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The opinions, findings and conclusions in this publication are those of the authors and not necessarily of the state agencies.

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Foreword

For twenty years, the California Student Survey (CSS) has monitored the trends in alcohol, tobacco and other drug use by students statewide. The CSS gathers data from 7th, 9th and 11th graders every two years and each survey has provided important findings on students’ healthy or at-risk behaviors for parents, educators, drug and alcohol prevention staff and state and local policy-makers. The 11th biennial CSS, given during the 2005-06 school year, continues this critical work.

We are fortunate to have the resources to gather and analyze this critical information that allows us to see, over time, whether our prevention education is effective. Special thanks go to all the school administrators, teachers, parents and students for participating – the CSS is a long-time endeavor that ultimately benefits everyone in California.

Over the last few years, the CSS has monitored dramatic declines in students’ overall substance use beginning in 1998; however, the 11th CSS confirmed that these declines now have flattened out, and current results are similar to the last survey in 2003-04. Although students’ substance use remains lower today than at the beginning of the decade, we should not be complacent. While the 2005-06 findings are still positive, the CSS study found there is a group of students who still need our help – heavy users of drugs and alcohol. Their pattern of binge drinking and heavy drug use has stayed almost the same since 1991 when we started examining their risky behaviors. Prevailing prevention messages don’t work with this group. Specific prevention or intervention strategies are needed that focus mainly on these heavy users.

Another disconcerting finding from the 11th CSS is new evidence of the high rate of use of prescription painkillers. Students responding to the current survey were asked for the first time about use of the three prescription painkillers: OxyContin, Percodan and Vicodin. In the six months prior to the survey, 9 percent of 9th graders and 14 percent of 11th reported using the painkillers to get “high.” While marijuana is the most popular drug with 11th graders, painkillers are the second most favorite drug.

The Attorney General’s Office is committed to working with our partners in education and drug abuse prevention to reduce risky behavior by our youth. It is clear that much more work needs to be done with students who are heavy alcohol and drug users. Joining us in these statewide prevention efforts are the CSS co-sponsors: California Department of Education and the Department of Alcohol and Drug Programs. Our thanks go to these agencies for their long-time support of the biennial survey.

California Attorney General’s Office
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We are indebted to Attorney General Edmund G. Brown Jr. for his continued support of this survey and his recognition of the importance of ongoing monitoring of alcohol, tobacco and other drug use by California youth as a guide to prevention and intervention efforts. This project, the mandated California Student Survey, also would not have been possible without the cooperation of the school superintendents, principals, and teachers. Their commitment and professionalism have made this survey a reality once again.

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Preface

The current survey was conducted in the late fall and early winter of the 2005-2006 school year. For the sake of convenience we refer to it as the 2005 CSS, because most students took the survey before the end of that year and the questionnaire asks about past behavior. Prior surveys are also referenced by the odd-numbered year.

Section I of this report summarizes the survey’s purpose, methods, and the sample characteristics. Sections II and III contain the results for the prevalence and frequency of alcohol and drug use (lifetime, six-month, and 30-day), including use at school and level of use preferences. Section IV deals with the adverse consequences of use — the problems experienced including drinking and driving — and indicators of possible dependency, including experiences related to use cessation efforts. Section V discusses use correlates or potential influences, such as perceived harm and other attitudes, availability, peer use and adult use, and exposure to alcohol and other drugs (AOD) prevention and intervention efforts. Section VI focuses on tobacco use and covers all the above areas. References to substance use do not include tobacco except as noted. Finally, we compare current trends with those from national surveys and discuss the overall implications of the study. The tables providing the results are located in the Appendix. Abbreviations and definitions of key terms used in the report follows this preface. An extensive Highlights summary and a full Compendium of Tables of the survey results is published separately and is available on the website of the Office of the Attorney General’s Crime and Violence Prevention Center (www.safestate.org/CSS).

The current survey was conducted in the late fall and early winter of the 2005-2006 school year. For the sake of convenience we refer to it as the 2005 CSS, because most students took the survey before the end of that year and the questionnaire asks about past behavior. Prior surveys are also referenced by the odd-numbered year.

Percentages in the tables include values of tenths of one percent. In the narrative text, we round rates to the nearest whole number except at the midpoint (0.5) when needed for clarification. For the most part, current results are compared in the text with those from the previous CSS in 2003. If there is no observation that results increased or decreased, it is because no meaningful change occurred. The main benchmark for longer trend is the 1999 survey, which constituted a new baseline for the state because of the integration of the CSS with the California Healthy Kids Survey that occurred that year, as we discuss further in this report. The tables that accompany the report provide a complete set of statistics since the 1999 CSS and selected data from earlier years.
Abbreviations & Definitions

Surveys
CSS  The Attorney General’s statewide Biennial California Student Survey
CHKS  California Healthy Kids Survey, sponsored by the California Department of Education for use by local schools/communities. The companion to the CSS.
MTF  Monitoring the Future Survey, sponsored by the National Institute of Drug Abuse. The oldest national survey of student drug use; conducted annually.

Drugs and Drug-Related Behaviors
AOD (ATOD)  Alcohol (tobacco) and other drugs.
Alcoholic Drink  One can/bottle of beer or wine cooler, glass of wine, mixed drink, or short glass of distilled spirits (liquor).
Binge Drinking  Consuming five drinks or more in a row on the same occasion in the past 30 days. See also Excessive Alcohol User (EAU).
CON  Conventional (or Occasional) Drug Users, who used illicit drugs in the past six months but did not make High-Risk User (HRU) heavy-use criteria.
Drugs  Psychoactive substances other than alcohol or tobacco, such as marijuana and inhalants.
EAU  Excessive Alcohol User, reported any of the following behaviors: drank five drinks in a row three days in the past 30 days; or was very drunk or sick three or more times in lifetime; or likes to drink to get drunk or feel the effects a lot.
HRU  High-Risk User, engaged in any of the following behaviors over the past six months: (a) Cocaine use in any form (including crack); (b) frequent polydrug use (three or more times); (c) weekly or more frequent marijuana use; or (d) a pattern of use of numerous other illicit drugs besides cocaine or marijuana, or of high frequencies of use of individual drugs; and (e) reported use of alcohol at least once.
Inhalants  Drugs that users "sniff" or "huff" to get high, such as glue, gasoline, paint fumes, aerosol sprays, and poppers.
Methamphetamine  Crystal meth, speed, ice, crank, or any amphetamine.
Polydrug Use  Use of two or more different drugs on the same occasion. Measured for the past six months.
Painkillers  OxyContin, Percodan, Vicodin, etc.
Smokeless Tobacco  Chew, dip or snuff, such as Redman, Levi Garrett, Beechnut, Skoal, Bandits, or Copenhagen.
Tobacco  Includes both smokeless tobacco and cigarettes.

Use Prevalence Measures
Six-Month  Any use during the six months prior to the survey.
Lifetime  Any use in respondent's lifetime.
Current  Any use in the 30 days prior to the survey.
Monthly/Weekly  Once a month/week or more often, calculated based on the frequency of use in the past six months.
Daily  Once a day or more often. Calculated from 20 or more days of reported use in 30-day period.
Executive Summary

The 2005-06 statewide California Student Survey (CSS) is the 11th biennial assessment of alcohol, tobacco, and other drug use among California secondary school students. The first CSS was conducted in 1985 and were repeated every other year. In 1991 the state Legislature passed legislation requiring the Attorney General to continue conducting the survey biennially. Then in 1993, the state Department of Alcohol and Drug Programs (ADP) and the California Department of Education (CDE) joined as co-sponsors with the Attorney General to fund the CSS. Over the years, survey content has been expanded to provide a broader range of information on health-risk behaviors, comparable with the local California Healthy Kids Survey (CHKS). This report summarizes the 2005 CSS results for substance use.

The 11th CSS was administered in fall 2005 and winter 2006 to 10,638 students in grades 7, 9 and 11 from a randomly selected, representative sample of 113 schools. The survey was conducted under conditions of strict confidentiality and student anonymity. Participation by school districts, schools, and students was voluntary. The methods of selection and administration were the same as for the previous CSS except that for the first time since 1995 passive parental consent was allowed in schools that had adopted it as policy. This change does not appear to have affected results.

Summary of 1999 - 2003 Survey Results

The early to middle 1990s was generally a period of rising AOD use followed by a leveling off in 1997. Two diverging patterns appeared in 1999. First, overall prevalence of use mainly declined, markedly for some of the most commonly used substances. However, several dramatic declines, especially for alcohol, were at least in part influenced by changes in item wording required as part of the CSS/CHKS integration taking place that year (see Methods). Nevertheless, we hypothesized that a general decline in overall prevalence in substance use had begun. Due to the changes in key questions in 1999, the 8th biennial findings had to be considered a new baseline for continued monitoring of adolescent health-related behavior. The current report focuses on the results since 1999.

Secondly, in 1999 results for frequent and heavy AOD use were about the same as in 1997. This continued stability in indicators of high involvement underscored the need for expansion of school intervention services. The two questions of greatest interest since then have been (a) whether the declines in prevalence in 1999 signaled a long-term trend and (b) would similar declines appear for heavy and regular users.
The 2001 survey confirmed that the rise in substance use during the first part of the decade had ended. Compared to 1999, no meaningful increases in substance use occurred, and there were reversals in key indicators, especially for alcohol in the 7th grade. But there was little change for marijuana or other drugs nor in patterns of regular and heavy use across all substances. The declines continued in 2003 and extended to other drugs and heavy AOD use in 11th grade.

For 2005 the picture across grades and substances has changed little since the previous survey. Differences for specific substances were few, small, and often inconsistent in direction across grades.

- **Upper Grades.** Most changes in use of specific substances for 9th and 11th graders were miniscule (1% or lower), although they tended to be in a negative direction. Marginal, two-point declines did occur among 11th graders for binge drinking, lifetime and six-month alcohol prevalence, weekly drinking (past six months), polydrug use, and lifetime cigarette smoking. Although the overall lifetime measure of “any drug use” did increase in the two upper grades, this was probably due to the addition of a new measure assessing illicit use of prescription painkillers such as OxyContin, Vicodin and Percodan, which was the second most widely used category of drugs after marijuana. Overall use of alcohol or drugs remained level.

- **Seventh Grade.** Younger students reported marginal increases of about two percentage points in several alcohol measures (lifetime and current use of alcohol, current alcohol use in school, and lifetime drunkenness) and in lifetime marijuana and current inhalant use. Consistent with these findings was a similarly marginal two-point decline in lifetime abstinence. However, measures of use during the previous six months were more stable.

Although AOD use remains moderately lower today than at the beginning of the decade, these findings argue against complacency. The overall stability in results, plus the marginal increases in 7th grade, suggests the possibility of a “bottoming-out” effect of prevention efforts, meaning that further reductions in overall prevalence may be more difficult to achieve under current conditions. Perhaps most important, there remains a critical need to target students who are both most at risk and harder to reach. Especially disconcerting is the new evidence of the high rate of use of prescription painkillers, which accounts for the increase in total use of drugs other than alcohol. Attention needs to be paid to who is using these drugs, how they are obtained, and how this use is related to other problems.

A primary caveat of the 2003 report also still applies with respect to the continued high level of heavy use among 11th grade students. One-fifth of 11th graders report binge drinking (the majority of all alcohol drinkers) or that they like to get drunk or feel alcohol a lot. Almost one-fifth of them are current marijuana users or High Risk Drug Users, and over one-tenth are regular bingers or marijuana users (use on three or more of the past thirty days). Overall, as in 2003, data suggest that almost one-fifth may be in need of some intervention and as many as one-tenth may be drug dependent.
EXECUTIVE SUMMARY


2 We apply a conservative standard to interpreting changes in statistical prevalence over time. A difference of 3 percentage points or more is noted without qualification. A difference of approximately 2 points, but less than 3, may be noted, but with appropriate qualification. Smaller differences are generally disregarded unless reflecting a continuing trend over more than 2 survey periods.

3 Regarding earlier trends, between 1985 and 1989, use of illegal drugs and cigarettes by California students declined steadily. In 1989, alcohol consumption declined as well. In 1991, signals were mixed. Use of cocaine and methamphetamine continued to decline, but use of alcohol and tobacco increased notably, and there were slight increases in the use of marijuana, LSD, and inhalants. The 1993 survey was a wake-up call to the state. Major increases occurred in use of cigarettes, marijuana and several other drugs, especially among 9th-grade students. Rates of alcohol use were stable but at disturbingly high levels. Overall, substance use prevalence levels approached the peaks recorded in the 1985 survey. While substance use generally stabilized in 1995, some small increases (such as in marijuana use, poly-drug use, and attending school “high”) continued pre-existing trends. Interpretation of these results was complicated by a shift from implied to written parental consent. In 1997, substance use was again generally stable but still at percentages as high as in 1985.
Chapter 1
Introduction & Methods

This report summarizes results on alcohol, tobacco, and other drug (ATOD) use from the 11th Biennial California Student Survey (CSS), conducted in the late fall and early winter of 2005-06 by WestEd under strict conditions of confidentiality and anonymity. Over ten thousand randomly-selected students (n=10,638) enrolled in grades 7, 9 and 11 from across the state participated in the survey. Participation by school districts, schools, and students was voluntary. Written versus passive consent (notification without requiring written approval) by a parent or guardian depended on local school policy. The state Health and Human Service Agency’s Committee for the Protection of Human Subjects reviewed and approved the research protocol, including all procedures, the sampling plan, the survey instrument, and consent forms. Sample selection and survey administration procedures for the current survey were the same as used previously.

Overview and Long-term Trends

The Office of the California Attorney General (OAG) initiated this survey in 1985. The legislature mandated its biennial administration in 1991. The California Department of Education and Department of Alcohol and Drug Programs joined the OAG in 1993 in co-sponsoring the survey, and in 1995 written parental consent was instituted, marking a major milestone in the survey’s history to be elaborated below. Two major changes have occurred since. In 1999, the California Student Survey (CSS) was merged with the California Healthy Kids Survey (CHKS), and for the 2005 survey, passive consent was instituted as an option for schools to obtain parent permission.

Between 1985 and 1989, use of drugs and cigarettes by California students declined steadily. In 1989, alcohol consumption declined as well. In 1991, signals were mixed. Use of cocaine and methamphetamine continued to decline, but use of alcohol and tobacco increased notably. There were also slight increases in the use of marijuana, LSD, and inhalants.

The 1993 survey was a wake-up call to the state. Alcohol use remained level and major increases occurred in use of cigarettes, marijuana, and several other drugs, especially among 9th-grade students, approaching the peaks recorded in the 1985 survey. Two years later in 1995, when the survey shifted from using implied (passive) parental consent to written (active) consent, use generally stabilized, with some small increases including marijuana use,
polydrug use, and attending school while “high” on alcohol or other drugs. In 1997, use remained generally stable but still at percentages as high as in 1985.

Comparing 1999 results to 1997 revealed two diverging patterns: (a) overall use was generally much lower, especially for the most commonly-used substances; and (b) most indicators of frequent and heavy use were about the same or changed in inconsistent directions. The continued stability in indicators of high involvement clearly underscored once again the need for expansion of school intervention services. The more dramatic declines in overall use — especially of alcohol among younger students — were more difficult to interpret. It was hard to determine how much they were due to changes in behavior and how much to changes in item wording made as part of the integration of the CSS with the California Healthy Kids Survey (see below). None of the item changes could be interpreted unequivocally as the reason for the declines, but neither could they be discounted. It was deemed prudent to consider the 1999 findings as a new baseline from which to continue monitoring adolescent substance use and other health-related behavior. This report is, therefore, largely limited to discussing current results compared to 2003 and trends since 1999.

The 2001 survey confirmed that the rise in substance use that characterized the first part of the decade had ended. Compared to 1999 results, no meaningful increases in substance use occurred, and there were reversals in key indicators, especially for alcohol in the 7th grade. High school students also reported moderate declines in overall alcohol use, especially 11th graders. But there was little change for marijuana or other drugs or in patterns of regular and heavy use across all substances.

The declines in use of alcohol observed since 1999 continued in 2003 and extended to other drugs and heavy AOD use. Among 11th graders there were especially encouraging declines in the use of marijuana, LSD, and ecstasy, binge drinking, drunkenness and being “high” on drugs, and drinking and driving. There were no meaningful increases.

**Content of the Instrument**

The CSS has focused since its inception primarily on use of alcohol and other drugs based on a consistent set of core survey questions. However, over the years modifications were incorporated to improve questions and meet evolving information requirements for the state and survey co-sponsors. Most notable, in 1999 the CSS was integrated with the California Healthy Kids Survey (CHKS), which required significant expansion in content so as to provide representative statewide data on a wider range of health risk behaviors. The California Department of Education had developed the CHKS in 1997 as a multi-purpose health risk and resilience assessment tool for local schools districts, using modular sets of instruments administered in grades 5, 7, 9 and 11. The overall goal of CSS/CHKS integration was to improve prevention, health and youth development programs by providing better statewide information on what influences youth behavior.

CDE drew heavily on the CSS in developing the CHKS instrument, especially the substance-use items, and the survey’s methods such as requiring survey administration at the same
grades. Thus, the two surveys already shared common content and procedures. Full integration of the surveys involved expanding the CSS content to include all items in the CHKS core module, including items relating to school safety, general health (i.e., eating habits and physical exercise), and resilience traits or assets. This process also involved some adjustments in item wording for both surveys. These modifications created difficulties in interpreting some 1999 findings, so that the 8\textsuperscript{th} CSS had to be considered a new baseline for monitoring future trends. Nevertheless, the long-term benefits of the integration that have occurred clearly warranted the changes, particularly as in fall 2003 CDE began requiring that all school districts must administer the CHKS at least once every two years if they receive federal Safe and Drug Free Schools and Communities funds, in compliance with the No Child Left Behind Act, or state Tobacco Use Prevention Education funds. These benefits include:

- Creating a single, comprehensive local and state health-related data collection system that efficiently and cost-effectively serves the needs of multiple agencies and programs while reducing the survey burden on schools.
- Enabling the CSS to provide statewide norms for comparison to the CHKS data collected by local school districts throughout the state.
- Allowing schools to combine CSS and CHKS data collection, which occurred among four out of ten schools in 2006.
- Expanding comparability of the CSS to the national Youth Risk Behavior Survey (YRBS), sponsored by the Centers for Disease Control and Prevention, from which items were also drawn in developing the CHKS. This is reflected in the expanded discussion of national trends in this report.

The current CSS assesses student behavior across five major aspects of alcohol, tobacco, and other drug use:

- **Prevalence and frequency.** The main set of items on alcohol and other drugs assesses the frequency of use in the six months prior to the survey, using a 7-point scale from “never” to “once a day or more often.” Additional items assess ATOD use over the respondent's lifetime (ever used) and the past 30 days. The reasons for asking about these three different time periods are discussed below.

- **Patterns and levels.** Patterns of use as well as the level of involvement are assessed by questions on drinking styles, experiences with intoxication (being drunk or “high”), binge drinking, and use at school.

- **Use-related problems, dependency, and treatment indicators.** The survey assesses 11 negative consequences of alcohol or drug use (e.g., intoxication, memory loss/passing out, trouble with the police, trouble with schoolwork and behavior, and interpersonal problems). There is also an alternative for “no problems.” Students are also asked separately about the most prevalent alcohol-related problem: drinking and driving. A new series of questions added in 2005 provides data on factors that have been found to be indicative of dependency or abuse. Several questions assess treatment-related need and cessation efforts, another common indicator of dependency. (see Chapter 4)
• **Attitudes and other correlates of use.** Several key correlates associated with AOD use are assessed, including perceived availability, harmfulness, use by peers, peer disapproval (added in 2005), and reasons for use. (see Chapter 5)

For 2005, the most significant change was addition of items on prescription painkillers and steroids, reflecting growing concerns about their use among adolescents. There were also several relatively minor changes. For example, based on input from the Department of Alcohol and Drug Problems, Office of Problem Gambling, a new response option of “bars, clubs, or gambling casinos” was added to the question about sources of alcohol. Because of survey time limitations, several questions were deleted, generally because of low response rates, little change in results over the years, or difficulty in interpreting the findings (such as questions related to prevention exposure). These changes are noted in this report when applicable for interpreting the results.

**Measures of Prevalence**

The prevalence of substance use is assessed in three time periods: lifetime, six-month and 30-day (or “current”). Each time period provides different information useful for identifying patterns of ATOD use. These data may also be useful for informing decision-making about prevention programs and for making comparisons with other survey results.

**Lifetime Use**

Percentages of students who have ever tried alcohol or other drugs are the most general measure of prevalence. Lifetime use is of special interest because prevention policies, based on the principle of zero-tolerance, focus on halting all ATOD use. Lifetime measures are also more useful in assessing younger students (e.g., 7th graders) and less common behaviors (e.g., heroin use). Finally, lifetime prevalence provides a guide for timing prevention efforts, which are likely to be most effective if administered just before initiation of drug use. However, lifetime percentages must be treated with caution. Taken alone they mask widely divergent ranges of experience with psychoactive substances, from use during a single occasion to regular, heavy use. Lifetime measures may be inflated by a single early experience involving only a minuscule amount.

**Six-month Use**

Students are asked to indicate the regular frequency of use of 13 substances as well as polydrug use over the six months prior to the survey (e.g., only once or twice, a few times monthly, weekly, daily). These items provide a relatively stable measure over the recent past — rather than immediate past — on how regularly respondents use substances. *The percentages of respondents who used monthly during the past six months is a good indicator of how many have incorporated regular substance use as part of their lifestyle.* In addition, the six-month data have proven to be comparable to twelve-month measures reported in national *Monitoring the Future Survey.*
INTRODUCTION AND METHODS

Thirty-day Use

For the most commonly-used substances, the survey also assesses use in the 30 days prior to the survey. This is a standard indicator of the percentage of students who are current users. Comparing the percentages of lifetime and 30-day use helps distinguish between youth who are merely experimenting versus regular users. However, 30-day percentages may exaggerate the importance of very recent behavior that may not be representative of use by an individual over a longer period of time.

- Use on 20 of the past 30 days is considered daily.
- Use on three days appears to be a good indicator of weekly use.

Administration Procedures

The 11th biennial survey followed the same administration procedures as previously, with the exception of a change in parental consent requirements. Trained WestEd proctors administered the surveys at each school site in the late fall and early winter of the school year. They read scripted instructions to ensure that all students understood their rights as voluntary survey participants, the purpose of the survey, and how to fill out the machine-readable answer sheets. The instructions included assurances of personal anonymity and confidentiality of data. No personal names were recorded on the answer sheets — only school name plus demographic data. Respondents were seated so that other students and proctors could not see their responses. Students placed their completed answer sheets in an envelope that was sealed and sent to WestEd.

The survey protocol was approved by the state Committee for the Protection of Human Subjects, insuring that all rights of students and parents were observed. Participation was voluntary for the schools and students. No student took the survey whose parent(s) or guardian(s) did not approve. All data are anonymous and confidential.

WestEd selected the random sample, contacted the schools, and administered the survey. Schools were able to combine their CSS data collection with that for the California Healthy Kids Survey. As in 2003, four in ten schools in the sample selected this combined-administration option.

Parental Consent

Parental consent has always been required for student participation. Between 1985 and 1993, the CSS used implied or “passive” consent procedures. Parents were informed about the survey and that they had the right to decline participation by their child. Parental agreement was assumed as long as school or project staff received no objection. Starting in 1995, the CSS required written or “active” parental consent. No students under age 18 were surveyed unless a parent or guardian agreed by returning a signed approval form. This change was a response to increasing public concern about the protection of parent and pupil rights, prompting some school authorities to decline participation in a survey that did not use active
parental consent. However, changes in state law in 2004 clarified and allowed passive parental consent procedures for students in grades 7 or higher under strict conditions. The new law applies only if the local School Board formally adopts a passive-consent policy implementing federal and state regulations. Under passive consent, parents only inform the school if they do not want their child to participate in the survey. Schools are also required to undertake a series of notifications to ensure that all parents/guardians are informed of the survey and the consent procedures. Because so many school districts were adopting these passive consent policies for their own CHKS, it was determined (and approved by the state Committee for the Protection of Human Subjects) that the 2005 CSS should adopt a mixed-consent policy, allowing schools to use for the CSS whatever consent policy they had locally adopted. About 56% of schools in the survey had adopted passive-consent procedures.

One apparent benefit of this change was an increase in the student response or participation rate. About 78% of students in the targeted sample completed the survey, compared to 58% in 2001 and 62% in 2003. Since written parental consent was mandated in 1995, student response rates have ranged from only 58% to 62%, even though as an incentive to increase consent form returns, students whose parents returned the consent form were allowed to participate in a raffle for one $15 gift card per classroom, regardless of whether their parents agreed on participation. An analysis of 1995 CSS data revealed that the decline in response rates was due to non-return of consent forms rather than active parental refusal. The percentages of non-return were highest in schools serving students from economically disadvantaged communities, as found in other research. However, the effect of the disproportionate loss of such students on CSS results after 1995 was not associated with changes in long-term trends. Likewise, there were no significant differences in the results for 2005 for schools allowing passive consent versus those requiring written consent. Thus, although the characteristics of students in passive versus written consent samples vary, these variations seem to have no significant effect on overall self-reported substance use.

School staff, under the supervision of a survey coordinator appointed by the principal, distributed consent-to-participate forms supplied by WestEd to the parents of students in the selected classrooms. This form was approved by the state Committee for the Protection of Human Subjects. With written consent, teachers generally sent these forms home with each student accompanied by an explanatory letter from the principal. They mailed the forms in the case of passive consent to insure delivery to parents. The form includes information on the purpose and sponsorship of the survey, its content and method, participant rights, confidentiality and anonymity procedures, possible risks and benefits, and whom to contact with questions. A Bill of Rights for Research Participants is also provided.

The Sampling Plan

The sampling procedures were the same as for previous surveys, with one exception. Private (independent) schools, which were added to the sampling frame in 1995, were removed in 2003. Their participation rate had always been highly unsatisfactory; only two agreed in 2001. Because of this, the results could only be generalized to public school students and efforts to recruit private schools were discontinued. Even within the public school
population, because of high school dropout rates the samples can only be considered as representative of students, not all California youth.

**School Grades Assessed**

The CSS assesses students in grades 7, 9 and 11. Each of these age cohorts is of special interest.

- **Grade 7** (modal age 12) is the last preteen year. Levels of alcohol and other drug (AOD) use have consistently been found to be low at this grade, but this is also an age when percentages begin to rise, thus providing a natural baseline for comparisons with older teenage populations.

- **Grade 9** (modal age 14) is typically the first year of senior high school, a time when the prevalence of AOD use has increased substantially.

- **Grade 11** (modal age 16) is a year before high school graduation. By this time most students who will initiate substance use during secondary school have already done so. Collecting information in this penultimate year of high school also provides a more accurate profile of the total population than the senior year because fewer students have dropped out. Research has shown that school dropouts report higher drug involvement than their in-school peers.

**Procedures**

To survey a representative state sample, the sampling strategy included two stages: (1) random selection of schools, and (2) random selection of classrooms in each school for each grade surveyed. Fifty-nine public senior high schools were initially selected at random from a six-cell sampling matrix representing six regions of the state (i.e., San Francisco Bay Area, Los Angeles County, and San Diego County, plus the remainder of the state divided into southern, central, and northern counties). The number of high schools sampled within each regional cell was proportional to the number of senior high schools in that region. Most regions had 10 to 13 schools, with San Diego lower at four schools. Half of the schools in the previous sample (selected at random) were retained in each cell to promote continuity over time. The school sample in each region resulted in an appropriate representation of regular (or comprehensive) high schools and continuation high schools.

For each comprehensive high school a “feeder” junior high or middle school was selected with a demographic profile in grade 7 that was closest to that of the high school student body. This produced a total target public school sample of 106 schools, of which 47 schools included 7th graders and 59 were high schools (including continuation schools). We contacted two additional high schools (with feeders) in each region in order to compensate for school attrition (loss of schools in the sample), which previously contributed to delays in survey administration. In total, we contacted 119 schools to participate.

The Office of the Attorney General sent invitations to the superintendents of each school district containing a targeted school. Once district approval was obtained, WestEd staff contacted the individual school principals.
Sample Size and Characteristics

**School Sample**

As Table 1 shows, 113 schools participated, of which 50 were middle schools, 63 high schools (compared to 50 and 63 in 2001, and 47 and 65 in 2003). The larger number of high schools reflects the inclusion of 11 continuation schools (representing 5% of the state enrollment) that do not have feeder middle schools. Compared to 2003, considerably fewer schools declined to participate or complete the survey (only 6 out of 119 contacted). Overall, the target sample number of 59 high schools was exceeded by four high schools. We fell short of the regional target by a few schools in the Los Angeles area, but exceeded our target in San Francisco. For feeder middle schools, the overall target of 47 schools was exceeded by four, most of which came again from the Bay Area. Compared to 2001, the past two surveys had more uniform participation across regions. Historically, the targeted number of schools has not always been attained for all regional cells. (Table 1)

**Student Sample Characteristics**

The final student sample numbered 10,638 respondents for the three grade levels, with a breakdown of 3,791 in 7th; 3,143 in 9th; and 3,704 in 11th grade. Compared to 2003, the number of respondents increased in grades 9 (by 351) and 11 (by 506), and declined in grade 7 (by 572). In each grade, the 2005 sample was 600 to 1000 students higher than in 2001. The increase in the upper grades for 2005 is likely related to the shift to passive parental consent in many schools, which increased the response rates for these grades. The current sample is one of the largest in the survey’s history. However, all CSS results are reported at the school level in part to compensate for overrepresentation of schools assessing proportionally more students (see Data Analysis and Measurement Issues, below).

**Gender**

Higher proportions of females in all grades (54% - 55%) have participated in the survey since active parental consent began in 1995. Under current mixed consent this difference has narrowed, although females still slightly exceed males in participation rates. Possible gender bias was controlled by statistical weighting, to compensate for over-representation of females. Trends or grade-level estimates are not affected as a result. (Table 1)

**Race/Ethnicity**

Because of California’s demographic diversity, students are asked about their identification to the traditional five main racial/ethnic groups (American Indian or Native American, African-American or black, Asian, Caucasian or white, Hispanic or Latino) as well as “mixed” and “other” alternatives. The survey also asks about 13 Asian and 8 Hispanic subgroups. The 1999 survey incorporated a significant change in the way that “mixed ethnicity” was determined. Previously, students were allowed to select “mixed ethnicity” as a separate option. To be consistent with new federal guidelines, respondents now are asked to check all ethnic groups with which they identified. Students who marked two or more groups were
classified in the “mixed” category. This may account for the slight drop in the proportion of students classified as “mixed” since 1999.

Data on the racial/ethnic composition of actual enrollment is provided by the California Basic Education Database System (CBEDS). Unfortunately, these data are not directly comparable with the CSS because CBEDS does not contain an “other” category and significantly underreports “mixed ethnicity.” This results in a lower proportion of whites, Hispanics, and African Americans in the CSS. But a comparison of the data does reveal similar patterns: Hispanics exceed whites in 7th grade, but the opposite is true in 11th grade. Asians now account for a higher proportion of students in both datasets than African Americans.

The racial/ethnic breakdowns of the grade level samples for the current survey are consistent with earlier surveys in reflecting the ongoing decline in the relative percentages of white (range by grade 22-29%) and increase in Hispanic (32-38%) students enrolled in public secondary schools. The proportions of Asians rose compared to 2003, to 12%-13% per grade; in the upper grades returning to the level in 2001. Whites and Hispanics have generally reported similar high prevalence rates, so this shift in the state’s student enrollment and CSS sample would not appear to be a factor in the results. Asians have generally reported the lowest prevalence percentages, so their slightly higher representation in this sample would not account for the leveling off of results. In fact, the biggest change in the proportion of Asians occurred in 7th grade. (Table 2)

Data Analysis and Measurement Issues

The results were calculated through 1993 using students as the unit of analysis. Since written consent began in 1995, the wide variation in school-response percentages that occurred warranted a more conservative approach using schools as the unit of analysis. Using means for schools rather than students yields more conservative estimates of error variance, and thus producing wider confidence intervals. While estimates of variances changed, it is also important to note that the prevalence percentages generated by both methods have been very similar.

The number of students assessed at a particular school or within a particular region is unlikely to be exactly proportional to overall enrollment. This is especially true because a set number of intact classrooms were surveyed regardless of total enrollment. A school enrolling 150 students at the 11th grade would contribute the same number of cases as a school enrolling 1,000 students. This discrepancy was compensated through further statistical weighting, adjusting the data first for school enrollment and second for enrollment within a region. As just noted, the data were also weighted to correct for overrepresentation of females. This assured that neither gender nor schools nor regions would exert an influence in the final results disproportionate to the number of students they enrolled.

ENDNOTES
INTRODUCTION AND METHODS

Department of Education & Department of Alcohol and Drug Programs have joined the Office of the Attorney General in sponsoring the survey.

The core alcohol and drug items were originally developed in the early 1980s by the Center for the Study of Drug Abuse Etiologies at the University of California, Los Angeles. The CSS uses the same multiple-choice questionnaire for grades 9 and 11. Seventh graders are given a shorter version. Copies of the instruments can be viewed and downloaded from the Internet (www.safestate.org/CSS or www.wested.org/css).

The CHKS was developed under contract by WestEd in partnership with Duerr Evaluation Resources and the assistance of an Advisory Committee of leading health researchers, survey experts, school practitioners, and representatives from state agencies. It consists of a general Core Module and five subject-specific supplementary modules. The Core Module assesses priority topics across health risks areas but is primarily focused on ATOD use and school violence, as well as nutrition and exercise. The supplementary modules provide additional data on alcohol, tobacco, and other drug use; violence and safety; suicide and mental health; diet, exercise, and physical health; sexual behavior and HIV-related risks. A special module is devoted to assessment resilience and youth assets. CDE requires that all California schools administer the Core Module and the school and community asset questions at least once every two years. Other modules are selected by districts on a voluntary basis to meet local needs and interests. Facilitating the integration of the CSS with the CHKS was the close working relationship of the California Department of Education, a cosponsor of the CSS, and the Office of the Attorney General. For more information on the CHKS see the project website, www.wested.org/hks, or call toll-free at 888.841.7536.

See Education Code 51938(b), which stipulates: “Notwithstanding Section 51513, anonymous, voluntary, and confidential research and evaluation tools to measure pupils’ health behaviors and risks, including tests, questionnaires, and surveys containing age appropriate questions about the pupil’s attitudes concerning or practices relating to sex may be administered to any pupil in grades 7 to 12, inclusive, if the parent or guardian is notified in writing that this test, questionnaire, or survey is to be administered and the pupil’s parent or guardian is given the opportunity to review the test, questionnaire, or survey and to request in writing that his or her child not participate.”


The 1995 CSS consent analysis (Skager & Austin 1997) revealed that students from poor families are under-represented and college bound students over-represented with written consent. To determine the precise effect of active parental consent on participation would have required a study comparing two randomly assigned groups, one employing passive consent and the other active parental consent. Without such a study, there was no way to know whether differences in the results since 1995 reflected sample bias, real changes in percentages of use, or both. However, samples and results since 1995 were consistent with those recorded prior to 1995. The shift to allowing mixed consent in 2005 did allow comparison of results between the two methods, although each school selected the consent method they would use and thus were not randomly assigned as would have been ideal.


The answer sheets from just under 2% of the total number of students surveyed were eliminated from the sample as unusable.

In earlier surveys, each response percentage was based on the number of students who had endorsed each alternative or combination of alternatives. Because of the very large number of cases at each grade level, the confidence intervals for interpreting the significance of differences were relatively small. For this and the past two reports, percentages endorsing each alternative were calculated for each school, then weighted and averaged over all participating schools. The overall results were thus based on the number of schools participating in the survey rather than the number of students. As it turned out, the relatively low variance among the school means yielded confidence intervals that were only slightly larger than those that would have resulted from a student-level analysis.

ELEVENTH BIENNIAL CALIFORNIA STUDENT SURVEY

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Between 1999 and 2003, the overall use of alcohol declined in all grades and especially among high school students. The same cohort that reported major declines in drinking (as 7th graders in 2001) continued to report declines as 9th graders in 2003 and 11th graders in 2005. High school students also reported declines in 2003 in heavy alcohol involvement. In 2005, there was a leveling off among upper graders, although several marginal declines still occurred among 11th graders. Among 7th graders, not only were there no further declines evident but several indicators increased marginally. Despite the gains observed since 1999, alcohol remains the most popular psychoactive substance. Its use is endemic in older teen culture, with episodic heavy (binge) drinking being the predominate pattern. Perhaps most noteworthy for 11th graders are the following findings:

- Almost four-out-of-ten had a drink of alcohol in the past 30 days.
- Over one-fifth reported each of the following: (a) current binge drinking — constituting two-thirds of the population of current drinkers; (b) liking to drink to feel it a lot or get very drunk; and (c) ever being drunk/sick from alcohol three or more times.
- One-sixth reported they were regular drinkers.
- One-tenth reported they were regular binge drinkers and almost one-tenth had consumed alcohol on school property (past 30 days) or had been very drunk/sick seven or more times (irrespective of location).

The findings support national studies indicating that, while older adolescents do not drink as frequently as adults, a larger proportion of them may drink heavily when they do drink. While heavy drinking increases markedly between 9th and 11th grades, measures of occasional use remain relatively constant.

**Prevalence of Use**

**Use in Lifetime (Ever)**

For lifetime use, the CSS specifies consuming a “full drink” of alcohol, defined in the instructions as “a can of beer, glass of wine, wine cooler, or shot of liquor.” Restricting responses to a full drink helps prevent inflation of lifetime percentages due to occasional sipping, such as may occur during religious practices or family celebrations, or any other minor forms of consumption. (Tables 3-4)

- Eighteen percent of 7th, 41% of 9th and 62% of 11th graders reported ever having had at least one full drink.
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• In comparison to 1999, these rates are six to nine percentage points lower in the 7th and 9th grades, respectively, and eight points lower in 11th grade. However, compared to 2003, lifetime consumption of at least a full drink of alcohol was up for 7th graders by almost two percentage points (a break from the decline since 1999), and leveled off for 9th and 11th graders, declining by only about one point in each grade.

Use in the Past Thirty Days (Current Use)

For current drinking in the previous 30 days, 12% of 7th, 24% of 9th and 36% of 11th graders reported consuming at least one alcoholic drink. Consistent with the lifetime trends, this percentage was a marginal two points higher than in 2003 for 7th graders, but stable in the upper grades. Still, compared to 1999, current drinking remained five percentage points lower for 9th graders and eight points lower for 11th graders. (Table 12)

Use in the Past Six Months (Recent Use)

For use in the past six months, the “full drink” criterion was not specified in the item, and students were asked about any use of beer, wine, and spirits separately. A total percentage for any alcohol use was then calculated based on the number of respondents who reported having at least one of the three forms of alcoholic beverages at least once in the previous six months. Two-year trends followed the same grade patterns as with the other alcohol time periods.

• Compared to 2003 rates, use of any alcohol in the past six months stayed around 26% for 7th graders, but decreased by a marginal two percentage points to 47% for 9th graders and was relatively unchanged at 61% for 11th graders.

• Since 1999, total six-month alcohol use has declined eight percent in 7th grade and five percent in 9th and 11th grades. (Tables 5-7)

Lifetime and six-month alcohol prevalence rates would be expected to be almost identical for 7th graders, since for most youth first alcohol use is quite recent. However, as seen before, the six-month percentage among 7th graders is actually higher than their lifetime percentage! This is because the former measure refers to any use of any alcohol and is calculated from separate reports for beer, wine and liquor (see below), while the lifetime measure refers to a full drink. Seventh graders are more likely to have tried some alcohol but not had a full drink than older students. Thus this seeming anomaly was reduced among 9th graders and nonexistent among 11th graders. (Tables 2-4)

Beverage Preferences (Past Six Months)

For specific beverages there is an increase associated with grade level in the consumption of spirits relative to beer and wine.

• In 7th grade, beer was the most popular (18.5%), followed by wine (16%), and use of spirits was the least popular (12%). (Table 5)

• In 9th grade, beer drinking remained the most popular (34%), but use of spirits (31%) surpassed that of wine (30%), a consistent finding since 1999. (Table 6)
In 11th grade, spirits became most popular (48%), followed by beer (45%), while wine dropped to third place at 37%. (Table 7)

It appears that the recent declines in overall alcohol use among upper graders are primarily due to reductions in choosing beer and, to a lesser extent, wine. Since 1999, drinking spirits has been relatively stable in 9th and 11th grade, while drinking beer has steadily declined, although it leveled off in 2005 in 9th grade. Among 11th graders, beer and wine drinking fell two points each in 2005. Compared to earlier in the last decade, these beverage-specific trends are consistent with the reductions in overall alcohol prevalence rates than are the heavy-use indicators, as spirits’ drinking is likely to be associated with measures reflecting significant alcohol involvement.

**Frequency of Drinking**

The CSS assesses frequency of drinking in three ways. For lifetime use, it asks whether students had consumed a “full drink of alcohol” once, two or three times, or four or more times. For the past six months, it specifies six categories to assess the regular pattern of use over this time period, from “1 - 2 times” to “once or more per day.” For the past 30 days, it requests more specifically the number of days students had a “at least one drink of alcohol,” using “20 or more” days as the definition of daily use (as is done in other surveys). By assessing frequency of use, those who tried alcohol only once versus those who drank on several occasions and regularly can be distinguished.

**Lifetime**

If a high school student has ever consumed a full drink of alcohol at least once, he/she is likely to have done so on multiple occasions. The percentages consuming a full drink of alcohol at least four times rose across grades from 5% in 7th to 19% in 9th and 41% in 11th. These more-involved drinkers account for about 30% of the lifetime drinkers in 7th grade, 50% of those in 9th, and 66% in 11th.

With respect to changes from 2003 to 2005, the percentage of lifetime drinking on four or more occasions increased among 7th graders by almost two points, but decreased among upper graders by over 1.5 points. More experimental drinking (1-3 times) was stable in all grades. (Table 13)

**Past Six Months**

The majority of students who drank in the past six months can be characterized as moderate or occasional alcohol users, but the percentage declined with grade. The proportion who reported drinking only one or two times in the past six months was relatively constant across grades, at 16%, 22%, and 19%. Twenty-three percent of 7th, 36% of 9th, and 40% of 11th graders only consumed alcohol a few times or less. These moderate drinkers are 85% of six-month alcohol users in 7th grade, dropping to 66% in 11th grade. Likewise, the proportion of students who drank at least once a month (who we can define as regular drinkers) increased with each grade.
ALCOHOL USE

- **Monthly Drinking.** The percentage indicating that they drank once per month or more increased markedly by grade, from 4% of 7th graders to 21% of 11th graders. These students constituted 14% and 35% of the drinking populations for these grades.

- **Weekly Drinking.** Drinking some kind of alcohol *once a week* or more often — a clear measure of regular drinking rather than occasional or experimental use — was reported by 3% of 7th, 7% of 9th and 14% of 11th graders. These percentages more than doubled with each jump in grade. Weekly drinkers also constituted a higher proportion of the drinking populations from grade to grade – 10% in 7th, 15% in 9th, and 23% in 11th. Among upper graders, weekly use of beer and spirits were reported by similar percentages, exceeding weekly use of wine (about 5% vs. 3% in 9th and 10% vs. 4% in 11th).

- **Daily Drinking.** Use of alcohol every day was rare — reported by only 1%, even in 11th grade. (Tables 5-7, 8)

Comparing 2003 to 2005, weekly drinking remained level in 7th and 9th grades. It decreased by two points among 11th graders, while occasional drinking (once to a few times) increased by three points.

**Past Thirty Days**

Similarly, most drinking in the past 30 days was only occasional (1-2 days), especially in middle school. However, by 11th grade almost half of current drinkers are regular drinkers (consumed on three or more days). The results have changed little since 2003.

- One to two days of drinking occurred among 8% of 7th, 13% of 9th, and 19% of 11th graders.

- Regular drinking on three or more of the past 30 days — likely reflecting a weekly pattern — was reported by 4% of 7th, 10% of 9th, and 17% of 11th graders. These rates are only somewhat higher than for weekly drinking over the past six months. They are virtually the same as in 2003, only up about one point in 9th grade and down by one point in 11th. Regular drinkers form a larger proportion of the drinking population at each grade level – 32%, 43%, and 46%, respectively.

- Only 5% in 9th and 6% in 11th reported having had a drink of alcohol on *10 or more days*. Only one to two percent of 9th or 11th graders reported drinking on *20 or more days*, a standard definition of daily drinking and consistent with the six-month daily use rate. (Table 13)

In sum, frequent drinking (be it weekly or more in the last 6 months or three or more days in the last month), accelerates around grade 9. By 11th grade, almost one-quarter of drinkers report consuming alcohol at least once a week over the past six months and almost one-half drank on three or more of the past 30 days.
Intensity of Alcohol Involvement

Some students drink regularly, though only in small amounts, while others drink less often but more on each occasion. The CSS asks respondents three questions to assess intensity of alcohol involvement: (a) the frequency of current binge drinking; (b) the frequency of ever being “drunk” or “very sick” from alcohol; and (c) preferred drinking style (how much they generally like to drink).

Binge Drinking

Consuming five or more drinks in a row (within a couple of hours) in the past 30 days is a standard indicator of episodic heavy drinking, often called “binge drinking.” This kind of drinking is particularly dangerous for adolescents who have limited drinking experience (and thus low tolerance for alcohol) along with relatively low body weight and surely results in obvious intoxication for virtually all respondents. This level of consumption renders them highly vulnerable to a variety of acute alcohol-related problems, including engaging in high-risk activities, including driving while intoxicated or unprotected sex. In addition, it is likely to produce a blood alcohol level above the state legal minimum for driving for all but extremely heavy drinkers.

- The percentage of binge drinkers increased by just one point in 7th grade to 5% and remained level in 9th at 12%. It fell two points to 21% for 11th graders. Since 2001, binging has declined almost five points among 11th graders, but is still reported by over one-fifth of respondents.
- Binge drinkers constituted almost half (48%) the current drinking population in 9th grade and 60% in 11th grade.
- In 11th grade, about one-tenth (11%) of the total sample (down only one point) binged on three or more days, probably reflecting a weekend pattern of binge drinking. They accounted for 30% of current drinkers and over half of all binge drinkers. In 9th grade, regular bingeing occurred among 5%. (Table 13)

It is encouraging that this dangerous behavior has somewhat declined since 2001 among 11th graders. Still, over one-fifth of these older students were binge drinkers and they made up almost two-thirds of all current drinkers, just as in 2003. If an 11th grader drinks, it is likely that he/she will have binged one or more times in the past 30 days. Over half of these appear to binge weekly (3+ out of 30 days). Moreover, the increase in binge drinking between 9th and 11th grade (from 12% to 21%) is higher than that for any drinking on 1-2 days (from 13% to 19%). A current drinker by 11th grade is likely to be not only a regular drinker but also a heavy drinker. Addressing this should be one of the most pressing priorities for prevention.

Lifetime Drunkenness

The frequency with which students had ever been “very drunk or sick” from alcohol one or more times at least doubled with grade level, from 8% in 7th to 21% in 9th and 40% in 11th, about the same as in 2003. Inexperienced drinkers may get drunk and even sick once or
twice without intending to do so. But as the frequency of intoxication increases, it is more likely the respondent deliberately drinks to get drunk or is simply unable to control his or her drinking regardless of intention.⁶

- Six percent of 7th, 13% of 9th and 22% of 11th graders reported being “very drunk or sick” one to two times. Compared to 2003, the percentage remained constant for 7th grade, and was virtually stable for 9th and 11th graders.

- Only 2% of 7th graders, but 8% of 9th and 18% of 11th graders (almost half of students ever drunk), reported being drunk or sick three or more times in their lifetimes. This heavy-use indicator was a marginal two points lower than in 2003 among 11th graders (but level in 9th).

- Only 3% of 9th and 8% of 11th graders reported seven or more instances. (Table 16).

**Drinking Styles**

“Drinking style” refers to how respondents like to drink or feel the effects of alcohol (e.g., a little or a lot).⁷ It is an indication of intended effects and, by inference, approximates quantity consumed. When asked “How do you like to drink alcohol, the majority of 7th graders indicated moderately, but this preference weakens significantly by 11th grade.

- Similar percentages across grades, from about one-sixth to one-fifth, indicated that they preferred to limit themselves to “just a sip or two” (16% in 7th, 20% in 9th and 17% in 11th). The percentages stayed essentially the same for all grades since 2003.

- Eleven percent of 9th and 21% of 11th graders (but only 4% of 7th) drank to “feel it a lot” or “get very drunk.” For 11th graders, this percentage exceeds that for just sipping. About one-third of this group in the upper grades (4% in 9th and 7% in 11th) indicated that they like to get very drunk.

These drinking-style results are quite consistent with the frequency-of-use data in showing indicators of occasional use remaining relatively constant across grades compared to the rise in heavy drinking between 9th and 11th grades. The percentages of upper graders who like to feel it a lot/get drunk are very similar percentages to those for binge drinking.

The “get very drunk” percentages are consistent with the rates for being drunk/sick on seven or more occasions and regular binge drinking. Both upper grades have experienced a decline in the percentages who prefer to feel the effects of alcohol “a lot” since 2001, but the trend is stronger for 11th graders (5 points) than 9th graders (3 points). This reflects the actual declines in use that were reported. However, even this decline leveled off in 2005. Seventh graders have shown little change on this measure. (Table 7)

**Excessive Alcohol Use (EAU)**

The Excessive Alcohol Use (EAU) index is a summary measure designed to identify the percentage of respondents who used alcohol abusively. The EAU is based on meeting at least one of three criteria: (a) engaged in binge drinking (5 drinks in a row) three or more days in
the past 30 days; (b) was very drunk or sick three or more times in their lifetime; or (c) liking to drink to get drunk or feel the effects a lot.

- About 6% of 7th, 14% of 9th and 27% of 11th graders were classified as EAU.
- The percentage for 11th graders was almost two points lower than in 2003, about a 7-point decline since 1999.

EAU percentages were only slightly higher than those for the specific measures from which they were derived, because binge drinking and drinking to get intoxicated are highly correlated indicators. Consistent with the trends reported for the three individual measures, EAU was virtually stable in 7th grade (increased by only one point), level in 9th grade, and declined three points in 11th. (Table 18)

**Current Drinking at School**

While any substance use at school means willingness to take serious risks, doing so frequently signifies both heavy substance use involvement and possible estrangement from school (since expulsion would be the usual result of being caught). Special attention is needed for students who have used at school more than once.

- Use of alcohol on school property at least once in the past 30 days increased only marginally (1.5 points) for 7th graders to 4% in 2005 and remained stable among upper graders at 8-9%.
- Few high school students reported drinking at school on three or more of the past 30 days, even in 11th grade (less than 3%). However, these juniors constituted one-third of school drinkers. (Table 15)

As discussed in the Section 3, higher percentages reported using marijuana at school on three or more days as well as for current use of alcohol or marijuana and for ever being drunk or “high” on alcohol or drugs at school.

ENDNOTES

1 HS 26/MS 22, “In your life, have you ever tried one full drink of alcohol (such as a can of beer, glass of wine, wine cooler, or shot of liquor)?”
2 HS 43/MS 38: “During the past 30 days, on how many days did you use…at least one drink of alcohol?”
3 HS/MS 8-10, “During the past six months, about how many times did you use these substances without a doctor’s orders…beer, wine, liquor?” Because the six-month alcohol prevalence rates are calculated based on the frequency of use of each of three beverages, there are more opportunities for respondents to make a stray or random mark, which could lead to inflating six-month rates compared to lifetime in all grades.
4 HS 44/MS 39: “During the past 30 days, on how many days did you use…five or more drinks of alcohol in a row, that is, within a couple of hours?”
5 The scope and nature of this high level of heavy drinking, and its implications at the individual, school and social level, are discussed in a special supplementary report of the 2003 CSS findings (Austin and Skager forthcoming, Heavy alcohol and drug use among California high school students, 2003-2004. Sacramento, CA: Office of the Attorney General).
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6 HS 38/MS 33, “During your life, how many times have you been... very drunk or sick after drinking alcohol?” These are self-perceptions. Because they lack drinking experience, younger respondents may interpret drunkenness differently than adults. To adjust for this, the qualification of “very drunk or sick” was added. Because of their lower body weight, youth also generally require less alcohol than adults to experience inebriation. This is particularly true for females.

7 HS 53/MS 46: “How do you like to drink alcohol?”
This section summarizes results for illegal use of substances other than alcohol or tobacco, including misuse of pharmaceuticals. Also discussed are polydrug use (more than one substance at the same time) and measures of any use of either alcohol or other drugs (AOD use). On the 2003 survey, although substantial numbers of older teens continued to report at least some drug use, there was a general declining trend among 9th and, especially, 11th graders. Promising reductions occurred in the use of marijuana, the most popular drug, as well as ecstasy, widely used in the club scene. In 2005, little change occurred. The largest change for any specific drug was a marginal two-point increase in inhalant use among 7th graders. Aside from this stability, the most notable finding is from a new question on prescription painkillers, which turned out for 11th graders to exceed all other drugs in popularity with the exception of marijuana. As was found for 11th graders in 2003:

- Two-thirds had used alcohol or a drug at some point in their lives.
- About four-in-ten reported ever using marijuana, and two-in-ten were current marijuana users (past 30 days).
- One-fourth had ever tried a drug other than marijuana.
- About one-fifth was classified as a High-Risk Drug User (HRU) and an equal proportion had been drunk or “high” on school property.
- About one-tenth used marijuana once a week or more.

Prevalence of Use

High school respondents were queried about use during the previous six months of each of 11 different classes of drugs, while 7th graders were asked about six classes. Questions on lifetime (seven categories) and current use (five categories) assessed prevalence of the most commonly used drugs. As already noted for alcohol, among 7th graders six-month percentages are often very close to lifetime. Marijuana continues to be the most popular drug after alcohol for high school students, although use of inhalants in grade 7 remains close. (Tables 3-7,12)

Marijuana

Regardless of grade, about half of the respondents who had ever experimented with marijuana in their lifetimes were also current users, as found previously. Compared to 2003, there were no meaningful changes in marijuana use across grades for all three of the time intervals measured.
As in 2003, 8% of 7th and 22% of 9th graders reported using marijuana at least once in their lifetime. After a five-point decrease in 2003, lifetime use among 11th graders stabilized at 38%.

Seven percent of 7th, 19% of 9th, and 30% of 11th graders reported using marijuana in the previous six months.

Thirty-day percentages remained stable at 5%, 13%, and 19% by ascending grade, although the 11th grade percentage was down one point. Half of 11th graders who ever tried marijuana thus remained current users, as has been found in previous surveys.

Looking back to 1999, what is most striking is the overall stability in marijuana use prevalence among younger students. In 7th grade, it has been stable since 1999 at 8% lifetime and 4-5% current. Six-month rates have been consistent at 6-7% since 2001. Among 9th graders, only lifetime use shows evidence of a declining trend, and that only a slight one point in 2003 and again in 2005 (to 22% vs. 24% in 1999 and 2001). For 11th graders, there were significant declines in 2003 (three to five points). Although this too has leveled off in 2005, current rates are still much lower than in 1999.

**Prescription Painkillers**

Students responding to the current survey were asked for the first time about use of the prescription painkillers OxyContin, Percodan, and Vicodin. This question was included in response to growing concerns over diversion of these drugs to use by non-clinical adolescents. Lifetime use of this class of substances was only 4% in 7th grade. However, it rose to 9% in 9th and 15% in 11th, with six-month use similarly at 9% and 14%. After marijuana, this category of drug was the most commonly used in 11th grade, about equivalent to inhalants in 9th, and next in popularity after inhalants in 7th.

**Inhalants**

Use of the broad class of inhaled substances (e.g., glue, hairspray, paint, butane, gasoline, amyl nitrate, rush, poppers, laughing gas) has consistently shown less grade difference than other substances. Indeed, inhalants often have been more popular in 7th than 11th grade, probably because they are so readily available in homes and local stores. The 1999 survey was the first in which the percentage of 7th graders reporting use of inhalants was less than use of marijuana. Overall there was little change in the prevalence of inhalant use since 2003 in the upper grades, but there was a marginal rise in 7th grade – in the current survey similar percentages reported using both inhalants and marijuana. Among 11th graders, inhalants ranked as the third most widely used category of drug, after marijuana and prescription painkillers. Among 9th graders, it is approximately the same as for painkillers.

**Seventh Grade.** In this grade inhalants account for most use of illegal drugs other than marijuana. In 2005, both lifetime and current use of inhalants increased marginally by two points to 8% for lifetime and to 5% for current (after remaining at 6% and 3%, respectively, for the last three surveys) and. Six-month use remained virtually stable (rising only one point) at 9%, the same rate as in
1999. About half of those who had ever tried inhalants had used it more than once (4%).

- **Upper Grades.** Among 9th and 11th graders use was even more stable compared to 2003, with lifetime rates at 10% (both grades); six-month use at 8% and 6%, respectively; and current use, at 5% and 4%. Although for 11th graders, lifetime incidence remains four points lower than in 1999, current and six-month use, in contrast, have changed little over the past four surveys.

**Ecstasy (MDMA)**

In the 2001 survey, ecstasy or MDMA (methylenedioxymethamphetamine) was targeted for special study and several questions were added on its use, availability, and perceived harm to help guide prevention efforts. At that time, lifetime use stood at 6% and 11% for 9th and 11th, respective. The 2003 results revealed decreases in high school for lifetime and six-month use (30-day ecstasy use is not assessed). In 2005, this trend leveled off. Lifetime ecstasy use registered at 4% among 9th graders and 6% among 11th graders. Six-month use was close at 4% and 5%. As in the past, use was negligible in 7th grade (1%).

**LSD/psychedelics**

Prevalence for the three time intervals for LSD and other psychedelics generally stabilized among upper graders (this category is not asked of 7th graders) after showing declines in 2001 and, especially, 2003. Use remained constant in 9th grade at 3% for lifetime and six-month and at 2% current. In 11th grade, current use remained at 3% (as it also was in 2001). Lifetime and six-month use each declined only very slightly (one point) to 4%. However, lifetime psychedelic use has dropped by two-thirds since 1999, when it stood at 12%.

**Cocaine and Methamphetamine**

The similar usage rates of cocaine and methamphetamine noted in 2003 for the three intervals measured across grades is again apparent in the 2005 results. These two stimulant drugs are likely used interchangeably depending on availability and cost. Prevalence in all three grades has been stable since 1999.

- Percentages for **cocaine** among 7th graders remained comparable to 2003 at 2-3% regardless of the time interval assessed. Grade 9 also remained relatively unchanged for all intervals since 2003, with six-month, lifetime and current all at 3-4%. Prevalence in grade 11th was only somewhat higher (than for 9th) at 6% for six months, 7% lifetime, and 4% current. There has been little or no change since the previous survey.

- Trends for **methamphetamines** were similar, with 7th grade remaining stable at 3% for lifetime and six-month use. Grade 9 was also stable across all intervals with six-month and lifetime at 4% and 30-day at 3%. In 11th grade, six-month and lifetime use was virtually the same at 6% at 7%. Current use is only 4%. There is still no sign that the sharp rise in methamphetamine use among adults in the latter 1990s has spread to in-school youth. Even among 11th graders, there has been little change in prevalence since 1999, and the slight change that has
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occurred has been a decline. Six-month and current use are down one point in 2005; lifetime has dropped gradually 2 points since 2001. In contrast, treatment agencies have recently noted a significant increase. However, most of the latter youth have dropped out of school and enter treatment through the juvenile justice system.

Heroin

Only two percent of high school respondents reported using heroin at least once during their lifetimes, as has been the case since 1999. Reports of heroin use among school-aged youth thus continue to be negligible.

Polydrug Use

Respondents were asked how often in the past six months they used two or more substances (excluding tobacco) on the same occasion (e.g., beer and marijuana). Beyond the compounding of intoxicating effects, this practice involves particular risk because potentially dangerous synergistic interactions may result when different drugs are used together. The percentage of students engaging in polydrug use in the past six months varied negligibly from 2003 totals, but followed the same grade-level pattern seen for other drugs: up negligibly (one point) for 7th grade to 4%, stable for 9th grade at 11%, and down a marginal 2 points to 19% in grade 11. Polydrug use among 11th graders has declined six percentage points from 25% in 1999, but in 7th and 9th grade the measure has been stable over the past six years.

Steroids

In a new item for 2005, only 2% of both 9th and 11th graders responded that they had used any steroids in the past 12 months “to build up muscle or increase performance or endurance.” The percentages were similar but slightly higher for use in the past 12 months of any “performance-enhancing supplement that claims to build muscle or increase strength and endurance,” at 3% for 9th and 5% of 11th graders. (Table 11)

Measures of Overall Use

This section presents the results of three summary measures: use of any drug other than marijuana, any illicit drug, and any alcohol or other drug. For all three measures, results were calculated based on responses about the use of individual substances.

Any Drug Other Than Marijuana

Compared to 2003, lifetime use of any drug other than marijuana rose two percentage points in 7th grade, from 10% to 12%. It increased five points in each of the high school grades, from 15% to 19% in 9th, and 21% to 26% in 11th. Similarly, for the past six months, non-marijuana drug use in 7th grade increased only one point to 11%, but in 9th grade it increased by four points to 17%, and in 11th by five points to 22%. These increases among upper graders undoubtedly are due to the addition of prescription painkillers to the survey, as use of
most other drugs did not increase. In other words, they are a survey artifact rather than a change in behavior. In 7th grade, the smaller increases reflect the slight rise in inhalant use.

In 7th grade, because of the relatively high rate of inhalant use, total use of drugs other than marijuana (12%) exceeded the prevalence of the latter (8%). In 11th grade, total non-marijuana drug use drops to two-thirds of that for marijuana (38%). The lifetime prevalence of most specific drugs other than marijuana did not exceed 8%, with the exception of inhalants at 10% and prescription painkillers at 15%.

**Any Drug Use**

In 2003, overall prevalence rates for any drug dropped notably for every time period assessed. This was due to declines in the use of most commonly used drugs. For 2005, marginal increases occurred (2-4 points) in lifetime and six-month rates, but not for any current drug use. The increases again were due largely to the influence of the addition of prescription painkillers, which were included in lifetime and six-month prevalence questions but not in the 30-day. For all grades, about half of the respondents who had ever tried a drug were current users.

- **Lifetime** use of any drug doubles between 7th and 9th grades from 16% to 30%, and increases again by half in 11th to 45%. In 2001, nearly half of 11th graders had tried at least one drug. This is still close to the current level (45%), though not strictly “normative” in the sense that it does not represent a majority.

- **Six-month** prevalence rates of any drug use also increased in the upper grades by 3-4 points, to 26% in 9th grade and 38% in 11th. Six-month use for 7th graders at 14% changed little.

- Percentages for 30-day drug use did not show the marked increases recorded for the other two intervals. Compared to 2003, 7th graders reported a marginal increase of two points to 8%, 9th graders increased one point to 15%, while 11th graders were level at 22%. These percentages are half those for lifetime drug use, suggesting half of students who try drugs do not become regular users.

**Any Alcohol or Other Drug Use**

The proportion of youth who report ever using any alcohol or other drugs increases markedly across grades. Only one-third (33%) of 11th graders were lifetime abstainers from the use of any alcohol or other drugs, even though this is a primary goal of many prevention education programs. In comparison, 75% of 7th graders abstained, dropping to 52% in 9th. The proportion of lifetime AOD users did drop noticeably between 1999 and 2003 in all grades, but again in 2005 we find this decline stabilizing in the upper grades and rising marginally in 7th. This reflects the trends found for the most commonly used substances within grades. Compared to the 2003 survey, the percentage reporting any lifetime AOD use rose in 7th grade by two percentage points to 25%. It remained the same in 9th and 11th grades, at 47% and 67%, respectively. Any AOD use in the past six months was reported by similar percentages as for lifetime across grades, unchanged from 2003, at 30%, 50%, and 65% by ascending grade. Overall the results suggest little recent progress in increasing the proportion of youth who avoid any AOD use.
Frequency of Use

Lifetime

Only 5% of 7th graders had tried marijuana more than once, but they were still roughly half of all marijuana users in that grade. In contrast, 12% of 9th and 24% of 11th graders had used marijuana four or more times, half and two-thirds of respondents, respectively, who had ever tried it. The majority of high school students who had ever tried any other specific drug also used it more than once. Among 11th graders, 3% reported using ecstasy and psychedelics more than once, 5% cocaine and methamphetamine, 6% inhalants, and 11% prescription painkillers. Eight percent had used painkillers four or more times. (Tables 3-4)

Past Six Months

For virtually all substances in all grades, the proportion of respondents who used less than once a month over the past six months — defined as occasional users — greatly exceeded the proportion reporting monthly or more frequent use, a trend that was noted in 2003. However, this difference narrowed, as students grew older. The exceptions were limited to 11th graders and included marijuana and use of any illicit drug. (Tables 8-10)

Marijuana

Marijuana is the drug of choice among young people who are regular or frequent users of drugs. Four-in-ten marijuana users consumed the drug once a month or more often. Although the overall prevalence of marijuana use is lower than for alcohol, among weekly users the difference narrowed — and among daily users marijuana exceeds alcohol. For 11th graders in 2003, monthly and weekly use of marijuana in the past six months was slightly lower than in 2001. In other words, the overall decline in prevalence among the older teens observed two years ago appeared due to a reduction among both regular and occasional users. A similar decline was not evident in 2005.

- Two percent of 7th, 7% of 9th and 13% of 11th graders used marijuana at least once per month over the past six months. This compares to 5%, 11% and 16%, respectively, for less than once a month.

- Use of marijuana at least once a week over the past six months held steady among 9th and 11th graders at 6% and 10% respectively. In other words, about one-third of six-month marijuana users in the upper grades were weekly consumers. These are lower weekly rates than for alcohol (7% for 9th and 14% for 11th), but about one-quarter of the marijuana users use that drug weekly, a higher proportion than for alcohol.

- Daily use in the past six months was 3% in grade 9, and 4% in 11th, exceeding daily alcohol drinking (1% for both grades).
**Other Drugs**

Frequent use of the other classes of illicit drugs — inhalants, prescription painkillers, methamphetamine, cocaine, LSD or other psychedelics, and ecstasy — was much lower than for marijuana. Even in 11th grade, monthly or more frequent use of *any drug other than marijuana* did not exceed about 3% of students. Weekly use was about 2% or less. The one exception is *painkillers*, with 4% weekly use.

**Past 30 Days**

The majority of current marijuana users used on three or more of the thirty days before the survey. Such frequent or regular use of other drugs was lower, at about 2% or less. (Tables 13-14)

- Use of *marijuana on three or more days* was unchanged in 9th grade at 7%, and declined two points in 11th grade to 11%, down four points since 2001. This likely reflects a weekly pattern of use, as these results are consistent with reported weekly use of marijuana in the past six months. *These respondents account for the majority of current users in 11th grade.*

- In grade 11, 4% were *daily marijuana users* (20 or more of the past 30 days); in grade 9, 3%. This is the same as reported for daily users in the past six months and, as consistently found, twice the daily use rate for alcohol.

- The percentages of students using a *drug other than marijuana* on more than one or two of the past 30 days was marginal.

**High-Risk Drug Use**

A summary measure of High-Risk Drug Use (HRU) was calculated based on a combination of six-month indicators, including weekly or more frequent use of marijuana, any use of cocaine, and/or sampling other illicit drugs. Alcohol consumption above a minimal level is also required as a validity check. Youth who used any drug in the past six months, but did not meet the HRU criteria, were classified as Conventional (or occasional) Users (CON). The proportion of HRU generally triples between 7th and 9th grade and then almost doubles between 9th and 11th. (Table 18)

- For 7th and 9th grades, the proportions of HRU have been quite stable for the past six years, at from 3-4% for 7th and 9-11% for 9th, with 2005 rates rising only one point to the high end. Correspondingly, CON declined one point in both grades to 26% and 40%.

- For 11th grade, in 2003 there was a three-point decline in HRU and almost four point rise in CON, with no change in the proportion of abstainers. For 2005, the rates remained the same, at 17% for HRU and 48% for CON.

- The proportion of abstainers remained flat in all grades, as previously noted.
“High” on Drugs (Lifetime)

The total percentage reporting ever being “high” or “loaded” on drugs has gone mostly unchanged since 2003. Seventh and 9th grades remained level at 7% and 20%, respectively, and 11th grade was stable, with a slight (one point) decrease to 37%. Almost half of this group in 9th and 11th (17%) grades reported ever being high seven or more times.

- Being “high” three or more times was reported by 3% of 7th, 12% of 9th, and 25% of 11th graders, similar to 2003 (with only one point increase for 7th and one point decrease for 11th grade).
- Nine percent of 9th and 17% of 11th graders reported having been high loaded seven or more times. This is again very close to our findings in 2003. Not only does this group amount to almost half of the students reporting being high/loaded at least once, but also in 11th grade they exceed the proportion reporting only 1-2 times (11%). (Table 16)

Among the total sample, percentages for being high/loaded on drugs at least once are similar to those for being drunk or sick on alcohol at least once in 7th grade and only slightly lower in the upper grades. However, a higher proportion of lifetime AOD users reported getting “high” on drugs than drunk on alcohol. For example, almost two-thirds of 11th graders who had ever been “high” on a drug reported three or more instances (25% out of the 36% who had ever used), compared to about half of those who had ever been very drunk (18% out of 40%). Among those 11th graders who ever used AOD, the proportion ever intoxicated is also higher among drug users (36% out of 45% for drugs vs. 40% out of 62%). This may reflect that drug users are more focused on an intoxicated state than drinkers or less able to moderate their use. An alternative explanation may be that “getting high” carries a less negative connotation or different meaning than “getting drunk.”

Style of Drug Use

For the first time in 2003, this survey assessed how “high” drug users in senior high school usually got. This makes it possible to compare data on drug-use style or preference to the drinking-level preferences reported in Chapter 2.5 By inference, this is another indication of how intensely these students are involved with drugs. Upper graders were given response options of not usually getting “high,” getting a little “high,” moderately “high,” and very “high.” The majority — 12% of 9th graders and 23% of 11th — reported moderately or very “high,” the same as in 2003. This compares to 11% and 21% for liking “to feel it a lot/until I get really drunk” among alcohol users. Moreover, about half of these students — 6% and 11%, respectively — reported that they liked to get very “high.” Percentages were lower (4% and 7%) for getting “really drunk.” Together with the results for lifetime intoxication, this suggests that drug users are somewhat more intent on getting “high” than alcohol users to get drunk, but again this difference may also be due to interpretation by respondents of the meaning of getting “high” versus very drunk. (Table 17)
Drug Use at School

As already noted for alcohol, substance use at school, especially more than once, is a red flag for highly problematic involvement with substances, risk taking, and probable estrangement from school (see Chapter 2). This section presents results for frequency of three other measures of substance use at school: (a) current (last 30 days) marijuana use, (b) current marijuana or alcohol use, and (c) ever being drunk or “high” on alcohol or drugs. The findings are little changed from 2003 or 2001. (Table 15)

- **Current Marijuana Use.** Any use of marijuana at school in the past 30 days was reported by 3% of 7th and 7% of both 9th and 11th graders. This is only a marginal increase in 7th and 9th grades from 2003, while 11th-grade prevalence is unchanged. About half of students who used in high school did so three or more days (3% in 9th grade and 4% in 11th). Compared to results for current alcohol use at school, the overall prevalence for marijuana is slightly lower (about two points), but the results for 3 or more days are higher. Why the overall incidence of marijuana use at school should be lower than for alcohol is unclear, but these results suggest greater involvement in substance use among the campus marijuana users. In addition, marijuana is more easily concealed, more quickly consumed, and longer lasting.

- **Current Use of Alcohol or Marijuana.** Using either alcohol or marijuana at least once on school property in the past 30 days was one-third to almost twice as high as for marijuana alone, at 5% in 7th, 11% in 9th, and 12% in 11th grade. In the upper grades, these percentages are 2-3 points lower than in 2003, even though the rate for alcohol and marijuana individually remained stable. This suggests more students are using both.

- **Ever Drunk/High.** Five percent of 7th, 13% of 9th, and 23% of 11th graders reported being drunk on alcohol or “high” on drugs on school property. These percentages are virtually unchanged since 2003 in the upper grades but an almost two-point increase in 7th. Over half of these respondents in 11th grade — 12% of the total sample — reported three or more occurrences of lifetime intoxication at school and 7% reported seven or more occurrences.

ENDNOTES

1 See Section 2 for the item wording for these prevalence questions.
2 The small difference between the lifetime and 6 month measures for 7th graders (the latter 1% higher) is likely due to random error, especially likely in the youngest age group where overall frequencies are relatively low.
3 Any AOD use in the past six months in 11th grade was also nearly twice as high as in 7th grade (65% vs. 33%).
4 Inclusion in the High-Risk User was based solely on engaging in any of the following behaviors over the past six months:
   - Cocaine use in any form (including crack)
   - Frequent polydrug use (three or more times)
   - Regular marijuana use (weekly or more frequent) or
   - A pattern of use of numerous other drugs besides cocaine or marijuana or of high frequencies of use of individual drugs.
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5 HS 54, “If you use marijuana or other drugs, how high (stoned, faded, wasted, trashed) do you usually get? (not high at all, a little high, moderately high, very high)”

6 HS 52/MS 45: “During the past 30 days, on how many days on school property did you use…marijuana?”

7 HS 40/MS 35: “During your life, how many times have you been drunk on alcohol or high on drugs on school property?”
Chapter 4
Use-related Problems, Dependency & Cessation Efforts

High school students were asked several questions about adverse consequences related to AOD use and use-cessation efforts. This section reports the percentages of 9th and 11th graders who had ever experienced any of 12 problems as a result of their alcohol or drug use. Along with the data on drinking and driving, these results provide a gauge of the social costs of AOD use for students and society. In addition, students are asked about other experiences typically noted in diagnosing dependence or abuse, including their own perceived need for treatment or counseling and personal efforts to reduce or stop use. Based on these measures, we then estimated the potential size of the proportion of respondents who may be abusive or dependent users in need of intervention. The degree to which use is problematic is the first criterion for determining such need.

Problems Experienced

Ninth and 11th graders identified which of 12 potential pharmacological, personal, school, and social problems they had experienced associated with use of alcohol and drugs individually, from which we calculated the prevalence of problems from any AOD use. With the possible exception of passing out, use-related problems are likely to be underestimated (or underreported) by students. For youth (or adults) whose AOD use causes significant problems to themselves and others, there is often a tendency to either deny problems or fail to connect those problems to their AOD use. While respondents may underestimate the frequency of these problems, these data nevertheless underscore how significantly adolescent AOD use contributes to health, academic, personal, and social problems. Results are summarized for problems related to AOD use overall and then separately for alcohol and other drugs, as reported by the total sample as well for alcohol users compared to drug users. The results for problems experienced from drinking or drug use remain similar to those reported in 2003. Because rates did not appear to have changed much across survey, this report focuses on differences between grades and between the substances. (Tables 19-21)

Total Sample

Overall Problem Prevalence

One-fifth of 9th graders and almost one-third of 11th (32%) reported at least one problem from either alcohol or drug use; and 10% and 18%, respectively, reported two or more problems.
These rates are only slightly lower (1-2 points) than reported in 2003 for 9th grade and virtually the same in 11th.

In the case of alcohol, 16% of 9th and 27% of 11th graders in the total sample reported one or more problems. For drugs, as in previous surveys, percentages were slightly lower – 11% for 9th and 18% for 11th graders. For both substances, about half of these amounts reported experiencing two or more problems: 7% and 14% for alcohol and 5% and 8% for drugs.

The higher rates for alcohol reflect the greater prevalence of drinking in the total sample. As discussed below, the differences between alcohol and other drugs narrowed markedly when the percentage of problems reported by users alone were calculated. Lifetime use of alcohol was 41% of 9th and 62% of 11th grade, compared to 30% and 45%, respectively, for drugs. This makes it difficult to estimate how common problems are irrespective of the class of substances. Comparing prevalence problems for only students using alcohol or drugs, the differences between substances narrows. Among 9th-grade users, the total-problem percentages reported for alcohol and drugs are equivalent (38% for any problem and 17% for two or more). Among 11th graders, more problems still resulted from alcohol than drugs, but the differences narrowed markedly, to 43% versus 39% for “any problem,” and 22% versus 18% for “two or more problems.”

The majority of alcohol and drug users in 11th grade did not report any problems associated with use, helping to account for the persistence of AOD use among youth. However, the proportion reporting no problems was higher among users of drugs than alcohol.

- Twenty-eight percent of 9th and 37% of 11th graders who drank reported no use-related problems. These percentages were greater than for one or more problems by 10 to 12 points.

- In contrast, 13% of 9th and 22% of 11th graders who used marijuana or another drug reported no use-related problems, amounts that were only marginally greater than for those reporting one or more problems.

Specific Problems Reported by the Total Sample

Generally, the prevalence rates across problems from any alcohol or drug use in 9th grade were about 3% to 4%, with the exception of mental health problems (6.5%) and passing out (7.5%). In 11th grade, the range in individual problem prevalence rates rises to about 4% to 7%, with 11% for mental health problems and 17% for passing out. The markedly higher rate for passing out in 11th grade reflects the rise in the prevalence in heavy use that occurs by that age. With the exception passing out/forgetting and emotional/mental health (options selected most often for both substances) problems reported for alcohol ranged from among 1% to 4% of 9th graders and 2% to 6% of 11th graders. For drugs, reported problems were slightly lower, ranging from among 1% to 3% of 9th graders and 2% to 4% of 11th graders. The kinds of problems experienced were generally similar for both alcohol and drugs but there are some notable differences.

- Forgetting what happened or passing out. Memory loss or unconsciousness was most frequently reported for alcohol by 6% of 9th and 15% of 11th graders. This measure ranked a close second for drugs, but at much lower rates, 3% of 9th
and 6% of 11th graders. This problem differed the most sharply between the two classes of substances, doubtless because marijuana is not associated with loss of consciousness as is the case with alcohol. For alcohol, this problem also increased the most dramatically from 9th to 11th grades. These findings reflect the increase in heavy drinking that occurs between grades 9 and 11, but may also be related as much to inexperience with controlling or regulating alcohol intake as to intention to get drunk.

- **Emotions and nervous/mental health problems.** This new option for the 2005 survey was ranked second for alcohol and a narrow first for drugs. It was reported by 5% of 9th and 8% of 11th graders for alcohol and 3% and 6%, respectively, for drugs.

- **Having unwanted or unprotected sex.** Alcohol use is widely associated with risky sexual behavior. Only 3% of 9th reported having unwanted or unprotected sex because of drinking. However, it was cited by 6% of 11th graders, making it the 3rd most common alcohol-related problem among high school juniors. This was the second largest increase in problem rates between grades 9 and 11 for alcohol. In contrast, only 2% to 3% in ether grade associated this problem with their use of drugs.

- **Trouble or problems with police.** For alcohol, trouble or problems with police doubled from 3% in 9th grade to 6% in 11th, while remaining level for drugs at 3% in both grades. The rise in police problems from alcohol use in 11th grade is likely in part related to drinking and driving (see below).

- **Fights with other kids.** Fighting was the third most prevalent problem for 9th grade alcohol users, reported by 4%. Though this problem occurred slightly more among 11th grade drinkers (5%), it ranked lower among them (fifth). For drug use, it was reported by 2% in 9th and 3% in 11th grade, and it ranked lower (sixth) for both grades.

- **Damage to a friendship.** This was the fourth most frequently reported problem stemming from alcohol use for 9th graders (3%), and like fighting, the percentage was greater among 11th graders (5%) but ranking was lower (sixth). For drugs, damage to a friendship was reported by 2% of 9th and 3% of 11th graders. Young people, like adults, value their friendships highly. Convincing young people that alcohol (and other drug use) can endanger friendships may help prevention efforts among these youth.

- **Problems related to school.** For both alcohol and drugs, slightly more students overall reported “hurt school work” as a problem than “get into trouble at school,” and the percentages were very similar for both substances. Moreover, for both substances “hurt school work” increased slightly from 9th to 11th grade (from 3% to 4% for alcohol and 2% to 4% for drugs), whereas “trouble at school” remained level at about 2.5% for both substances.

- **Money problems.** This was the least common problem reported for alcohol, by only 1-2% of students. However, problems with money from drug use was reported by 2% of 9th and 4% of 11th graders and thus tied with “hurting school
work” as the third most prevalent drug problem for 11th graders. This may reflect the higher cost of drugs compared to alcohol.

- **Physically Hurt Self.** Physical injury was more associated with alcohol (2.5% in 9th vs. 5% in 11th) than drugs (1% vs. 2%).

### Problems Prevalence Among Reported Users

As with total problems, differences across specific problems narrowed when the percentages of users only who reported a problem were calculated. Still, four problems associated with alcohol in the total sample were still higher (in the adjusted data) among alcohol users than among drug users:

- **memory loss/unconsciousness** (16% of 9th and 24% of 11th grade alcohol users vs. 9% of 9th and 14% of 11th grade drug users);
- **physical injury to self** (6% / 8% vs. 4% / 4%);
- **fighting** (9% in both grades vs. 7% / 6%); and
- **having unwanted/unprotected sex** (6% / 10% vs. 6% / 7%).

In contrast, three other problems were more common among drug users:

- **money problems** (3% of 9th and 4% of 11th of alcohol users vs. 6% and 10% of drug users);
- **getting into trouble at school** (6% / 4% of alcohol users vs. 9% / 6% of drug users); and
- **problems related to school work** (7% / 6% of alcohol users vs. 8% / 10% of the drug users).

These results appear to support two notions about substance use in high school. Problems due to alcohol use (such as passing out, risky sex, trouble with the police, self-injury) seem predominantly linked to increases in risk-taking tendencies and the acute pharmacological effects of alcohol in lowering inhibitions, impairing coordination, and controlling behavior. Trouble with the police reflects the likelihood of being apprehended for public drinking (parties, etc.) and for drinking and driving. Problems associated with drug use (such as school and money problems) may be at least partially linked to the higher percentages of students who use marijuana regularly at school and the higher cost of drugs.

### Grade differences

Most problems from any AOD use increased between grades. However, given the rise in heavy use that occurs between 9th and 11th grades, it is surprising that, with the exception of passing out and mental health problems, the differences aren’t greater. Perhaps some of the 9th graders who are experiencing use-related problems may drop out of regular school by the 11th grade and/or be more troubled personally or socially to begin with. Suggestive of this, the most notable exception to the rise in problem prevalence with grade is **trouble in school**, which drops with grade among alcohol users from 6% to 4% and among drug users from 9% to 6%.
to 6%. *Hurting schoolwork* also showed narrow grade differences: 7% and 6% among alcohol users and 8% and 10% among drug users.

**Drinking and Driving**

The CSS assesses the proportion of 9th and 11th graders who had driven a car when drinking or had been in a car with a friend who did so. This is a measure of the overall risk posed by teen drinking and driving, not the percentage of teens who have themselves driven under the influence. For 9th graders, who are under the driving age, this presumably would reflect drinking and driving by older teens or an adult. (Table 23)

Once teens start driving on their own around grade 11, almost one-fifth of the respondents reported multiple instances of drinking and driving. One of the most promising trends in recent years has been the reduction in drinking and driving in 11th grade, when teens start driving on their own. Between 1999 and 2003, the overall prevalence declined by almost one-fourth, from 36% to 27%. This trend has now reversed although still lower than in 1999.

- Twenty percent of 9th and 30% of 11th graders reported at least one drinking-driving experience in their lifetime. This represents a marginal one-point increase for 9th and three-point increase for 11th graders.
- Almost half of 9th and 11th graders who were involved in drinking and driving reported three or more instances (9.5% and 14%, respectively, for the total sample), indicating frequent risk-taking behavior. This measure reflects an increase of one to two points for both 9th and 11th graders when compared to 2003.

Because 7th graders are well under the legal driving age, they were asked how many times they had ever been in a car with “someone who was drinking and driving.” This provides a gauge of the extent to which drinking and driving by others place young students at risk. (Table 22)

- Thirty-seven percent of 7th graders reported having had at least one such experience — a higher percent than reported by 11th graders for drinking and driving by themselves or friends. This percentage is 2-points higher than in 2003 (35%), although it remains lower than in 2001 (40%).
- Sixteen percent had three or more such experiences — as was similarly reported in 2001.

**Dependency-related Experiences**

Students who had used alcohol or drugs were asked about 11 experiences associated with abuse and dependency. The response options were based on the diagnostic criteria established by the American Psychiatric Association (DSM-IV). Seven indices related to level of use across four areas: (a) development of tolerance to drug effects; (b) high lifestyle...
involvement in, or preoccupation with, AOD use; (c) loss of control over use (using alone; unplanned use; using more than intended); and (d) use interfering with normal activities. These questions, while reflecting problems, were phrased as neutrally as possible. The results were calculated for both the total sample and the percentage of those who were users. The percentages for users were about double those of the total sample. (Table 24)

Five percent of 9th and 13% of 11th graders reported experiencing two or more of the seven indicators associated with substance dependency, or about one-quarter of 11th-grade respondents who admitted to AOD use. Virtually all seven indicators were selected by about 3% to 5% of 9th graders and 6% to 11% of 11th graders. Eleventh graders can be divided into two groups, with about one-tenth of them (range 9%-11%) — the most drug-involved group — reporting the four top-ranked indicators: using alone, increasing amount used, using more than intended, and using when not intended.

- **Used Alone.** Using when alone (by yourself) was, by a slight margin, the most frequently endorsed indicator, selected by 5% of 9th and 11% of the 11th graders overall and by 15% and 21%, respectively, of users. This indicator also showed the sharpest increase from grade 9 to 11.

- **Tolerance.** Ranked second was increasing the amount used “to have the same effect as before, endorsed by 5% of 9th and 10% of 11th graders overall and, 13% and 18% of users, respectively. This indicator of tolerance to drug effects showed the third biggest increase from grade 9 to 11.

- **Unplanned Use.** Using after intending not going to use, an indicator of loss of control, was the fourth most prevalent indicator among 9th graders (4%) and third among 11th graders (9%). It was reported by 11% and 18% of users, respectively, and showed the second biggest increase from grade 9 to 11.

- **Used More than Intended.** This indicator was the third most frequently selected among 9th graders (4%) and fourth for 11th graders (9%). It accounted for 12% and 16% of users, respectively.

- **Lifestyle Involvement.** Only 3% of 9th and 6% of 11th graders reported spending a lot of time getting, using, or being “hung over” from AOD use — accounting for 9% and 11% of users in these grades.

- **Preference for Being Drunk/High.** Not liking the way you feel when you are not drunk or high on drugs — a new response option in the 2005 survey — was among the least reported, by 2% of 9th and 6% of 11th graders, constituting 6% and 10% of users for these grades. This is not surprising given the ages of the respondents.

- **Use Interferes with Normal Activities.** Being kept from normal activities (school, work, or recreation/hobbies) because of AOD use was also among the least reported experiences — by 3% of 9th and 5% of 11th graders. This dependency indicator was reported by 7% and 10% of the users in these grades.

Many of these experiences within the substance-using population increased from 2003 to 2005 for both grades. In particular, three indicators — use after deciding not to, using more than intended, and use interfering with normal activities — all increased for both grades.
This was only the second time these questions were asked, so longer term trends are not available.

To summarize results for lifetime AOD users in 11th grade:

- about one-fifth reported that they used alone;
- about one-sixth reported they used after deciding not to, increased the amount to have the same effect, or used a lot more than intended; and
- about one-tenth had a drug lifestyle, did not like how they felt when not high/drunk, did not engage in a normal activity because of use, or reported two or more of these seven indicators.

**Cessation of Use**

Most youth who experiment with substances do not progress into regular use. This is evident in the lower percentages for current use compared to those for lifetime use. Nevertheless, a substantial minority progress to regular, heavy use. Several questions on this survey probe contemplating or trying to stop using as well as need for help such as treatment or counseling, among high school students. Significant numbers of respondents may have used in the past, but for a variety of possible reasons never made a conscious effort to “stop” using. For example, it would be unlikely for students who tried alcohol or marijuana only once to view current abstinence as “cessation,” since they never thought of themselves as a drinker or user to begin with. Even frequent/heavy users may vary in how they interpret what defines a cessation-related thought or action. Nevertheless, this information is important for determining the need for support services such as Student Assistance Programs. Cessation-related experiences (persistent desire or unsuccessful efforts to cut down or control substance use.) are one of the criteria in the DSM-IV for determining substance abuse dependency. Overall, results indicate that:

- Substantial proportions of users in high school have tried stopping use at least once, but the percentage of students who tried to stop is lower for alcohol than for marijuana.
- Cessation efforts decline with age during the same period in which AOD use increases. This is especially true for alcohol.
- Only about half of users thinking about cessation took positive action.

Clearly, more and better support for cessation among older teens is needed, especially for alcohol. That cessation rates for alcohol are lower than for marijuana probably reflects the greater social acceptability of drinking in American culture. (Table 25-27)

**Cessation Attempts**

The lifetime frequency of attempts to stop using alcohol or marijuana was determined for the total sample and for users (defined for this set of questions as any respondent that did not check the option, “Does not apply, never used”). The results for the total sample provide an
indication of the service needs across the general population. The user data provide an indication of how open users may be to intervention. The results indicate that marijuana users are more likely to seek or accept assistance from intervention programs than students who drink alcohol.

- **Alcohol.** Consistent with results found in 2003, relatively few high school students reported one or more attempts to stop drinking alcohol (12% of 9th (11% in 2003) and 14% of 11th graders (up marginally by two points). Among students who drank alcohol at some time in their lives, one-third at grade 9 (32%) reported at least one cessation attempt, an eight-point increase since 2001. In contrast, only 25% of 11th grade lifetime drinkers attempted to stop, although this marks a three-point increase since 2003. Overall, 11th grade cessation attempts have remained stable since 1999 at 22-25%.

- **Marijuana.** For the total sample, half of the users in 9th grade (11%) attempted to stop using marijuana, only one percent less than those reporting alcohol cessation attempts. In contrast, 11th grade cessation attempts were at 17%, somewhat higher than for alcohol and virtually unchanged from 2003. These respondents made up almost one-fifth to one-third of the users (49% and 48%, respectively by grade). (Table 25)

Overall, current cessation findings are similar to those in 2003. One exception is a marginal increase in 11th grade for attempts at alcohol cessation, but the percentages are still lower than for marijuana, despite the much higher prevalence of alcohol use. The lower cessation rates for alcohol probably reflect the common acceptance of drinking among older teens.

Three other cessation-related questions (first added to the survey in 2003) asked upper-grade students whether they had ever: (a) thought about reducing or stopping AOD use; (b) spoke with someone about it; or (c) saw a counselor, attended a program, or joined a group to help reduce or stop use. The results demonstrate that students are much more likely to think about stopping than actually doing it, supporting the need to help young people to move from thoughts to actions. Results are again provided for both the total sample and the subgroup of students that have used alcohol or other drugs (referred to as "users").

- Six percent of 9th and 12% of 11th graders reported **contemplating** reducing or stopping AOD for the total sample, rising to 16% and 22% among respondents who used at least once. These percentages are much lower than those reported for actual attempts to stop alcohol or drug use. They are, however, 3-4 points higher than in 2003.

- Only half as many students had **talked to someone** about cessation: 2% of 9th and 6% 11th graders overall, and 7% and 11%, respectively, among users.

- Only a minuscule 1% of 9th and 11th graders — about one-point less than in 2003 — had actually **participated** in a cessation activity (attended counseling, a program or group to help reduce or stop use). Even among 11th graders, this amounted to only 2.5% of users. (Table 26).
Perceived Need for Counseling or Treatment

Few respondents reported that they needed help such as counseling or treatment for their AOD use, despite significant numbers of high-risk drug users and excessive alcohol users in the higher grades. Of the total sample, 22% of 9th graders, and 38% of 11th graders had used but did not feel they needed help. Only 2% and 3% of 9th and 11th graders in the total sample, but among AOD users 6% in both grades, reported that they needed it, little changed from 2001 or 2003. However, 9% of 9th and 7% of 11th graders marked “don’t know” on this question. Occasional and moderate users are unlikely to feel that they need help, but students responding with “don’t know” on the question could have been wondering whether or not they indeed needed assistance. Combining the two percentages ("need help" and "don’t know") reveals that about one in ten high school students (10% of both 9th and 11th graders) may be candidates for intervention, only slightly lower than the percent of respondents who reported thinking about stopping or reducing use. This amounts to about one-third of users in 9th and one-fifth in 11th grade.10 (Table 27)

Estimated Size of the Intervention Population

As noted, the CSS questions on dependency, problems associated with use, and cessation discussed in this section are consistent with criteria used by the American Psychiatric Association (Diagnostic and Statistical Manual of Mental Disorders, 4th edition, known as DSM-IV) for diagnosing substance abuse and dependency. The DSM criterion for dependency is three out of six indicators (excluding withdrawal, for which there are no CSS indicators). Using the CSS items that corresponded to these six criteria, we determined the proportion of 9th and 11th graders that met three or more of them. The following lists the DSM criteria followed by the CSS data used in parenthesis:

- Evidence of tolerance to use (CSS: Increased use for same effect);
- Lack of use control (CSS: Reported used a lot more than intended or used when wasn’t planning to use);
- Time-consuming substance use lifestyle (CSS: Spent a lot of time finding, using recovering from AOD use);
- Important activities given up/reduced (CSS: Use interfered in a normal activity like school, recreation/hobby, or work);
- Persistent or recurrent physical or psychological problems (CSS: Reported two or more of the 12 problems from AOD use); and
- Attempted cessation or tried treatment (CSS: Met one or more of following four criteria: reported 2 or more efforts to stop use, felt need for treatment, talked to someone about use, or attended a counseling or treatment session, or participated in a cessation activity).

Under DSM-IV, substance abusers are also defined as users who do not meet the criteria for dependence, but engage in recurrent use and demonstrate at least one of four characteristics: (a) failure to fulfill major role obligations, (b) use in situations which are physically
hazardous, (c) related legal problems, and (d) persistent or recurrent social or interpersonal problems caused or exacerbated by use effects. For the CSS estimate, we identified the percentage of current users (past 30 days) who reported one of the following problems related to these four DSM criteria: (a) AOD caused problems with money, school, or normal activity; (b) drinking and driving or AOD use ever caused physical injury, unwanted/protected sex, or passing out; (c) AOD use ever caused trouble with the police; and (d) AOD use ever caused a fight with other kids or damaged a friendship.

There are limitations to this approach. First, are adult dependency criteria valid for adolescents? Many heavy-using youth may not have been using long enough to develop the persistent adverse physiological consequences associated with later abuse and dependency. For example, alcoholism is often difficult to define at any age and is rarely diagnosed among young people according to adult criteria. Drinking tends to be sporadic during adolescence and early adulthood, and most alcohol use disorders take years to develop. Flewelling et al. (2004) report very low prevalence rates among adolescents and young adults for key alcohol abuse and dependence symptoms, such as legal problems and withdrawal symptoms. Other indicators of abuse and dependency are not relevant to the students’ developmental context, such as driving after drinking for adolescents under the age of 16. In addition, CSS self-report data can only approximate formal clinical diagnosis. Moreover, in some cases multiple CSS items were used to measure one criterion and in other cases (e.g., evidence of tolerance, using more than intended, interference with normal activity) only one.

Nevertheless, the proximity of these CSS questions to the DSM criteria for dependency and abuse makes them useful as one approach for attempting to address the difficult task of estimating how many youth are so seriously involved in problematic substance use that they may be in need of intervention services at some level. A similar approach is used by the National Survey on Drug Use and Health. Applying these criteria to the CSS results led to these estimates:

- 4% of 9th and 9% of 11th graders may be dependent
- Another 7% and 10%, respectively, may be abusers.
- This suggests that a total of 11% of 9th and 19% of 11th may need some form of targeted intervention to help them stop or reduce their use.

These estimates are virtually the same as determined in 2003 and are consistent with other heavy-user indicators. For example, looking at 11th graders:

- Roughly about one-tenth of juniors, the estimated size of the dependent population, reported each of the following: regular binge drinking and marijuana use (3 or more days in the past 30), weekly marijuana use, polydrug use more than once or twice in the past six months, using alcohol or marijuana at school in the past 30 days, getting drunk or high on school property three or more times, or liking to get very high.
- Roughly one-fifth, the size of the combined dependency and abuse groups, reported each of these behaviors: any binge drinking, current marijuana use, use of a drug other than marijuana in the past six months, having been high or loaded on drugs seven or more times, liking to drink to feel it a lot / get drunk, or getting

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at least moderately high on drugs. This percentage is also close to the percentage of High-Risk Users of drugs. (Table 28)

ENDNOTES

1  HS 82: “Has drinking alcohol ever caused you to have any of the following problems:”
2  HS 82 and 83: Response option changed from “Health Problems” in 2003 to its current form to make the option for specific.
3  HS 55: “During your life, how many times have you ever driven a car when you had been drinking alcohol or been in a car driven by a friend when he or she had been drinking.”
4  MS 47: “During your life, how many times have you ridden in a car driven by someone who had been drinking alcohol?”
5  HS 84: “If you use alcohol or another drug, have you had any of the following experiences?”
7  An additional item assessed not feeling good when sober, an observation often volunteered by alcohol/drug dependent individuals. Three other questions related to cessation. These are discussed in other sections.
8  HS 85-86: “How many times have you tried to quit or stop using…alcohol…marijuana?”
9  MS 47: “During your life, how many times have you ridden in a car driven by someone who had been drinking alcohol?”
10 Calculated by dividing the percentage of users who said they did or didn’t know if they needed help by the percentage of respondents who indicated that they were users (i.e., did not mark “never used”). Thus 49% of 11th graders indicated they were users; of these 9% — or 18% of the subgroup of users — did not mark used but did not feel a need for help.
11 Walker, Jasinska, & Carnes 1978:53
Chapter 5
Measures Related To ATOD Use

Findings on attitudinal, environmental, and social measures help clarify the dynamics of alcohol and other drug (AOD) use and guide prevention and intervention efforts. CSS respondents are asked about four factors that have been shown to influence use among young people: perception of risk or harm resulting from use, the availability of alcohol and drugs, perception of AOD use by peers, and social disapproval of use. This chapter also includes information on awareness of counseling, or intervention, or other resources at schools for students needing assistance “to stop or reduce” use of alcohol or drugs.

In 2003, perceptions of harm from occasional use increased. There were congruent reductions in estimates of peer use, perceived adult use, perceived availability, and episodes of being offered drugs at school. These 2003 findings were consistent with declines in use reported by the students. In 2005, there were few meaningful changes in these potential influences on use, as would be expected given the stability in prevalence. Changes that did emerge were consistent with the leveling of the earlier downward trend (e.g., perceived harm), while others probably reflect the influence of earlier declines in prevalence (perceived peer use).

Perceived Harm from Use

Students were asked about their perceptions of harm associated with both frequent and occasional use of alcohol, marijuana, inhalants, methamphetamine and ecstasy, using a five-point scale of “extremely harmful” to “harmless.” Frequent use was defined as “daily or almost daily” and occasional use as “once in a while.”

Frequent Use

Overall, current results regarding harm from frequent (daily) use resemble those of previous surveys. The majority of students in all grades (50% or more) viewed frequent use of alcohol, marijuana, and other drugs as “extremely harmful.” However, perceived harm for alcohol, and especially, marijuana, decreased markedly with age (and one would surmise, direct experience). Estimates of harm were generally consistent with social disapproval for each type of substance — higher for marijuana than for alcohol and higher still for methamphetamine and inhalants. (Tables 29)
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- **Alcohol.** A majority in each grade perceived frequent alcohol drinking as “extremely harmful,” but the rates dropped from 66% in 7th grade to 52% of 9th and 51% of 11th graders. Since 1999, these percentages have dropped 6 points for 9th and 4 points for 11th graders, but did not change for 7th graders. Results are virtually the same as in 2003.

- **Marijuana.** As has been found in previous surveys, the ratings of extremely harmful for frequent marijuana use were much higher than for alcohol, but also declined more steeply by grade (by 25 points between grades 7 and 11 compared to 15 for alcohol). While 82% endorsed “extremely harmful” in 7th grade, the rate was 66% in 9th and 57% in 11th grade. The only difference from 2003 is almost a two-point drop in 9th grade.

- **Inhalants and Methamphetamine.** Ratings of extremely harmful for inhalants (asked in 7th grade only) as well as methamphetamine (asked in 9th and 11th grades only) were much higher than for alcohol or marijuana, at over eight out of ten respondents. Compared to 1999, these percentages are lower by about three points for 7th, eight points for 9th and four points for 11th, but they are stable since the last survey.

**Occasional Use**

Because occasional drug use (defined as “once in a while”) is the more common pattern of AOD use among teenagers, these ratings are of particular interest. Many respondents who consider frequent use of a drug dangerous may view occasional use differently. This is reflected in the fact that, in contrast to frequent use, considerably fewer respondents viewed occasional use of any substances as extremely harmful. In addition, there were sharper declines in perceived harm with increasing age. For alcohol, the decline was 19 points between grades 7 and 11; and for marijuana, a huge drop of 34 points. Thus, older students are much more likely to view occasional use of alcohol and, especially, marijuana as less than extremely harmful. On the optimistic side, smaller proportions view occasional use as “harmless” or “mainly harmless” (7% of 7th, 17% of 9th and 25% of 11th graders for marijuana). These percentages are somewhat lower than in 2001 especially in 11th grade (38% then vs. 25% currently).

- **Alcohol.** Only 37% of 7th, 23% of 9th and 16% of 11th graders perceived occasional use of alcohol as extremely harmful, the lowest proportions relative to the other substances. These rates were 4 and 3 points lower than in 2003 for grades 7 and 9, but stable for grade 11. In comparison to harmfulness ratings for frequent use, current percentages were 28, 29, and 35 points lower for grades 7, 9, and 11. Relative to the other substances, these differences between occasional versus frequent use were the largest. Moreover, the differences between grades 7 and 9 versus 11 were much lower. Both findings reflect the high acceptability for occasional use of alcohol among younger students. (Tables 30)

- **Marijuana.** Sixty-five percent of 7th, 41% of 9th, and 31% of 11th graders rated occasional marijuana use as extremely harmful. Compared to 2003, these rates were 3, 5 and 4 points lower by ascending grade. These percentages are nearly double the percentages for occasional alcohol use, and the difference between
percentages for occasional and frequent use is smaller for marijuana than alcohol (17-26 vs. 28-35 points). (Table 30)

- **Inhalants and Methamphetamine.** About two-thirds of 7th graders (66%) perceived occasional use of inhalants as extremely harmful, virtually the same as found for marijuana. This percentage is down three points since 2003, consistent with the marginal increase in use reported. The percentages for methamphetamine in the upper grades were comparable at 65% in 9th and 68% in 11th grade. For 11th graders, this percentage is double that for marijuana and four times higher than for alcohol. Also, compared to the other substances, differences in estimated harm for occasional use versus frequent use of these drugs were the smallest, only 16-17% lower for all grades. (Table 31)

- **Ecstasy (MDMA).** Occasional use of ecstasy was seen as extremely harmful by 7 out of 10 students in all grades (72% of 7th, 67% of 9th and 71% of 11th graders). These percentages were the highest among the substances rated, including inhalants and methamphetamine. Only a third or less among the two older groups believed it was safe for even occasional use. (Table 31)

The summed percentages of students selecting “somewhat harmful”, “mainly harmless”, and “harmless” for occasional use of each substance correspond reasonably well to the percentages of respondents reporting lifetime use of alcohol or marijuana. For example, among 11th graders this combined total-harmless percentage was 62% for alcohol and 46% for marijuana, compared to a lifetime prevalence of 62% for an alcoholic drink and 38% for marijuana. Similarly, the summed percentage of students selecting “extremely harmful” and “harmful” for alcohol (38% of 11th graders) is identical to the percentage reporting lifetime abstinence from that substance (also 38%).

**Availability**

History reveals that the relationship between using a substance and its availability is complex. Changes in prevalence of use have occurred with little evidence for increased or decreased availability. Still, access is obviously a critical prerequisite to use. The CSS asks students four questions related to availability: (a) perceptions of how easy it is to obtain alcohol and other drugs, (b) where alcohol is obtained, (c) whether drugs are available at school, and (d) if the respondent ever sold drugs. (Tables 32-36)

**Perceived Difficulty Obtaining Alcohol and Other Drugs**

Teenagers’ perception of availability may be as an important as actual availability. If alcohol or an illicit drug is believed to be easy to obtain, then youth may assume that it is widely used and therefore that use is “normal.” Students were asked to rate the availability of alcohol, cigarettes, marijuana, and other drugs on four-point scales ranging from “very easy” to “very difficult”, with an option for “don’t know”. Other drug(s) for 7th graders were confined to inhalants, while methamphetamine and ecstasy were added to the list for upper graders. (Table 32-33)
Current results are consistent with findings in previous surveys. Availability ratings increase with age while percentages of students marking “don’t know” decrease. Upper graders perceive very little difference in the availability of the “licit” alcohol and the “illicit” marijuana.

- **Alcohol and Marijuana.** The majority of 9th graders reported that it was “very easy” or “fairly easy” to obtain both alcohol (60%) and marijuana (53%). By grade 11, these percentages had risen to seven out of ten (76% for alcohol and 71% for marijuana). In contrast, among 7th graders, the percentages choosing “easy” or “fairly easy” were half those of 9th graders for alcohol (31%) and less than half (19%) for marijuana. Thus, differences in perceived availability of these two substances narrow with age, almost disappearing by 11th grade.4

- **Methamphetamine and Ecstasy.** Compared to marijuana, fewer high school students reported that it was very/fairly easy to obtain either methamphetamine or ecstasy, with very similar results. Just over one-fifth in 9th grade (23% and 22%, respectively) and one-third in 11th (32% and 33%) saw these substances as readily available. Only 11% of 7th graders indicated that ecstasy was very/fairly easy to obtain. Although perceived availability of these drugs was much lower than for marijuana, about one-sixth (16-17%) of 11th graders still rated each as very easy to obtain.

- **Inhalants.** Inhalants such as glue, paint or various hydrocarbon-based cleaners are common in households and thus readily available to very young children. So is gasoline. Not surprisingly, the proportion of 7th graders rating inhalants as easy to obtain was higher than for marijuana and almost as high as for alcohol. Twenty-two percent of 7th graders reported that inhalants were very or fairly easy to obtain. Two-thirds of these respondents (15%) selected “very easy,” about the same percentage of 11th graders who gave the same ratings for methamphetamine and ecstasy.

Compared to 2003, the percentages rating availability of alcohol and marijuana as very/fairly easy were down about three percentage points in grade 11, but up a marginal two points in 7th and 9th grades. Among 11th graders most of the decline was for “very easy.” Since 2001, the “very easy” percentages for marijuana have dropped by 9 points among 11th graders, ecstasy by 7, and alcohol by 4. Among 9th graders, these “very easy” percentages were stable compared to 2003, but for marijuana still 6-7 points lower than in 2001. Among 7th graders, percentages for “very easy” were level for alcohol and marijuana, but increased for inhalants by three points. In contrast, between 1999 and 2003 these percentages declined 4-7 points.

**Lack of Awareness.** Only a minority of respondents indicated that they did not know how available alcohol and marijuana were. The percentages further decreased by grade. For alcohol, the percentage of “don’t know” dropped from 29% in 7th to 20% in 9th and 10% in 11th. The percentage of respondents unaware of the availability of marijuana was only marginally higher, at 33% for 7th, 24% for 9th, and 16% for 11th graders. Similar percentages of 7th graders selected “don’t know” for inhalants, with the highest rates. In contrast, four out of ten upper graders didn’t know about the availability of methamphetamine (41% of 9th and 40% of 11th graders) or ecstasy (40% of 9th, and 38% of 11th graders).
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Where Students Get Alcohol

Respondents were asked where most users obtained alcohol from a list of seven sources or places plus options for “other” and “don’t know.” There was only small variation in the results, and no consistent trend, compared to 2003. The percentage endorsing “don’t know” was highest of all response options among 7th graders (47%), fourth for 9th graders (30%), and last among 11th graders (18%). It is hardly surprising that, as drinking increases with age, so does awareness of where to get alcohol. The most frequently-selected sources were parties/social events and friends, reflecting the social nature of adolescent drinking. Next in order were three options involving adults either directly or indirectly: availability at home, friend’s homes, or by adults buying. (Table 34)

- **Friends** and **social events** were by far the two most-selected sources of alcohol. Parties/social events were selected by 26% of 7th, 47% of 9th and 62% of 11th graders. Friends were cited by 24%, 40% and 53%, respectively.

- The next most-selected options were those related to adults. **Home** was the most common source among these options by 21% of 7th, 31% of 9th and 39% of 11th. Among 7th graders, home rivals friends/social events. **Adults at friends’ homes** was relatively less common, but still selected by 12% of 7th and 27% of upper graders. **Getting adults to buy** was relatively more common for 9th (21%) and 11th graders (35%) than for 7th graders (9%). This was the fourth most common source in grades 9 and 11. By the 11th grade, then, over one-third of students reported that teens can get adults to purchase alcohol for them or get it from their home, and almost as many selected from an adult at a friend’s home.

- Only 7% in 7th grade and 13% in 9th grade reported **buying alcohol themselves** at a store, but this source jumps to 23% by grade 11.

- The least-selected sources with the least difference across grades were **school** at 11-15% and **bars/clubs/casinos** at 5-6%.

- Eleven percent of 7th, 14% of 9th, and 16% of 11th selected “other” as a source (similar to the results for school), indicating that other sources of alcohol are available.

Offered Drugs at School (Past Year)

Although school was a relatively uncommon source of alcohol, significant percentages of older students reported “being offered, sold or given” drugs at school — 12% in 7th grade, 29% in 9th and to 38% in 11th grade. These percentages, after declining from 1999 through 2003 among upper graders, rose 5 points in 9th grade and 2 points in 11th. Half of the 7th graders who had been offered drugs reported more than one incident (6%), as did three-fifths of the 9th graders (17%), and two-thirds of the 11th (26%). Fourteen percent of 11th graders reported four or more occasions. (Table 35)

Sold Drugs (Past Year)

As in the past, only a minority of students, even in 11th grade, admitted to selling drugs in the past year, with little change since 1999. However, such admissions increased with age, with
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4% of 7th, 8% of 9th, and 12% of 11th graders indicating that they had sold drugs one or more times. Of these students, 32% in 9th and 44% in 11th grade (or 3% and 5% of the total sample) indicated that had done so four or more times. (Table 36)

Peer Use

Young people’s estimates of peer substance use provide a key insight into the climate of social acceptance of drug use. Researchers have reported that spontaneous modeling of peer behavior is a potent factor, more influential than overt “peer-pressure,” the culprit typically cited by adults.8 Youth perceptions of substance use among peers of similar age (and probably somewhat older also) is likely to be the dominant social influence on drug initiation and use. Accordingly, all students were asked to estimate the percentage (in deciles) of their same-age peers who had tried marijuana, while 7th graders were additionally asked to estimate the percentage of monthly alcohol drinkers.

The percentage of students estimating that 50% or more had engaged in a behavior is a plausible statistical definition of what is “normal” in a social group. Even though students’ estimates invariably exceed reported use by a substantial margin, perception, rather than objective reality, is the basis for social norms and the behaviors that follow. Consistent with this hypothesis, there were declines in 2005 among 9th and 11th graders in perceptions of marijuana use among peers that correspond to actual declines in use observed in the early decade. (Table 37)

- **Marijuana.** Asked to estimate the percentage of their peers who ever tried marijuana, 14% of 7th, 45% of 9th, and 63% of 11th graders estimated at least fifty percent or more. Compared to 2003, these percentages increased 2 points in 7th, remained constant in 9th, and decreased 3 points in 11th. For 11th graders this decline is part of a 5-point drop since 2001.

- **Alcohol.** As far as peers who drink at least once a month, 15% of 7th graders estimated that at least 50 percent did – an amount higher than for marijuana.

Almost half of 9th and two-fifths of 11th graders appear to overestimate marijuana use among their peers, as actual self-reported lifetime prevalence is 22% and 38%, respectively. Similarly, in 7th grade actual monthly drinking in the past six months was only 1%. However, drinking in the past 30 days was closer to perceived peer use, at 12%. These differences between actual and perceived peer use probably reflect at least some non-reporting of illegal personal behaviors as well as some degree of exaggeration in estimated use based on the notion that “everybody does it.” Whatever the true values may be, estimates of peer use do provide a useful indicator of social acceptability.

Peer Disapproval

Young people’s estimates of peer approval and disapproval for specific behaviors are an important attitudinal predictor of actual behavior.9 Respondents were asked to indicate how much their friends would disapprove if they were to use alcohol or marijuana, using a 4-point
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scales ranging from “A Lot” to “Not at All”. Strong disapproval was lower for alcohol than for marijuana, which declined by grade more sharply. Perceived peer disapproval generally reflected actual prevalence rates. (Table 38)

• Only 15% to 19% of students across grades believed that peers would care not at all if they used marijuana. For alcohol, the rate in 7th grade was close at 15%, but not caring at all increased to 21% in 9th and 28% in 11th grade.

• The majority of students reported that their peers would disapprove some or a lot (combined), regardless of substance. For alcohol, this combined disapproval rate declined rather steadily from 75% in 7th to 46% in 11th. There was a more moderate grade-related decline for marijuana, from 80% in 7th to 64% in 11th.

• The majority of 7th graders assumed that use of either substance would bring a lot of disapproval, but the percentage for marijuana exceeded alcohol (70% vs. 58%). In grade 9, this percentage dropped to 54% for marijuana and 37% for alcohol. In 11th grade, percentages dropped even further to 45% for marijuana and only 25% for alcohol.

• Perhaps even more revealing on social acceptability of alcohol, a majority of 11th graders (54%) rated alcohol use as bringing little disapproval (“not at all” or “not much”), a greater percentage than for total disapproval (“a lot” plus “some”, at 46%).

Compared to 2003, in all grades the percentage disapproving marijuana “a lot” increased, by six points in 7th, three points in 9th, and five points in 11th. There was no similar increase for alcohol, except for grade 7 (by 3%).

The School Response

Is help available for students who want help to stop or reduce their AOD use? What do respondents think would happen to a student who came to the school’s attention about use-related problems? High school students were asked, "How likely is it that a student who wanted to stop or reduce using alcohol or other drugs would find such help at school?" Given the high rates of heavy use reported, it is increasingly apparent that schools should be offering support to these troubled students. Lower-than-expected academic achievement and school behavioral problems are common for this group. School staff should be alerted to identify these students and equipped organizationally to respond appropriately with intervention and assistance, usually through student assistance programs. Unfortunately, on the current survey few students believed it likely that such help would be available, with little change from 2003. Progress has not been made despite recognition of the need on the part of the California Department of Education.10

• Just over one-third (35% and 36%) thought it was likely to very likely that a student would find help at school when the two responses were combined, again relatively unchanged since 2003. About one-sixth of students in both grades selected each option individually.
MEASURES RELATED TO AOD USE

• About four-in-ten upper graders (41% of 9th and 46% of 11th) believed that it was *not likely* that such an individual would receive help at their school. This was the most frequently-selected option, well over double any other percentage. The not-likely percentage in 11th grade has been declining markedly since 2001 (by seven percentage points) and is also down in 9th grade (by four points, though unchanged compared to 2003). But most of this decline is because of the shift to higher percentages selecting “don’t know,” rather than a rise in perceiving that help was becoming more likely.

• If a program does exist, students need to be aware of it. The percentage of students reporting they *don’t know* whether a student could find help at their school increased three points since 2003 to 26% for 9th graders (but the same as in 1999). This measure increased five points to 19% for 11th graders.

• Summing the percentages for *not likely* and *don’t know* accounted for two-thirds of respondents (66% of 9th and 65% of 11th), an increase of 4% and 2%, respectively, since the last survey. (Table 39)

ENDNOTES

1 HS 62-65/MS 53-56: "How harmful do you think it is to use the following substances frequently (daily or almost daily)?"
2 HS 57-61/MS 48-52: "How harmful do you think it is to use the following substances occasionally (once in a while)?"
3 HS 66-70/MS 57-61: "How difficult is it for students in your grade to get the following substances if they really want them?"
4 Data from the 2001 National Household Survey on Drug Abuse (now National Survey on Drug Use and Health) indicated that over half of household residents who were marijuana users reported they obtained the drug for free (given to or shared with them by others). See CESAR FAX March 19, 2007, *Marijuana distribution relies primarily on generosity of friends and family*, www.cesar.umd.edu
5 HS 72/MS 62: “How do most kids at your school who drink alcohol usually get it?”
6 HS 111/MS 94: “During the past 12 months, how many times have you done or experienced the following on school property? …been offered, sold, or given an illegal drug.”
7 HS 110/MS 93: “During the past 12 months, how many times have you…sold drugs to someone?”
10 HS 91: “How likely will students find help at school?”
Chapter 6
Tobacco Use

This section provides results on use of tobacco paralleling those covered earlier on alcohol and drugs. Topics include cigarette smoking and smokeless tobacco use in the past 30 days and lifetime, perceived harm and availability, and cessation attempts. Earlier surveys found lifetime and current cigarette smoking steadily declining since the mid-1990s, a trend that continued in 2003. There were also several changes in correlates of use consistent with this trend, notably a decline in perceived availability, especially in 7th grade, and a rise of perceived harm and cessation attempts in 11th. This has been one of the success stories for prevention. The findings for 2005 show very little change from the previous survey. Consistent with the results for alcohol and drugs, lifetime smoking indicators did increase marginally in 7th grade and did decline marginally in the upper grades.

Prevalence and Frequency of Use

Lifetime Cigarette Smoking

Smoking a cigarette, even a puff or two, was reported by 18% of 7th, 32% of 9th, and 42% of 11th graders. For 9th and 11th grades, the percentages decreased by three points since 2003. These figures compare very favorably against 1999 results of 24%, 41%, and 58%, respectively. The majority in 7th grade (11%) had only puffed once. In contrast, in 11th grade half had at least a puff four or more times (21%). (Table 3)

The proportion of students who smoked a whole cigarette at least once in their lifetime was only 8% in 7th grade, although this was a marginal two-percentage points higher than in 2003. Rates rose to 16% in 9th and 28% in 11th grade, and trends were mixed. The percentage for 9th grade was lower than on the previous survey by 2 points in 9th grade, but remained constant in 11th. Almost half of these lifetime smokers in 7th grade had limited their experimentation to one whole cigarette, and less than one-third had smoked a whole cigarette on four or more occasions. By the 11th grade, almost two-thirds of lifetime smokers reported four or more occasions, and less than one fifth (5% of the total sample) reported only one occasion. (Table 3)

Current Smoking

Any smoking in the past 30 days remained constant in all three grades, at 5%, 10%, and 15% respectively. Daily smoking (on 20 or more of the past 30 days) remained level in 9th grade at only 1%. It increased slightly to 4% in 11th grade. (Tables 12-13)
Current Smoking at School

Regardless of grade, very few students smoke at school. For all grades, smoking on school property in the past 30 days remained level and minimal, peaking at 6% in 11th grade, as it has been since 1999. Moreover, of those who did smoke at school, almost all in 7th grade and almost half in 9th and 11th grades did so on only one or two days. These low frequencies may reflect the impact of the requirement under Proposition 99 that schools choosing to receive funds must adopt (and enforce) a policy of no tobacco use on school property. (Table 15)

Smokeless Tobacco

Lifetime use of smokeless or chewing tobacco (snuff) was dramatically lower than cigarette smoking, but it increased by grade at a comparable rate: from negligible 3% in 7th grade to 5% to 8%. Use in the past 30 days was reported by 2-3% in grades 7 and 9, and only 3% in grade 11. (Tables 12-13)

Perceived Harm of Cigarette Use

As in the past, the belief that frequent smoking is extremely harmful remained higher than for alcohol and fairly constant and stable across grades. The percentage of extreme harm in occasional smoking (once in a while) was much lower than for frequent use – a difference that also increases by grade.

Frequent Smoking

The percentages of students perceiving frequent (“daily or almost daily”) use of cigarettes as extremely harmful varied relatively little by grade, as found previously. The rate for 11th graders was 68%, only ten points higher than the lowest rate of 57% among 9th graders, with 7th graders reporting 59%. This stands in sharp contrast to perceived harm of frequent marijuana use, which declines with age. Compared to 2003, percentages were down by 4 points for 11th graders but up by three points for 7th graders. However, if the results for extremely harmful and harmful are summed, there is little variation in any grade compared to 2001 or 1999. Over time, the ratings of extreme harm for frequent smoking have consistently fallen between those for marijuana (higher) and alcohol (lower). Except for grade 11, where ratings are approximately the same for cigarettes and marijuana, this pattern still holds true. About 5% per grade reported frequent smoking as harmless, consistent with previous findings. (Table 29)

Occasional Smoking

Much lower percentages of respondents perceived occasional smoking (“once in while”) as harmful, and these ratings dropped markedly between middle school and high school, as was the case for alcohol and marijuana. Extremely harmful ratings were given by 42% in 7th grade, dropping to 30% in 9th and 27% in 11th grade — higher than for alcohol but lower than marijuana. There was a decrease in all grades compared to 2003 (by 2 points in 7th and 3
Tobacco Use

points in both upper grades. The percentages selecting mainly harmless or harmless were stable compared to 2003, at 11% in 7th and 16% in both upper grades. (Table 30)

As with attitudes towards occasional use of alcohol and marijuana, percentages reporting use are predicted fairly well by adding the number of students choosing mainly harmless, somewhat harmful, or harmless. For example, among 11th graders this percentage was 43%, a percentage comparable to the 42% of actual lifetime smoking of even a puff or two.

Peer Use and Disapproval

The percentages estimating that 50% or more of their peers were monthly smokers were 29% among 9th and 37% among 11th graders, down six and ten points, respectively, since 2003, and eight and fifteen points since 2001. This is the third survey in a row in which peer estimates of cigarette smoking have declined among upper graders, steadily augmenting the gap in perceptions that more peers have tried marijuana than smoked cigarettes since 2001. (Table 37)

Only between 13% and 15% of students across grades believed that their peers would care “not at all” if they smoked cigarettes, similar to alcohol and marijuana in 7th grade, but less than for marijuana and, especially, alcohol in 11th grade. In contrast, 64% of 7th graders reported their friends would disapprove a lot — an amount that increased by four points since 2003. In 9th and 11th grades, the rates rose to 51% and 47%, the latter slightly higher than for marijuana, but almost double the percentage for alcohol. (Table 38)

Perceived Availability

Perceived availability of cigarettes once again increased with grade. The percentage of students rating cigarettes very easy to obtain was at 15% in 7th grade, more than doubled in 9th (34%) and reached 51% in 11th. In contrast, 41% of 7th graders reported that it was fairly difficult or very difficult for them to obtain cigarettes, compared to 19% of 9th and 11% of 11th graders. Only 7% of upper graders selected “very difficult.”

The findings for availability of cigarettes are stable compared to 2003, varying by only one point in mixed directions. However, since 1999 perceived availability has been steadily declining across all grades. Percentages of “very easy” have dropped 6 points for 7th, 9 points for 9th and 13 points for 11th. Among the upper grades, the percentages for “very difficult” rose by two points compared to 2003, and have gradually increased since 2001.

The proportion of students responding “don't know” about the availability of cigarettes, an indirect indicator of disinterest in or lack of experimentation with a substance, also decreased by half across grades, dropping from 30% in 7th to 23% in 9th to 13% in 11th grade. Moreover, the proportion responding “don’t know” has been increasing for upper graders since 1999, reflecting notable declines since then in smoking for these grade groups. (Table 32)
Smoking Cessation

Ten percent of 9th and 14% of 11th graders tried at least once to quit smoking cigarettes. This amounts to 48% of smokers in 9th grade and 44% of smokers in 11th. Compared to 2003, there is no clear trend. The cessation-attempt percentages increased 4 points for 9th graders, but dropped 4 points for 11th graders. These are higher percentages than users reported for alcohol but similar to those for marijuana. However, the majority of smokers who had made any cessation effort had made only one attempt (28% in 9th and 25% in 11th grade). The data suggest that openness to cessation merits further encouragement and assistance. (Table 25)

ENDNOTES

1 HS 24, “In your life, have you ever used or tried…a cigarette, even one or two puffs? …a whole cigarette?”
2 HS 50, “During the past 30 days, on how many days on school property did you…smoke cigarettes?”
3 Comparisons with previous years could be affected by the new addition of perceived harmfulness of occasional use item placed just before it on the questionnaire.
4 HS 62/MS 53: “How harmful do you think it is to use the following substances frequently (daily or almost daily)?”
5 HS 66/MS 57: “How difficult is it for students in your grade to get the following substances if they really want them…cigarettes?”
Chapter 7
Conclusion

In the Overview to the 1999 CSS report, we observed that the two questions of greatest interest were: (a) whether the declines in the overall prevalence of ATOD use that year were the beginning of a long-term trend, and (b) whether similar declines in heavy and frequent use would occur. The results from the next two surveys were encouraging. In 2003, particularly, meaningful downward trends occurred across grades in overall prevalence (any use) of alcohol, cigarettes, marijuana, and other drugs, including ecstasy, as well as in key indicators of heavy or regular use of alcohol or other drugs. Common influences on use (including perceived availability of alcohol and drugs and perceived harm from using these substances) also changed in directions consistent with declining prevalence.

The current results may be interpreted in different ways. On the one hand, California students still report some of the lowest rates of substance use recorded thus far in the history of the survey — significantly lower than in 1991. Among 11th graders, marginal declines (about two points) continued for binge drinking, lifetime and six-month alcohol prevalence, weekly drinking (past six months), polydrug use, and lifetime cigarette smoking. Ninth graders also reported marginal declines in six-month alcohol use and lifetime smoking. And in both upper grades several smaller declines still contributed to long-term gradual reductions. This may reflect the success of prevention efforts over the past decade. The major increase that occurred among upper graders in overall drug use is an anomalous situation undoubtedly due to the addition of prescription painkiller drugs to the survey.

Also in the category of good news is methamphetamines. Despite much concern, there is no evidence for a spread of methamphetamine use from adults to youth. Methamphetamine use among youth falls well behind that of diverted pharmaceuticals in the in-school population. “Epidemics” reported among youth in the juvenile justice system or entering treatment agencies may not reflect what is normal in the in-school population.

On the other hand, the warning signs are numerous. AOD use remains endemic. Only 35% of 11th graders were abstinent in the past six months. Not only has the declining trend stalled or slowed in the upper grades, but 7th graders reported marginal increases in the most commonly-used substances: lifetime and current use of alcohol, lifetime drunkenness, current alcohol use on school property, lifetime marijuana, and lifetime and current inhalant use. Moreover, other smaller increases of only about one point were evident in other indicators of alcohol, drug, and tobacco use, meaningless in themselves but of concern, as a whole, adding to the indications of a negative change among young students.

What makes the 7th-grade data particularly worrisome is the substantial body of research consistently indicating that delaying initiation of AOD use is related to lower involvement in substance use and related risk behaviors later in life. The earlier a child initiates AOD use (regardless of substance), the greater will be the later use and adverse consequences, as well
as involvement in other risk activities. Young people who initiate any drug use before the age of 15 appear to be at twice the risk of having drug problems during their lifetime, compared to those who wait until after the age of 19. Early use of alcohol, marijuana, and other drugs has also predicted early school dropout. Students who use marijuana before the age of 15 have been found to be three times more likely than other students to have left school before age 16 and were two times likelier to report frequent truancy. In one study, early marijuana users (mean age 14) were at greater risk in late adolescence (five years later) of not graduating from high school, delinquency, having multiple sexual partners, not always using condoms, perceiving drugs as not harmful, having substance use problems, and having more friends who exhibit deviant behavior. Thus increases in substance use among 7th graders may presage further use increases and other problems as this cohort ages.

Another disturbing finding of the current survey is the use among older students of diverted (not prescribed by physicians) prescription painkillers. These substances ranked highest in frequency behind marijuana. This new entrant in the youth drug market also raises questions about the difference between familiar “street” drugs and these widely prescribed modern medications. This issue is not the subject of this report, but their apparent availability and growing popularity as “recreational” drugs is certainly a major finding.

Also of concern is the three-point rise in drinking-driving involvement among 11th-graders. This measure had dropped eleven points between 1997 and 2003, one of the true success stories of prevention.

Although 11th graders did report some declines in one indicator of heavy substance use — binge drinking — its persistence among the older teen population, as emphasized in the 2003 report and supported by the 2005 data, remains perhaps the most disturbing ongoing problem. Heavy use is still all-too-common. Summarizing some of the findings for 11th graders:

- About one-quarter had been “high” on drugs at least three times or had been drunk or “high” at school at least once.
- About one-fifth had binged on alcohol at least once, been very drunk or sick three or more times, were current weekly drinkers, had been involved in more than one drinking and driving experience, had recently used a drug other than marijuana or engaged in polydrug use, had been “high” on drugs seven or more times, were classified as High-Risk Drug Users, or reported that they liked to use alcohol or drugs to a state of intoxication.
- About one-tenth had been drunk/sick seven or more times, had passed out or lost control from drinking, engaged in weekly binge drinking or marijuana use, used alcohol or marijuana at school, had been drunk/“high” at school three or more times, or had experienced two or more problems from their AOD use.
- Moreover, our findings still indicate, as they did in 2003, that a minimum of ten percent of the 11th-grade enrollment warrant targeted interventions to help them stop or reduce their substance abuse and as many as 19% may need some lesser intervention services.
CONCLUSION

That these high rates of use among 11th graders do not reflect the even high levels of use known to occur among the substantial population school dropouts indicates that the problem is even greater among this age group for the California population as a whole.

National Comparisons

Similar trends are also evident nationally. The Monitoring the Future (MTF) Survey is the nation’s oldest and most important and referenced survey of adolescent substance use. Just as for the CSS, MTF results in the early decade revealed a strong downward trend in substance use. In the last two surveys, conducted in the spring of 2005 and 2006, the declining trend continued but it began to “decelerate,” although more for illicit drugs and cigarettes than alcohol. Although no significant increases occurred and most indicators continued to decline, the declines were small and not significant at the individual grade level. Moreover, as with the CSS, trends in the last three annual MFT surveys were less promising among younger (8th grade) than older teens (10th and 11th grades).

Two other specific findings of the MTF that mirror CSS results also merit mention. First, the researchers express concern about the prevalence of use of OxyContin, Vicodin, and other prescription-type drugs. Indeed, the lead to their 2006 press release states: “Teen drug use continues down in 2006, particularly among older teens; but use of prescription-type drugs remains high.” Speaking specifically of OxyContin, survey director Lloyd Johnston stated in the 2006 press release: “Obviously, relatively few young people are using OxyContin; still, given the addictive potential of this strong narcotic drug, I think we should be concerned about these rates.” Second, they note that use of methamphetamine remains very limited and still appears to be gradually declining in most grades.

Implications

Overall, these results are a warning sign against complacency and a call for ongoing support of prevention and intervention efforts particularly targeting 7th graders and heavy users. In discussing the possible reasons why more declines occurred among older than younger students in the MTF, researchers identified a “cohort effect” as at least one explanation. They noted that the previous declining trend had begun among 8th graders and these students as they progressed through high school were now reporting lower prevalence rates than previous 10th and 12th graders, while progress was stalling among the new generation of 8th graders. As they wrote about the 2005 results:

In recent years, the trends in drug use have become more complex and, thus, more difficult to describe. We believe that a major reason for the increased complexity is that “cohort effects” have emerged… “Cohort effects” refer to lasting differences between class cohorts that stay with them as they advance through school and beyond. These effects result in the various grades reaching peaks or troughs in different years, and thus the various age groups are sometimes moving in different directions at a given point in history. We have seen such cohort effects for cigarette smoking throughout most of the life of the study, but such effects were much less apparent for the illicit drugs until the past decade or so. The 8th...
ELEVENTH BIENNIAL CALIFORNIA STUDENT SURVEY

CONCLUSION

Graders have been the first to show turnarounds in illicit drug use: they were the first to show the upturn in use in the early 1990s and the first to show the decline in use after 1996; they now appear to be the first to show an end to the declines observed in recent years.3

These results could also mean that we are experiencing a “bottoming-out” effect for prevention, where substance use has declined to the point that further reductions will be harder to achieve and likely require increased targeting of young people most at risk and more difficult to reach. Identifying and assisting (rather than merely punishing) high-risk students as early as possible — such as occurs through a Student Assistance Program — is essential for making further inroads into reducing substance use and related problems in our state.

Particular attention also clearly needs to focus on the dangers of using painkillers such as OxyContin and other prescription medications. The rise and fall in use of different substances across time underscores the need to take substance-specific approaches to prevention. State efforts targeting binge drinking and ecstasy appear to have been successful in making inroads against these behaviors since 2001.

ENDNOTES


References


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