The 2009 Vermont Youth Risk Behavior Survey

Summary of Results for Participating Schools in the

CHITTENDEN EAST SUPERVISORY UNION

Every two years since 1985, the Department of Health's Division of Alcohol and Drug Abuse Programs and the Department of Education's Comprehensive School Health Program have sponsored a survey of Vermont students. The Vermont Youth Risk Behavior Survey (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 enables us to:

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

In 2009, school staff administered the YRBS to 29,850 eighth to twelfth grade Vermont students in 143 schools representing 55 supervisory unions. 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 summarizes the results of the survey for the Chittenden East Supervisory Union**. The schools that participated were Browns River Middle School, Camels Hump Middle School, and Mt. Mansfield Union High School. The behaviors have been divided into categories:

- ✓ **Injuries, Violence, and Safety**
- ✓ **Use of Alcohol, Tobacco, and Other Drugs (ATOD)**
- ✓ **Attitudes and Perceptions about ATOD Use**
- ✓ **Sexual Behavior**
- ✓ **Body Weight and Nutrition**
- ✓ **Physical Activity**
- ✓ **Measures of Youth Assets**

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. It can help target prevention efforts to specific groups of students, and can indicate whether or not policies and programs are having their intended effect on student behaviors.

Think of the YRBS as a tool for starting discussions, for educating the community, and for planning and evaluating programs.

→ **Starting the Conversation:** Use the YRBS to begin a conversation with young people 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 is not 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. It can even inform communities about strategies to address those weaknesses.

A Word of Caution

Unless your supervisory union has conducted its own surveys, the YRBS probably represents the most complete and most recent information available about risk behaviors among your students. However, the YRBS has some limitations that you should keep in mind when interpreting the results.

- **Sampling & Data Quality:** This report is based on all the students who completed the survey in your supervisory union. Some schools may not have participated, some students may have been absent on the day the survey was administered, and other students may have declined to participate or incorrectly filled out the survey. It is likely that the results are representative of your student population, but we cannot be sure. However, several precautions were taken to ensure the reliability and validity of the results. First, the questionnaire has been 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. These precautions can reduce most sources of error, but not all.
- **Comparing Your Results:** It is natural to want to know how your supervisory union compares to the state overall or to other supervisory unions. We urge caution in making such comparisons, because many risk behaviors are associated with age. A school with a large percentage of older students will likely have a higher prevalence of these risk behaviors than a school with a small percentage of older students. In addition, the statewide results are "weighted" in order to compensate for differences between the sample and the population of all 8th to 12th grade students in Vermont. The supervisory union results are not "weighted."
- ***What*, not *Why*:** The YRBS can indicate what students are doing. It can also suggest the groups of students (e.g., male vs. female, 8th graders vs. 12th graders) who are more likely to engage in these behaviors. However, the survey does not answer the most important question: Why are they doing it?

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 are also VERY grateful to the students who took the time and effort to share with us a piece of their lives. This report is our way of thanking all of you. We hope that you will find the survey report informative and useful.

The next YRBS is scheduled for 2011. We encourage you to participate again, because you will be able to assess changes in student behaviors and to evaluate the effectiveness of your prevention or intervention programs over the next two years. If you have questions or comments about the YRBS, please contact Erika Edwards at the Vermont Department of Health (802-863-7246).

Table of Contents

INTRODUCTION i

BASIC INFORMATION 1

INJURIES, VIOLENCE, AND SAFETY 3
- Physical Fighting 5
- Abusive Behavior 8
- Bullying 9
- Electronic Bullying 11
- Bicycle Helmets 12
- Safety Belts 13
- Safety Belt Use and Injuries Following Crashes 14
- Driving Under the Influence 15
- Suicide and Self-Harm 21

ALCOHOL, TOBACCO, AND OTHER DRUGS 22
- Alcohol Use 24
- Tobacco Use 30
- Marijuana Use 35
- Prescription Drug Use 39
- Other Drug Use 40
- Seeking Help 41

ATTITUDES AND PERCEPTIONS ABOUT ATOD 42
- Disapproval of ATOD use 43
- Perceived Harmfulness of ATOD 44
- Perceived Availability of ATOD 45

SEXUAL BEHAVIOR AND ORIENTATION 48

BODY WEIGHT AND NUTRITION 55

PHYSICAL ACTIVITY 59
- Physical Activity 60
- Physical Education 61
- TV and Computer Games 62

MEASURES OF YOUTH ASSETS 63

REFERENCES 70

Basic Information

Understanding This Report:

- The results of the 2009 Vermont YRBS are presented as data tables, pie charts, and bar graphs. All results are expressed as percentages of students who endorsed the responses being reported. The percentages in some charts may not add up to 100 percent due to rounding.

- This report includes 10 year trends for several behaviors. Some or all of the schools in your supervisory union may not have participated in previous years and therefore the trend may have a break and/or the data may not be directly comparable across years. Please consult your previous reports to find out which of your schools participated or call Erika Edwards (802-863-7246) for more information.

- To protect student anonymity, results from grades or other subgroups with fewer than 20 students are not reported. In those cases, -- appears instead of a numerical figure.

- ***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* and *Healthy Vermonters 2010,* available from the Vermont Department of Health.

Remember to look at the flip side! In most cases the majority of adolescents are NOT engaging in risky behaviors. Although most of the charts are oriented to examining the prevalence of risk behaviors, please do not forget about the percent of adolescents who are NOT engaging in the behavior!

YRBS PARTICIPANTS IN YOUR SUPERVISORY UNION

	GRADE*					GENDER*		
	8	**9**	**10**	**11**	**12**	**F**	**M**	**All**
Number enrolled**	217	245	259	234	223	578	600	1,178
Number who participated	170	175	150	163	160	445	460	922*
Response rate	0.78	0.71	0.58	0.70	0.72	0.77	0.77	0.78

***** NOTE: Some students did not indicate their grade and/or gender.
**based on October 1st, 2008 enrollment figures.

YRBS PARTICIPANTS - DEMOGRAPHICS

	Percent
Race and Ethnicity	
White non-Hispanic	88
Racial or Ethnic Minority	12
Mother's Education	
High school or less	21
Some college	9
College graduate	62
Not sure	8
Has an Individualized Education Plan (IEP)	8

✓ 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.

- **Physical Fighting:** Physical fighting is a marker for problem behaviors[1] and is associated with serious injury.[2,3] Abuse by an intimate partner is common among adolescents and is associated with risk behaviors among both males and females.[4] Forced sex is associated with negative psychosocial and mental health among adolescents.[5,6]

- **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.[7] Homicide is the second leading cause of death among all youth aged 15 to 19 in the U.S., after unintentional injuries.[7] Firearms intensify violence and increase the likelihood of fatality in a conflict.[8] In 2006, 85% of homicide victims 15 to 19 were killed with firearms.[7] From 2000 to 2006, 67% of Vermont homicide victims ages 15 to 19 died as a result of firearms (6 out of 9).[7]

- **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,[9, 10] poor academic achievement,[10] and violent behavior.[11]

- **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.[7] In 2006, 35% (9 out of 26) of deaths among 15 to 19 year olds in Vermont were due to motor vehicle crashes.[7] 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%.[12] Head injury is the leading cause of death in bicycle crashes.[13,14] Bicycle helmets are 85% to 88% effective at reducing the impact of head and brain injuries due to bicycle crashes.[15,16] Despite this, less than a third (20-25%) of bicyclists wear helmets.[15,16]

- **Vehicle Safety - Driving Under the Influence:** In 2006, alcohol use was associated with 32% of motor vehicle-related fatalities nationwide and 33% in Vermont.[17] 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.[18] 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.[19]

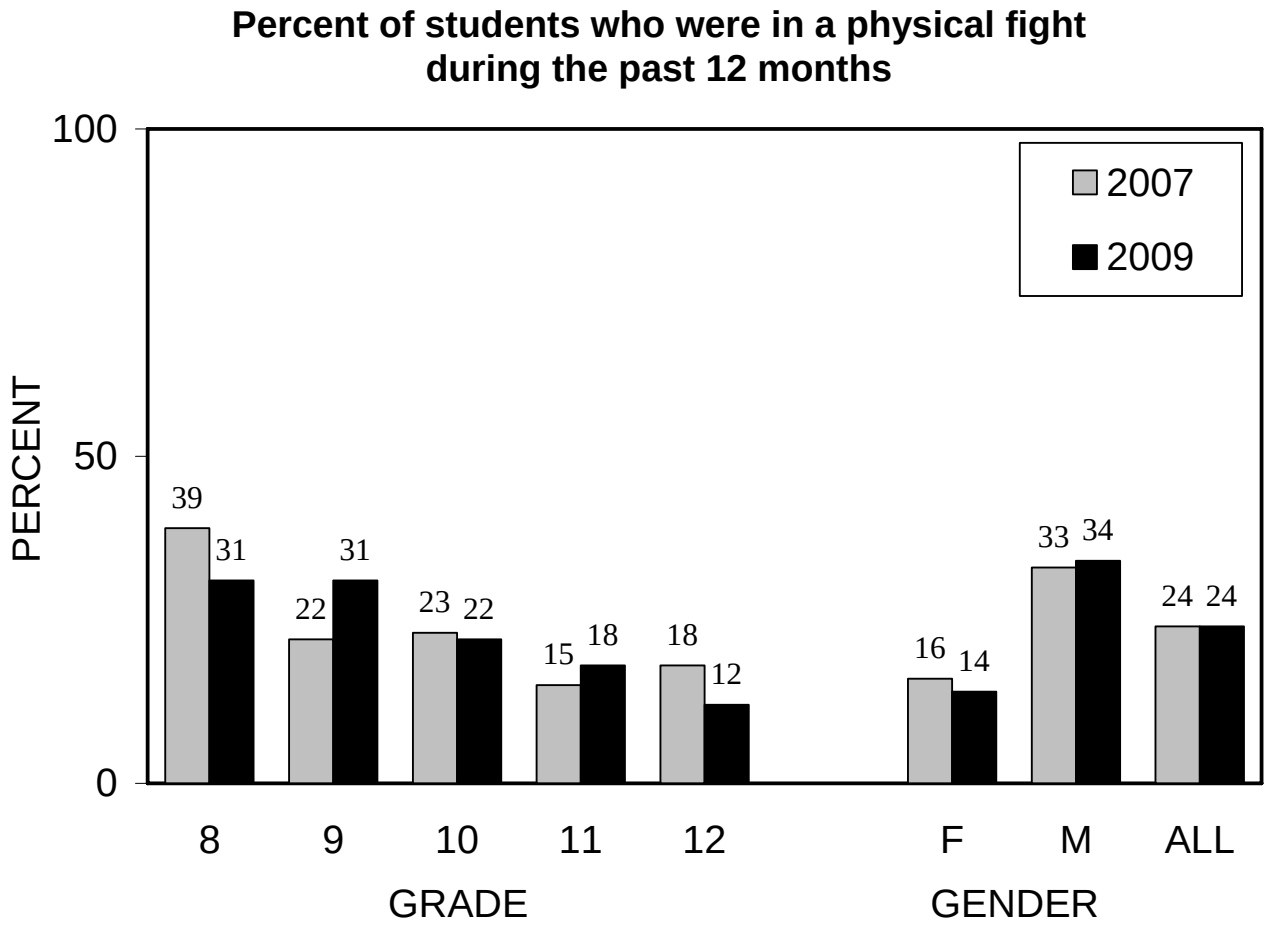
- **Suicide:** Suicide was the second leading cause of death among Vermont youth ages 15 to 19 from 2000 to 2006.[7] From 2003 to 2006, Vermont's suicide rate among 15 to 24 year olds was 8.0 deaths per 100,000, compared to 10.0 deaths per 100,000 nationwide.[7]

✓ Injuries, Violence, and Safety (cont.)

Related *Healthy Vermonters 2010* Goals:

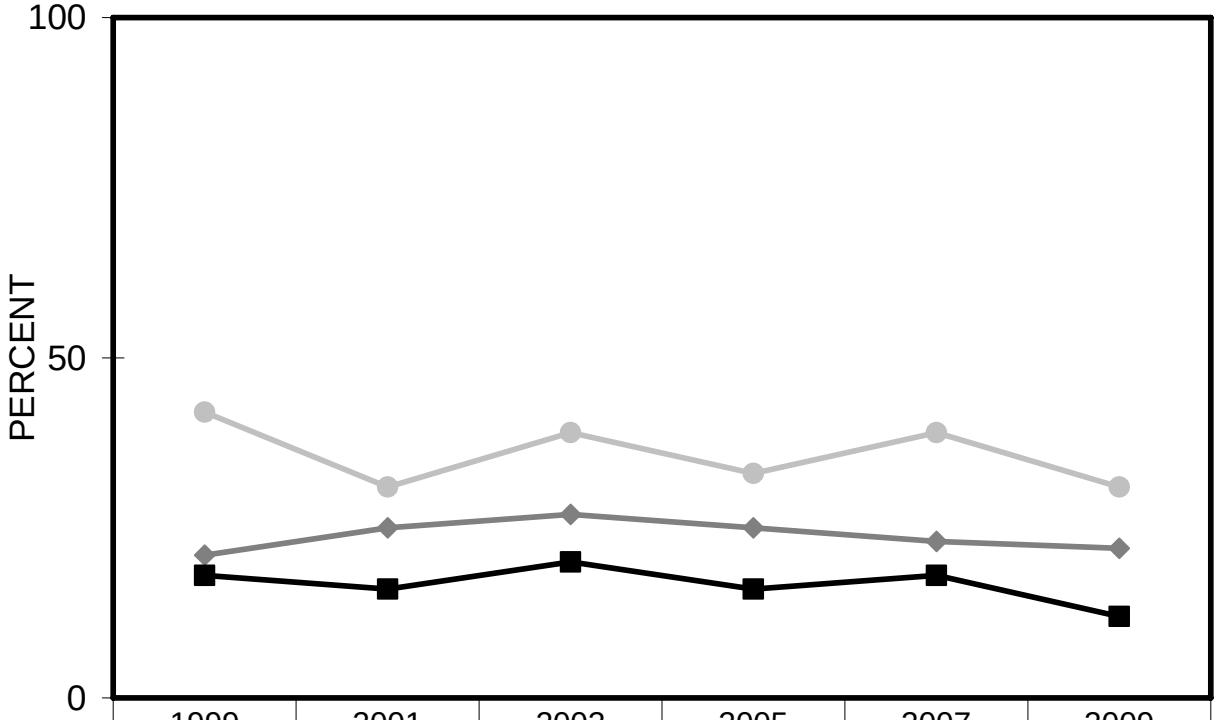
- Increase the percentage of people who always use safety belts to at least 92 percent.
- Further reduce physical assaults by intimate partners to less than 3.6 per 1,000 people age 12 and older.
- Reduce alcohol-related motor vehicle deaths to less than 4 per 100,000.
- Reduce suicide attempts by adolescents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

Physical Fighting



Physical Fighting

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



	1999	2001	2003	2005	2007	2009
8th Grade	42	31	39	33	39	31
10th Grade	21	25	27	25	23	22
12th Grade	18	16	20	16	18	12

▪ Physical Fighting

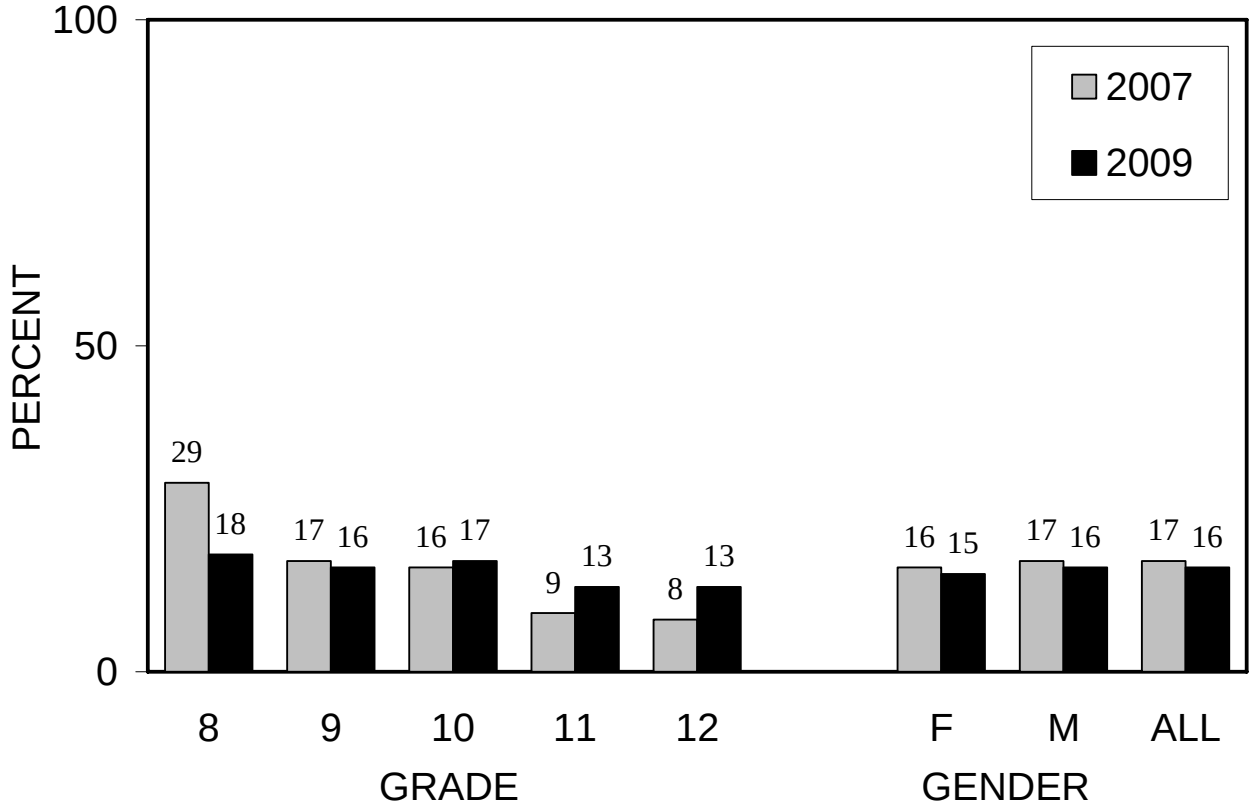
	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who:									
Did not go to school because they felt unsafe during the past 30 days	6	5	4	5	5	6	4	3	7
Carried a weapon such as a gun, knife, or club *on school property* during the past 30 days	11	11	9	4	19	14	9	4	18
Were threatened or injured with a weapon *on school property* during the past 12 months	8	7	7	6	6	8	7	3	11
Were in a physical fight *on school property* in the past 12 months	13	11	12	15	12	7	5	5	18
Were in a physical fight and had to be treated by a doctor or nurse	5	3	4	3	2	4	1	1	5

Abusive Behavior

	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	9	8	5	6	12	10	6	6	9
Percent of students who have ever been:									
Touched against their wishes or forced to touch someone else	9	9	7	7	9	11	8	10	8
Forced to have sexual intercourse	5	4	2	3	4	5	5	2	6

Bullying

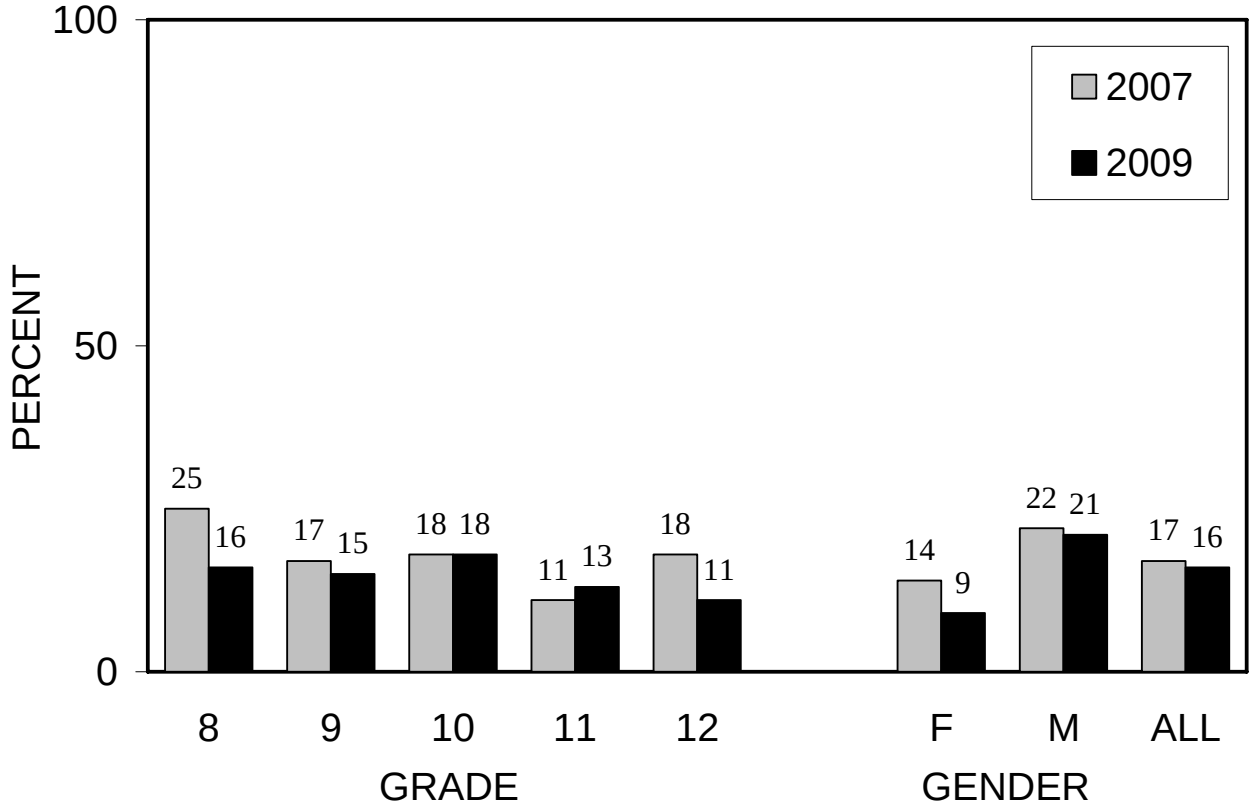
Percent of students who were bullied* during the past 30 days



***For the purposes of the VT Youth Risk Behavior Survey, 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, 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.

Bullying

Percent of students who bullied* someone during the past 30 days



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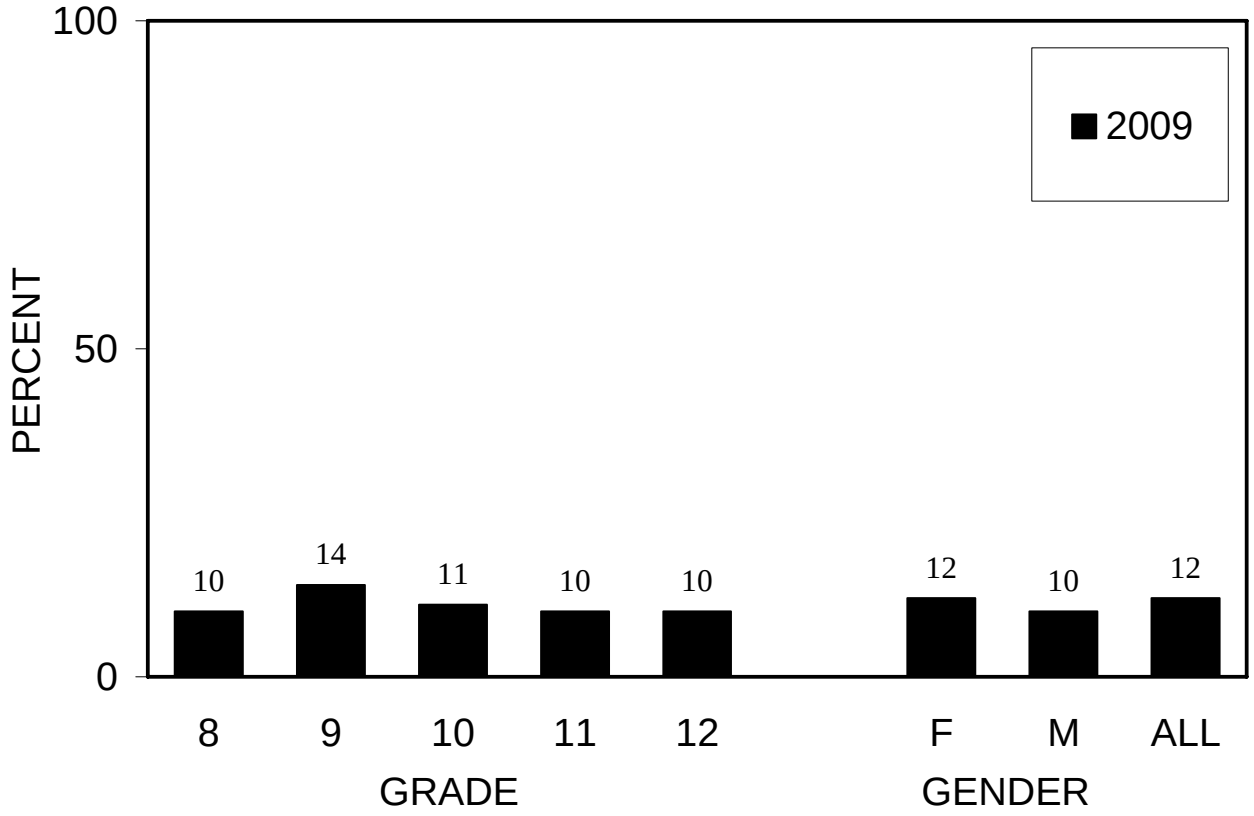
Electronic Bullying

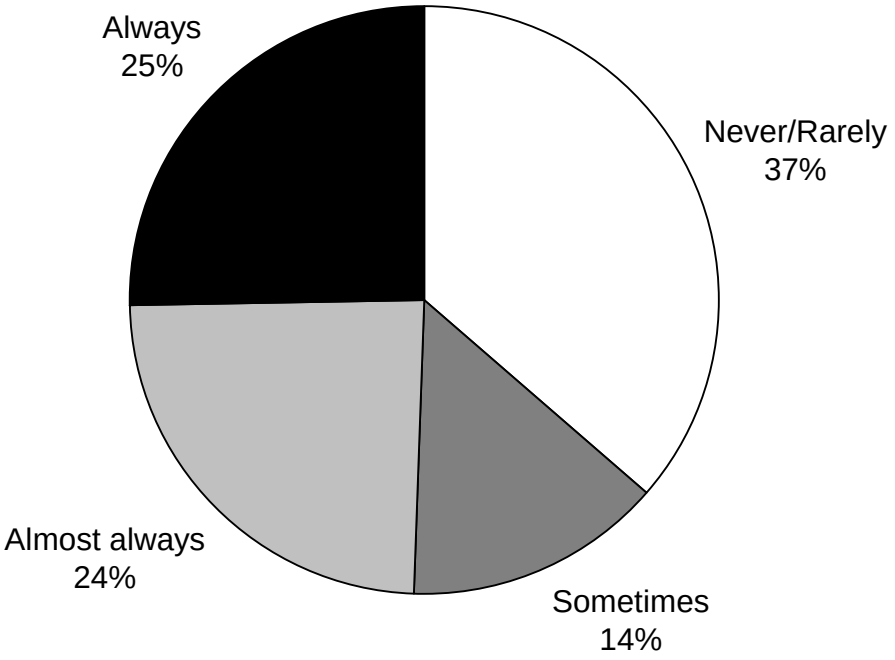
Percent of students who were electronically bullied, such as through e-mail, chat rooms, instant messaging, Web sites, or text messaging, in the past 12 months



New question in 2009

Bicycle Helmets

Frequency of helmet use among students who rode a bicycle during the past 12 months

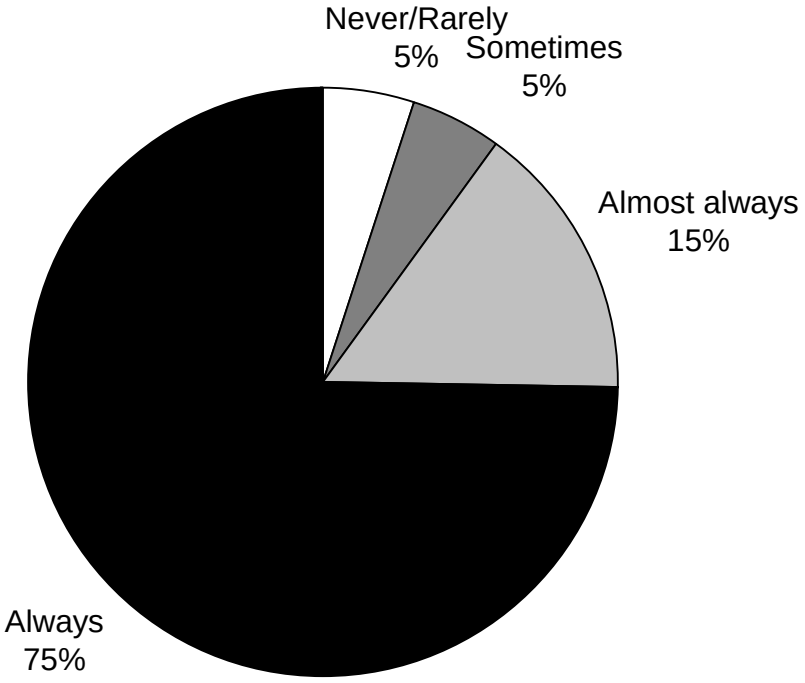


	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Frequency of helmet use (in percents) among students who rode a bicycle in the past 12 months									
Always	*	25	34	25	20	23	25	25	26
Almost always	*	24	28	36	20	18	21	27	23
Sometimes	13	14	17	9	19	11	15	17	12
Never or rarely	35	36	22	30	41	48	39	31	40

* = The 2007 results were calculated as “always or almost ways”.

Safety Belts

Frequency of safety belt use among students when riding in a car driven by someone else

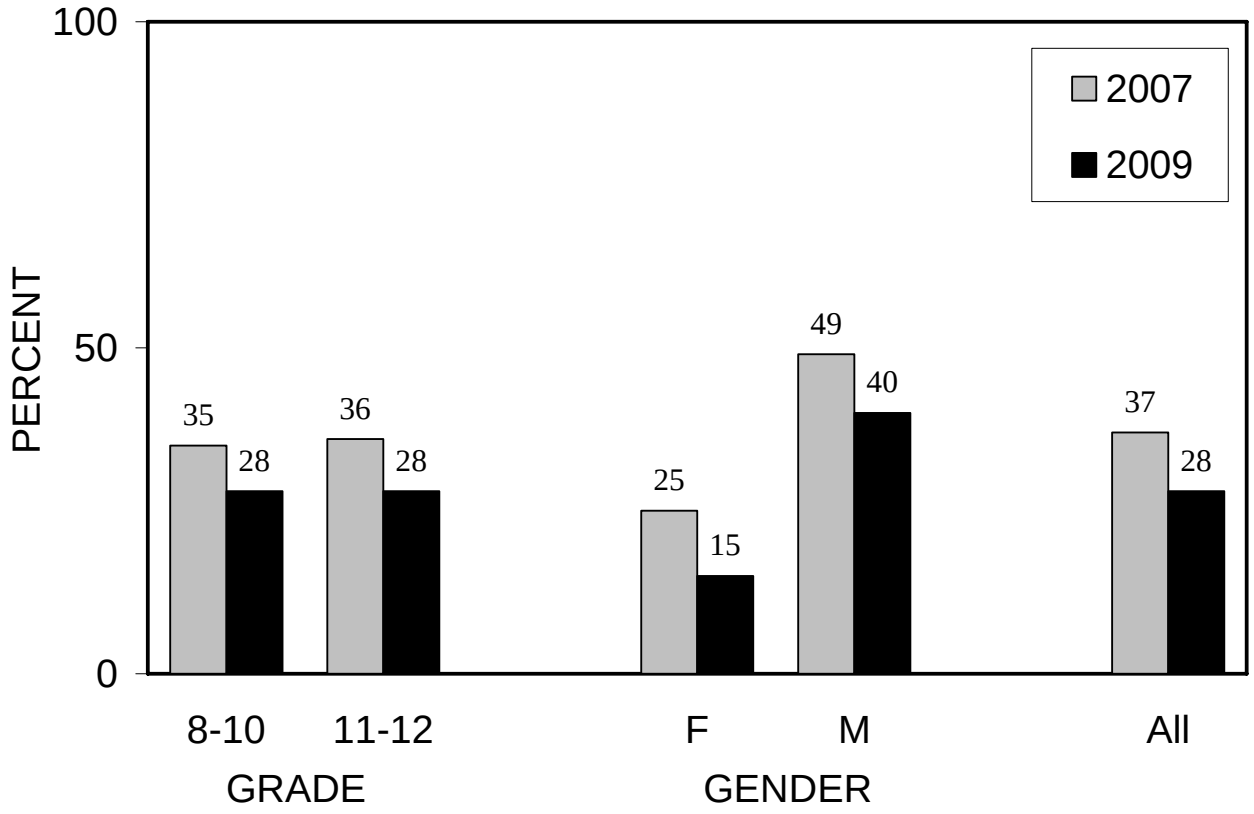


	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who wear a safety belt when riding in a car driven by someone else									
Always	*	74	80	73	66	73	84	78	70
Almost always	*	15	13	17	24	13	7	15	16
Sometimes	4	5	2	5	6	7	4	4	6
Never or rarely	6	5	4	5	4	6	5	3	8

* = The 2007 results were calculated as “always or almost ways”.

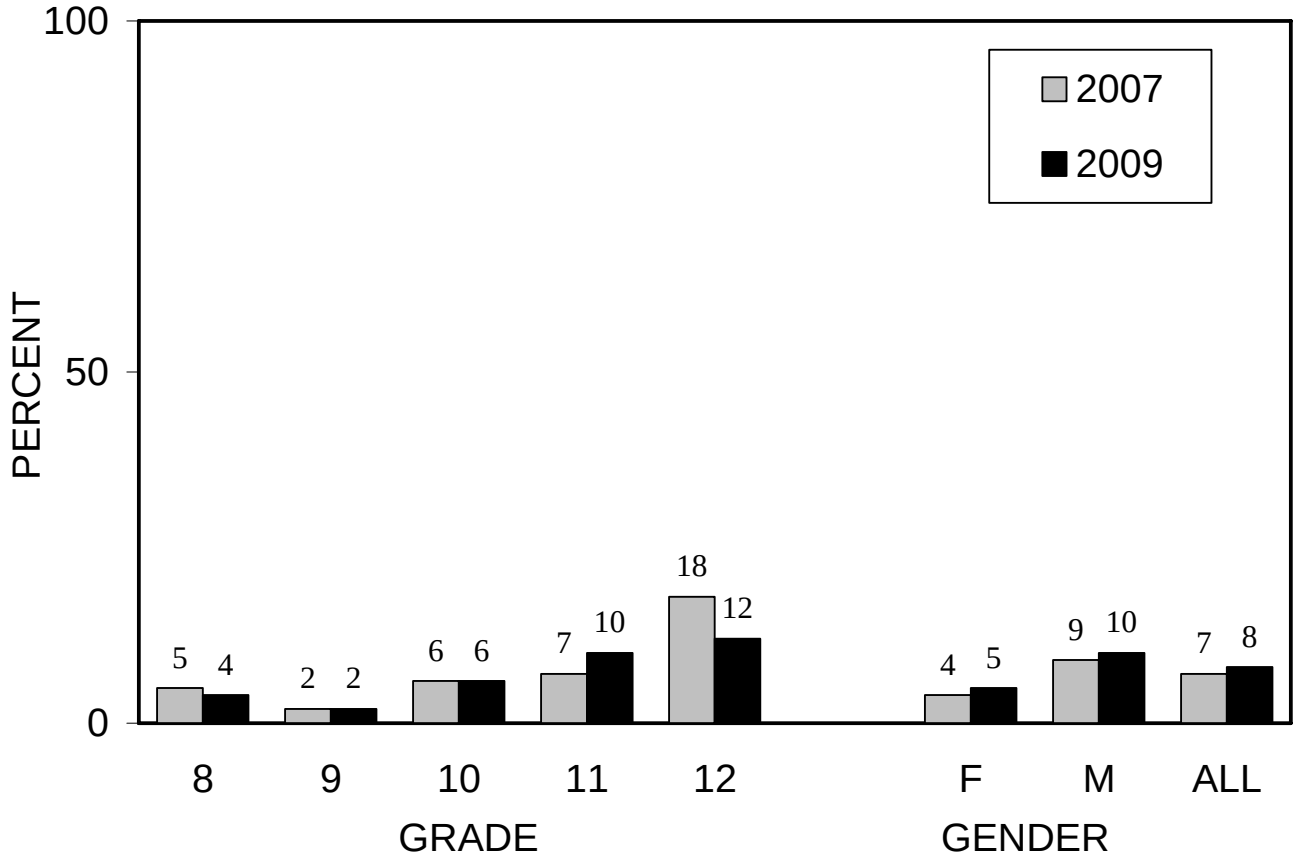
Safety Belt Use and Injuries Following Crashes

Percent of students injured in a crash during the past 12 months who were not wearing their safety belt



Driving Under the Influence

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



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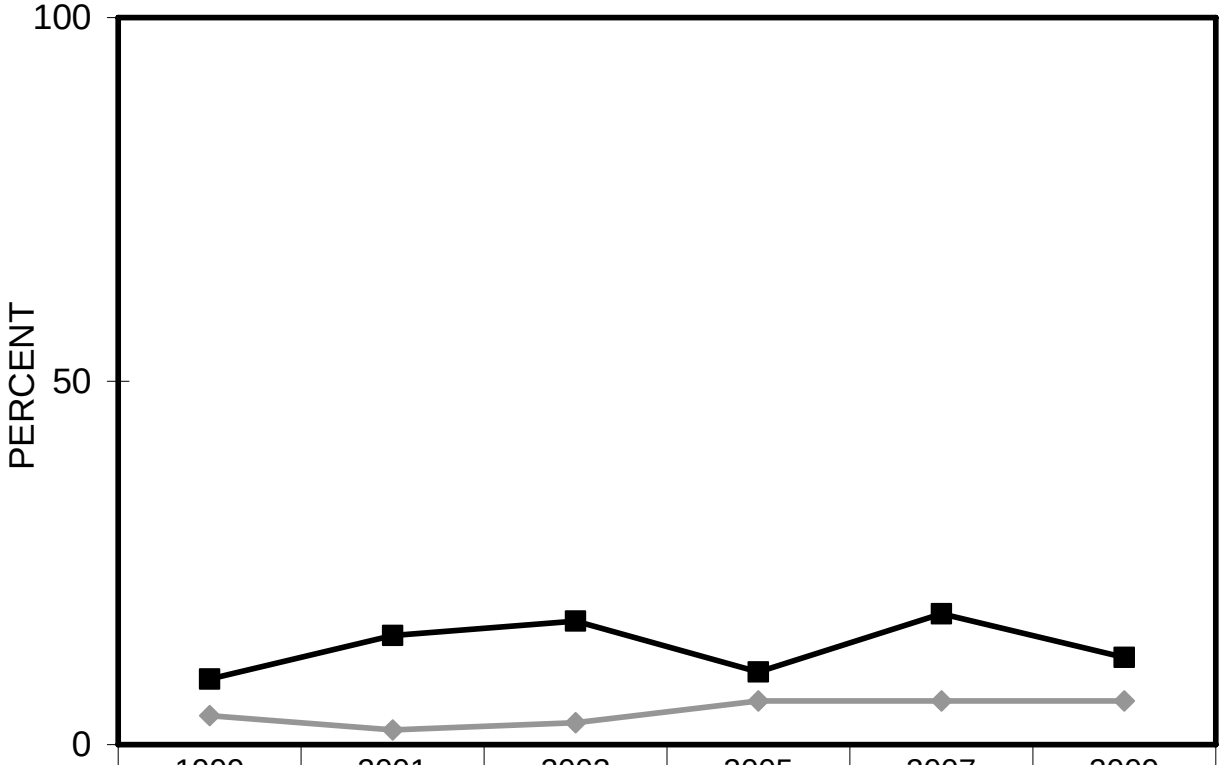
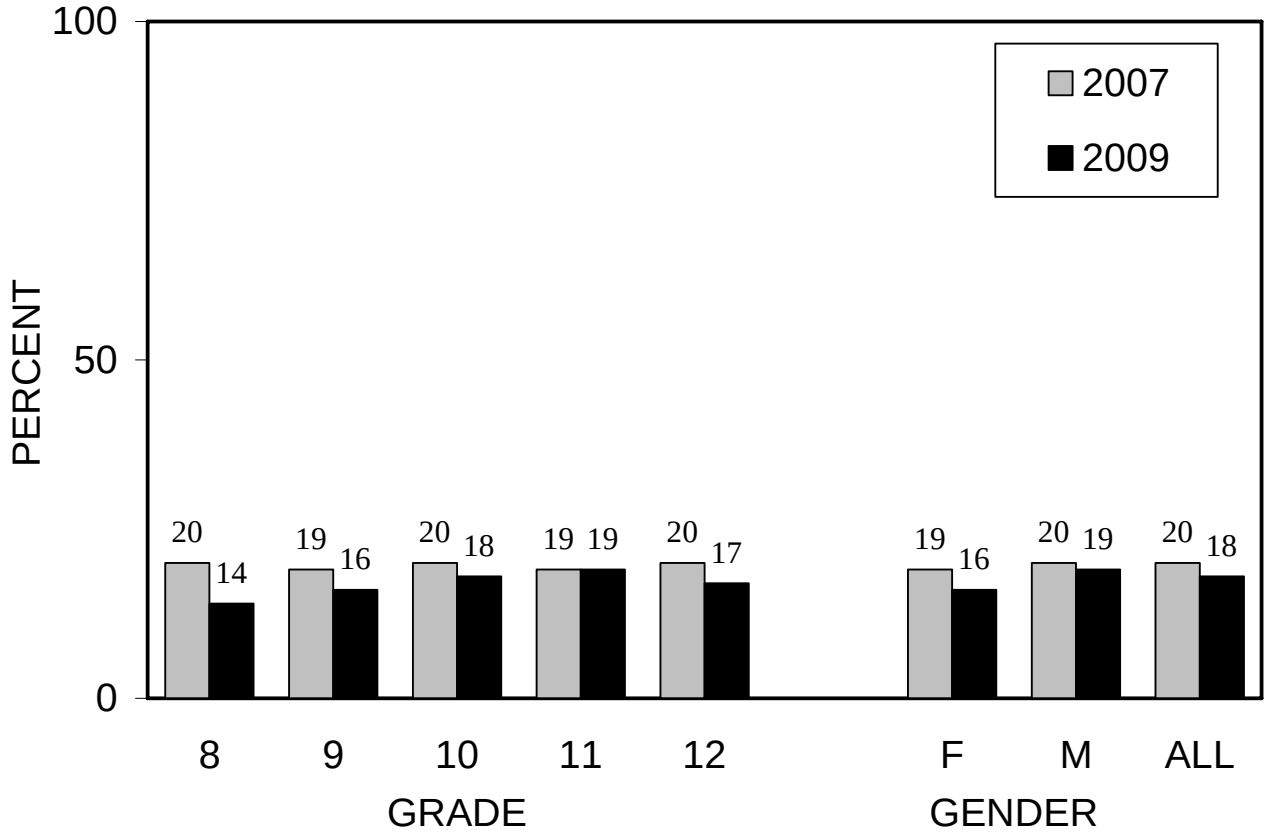


	1999	2001	2003	2005	2007	2009
10th Grade	4	2	3	6	6	6
12th Grade	9	15	17	10	18	12

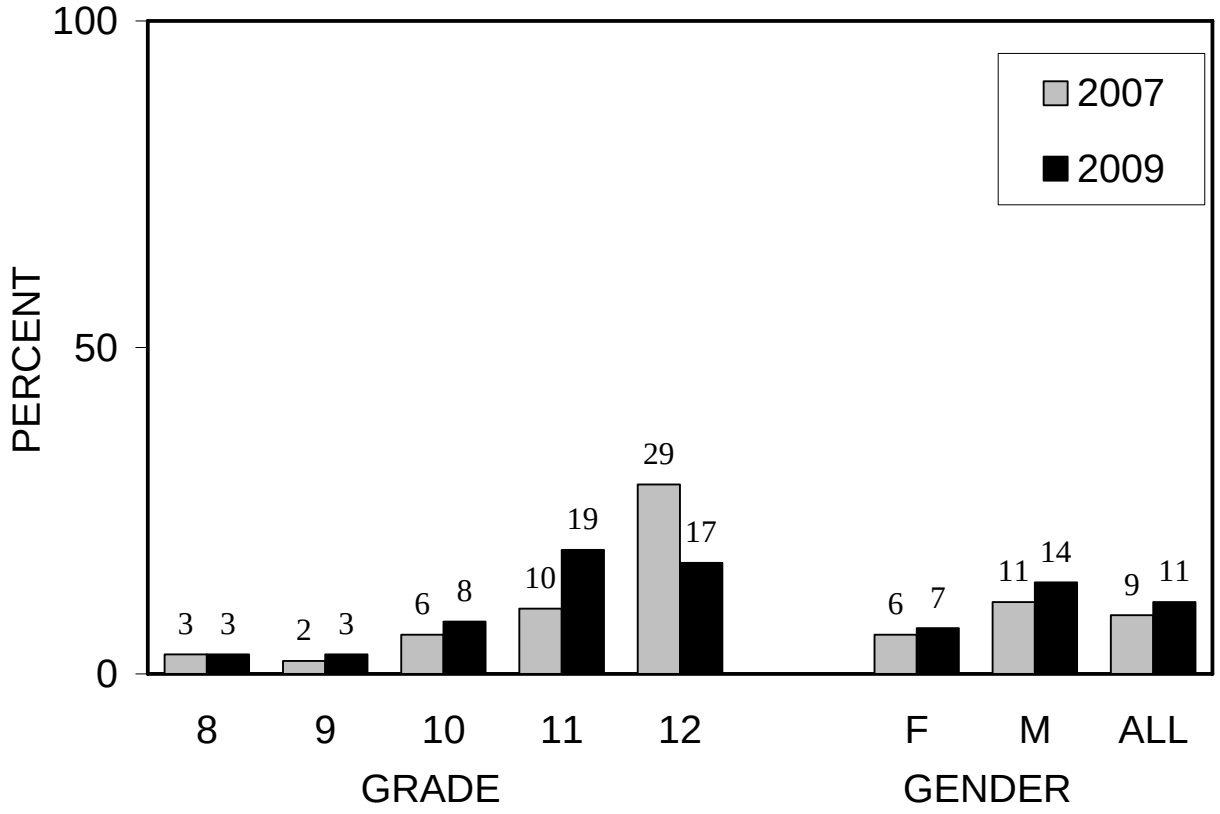
Driving Under the Influence

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



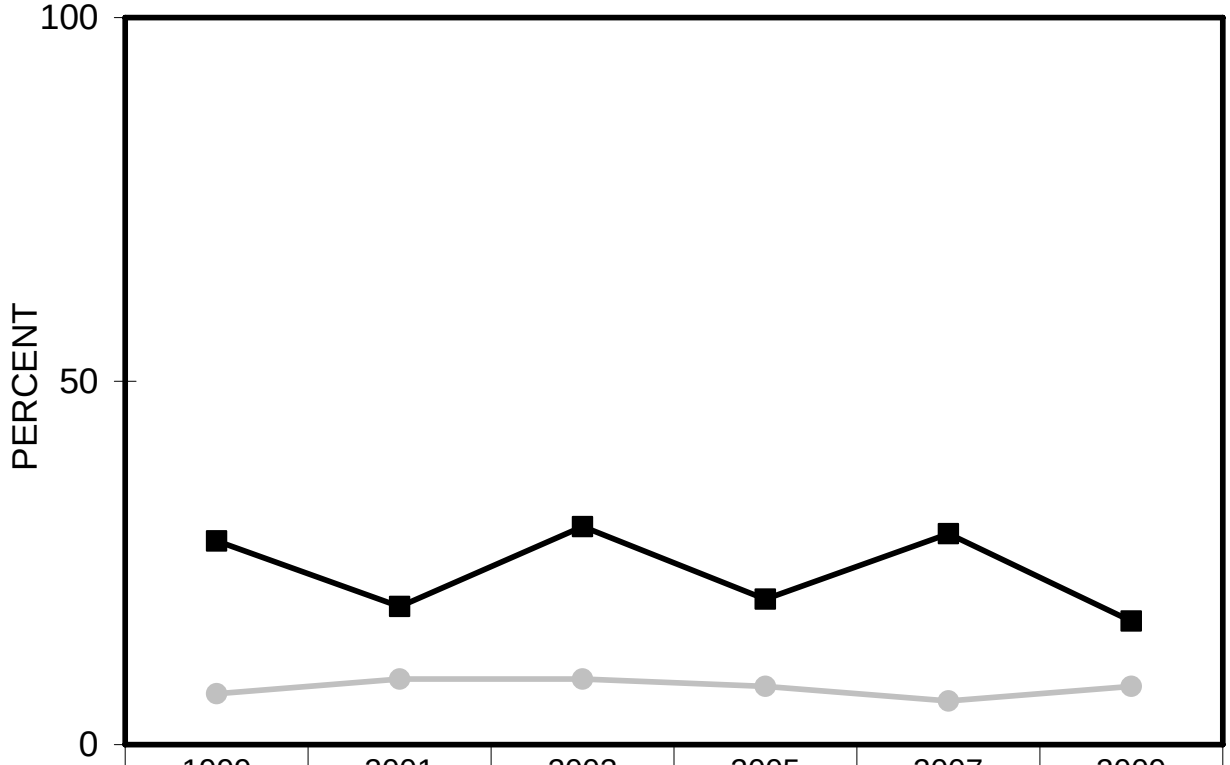
Driving Under the Influence

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



Driving Under the Influence

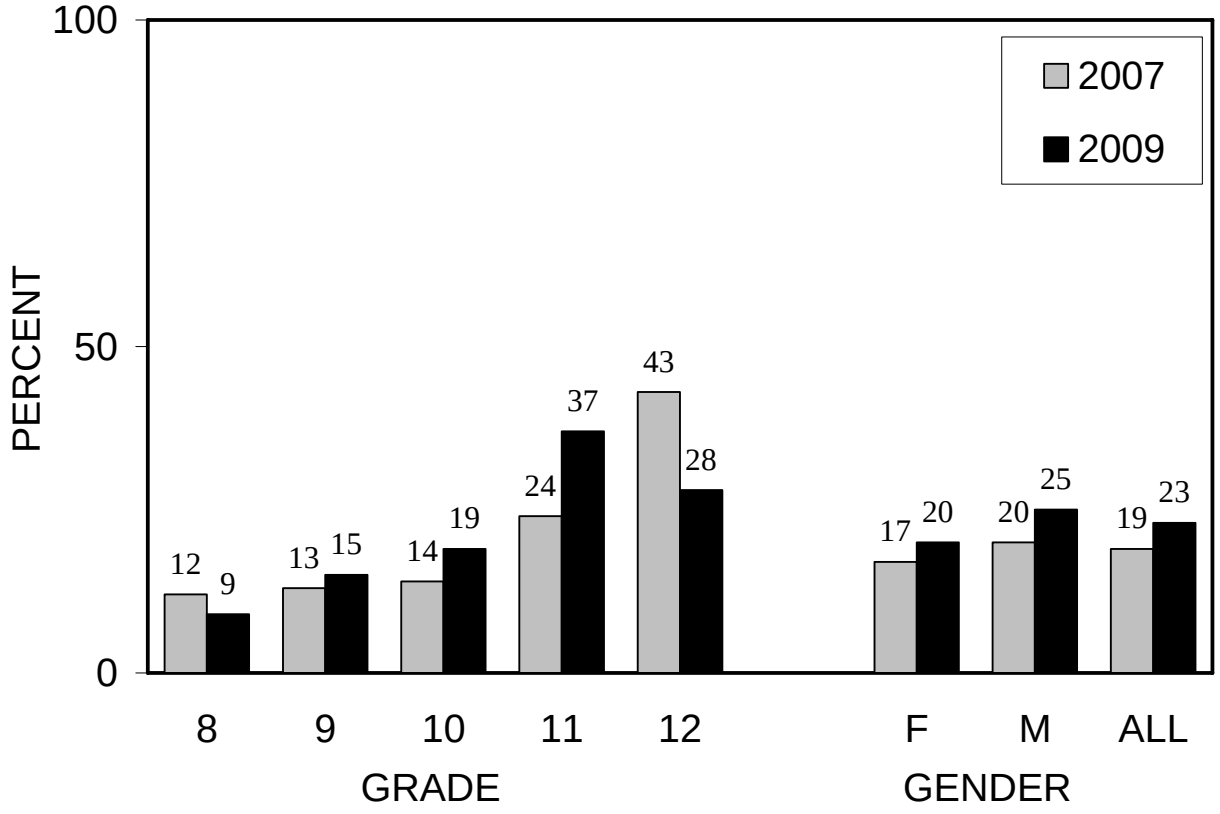
Percent of students who during the past 30 days drove a car or other vehicle when they had been smoking marijuana



	1999	2001	2003	2005	2007	2009
10th Grade	7	9	9	8	6	8
12th Grade	28	19	30	20	29	17

Driving Under the Influence

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



Suicide and Self-Harm

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who, during the past 12 months:									
Felt so sad or hopeless almost every day for at least 2 weeks that they stopped doing some usual activities	19	17	14	17	15	21	16	22	13
Purposely hurt themselves (e.g., cut or burned) without wanting to die	16	15	16	12	19	14	11	20	10
Made a plan about how to attempt suicide	9	8	6	6	11	9	8	8	8
Actually attempted suicide	5	4	4	4	5	3	3	4	3
Attempted suicide and required medical treatment	1	1	1	1	1	1	1	0	2

✓ 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.

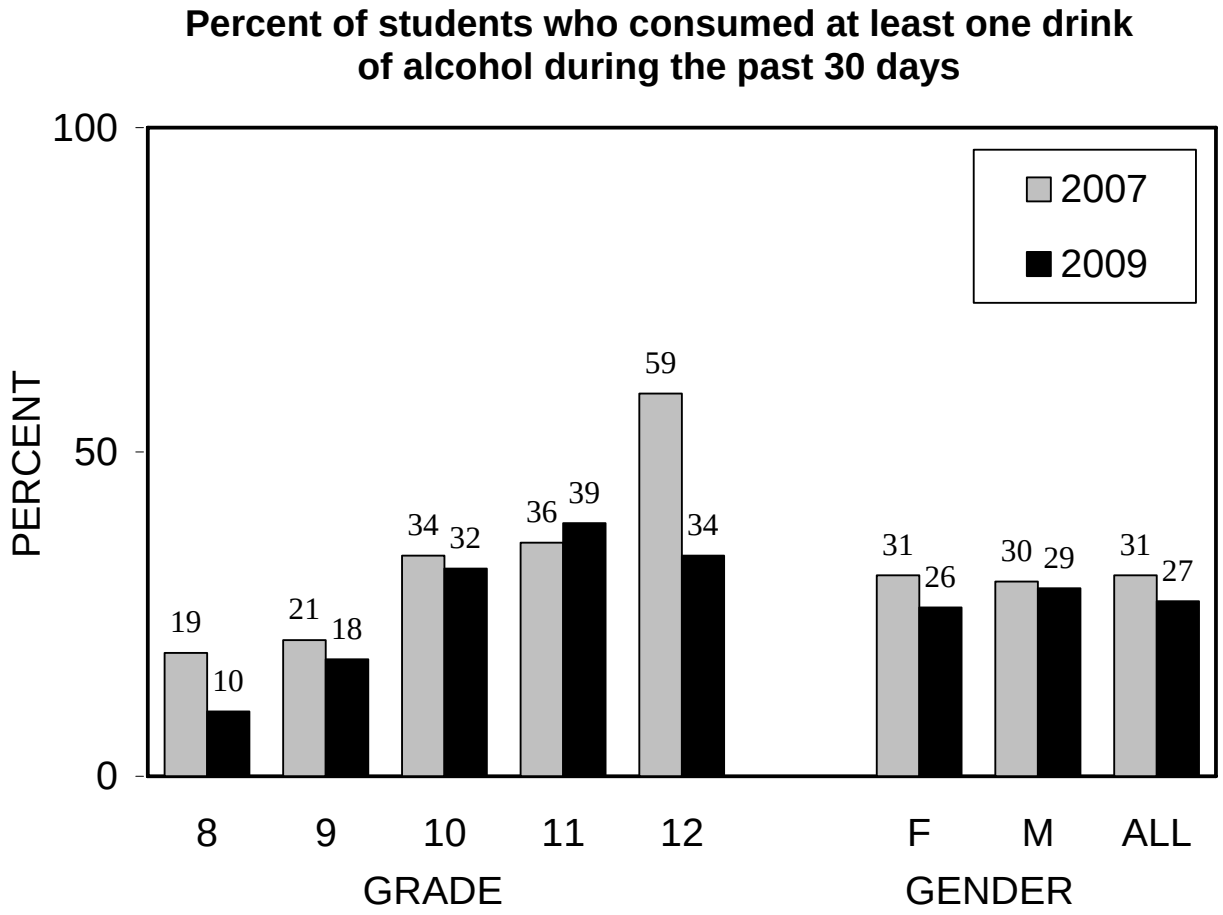
- **Alcohol Use** is a major contributing factor in about half of all homicides and sexual assaults,[20] and about one-third of all motor vehicle crash fatalities.[17] Approximately 80,000 American deaths per year are attributable to excessive alcohol use.[7] Heavy drinking among youth has been linked to violence, academic and job problems, suicidal behavior, trouble with law enforcement authorities, risky sexual behavior,[21, 22] and use of cigarettes,[23,24] marijuana, cocaine, and other illegal drugs.[23]
- **Tobacco Use** is the single most preventable cause of death in the United States,[25] contributing to more than one of every five deaths.[26] 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.[25] 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.[27]
- **Marijuana Use** is associated with smoking-related respiratory damage, temporary short-term memory loss, decreased motivation, and psychological dependence.[28] Other reactions include feelings of distrust, anxiety, or depression.[28] More teens enter treatment with a primary diagnosis for marijuana dependence than for all other illicit drugs combined.[29]
- **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.[30] Long-term risks vary, but include brain and nervous system damage and toxic effects to the lungs, liver, and kidneys.[30] Inhalants are easy to get, inexpensive and difficult to detect, and 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.[31] In 2008, 25% of U.S. 12th graders reported ever using other drugs.[32]

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

Related *Healthy Vermonters 2010* Goals:

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

Alcohol Use


Percent of students who consumed at least one drink of alcohol during the past 30 days
100
50
0
PERCENT
2007
2009
19
10
21
18
34
32
36
39
59
34
31
26
30
29
31
27
8
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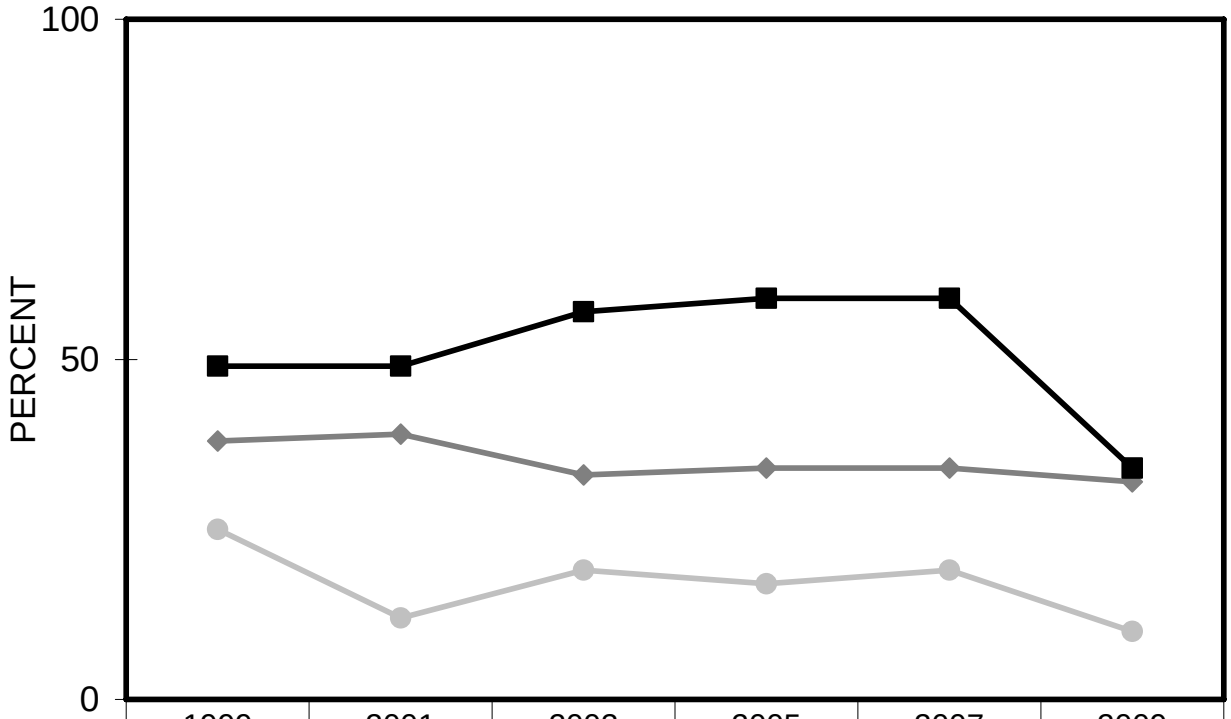
F
M
ALL
GRADE
GENDER

Alcohol Use

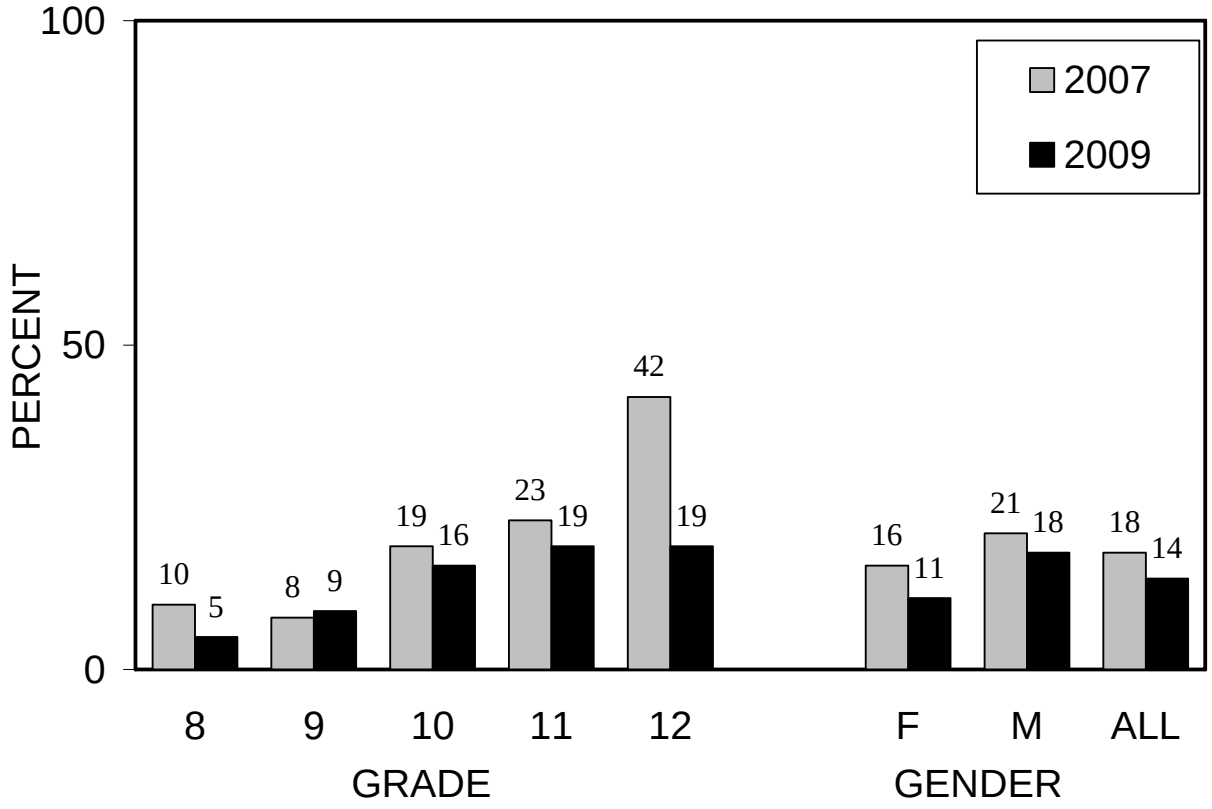
Percent of students who consumed at least one drink of alcohol during the past 30 days



	1999	2001	2003	2005	2007	2009
8th Grade	25	12	19	17	19	10
10th Grade	38	39	33	34	34	32
12th Grade	49	49	57	59	59	34

Alcohol Use

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



Alcohol Use

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who:									
Have ever had a drink of alcohol, other than a few sips	51	53	28	41	58	64	74	54	51
First consumed alcohol, other than a few sips, prior to age 13	17	16	14	14	17	18	12	12	20
Drank alcohol on 3 to 9 days during the past 30 days	11	9	2	6	11	14	10	10	8
Drank alcohol on 10 or more days during the past 30 days	4	4	4	2	1	4	3	1	6
Binged on alcohol 3 or more days in the past 30 days	8	5	2	2	5	6	6	4	6
Drank alcohol *on school property* during the past 30 days	3	4	3	2	3	7	3	2	7

▪ Alcohol Use

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
Percent of students who report usual type of alcohol as:									
Liquor	50	56	60	55	58	58	45	55	56
Beer	25	21	20	7	26	23	26	12	29
Malt Beverages	14	16	13	21	16	11	23	22	11
Wine	9	6	0	14	0	6	6	8	3
Wine Coolers	2	1	7	3	0	2	0	3	0

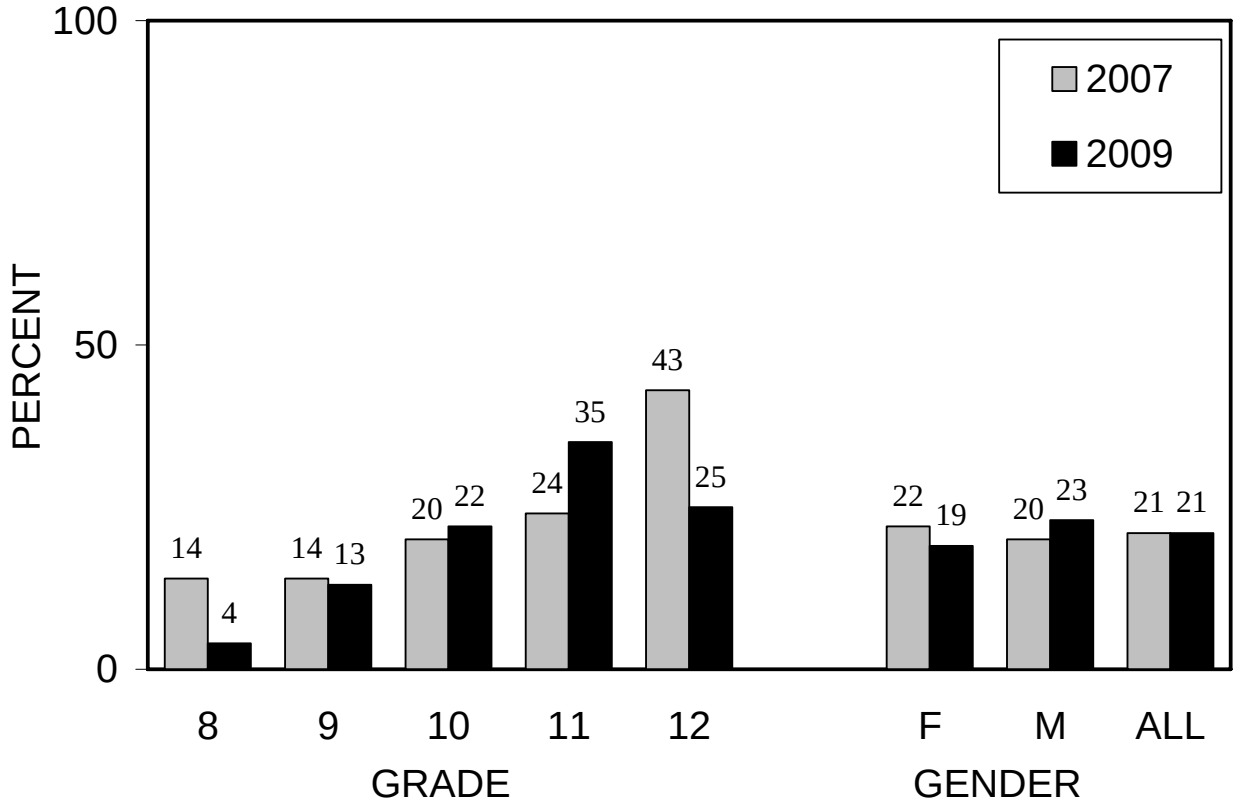
▪ Alcohol Use

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
Percent of students who report usual source of alcohol:									
Bought it in a store	1	4	15	0	2	6	2	0	8
Bought it in a liquor store	1	3	10	0	2	0	4	0	6
Bought in at a restaurant, bar, or club	1	1	0	0	0	2	0	0	1
Gave someone money to buy it for me	18	23	5	6	20	34	24	16	28
Someone gave it to me	46	48	40	62	42	45	64	67	33
Got it or stole it from home	23	17	25	26	29	9	5	16	17
Stole it in a store or restaurant	9	4	5	6	4	3	2	1	7

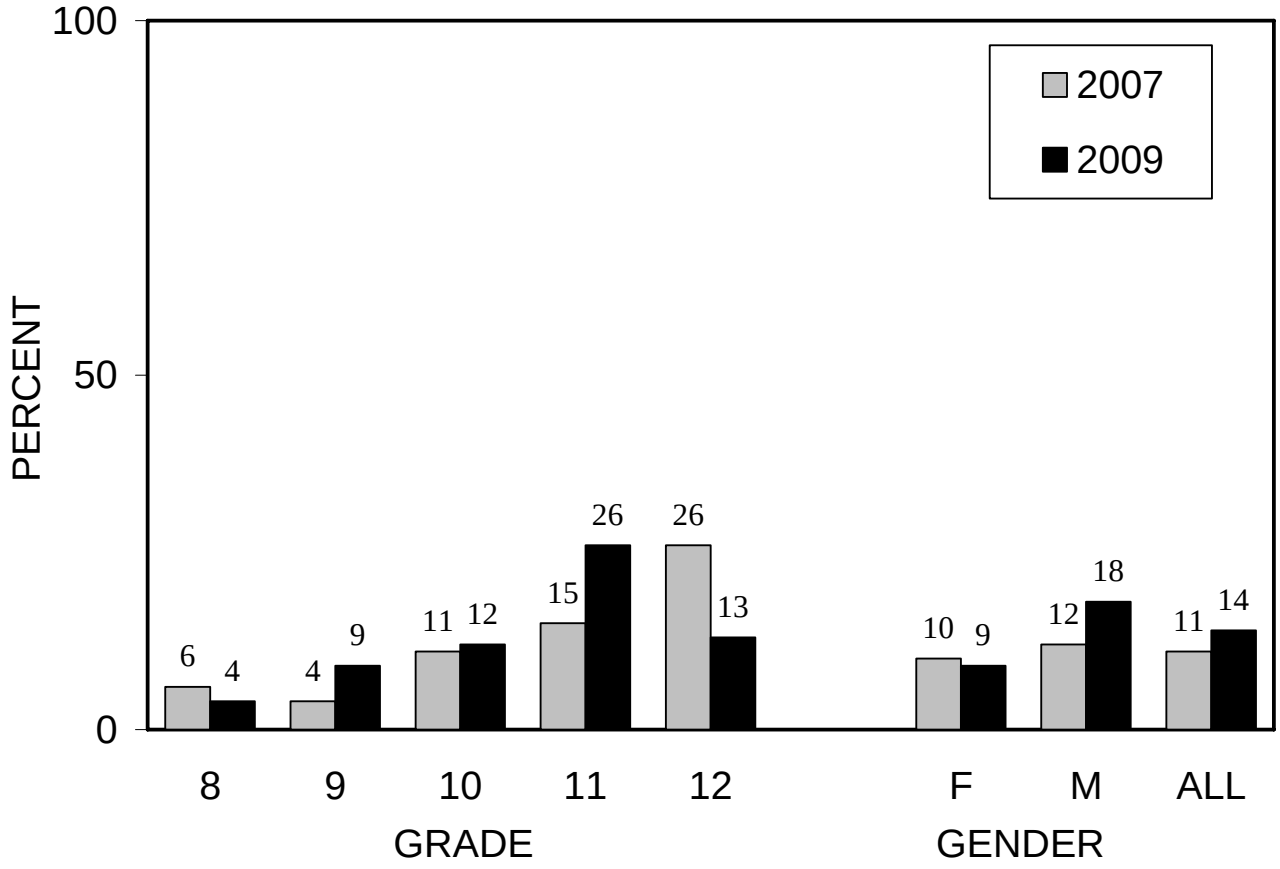
Tobacco Use

Percent of students who have ever smoked a whole cigarette



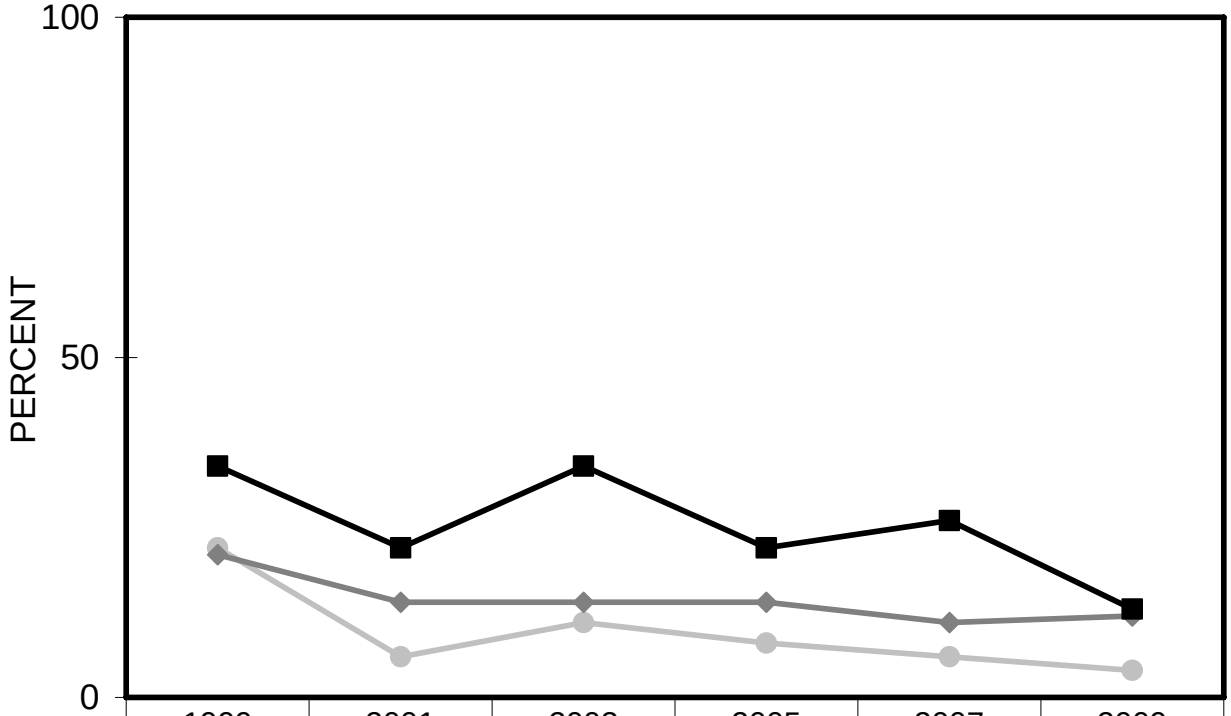
Tobacco Use

Percent of students who smoked cigarettes during the past 30 days



Tobacco Use

Percent of students who smoked cigarettes during the past 30 days



	1999	2001	2003	2005	2007	2009
8th Grade	22	6	11	8	6	4
10th Grade	21	14	14	14	11	12
12th Grade	34	22	34	22	26	13

▪ Tobacco Use

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who:									
Smoked a whole cigarette prior to age 13	9	8	4	5	9	9	9	5	11
Smoked every day during the past 30 days	4	5	2	2	2	10	6	1	8
Smoked more than 10 cigarettes on days smoked during the past 30 days	2	3	2	2	1	5	3	0	5
Smoked more than a pack on days smoked during the past 30 days	1	2	1	2	1	2	1	0	3
Used chewing tobacco or snuff during the past 30 days	4	5	3	3	5	7	6	1	9
Smoked cigars, cigarillos, or little cigars during the past 30 days	NA	13	4	10	16	16	16	8	17

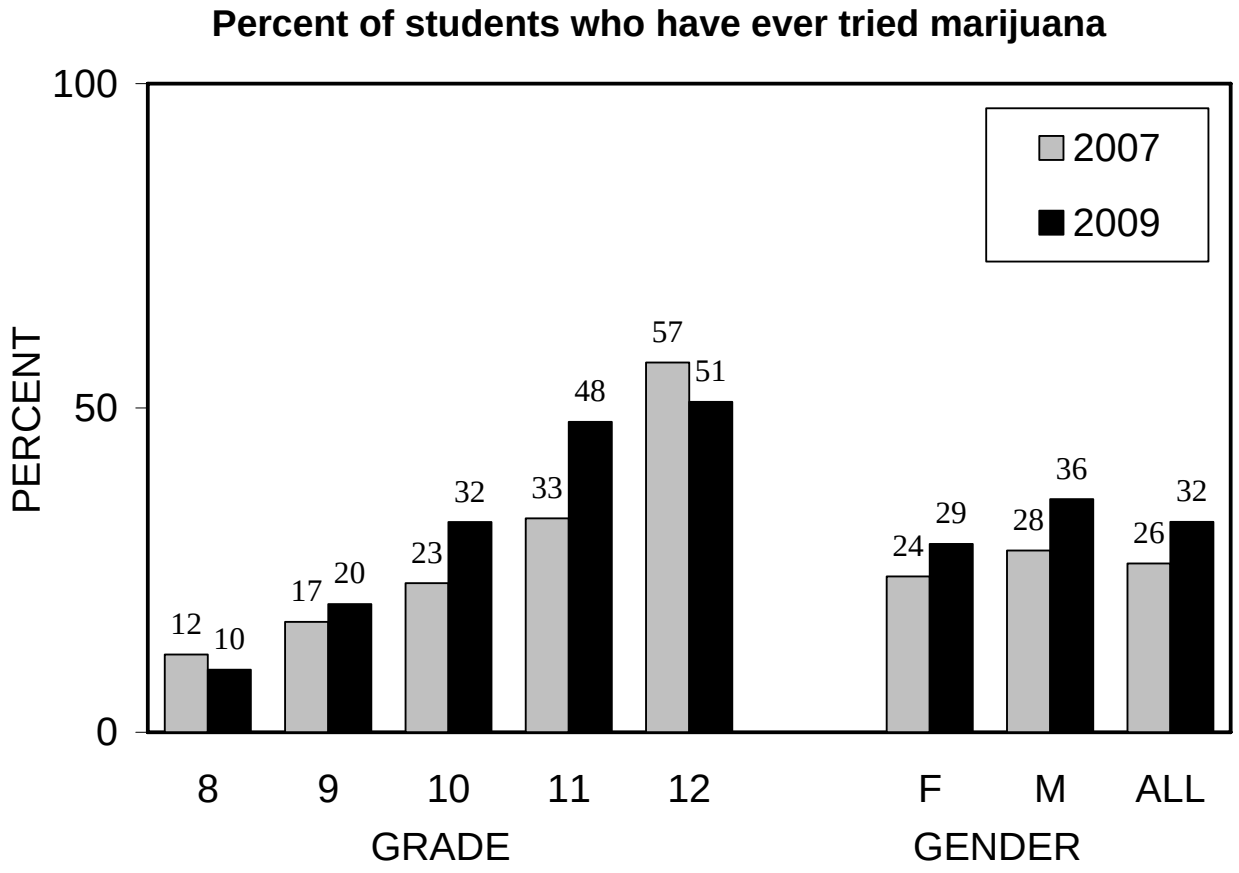
NA = Not available; Not asked in 2007

Tobacco Use

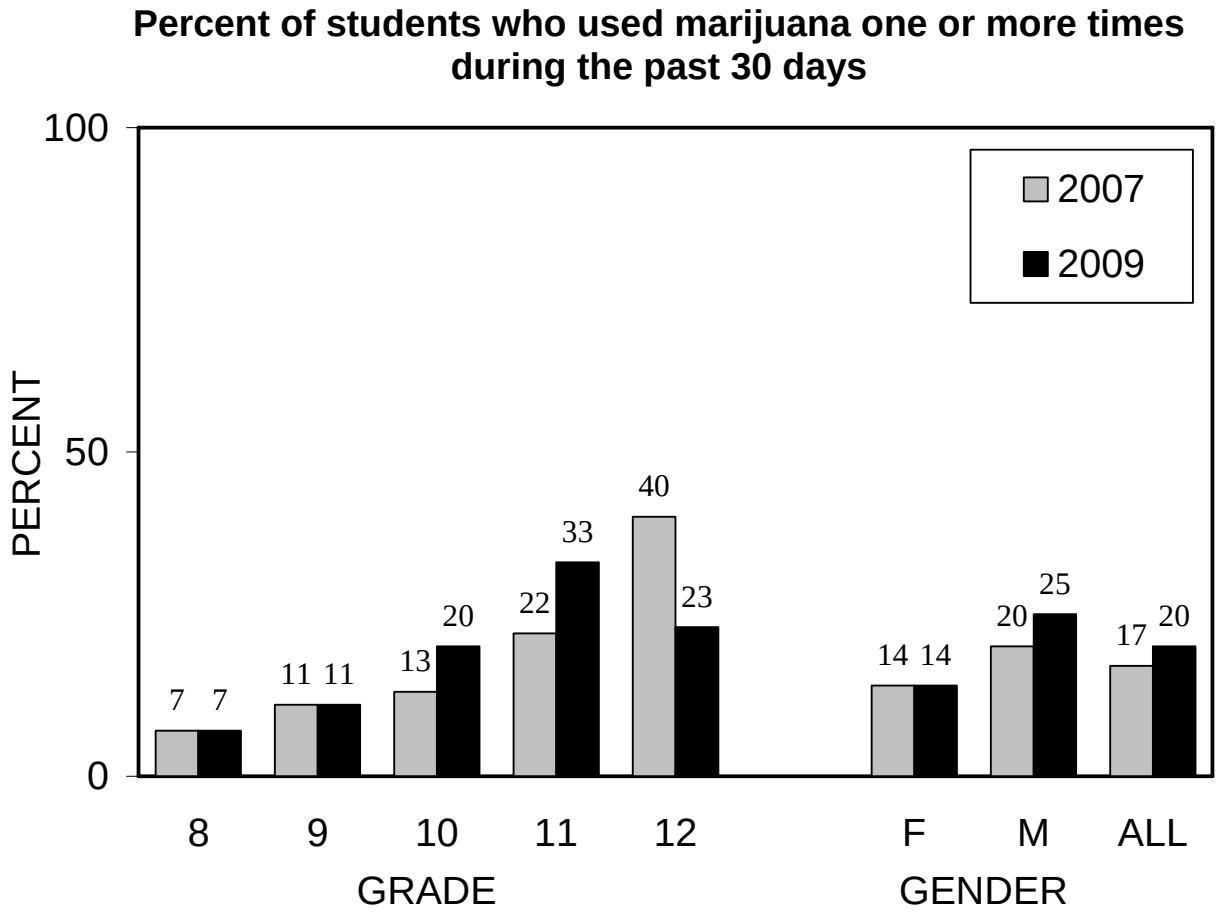
	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who, during the past 7 days:									
Were in the same room with someone who was smoking cigarettes	41	35	25	31	34	47	28	33	36
Were in a car with someone who was smoking cigarettes	24	26	21	19	25	36	22	24	28
Percent of students who think:									
Most high school students smoke cigarettes (55%+)	NA	11	14	8	10	15	8	10	13

NA = Not Available; New question in 2009

Marijuana Use

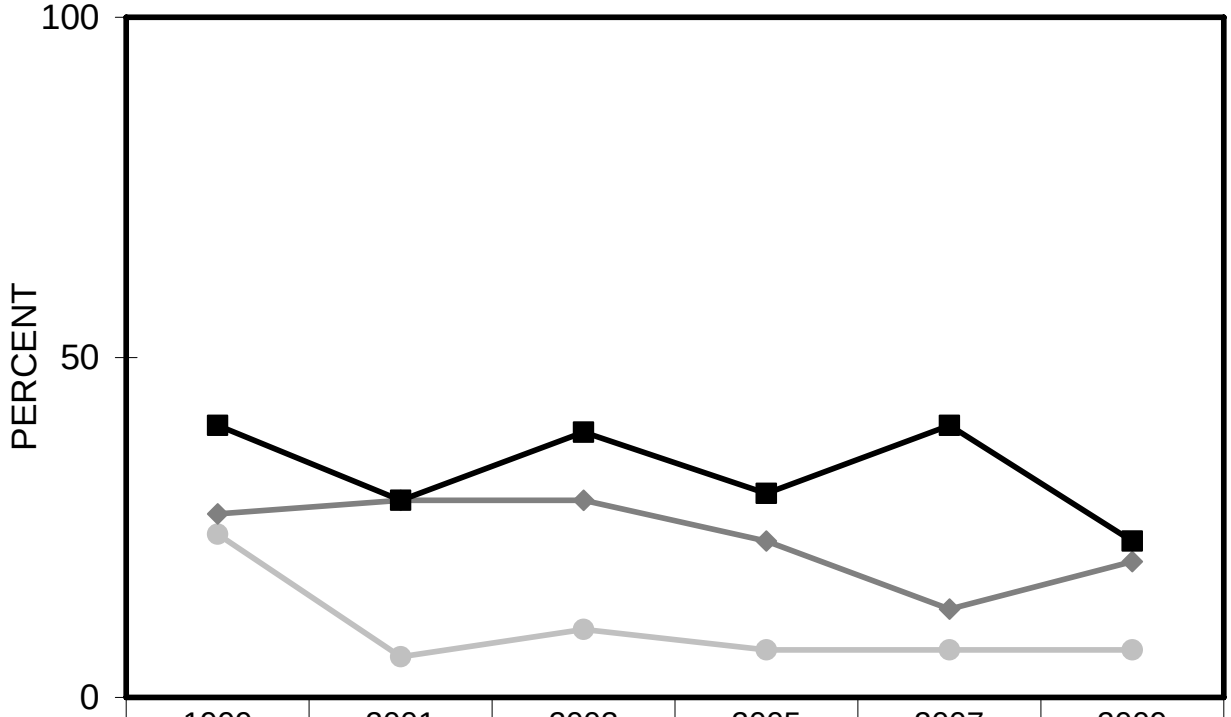


Marijuana Use



Marijuana Use

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



	1999	2001	2003	2005	2007	2009
8th Grade	24	6	10	7	7	7
10th Grade	27	29	29	23	13	20
12th Grade	40	29	39	30	40	23

Marijuana Use

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who:									
Used marijuana prior to age 13	7	7	6	5	5	8	8	4	11
Used marijuana 3 to 9 times during the past 30 days	4	5	1	3	8	9	8	5	5
Used marijuana 10 or more times during the past 30 days	8	9	2	4	7	17	9	3	14
Used marijuana one or more times *on school property* in the past 30 days	6	8	3	3	7	14	9	4	11

▪ Prescription Drug Use

Percent of students who have ever taken a prescription pain reliever or stimulant not prescribed to them

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who have ever used:									
A prescription stimulant, such as Ritalin or Adderall, not prescribed to them	NA	7	2	4	9	10	9	5	9
A prescription pain reliever, such as Oxycontin, Vicodin, or other prescription pain killer, not prescribed to them	NA	13	8	6	15	20	14	10	17
Either a prescription stimulant or a prescription pain reliever not prescribed to them	14	15	8	6	19	21	16	12	18

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.

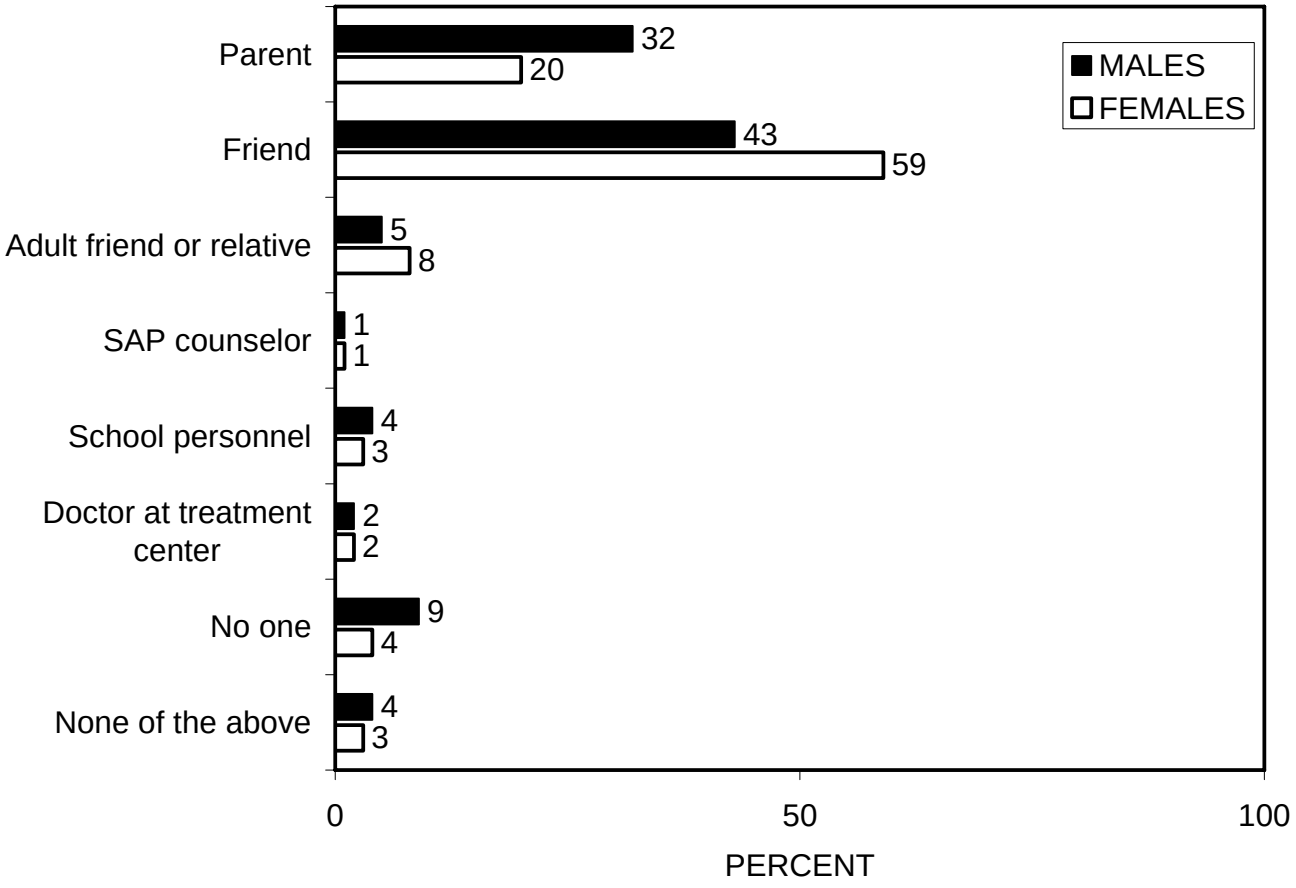
NA = Not available

Other Drug Use

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who used cocaine during the last 30 days	5	5	3	3	7	6	5	2	9
Percent of students who during their lifetime have:									
Taken steroid pills or shots without a prescription	3	3	3	2	4	3	3	1	5
Used inhalants	11	10	10	8	10	9	9	8	12
Used heroin	3	4	4	3	5	4	3	1	7
Used methamphetamines	5	5	3	3	5	5	4	1	8
Used hallucinogens	9	10	3	5	8	15	14	5	14
Used a needle to inject any illegal drug into their body	3	4	3	3	3	2	4	1	6
Percent of students who were offered, sold, or given an illegal drug *on school property* during the past 12 months	20	22	4	18	31	28	27	17	26

Seeking Help

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 ATOD 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 these substances, their perception of how wrong their parents and other adults in their community think it is for someone their age to use these substances, and how harmful they think it is to use alcohol, tobacco, and marijuana.

- **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.[33]

- **Perceived harmfulness of alcohol, tobacco, and marijuana:** The perception of risk in using alcohol and other drugs is an important factor in decreasing use. Data have shown that as perception of harmfulness decreases, there is a tendency for use to increase.[33] 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 if the perception is accurate.[33]

▪ Disapproval of ATOD Use

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who think their parents think it is *wrong or very wrong* for them to:									
Smoke cigarettes	94	93	98	98	93	85	91	95	90
Drink alcohol	84	82	95	87	85	74	77	87	77
Use marijuana	92	88	96	92	90	80	86	93	84
Percent of students who think it is *wrong or very wrong* for someone their age to:									
Smoke cigarettes	81	77	94	83	76	62	72	79	74
Drink alcohol	55	54	81	63	51	38	38	57	51
Use marijuana	69	65	89	72	63	51	50	70	60

▪ Perceived Harmfulness of ATOD Use

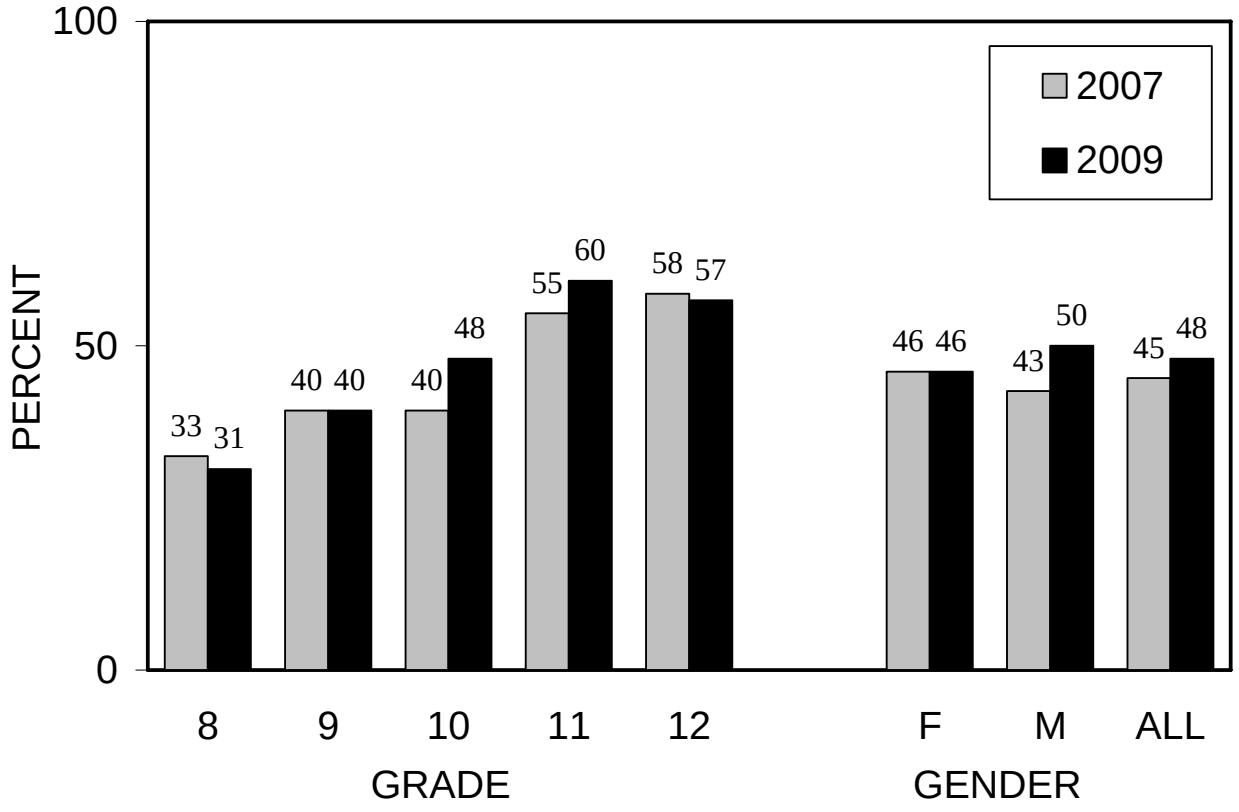
	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who think that there is *great* risk in people harming themselves from:									
Smoking one or more packs of cigarettes/day	72	71	76	70	70	66	77	76	67
Drinking one or two alcoholic drinks nearly every day	27	27	31	31	24	18	25	33	22
Using marijuana regularly	53	49	67	57	44	33	42	56	43

▪ Perceived Availability of ATOD

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who report that it is *sort of easy or very easy* to get:									
Cigarettes	55	58	24	50	64	75	77	56	60
Alcohol	70	70	56	66	78	75	78	71	70
Marijuana	50	55	22	44	71	69	75	52	59

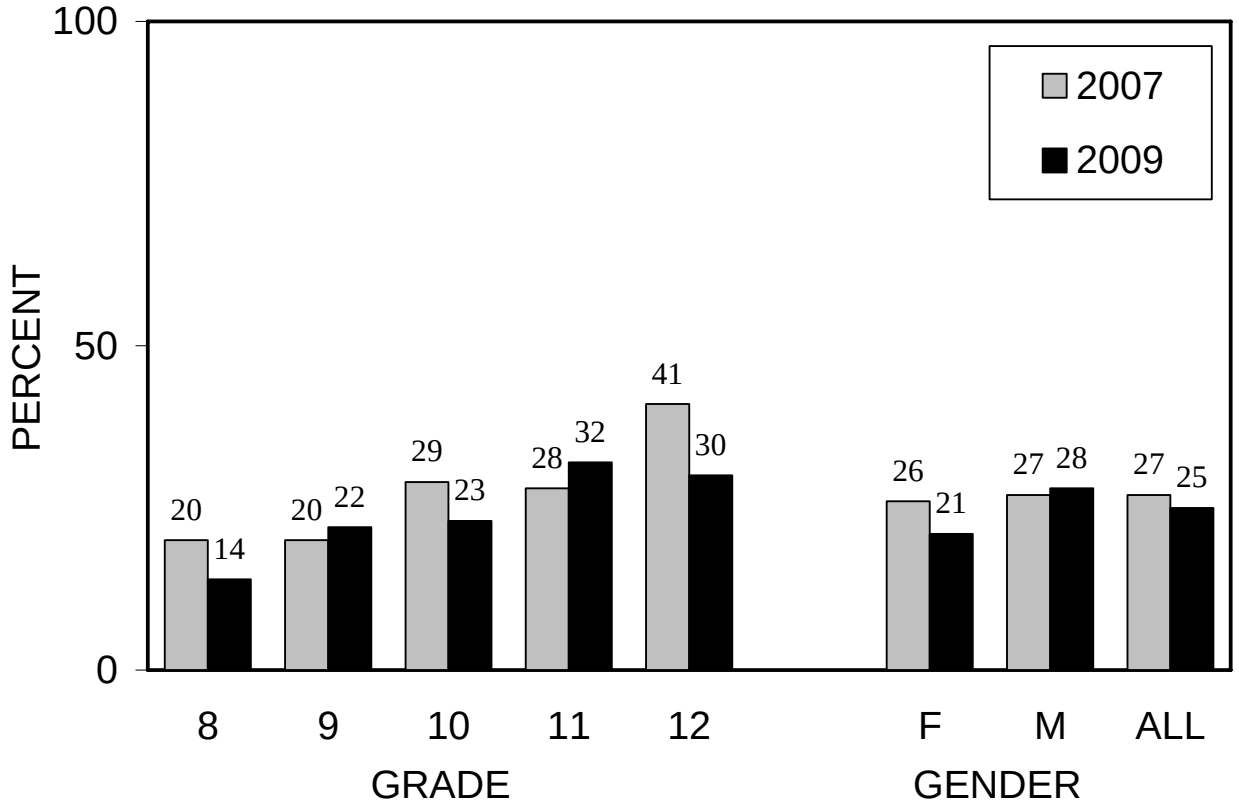
▪ Perceived Availability of ATOD

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



Perceived Availability of ATOD

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



✓ Sexual Behavior and Orientation

The questions 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.

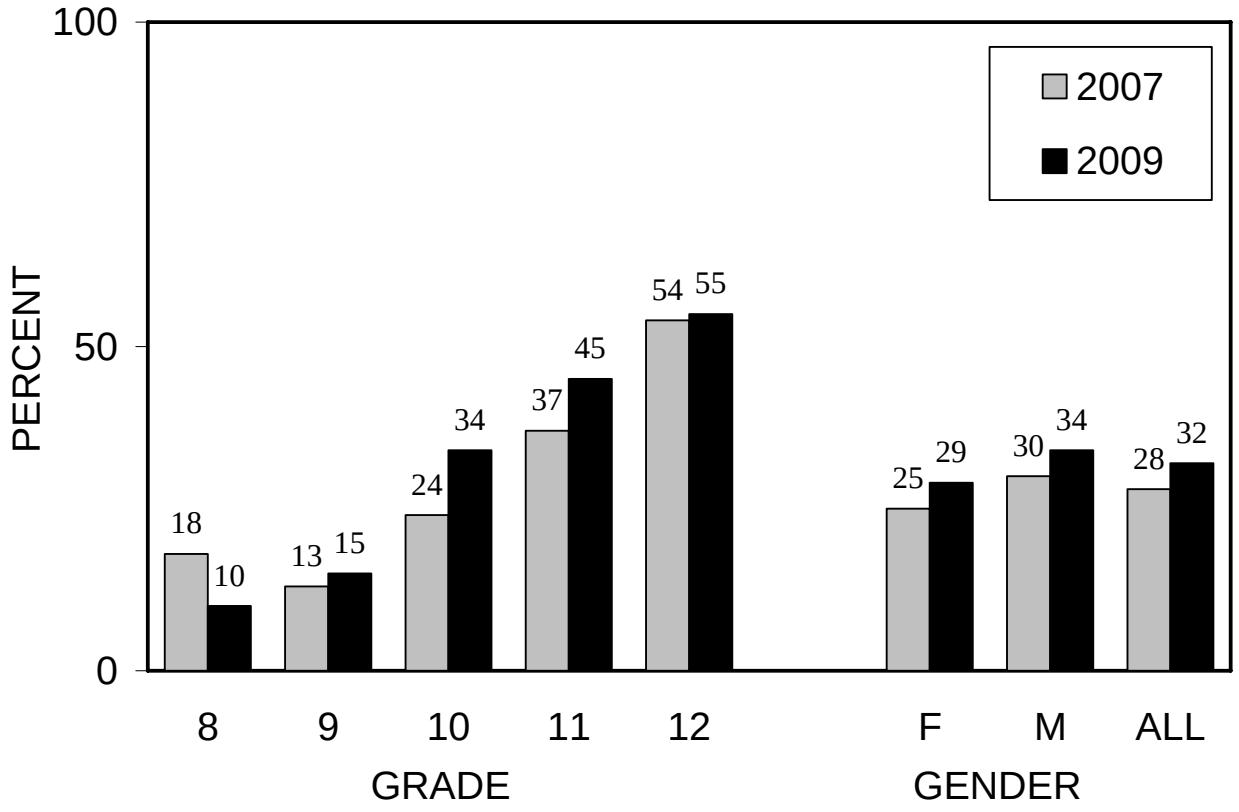
- **Early sexual activity** and having multiple sexual partners are associated with an increased risk of unwanted pregnancy and sexually transmitted diseases (STDs), including HIV infection,[34] and negative effects on social and psychological development.[35] Alcohol and drug use may serve as predisposing factors for initiation of sexual activity and unprotected sexual intercourse.[36] Of the nearly 19 million new cases of STDs per year in the United States, almost half are among youth 15-24.[37] STDs may result in infertility and facilitation of HIV transmission and may have an adverse effect on pregnancy outcomes and maternal and child health.[35]
- **AIDS** is the eighth leading cause of death for youth aged 15 to 24 in the U.S.[7] It is estimated that 34 percent of new cases of HIV infection in 2006 occurred in people aged 13 to 29.[38] 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.[39]

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.

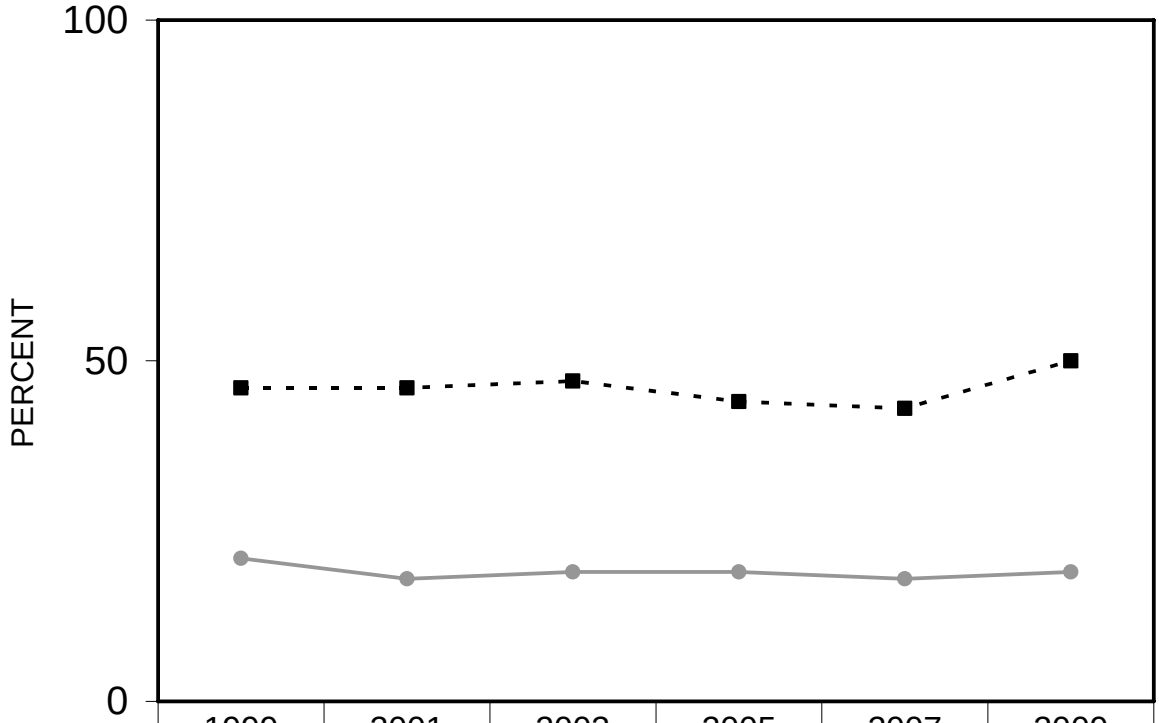
Sexual Behavior

Percent of students who have ever had sexual intercourse



Sexual Behavior

Percent of students who have ever had sexual intercourse



	1999	2001	2003	2005	2007	2009
8th-10th Grade	21	18	19	19	18	19
11th-12th Grade	46	46	47	44	43	50

Sexual Behavior

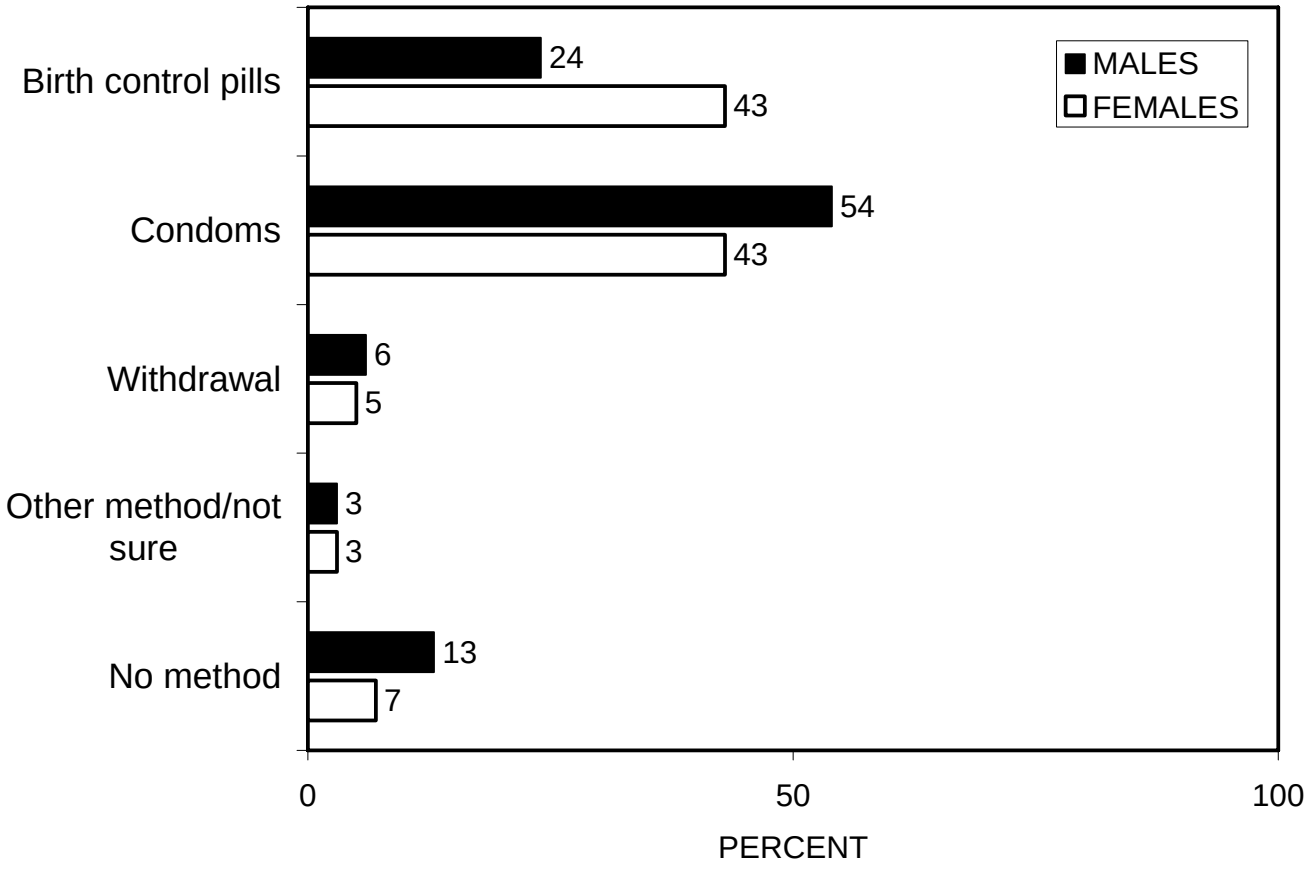
	ALL		GRADE		GENDER	
	2007	2009	8-10	11-12	F	M
Percent of students who:						
Have had 4 or more lifetime sex partners	8	10	6	14	6	14
First had sexual intercourse prior to age 13	6	5	5	5	2	8
Have ever been tested for HIV	N/A	8	7	9	8	7
Used drugs or alcohol before their most recent sexual experience*	27	24	21	23	13	33
Used a condom during their most recent sexual experience*	70	65	66	65	62	68

NA = Not available; New question in 2009

***** NOTE: Includes only students who said that they have had sexual intercourse.

Sexual Behavior

What method did you or your partner use to prevent pregnancy the last time you had sexual intercourse?*

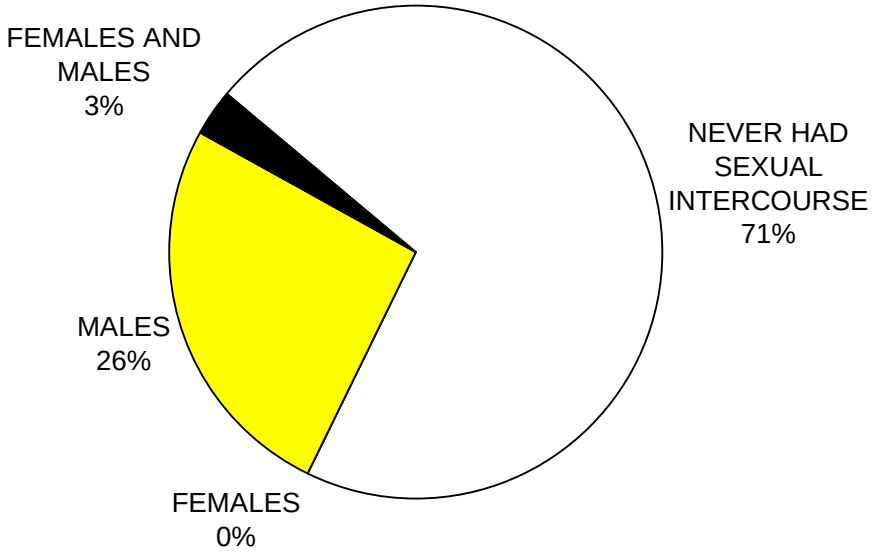


*NOTE: Includes only students who said that they have had sexual intercourse

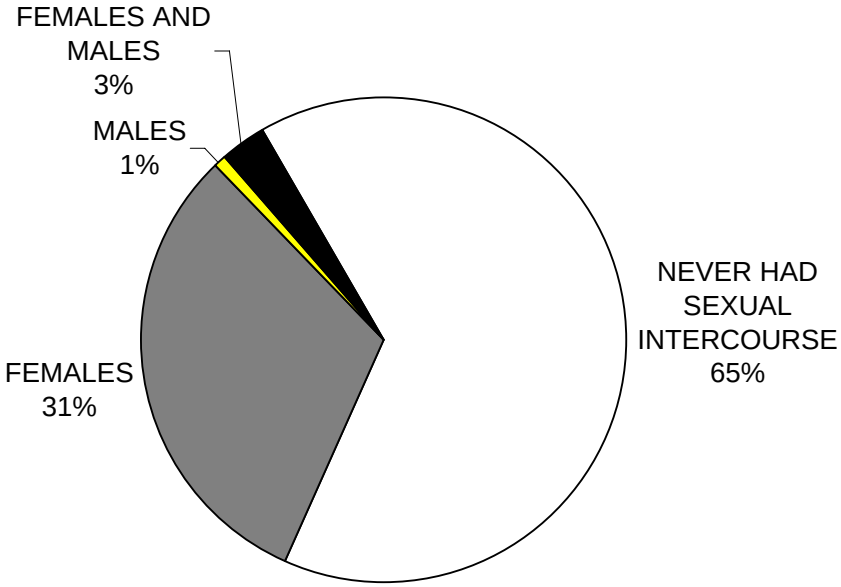
▪ Sexual Behavior

The persons with whom you have had sexual intercourse are:

FEMALES



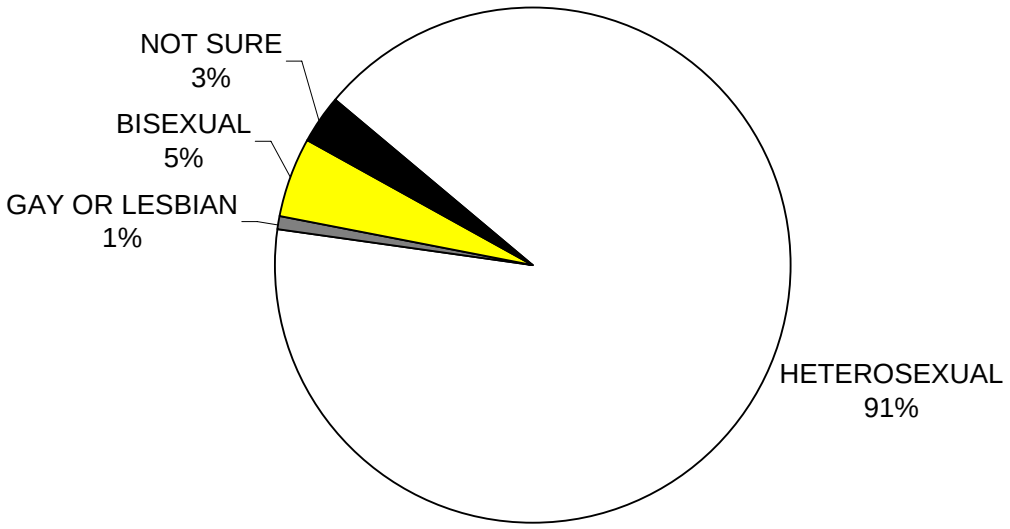
MALES



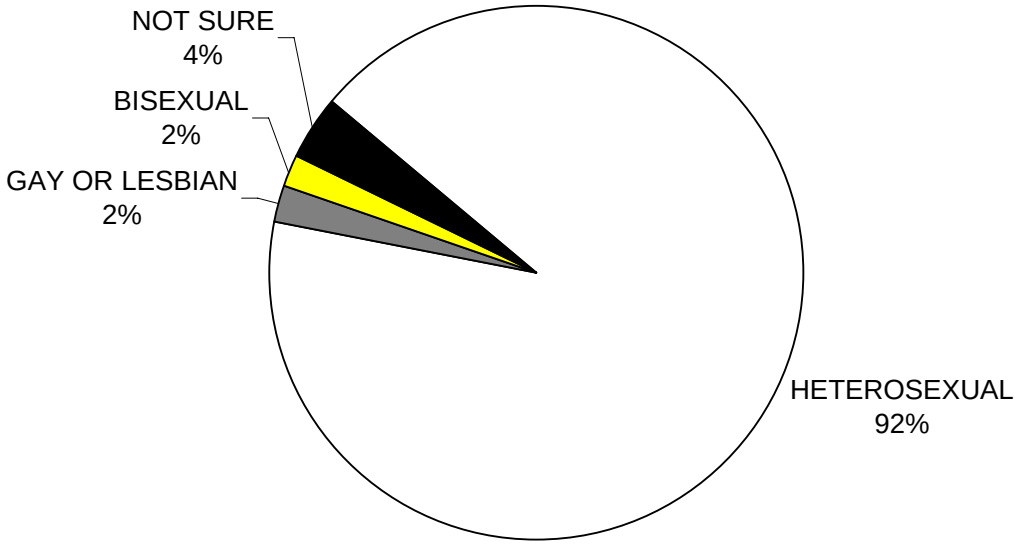
▪ Sexual Orientation

Self-reported sexual orientation

FEMALES



MALES



✓ 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 inquire about how often students eat breakfast, eat fruits and vegetables, drink milk, and drink soda.

- In the U.S., there are more than three as many overweight children and adolescents than there were in 1980.[40] Overweight and obesity acquired during childhood or adolescence may persist into adulthood.[41] 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.[25] 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.[42] However, overemphasis on slenderness during adolescence may contribute to eating disorders such as anorexia nervosa and bulimia.[43,44] 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.[45,46] An estimated 7-8% of females in the U.S. suffer from anorexia nervosa and/or bulimia nervosa during their lifetime.[47]

- **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.[48-53] 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.[54,55] 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.[52,55] 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.[56, 57]

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 fruit.
- Increase the percentage of people who eat at least three daily servings of vegetables.

Body Weight

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who are overweight (85th BMI percentile)	12	11	10	11	12	12	11	10	12
Percent of students who are obese (95th BMI percentile)	11	11	10	11	5	13	13	9	13

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 ≥ 95th percentile for age and sex, and “at risk for overweight” for those with a BMI ≥ 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

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who describe themselves as:									
Underweight	14	13	14	17	11	9	15	9	17
About the right weight	61	62	65	56	62	67	63	62	62
Overweight	26	25	21	27	27	25	22	29	21
Percent of students who are:									
Trying to lose weight	37	36	30	34	40	35	38	49	22
Trying to gain weight	13	16	13	14	16	17	18	4	26
Trying to stay the same weight	23	19	21	18	21	19	20	21	19
Doing nothing about their weight	27	29	37	33	23	30	25	26	33
Percent of students who, during the past 30 days:									
Vomited or took laxatives	5	4	3	5	5	2	3	4	3
Took diet pills, powders, or liquids	4	3	4	2	5	2	2	4	3

Nutrition

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who:									
Eat breakfast 3 days a week or more	81	78	85	81	76	77	75	79	76
Eat breakfast every day	50	50	55	55	53	42	45	46	54
Eat 2 or more servings of fruit per day	41	45	49	43	49	48	41	44	46
Eat 3 or more servings of vegetables per day	20	24	24	24	28	24	20	21	27
Eat 5 or more servings of fruits and vegetables per day	28	32	35	31	40	34	27	30	35
Drink 1 or more glasses of *milk* per day	62	63	68	68	64	61	56	60	66
Drink 3 or more glasses of *milk* per day	26	26	28	28	26	26	19	22	30
Drink 1 or more glasses of *soda* per day	21	18	16	14	18	25	18	10	26
Drink 3 or more glasses of *soda* per day	8	7	6	5	10	9	4	2	11

✓ 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.

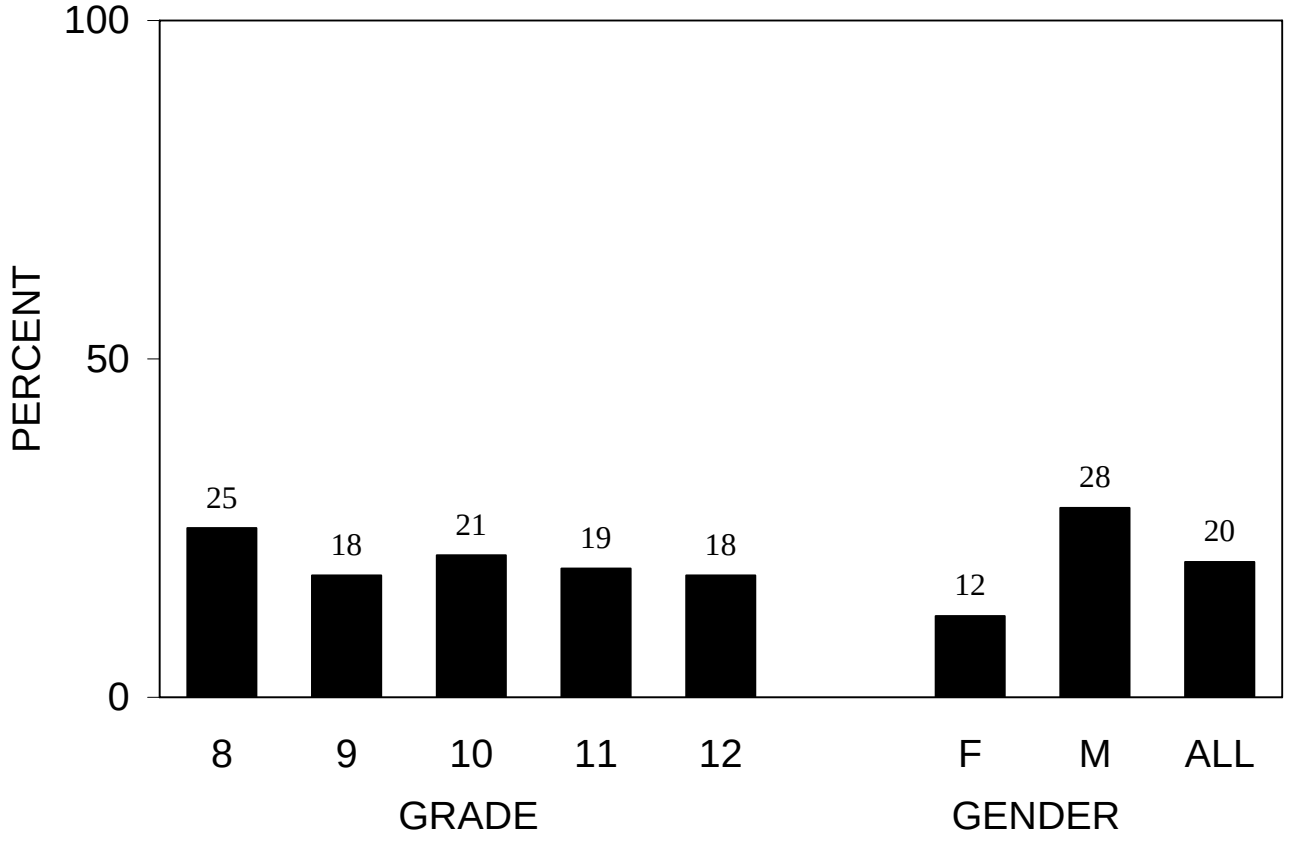
- **Regular physical activity** helps build and maintain healthy bones and muscles, control weight, build lean muscle and reduce fat, and reduces feeling of depression and anxiety.[55,58] In the long term, regular physical activity decreases the risk of dying prematurely, dying of heart disease, and developing diabetes, colon cancer, and high blood pressure.[58] 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.[58]
- **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.[59] 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.[60-63]
- **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[63,64] and violent or aggressive behavior.[65-67] Using the computer for fun and playing video games have become increasingly common sedentary leisure time activities among young people as well.

Related *Healthy Vermonters 2010* Goals:

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

Physical Activity

Percent of students who participated in at least 60 minutes of physical activity every day during the past 7 days, per the U.S. Department of Health and Human Services guidelines



Physical Education

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who participated in:									
Physical education classes at least once during an average week	54	56	99	93	32	22	19	51	60
Physical education classes 5 days during an average week	5	6	3	16	2	6	3	5	7

▪ TV and Computer Games

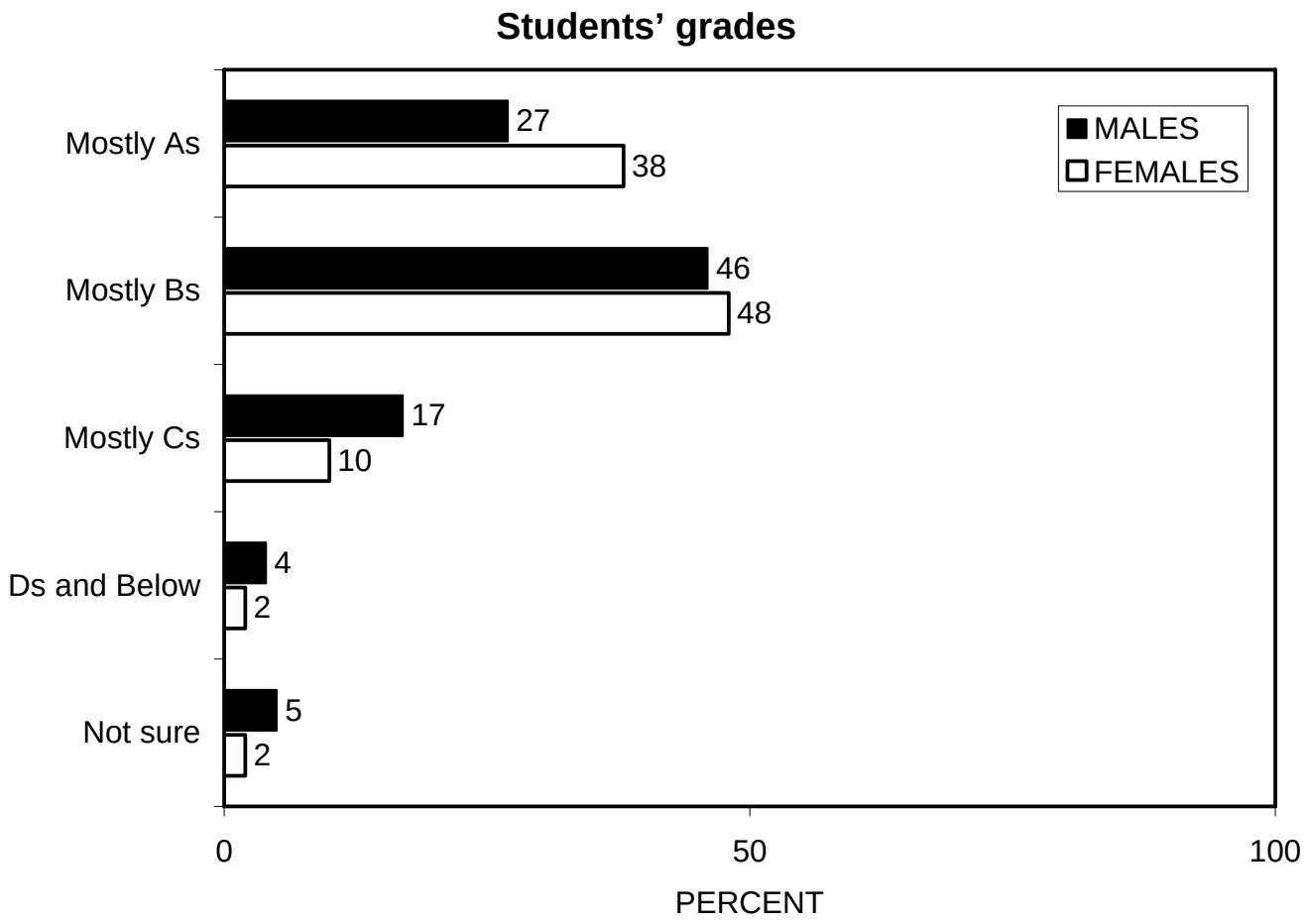
	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who:									
Spend 3 or more hours per school day watching TV or playing on the computer	34	34	30	31	34	39	35	27	40
Spend 5 or more hours per school day watching TV or playing on the computer	9	10	6	10	11	15	8	6	14

✓ 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 about students' role in deciding what happens in school, and their perception of how they are valued by their communities.

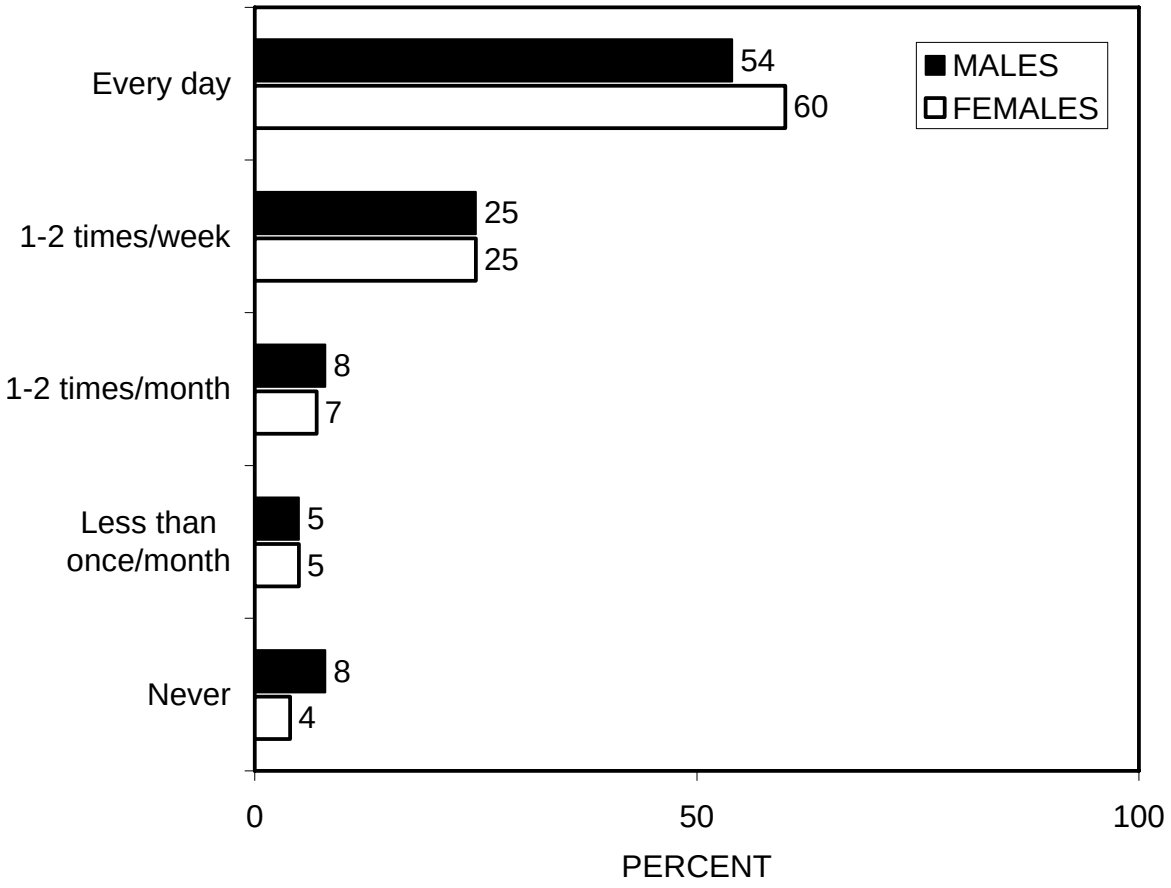
- **Grades in School:** Above-average school performance is viewed as one of many developmental assets, or factors promoting positive development, for youth. Studies have shown that students who get higher grades in school are less likely to use cigarettes, alcohol, or marijuana, and are more likely to postpone sexual intercourse.[68]
- **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.[71] 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.[70]
- **Family meals:** Mealtimes can be important opportunities for family members to connect with one another and strengthen relationships.[71] 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.[71,72] 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.[72] Parents' presence at family meals is also associated with adolescents' higher consumption of fruits, vegetables, and dairy foods.[73]
- **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.[76] In addition, evidence is emerging that students who participate in such activities are also more likely to engage in other "thriving" behaviors.[77]
- **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



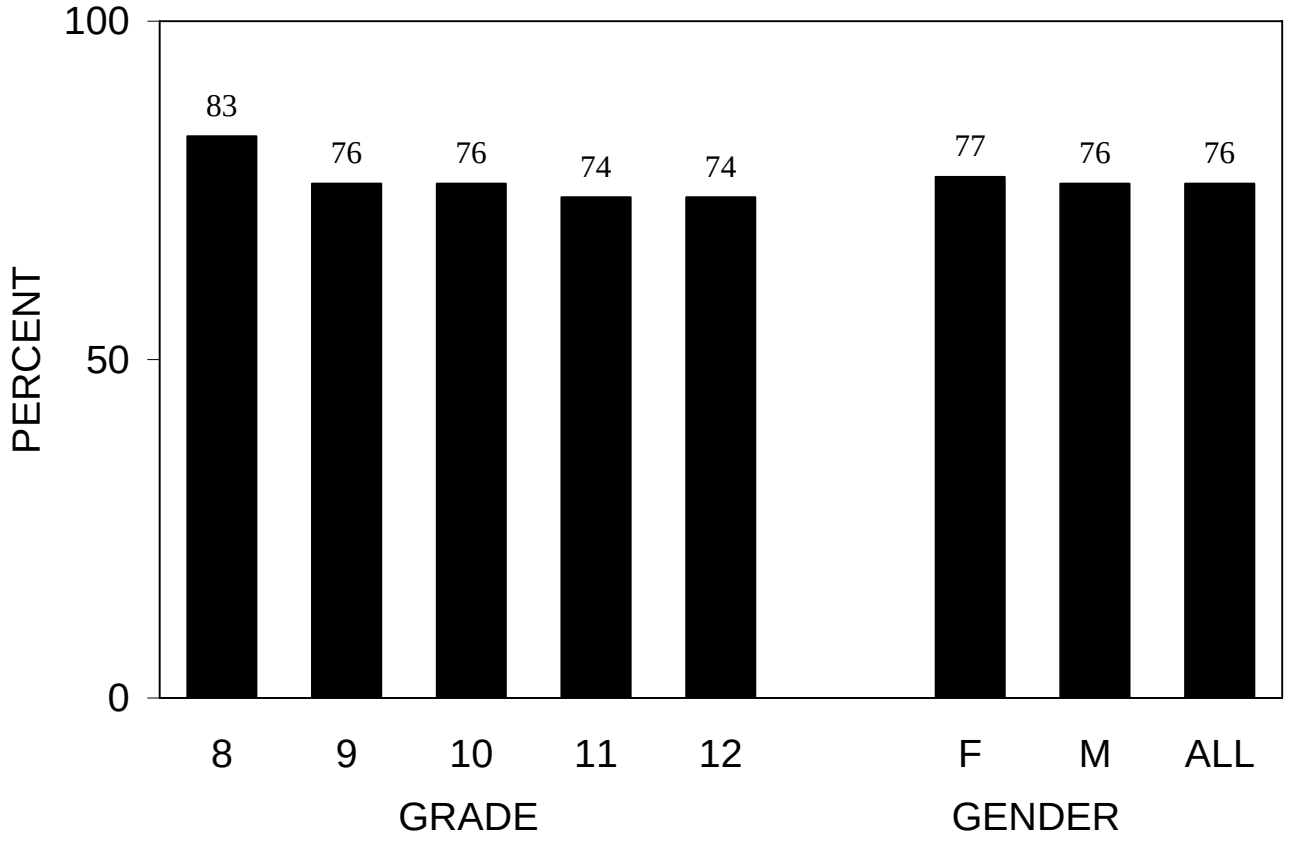
Measures of Youth Assets

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

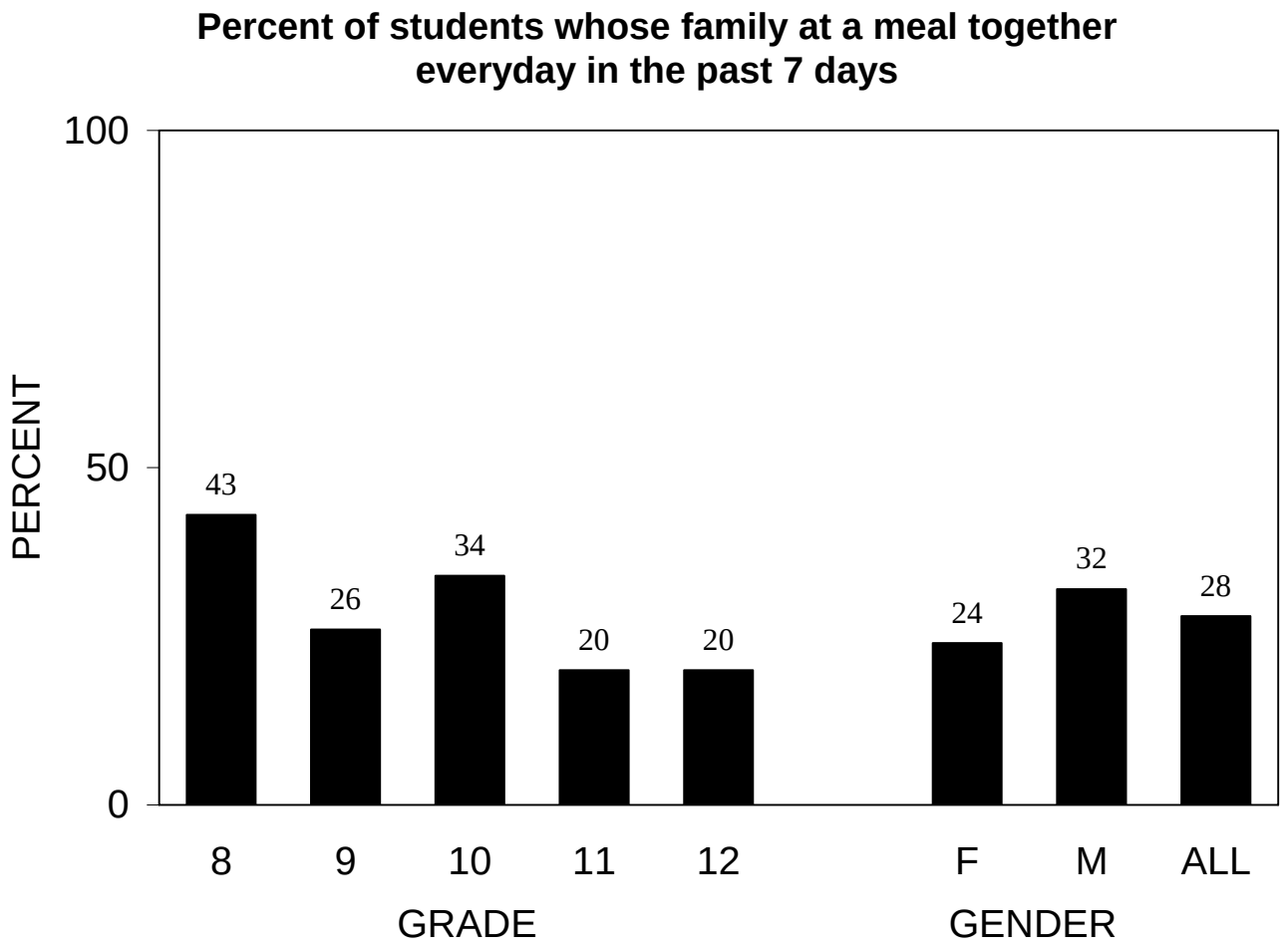


Measures of Youth Assets

Percent of students whose family ate a meal together at least 3 days in the past 7 days



Measures of Youth Assets



Measures of Youth Assets

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who:									
Spend 1 or more hours per week in clubs or organizations outside of school (not including sports)	26	26	21	28	32	23	27	30	23
Spend 3 or more hours per week in clubs or organizations outside of school (not including sports)	11	12	11	9	14	14	13	12	13
Spend 1 or more hours per week volunteering their time to make their community a better place to live	46	44	32	49	46	47	48	46	42
Spend 3 or more hours per week volunteering their time to help others make their community a better place to live	13	12	6	9	10	21	13	10	13

Measures of Youth Assets

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who agree with the following statements:									
Students help decide what goes on in my school	48	50	44	65	54	47	42	51	50
In my community, I feel like I matter to people	52	56	55	57	59	53	59	53	60
Percent of students who have an adult in their life they can usually turn to for help and advice	88	89	89	90	86	90	91	90	88

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