Drug and Alcohol Use Among Sample School 7th – 12th Graders Spring 2024

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Tri-Ethnic Center for Prevention Research Department of Psychology Colorado State University http://triethniccenter.colostate.edu/

EXECUTIVE SUMMARY

Substance use among adolescents is a serious national problem. Those concerned about the welfare of Sample School students have, therefore, conducted a survey to measure student substance use and other factors associated with substance use. The survey was administered to students in Spring 2024. Parents could opt their child out of the survey.

The "Our Youth, Our Future" survey is an online questionnaire given anonymously that takes from 20 to 50 minutes to complete. The survey items ask students about their history of drug and alcohol use and the frequency and intensity of their current drug and alcohol use. It also asks about other factors that may relate to substance use as well as characteristics of students that may protect them from substance use and abuse.

Prior to presenting a summary of substance use rates for surveyed students at Sample School, we present data on students' attitudes toward school and whether and how often students reported skipping a day or part of a day at school without permission.

Percent of Sample School Students Reporting Various Levels of School Engagement					
	Not at all or not much like me	Somewhat <u>like me</u>	Mostly or very much like me		
I try my best at school.	8.2%	25.5%	66.3%		
I work hard in the face of challenges/difficulties at school.	14.6%	30.6%	54.8%		
I am happy at school.	41.7%	29.7%	28.6%		
I enjoy working with peers at school.	36.1%	29.0%	35.0%		

Percent of Sample School Students Reporting Various Levels of Truancy						
	<u>Never</u>	<u>Seldom</u>	<u>Sometimes</u>	<u>Often</u>	Almost <u>always</u>	
Thinking back over the past year at school, how often did you skip a day of school or part of a day of school, without permission?	58.2%	16.4%	17.2%	5.8%	2.4%	

The next 3 tables summarize the substance use rates found for surveyed students at Sample School. The first table provides results for the percent of students ever trying a substance while the next two tables provide results for the percent of students using a substance in the last 12 months and the last month.

The **Detailed Report** that follows the Executive Summary explains the procedures used to assure that the survey results are as valid as possible and provides the detailed results for Sample School.

Percent of Sample School Students Who Have Ever Tried a Drug				
	7 th -8 th Graders	9 th -10 th Graders	11 th -12 th <u>Graders</u>	
Alcohol	25.5%	35.4%	45.5%	
Been Drunk	8.5%	21.4%	29.1%	
Cigarettes	6.3%	9.7%	15.1%	
Vaped Nicotine	23.7%	24.8%	32.8%	
Smokeless Tobacco	6.3%	8.0%	9.9%	
Marijuana	18.2%	28.7%	40.1%	
Inhalants (glue, gas, sprays, etc.)	8.3%	5.6%	3.6%	
Nonprescription Cough or Cold Medicine to get high	3.4%	5.4%	4.1%	
LSD	2.0%	3.7%	3.5%	
Amphetamines (Ritalin, Adderall, etc.) without a doctor's orders	1.6%	3.1%	3.4%	
Methamphetamine	1.6%	2.4%	2.2%	
Tranquilizers (Valium, Xanax, Klonopin, etc.) without a doctor's orders	1.2%	3.0%	2.3%	
Cocaine (powdered, crack, or freebase)	2.0%	3.1%	2.9%	
MDMA (ecstasy)	2.8%	2.2%	2.3%	
Heroin	1.6%	2.9%	2.4%	
Hydrocodone (Vicodin) or Oxycodone (OxyContin) without a doctor's orders	1.2%	2.7%	2.8%	

Percent of Sample School Students Who Have Used Each Drug in the Last 12 Months

	7 th -8 th <u>Graders</u>	9 th -10 th <u>Graders</u>	11 th -12 th Graders
Alcohol	13.0%	23.5%	30.9%
Been Drunk	4.9%	16.6%	20.2%
Vaped Nicotine	15.5%	16.4%	19.4%
Marijuana	13.1%	22.0%	28.5%
Inhalants (glue, gas, sprays, etc.)	4.5%	2.3%	1.9%
Nonprescription Cough or Cold Medicine to get high	1.9%	1.5%	1.7%
LSD	1.2%	2.6%	2.1%
Amphetamines (Ritalin, Adderall, etc.) without a doctor's orders	0.8%	2.0%	2.0%
Methamphetamine	1.2%	1.4%	1.3%
Tranquilizers (Valium, Xanax, Klonopin, etc.) without a doctor's orders	0.8%	2.2%	1.1%
Cocaine (powdered, crack, or freebase)	1.6%	1.8%	1.1%
MDMA (ecstasy)	1.2%	1.2%	1.6%
Heroin	0.8%	1.1%	0.9%
Hydrocodone (Vicodin) or Oxycodone (OxyContin) without a doctor's orders	0.8%	1.9%	1.2%

Percent of Sample School Students Who Have Used Each Drug in the Last Month

	7 th -8 th <u>Graders</u>	9 th -10 th <u>Graders</u>	11 th -12 th <u>Graders</u>
Alcohol	6.7%	13.3%	13.9%
Been Drunk	3.7%	9.4%	7.8%
Cigarettes	2.6%	2.2%	2.8%
Vaped Nicotine	10.0%	12.7%	14.6%
Smokeless Tobacco	2.6%	3.6%	3.7%
Marijuana	7.9%	13.0%	15.6%
Inhalants (glue, gas, sprays, etc.)	2.7%	0.9%	1.7%
Nonprescription Cough or Cold Medicine to get high	0.4%	0.9%	1.2%
LSD	0.8%	1.0%	1.4%
Amphetamines (Ritalin, Adderall, etc.) without a doctor's orders	0.8%	1.6%	0.7%
Methamphetamine	0.4%	1.4%	0.9%
Tranquilizers (Valium, Xanax, Klonopin, etc.) without a doctor's orders	0.8%	1.6%	0.7%
Cocaine (powdered, crack, or freebase)	1.2%	1.5%	1.1%
MDMA (ecstasy)	0.8%	0.7%	1.2%
Heroin	0.8%	1.1%	0.9%
Hydrocodone (Vicodin) or Oxycodone (OxyContin) without a doctor's orders	0.4%	1.4%	0.7%

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INTRODUCTION

Substance use among adolescents has become a serious national problem. Those concerned about the welfare of Sample School students have, therefore, conducted a survey of local student substance use. This report presents the results of that survey and should lead to a better understanding of local adolescent substance use.

We encourage those charged with disseminating this information at the local level to study the entire report carefully. The text and accompanying tables are designed to help the community place local adolescent substance use in the proper perspective.

THE SURVEY

The "Our Youth, Our Future" survey is an online questionnaire given anonymously that takes from 20 to 50 minutes to complete. The difference in range of time is because, depending on their answers, not all students will answer all questions. The survey items ask students about their history of drug and alcohol use and the frequency and intensity of their current drug and alcohol use. It also asks about other factors that may relate to substance use as well as characteristics of students that may protect them from substance use and abuse. This report summarizes the findings for Sample School students who were surveyed.

The survey has had extensive development. Similar versions have been given to more than 1,000,000 students over the last 40 years. Since substance use changes over time, there have been annual revisions to make sure that it asks the right questions. The present survey was updated in August 2023.

ACCURACY OF SURVEY RESULTS

Experience with this survey has shown that students are usually very cooperative and give honest answers about their substance use when they know that their names are not on the surveys and that no one will ever know how any individual answered the questions. The staff at the school who arranged for the survey administration were careful to make sure that this anonymity was preserved and that no one saw how a student answered the questions. The completed surveys were sent electronically to our offices so that no one could observe student responses. More information about honesty on adolescent drug surveys and about reliability and validity of our surveys is presented in the article, "Adolescent Drug Use: Findings of National and Local Surveys," in Vol. 58 of the <u>Journal of Consulting and Clinical Psychology</u> (1990).

There are also statistical ways of assessing the reliability of tests and surveys. The reliability coefficients (Cronbach's alpha) for the drug use scales on the survey average around .90.

PROPORTION OF STUDENTS SURVEYED

When the survey was given, the survey administrators attempted to include all students who were enrolled in the grades selected and whose parents did not opt them out of the survey. The following table shows the total number of Sample School students surveyed and the percent of total enrollment they represent.

ortion of Sample School Stude	nts Surveyed	
Number <u>Surveyed</u>	Number <u>Enrolled</u>	Percent of Total Enrollment
1696	2012	84%
	Number <u>Surveyed</u>	<u>Surveyed</u> <u>Enrolled</u>

A high enough proportion of students was surveyed to ensure that the results provide a good estimate of the drug and alcohol use of the students who are attending school.

No attempt was made to survey school dropouts or absentees. However, in communities where absentees and dropouts are surveyed, their substance use is usually higher than students who are in school. Those working with dropouts and chronic absentees in your area will probably find higher substance involvement among them than is found in students who are attending school. You can find more information about this in the following article: Swaim, R.C., Beauvais, F., Chavez, E.L., & Oetting, E.R. (1997). The effect of school dropout rates on estimates of drug use among racial/ethnic groups. *American J. of Public Health*, 87, 51-55.

There are four parts to this report:

Part I provides a complete overview of the patterns of drug and alcohol use. It repeats tables from the **Executive Summary** showing how many students have used or are using alcohol and drugs, and it presents frequency of use and a description of the drugs in the tables.

Part II provides information about students' perceptions of the availability and the riskiness of different drugs, age of first use, and intent to use drugs in the future.

Part III provides information on factors associated with substance use and should be useful in understanding what effective substance use prevention programs should address. These factors include peer, family and school influences, and personal characteristics.

Part IV provides a description of alcohol and drugs asked about on the survey.

PART I: SUBSTANCE USE

Part I provides a complete overview of the patterns of drug and alcohol use at Sample School, as well as a description of individual drugs and their effects.

LIFETIME USE OF ALCOHOL AND DRUGS (EVER TRIED)

Table 1A lists the percentage of students who have "ever tried" alcohol or drugs. The "ever tried" statistic is a very general measure since it includes <u>any</u> amount of a substance <u>ever</u> taken (except for a few sips of alcohol). A student who had a small glass of wine at a family celebration would be included as having "ever tried" alcohol -- so would the student who drinks enough to get drunk every week. That is one of the reasons why the next row lists the percent who have ever been drunk. This table would also not distinguish between the student who tried marijuana once several years ago and one who is now using it every day; both would be listed as having tried marijuana. However, following Table 1A, we present information about current use and frequency of use.

Despite its limitations, the "ever tried" statistic is useful because it shows how many students were willing to experiment with a substance.

Furthermore, the ever tried measure is highly reliable, and because it is used on most other surveys, it allows us to make comparisons between Sample School students and students across the country. To make these comparisons, Table 1B gives rates of substance use obtained from a national sample of 8th, 10th and 12th graders who were surveyed in 2023.

TABLE 1A Percent of Sample School Students Who Have Ever Tried a Drug 7th-8th 9th-10th 11th-12th Graders Graders Graders 25.5% 35.4% 45.5% Alcohol 8.5% 21.4% 29.1% **Been Drunk** 6.3% 15.1% Cigarettes 9.7% 23.7% 24.8% 32.8% **Vaped Nicotine Smokeless Tobacco** 6.3% 8.0% 9.9% Marijuana 18.2% 28.7% 40.1% 5.6% Inhalants (glue, gas, sprays, etc.) 8.3% 3.6% Nonprescription Cough or Cold Medicine to get high 3.4% 5.4% 4.1% LSD 2.0% 3.7% 3.5% 1.6% 3.1% 3.4% **Amphetamines** (Ritalin, Adderall, etc.) without a doctor's orders 1.6% 2.4% 2.2% Methamphetamine Tranquilizers (Valium, Xanax, Klonopin, etc.) without a 1.2% 3.0% 2.3% doctor's order Cocaine (powdered, crack, or freebase 2.0% 3.1% 2.9%

Please see Table 1B to compare these rates to rates representative of all U.S. students.

Hydrocodone (Vicodin) or **Oxycodone** (Oxycontin)

MDMA (ecstasy)

without a doctor's orders

Heroin

2.8%

1.6%

1.2%

2.2%

2.9%

2.7%

2.3%

2.4%

2.8%

TABLE 1B

Percent of 8th, 10th, and 12th Graders

Across the Country Who Have Ever Tried a Drug (2023)

	8 th <u>Graders</u>	10 th <u>Graders</u>	12 th <u>Graders</u>
Alcohol	20.1%	35.8%	52.8%
Been Drunk	7.3%	17.6%	32.7%
Cigarettes	5.8%	9.4%	15.0%
Vaping Nicotine	16.5%	25.1%	33.5%
Smokeless Tobacco	4.5%	5.5%	7.8%
Marijuana	11.5%	22.5%	36.5%
Inhalants (glue, gas, sprays, etc.)	9.0%	6.5%	6.3%
LSD	1.1%	2.1%	3.1%
Other Hallucinogens (peyote, shrooms, etc.)	1.4%	3.0%	5.9%
Amphetamines (Ritalin, Adderall, etc.) without a doctor's orders	5.0%	5.7%	4.3%
Methamphetamine	0.3%	0.5%	0.6%
Tranquilizers (Valium, Xanax, Klonopin, etc.) without a doctor's orders	2.3%	2.5%	2.7%
Cocaine (powdered, crack or freebase)	1.0%	1.0%	1.3%
MDMA (ecstasy)	0.9%	1.4%	1.6%
Heroin	0.8%	0.5%	0.2%

These national data on drug use among 8th, 10th, and 12th graders are from the annual national surveys funded by the National Institute on Drug Abuse and conducted by the Institute for Social Research at the University of Michigan, 2023.

CURRENT SUBSTANCE USE AMONG STUDENTS

The "ever tried" figures that were presented in Table 1A showed how many Sample School students have experimented with alcohol and drugs, but do not show how many are using these substances <u>now</u>. Many young people try a substance for a while but then stop using it. In a national study, for example, almost a fourth of the high school seniors who had tried marijuana when they were younger did not use it during their senior year, and in the same study, about half of those who had tried other drugs were not using them at the time of the survey.

Tables 2A and 3A provide estimates of current substance use. Table 2A shows how many Sample School students used each substance during the last 12 months. Table 3A shows how many used substances during the last month prior to the survey.

As with the "ever tried" figures, these rates can be compared to national rates of use. Tables 2B and 3B give last 12 months and last month rates, respectively, of substance use obtained from a national sample of 8^{th} , 10^{th} and 12^{th} graders who were surveyed in 2023.

TABLE 2A

Percent of Sample School Students

4.5%

1.9%

1.2%

0.8%

1.2%

0.8%

1.6%

1.2%

0.8%

0.8%

2.3%

1.5%

2.6%

2.0%

1.4%

2.2%

1.8%

1.2%

1.1%

1.9%

11th-12th

Graders

30.9%

20.2%

19.4%

28.5%

1.9%

1.7%

2.1%

2.0%

1.3%

1.1%

1.1%

1.6%

0.9%

1.2%

Who Have Used Each Drug in the Last 12 Months 7th-8th 9th-10th **Graders** Graders Alcohol 13.0% 23.5% **Been Drunk** 4.9% 16.6% **Vaped Nicotine** 15.5% 16.4% 13.1% Marijuana 22.0%

Inhalants (glue, gas, sprays, etc.)

LSD

orders

Methamphetamine

doctor's orders

MDMA (ecstasy)

a doctor's orders

Heroin

Nonprescription Cough or Cold Medicine to get high

Amphetamines (Ritalin, Adderall, etc.) without a doctor's

Tranquilizers (Valium, Xanax, Klonopin, etc.) without a

Hydrocodone (Vicodin) or **Oxycodone** (OxyContin) without

Cocaine (powdered, crack, or freebase)

Please see Table 2B to compare these rates to rates representative of all U.S. students.

TABLE 2B

Percent of 8th, 10th, and 12th Graders Across the Country Who Used Each Drug in the Last 12 Months (2023)

8 th <u>Graders</u>	10 th Graders	12 th Graders
15.1%	30.6%	45.7%
4.6%	13.1%	25.1%
11.4%	17.6%	23.2%
8.3%	17.8%	29.0%
4.0%	3.0%	2.4%
4.3%	2.0%	2.0%
0.7%	1.2%	1.2%
0.9%	1.7%	4.0%
2.8%	2.7%	2.1%
0.0%	0.4%	0.4%
0.9%	1.2%	1.0%
0.4%	0.5%	0.6%
0.4%	0.7%	0.7%
0.4%	0.3%	0.1%
0.8%	0.4%	0.6%
0.9%	0.3%	0.6%
	15.1% 4.6% 11.4% 8.3% 4.0% 4.3% 0.7% 0.9% 2.8% 0.0% 0.9% 0.4% 0.4% 0.4% 0.4%	Graders Graders 15.1% 30.6% 4.6% 13.1% 11.4% 17.6% 8.3% 17.8% 4.0% 3.0% 4.3% 2.0% 0.7% 1.2% 0.9% 1.7% 2.8% 2.7% 0.0% 0.4% 0.9% 1.2% 0.4% 0.5% 0.4% 0.7% 0.4% 0.3% 0.8% 0.4%

These national data on drug use among 8th, 10th, and 12th graders are from the annual national surveys funded by the National Institute on Drug Abuse and conducted by the Institute for Social Research at the University of Michigan, 2023.

TABLE 3A

Percent of Sample School Students
Who Have Used Each Drug in the Last Month

	7 th -8 th <u>Graders</u>	9 th -10 th <u>Graders</u>	11 th -12 th <u>Graders</u>
Alcohol	6.7%	13.3%	13.9%
Been Drunk	3.7%	9.4%	7.8%
Cigarettes	2.6%	2.2%	2.8%
Vaped Nicotine	10.0%	12.7%	14.6%
Smokeless Tobacco	2.6%	3.6%	3.7%
Marijuana	7.9%	13.0%	15.6%
Inhalants (glue, gas, sprays, etc.)	2.7%	0.9%	1.7%
Nonprescription Cough or Cold Medicine to get high	0.4%	0.9%	1.2%
LSD	0.8%	1.0%	1.4%
Amphetamines (Ritalin, Adderall, etc.) without a doctor's orders	0.8%	1.6%	0.7%
Methamphetamine	0.4%	1.4%	0.9%
Tranquilizers (Valium, Xanax, Klonopin, etc.) without a doctor's orders	0.8%	1.6%	0.7%
Cocaine (powdered, crack or freebase)	1.2%	1.5%	1.1%
MDMA (ecstasy)	0.8%	0.7%	1.2%
Heroin	0.8%	1.1%	0.9%
Hydrocodone (Vicodin) or Oxycodone (OxyContin) without a doctor's orders	0.4%	1.4%	0.7%

Please see Table 3B to compare these rates to rates representative of all U.S. students.

TABLE 3B

Percent of 8th, 10th, and 12th Graders Across the Country Who Have Used Each Drug in the Last Month (2023)

	•	•	
	8 th <u>Graders</u>	10 th <u>Graders</u>	12 th <u>Graders</u>
Alcohol	5.9%	13.7%	24.3%
Been Drunk	1.5%	5.1%	12.5%
Cigarettes	1.1%	2.3%	2.9%
Vaping Nicotine	7.0%	11.9%	16.9%
Smokeless Tobacco	1.6%	2.3%	2.5%
Marijuana	4.7%	10.3%	18.4%
Inhalants (glue, gas, sprays, etc.)	2.6%	0.9%	1.2%
LSD	0.3%	0.4%	0.4%
Other Hallucinogens (peyote, shrooms, etc.)	0.2%	0.7%	1.5%
Amphetamines (Ritalin, Adderall, etc.) without a doctor's orders	1.6%	1.3%	1.1%
Methamphetamine	0.0%	0.3%	0.1%
Tranquilizers (Valium, Xanax, Klonopin, etc.) without a doctor's orders	0.4%	0.4%	0.3%
Cocaine (powdered, crack or freebase)	0.3%	0.4%	0.4%
MDMA (ecstasy)	0.3%	0.3%	0.3%
Heroin	0.3%	0.2%	0.1%
Narcotics other than heroin (Morphine, Vicodin, Oxycontin, etc.) without a doctor's orders	NA	NA	0.4%

These national data on drug use among 8th, 10th, and 12th graders are from the annual national surveys funded by the National Institute on Drug Abuse and conducted by the Institute for Social Research at the University of Michigan, 2023.

NA: Not available

FREQUENCY OF SUBSTANCE USE

Using a substance in the last month could mean anything from using it once to using it nearly every day. Thus, it is important to know how often drugs or alcohol were used in the last month. Tables 4A-4C show how often each drug has been used during the **last month** by Sample School students. Table 4A gives these rates for 7th-8th graders, Table 4B for 9th-10th graders, and Table 4C for 11th-12th graders.

TABLE 4A Frequency of Use During the Last Month by Sample School 7 th -8 th Graders							
	<u>0 times</u>	<u>1-2 Times</u>	<u>3-9 Times</u>	<u> 10+ Times</u>			
Alcohol	93.3%	3.3%	2.6%	0.7%			
Been Drunk	96.3%	2.2%	1.1%	0.4%			
Marijuana	92.1%	2.6%	1.5%	3.7%			
Inhalants (glue, gas, sprays, etc.)	97.3%	0.4%	1.9%	0.4%			
Nonprescription Cough or Cold Medicine to get high	99.6%	0.0%	0.4%	0.0%			
LSD	99.2%	0.0%	0.4%	0.4%			
Amphetamines (Ritalin, Adderall, etc.) without a doctor's orders	99.2%	0.0%	0.4%	0.4%			
Methamphetamine	99.6%	0.4%	0.0%	0.0%			
Tranquilizers (Valium, Xanax, Klonopin, etc.) without a doctor's orders	99.2%	0.4%	0.4%	0.0%			
Cocaine (powdered, crack or freebase)	98.8%	0.8%	0.4%	0.0%			
MDMA (ecstasy)	99.2%	0.4%	0.4%	0.0%			
Heroin using a needle	99.2%	0.4%	0.4%	0.0%			
Heroin without using a needle	99.6%	0.4%	0.0%	0.0%			
Hydrocodone (Vicodin) or Oxycodone (OxyContin) without a doctor's orders	99.6%	0.0%	0.0%	0.4%			

TABLE 4B

Frequency of Use During the Last Month by Sample School 9th-10th Graders

	<u>0 times</u>	<u>1-2 Times</u>	<u>3-9 Times</u>	<u> 10+ Times</u>
Alcohol	86.7%	6.6%	4.7%	2.0%
Been Drunk	90.6%	6.0%	2.2%	1.2%
Marijuana	87.0%	4.9%	2.8%	5.3%
Inhalants (glue, gas, sprays, etc.)	99.1%	0.3%	0.3%	0.4%
Nonprescription Cough or Cold Medicine to get high	99.1%	0.4%	0.0%	0.5%
LSD	99.0%	0.1%	0.1%	0.7%
Amphetamines (Ritalin, Adderall, etc.) without a doctor's orders	98.4%	0.3%	0.1%	1.2%
Methamphetamine	98.6%	0.4%	0.3%	0.7%
Tranquilizers (Valium, Xanax, Klonopin, etc.) without a doctor's orders	98.4%	0.3%	0.3%	1.1%
Cocaine (powdered, crack or freebase)	98.5%	0.3%	0.3%	1.0%
MDMA (ecstasy)	99.3%	0.1%	0.0%	0.5%
Heroin using a needle	99.2%	0.0%	0.1%	0.7%
Heroin without using a needle	99.0%	0.0%	0.0%	1.0%
Hydrocodone (Vicodin) or Oxycodone (OxyContin) without a doctor's orders	98.6%	0.0%	0.4%	1.0%

TABLE 4C
Frequency of Use During the Last Month by Sample School 11th-12th Graders

	0 times	1-2 Times	<u>3-9 Times</u>	10+ Times
Alcohol	86.1%	6.5%	3.7%	3.7%
Been Drunk	92.2%	3.4%	2.2%	2.2%
Marijuana	84.4%	3.6%	3.8%	8.2%
Inhalants (glue, gas, sprays, etc.)	98.3%	0.3%	0.3%	1.0%
Nonprescription Cough or Cold Medicine to get high	98.8%	0.3%	0.2%	0.7%
LSD	98.6%	0.4%	0.4%	0.7%
Amphetamines (Ritalin, Adderall, etc.) without a doctor's orders	99.3%	0.0%	0.2%	0.5%
Methamphetamine	99.1%	0.0%	0.2%	0.7%
Tranquilizers (Valium, Xanax, Klonopin, etc.) without a doctor's orders	99.3%	0.0%	0.2%	0.5%
Cocaine (powdered, crack or freebase)	98.9%	0.0%	0.2%	0.9%
MDMA (ecstasy)	98.8%	0.4%	0.2%	0.7%
Heroin using a needle	99.1%	0.0%	0.0%	0.9%
Heroin without using a needle	99.1%	0.0%	0.0%	0.9%
Hydrocodone (Vicodin) or Oxycodone (OxyContin) without a doctor's orders	99.3%	0.0%	0.0%	0.7%

HEAVY DRINKING

The term "binge drinking" has been used in various ways, usually to describe an episode of heavy drinking. It was commonly used in the past to refer to drinking 5 or more drinks in a single sitting for males and 4 or more drinks in a single sitting for females. More recently, the term "binge" has been reserved to describe an extended period of drinking (two or more days), reaching the point of intoxication, and giving up one's usual activities to drink. On the current survey, students were asked how many times in the past two weeks they drank five or more drinks in a row. In Table 5, this is reported as "heavy drinking" instead of "binge drinking."

TABLE 5							
Heavy Drinking by Sample School Students							
Number of times have had 5 or more drinks in a row in last 2 weeks $\frac{7^{th}-8^{th}}{Graders}$ $\frac{9^{th}-10^{th}}{Graders}$ $\frac{11^{th}-12^{th}}{Graders}$							
None	97.8%	91.8%	92.9%				
Once	1.5%	4.0%	3.0%				
Twice	0.0%	2.0%	1.2%				
3-5 times	0.4%	0.9%	1.0%				
6 or more times	0.4%	1.3%	1.9%				

TOBACCO AND NICOTINE USE

Tobacco and other nicotine products are legal for adults and easily accessible to young people. Nicotine is highly addictive, and young people who use tobacco or other nicotine products regularly may have difficulty quitting. The adolescent years are very important in determining whether people will use nicotine as adults. Current research suggests that nearly every young adult who smokes today smoked regularly before the age of 19, and that hardly any youth who regularly smoke half a pack a day or more will quit before they reach the age of 30.

The dangers from tobacco use have received wide publicity, and tobacco use has subsequently dropped among adults. Cigarette use by high school seniors has been declining; about 0.7% of American high school seniors smoke cigarettes daily.

TABLE 6							
Cigarette Use by Sa	ample School Stude	ents					
7 th -8 th 9 th -10 th 11 th -12 <u>Graders</u> <u>Graders</u> <u>Graders</u>							
Ever Used	6.3%	9.7%	15.1%				
Current Daily Users	1.1%	1.2%	1.7%				
Less than half a pack of cigarettes per day	1.1%	0.4%	0.8%				
Half a pack of cigarettes per day	0.0%	0.1%	0.0%				
One pack or more cigarettes per day	0.0%	0.7%	0.8%				

Smokeless tobacco is tobacco that is not burned. It comes in various forms such as chewing tobacco (loose leaves placed between the cheek and gums), and snuff (finely ground powdered tobacco) that is sold moist, dry, or in tea bag-like pouches. Snus is the moist form of snuff, and dip is moist snuff used like chewing tobacco. There are also dissolvable products including lozenges, orbs, sticks, and strips.

Just like cigarettes, smokeless tobacco contains nicotine and is therefore, highly addictive. Holding an average-size dip in the mouth for 30 minutes can deliver as much nicotine as smoking three cigarettes. Smokeless tobacco can also cause mouth, tongue, cheek, and gum cancers and other health problems such as mouth sores, gum disease, other dental problems, and similar to cigarette smoking, increased risk for cardiovascular problems.

TABLE 7						
Smokeless Tobacco Use by Sample School Students						
7 th -8 th 9 th -10 th 11 th -1 <u>Graders</u> <u>Graders</u> <u>Graders</u>						
Ever Used	6.3%	8.0%	9.9%			
Current Users in Last Month	2.6%	3.6%	3.7%			
Once or twice in last month	1.5%	2.0%	1.3%			
Once or twice a week	0.4%	0.5%	0.7%			
3-5 times per week	0.4%	0.3%	0.5%			
About once a day	0.4%	0.0%	0.2%			
More than once a day	0.0%	0.8%	1.0%			

E-cigarettes, such as JUUL, or other vaping devices, such as vape pens, contain nicotine, an ingredient in tobacco that can lead to addiction. These devices are also sometimes called e-cigarettes or e-cigs. Since they contain the same addictive ingredient found in cigarettes, when people vape, they can find it difficult to quit. Both tobacco and vaping devices contain other harmful chemicals; burning tobacco can create these chemicals and vaping devices turn chemicals and flavorings into mist that combines with synthetic nicotine. National adolescent nicotine vaping increased at a record pace from 2017 to 2019; in spring 2019, 25.5% of 12th graders reported vaping nicotine in the last 30 days. Nicotine vaping has since decreased; in spring 2023, 16.9% of 12th graders reporting vaping nicotine in the last 30 days.

TABLE 8						
Vaping of Nicotine by Sample School Students						
7 th -8 th 9 th -10 th 11 th -12 <u>Graders</u> <u>Graders</u> <u>Grades</u>						
Ever vaped nicotine	23.7%	24.8%	32.8%			
Vaped nicotine in last year	15.5%	16.4%	19.4%			
Vaped nicotine in last month	10.0%	12.7%	14.6%			

PART II: SAMPLE SCHOOL STUDENTS' EXPERIENCES AND ATTITUDES REGARDING DRUGS AND ALCOHOL

In addition to the types and amounts of drugs being used, the survey assessed the attitudes local youth hold toward drugs and alcohol. If the community wants to create an environment where young people are able to remain drug-free, they must understand what factors contribute to the decisions local youth make about drugs.

Part II presents information on the availability of drugs, perceived riskiness of drugs and alcohol, and age of first use.

PERCEIVED AVAILABILITY OF DRUGS AND ALCOHOL

The students were asked how hard it would be to obtain each of the different types of substances. (Note: This question asks about the availability of substances in general. It does **not** mean alcohol or drug availability at school.) **Table 9A** shows how many students felt it would be either "fairly easy" or "very easy" to get each substance. These numbers can be compared to the perceived availability of these substances for 8th, 10th, and 12th graders across the country, as shown in **Table 9B**.

TABLE 9A							
Perceived Availability of Substances Among Sample School Students Percent Marking Either "Fairly Easy" or "Very Easy" to Get Each Drug							
7 th -8 th 9 th -10 th 11 th -12 th <u>Graders</u> <u>Graders</u> <u>Graders</u>							
Cigarettes	19.0%	26.4%	34.0%				
Smokeless tobacco	14.8%	24.9%	31.8%				
Alcohol*	21.1%	37.6%	43.1%				
Vape pen or e-cigarettes	28.3%	42.6%	47.2%				
Marijuana in the form of flower, bud, or plants	15.3%	29.3%	39.3%				
Marijuana in the form of concentrate (dabs, vape pens, wax)	19.5%	36.4%	44.5%				
Marijuana in the form of edibles (cookies, brownies, gummies/candies that contain cannabis)	16.5%	30.8%	39.1%				

^{*}Alcohol is usually the most accessible drug because it is legal for adults. Other drugs are usually less available (with the exception of marijuana), but in most communities, at least some students believe that almost any drug is available.

TABLE 9B

Perceived Availability of Substances Among 8th, 10th, and 12th Graders Across the Country (2023) Percent Marking Either "Fairly Easy" or "Very Easy" to Get Each Drug

	8 th <u>Graders</u>	10 th <u>Graders</u>	12 th <u>Graders</u>
Cigarettes	33.0%	48.3%	60.4%
Alcohol	41.0%	59.2%	81.7%
Vaping device	34.1%	54.7%	75.6%
Marijuana	25.8%	47.5%	72.7%

These national data on drug use among 8th, 10th, and 12th graders are from the annual national surveys funded by the National Institute on Drug Abuse and conducted by the Institute for Social Research at the University of Michigan, 2023.

PERCEIVED HARMFULNESS OF SUBSTANCE USE

The attitudes that young people have about the dangers of substance use often shape their decisions about whether they will use them. For example, if a youth believes that no harm is attached to using marijuana, they are much more likely to give it a try.

Table 10 shows the percentage of students who think that using a substance will lead to a great risk of harm. Students who think that using a substance will lead to harm will probably not try it. **Table 10** shows that many students do see regular use of these products as harmful. Some students, however, see no harm attached to regular use. This group of students is at higher risk of substance use since they do not believe that using these regularly is dangerous.

The fact that some young people in this school do not see regular substance use as risky indicates that educational programs detailing drug hazards could be useful. However, programs that focus <u>only</u> on the dangers of drugs are not as effective as programs that educate students about other aspects of drug abuse as well. One reason is that the relationship between beliefs about drug hazards and drug use is a complex one. Some youth, for example, will actually use a drug because it is dangerous. The risk is part of the appeal.

TABLE 10

Percent of Sample School 7th - 12th Grade Students
Who Believe That Using a Substance Will Lead to "Great Risk" of Harm

	7 th -8 th Graders	9 th -10 th Graders	11 th -12 th Graders
Smoke one or more packs of cigarettes per day?	44.5%	58.5%	62.3%
Use smokeless tobacco regularly?	31.8%	39.7%	35.5%
Vape nicotine regularly?	39.4%	48.9%	49.3%
Take one or two drinks nearly every day?	23.5%	27.2%	29.2%
Take four or five drinks nearly every day?	44.7%	57.1%	59.9%
Drink 5 or more drinks in a row regularly?	61.0%	75.6%	76.0%
Use marijuana regularly?	38.6%	36.8%	29.4%

AGE OF FIRST USE

Knowing the age of first use among students is important in planning prevention programs. Once students have started using substances, it is much more difficult to intervene or to reduce their use. Therefore, the most effective prevention programs should be in place prior to the age when most students who are going to use a substance begin using it. Also, it is well known that students who use alcohol or drugs at very young ages are more likely to have serious and continuing problems later in life. Early intervention with this group is very important in reducing the amount of distress and problems these young people will encounter in the coming years.

Students who reported trying a substance were asked at what age they began using that substance. **Table 11** gives the percentage of these students reporting the age at first use by age group and the average age at which these students began using. The students who have never tried the drug are not included in these averages.

	TABLE 11					
Student	Age of Samps When They F		ubstances			
	10 years old or younger	11-12 <u>Years</u>	13-15 <u>Years</u>	16 or <u>Older</u>	Never <u>Tried</u>	
Smoked first cigarette	2.8%	1.7%	4.5%	1.8%	89.1%	
Average age at first cigarette:	13					
Used smokeless tobacco	1.6%	0.9%	3.6%	1.7%	92.1%	
Average age of first use of smokeless tobacco:	13.6					
Vaped nicotine	2.1%	6.7%	14.8%	3.7%	72.7%	
Average age of first trying vaping of nicotine:	13.4					
Tried alcohol (more than a few sips)	4.8%	6.9%	17.6%	8.0%	62.7%	
Average age of first trying alcohol:	13.6					
Got drunk	1.4%	2.5%	12.6%	5.4%	78.0%	
Average age first drunk:	14.3					
Tried marijuana	2.5%	4.1%	17.8%	6.2%	69.3%	
Average age first used marijuana:	13.9					

INTENT TO USE

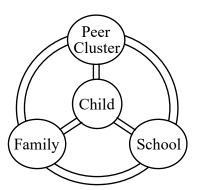
Intentions have been found to be a strong predictor of future behavior. **Table 12** below gives the percentage of students, by grade group, that think they will be using different substances five years from now. Of course, adolescence is a time of great change; therefore, intentions are likely to change due to emotional, physical, and mental growth and many other factors. However, this information can still be useful for prevention planning.

TABLE 12				
Percent of Sample School Students Who Say They "Definitely" or "Probably Will" Be Using Each Drug Five Years From Now				
	7 th -8 th <u>Graders</u>	9 th -10 th <u>Graders</u>	11 th -12 th <u>Graders</u>	
Alcohol	21.6%	28.3%	37.0%	
Cigarettes	5.5%	5.5%	6.0%	
Vaping Nicotine	12.5%	11.5%	13.2%	
Marijuana	11.6%	17.0%	21.6%	
Methamphetamine	1.6%	1.7%	2.4%	

PART III: PREVENTING SUBSTANCE USE: SOCIAL AND PERSONAL CHARACTERISTICS RELATED TO DRUG USE

Several questions were asked about characteristics of young people that can be important for understanding alcohol and drug use and planning prevention programs. The results can suggest what kinds of young people need prevention programs the most and what may need to be changed to reduce the risk factors that lead to drug use.

The social and personal characteristics that are assessed by the survey were selected because research studies show that they are related to alcohol and drug use and because they fit into a general prevention model. The figure below graphically shows that model.



The Prevention Model shows that a youth's attitudes, beliefs and behaviors are influenced primarily by three forces: the family, the school and the youth's peers. When the influences from family, school and peers are positive, the young person is likely to have good basic values and is less likely to have any serious and deep-seated problems, including problems with drugs.

<u>Peers</u>. Peers play a very important role in this model. Adolescent drug use, for example, probably takes place almost entirely in the social context of peer clusters (best friends, couples, or a small group of close friends). These friends share attitudes, may share drugs, and establish group norms for drug use. But while peer influence is a factor in most drug use, an adolescent's relationships with family and school are equally as important. Family and school problems often set the stage from which drug-using peer clusters may emerge.

<u>Family</u>. When the connections between a child and the family are strong and are used to communicate positive social norms and behaviors, a solid foundation is likely to be established for the future. The child is likely to do reasonably well in school and is likely to build friendships with other young people who share positive norms and ideals. Strong family relationships can protect against drug use.

<u>School</u>. When young people do well in school and like school and when the teachers and the school environment are able to communicate positive values to an adolescent, that youth is likely to form peer clusters that are a positive influence. Adolescents with good school adjustment are likely to develop friendships with other "healthy" youth, and the resulting peer clusters also communicate anti-drug attitudes and beliefs.

When there is a breakdown in this system, when the family is dysfunctional or when the child fails to do well in school, they are more likely to associate with other youth who are having problems. Because adolescents who have problems seem to have a penchant for finding and making friends with others who

have problems, the friends of these troubled youth are likely to be troubled themselves. When that occurs, the chances that the resulting peer clusters will become involved with drugs are greatly increased.

There are, of course, many influences other than family, school, and peers in the life of an adolescent. Some of these have been "blamed" for drug use, for example, pro-drug use messages in movies, television, and music, and drug use in the youth's neighborhood. These environmental characteristics can have an influence on drug use, but such influences probably affect the youth only indirectly. When relationships with family, school and peers are strong and healthy, then any of these other negative influences are likely to have less effect; the youth is more likely to pay attention to positive messages and ignore or reject any pro-drug use messages in their environment. However, when a youth's friends are involved with drugs, that youth is much more likely to pay attention to pro-drug messages.

Throughout this report, therefore, the emphasis will be on the most important <u>and immediate</u> risk factors for drug use: the interactions between the youth, the family, the school, and peers.

PEERS AND SUBSTANCE USE

Having friends who use substances is among the most important risk factors that determines whether a student will themselves use the substance. Furthermore, if a student's friends are using the substance regularly, it increases the chances that the student will match their friends' level of use with their own.

Nearly all substance use actually takes place within peer clusters. A peer cluster consists of a pair of best friends, a dating couple or a small group of close friends who spend a lot of time together. An adolescent may be involved with more than one peer cluster, but if that youth is using alcohol or drugs, then at least one of their peer clusters almost undoubtedly includes alcohol or drug-using friends. This peer substance involvement is the single most powerful predictor of whether a youth is using alcohol or drugs.

Number of Friends Who Use Alcohol and Drugs

In **Table 13** below, the results indicate students' perceptions of how many of their friends use various substances. It is important to note that this is a student's belief about how many of their friends use, not the actual use of friends. But students' beliefs about their friends' use can be just as important as the actual use of friends since youth will often try to match their own behaviors to what they believe their friends are doing. Most of the time, adolescents overestimate the rates of alcohol and drug use of their friends.

TABLE 13

Percent of Sample School Students
Who Have Friends Who Use Substances By Number of Friends

How many friends	<u>None</u>	One or <u>Two</u>	Some of Them	Most of Them
drink alcohol?	48.0%	23.1%	18.8%	10.2%
get drunk?	53.4%	20.9%	16.2%	9.6%
drink 5 or more drinks in a row regularly?	74.6%	12.6%	6.7%	6.0%
smoke cigarettes?	76.8%	13.2%	5.8%	4.1%
use smokeless tobacco?	76.7%	12.5%	6.6%	4.2%
use marijuana?	49.7%	18.5%	17.8%	14.0%
use other illegal drugs?	78.4%	11.9%	5.8%	3.9%

FAMILY AND SUBSTANCE USE

The family is of central importance in the development of the child, and family problems can increase the chances that a youth will get involved with alcohol and drugs. For the very young child, the family is the primary source of emotional support. It is also the place where the child learns about "right" and "wrong" behaviors. Later, as the youth grows into adolescence, there is increased influence from the school and peers. However, there is good evidence that parents who disapprove of substance use can be an important influence for reducing risk for child and adolescent substance use.

Parental Monitoring

Parental monitoring is an effective source of prevention against adolescent substance use. It is the degree to which parents monitor their child's behaviors and have rules and expectations the child is expected to follow. Table 14 shows the responses of students regarding their perceptions of parental monitoring.

TABLE 14

Percent of Sample School Students
Who Report Different Levels of Parental Monitoring

	Rarely or never	<u>Sometime</u>	Most of the time or always
When I go out at night, my parents know where I am.	6.7%	6.7%	86.5%
My parents know where I am after school.	5.4%	6.3%	88.3%
When I go out at night, my parents know who I am with.	7.6%	7.1%	85.3%
When I go out on weekend nights, I have to be home by a set time.	19.7%	14.5%	65.8%

SUBSTANCE USE AND SCHOOL

School Engagement

Higher levels of behavioral and emotional school engagement have been found to predict a lower risk of substance use. In addition, adolescents who are engaged in school are likely to develop friendships with other "healthy" youth.

Table 15 shows how engaged students are in school, asking the students how much they are like each of the statements listed.

TABLE 15				
Percent of Sample School Students Reporting Various Levels of School Engagement				
	Not at all or not much like me	Somewhat <u>like me</u>	Mostly or very much like me	
I try my best at school.	8.2%	25.5%	66.3%	
I work hard in the face of challenges/difficulties at school.	14.6%	30.6%	54.8%	
I am happy at school.	41.7%	29.7%	28.6%	
I enjoy working with peers at school.	36.1%	29.0%	35.0%	

Truancy is a strong predictor of substance use, probably due to the negative effects of reduced school engagement and the unsupervised time while being truant. Table 16 shows the percentage of students reporting various levels of truancy over the past year.

TABLE 16					
Percent of Sample School Students Reporting Various Levels of Truancy					
Thinking back over the past year at school, how often did you skip a day of school or part of a day of school, without permission?	<u>Never</u> 58.2%	<u>Seldom</u> 16.4%	Sometimes 17.2%	<u>Often</u> 5.8%	Almost <u>always</u> 2.4%

STUDENT WELL-BEING

Although it is important to measure substance use by students, those measures do not capture the overall well-being of these students or what has been called flourishing. The Human Flourishing Program at Harvard has developed a measure based around five central domains: happiness and life satisfaction, mental and physical health, mean and purpose, character and virtue, and close social relationships. They have modified their original adult measure for adolescents aged 12-18. Below we present how students in your school responded to these measures. For each measure, the scale ranged from 0 to 10. Responses are summarized into 3 categories: 0-3, 4-6, and 7-10, with language describing each category depending on the statement.

TABLE 17				
Percent of Sample School Students Reporting Various Levels of Well-Being				
	Poor <u>0-3</u>	<u>4-6</u>	Excellent <u>7-10</u>	
How would you rate your physical health?	6.8%	29.5%	63.7%	
How would you rate your mental health?	21.4%	30.3%	48.3%	
	Strongly disagree <u>0-3</u>	<u>4-6</u>	Strongly agree <u>7-10</u>	
I think I am a happy person.	13.1%	29.7%	57.2%	
I am doing things now that will help me achieve my goals in life.	11.8%	26.6%	61.5%	
My family has enough money to have a comfortable life.	12.0%	24.0%	63.9%	
I am happy with my friendships and relationships.	8.2%	18.6%	73.2%	
I have people in my life I can talk to about things that really matter.	14.4%	17.2%	68.4%	
	Not true of me		Completely true of me	
	0-3	4-6	7-10	
I try to do good in all circumstances, even when it is hard.	9.3%	26.2%	64.6%	
I can give up some happiness now for more happiness later.	11.7%	26.8%	61.5%	
	Not satisfied at all 0-3	4-6	Completely satisfied 7-10	
Overall, how satisfied are you with life these days?		30.4%	55.2%	
	Worry all of the time 0-3	4-6	Do not ever worry 7-10	
How often do you worry about safety, food or housing?	19.8%	17.5%	62.7%	
	Not at all worthwhile 0-3	4-6	Completely worthwhile 7-10	
Overall, how much do you feel the things you do in your life are worthwhile?	11.8%	29.7%	58.5%	

PART IV: DESCRIPTION OF INDIVIDUAL DRUGS

The following pages describe each of the different types of drugs, how they are used by youth, what effects they usually have, and the major risks students encounter by using them.

The substances most commonly used by students are alcohol, marijuana and tobacco. Inhalants are sometimes used by younger students, especially those in 7th and 8th grades. This is true no matter how small or isolated that community may be. A brief description of each drug, even if it is not used locally, is included to inform readers about the drug and to warn that it may become available locally in the future. When a drug is available, some students are likely to try it.

Adolescents who use alcohol and drugs usually describe them in positive terms. Indeed, alcohol and drugs do have short term effects that appear very desirable. If this were not the case, very few people would try them and even fewer would continue to use them. The descriptions below, therefore, include many of the effects that substance users are seeking. This is not meant to put substance use in a positive light – rather, the intent is to show why young people may be attracted to alcohol and drugs.

Keep in mind that continuing use, or even occasional use of <u>any</u> substance has detrimental effects. These effects may be physical, such as increasing the chances of accidents, or they may be emotional. Adolescents are going through a very important period of emotional growth. They have to confront many difficult tasks such as learning to make friends or learning how to deal with many of the pressures and strains of moving into the adult world. If young people resort to alcohol or drugs to get through these normal phases of development, they may not fully achieve the emotional maturity necessary for effective adult living.

ALCOHOL

Alcohol has been, and continues to be, the most widely used substance among students in most areas. Alcohol is, of course, a legal substance for adults. Thus, it is both readily available and widely accepted by society.

Alcohol use could involve anything from a single beer to getting drunk. Thus, it is important to know how much alcohol is being used. Tables 4A-C (pages 13-15) show how often Sample School students are using alcohol and how often they are getting drunk during the month prior to the survey. The "drunk" figures are the students' own judgments about whether or not they were drunk and not actual estimates of the amount of alcohol they consumed. Some students who believe they were drunk may not have been legally intoxicated, while others who were legally intoxicated might not think they were. Experience suggests these factors balance each other out and the numbers in the tables provide a close estimate of how many students have actually been drunk.

The term "binge drinking" has been used in various ways, usually to describe an episode of heavy drinking. It was commonly used in the past to refer to drinking 5 or more drinks in a single sitting for males and 4 or more drinks in a single sitting for females. More recently, the term "binge" has been reserved to describe an extended period of drinking (two or more days), reaching the point of intoxication, and giving up one's usual activities to drink. On the current survey, students were asked how many times in the past two weeks they drank five or more drinks in a row. In Table 5, this is reported as "heavy drinking" instead of "binge drinking."

Recent evidence suggests that when young people describe what happened to them when they got drunk or got high on drugs, they will tell a fairly clear story about the incident. The story will often explain in some detail what led up to drinking or using drugs, who was there, and what happened early in the episode. The story may then reach a point where it is clear that something bad may have happened -- a fight, a sexual

assault, a humiliating incident, or some other unpleasant occurrence. At that point the youth often says, "I don't remember what happened after that." While we cannot know what really happened to those students who said they "couldn't remember what happened," it is likely that some may have reached the point of blackout (due to excessive drinking), so that they cannot recall the events, or that their memory was impaired due to alcohol or drug intoxication.

While alcohol is legal for adults to use, and while there is considerable social tolerance for adolescent drinking, alcohol is a dangerous substance. For one thing, alcohol is addictive. Heavy use over a long period can lead to all of the attendant physical and social problems of alcoholism. Many alcoholics report that they started heavy drinking as adolescents. At least some youth who are drinking heavily now are on the path to alcoholism.

In addition to potential alcoholism, there are some <u>immediate</u> hazards linked to heavy alcohol use by young people. The most obvious danger is from drunk driving. In addition, each year a significant number of young people lose their lives directly to alcohol poisoning simply because they do not know when to quit drinking.

Some youth who use alcohol also take drugs while drinking, and the effects from taking drugs along with alcohol can be very dangerous. When marijuana and alcohol are used together, the effects on judgment and on driving skills are greater than when those substances are taken separately. Using alcohol with other drugs also increases the danger of a number of negative outcomes, both physical and emotional.

Less obvious damage from alcohol use occurs when a youth is unable to study or concentrate because of residual intoxication or hangovers. Damage is also done when heavy alcohol use interferes with emotional development.

MARIJUANA (CANNABIS)

Marijuana has, unfortunately, gained wide social acceptance among young people; nationally, it is now second in popularity only to alcohol. Marijuana is usually smoked like tobacco - in a pipe, bong, or rolled in cigarette paper. The user gets high very quickly, within a few minutes, and stays high for two to three hours. When eaten, it may take 20 to 30 minutes for marijuana to "hit" – but the high may be just as intense or even more intense, particularly if large portions of edibles are consumed. Many users will stay high for several hours at a time by taking more of the drug.

As with other drugs, the effect of marijuana on the user is likely to depend on the action of the drug, the amount used, the immediate social setting and the user's expectations. The usual response to marijuana is a light and relaxed sensation. Under some conditions, everything may seem hysterically funny. Colors and sounds may seem very bright and intense, time may seem to slow down and appetite often increases for the user. These pleasant sensations are generally associated with the light use of those new to marijuana. As marijuana use continues, however, other less desirable effects are felt.

When marijuana is used in situations that create anxiety or by people already having emotional problems, it can intensify such feelings as depression, anxiety, or fear. Some youth may believe that they are going crazy while on marijuana. These negative responses are more likely with heavy doses of the drug, but even light doses can intensify such moods for particularly sensitive people.

Even in low doses, marijuana interferes with judgment. Young people who have limited experience with the world are likely to make errors that endanger them -- marijuana use increases the opportunities for such errors.

Extremely negative emotional and personal experiences, "bad trips," are possible among people who use marijuana heavily. There is also evidence that long-term, heavy marijuana use can ultimately endanger a youth's physical and emotional health and impair memory. Since marijuana is passed out of the body slowly, students who use it daily or even several times a week have some of the drug in their system all the time.

Most of the psychoactive drugs influence the brain because the drug attaches to specific receptors in the brain. The location of those receptors and their normal function in the brain determine the drug's effect - whether the drug blocks pain, works as a depressant, or acts as a stimulant. Researchers have worked for decades trying to identify the receptors for THC, the chemical in marijuana that leads to its effects. They have finally succeeded. They still do not know what the receptors do in the normal brain, although it is now thought that some of them help deal with pain. The THC receptors are spread throughout the brain. There are more of them in some parts of the brain, which may help explain some of the effects of marijuana. There are, for example, very few THC receptors in the parts of the brain that effect breathing and the heart, and marijuana has little effect on those functions. The parts of the brain that control movement, thinking and memory, however, have many THC receptors, helping to explain why marijuana leads to deficits in coordination, thinking and problem solving.

Some of the parents of today's adolescents experimented with marijuana when they were young. Most of them used marijuana only at occasional parties or used it once in a while with friends and did not get heavily involved with the drug. Some of these parents may feel that marijuana is a relatively innocuous drug, and they may, somehow, communicate that to their children without intending to. These parents should know that the marijuana available today may be several times stronger than the marijuana they used.

COCAINE

Cocaine is a white powder derived from the South American coca plant. It is usually "sniffed" or "snorted" but is also dissolved and injected by heavy drug users.

Cocaine is a very powerful stimulant. When sniffed, it is rapidly absorbed into the blood stream through the membranes in the nose. The drug immediately dries out and numbs the nose and sinuses; thus the user often feels "a breath of cold, clean air." When sniffed or "snorted," cocaine hits the brain very fast, and the user generally feels excited, energetic, and capable of great mental and physical feats. Injecting cocaine leads to a similar response, but the feelings are even more intense because of the large amounts suddenly reaching the brain.

The initial effects of cocaine seem extremely pleasant to the user. But when the "rush" wears off, it usually leaves the user feeling tired and let down. The user, in turn, often tries to alleviate this depression with another dose of cocaine. The result is an extended cycle of ups and downs as the user develops an insatiable appetite for cocaine while trying to maintain the high.

A few users may be high on cocaine virtually all the time; their lives center around the drug while their work and personal relationships are destroyed. Fortunately, most cocaine use by students is still occasional use, with very few students using it more than once or twice a month. The drug "crack" received a great deal of attention in newspapers and on television in past years, though its prevalence has decreased somewhat recently.

Crack is a form of cocaine quite different from the powdered form taken by most cocaine users. Powdered cocaine is processed from the coca plant with the use of several liquid chemicals. This mixture is dried resulting in a powder which is usually sniffed ("snorted") through the nasal passages. Powdered cocaine is

absorbed by the bloodstream and travels to the brain where it has its effect. This regular cocaine powder, however, vaporizes at a very high temperature and therefore, cannot be smoked.

Powdered cocaine can be treated so that it vaporizes at a lower temperature. When it is treated this way it comes out in small, hard lumps called "crack," or "freebase." In the past, the usual way of producing "freebase" used flammable chemicals, such as ether, and was very dangerous. More recently, however, a chemical procedure was developed that is not flammable. This simple, inexpensive process produces crack. In some places, crack is also called "rock cocaine." The term "Rock," however, is also used in a few locations to describe drugs other than cocaine.

While cocaine powder cannot be smoked because it burns up before it vaporizes, crack can be smoked because it turns to gas at a lower temperature. This smoked form of cocaine delivers a lot of vapor into the lungs where it is rapidly absorbed into the bloodstream. The result is a very intense and immediate high.

The price of cocaine has dropped significantly in the last few years; thus crack can be produced for a relatively low cost. In addition, because it takes less cocaine to get high when it is smoked as crack, crack can be sold in small amounts. Many young people, therefore, can now afford cocaine in the crack form.

Such conditions have made crack a continuing problem in some cities. Crack is relatively cheap, it produces a very intense high, and because it does not need to be injected, it is easy to take. A crack high does not last very long. When it wears off, crack, like other forms of cocaine, leaves the user feeling let down, and the user often tries to maintain the high with successive doses of crack. For those reasons, crack is an extremely dangerous drug.

Results from small towns and rural areas indicate that crack is now available almost everywhere. Crack is still around and is still dangerous.

MDMA (ECSTASY)

MDMA, like K2 or "Spice," is a synthetic drug with mind-altering properties. It has both stimulating and hallucinogenic properties which result in the user having sensations of increased energy, pleasure, and distorted perceptions. For these reasons, it has been very popular among youth as one of the favored "club drugs," substances that are commonly used at "raves" or other music or dance parties. It goes by the names Ecstasy and Molly. However, like K2 or "Spice," Molly can consist of other synthetic materials that have no relationship to the actual chemical, MDMA. MDMA, similar to other hallucinogenic drugs, can alter the body's ability to regulate temperature, leading to potentially dangerous increases in body temperature that can lead to liver, kidney, or heart failure. Another danger of this substance is its effect on the neurotransmitter, serotonin. Because it causes the release of high levels of serotonin, a nervous system chemical responsible for regulating mood, sleep, and other behaviors, the body can become depleted of sufficient levels of serotonin. This can lead to depression, poor memory functioning, and other cognitive deficits.

AMPHETAMINES

Stimulants are usually amphetamine or amphetamine-like drugs. They are sometimes called "prescription stimulants" because, to take them legally, they would have to be obtained through a doctor's prescription. Some stimulants, however, are manufactured and sold illegally. While marijuana and cocaine are derived from naturally occurring plants, stimulants are produced artificially in a laboratory. Stimulants cause sensations of alertness and excitement. Stimulants are usually referred to as "uppers" or "speed" by drug users. Stimulant use is usually associated with a dry mouth and a loss of appetite.

Stimulants can be taken in pill or capsule form. They are most often taken orally and absorbed through the digestive system. It takes about 15 to 20 minutes to get high. The high then lasts from two to six hours and may be followed by a "let down" feeling or serious depression if large or repeated doses are taken. Heavy drug users may also inject stimulants, although this is infrequent among adolescents.

In the late 1960's and early 1970's, some youth were involved in very heavy stimulant use. They used stimulants constantly and made frequent "speed runs" where they took heavy doses every couple of hours, staying high for seven or more hours at a time. "Speed freaks," as they were called at the time, often developed serious hallucinations and delusions of paranoia and were prone to violence and suicide. The admonition, "Speed Kills!," spread effectively among drug-using youth and helped to diminish greatly the use of speed. Today, even heavy stimulant users do not take as much of the drug, do not get as high, and only a very small proportion of young people who use stimulants stay high for such extended periods of time.

Lighter stimulant use, however, is also dangerous, partly because uppers will keep a person awake while making them feel perfectly competent even when there is considerable loss in reaction time. Judgment may be distorted, but stimulant users often cannot detect that anything is wrong. This is particularly true if alcohol and uppers are taken together. Such users may think they are functioning well when actually they are simply wide-awake drunks, and therefore dangerous ones, particularly behind the wheel.

Ritalin and Adderall (along with Concerta and Vyvanse) are drugs that are often prescribed to help young people who are constantly irritable and jumpy, can't concentrate, and are having problems paying attention. They are stimulants, but for youth who are actually suffering from attention deficit/hyperactivity disorder, they work in the opposite way, calming them down and helping them pay attention. But they can be abused by other youth, who can use them to get high just like any other stimulant. Where these drugs are prescribed frequently by physicians, some of them are likely to be used by other students to get high. The survey asked about use of these substances without a doctor's prescription.

METHAMPHETAMINE

Methamphetamine is a particular type of stimulant that is also called "crank," "speed," "crystal meth," or just "crystal." One form is called "ice," and the term "ice" is being used more generally for methamphetamine in some areas. It can be injected, smoked, sniffed or taken orally. Crystal meth has become more popular and is often used instead of cocaine. One reason some people prefer it is that it gives a very intense high, similar to cocaine, but the effect lasts much longer. Another reason for its popularity is that it can be illegally manufactured in large quantities from common industrial chemicals or from herbal products that can be bought over the counter.

Crystal meth has all of the negative effects described above for other stimulants although there is good reason to believe that the effects are intensified. In part, this is because it is a more potent chemical, but also, it is used in ways that put more of it into the bloodstream very rapidly, for instance by smoking or

injecting. The emotional effects are very strong and crystal meth users often suffer severe psychological crises including paranoia and depression.

INHALANTS

Some youth inhale many different substances, ranging from gasoline to computer cleaning dusters, to get high. The most commonly used inhalants are glue, gasoline, paint and paint thinner. Almost anything that has a solvent that evaporates at room temperature can be abused in this manner. The inhalant is usually smeared on the inside of a paper or plastic bag, rag, or old sock. The fumes are "sniffed" (breathed in through the nose) or "huffed" (breathed in through the mouth).

Inhalants are rapidly absorbed into the blood stream through the nasal passages and lungs, and the user gets high in minutes. Depending on the amount taken, once the user stops inhaling, the high lessens and is gone usually within a half hour. Thus, many inhalant users continue to "sniff" in order to stay high. An inhalant high is essentially the same as an alcohol high, with an initial stage of euphoria followed, as the youth continues to inhale, by greater intoxication, dizziness, and loss of physical and mental control.

The average age of children who use inhalants regularly is between 12 and 13. These youth use inhalants because they are cheap and easily available. Younger children who use inhalants have a tendency to move on to other drugs as they get older, which is one reason why reported inhalant use tends to be lower among high school seniors than it is among junior high or middle school students. Another reason is that many of the heavier inhalant users never make it to the senior year before dropping out of school, often at least partly because of their drug use.

Some people, usually young adults in their mid-20's or early 30's, use inhalants constantly. These people may use inhalants every day, staying high for hours at a time. Such heavy inhalant use places the user in grave danger. Inhalants can damage the liver, cause an imbalance in blood chemicals, and lead to coma or even death. These inhalant-dependent adults are often seriously disturbed -- they have a reputation for violence and bizarre behavior. Occasionally, a younger person develops this type of severe inhalant dependence which inevitably becomes a critical problem.

Most of the students who use inhalants, however, do not use them very often and the amount that they use is unlikely to do any irreparable physical damage. Fortunately, while the substances that are most often inhaled – paint, glue and gasoline -- are damaging, they are among the least toxic of inhalants and seem to do little permanent damage when used only occasionally and in small amounts. Inhalant users, however, typically do not know whether the substance they are using is dangerous or not. There are some vapors that can be fatal and others that can sensitize the heart so that suddenly being startled or frightened could kill. Inhalant vapors are also flammable, and there is often a danger of explosion or fire. Inhalant intoxication is similar to alcohol intoxication -- it interferes with judgment and motor skills, and it can cause inhalant-intoxicated youth to get into serious trouble as a result.

Communities should be aware that small groups of youth can become obsessed with using inhalants. Occasionally this pattern spreads to other groups of youth, thus creating a serious, widespread problem in their community. Such behavior rarely involves older youth, but can remain an epidemic among the younger children. A severe inhalant problem can appear suddenly in one grade or class even when previous classes have not shown it. It is wise to watch for a sudden increase in the number of elementary or junior high school students using inhalants 10 or more times a month.

COUGH AND COLD MEDICINES

Several cough and cold medicines contain ingredients that are psychoactive when taken in higher-than-recommended dosages. Many are bought over the counter where no prescription is required, making them popular among young people.

Cough syrups and capsules containing dextromethorphan (DXM), when taken in larger amounts, produce euphoria and can also produce dissociative effects (feeling like you are detached from your body). Promethazine-codeine cough syrups contain an opioid (codeine) which also produces a "high" when used more than prescribed.

TRANQUILIZERS

Some young people also use tranquilizers to get high. The figures in the tables in this report do not include use of tranquilizers that were prescribed by a doctor as medicine but only when tranquilizers were taken just to get high. A heavy dose of tranquilizers creates an initial euphoria, but then drowsiness, inattention and impaired judgment set in. Two of the more commonly used tranquilizers are ValiumTM and XanaxTM. These drugs are often prescribed for legitimate medical purposes, but they are also used illegally. If tranquilizers have been used heavily and on a daily basis, withdrawal should be done under medical supervision.

LSD AND OTHER HALLUCINOGENS

Hallucinogens, a class of drugs also known as psychedelics, interfere with the nerve impulses in the brain resulting in strange physical and emotional sensations, such as hallucinations. LSD (lysergic acid diethylamide), the most common hallucinogen, is a substance that appears naturally in a fungus but is often artificially produced in a laboratory.

Other hallucinogens are derived from plants. The best known among drug users are psilocybin, from a mushroom of that name, and mescaline, from the peyote plant.

Hallucinogens are taken orally and take from 20 minutes to an hour to take effect. The effects of a hallucinogen can last from less than an hour to a day or longer. The effects of LSD usually last five to six hours.

The response to any drug is caused, of course, by the drug itself but also to a great extent by the user's expectations. This is particularly true of hallucinogens. The amount taken is also important; light doses, for example, rarely lead to vivid hallucinations.

After taking a hallucinogen, light, sound, and skin sensations often become very intense. Users may feel disconnected from their bodies or that their bodies are strange or distorted. On heavier doses, users may see or hear things that are not there or get strange mixed sensations, such as the feeling that they are seeing music or hearing lights.

Hallucinogen users frequently feel happy and relaxed when high, particularly in early stages, but emotional responses can be extreme, particularly with heavy dosages. Most users, however, know that their hallucinations are not real and are caused by the drug. Intense "religious" or mystical feelings may be aroused, particularly if the user anticipates such effects.

Some young people who use hallucinogens believe that if the drugs are "natural" they are safe to use. Psilocybin ("mushrooms" or "shrooms"), for example, are often cited as an "organic" drug by users. Many times, however, the psilocybin mushrooms that they buy are actually grocery store mushrooms soaked in LSD. There are some other hallucinogens that are also viewed as different from LSD but which are also often simply LSD disguised as something else. It should also be noted that whether or not a drug is "organic" has little relevance to the dangers involved in using that drug.

Many young people use hallucinogens without getting into direct trouble. Hallucinogens, however, can cause problems with some users, such as bizarre behavior or accidents. Sometimes the user experiences strong feelings of paranoia or fear of going insane. Flashbacks (hallucinations that occur after taking the drug) may occur fairly frequently but usually do not cause problems unless they lead to panic or fear. Although it is quite rare, a person who has taken hallucinogens can later develop serious emotional problems, problems that cannot be distinguished from the symptoms of severe mental illness.

While these serious problems are infrequent, hallucinogen use can cause other, subtler problems. These young people are at an age when they are struggling to develop their own attitudes, beliefs, and values. Taking hallucinogens sometimes convinces them that they are developing creative ideas and thoughts and learning the answers to life's problems, so they take the drug instead of seeking real solutions or actually developing creative and intellectual abilities.

HEROIN

Heroin, morphine, and opium are all opiates. Opium is a drug derived from the opium poppy. It can be smoked or taken orally and has long been used to block pain or to induce sleep. Morphine is a stronger, concentrated form of opium. Heroin is produced by chemical treatment of morphine; it works more rapidly and is more effective because it can get into the brain more readily than morphine. While these are all essentially the same drug, users prefer heroin because of its potency. Heroin is not legally available in the United States.

If injected, heroin takes effect almost immediately, and the sensations will peak in less than five minutes. The high from a single dose lasts from four to six hours. The rapid and intense effect (the "rush") from injecting the drug is popular among the drug's users, thus some prefer to administer it with a needle. The high is less immediate and less intense when heroin is taken orally.

The response to taking the drug is usually a drowsy, relaxed state, with feelings of euphoria, particularly if the user has experience with the drug. Although the usual response is euphoric, it is not at all rare for a user to feel depressed after taking the drug. When the drug wears off, there is a melancholy feeling that encourages repeated use.

Heroin is becoming a more and more popular drug among students. In some cases, students may have undergone a surgery or have other types of pain and been prescribed Oxycontin (see description below). If Oxycontin is used beyond the period for which it is prescribed, users can easily become addicted, turning to illegally obtained Oxycontin. But on the street, this drug can be very expensive. These opiate-addicted youth then turn to heroin which is much less expensive.

Heroin intoxication is, in some ways, similar to alcohol intoxication -- judgment, motor skills, memory and attentiveness are affected. Heroin also reduces the user's motivation. It is a highly addictive drug as many users begin to crave the sensations heroin causes and become very anxious when they do not have the drug. When the user comes down from a high, there are often feelings of depression, discomfort and a

craving to continue using the drug. Frequent use over a long period of time can trigger an obsession with heroin that dominates the user's life.

It is possible that some young people may think that they are getting heroin when they have actually been sold a phony street drug. If so, using that drug could be almost as serious as taking heroin. The drug may be another drug that could do very severe damage, and even if the drug is innocuous, young people who take it are showing a <u>willingness</u> to use heroin and are likely to actually try heroin later on.

HYDROCODONE AND OXYCODONE

Many other narcotics have effects similar to heroin. Morphine and opium are, of course, the same basic drug as heroin but are not as concentrated. Demerol is a potent pain killer and narcotic. Codeine has similar effects but is less powerful. Methadone was developed as an alternative to heroin for treatment of heroin addicts. It can be taken orally and lasts for a day or more. Methadone does not make the user as drowsy and lethargic as heroin, thus the addict can use it while working. Methadone, however, can also be abused. The physical and psychological effects and the hazards of these other narcotics are essentially the same as those of heroin. The survey questions ask only about the use of narcotics other than heroin Use under a doctor's care is excluded.

Oxycodone (Oxycontin) has received significant attention in the media. It is a powerful prescription narcotic used to control moderate to severe pain. In addition, it produces a strong euphoria which is why it is used illegally. It usually comes in a pill form that has an extended release formula which spreads its effects over a 12-hour period. However, when it is used illegally it is often crushed or chewed which destroys the extended effect feature. This produces a quick and very powerful high and can have serious effects, including death, because the active ingredient is released into the body all at once rather than over time. Oxycodone also produces strong withdrawal symptoms if it has been used for a period of time beyond prescribed levels. Oxycodone is obtained from sellers who divert it from the legal market or it is taken from the homes of those who have a legal prescription.

Hydrocodone (Vicodin), similar to oxycodone, is a popular opioid prescribed for pain control. Many of the characteristics described above for oxycodone are true for hydrocodone, but to a slightly lesser degree. The risk for addiction is high for both drugs, but greater for oxycodone, with oxycodone being the preferred opioid among most who abuse this form of drug.

One very serious pattern currently observed among young people is becoming addicted to opioids after being prescribed for pain. Users continue to abuse the prescription opioids such as hydrocodone or oxycodone, but they are very expensive when bought illegally on the street. Abusers then turn to heroin as a substitute which is substantially cheaper.