. The "gateway drugs" -- alcohol, tobacco and marijuana -- are the most common substances. Alcohol is the most widely used substance among students at all grade levels. More than half of students in junior high and three-fourths of senior high students report lifetime alcohol use. Recent use of alcohol increases sharply from junior high school to high school; approximately 33% of 7th and 8th graders drank recently, whereas 53% of high school boys and 48% of high school girls report drinking in the last 30 days. Forty-five percent of boys and girls in the 7th and 8th grades report smoking cigarettes in their

lifetimes, and approximately 57% of 9th through 12th graders are lifetime smokers. Twenty percent of boys and 25% of girls in junior high school are current cigarette smokers. Among senior high school students the rate of current cigarette smoking increases to 31% of boys and 29% of girls. The rate of marijuana use increases two to three-fold from junior high to senior high school. Eleven percent of boys and girls in the 7th and 8th grades report that they have smoked marijuana in the 30 days prior to the survey; at the senior high school level 31% of boys and 23% of girls are recent marijuana users.

Certain other drugs, although used by minorities of students, are reported with enough frequency to warrant concern. Among junior high students more than ten percent of the students have ever used inhalants and more than five percent report current use. Girls in junior and senior high school report misuse of downers, uppers and pain medications. Four percent of boys in 7th and 8th grade and 11% of boys in the 9th through 12th grades recently used smokeless tobacco.

Prevalence of Substance Use

- Use of psychoactive substances is widely prevalent among Connecticut's adolescent school population. Alcohol, tobacco and marijuana are the most popular substances among all grade levels, with the use of other substances relatively low.

Trends Over Time

Table 3 describes changes in substance use between 1989 to 1995. In examining the trends in recent use in Table 3, it is apparent that there may be different cohort effects between junior high and senior high school. Among 7th and 8th graders there are noticeable increases in use of cigarettes, marijuana, inhalants and downers. Cigarette smoking increased 4% among junior high boys (16% in 1989 to 20% in 1995) and increased 8% among junior high girls (17% to 25%). Marijuana use has also increased among 7th and 8th graders (approximately 5% for both boys and girls), mirroring the increase in cigarette smoking. Recent use of inhalants and downers almost doubled during the six-year period. Use of other drugs, including alcohol, remained relatively constant.

Among 9th to 12th graders a different picture emerges. With few exceptions, the rates of substance use overall appeared to decrease among older students. Especially noteworthy is the drop in alcohol use: from 66% in 1989 to 53% in 1995 among males and from 65% to 48% among females. Use of cocaine among both boys and girls, cigarettes among girls and uppers among boys also fell. The most worrisome increase in substance use in the higher grade levels was marijuana use among males (from 24% in 1989 to 31% in 1995).

The data in Figures 1 and 2 for age of initiation of select licit and illicit drugs confirm the above trends in substance use prevalence among junior and senior high students. Figure 1 shows that student-users in 8th grade in 1995 report initiating alcohol, marijuana and inhalants use one year younger than their 1989 peers. Figure 2, on the other hand, indicates that initial use of alcohol and inhalants occurred at comparable ages among 10th grade users in both surveys, while initiation of marijuana use begins approximately half a year later in the most recent survey.

Trends Over Time

- From 1989 to 1995, there were significant increases in the use of cigarettes, marijuana, inhalants and downers among 7th and 8th grade students.
- Drinking alcohol has decreased since 1989, most notably among the senior high school population. However, with one in every two high school students reporting current use, alcohol remains the most widely used substance.
- Substance users in junior high school in 1995 report initiating their use of tobacco, alcohol, and marijuana a full year earlier than did users in 1989.

Comparisons with Regional and National Data

The prevalence rates of the 1995 AADUS Survey were compared with regional and national data from the 1995 Monitoring the Future Survey, which is based on representative samples of 8th, 10th, and 12th graders throughout the country (Johnson, et al. 1995). Figures 4, 5 and 6 compare the state, Northeast regional and national data for the three most prevalent substances used by students -- cigarettes, alcohol, and marijuana -- over the last 30 days. In all comparisons the rates for Connecticut exceed regional and national figures. Figure 4 indicates that approximately 8% more 8th graders in Connecticut are current cigarette smokers compared to their peers nationwide (27% versus 19%), while the smoking rates for 10th and 12th graders are closer. National and Northeast regional prevalence estimates are similar for alcohol and marijuana. Figure 5 shows that 10 to 14% more of Connecticut's teenagers across the grade levels are drinking currently than are students regionally or nationwide. Figure 6 also reveals a pattern of higher levels of marijuana use across all three grade levels. Specifically, 14% of 8th graders in Connecticut use marijuana as opposed to only 9% nationally, and 29% of 10th graders in Connecticut use marijuana in comparison to 17% of the nation's sophomores. Finally, Connecticut's seniors report nearly one-third more than the national rates of marijuana use -- Connecticut's rate being 32% of all 12th graders while the national rate is 21%.

Comparisons with Regional and National Data

- Compared to their peers nationwide and in the Northeast region, Connecticut's students report higher rates of use of cigarettes, alcohol, and marijuana.

Substance Use by Race/Ethnicity

Table 4 shows the lifetime and current distribution of student substance use by racial/ethnic background. For all racial/ethnic groups, alcohol, cigarette, and marijuana use are the predominant types of substance use. Except for rates of lifetime use of alcohol and marijuana which are relatively comparable across each of the groups, Black students consistently report lower rates of both lifetime and current use of substances than either their White or Hispanic peers. Lifetime use of smokeless tobacco and inhalants are most often reported by White students (17% and 15% respectively). In terms of current use, more White students drink alcohol than their Black and Hispanic counterparts. Hispanic students have the highest rates of current use of marijuana, cocaine, hallucinogens, angel dust, downers and pain medications.

The graphic display of the data showing recent use of various substances by grade level for each of the major racial/ethnic groups emphasizes the differences in patterns of drug use between white, Black and Hispanic students. First, the data in Figure 7 show that Black 7th-8th graders are not very different from white and Hispanic students with respect to recent alcohol use at this earlier age and Blacks and Hispanics report higher rates of marijuana use than whites. White junior high school students, on the other hand, lead in rates of cigarette and other illicit drug (primarily inhalants) use. Hispanic junior high students also have the highest rates of prescription drug misuse. The picture changes for senior high school students (Figure 8). At this grade level Black youth currently in school consistently report the lowest rates of drug use. In fact, except for alcohol and marijuana use, the prevalence of current drug use among Black students changes very little from junior high to senior high school. Hispanic 9th through 12th graders report the highest rates of use of illicit and prescription drugs and white students lead with respect to alcohol use.

Substance Use by Race/Ethnicity

- White and Hispanic students report more use of drugs than Black students, with Hispanic students reporting more current use of illicit drugs.

Substance Use by Community Type

Table 5 compares urban versus suburban rates of student substance use. The term "urban" includes Connecticut's major cities--Hartford, Bridgeport, and New Haven. This table compares those areas with all other areas in Connecticut, including suburban and rural areas. These non-urban areas are referred to collectively as "suburban." In general, suburban area students report higher rates of all types of substance use. Suburban students smoke 10% more cigarettes and drink 6% more alcohol on average than do urban students. This pattern is also seen for recent use of these substances. Alcohol, cigarettes, and marijuana remain the top three substances used by in-school youth regardless of urbanicity.

Figures 9, 10 and 11 show the differences in rates of cigarette, alcohol and marijuana use for suburban and urban students by each grade. Slightly different patterns of involvement appear according to type of substance. With respect to tobacco use, more suburban students smoke from the earliest grade on. Alcohol and marijuana use patterns are different. The rates of alcohol and marijuana use are comparable among younger students regardless of type of community, but they begin to diverge after the 9th grade. The rate of use increases almost linearly for suburban students with each grade level. But it remains relatively constant for urban students over the high school years.

Table 6 examines lifetime and recent rates of substance use by community type as defined by the State Department of Education's (SDEs) "Educational Reference Groups" (ERGs). The ERG classification rank orders all 169 school districts in Connecticut according to socioeconomic factors and demographic characteristics of the community which relate to academic achievement. School districts, which are often but not always equivalent to specific cities or towns, are grouped according to their similarities with other districts throughout the state. For this report, the nine ERGs currently identified by SDE were collapsed into five aggregate groups to ensure stable estimates and for practical reporting purposes. The school districts that comprise the five ERG-based groups are listed in Appendix B.

In general, the variations in rates of substance use within the ERG-based groups reflect the urban/suburban differences reported above. The rates found in ERG I, which includes the three major cities in Connecticut, are consistently lower than those found in the other communities throughout the state. The differences in the rates of substance use for the remaining district groups tend to be minor. The most noticeable exceptions are the high rates of lifetime smokeless tobacco use (18%) in ERGs C-E and ERGs F-G, which encompass the most rural communities in the state. These districts also show the highest rates of inhalant use.

Substance Use by Community Type

- Students surveyed in urban schools generally report lower rates of substance use than students in other types of communities.

Substance Use by Region

Table 7 displays the prevalence rates for lifetime and recent use of each of the drugs for the five Service Delivery Areas (SDA's), the state regional planning areas. Overall, there are few differences across regions in the most commonly used substances -- cigarettes, alcohol and marijuana. Otherwise the data seem to reflect the differences in the urban/suburban make-up of the communities in each region. Those districts which are more rural in composition -- the East and Northwest SDA's -- show higher rates of smokeless tobacco, inhalants, downers and uppers use than is evident in the other regions. Those regions which encompass the major urban centers, including the Southwest (Bridgeport), South Central (New Haven), and North Central (Hartford) planning areas, may underestimate the prevalence of alcohol and other drug use due to the higher portions of school-aged youth not currently in school.

Substance Use by Region

- Variations in rates of substance use across the five planning regions tend to reflect differences in the types of communities.

Regular Substance Use and Intoxication

A comparison of the regular use of cigarettes (e.g. six or more times in the past 30 days), alcohol and marijuana in 1989 and 1995 is shown in Table 8. Regular use of alcohol or other drugs is considered to put youth at much greater risk of substance abuse problems and need for treatment. A minority of students report regular use of cigarettes, alcohol and marijuana, although the proportion of regular users increases dramatically from junior high to senior high school. Tobacco is used by more students on a regular basis more than any other drug; 8% of 7th-8th graders and 19% of 9th-12th graders smoked cigarettes on six or more occasions in the month prior to the 1995 survey. The percentage of daily smokers triples from junior high school to high school, from 4% to 13%. Consistent with the lifetime and recent use prevalence rates, regular use of alcohol among high school students dropped from 1989 to 1995, with 16% of high school boys and 8% of high school girls reporting that they drank alcohol on six or more occasions during the previous month in the most recent survey. There was a slight trend to increased use of marijuana, especially among high school males. Boys in general were more likely than girls to be regular users of substances at the high school level.

Table 9 shows that 15% of junior high school students got "high" or drunk on alcohol at least one or two times in the previous 30 days. Six percent (6%) did so often enough to be drunk almost every weekend. Twice as many (33%) of the high school students were intoxicated at least once in the month prior to the survey, half of them probably every weekend. However, it is

promising that the trend data show that in 1995 students at all grade levels drank to intoxication less frequently than they did in 1989.

Regular Substance Use and Intoxication

- The proportion of regular users increases dramatically from junior high to senior high school.
- Twice as many (34%) senior high school students drank to intoxication at least once in the past month than did junior high school students (15%).
- Fewer students report drinking to intoxication than did in 1989.

Context of Alcohol and Other Drug Use

Table 10 describes when alcohol and other drugs are used. Most students who drink report consuming alcohol on special occasions (74% of junior high and 79% of high school students). The next most common time to drink is on the weekends (41% of junior high and 69% of senior high school students). Twenty to thirty percent of students report that they drink or use drugs after school. A significant percentage of high school students report substance use before (15%) or during school (11%). The number is large enough to raise concerns about the impact of the students' substance use on their school performance. In fact, Table 29 does document student alcohol and other drug use is associated with increased problems in school.

Table 11 describes the social settings in which students most commonly use alcohol and other drugs. Both junior and senior high students are most likely to drink or use drugs at home or at a friend's home. Older friends play a prominent role in substance use by both junior and senior high students; 37% of 7th and 8th graders and 58% of 9th through 12th graders reported using alcohol or other drugs with older friends. One-tenth of junior high and one-fifth of senior high students who drink or use drugs do so while attending school activities, such as school dances or sports events. Similar proportions of student users said that they used substances when skipping school.

Table 12, which shows where junior high school and high school students who currently smoke and drink get their cigarettes and alcohol, highlights the role of peers in promoting cigarette and alcohol use. Ninety-six percent of 7th and 8th grade smokers and 90% of 9th through 12th grade smokers get their cigarettes from friends; the comparable percentages are 83% and 91% for alcohol. Retail outlets provide the next most frequently reported source for cigarettes. More than half (53%) of current smokers in junior high and four-fifths (81%) of senior

high smokers report that they bought cigarettes from stores. Vending machines are also an avenue of access for cigarettes, as reported by 42% of 7th and 8th graders and 35% of 9th through 12th graders who smoke.

Parents are an important source for both cigarettes and alcohol use for students, although most typically without their formal permission. This is especially true for younger students; 51% of junior high students say they got their cigarettes from home, albeit without their parents' permission. Approximately two-thirds (65%) of junior high and almost half (47%) of senior high drinkers got their beer, wine or liquor from their parents' home, again without permission. Parents are more likely to allow their children to use alcohol than cigarettes. Thirty-eight percent of 7th and 8th graders and 30% of 9th through 12th graders obtain their alcohol from home with their parents' permission, while only 13% of junior high and 24% of high school students report getting cigarettes this way.

Context of Alcohol and Other Drug Use

- Most students who drink report consuming alcohol on special occasions; the next most common time to drink is on the weekends.
- Both junior and senior high students are most likely to drink or use drugs in their own home or at a friend's home.
- Most students report that they obtain cigarettes and alcohol from their friends.

Attitudes Towards Alcohol and Other Drug Use

Tables 13 and 14 describe the reasons substance-using students give to explain why they use alcohol and other drugs, while Tables 15 and 16 describe why abstainers do not use alcohol or drugs. Regardless of gender and grade level, liking the taste is the most frequently cited reason to drink followed by "to have a good time," "to feel good," "relax," "get drunk," and as a remedy for boredom. Females report a somewhat higher rate of drinking "to forget problems" than their male counterparts (26% of junior high school girls reported "forgetting problems" as a reason to drink whereas only 19% of junior high school boys cited this response). Similarly, 33% of high school girls cited this reason and only 21% of high school boys said they drank to forget their problems. Another gender difference is that 30% of high school girls said they drink to "cheer themselves" up when they get down. Only 22% of the boys cited this reason.

As Table 14 reveals, students likewise are motivated to use other drugs to relax, get high, have a good time, and to feel good. Nonetheless, curiosity is also an important factor in drug use

(48% of junior high school males, 49% of junior high school females, 57% of high school males and 54% of high school females report ever using drugs "to see what it was like"). It appears that drugs are perceived more as being able to eradicate negative internal emotional states such as anger, worry, or boredom than to improve external appearance or performance (to look better, lose weight, or improve one's athletic ability).

Among students who report that they have never consumed alcohol, health and fear of becoming an alcoholic were the first and second reasons cited by both boys and girls in junior high and high school for not drinking (Table 15). Boys at both the junior and senior high school levels also feared getting drunk. Girls in 7th and 8th grade expressed concern about the immediate consequences of getting drunk -- getting sick or having a hangover -- and senior high girls worried about parental disapproval. Barriers with respect to cost and ease of access to alcohol were cited much less often as reasons for not using. This suggests that while use of alcohol by underage youth is illegal it remains accessible.

Concern about health is likewise the number one reason all students cite for not using drugs (Table 16). Both boys and girls in the 7th and 8th grades worried about being unable to stop using drugs, while both male and female senior high students asserted that they "don't need them."

Table 17 summarizes perceptions of harm in relation to frequency of use of various substances among the respondents who have used alcohol or drugs at least once in their lives. Students view the regular use of any substance (alcohol, cocaine, marijuana, cigarettes) as more hazardous than occasional use. It is noteworthy that approximately one-tenth of the junior high students don't know whether even regular use of cigarettes, marijuana or cocaine is harmful or not. There is a relatively high level of tolerance for drinking to intoxication on an occasional basis; 24% of junior high school and 41% of high school students feel drinking to intoxication "once or twice" has few harmful consequences. However, drinking to intoxication regularly is considered harmful by almost all students. Ninety-one percent (91%) of 7th and 8th graders and 94% of 9th through 12th graders rate regular drinking to intoxication as harmful. Relatively large percentages of senior high students believe marijuana use is not harmful.

Attitudes Towards Alcohol and Other Drug Use

- Popular reasons for both alcohol and drug use are to have a good time, to feel good, to relax, and to get drunk or high.
- Concern about health is the number one reason all students cite for not using alcohol or other drugs.
- Drinking to intoxication regularly is considered harmful by most students. However, many students feel drinking to intoxication “once or twice” has few harmful consequences.
- Students view the regular use of any substance as more hazardous than occasional use. However, relatively large percentages of senior high students believe marijuana use is not harmful.

Problems Related to Substance Use

Table 18 examines problems associated with alcohol and other drug use among all students and those who are regular users of alcohol and other drugs. The rate of substance-related problems is fairly infrequent among the total student population; 91% of students report little or no problems associated with substance use. However, there are some problems which occur often enough to be of concern. Drinking and driving incidents, either as a passenger or as a driver, are common events. Twenty-four percent of junior high and 40% of senior high students have been a passenger in a car when the driver had been drinking or using drugs. Although driving under the influence is rare among 7th and 8th graders, 18% of 9th through 12th graders report drinking and driving behavior. Almost one-in-five (17%) students in high school report that they have attended class drunk or high from drug use at least once, and approximately half as many junior high students (8%) have done so.

As would be expected, regular substance use is strongly related to reports of problems. The data in Table 18 indicate that students classified as regular users experience high rates of problems associated with their substance use. Of the regular users in junior high school, 66% report going to class at least once under the influence of alcohol or drugs, while 58% have been passengers in a vehicle operated by a driver who had been using substances. One-third of 7th and 8th graders who are regular users admit they have been absent from school because of their drug use. Approximately one-fourth of regular users in junior high report that they have experienced problems with family, friends or the police because of their drinking or drug use. Certain problems are even more frequent among regular users at the high school level. In particular, large proportions of 9th through 12th graders who are regular users report risky drinking and driving behavior (80% as passengers of a substance-using driver and 53% as drivers under the influence

themselves). Regular users report more problems with parents (38%) and friends (37%) related to their substance use when compared to other high school students. Finally, although relatively few regular users at the high school level (13%) admitted to substance-related problems with school officials or teachers, almost two-thirds (63%) said they had attended class “stoned” or “high” one or more times. The implication of Table 18 is that life is not only increasingly precarious or dangerous for regular adolescent substance users, but it is also fraught with interpersonal strife and potential for academic difficulties.

Problems Related to Substance Use

- Regular users of any substance are more likely to report problems related to substance use, such as drinking and driving behaviors, family problems and attending class “stoned” or “high”.

Treatment Need

Table 19 quantifies the results of the PESQ for the entire state student population and by planning region. The majority of junior high (96%) and high school (91%) students need no further evaluation. Of those students who score positive on the PESQ, more report use patterns indicative of severe substance abuse problems needing treatment. Nine percent of high school students are recommended for further evaluation; two-thirds of these (6% of high school students) are likely candidates for treatment. Based on previous research with the PESQ (Babor et al., 1990), approximately two-thirds of those who screen positive (i.e., 6%) are likely candidates for substance abuse treatment. When these percentages are applied to the total student enrollment figures for the 1994-1995 school year (Table 20), it is estimated that a total of 14,118 junior high and senior high school students in Connecticut are eligible for substance abuse treatment evaluation. Of those, 8,044 (1,343 7th-8th graders and 6,701 9th-12th graders) are likely to need a treatment intervention.

When treatment need according to the PESQ is examined for regional planning areas, it is evident that there is some variation in treatment need in different parts of the state (Table 19). For instance, in the Southwest district very few junior high school students (1%) display need for intervention. On the other hand, senior high students in the Northwest corner have the highest rates of treatment need; 13% meet criteria for an evaluation and assessment, and 7% are likely to need some type of substance abuse treatment. The estimated number of students within each region likely to benefit from substance abuse evaluation and treatment are shown in Table 20.

Subgroup differences in treatment need were examined by looking at the rate of those flagged by the PESQ by gender, grade level, race/ethnicity and community type. As the data in Table 21 show, there are no gender differences in projected treatment need despite the fact that

males in high school are more likely to use most drugs and also that males predominate in the substance abuse treatment population, at least among adults. The rates of treatment need by grade level confirm that high school students are more likely to need treatment than younger students. The rates of projected treatment need also vary noticeably according to racial/ethnic background. Consistent with their lower reported rates of substance use involvement, Black students were least likely to meet PESQ criteria. Only 3% of Black students were flagged by the PESQ for evaluation and only 1% were likely candidates for treatment. Eight percent of White students were flagged for an evaluation, with 5% likely to need a treatment intervention. Hispanic students displayed the most need for intervention; 11% of Hispanic students met criteria for an assessment and evaluation, and 8% were likely to be referred for treatment. Finally, suburban students were more likely to require evaluation and referral than their urban peers (8% and 5% respectively were flagged for evaluation).

Treatment Need

- Nine percent of senior high school students and 4% of junior high students --totalling an estimated 14,000 adolescents statewide -- give evidence of sufficient involvement with drugs and alcohol to warrant a diagnostic evaluation for substance abuse.
- Approximately 6,700 students statewide are estimated to need a substance abuse treatment intervention.

Meeting the Need for Treatment

Table 22 examines students' symptoms of substance abuse and self-perceived need for assistance regarding substance use. Although 32% of regular users have been unsuccessful "cutting down" their substance use and 29% wish they could manage or control their use, only 14% believe they need to seek help for their alcohol or drug use. Apparently, "not being able to stop" is not reason enough to seek help. Forty-one percent of PESQ-identified students have tried unsuccessfully to cut down on alcohol or drug use, while 22% have felt they need help, counseling, or treatment.

Despite the large number of students who need treatment, few students have gotten help for substance use problems. Table 23 shows that those students flagged by the PESQ appear most likely to report help-seeking behavior. Forty-four percent of these students report they have sought help from a variety of sources. Regular users -- students who are likely to be at risk for substance abuse problems -- are also more likely to report help-seeking behavior (25% as compared with 10% for all students). Friends are a primary source of help for problems. Of

those students estimated to need a treatment intervention, only 31% have received some type of professional help, which includes crisis centers, professional counseling or treatment, or school counseling. This is consistent with previous research findings that one-fourth to one-third of students indicated for mental health and substance abuse treatment report having received such treatment (Leaf, et.al, 1996).

Table 24 describes responses to questions about different sources of help students might turn to for alcohol and drug problems. First, all students -- regardless of their current drug use -- perceive friends as their primary source of support and potential help (74% of senior high school students and 63% of junior high school students). The second most cited source of support is family. Although both friends and family are cited less often by regular users, they also report them as their primary sources of help for substance abuse. Interestingly, regular alcohol and/or drug users are less likely to endorse any single source of support for a substance-related problem, which may indicate a greater alienation of these youth in general from social supports.

Meeting the Need for Treatment

- Only one-in-three students who need substance abuse services report that they have actually received professional help.

Associated Problems of Substance Abuse

The information in Table 25 indicates shows the relationship of alcohol and other drug use to problems in school. Thirty-one percent (31%) of regular users of any substance report their grades are below average, as compared to 13% of all students. Over half of regular users often do not do school assignments. Forty-one percent (41%) of them report often being late for class; 44% report their grades are worse than they used to be. Twice as many regular users than all students report being suspended from school. While a quarter of all students report ever failing a grade, 41% of regular users have been held back. The trend is the same for PESQ-identified students; moreover, greater percentages of these students report problems than do regular users.

Likewise, regular users and PESQ-identified students are more likely to report dangerous and anti-social behaviors. Table 26 depicts the proportions of these students who acknowledge illegal acts. Nearly three-fourths of PESQ-flagged students report purposely damaging property, as compared to 28% of all students. Two-thirds of them have stolen or tried to steal something worth \$50 or less; two-thirds also report they have carried a weapon, such as a gun, knife, club or razor. Twice as many regular users than all students report these behaviors as well. In general, regular substance using or PESQ-identified students are two to three times more likely to engage in anti-social behaviors.

Another index of problems is reported suicidality. Suicidal ideation and related questions are presented in Table 27. In contrast to two-thirds of all students reporting contentment with their lives, less than half of high-risk students indicated such a positive outlook. Regular users and PESQ-identified students are twice as likely than all students to report suicidal ideation. Two to three times as many have made plans of how to kill themselves, while similar proportions have attempted. The higher percentage of attempts for these at-risk youth over all students is indicative of the special needs for this population.

Associated Problems of Substance Abuse

- Substance-abuse students are significantly more likely to report school performance problems, anti-social or dangerous behaviors, and suicidal ideation.

Exposure to Prevention Programs

Table 28 provides information about the students' exposure to school-based prevention programs and their attitudes toward those programs. Students report widespread experience with drug education curricula. Seventy-two percent of both junior high and high school students have participated in a "special class about drugs" and 68% of junior high and 76% of high school students have had lectures or discussions about drugs in their regular classes. With respect to the positive effects of school-based prevention activities, 52% of junior high school students report that the education program convinced them not to use alcohol. But education programs were less effective among older students; only 35% of high school students were persuaded not to use alcohol. The drug education programs appeared more effective regarding illicit substances, 62% of junior high school students and 50% of high school students were convinced to avoid drugs.

Exposure to Prevention Programs

- Over two-thirds of students have participated in a special class about drugs or have had lectures or discussions about drugs in their regular classes.
- Drug education programs appear effective regarding illicit substances; 62% of junior high school students and 50% of high school students say they were convinced to avoid drugs.
- Alcohol education programs were less effective for older students.

Summary And Conclusions

The findings from the 1995 statewide Adolescent Alcohol and Drug Use Student (AADUS) Survey document the pervasive use of licit and illicit substances, particularly alcohol, tobacco and marijuana, in Connecticut's secondary school population. In general, the rates of student drug use in Connecticut are higher than reported nationally and regionally. Consistent with national trends in student drug use, there have been increases in the use of a number of drugs over the past several years, especially among junior high school students. Regular use of cigarettes and alcohol has increased among 7th and 8th graders, and regular use of marijuana has increased at both the junior and senior high school levels. Further, the evidence shows that the "gateway" drugs are being initiated by the younger students at earlier ages. Without changes in interventions, it is likely that the trends observed among the younger students will portend further increases in student drug use over the next few years.

The AADUS data identify patterns of use across different subgroups of the student population. Analyses of the rates of use by age, gender, ethnicity and community type show that alcohol, tobacco, and marijuana are the most popular substances among all students. Substance use increases significantly from junior high school to senior high school. Girls and boys are equally at risk of substance use at the junior high school level, but boys are more likely to use drugs in senior high school. Students surveyed in the suburban districts generally report higher rates of substance use than urban students. Black students report lower rates of most drugs compared to White and Hispanic students, and Hispanic students report more involvement with other illicit drugs than their in-school peers.

Information from the AADUS Survey concerning the patterns, motivations, attitudes and circumstances associated with adolescent alcohol and drug use can be used to inform prevention and intervention efforts. For instance, differences in substance use at different ages suggest that developmentally appropriate substance abuse prevention strategies should be used. Drug abuse prevention programs implemented during junior high school years can produce meaningful and durable reductions in tobacco, alcohol, and marijuana use if they teach a combination of social resistance skills and general life skills, and include at least two years of booster sessions (Botvin, et al., 1995). Prevention programs directed at college students have also proved effective, but are virtually nonexistent in Connecticut.

Large percentages of students in the statewide survey do not view occasional use of tobacco, alcohol and marijuana as harmful. Data from the Monitoring the Future Study (Johnston et al., 1995) show that increases in substance use are accompanied by decreases in the perceived harmfulness of tobacco, alcohol and other drugs. Although statewide data are not available, trend data from the Eastern Fairfield regional student surveys (Del Boca et al., 1996) revealed a recent weakening in the perceived harmfulness of marijuana use among students. Efforts to reduce substance use in this population will have to address issues of perceived harmfulness of substances.

Health and well-being appear to be among the major underlying reasons adolescents give for using or not using alcohol and other drugs. Those who use substances do so to "feel good" or to "feel less tense"; those who do not report alcohol or other drug use are motivated to abstain to maintain their health. For example, reasons for not using drugs are primarily related to "concerns about health" and fear of becoming an "addict." These findings support approaches that promote health and healthy life choices as a conceptual framework for substance abuse prevention efforts.

Student concerns about the impact of substance use on their health also point to the important role primary care practitioners can play in the prevention and reduction of adolescent substance abuse. Family medical practitioners and pediatricians are currently a largely untapped resource for substance use prevention and screening efforts. Including substance abuse education and evaluation as routine in medical checkups of adolescents would greatly enhance the rate of early identification, as well as reinforce the negative health implications of substance use.

Although some substance use appears to be sanctioned by parents, most is not. Alcohol is most commonly used on special occasions or on holidays, often with parental permission. A minority of students smoke with their parents' permission, but even more do so without their parents' knowledge. Half of junior high school smokers get their cigarettes at home without their parents' permission and approximately half of all students who drink likewise obtain their alcohol at home without parental permission. Since a large proportion of student drinking and drug use takes place after school, this may reflect a lack of adequate adult supervision at this time. Parents need to be aware of their children's exposure to drugs and the risks of unsupervised and unstructured time for their children. These findings underscore the importance of positive parental involvement and comprehensive community prevention approaches that involve adults, peers, schools, and community organizations in increasing awareness of student substance use and reducing the opportunities to use drugs. Through supervision and education, each can play a role in demystifying the allure and celebration of substance use, while structuring time so there is less opportunity to use these substances.

In addition to school-based prevention programs, newer "environmental" approaches have been developed to limit the availability of legal, gateway substances like tobacco products and alcohol. These include enforcement of legal minimum age for drinking and tobacco purchasing, and programs to educate retailers about the sanctions involved in legal violations. The high proportions of student smokers in the AADUS who reported that they obtained their cigarettes at stores or through vending machines document the need for more careful monitoring and restrictions on tobacco sales in Connecticut.

A significant proportion of the high school population give evidence of sufficient involvement with drugs and alcohol to warrant a more detailed diagnostic evaluation for substance abuse. Based on the PESQ, the assessment instrument used in this study, we estimate that approximately 14,000 adolescents in the public schools would be candidates for some form of substance abuse intervention. At the senior high school level, this means that almost one out of every ten students should be evaluated for substance abuse. Based on the PESQ criteria and previous experience with screening and clinical assessment of youth in Connecticut (Babor et al.,

1991), at least half of the students in need of a diagnostic evaluation are likely to require a treatment referral. The intervention could range from brief counseling in school to more intensive treatment in a residential program.

Group differences in identified treatment need have implications for culturally appropriate treatment interventions. Disproportionately more Hispanic students were flagged by the PESQ for evaluation and likely treatment referral. This is consistent with these students' greater involvement in other illicit drug use. However, these findings should be interpreted cautiously because there may be response biases due to cultural differences that may affect the assessment. The further finding that Black students have very low rates of treatment need should likewise be viewed with caution; both of these racial/ethnic groups have disproportionately high dropout rates. Direct comparisons of relative treatment need among these groups can only be made after taking into account the out-of-school youth.

Only one-third of those students identified to be in need of a substance abuse evaluation report that they have received professional help for their alcohol or drug abuse, including therapy and counseling. This is consistent with previous research showing that one-fourth to one-third of students indicated for mental health and substance abuse treatment report having received such services (Leaf et al., 1996). Given that this same research found that adolescents tend to underreport services they have received compared to their parents' reports, we would conservatively estimate that no more than half of the adolescents in need of substance abuse services have received appropriate treatment. This unmet need for substance abuse treatment can be addressed through earlier identification with appropriate and timely referral to intervention services.

When adolescents do feel they have a problem with alcohol or drug use, they typically turn to their friends for help. Most students in the AADUS Survey say that they would go to a friend if they had a drug or alcohol problem; one-fourth of the students flagged by the PESQ for a diagnostic evaluation had gotten help from friends. Peer influences on attitudes and access to substance use are well documented, and the effectiveness of peer counselling programs is likewise well established (Logan, 1991). These findings point to the importance of incorporating peer-based prevention programs into the drug use prevention curricula. These data also suggest that the students themselves may have a role to play in facilitating early identification and intervention in their peers' drug abuse.

Treatment and prevention should be considered synergistic. Adolescents in treatment are likely to have a salutary effect on their drug using peers. Enhancement of prevention efforts may yield long-term dividends by reducing the number of adolescents making demands on the existing and future treatment systems. Given the strong association between substance abuse and other problems with respect to school, mental health, and criminal activity, prevention and treatment of adolescent substance abuse are likely to have positive impacts on those systems. The interrelationships between these problem behaviors in adolescents also supports the need for intervention approaches which deal with the various problem areas.

To better coordinate prevention and treatment efforts, there is a need to create a continuum of services that includes: screening and early identification; standardized diagnostic assessment; treatment planning; referral guidelines; and an appropriate range of services. One of the most promising approaches to adolescent treatment services is one recommended by the Institute of Medicine (IOM) expert committee report, Broadening the Base of Treatment for Alcohol Problems (IOM, 1990). The IOM report describes a hypothetical treatment service system that includes the early identification of alcohol and other substance abuse through a variety of cooperating community agencies. Cases found to have alcohol and other substance abuse problems are referred for a more systematic evaluation based on an objective, sequential assessment procedure. The final ingredient of the IOM model is the referral of clients to appropriate services by means of rational, scientifically-based treatment matching guidelines.

As conceived by the IOM Committee, identification, assessment and referral should be organized within independent assessment and case management agencies that have no financial, professional or ideological interest in a particular form of treatment. Such a system could be modeled after the Youth Evaluation Services demonstration program tested in southwestern Connecticut (Babor et al., 1991) and recommended by the IOM. Through the establishment of independent, regional assessment and case management centers, the schools, the courts and parents could have access to the most cost-effective and effective treatments.

Certain caveats should be taken into account in the interpretation of the drug survey findings. The major concern in all surveys is that the data be valid, reliable and representative (CSAT, 1993). Attainment of these objectives is often difficult. First, surveys used to measure sensitive, illegal, or stigmatizing behaviors are often characterized by underreporting. This is so because when self-report is used to collect sensitive information there is a tendency for respondents to minimize deviant behavior and to present what they think is "normal." Research shows that reports of drug use by adolescents are generally reliable and valid (Oetting and Beauvais, 1990). However, some evidence of underreporting in drug use surveys (Mensch and Kandel, 1988) suggests that the rates of use and abuse reported in this study, especially of the illicit drugs, may provide conservative estimates of the prevalence of substance use.

Although the 1995 AADUS Survey repeated the same methods of data collection employed successfully in the 1989 statewide survey, the response rate to the most recent survey resulted in a smaller sample size than was targeted. Despite this, the 3,995 students who did participate were generally representative of the total student population. Any discrepancies in the demographic breakdown of the sample compared to 7th through 12th grade enrollees statewide were able to be statistically adjusted. However, the smaller sample size meant that certain more fine-tuned analyses (e.g., prevalence rates for all nine ERG groups) could not be conducted with confidence in the reliability of the estimates. For the most part, the low response rate resulted from the hesitancy of school administrators to provide class time to complete the survey rather than student refusals to participate. School administrators' enthusiasm for participation in research has been eroding due to demands from multiple surveys in the schools. Yet, school-based student surveys remain the most reliable and valid method for obtaining information on adolescent substance use behavior. To help facilitate school cooperation in the future, there needs to be a concerted effort on the part of state agencies and researchers to better coordinate implementation of school surveys, as well as the use and dissemination of the findings.

As previously mentioned, the population from which the sample was drawn is limited to those youth who currently attend school and were available to be surveyed. Data from the Connecticut State Department of Education (1993) show that significant proportions of school-aged youth drop out of school at early ages, especially minority youth from urban centers. The extent of substance use and treatment needs of these youth are not captured by a survey of school students and the data should not be generalized to out-of-school adolescents. A complete picture of the needs of Connecticut adolescents will be available only after an investigation of the youth who have dropped out, are chronically truant or in alternative school programs is conducted. The higher level of risk factors for urban minority youth make it more likely for these students to develop substance abuse problems and drop out of school before graduation. The differences in prevalence rates according to urbanicity and ethnicity may be related to differential dropout rates. A companion survey conducted by the UConn ARC among youth at-risk will address these issues.

The most recent AADUS Survey data do reveal the need for coordinated prevention and treatment interventions to combat the widespread use and abuse of substances in Connecticut's student population. One cannot expect to find any one treatment or prevention measure that alone reduces the incidence and prevalence of substance use and related problems. Strategies to address adolescent substance abuse problems can be informed by learning more about the effectiveness of local and regional efforts. We recommend that DMHAS coordinate data gathering activities whenever possible with the Department of Children and Families (DCF) and Juvenile Justice to obtain epidemiological data relevant to adolescent health. For example, the statewide Adolescent Alcohol and Drug Student Survey described in this report should be replicated periodically, perhaps every two to three years, to monitor state and local trends and to assist the planning of prevention and treatment programs. Future surveys could cover a broader array of social and psychological problems that are of direct relevance to DMHAS, including prevention and service needs. More importantly, DMHAS and other state agencies could coordinate data gathering so that all children and adolescents who receive state supported services are evaluated by means of standardized assessments that are pooled in a regional or statewide data bank. This information could serve a variety of purposes, including needs assessment, program planning, resource allocation, outcome evaluation and basic research.

Bibliography

- Babor, T. F., Del Boca, F. K., McLaney, M. A., Jacobi, B., Higgins-Biddle, J., & Hass, W. (1991). *Just Say Yes: Matching Adolescents to Appropriate Interventions for Alcohol and Other Drug-Related Problems*. *Alcohol Health & Research World*, 15(1), 77-86.
- Babor, T. F., Del Boca, F. K., & DuBois, K. (1990). *Toward a regional system of substance abuse services: Report to RYSAP's Treatment System Development Committee*. Technical report submitted to Regional Youth Substance Abuse Project, Bridgeport, CT.
- Babor, T. F., & Del Boca, F. K. (1990). *Student substance abuse in Connecticut: Report No. 1, Prevalence and Consequences*. Technical report submitted to the Connecticut Alcohol and Drug Abuse Commission.
- Barnes, G. M., & Welte, J. W. (1986). Adolescent alcohol abuse. Subgroup differences and relationships to other problem behaviors. *Journal of Adolescence Research*, 1, 79-94.
- Botvin, G.J., Baker, E., Dusenbury, L., Botvin, E., and Diaz, T. (1995). Long-term follow-up results of a randomized drug abuse prevention trial in a white middle-class population. *The Journal of the American Medical Association*, 273, 1106-1112.
- Center for Substance Abuse Treatment. (1993). *Need, Demand, and Problem Assessment for Substance Abuse Services*. CSAT Technical Assistance Publication #3.
- Cohen, A. Y. (1969). Inside what's happening: sociological, psychological, and spiritual perspectives on the contemporary drug scene. *American Journal of Public Health & the Nations Health*. 59(11), 2092-5.
- Connecticut Alcohol and Drug Abuse Commission. (1990). *CADAC Statewide Service Delivery Plan for Substance Abuse Treatment Services*.
- Connecticut State Department of Education (1993). *Dropout Data Analysis on Public School Districts in Connecticut 1991-92 School Year*. Connecticut State Department of Education Division of Teaching and Learning Program Evaluation Unit.
- Del Boca, F. K., and Babor, T. F. (1989). *Adolescent substance abuse in Eastern Fairfield County. Report No. 1: Changes in prevalence of alcohol and other drug use: 1984-1989*. Technical report submitted to the United Way Regional Youth Substance Abuse Project.
- Del Boca, F. K., et al. (1996) *Connecticut Needs Assessment Project: Youth Substance Abuse in Eastern Fairfield County*. Technical report submitted to the Department of Public Health and Addiction Services

- Felner, R. D., Silverman, M. M., and Adix, R. (1991). Prevention of substance abuse and related disorders in childhood and adolescence: A developmentally based, comprehensive ecological approach. *Family Community Health*, 14(3), 12-22.
- Flesch, R. (1948). A new reliability yardstick. *Journal of Applied Psychology*, 32, 221-233.
- Hawkins, J. D., Catalano, R. F., and Miller, J. Y. (1992). Risk and Protective Factors for Alcohol and Other Drug Problems in Adolescence and Early Adulthood: Implications for Substance Abuse Prevention. *Psychological Bulletin*, 112(1), 64-105.
- Institute of Medicine (1990). *Broadening the base of treatment for alcohol problems*. Washington, D.C.: National Academy Press.
- Jansen, M. A., and Johnson, E. M. (1993). Methodological Issues in Prevention Research: An Introduction to the Special Issue. *American Journal of Community Psychology*, 21(5), 561-569.
- Johnston, L. D., O'Malley, P. M., and Bachman, J. G. (1995). *National Survey Results on Drug Use from the Monitoring the Future Study, 1975-1995*. National Institute on Drug Abuse.
- Johnston, L. D., O'Malley, P. M., and Bachman, J. G. (1988). *Illicit drug use, smoking, and drinking by America's high school students, and young adults: 1975-1987*. National Institute on Drug Abuse.
- Kalton, G. (1983). *Compensating for missing survey data*. Ann Arbor, Michigan: Institute for Social Research.
- Kandel, D. B. (1978). Convergences in prospective longitudinal surveys of drug use in normal populations. In D. Kandel (Ed.), *Longitudinal research on the drug use: Empirical findings and methodological issues*. Washington, D.C.: Hemisphere.
- Kandel, D. B., Davies, M., Karus, D., and Yamaguchi, K. (1986). The consequences in young adulthood of adolescent drug involvement. *Archives of General Psychiatry*, 43, 746-754.
- Leaf, P. J., Alegria, M., Cohen, P., Goodman, S. H., Horwitz, S. M., Hoven, C. W., Narrow, W. E., Vaden-Kiernan, M., Regier, D. A. (1996). Mental Health Service Use in the Community and Schools: Results from the Four-Community MECA Study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35(7), 889-897.
- Logan, B. N. (1991) Adolescent substance abuse prevention: An overview of the literature. *Family Community Health*, 13(4), 25-36.
- Mensch, B. and Kandel, D. (1988). Underreporting of substance use in a national longitudinal youth cohort. *Public Opinion Quarterly*, 52, 100-108.

National Institute on Drug Abuse (1988). *National Household Survey on Drug Abuse: Main Findings, 1985*. National Institute on Drug Abuse. DHHS Publication No. (ADM) 88-1586.

Oetting, E. and Beauvais, F. (1990). Adolescent drug use: findings of national and local surveys. *Journal of Consulting and Clinical Psychology*, 58, 385.

Winters, K. C. and Henly, G. A. (1988). *Assessing adolescents who misuse chemicals: The Chemical Dependency Adolescent Assessment Project*. In E. R. Rahdert and J. Grabowski (Eds.), *Adolescent Drug Abuse: Analyses of Treatment Research*. (DHHS Publication No. ADM88-1523). Washington, DC: U.S. Government Printing Office.

APPENDIX A - DATA TABLES

**Table 1
1995 Alcohol and Drug Survey Sample**

<u>Grade</u>	<u>Sample N</u>	<u>Weighted N</u>	<u>%</u>	<u>W %</u>
7	834	742	20.9%	18.2%
8	836	711	21.0	17.5
9	776	760	19.4	18.7
10	535	677	13.4	16.6
11	552	622	13.8	15.3
12	455	560	11.4	13.7
Missing Cases	7	-	-	-
TOTAL	3995	4073	-	-

<u>Sex</u>	<u>Sample N</u>	<u>Weighted N</u>	<u>%</u>	<u>W %</u>
Male	1853	2080	46.8%	51.1%
Female	2103	1993	53.2	48.9
Missing Cases	39	-	-	-

<u>School Level</u>	<u>Sample N</u>	<u>Weighted N</u>	<u>%</u>	<u>W %</u>
Middle School	1672	1455	41.9%	35.7%
High School	2323	2618	58.1	64.3

<u>Ethnicity</u>	<u>Sample N</u>	<u>Weighted N</u>	<u>%</u>	<u>W %</u>
White	2771	2912	69.9%	71.5%
Black	694	486	15.2	11.9
Hispanic	289	394	7.3	9.7
Other	300	280	7.6	6.9
Missing Cases	31	-	-	-

<u>Service Delivery Area</u>	<u>Sample N</u>	<u>Weighted N</u>	<u>%</u>	<u>W %</u>
1	649	692	16.2%	17.0
2	548	568	13.7	13.9
3	789	816	19.8	20.0
4	1027	991	25.7	24.3
5	978	1002	24.5	24.6
Missing Cases	4	-	-	-

Table 2
Lifetime and Recent Substance Use by Sex:
Grades 7 - 8 & Grades 9 - 12

Grades 7 - 8

Substance	Lifetime Use		Recent Use	
	Males	Females	Males	Females
Tobacco: Cigarettes	44.7%	44.9%	20.2%	24.7%
	12.8	3.5	4.4	2.2
Smokeless				
Alcohol	56.2	52.9	33.3	32.4
Marijuana	17.7	15.5	10.8	11.3
Cocaine	1.3	1.3	0.6	0.6
Crack	0.9	0.7	0.0	0.5
Hallucinogens	2.7	2.7	0.9	1.6
Angel Dust	1.7	1.0	0.4	0.5
Inhalants	10.8	12.0	5.0	7.5
Heroin	0.7	0.7	0.3	0.1
Downers	4.0	8.1	2.6	5.5
Tranquilizers	0.8	1.3	0.4	0.8
Uppers	2.4	4.8	1.4	3.4
Steroids	1.8	0.6	1.1	0.1
Pain Medicines	7.2	11.9	3.8	8.0

Grades 9 - 12

Substance	Lifetime Use		Recent Use	
	Males	Females	Males	Females
Tobacco: Cigarettes	56.8%	57.7%	30.6%	29.0%
	29.1	6.1	11.3	1.6
Smokeless				
Alcohol	77.3	74.7	53.3	47.9
Marijuana	42.4	35.7	31.0	22.7
Cocaine	3.8	2.7	1.4	0.7
Crack	2.4	1.7	0.6	0.3
Hallucinogens	10.7	6.2	4.2	2.8
Angel Dust	2.0	1.7	0.7	0.6
Inhalants	15.3	9.9	5.0	3.1
Heroin	1.8	0.7	1.1	0.2
Downers	6.3	11.4	2.8	6.3
Tranquilizers	3.4	2.6	1.4	1.3
Uppers	6.5	8.4	2.6	5.0
Steroids	1.3	0.6	0.9	0.3
Pain Medicines	12.4	13.9	5.8	8.1

Table 3
Recent Substance Use: Comparison of 1989 and 1995 Rates

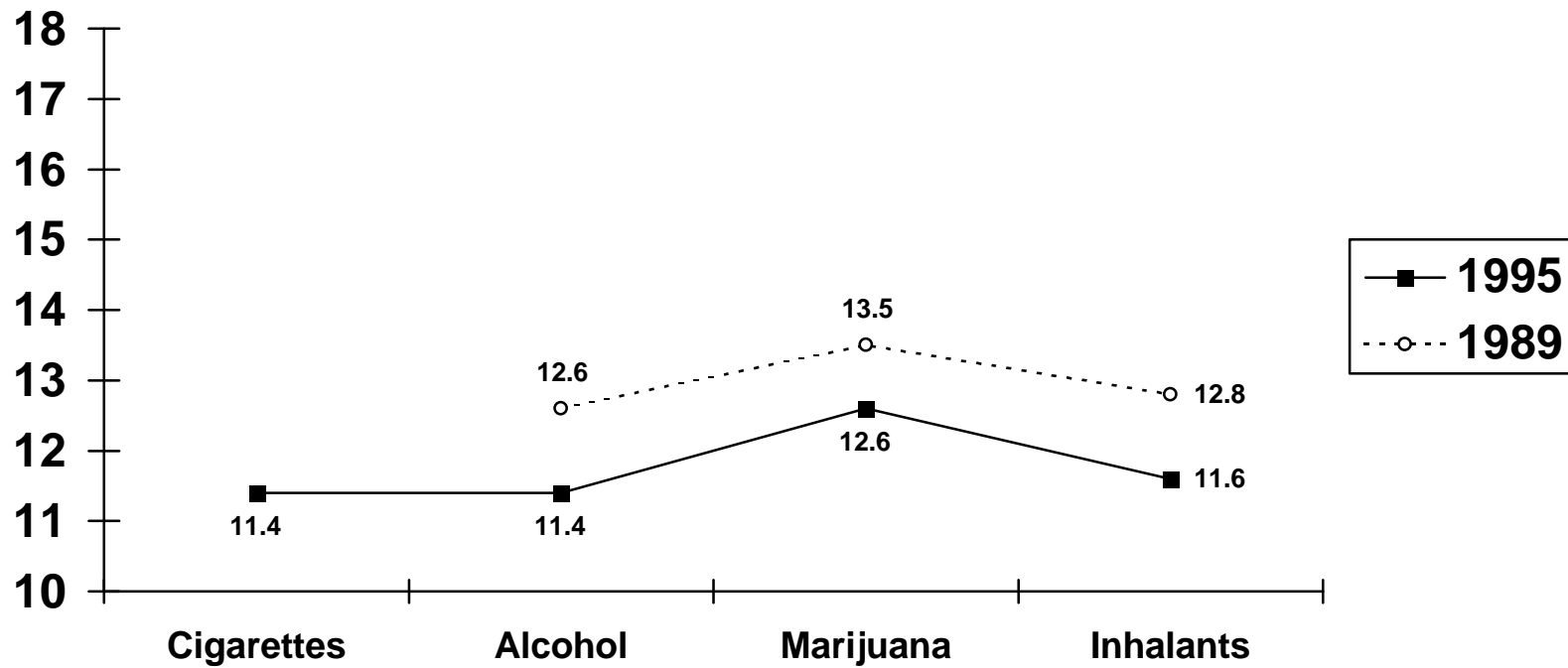
Grades 7 - 8

Substance	Males		Females	
	1989	1995	1989	1995
Tobacco: Cigarettes	16.1%	20.2%	16.8%	24.7%
Smokeless	4.9	4.4	0.6	2.2
Alcohol	34.2	33.3	34.7	32.4
Marijuana	7.3	10.8	5.4	11.3
Cocaine	0.8	0.6	0.8	0.6
Crack	0.4	0.0	0.3	0.5
Hallucinogens	0.7	0.9	0.7	1.6
Angel Dust	0.5	0.4	0.5	0.5
Inhalants	2.9	5.0	2.0	7.5
Heroin	1.0	0.3	0.4	0.1
Downers	1.8	2.6	3.2	5.5
Tranquilizers	0.9	0.4	0.8	0.8
Uppers	1.9	1.4	2.5	3.4
Steroids	0.9	1.1	0.2	0.1
Pain Medicines	4.8	3.8	7.4	8.0

Grades 9 - 12

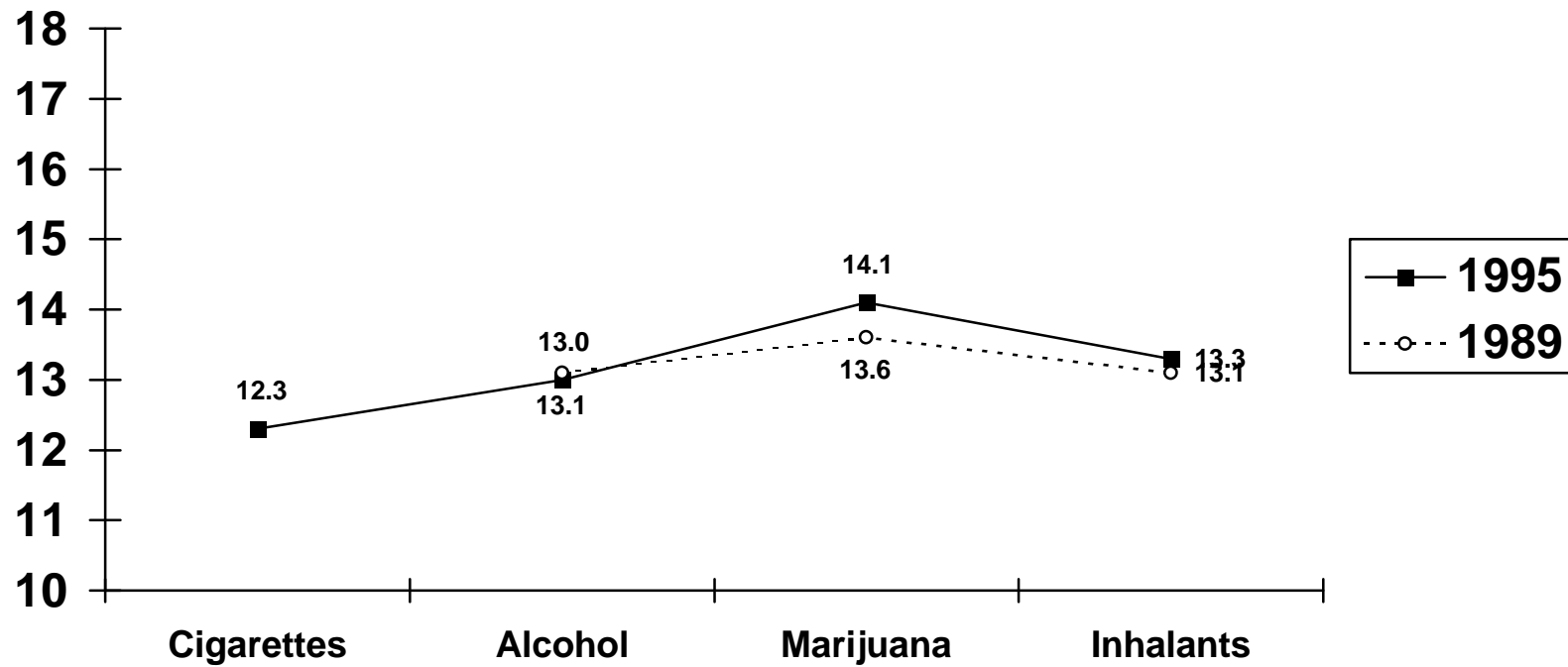
Substance	Males		Females	
	1989	1995	1989	1995
Tobacco: Cigarettes	28.5%	30.6%	35.0%	29.0%
Smokeless	15.5	11.3	0.9	1.6
Alcohol	66.2	53.3	64.6	47.9
Marijuana	24.1	31.0	20.4	22.7
Cocaine	4.9	1.4	2.9	0.7
Crack	0.8	0.6	0.4	0.3
Hallucinogens	3.8	4.2	2.9	2.8
Angel Dust	0.5	0.7	0.4	0.6
Inhalants	3.1	5.0	2.0	3.1
Heroin	0.5	1.1	0.2	0.2
Downers	2.7	2.8	4.1	6.3
Tranquilizers	1.5	1.4	2.2	1.3
Uppers	4.5	2.6	5.6	5.0
Steroids	1.4	0.9	0.1	0.3
Pain Medicines	5.2	5.8	7.8	8.1

Figure 1
Age of Initiation Among Users of Cigarettes*, Alcohol,
Marijuana and Inhalants: 1989 & 1995
Grade 8



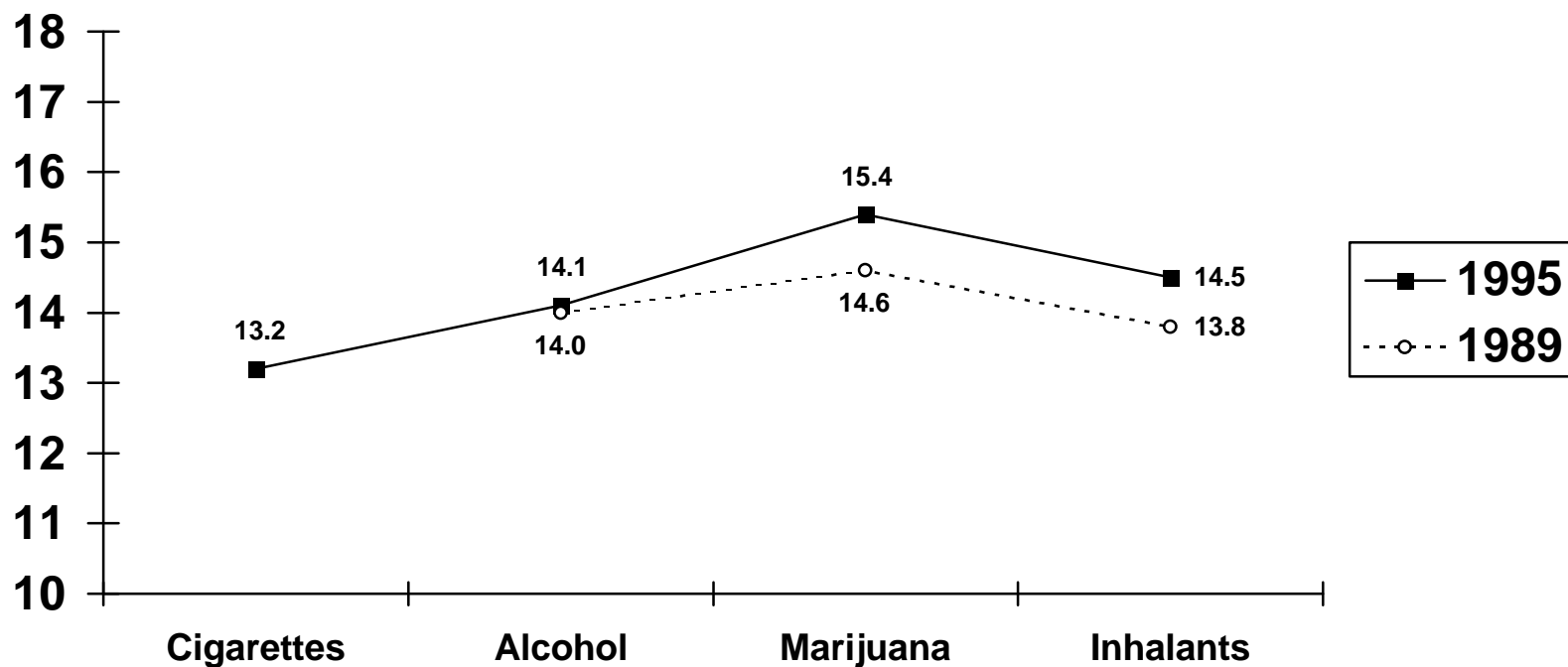
*Data not available for 1989.

Figure 2
Age of Initiation Among Users of Cigarettes*, Alcohol,
Marijuana and Inhalants: 1989 & 1995
Grade 10



*Data not available for 1989.

Figure 3
Age of Initiation Among Users of Cigarettes*, Alcohol,
Marijuana and Inhalants: 1989 & 1995
Grade 12



*Data not available for 1989.

Figure 4

30-Day Use of Cigarettes: State, Regional, and National Data Grades 8, 10 and 12

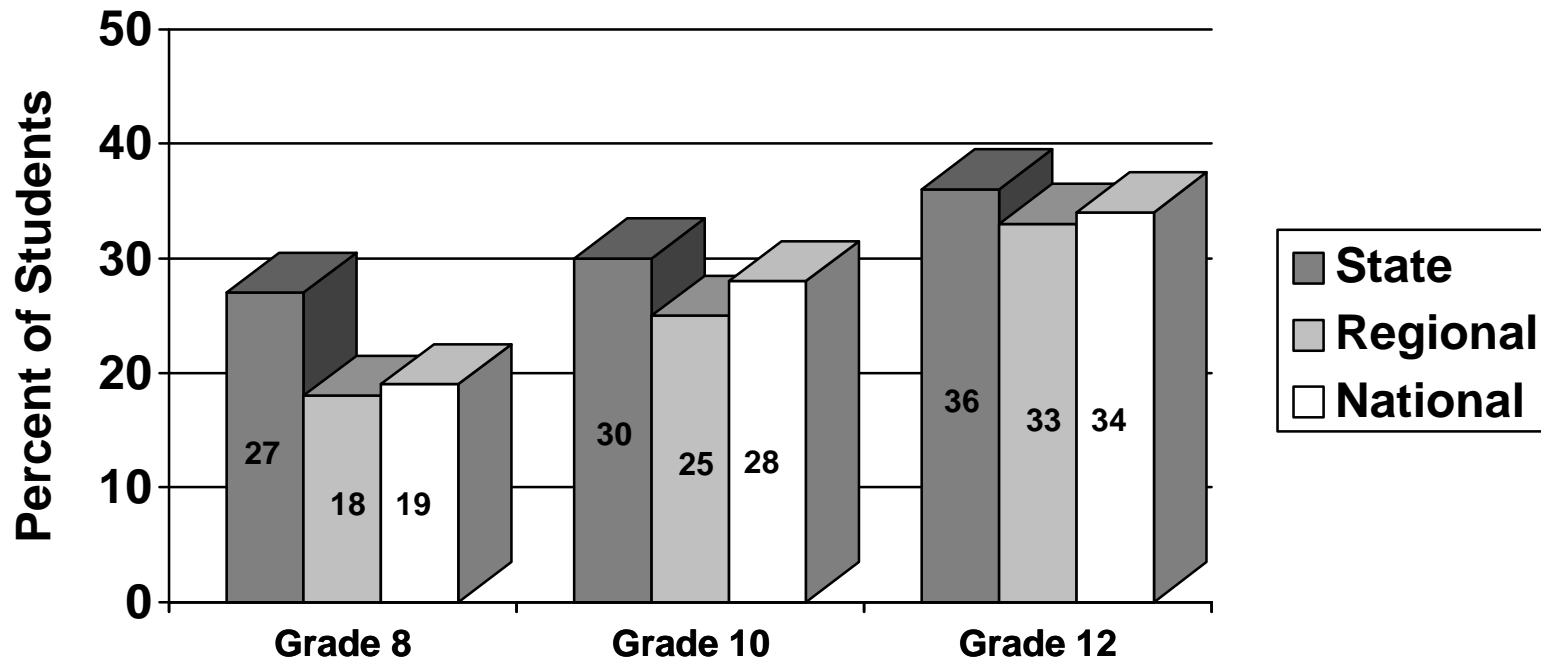


Figure 5

30-Day Use of Alcohol: State, Regional, and National Data Grades 8, 10 and 12

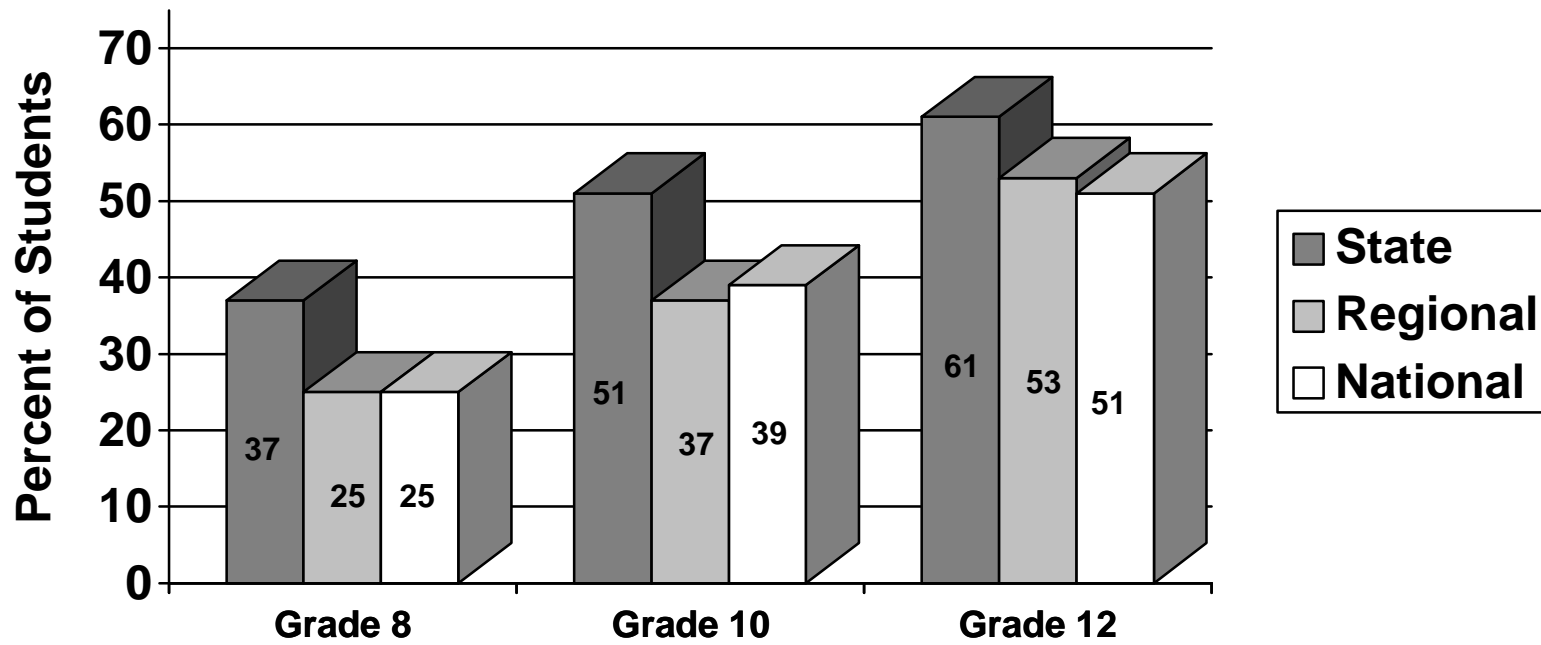


Figure 6

30-Day Use of Marijuana: State, Regional, and National Data Grades 8, 10 and 12

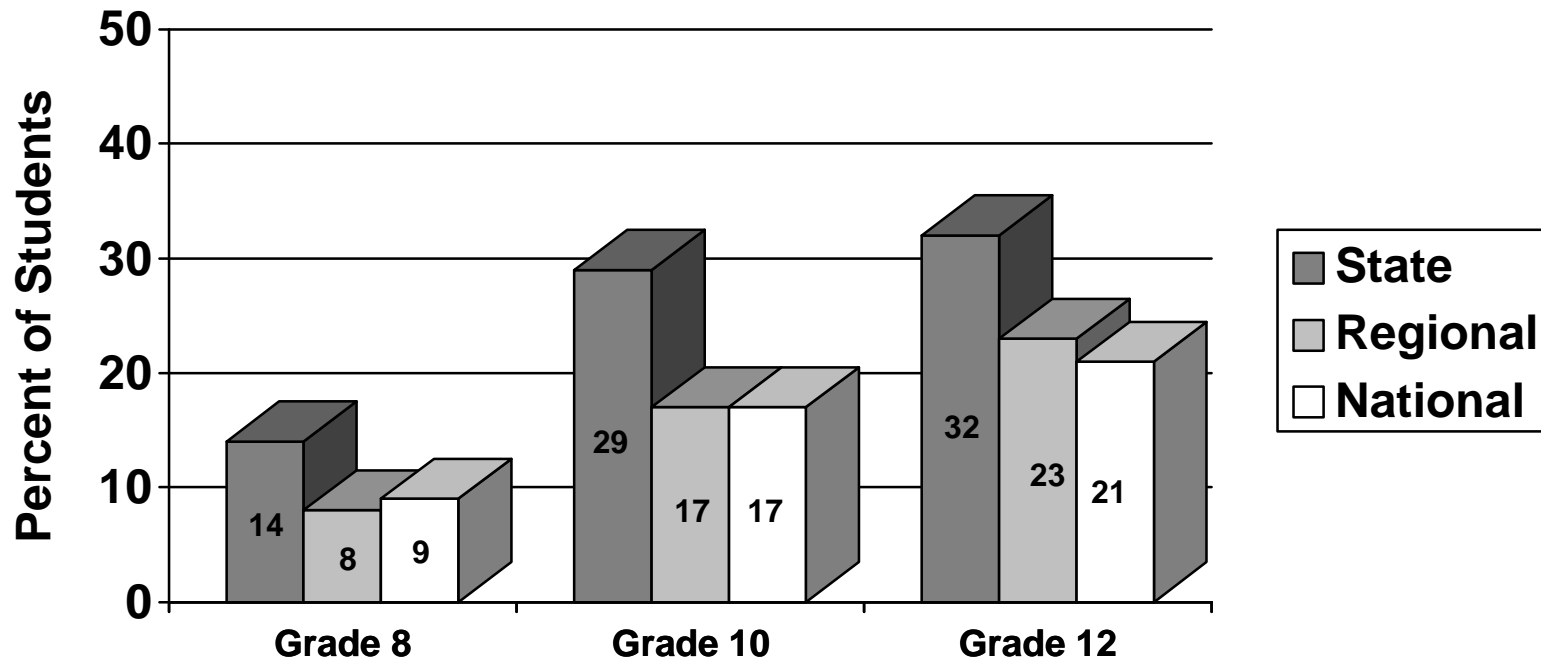


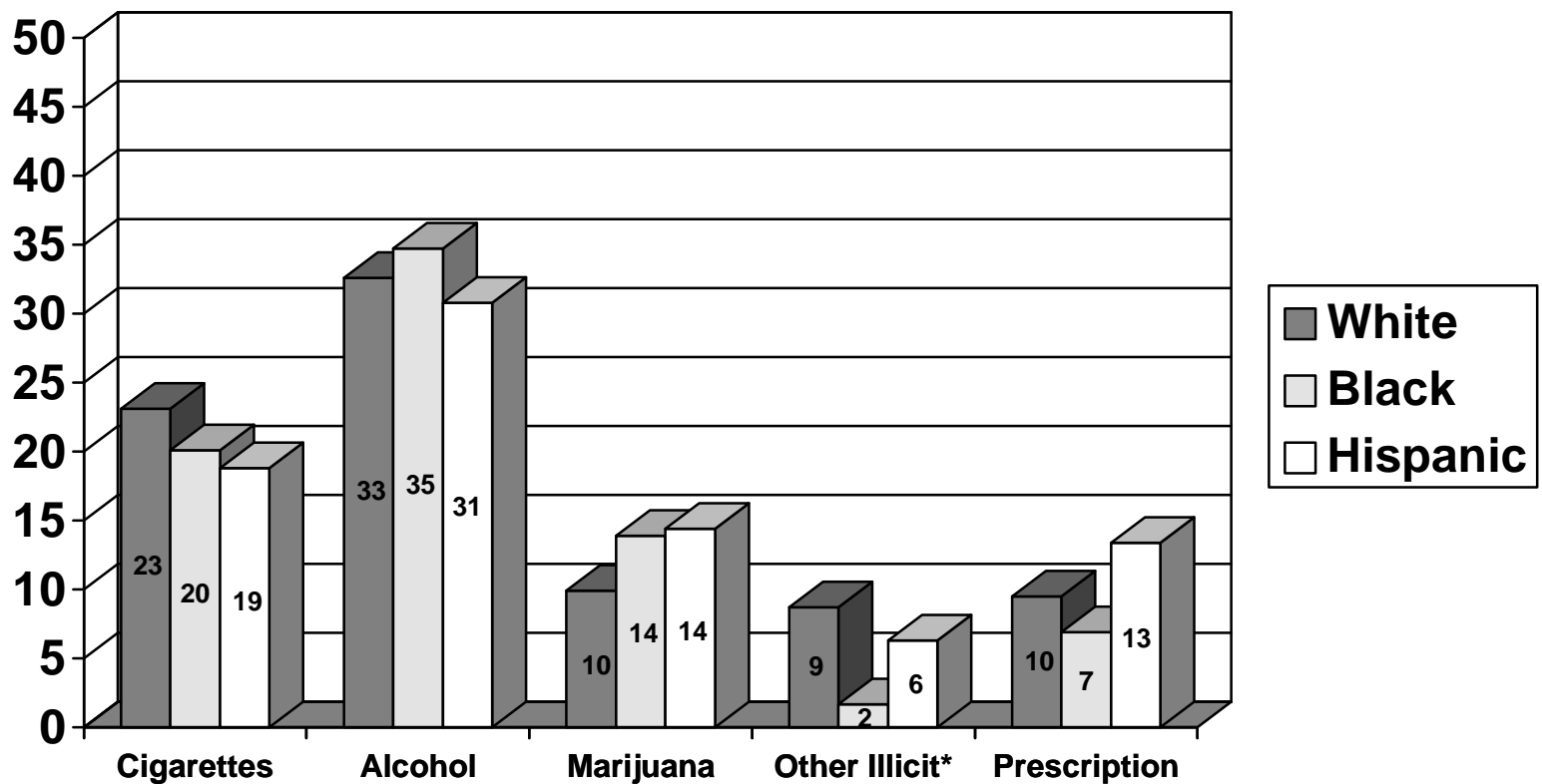
Table 4
Lifetime and Recent Substance Use by Race/Ethnicity

Lifetime Use				
Substance	White	Black	Hispanic	Other*
Tobacco: Cigarettes	54.5%	43.8%	53.2%	50.7%
Smokeless	17.3	2.2	8.7	13.6
Alcohol	69.5	67.1	66.3	61.9
Marijuana	30.5	33.7	34.4	28.2
Cocaine	2.8	0.6	3.5	1.9
Crack	1.8	0.4	1.9	1.1
Hallucinogens	7.6	0.3	5.7	5.4
Angel Dust	1.6	0.8	3.4	1.1
Inhalants	14.8	2.2	6.1	8.5
Heroin	1.2	0.2	1.7	0.4
Downers	8.3	3.6	9.4	7.1
Tranquilizers	2.7	0.5	1.4	2.7
Uppers	7.5	1.4	3.8	2.3
Steroids	0.9	0.6	1.8	1.6
Pain Medicines	12.6	7.6	12.3	10.2

Recent Use				
Substance	White	Black	Hispanic	Other*
Tobacco: Cigarettes	28.8%	18.7%	27.7%	23.5%
Smokeless	6.3	1.3	5.1	3.8
Alcohol	45.5	39.9	41.3	44.1
Marijuana	20.6	21.5	27.3	18.7
Cocaine	0.8	0.2	2.4	1.2
Crack	0.3	0.0	1.1	0.5
Hallucinogens	3.0	0.2	4.4	1.3
Angel Dust	0.3	0.0	3.0	0.9
Inhalants	5.7	0.8	4.5	3.6
Heroin	0.5	0.2	1.1	0.5
Downers	4.4	1.9	6.5	5.0
Tranquilizers	1.2	0.2	1.0	1.2
Uppers	4.0	0.7	2.7	1.1
Steroids	0.5	0.4	0.8	1.4
Pain Medicines	6.6	4.7	8.2	6.4

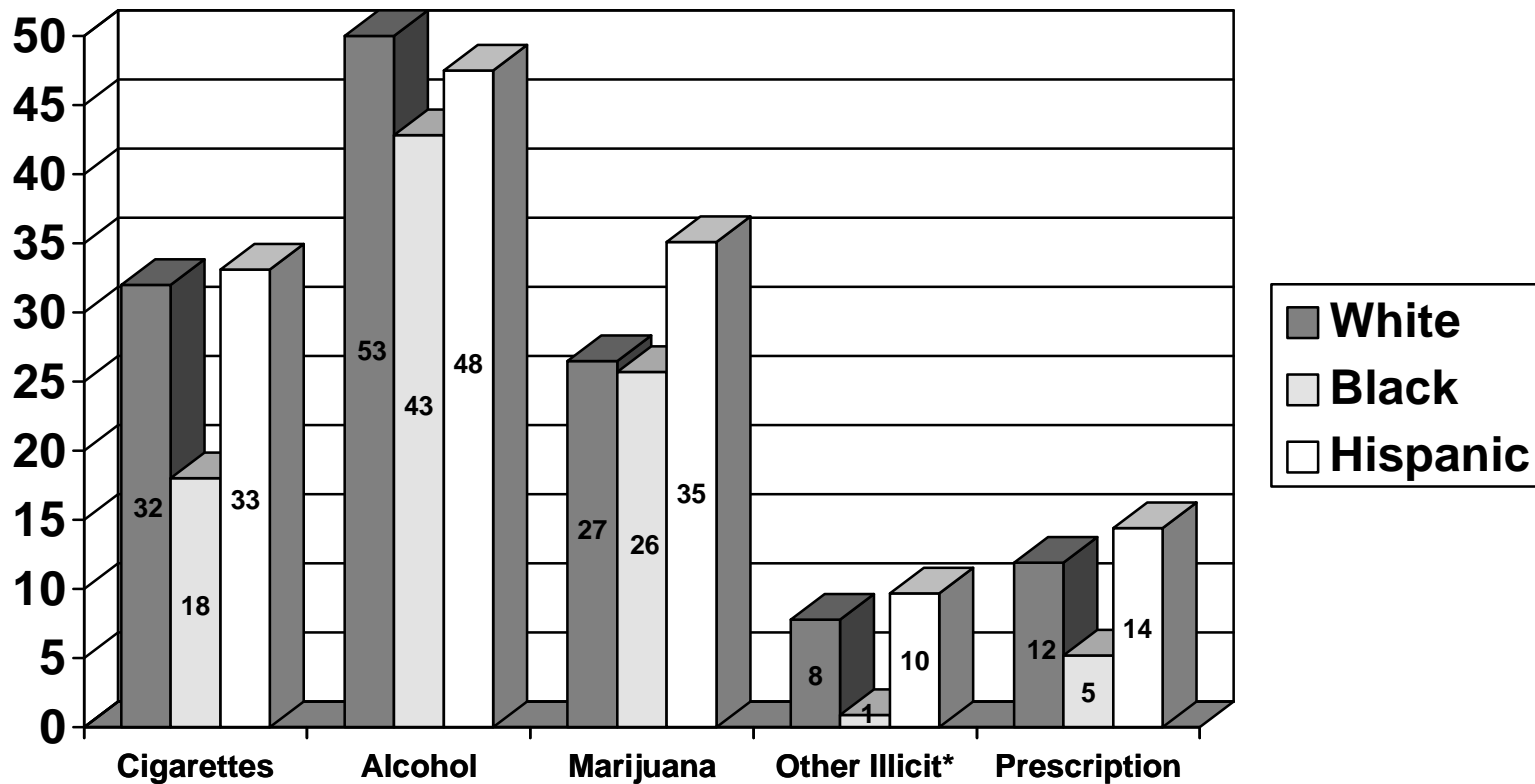
**Note: Other refers to Asian American, Native American and other racial/ethnic groups. Each group alone provided insufficient data to warrant a separate category.*

Figure 7
 Recent Cigarette, Alcohol, Marijuana, Other Illicit Drug and Prescription Drug Use by Race/Ethnicity
 Grades 7-8



*Refers to cocaine, crack, hallucinogens, angel dust, inhalants and heroin.

Figure 8
 Recent Cigarette, Alcohol, Marijuana, Other Illicit Drug and Prescription Drug Use by Race/Ethnicity
 Grades 9-12



*Refers to cocaine, crack, hallucinogens, angel dust, inhalants and heroin.

Table 5
Lifetime and Recent Substance Use: Urban vs. Suburban

Substance	Lifetime Use		Recent Use	
	Urban	Suburban	Urban	Suburban
Tobacco: Cigarettes	44.5%	54.9%	17.7%	29.5%
Smokeless	3.5	17.0	2.3	6.2
Alcohol	63.7	69.6	39.5	45.5
Marijuana	29.8	31.4	20.0	21.5
Cocaine	1.3	2.9	0.9	0.9
Crack	0.9	1.8	0.8	0.3
Hallucinogens	2.0	7.5	1.9	2.9
Angel Dust	2.6	1.5	1.8	0.3
Inhalants	2.5	14.5	1.7	5.6
Heroin	1.0	1.1	0.9	0.4
Downers	5.4	8.4	2.9	4.7
Tranquilizers	1.3	2.5	0.6	1.2
Uppers	1.4	7.2	1.0	3.8
Steroids	1.4	0.9	1.0	0.5
Pain Medicines	8.9	12.5	5.2	6.9

Figure 9
Cigarette Use: 30-Day Prevalence Rates
by Community Type and Grade

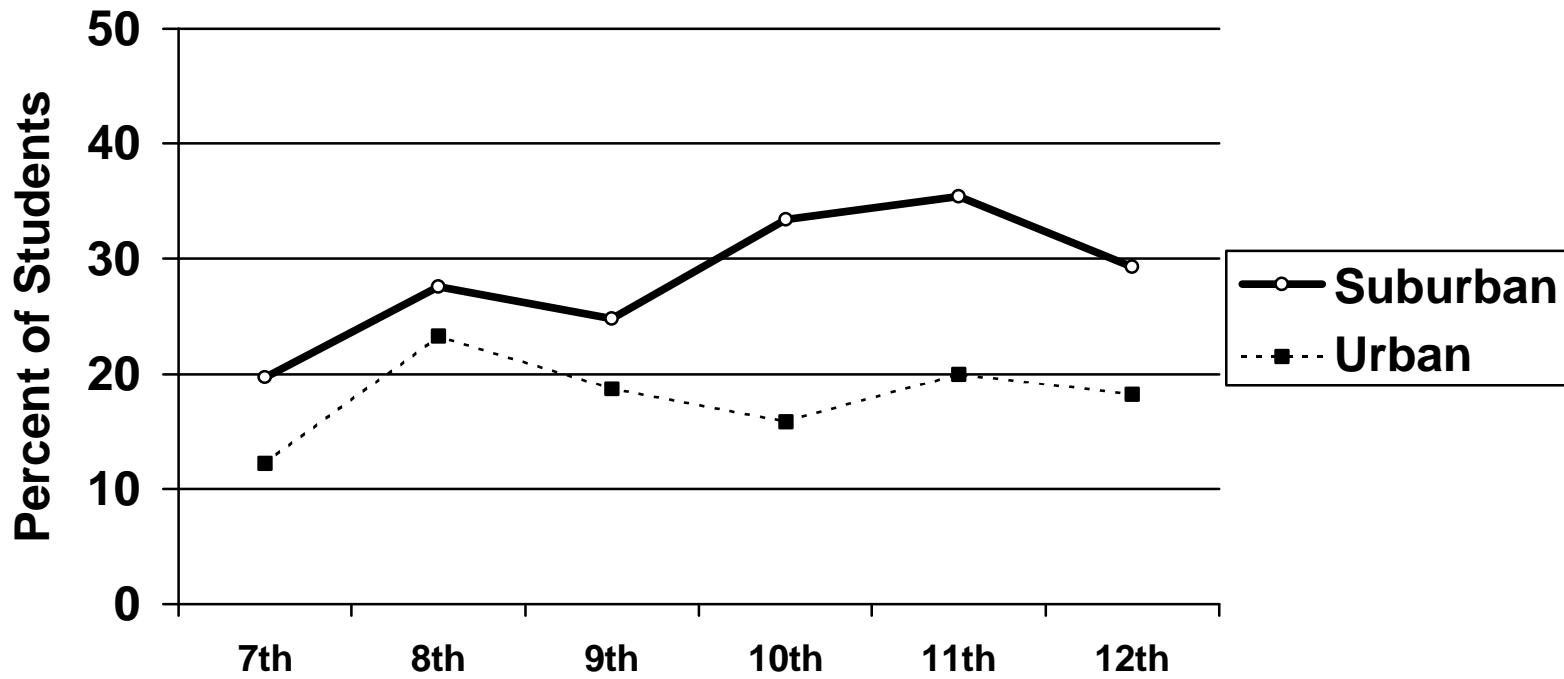


Figure 10

Alcohol Use: 30-Day Prevalence Rates by Community Type and Grade

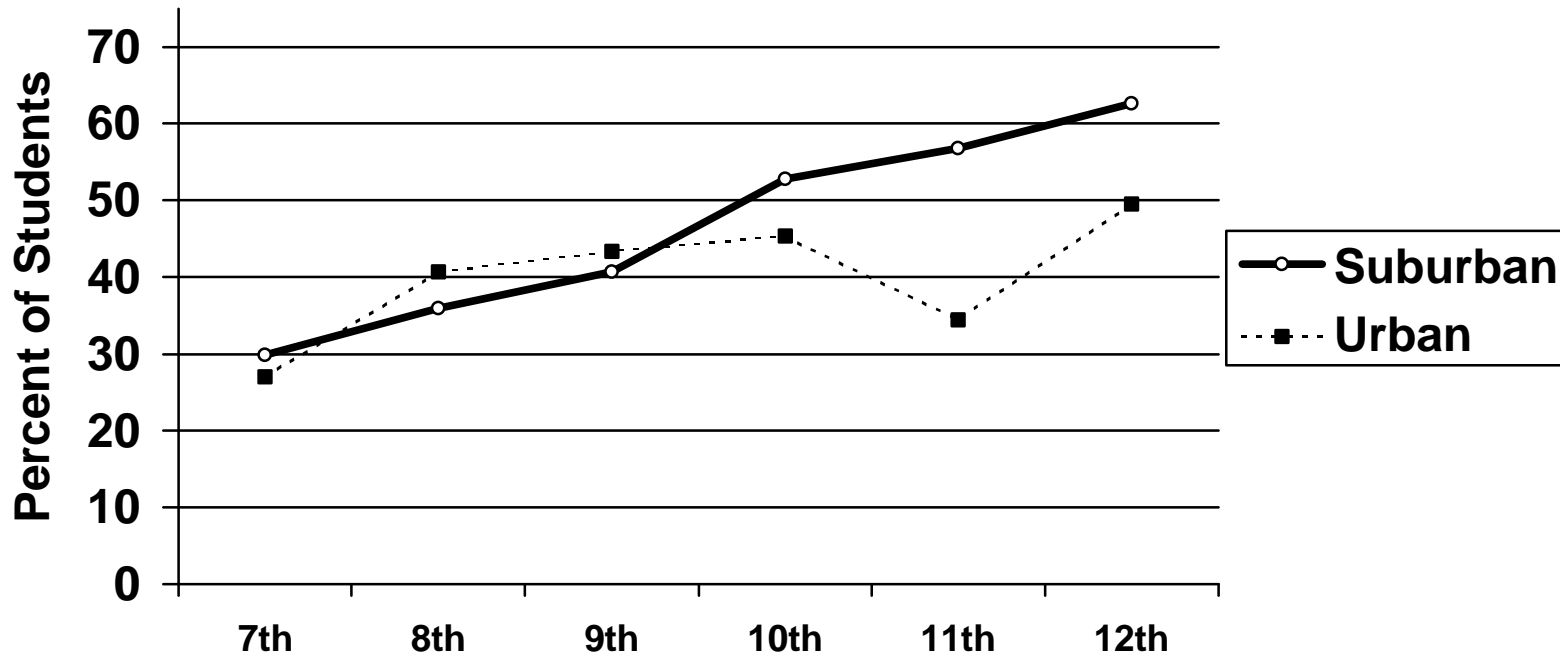


Figure 11
Marijuana Use: 30-Day Prevalence Rates
by Community Type and Grade

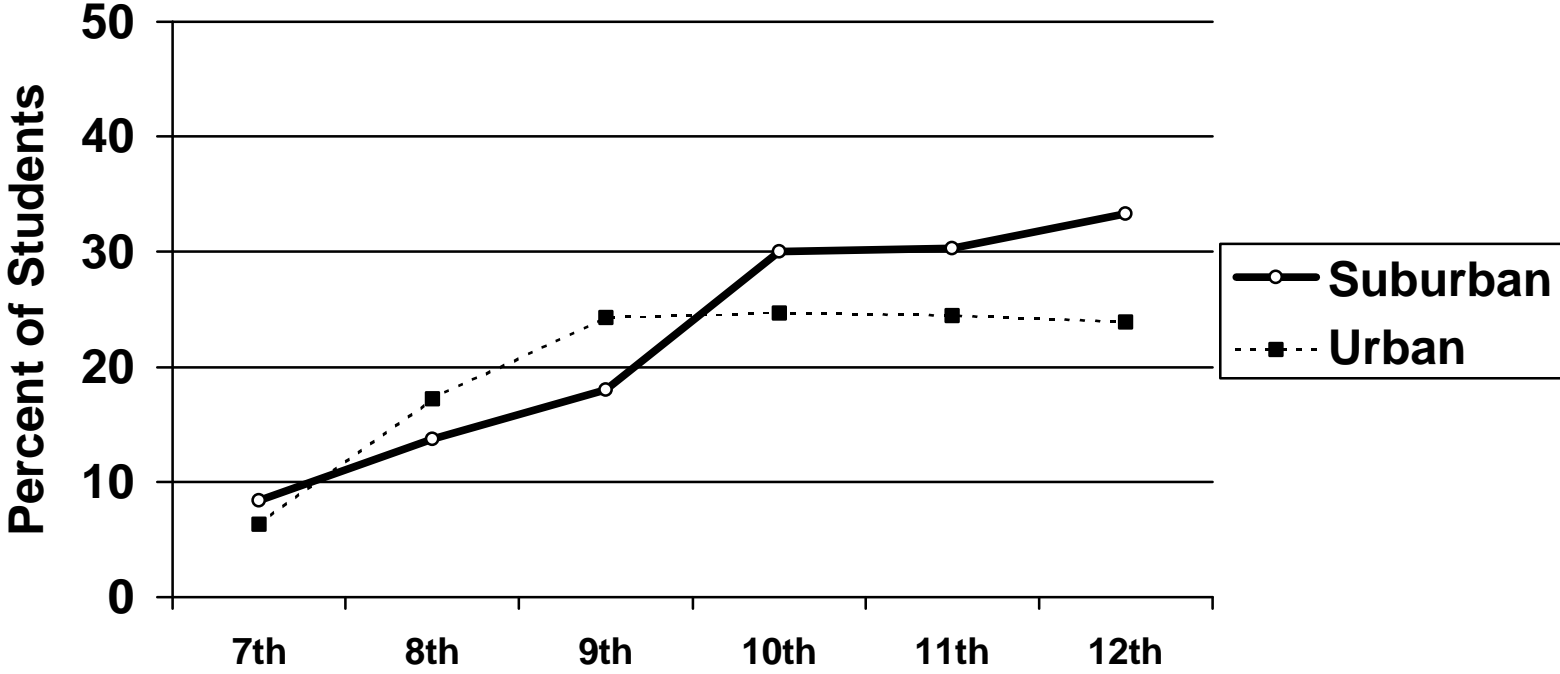


Table 6
Substance Use by Groups of School Districts*: Lifetime Rates

Substance	ERGs A-B	ERGs C-E	ERGs F-G	ERG H	ERG I
Tobacco: Cigarettes	54.8%	49.9%	56.2%	55.4%	46.1%
Smokeless	13.7	17.6	17.6	11.2	2.9
Alcohol	66.9	67.7	70.4	68.0	62.1
Marijuana	29.0	25.5	31.6	31.9	29.2
Cocaine	2.8	3.1	2.7	3.0	1.2
Crack	1.4	2.4	1.7	1.5	0.7
Hallucinogens	7.1	6.9	8.8	4.7	1.7
Angel Dust	2.0	2.0	2.1	1.4	2.3
Inhalants	12.2	18.1	15.1	8.9	2.7
Heroin	1.6	1.3	1.1	1.3	0.8
Downers	8.4	9.8	8.0	6.7	5.0
Tranquilizers	3.0	2.6	2.8	1.6	1.3
Uppers	5.4	7.1	7.5	4.4	1.3
Steroids	1.1	1.0	1.1	0.5	1.5
Pain Medicines	11.7	14.3	11.0	13.9	8.2

Cigarette, Alcohol, Marijuana and Inhalant Use
by Groups of School Districts*: 30-Day Rates

Substance	ERGs A-B	ERGs C-E	ERGs F-G	ERG H	ERG I
Cigarettes	33.7%	25.9%	28.9%	30.1%	19.3%
Alcohol	46.4	43.1	45.8	44.6	38.8
Marijuana	20.3	16.6	21.9	21.6	18.1
Inhalants	3.4	8.4	6.4	3.2	1.8
Other Illicit Drugs	6.2	8.6	9.8	5.2	3.8
Prescription Drugs	11.4	12.6	11.3	11.3	6.8

**Note: Data includes students in grades 7 through 12 from the 1995 Regional Youth/Adult Substance Abuse Project.*

Table 7
Substance Use by Service Delivery Area

Lifetime Use

Substance	South west	South Central	East	North Central	North west
Tobacco: Cigarettes	50.8%	51.9%	56.2%	48.1%	56.8%
Smokeless	8.9	9.2	21.9	12.8	16.4
Alcohol	60.7	70.7	68.7	65.8	74.7
Marijuana	29.5	31.9	30.7	28.2	34.7
Cocaine	1.7	3.0	2.6	1.3	4.2
Crack	0.8	2.0	1.0	1.2	2.9
Hallucinogens	4.7	4.7	7.3	5.3	8.9
Angel Dust	3.1	1.2	1.1	0.6	2.6
Inhalants	5.8	9.3	15.0	11.1	16.8
Heroin	1.0	0.9	1.3	0.6	1.5
Downers	6.2	5.9	9.5	7.2	9.1
Tranquilizers	1.5	2.7	2.3	1.9	3.1
Uppers	4.0	3.4	7.5	6.1	7.7
Steroids	1.3	0.3	1.3	1.0	1.1
Pain Medicines	9.0	11.5	12.2	11.5	13.9

30-Day Use

Substance	South west	South Central	East	North Central	North west
Tobacco: Cigarettes	26.8%	25.8%	27.6%	24.6%	30.4%
Smokeless	4.1	3.3	9.0	3.4	6.5
Alcohol	41.9	46.2	45.1	41.1	47.6
Marijuana	20.8	22.2	21.0	18.6	23.7
Cocaine	0.7	0.6	1.1	0.7	1.1
Crack	0.6	0.6	0.1	0.4	0.2
Hallucinogens	2.8	1.8	2.7	2.3	3.5
Angel Dust	2.1	0.2	0.0	0.2	0.6
Inhalants	1.9	3.6	6.8	4.4	6.4
Heroin	0.7	0.6	0.4	0.3	0.6
Downers	4.0	4.2	4.4	3.6	5.4
Tranquilizers	0.6	1.5	0.8	0.7	1.7
Uppers	2.5	2.1	3.9	3.1	4.2
Steroids	1.3	0.2	0.5	0.4	0.6
Pain Medicines	6.4	4.4	5.8	6.4	8.7

Table 8
Sex Difference in Regular Use of Cigarettes, Alcohol and Marijuana: 1989 vs.
1995 Comparison

Grades 7-8

Substance	Males		Females	
	1989	1995	1989	1995
Cigarettes	7.4%	7.9%	6.8%	8.9%
Alcohol	4.8	5.2	3.8	4.2
Marijuana	2.0	3.1	1.1	2.5

Grades 9 - 12

Substance	Males		Females	
	1989	1995	1989	1995
Cigarettes	17.8%	19.5%	22.5%	17.6%
Alcohol	20.6	15.7	14.4	8.1
Marijuana	10.7	14.4	7.0	7.7

Table 9
Frequency of Alcohol Intoxication:
Comparison of 1989 and 1995 Rates

Number of days in the previous month	Grades 7-8		Grades 9-12	
	1989	1995	1989	1995
None	77.0%	84.9%	48.4%	66.6%
One time	8.5	6.2	13.5	8.6
Two times	6.0	3.3	10.5	8.0
3 to 5 times	5.6	3.4	14.6	8.9
6 to 9 times	1.3	0.9	8.0	4.0
10 or more times	1.6	1.4	5.0	3.8

**Note: Because of rounding, table columns may not sum to 100%.*

Table 10
Times When Alcohol and Other Drugs Are Used*

Time/Occasion	Alcohol		Other Drugs	
	Grades 7-8	Grades 9-12	Grades 7-8	Grades 9-12
Before school	5.0%	6.9%	7.7%	14.5%
During the school day	3.1	4.8	3.7	11.2
After school	29.8	26.3	18.9	25.3
Weekday evenings	25.0	30.7	17.5	25.7
Weekends	41.4	68.7	24.9	37.2
Holidays or special occasions	73.9	79.1	16.8	24.3

**Note: Percents are based on those students who indicated that they had consumed alcohol or used other drugs at least once in their lifetimes.*

Table 11
Circumstances Where Alcohol and Other Drugs are Used

Setting/Occasion	Grades 7-8	Grades 9-12
At home	46.8%	60.5%
At places on the street where adults hang around	13.0	21.5
With older friends	37.0	57.7
At the homes of friends or relatives	36.6	57.9
At school activities, such as dances or football games	10.3	22.3
At work	2.5	9.1
When skipping school	10.7	19.9
To enjoy music or colors, or feel more creative	8.3	17.1

Note: Percents are based on those students who indicated that they had consumed alcohol or used other drugs at least once in their lifetimes.

Table 12
Sources of Cigarettes and Alcohol

Sources of Cigarettes	Grades 7-8	Grades 9-12
From home, with parents' permission	13.4%	23.5%
From home, without parents' permission	51.1	28.1
From friends	96.0	90.2
From brothers and sisters	32.8	32.6
From stores	52.7	81.1
From machines	41.5	35.4

Note: Percentages are based on those students who currently smoke and who indicated that they obtain cigarettes “sometimes” or “often” from these sources.

Source of Alcohol	Grades 7-8	Grades 9-12
From home, with parents' permission	38.3%	29.7%
From home, without parents' permission	64.6	46.8
From friends	82.5	91.2
From brothers and sisters	29.4	29.3
From other people who buy it	47.3	72.9
From a store, bar or restaurant (you buy it)	15.6	36.0

Note: Percentages are based on those students who currently drink and who indicated that they obtain alcohol “sometimes” or “often” from these sources.

Table 13
Reasons for Alcohol Use

Reasons for Using Alcohol	Grades 7-8		Grades 9-12	
	Males	Females	Males	Females
Enjoy the taste	46.6%	47.4%	58.5%	57.5%
To forget my problems	19.2	26.3	21.0	32.7
To relax or feel less tense	28.9	31.2	47.6	48.6
To feel good	28.5	33.8	52.8	49.5
To not be shy or uneasy	17.0	21.2	25.3	29.1
To have a good time	38.6	47.0	58.5	54.6
To fit in better with my friends who drink	17.0	20.0	18.9	11.8
To cheer me up when I am down	17.9	26.1	22.4	30.4
To get along better with the opposite sex	17.0	16.2	20.1	14.9
For religious reasons	14.9	15.2	12.4	10.5
To get drunk or high	23.4	28.1	44.7	36.3
To feel more grown-up	16.0	20.1	12.0	6.8
Boredom, nothing else to do	21.6	30.3	31.4	28.9
Need it to feel OK	14.4	19.2	15.1	13.6
People in my family drink	14.9	22.1	13.2	12.6

Note Percent indicates proportion of students rating each reason as "somewhat" or "very important." Percents are based only on those students who had consumed alcohol at least once in their lifetimes.

Table 14
Reasons for Drug Use

Reasons for Using Drugs	Grades 7-8		Grades 9-12	
	Males	Females	Males	Females
To see what it's like	47.9%	48.8%	56.9%	54.3%
To relax or feel less tense	38.2	38.8	53.6	50.1
To feel good or get high	48.6	44.9	63.3	58.0
Seek deeper insights and understandings	24.6	29.8	33.5	32.6
To have a good time	46.8	47.5	61.6	55.4
To fit in with a group	27.6	27.2	23.2	14.3
To get away from my problems	29.9	35.7	29.2	37.7
Boredom, nothing else to do	28.2	27.8	36.1	32.0
Anger or frustration	30.2	38.2	30.0	36.9
To be more creative	16.7	19.4	24.7	20.4
To do better in sports	15.4	10.0	10.8	4.4
To look better	13.4	12.4	9.9	6.7
To get to sleep	18.1	22.8	24.2	23.1
To lose weight	14.0	24.3	8.5	18.8
Because I need them	16.9	16.8	10.7	10.7
Because people in my family do	14.1	14.1	6.3	5.3

Note Percent indicates proportion of students rating each reason as "somewhat" or "very important." Percents are based only on those students who had used drugs at least once in their lifetimes.

Table 15
Reasons for NOT Using Alcohol

Reasons for NOT Drinking Alcohol	Grades 7-8		Grades 9-12	
	Males	Females	Males	Female
Costs too much	51.1%	47.3%	39.2%	43.5%
Concerned about my health	86.3	94.2	83.3	91.8
Too busy with school work	71.1	74.7	64.4	76.3
My friends don't drink	66.2	64.8	57.2	65.5
Don't want to be an alcoholic	84.8	90.2	81.8	87.0
Don't like the way it makes me feel	74.2	82.5	63.4	74.9
Religious reasons	51.1	54.8	44.2	54.2
Don't want to get drunk	82.6	85.9	77.3	82.1
Afraid of what I might do or say	78.4	83.7	65.6	77.7
Parents disapprove	81.1	86.0	72.6	82.7
Afraid of getting caught	79.8	78.7	62.0	74.1
Don't like the taste	71.1	77.2	62.6	75.1
It is illegal	81.1	86.4	62.9	77.7
My friends disapprove	65.2	65.0	45.8	57.9
Too hard to get	50.9	45.6	35.4	43.5
Don't want to get sick or have a hangover	81.8	88.3	69.4	81.6

Note Percent indicates proportion of students rating each reason as "somewhat" or "very important." Percents are based only on those students who had NOT consumed alcohol at least once in their lifetimes.

Table 16
Reasons for NOT Using Drugs

Reasons For NOT Using Drugs	Grades 7-8		Grades 9-12	
	Males	Females	Males	Females
Costs too much	54.6%	54.3%	54.2%	50.4%
Concerned about my health	81.9	92.5	85.6	89.1
Parents disapprove	77.4	86.4	76.7	80.7
My friends disapprove	67.8	74.4	63.9	69.8
Afraid I wouldn't be able to stop	78.8	88.4	76.9	81.3
Not curious	65.5	75.4	72.8	78.2
Don't need them	77.7	85.9	82.6	86.9
Don't like the way they make me think or act	75.8	85.0	70.1	76.7
Had a bad experience	55.2	60.5	40.0	47.0
Afraid of getting caught	74.2	79.6	66.3	73.4
It is illegal	77.8	86.0	73.6	79.3

Note Percent indicates proportion of students rating each reason as "somewhat" or "very important." Percents are based only on those students who had NOT used drugs at least once in their lifetimes.

Table 17
Perceptions of Harmful Consequences
Grades 7 - 8

Substance / Amount of Use		No Harm or Very Little Harm	Some Harm or A Lot of Harm	Don't Know
Tobacco:	Occasionally	40.5%	45.9%	13.6%
	Regularly	7.0	77.6	13.2
Alcohol:	1 or 2 Times	71.8	18.4	9.8
	Regularly	13.6	77.7	8.7
Intoxication	1 or 2 Times	24.2	65.7	10.1
	Regularly	2.9	88.2	8.9
Marijuana:	1 or 2 Times	36.4	50.6	13.0
	Occasionally	12.4	74.6	13.0
	Regularly	5.7	81.3	12.9
Cocaine:	1 or 2 Times	17.2	67.2	15.6
	Occasionally	4.5	80.8	14.7
	Regularly	2.1	83.7	14.1

Grades 9 - 12

Substance / Amount of Use		No Harm or Very Little Harm	Some Harm or A Lot of Harm	Don't Know
Tobacco:	Occasionally	46.2%	46.5%	8.4%
	Regularly	7.4	84.4	8.2
Alcohol:	1 or 2 Times	79.1	13.9	7.0
	Regularly	11.1	83.6	5.3
Intoxication	1 or 2 Times	40.6	52.3	7.1
	Regularly	3.1	91.3	5.6
Marijuana:	1 or 2 Times	54.3	37.4	8.3
	Occasionally	22.8	69.2	8.1
	Regularly	9.6	82.1	8.2
Cocaine:	1 or 2 Times	14.5	75.7	9.9
	Occasionally	2.9	87.5	9.6
	Regularly	1.4	89.0	9.7

Note: Because of rounding, table rows may not sum to 100%.

Table 18
Problems Associated With Alcohol and Other Drug Use

Problems	All Students		Regular Users	
	Grades 7-8	Grades 9-12	Grades 7-8	Grades 9-12
Family problems (parents or guardians)	7.5%	13.1%	23.7%	37.6%
Problems with friends	8.1	15.0	25.4	36.8
School problems	2.8	3.6	13.2	12.5
Police/Legal Problems	3.0	6.2	23.3	20.7
Absent from school	5.7	8.3	33.3	29.8
Attended class stoned or high	8.3	17.2	66.0	62.7
Driven a car after drinking or using drugs	2.6	18.4	17.5	52.7
Been a passenger in a car when the driver had been drinking or using drugs	24.1	40.2	57.9	80.1

Table 19
Percent of Students in Need of Assessment for
Substance Abuse Treatment Statewide and by Regional Planning Area

Grades 7 - 8

	Statewide TOTAL	Southwest	South Central	East	North Central	Northwest
No further evaluation needed	95.9%	98.9%	97.2%	94.1%	95.1%	95.6%
Evaluation recommended - Early intervention likely	1.9	0.7	2.1	2.9	2.5	1.3
Evaluation recommended - Treatment referral likely	2.2	0.4	0.7	3.1	2.4	3.1

Grades 9 - 12

	Statewide TOTAL	Southwest	South Central	East	North Central	Northwest
No further evaluation needed	90.6%	91.5%	91.9%	90.9%	93.1%	86.7%
Evaluation recommended - Early intervention likely	3.9	1.7	3.9	3.7	3.1	6.2
Evaluation recommended - Treatment referral likely	5.5	6.9	4.2	5.4	3.9	7.1

Table 20
Projected Number of Students in Need of Assessment for
Substance Abuse Treatment Statewide and by Regional Planning Area

Grades 7 - 8

	Statewide Total	Southwest	South Central	East	North Central	Northwest
Total enrollment 1994	70,798	12,036	15,893	9,173	20,775	12,921
Evaluation recommended - Early intervention likely	1,371	84	334	266	519	168
Evaluation recommended - Treatment referral likely	1,343	48	111	284	499	401

Grades 9 - 12

	Statewide Total	Southwest	South Central	East	North Central	Northwest
Total enrollment 1994	127,715	21,996	29,658	15,012	37,631	23,418
Evaluation recommended - Early intervention likely	4,703	374	1,157	555	1,165	1,452
Evaluation recommended - Treatment referral likely	6,701	1,516	1,246	811	1,466	1,663

Table 21
Percentage of Students in Need of Assessment
for Substance Abuse Treatment by Demographic Characteristics

	No Further Evaluation Needed	Evaluation Recommended	Treatment Referral Likely
Level			
Middle School	95.9%	1.9%	2.2%
High School	90.6	3.9	5.5
Gender			
Males	92.2	3.4	4.4
Females	92.7	3.0	4.3
Race/Ethnicity			
Whites	91.9	3.6	4.5
Blacks	97.0	2.0	1.0
Hispanics	88.9	3.1	8.0
Community			
Urban	95.2	1.8	3.0
Suburban	91.8	3.5	4.7

Table 22
Self-Perceived Need for Treatment

Question	Total Sample	Regular Users	Treatment Evaluation Indicated
Ever tried unsuccessfully to cut down or stop using alcohol or other drugs?	13%	32%	41%
Ever wish that you could control your alcohol or other drug use?	15	29	34
Ever felt you needed help, counseling, or treatment for any problems related to your drug or alcohol use?	5	14	22

Table 23
Received Help for Alcohol and Drug Problems

Have you ever gotten help for a drug or alcohol problem from...	Total Sample	Regular Users	Treatment Evaluation Indicated
A hotline or a crisis center?	2%	6%	13%
Professional counseling, treatment or therapy?	3	11	23
A program or counselor in a school?	2	3	7
Another adult in school (such as a school nurse or teacher)?	1	2	6
A community program outside of school?	2	5	13
Your parents?	3	6	14
Another family member?	3	7	15
A medical doctor?	2	4	8
Your friends?	5	13	26
Another adult (such as grandparent, other relative, clergyman)?	2	2	6
Received help from any source?	10	25	44
Received help from a professional source?	7	17	31

Table 24
Perceived Sources of Help for Alcohol or Drug Problems

If you had a drug or alcohol problem, you would go to...	All Students		Regular Users	
	Grades 7 - 8	Grades 9 - 12	Grades 7 - 8	Grades 9 - 12
A program or counselor in school?	43%	37%	22%	24%
Another adult in school (such as a school nurse or teacher)?	35	31	20	20
A community program outside of school?	41	40	30	33
Your parents?	50	49	25	38
Another family member?	52	56	41	47
A medical doctor?	42	37	21	21
Your friends?	63	74	61	69
Another adult (such as grandparent, other relative, clergyman)?	45	45	24	29

Table 25
Problems in School

	Total Sample	Regular Users	Treatment Evaluation Indicated
Grades below average?	13%	31%	34%
Often not do school assignments?	29	54	63
Often late for class?	17	41	51
Grades in school worse than they used to be?	29	44	52
Ever failed a grade in school?	25	41	48
Ever been suspended?	25	50	57

Table 26
Dangerous or Illegal Behavior

	Total Sample	Regular Users	Treatment Evaluation Indicated
Stolen or tried to steal a motor vehicle?	7%	21%	30%
Purposely damaged or destroyed another's property?	28	55	73
Stolen or tried to steal something worth less than \$50?	26	49	67
Carried a weapon such as a gun, knife, club or razor?	24	50	67
Used force or threat of force to get money or other things?	6	19	31
Broken in to tried to break into a building to steal something or just look around?	12	30	43

Table 27
Suicidal Ideation in High School Students

	Total Sample	Regular Users	Treatment Evaluation Indicated
I have seriously thought about taking my own life	18%	30%	41%
I have made a plan for how I would kill myself	11	22	31
I have tried to kill myself	8	17	26
Any suicidal ideation	27	40	54

Table 28
Participation In School-Based Prevention Activities

In your school, have you ever had...	Grades 7 - 8	Grades 9 - 12
	Yes	Yes
A special class about drugs?	72%	72%
Films, lectures, or discussions about drugs in one of your regular classes?	68	76
Films or lectures about drugs outside of your regular class?	41	49
Special discussions (“rap” groups) about drugs?	37	41

Reactions to School-Based Prevention Activities

Has the information about alcohol and other drugs that you get at school...	Grades 7 - 8	Grades 9 - 12
	Yes	Yes
Made you MORE curious about alcohol or drugs?	24%	25%
Convinced you NOT to use alcohol?	52	35
Convinced you NOT to use drugs?	62	50
Exaggerated the dangers of alcohol or drugs?	35	38

APPENDIX B
CONNECTICUT CITIES AND TOWNS BY EDUCATIONAL REFERENCE GROUP

This appendix includes a list of cities and towns that make up Educational Reference Groups for the State of Connecticut used in this survey.

ERGs A-B

Avon	Glastonbury	New Fairfield	West Hartford
Bethel	Granby	Newtown	Weston
Brookfield	Greenwich	Orange	Westport
Cheshire	Guilford	Redding	Wilton
Darien	Madison	Ridgefield	Woodbridge
Easton	Marlborough	Simsbury	Region 5
Fairfield	Monroe	South Windsor	Region 9
Farmington	New Canaan	Trumbull	Region 15

ERGs C-E

Ashford	East Granby	Norfolk	Watertown
Andover	East Haddam	North Branford	Westbrook
Barkhamstead	East Hampton	North Haven	Wethersfield
Berlin	East Lyme	North Stonington	Willington
Bethany	Eastford	Old Saybrook	Windsor
Bolton	Ellington	Oxford	Woodstock
Bozrah	Essex	Pomfret	Woodstock Acad.
Branford	Franklin	Portland	Region 1
Brooklyn	Hamden	Preston	Region 4
Canaan	Hampton	Rocky Hill	Region 6
Canterbury	Hartland	Salem	Region 7
Canton	Hebron	Salisbury	Region 8
Chester	Kent	Scotland	Region 10
Clinton	Ledyard	Sharon	Region 11
Colchester	Lebanon	Shelton	Region 12
Colebrook	Lisbon	Sherman	Region 13
Columbia	Litchfield	Somers	Region 14
Cornwall	Mansfield	Southington	Region 15
Coventry	New Hartford	Suffield	Region 16
Cromwell	New Milford	Tolland	Region 17
Deep River	Newington	Union	Region 18
			Region 19

ERGs F-G

Bloomfield
Chaplin
East Haven
East Windsor
Enfield
Griswold
Groton
Manchester

Milford
Montville
Naugatuck
North Canaan
Plainfield
Plainville
Plymouth
Seymour

Sprague
Stafford
Sterling
Stonington
Stratford
Thomaston
Thompson
Torrington

Vernon
Voluntown
Wallingford
Waterford
Winchester
Windsor Locks
Wolcott
Gilbert Academy

ERG H

Ansonia
Bristol
Danbury
Derby

East Hartford
Killingly
Meriden
Middletown

Norwalk
Norwich
Putnam

Norwich Free Acad.
Stamford
West Haven

ERG I

Bridgeport
Hartford

New Britain
New Haven

New London
Waterbury

Windham

APPENDIX C
ADOLESCENT ALCOHOL AND DRUG USE SCHOOL SURVEY

If you would like to receive a copy of the survey instrument, please contact:

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