

NEVADA DEPARTMENT OF EDUCATION
2009 YOUTH RISK BEHAVIOR SURVEY RESULTS
Executive Summary

In the spring of 2009, the Nevada Department of Education conducted its ninth statewide administration of the Youth Risk Behavior Survey (YRBS) as part of the United States Centers for Disease Control and Prevention (CDC) Youth Risk Behavior Surveillance System. The CDC uses this epidemiological surveillance system to measure the prevalence of priority health and safety behaviors that put youth at risk for significant health and social problems and to monitor progress toward achieving relevant national health objectives for the year 2010. The 2009 administration was the fifth in which the survey document included selected questions from the Nevada Safe and Drug-Free Schools and Communities Student Survey along with core YRBS questions and also the fifth time that middle school students were surveyed using a similar, age-appropriate document. However, since 2007 was the first time that the middle school survey included the required number of core items to qualify it for analysis by CDC, 2009 is the first year in which comparisons of weighted data over time can be made. Survey administration procedures were designed to help protect the privacy and confidentiality of all participating students. Student participation was voluntary, and parent permission was obtained.

A total of 2,951 students in 82 public schools containing grades 9, 10, 11, or 12 were selected for participation in the 99-item, multiple choice high school YRBS. The school response rate was 91 percent, and the student response rate, based on 2,085 usable questionnaires received from the sampled students, was 71 percent, resulting in an overall response rate of 64 percent. This marks the ninth year in which Nevada has obtained weighted high school YRBS data. At the middle school level, 99 of the 111 sampled schools containing grades 6, 7, or 8 administered the 61-item survey, resulting in an 89% school participation rate. A total of 2,467 usable questionnaires were obtained from the 3,225 students enrolled in the selected classes for a 76% student response rate. The resulting overall response rate of 68% provides Nevada with its second weighted middle school YRBS data, which means that survey results can not only be generalized to all regular public school students in grades 6 through 8 but that it is also possible to determine whether behaviors have increased, decreased, or stayed the same since 2007.

The data generated from the 1993 Nevada YRBS provided the first benchmark of the prevalence of certain risk behaviors practiced by Nevada adolescent youth. Subsequent YRBS results not only assess the prevalence of these behaviors but also provide a measure of the State's progress toward achieving relevant national health objectives for the year 2010. The students who participated in the 2009 middle and high school surveys are representative of students in Nevada. Therefore, the results can be used to make important inferences concerning the health-risk behaviors of all Nevada regular public school students in grades 6-12.

Goals Attained or Surpassed

The proportions of Nevada students reporting the following desired behaviors currently **equal or exceed** the goals established in the national health objectives for the year 2010.

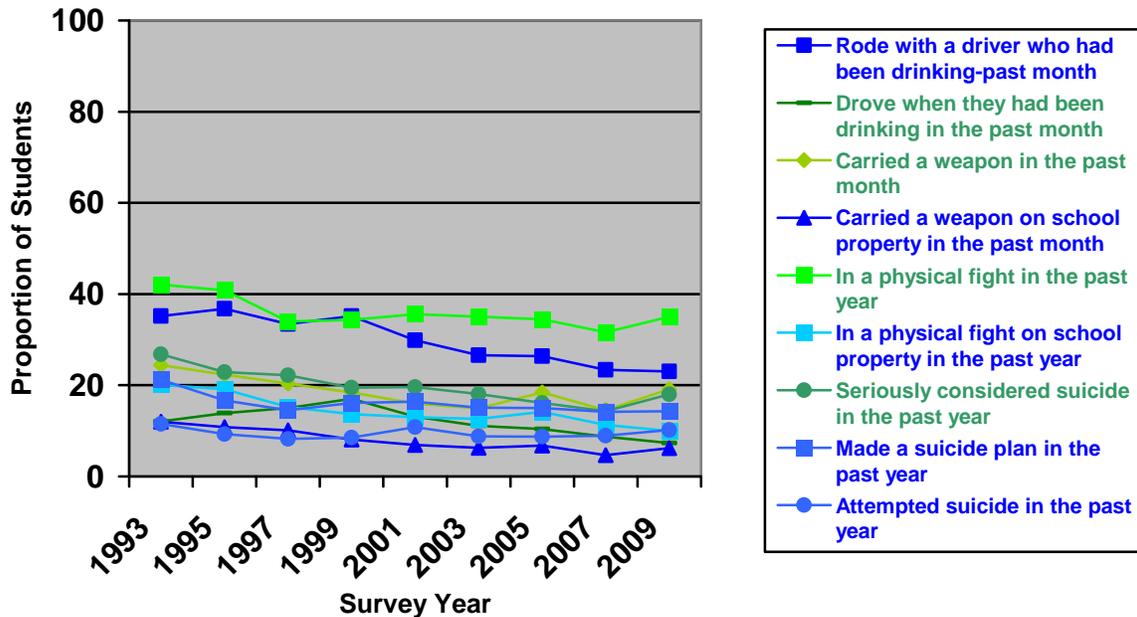
- The proportion of high school students reporting that they rode, during the last 30 days, with a driver who had been drinking alcohol was 23 percent. (Goal of reducing to 30%)
- The use of tobacco products in the past month was reported by 10.3 percent of middle school students and 19.4 percent of high school students. (Goal of reducing to 21%)
- Cigarette smoking on one or more days in the past month was reported by 8.2 percent of middle school students. (Goal of reducing to 16%)
- Use of cigars in the past month was reported by 5.9 percent of middle school students. (Goal of reducing to 8%)

Progress Recorded

A trend analysis report generated by the CDC shows that significant positive changes have

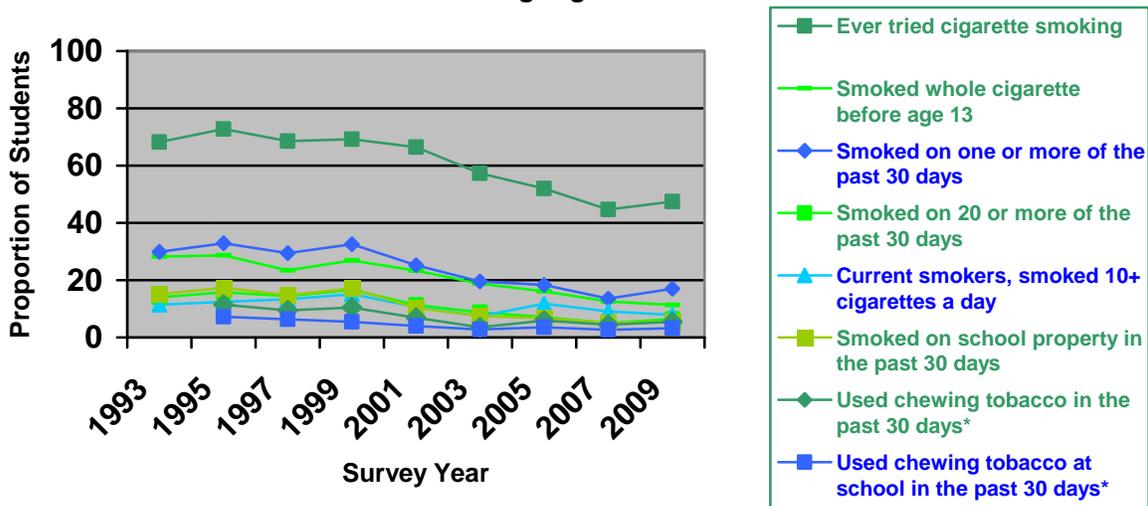
occurred over time in behaviors measured by forty of the standard High School YRBS questions from the Nevada YRBS. Trend lines grouped by behavior area are shown on the following pages. The legend shows significant linear changes in blue, while overall significant linear changes which have leveled off or begun to move in the opposite direction (quadratic changes) are shown in green. 2009 marks the first year that comparisons over time can be made for Nevada middle school students. Because at least three years of data are needed to test for quadratic changes, only linear changes are noted at the middle school level.

Significant Positive Changes in Injury and Violence-Related Behaviors Among High School Students

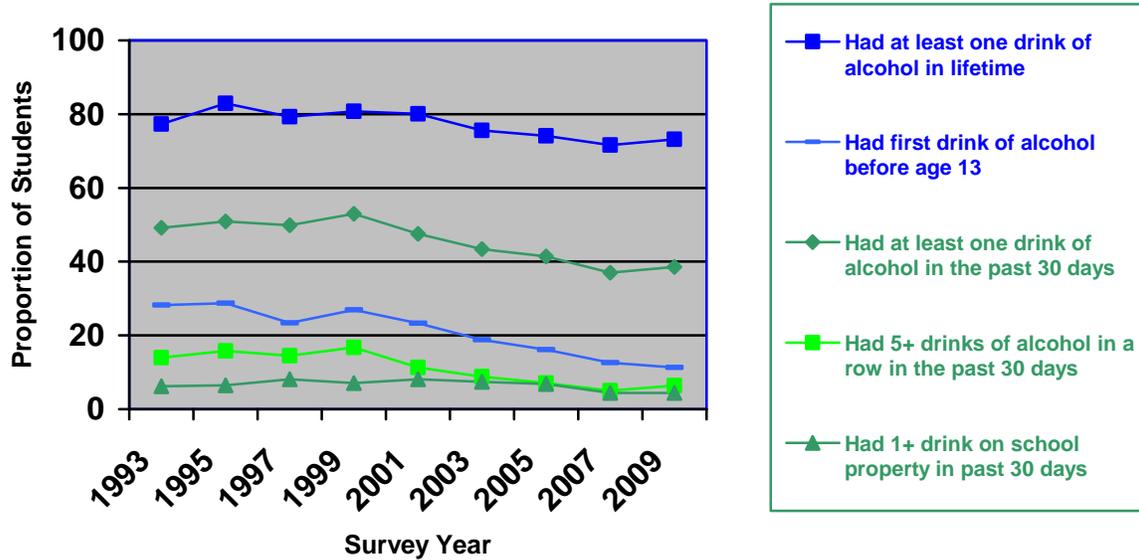


Among middle school students, the percentage of female students reporting that they have ever made a suicide plan decreased significantly from 20.2 percent in 2007 to 15.2 percent in 2009.

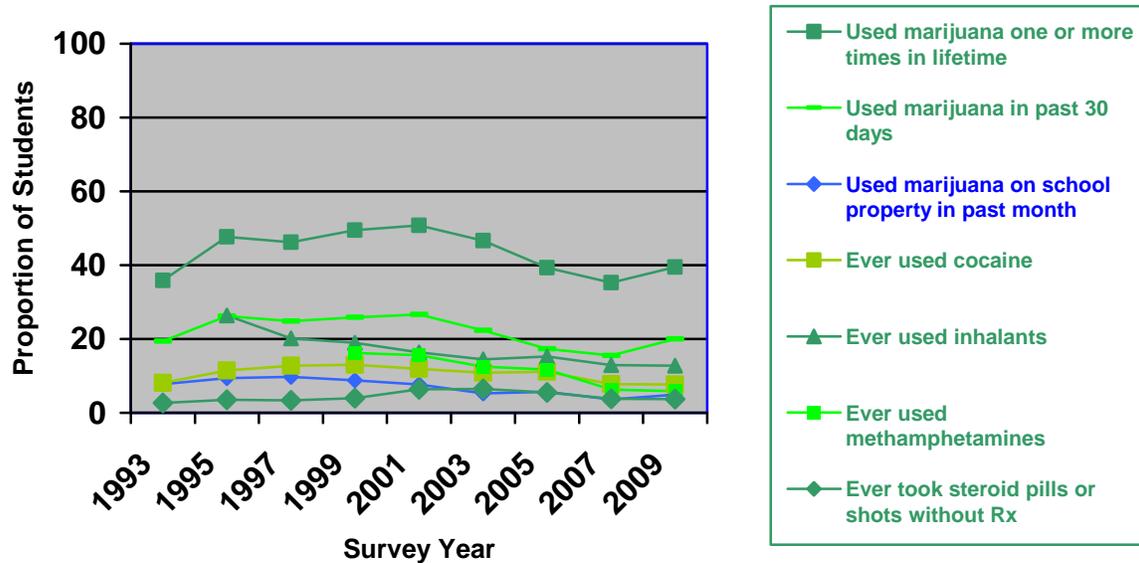
Significant Positive Changes in Tobacco Use Among High School Students



Significant Positive Changes in Alcohol Use Among High School Students



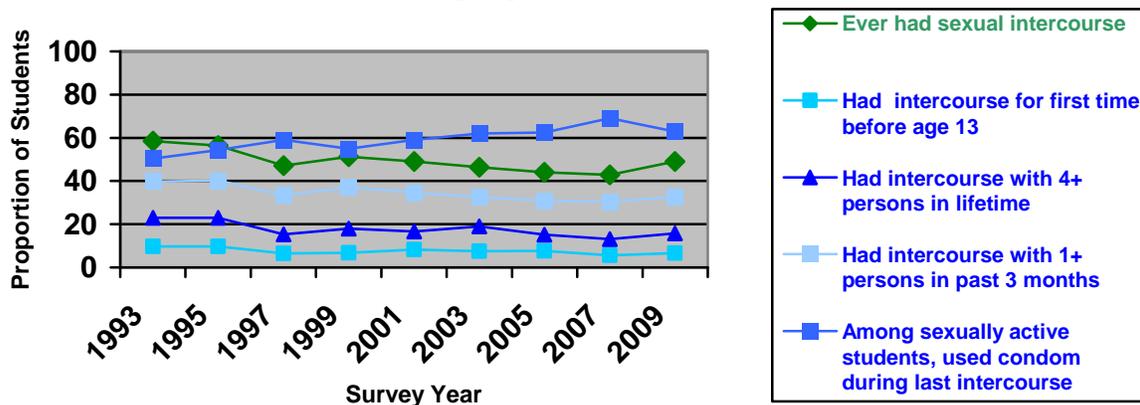
Significant Positive Changes in Drug Use Among High School Students



At the high school level, not all questions on tobacco and drug use have data for all years. Blanks for a given question or year signify that weighted data were not available for that year or that the question was not asked.

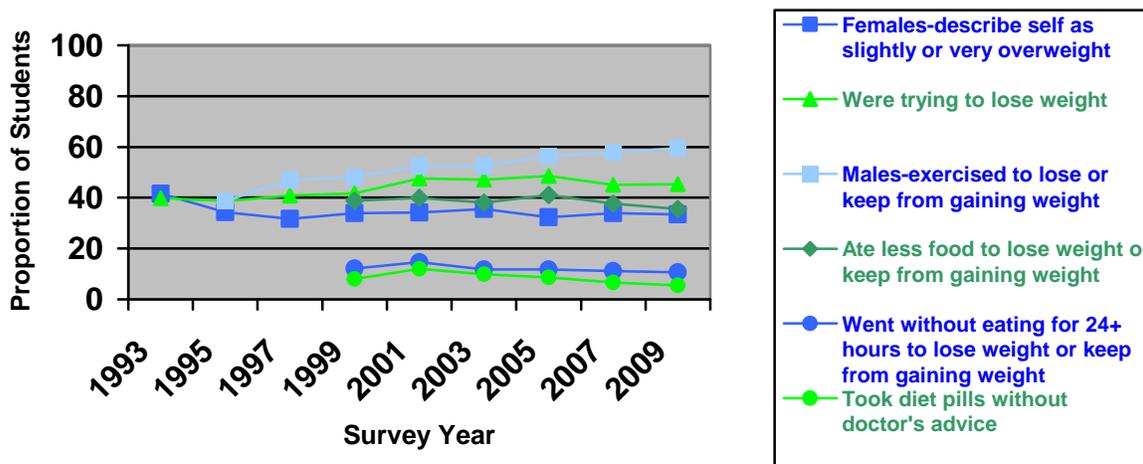
At the middle school level, where only two years of weighted data are available, no significant changes in tobacco, alcohol, or other drug use were apparent.

Significant Positive Changes in Sexual Behaviors Among High School Students



At the middle school level, while no questions on sexual behaviors were included in the survey, the percentage of male students reporting that they had been taught about AIDS or HIV infection in school increased significantly from 49.2 percent in 2007 to 56.9 percent in 2009.

Significant Positive Changes in Weight Management and Dietary Behaviors Among High School Students



High school males also demonstrated significant linear and quadratic changes regarding vomiting or taking laxatives to lose weight or keep from gaining weight; however, after peaking at 6.3 percent in 2005, the trend line for this behavior dropped back to its initial 2.6 percent in 2007 and then rose slightly to 2.8 percent in 2009.

The only questions on weight management and dietary behaviors on the middle school survey were the two related to students' perception of their own weight and what students are trying to do about their own weight. No significant change was apparent in either of these questions between 2007 and 2009.

Areas of Increasing Risk

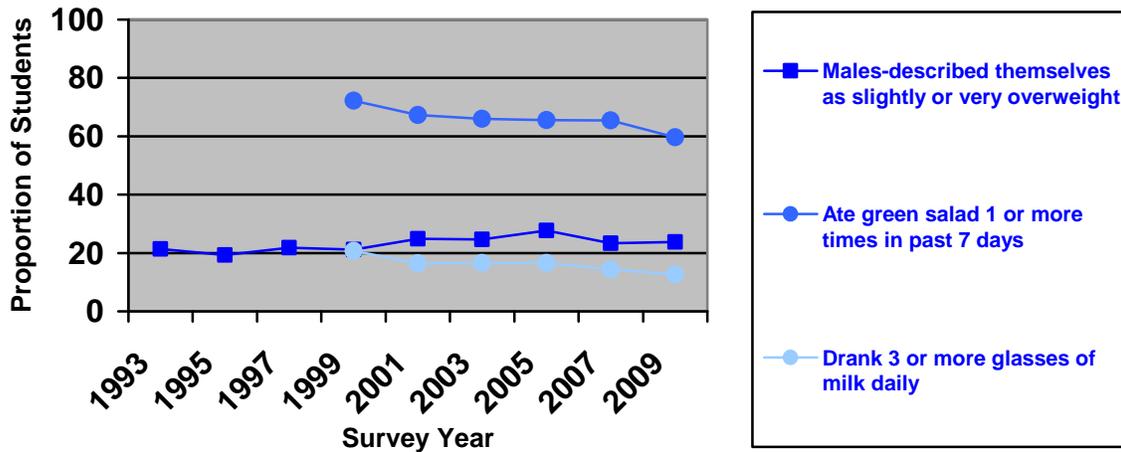
The CDC trend analysis also identified several behaviors reported by Nevada students where significant negative changes had occurred over time. Among middle school students, elimination of numerous survey questions and changes in the wording of other questions preclude most

comparisons over time. However, two significant negative linear changes were apparent in the following two behaviors that may result in unintentional or intentional injury:

- Ever having carried a weapon increased significantly from 29.8 percent to 44.5 percent.
- Ever been in a physical fight increased significantly from 51.4 percent to 58.9 percent.

For high school students, all significant negative changes were in the areas of weight management and dietary behaviors. Trend lines for these significant negative changes can be viewed in the next line graph.

Significant Negative Changes in Weight Management and Dietary Behaviors Among High School Students



Short-Term Changes

In addition to the positive and negative changes in adolescent behaviors over time, a number of short-term changes, both positive and negative, were apparent between the 2009 Youth Risk Behavior Survey results and the results from the 2007 administration of the survey. The findings below and on the next pages (listed sequentially by survey category) provide additional information regarding Nevada students' response to the 2009 YRBS by providing comparisons with 2007 YRBS results. Within each category, changes representing progress in health and safety behaviors that put Nevada youth at risk will be presented first, followed by changes that indicate backsliding. Changes included in previously reported trends will not be repeated.

Behaviors that Result in Unintentional and Intentional Injuries:

In addition to the significant positive and following changes reported above, the following **improvements in reducing risk** since the 2007 survey were apparent:

Among high school students:

- Rarely or never wearing a seatbelt decreased from 10.3 percent to 9.0 percent.

Among middle school students:

- Always wearing a helmet rose from 7.1 percent to 8.3 percent among bicycle riders.
- Always wearing a seatbelt increased from 47.5 percent to 52 percent.
- Being intentionally hurt by boyfriend/girlfriend fell from 7.2 percent to 6.1 percent.
- Ever making a suicide plan fell from 15.1 percent to 13.8 percent.

- Ever attempting suicide decreased from 10.1 percent to 8.8 percent.

Increased risk or no change was apparent since the 2007 survey in the following behaviors.

Among high school students:

- Not going to school because of safety concerns increased from 7.0 percent to 7.5 percent.
- Weapon threats or injuries on school property rose from 7.8 percent to 10.3 percent.
- Being intentionally hurt by boyfriend/girlfriend increased from 9.4 percent to 11.4 percent.
- Being physically forced to have sexual intercourse rose from 7.6 percent to 10.1 percent.
- Symptoms of depression in the past year increased from 26.1 percent to 30.3 percent.
- Among students who attempted suicide, the need for medical treatment remained at 37 percent.

Among middle school students:

- For students who rollerblade or ride a skateboard, always wearing a helmet decreased from 6.7 percent to 4.9 percent.
- Need for medical treatment after a physical fight increased from 6.0 percent to 7.2 percent.

Tobacco, Alcohol, and Other Drug Use: The following **improvements in reducing risk** since the 2007 survey were apparent. Once again, previously reported changes will not be repeated.

Among high school students:

- 46.8 percent of smokers who bought cigarettes in a store were not asked to show proof of age compared with 48.3 percent in 2007.
- 36 percent of current drinkers usually were given their alcohol by someone compared with 38.1 percent in 2007.
- Ever used a needle to inject a drug dipped to 1.8 percent in 2009 from 2.0 percent in 2007.

Among middle school students:

- Smoked a whole cigarette before age 11 fell from 6 percent in 2007 to 5.3 percent in 2009.
- Daily smoking decreased from 3.8 percent in 2007 to 3.0 percent in 2009.
- Use of chewing tobacco in past 30 days fell from 4.0 percent in 2007 to 3.8 percent in 2009.
- Ever smoked cigars dropped from 7.6 percent in 2007 to 5.9 percent in 2009.
- Lifetime alcohol use decreased from 38.5 percent in 2007 to 37.5 percent in 2009.
- First drink before age 11 dropped from 17.9 percent in 2007 to 17.1 percent in 2009.
- Lifetime marijuana use fell from 13.2 percent in 2007 to 12.5 percent in 2009.
- Marijuana use before age 11 dropped from 4.5 percent in 2007 to 3.5 percent in 2009.
- Lifetime cocaine use dipped to 4.1 percent in 2009 from 4.2 percent in 2007.
- Steroid use without a prescription dropped to 1.9 percent in 2009 from 2.7 percent in 2007.

Increased risk in this area was apparent since the 2007 survey in the following behaviors.

Among high school students:

- 13.4 percent of current smokers under 18 bought their cigarettes in a store or gas station in 2009 compared with 10.1 percent in 2007.
- First marijuana use before age 13 rose to 9.3 percent in 2009 from 8.4 percent in 2007.
- 14.3 percent had taken over-the-counter drugs to feel high in 2009 compared with 10.9 percent in 2007.
- 35.6 percent were offered, sold, or given an illegal drug on school property compared to 28.8 percent in 2007.

Among middle school students:

- Current smoking rose to 8.2 percent in 2009 from 7.0 percent in 2007.

- Current tobacco use increased to 10.3 percent in 2009 from 10.1 percent in 2007.
- Lifetime inhalant use climbed from 10.6 percent in 2007 to 12.2 percent in 2009.
- 4.2 percent ever took over-the-counter drugs to feel high in 2009 compared with 3.4 percent in 2007.

Sexual Behaviors and Health-Related Outcomes:

The only **positive changes** in 2009 beyond the previous trend analysis, page iv graphic illustration, were the following:

- Among sexually active high school students:
 - Use of alcohol or drugs before last sexual intercourse dropped to 20.7 percent from 21.5 percent in 2007.
 - Use of birth control pills before last sexual intercourse increased to 16.9 percent from 16.5 percent in 2007.
- At the middle school level, 55.5 percent of students reported ever having been taught about AIDS or HIV infection in school compared with 50.5 percent in 2007.

Dietary Behaviors and Physical Activity:

At the middle school level, the following changes were apparent between 2007 and 2009:

- Described themselves as slightly or very overweight rose to 24.4 percent from 23.2 percent.
- Were trying to lose weight increased to 45.4 percent from 43.3 percent.

At the high school level, the percentage of students who described themselves as slightly or very overweight dipped from 28.6 in 2007 to 28.5 in 2009. Based on their responses to the height and weight questions, the following determinations were made:

- Overweight students decreased from 14.5 percent in 2007 to 13.4 percent in 2009.
- Obese students continued to make up 11 percent of Nevada high school students.

Only high school students were asked questions about specific dietary behaviors. Changes are as follows;

Positive changes in dietary behaviors among high school include the following:

- Ate other vegetables during the last 7 days rose from 80.4 percent to 81.0 percent.
- Drank non-diet soda one or more times a day during the last 7 days dropped from 23.5 percent to 22.1 percent.

Negative changes in dietary behaviors among high school students include the following:

- Drank fruit juice in past week dropped to 78.6 percent from 80.9 percent.
- Ate fruit in past week dipped to 84.4 percent from 84.6 percent.
- Ate potatoes in past week fell from 66.9 percent to 65 percent.
- Ate carrots in past week declined from 48.4 percent to 46.2 percent.
- Ate fruits and vegetables 5 or more times per day during the last 7 days fell from 19 percent to 17 percent.

Both high school students and middle school students were asked questions about physical activity.

Among high school students, the percentage of students who watched 3 or more hours of TV on an average school day remained at 35.1. The following negative changes in physical activity were apparent since the 2007 survey:

- Were physically active for 60 or more minutes on 5 or more of the past 7 days decreased

from 46.62 percent to 44.1 percent.

- Video game playing and non-school related computer use for 3 or more hours per day on school days increased from 24.0 percent to 26.2 percent.

For middle school students, both positive and negative changes were apparent in physical activity.

- Positive changes:
 - 3 or more hours of TV on school days decreased from 42.7 percent to 40.8 percent.
 - 3 or more hours of playing video games or non-school related computer use dropped from 28.4 percent to 27.7 percent.
- Negative changes;
 - Were physically active for 60 or more minutes on 5 or more of the past 7 days decreased from 54.6 percent to 54.3 percent.
 - P.E. classes at school 5 days a week dropped from 51.3 percent to 44.8 percent.
 - Played on sports team decreased from 57.9 percent to 56.6 percent.

Conclusion

The results of the 2009 administration of the YRBS suggest that progress continues to be made in reducing the prevalence of many of the behaviors that put Nevada youth at risk. Since the high school survey's inception in Nevada in 1993, significant reductions are apparent in injury and violence-related behaviors; tobacco, alcohol, and drug use; sexual behaviors; and weight management behaviors. The only significant negative changes appear in the area of dietary behaviors where the percentages of high school students eating green salad in the past week and drinking 3 or more glasses of milk each day have both declined significantly. Only in the area of physical activity, where just two years of data exist, can no significant changes be perceived. While 2009 results show small increases from 2007 in some risk behaviors, most trends reflect decreases over time.

In 2007, Nevada high school students were found to be at equal or less risk than students throughout the United States in all priority risk behaviors in these areas with the exception of lifetime methamphetamine use and having been offered, sold, or given an illegal drug by someone on school property.¹ Trend data, however, show that the percentage of Nevada students who have ever used methamphetamines has declined steadily from 16.2 percent in 1999 to 5.9 percent in 2009. However, the percentage of students who were offered drugs on school property, which ranges from a low of 28.8 percent in 2007 to a high of 38 percent in 1995, shows no such linear decline and has always exceeded the national percentage by more than 2 to nearly 8 percentage points.

At the middle school level, weighted data are available for only two years, 2007 and 2009. While changes in the percentage of students demonstrating various risk behaviors are apparent between those two years, the only significant ones, both negative, are increased percentages of students who had ever carried a weapon such as a gun, knife, or club and students who had ever been in a physical fight. Two small improvements were seen: Fewer female students had made a suicide plan, and more male students had been taught in school about AIDs or HIV infection.

Past experience has shown that by focusing attention on risk areas in which many students continue to engage in behaviors that put them at risk for significant health and social problems and/or in which the prevalence of such behaviors has increased, progress can be achieved. Areas of concern arising from Nevada's 2009 YRBS participation include weapon carrying and physical fighting at the middle school level and dietary behaviors, especially consumption of green salads, fruits and vegetables, and milk, at the high school level. The area of physical activity elicits concern at both middle and high school levels, with fewer students meeting recommended levels of physical activity and more reporting sedentary activities such as watching television and playing video games.

¹ <http://www.cdc.gov/yrbss>