The 2009 Vermont Youth Risk Behavior Survey

Summary of Results for Participating Schools in the

LAMOILLE NORTH 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 Lamoille North Supervisory Union**. The school that participated was: Lamoille Union Middle and 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).

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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**	139	170	156	124	142	350	381	731
Number who participated	111	111	98	85	84	265	270	545*
Response rate	0.80	0.65	0.63	0.69	0.59	0.76	0.71	0.75

***** 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	89
Racial or Ethnic Minority	11
Mother's Education	
High school or less	37
Some college	17
College graduate	35
Not sure	11
Has an Individualized Education Plan (IEP)	11

✓ 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]

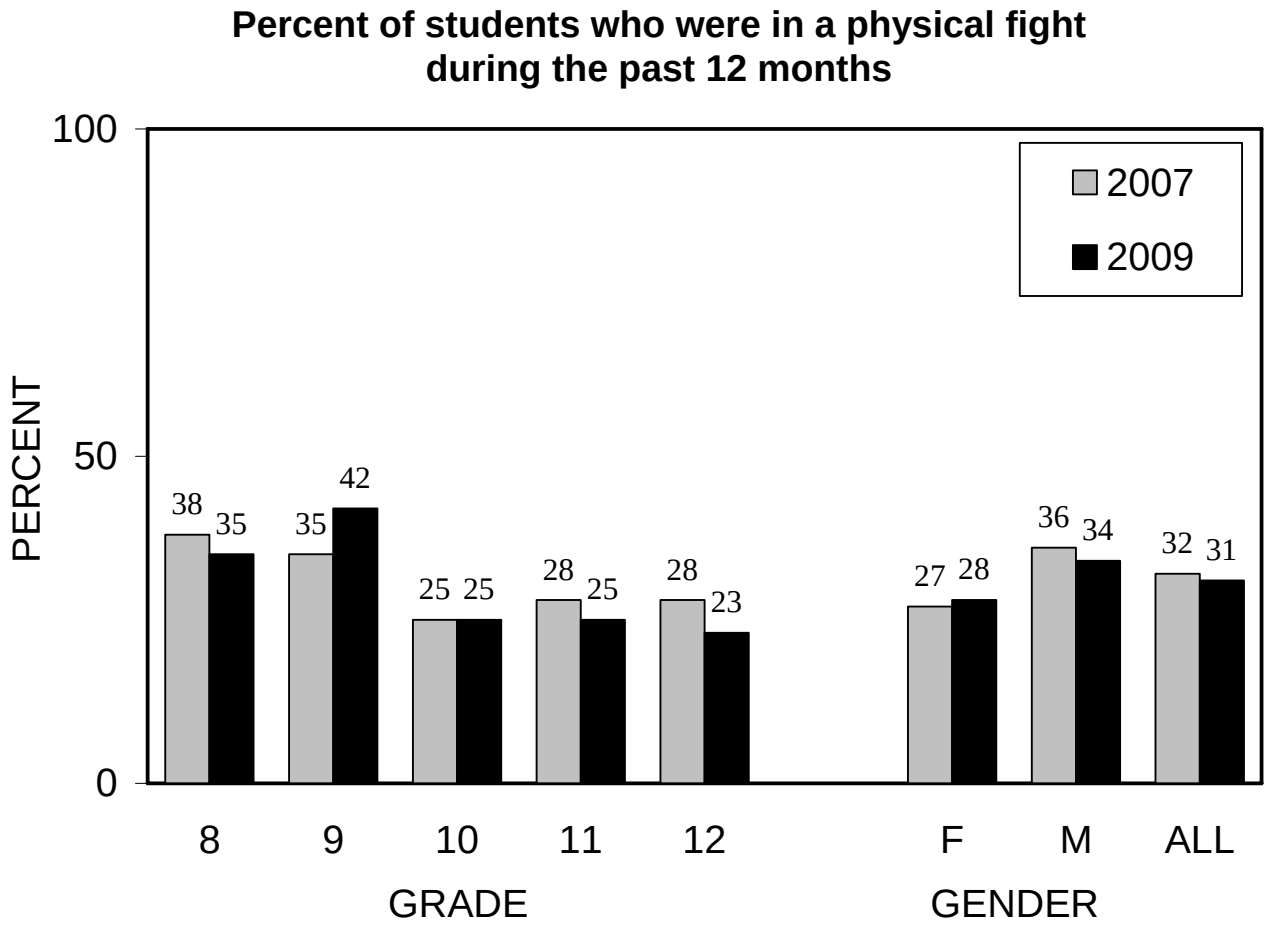
- **Suicide:** Suicide was the second leading cause of death among Vermont youth ages 15 to 19 from 2000 to 2006.[7] From 2003 to 2006, Vermont's suicide rate among 15 to 24 year olds was 8.0 deaths per 100,000, compared to 10.0 deaths per 100,000 nationwide.[7]

✓ Injuries, Violence, and Safety (cont.)

Related *Healthy Vermonters 2010* Goals:

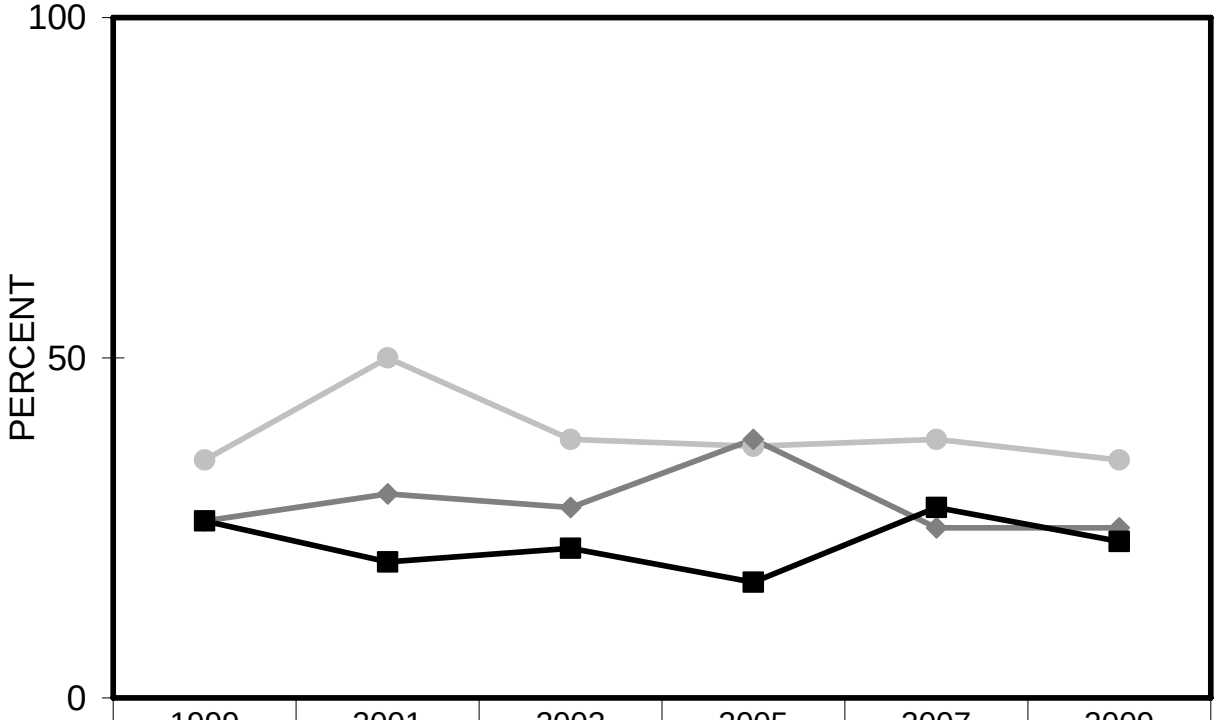
- Increase the percentage of people who always use safety belts to at least 92 percent.
- Further reduce physical assaults by intimate partners to less than 3.6 per 1,000 people age 12 and older.
- Reduce alcohol-related motor vehicle deaths to less than 4 per 100,000.
- Reduce suicide attempts by adolescents 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	35	50	38	37	38	35
10th Grade	26	30	28	38	25	25
12th Grade	26	20	22	17	28	23

▪ Physical Fighting

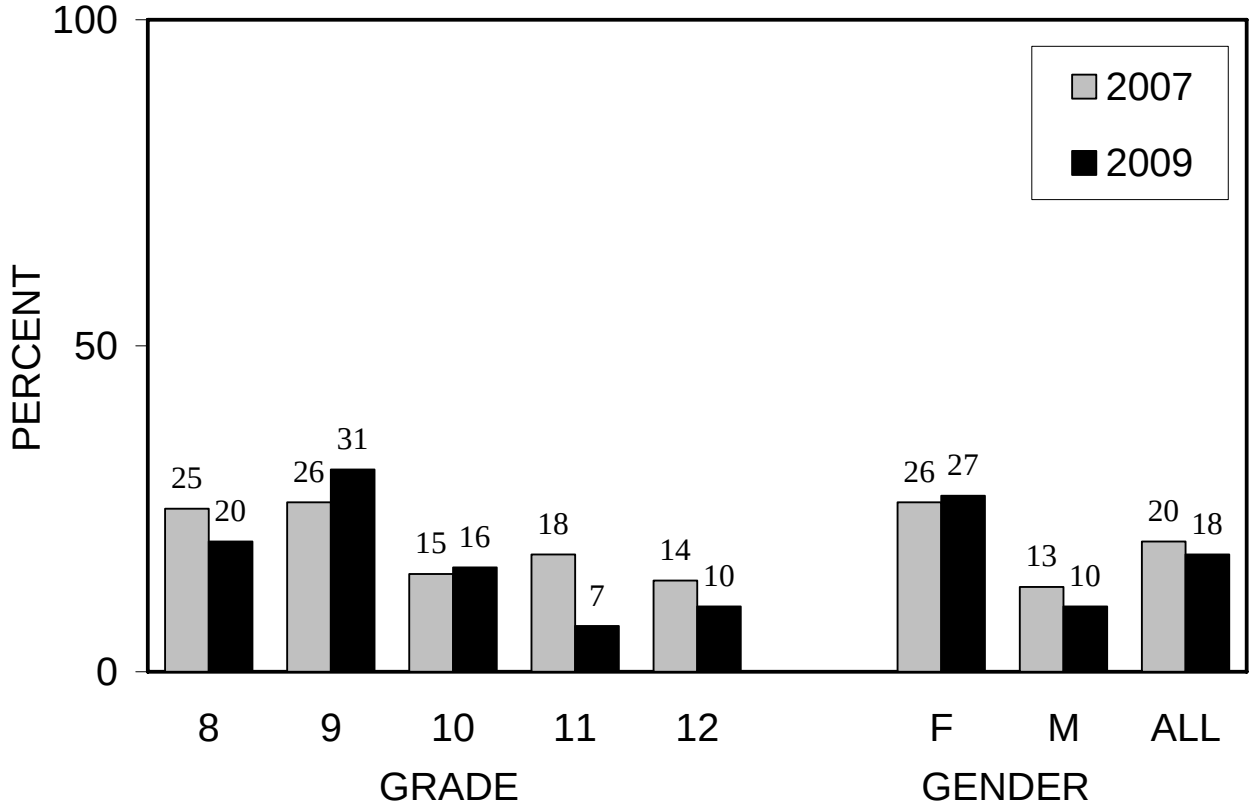
	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who:									
Did not go to school because they felt unsafe during the past 30 days	6	6	5	6	5	5	6	8	4
Carried a weapon such as a gun, knife, or club *on school property* during the past 30 days	12	11	7	14	10	16	7	5	17
Were threatened or injured with a weapon *on school property* during the past 12 months	8	7	6	14	5	1	8	7	8
Were in a physical fight *on school property* in the past 12 months	16	15	21	16	14	10	8	14	16
Were in a physical fight and had to be treated by a doctor or nurse	4	3	5	4	4	1	2	4	2

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	7	12	13	13	10	7	17	13	11
Percent of students who have ever been:									
Touched against their wishes or forced to touch someone else	16	15	16	18	12	11	15	27	4
Forced to have sexual intercourse	8	7	8	6	5	7	13	11	3

Bullying

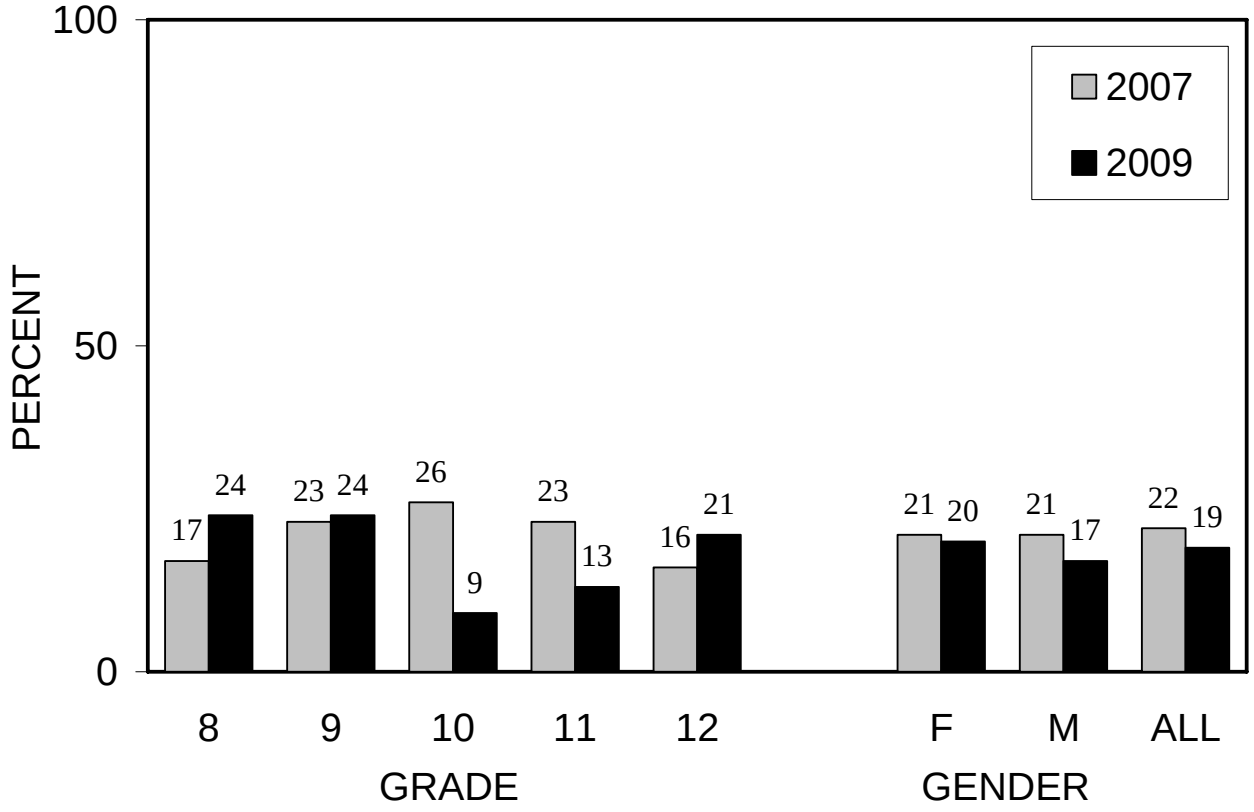
Percent of students who were bullied* during the past 30 days



***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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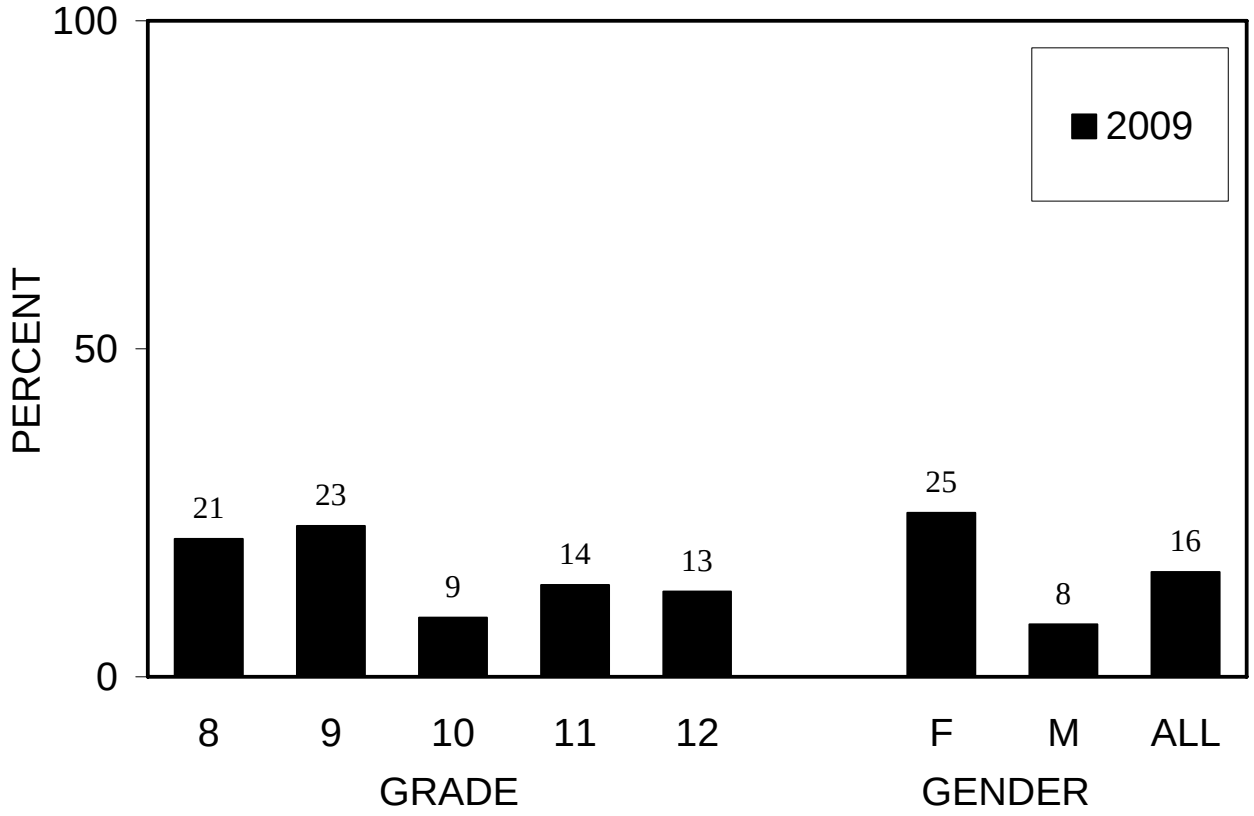
▪ Electronic Bullying

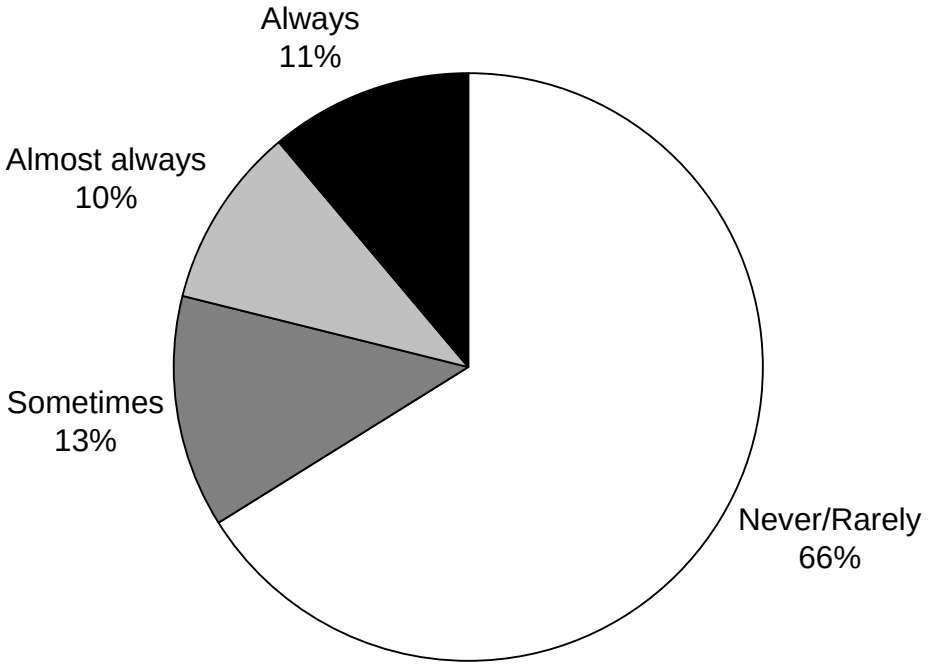
Percent of students who were electronically bullied, such as through e-mail, chat rooms, instant messaging, Web sites, or text messaging, in the past 12 months



New question in 2009

Bicycle Helmets

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

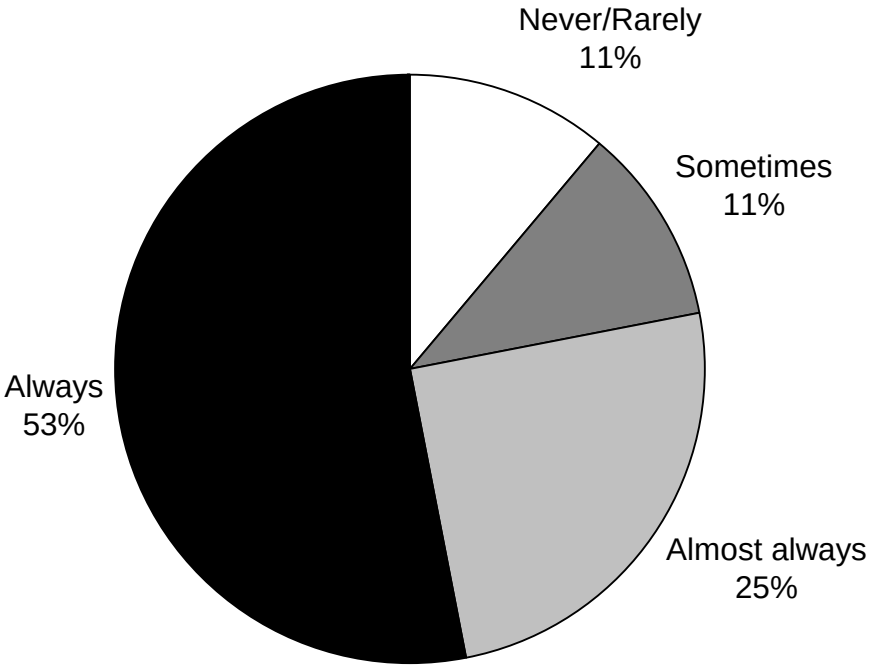


	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Frequency of helmet use (in percents) among students who rode a bicycle in the past 12 months									
Always	*	11	10	11	10	9	13	14	8
Almost always	*	10	12	9	13	4	11	11	9
Sometimes	14	13	21	12	13	6	11	14	12
Never or rarely	59	66	58	68	64	81	64	61	71

* = 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

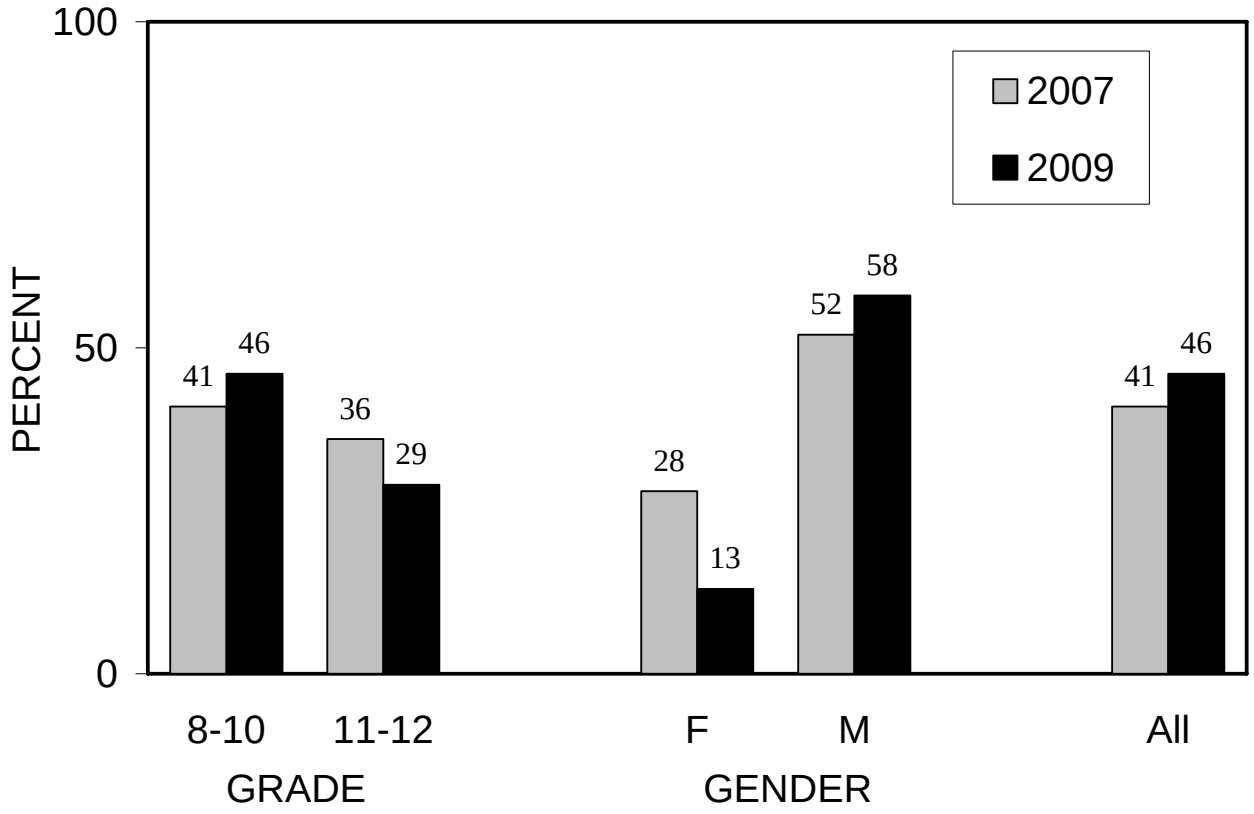


	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who wear a safety belt when riding in a car driven by someone else									
Always	*	53	60	49	63	45	53	58	48
Almost always	*	25	20	25	18	29	28	25	25
Sometimes	9	11	12	12	8	14	8	10	12
Never or rarely	10	11	8	14	11	12	11	7	16

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

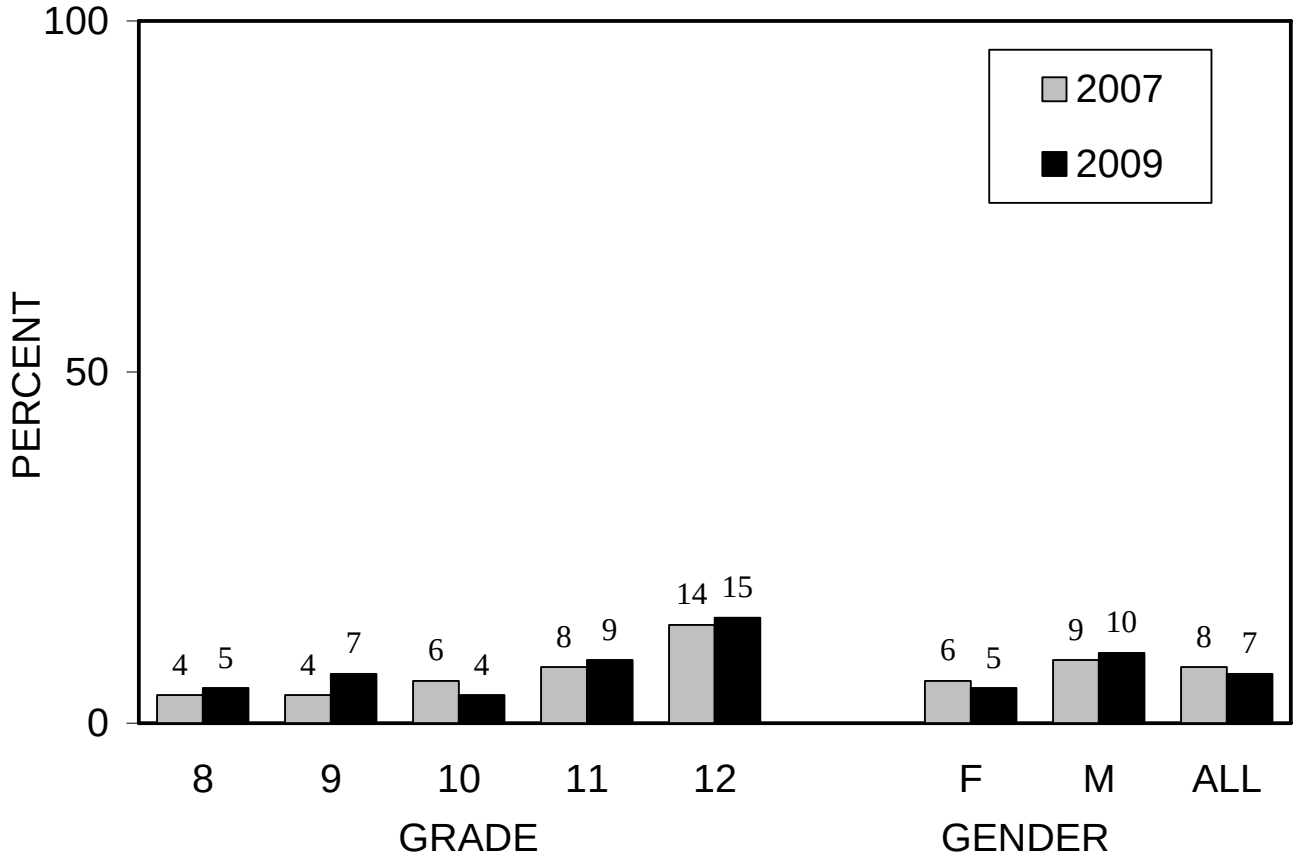
Safety Belt Use and Injuries Following Crashes

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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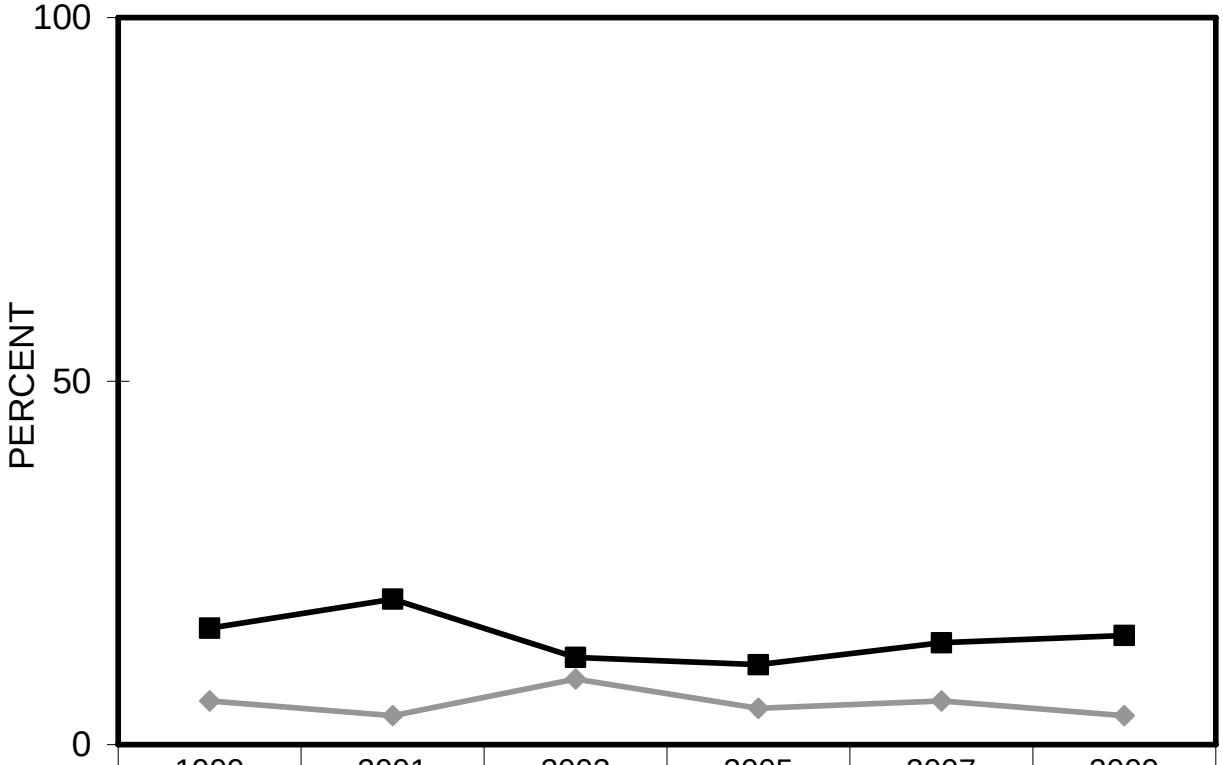
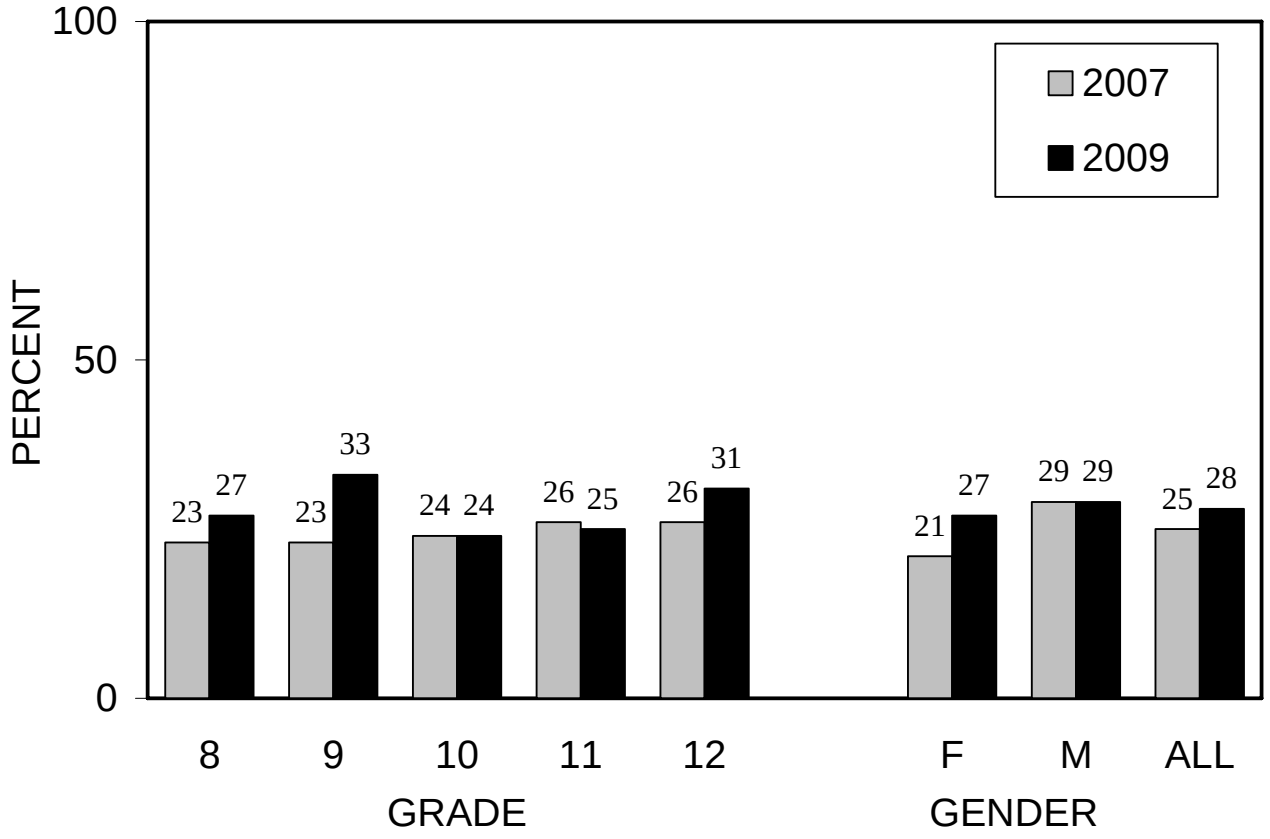


	1999	2001	2003	2005	2007	2009
10th Grade	6	4	9	5	6	4
12th Grade	16	20	12	11	14	15

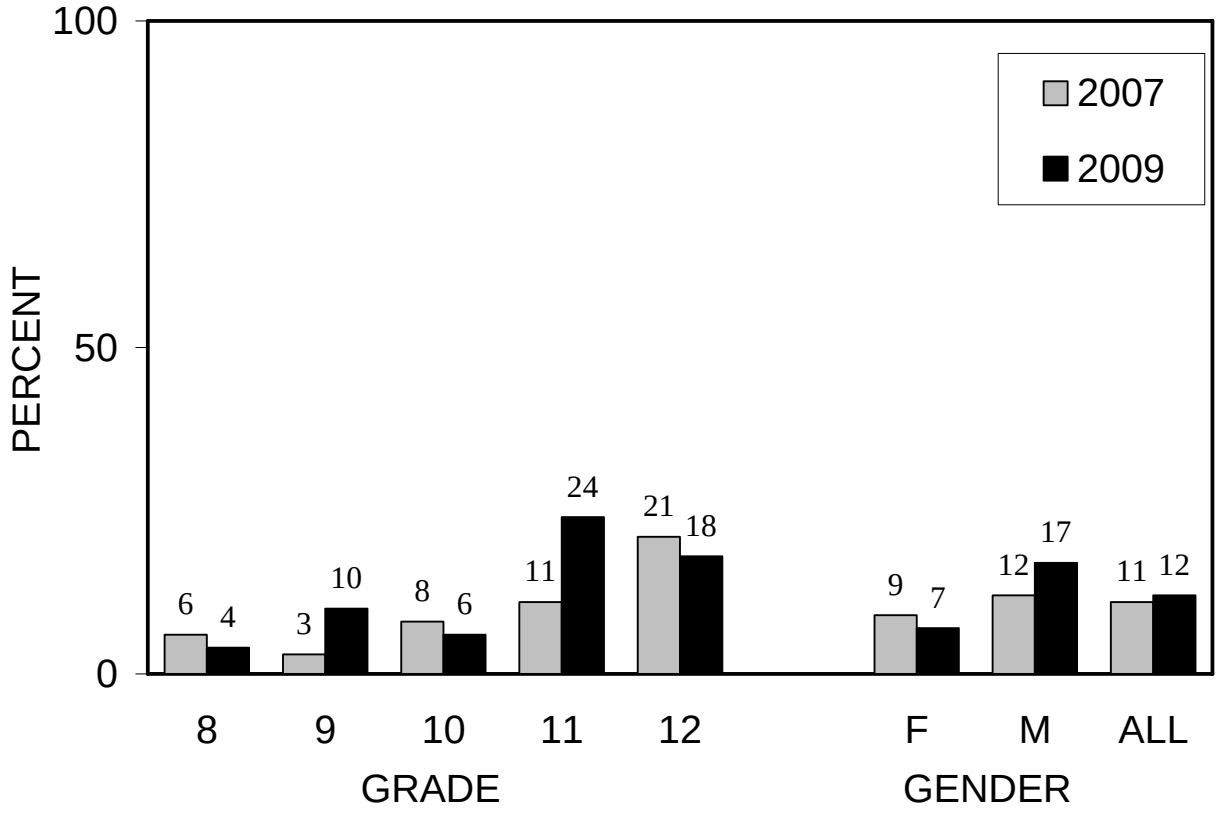
▪ Driving Under the Influence

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



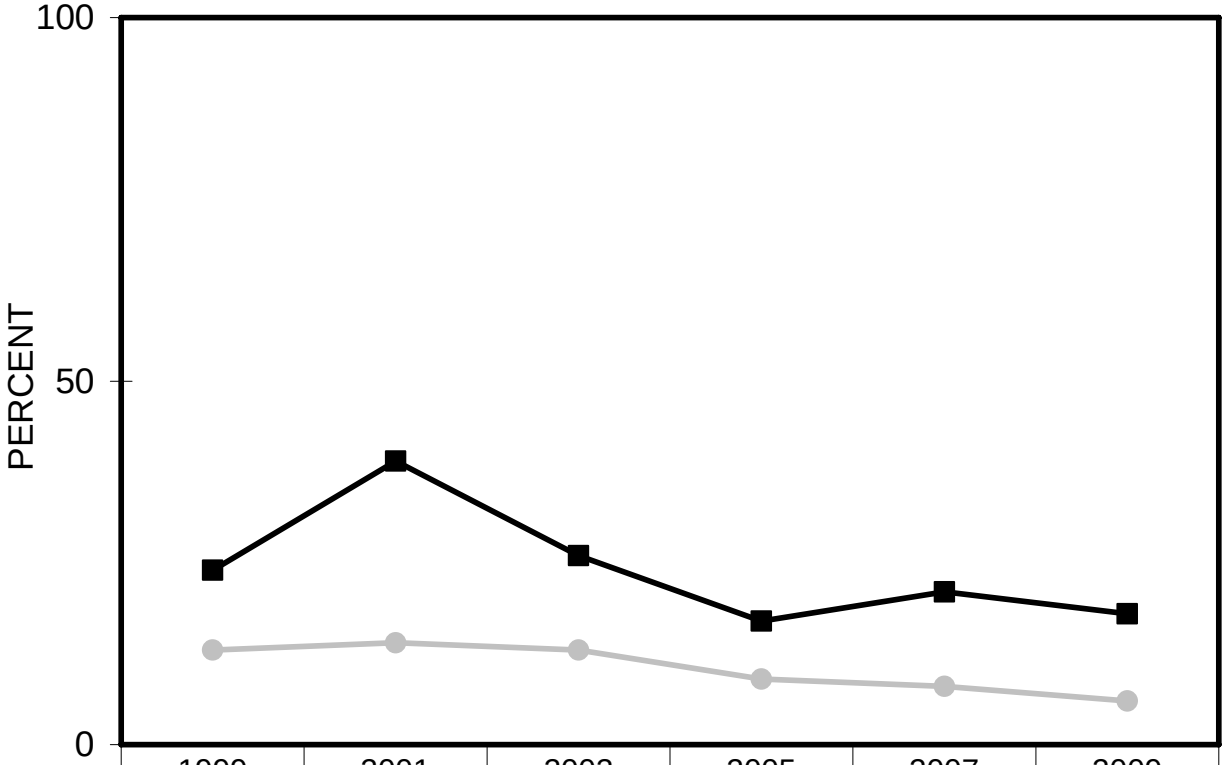
Driving Under the Influence

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

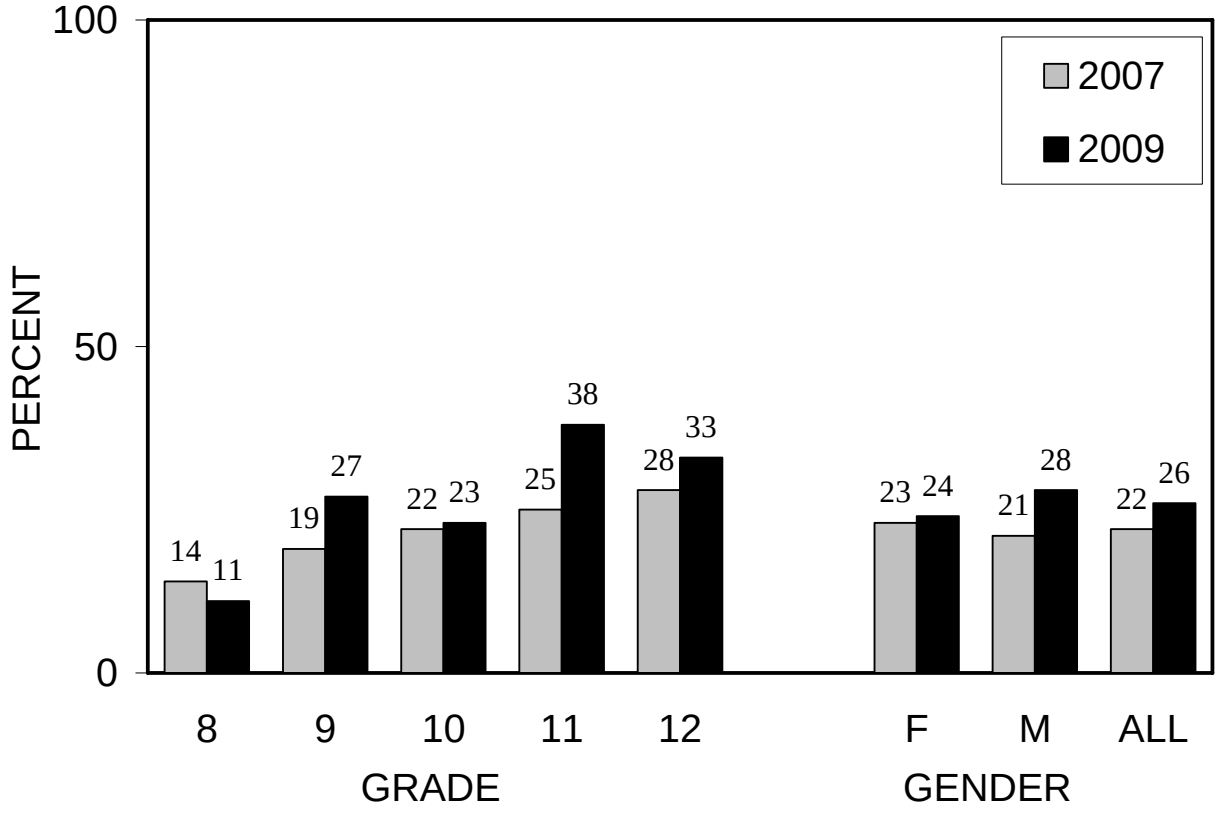
Percent of students who during the past 30 days drove a car or other vehicle when they had been smoking marijuana



	1999	2001	2003	2005	2007	2009
10th Grade	13	14	13	9	8	6
12th Grade	24	39	26	17	21	18

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	26	28	31	31	34	25	21	41	17
Purposely hurt themselves (e.g., cut or burned) without wanting to die	19	20	24	24	17	13	17	30	9
Made a plan about how to attempt suicide	9	14	20	18	11	8	12	19	10
Actually attempted suicide	6	7	9	8	5	8	7	9	5
Attempted suicide and required medical treatment	2	2	4	1	1	2	1	3	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.

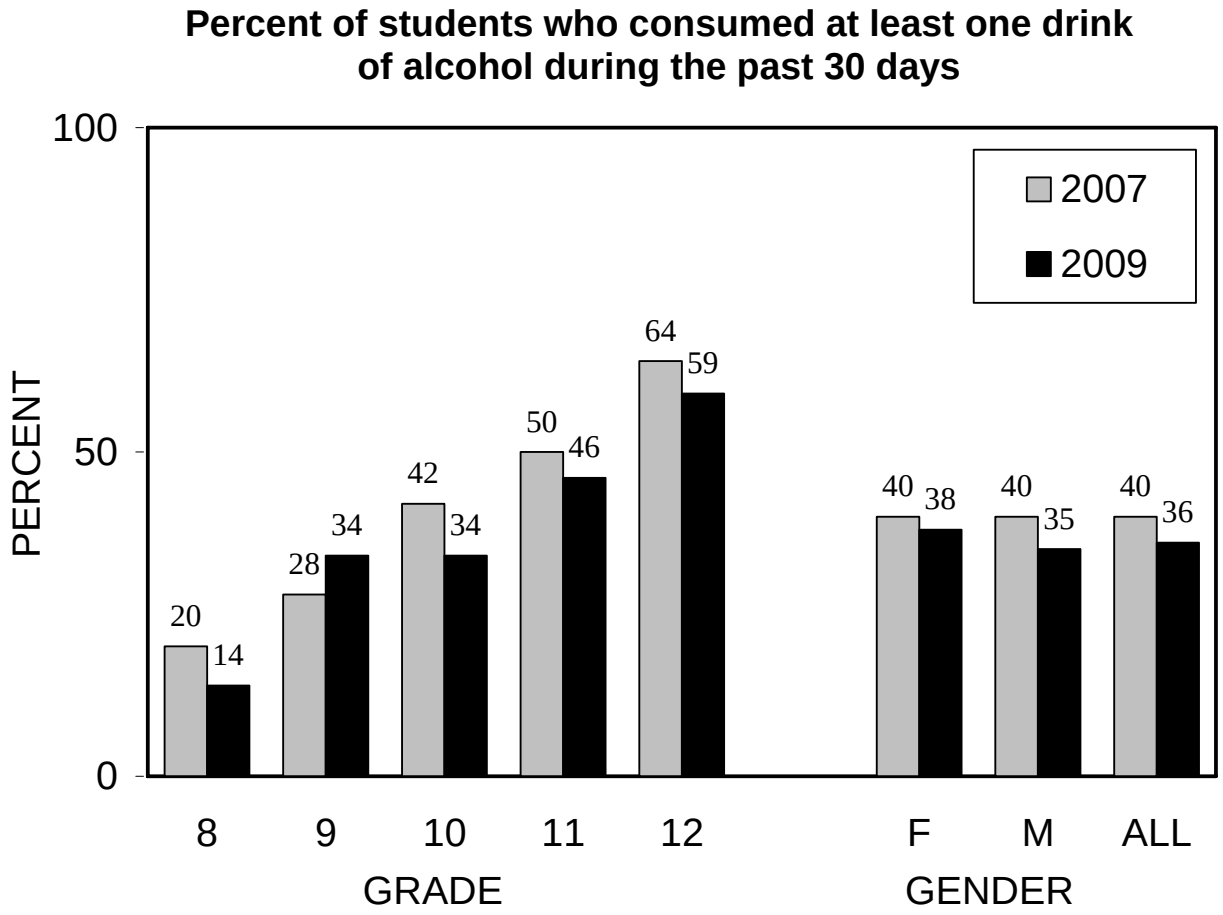
- **Alcohol Use** is a major contributing factor in about half of all homicides and sexual assaults,[20] and about one-third of all motor vehicle crash fatalities.[17] Approximately 80,000 American deaths per year are attributable to excessive alcohol use.[7] Heavy drinking among youth has been linked 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:

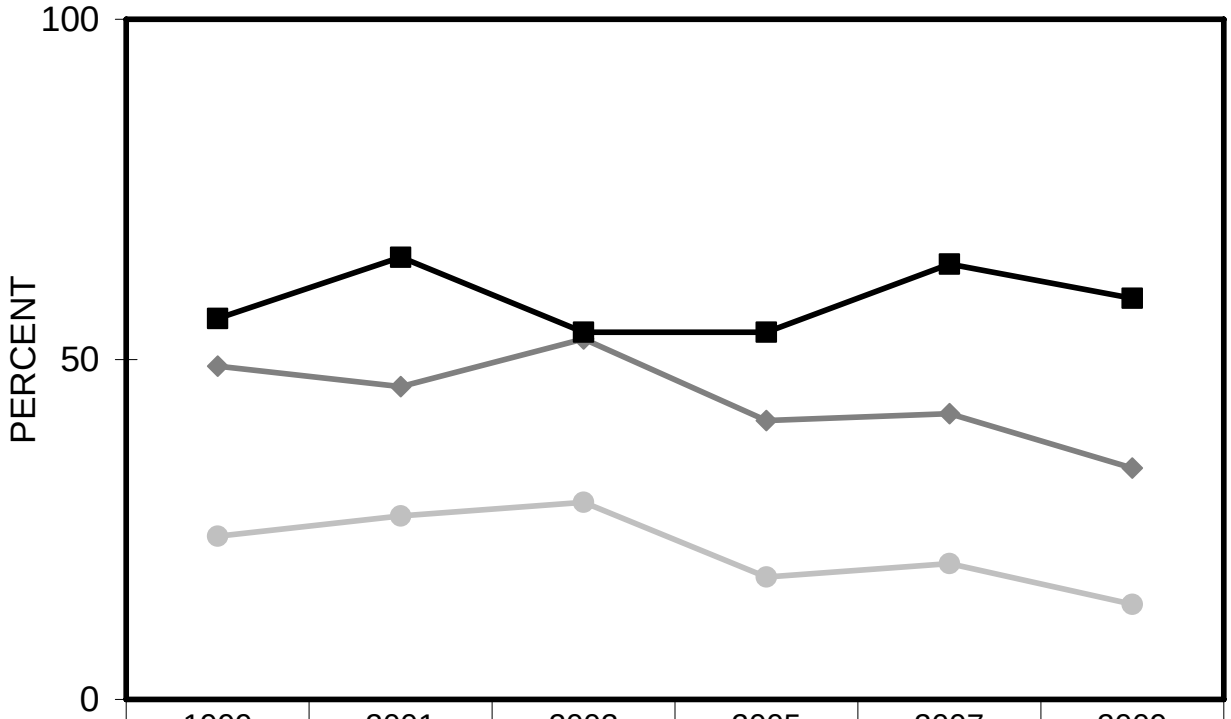
- Reduce the percentage of youth who use alcohol prior to age 13 to 0 percent.
- Reduce the percentage of youth who engage in binge drinking in the past month to 3 percent or less.
- Reduce the percentage of youth who smoked cigarettes in the past month to 16 percent or less.
- Reduce the percentage 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
20
14
28
34
42
34
50
46
64
59
40
38
40
35
40
36
8
9
10
11
12
F
M
ALL
GRADE
GENDER

Alcohol Use

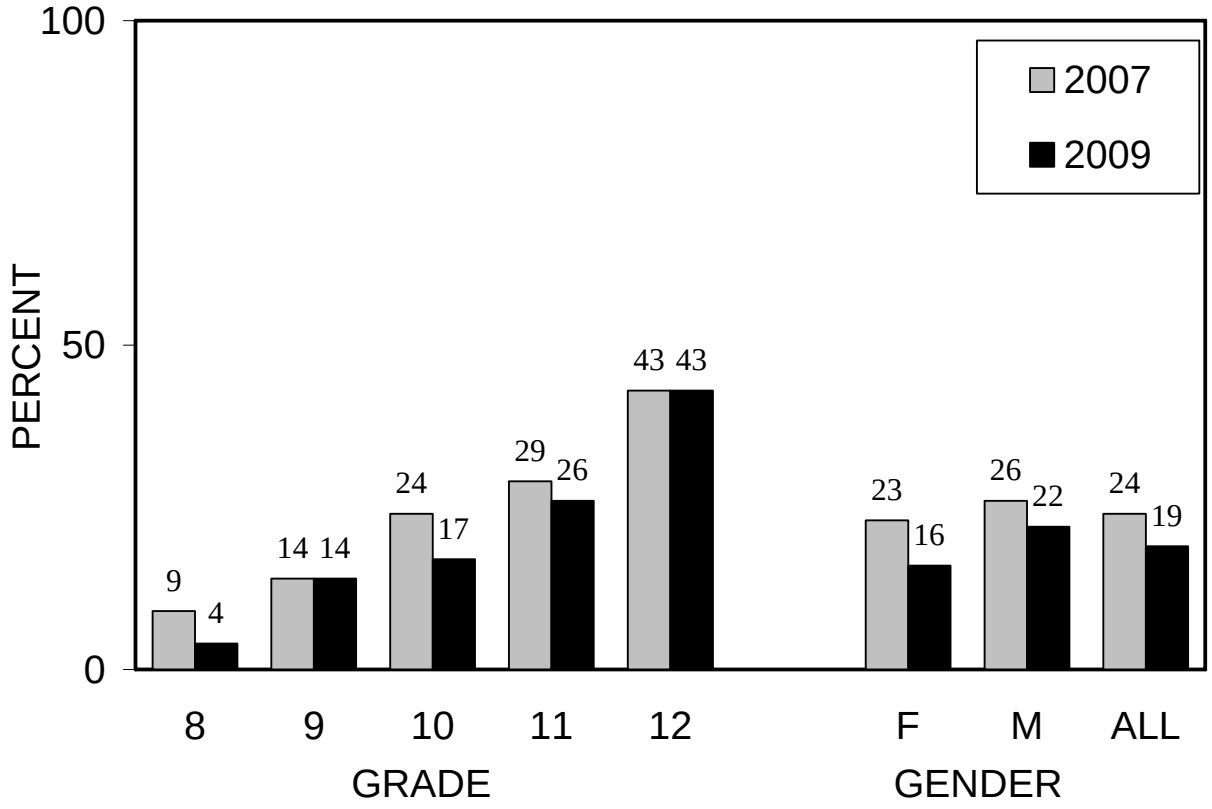
Percent of students who consumed at least one drink of alcohol during the past 30 days



	1999	2001	2003	2005	2007	2009
8th Grade	24	27	29	18	20	14
10th Grade	49	46	53	41	42	34
12th Grade	56	65	54	54	64	59

▪ 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	68	63	39	60	63	77	85	61	65
First consumed alcohol, other than a few sips, prior to age 13	26	23	29	33	17	17	20	23	24
Drank alcohol on 3 to 9 days during the past 30 days	15	14	5	12	16	19	25	12	17
Drank alcohol on 10 or more days during the past 30 days	7	4	1	5	2	7	6	3	5
Binged on alcohol 3 or more days in the past 30 days	12	8	2	5	5	15	16	7	10
Drank alcohol *on school property* during the past 30 days	5	3	1	6	0	5	4	3	4

Alcohol Use

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

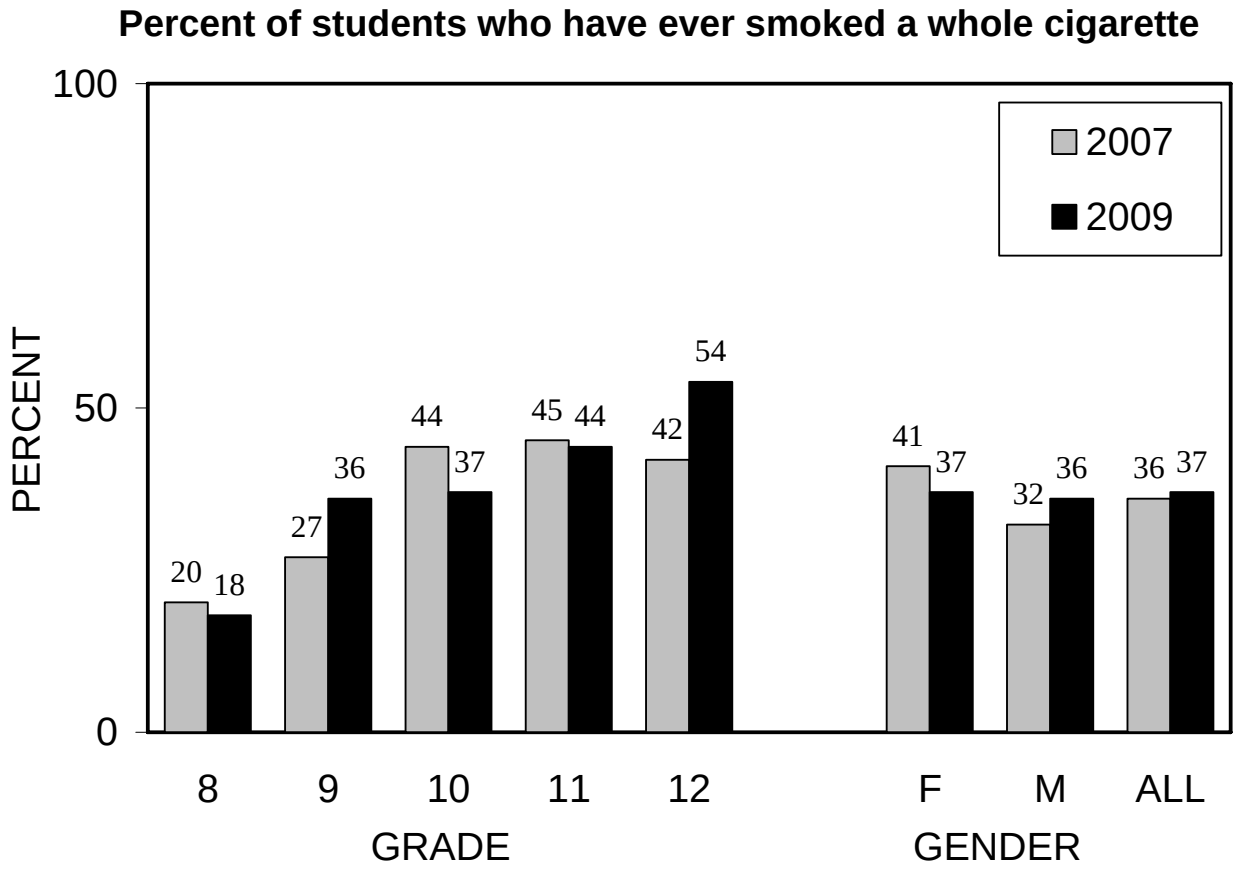
	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who report usual type of alcohol as:									
Liquor	37	40	40	41	42	53	28	33	47
Beer	33	29	13	24	29	21	50	18	41
Malt Beverages	24	27	40	35	26	18	22	42	10
Wine	2	2	7	0	3	3	0	3	1
Wine Coolers	3	2	0	0	0	6	0	3	0

▪ 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	4	3	0	8	0	3	4	2	4
Bought it in a liquor store	2	0	0	0	0	0	0	0	0
Bought in at a restaurant, bar, or club	0	1	0	3	0	0	2	2	0
Gave someone money to buy it for me	27	27	0	11	28	33	49	19	36
Someone gave it to me	41	48	67	59	47	41	37	56	40
Got it or stole it from home	20	17	22	16	25	21	8	20	14
Stole it in a store or restaurant	6	3	11	3	0	3	0	1	5

▪ Tobacco Use


Percent of students who have ever smoked a whole cigarette
100
50
0
PERCENT
2007
2009
20
18
27
36
44
37
45
44
42
54
41
37
32
36
36
37
8
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ALL
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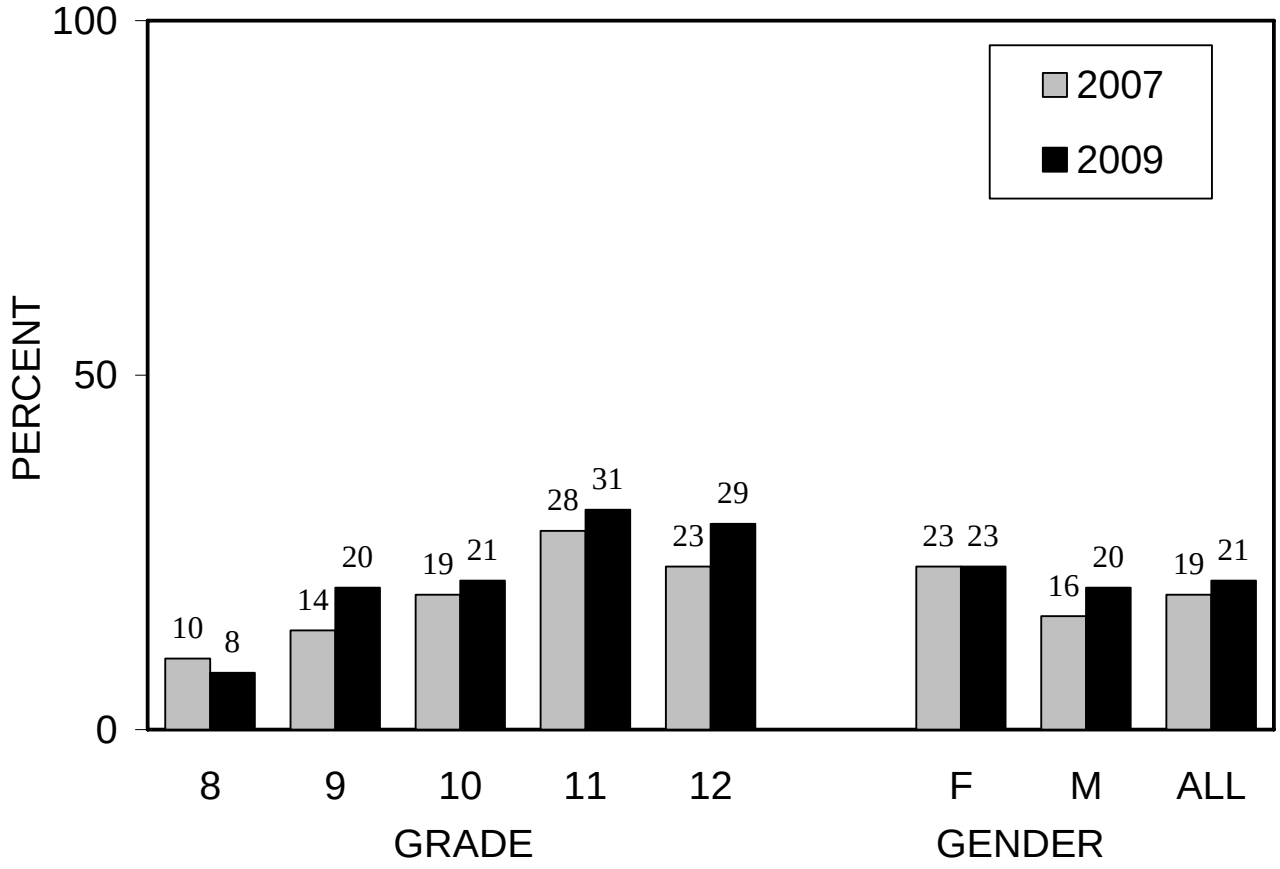
GENDER

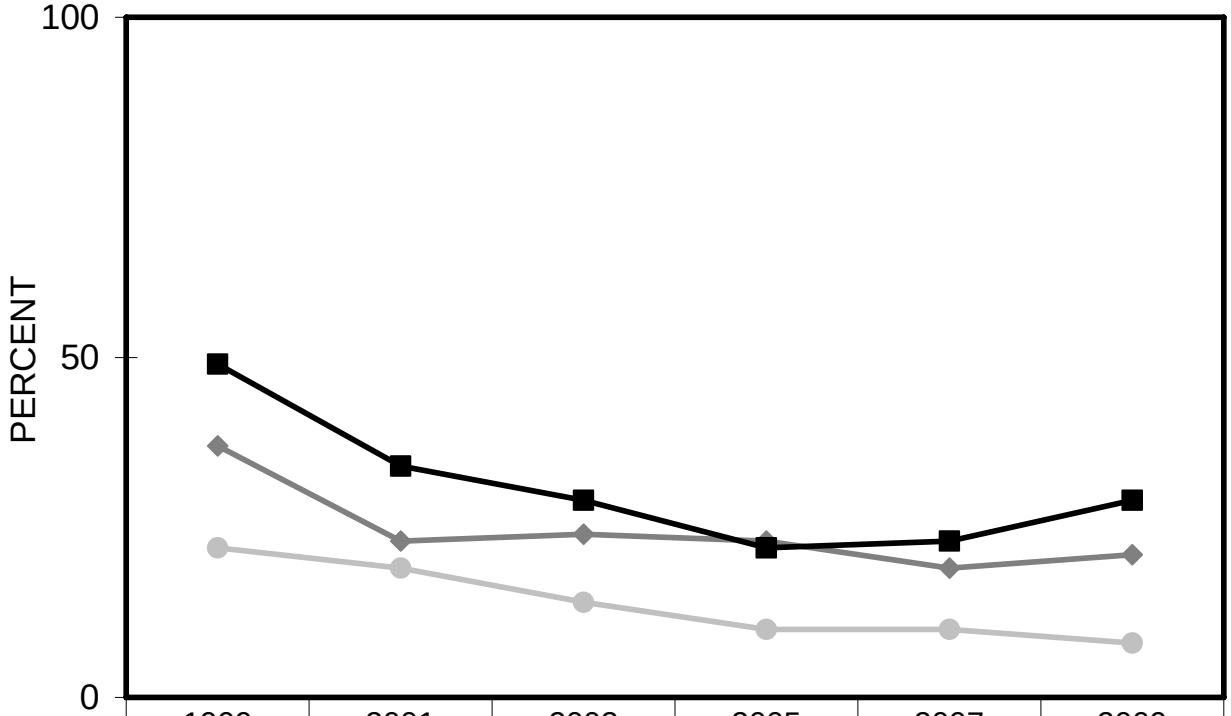
Tobacco Use

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	19	14	10	10	8
10th Grade	37	23	24	23	19	21
12th Grade	49	34	29	22	23	29

▪ 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	17	17	13	19	11	14	23	16	17
Smoked every day during the past 30 days	8	8	0	8	5	16	14	7	9
Smoked more than 10 cigarettes on days smoked during the past 30 days	3	4	0	4	3	6	6	2	6
Smoked more than a pack on days smoked during the past 30 days	2	1	0	2	0	0	1	0	2
Used chewing tobacco or snuff during the past 30 days	12	9	3	5	8	12	12	3	13
Smoked cigars, cigarillos, or little cigars during the past 30 days	NA	12	4	8	12	18	20	7	16

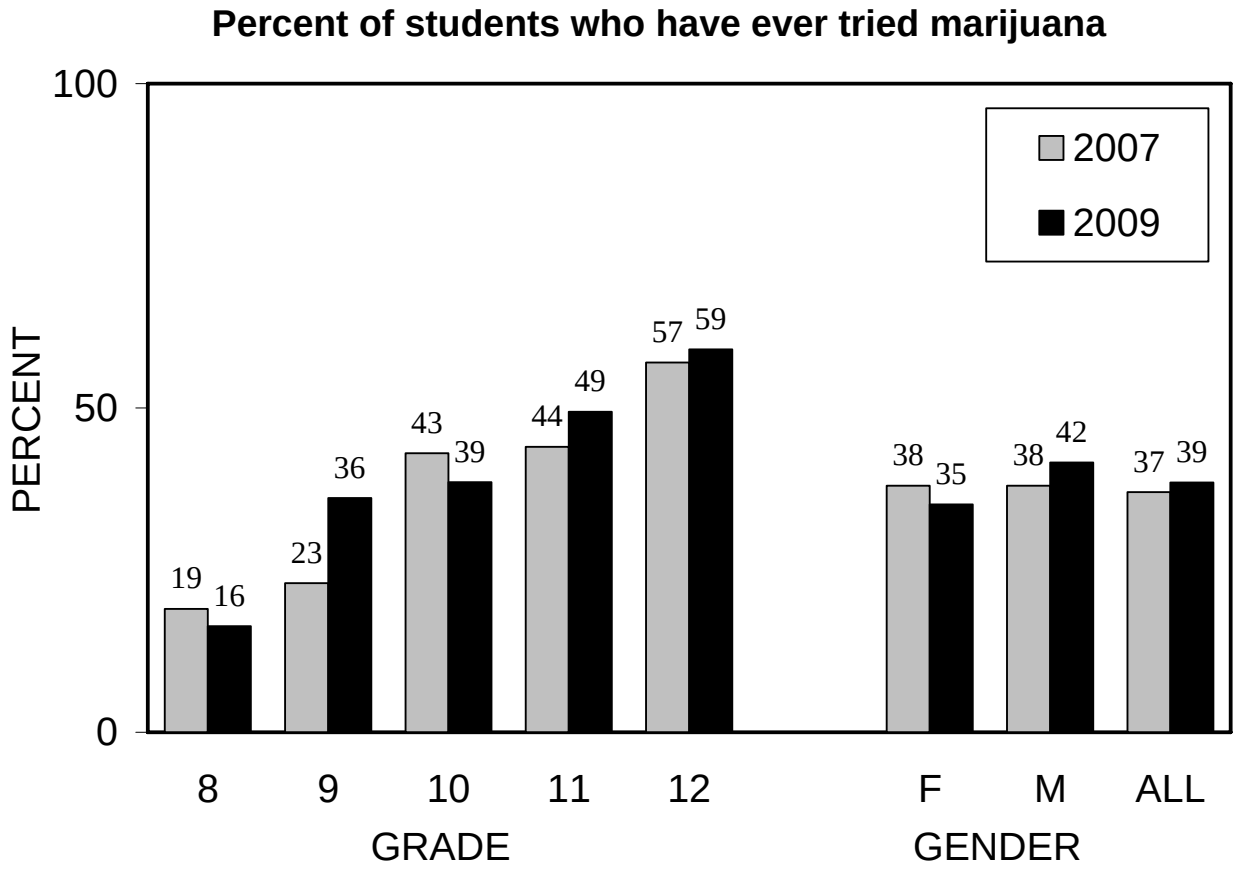
NA = Not available; Not asked in 2007

▪ Tobacco Use

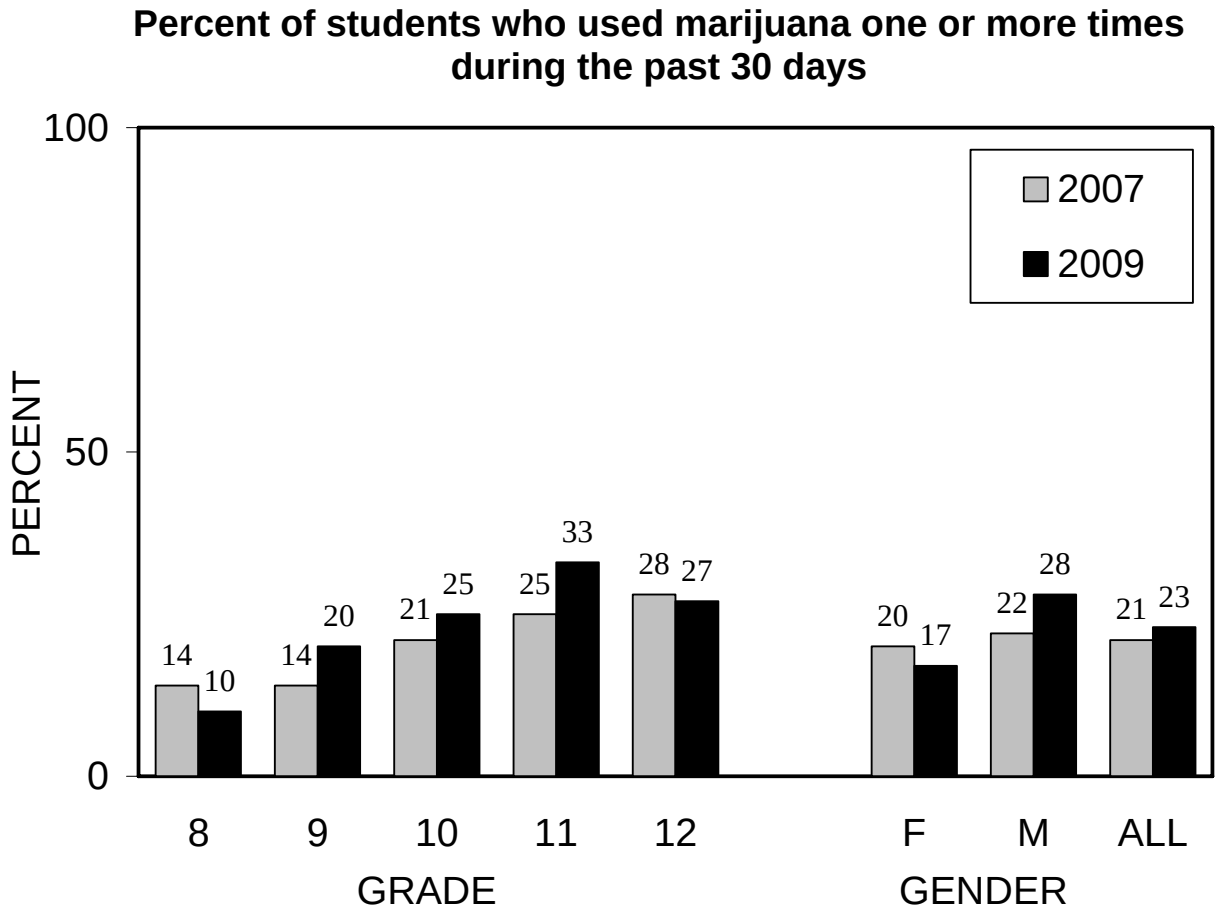
	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who, during the past 7 days:									
Were in the same room with someone who was smoking cigarettes	24	57	53	59	51	70	58	57	57
Were in a car with someone who was smoking cigarettes	24	46	36	48	42	56	50	47	46
Percent of students who think:									
Most high school students smoke cigarettes (55%+)	NA	28	33	34	19	29	18	32	24

NA = Not Available; New question in 2009

▪ Marijuana Use

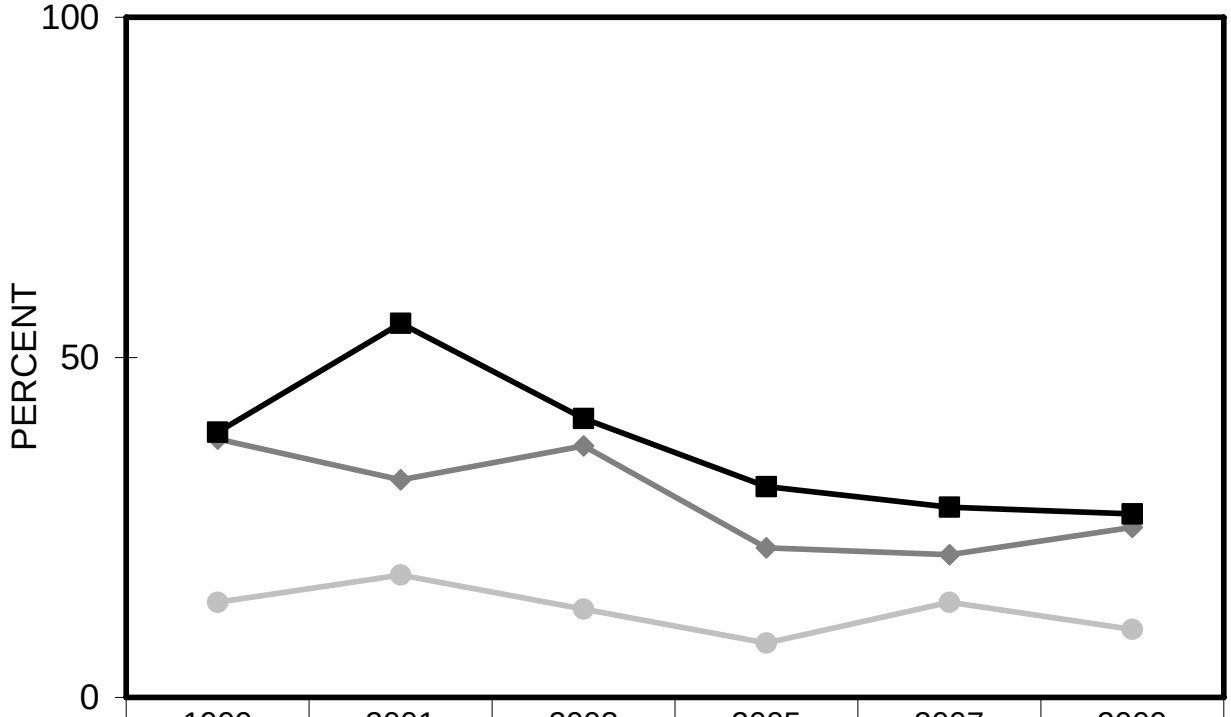


Marijuana Use



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	14	18	13	8	14	10
10th Grade	38	32	37	22	21	25
12th Grade	39	55	41	31	28	27

▪ Marijuana Use

	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who:									
Used marijuana prior to age 13	10	11	8	17	6	11	12	7	14
Used marijuana 3 to 9 times during the past 30 days	4	6	4	6	4	11	7	6	7
Used marijuana 10 or more times during the past 30 days	12	11	3	8	14	19	11	7	15
Used marijuana one or more times *on school property* in the past 30 days	6	5	3	3	5	7	6	2	7

▪ 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	5	8	7	7	10	6	8
A prescription pain reliever, such as Oxycontin, Vicodin, or other prescription pain killer, not prescribed to them	NA	17	10	22	17	22	14	18	16
Either a prescription stimulant or a prescription pain reliever not prescribed to them	22	18	11	25	18	22	15	19	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.

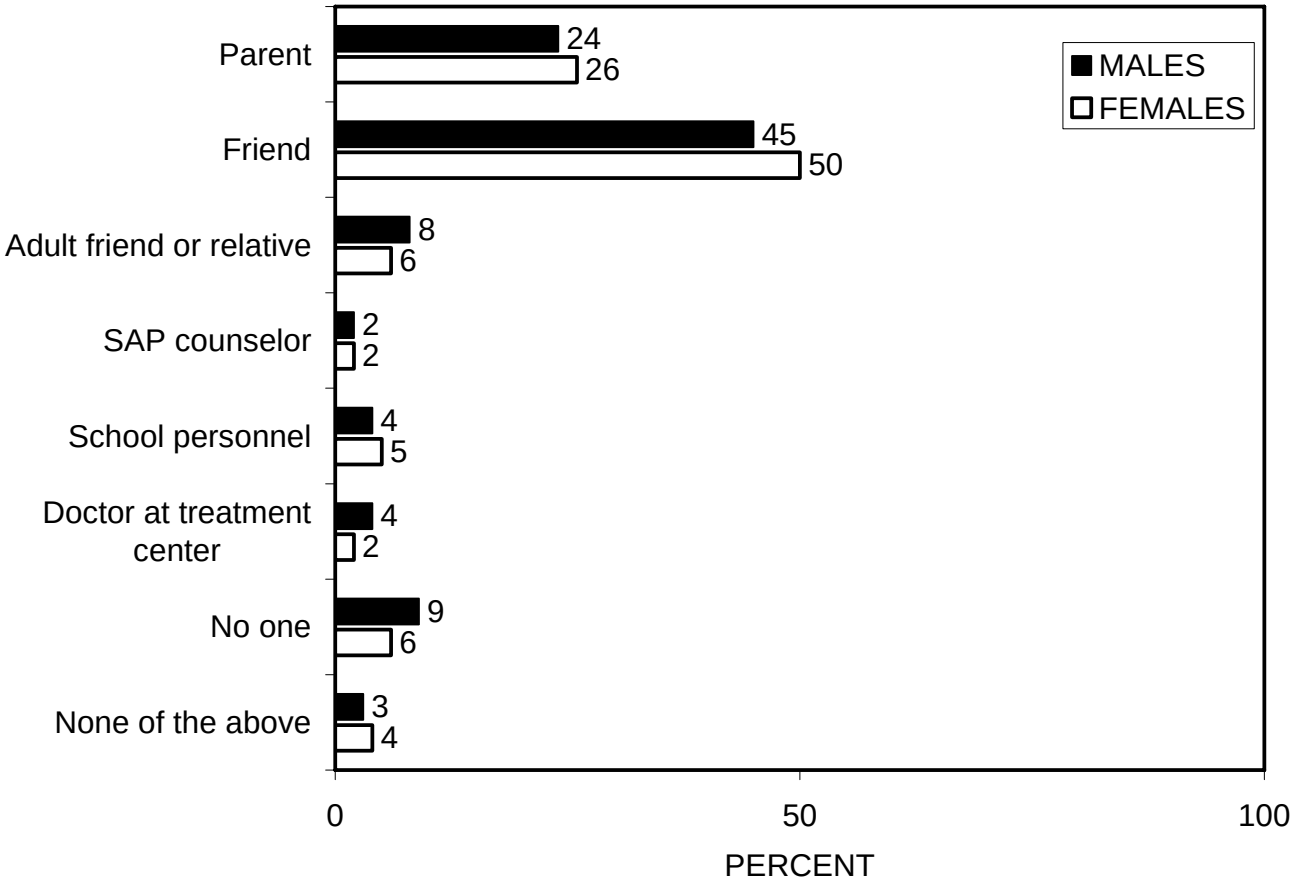
NA = Not available

▪ 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	6	3	3	3	2	2	2	3	2
Percent of students who during their lifetime have:									
Taken steroid pills or shots without a prescription	3	2	3	3	1	0	2	1	3
Used inhalants	16	16	16	30	13	9	11	19	14
Used heroin	4	3	4	3	1	2	1	3	3
Used methamphetamines	7	6	6	5	3	7	7	6	5
Used hallucinogens	13	11	5	14	10	13	11	8	14
Used a needle to inject any illegal drug into their body	4	2	3	2	0	2	1	3	2
Percent of students who were offered, sold, or given an illegal drug *on school property* during the past 12 months	25	22	16	25	16	28	28	20	24

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	90	88	92	89	93	87	81	90	87
Drink alcohol	74	73	87	76	78	64	61	77	70
Use marijuana	88	84	93	83	86	77	83	87	82
Percent of students who think it is *wrong or very wrong* for someone their age to:									
Smoke cigarettes	69	66	85	67	66	55	53	69	64
Drink alcohol	45	48	72	50	50	34	27	51	45
Use marijuana	63	62	80	68	65	42	47	67	58

▪ Perceived Harmfulness of ATOD Use

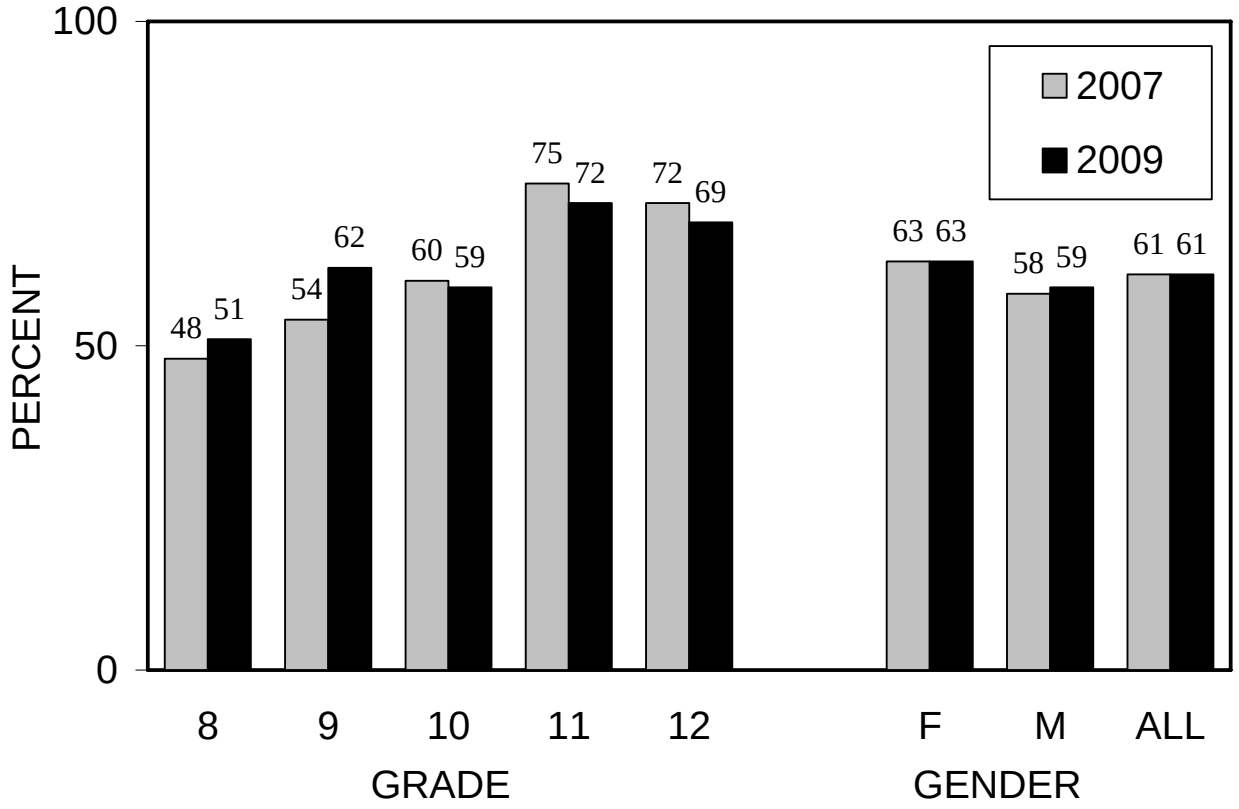
	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who think that there is *great* risk in people harming themselves from:									
Smoking one or more packs of cigarettes/day	64	63	63	60	67	57	66	68	59
Drinking one or two alcoholic drinks nearly every day	24	25	34	20	27	23	19	33	18
Using marijuana regularly	45	42	55	46	44	28	32	49	35

▪ 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	69	72	51	71	67	83	96	72	72
Alcohol	70	64	50	65	63	76	77	65	64
Marijuana	61	61	43	62	56	71	80	61	62

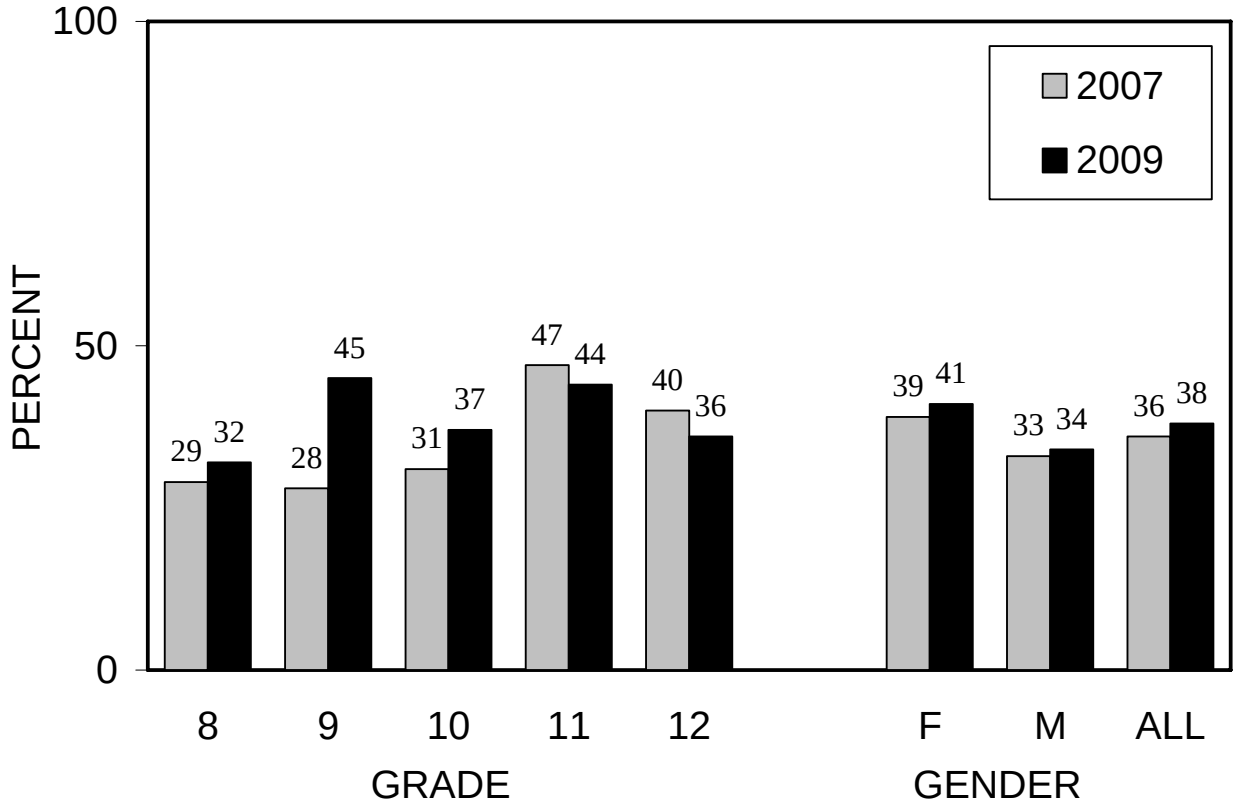
▪ Perceived Availability of ATOD

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

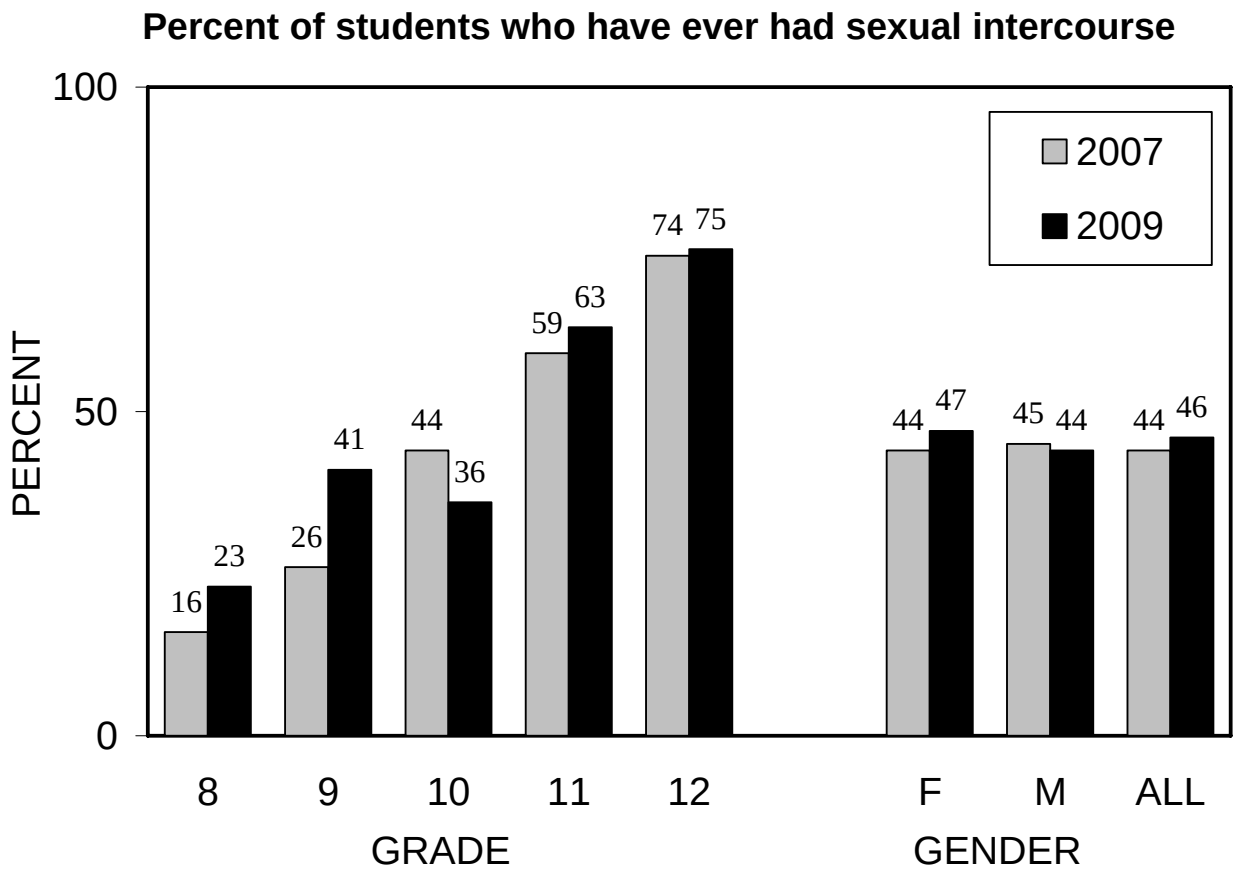
The questions in this section measure whether students have had sexual intercourse, the age at which they first had sex, the frequency with which they have sex, with whom they have sex, alcohol and drug use related to sexual intercourse and whether they use contraception.

- **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:

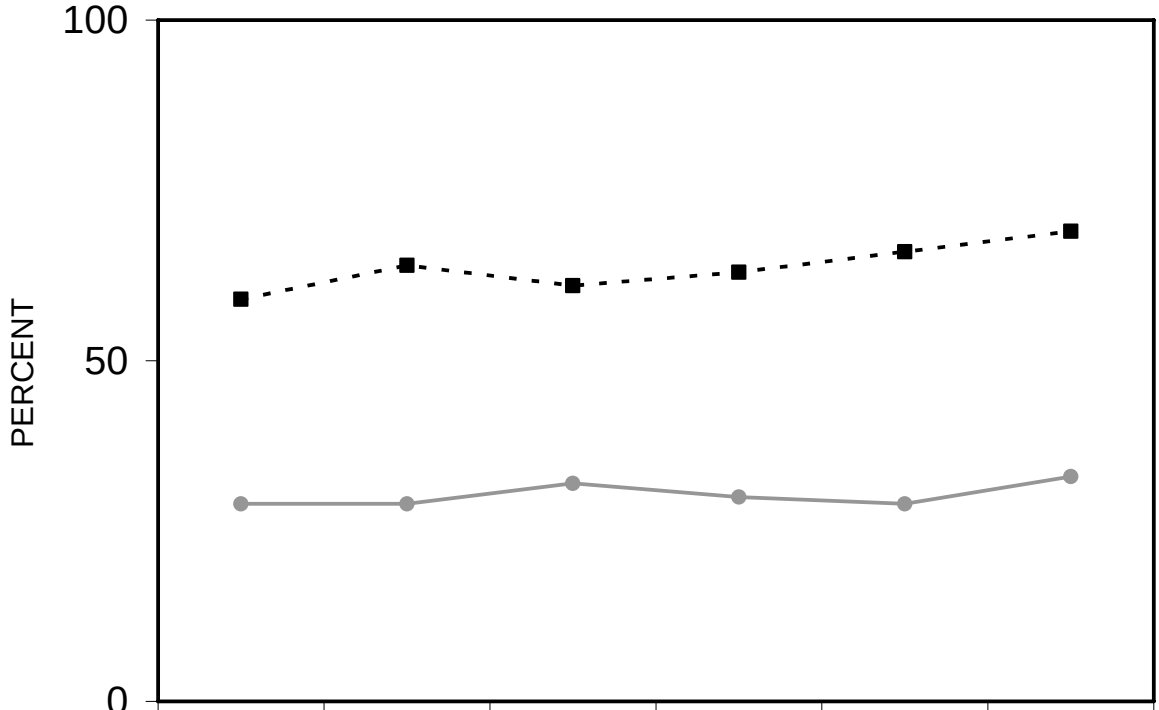
- Increase the percentage of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.
- Reduce HIV infection among adolescents and adults.
- Further reduce the percentage of people ages 15-24 with *Chlamydia trachomatis* infection.

Sexual Behavior



Sexual Behavior

Percent of students who have ever had sexual intercourse



	1999	2001	2003	2005	2007	2009
8th-10th Grade	29	29	32	30	29	33
11th-12th Grade	59	64	61	63	66	69

Sexual Behavior

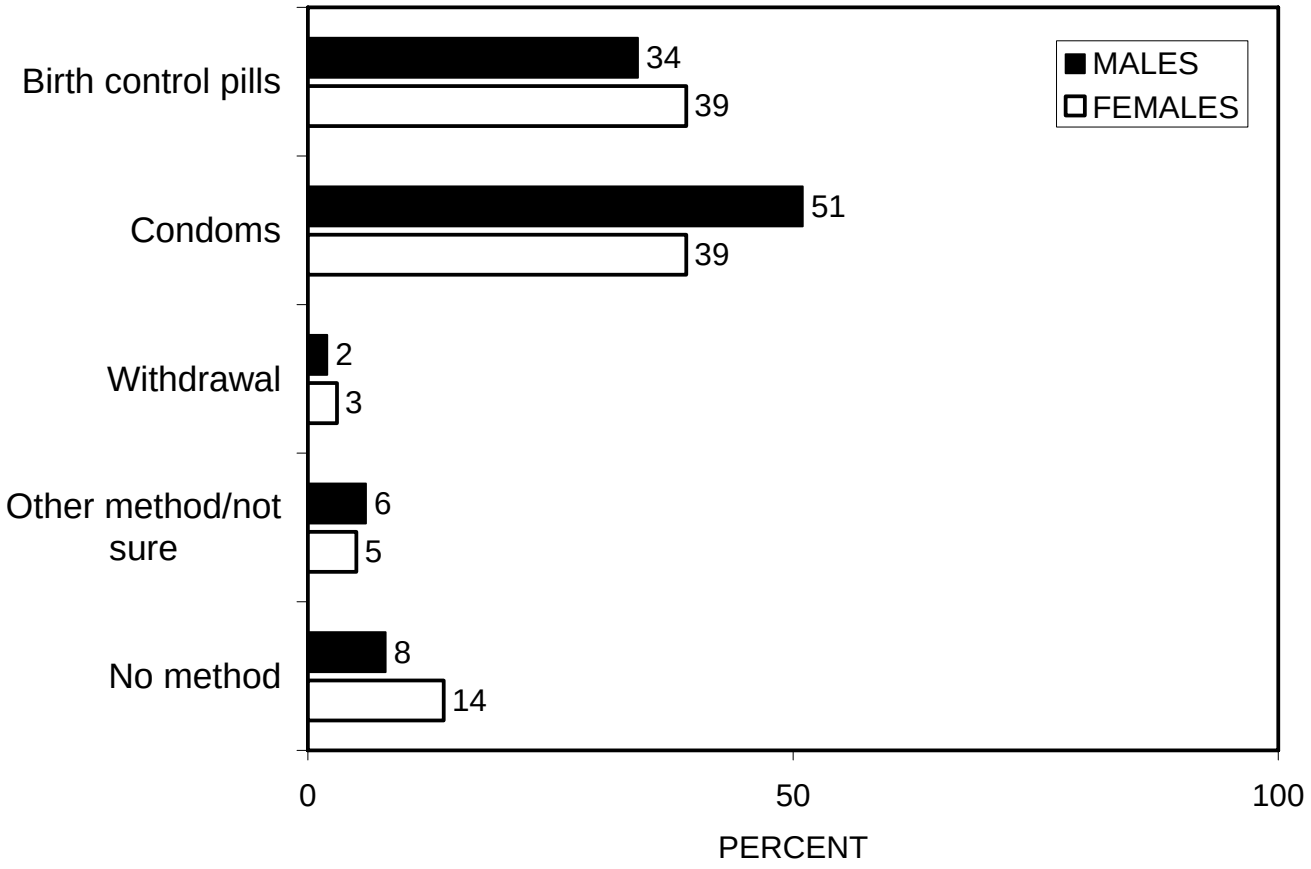
	ALL		GRADE		GENDER	
	2007	2009	8-10	11-12	F	M
Percent of students who:						
Have had 4 or more lifetime sex partners	13	12	8	20	12	13
First had sexual intercourse prior to age 13	8	8	8	5	7	9
Have ever been tested for HIV	NA	13	10	19	17	10
Used drugs or alcohol before their most recent sexual experience*	30	21	22	19	18	25
Used a condom during their most recent sexual experience*	67	66	72	58	61	71

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?*

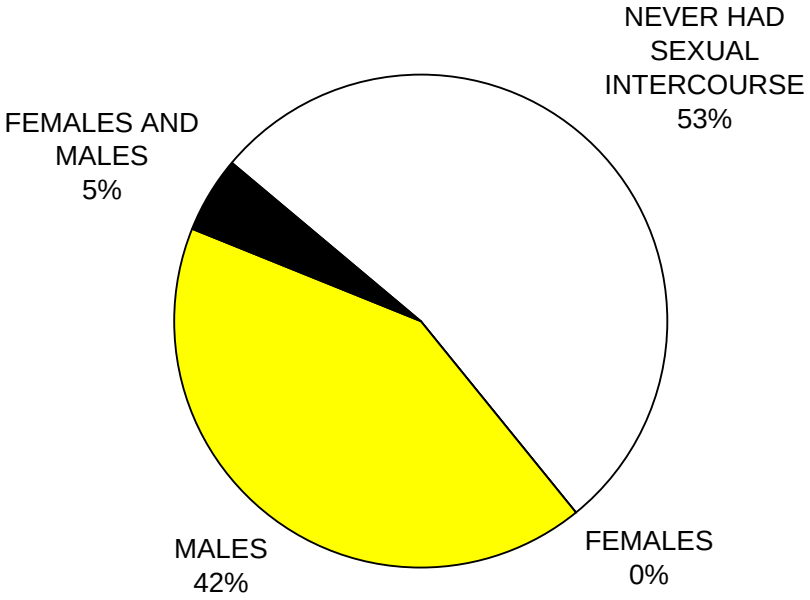


*NOTE: Includes only students who said that they have had sexual intercourse

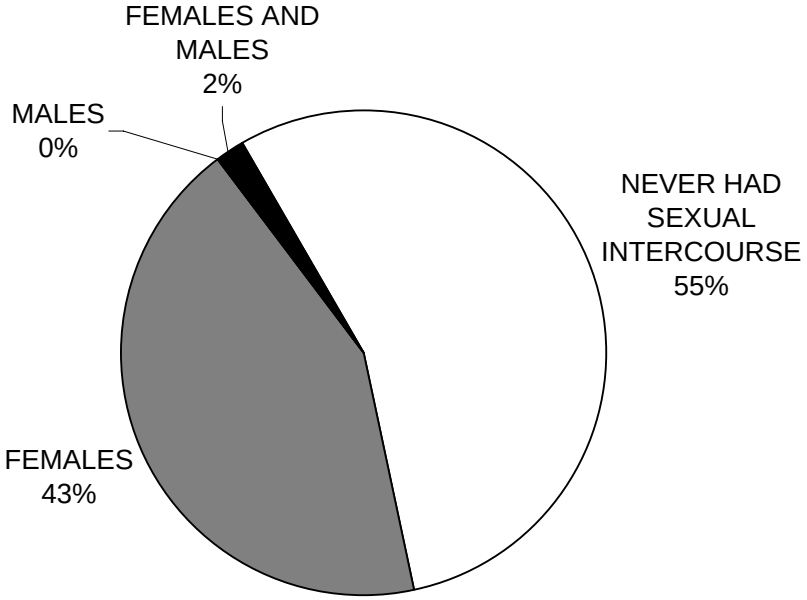
▪ Sexual Behavior

The persons with whom you have had sexual intercourse are:

FEMALES



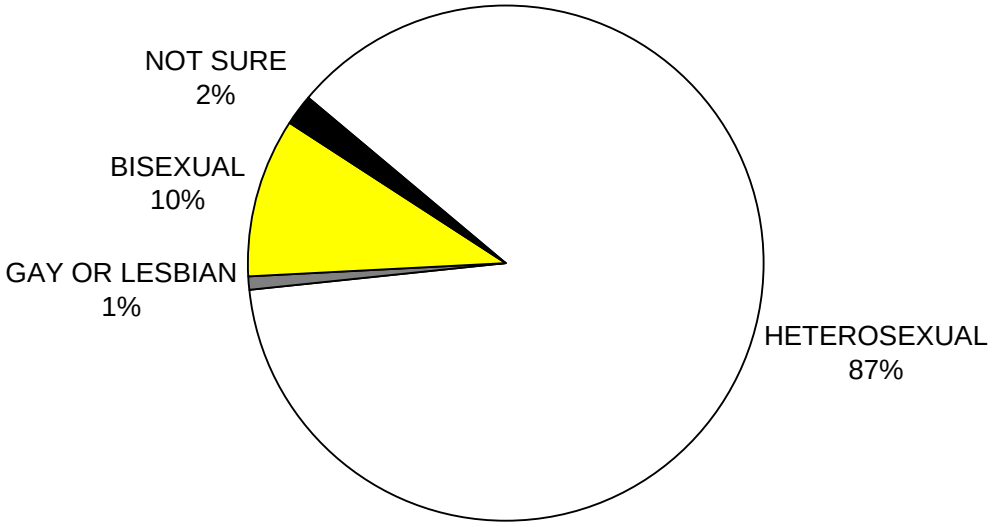
MALES



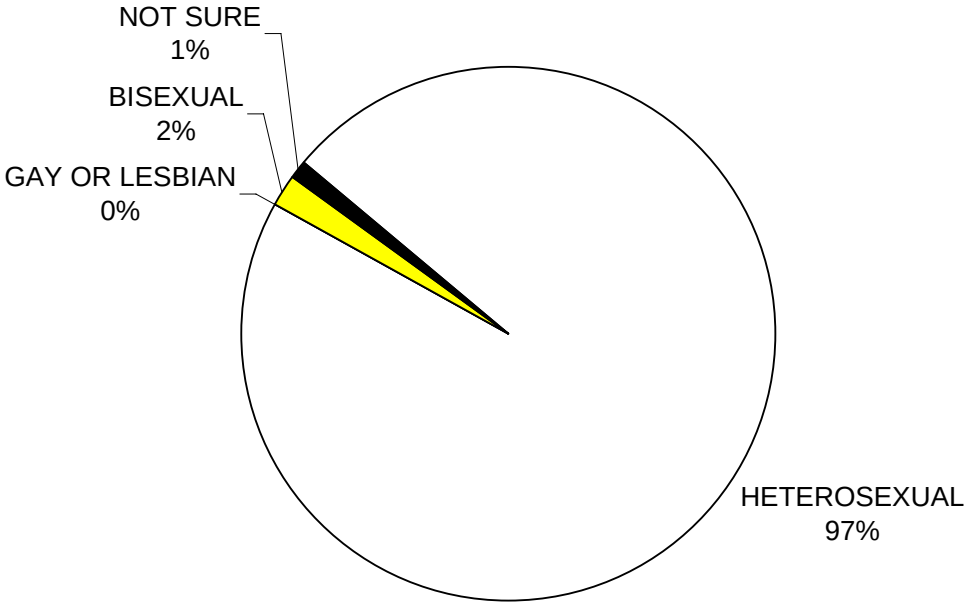
▪ Sexual Orientation

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)	16	16	12	24	14	14	17	13	18
Percent of students who are obese (95th BMI percentile)	19	17	6	18	22	19	22	13	20

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	11	11	11	12	14	13	7	10	12
About the right weight	54	59	68	58	53	53	57	59	59
Overweight	35	30	21	30	33	34	36	31	29
Percent of students who are:									
Trying to lose weight	43	45	45	45	38	46	51	60	32
Trying to gain weight	12	10	7	8	12	10	12	5	15
Trying to stay the same weight	20	19	18	23	20	14	19	20	18
Doing nothing about their weight	25	25	30	23	30	30	18	15	35
Percent of students who, during the past 30 days:									
Vomited or took laxatives	5	4	7	7	2	2	2	8	1
Took diet pills, powders, or liquids	6	3	5	4	0	4	4	5	1

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	74	75	74	74	82	73	74	74	76
Eat breakfast every day	42	38	42	38	41	28	38	40	36
Eat 2 or more servings of fruit per day	30	28	33	28	26	24	29	29	27
Eat 3 or more servings of vegetables per day	14	12	17	14	13	5	11	13	12
Eat 5 or more servings of fruits and vegetables per day	20	18	24	19	16	7	19	20	17
Drink 1 or more glasses of *milk* per day	59	61	64	61	68	54	51	57	65
Drink 3 or more glasses of *milk* per day	25	27	38	28	28	24	14	24	31
Drink 1 or more glasses of *soda* per day	28	24	22	24	26	27	23	18	30
Drink 3 or more glasses of *soda* per day	12	10	11	11	7	11	7	5	13

✓ 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.

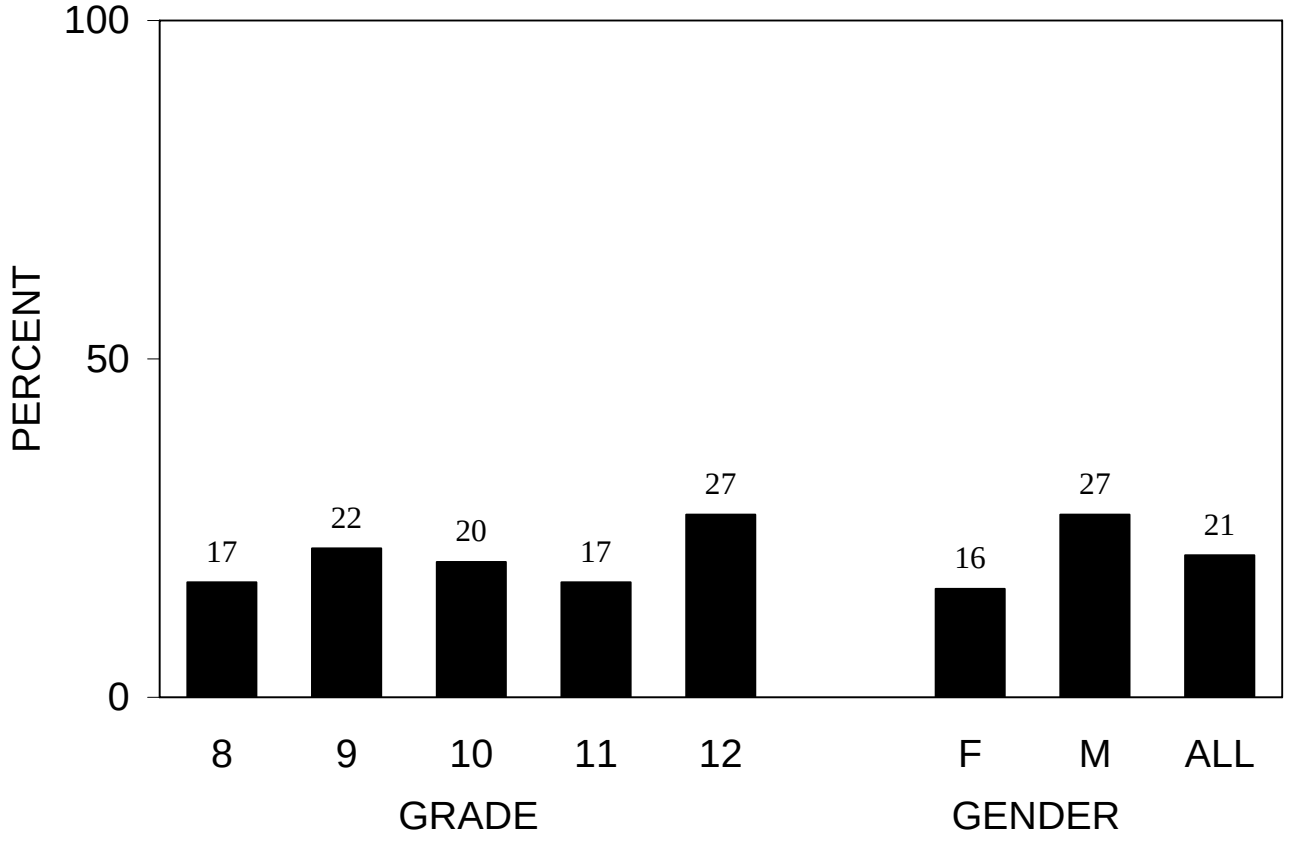
- **Regular physical activity** helps build and maintain healthy bones and muscles, control weight, build lean muscle and reduce fat, and reduces feeling of depression and anxiety.[55,58] In the long term, regular physical activity decreases the risk of dying prematurely, dying of heart disease, and 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	47	44	57	61	34	35	23	46	42
Physical education classes 5 days during an average week	44	40	50	61	31	30	19	44	36

▪ TV and Computer Games

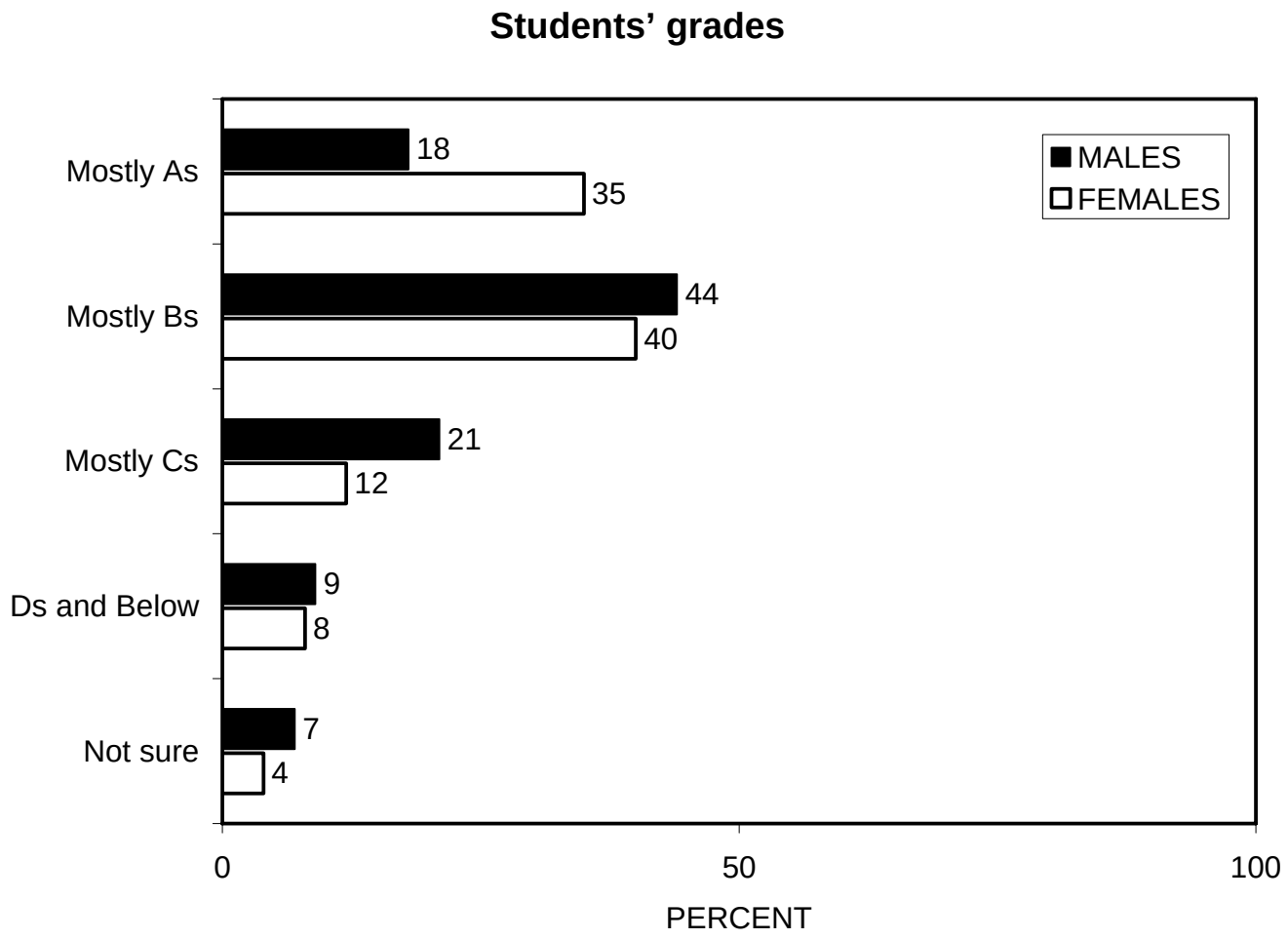
	ALL		GRADE					GENDER	
	2007	2009	8	9	10	11	12	F	M
Percent of students who:									
Spend 3 or more hours per school day watching TV or playing on the computer	38	38	43	42	38	34	38	33	45
Spend 5 or more hours per school day watching TV or playing on the computer	11	11	11	13	10	10	13	8	14

✓ 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.

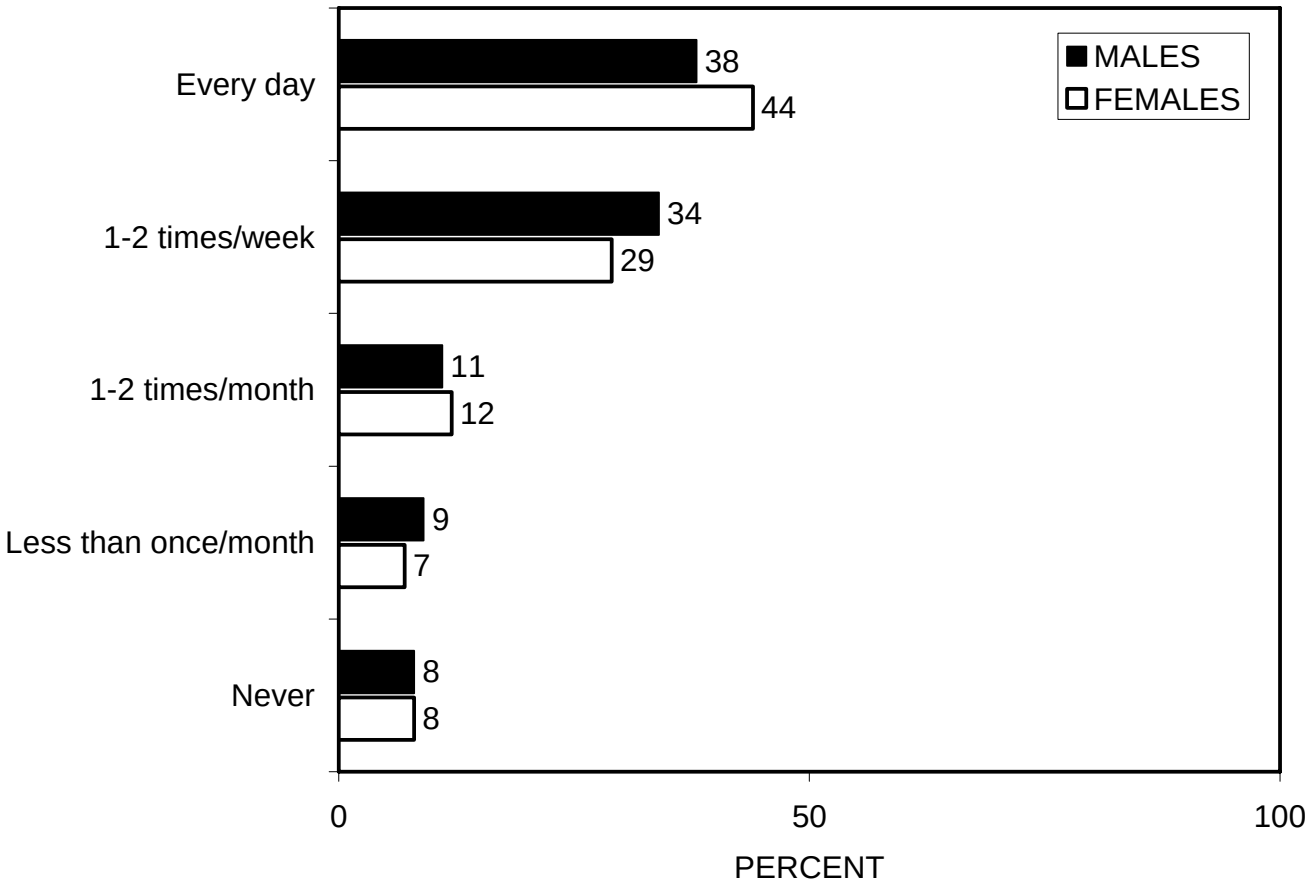
- **Grades in School:** Above-average school performance is viewed as one of many developmental assets, or factors promoting positive development, for youth. Studies have shown that students who get higher grades in school are less likely to use cigarettes, alcohol, or marijuana, and are more likely 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



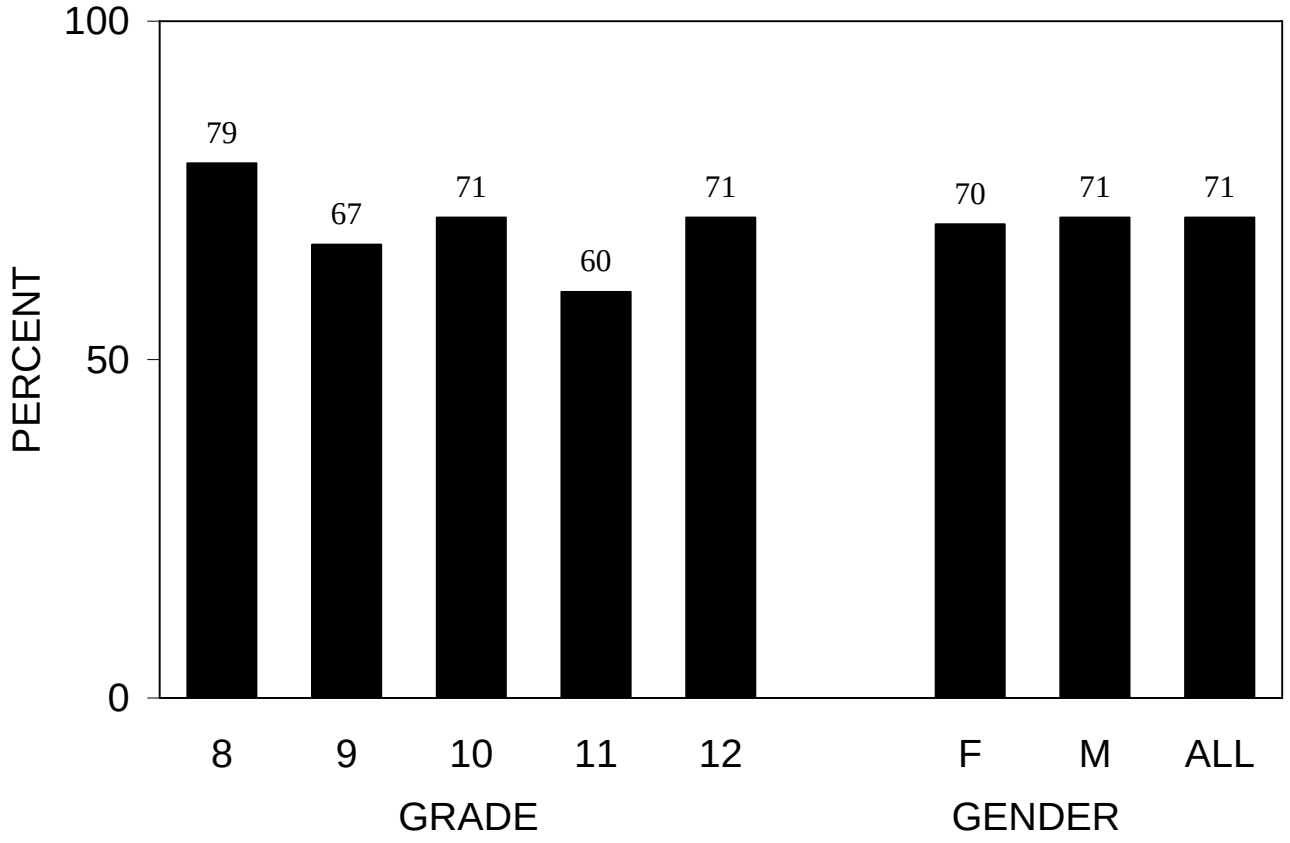
Measures of Youth Assets

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

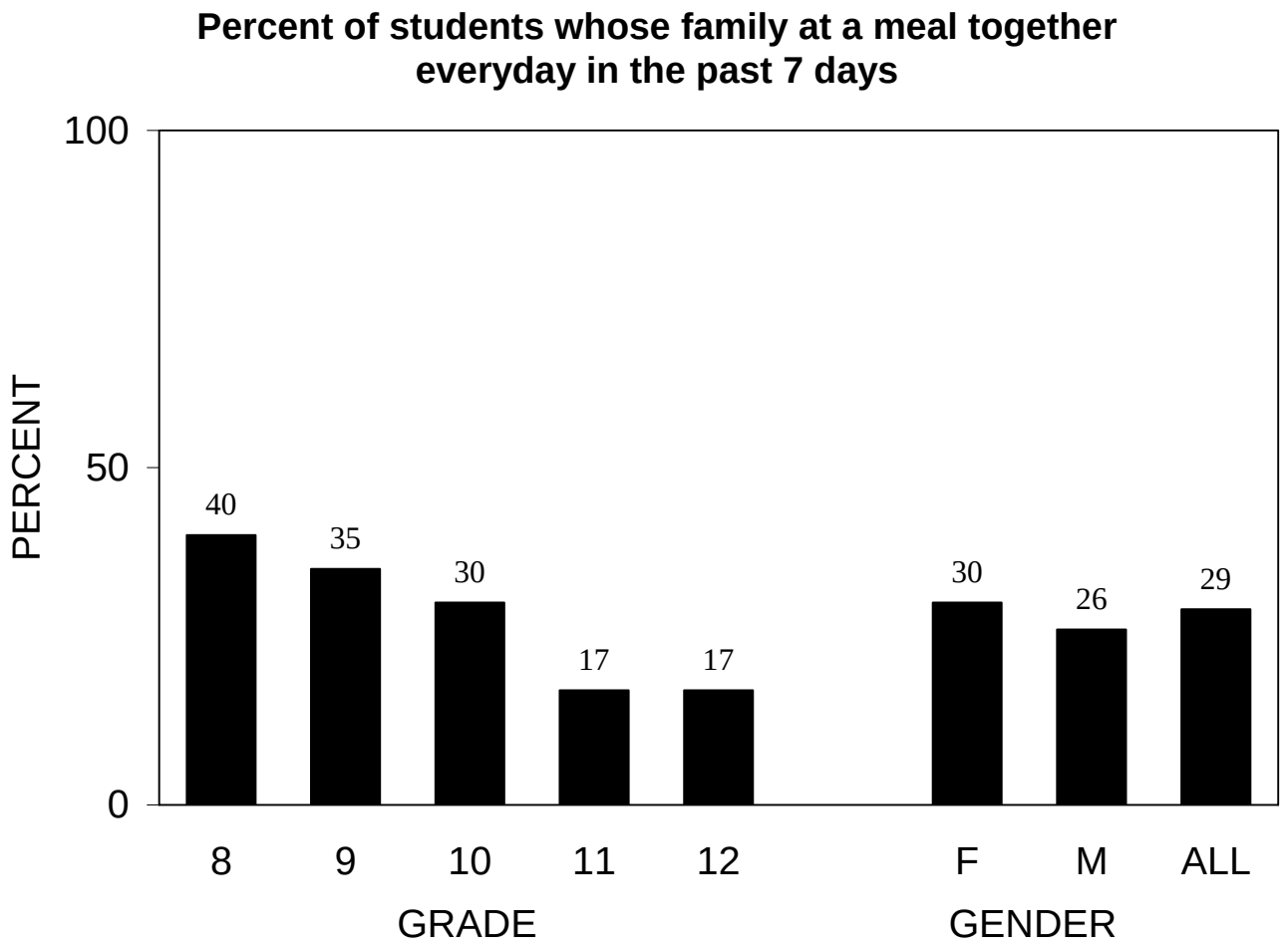


Measures of Youth Assets

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)	24	20	19	17	20	27	19	25	14
Spend 3 or more hours per week in clubs or organizations outside of school (not including sports)	10	10	9	7	11	13	10	12	7
Spend 1 or more hours per week volunteering their time to make their community a better place to live	37	36	34	44	35	27	43	36	36
Spend 3 or more hours per week volunteering their time to help others make their community a better place to live	12	13	8	15	14	11	17	14	12

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	41	40	55	39	29	40	34	48	33
In my community, I feel like I matter to people	39	37	40	39	30	35	35	38	35
Percent of students who have an adult in their life they can usually turn to for help and advice	87	88	86	87	88	89	92	86	89

References

1. Sosin, D.M., Koepsell, T.D., Rivara, F.P., Mercy, J.A. Fighting as a marker for multiple problem behaviors in adolescents. Journal of Adolescent Health 16(3):209-215, 1995.
2. Borowsky, I.W., Ireland, M. Predictors of future fight-related injury among adolescents. Pediatrics 113(3 pt 1):530-536, 2005.
3. Pickett, W., Craig, W., Harel, Y., et al. Cross-national study of fighting and weapon carrying as determinants of adolescent injury. Pediatrics 116(6):e855-863, 2005.
4. Roberts, T.A., Klein, J.D., Fisher, S. Longitudinal effect of intimate partner abuse and high-risk behavior among adolescents. Archives of Pediatrics and Adolescent Medicine 157(9):875-881, 2003.
5. Ackard, D.M., Neumark-Sztainer, D. Date violence and date rape among adolescents: association with disordered eating behaviors and psychological health. Child Abuse and Neglect 26(5):455-473, 2002.
6. Howard, D.E., Wang, M.Q. Psychosocial correlates of U.S. adolescents who report a history of forced sexual intercourse. Journal of Adolescent Health 36(5):372-379, 2005.
7. Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS). National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Online: www.cdc.gov/injury/wisqars/index.html
8. Cook, P.J., Ludwig, J. The costs of gun violence against children. Future of Children 12(2):87-99, 2002.
9. Juvonen, J., Graham, S., Schuster, M.A. Bullying among young adolescents: the strong, the weak, and the troubled. Pediatrics 112(6 pt 1): 1231-1237, 2003.
10. Spivak, H., Prothrow-Stith, D. The need to address bullying-an important component of violence prevention. JAMA 285(16):2131-2132, 2001.
11. Nansel, T.R., Overpeck, M., Pilla, R.S., et al. Bullying behaviors among U.S. youth: prevalence and association with psychological adjustment. JAMA 285(16):2094-2100, 2001.
12. National Highway Traffic Safety Administration. Traffic safety facts 2007: occupant protection. Online: www-nrd.nhtsa.dot.gov/Pubs/810991.PDF
13. Centers for Disease Control and Prevention. Injury-control recommendations: bicycle helmets. Morbidity and Mortality Weekly Report 44:1-17, 1995.
14. Sosin, D.M., Sacks, J.J., Webb, K.W. Pediatric head injuries and deaths from bicycling in the United States. Pediatrics 98(5):868-870, 1996.
15. Rivara, F.P., Grossman D.P. Prevention of traumatic deaths to children in the United States: how far have we come and where do we need to go? Pediatrics 97(6 pt 1):791-797, 1996.
16. National Highway Traffic Safety Administration. Traffic safety facts: bicycle helmet use laws, 2008. Online: www.nhtsa.dot.gov/people/injury/TSFLaws/PDFs/810886.pdf
17. National Highway Traffic Safety Administration. 2007 Traffic Safety Annual Assessment – Alcohol-Impaired Driving Fatalities. Research Note DOT HS 811 016. Washington, D.C., U.S. Department of Transportation, 2008.
18. National Highway Traffic Safety Administration. The Economic Cost to Society of Motor Vehicle Accidents. Technical Report DOT HS 809-195. Washington, DC: U.S. Department of Transportation, 1987.
19. Jones, R.K., Shinar, D., Walsh, J.M. State of knowledge of drug-impaired driving. National Highway Traffic Safety Administration Technical Report DOT HS 809 642. Washington, DC: U.S. Department of Transportation, 2003.
20. Abbey, A., Zawacki, T., Buck, P.O., et al. Alcohol and sexual assault. Alcohol Research and Health 25(1):43-51, 2001.
21. Miller, J.W., Naimi, T.S., Brewer, R.D., Jones, S.E. Binge drinking and associated health risk behaviors among high school students. Pediatrics 119(1):76-85, 2007.

22. Dunn, M.S., Bartee, R.T., Perko, M.A. Self-reported alcohol use and sexual behaviors of adolescents. Psychological Reports 92(1):339-48, 2003.

23. Jones, S.E., Oeltmann, J., Wilson, T.W., et al. Binge drinking among undergraduate college students in the United States: implications for other substance use. Journal of American College Health 50(1):33-38, 2001.

24. Johnson, P.B., Boles, S.M., Vaughan, R., Kleber, H.D. The co-occurrence of smoking and binge drinking in adolescence. Addictive Behaviors 25(5):779-783, 2000.

25. U.S. Department of Health and Human Services. The Health Consequences of Smoking: A Report of the Surgeon General. U.S. Department of Health and Human Services; Centers for Disease Control and Prevention; National Center for Chronic Disease Prevention and Health Promotion: Office on Smoking and Health, 2004.

26. Mokdad, A.H., Marks, J.S., Stroup, D.F., Gerberding, J.L. Actual causes of death in the United States, 2000. JAMA 291(10):1238-1245, 2004.

27. Everett, S.A., Malarcher, A.M., Sharp, D.J., et al. Relationship between cigarette, smokeless tobacco, and cigar use, and other health risk behaviors among U.S. high school students. Journal of School Health 70(6):234-240, 2000.

28. National Institute on Drug Abuse. Research report series: marijuana abuse. NIH Publication 05-3859, 2002.

29. Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS), April 2002.

30. Do It Now Foundation. FastFacts-inhalants. 2007.

31. Newcomb, M.D., Locke T. Health, social, and psychological consequences of drug use and abuse. In: Epidemiology of Drug Abuse (Z. Sloboda, ed.). Springer U.S., 2006.

32. Johnston, L.D., O'Malley, P.M., Bachman, J. G., Shulenberg, J.E. Monitoring the Future National Results on Adolescent Drug Use: Overview of Key Findings, 2008 (NIH Publication No. 09-7401). Bethesda, MD: National Institute on Drug Abuse, 2009.

33. Johnston, L., O'Malley, P., Bachman, J. G., Shulenberg, J.E. National Survey Results on Drug Use From the Monitoring the Future Study, 1975-2007, Volume I: Secondary School Students (NIH Publication No. 08-6418A). Bethesda, MD: National Institute of Drug Abuse, 2008.

34. Abma, J.C., Sonenstein, F.L. Sexual activity and contraceptive practices among teenagers in the United States, 1998 and 1995. National Center for Health Statistics. Vital Health Statistics Series 23:1-26, 2001.

35. Centers for Disease Control and Prevention. Fact sheet on STDs and pregnancy. Online: www.cdc.gov/std/pregnancy/STDs-and-pregnancy-fact-sheet.pdf

36. Rosenbaum, E., Kandel, D.B. Early onset of adolescent sexual behavior and drug involvement. Journal of Marriage and the Family 52(3):783-798, 1990.

37. Weinstock, H., Berman, S., Cates, W. Sexually transmitted diseases among American youth: incidence and prevalence estimates, 2000. Perspectives on Sexual and Reproductive Health 36(1):6-10, 2004.

38. Hall, H.I., Song, R., Rhodes, P., et al. Estimation of HIV incidence in the United States. JAMA 300(5):520-529, 2008.

39. Hart, T.A., Heimberg, R.G. Presenting problems among treatment-seeking gay, lesbian, and bisexual youth. Journal of Clinical Psychology 57(5):615-627, 2001.

40. Ogden, C.L., Carroll, M.D., Curtin, L.R., et al. Prevalence of overweight and obesity in the United States, 1999-2004. JAMA 295(13):1549-1555, 2006.

41. Wright, C.M., Parker, L., Lamont, D., Craft, A.W. Implications of childhood obesity for adult health: findings from thousand families cohort study. British Medical Journal 323(7324):1280-1284, 2001.

42. Daniels, S.R., Arnett, D.K., Eckel, R.H., et al. Overweight in children and adolescents: pathophysiology, consequences, prevention, and treatment. Circulation 111(15):1999-2012, 2005.

43. Tremblay, L., Lariviere, M. The influence of puberty onset, body mass index, and pressure to be thin on disordered eating behaviors in children and adolescents. Eating Behaviors 10(2):75-83, 2009.

44. Mitchell, J.E., Eckert, E.D. Scope and significance of eating disorders. Journal of Consulting Clinical Psychology 55:628-634, 1987.

45. Neumark-Sztainer, D., Hannan, P.J. Weight-related behaviors among adolescent girls and boys: results from a national survey. Archives of Pediatric and Adolescent Medicine 154(6):569-577, 2000.

46. Neumark-Sztainer, D., Story, M., Hannan, P.J., et al. Weight-related concerns and behaviors among overweight and nonoverweight adolescents: implications for preventing weight-related disorders. Archives of Pediatric and Adolescent Medicine 156(2):171-178, 2002.

47. American Psychiatric Association. Practice guideline for the treatment of patients with eating disorders (revision). American Journal of Psychiatry 154(1):1-39, 2004.

48. Key, T.J., Schatzkin, A., Willet, W.C., et al. Diet, nutrition, and the prevention of cancer. Public Health Nutrition 7(1A):187-200, 2004.

49. National Cancer Institute. 5 A Day for Better Health program. NIH Publication 01-5019, 2001.

50. Kavey, R.E., Daniels, S.R., Lauer, R.M., et al. American Heart Association guidelines for primary prevention of atherosclerotic cardiovascular disease beginning in childhood. Journal of Pediatrics 142(4):368-372, 2003.

51. Terry, P., Terry, J.B., Wolk, A. Fruit and vegetable consumption in the prevention of cancer: an update. Journal of Internal Medicine 250(4):280-290, 2001.

52. U.S. Department of Health and Human Services and U.S. Department of Agriculture. Dietary Guidelines for Americans, 6th Edition, 2005. Washington, D.C., U.S. Government Printing Office.

53. Van Duyn, M.A., Pivonka, E. Overview of the health benefits of fruit and vegetable consumption for the dietetics professional: selected literature. Journal of the American Dieticians Association 100(12):1511-1521, 2000.

54. Sondick, E. Focus area 19: nutrition and overweight progress review, 2008. Online: www.cdc.gov/nchs/ppt/hpdata2010/focusareas/fa19_2.ppt

55. U.S. Department of Health and Human Services. Bone Health and Osteoporosis: A Report of the Surgeon General. Rockville, MD: Department of Health and Human Services, Office of the Surgeon General, 2004.

56. Malik, V.S., Schulze, M.B., Hu, F.B. Intake of sugar-sweetened beverages and weight gain: a systematic review. American Journal of Clinical Nutrition 84(2):274-288, 2006.

57. Ludwig, D.S., Peterson, K.E., Gortmaker, S.L. Relation between consumption of sugar-sweetened drinks and childhood obesity: a prospective, observational analysis. Lancet 357(9255):505-508, 2001.

58. Physical Activity Guidelines Advisory Committee. Physical Activity Guidelines Advisory Committee Report, 2008. Washington, D.C.: U.S. Department of Health and Human Services, 2008.

59. Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance - United States, 2007. Morbidity and Mortality Weekly Report 57:SS-4, 1-136, 2008.

60. Durant, N., Harris, S.K., Doyle, S., et al. Relation of school environment and policy to adolescent physical activity. Journal of School Health 79(4):153-159, 2009.

61. McKenzie, K.L., Li, D., Derby, C.A., et al. Maintenance of effects of the CATCH Physical Education Program: results from the CATCH-ON Study. Health Education & Behavior 30(4):447-462, 2003.

62. U.S. Department of Health and Human Services and U.S. Department of Education. Promoting better health for young people through physical activity and sports. Silver Spring, MD, 2000. Online: www.cdc.gov/HealthyYouth/physicalactivity/promoting_health/pdfs/ppar.pdf

63. Center for Disease Control and Prevention. Guidelines for school and community programs to promote lifelong physical activity among young people. Morbidity and Mortality Weekly Report 46 (No. RR-6):1-36, 1997.

64. Zabinski, M.F., Norman, G.J., Sallis, J.F., et al. Patterns of sedentary behavior among adolescents. Health Psychology 26(1):113-120, 2007.

65. Crespo, C.J., Smit, E., Troiano, R.P., et al. Television watching, energy intake, and obesity in U.S. children: results from the third National Health and Nutrition Examination Survey, 1988-1994. Archives of Pediatric and Adolescent Medicine 155(3):360-365, 2001.

66. Kaur, H., Choi, W.S., Mayo, M.S., Harris, K.J. Duration of television watching is associated with increased body mass index. Journal of Pediatrics 143(4):506-511, 2003.

67. Kuntsche, E., Pickett, W., Overpeck, M., et al. Television viewing and forms of bullying among adolescents from eight countries. Journal of Adolescent Health 39(6):908-915, 2006.

68. Resnick, M.D., Bearman, P.S., Blum, R.W., et al. Protecting adolescents from harm. Findings from the National Longitudinal Study on Adolescent Health. JAMA 278(10):823-832, 1997.

69. Fan, X., Chen, M. Parental involvement and students' academic achievement: a meta-analysis. Educational Psychology Review 13(1):1-22, 2001.

70. U.S. Council of Economic Advisors. Teens and their parents in the 21st century: An examination of trends in teen behavior and the role of parental involvement. 2000. Online: http://clinton3.nara.gov/WH/EOP/CEA/html/Teens_Paper_Final.pdf

71. National Center on Addiction and Substance Abuse at Columbia University. The importance of family dinners IV. 2007.

72. Eisenberg, M.E., Olson, RE, Neumark-Sztainer, D., et al. Correlations between family meals and psychological well-being among adolescents. Archives of Pediatrics and Adolescent Medicine 158(8):792-796, 2004.

73. Videon, T.M., Manning, C.K. Influences on adolescent eating patterns: the importance of family meals. Journal of Adolescent Health 32(5): 365-373, 2003.

74. Fredricks, J.A., Eccles, J.S. Is extracurricular participation associated with beneficial outcomes? Developmental Psychology 42(4):698-713, 2006.

75. Scales, P.C., Benson, P.L., Leffert, N., Blyth, D.A. Contribution of developmental assets to prediction of thriving among adolescents. Applied Developmental Science 4(1):27-46, 2000.