Overview of Substance Use among Minnesota Youth

Part III: Substance use disorders

Data from 2013 Minnesota Student Survey

May 2014

Minnesota Department of **Human Services**
Performance Measurement and Quality Improvement Division

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By

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May 2014

Eunkyung Park is solely responsible for all the data analyses and interpretation of the results reported here.

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While substance abuse has been one of the most complex public health issues because of the various social norms and public opinions as well as the political and legal responses to the use of alcohol and illicit drugs, there is now a deeper understanding of substance abuse as a chronic disorder that develops, in many occasions, during adolescence. Substance abuse has serious health and social consequences, including drug-related injury and deaths, HIV/AIDS and other sexually transmitted diseases, co-morbid psychiatric diseases, and loss of productivity. Preventing substance abuse among adolescents is of utmost importance and has been an ongoing goal of the *Healthy People* initiative by the U.S. Department of Health and Human Services[1].

It is well documented that adolescents who use alcohol or drugs at an earlier age are more likely to develop substance use disorders.[2] An analysis of data from the National Longitudinal Alcohol Epidemiologic Survey shows that the earlier a person begins drinking alcohol, the more likely s/he is to have ever used other drugs illicitly even after controlling for relevant socio-demographic factors.[3] Research has also shown that the perception of harm and risk associated with substance use is an important factor in decreasing substance use.[4]

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[1] For details on Healthy People initiative, see web page: http://www.healthypeople.gov.

[2] Chen CY, O'Brien MS, Anthony JC. Who becomes cannabis dependent soon after onset of use? Epidemiological evidence from the United States:2000-2001. Drug Alcohol Depend 2005;79:11-22.
  DeWit DJ, Adlaf EM, Offord DR, Ogborne AC. Age at first alcohol use: a risk factor for the development of alcohol disorders. Am J Psychiatry 2000;157: 745-750.
  Gil AG, Wagner EF, Tubman JG. Associations between early-adolescent substance use and subsequent young-adult substance use disorders and psychiatric disorders among a multiethnic male sample in south Florida. American J Pub Health 2004; 94(9):1603-09.
  Anthony JC, Petronis KR. Early-onset drug use and risk of later drug problems. Drug and Alcohol Dependence 1995;40: 9-15. Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (December 4, 2008). *The NSDUH Report: Trend in Substance Use, Dependence or Abuse, and Treatment among Adolescents: 2002 to 2007.* Rockville, MD.

[3] Hingson RW, Heeren T, Edwards EM. Age at drinking onset, alcohol dependence and their relation to drug use and dependence, driving under the influence of drugs and motor-vehicle crash involvement because of drugs. Journal of Studies on Alcohol and Drugs 2008;69(2):192-201.

[4] Benthin A, Slovic P, Severson H. A psychometric study of adolescent risk perception. J Adolesc 1993;16(2):153-68.

Monitoring adolescents' substance use, age at first use, and their risk perception about substance use is critical for planning prevention programs. This series of reports on the 2013 Minnesota Student Survey (MSS)[5] is part of such a monitoring effort.

The topics covered by this series are as follows:

Part I: Use of tobacco, alcohol, marijuana and other illicit drugs
Part II: Age of first use, perception of risk and perceived parental disapproval
Part III: Substance use disorders.

Methods

Data
The Minnesota Student Survey (MSS) is a statewide school-based survey conducted every three years by an interagency team consisting of four state agencies (Education, Health, Human Services, and Public Safety). In 2013, the MSS was administered in the first half of 2013 to public school students in grades 5, 8, 9 and 11 in either the paper-and-pencil survey or web-survey mode. In total, 39,854 5th graders, 42,841 8th graders, 42,381 9th graders, and 36,958 11th graders participated in the 2013 MSS. Most of the questions about substance use were not asked to the 5th graders. The analyses presented in this report were conducted with the 2013 MSS data from students in grades 8, 9 and 11.

Mode of Administration
In 2013, for the first time, schools could choose to administer the MSS by using the web-based survey or the traditional paper-and-pencil survey. Each participating school had to choose one mode of administration. Schools with small student body and those located in non-metro, rural area were more likely to select web mode of administration. Overall, 35% of students took the survey by web and 65% used the paper survey.[6]

Response rates
MSS is not a sample-based, but a census-like survey, where all public school districts are invited to participate and student participation is voluntary. In 2013, 280 of the 334 public school districts (84%) agreed to participate. The overall student participation across the four grades was approximately 67% of total enrollment with 62% of fifth graders, 71% of eighth graders, 69% of ninth graders, and 62% of eleventh graders participating.

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[5] Information about the survey is described in Method section at the end of this report.
[6] The effect of administration mode on data quality in the 2013 MSS was examined in a report, "Web vs. paper administration of a school-based survey: Mode effect analysis for the 2013 MSS, available at www.dhs.state.mn.us/mss.

Socio-demographic description of students participated in the 2013 MSS
Gender is evenly divided. Overall, more than a quarter of students (27.2%) are members of a minority population or of multiple-race background. The proportion of minority students was higher among younger students (30.3% of 5th graders; 27.9% of 8th graders; 27.0% of 9th graders; 23.5% of 11th graders). Just over a quarter of students (27.3%) reported getting a free or reduced-price lunch at school at the time of survey. This was used as a proxy measure for low-income status throughout the analyses (see Table 1 in the Appendix for details).

This is the third and final part of the series. This report examines the prevalence of substance use disorders in relation to various socio-demographic factors, age at first use, risk perception of substance use, and the perceived parental and peer disapproval of substance use.

Substance use disorder

The 2013 MSS asked students in grades 8, 9 and 11 a series of questions, following the criteria in the Diagnostic and Statistical Manual of Mental Disorders 4th Edition (DSM-IV)[7], to estimate the prevalence of substance use disorders (i.e., abusive or dependent use of alcohol or drugs). The substance use disorders are estimated using the questions about tolerance, substance use in larger amount than intended, failed attempts to control substance use, a great deal of time spent to obtain the substance or to get over the effects, interference in important social activities, continued use despite physical/emotional problems, failure to fulfill major role obligations at work, school or home, recurrent substance use in physically hazardous situations, recurrent substance-related trouble with the law, and continued substance use despite having social and/or interpersonal problems caused by it. The first six questions are used for estimating dependence and the last four for estimating abuse. The estimation of substance use disorders from the MSS data is not substance specific. The details of the estimation of substance use disorders can be found in the DSM-IV diagnostic decision tree in the Appendix.

This report describes the estimates of substance use disorders among students in grades 8, 9 and 11. The prevalence of substance use disorders is examined in relation to various socio-demographic factors as well as other factors discussed in this series of reports, such as age at first use, risk perception of substance use and perceived disapproval of substance use by parents and peers. A set of multivariate analyses were conducted and the adjusted odds ratios and relevant p values are reported in the Appendix.

Overall, 4.3% of students in grades 8, 9 and 11 had substance use disorders during the 12 months before the survey. The prevalence of substance use disorders was higher among male students than females (4.7% vs. 3.9%), and was higher among older students (1.7% for 8th graders, 3.7% for 9th graders and 8.0% for 11th graders).

Figure 1. Percent of students who had substance use disorders during past year by gender and grade
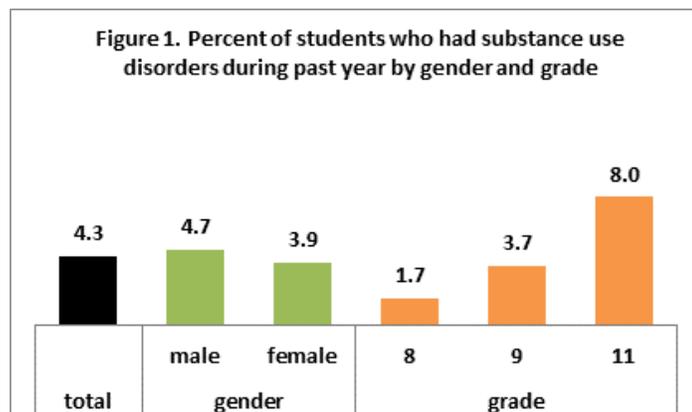
Among students in grade 11, male students had higher prevalence of substance use disorders than females (9.4% vs. 6.6%), but the gender difference was virtually disappeared among students in grade 8 or 9 (see Table 2 in the Appendix).

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[7] American Psychiatric Association, Diagnostic and Statistical Manual of mental Disorders, Fourth Edition, 1994, Washington, D.C. A new set of criteria for substance use disorders (DSM-5) will be applied to the next round of student survey scheduled in 2016.

American Indian (AI) students had the highest prevalence of substance use disorders (9.6%), followed by students of multi-racial background (7.2%), Hispanics (6.4%), blacks (4.2%), whites (3.9%) and Asian/Pacific Islanders (API;2.2%). In each racial/ethnic subgroup, male students had higher prevalence of substance use disorders than females, except among American Indians where the female students

Figure 2. Percent of students who had substance use disorders during past year by race/ethnicity and income

had higher prevalence than their male counterparts (11.9% for AI females vs. 7.8% for AI males; Table 2 in the Appendix).
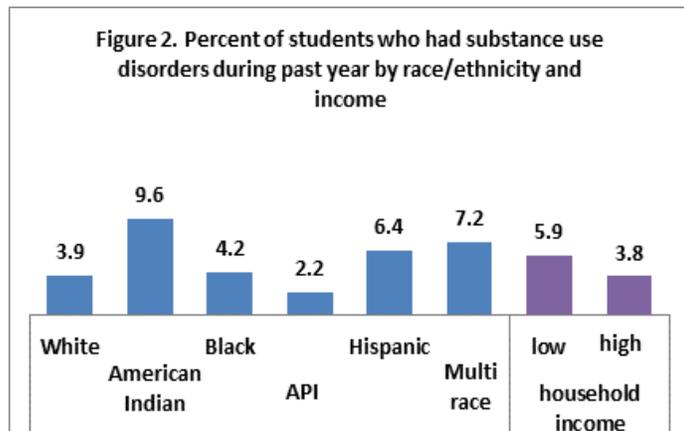
Students from low-income households were more likely than their more affluent counterparts to have substance use disorders (5.9% vs. 3.8%; Figure 2).

Age at first use[8] and substance use disorder

The prevalence of substance use disorders was higher among students who started using alcohol or marijuana before age 13 than those who started using them at age 13 or later. About one in six (17.0%) of the students who had their first drink before age 13 had substance use disorders during the year before the survey, compared to one in ten (10.9%) of those who had their first drink at age 13 or older age. Similarly,

Figure 3. Prevalence of substance use disorder by age at first use* of alcohol and drug

* The age at first use was asked only to 9th and 11th graders.

about four in ten (39.3%) of those who reported smoking their first marijuana before age 13 had substance use disorders while about two in ten (21.0%) of those who reported smoking their first marijuana at age 13 or older age.

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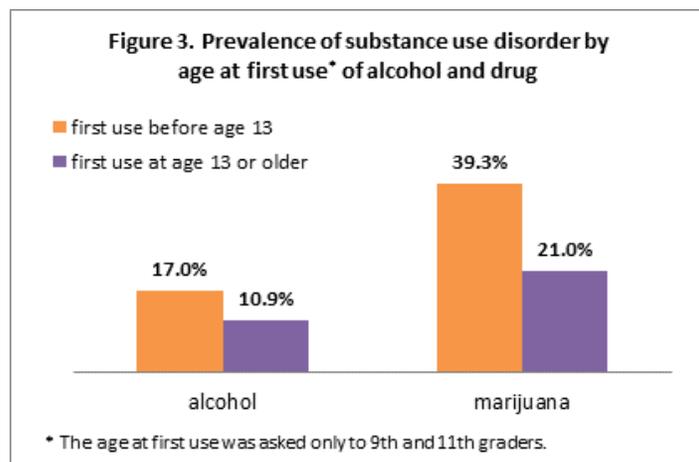
[8] Students in grades 9 and 11 were asked "how old were you when you had your first drink of an alcoholic beverage, such as beer, wine, wine coolers and liquor, other than a few sips?" and "how old were you when you tried marijuana (pot, weed) or hashish (hash, hash oil) for the first time?"

Risk perception[9] and substance use disorder

The prevalence of substance use disorders was inversely associated with perceived risk levels that students had about drinking or smoking marijuana. Students who perceived no risk or only slight risk in having five or more drinks once or twice a week had the highest prevalence of substance use disorders (7.4% and 7.6%, respectively) and the prevalence decreased as the perceived risk level increased to moderate risk and great risk (4.3% and 2.1%, respectively).

Figure 4. Prevalence of substance use disorder by perceived risk of substance use
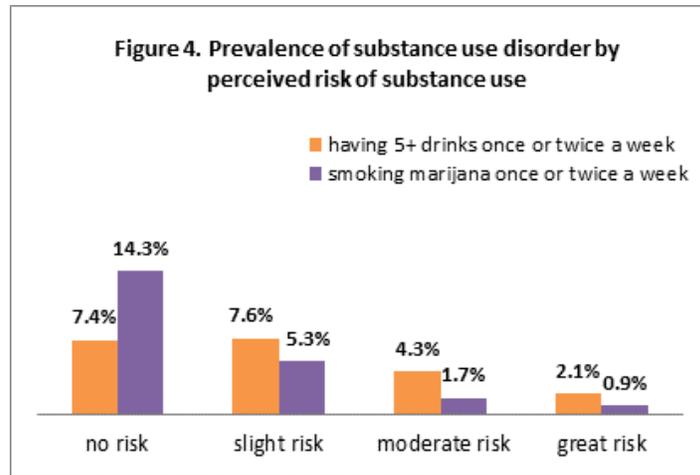
A similar yet stronger relationship appeared between the perceived risk levels about smoking marijuana once or twice a week and the prevalence of substance use disorders. The prevalence of substance use disorders was 14.3% among those who perceived no risk, and it sharply decreased as the perceived risk level increased: 5.3% among those who perceived slight risk, 1.7% among those who perceived moderate risk, and 0.9% among those who perceived great risk had substance use disorders.

Perceived disapproval[10] and substance use disorder

Students who thought that their parents would disapprove of drinking or smoking marijuana were less likely to have substance use disorders than those who did not perceive strong parental disapproval. Among students who thought that their parents would feel it very wrong for

Figure 5. Prevalence of substance use disorder by perceived parental disapproval of substance use

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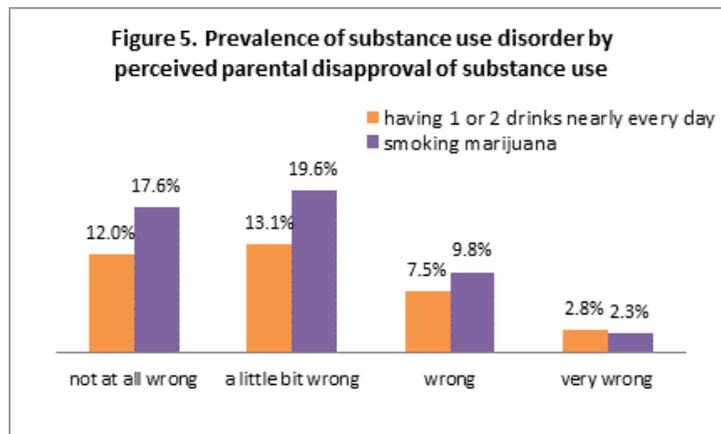
[9] Students in grades 8, 9 and 11 were asked "How much do you think people risk harming themselves physically or in other ways if they have five or more drinks of an alcoholic beverage once or twice per week?" and "How much do you think people risk harming themselves physically or in other ways if they smoke marijuana once or twice per week?"

[10] Students in grades 8, 9, and 11 were asked "How wrong do your parents [friends] feel it would be for you to have one or two drinks of an alcoholic beverage nearly every day [to smoke marijuana]?"

them to have one or two drinks nearly every day, less than 3% had substance use disorders during the year before the survey (Figure 5) and the prevalence increased more than four times among those who thought that their parents would feel it not at all wrong (12.0%) or only a little bit wrong (13.1%). Similarly, the prevalence of substance use disorders was 2.8% among those who thought that their parents would feel it very wrong for them to smoke marijuana and it increased more than seven times among those who thought that their parents would feel it not at all wrong or a little bit wrong (17.6% and 19.6%, respectively; Figure 5).

Figure 6 shows a similar yet stronger relationship between perceived disapproval by friends and the prevalence of substance use disorders. Among students who perceived strong disapproval (very wrong) by friends of having one or two drinks nearly every day the prevalence of substance use disorders was about 1%, however, it increased to 16.8%

Figure 6. Prevalence of substance use disorder by perceived friends' disapproval of substance use

■ having 1 or 2 drinks nearly every day
■ smoking marijuana
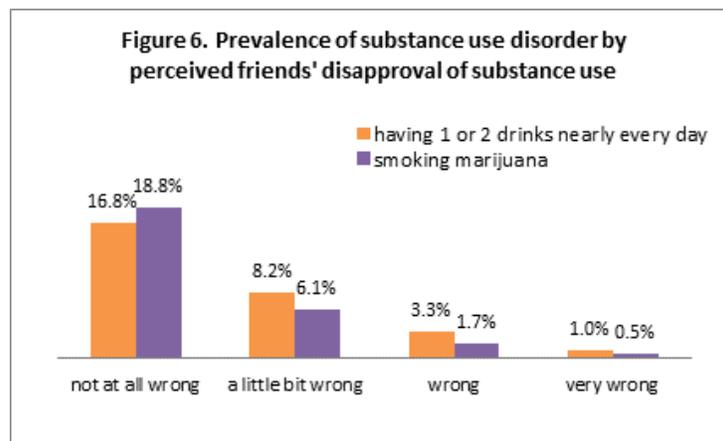
for those who perceived no disapproval (not at all wrong). The prevalence increased from 0.5% among those who perceived strong disapproval by friends of smoking marijuana to 18.8% among those who perceived no disapproval by friends.

Multivariate analysis

To examine if the relationships found in the bivariate analyses would hold when all the factors were considered together, multivariate analyses were conducted first for both genders of students together then for each gender separately. The results are reported in details in Tables 3 through 6 in the Appendix.

Below is a list of major findings from the multivariate analysis:

- Students in grade 11 were more likely than 8th or 9th graders to have substance use disorders during the past year.
- American Indian students, Hispanic (especially male students) and those from multi-racial backgrounds were more likely than white counterparts to have substance use disorders during the past year.
- API students were less likely than white students to have substance use disorders during the past year.

- Black female students were less likely than white counterparts to have substance use disorders while black male students were more likely than white counterparts to have substance use disorders during the past year.
- Gender and household income became insignificant factors for substance use disorders when age at first use was included in the analysis.
- Students who used alcohol or marijuana for the first time before age 13 were more likely than those who used them later to have substance use disorders during the past year.
- Students who perceived great risk in drinking and smoking marijuana were less likely than the others to have substance use disorders during the past year.
- Students who thought that their parents would strongly disapprove of substance use were less likely than the others to have substance use disorders during the past year.
- Students who thought that their friends would strongly disapprove of substance use were less likely than the others to have substance use disorders during the past year.

Discussion

The prevalence of substance use and substance use disorders varies across subpopulations of students based on gender, age and race/ethnicity as summarized in this series of reports. Prevention programs should be tailored to the specific characteristics of each subpopulation. Of the factors examined in this report, the most important factors for substance use disorders among Minnesota students were age at first use, perceived disapproval by parents and friends and perception of risk about substance use. Monitoring data on adolescents' substance use as well as their perception of risk about using a substance is critical for planning prevention programs. The Minnesota Student Survey with the questions about age at first use, risk perception of substance use and perceived disapproval by parents and friends will provide valuable resource for such monitoring and planning efforts by policy makers and program coordinators.

Since early onset of substance use increases the likelihood of developing substance use disorders, prevention needs to start early in childhood. Successful prevention should be implemented through orchestrated efforts among families, schools, and communities. In addition, more treatment programs should targeting the subpopulations that are hard to reach in an effort to reduce the gap between those who need treatment and those who receive it.

Peers and social networks have long been thought to be important influences on behavior during adolescence when many unhealthy behaviors develop, and health campaigns are

increasingly being based on network interventions.[11] The analysis in this report also shows that friends' opinion of substance use perceived by students is one of the most powerful factors for substance use disorders and it appears that it matters to students even more than their parents' opinion.

The multivariate analyses revealed some interesting interaction between gender and race/ethnicity of students in relation to substance use disorders. When both genders were examined together, there was no significant difference in the prevalence of substance use disorders between black and white students (Table 4 in the Appendix). However, the gender specific analyses revealed that, black male students were more likely than white males to have substance use disorders and black females were less likely than white females to have substance use disorders (Tables 5 and 6 in the Appendix). In addition, Hispanic female students were more likely than white females to have substance use disorders while the difference was not significant among males.

The findings in this report are subject to several limitations. First, the results apply only to youth who attend public schools, excluding those who do not attend schools as well as those who attend private schools or alternative learning centers, and those who are home-schooled. Second, measurement errors innate with survey methodology, such as under-reporting or over-reporting of behaviors, cannot be determined. Third, the data presented in this report were gathered at a point in time. The relationship among factors reported here doesn't necessarily mean causation. Finally, the list of factors examined in this series of report is not comprehensive by any means. Further examination into other risk and protective factors in relation to substance use among students is important.

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[11] Ennett ST, Bauman KE. Peer group-structure and adolescent cigarette-smoking-a social network analysis. *J. Health and Social Behavior* 1993; 34: 226-236.
   Valente TW. Network interventions. *Science* 2012; 337: 49-53.

Appendix

Table 1. Socio-demographic characteristics of survey participants

	Grade 8 (n=42,841) %	Grade 9 (n=42,381) %	Grade 11 (n=36,958) %	Total (n=122,180) %
Gender				
Female	49.7	50.0	49.6	49.8
Race/Ethnicity[1]				
White	72.1	73.0	76.5	73.7
American Indian	1.5	1.2	0.8	1.2
Black	5.7	5.3	4.9	5.3
Asian/Pacific Islander	5.1	5.6	6.1	5.6
Hispanic	8.2	7.4	6.2	7.3
Multiple race	7.4	7.5	5.5	6.9
Household income				
Currently get a free or reduced-price lunch at school	27.9	27.8	24.6	26.8

[1] All the race categories (white, American Indian, black, Asian/Pacific Islander and multiple race) are non-Hispanic.

Table 2. Percentage of students in grades 8, 9 and 11 who had substance use disorders, by sex, race/ethnicity, grade and household income

Category	Had substance use disorders during 12 months before the survey		
	Male %	Female %	Total %
Grade			
8	1.7	1.7	1.7
9	3.6	3.8	3.7
11	9.4	6.6	8.0
Race/Ethnicity			
White	4.3	3.5	3.9
American Indian	7.8	11.9	9.6
Black	5.5	2.9	4.2
Asian/Pacific Islander	3.0	1.4	2.2
Hispanic	6.1	6.6	6.4
Multiple race	7.3	7.1	7.2
Household income[1]			
Low	6.0	5.7	5.9
High	4.2	3.3	3.8
Total	4.7	3.9	4.3

[1] Those who reported getting free or reduced-price lunch at school are coded as low-income household.

Table 3. Odds ratios from multivariate logistic regression[1]

Dependent variable: substance use disorder (N=102,584)	
Independent variables (reference category)	Odds ratio
Gender (female)	
Male	1.20***
Grade (8)	
9th grader	2.22***
11th grader	5.30***
Race/ethnicity (white)	
American Indian	2.67***
Black	.89
Asian/Pacific Islander	.44***
Hispanic	1.90***
Multiple race	1.50***
Household income (high)	
Low[2]	1.61***

*** p<.001

[1] This analysis was conducted only with socio-demographic factors and all students in grades 8, 9 and 11 were included. Dependent variable is coded as 1 for those who had a substance use disorder during 12 months before the survey and 0 for the others.

[2] Currently get a free or reduced-price lunch at school.

Table 4. Odds ratios from multivariate logistic regression[1]

Dependent variable: substance use disorder (N=61,052)	
Independent variables (reference category)	Odds ratio
Gender (female)	
Male	.94
Grade (9)	
11th grader	1.69***
Race/ethnicity (white)	
American Indian	1.40*
Black	.97
Asian/Pacific Islander	.66***
Hispanic	1.18*
Multiple race	1.39***
Household income (high)	
Low[2]	.99
Age at first use (13 or older)	
Younger than 13[3]	2.17***
Risk perception[4] (No, slight or moderate risk)	
Great risk	.40***
Perceived parental disapproval[5] (Not at all wrong, a little bit wrong or wrong)	
Very wrong	.62***
Perceived peer disapproval[6] (Not at all wrong, a little bit wrong or wrong)	
Very wrong	.24***

 * p<.05   ** p<.01   *** p<.001

[1] This analysis was conducted only among students in grades 9 and 11 because age at first use was not asked to 8th graders. Dependent variable is coded as 1 for those who had a substance use disorder during 12 months before the survey and 0 for the others.
[2] Currently get a free or reduced-price lunch at school.
[3] Those who drank alcohol or smoked marijuana before age 13 were categorized as "younger than 13."
[4] Those who perceived "great risk" in having five or more drinks once or twice a week and in smoking marijuana once or twice a week were categorized as "great risk."
[5] This was measured by asking "How wrong do your parents feel it would be for you to have once or more drinks of alcoholic beverage nearly every day?" and "How wrong do your parents feel it would be for you to smoke marijuana?" In the analysis, those who answered "very wrong" were compared to the others.
[6] This was measured by asking "How wrong do your friends feel it would be for you to have once or more drinks of alcoholic beverage nearly every day?" and "How wrong do your parents feel it would be for you to smoke marijuana?" In the analysis, those who answered "very wrong" were compared to the others.

Table 5. Odds ratios from multivariate logistic regression: Female students only

Dependent variable: substance use disorder[1] (N=31,081)	
Independent variables (reference category)	Odds ratio
Grade (9)	
11th grader	1.34***
Race/ethnicity (white)	
American Indian	1.43
Black	.59**
Asian/Pacific Islander	.65*
Hispanic	1.23*
Multiple race	1.32**
Household income (high)	
Low[2]	1.01
Age at first use (13 or older)	
Younger than 13[3]	2.22***
Risk perception[4] (No, slight or moderate risk)	
Great risk	.38***
Perceived parental disapproval[5] (Not at all wrong, a little bit wrong or wrong)	
Very wrong	.67***
Perceived peer disapproval[6] (Not at all wrong, a little bit wrong or wrong)	
Very wrong	.21***

* p<.05   ** p<.01   *** p<.001

[1] Dependent variable is coded as 1 for those who had a substance use disorder during 12 months before the survey and 0 for the others.
[2] Currently get a free or reduced-price lunch at school.
[3] Those who drank alcohol or smoked marijuana before age 13 were categorized as "younger than 13."
[4] Those who perceived "great risk" in having five or more drinks once or twice a week and in smoking marijuana once or twice a week were categorized as "great risk."
[5] This was measured by asking "How wrong do your parents feel it would be for you to have once or more drinks of alcoholic beverage nearly every day?" and "How wrong do your parents feel it would be for you to smoke marijuana?" In the analysis, those who answered "very wrong" were compared to the others.
[6] This was measured by asking "How wrong do your friends feel it would be for you to have once or more drinks of alcoholic beverage nearly every day?" and "How wrong do your parents feel it would be for you to smoke marijuana?" In the analysis, those who answered "very wrong" were compared to the others.

Table 6. Odds ratios from multivariate logistic regression: Male students only

Dependent variable: substance use disorder[1] (N=29,971)	
Independent variables (reference category)	Odds ratio
Grade (9)	
11th grader	2.11***
Race/ethnicity (white)	
American Indian	1.36
Black	1.39*
Asian/Pacific Islander	.66**
Hispanic	1.09
Multiple race	1.44***
Household income (high)	
Low[2]	.97
Age at first use (13 or older)	
Younger than 13[3]	2.14***
Risk perception[4] (No, slight or moderate risk)	
Great risk	.44***
Perceived parental disapproval[5] (Not at all wrong, a little bit wrong or wrong)	
Very wrong	.57***
Perceived peer disapproval[6] (Not at all wrong, a little bit wrong or wrong)	
Very wrong	.28***

  * p<.05   ** p<.01   *** p<.001

[1] Dependent variable is coded as 1 for those who had a substance use disorder during 12 months before the survey and 0 for the others.
[2] Currently get a free or reduced-price lunch at school.
[3] Those who drank alcohol or smoked marijuana before age 13 were categorized as "younger than 13."
[4] Those who perceived "great risk" in having five or more drinks once or twice a week and in smoking marijuana once or twice a week were categorized as "great risk."
[5] This was measured by asking "How wrong do your parents feel it would be for you to have once or more drinks of alcoholic beverage nearly every day?" and "How wrong do your parents feel it would be for you to smoke marijuana?" In the analysis, those who answered "very wrong" were compared to the others.
[6] This was measured by asking "How wrong do your friends feel it would be for you to have once or more drinks of alcoholic beverage nearly every day?" and "How wrong do your parents feel it would be for you to smoke marijuana?" In the analysis, those who answered "very wrong" were compared to the others.

DSM-IV diagnostic decision tree

```
                    ┌─────────────┐
                    │    Any      │
                    │ substance   │
                    │ use in past │
                    │ 12 months?  │
                    └──────┬──────┘
              ┌────────────┴────────────┐
          ┌───┴───┐                  ┌──┴──┐
          │  NO   │                  │ YES │
          └───────┘                  └──┬──┘
                               ┌────────┴────────┐
                               │  In the past    │
                               │ year, drank 20+ │
                               │ times with 2+   │
                               │ drinks per time │
                               │ or used drugs   │
                               │   6+ times?     │
                               └────────┬────────┘
                          ┌─────────────┴─────────────┐
                      ┌───┴───┐                     ┌──┴──┐
                      │  NO   │                     │ YES │
                      └───────┘                     └──┬──┘
                                            ┌──────────┴──────────┐
                                            │        Any          │
                                            │    dependence       │
                                            │    symptoms?        │
                                            └──────────┬──────────┘
                                      ┌────────────────┴──────────────┐
                                 ┌────┴────┐                    ┌──────┴──────┐
                                 │ 0 TO 2  │                    │  3 OR MORE  │
                                 └────┬────┘                    └──────┬──────┘
                            ┌─────────┴─────────┐          ┌───────────┴───────────┐
                            │       Any         │          │     DEPENDENCE        │
                            │      abuse        │          │     DIAGNOSIS         │
                            │    symptoms?      │          └───────────────────────┘
                            └─────────┬─────────┘
                     ┌────────────────┴──────────────┐
                 ┌───┴───┐                    ┌───────┴───────┐
                 │   0   │                    │  1 OR MORE    │
                 └───────┘                    └───────┬───────┘
                                        ┌─────────────┴─────────────┐
                                        │         ABUSE             │
                                        │       DIAGNOSIS           │
                                        └───────────────────────────┘
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