

# The 2009 Vermont Youth Risk Behavior Survey

## Statewide Report

Every two years since 1993, the Department of Health Division of Alcohol and Drug Abuse Programs and the Department of Education Coordinated School Health Programs have sponsored the Vermont Youth Risk Behavior Survey (YRBS). The YRBS measures the prevalence of behaviors that contribute to the leading causes of death, disease, and injury among youth. The YRBS is part of a larger effort to help communities increase the “resiliency” of young people by reducing high risk behaviors and promoting healthy behaviors. The YRBS provides accurate information about Vermont students, which enables us to:

- **monitor trends** in their health and risk behaviors
- **compare Vermont** students with a national sample of students
- **plan, evaluate, and improve** community and school programs that prevent health problems and promote healthy behaviors

In 2009, school staff administered the YRBS to 29,303 eighth to twelfth grade Vermont students in 141 schools representing 55 supervisory unions. **This report presents results from a representative sample of 11,427 Vermont high school and middle school students, selected from 20 high schools of varying sizes, along with their 25 associated middle schools.** The results were “weighted” to represent the population of eighth to twelfth grade students in Vermont by gender, grade, and race/ethnicity, permitting us to draw inferences about the entire student population.

Participation by both schools and individual students was completely voluntary. To protect student privacy, the questionnaire was anonymous. Therefore, it is impossible to identify an individual student’s responses.

This report and previous years’ reports are available online at: <http://healthvermont.gov/research/yrbs.aspx>

## How to use the YRBS

The YRBS provides one important piece of the evaluation puzzle. It can help detect changes in risk behaviors over time. It can help identify differences among ages, grades, and genders. With its help we can focus primary prevention efforts on specific groups of teens, and determine whether or not school policies and community programs are having the intended effect on student behaviors.

Think of the YRBS as a tool for starting discussions, for educating the community, for planning and evaluating programs, and for comparing Vermont students with other students nationwide.

- **Starting the Conversation:** Use the YRBS to begin a conversation with teens about the personal choices they make or about the health of their community. Ask them if the results accurately reflect what they see happening around them. How do they explain the results? What ideas do they have about ways to promote healthy behaviors? From their perspective, what seems to be working and what isn't working?
- **Increasing Awareness:** The YRBS provides an opportunity to break through "denial" and to make community members aware of the risks that their young people face. It can also dispel myths and correct misinformation about the "average teenager." The YRBS can be used to accentuate the positive, and to celebrate the fact that many students are abstaining from behaviors that endanger their health and their ability to succeed.
- **Planning and Evaluating Programs:** The YRBS can serve as the basis of a community needs assessment. It can help identify strengths and weaknesses in your community, and can inform communities about strategies to address those weaknesses.
- **Vermont Trends and National Comparisons:** We have been able to track some information for 16 years, because Vermont students have been participating in the YRBS since 1993. Also, the Centers for Disease Control and Prevention conduct a biennial YRBS of a national sample of high school students. These combined results permit us to draw comparisons between Vermont and the nation.

## A Word of Caution

The YRBS represents the most complete and most recent information available about risk behaviors among Vermont students. However, the YRBS has some limitations that you should keep in mind when interpreting the results.

- **Data Quality:** Several precautions were taken to ensure the reliability and validity of the results. First, the questionnaire was carefully designed and thoroughly tested by Centers for Disease Control and Prevention. Second, the survey was anonymous to encourage students to be honest and forthright. Third, over 100 consistency checks were run on the data to exclude careless, invalid, or logically inconsistent answers. Fourth, the results are statistically adjusted or “weighted” so that the sample accurately represents all Vermont eighth to twelfth grader students based on gender, grade, and race/ethnicity. These precautions can reduce some sources of error, but not all. For example, some high risk students, such as those who have dropped out of school, are not represented in the results.
  
- **Comparing Supervisory Unions to Each Other and to the State:** Participating supervisory unions will receive individual reports summarizing their own results. It is natural to want to know how individual supervisory unions compare to the state overall or to other supervisory unions. We urge caution in making such comparisons because the statewide results are “weighted” whereas the supervisory union results are not. As a result, it is possible that apparent differences, especially small differences, are due to demographic characteristics, rather than to true differences in prevalence. Furthermore, small differences may not be statistically different and may simply be a function of normal sampling error.
  
- **What, not Why:** The YRBS can indicate what students are doing. It can also suggest which groups of students (e.g., male vs. female, eighth graders vs. twelfth graders) are more likely to engage in these behaviors. However, the survey does not answer the most important question: Why are they doing it?

## **A Special Thanks!**

We are grateful to the principals and superintendents who chose to participate in the YRBS and to the teachers and school staff who administered the survey or in other ways supported this effort. We also wish to thank the Centers for Disease Control and Prevention, Division of Adolescent and School Health for sponsoring the statewide survey through a cooperative agreement with the Vermont Department of Education, and Westat Survey Technical Assistance Project for processing and analyzing the data. Finally, we are grateful to the students who took the time to share with us a piece of their lives. This report is our way of thanking all of you. We hope that you find the survey report informative and useful.

The next YRBS is scheduled for 2011. We encourage schools to participate again, because we will be able to continue to monitor trends in students' health and risk behaviors, compare Vermont students with a national sample of students, and plan, evaluate, and improve community programs designed to prevent health problems and promote healthy behaviors. The YRBS is our best opportunity to look at a "snapshot" of risk-related behaviors of Vermont adolescents. If you have any questions or comments about the YRBS, please contact Erika Edwards at the Division of Health Surveillance, Vermont Department of Health (802-863-7246).

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## Basic Information

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### Understanding This Report:

- **Format:** The results are presented as data tables, pie charts, bar graphs, and line graphs. Each page of data also has explanatory text. In most cases, the data are organized by gender and grade. All results are expressed as percentages of students who responded affirmatively. The percentages in some charts may not total 100% due to rounding. Statistical tests were done to assess whether percentages were different from each other at the  $p < 0.05$  level. Percentages that were different (also known as “significant differences”) are noted in the explanatory text.
- **Healthy Vermonters 2010:** Vermont has established goals for promoting health and reducing risk behaviors in *Healthy Vermonters 2010*. Goals relevant to the behaviors surveyed by the YRBS are included in the report for your reference. For more information, see *The 2008 Health Status of Vermonters*, *Healthy Vermonters 2010*, and *Vermont’s Blueprint for Improving Public Health*, available from the Vermont Department of Health.

**Remember to look at the positive side.** In most cases the majority of adolescents are NOT engaging in risky behaviors. Although most of the charts examine the prevalence of risk behaviors, please do not forget about the percentage of adolescents who are NOT engaging in these behaviors.

## Basic Information

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### Description of the Sample for this Report

- **Sampling:** In 2009, school staff administered the YRBS to 29,303 eighth to twelfth grade Vermont students in 141 schools representing 55 supervisory unions. Twenty high schools of varying sizes, with their 25 associated middle schools, were randomly selected to comprise the weighted sample for this report (n=11,427). A survey of this size was required in order to have an error rate of +/- 5% at each of the five grade levels.
- **Weighting:** The results were “weighted” by gender, grade, and race/ethnicity in order to compensate for differences between the sample and the population of all eighth to twelfth grade students in Vermont. The weighting procedure ensures that the sample is representative of this population, permitting us to draw inferences about the school-based student population based on the results of this sample.
- **Response Rates:** The school response rate was 98%, and the student response rate was 77%. Therefore, the overall response rate was 75% ( $.98 \times .77 = .75$ ). Statistically, this is a remarkably high number and adds to the confidence that we have in the results.



## Sample Demographics

	Grade					Gender		
	8	9	10	11	12	F	M	All*
<b>Number of students</b>	1,855	2,413	2,253	2,057	1,794	5,662	5,557	11,427

\*NOTE: Some students did not indicate their grade or gender. Therefore, totals by grade and by gender do not equal the overall total.

	Percent
<b>Race and Ethnicity</b>	
White non-Hispanic	93
Racial or Ethnic Minority	7
<b>Age</b>	
13 and younger	10
14	18
15	21
16	21
17	21
18 and older	10
<b>Has an Individualized Education Plan (IEP)</b>	11
<b>Mother's Education Level</b>	
High school or less	32
Some college	15
College graduate	44
Not sure	9

## ✓ Injuries, Violence, and Safety

This section deals with personal safety and violence, and includes questions about physical fights, bullying, dating violence, weapons, vehicle safety, and suicide.

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- **Physical Fighting:** Physical fighting is a marker for problem behaviors<sup>1</sup> and is associated with serious injury.<sup>2,3</sup> Abuse by an intimate partner is associated with other risk behaviors among both males and females.<sup>4</sup> Forced sex is associated with negative psychosocial and mental health among adolescents.<sup>5,6</sup>
- **Weapons:** During adolescence, homicide rates in the U.S. increase from 1.2 per 100,000 in youth aged 10 to 14 to 10.8 per 100,000 in youth aged 15 to 19.<sup>7</sup> Homicide is the second leading cause of death among all youth aged 15 to 19 in the U.S., after unintentional injuries.<sup>7</sup> Firearms intensify violence and increase the likelihood of fatality in a conflict.<sup>8</sup> In 2006, 85% of homicide victims 15 to 19 were killed with firearms.<sup>7</sup> From 2000 to 2006, 67% of Vermont homicide victims ages 15 to 19 died as a result of firearms (6 out of 9).<sup>7</sup>
- **Bullying:** Bullying and being victimized by bullies have been increasingly recognized as health problems for children, because of their association with a range of adjustment problems, including poor psychological adjustment,<sup>9,10</sup> poor academic achievement,<sup>10</sup> and violent behavior.<sup>11</sup>
- **Personal Safety - Safety Belts and Bicycle Helmets:** Motor vehicle crash injuries are the leading cause of death among youth aged 15 to 19 in the U.S.<sup>7</sup> In 2006, 35% (9 out of 26) of deaths among 15 to 19 year olds in Vermont were due to motor vehicle crashes.<sup>7</sup> Proper use of safety belts reduces the risk of fatal injury to front seat passengers by 45% and risk of moderate to critical injury by 50%.<sup>12</sup> Head injury is the leading cause of death in bicycle crashes.<sup>13,14</sup> Bicycle helmets are 85% to 88% effective at reducing the impact of head and brain injuries due to bicycle crashes.<sup>15,16</sup> Despite this, less than a third (20-25%) of bicyclists wear helmets.<sup>15,16</sup>

## ✓ Injuries, Violence, and Safety (cont'd)

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- **Vehicle Safety - Driving Under the Influence:** In 2006, alcohol use was associated with 32% of motor vehicle-related fatalities nationwide and 33% in Vermont.<sup>17</sup> Alcohol-related crashes also cause serious injury and permanent disability, and ranks as the leading cause of spinal cord injury among adolescents and young adults.<sup>18</sup> Research examining drugs *other than alcohol* indicates cannabis (marijuana) is by far the most prevalent drug detected in impaired drivers, fatally injured drivers, and motor vehicle crash victims.<sup>19</sup>
  
  - **Suicide:** Suicide was the second leading cause of death among Vermont youth ages 15 to 19 from 2000 to 2006.<sup>7</sup> From 2003 to 2006, Vermont's suicide rate among 15 to 24 year olds was 8.0 deaths per 100,000, compared to 10.0 deaths per 100,000 nationwide.<sup>7</sup>
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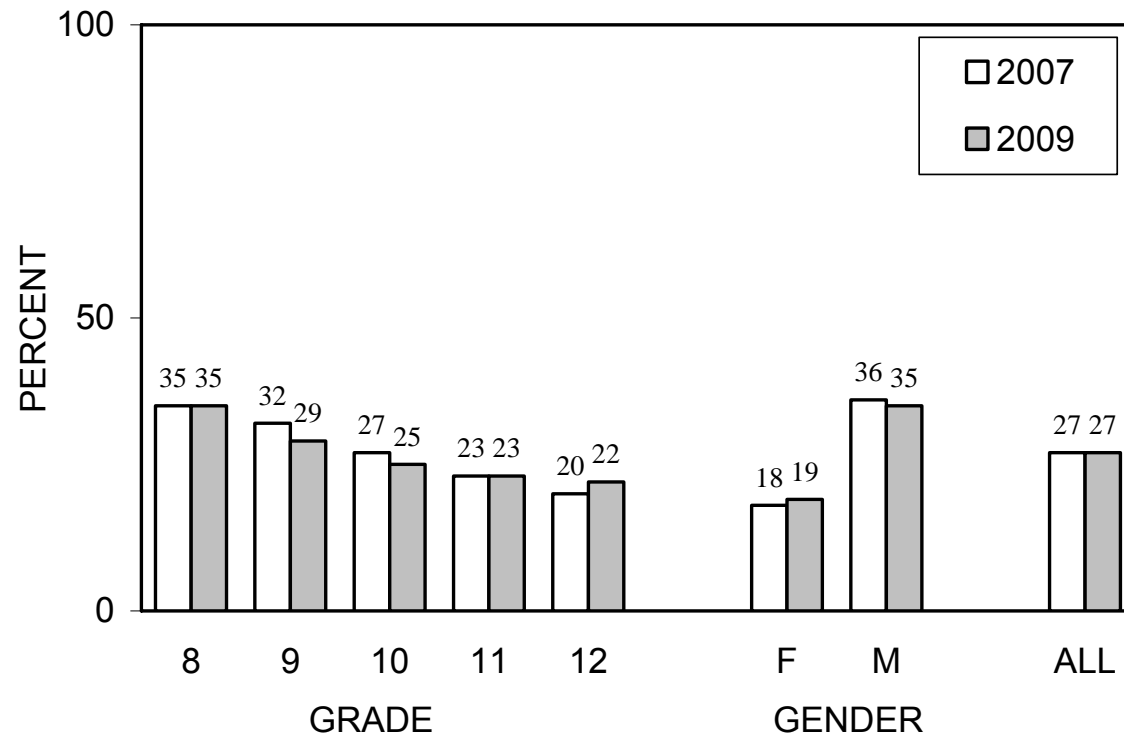
### **Related *Healthy Vermonters 2010* Goals:**

- Increase the percentage of people who always use safety belts to at least 92%.
  
- Further reduce physical assaults by intimate partners to less than 3.6 per 1,000 people age 12 and older.
  
- Reduce alcohol-related motor vehicle deaths to fewer than 4 per 100,000.
  
- Reduce suicide attempts by adolescents to less than 1%.
  
- Reduce suicide deaths to fewer than 6 per 100,000 people.

## Physical Fighting

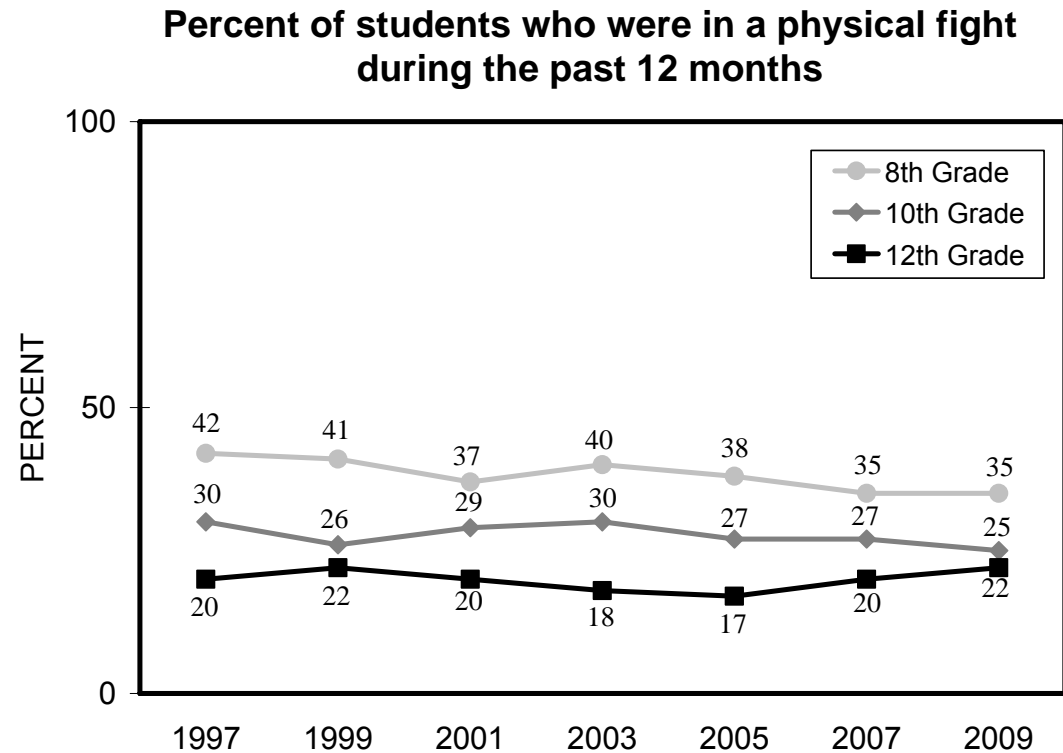
- One quarter of students (27%) reported being in at least one physical fight in the past 12 months.
- Males were significantly more likely to be in a physical fight than females.
- Eighth graders were significantly more likely to be in a physical fight than 10th, 11th, or 12th graders.
- Of all students, 3% reported needing treatment from a doctor or nurse following a fight. Males (4%) were significantly more likely than females (2%) to require treatment after a fight.

Percent of students who were in a physical fight during the past 12 months



## ■ Physical Fighting

- **Physical fighting remains relatively unchanged.** In 1997, 31% of students were in a physical fight in the past 12 months, compared to 27% in 2009.



## ■ Safety at School

- In the past 30 days, 5% of students did not go to school because they felt they would be unsafe at school or on their way to or from school.
- One in ten students (9%) carried a weapon to school in the past 30 days. Slightly fewer were injured or threatened with a weapon on school property in the past 12 months (6%). Males were significantly more likely than females to report these issues.
- In the past 12 months, 12% of students were in a physical fight on school property. Students in 8th or 9th grades were significantly more likely to report this behavior than 12th graders, and males significantly more than females.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
Percent of students who:									
Did not go to school during the past 30 days because they felt unsafe	4	5	6	5	6	5	4	6	5
Carried a weapon such as a gun, knife, or club <u>on school property</u> during the past 30 days	9	9	6	7	8	10	10	3	14
Were threatened or injured with a weapon <u>on school property</u> during the past 12 months	6	6	6	7	6	5	5	4	8
Were in a physical fight <u>on school property</u> during the past 12 months	12	12	18	14	11	9	8	7	17

## ■ Abusive Behavior

- Overall, 7% of students have been physically hurt by a boyfriend or girlfriend during the past year.
- Of all students, 11% have ever been touched against their wishes or forced to touch someone else, and 5% have ever been forced to have sexual intercourse. Females were significantly more likely to report these issues than males.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
Percent of students whose boy/girlfriend hit, slapped or physically hurt them during the past 12 months	7	7	5	6	7	8	9	6	8
Percent of students who have ever been:									
Touched against their wishes or forced to touch someone else	11	11	8	10	12	11	13	17	5
Forced to have sexual intercourse	5	5	3	4	6	5	8	8	3

## ■ Bullying

- In the past 30 days, 17% of students were bullied and 20% of students bullied someone else.
- Females were significantly more likely to have been bullied and significantly less likely to bully someone else.
- Students in 8th or 9th grade were significantly more likely to have been bullied or to report being bullies themselves than students in 12th grade.

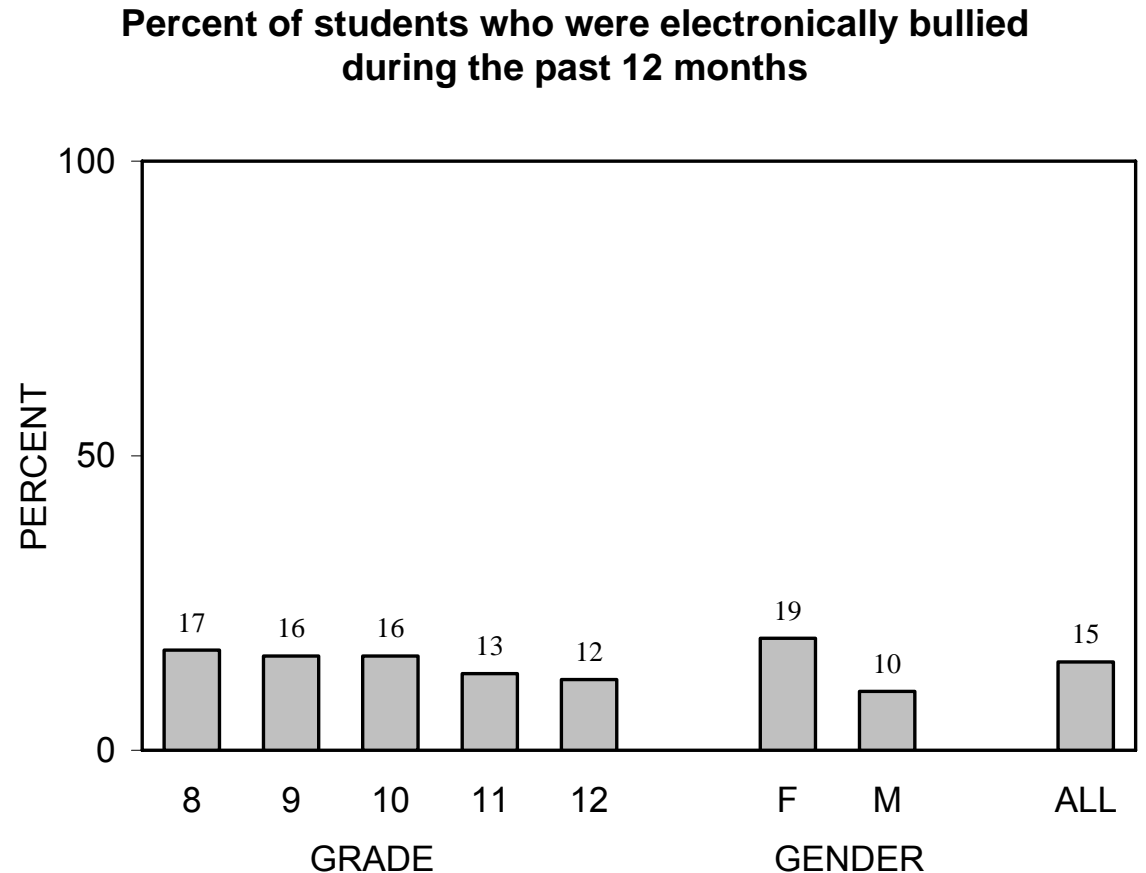
	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who:</b>									
<b>Were bullied on one or more of the past 30 days</b>	17	17	24	21	17	13	10	20	15
<b>Bullied someone on one or more of the past 30 days</b>	21	20	24	21	20	17	15	17	22

For the purposes of the Vermont YRBS, bullying was described as occurring when, on many occasions, a student or group of students say or do unpleasant things to another student to make fun of, tease, embarrass, or scare him/her, or purposefully exclude him/her. Bullying can occur before, during, or after the school day; on school property; on a school bus; or at a school-sponsored activity. It is not bullying when two students of about the same strength and power argue or fight or when teasing is done in a friendly way.



## ■ Electronic Bullying

- Of all students, 15% reported being bullied electronically, such as through chat rooms, instant messaging, Web sites, or text messaging, in the past 12 months.
- Females were significantly more likely than males to report being electronically bullied. There were no significant differences by grade.
- This question is new in 2009.



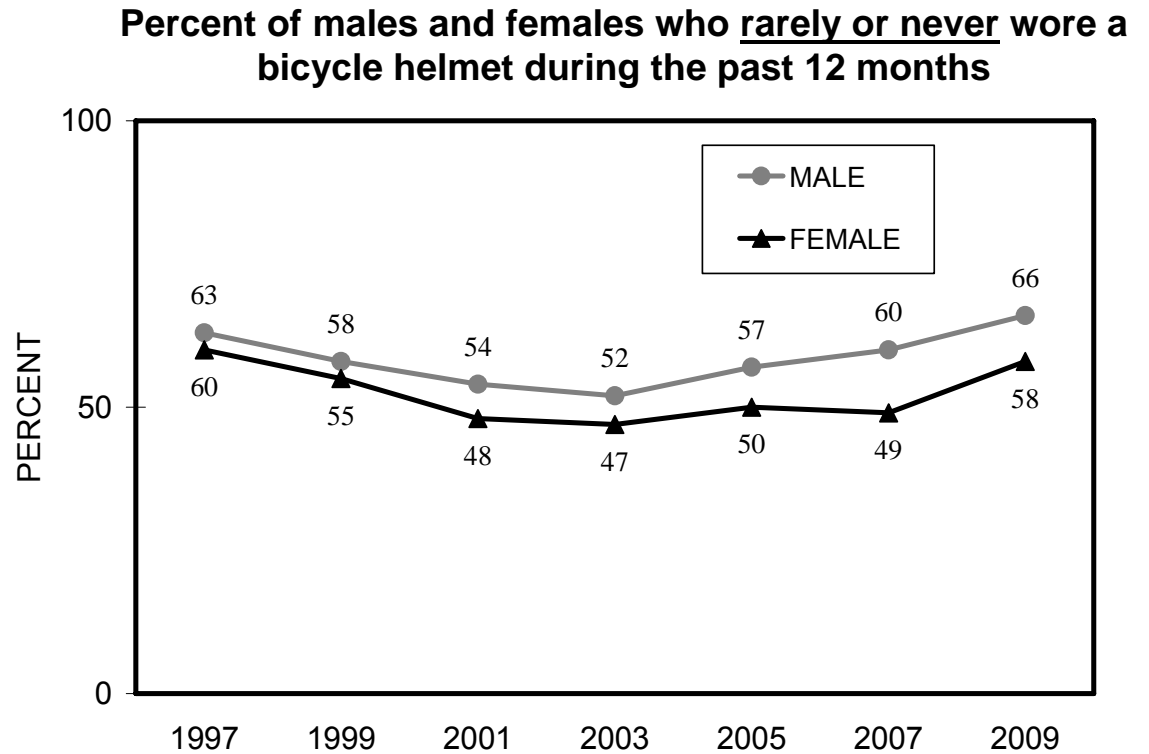
## ■ Personal Safety - Bicycle Helmets

- In the past 12 months, 26% of students who ride bicycles always or almost always wore helmets.
- Females were significantly more likely than males to report always or almost always wearing a helmet. Males were significantly more likely than females to report rarely or never wearing a helmet. There were no significant differences by grade.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Frequency of helmet use (percent) among students who rode a bicycle in the past 12 months only</b>									
<b>Always</b>	17	13	14	12	13	13	16	15	12
<b>Almost always</b>	16	13	16	14	12	11	12	14	12
<b>Sometimes</b>	11	11	12	12	12	10	8	12	10
<b>Never or rarely</b>	55	63	58	61	64	66	64	58	66

## ■ Personal Safety - Bicycle Helmets

- Over 60% of students who ride bicycles report rarely or never wearing a bicycle helmet.
- This percent, which was declining, increased from 2007 to 2009, particularly among females.



## ■ Personal Safety - Safety Belts

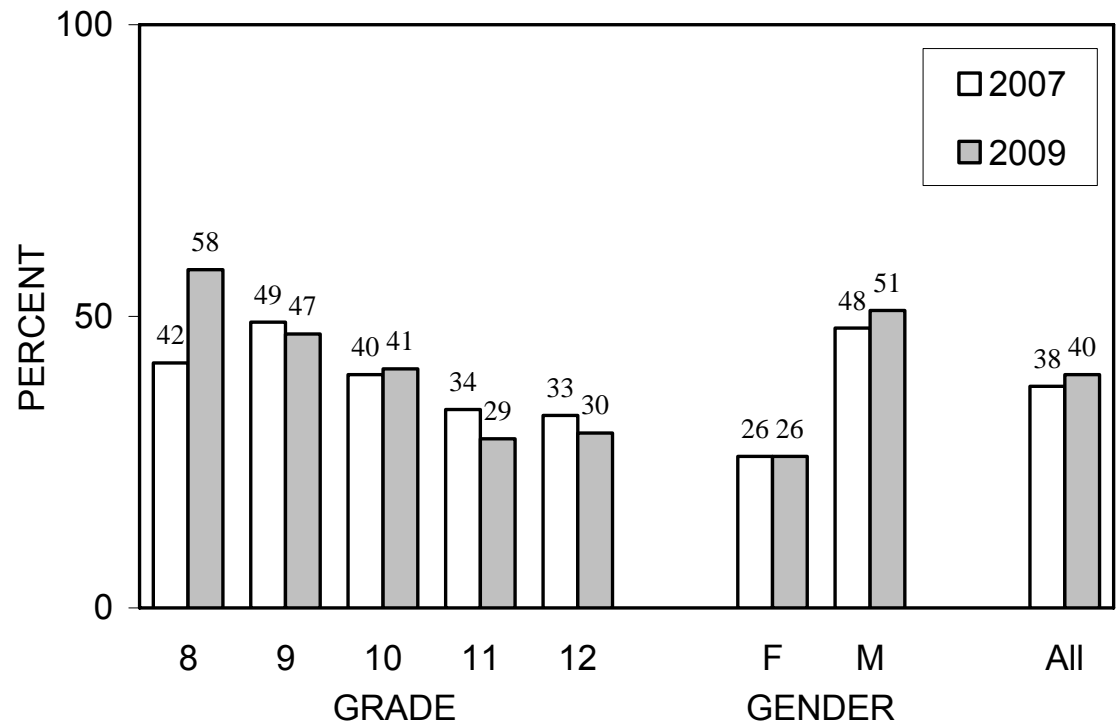
- Overall, 83% of students reported always or almost always wearing their safety belt when riding in a car driven by someone else.
- Safety belt use is up since 1993. In 1993, 63% of students reported always or almost always wearing their safety belt.
- Females were significantly more likely to always or almost always wear safety belts than males. Males were significantly more likely to rarely or never wear safety belts than females. There were no significant differences by grade.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
Percent of students who wear a safety belt when <i>riding in a car</i> driven by someone else									
Always	58	59	62	57	55	60	60	63	55
Almost always	25	24	24	25	27	23	22	24	24
Sometimes	9	9	7	10	11	11	9	8	10
Never or rarely	8	8	7	8	8	7	9	6	10

## ■ Personal Safety - Crashes

- Two out of five students injured in a crash in the past 12 months were not wearing their safety belts.
- Males were significantly more likely than females to report not wearing a safety belt during an injury-causing car or other vehicle crash.
- Younger students were more likely than older students to report not wearing a safety belt during a car or other vehicle crash. Students in 8th grade were significantly more likely than 10th, 11th, or 12th graders to report not wearing a safety belt during an injury-causing car or other vehicle crash.

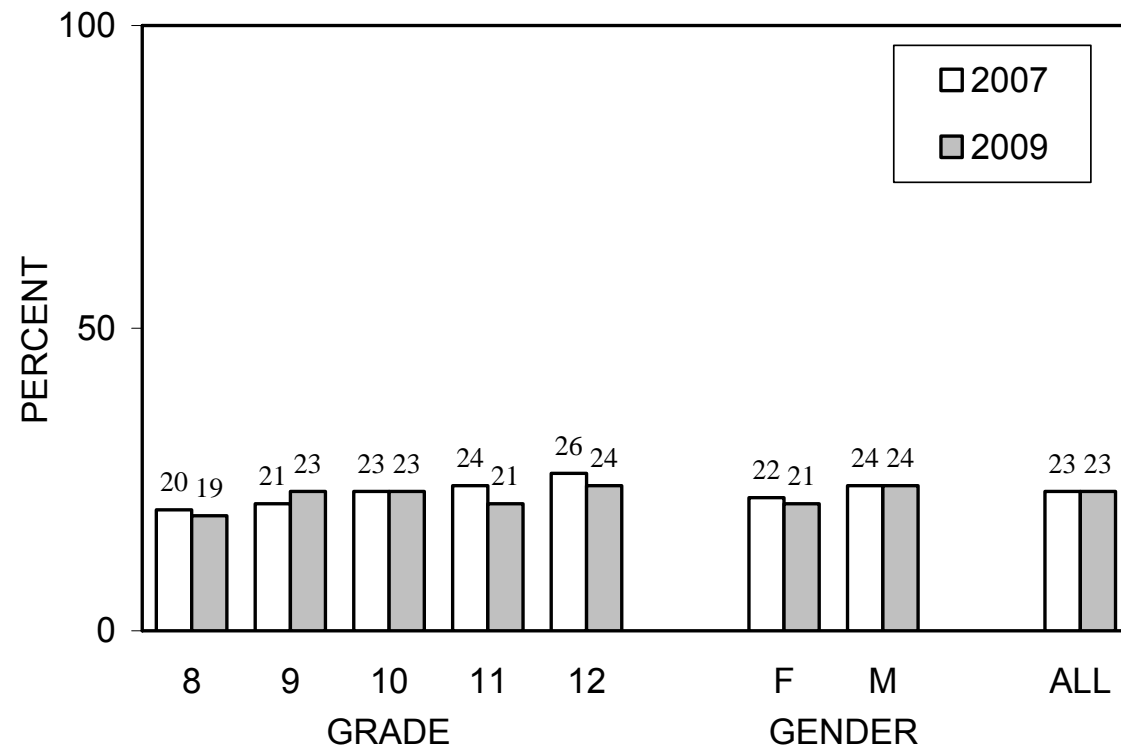
Percent of students who were injured in a car or other vehicle crash during the past 12 months and were not wearing a safety belt



## ■ Vehicle Safety - Driving Under the Influence

- **Almost one quarter (23%) of students reported riding with a drinking driver in the past 30 days.** No significant differences were seen by gender or grade.
- **While riding with a drinking driver has decreased since 1995, it has remained basically unchanged since 1999.**

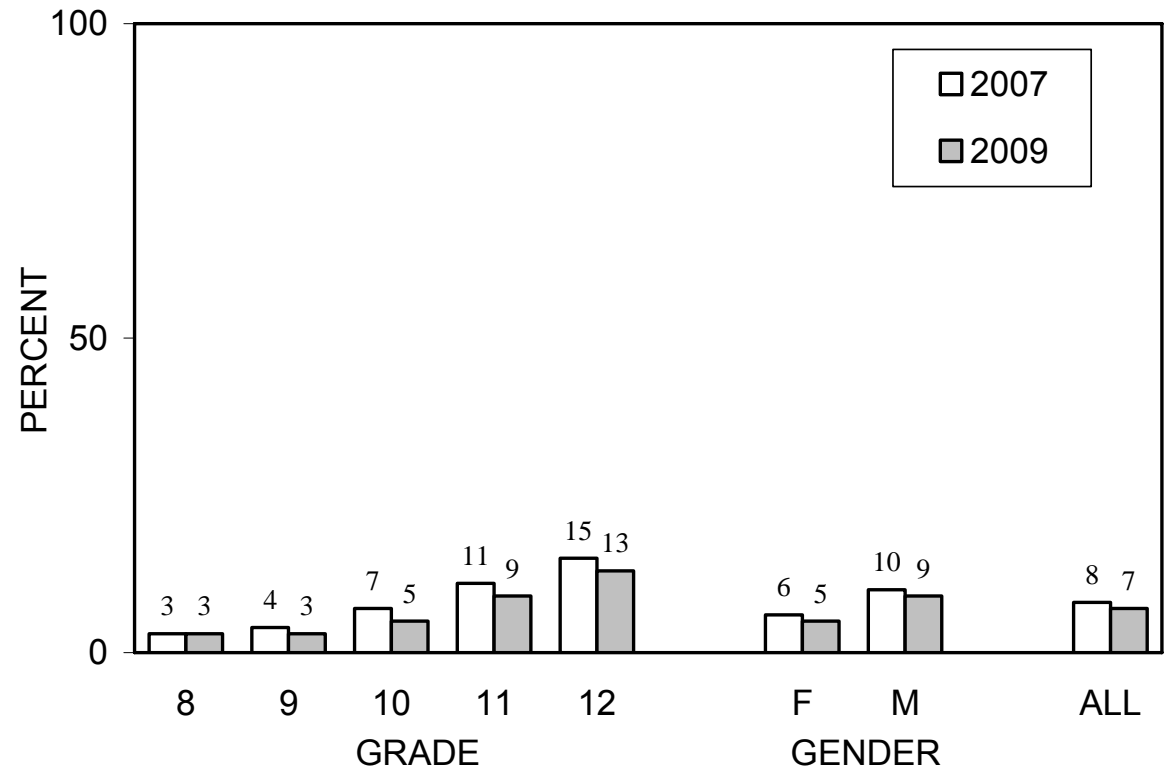
**Percent of students who rode one or more times during the past 30 days in a car or other vehicle driven by someone who had been drinking alcohol**



## ■ Vehicle Safety - Driving Under the Influence

- Overall, 7% of students reported driving one or more times after drinking in the past 30 days.
- Male students were significantly more likely than female students to drive a car after drinking alcohol.
- Older students drink and drive more than younger students. Twelfth graders were significantly more likely than 8th, 9th, or 10th graders to drive after they had been drinking alcohol.

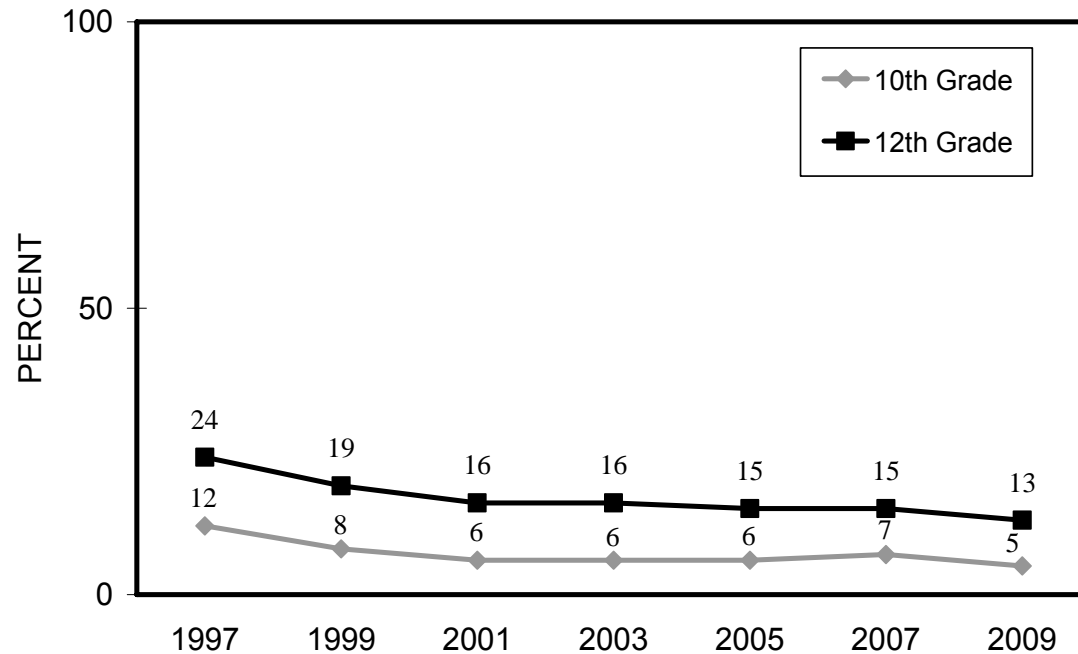
Percent of students who drove a car or other vehicle one or more times during the past 30 days when they had been drinking alcohol



## ■ Vehicle Safety - Driving Under the Influence

- **Drinking and driving has decreased since 1997.**  
Among 12th graders, drinking and driving decreased from 24% in 1997 to 13% in 2009. This pattern was similar among 10th grade drivers (12% vs. 5%).
- **Reported rates of drinking and driving have remained basically unchanged since 2001.**

**Percent of 10th and 12th grade students who drove a car or other vehicle one or more times during the past 30 days when they had been drinking alcohol**

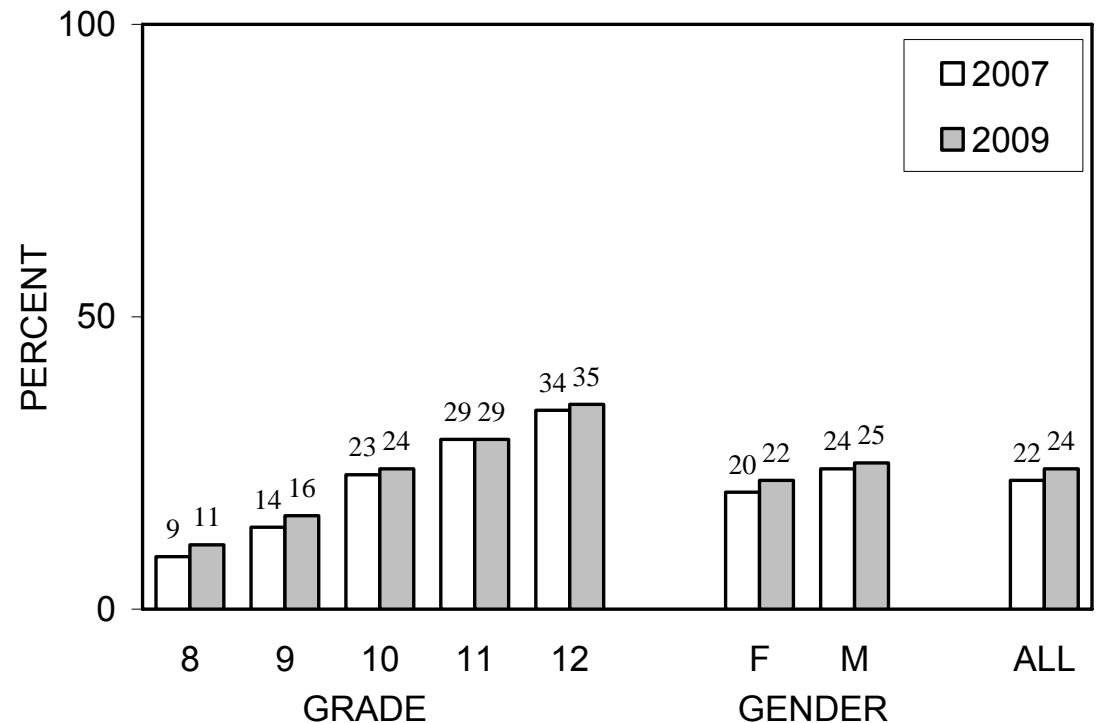




## ■ Vehicle Safety - Driving Under the Influence

- In the past 30 days, 24% of students rode in a car or other vehicle with someone who was using marijuana.
- In 1997, the first time the question was asked, 30% of students reported riding with someone who was using marijuana.
- Older students are more likely to ride in a car or other vehicle with someone who has been using marijuana than younger students. Twelfth graders were significantly more likely than 8th, 9th, or 10th graders to ride in a car driven by someone smoking marijuana.

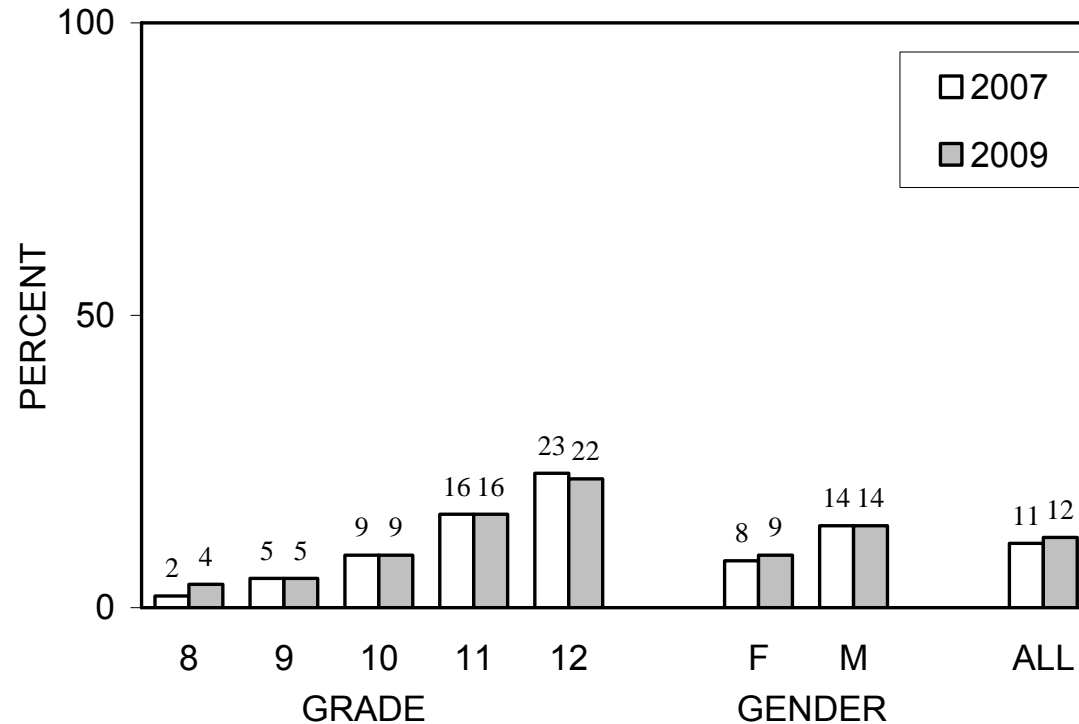
Percent of students who one or more times during the past 30 days rode in a car or other vehicle driven by someone who had been smoking marijuana



## ■ Vehicle Safety - Driving Under the Influence

- Of all students, 12% reported driving after smoking marijuana in the past 30 days.
- In 1999, 16% of students reported this behavior.
- Female students were significantly less likely to drive after marijuana use than male students.
- Older students are more likely to drive when they have been smoking marijuana. Twelfth graders were significantly more likely than students in all other grades to drive after using marijuana.

Percent of students who one or more times during the past 30 days drove a car or other vehicle when they had been smoking marijuana



## ■ Suicide and Self-Harm

- In the past 12 months, 21% of all students felt sad or hopeless almost every day for at least two weeks, 9% made a suicide plan, and 4% attempted suicide. Of all students, 2% had a suicide attempt that required medical treatment.
- Suicide plans and attempts are down since peaking in 1995. In 1995, 22% reported making a plan to attempt suicide and 10% reported actually attempting suicide.
- Females were significantly more likely than males to feel sad or hopeless almost every day for at least two weeks, to purposely hurt themselves, to make a plan on how to attempt suicide, and to actually attempt suicide. There were no significant differences by gender in attempted suicides that required medical treatment.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who during the past 12 months:</b>									
<b>Felt so sad or hopeless almost every day for at least two weeks that they stopped doing some usual activities</b>	20	21	20	19	24	23	19	27	15
<b>Purposely hurt themselves (e.g., cut or burned) without wanting to die</b>	15	15	15	15	16	16	12	21	9
<b>Made a plan about how to attempt suicide</b>	9	9	11	9	9	10	7	11	7
<b>Actually attempted suicide</b>	5	4	4	4	4	5	3	5	3
<b>Attempted suicide and required medical treatment</b>	2	2	1	1	2	2	2	2	1

## ✓ Alcohol, Tobacco, and Other Drugs

The questions in this section ask students about their use of alcohol, tobacco products, marijuana, inhalants, cocaine, steroids, heroin, hallucinogens, methamphetamines, and prescription drugs. The questions ask the age at which students first used alcohol, cigarettes, marijuana, and inhalants and how often they use them now.

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- **Alcohol Use** is a major contributing factor in about half of all homicides and sexual assaults,<sup>20</sup> and about one-third of all motor vehicle crash fatalities.<sup>17</sup> Approximately 80,000 American deaths per year are attributable to excessive alcohol use.<sup>7</sup> Heavy drinking among youth has been linked to violence, academic and job problems, suicidal behavior, trouble with law enforcement authorities, risky sexual behavior,<sup>21,22</sup> and use of cigarettes,<sup>23,24</sup> marijuana, cocaine, and other illegal drugs.<sup>23</sup>
- **Tobacco Use** is the single most preventable cause of death in the United States,<sup>25</sup> contributing to more than one of every five deaths.<sup>26</sup> Cigarette smoking increases the risk of: heart disease; chronic obstructive pulmonary disease; acute respiratory illness; stroke; and cancers of the lung, larynx, oral cavity, pharynx, pancreas, and cervix.<sup>25</sup> In addition, cigarette smokers are more likely than nonsmokers to drink alcohol, use marijuana and cocaine, engage in a physical fight, carry a weapon, and attempt suicide.<sup>27</sup>
- **Marijuana Use** is associated with smoking-related respiratory damage, temporary short-term memory loss, decreased motivation, and psychological dependence.<sup>28</sup> Other reactions include feelings of distrust, anxiety, or depression.<sup>28</sup> More teens enter treatment with a primary diagnosis for marijuana dependence than for all other illicit drugs combined.<sup>29</sup>
- **Inhalant Use** is the deliberate inhalation or sniffing of common products found in homes and schools, like glue and cleaners, and some gases intended for medical or dental purposes, to obtain a “high.” Short-term effects of inhalant use include headache, ringing in ears, coughing, vomiting, pain in the chest, muscles or joints, or even sudden death.<sup>30</sup> Long-term risks vary, but include brain and nervous system damage and toxic effects to the lungs, liver, and kidneys.<sup>30</sup> Inhalants are inexpensive and easy to get while also being difficult to detect. Experimentation typically begins in the preteen years.
- **Other Drug Use** is related to suicide, early unwanted pregnancy, school failure, delinquency, and transmission of sexually transmitted diseases (STDs), including HIV infection.<sup>31</sup> In 2008, 25% of U.S. 12th graders reported ever using other drugs.<sup>32</sup>

## ✓ Alcohol, Tobacco, and Other Drugs (cont'd)

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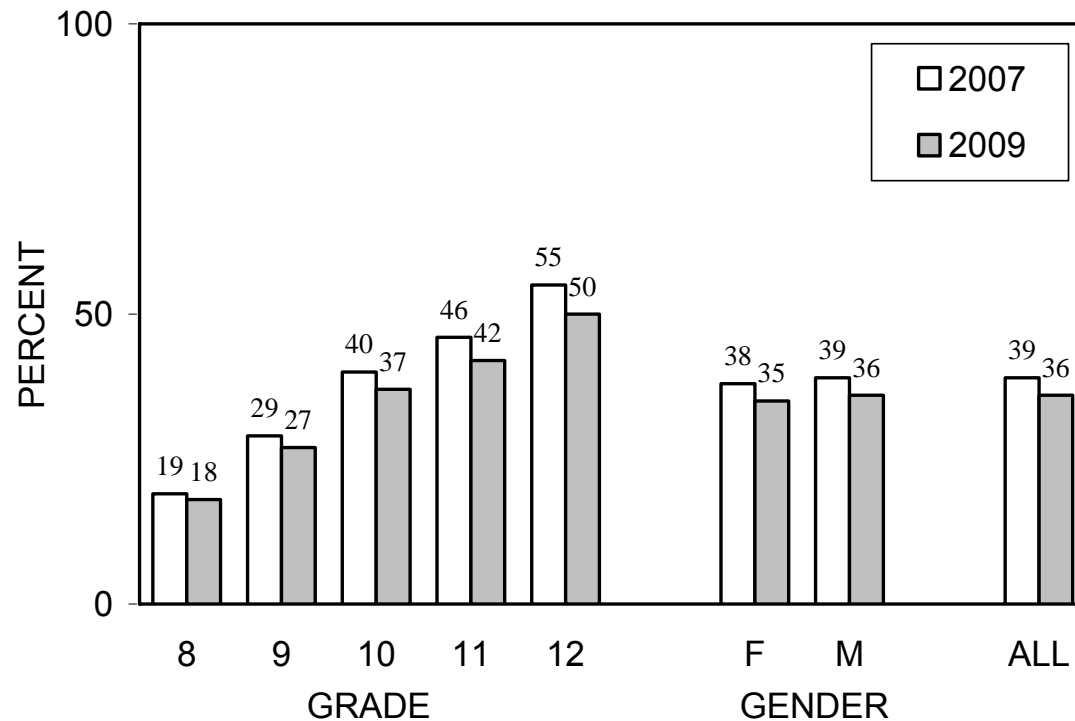
### **Related *Healthy Vermonters 2010* Goals:**

- Reduce the percentage of youth who use alcohol prior to age 13 to 0%.
- Reduce the percentage of youth who engage in binge drinking in the past month to 3% or less.
- Reduce the percentage of youth who smoked cigarettes in the past month to 16% or less.
- Reduce the percentage of youth who used spit tobacco in the past month to 1% or less.
- Reduce the percentage of youth who smoked cigars, cigarillos, or little cigars in the past month to 8% or less.
- Reduce the percentage of youth who used marijuana in the past month to 0.7% or less.

## Alcohol Use

- Overall, 36% of students drank alcohol at least once during the past 30 days.
- Alcohol use increases across grades. Twelfth graders were significantly more likely than 8th, 9th, or 10th graders to drink in the past 30 days.

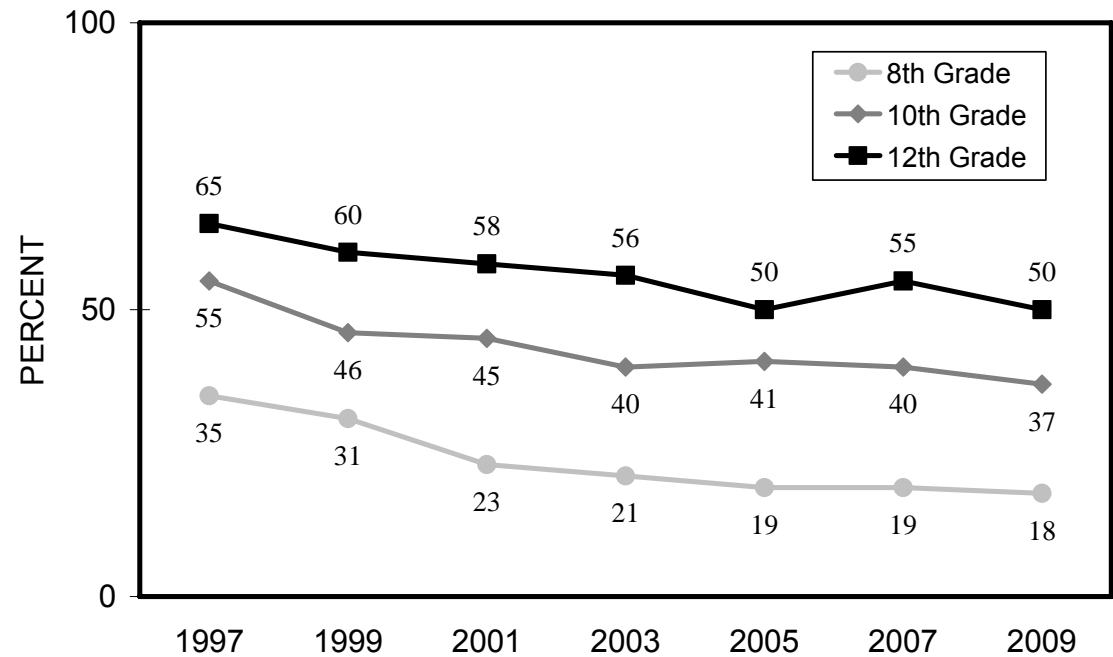
Percent of students who consumed at least one drink of alcohol on one or more days during the past 30 days



## ■ Alcohol Use

- **Alcohol use in the past 30 days is declining.** In 1997, 50% of students drank alcohol in the past 30 days compared to 36% in 2009.
- **From 1997 to 2009, alcohol use in the past 30 days decreased 15% among 12th graders, 18% among 10th graders, and 17% among 8th graders.**

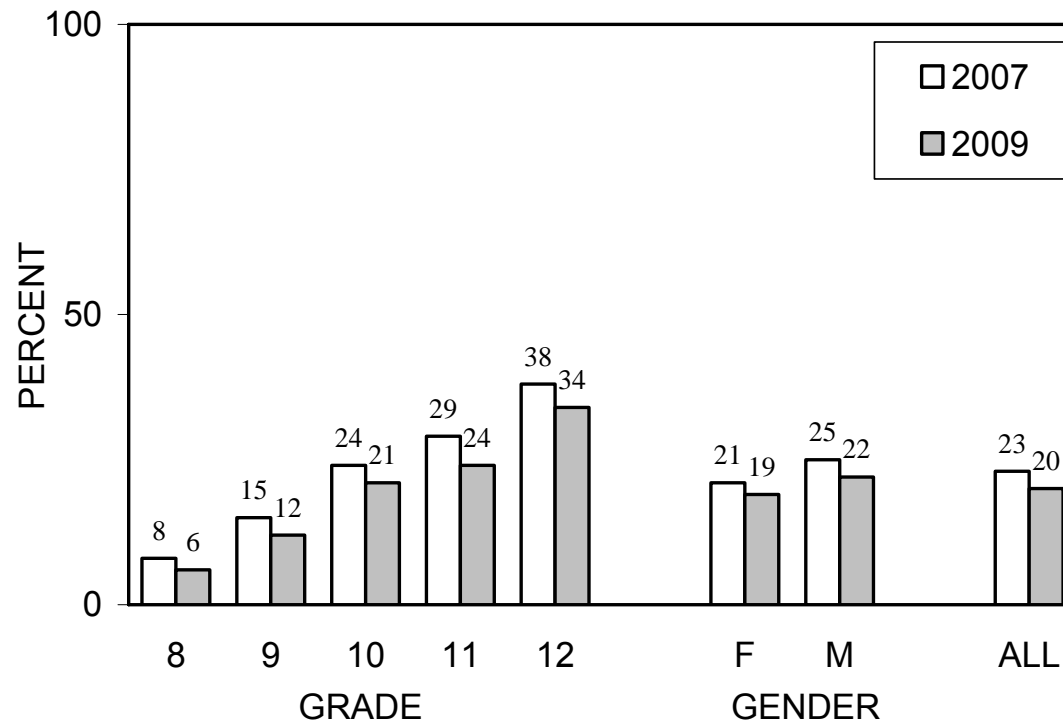
**Percent of students who had at least one drink of alcohol on one or more of the past 30 days**



## Alcohol Use

- **One out of five students (20%) binge drink.** Binge drinking is defined as having five or more drinks of alcohol within a couple of hours.
- **Older students binge drink more than younger students.** Twelfth graders were significantly more likely to binge drink than students in all other grades.

**Percent of students who had five or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days**

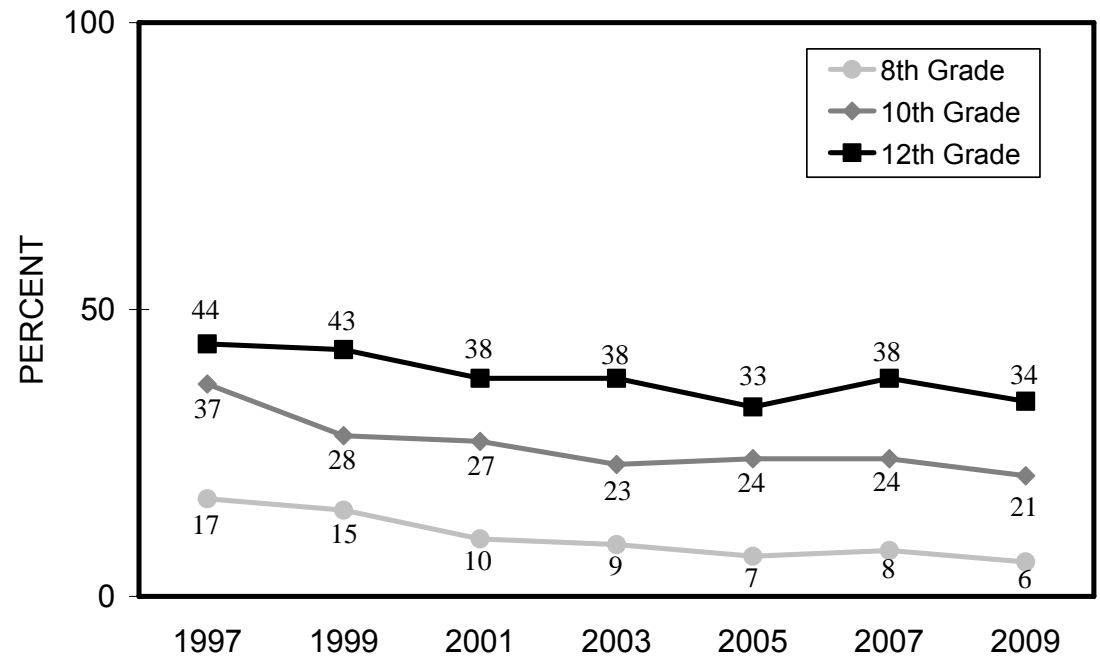




## ■ Alcohol Use

- **Binge drinking is decreasing.**  
In 1997, 31% of all students reported binge drinking compared to 20% in 2009.
- **From 1997 to 2009, binge drinking in the past 30 days decreased 11% among 8th graders, 16% among 10th graders, and 10% among 12th graders.**

**Percent of students who binged on alcohol  
(had five or more drinks within a couple of hours)  
during the past 30 days by grade**



## ■ Alcohol Use

- **Six out of ten students (61%) have ever had a drink of alcohol.** In 1995, 77% had ever had a drink.
- **One in five students (19%) starts drinking before the age of 13.** Males are significantly more likely to start drinking before age 13 than females.
- **Males drink more frequently than females.** Males were significantly more likely to report drinking on 10 or more and binge drinking 3 or more of the past 30 days than females. Males were also significantly more likely to drink on school property.
- **Ever drinking, and drinking frequency, increases significantly as students get older.**

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who:</b>									
<b>Have ever had a drink of alcohol, other than a few sips</b>	62	61	37	51	65	71	78	61	61
<b>First consumed alcohol, other than a few sips, before 13 years of age</b>	20	19	22	22	18	16	14	15	22
<b>Drank alcohol on 3-9 of the past 30 days</b>	14	13	5	8	14	15	22	12	13
<b>Drank alcohol on 10 or more of the past 30 days</b>	6	4	1	3	4	5	7	3	6
<b>“Binged” on alcohol 3 or more of the past 30 days</b>	10	8	2	3	7	10	17	6	10
<b>Drank alcohol <u>on school property</u> during the past 30 days</b>	4	3	2	2	3	4	3	2	4

## ■ Alcohol Use

- **Liquor is the alcoholic beverage most frequently consumed by students, followed by beer and malt beverages.**
- **Females are significantly more likely than males to drink malt beverages, also known as AlcoPops.**  
Females are also significantly more likely to drink wine coolers. Males are significantly more likely to drink beer.
- **Beer consumption increases, and malt beverage consumption decreases, as students get older.** Twelfth graders were significantly more likely to drink beer, and significantly less likely to drink malt beverages, than students in all other grades.

### Type of beverage usually consumed during the past 30 days (among students who drank in the past 30 days)

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of drinkers who report usual type of alcohol as:</b>									
<b>Liquor</b>	45	44	45	42	48	45	41	43	45
<b>Beer</b>	29	30	19	23	25	31	42	20	40
<b>Malt Beverages</b>	20	19	24	27	20	17	11	28	9
<b>Wine</b>	5	5	8	6	5	4	5	6	4
<b>Wine Coolers</b>	2	2	4	2	2	3	2	4	1

Malt beverages, also known as AlcoPops, include Smirnoff Ice, Bacardi Silver, and Hard Lemonade. Wine coolers include Bartles & Jaymes or Seagrams.

## ■ Alcohol Use

- **Most students (76%) obtain alcohol by someone giving it to them or by giving someone money to buy it for them.**
- **Females were significantly more likely than males to report someone gave them alcohol.** Males were significantly more likely to report purchasing or stealing alcohol from a store or restaurant.
- **Younger students were significantly more likely to obtain alcohol from home.** Eighth graders were significantly more likely than 10th, 11th, or 12th graders to report that they got or stole alcohol from home.

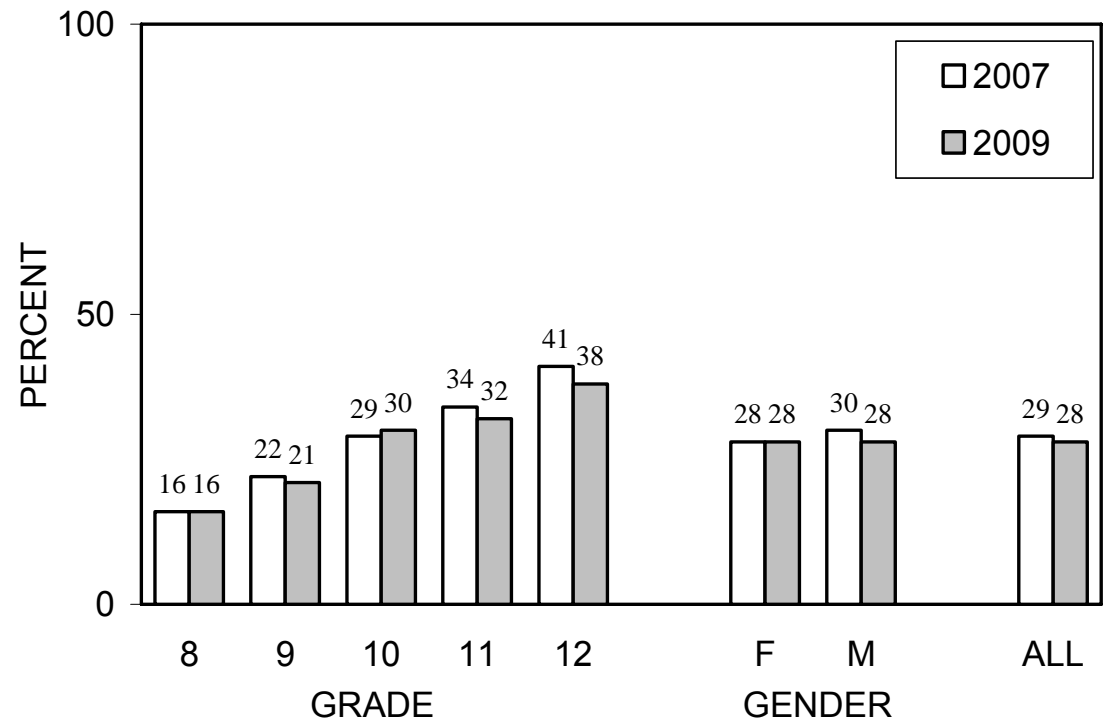
**Where students usually get their alcohol  
(among students who drank during the past 30 days)**

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of drinkers who report usual source of alcohol:</b>									
<b>Purchased from a store, liquor store, or restaurant</b>	6	6	4	4	4	6	8	3	9
<b>Gave someone money to buy it for me</b>	28	30	12	18	27	30	43	29	30
<b>Someone gave it to me</b>	42	46	48	54	46	50	41	52	41
<b>Got it or stole it from home</b>	21	16	32	24	21	11	6	16	15
<b>Stole it in a store or restaurant</b>	4	3	4	1	2	3	2	1	4

## ■ Cigarette Use

- Overall, 28% of students reported ever having smoked a whole cigarette, down from a high of 59% in 1997.
- Younger students are significantly less likely to have ever smoked a whole cigarette than older students. Students in 8th or 9th grade were significantly less likely to have ever smoked a whole cigarette than students in 10th, 11th, or 12th grades.

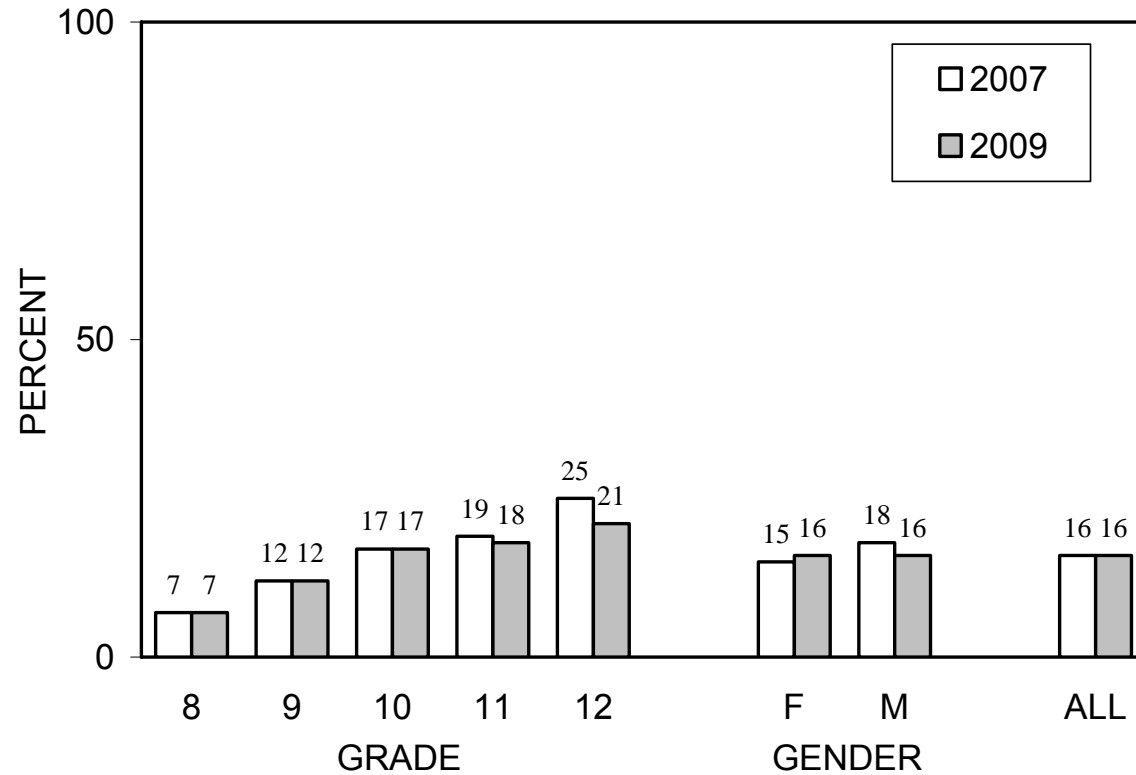
Percent of students who have ever smoked a whole cigarette



## ■ Cigarette Use

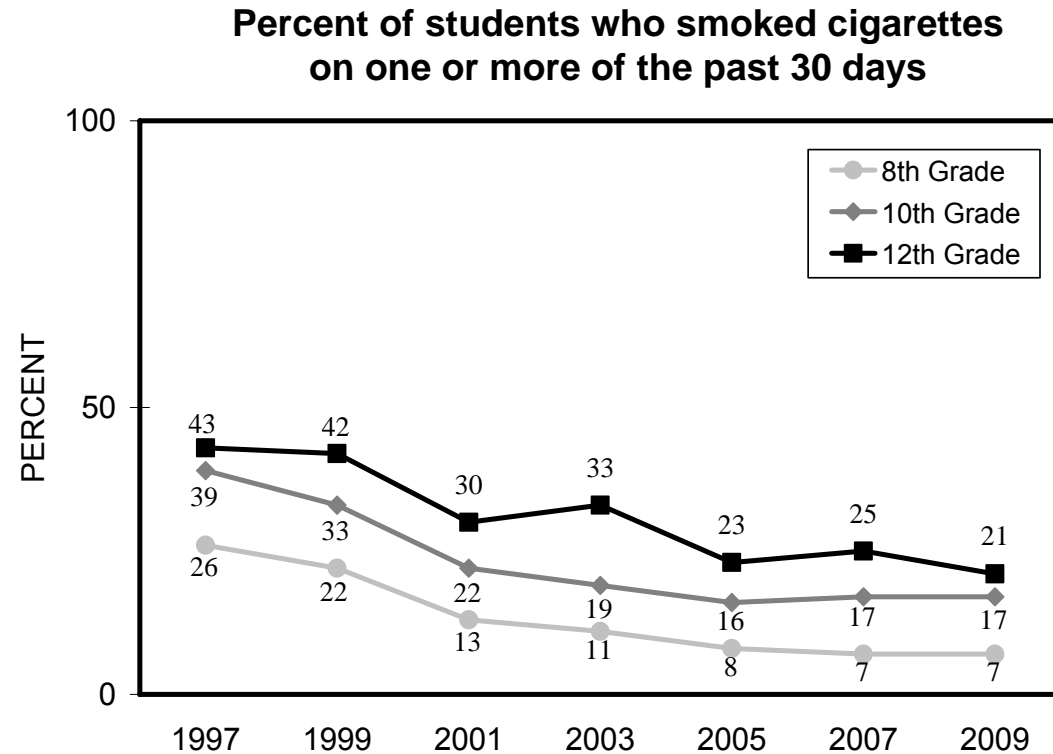
- Of all students, 16% reported smoking at least once during the past 30 days.
- Older students are more likely than younger students to smoke. Twelfth graders were significantly more likely than 8th, 9th, or 10th graders to smoke in the past 30 days.

Percent of students who smoked cigarettes on one or more of the past 30 days



## ■ Cigarette Use

- For all students, the rate of cigarette smoking in the past 30 days has remained unchanged since 2003. Smoking in the past 30 days decreased from a high of 38% in 1995 to 16% in 2003, and has remained at 16%.
- From 1997 to 2009, cigarette use in the past 30 days decreased 22% among 12th graders, 22% among 10th graders and 19% among 8th graders.



## ■ Cigarette Use

- **Fewer students start smoking prior to age 13.** In 2009, 12% of students reported smoking a cigarette prior to age 13, down from 28% in 1999.
- **Daily smoking has declined.** In 2009, 5% of students smoked every day compared to a high of 15% of students in 1995.
- **Of all students, 2% smoked more than 10 cigarettes on days smoked.**

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who:</b>									
<b>Smoked a whole cigarette prior to age 13</b>	12	12	11	11	11	10	11	11	12
<b>Smoked every day during the past 30 days</b>	5	5	1	4	5	6	9	5	6
<b>Smoked 10 or more cigarettes on days smoked during the past 30 days</b>	3	2	1	1	2	2	4	1	3
<b>Smoked more than a pack a day on days smoked during the past 30 days</b>	1	1	1	0	1	1	1	0	1

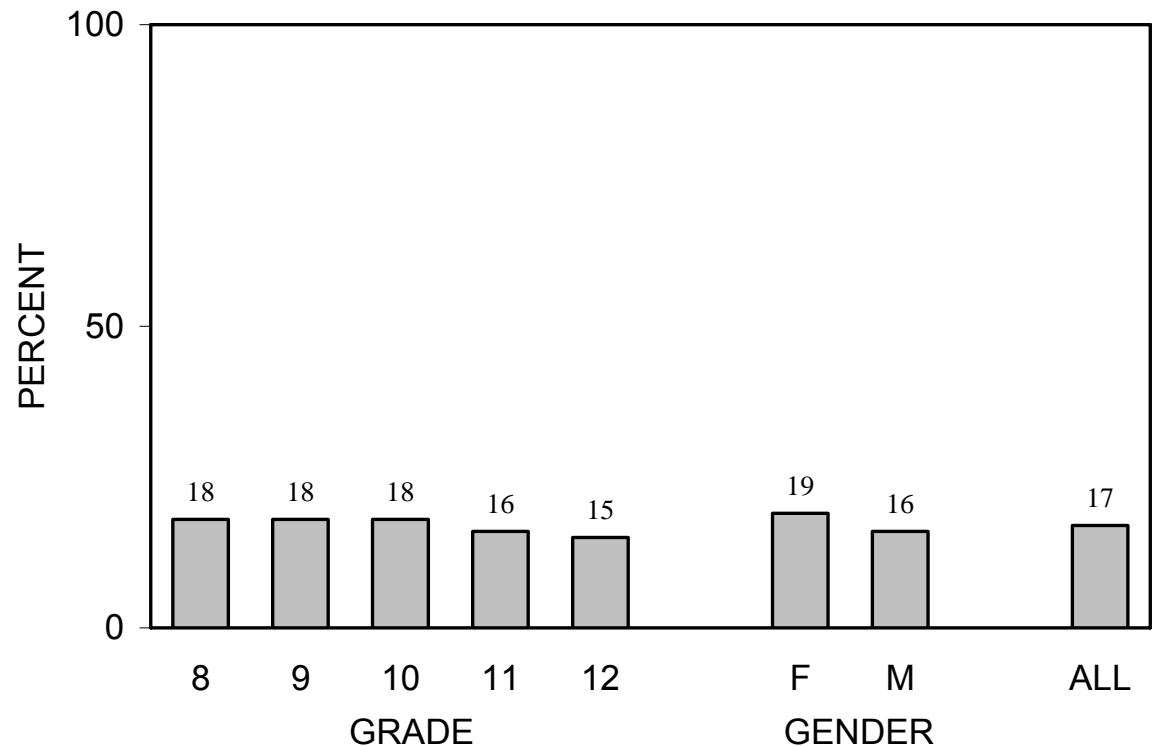


## ■ Awareness of Students' Smoking

In 2009, this survey asked, "Out of 100 Vermont high school students, how many do you think smoke cigarettes?"

- **Almost half (49%) of all students think that less than one quarter of students smoke.** Of those, 16% think that 15 or fewer students smoke, and 33% think that up to one quarter of students smoke.
- **Overall, 17% think that more than half of students smoke.** Of those, 8% believe that 56 to 75 students smoke, and 9% think that more than three quarters of students smoke.
- **About three in ten (34%) think that between one quarter and one half of students smoke.**

Percent who think that, out of 100 Vermont high school students, 56 or more smoke cigarettes



## Other Tobacco Use

- Overall, 8% of students reported using chewing tobacco, snuff, or dip during the past 30 days.** Males were significantly more likely than females, and 12th graders were significantly more likely than 8th or 9th graders, to use smokeless tobacco.
- One in ten (12%) smoked cigars, cigarillos, or little cigars in the past 30 days.** Males were significantly more likely than females, and 12th graders were significantly more likely than students in all other grades, to smoke cigars.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who:</b>									
<b>Used chewing tobacco, snuff, or dip during the past 30 days</b>	8	8	4	6	9	10	11	3	13
<b>Smoked cigars, cigarillos, or little cigars during the past 30 days</b>	NA	12	4	7	12	14	21	7	17

NA = Not available

## ■ Exposure to Cigarette Smoke

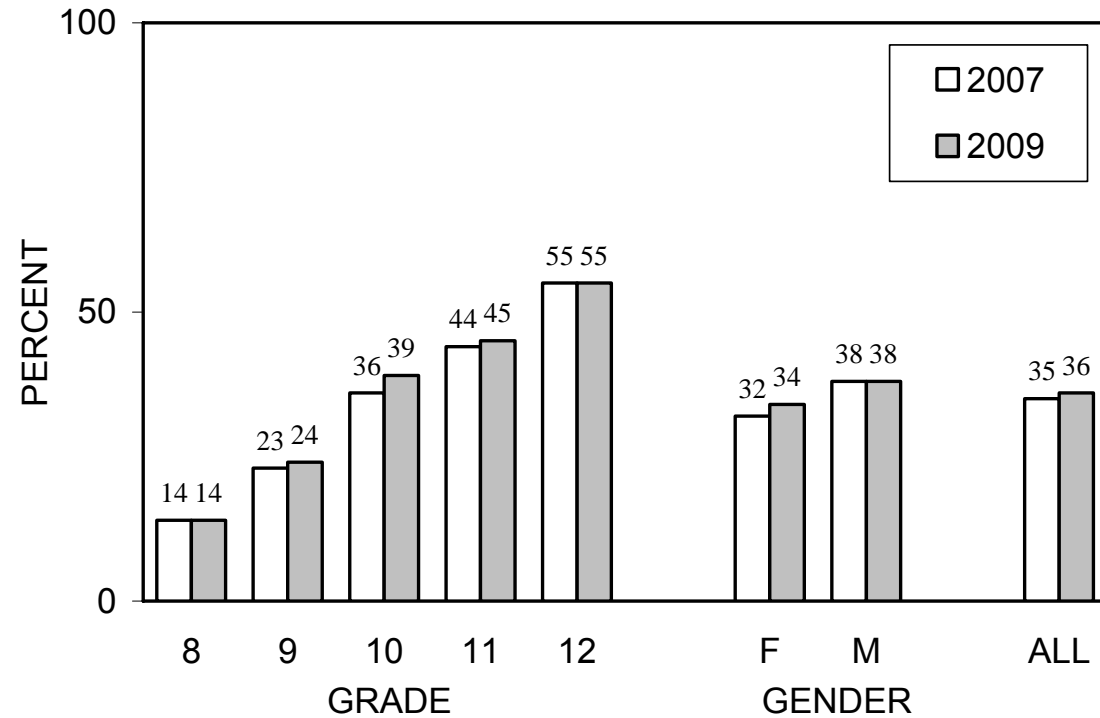
- Half of all students were in the same room with someone who was smoking cigarettes during the past seven days.
- Four in ten students (39%) were in a car with someone who was smoking cigarettes during the past seven days.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who, during the past seven days:</b>									
<b>Were in the same room with someone who was smoking cigarettes</b>	51	49	48	47	46	49	51	49	48
<b>Were in a car with someone who was smoking cigarettes</b>	39	39	39	38	37	39	41	40	38

## ■ Marijuana Use

- Overall, 36% of students have tried marijuana, down from 48% in 1997.
- Younger students were significantly less likely than older students to have ever tried marijuana.

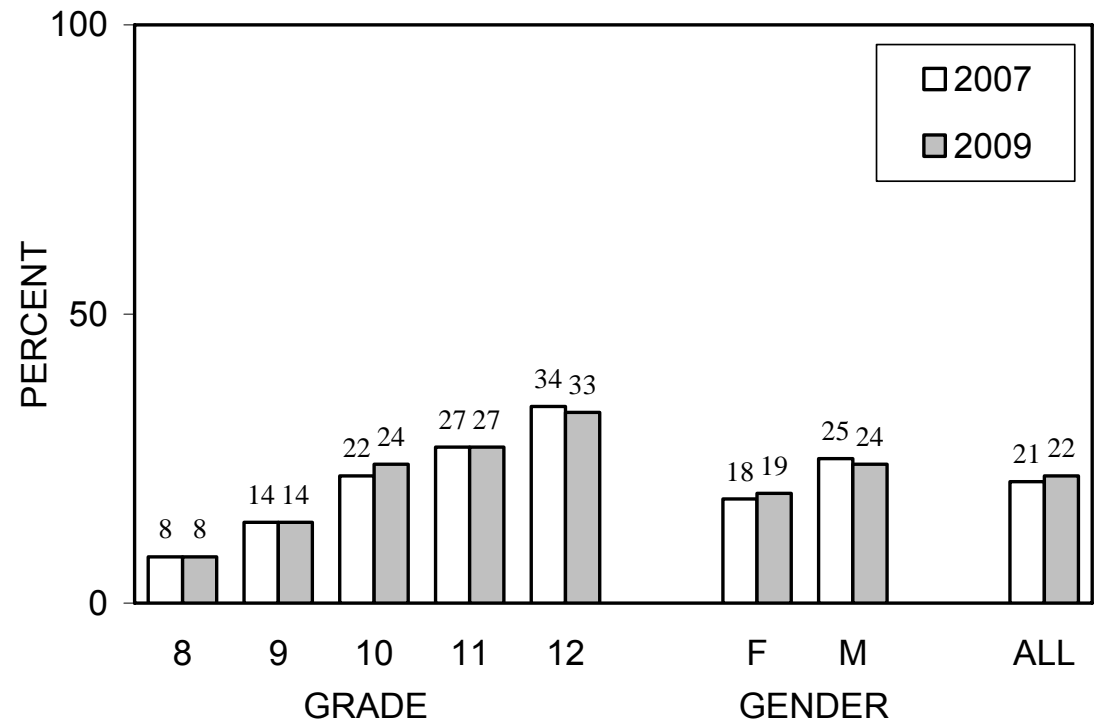
Percent of students who have ever tried marijuana



## ■ Marijuana Use

- One-fifth (22%) of all students smoked marijuana one or more times in the past 30 days.
- Older students were more likely to use marijuana in the past 30 days than younger students. Twelfth graders were significantly more likely to use marijuana than 8th, 9th, or 10th graders.

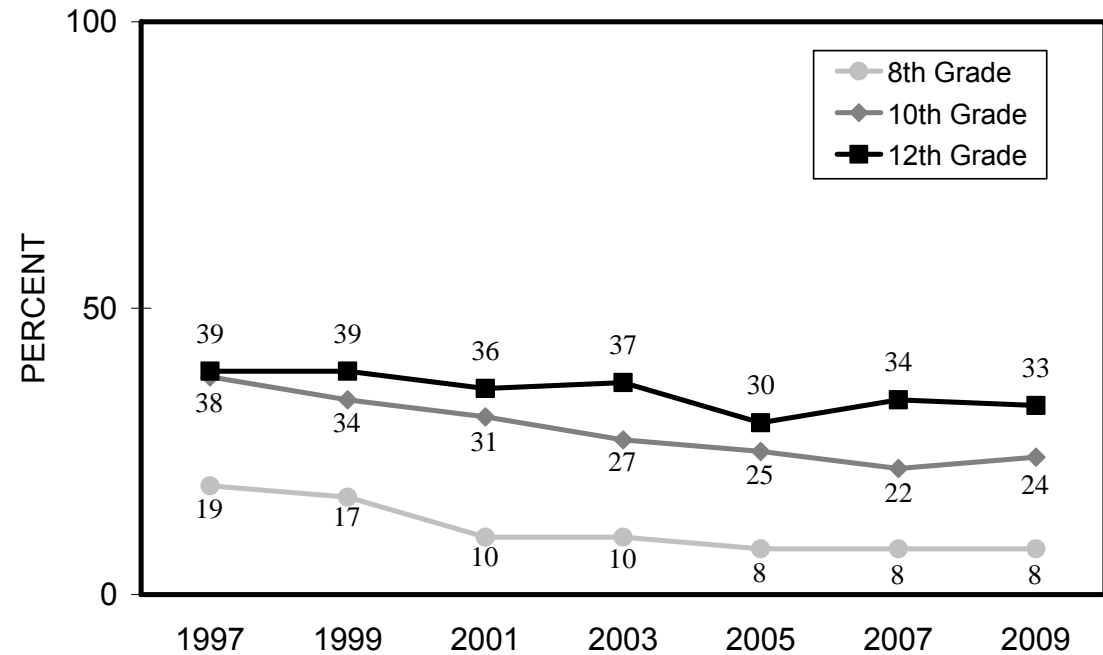
Percent of students who used marijuana one or more times during the past 30 days



## ■ Marijuana Use

- In 2009, 22% of all students used marijuana one or more times in the past 30 days, compared to 32% in 1997.
- Marijuana use in the past 30 days is decreasing among younger students. From 1997 to 2009, use decreased 11% among 8th graders, 14% among 10th graders, and 6% among 12th graders.

Percent of students who smoked marijuana one or more times during the past 30 days



## ■ Marijuana Use

- Of all students, 8% have smoked marijuana by age 13. Males were significantly more likely than females to report this behavior.
- Males were significantly more likely than females to have smoked 10 or more times or to have used marijuana on school property during the past 30 days.
- Younger students were less likely to smoke 3 or more times or on school property in the past 30 days.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who:</b>									
<b>Tried marijuana before age 13</b>	9	8	6	9	9	8	7	6	10
<b>Used marijuana 3 to 9 times during the past 30 days</b>	5	5	1	4	6	6	8	5	5
<b>Used marijuana 10 or more times during the past 30 days</b>	9	10	3	6	11	14	16	7	13
<b>Used marijuana one or more times <u>on school property</u></b>	6	6	2	4	6	7	7	3	8

## ■ Prescription Drug Use

- In 2009, 16% of students reported ever taking a prescription pain reliever or stimulant not prescribed to them, the same as in 2007.
- Overall, 14% reported ever having taken a prescription pain reliever not prescribed for them, and 7% reported ever having taken a prescription stimulant not prescribed for them.
- Younger students were significantly less likely to report misusing prescription drugs than older students.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who have ever used:</b>									
<b>A prescription stimulant, such as Ritalin or Adderall, not prescribed to them</b>	NA	7	2	5	6	10	10	6	8
<b>A prescription pain reliever, such as Oxycontin, Vicodin, or other prescription pain killer, not prescribed to them</b>	NA	14	7	10	15	18	18	14	15
<b>Either a prescription stimulant <u>or</u> a prescription pain reliever not prescribed to them</b>	16	16	8	11	16	19	20	15	16

In 2007, the Vermont YRBS asked about prescription pain relievers and stimulants in one question. In 2009, the YRBS asked about pain relievers and stimulants separately.

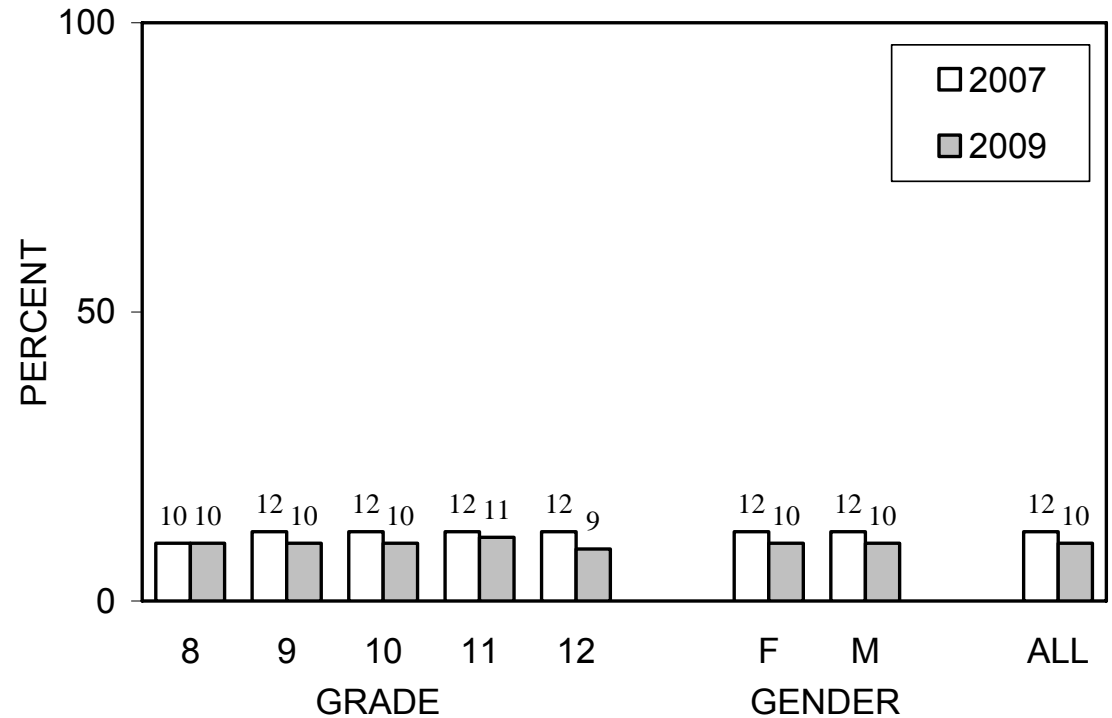
NA = Not available



## ■ Inhalant Use

- Overall, 10% of students have ever tried inhalants, down from 27% in 1995.
- Of those who have used inhalants, 50% started when they were 12 or younger and 50% when they were 13 or older.

**Percent of students who have ever used inhalants  
(e.g., sniffed glue, breathed the contents of aerosol spray cans,  
inhaled any paints or sprays to get high)**



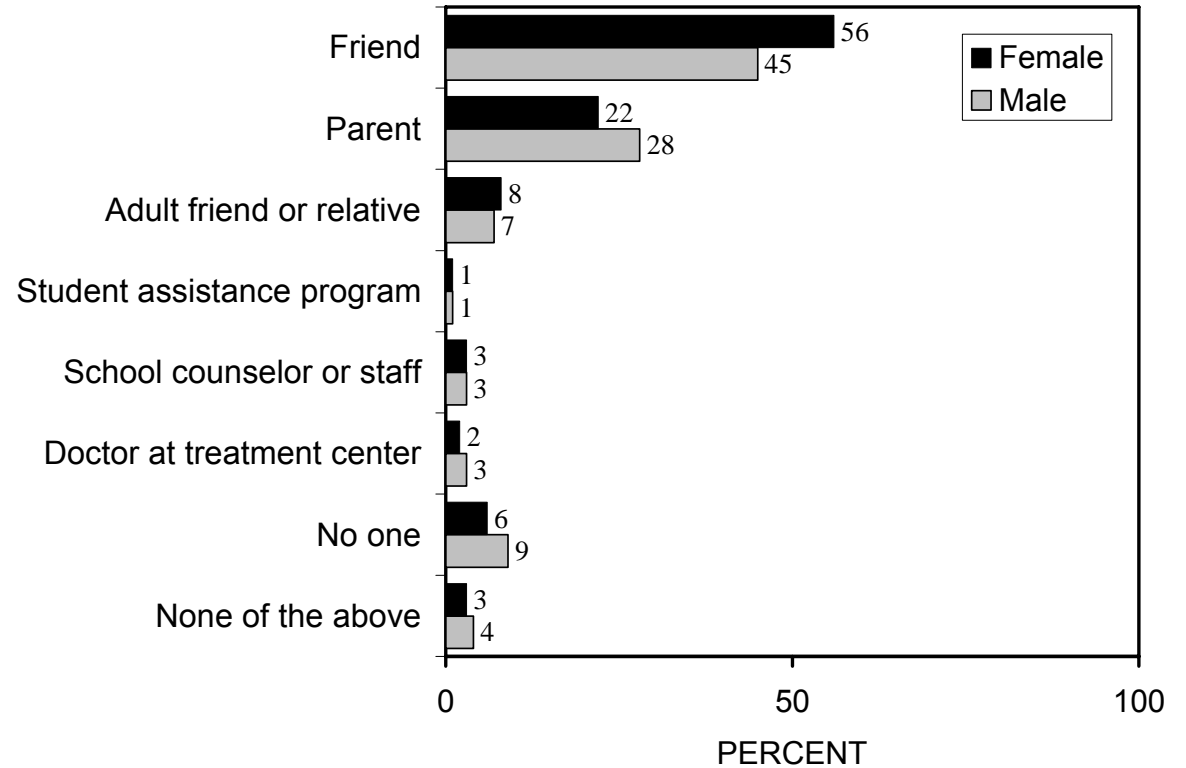
## ■ Other Drug Use

	All		Grade					Gender			
	2007	2009	8	9	10	11	12	F	M		
<ul style="list-style-type: none"> <li>Less than 5% of students used cocaine in the past 30 days (4%), or have ever taken steroids (2%), used heroin (3%), used methamphetamines (4%), or used a needle to inject an illegal drug (2%).</li> </ul>	Percent of students who used cocaine during last 30 days		5	4	2	2	3	5	4	2	5
	Percent of students who during their life have:										
<ul style="list-style-type: none"> <li>Less than 10% have ever used hallucinogens (9%).</li> </ul>	Taken steroids without a prescription		3	2	2	2	2	2	2	1	3
	Used heroin		3	3	2	2	3	4	4	2	4
<ul style="list-style-type: none"> <li>Less than 20% were offered, sold, or given an illegal drug at school in the past 12 months (19%).</li> </ul>	Used methamphetamines		4	4	3	2	3	5	4	3	4
	Used hallucinogens		10	9	4	5	9	11	14	7	11
<ul style="list-style-type: none"> <li>Males were significantly more likely than females to report any of these behaviors.</li> </ul>	Used a needle to inject any illegal drug into their body		2	2	2	2	2	2	2	2	3
	Percent of students who were offered, sold or given an illegal drug <u>on school property</u> during the past 12 months		20	19	10	17	24	23	21	16	22
<ul style="list-style-type: none"> <li>Younger students were less likely to use heroin, hallucinogens or to be offered an illegal drug on school property.</li> </ul>											

## ■ Help for Tobacco, Alcohol, or Other Drugs

- **Students are more likely to talk with friends than adults about a problem with tobacco, alcohol, or other drugs.** Overall, 50% of students would most likely talk to a friend about a problem while 25% would talk to a parent and 7% to an adult friend or relative.
- **Males were significantly more likely than females to report that they would talk to a parent.** Females were significantly more likely to report that they would talk to a friend.
- **Younger students were significantly more likely to report that they would talk to a parent.** Overall, 32% of 8th graders and 29% of 9th graders would talk to a parent, compared to 22% of 10th, 11th, or 12th graders.

**If you had a problem with tobacco, alcohol, or other drugs, who would you be most likely to talk to about it?**



## ✓ Attitudes and Perceptions about Alcohol, Tobacco, and Marijuana Use

The questions in this section ask students how easy it is to get alcohol, tobacco, and marijuana, whether they think it is wrong for someone their age to use alcohol, tobacco, and marijuana, their perception of how wrong their parents and other adults in their community think it is for someone their age to use alcohol, tobacco, and marijuana, how harmful they think it is to use alcohol, tobacco, and marijuana, and whether they know adults who use or sell drugs.

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- **Disapproval of alcohol, tobacco, and marijuana:** Peer disapproval of substance abuse is inversely related to adolescents' reports of use. Multi-year tracking of the results of the Monitoring the Future Survey indicates that the prevalence of marijuana use among youth declines as the percentage of youth expressing disapproval of marijuana increases; similarly, an increase in the prevalence of marijuana use among youth during the early 1990s coincided with an apparent decline in the percentage of parents and peer expressing strong disapproval.<sup>33</sup>
- **Perceived harmfulness of alcohol, tobacco, and marijuana:** The perception of risk in using alcohol and other drugs is an important factor in decreasing use. Research has shown that as perception of harm decreases, there is a tendency for use to increase.<sup>33</sup> Therefore, it is very important for youth to be informed of the medical and psychological risks and hazards of using alcohol, tobacco, and other drugs.
- **Perceived availability of alcohol, tobacco, and marijuana:** The more available alcohol, tobacco, and other drugs are in a community, the higher the risk that young people will use them. Increased use is also associated with the perception that substances are readily available, regardless of whether the perception is accurate.<sup>33</sup>

## ■ Disapproval of Alcohol, Tobacco, and Other Drug Use

- All students are highly likely to report parental disapproval of tobacco, alcohol, and marijuana use. Younger students and females are significantly more likely than older students to report parental disapproval.
- Students are more likely to disapprove of kids their age smoking cigarettes than using marijuana or drinking alcohol.
- Females are significantly less likely than males to approve of students their age using alcohol, cigarettes, or other drugs.
- Peer approval of cigarette smoking, drinking, and marijuana use increases as students get older.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who think their parents think it is <i>wrong</i> or <i>very wrong</i> for them to:</b>									
<b>Smoke cigarettes</b>	92	91	97	94	93	91	85	93	90
<b>Drink alcohol</b>	79	79	91	84	80	75	67	82	76
<b>Use marijuana</b>	89	89	96	93	89	86	83	90	87
<b>Percent of students who think it is <i>wrong</i> or <i>very wrong</i> for kids their age to:</b>									
<b>Smoke cigarettes</b>	75	73	88	80	73	69	57	75	71
<b>Drink alcohol</b>	50	49	75	58	46	39	33	51	48
<b>Use marijuana</b>	67	64	84	74	60	56	46	67	61

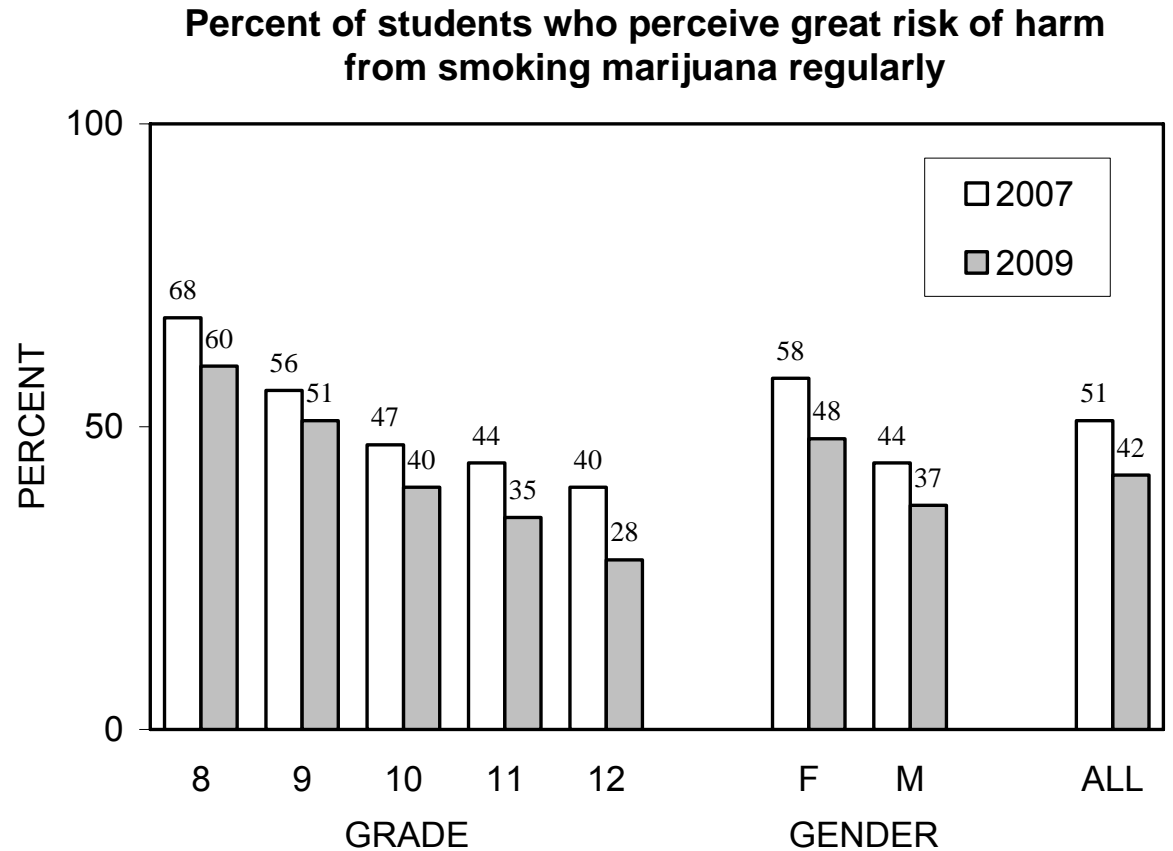
## ■ Perceived Harmfulness of Alcohol and Tobacco Use

- **More students think there is great risk in smoking cigarettes than in drinking alcohol.** However, the perception that there is great risk in smoking cigarettes decreased from 2007 to 2009 after increasing for 10 years.
- **Females are significantly more likely than males to perceive great risk from smoking cigarettes or drinking one or two alcohol beverages nearly every day.**
- **Students in 8th, 9th, or 10th grade are significantly less likely to perceive great risk from smoking one or two packs a day than students in 12th grade.**

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who think that there is <i>great risk</i> in people harming themselves from:</b>									
<b>Smoking one or more packs of cigarettes per day</b>	72	67	64	65	66	68	71	71	62
<b>Drinking one or two alcoholic beverages nearly every day</b>	26	25	29	25	26	23	24	30	21

## ■ Perceived Harmfulness of Marijuana Use

- The percent of students who perceive great risk of harm, physically or in other ways, from smoking marijuana regularly, declined from 2007 to 2009.
- Males were significantly less likely than females to perceive great harm from smoking marijuana regularly.
- Students in 12th grade were significantly less likely to perceive great harm than those in all other grades.



## ■ Perceived Availability of Alcohol, Tobacco, and Other Drugs

- **Students perceive that alcohol and cigarettes are easy to get.** Two-thirds of students report that cigarettes and alcohol are easy to get, and 57% think marijuana is easy to get.
- **Males were significantly more likely than females to perceive that cigarettes or marijuana is easy to obtain.**
- **Perceived availability increases significantly as students get older.**

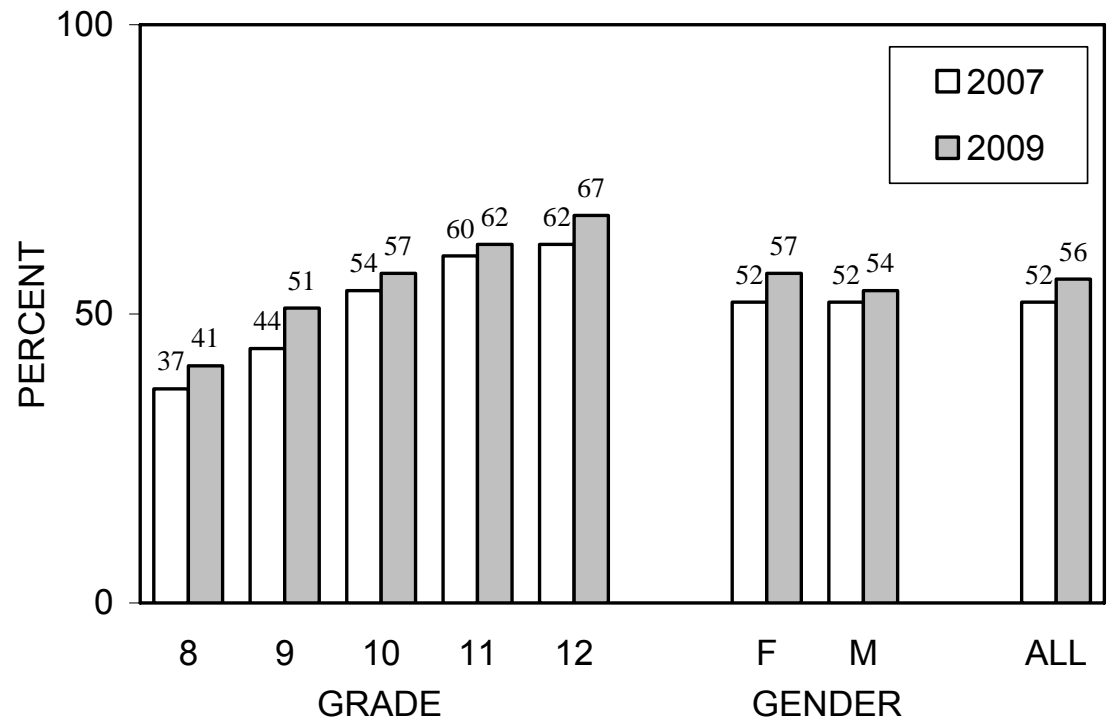
	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who report that it is <i>sort of easy or very easy</i> to get:</b>									
<b>Cigarettes</b>	66	67	42	59	70	76	88	65	69
<b>Alcohol</b>	69	67	50	62	67	74	77	67	67
<b>Marijuana</b>	55	57	29	47	60	70	75	55	59



## ■ Perceived Availability of Alcohol, Tobacco, and Other Drugs

- Over half (56%) of students know an adult who used marijuana, cocaine, or another illegal drug during the past year.
- Older students more frequently report knowing an adult who uses illegal drugs than younger students. Twelfth graders were significantly more likely than 8th, 9th, or 10th graders to know someone who used an illegal drug.

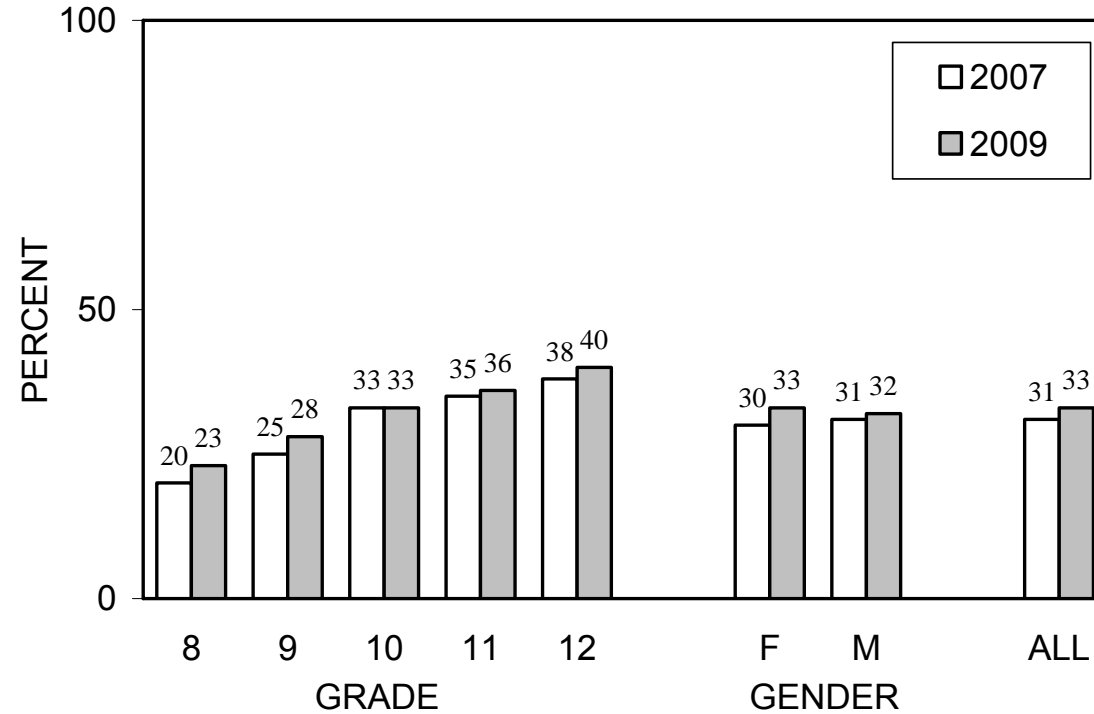
Percent of students who know an adult who has used marijuana, cocaine, or another illegal drug during the past year



## ■ Perceived Availability of Alcohol, Tobacco, and Other Drugs

- One-third (33%) of students know an adult who sold drugs in the past year.
- Older students more frequently report knowing an adult who uses illegal drugs than younger students. Twelfth graders were significantly more likely than 8th or 9th graders to know someone who used an illegal drug.

Percent of students who know an adult who has sold drugs during the past year



## ✓ Sexual Behavior and Orientation

The questions reported in this section measure whether students have had sexual intercourse, the age at which they first had sex, the frequency with which they have sex, with whom they have sex, alcohol and drug use related to sexual intercourse and whether they use contraception.

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- **Early sexual activity** and having multiple sexual partners are associated with an increased risk of unwanted pregnancy and sexually transmitted diseases (STDs), including HIV infection,<sup>34</sup> and negative effects on social and psychological development.<sup>35</sup> Alcohol and drug use may serve as predisposing factors for initiation of sexual activity and unprotected sexual intercourse.<sup>36</sup> Of the nearly 19 million new cases of STDs per year in the United States, almost half are among youth 15-24.<sup>37</sup> STDs may result in infertility and facilitation of HIV transmission and may have an adverse effect on pregnancy outcomes and maternal and child health.<sup>35</sup>
- **AIDS** is the eighth leading cause of death for youth aged 15 to 24 in the U.S.<sup>7</sup> It is estimated that 34% of new cases of HIV infection in 2006 occurred in people aged 13 to 29.<sup>38</sup> While heterosexual transmission was once uncommon, trends indicate that growing numbers of individuals are at risk of contracting HIV in this way. Many people, especially adolescents, do not have the knowledge, awareness, and skills necessary to prevent their becoming infected. Besides abstinence, condom use is currently the most effective means of preventing sexual transmission of HIV.
- **Gay and Lesbian Youth:** Although many lesbian, gay, bisexual, and transgender adolescents lead happy and healthy lives, others face tremendous challenges to growing up physically and mentally healthy. Compared to heterosexual youth, lesbian, gay, bisexual, and transgender young people are at higher risk for depression, alcohol and other drug use, suicide, HIV infection, and other sexually transmitted diseases.<sup>39</sup>

## ✓ Sexual Behavior and Orientation (cont'd)

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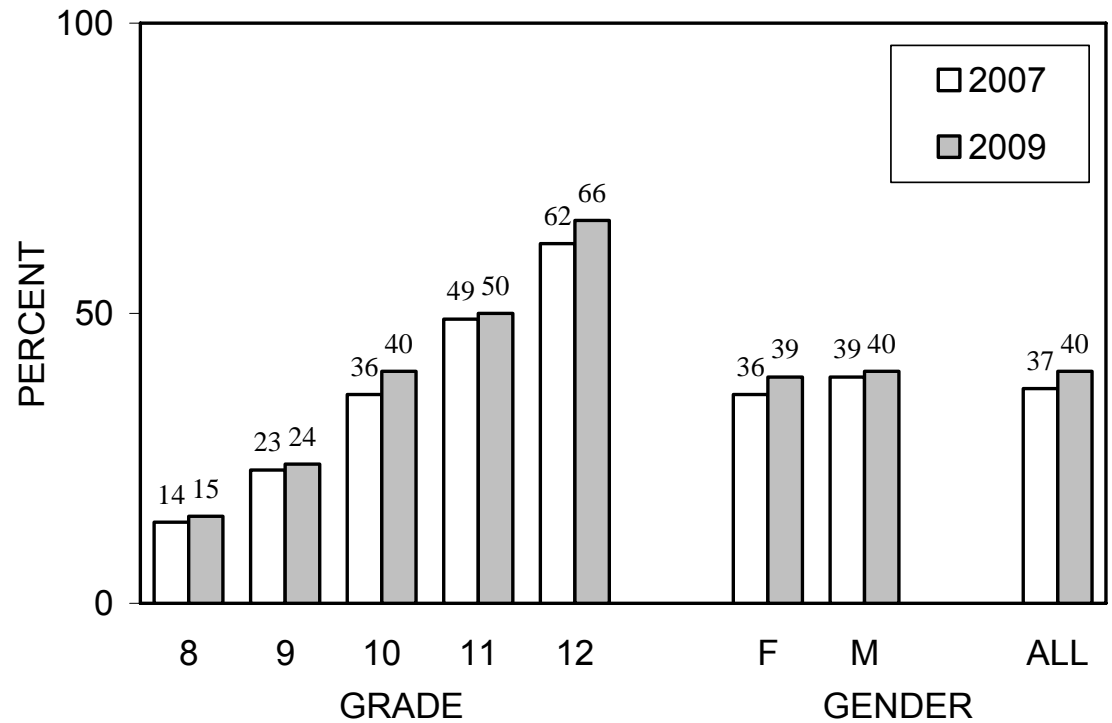
### Related *Healthy Vermonters 2010* Goals:

- Increase the percentage of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.
- Reduce HIV infection among adolescents and adults.
- Further reduce the percentage of people ages 15-24 with *Chlamydia trachomatis* infection.

## ■ Sexual Behavior

- Four in ten students (40%) have ever had sex.
- In 2001, 34% of students reported ever having sex.
- Older students are significantly more likely to have had sex than younger students.

Percent of students who have ever had sexual intercourse



## ■ Sexual Behavior

- Overall, 10% of students have had sex with 4 or more partners in their lifetimes.
- Males were significantly more likely than females to have had sex before age 13.
- One in ten students (10%) has ever been tested for HIV. Females and older students were significantly more likely to have been tested.
- One-fifth (20%) of sexually active students used alcohol or drugs prior to sex in the past three months. Females were significantly less likely than males to report this behavior.
- Two-thirds (65%) of sexually active students use condoms. Older students and females were significantly less likely to use condoms.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who:</b>									
<b>Have had 4 or more lifetime sex partners</b>	11	10	4	5	9	12	19	9	11
<b>First had sexual intercourse before age 13</b>	6	5	5	5	5	4	4	3	7
<b>Have ever been tested for HIV</b>	NA	10	6	8	9	13	15	13	8
<b>Used drugs or alcohol before their most recent sexual experience*</b>	28	20	18	18	18	22	21	18	22
<b>Used a condom during their most recent sexual experience*</b>	63	65	73	70	71	61	60	60	70

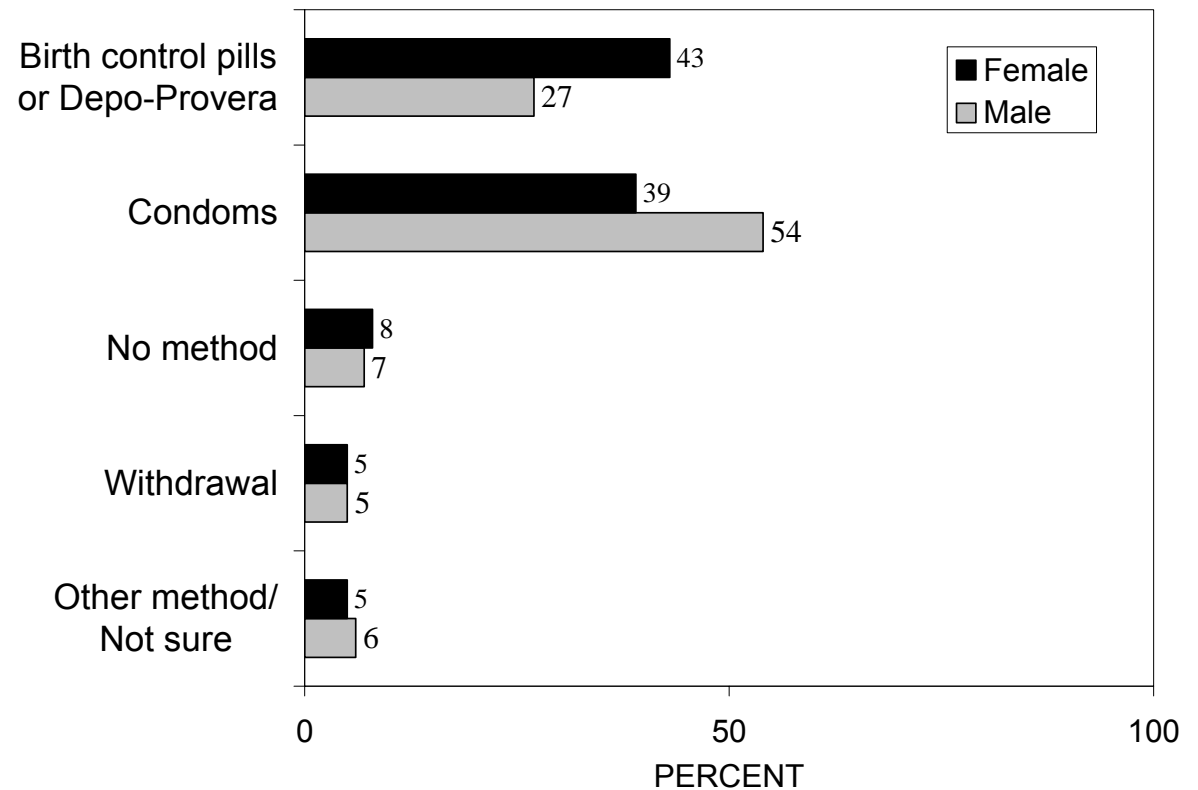
\*Includes only students who said that they have had sexual intercourse during past three months.

NA = Not available

## ■ Sexual Behavior

- **Condoms are the most commonly used contraceptive, followed by prescription birth control (pills or Depo-Provera).** Overall, 47% of students used condoms to prevent pregnancy and 35% used prescription birth control.
- **Some students do not use any method to prevent pregnancy.** Of all students, 8% of students did not use any method to prevent pregnancy the last time they had sex, and 3% were not sure what method they used.

**What method did you or your partner use to prevent pregnancy the last time you had sexual intercourse?  
(among those students who have ever had sex)**

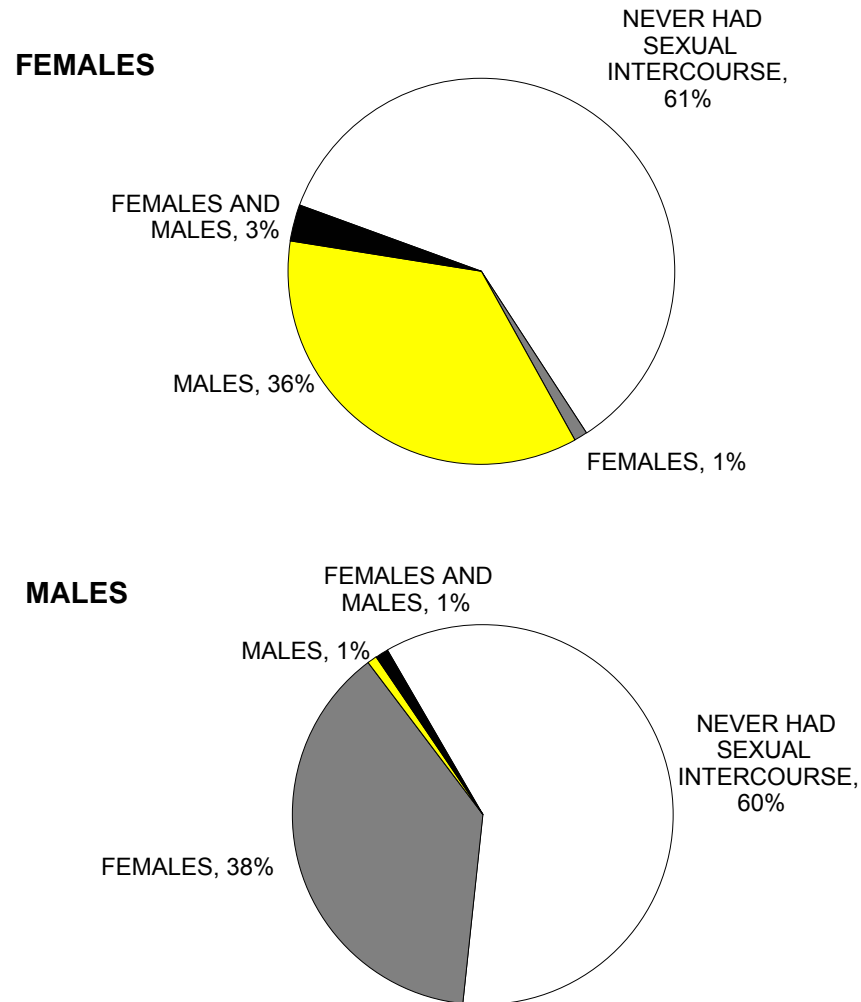


## ■ Sexual Behavior

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- Overall, 2% of students report bisexual behavior and 1% of students report same-sex behavior.

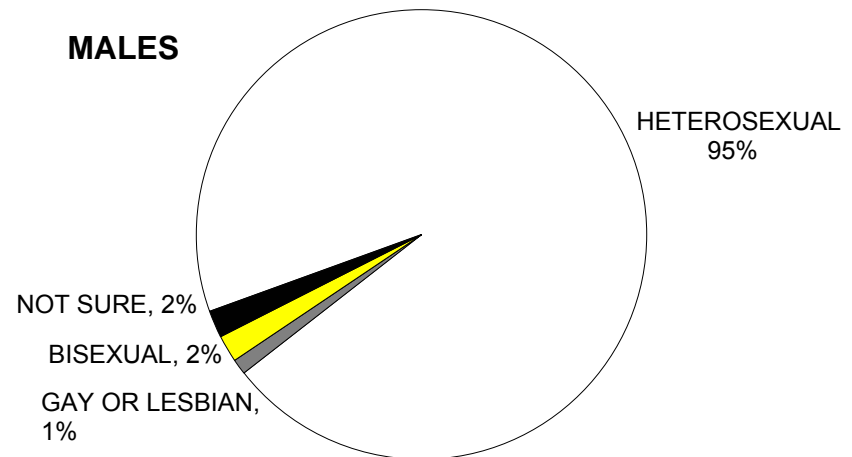
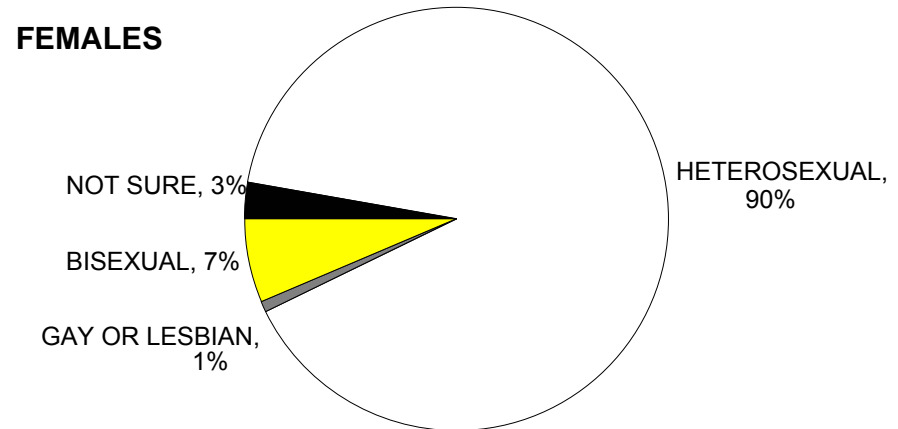
The persons with whom you have had sexual intercourse are:





## ■ Sexual Orientation

- Of all students, 1% describe themselves as gay or lesbian, 4% as bisexual, and 3% are not sure.



## ✓ Body Weight and Nutrition

This section asks students their height and weight, how they feel about their weight, and what, if anything, they are doing to control their weight. The questions also measure how often students eat breakfast, eat fruits and vegetables, and drink milk and soda.

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- In the U.S., there are more than three times as many overweight children and adolescents than there were in 1980.<sup>40</sup> Overweight and obesity acquired during childhood or adolescence may persist into adulthood.<sup>41</sup> Approximately 400,000 deaths a year in the U.S. are currently associated with overweight and obesity and, left untreated, overweight and obesity may soon overtake tobacco as the leading cause of death.<sup>25</sup> Obesity in childhood and adolescence is associated with negative psychological and social consequences and adverse health outcomes, including type 2 diabetes, obstructive sleep apnea, hypertension, dyslipidemia, and metabolic syndrome.<sup>42</sup>

However, overemphasis on slenderness during adolescence may contribute to eating disorders such as anorexia nervosa and bulimia.<sup>43,44</sup> Studies have shown high rates of body dissatisfaction and dieting among adolescent females, with many engaging in unhealthy weight control behaviors, such as fasting and self-induced vomiting that can lead to abnormal physical and psychological development.<sup>45,46</sup> An estimated 7-8% of females in the U.S. suffer from anorexia nervosa and/or bulimia nervosa during their lifetime.<sup>47</sup>

- **Nutrition:** Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances that are important for good health. Dietary patterns with higher intakes of fruits and vegetables are associated with a variety of health benefits, including a decreased risk for some types of cancer.<sup>48-53</sup> Milk consumption, the largest single source of calcium for adolescents, has decreased over time. It is estimated that less than half of adolescent males and less than one quarter of adolescent females do not meet dietary recommendations for calcium intake.<sup>54,55</sup> Calcium is essential for the formation and maintenance of bones and teeth; low calcium intake during the first two to three decades of life is an important risk factor in the development of osteoporosis.<sup>52,55</sup> In recent years, soft drink consumption has significantly increased among children and adolescents. Consumption of sugar-sweetened drinks, including soft drinks, appears to be associated with an increased risk for being overweight in children.<sup>56,57</sup>

## ✓ **Body Weight and Nutrition (cont'd)**

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### **Related *Healthy Vermonters 2010* Goals:**

- Reduce the percentage of youth who are obese or overweight.
- Increase the percentage of people who eat at least two daily servings of fruits.
- Increase the percentage of people who eat at least three daily servings of vegetables.

## ■ Body Weight

- **Of all students, 14% are overweight and 12% are obese.** In 1999, the rate of overweight was the same, but the obesity rate was only 8%.
- **Males were significantly more likely to be obese than females (16% vs. 8%).**

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who are overweight (85<sup>th</sup> BMI Percentile*)</b>	15	14	16	16	12	13	15	13	15
<b>Percent of students who are obese (95<sup>th</sup> BMI Percentile*)</b>	12	12	13	14	12	12	11	8	16

\* BMI = Body Mass Index. BMI is calculated as weight in kilograms divided by the square of the height in meters.

Previous YRBS reports used the terms “overweight” to describe those youth with a BMI  $\geq$  95th percentile for age and sex and “at risk for overweight” for those with a BMI  $\geq$  85th percentile and  $<$ 95th percentile. However, the terms “obese” and “overweight” are now used in accordance with the 2007 recommendations from the Expert Committee on the Assessment, Prevention, and Treatment of Child and Adolescent Overweight and Obesity convened by the American Medical Association (AMA) and cofunded by the AMA in collaboration with the Health Resources and Services Administration (HRSA) and the Centers for Disease Control and Prevention (CDC).

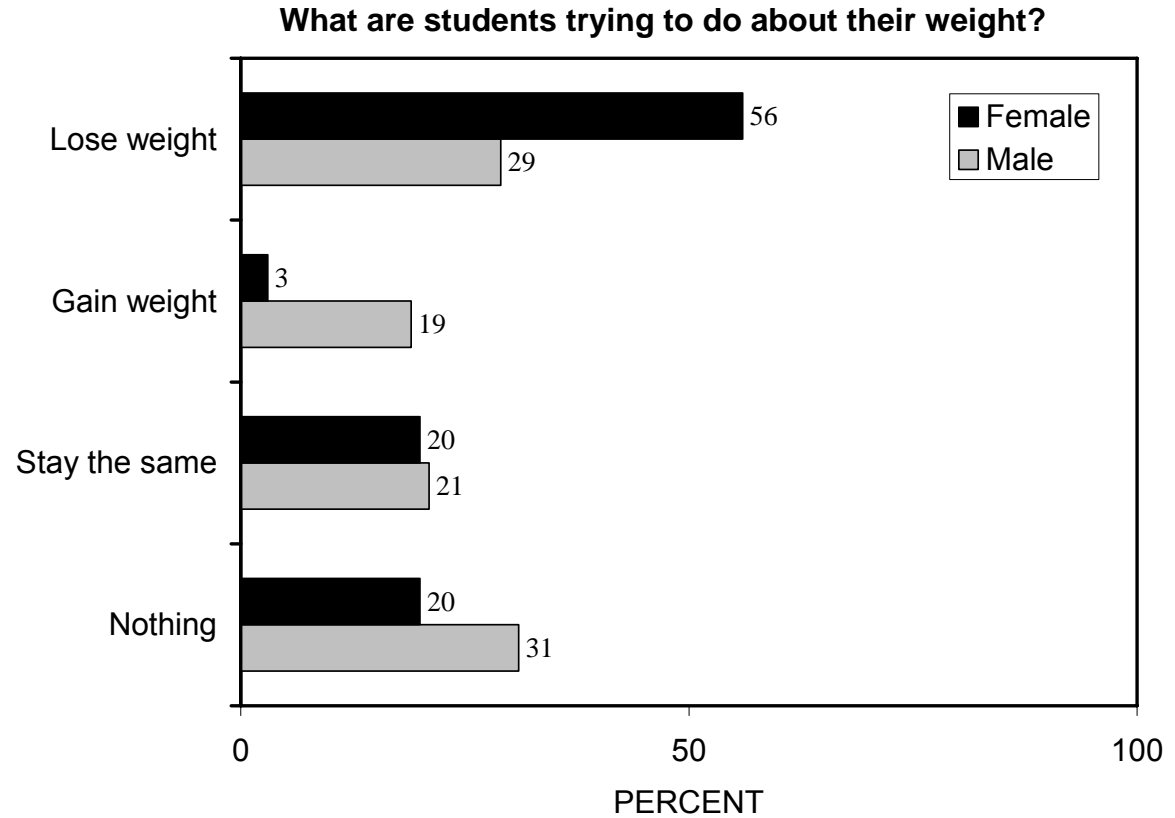
## ■ Body Weight

- A majority of students (58%) think that they are about the right weight.
- Males were significantly more likely to think of themselves as underweight, and females were significantly more likely to think of themselves as overweight. There were no significant differences by grade.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who describe themselves as:</b>									
<b>Underweight</b>	12	12	12	11	13	11	11	9	15
<b>About the right weight</b>	58	58	59	58	58	60	57	58	59
<b>Overweight</b>	30	30	29	31	28	29	31	33	26

## ■ Body Weight

- Most students are trying to maintain their current weight (21%) or are not trying to do anything about their weight (26%).
- Males were significantly more likely to report trying to gain weight, and were significantly more likely to report doing nothing about their weight. Females were significantly more likely to report trying to lose weight. There were no significant differences by grade.



## ■ Body Weight

- Overall, 4% percent of students reported vomiting or taking laxatives to lose weight or to keep from gaining weight in the past 30 days, and 3% percent took diet pills, powders, or liquids without a doctor's advice.
- Females were significantly more likely than males to report both behaviors.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who, in the past 30 days:</b>									
<b>Vomited or took laxatives to lose weight or keep from gaining weight</b>	5	4	4	4	4	5	4	6	2
<b>Took diet pills, powders, or liquids without a doctor's advice to lose weight or keep from gaining weight</b>	4	3	2	3	2	3	3	4	2

## ■ Nutrition

- Three-quarters of students (76%) eat breakfast three or more days per week.
- Overall, 43% of students eat breakfast every day.
- One in ten students (9%) reported never eating breakfast.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who:</b>									
<b>Ate breakfast three or more days a week</b>	74	76	77	77	78	74	75	75	77
<b>Ate breakfast every day</b>	42	43	44	43	44	43	39	40	45
<b>Never ate breakfast</b>	11	9	10	8	9	9	9	9	9



## ■ Nutrition

- **Overall, 34% of students consumed two or more servings of fruit or fruit juice daily.** In 1999, 45% of students reported having two or more servings of fruit per day.
- **Fifteen percent of students ate three or more servings of vegetables daily.**
- **Almost one-quarter (23%) of students ate five or more servings of fruits and vegetables daily.** In 1999, 33% of students reported eating five or more servings of fruits and vegetables per day.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who:</b>									
<b>Eat two or more servings of fruit or fruit juice per day</b>	35	34	34	35	34	34	33	34	34
<b>Eat three or more servings of vegetables per day</b>	16	15	15	16	15	14	15	15	15
<b>Eat five or more servings of fruits and vegetables per day</b>	24	23	25	23	22	22	22	23	23

## ■ Nutrition

- Overall, 57% of students drank at least one glass of milk daily.
- One-fifth (22%) of students drank at least one can, bottle, or glass of soda daily.
- Males were significantly more likely than females to drink milk or soda.
- Younger students were significantly more likely to drink one or more glasses of milk daily. Soda consumption did not differ significantly by grade.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who:</b>									
<b>Drink one or more glasses of milk per day</b>	59	57	62	59	58	56	55	51	63
<b>Drink three or more glasses of milk per day</b>	23	23	27	27	24	20	19	17	29
<b>Drink one or more sodas per day</b>	24	22	19	22	22	20	24	15	29
<b>Drink three or more sodas per day</b>	10	9	7	9	9	8	9	5	12

## ✓ Physical Activity

This section asks students how often they engage in physical activity and physical education classes. Students are also asked how often they watch television and play on the computer for fun or play video games.

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- **Regular physical activity** helps build and maintain healthy bones and muscles, control weight, build lean muscle and reduce fat, and reduces feelings of depression and anxiety.<sup>55,58</sup> In the long term, regular physical activity decreases the risk of dying prematurely, dying of heart disease, and developing diabetes, colon cancer, and high blood pressure.<sup>58</sup> The U.S. Department of Health and Human Services recommends that young people (ages 6–17) participate in at least 60 minutes of physical activity daily.<sup>58</sup>
  
  - **School physical education classes:** Major decreases in vigorous physical activity occur during grades 9 through 12, particularly for girls; by 12th grade, more than half of female students in the U.S. are not participating regularly in vigorous physical activity.<sup>59</sup> School physical education classes can increase adolescent participation in physical activity and help adolescents develop the knowledge, attitudes, and skills they need to engage in lifelong physical activity.<sup>60-63</sup>
  
  - **Television viewing** is the principal sedentary leisure time behavior in the U.S. Studies have shown that television viewing in young people is related to obesity<sup>63,64</sup> and violent or aggressive behavior.<sup>65-67</sup> Using the computer for fun and playing video games have become increasingly common sedentary leisure time activities among young people as well.
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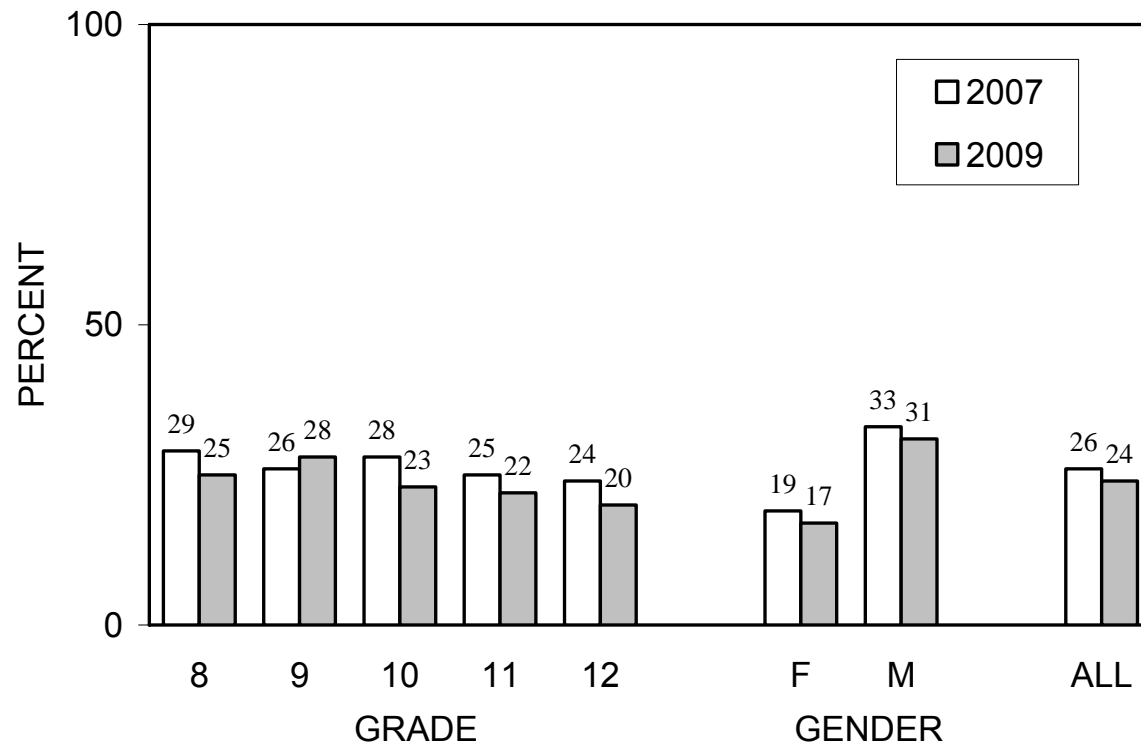
### **Related *Healthy Vermonters 2010* Goals:**

- Increase the percentage of middle and junior high schools that require daily physical education for all students.

## Physical Activity

- Overall, 24% of students participated in 60 minutes of physical activity every day, per the U.S. Department of Health and Human Services Guidelines.
- Females were significantly less likely to participate in daily physical activity than males.
- Of all students, 12% reported zero days with at least 60 minutes of physical activity in the past week.

Percent of students who participated in at least 60 minutes of physical activity every day during the past seven days



## ■ Physical Education

- **Approximately half (48%) of students participated in physical education classes at least once a week.**

Students in 8th, 9th, or 10th grade were significantly more likely to attend physical education classes than 11th or 12th grade students.

- **One in five students (19%) participated in physical education class every day during an average school week.**

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who participated in:</b>									
<b>Physical education classes at least once during an average week</b>	49	48	81	67	44	27	24	46	50
<b>Physical education classes five days during an average week</b>	18	19	17	30	21	13	12	18	20

## ■ TV and Computer Games

- **Four in ten students (38%) spent three or more hours a school day watching TV, playing video games, or playing on the computer for fun.** In 1999, 28% reported this behavior.
- **Males were significantly more likely to report spending time watching TV or playing games than females.**
- **One in ten students (10%) spent five or more hours per school day watching TV, playing video games, or playing on the computer for fun.** In 1999, 18% reported spending five or more hours doing these tasks.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who:</b>									
<b>Spend three or more hours per school day watching TV or playing on the computer</b>	36	38	36	37	40	36	40	32	44
<b>Spend five or more hours per school day watching TV or playing on the computer</b>	10	10	10	11	10	9	10	7	13

## ✓ Measures of Youth Assets

Healthy development depends not only on avoiding harmful behavior, but on strengthening the sources of positive influence in our lives. This section asks students about the grades they receive in school, how often their parents talk to them about school, how often they eat meals with their family, how often they are involved in clubs or organizations, how often they volunteer their time helping their community, their perception of students' role in deciding what happens in school, and their perception of how they are valued by their communities.

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- **Grades in School:** Above-average school performance is viewed as one of many developmental assets, or factors promoting positive development, for youth. Studies have shown that students who get higher grades in school are less likely to use cigarettes, alcohol, or marijuana, and are more likely to postpone sexual intercourse.<sup>68</sup>
- **Parents Involvement in School:** One of the strongest predictors of students' success in school is the extent to which their parents stay involved with their schoolwork—asking about academic progress, attending teacher conferences, and so on.<sup>71</sup> In addition, a national study of adolescent health found that youth who reported a “connectedness” to their parents/family and school were the least likely to engage in risky behaviors. Parental expectations regarding school achievement were also associated with lower levels of risk behaviors.<sup>70</sup>
- **Family Meals:** Mealtimes can be important opportunities for family members to connect with one another and strengthen relationships.<sup>71</sup> Teens who regularly eat meals with their family are more likely to get better grades in school and to initiate sexual activity later than teens who do not. They are also less likely to get into fights, contemplate suicide, smoke cigarettes, drink, and use drugs.<sup>71,72</sup> Even after controlling for other kinds of family connectedness, more frequently sharing meals with family is associated with lower substance use, fewer depression symptoms, and better grades among teens.<sup>72</sup> Parents' presence at family meals is also associated with adolescents' higher consumption of fruits, vegetables, and dairy foods.<sup>73</sup>

## ✓ Measures of Youth Assets (cont'd)

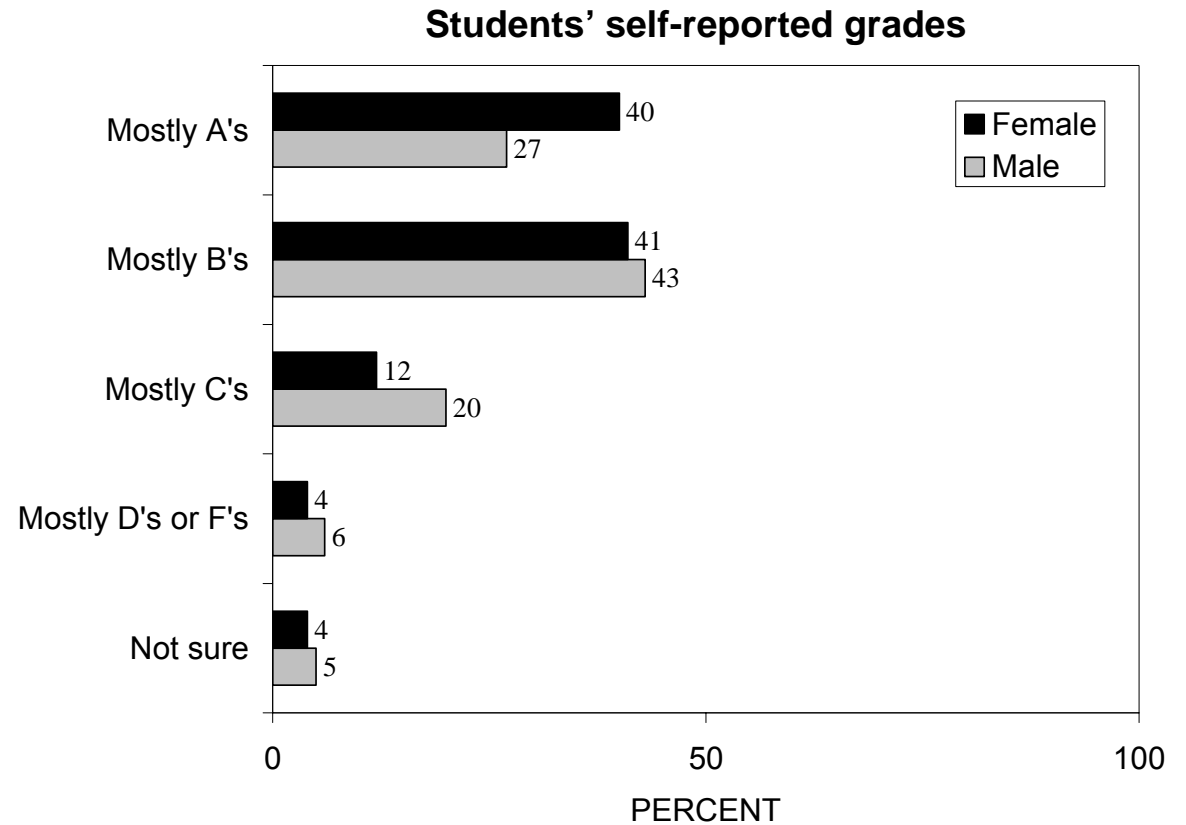
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- **Participation in youth programs and service to community:** Research shows that involvement in constructive, supervised extra-curricular activities is associated with reduced likelihood of involvement in risky behaviors such as school failure, drug use, and delinquency.<sup>76</sup> In addition, evidence is emerging that students who participate in such activities are also more likely to engage in other “thriving” behaviors.<sup>77</sup>
- **Youth as resources:** Youth are not simply objects of adult efforts to modify their behaviors. Rather, if given the opportunities, they can make significant contributions to their families, schools, and communities. Adolescents, especially, need to exercise decision-making power in as many settings as is practical, so that they can develop into competent adults. Schools are a natural setting for youth to share in decisions that affect their lives.



## ■ Measures of Youth Assets

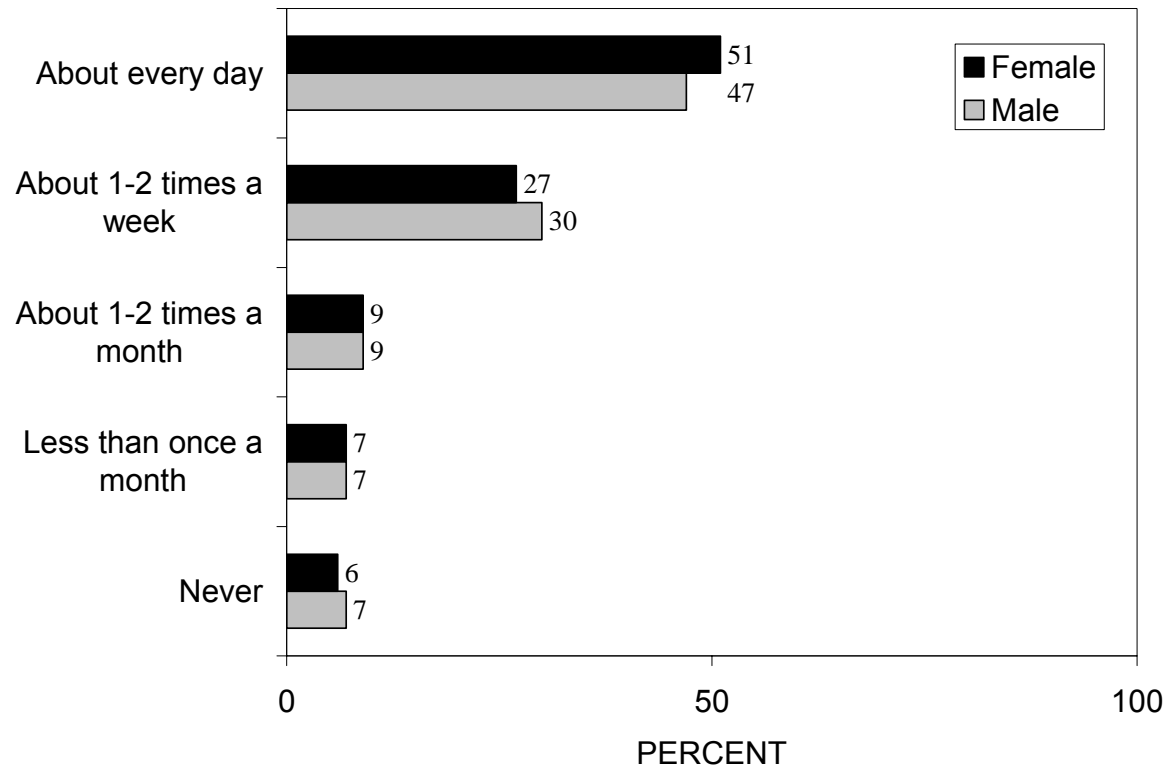
- Three out of four students (75%) reported receiving B's and above.
- Females were significantly more likely to report getting mostly A's than males.



## ■ Measures of Youth Assets

- **Over three-fourths (77%) of students' talk with their parents about school at least once a week.** Overall, 49% of students reported that their parents talked with them daily about school and 28% talked with them once or twice a week.
- **Few parents rarely or never talk with their children about school.** Of all students, 7% of students reported that their parents never talk with them about school and 7% reported that their parents talk with them about school less than once a month.

**How often does one of your parents talk with you about what you are doing in school?**



## ■ Family Meals

- Almost three-quarters of students (72%) ate meals with their family three or more times per week.
- Over one-quarter (28%) ate a meal with their family every day.
- Younger students were significantly more likely than older students to eat a meal with their family.
- Of all students, 14% did not eat a meal with their family during the past seven days.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who:</b>									
<b>Ate a meal with all or most of their family members three or more times during the past seven days</b>	73	72	78	74	74	67	67	70	74
<b>Ate a meal with all or most of their family members every day</b>	26	28	36	32	28	23	21	27	28
<b>Did not eat a meal with their family during the past seven days</b>	13	14	11	12	13	16	16	14	13

## ■ Participation in Youth Programs

- About one quarter of students (27%) participate in clubs or organizations outside of school.
- Females were significantly more likely than males to spend one or more hours per week in clubs or organizations outside of school.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who:</b>									
<b>Spend one or more hours per week in clubs/organizations outside of school (not including sports)</b>	30	27	26	26	26	29	30	31	24
<b>Spend three or more hours per week in clubs/organizations outside of school (not including sports)</b>	14	12	10	11	12	13	15	13	11

## ■ Service to Community

- Four in ten students (42%) spend at least one hour per week volunteering.
- Students in 12th grade were significantly more likely than students in all other grades to spend at least one hour per week volunteering.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who:</b>									
<b>Spend one or more hours per week volunteering their time to make their community a better place to live</b>	45	42	39	39	40	45	48	45	40
<b>Spend three or more hours per week volunteering their time to make their community a better place to live</b>	13	13	11	13	13	14	16	14	13

## ■ Valued by School and Community

- Half of students (50%) report that they help decide what goes on at their school.
- Almost half of students (47%) feel valued by their community.
- Nine out of ten students (89%) have an adult in their life they can turn to for help and advice.

	All		Grade					Gender	
	2007	2009	8	9	10	11	12	F	M
<b>Percent of students who agree with the following statements:</b>									
<b>Students help decide what goes on in my school</b>	51	50	54	51	50	51	47	52	49
<b>In my community, I feel like I matter to people</b>	47	47	48	47	44	44	50	45	48
<b>Percent of students who have an adult in their life they can usually turn to for help and advice</b>	89	89	88	89	88	89	92	89	89

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