

Thirteenth BIENNIAL

Statewide Survey

of California Students

in Grades 7, 9 and 11

Highlights

2009 – 10

WestEd

Greg Austin and Rodney Skager

HIGHLIGHTS

Results of the 13th Biennial California Student Survey 2009–10

Drug, Alcohol, and Tobacco Use Among Students Grades 7, 9 and 11

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Jointly sponsored by
California Department of Alcohol and Drug Programs
and California Department of Education

2011

Suggested Citation: Austin, G. and Skager, R. (2011). *Results of the 13th Biennial California Student Survey, 2009–10. Highlights: Drug, Alcohol, and Tobacco Use Among California Secondary Students.* San Francisco: WestEd.

This survey and report are mandated by Health and Safety Code Section 11605 and prepared by WestEd under contract from the Department of Alcohol and Drug Programs with additional funding from the California Department of Education.

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To download the *Highlights*: <http://www.wested.org/cs/we/view/pj/572>

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



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Preface & Acknowledgements

This report highlights the key findings on alcohol, tobacco, and other drug (ATOD) use from the 13th biennial California Student Survey (CSS), conducted by WestEd during the 2009–10 school year. The survey was conducted under contract from the California Department of Alcohol and Drug Programs in collaboration with the California Department of Education. Complete results are posted in the *Compendium of Tables* on the survey website: <http://www.wested.org/cs/we/view/pj/572>.

This statewide biennial research continues the important work, which began in 1985, of collecting substance use data from students themselves. In 1991, the California Legislature mandated the Office of the Attorney General to continue a regular, biennial schedule of administration. This survey and report were authorized by Health and Safety Code section 11605. From 1993 until 2007, the state departments of Alcohol and Drug Programs (DADP), Education (CDE) and Health Services (DHS) partnered with the Attorney General in co-sponsoring the survey. For 2009, DADP took over the lead survey sponsorship, with additional financial support from the CDE.

In this *Highlights*, the survey is referred to as the 2009 CSS, because most students took the survey before the end of that year. Comparisons to the results from previous surveys are generally limited to the immediately preceding CSS in 2007 (12th CSS). Percentages are rounded to the nearest whole number and references are provided to the tables, by number, in the *Compendium of Tables*, which contains the detailed results to the tenth of a percentage.¹ Normal statistical irregularities that occur in rounding when using weighted data may result in overall +/- one percentage point decrease/increase discrepancies on reported items in this report. For heavy-use measures, summaries of results are provided only for high school students. Unless otherwise specified, general discussions of substance use do not include tobacco. A list of abbreviations and definitions of key terms used in the report follows this preface.

We are grateful for the continued support of the California Departments of Alcohol and Drug Programs and of Education, and their 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. We wish to acknowledge the contributions at DADP of Stephen Bright, Office of Applied Research and Analysis, and Michelle Abe, Office of Problem Gambling; and at CDE, of Hilva Chan and Tom Herman, Coordinated School Health and Safety Office.

This project also would not have been possible without the cooperation of the superintendents, principals, and teachers at the participating schools. Their commitment and professionalism have made this survey a continued reality. At WestEd, Kiku Annon and Michal Clingman supervised the survey administration. Special acknowledgment should be made to the contribution of Jerry Bailey in planning this survey and analyzing the results. Jeff Polik, Michal Clingman, and Veasna Tep helped prepare this report.

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¹ 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 a trend over more than 2 survey periods.

Abbreviations

SURVEYS

| | |
|-------------|---|
| CSS | The California Student Survey. Also known as the biennial Statewide Survey of Drug and Alcohol Use among California Students and the biennial statewide California Healthy Kids Survey (see below). |
| CHKS | California Healthy Kids Survey, a companion survey to the CSS for local data collection, sponsored by the California Department of Education (CDE). The CSS includes all the required CHKS questions that districts must administer and is often administered in schools at the same time as they conduct their local CHKS. At the time of this survey administration, CDE required all districts that accepted federal or state prevention funds to administer the CHKS biennially. For further information, see http://chks.wested.org . |
| SAMHSA NOMs | National Outcome Measures selected by the Substance Abuse and Mental Health Services Administration and required to be reported by grantees. |

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 5 drinks or more in a row on the same occasion in the past 30 days. |
| Drugs | In this report, substances (e.g., marijuana) other than alcohol or tobacco. |
| 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. |
| Painkillers | Prescription painkillers such as OxyContin, Vicodin, Percodan. |
| Polydrug Use | Use of two or more different drugs on the same occasion. Measured for the past six months. |
| Smokeless Tobacco | Chew, dip or snuff, such as Redman, Beechnut, Skoal, or Copenhagen. |
| Tobacco | Includes both smokeless tobacco and cigarettes. |

PREVALENCE MEASURES

| | |
|--------------|--|
| Current Use | Any use 30 days prior to the survey. |
| Daily Use | Once a day or more often. For the past 30 days, using 20 or more days. |
| Lifetime Use | Any use over respondent's lifetime (i.e., ever use). |
| Recent Use | Any use in the past six months. |
| Weekly Use | Once a week or more often, based on the use in the past six months, or use on three or more of the past 30 days. |

1. Overview

This 2009–10 *California Student Survey* (CSS) is the 13th biennial, statewide assessment of health risk and resilience factors among California secondary school students in grades 7, 9 and 11. The initial surveys (starting 1985–86) in this now–extended series focused on alcohol and other drug (AOD) use and were developed, sponsored, and administered at the request of John K. Van de Kamp, then Attorney General of California. Over time, the focus of the CSS has been enlarged to include questions on other health–risk behaviors and personal resiliency, in part to promote comparability with the local *California Healthy Kids Survey* (CHKS), which began in 1999. This report summarizes the key 2009 results for alcohol, tobacco, and drug use. It is designed to be used in conjunction with the detailed results in the *Compendium of Tables*. References to table numbers in this report refer to this *Compendium*.²

Current results compared to 2007 are mixed. There was little change among 7th graders. Among high school students, especially 11th graders, notable reductions occurred in several indicators of use of alcohol, tobacco, and several illegal drugs other than marijuana, as well as AOD use at school. In contrast, overall use of marijuana and prescription painkillers was level, and use of Ecstasy increased notably among 11th graders, as did several indicators of frequent marijuana use. Because of the decline in alcohol consumption, total AOD use among high school students declined somewhat compared to two years ago, but overall drug use remained about the same. These mixed results warrant a repeat of the call against complacency in the 2007 report. In this light, the cutbacks that are occurring in federal drug prevention funding for schools and communities is a troubling development.

The 2009 Survey Sample and Conditions of Administration

The 13th CSS was administered during fall 2009 and winter 2010 to 8,390 students enrolled in a randomly–selected sample of 74 schools in grades 7, 9 and 11. This is a decline in participation of 36 schools compared to 2007. Unfortunately, many school officials showed a marked reluctance to participate, resulting in a 25% reduction in overall school participation from the target sample of 110 schools. Comparisons to prior CSS results thus must be treated with caution.

The CSS is conducted under conditions of strict confidentiality. The anonymity of participants is assured. Participation by school districts, schools, and students is voluntary, and the latter must have parental consent. The survey procedures for obtaining consent as well as the conditions for survey administration were the same as those used since 2001, with the single exception that since 2005, “passive” parental consent has been allowed, as discussed further in Section 2.

Summary of Prior Findings

The early– to mid–1990s was a period of rising AOD use, finally leveling off in 1997.³ The next survey in 1999 revealed that overall prevalence of use mainly declined, markedly for some of the most commonly–used substances. Although part of that decline was probably due to changes in item wording, subsequent surveys confirmed that the previous rising trend had ended. In 2001, no meaningful increases in use were identified, and there were reversals for some key indicators, especially in overall use of alcohol. In 2003, declines in overall use continued for alcohol and extended to other drugs and heavy AOD use, which remained disturbingly high among high school students, as highlighted in a special report.

In 2005, this declining trend appeared to level off. The picture across grades and substances changed very little. Differences for specific substances were few, small, and often inconsistent in direction. The 2005 survey further provided the first data on the extent of illicit use of prescription painkillers, used in the past six months by 14% of 11th graders, and other medicinal drugs. Overall, the results sent out a warning against complacency and reinforced the need to provide services to heavy substance users.

² The *Compendium of Tables* contains all the survey results, including those related to school violence, bullying, and youth resilience. It may be downloaded from the survey website: <http://www.wested.org/cs/we/view/pj/572>

³ Between 1985 and 1989, use of illegal drugs and cigarettes by California students declined steadily. In 1989, alcohol consumption declined as well. In 1991, findings were mixed in the direction of changes. Use of cocaine and methamphetamine continued to decline, but drinking alcohol and using tobacco increased significantly. 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.

For 2007, the most significant findings were from new questions on recreational use of diverted prescription and over-the-counter (OTC) drugs, added in response to the 2005 findings. These data revealed that the CSS, as well as other surveys, had been underestimating true levels of substance use by neglecting to include questions on "recreational" use of prescription and nonprescription (cold/cough) medications.

Assessment of other AOD use trends in 2007 was complicated by changes in some of the survey items. However, for questions that were not changed (e.g., drug use in the past six months), overall prevalence rates again remained very stable, as did indicators of problematic use (or they increased marginally). Most important, *there was no unequivocal evidence of declines on any measure*, with the exception of methamphetamine use in the past six months for 11th graders (but not current or lifetime use). As a result, it seemed safe to conclude that the downward trend in overall use during the early years of the decade had ended. The 2007 survey was thus the second in a row delivering a strong warning about the need for more effective approaches to alcohol and other drug prevention education and interventions targeting youth at risk of heavy and problematic use.

Summary of 2009 Findings

ALCOHOL

Among 9th and 11th graders, ever having at least one drink dropped by two percentage points (to 46%) and by four points (to 63%), respectively. Lifetime consumption of seven or more drinks dropped by six points among 11th graders (to 36%). Any *current* drinking (past 30 days) declined by four and five points (to 24% and 37%), respectively,

Heavy use indicators also declined: *binge drinking*, by three points in 9th grade (to 12%) and by six points in 11th (to 23%); and ever being "very drunk/sick", by four points (to 24%) and by three points (to 41%), respectively. *Drinking and driving* involvement dropped a pronounced seven points among 9th graders and eight points among 11th (to 16% and 24%). Reflecting these declines, the percentage classified as *Excessive Alcohol Users* was down five and two points, respectively, to 12% and 27%.

CIGARETTES

The percentages reporting ever smoking at least one whole cigarette declined in all grades compared to 2007: by two points (to 5%) in 7th, four points (to 16%) in 9th, and five points (to 29%) in 11th. These findings are similar to the prevalence rates found earlier in the decade (e.g., 2003). The number of 9th graders who reported smoking for the first time by age 14 decreased by seven points (to 18%).

MARIJUANA

Overall marijuana use was generally stable, especially among 7th graders, but some indicators of regular use increased modestly in high school, especially among 11th graders. Current use is now at 6%, 14%, and 24% across grades. Among 9th graders, there was a two-point decline in current use, yet a two-point increase in lifetime use (27%) due to a rise in the percentage using seven or more times (13%). In 11th grade, there were two-to-three point increases for overall and weekly use in the past six months, and for lifetime use seven or more times (to 33%, 15%, and 26%, respectively). Consistent with this, there were increases in indicators of perceived availability, peer use, and lack of harm from use among 11th graders.

RECREATIONAL USE OF PRESCRIPTION DRUGS AND COLD/COUGH MEDICATIONS

The 2009 findings confirm those of 2007 in showing the troubling extent of lifetime use of prescription medications to get high (without a doctor's prescription), level at 18% in 9th grade and 22% in 11th. Twelve percent of 9th and 19% of 11th graders had ever tried a *prescription painkiller*, making it the most popular class of drugs after marijuana. In both grades, around 5–6% reported use of tranquilizers/sedatives, and diet pills, and attention deficit medications; and 2% use of barbiturates. There was little change in any category except *diet pills*, down by three points in 9th and two points in 11th.

In addition, 21% of 9th and 23% of 11th graders had used a *cold/cough medicine* for the same purpose, down by five points in 9th grade and two points in 11th.

ECSTASY/MDMA

Lifetime use of Ecstasy has risen steadily in the last decade. Among 9th and 11th graders, the percentages nearly doubled from 2007 to 2009, to 9% and 16%, respectively. Similarly, use in the past six months increased from 4% to 8% for 9th graders, and from 6% to 11% for 11th graders. These were the most substantial findings for an increase in use among substances and grades in the 2009 CSS.

METHAMPHETAMINE

Current use of methamphetamine among 11th graders declined by more than half to 2%, continuing a general trend of reduction since 2003.

OVERALL AOD USE

Overall lifetime AOD use rates are at 29%, 51%, and 66%, by grade, down three points in 11th because of the reductions in alcohol use. Factoring in new, more detailed information on prescription drug use among 9th/11th graders raises the rate to 54% and 67%; including use of cold/cough medicines increases them further to 58% and 70%. Overall drug use, however, was little changed.

HEAVY DRUG USE AND OVERALL AOD DEPENDENCY

Most indicators of heavy illicit drug use were little changed. Reflecting the general stability in illicit drug use in the past six months, the percentage of high school students classified as High Risk Drug Users was level at 8% of 9th and 17% of 11th. The percentage classified as at risk of AOD dependency was down by 2 points in 9th (to 2%) and four points in 11th (to 7%), arguably reflecting the declines in alcohol use. The percentages classified as AOD "abusers" rose by similar amounts, resulting in a little change in the estimate of the total population potentially in need of intervention (12% in 9th and 22% in 11th).

USE ON SCHOOL PROPERTY

Use of tobacco, alcohol, marijuana, and any other illegal drug or pill on school property in the past 30 days all declined across grade levels, with the exception of an almost two-point increase in any other drug use among 9th graders. Among 11th graders, the percentages were down by two points, in the case of marijuana, by four points. Among 9th graders, tobacco was down four points; alcohol, by three points; and marijuana by two. Rates among 7th graders were more stable, with alcohol showing the most decline, but less than two points.

2. Methods & Content

As noted earlier, in 1999 the goals and content of the CSS were expanded through integration with the California Department of Education's *California Healthy Kids Survey* (CHKS), a comprehensive survey of health–risk behaviors, resilience factors, and school climate administered by school districts. Biennial CHKS administration was required by CDE in 2003 in compliance with the *No Child Left Behind Act* of 2001. All CHKS core questions are now embedded within the CSS, enabling the CSS to generate representative, statewide norms against which local CHKS results can be compared. This arrangement makes it possible for schools to combine CSS and CHKS administration, thereby reducing their overall survey burden and encouraging CSS participation.

The procedures for sampling and data collection were the same as for previous surveys, with the notable exception that, beginning in 2005, “passive” parental consent was again allowed, whereas between 1995 and 2003 only written consent was permitted, as discussed below. The survey protocol was approved by the state Health and Welfare Agency's 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 did not approve. All data are anonymous and confidential. Research staff at WestEd selected the statewide random sample of schools and classrooms, contacted the schools, and administered the survey to insure that no selection bias might influence the results.

Parental Consent and the Student Participation Rate

A change in state law allowed passive parental consent procedures to be used beginning in 2005.⁴ Under passive consent, parents inform the school only if they do *not* want their child to participate in the survey. The new law applies only if the local School Board adopts a formal passive–consent policy implementing federal and state regulations. 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. Otherwise, no student could agree to participate in the survey without a signed consent form from a parent or guardian. About 70% of schools in 2009 had adopted passive–consent procedures, compared to 78% in 2007, resulting in a mixed–consent survey (some schools using written consent; others, passive).

About 75% of students in the participating schools completed the survey in 2009, only down slightly from 78% in both 2005 and 2007. This compares to only 58% in 2001 and 62% in 2003. This increase in response rates in recent administrations is unquestionably due to the shift to passive consent adopted by the majority of participating schools. This improvement in participation is consistent with a 1995 study of CSS data confirming that the decline in response rates was due to non–return of consent forms rather than active parental refusal.⁵ The percentages of parents not returning written consent forms were most pronounced in schools serving students from economically disadvantaged communities. However, this likely loss of participating students after 1995 did not appear to effect long–term trends in the sense of affecting survey results. Likewise, there were only small differences in the results for 2007 and 2009 for students at schools allowing passive consent versus those where written consent was required, although prevalence rates were *slightly* higher among 11th graders, as might be expected. Thus, although the demographic and other characteristics of students in passive– vs. written–consent samples vary, these variations seem to have no significant effect on overall self–reported substance use.

Sample

The final 2009–10 sample consisted of 8,390 randomly–selected students (a little over 2,500 per grade) from 31 middle schools and 44 comprehensive and continuation high schools, with one K–12 school overlapping, for a total of 74 schools (see Table 1.1). The

4 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.”

5 Skager, R. & Austin, G. Effects of active parental consent on response rates for a statewide secondary school substance use survey and relationships with school level measures of student ethnicity, poverty and educational advancement. Paper presented at the annual meeting of the American Educational Research Association, Chicago, March 27, 1997.

larger number of high schools reflects inclusion of eleven *continuation schools*, which do not have linked feeder middle schools, weighted to represent of the total state enrollment of students in these schools.⁶

- **Race/Ethnicity.** The racial/ethnic composition of the grade-level samples are consistent with earlier surveys and reflect the ongoing school-enrollment decline in the relative percentages of white students (range by grade 18–29%) and increase in Hispanics (43–45), particularly in 9th grade. Other groups have remained fairly stable which may be taken as an indication that the sample adequately represents the State.
- **Gender.** When only written parental consent was permitted, there were slightly higher proportions of females in the sample in all grades. Under current mixed consent, this difference has narrowed, although females still slightly exceed males in participation rates in 7th and 9th grades. This gender bias was controlled by statistical weighting

While the selection of the schools and classrooms in the survey was unbiased and random, the main concern in interpreting findings of the current survey is that 36 schools in the intended sample of 110 declined to participate (down 19 schools in 7th grade, 17 in 9th, and 16 in 11th). This appeared to be the result of three factors: (1) federal Safe and Drug Free Schools funding was no longer available to school districts, (2) local budget cuts, and (3) academic "accountability" pressure to not divert classroom instruction time to survey administration. This raises possibility of selection bias and creates uncertainty over how representative the results are for the state as a whole. Although aspects of the sample (e.g. ethnicity) have remained fairly consistent with previous years suggesting representativeness, and the differences in the number of schools was adjusted by weighting on school social and demographic characteristics, the potential sampling bias still warrants caution in generalizing our findings. Therefore, we must admit to concern about precise comparisons with previous survey findings. While we must make such comparisons, it is with less confidence than was the case for earlier surveys.

Content of the Instrument

In fulfillment of its legislative mandate (and original purpose), the CSS focuses mainly on substance use. The survey assesses the overall prevalence (any use) and frequency of use of alcohol, tobacco, and a wide range of drugs (the latter significantly extended in the current survey), as well as forms of risky and abusive use including binge drinking, drinking and driving, and substance use at school. It also assesses perceived harm and other attitudes relevant to substance use; personal problems associated with alcohol and other drug (AOD) use; social influences such as availability as well as perceived use among peers and adults known to the student. Since 1985, the main series of questions assess AOD use in the *six months* prior to survey administration.

Overtime, the information needs of the co-sponsoring agencies led to an expansion in coverage – particularly in regard to school violence, victimization, and safety – and to changes in questions. Most notably, in 1999, the CSS and CHKS content were integrated to enable state and local data comparability across a broader range of health-related behaviors. Since then, several items were added, or existing items were modified, in order to: (a) meet the requirements of the federal No Child Left Behind Act of 2001 for student assessment; (b) expand the value of the CSS for understanding the scope and nature of heavy AOD use; (c) bring the survey in compliance with the National Outcome Measures (NOMs) required by the Substance Abuse and Mental Health Services Administration (SAMHSA); and, most recently, (d) assess lifetime use of diverted prescription medications and over-the-counter (OTC) cold/cough/congestion medications, in response to developing concerns over their recreational use. As a result of these last two changes, many of the survey results for substance use in 2007, especially for lifetime and 30-day use trends, were considered a new baseline for making future comparisons. In 2009, there were minimal changes to the instruments, none of which affected substance use items.

6 In contrast, CHKS results (at the local level) are reported separately for 11th graders in comprehensive (traditional) high schools vs. those for students in continuation and other nontraditional schools. This distinction provides districts with data relevant to the needs of students in both types of schools. As continuation and other nontraditional-school students report significantly higher rates of substance use than their 11th-grade peers, *any differences between the CSS and CHKS samples should be taken into consideration in making comparisons between the results of the two surveys.* For data on substance use among continuation school students, see: Austin, G., & Abe, Y. (2002). *Continuation schools report: Findings on the use of alcohol, tobacco, and other drugs from the 8th Biennial Survey in grades 7, 9, and 11* (Sacramento: Office of the Attorney General); and Austin, G., Dixon, D., Bailey, J., and Berliner, B. (2008). *Continuation high schools and their students: What the data tell us* (San Francisco: WestEd).

3. Use of Alcohol

Alcohol remains the most popular psychoactive substance among secondary students, with the majority (54%) of 11th graders reporting recent drinking (past six months). Item changes in 2007 made the interpretation of longer-term trends problematic for alcohol in 2007. Nevertheless, when compared to the previous survey, the 2009 data suggest that the declining trend in current drinking that began early in the decade may have been resumed. Current drinking on school property is also down, as is drinking and driving.

Overall Use

LIFETIME (EVER)

Lifetime consumption of a *full drink* among 7th, 9th, and 11th graders was at 24%, 46%, and 63%, respectively, including an almost four-point decline between 2007 and 2009 among 11th graders. Despite some fluctuation from year to year, having tried at least one full drink seems to be a stable norm for nearly one-quarter of 7th graders, half of 9th, and two-thirds of 11th. (Table 2.1)⁷

PAST SIX MONTHS (RECENT USE)

The percentages reporting that they had at least one *alcoholic drink* of any kind (beer, wine, or spirits) in the past six months were relatively unchanged since 2007. These percentages were 20%, 39%, and 54% across the three grades assessed in the CSS, somewhat lower than in 2005 or previously. This decline may be the result of using a single generic category ("an alcoholic drink") in the last two survey administrations compared to the previous assessment of specific beverage categories ("beer", "wine", and "spirits"), from which a total alcohol rate was calculated.⁸ It is possible that some respondents did not think of beer as an "alcoholic" drink. This basic question was changed because, on earlier surveys, the percentages for six-month alcohol use were illogically higher than for lifetime consumption of an alcoholic drink. Current results, like those in 2007, are now slightly lower, as would be expected. (Tables 2.6–2.8)

PAST THIRTY DAYS (CURRENT USE)

Fifteen percent of 7th, 24% of 9th and 37% of 11th graders reported having at least one alcoholic *drink* in the past 30 days. Such current use was down notably among high school students compared to 2007, by four percentage points for 9th graders and by five points for 11th graders. (Tables 2.14–2.15)

Level of Involvement (Heavy Use Indicators)

Most measures of frequent or heavy drinking, which in previous years have not notably changed, declined on the current survey, including weekly drinking, binge drinking, lifetime drunkenness, and drinking and driving involvement.

FREQUENT DRINKING

Weekly drinking (once a week or more often) in the past six months among 9th and 11th graders dropped since the previous CSS by two points to 5% and 15%, respectively. For 9th graders, this was the first decline since 2001. Among 7th graders, weekly/daily drinking has been stable at around 2% since 2001. Weekly drinkers accounted for only 13% of the drinking population in 7th grade, but over one-quarter (28%) in 11th. (Tables 2.6–2.9)

Similar, or only slightly lower percentages compared to those in 2007 were reported for drinking on three or more of the past 30 days (a rough equivalent to weekly use), at 4% in 7th grade, 9% in 9th and 17% in 11th. This measure also remained relatively stable, as did daily drinking at 2% for both 9th and 11th graders. (Table 2.15)

Consistent with these results, the percentage who had consumed seven or more drinks in their lifetime was down three and six points, to 16% in 9th grade and 36% in 11th. (Table 2.1)

7 Table identifications refer to table numbers in the full survey Compendium, which can be downloaded from: <http://www.wested.org/cs/we/view/pj/572>

8 The question still provided beer, wine, and liquor as examples of an alcoholic drink.

BINGE (HEAVY) DRINKING (PAST 30 DAYS)

Binge drinking, defined as consuming five drinks in a row at least once in the past 30 days, has been fairly stable among 7th graders since 2005 at around 5%. In contrast, it declined from 16% to 12% in 9th and, notably, from 29% to 23% in 11th. Students who binged at least once constituted 33% of the current drinking population in 7th grade, 53% in 9th, and 62% in 11th. *Despite this improvement, it remains the case that the 9th or 11th grader who is currently drinking is more likely than not to have binged.* Moreover, regular binge drinking (on three or more of the last 30 days) was also down 2–3 points compared to 2007, to 5% of 9th and 12% of 11th graders. Still the regular bingers represented over one-third of all binge drinkers in 9th grade and one-half in 11th grade. (Tables 2.14–15)

DRUNKENNESS

The percentages for *ever very drunk or sick* from alcohol were 9% of 7th, 24% of 9th, and 41% of 11th graders. All three of these percentages were lower compared to 2007, by two points in 7th grade, four points in 9th, and three points in 11th. Frequent drunkenness remained stable, with 10% of 9th graders and 22% of 11th reporting that they had been drunk or sick on three or more occasions. Over half of these students (5% and 12%, respectively) reported being drunk/sick seven or more times. Similar percentages (6% of 9th and 15% of 11th graders) reported *forgetting something or passing out* from alcohol use on at least one occasion. However, as is consistent with the decline in prevalence rates, these percentages are lower by two and three points, respectively, than in 2007. (Tables 2.20 & 3.5)

DRINKING STYLE

Six percent of 9th and 11% of 11th graders reported that they like to drink enough to “*feel it a lot or get really drunk*”⁹ (Table 2.18). These findings are down one-to-two percentage points from 2007, consistent with lower rates of heavy drinking. (Table 2.18)

EXCESSIVE ALCOHOL USE

Although over one-tenth of 9th graders (12%) and over one-quarter (26.5%) of 11th graders were classified as Excessive Alcohol Users (EAU), these percentages are down about five and three points, respectively, compared to the 2007 survey results. The EAU statistic is based on three measures: (1) had 5 drinks in a row on three or more days in the past 30 days, (2) being drunk/sick three or more times in lifetime, or (3) likes to “drink to get drunk” or “feel the effects a lot”. (Table 2.21)

DRINKING AND DRIVING

Drinking and driving, including being driven by a friend who had been drinking, had risen steadily among high school students since 2003, but is now in decline. Compared to 2007, this statistic dropped substantially: seven percentage points down to 16% in 9th and eight points down to 24% in 11th grade. (Table 3.2)

9 These are considerably lower percentage than found in 2005 when getting drunk and feeling it a lot were two separate categories and adding them together produced rates of 11% and 21%. In 2007, these two options were combined and a new option of drinking “enough to feel it moderately” was added in order to better align this question with the marijuana use style question and eliminate the large gulf between drinking a little vs. drinking a lot on earlier CSS questionnaires.

4. Use of Drugs

Use of marijuana and other illegal drugs, which generally declined in 2003, leveled off in 2005 and 2007, and again showed few notable changes in 2009. Marijuana remains the most commonly used substance after alcohol. One-quarter of 11th graders reported use in the past 30 days and 41% have tried it sometime in the past. The exceptions to this general stability in drug use were mixed. There was an increased percentage reporting use of Ecstasy in both 9th and 11th grades, but declines occurred among 11th graders in lifetime use of inhalants, cocaine, methamphetamine, LSD/psychedelics, and heroin, and in current use of inhalants and methamphetamine.

Consistent with 2007 results, newer questions assessing the recreational use of prescription and over-the-counter (OTC) drugs in the non-clinical high school population (i.e., "without a doctor's order to get high or stoned") reveal more fully than before the extent to which teenagers are using "medicinal" substances. This phenomenon must be taken into account in order to ascertain a more accurate picture of substance use among young people. These findings suggest that the boundary between "licit" and "illicit" is indeed murky since the same substances can be used both legitimately (as prescriptions) and illegitimately (for "recreational" purposes). Compared to 2007, there were moderate declines in use of diet pills and cold/cough medicines, but stability in the use of prescription painkillers and depressants.

Total lifetime recreational use of drugs, including prescription medications, remained stable in the 9th grade at 36%, but declined two points in 11th grade, to 48%. Total current drug use was unchanged in all grades at 8% in 7th grade, 16% in 9th and 27% in 11th.

Overall Use of Specific Drugs

MARIJUANA

Among 7th-grade students, overall marijuana use was level compared to 2005 and 2007 surveys. There were only relatively slight differences between lifetime, six-month, and 30-day prevalence rates (8%, 7%, and 6%, respectively, across grades). This reflects that, at this age, most students have only recently been exposed to the drug.

Predictably, use increased dramatically in 9th and then again in 11th grade. Lifetime use was reported by 27% in 9th and 41% in 11th grade; current use was at 14% in 9th and 24% in 11th. Current marijuana use was about half the rate of lifetime use in both grades.

Among high school students, trends since 2007 were mixed but generally suggest stability in overall prevalence or modest increases, particularly among regular users. In 9th grade, there was a two-point decline in overall current use; a two-point increase in lifetime use; and little change in six-month use, although it has risen by two points since 2005 to 21%. In 11th grade, overall current and lifetime use were stable, but six-month use increased slightly compared to 2003–2007 rates, by two points, to 33%. However, lifetime use for seven or more times increased by two points in 9th grade to 13%, and by three points in 11th to 26%, even though for the latter grade the overall prevalence was unchanged. Similarly, there were increases in weekly and daily marijuana use in the past six months and 30 days, as discussed below in the section on level of use. (Tables 2.2, 2.6–2.9 & 2.14)

ANY DRUG OTHER THAN MARIJUANA

Calculating the percentages of 9th and 11th graders who reported ever using any drug other than marijuana resulted in lifetime percentages of 27% and 33%. However, 72% of lifetime drug users still used marijuana in 9th grade and 85% in 11th.

INHALANTS

As in 2007, among 7th graders, lifetime use of hydrocarbon-based inhalants (glue, paint, aerosol sprays, gasoline, poppers, or gases) is at 10%, exceeding the use of marijuana by two points. This finding has emerged throughout the history of the CSS. Six-month and current use were level at 7% and 4%, respectively.

At the upper grades, lifetime inhalant use was level at 14% in 9th, but declined from 15% to 12% in 11th. Use in the previous six months was about the same as in 2007, at 8% and 6%, respectively, whereas current use was down nearly three points both grades, to 5% and 4%.

ECSTASY (MDMA), LSD, AND PSYCHEDELICS

Lifetime use of Ecstasy, while increasing steadily in previous years, rose substantially in 2009 compared to 2007, from 6% to 9% in 9th grade, and from 10% to 16% in 11th.¹⁰ Recent use (past six months) nearly doubled for both 9th and 11th grades to 8% and 11%. This is one of the most troubling findings from the 2009 CSS. Reflecting the increase in use of Ecstasy, current use of any psychedelic is now at 5% in 9th and 7% in 11th grade, compared to 2%–3% in 2003 and 2005. In contrast, recent use of LSD/psychedelics (not including Ecstasy) use remained stable at 3% and 5%. (Tables 2.2 & 2.6–2.8)

METHAMPHETAMINE

Lifetime and current use of methamphetamine (and amphetamine) was stable in 9th grade, both at 4%. However, both were down three points in 11th grade, to 4% and 2%. Six-month use was stable at 4% in 9th and 3% in 11th. Most indicators of methamphetamine use have shown little change since 2003, when six-month use declined 4.5 points in 11th grade compared to 2001. This drug has never been a major factor in the general youth population, although localized groups of heavy and abusive users undoubtedly exist. Generalizations from the latter do not apply to most young people.¹¹ (Tables 2.2, 2.7–2.8 & 2.14)

COCAINE

Use of cocaine was similar to methamphetamine, with six-month prevalence stable at 3% for 9th and 5% for 11th grade. Lifetime rates were at 5% and 7%, and current use at 3% for both grades. Among 11th graders, lifetime use was down by three percentage points, as was the case with methamphetamine. (Tables 2.2, 2.7–2.8 & 2.14)

PAINKILLERS AND OTHER PRESCRIPTION DRUGS

The 2009 findings confirm those of 2007 in that lifetime use of prescription medications to get high (without a doctor's prescription) was level at 18% in 9th grade and 22% in 11th (7th graders are not asked this series of questions).

Lifetime use of *prescription painkillers* such as Vicodin®, OxyContin®, and Percodan® was level, reported by 12% of 9th and 19% of 11th graders (not asked of 7th graders). These substances are the most popular class of drugs after marijuana among high school students. Moreover, 4% and 7%, respectively, reported use seven or more times. These frequent users amounted to over one-third of lifetime users of prescription painkillers in the upper grades. (Table 2.3)

At much lower levels were *diet pills* at 6% of 9th and 5% of 11th graders. Their use was down three and two percentage points, respectively, compared to 2007, the only category of prescription drugs to show a meaningful change.

Use of other categories remained stable, with relatively small differences between grades. In grade 11, use of *tranquilizers or sedatives* (anti-anxiety benzodiazepines such as Xanax® or Valium®) was reported by 5% of 11th graders and barbiturates such as Seconal, by only 2%.

Two medications for *attention deficit disorder* (ADD), Ritalin® and Adderall®, were reported by 6% in both upper grades. Although often prescribed for children and youth, when taken by users who do not suffer from ADD, these drugs can produce a "high" similar to that from methamphetamine or other "upper" drugs.¹² (Table 2.3)

OVER-THE-COUNTER COUGH AND COLD MEDICINES

Over one-fifth of 9th and 11th graders reported ever using over-the-counter *cold/cough/congestion medicine* (often called "triple C's" on the street) to get high or stoned. These percentages are down as compared to 2007, especially in 9th grade, from 26% to 21%, and from 25% to 23% for 11 graders. That the percentages are nearly similar for the two grade levels suggests that most all use of these substances has started by grade nine, after which students turn to alcohol and other drugs. Not usually considered as psychoactive drugs, cough/cold medicines are potentially dangerous in greater than recommended dosages because they contain dextro-

10 The CSS does not assess Ecstasy use in the past 30 days.

11 While some adolescent treatment agencies report a surge in admissions for methamphetamine abuse, self-report evidence do not necessarily corroborate an increase – let alone an epidemic – among the general in-school population. However, self-report trends should be examined for various demographic groups to better investigate this issue.

12 These two stimulant drugs are also widely used as study aids among college students, especially for those late or even "all-night" cramming sessions so characteristic of college life. On the "positive side," studies show that they are used for this purpose instead of methamphetamine, generally perceived in this population as much more risky.

methorphan (DMX). Consumed in significant amounts, these presumably benign symptom relievers may produce hallucinations and dissociative, “out-of-body” experiences.¹³ Drinking an alcoholic beverage before or after ingestion of critical amounts of these drugs increases the danger of fatal overdose.

Any Drug Use

Among 7th graders, although lifetime use of each the three drug categories assessed (marijuana, inhalants, other illegal drug or pill) was in effect stable, there was a three–point decline in overall lifetime use of *any illegal drug or pill* (from 17% to 14%). Use of any psychoactive drug in the past six months likewise declined by two points to 11%, though current (past 30 day) use was more stable, at 8%.

Among upper graders, lifetime use of *any drug* (including prescription medications but excluding OTC cold/cough medicines), was level at 36% in 9th grade. It was down only a slight two points to 48% in the 11th grade because the declines in some non–marijuana categories were offset by the notable increase in Ecstasy use. Incorporating the use of cold/cough medicine into the estimate of total lifetime drug use increases the percentages to 44% and 54%. (Table 2.5)

Current (past 30 days) use of “any illegal drug or pill” was stable at 8% in 7th grade, 17% in 9th, and 27% in 11th. In 11th grade, the current use percentage is over half the lifetime rate (excluding cold/cough medicines). (Table 2.14)

Level of Use

Although the overall prevalence of marijuana use was generally stable over the past two years, indicators of regular use increased among 11th graders, consistent with the increases in lifetime use on seven or more occasions. There was also an increase in self–report of how “high” students got when they used drugs. Other indicators of frequent, risky, or high levels of drug use were level.

INTOXICATION

Lifetime percentages for ever being “high” or loaded on drugs were stable across grades at 8%, 22%, and 37%, respectively, consistent with CSS results since 2001. Although fewer 9th/11th graders used drugs than drank alcohol, the prevalence rates for being high or loaded on drugs were only slightly lower than those for being very drunk/sick on alcohol. Furthermore, 12% of 9th graders and 23% of 11th were high on drugs seven or more times. These percentages were about twice those of very drunk or sick from alcohol (5% and 12%). (Tables 2.19–2.20)

INTENSITY OF USE

The percentage of students reporting that when they used drugs they usually got “moderately high” or “really high or wasted” increased by three points to 16% in 9th grade and by two points to 26% in 11th. About half (7% and 13%, respectively) wanted to be “really high,” in the case of 11th graders an increase of almost three points over 2007.

The percentage of 11th graders reporting they wanted to get “really high or wasted” on a drug was slightly higher than those reporting drinking to “feel it a lot/get really drunk.” In other words, slightly *more* users are focused on feeling intense effects of drugs than of alcohol. Supportive of this possibility, there is also a striking difference for alcohol vs. other drugs in preference for moderate over intense effects. For drugs, preferring moderate vs. heavy use was tied at 13%, but for alcohol the former was almost twice as large at 21% vs. 11%. (Table 2.18)

WEEKLY AND DAILY MARIJUANA USE

Use of marijuana *at least once a week* over the past six months was stable at 8% in 9th grade, but increased by three points to 15% in 11th grade. Among 9th graders, this percentage was three points higher than that for weekly alcohol use; among 11th graders, it is the same (15%). In both grades, however, a larger proportion of the marijuana–using population are weekly users (38% in 9th and 45% in 11th) than is the case for alcohol (ratio of percent weekly use divided by total percent reporting use).

13 Hospital emergency department patients aged 12 to 20 accounted for almost half (48%) of all the emergency department visits resulting from recreational consumption of *dextromethorphan* (DMX) usually associated with cough and cold medicines. Emergency Department Visits Involving Dextromethorphan. (2006) The DAWN Report. Drug Abuse Warning Network. SAMHSA. <https://dawninfo.samhsa.gov/files/TNDR10DXMforHTML.pdf>

The percentage of students reporting use of marijuana in *three or more* of the past 30 days, another gauge of weekly use, was 8% in 9th and 16% in 11th grade. The latter was up three points since the last survey. *This group accounts for the great majority of current users.*

Daily marijuana use (measured for both the past six months and 30 days) was negligible in grade 9 (2–3%) and barely statistically significant at 5–6% in 11th. However, even this close-to-marginal figure exceeded daily use of alcohol, which was effectively zero (1%). Moreover, the three-point increase in current weekly use among 11th graders was due largely to an increase in the percentage reporting daily use (on 20 or more of the past 30 days). (Tables 2.7–2.9 & 2.15)

POLYDRUG USE

Simultaneous use of more than one substance (e.g., alcohol and marijuana) is especially dangerous because of potential adverse drug interactions. It is also a sign of more intense involvement with psychoactive substances. Polydrug use over the past six months was level at 10% in 9th and 19% in 11th. For the past 30 days, this measure was only moderately lower compared to 2007 in 9th grade at 6% and level in 11th at 13%. About three-quarters of these current polydrug users (4% in 9th and 10% in 11th) reported the practice on more than one of the past 30 days. (Tables 2.11, 2.14 & 2.16)

HIGH-RISK DRUG USE

As in 2007, 8% of 9th graders and 17% of 11th engaged in a high level of illicit drug use in the past six months and were classified as High-Risk Drug Users (HRU). Among 11th graders, this percentage has been level since 2003. The percentage of Conventional Users (those who reported some use in the past six months but did not meet the HRU criteria) was 37% in 9th and 42% in 11th grade. (Table 2.21)

5. Overall AOD Use & Related Problems

This section summarizes measures indicative of the overall percentages of students who are alcohol and drug users and how many among them experience use-related life problems and dependency, and have attempted to stop or reduce AOD use. Taken as a whole, these measures shed light on overall abstinence and percentage of students who may be in need of intervention.

Overall AOD Use

Calculated measures of total alcohol and other drug use were down moderately, most notably in 11th grade, on the strength of the declines in alcohol use.

LIFETIME

The main series of questions on *lifetime* AOD use (excluding prescription drugs) indicated that 29% of 7th graders, 51% of 9th, and 66% of 11th, had up to that point in their lives, at least tried alcohol or an illicit drug. In other words, the percentage of lifetime AOD users almost doubles between the 7th and 9th grades, when it becomes statistically normative behavior (reported by half of 9th graders). Among 11th graders, this measure was down by two points. It was only down one point in 7th and 9th grade, with percentages still higher than in 2003 and 2005.

Adjusting the rates among high school students to account for the more detailed data on use of prescription drugs increases the rates only slightly, to 54% in 9th grade and 67% in 11th. *Thus, despite total abstinence being the primary goal of all past and current prevention efforts, over half of 9th graders and two-thirds of 11th graders have tried alcohol or another drug or pill for the purpose of getting high.*¹⁴ However, this measure was down three points in 11th grade.

Including cold/cough medicines raises these percentages further to 58% and 70%. This measure showed the largest overall declines, down two and three points, respectively, because of reductions in both alcohol and cold/cough medicine. (Tables 2.2 & 2.5)

CURRENT

The percentages of respondents using alcohol or other drugs in the *past 30-days* were considerably lower than those for the six-month and lifetime measures, at 17% in 7th grade, 28% in 9th (a decrease of four points since 2007) and 44% in 11th (a two-point decline). (Table 2.14)

Problems Related to Use

High school students were asked to identify any of twelve pharmacological, personal, school, and social problems they had ever experienced due to their own use of alcohol or other drugs. Thirteen percent of 9th and 19% of 11th graders reported *two or more such problems* from their AOD use, a marginal increase in 9th and decrease in 11th. Percentages were five points higher for alcohol than for drugs among 11th graders, reflecting the higher overall prevalence of drinking. (Tables 3.5–3.7)

The most frequent specific problem reported for either alcohol or drugs was the combined alternative “*passing out/forgetting what happened*” (9% of 9th and 17% of 11th); followed by problems with emotions, nerves or mental health (7% of 9th and 12% of 11th). For 9th graders, damage to a friendship ranked next at 6%. Only 3%–4% of 9th and 6%–8% of 11th graders reported most other problems including trouble with the police, having unwanted sex, missing school, hurting one’s school work, money problems, and physically hurting one’s self. There were no instances of frequencies significantly different than those found in 2007. (Table 3.7)

Indicators of Dependency

Six percent of 9th and 13% of 11th graders endorsed *two or more* out of seven experiences typically associated with AOD dependency or abuse. These frequencies were approximately the same as in 2007. About 10% of 11th graders chose each of the following signs of

¹⁴ Note that the addition of prescription and OTC drugs affects the rate of lifetime AOD use less than the rate of total lifetime drug use because of the higher percentage of students who drank alcohol.

dependency: (a) increasing the amount they drank/used in order to achieve the initial effects; (b) drinking/using alone; and (c) using after deciding they would not do so. Among 11th graders, 7% reported using "a lot more" of a substance than originally intended, down from 10.5% in 2007— the only substantial decline among these indicators — and 6% "spent a lot of time getting, using, or being 'hung over'." For 9th graders, the percentages were about half of those for 11th graders. (Table 3.3)

Efforts at Cessation

The percentage of students responding that they had tried at least once to quit drinking alcohol was 10% in 9th and 13% in 11th. Among the drinking population, about one in four (28% for 9th and 25% for 11th) had tried to stop using at some point. For marijuana, the percentage of students in the total sample reporting any quit attempt was 11% and 18%, respectively, with about half of users reporting at least one quit attempt (47% for 9th and 48% for 11th). These measures have remained relatively level since 2003, except for 11th graders in 2007, when there was a notable rise in attempts for alcohol and modest decline for marijuana. This suggests the reductions in overall prevalence rates are occurring among the number of students initiating use rather than reductions among the drinking population. (Table 5.1)

Only 5% of 9th graders and 4% of 11th reported ever feeling that they needed help (such as counseling or treatment) for their AOD use. Almost four times as many 11th graders (15%) reported that they had *thought* about reducing or stopping AOD use. For lifetime AOD users, the percentage doubled to 29%, a seven-point increase since 2005. However, these 11th graders were half as likely to take it to the next level and *talk* to someone about stopping (8% of total sample, or 15% of AOD users). Only 3% of 11th grade AOD users actually attended a counseling or support group. (Tables 5.3 & 5.4)

Overall, these results suggest that a substantial and increasing minority of users do consider stopping, but nevertheless fail to do so. This leads to the conclusion that intervention strategies need to expand and/or improve to help this group move from thinking about stopping to taking action. As reported in section 8, most schools are not likely to provide such help.

Estimated Size of the Intervention Need Population

The questions on AOD dependency, problems associated with use, and cessation are reasonably consistent with criteria used by the American Psychiatric Association to diagnosis AOD dependency and abuse (see the Diagnostic and Statistical Manual of Mental Disorders, 4th edition). Applying these criteria to the CSS results in 2009, it is estimated that 2% of 9th and 7% of 11th graders may be at risk of dependency.¹⁵ Based on these criteria, an additional 10% and 14%, respectively, may be substance "abusers." This indicates that an overall total of 12% of 9th and 22% of 11th may need some form of targeted intervention to help them stop or reduce their use. Despite the current reductions noted for alcohol use, these estimates are very similar to those calculated since 2003 — one out of ten for 9th graders and over two out of ten for 11th graders. However, there were shifts between the subcategories. Compared to 2003 through 2007, the dependency percentage was down two points and the abuse percentage correspondingly increased two points in 9th grade, and there was a four-point shift in 11th grade. Whether this foretells a longer-term reduction in the number of most at-risk users is a question of keen interest for the 2011 survey. (Tables 3.3 & 3.8)

15 Among 11th graders, this is about half the percentage for reporting two or more of the AOD dependence indicators.

6. Use of Tobacco

Steady reductions in tobacco smoking among students have been a long-term success story for prevention and/or regulation in California. After a slight increase in 2007, lifetime and current use rates declined to the levels of 2005 and 2003 (and, in some cases, percentages are even lower).

Lifetime Smoking

Ever smoking a *whole cigarette* was reported by 5% of students in grade 7 (down two points) and by 16% in 9th and 29% in 11th (down four points in both grades). Having smoked a whole cigarette seven times or more times remained stable at 7% for 9th and 16% for 11th graders (almost half of the 11th graders who reported ever smoking). (Table 2.1)

Current Smoking

Smoking in the past 30 days was at 4% in 7th grade, 8% in 9th, and 15% in 11th, down about two to three points in each grade. Current daily smoking (on 20 or more of the past 30 days) was reported by only 1% in 9th and 4% in 11th grade. Even in grade 11, daily smoking was, perhaps surprisingly, atypical. (Tables 2.14–2.15)

Smoking Cessation Efforts

Eight percent in 9th and 11% in 11th grade reported at least one attempt to stop smoking, the lowest rates of the last four administrations of the CSS survey. Among smokers, the percentages attempting cessation dropped three points to 43% in 9th and seven points to 42% in 11th. Some of this decline may reflect the decline in the size of the smoking population, but it may also indicate that current smokers are more resistant to cessation, thus the need for expanding cessation efforts. About six-tenths in both 9th grade and 11th tried to quit only once. Among users, cessation percentages for smoking are similar to those for marijuana, but much higher than for alcohol. (Table 5.1)

Smokeless Tobacco

For smokeless tobacco (chewing tobacco and snuff), lifetime use (at least once) rates were only 3% in 7th grade, but rose to 7% and 8% among 9th/11th graders. Among 9th graders there has been a gradual increase in use since 2003 (4%), but among 11th graders the percentage was a return to the levels of 2003 and 2005 after a two-point increase to 10% in 2007.

Current use was reported by only about 1% in 7th and 4% in both 9th and 11th grade, a decrease of two and two percentage points, respectively, since 2007. (Tables 2.1, 2.14 & 2.15)

7. Influences on Use

Student reports on perceptions towards use and availability were, on the whole, more positive for marijuana than for cigarettes and alcohol. This may help account for why marijuana use did not show the declines in use evident for alcohol and cigarettes.

Perceived Risk of Harm

Students are asked “how much do people risk harming themselves physically or in other ways” from occasional and frequent use of cigarettes, alcohol, and marijuana. Even in 11th grade, 70%–90% of students are reporting that people moderately to greatly risk harming themselves when they *frequently* use each of these three substance; and also when they *occasionally* use cigarettes. But pronounced differences in attitudes are evident at the extremes (greatly harm vs. no harm).

OCCASIONAL USE

Substantial proportions of the high school population consider *occasional* use of each of the three main classes of substances (alcohol, marijuana, and cigarettes) as, at worst, only having moderate risk of harm. Overall, the least risk is associated with occasional use of alcohol and between grades attitudes change markedly for marijuana. Percentages are relatively stable across grades for alcohol and cigarettes, with about one-third reporting great risk of harm for cigarettes and around one-quarter for alcohol. In contrast, the percentage for marijuana in 7th grade is the highest (45%), but then it drops by 11 points by 11th grade, to only 29%, higher than for alcohol but lower than for cigarettes. In addition, the percentage reporting *no risk of harm* was highest for marijuana in all grades, twice that for cigarettes in 11th grade (20% vs. 10%, respectively).

Moreover, trends since 2007 were less positive for marijuana. Whereas the *great-harm* percentage for cigarettes rose by about three points in each grade, and by one point for alcohol, it declined by two points for marijuana among 11th graders. For *no harm*, percentages were stable for cigarettes, down about two points for alcohol, and for marijuana by four points among 7th graders and over two points among 9th/11th graders. (Table 4.1)

FREQUENT USE

To assess perceived harm of *frequent use*, students were asked about plausible patterns for each of the same three substances: 1–2 packs of cigarettes per day, marijuana 1–2 times per week, and 5 or more drinks 1–2 times per week. Notable differences by grade again occur across categories. Students in all grades perceive greatest harm from frequent cigarette use, with the percentage rising with grade. The *great-harm* percentages remain relatively stable across grades for alcohol at roughly half. They dropped markedly by 11th grade for marijuana, to lower than for alcohol and cigarettes (the highest percentage). Similarly, smoking marijuana once or twice a week had the highest percentage for no harm. More specifically:

- **Cigarettes.** The percentages rating smoking *1–2 packs of cigarettes per day* as posing great harm rose by grade from 67% in 7th to 77% in 11th grade.
- **Marijuana.** Unlike cigarettes, the percentages rating marijuana smoking *once or twice a week* as posing great harm *dropped* from 58% in 7th to 48% in 9th to 43% in 11th. The no-harm percentage was the lowest at 16%, compared to 7% for both cigarettes and alcohol.
- **Alcohol.** The percentages who rated drinking *5+ drinks of alcohol once or twice a week* as posing great harm were relatively consistent across grades, ranging from 46% in 9th to 51% in 11th. Whereas it is perceived as less harmful than frequent marijuana use in 7th and 9th grades, it is perceived as more harmful in 11th.

Although they are very different frequent-use patterns, it is striking that, by 11th grade, weekly marijuana use is perceived as significantly less harmful than daily smoking (43% vs. 77%) or weekly binge drinking (51%).

Compared to 2007, the biggest and most positive shift was among 7th graders. For this youngest group, there was an overall decline across substances in the percentages perceiving no harm and a corresponding increase in perceptions of great harm. In contrast, the opposite trend was evident for marijuana in the 11th grade: a slight decline in the percentage for great harm and a rise of almost

three points in no harm, the same trend of decline perceived risk found for occasional marijuana smoking. Trends for frequent cigarette and alcohol use were mixed across grades.

Perceived Use by Peers

Respondents were asked to estimate the percentage of their same-age peers who had: (1) tried marijuana at least once, and (2) used cigarettes once a month or more. Seventh graders were also asked if they drank alcohol monthly. It is reasonable to assume that the percent of respondents who reported that half or more of students engaged in each of these behaviors is a meaningful benchmark to establish that the behavior is perceived as "normal" or "common." Very few 7th graders saw AOD use as normative: only 9% thought half or more of their peers smoked cigarettes monthly, 14% that they had tried marijuana, and 15% that they drank monthly, down 2–3 points in all three categories. In 9th grade, the percentages for cigarettes and marijuana were more than three times higher, at 31% and 48%, respectively. In 11th grade, the percentage for cigarettes remained relatively level at 34%, but it jumped to 65% for marijuana.¹⁶ In other words, about one-third of high school students think monthly cigarette smoking is normative among their peers (behavior by half or more of them) and about half to two-thirds think trying marijuana is normative.

These are large overestimations compared to the actual prevalence rates for smoking in the past 30 days (8% of 9th and 15% of 11th) and marijuana lifetime experimentation (27% and 41%). Moreover, the percentages for marijuana are five points higher in 9th grade and seven points higher in 11th than in 2007, whereas the percentages for cigarettes and alcohol generally declined. Although there is no evidence for a rise in overall marijuana use, the marked and increasing *overestimation* of the percentage of peers using it is troublesome. Belief that "lots of other kids are doing it" is a rationalization for initiation. One strategy in some prevention education programs takes advantage of this tendency to overestimate use by peers by proving it wrong. (Table 4.6)

Disapproval of Use

Respondents were asked how much *they* would disapprove of someone their age: (a) smoking one or more packs of cigarettes a day; (b) having one or 2 drinks of alcohol every day; (c) trying marijuana or hashish once or twice; and (d) using marijuana once a month or more. About two-thirds of 7th graders registered strong disapproval for each of the four indicators. In contrast, there was a considerable differentiation at the higher grades, with the most disapproval for cigarettes and least for marijuana. In the 11th grade, 64% strongly disapproved of a peer smoking a pack of cigarettes per day, dropping to 55% for having 1–2 drinks of alcohol per day, and then to only 38% for using marijuana once per month or more, and to only 32% for trying marijuana once or twice — the latter two percentages revealing the extent 11th graders accept regular and experimental use by peers as normative. (Table 4.10)

Perhaps the most significant finding is that, between grades 7 and 11, strong disapproval dropped about eight percentage points for regular (daily) use of cigarettes and for alcohol; but for monthly marijuana use, it dropped almost by half, from two-thirds (67%) to only a little over one-third (38%). This is the same pattern seen for perceived risk. Similarly, ratings of indifference ("neither approve nor disapprove") varied very little for alcohol and cigarettes across grades (all under 27%), but increased markedly for marijuana (from high teens to the mid-forties). Although this item contrasts daily use of cigarettes and alcohol with monthly use of marijuana, which is likely to be perceived by young people as less intensive involvement, it is even more striking that there is very little difference in disapproval of trying marijuana once or twice vs. monthly use; and whereas the strongly-disapprove percentages increased substantially, in 11th grade since 2007 for daily cigarettes and alcohol (by 7–8 points for both), there was virtually no change for monthly marijuana. (Tables 4.10)

Perceived Availability (Difficulty)

In 7th grade, about one-third reported that cigarettes, alcohol, and marijuana are very or fairly easy to obtain. The percentages dropping to 23% for marijuana. In high school, the percentage increased dramatically, especially for marijuana. By 11th grade, relatively similar percentages rated each substance as very/fairly easy to obtain: 70% for cigarettes, 73% for alcohol, and 72% for marijuana. Whereas the percentages nearly doubled for cigarettes and alcohol between 7th and 11th grade, it more than tripled for marijuana. *Older adolescents see very little difference between the availability of substances based on whether they are, for adults, legal (alcohol) to use or illegal (marijuana).* Clearly, high school student perception regarding access of these three substances is that it is not a problem for students who want to obtain them to get them. Moreover, among 11th graders, the percentage for cigarette use was

¹⁶ Percentages for estimated use of alcohol were not assessed at grades 9 and 11 because of the greater frequency of "actual" use among them.

stable, the percentage for alcohol use increased 3 points and marijuana increased five percentage points compared to 2007, perhaps a factor in the lack of any decline in its use. (Table 4.2)

Sources of Alcohol

When asked where students obtain alcohol, the most frequently selected source in each grade was *parties or social events* (31%, 47%, and 62%). This was followed by *friends or other teens* (29%, 39%, and 51%), and, finally, the *home* (28%, 32%, and 42%). For the upper grades, *getting adults to buy* their alcohol was next at 16% and 33%, respectively, followed by *adults at friends' homes* (16% and 26%). For 7th grade, the order of these two response options was reversed, with *adults at friend's homes* at 11%, followed by *getting adults to buy* at 9%. (Table 4.5)

8. Findings Related to School

One of the major public concerns about adolescent substance use is its effects on learning and the school environment. While the CSS does not address this issue directly, it does monitor availability and use on school property, as well as respondents' perceptions of its effects on school-related behavior and performance.

Substance Use at School

Substance use by students either just before or during school hours has troubling implications for attempts to raise academic achievement and foster a learning-friendly school environment. Drinking/using at school once or twice could merely reflect motives such as achieving bragging rights or just tweaking a system of control that many students may resent. More frequent use is more likely to reflect drug dependency resulting in disengagement from school and the learning process.

CURRENT USE OF ALCOHOL, MARIJUANA, OR OTHER DRUGS

For grade 7, use of any substance on school property in the past 30 days was well below 5%. Six percent of 9th and 7% of 11th graders reported *current* drinking of alcohol on school property. Virtually the same percentages of 9th and 11th graders used marijuana at school as did alcohol, and a total of 9% and 11%, respectively, used alcohol or marijuana.

In addition, 7% of 9th graders and 4% of 11th reported using any other illegal drug or pill at school, raising the total percentage of alcohol or any drug use at school to 12% in both grades. In 9th grade, this is three percentage points higher than for only alcohol and marijuana, indicating a particular need to focus on use of drugs in addition to marijuana at this grade.

Both alcohol and marijuana use at school were down by about three to four points, respectively, in 11th grade since 2007, and marijuana was down a marginal two points in grade 9. The total of alcohol or marijuana was down four points in both grades. Tobacco use was also down, from 7% to 3% for 9th graders and from 7% to 4% for 11th graders. (Table 2.17)

EVER DRUNK OR "HIGH" AT SCHOOL

Only 4% of 7th graders reported ever being very drunk/sick at school, increasing markedly to 16% of 9th and 24% of 11th. Trends were mixed by grade, declining by two points among 7th graders, while increasing by three points among 9th graders and remaining level among 11th. (Table 2.19)

School-related Problems

Four percent of 9th and 7% of 11th graders had ever missed school due to use of alcohol or other drugs. Similar percentages (3% and 7%) reported use had harmed their schoolwork.¹⁷ In addition, 6% of 9th and 8% of 11th graders reported that alcohol or other drug use had kept them from doing "normal" activities such as school, work, recreation or hobbies. (Table 3.4 & 3.7)

Availability at School

Being offered drugs at school (given or sold) in the past 12 months was reported by 14% in 7th grade, increasing to 34% in 9th and 37% in 11th. These percentages remained stable at the 7th and 11th grades, but there was a four-point increase for 9th graders, up from 30% in 2007. Among 9th and 11th graders, four or more such encounters were reported by 14% and 16%, respectively. On a different question, only 7%–10% across grades reported that school was a place to obtain alcohol, reflecting that it is easier to conceal and distribute drugs on school property than alcohol. (Tables 4.4–4.5)

School Support for Cessation Efforts

Problems with academic achievement and school behavior are common among young people who have developed an unhealthy involvement with psychoactive substances. In an ideal world, school counselors and administrators would be alert to such problems

17 As shown in 2003–04 CSS Brief #1, students reporting current AOD use at school also report use-related school problems two-to-three times more frequently than other current users.

and respond appropriately with intervention and assistance. Unfortunately, most schools have little capacity to offer this type of help (an important function of Student Assistance Programs), and too often rely on suspension or expulsion.

To explore this issue, respondents were asked to rate how likely it was that their school would provide help to students for stopping or reducing AOD use. The results were mixed. On the positive side, reports by 9th and 11th graders that it is *likely* or *very likely* that the school would provide help have increased three to four percentage points since 2007 to 42% and 40%, respectively, and eight and five point increase, respectively, since 2005. The percentage selecting *not likely* remained the same in 11th grade at about 43%, but declined by six points to 34% in 9th.

On the negative side, and consistent with previous years, among 11th graders, *not likely* was selected by slightly higher percentages than *likely/very likely* (43%). And although active and effective assistance program should be known to virtually all students, about 24% of 9th and 17% of 11th selected *don't know*. Overall, approximately six out of ten high school respondents selected either *not likely* or *don't know*, versus about four out of ten for *likely/very likely*. (Table 5.2)

9. Conclusion

To summarize, the major trends between 2007 and 2009 were mixed. Among high school students, especially 11th graders, there were promising declines in alcohol drinking and cigarette smoking. Two of the most positive survey findings are for drinking-driving and binge drinking. In the 2007 report, concern was expressed over the rise in reports of *drinking-driving involvement* among high school students, which had been increasing since 2003. This measure, dropping eleven points between 1997 and 2003, had been one of the true success stories of prevention. The 2009 two-year decline of eight points among 11th graders returns the prevalence to below 2003 rates. Similarly, the decline in *binge drinking* of three points among 9th graders and six points among 11th graders is a return to 2005 levels after marked increases in 2007.

Substance use on school property for alcohol, tobacco, and marijuana also declined among high school students. As these are indicators of not only potentially heavy involvement and impairment of a student's learning ability, but also disengagement from school, this turnaround is a very encouraging sign.

On the other hand, there was little change in any *AOD use among 7th graders*. Among high school students, the results for illicit drug use were complex and decidedly mixed. There were some moderate declines in the use of inhalants, cocaine, methamphetamine, and diet pills, as well as cold/cough medicine. But most indicators of *marijuana* use (excluding use at school) were level compared to 2007. There were even several moderate increases: overall prevalence and weekly use in the past six months among 11th graders; lifetime use among 8th and lifetime use on seven or more occasions among both 9th/11th graders. There was little improvement in use of prescription *painkillers*, which rival marijuana in popularity, and there was a nearly doubling of *Ecstasy* use among 11th graders. As a result, overall drug use remains level compared to 2007, although AOD use declined on the strength of the alcohol reductions.

Other findings among 11th graders also raise concerns over *marijuana* use. There was a seven-point increase in the percentage that thought half or more of their peers that every tried it, an indicator that use is perceived as normative. Two factors that are likely contributing to continued use are availability and weak perceptions of harm. There was a five-point increase perceived availability (very/fairly easy to get), with almost half selecting very easy. Around one out of every five juniors does not think that smoking marijuana occasionally or even once or twice a week is harmful. Not only are these higher percentages than for occasional and frequent use of alcohol and cigarettes, there was a moderate reduction in the percentages perceiving great risk of harm in marijuana use and an increase for no harm since 2007.

Also still troubling is the persistence of *heavy AOD use* among the older teen population, as emphasized in the 2003 report and further supported by the data since then. Binge drinking did decline as did the percentage of 9th and, especially 11th graders classified at risk of AOD dependency. Nevertheless, binge drinking is still reported by almost one-quarter of 11th graders, half of them engaging regularly in this practice, and the percentage at risk of AOD abuse actually increased. As shown in Exhibit 1, from one-tenth to one-fifth of 11th graders report a range of heavy use indicators.

Finally, the new data in 2007 and 2009 on a wide spectrum of *prescription and OTC drugs* diverted to recreational use by high school students provides further understanding regarding adolescent drug use and raises a red-flag for prevention efforts. The following points are worth considering.

- Incorporating prescription drugs, less than half of 9th graders and one-third of 11th graders remained totally AOD abstinent in their lifetimes.
- Among 11th graders, recreational use of prescription painkillers exceeds all other illegal drugs use except marijuana (at 19% lifetime), with no improvement over the past two years.
- Among 9th graders, use of any other drug or pill equals that of marijuana (27% for both), and the percentage using another illegal drug or pill on school property is higher than for using either alcohol or marijuana.
- In a related new finding, although the overall prevalence was down, about one-fifth of secondary students had used over-the-counter *cough/cold medicines* to get high, with over half of this group in both grades doing so seven or more times. Incorporating these medicines into estimates of overall AOD use, only 42% of 9th graders and 30% of 11th are totally abstinent.

In short, the renewed declines in alcohol drinking and cigarette smoking, as well as a range of drugs other than marijuana, are promising. But the results for marijuana, Ecstasy, painkillers, and other drugs confirm the red-flags raised in the 2005 and 2007 reports against complacency in the face of the ending of the declining trends seen in the early decade. The lack of any improvement in marijuana use, and even some increases in indicators, coupled with the increase in perceived availability and peer use, and decreases in perceived harm, is especially troubling and warrant renewed efforts to counter the factors that support this use.

Growing recognition of the prevalence of medicinal drug misuse among all ages led the Department of Alcohol and Drug Programs to form a California State Task Force on Prescription Drug Misuse in 2008. These CSS findings support the need for a coordinated statewide effort to raise awareness of the extent and danger of this problem and to expand and improve prevention strategies that target them. An open dialog with youth about the dangers of these substances in tandem with conventional prevention education's inclusion of warnings about the dangers would be a reasonable next step in guiding prevention efforts.

As cold/cough medications are so readily available, information about the potential dangers of their active ingredients, notably *dextromethorphan*, need to be incorporated into all prevention efforts. Particular attention needs to be paid to the dangerous, but often common practice of combining the drinking of a whole bottle of these medicines with alcohol to produce an enhanced "high."¹⁸

Attention to use of pharmaceuticals and drugs other than marijuana among 9th graders is especially important. Among these, the percentage of lifetime users equals that of marijuana, the use of prescription drugs is only four points lower than in 11th grade, use of cold/cough medicine is equivalent, and use of drugs/pills other than marijuana on school property is higher than for alcohol or marijuana.

Finally, intervention and assistance efforts in schools need to be supported and expanded to address the needs of heavy users. Identifying and assisting (rather than merely punishing) high-risk students as early as possible is essential if addressing substance use and related problems in our state.

As this report is being written, the concern arises over whether current prevention efforts can be sustained with the ending of the Federal Safe and Drug Free Schools and Communities program, which funded both school- and community-based prevention efforts for the past two decades. Given the budget crisis that schools are facing, and the pressure on them to increase test scores, addressing the needs of youth related to substance use may decline as a priority, despite the links between it and school attendance and academic performance. Whether the current declines continue and are extended to marijuana, Ecstasy, and painkillers, or whether the 2009 improvements are only a temporary upturn, is the question of interest for the next CSS.

18 We would have continued to be oblivious to the "recreational" use of such drugs had not one of us had an illuminating conversation with a counselor at an adolescent drug treatment facility operated by Phoenix House.

Exhibit 1. Summary of Heavy AOD Use Indicators Among 11th Graders

| | (%) |
|--|-----|
| Any current AOD use at school | 11 |
| Likes to drink until gets really drunk | 11 |
| Binge drinking weekly (3+ times/month) | 12 |
| Drunk/sick 7 or more times | 12 |
| Any current AOD use on school property | 12 |
| Likes to get really high on drugs | 13 |
| 2 or more AOD dependency indicators | 13 |
| Drink alcohol weekly | 15 |
| High Risk Drug User | 17 |
| 2 or more AOD problem indicators | 19 |
| Meets DSM criteria for dependency or abuse | 22 |
| High/loaded on drugs 7 or more times | 23 |
| Any current binge drinking | 24 |
| Drink/driving involvement past year | 24 |
| Ever drunk/high at school | 24 |
| Excessive Alcohol User | 27 |