



New Jersey  
Student Health Survey

2011



New Jersey Department of Education | Division of Student and Field Services | Office of Student Support Services

# REPORT ON THE 2011 NEW JERSEY STUDENT HEALTH SURVEY OF HIGH SCHOOL STUDENTS

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May 2012

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***Funded by:***

Funding for the survey was provided by the New Jersey Department of Education through a cooperative agreement with the Centers for Disease Control and Prevention #5U87DP001263; by the U.S. Department of Education under Title IV, Part A of No Child Left Behind Act; and by the New Jersey Department of Human Services, Division of Mental Health and Addiction Services.



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# BACKGROUND

## Introduction

The 2011 New Jersey Student Health Survey was administered to a sample of public high school students during the spring of 2011 by the New Jersey Department of Education (NJDOE). The study was conducted under contract with the Bloustein Center for Survey Research (BCSR) at the Edward J. Bloustein School of Planning and Public Policy, Rutgers University. The NJDOE has conducted a similar survey biennially since 1993.

From 1993 to 2001, the NJDOE administered Youth Risk Behavior Survey (YRBS) questions as promulgated by the Centers for Disease Control and Prevention (CDC) without additions or deletions. In 2003, NJDOE began adding to the YRBS set of core questions. The additional questions included questions previously asked in surveys conducted by other state agencies or other national surveys. Questions included in the 2003 to 2011 surveys were chosen to better reflect the data needs of the NJDOE, New Jersey Department of Health and Senior Services, the New Jersey Department of Human Services and the New Jersey Department of Law and Public Safety.

The YRBS is used nationally by the CDC and provides information about the self-reported prevalence of behaviors that are highly related to the most important causes of preventable premature illness and death among youth and young adults:

- behaviors that result in unintentional injuries and violence;
- tobacco use;
- alcohol and other drug use;
- sexual behaviors that result in HIV infection, other sexually transmitted diseases, and unintended pregnancies;
- dietary behaviors; and
- physical activity.

Beginning in the year 2000, the NJDOE began exploring means to expand the scope of the survey

to address the needs of several New Jersey state agencies and reduce duplication of effort in conducting student surveys in New Jersey schools. As a result, the 2003 questionnaire used for the New Jersey Student Health Survey (NJSHS) contained the following: two sets of questions concerning attitudes toward substance use; and individual questions concerning primary language, unwanted sexual contact, testing for HIV or other sexually transmitted infection, diagnosis with asthma, and dental care. In order to keep up with the trends of adolescent behavior, questions are added or rotated on a regular basis. For example, questions were added in the 2005 survey to measure student attitudes toward the use of tobacco, alcohol, and marijuana. Questions were also added in 2007 regarding online communication and self-mutilation, and in 2009 regarding bullying, participation in clubs and volunteer service, and the school environment. In 2011, new items addressing driving and the use of cell phones/texting, dietary habits, weight, the use of prescription, and over the counter drugs were included. For wording of questions and frequency distributions for all 88 items in the high school questionnaire for the 2011 New Jersey Student Health Survey, see Appendix A.

The CDC produces a 2011 Comparison Fact Sheet which differentiates students in New Jersey from those in the nation on risk behavior. This Fact Sheet is available for download from the CDC website at <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>.

The New Jersey findings are based on the survey results compiled for this report while the national findings are based on the results of the CDC's YRBS administered to a national sample of public and private schools.

The NJDOE provides the findings of these surveys in both a detailed report and a summary brochure in order to encourage the broadest possible distribution of the information to adults who work directly with youth or for the benefit of youth. The following are examples of how the findings are used:

- **Identify priority areas** at the state and local levels for increased programming, changes in school policy and collaboration with community agencies.

- **Monitor the impact** of large-scale state or national initiatives to improve adolescent health.
- **Establish benchmarks** for reducing adolescent risks and increasing pro-social behaviors.
- **Recognize program successes** in influencing adolescent behaviors.
- **Provide teachers with a basis for allocating instructional time** in the health and physical education curriculum.
- **Provide teens with peer norms** rather than inflated perceptions of what their peers are doing.

The detailed report and summary brochure are distributed in printed form and made available for download from the NJDOE website at <http://www.state.nj.us/education/students/yrebs/index.html>. These materials may be copied and distributed without permission.

Data from the spring 2011 New Jersey Student Health Survey are highly comparable to that collected during the fall 2010 Youth Tobacco Survey conducted by the New Jersey Department of Health and Senior Services (NJDHSS), Comprehensive Tobacco Control Program. These surveys use a common core of questions concerning tobacco use. However, since the Youth Tobacco Survey is conducted during the fall, students are younger overall than during a spring survey administration. Summary reports are available on the NJDHSS website at [www.state.nj.us/health/as/ctcp/research.htm](http://www.state.nj.us/health/as/ctcp/research.htm).

The New Jersey Department of Human Services (NJ DHS), Division of Mental Health and Addiction Services also collects data concerning student use of alcohol, tobacco and other substances in the seventh through twelfth grades. While the questions are asked differently from those on the high school New Jersey Student Health Survey, the responses do provide a means to examine changes in student use with increasing age and grade. Reports can be found at <http://www.state.nj.us/humanservices/das/news/reports/surveys/>.

Finally, from 1980 to 1998, the New Jersey Department of Law and Public Safety, Division of Criminal Justice conducted the triennial Survey of Drug and Alcohol Use Among New Jersey High School Students. Findings of the spring 1998 survey can be found at [www.state.nj.us/lps/dcj/dahs1230.htm](http://www.state.nj.us/lps/dcj/dahs1230.htm).

## Funding Sources

The 2011 New Jersey Student Health Survey was made possible through funding from the Centers for Disease Control and Prevention cooperative agreement 5U87DP001263, the United States Department of Education Elementary and Secondary Education Act, as amended (Title IV, Part A of the No Child Left Behind Act); and the New Jersey Department of Human Services, Division of Mental Health and Addiction Services.

## Survey Methods

The following section outlines major aspects of survey administration. More detailed information has been provided to the NJDOE by BCSR.

In 2011 as with all NJSHS studies since 2003, the administration of the survey was conducted under standards established by *N.J.S.A. 18A:36-34*. The law requires active parental consent for student participation which means that students could only participate if they returned a signed consent form from a parent/guardian.

The majority of all high school students (79%) returned a parental consent form, among whom 97% consented to participate in the survey and 3% did not consent. It should be noted that the parental consent requirement may act as a screening process whereby students not participating in the survey are the students who fail to bring home or return permission forms necessary for participation. At the same time, there is another group of students who are excluded because their parents have chosen not to consent to participation in this survey. While there is no empirical evidence to support the notion that these groups of students differ in any way from students who do return their consent form allowing survey participation, the active parental consent process creates an obvious screening

criteria for inclusion in this study. In 2011, 21% of students did not return a parental permission form and 3% of the returned permission forms indicated the child could not participate.

## **School and Student Recruitment**

BCSR staff members began contacting school district superintendents and principals in January, 2011 to obtain permission to conduct the survey at their schools. Once a school agreed to participate, a list of all classes was provided to BCSR. Classes were then randomly selected in a manner which assured that all students were eligible for selection into the sample.

Parental Permission – Participating schools were provided with parent consent letters and survey fact sheets to send home with students. The survey procedure called for the consent letter and fact sheet to also be mailed to the home address of students in sampled classes. Some of the participating schools provided addresses to BCSR to complete this mailing. Most schools elected to do the mailing themselves using postage-paid envelopes which were stuffed with the survey fact sheet and a parental consent form. In all cases, documented parental consent was required for a student to participate, consistent with New Jersey statute. Any student who did not want to participate on the day of administration was also excused.

## **Field Administration**

BCSR staff administered the survey in each randomly-selected classroom at sampled high schools during the spring semester of 2011, between March and June.

### **Sampling**

From 1993 to 2011, the final sample size has ranged from 1,399 to 2,805 students. In 2011, the NJDOE set the number of students in all sampled schools that were selected for participation to about 2,300 students. This equates to about 80 students per school, with a goal of obtaining 1,700 completed surveys. The sample size enables a more accurate analysis of the survey results at the statewide level

with some limited ability to analyze demographic subgroups such as race and ethnicity.

School Level – All of the state's 411 public regular, vocational, and alternative schools containing grades 9, 10, 11, or 12 were included in the sampling frame. Schools serving primarily special education or adult populations were excluded. Schools were selected systematically with probability proportional to enrollment in grades 9 through 12 using a random start. Westat, Inc., a national firm hired by CDC to provide technical assistance to states administering the YRBS, drew the sample. Thirty-nine high schools were selected. Of the 39 high schools selected, one school was deemed ineligible to participate, leaving 38 eligible schools.

Class Level – All classes in a required subject or, depending on the school's choice, all classes meeting during a particular period of the day were included in the sampling frame. Westat, Inc. generated random numbers that were used to select the sample classes. The random numbers were based on the total enrollment of the school and an assumed number of students in each class, for class selection. The number of classes selected per school ranged from one to four, with most schools having three classes selected. Student enrollment averaged 25 students per class.

### **Response Rate**

Overall, 1,657 students in 31 public high schools completed the New Jersey Student Health Survey during the spring of 2011. The school response rate was 82% (31 of the 38 sampled schools participated) and the student response rate was 73% (1,657 of the 2,265 sampled students completed usable questionnaires), yielding an overall response rate of 60% ( $82\% \times 73\% = 60\%$ ). Seventy nine percent (1,784 of 2,265) of sampled students returned a consent form, and of those, 97% (1,737 of 1,784) of parents consented for their child to participate.



## Weighting

In order to consider the survey findings representative of the New Jersey high school student population, the CDC has established a threshold of 60% combined participation rate as the minimum rate required to apply weights to data collected for the YRBS. This threshold was achieved in 2011 and therefore, the CDC weighting procedure outlined below was used to weight the 2011 high school data.

The CDC weighting procedure includes two components: (a) one adjustment that is associated with school/student probability of selection, and (b) one adjustment to insure demographic comparability. A weight has been associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for patterns of non-response. The sample is weighted by the probability of selection at the school and classroom level and by state student population parameters. The weight used for estimation is given by:

$$W = W1 * W2 * f1 * f2 * f3$$

- W1 = the inverse of the probability of selecting the school;
- W2 = the inverse of the probability of selecting the classroom within the school;
- f1 = a school level non-response adjustment factor calculated by school size category (small, medium, large). The factor was calculated in terms of school enrollment instead of number of schools;
- f2 = a student level non-response adjustment factor calculated by class;
- f3 = a post-stratification adjustment factor calculated by gender within grade and by race/ethnicity.

Once the final school and classroom probability weights are calculated, the sampled data is adjusted with these probability weights and the resulting sample demographics are compared to population parameters. Weighting on student demographic characteristics is necessary to bring the sample in line with the state's high school student population. The demographic variables used for weighting are

based on grade and gender (eight categories based on grade level – 9<sup>th</sup> thru 12<sup>th</sup>; and gender – male and female) and race and ethnicity (four categories based on White, Black, Hispanic and Asian).

The weighted percentages used in this report are a more accurate reflection of the total New Jersey high school population than if the results were to be used in their non-weighted form. The weighted results can be used to make inferences concerning the priority health-risk behaviors of all regular public school students in grades 9 through 12 in New Jersey and permit comparisons of findings across points in time and different locations.

## Profile of High School Students

The survey results are representative of all New Jersey high school students in grades 9 through 12. The weighted and unweighted demographic characteristics of the sample are shown in Table 1.

### Gender

Overall, based on weighted demographic data, females and males are represented about equally in the survey (49.6% and 50.4%, respectively).

### Age

The students ranged in age from less than 13-years-old to 18-years-old and older. Overall, based on weighted demographic data, 35.1% of the students were aged 15-years-old and younger, 48.2% were 16- to 17-years-old, and 16.6% were 18-years-old and older.

### Grade

Based on weighted demographic data, slightly more than one fourth of the students were in 9<sup>th</sup> grade (26.4%), about one fourth of students were in 10<sup>th</sup> grade (25.4%) or 11<sup>th</sup> grade (24.6%), and slightly less than one fourth of the students were in 12<sup>th</sup> grade (23.7%).

### Ethnicity

Based on weighted demographic data, 56.9% were White, 16.2% were Black or African American, 18.3% were Hispanic or Latino (including Hispanics who also identified with a race or multiple races), and 8.7% were of another race (including Asians or Native Hawaiian/Pacific Islanders, American Indian/Alaskan Natives and non-Hispanic students who identified with multiple races).

**Table 1: Profile Of High School Students In The 2011 New Jersey Student Health Survey**

Sex	Sample (n)	Sample %	Weighted %	Grade	Sample (n)	Sample %	Weighted %
Female	900	54.4%	49.6%	9 <sup>th</sup>	457	27.7%	26.4%
Male	753	45.6%	50.4%	10 <sup>th</sup>	481	29.2%	25.4%
<b>Age</b>				11 <sup>th</sup>	357	21.7%	24.6%
13-Years-Old and Younger	5	0.3%	0.3%	12 <sup>th</sup>	353	21.4%	23.7%
14-Years-Old	188	11.4%	10.6%	<b>Ethnicity</b>			
15-Years-Old	429	25.9%	24.2%	Black	176	10.8%	16.2%
16-Years-Old	462	27.9%	26.9%	Hispanic/Latino	368	22.6%	18.3%
17-Years-Old	326	19.7%	21.3%	White	880	54.2%	56.9%
18-Years-Old and Older	244	14.8%	16.6%	All other races	201	12.4%	8.7%

## Comparability of Findings

The report notes differences with age, racial/ethnic, and gender categories that appear to be of practical significance, given the size of the difference and sample size. Statistical tests of significance are not used to determine which differences are noted. Generally, however, differences noted usually achieve a chi-square of .05 or lower.

Throughout the report, differences between the current results and those of 1995, 2001, 2005, and 2009 – years where CDC permitted the weighting of data because the 60% response rate was reached – are shown as trend lines. In addition, it should be noted that while survey results from five different years are compared in this document, only the surveys in 2005 through 2011 required active parental consent for all students. Because active consent can eliminate students who would have otherwise participated under the passive consent process used in prior years, the survey design is not comparable. It is unclear whether the behavior of students participating under the current active consent recruitment format differs from those who would have participated under the prior consent guidelines.

## Additional Information

The interpretation of data, conclusions, and recommendations expressed in this report are those of the authors and may or may not represent the views of NJDOE or NJDHS.

If you would like additional information about this report, or have comments or questions, contact the New Jersey Department of Education, Office of Student Support Services, PO Box 500, Trenton, NJ 08625 or call the office at 609-292-5935. Comments may also be submitted through the NJDOE Parent's Circle web page at <http://www.state.nj.us/njded/parents/>.

Copies of this report and of a summary brochure of findings can be downloaded from the NJDOE website at <http://www.state.nj.us/education/students/yrbs/index.html>.

## CHAPTER 1: ALCOHOL USE

These questions measure lifetime and current use of alcohol, age of initiation, binge drinking and access to alcohol. Alcohol is used by more young people than tobacco or illicit drugs.<sup>1</sup> Heavy alcohol drinking among youth is associated with risky sexual behaviors (including sexual initiation, multiple sex partners, reduced condom use, and pregnancy<sup>2</sup> and use of cigarettes<sup>3</sup> marijuana, cocaine, and other illegal drugs.<sup>5</sup> Motor vehicle crashes are the leading cause of death among youth ages 15–19 years in the United States<sup>6</sup> and alcohol use is associated with 9% of all motor vehicle crashes that result in injury<sup>7</sup> and approximately one third of all traffic-related fatalities.<sup>8</sup> Persons who begin drinking alcohol before

the age of 15 years are five times as likely to report alcohol dependence or abuse than those who first drank alcohol at age 21 or older.<sup>9</sup> Limiting youth access to alcohol has reduced underage alcohol use and alcohol-related problems.<sup>10</sup> However, youth continue to obtain alcohol from a variety of sources, reflecting the need for improved enforcement of underage drinking laws as well as greater public awareness of restrictions on drinking alcohol by underage youth. Among high school students nationwide in 2009, 72% had had at least one drink of alcohol on at least one day during their life and 42% had had at least one drink of alcohol on at least one day during the 30 days before the survey.<sup>11</sup> In addition, 24% of high school students had had five or more drinks of alcohol in a row on at least one day during the 30 days before the survey and 5% of students had drunk at least one drink of alcohol on school property on at least one day during the 30 days before the survey.<sup>12</sup> The percentage of high school students who had consumed at least one drink of alcohol on at least one day during their life decreased during 1991–2009 (82%–72%).<sup>13</sup>

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<sup>1</sup> Substance Abuse and Mental Health Services Administration. *Results from the 2008 National Survey on Drug Use and Health: National Findings*. Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies; 2009. NSDUH Series H-36, DHHS Publication No. SMA 09-4434.

<sup>2</sup> Dunn MS, Bartee RT, Perko MA. Self-reported alcohol use and sexual behaviors of adolescents. *Psychological Reports* 2003;92:339-348.

<sup>3</sup> Everett SA, Oeltmann J, Wilson TW, Brener ND, Hill CV. Binge drinking among undergraduate college students in the United States: Implications for other substance use. *Journal of American College Health* 2001;50:33-38.

<sup>4</sup> Johnson P, Boles SM, Vaughan R, Herbert D. The co-occurrence of smoking and binge drinking in adolescence. *Addictive Behaviors* 2000;25:779-783.

<sup>5</sup> Everett SA, Oeltmann J, Wilson TW, Brener ND, Hill CV. Binge drinking among undergraduate college students in the United States: Implications for other substance use. *Journal of American College Health* 2001;50:33-38.

<sup>6</sup> Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2010. Accessed May 24, 2010.

<sup>7</sup> National Highway Traffic Safety Administration. *Traffic Safety Facts, 2006 Data: Overview*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2008. Available at <http://www-nrd.nhtsa.dot.gov/Pubs/810809.pdf>. Accessed May 24, 2010.

<sup>8</sup> National Highway Traffic Safety Administration. *Traffic Safety Facts, 2008 Data: Alcohol-Impaired Driving*. Washington, DC: U.S. Department of Transportation,

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National Highway Traffic Safety Administration; 2009. Available at <http://www-nrd.nhtsa.dot.gov/Pubs/811155.PDF>. Accessed May 24, 2010.

<sup>9</sup> Substance Abuse and Mental Health Services Administration. Alcohol dependence or abuse and age at first use. *The NSDUH Report* October 22, 2004. Available at <http://oas.samhsa.gov/2k4/ageDependence/ageDependence.cfm>. Accessed May 19, 2010.

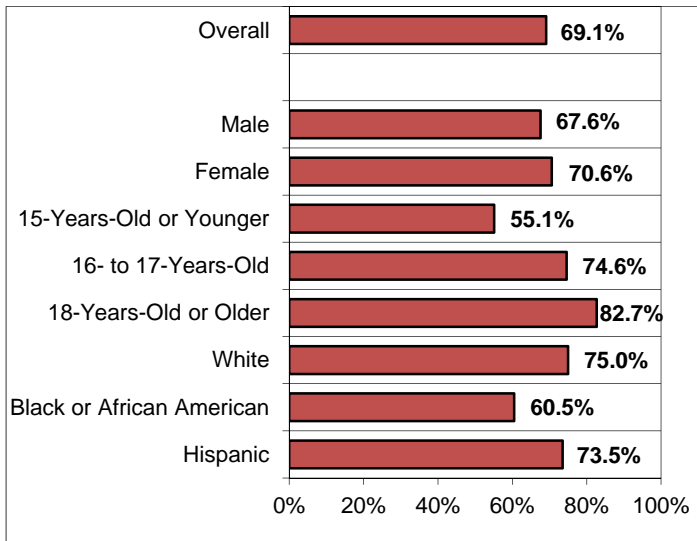
<sup>10</sup> Klepp KI, Schmid LA, Murray DM. Effects of the increased minimum drinking age law on drinking and driving behavior among adolescents. *Addiction Research* 1996;4:237-244.

<sup>11</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

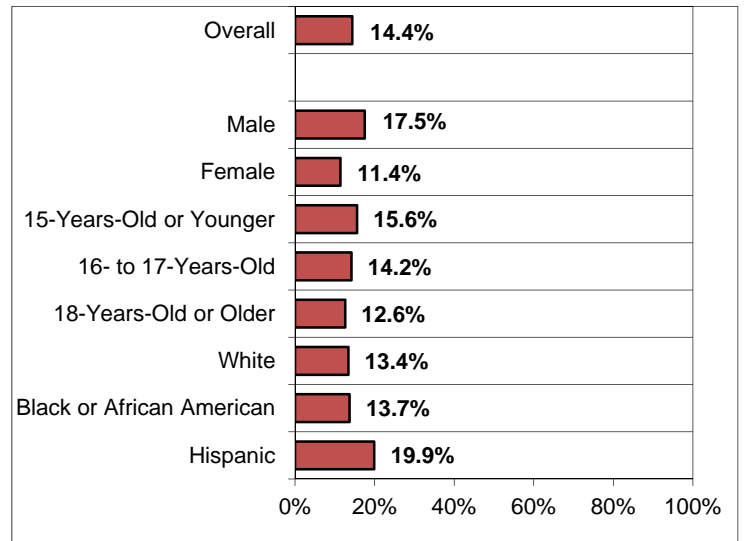
<sup>12</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>13</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

**Figure 1.1: Lifetime Use Of Alcohol**

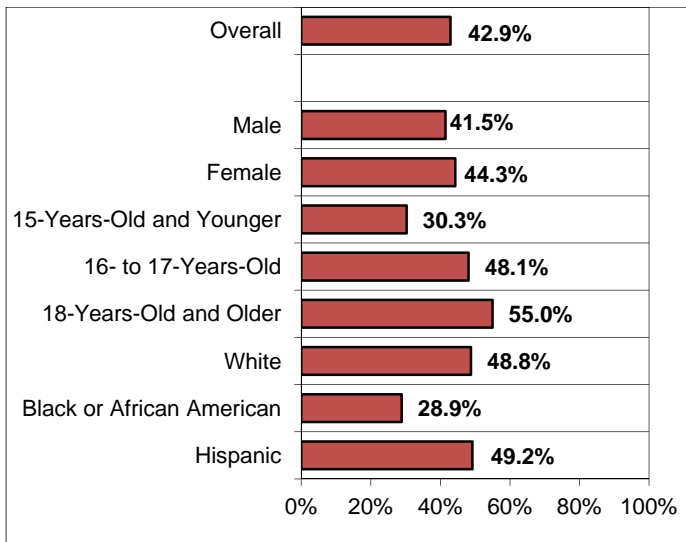


**Figure 1.2: Lifetime Alcohol Use Before Age 13**



- In 2011, about seven in 10 of New Jersey high school students (69.1%) reported drinking alcohol in their lifetime (Figure 1.1).
- Female students were slightly more likely than male students to have used alcohol in their lifetime (70.6% vs. 67.6%).
- Slightly over eight in 10 students (82.7%) aged 18-years-old and older reported lifetime use of alcohol, as compared to nearly three in four (74.6%) 16- to 17-year-olds and over half (55.1%) of those aged 15-years-old and younger.
- Both White and Hispanic students (75.0% and 73.5%, respectively) were more likely to have used alcohol in their lifetime than Black students (60.5%).
- Approximately one in seven students (14.4%) drank alcohol before they were 13-years-old (Figure 1.2).
- Males students were more likely than female students to have started drinking before age 13 (17.5% vs. 11.4%).
- About one in six students (15.6%) aged 15-years-old and younger started drinking before the age of 13. Slightly smaller percentages of students aged 16- to 17-years-old or 18-years-old and older started drinking before the age of 13 (14.2% and 12.6%, respectively).
- Hispanic students (19.9%) were more likely than Black or White students (13.7% and 13.4%, respectively) to indicate that they had their first drink before age 13.

**Figure 1.3: One Or More Drinks Of Alcohol On At Least One Day, Last 30 Days**



- Overall, about four in 10 students (42.9%) drank alcohol on at least one day during the prior 30 days (Figure 1.3). Further, 4.5% of students had drunk alcohol on 10 or more of the last 30 days.
- Males (41.5%) were slightly less likely than females (44.3%) to report having used alcohol at least once during the past 30 days.
- Older students were more likely than younger students to have used alcohol in the past 30 days. Among those aged 18-years-old and older, more than half (55.0%) reported drinking on at least one day during the previous month, as compared to 16- to 17-year-olds (48.1%) and students aged 15-years-old and younger (30.3%).
- Hispanic (49.2%) and White (48.8%) students were much more likely than Black students (28.9%) to report having used alcohol during the past 30 days.

**HEALTHY NEW JERSEY 2010 GOAL<sup>14</sup>**

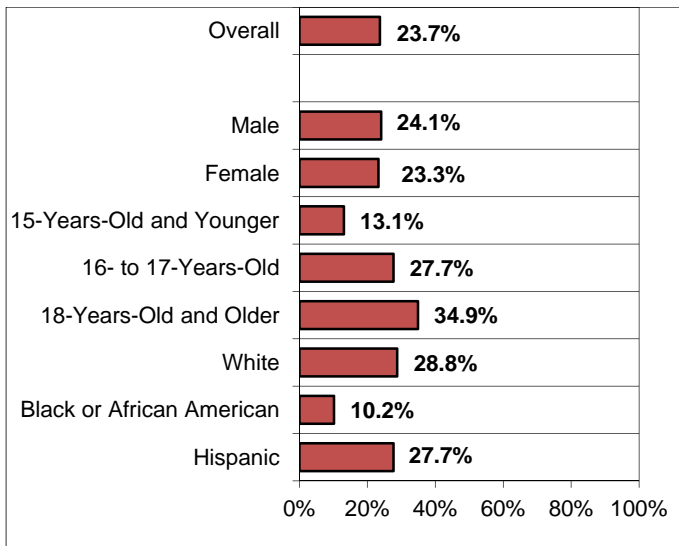
Decrease the percentage of public high school sophomores, juniors and seniors who have used alcohol in the past 30 days to 37%.

**2011 NJSHS RESULTS**

None of the grade levels met the 2010 goal. Sophomores (40.8%), juniors (45.5%), and seniors (58.3%) reported higher levels of recent alcohol use than the goal specifies.

<sup>14</sup> All references to “Healthy New Jersey 2010 Goal” refer to *Healthy New Jersey 2010: A Health Agenda for the First Decade of the New Millennium*, Vol. I. New Jersey Department of Health and Senior Services, June 2001.

**Figure 1.4: Five Or More Drinks Of Alcohol In A Row On At Least One Day, Last 30 Days**



- Slightly less than one quarter (23.7%) of New Jersey high school students indicated binge drinking in the past month, which is defined as having five or more drinks on at least one day in the last 30 days (Figure 1.4).
- There was little variation by gender in terms of binge drinking.
- Students aged 18-years-old and older (34.9%) were the most likely of all age groups to binge drink during the past 30 days, as compared to 27.7% of 16- to 17-year-olds and 13.1% of students aged 15-years-old and younger.
- White and Hispanic students (28.8% and 27.7%, respectively) were more likely than Black students (10.2%) to have consumed five or more drinks on at least one day in the last 30 days.

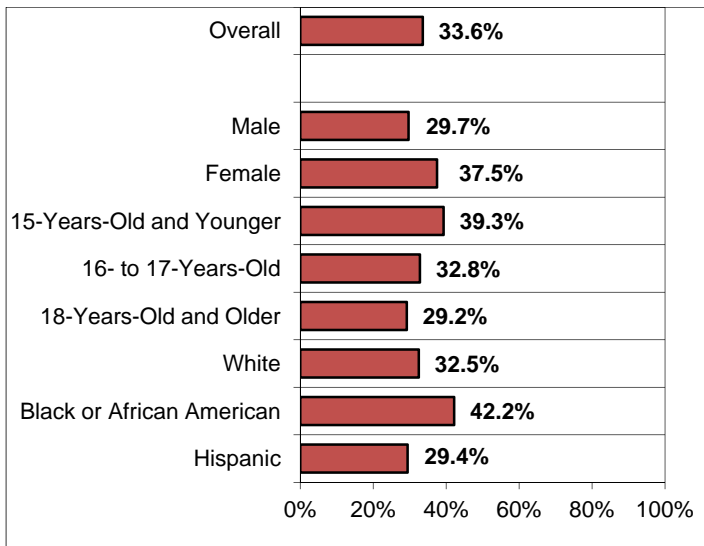
**HEALTHY NEW JERSEY 2010 GOAL**

Reduce the percentage of persons aged 18-years - old and older, who consumed five or more alcoholic drinks per occasion, one or more times during the past month to: 10.6% for ALL Adults; 11.0% for Whites; 5.0% for Blacks or African Americans; 8.0% for Hispanics.

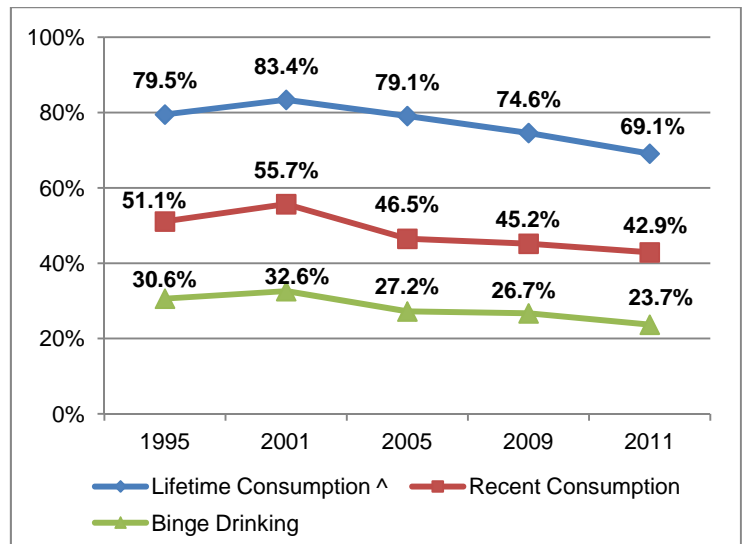
**2011 NJSHS RESULTS**

About one quarter of high school students (23.7%) reported drinking five or more alcoholic drinks on an occasion in the past 30 days. Whites (28.8%), Blacks (10.2%), and Hispanics (27.7%) in high school all binge drink at rates above this goal.

**Figure 1.5: Received Alcohol From Someone, Among Those Who Drank, Last 30 Days**



**Figure 1.6: Trends In Alcohol Use: 1995 - 2011**



^ NOTE: Percentages for lifetime alcohol use have been recalculated from previous reports to correspond to CDC calculation of prevalence. In prior years, NJ determined lifetime alcohol use based on whether students indicated an age on the questionnaire for when they first used alcohol. Lifetime alcohol use has been adjusted based on whether students indicated they used alcohol in their life one or more times.

- Among students who drank alcohol in the last 30 days, 33.6% reported that they usually received it from someone who gave it to them (Figure 1.5). Other ways students received alcohol included having paid someone to get it (34.9%), purchasing it at a store, restaurant or public event (8.6%), and taking alcohol from their family or a store (8.4%). An additional 14.9% said they drank alcohol obtained in some other way.
- Female students were more likely than male students to consume alcohol that someone gave them (37.5% vs. 29.7%).
- Students aged 15-years-old and younger (39.3%) were more likely to report someone giving them alcohol than 16- to 17-year-olds and those aged 18-years-old and above (32.8% and 29.2%, respectively).
- Black students (42.2%) were far more likely than White (32.5%) and Hispanic (29.4%) students to report someone giving them alcohol.
- Reported rates of lifetime alcohol consumption continued to decline in 2011 from levels seen in past surveys, reaching a new low of 69.1% in 2011 (Figure 1.6).
- Rates of recent drinking (42.9%) and binge drinking (23.7%) fell slightly between 2005 and 2011, and both were decidedly lower than their 2001 levels (55.7% and 32.6%, respectively).



## Drinking and Driving

These questions measure the frequency with which high school students drove a motor vehicle while under the influence of alcohol or rode as a passenger in a motor vehicle operated by someone who was under the influence of alcohol. In 2008, 22% of 15- to 20-year-old drivers who were killed in motor vehicle crashes and 4% of those injured in crashes had been drinking alcohol.<sup>15</sup> In 2008, 31% of drivers ages 15- to 20-years old who were killed in crashes had a blood alcohol concentration (BAC) of .01 grams per deciliter (g/dL) or higher; 25% had a BAC of .08 or higher at the time of the crash.<sup>16</sup> In 2009, 10% of high school students nationwide had driven a car or other vehicle one or more times when they had been drinking alcohol and 28% of high school students nationwide had ridden in a car or other vehicle driven by someone who had been drinking alcohol one or more times during the 30 days before the survey.<sup>17</sup> The percentage of students who drove when they had been drinking alcohol did not change significantly during 1991 – 1997 (17%–17%) and then decreased during 1997–2009 (17%–10%). During 1991–2009, a significant linear decrease occurred in the percentage of students who rode with a driver who had been drinking alcohol (40%–28%).<sup>18</sup>

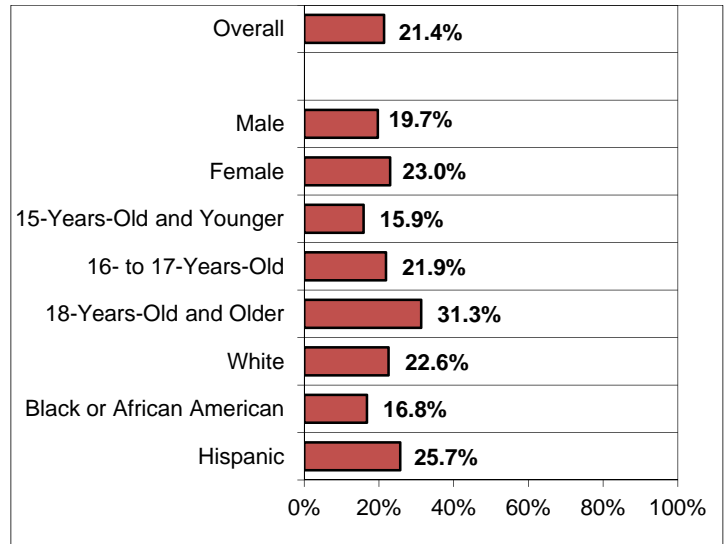
<sup>15</sup> National Highway Traffic Safety Administration. *Traffic Safety Facts, 2008 Data: Young Drivers*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2009. Available at <http://www-nrd.nhtsa.dot.gov/pubs/811169.pdf>. Accessed May 17, 2010.

<sup>16</sup> National Highway Traffic Safety Administration. *Traffic Safety Facts, 2008 Data: Young Drivers*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2009. Available at <http://www-nrd.nhtsa.dot.gov/pubs/811169.pdf>. Accessed May 17, 2010.

<sup>17</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

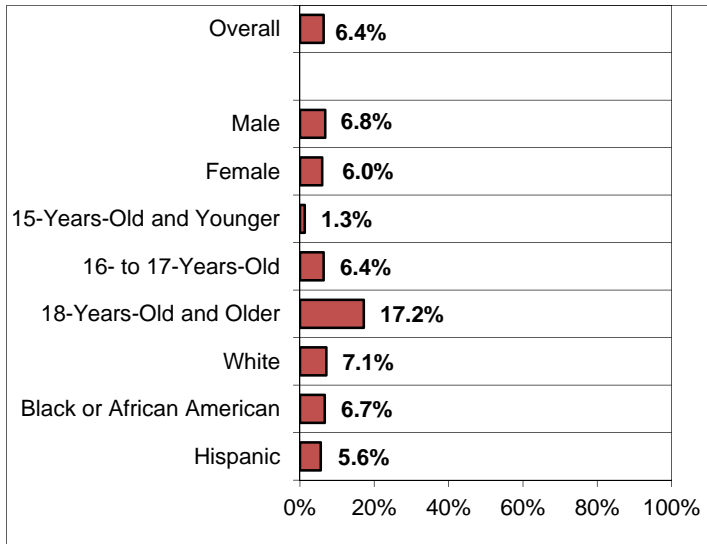
<sup>18</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

**Figure 1.7: Rode In A Car With A Driver Who Had Been Drinking At Least Once, Last 30 Days**

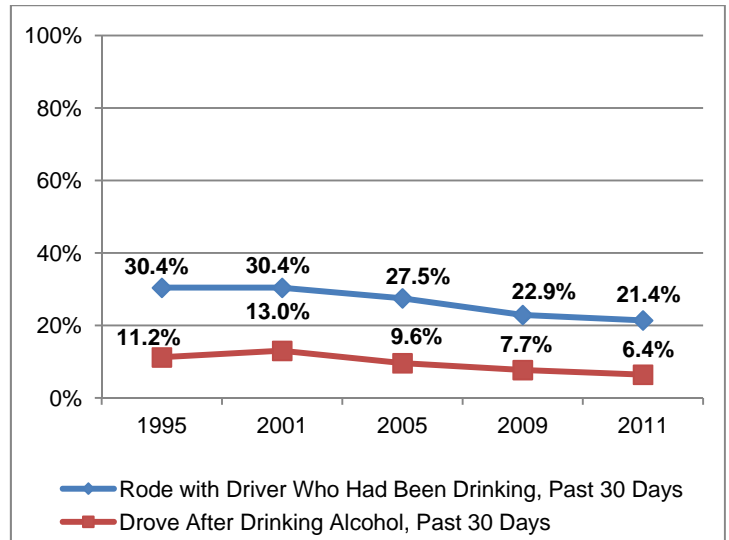


- During the past 30 days, slightly more than one in five students (21.4%) rode in a vehicle with someone who had been drinking at least one time (Figure 1.7). Further, 12.7% of students did so on two or more occasions during this period.
- Females were slightly more likely than males to ride in a car with a driver who had been drinking (23.0% vs. 19.7%).
- Students aged 18-years-old and older (31.3%) were more likely to accept a ride with someone who had been drinking than both those aged 16- to 17-years-old (21.9%) and those aged 15-years-old and younger (15.9%).

**Figure 1.8: Drove A Vehicle After Drinking Alcohol, One Or More Times, Last 30 Days**



**Figure 1.9: Trends In Drinking And Driving: 1995 - 2011**



- Overall, 6.4% of New Jersey high school students reported that they drove a car or other vehicle after they had been drinking alcohol during the past 30 days – 3.3% drove a vehicle after using alcohol only once and another 3.2% did so more than once (Figure 1.8).
- Males were about as likely as females to report that they had driven after they had been drinking.
- Students aged 18-years-old and older (17.2%) were far more likely than students 16- to 17-years-old (6.4%) or those aged 15-years-old and younger (1.3%) to have operated a vehicle after drinking.
- There was very little difference by race/ethnicity in drinking and driving behavior.
- The percentage of students who rode with a driver who had been drinking during the previous 30 days reached its lowest point in 2011 (21.4%) when compared to previous survey years (22.9%-30.4%) (Figure 1.9).
- Likewise, fewer students indicated incidents of drinking and driving than in previous survey years. In 2011, 6.4% of students reported drinking and driving within the previous 30 days as compared to 7.7%-13.0% of students in other years.

**HEALTHY PEOPLE 2010 NATIONAL GOAL<sup>19</sup>**

Reduce the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol to 30%.

**2011 NJSHS RESULTS**

New Jersey met the 2010 goal with less than 30% of New Jersey high school students (21.4%) reporting that they had been a passenger in a car with a drinking driver during the previous month.

<sup>19</sup> All references to “Healthy People 2010 National Goal” refer to - U.S. Department of Health and Human Services. *Healthy People 2010. 2nd ed. With understanding and improving health and objectives for improving health.* Washington D.C., Government Printing Office, 2004.



## CHAPTER 2: DRUG USE

These questions measure lifetime and current use of marijuana and cocaine, and ever use of inhalants, heroin, methamphetamines, ecstasy, steroids, injected drugs, and prescription drug abuse. Among youth, illicit drug use is associated with heavy alcohol and tobacco use,<sup>20</sup> violence and delinquency,<sup>21 22 23 24</sup> and suicide.<sup>25</sup> All school districts prohibit illegal drug possession or use by students on school property.<sup>26</sup> Among high school students nationwide in 2009, 37% had used marijuana, 6% had used any form of cocaine, 3%

had taken steroid pills or shots without a doctor's prescription, 8% had used hallucinogenic drugs, 2% had used heroin, 4% had used methamphetamines, and 7% had used ecstasy one or more times during their life.<sup>27</sup> In addition, 12% of high school students had sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high and 2% had used a needle to inject any illegal drug into their body one or more times during their life.<sup>28</sup> The percentage of high school students who had used marijuana one or more times during their life increased during 1991–1999 (31%–47%) and then decreased during 1999–2009 (47%–37%).<sup>29</sup>

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<sup>20</sup> Substance Abuse and Mental Health Services Administration. *Results from the 2008 National Survey on Drug Use and Health: National Findings*. Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies; 2009. NSDUH Series H-36, DHHS Publication No. SMA 09-4434.

<sup>21</sup> Substance Abuse and Mental Health Services Administration. Youth violence and illicit drug use. *The NSDUH Report* 2006;5:1-4. Available at <http://oas.samhsa.gov/2k6/youthViolence/youthViolence.cfm>. Accessed May 19, 2010.

<sup>22</sup> Substance Abuse and Mental Health Services Administration. Marijuana use and delinquent behaviors among youths. *The NSDUH Report* January 9, 2004. Available at <http://oas.samhsa.gov/2k4/MJdelinquency/MJdelinquency.cfm>. Accessed May 19, 2010.

<sup>23</sup> Substance Abuse and Mental Health Services Administration. Inhalant use and delinquent behaviors among young adolescents. *The NSDUH Report* March 17, 2005. Available at <http://oas.samhsa.gov/2k5/inhale/inhale.cfm>. Accessed May 19, 2010.

<sup>24</sup> Substance Abuse and Mental Health Services Administration. Nonmedical stimulant use, other drug use, delinquent behaviors, and depression among adolescents. *The NSDUH Report* February 28, 2008. Available at <http://oas.samhsa.gov/2k8/stimulants/depression.cfm>. Accessed May 19, 2010.

<sup>25</sup> Substance Abuse and Mental Health Services Administration. Substance use and the risk of suicide among youths. *The NHSDA Report* July 12, 2002. Available at <http://oas.samhsa.gov/2k2/suicide/suicide.cfm>. Accessed May 19, 2010.

<sup>26</sup> Everett Jones S, Fisher CJ, Greene BZ, Hertz MF, Pritzl J. Healthy and safe school environment, Part I: Results from the School Health Policies and Programs Study 2006. *Journal of School Health* 2007;77(8):522-543.

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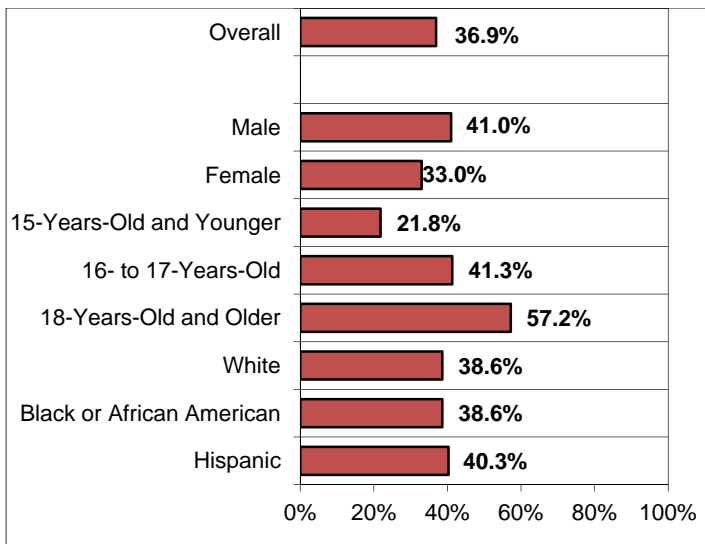
<sup>27</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>28</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

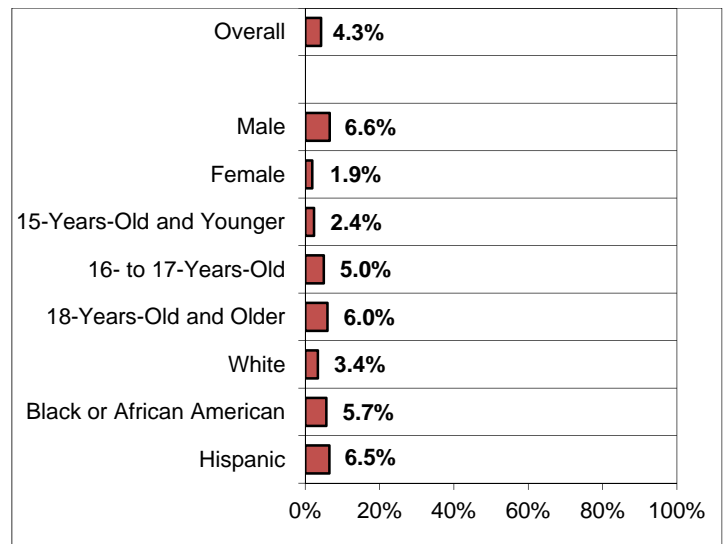
<sup>29</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

## Marijuana Use

**Figure 2.1: Lifetime Use Of Marijuana**

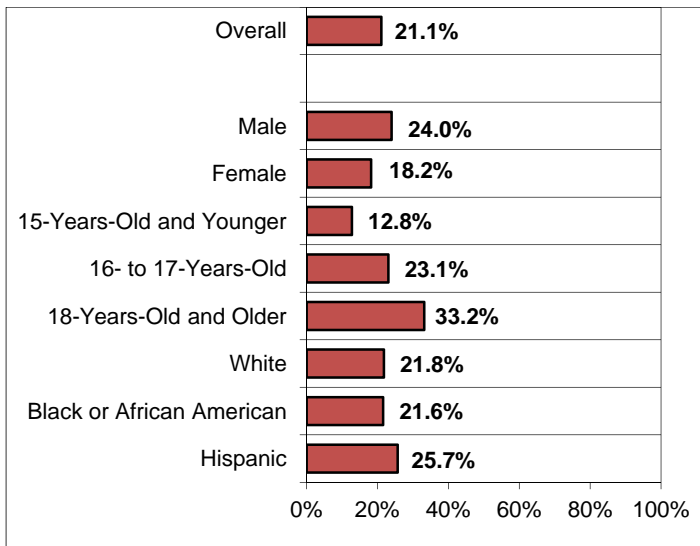


**Figure 2.2: Lifetime Marijuana Use Before Age 13**

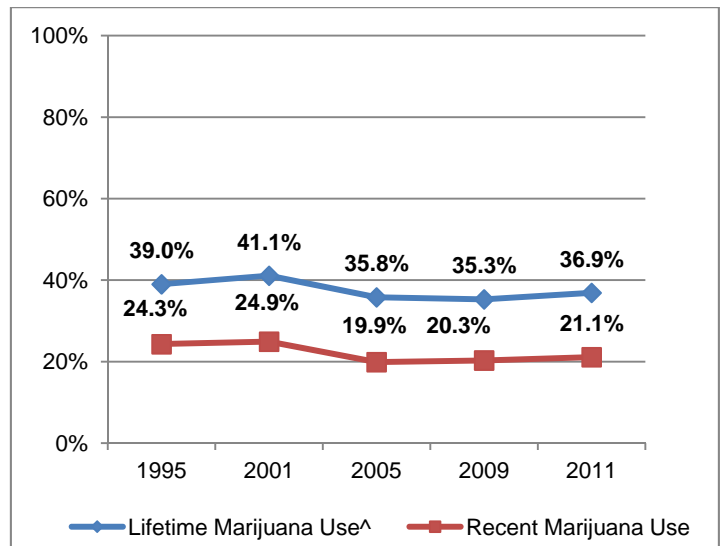


- Overall, more than one third (36.9%) of all students reported having tried marijuana in their lifetime (Figure 2.1). Further, 17.1% of students had done so on 20 or more occasions in their life.
- Males were more likely than females to report lifetime marijuana use (41.0% vs. 33.0%).
- About one fifth (21.8%) of students aged 15-years-old and younger reported having tried marijuana, as compared to four in 10 of 16- to 17-year-olds (41.3%) and almost six in 10 of those aged 18-years-old and older (57.2%).
- There was little variation in lifetime marijuana use by race/ethnicity.
- Overall, 4.3% of students tried marijuana before the age of 13 (Figure 2.2).
- A greater percentage of males than females reported first use of marijuana before age 13 (6.6% vs. 1.9%).
- Students aged 15-years-old and younger (2.4%) were slightly less likely to use marijuana before the age of 13 than were 16- to 17-year-olds and those 18-years-old and older (5.0% and 6.0%, respectively).
- Hispanic and Black students (6.5% and 5.7%, respectively) were slightly more likely than White students (3.4%) to report having tried marijuana before age 13.

**Figure 2.3: Used Marijuana One Or More Times, Last 30 Days**



**Figure 2.4: Trends In Marijuana Use: 1995 - 2011**



<sup>^</sup> NOTE: Percentages for lifetime marijuana use have been recalculated from previous reports to correspond to CDC calculation of prevalence. In prior years, NJ determined lifetime marijuana use based on whether students indicated an age on the questionnaire for when they first used marijuana. Lifetime marijuana use has been adjusted based on whether students indicated they used marijuana in their life one or more times.

- Overall, about one in five (21.1%) students reported marijuana use during the last 30 days (Figure 2.3). Further, 8.4% of students had used marijuana 10 or more times during this period.
- Males were more likely than females to report past 30 day marijuana use (24.0% vs. 18.2%).
- Older students were more likely than younger students to have used marijuana during the past 30 days. About one third (33.2%) of students 18-years-old and older and around one in four (23.1%) students 16- to 17-years-old used marijuana during the previous month, as compared to 12.8% of those 15-years-old and younger.
- Hispanic students (25.7%) were slightly more likely than White (21.8%) or Black (21.6%) students to have used marijuana in the past month.
- The percentage of New Jersey high school students who reported both lifetime and recent marijuana use has remained relatively stable in recent years, after dropping from their previous highs (Figure 2.4). In 2011, 36.9% of students reported lifetime use of marijuana, which was comparable to 2005 and 2009 levels (35.8% and 35.3%, respectively) but lower than in 2001 and 1995 (41.1% and 39.0%, respectively).
- In 2011, about one in five students (21.1%) reported recent marijuana use, which was comparable to the 20.3% rate recorded in 2009.

**HEALTHY NEW JERSEY 2010 GOAL**

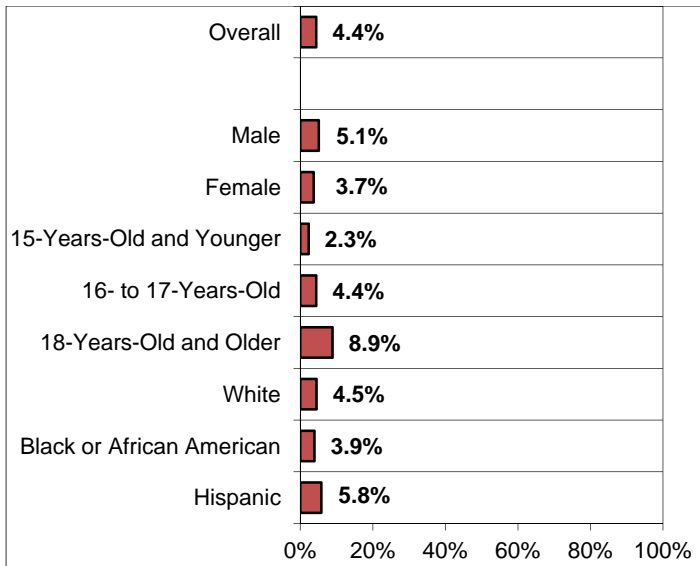
Decrease the percentage of public high school sophomores, junior and seniors who have used marijuana in the past 30 days to 11%.

**2011 NJSHS RESULTS**

Sophomores (19.2%), juniors (22.6%) and seniors (33.4%) all used marijuana during the past 30 days at rates higher than the specified goal.

## Cocaine Use

**Figure 2.5: Lifetime Use Of Any Cocaine Or Crack**

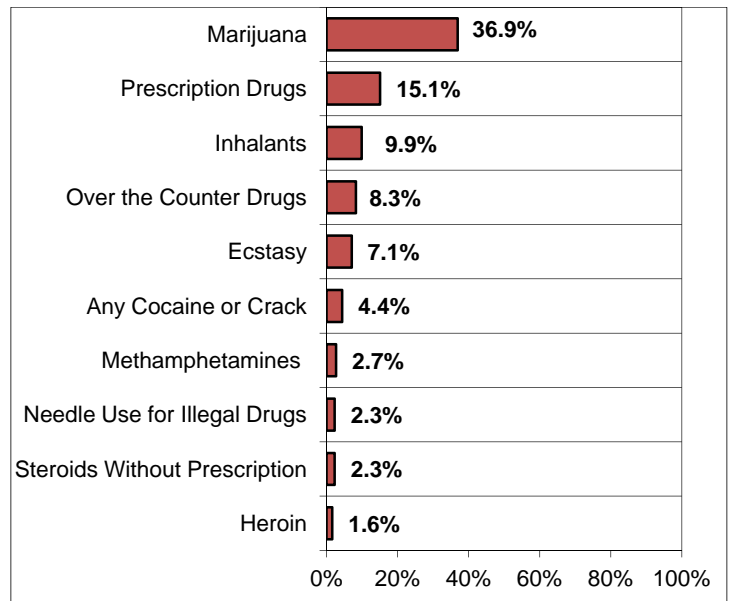


- Overall, 4.4% of students reported lifetime use of any form of cocaine or crack (Figure 2.5).
- There were no notable differences by gender or race/ethnicity in students' reported use of cocaine or crack.
- Students aged 18-years-old and older (8.9%) were slightly more likely than 16- to 17-year-olds (4.4%) and those aged 15-years-old and younger (2.3%) to report lifetime use of any form of cocaine or crack.

## Other Drug Use

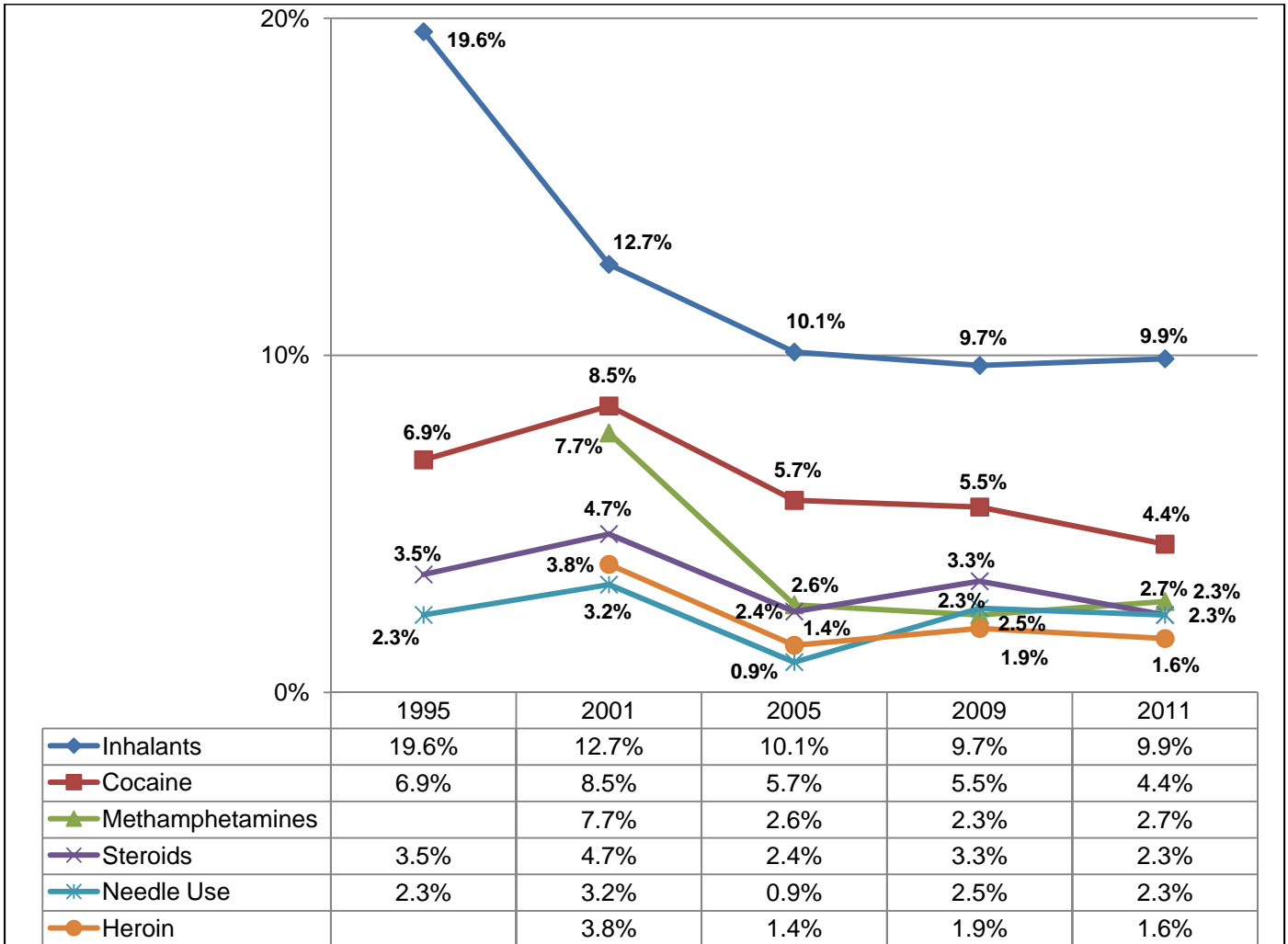
Eight questions on the NJSHS addressed lifetime use of drugs other than marijuana and cocaine, including prescription drugs, inhalants, over the counter drugs, ecstasy, methamphetamines, needles used to inject any illicit drug, steroid pills or shots without a doctor's prescription, and heroin.

**Figure 2.6: Lifetime Use Of Illicit Drugs (Used One Or More Times)**



- Among all illicit drugs used by students during their lifetime, marijuana was the most frequently used (36.9%) (Figure 2.6).
- Roughly one in six students (15.1%) reported lifetime use of prescription drugs and less than one in 10 reported use of inhalants (9.9%), over the counter drugs (8.3%), and ecstasy (7.1%) in their lifetimes.
- Fewer students reported lifetime use of cocaine or crack (4.4%), methamphetamines (2.7%), needles to inject illicit drugs (2.3%), steroids without a prescription (2.3%), and heroin (1.6%).

**Figure 2.7: Trends In Other Drug Use: 1995 - 2011**



- Overall, lifetime use of these other illicit drugs has declined since the higher levels that were first measured in 1995 (inhalants) and 2001 (all other drugs) (Figure 2.7).
- In 2011, use of inhalants was reported by one in 10 students and has remained virtually the same since 2005 (9.7%-10.1%).
- Since 2005, the use of four drugs: cocaine (4.4%-5.7%), methamphetamines (2.3%-2.7%), steroid pills or shots without a doctor's

prescription (2.3%-3.3%), and heroin (1.4%-1.9%)<sup>30</sup> has also remained virtually unchanged.

- The proportion of students who reported needle use for an illegal drug remained stable between 2009 and 2011 (2.5% and 2.3%, respectively) after rising from the low of 0.9% recorded in 2005.

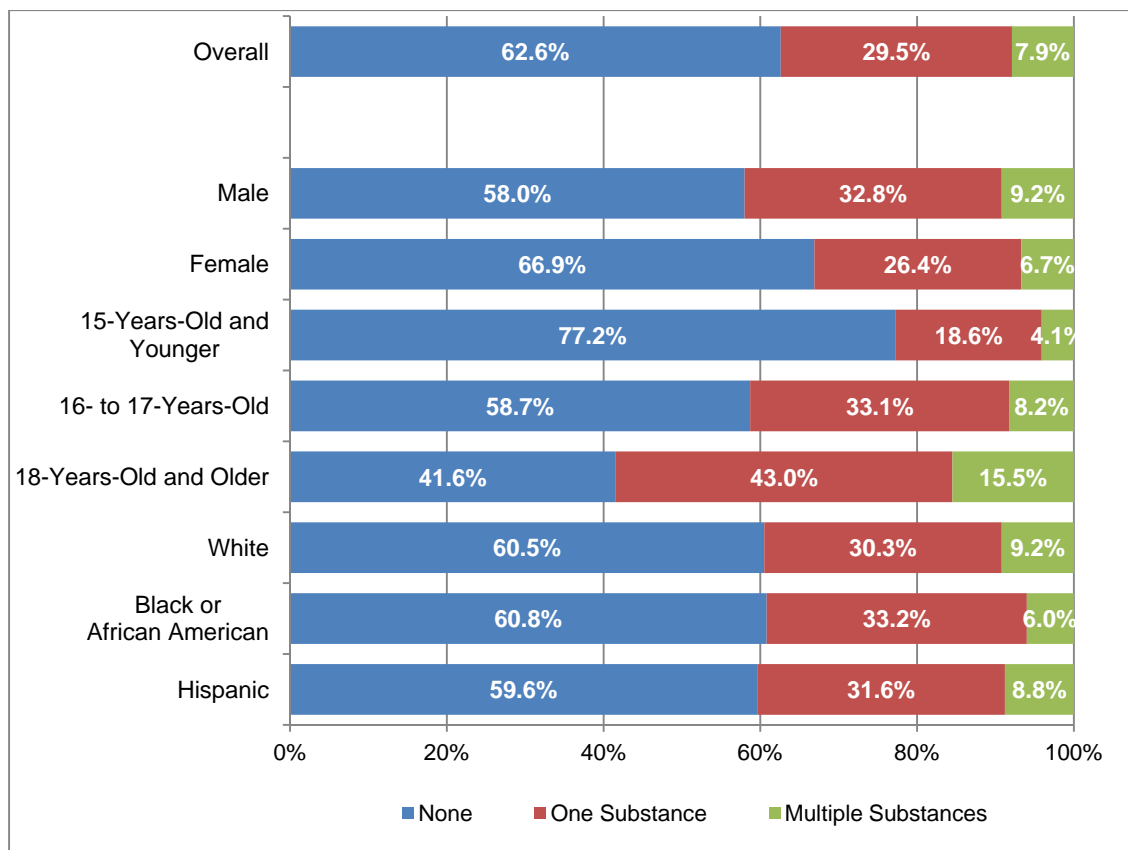
<sup>30</sup> Results for 1995 were excluded due to differences in question wording. In 1995, a single question asked about the use of "LSD, PCP, ecstasy, mushrooms, speed, ice or heroin;" while in 2001-2007, separate questions were asked about the use of "heroin, also called smack, junk or China White" and "methamphetamines, also called speed, crystal, crank or ice."



Figure 2.8 combines all 10 lifetime substance use questions regarding marijuana, crack/cocaine, prescription drugs, inhalants, over the counter drugs, ecstasy, methamphetamines, needles used to inject any illicit drug, steroid pills or shots without a doctor's

prescription, and heroin. Students are then divided into three groups: those who have not used any drugs, those who have used one of the 10 drugs, and those who have used more than one of the 10 drugs.

**Figure 2.8: Lifetime Use Of One Or More Substances**



- The majority of New Jersey high school students (62.6%) have not used any drugs in their lifetime. Three in 10 students (29.5%) have used one of the 10 drugs and another 7.9% have used multiple substances.
- Females were more likely than males to have not used any drugs (66.9% vs. 58.0%) and males were slightly more likely than females to have used one drug (32.8% vs. 26.4%) or multiple drugs (9.2% vs. 6.7%) in their lifetimes.
- Younger students were far less likely to have used substances in their lifetime than older

students. Over three in four students (77.2%) aged 15-years-old and younger never used drugs. This figure dropped to 58.7% among 16- to 17-year-olds and 41.6% among students aged 18-years-old and older. Also, students 18-years-old and older were more likely than 16- to 17-year-old students or those aged 15-years-old and younger to have used multiple substances (15.5% vs. 8.2% and 4.1%, respectively).

- There was very little variation by race/ethnicity in terms of lifetime use of one or more substances.

## CHAPTER 3: USE OF CIGARETTES

### Cigarette Use

These questions measure lifetime and current smoking patterns, age of initiation, access to cigarettes, smoking on school property, and attempts to quit smoking. Cigarette smoking is the leading cause of preventable death in the United States<sup>31</sup> and accounts for approximately 440,000 deaths each year.<sup>32</sup> Cigarette smoking increases risk of heart disease; chronic obstructive pulmonary disease; acute respiratory illness; stroke; and cancers of the lung, larynx, oral cavity, pharynx, pancreas, and cervix.<sup>33</sup> In addition, as compared to nonsmokers, cigarette smokers are more likely to drink alcohol, use marijuana and cocaine, engage in risky sexual behaviors, engage in physical fighting, carry a weapon, and attempt suicide.<sup>34 35 36 37</sup> If current

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<sup>31</sup> 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.

<sup>32</sup> Centers for Disease Control and Prevention. Annual smoking-attributable mortality, years of potential life lost, and productivity losses—United States, 2000–2004. *Morbidity and Mortality Weekly Report* 2008;57(45):1226–1228.

<sup>33</sup> 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.

<sup>34</sup> Everett SA, Malarcher AM, Sharp DJ, Husten CG, Giovino GA. Relationship between cigarette, smokeless tobacco, and cigar use, and other health risk behaviors among U.S. high school students. *Journal of School Health* 2000;70:234-240.

<sup>35</sup> Substance Abuse and Mental Health Services Administration. *Results from the 2008 National Survey on Drug Use and Health: National Findings*. Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies; 2009. NSDUH Series H-36, DHHS Publication No. SMA 09-4434.

<sup>36</sup> U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Young People: A Report*

patterns of smoking behavior persist, an estimated 6.4 million U.S. persons who were under the age of 18 in 2000 could die prematurely from smoking-related illnesses.<sup>38</sup> In 2006, approximately 64% of schools had adopted policies that 1) prohibited cigarette smoking and smokeless tobacco use among students, faculty and staff, and school visitors in school buildings; outside on school grounds; on school buses or other vehicles used to transport students; and at off-campus, school-sponsored events; and 2) prohibited cigar or pipe smoking by students, faculty and staff, and school visitors.<sup>39</sup> Among high school students nationwide in 2009, 46% had tried cigarette smoking at least once in their lifetime, 19% had smoked cigarettes on at least one day during the 30 days before the survey, and 5% had smoked cigarettes on school property on at least one day during the 30 days before the survey.<sup>40</sup> The percentage of high school students who had tried cigarette smoking in their lifetime did not change significantly during 1991–1999 (70%–70%) and then decreased during 1999–2009 (70%–46%).<sup>41</sup> The

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*of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 1994.

<sup>37</sup> Campaign for Tobacco-Free Kids. *How Parents Can Protect Their Kids from Becoming Addicted Smokers*. Washington: Campaign for Tobacco-Free Kids, 2009. Available at <http://www.tobaccofreekids.org/research/factsheets/pdf/0152.pdf>. Accessed May 15, 2010.

<sup>38</sup> Hahn EJ, Rayens MK, Chaloupka FJ, Okoli CTC, Yang J. Projected smoking-related deaths among U.S. youth: A 2000 update. *ImpacTeen. Research Paper Series* 2002;22.

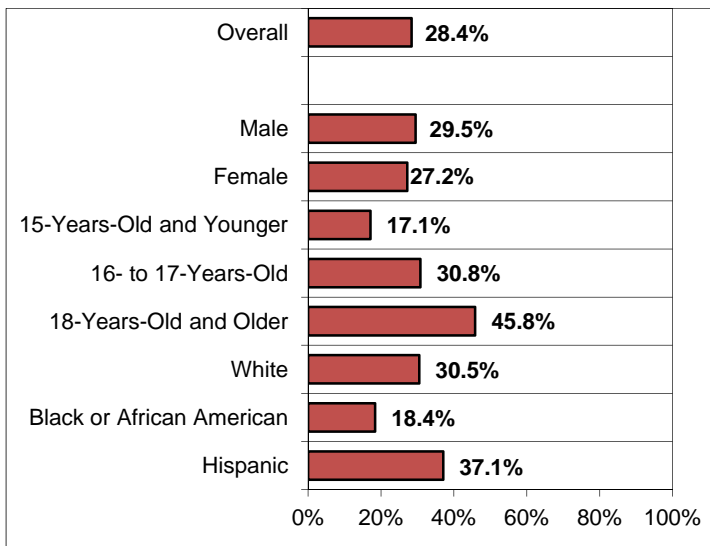
<sup>39</sup> Kann L, Brener ND, Wechsler H. Overview and summary: School Health Policies and Programs Study 2006. *Journal of School Health* 2007;77(8):385-397.

<sup>40</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

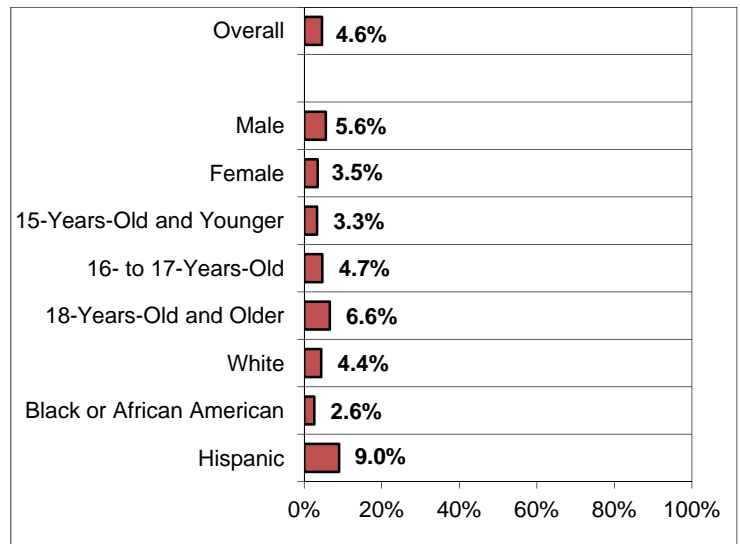
<sup>41</sup> Hahn EJ, Rayens MK, Chaloupka FJ, Okoli CTC, Yang J. Projected smoking-related deaths among U.S. youth: A

percentage of high school students who had smoked cigarettes on at least one day during the 30 days before the survey increased significantly during 1991–1997 (28%–36%) and then decreased during 1997–2009 (36%–19%).<sup>42</sup>

**Figure 3.1: Smoked At Least One Whole Cigarette In Lifetime**



**Figure 3.2: Smoked At Least One Whole Cigarette Before Age 13**



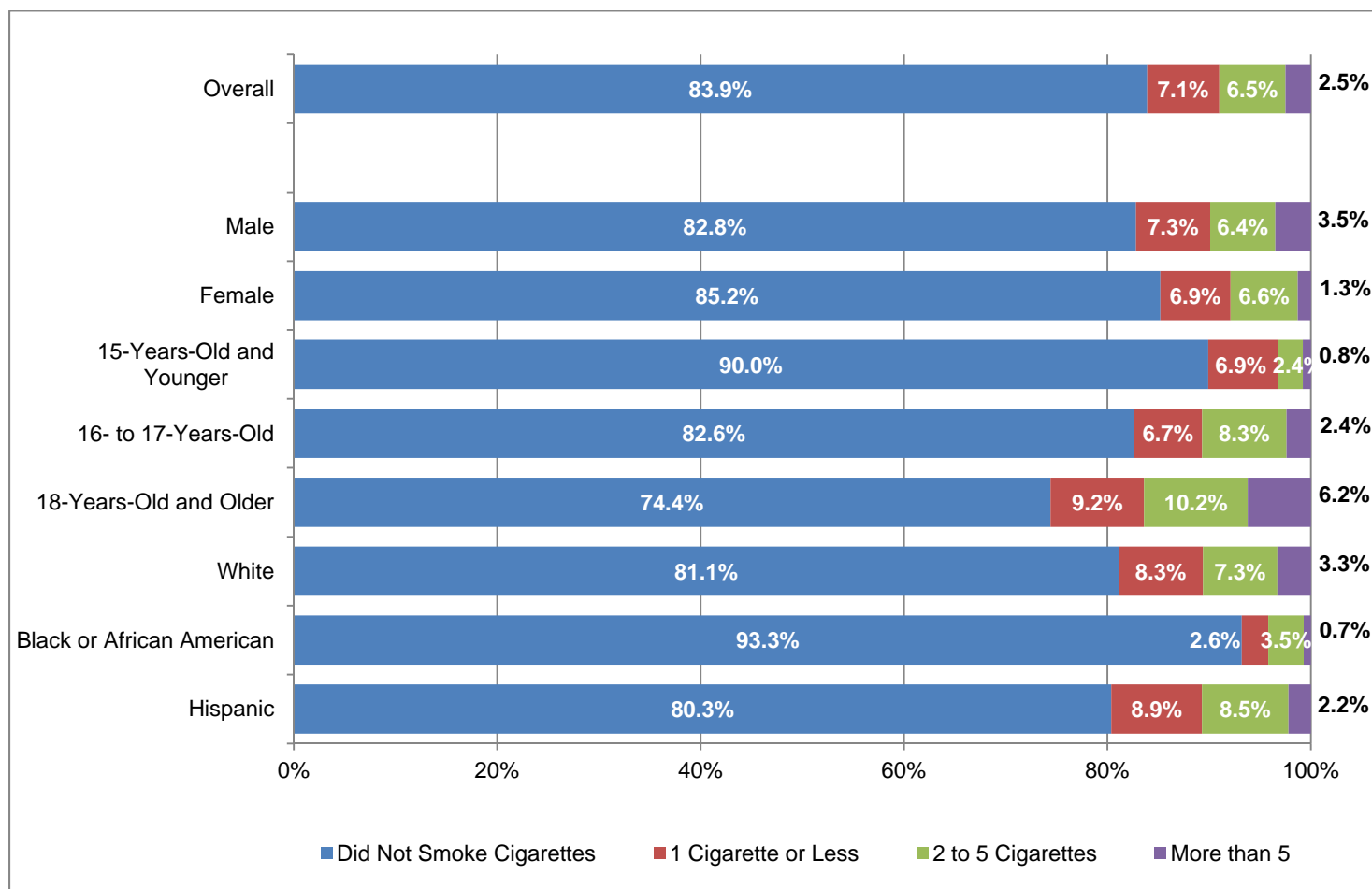
- Less than one in 20 New Jersey high school students (4.6%) tried cigarette smoking before the age of 13 (Figure 3.2).
- The proportion of students who had tried smoking before age 13 did not vary substantially by gender or age.
- Hispanic students (9.0%) were more than twice as likely to try smoking before age 13 than were White (4.4%) or Black (2.6%) students.

- Slightly fewer than three in 10 New Jersey high school students (28.4%) had smoked at least one whole cigarette in their lifetime (Figure 3.1).
- Males (29.5%) were about equally likely as females (27.2%) to have smoked in their lifetime.
- The likelihood of cigarette use increased with age. Less than one fifth (17.1%) of students 15-years-old and younger had smoked at least one whole cigarette in their life compared to three in 10 of 16- to 17-year-olds (30.8%) and nearly half of those 18-years-old and older (45.8%).
- Cigarette smoking varied by race/ethnicity with Hispanic (37.1%) and White (30.5%) students much more likely to have smoked a cigarette in their lifetime than Black students (18.4%).

2000 update. *ImpacTeen. Research Paper Series* 2002;22.

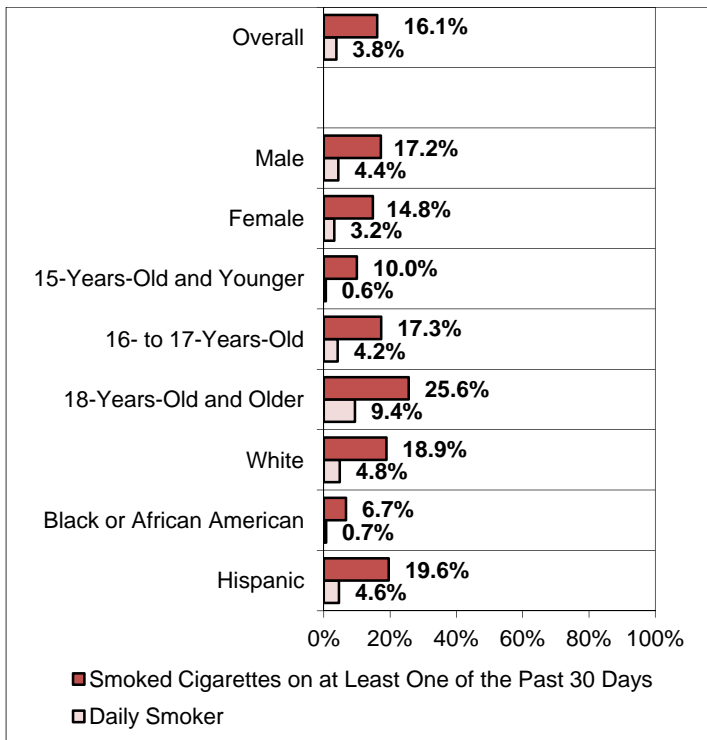
<sup>42</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

**Figure 3.3: Number Of Cigarettes Smoked Per Day, Last 30 Days**

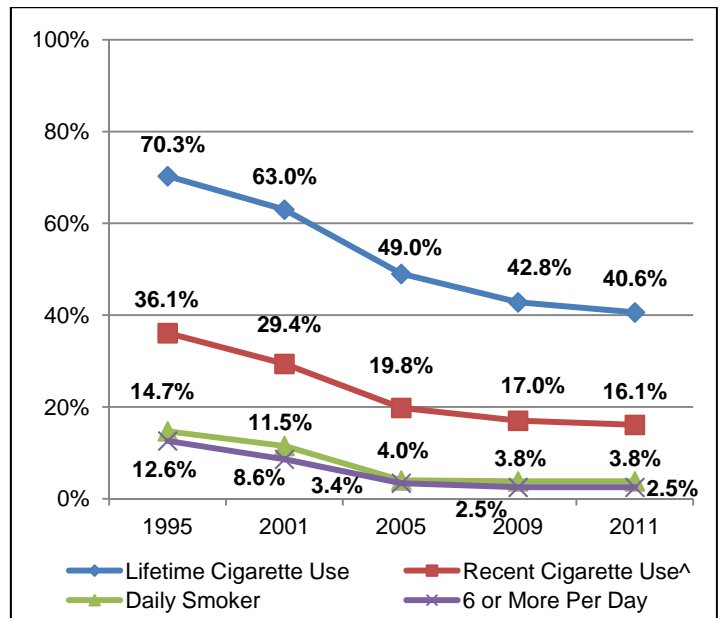


- Overall, more than eight in 10 of students (83.9%) had not smoked cigarettes in the last 30 days (Figure 3.3). Less than one in 10 students (7.1%) smoked one cigarette or less per day during the previous month while a similar percentage (6.5%) had smoked two to five cigarettes. Far fewer students (2.5%) smoked more than five cigarettes a day during the previous month.
- Slightly more females than males reported not smoking during the last 30 days (85.2% vs. 82.8%).
- Nine out of 10 (90.0%) students 15-years-old and younger reported not smoking during the previous 30 days, as compared to 74.4% of those 18-years-old and older.
- Black (93.3%) students were more likely than White (81.1%) or Hispanic (80.3%) students to have not smoked during the past 30 days.

**Figure 3.4: Smoked Cigarettes On One Or More Of The Past 30 Days**



**Figure 3.5: Trends In Cigarette Use: 1995 - 2011**



<sup>^</sup> NOTE: Percentages for recent cigarette use have been recalculated from previous reports to correspond to CDC calculation of prevalence. In prior years, NJ determined recent cigarette use based on whether students indicated a number on the questionnaire for the number of cigarettes they smoked per day in the past 30 days. Recent cigarette use has been adjusted based on how many days students indicated they smoked in the past 30 days.

- Overall, 16.1% of New Jersey high school students reported smoking on at least one of the last 30 days and 3.8% of students were daily smokers (Figure 3.4).
- Slightly more males (17.2%) than females (14.8%) smoked on at least one of the previous 30 days, but were about equally likely to be daily smokers during that period.
- The rate of students who smoked on one or more of the past 30 days increased with age. The percentage of those 15-years-old and younger who reported recent smoking was 10.0%, as compared to 17.3% of 16- to 17-year-olds and 25.6% of those 18-years-old and older. A greater proportion of students aged 18-years-old and older smoked daily (9.4%) as compared to 4.2% of 16- to 17-year-olds and 0.6% of those 15-years-old and younger.
- Fewer Black students (6.7%) had smoked on at least one day in the past 30 days, compared to 18.9% of White students and 19.6% of Hispanic students.
- Reports of lifetime, recent, and daily cigarette use among New Jersey high school students all reached new lows in 2011 (Figure 3.5). About two in five students (40.6%) had tried cigarette smoking, even one or two puffs, as compared to 42.8% in 2009, 49.0% in 2005, 63.0% in 2001, and 70.3% in 1995.
- The number of students reporting cigarette use during the previous month reached a low of 16.1% in 2011. This figure was 17.0% in 2009, 19.8% in 2005, 29.4% in 2001, and 36.1% in 1995.
- In 2011, students reported being daily smokers at exactly the same rate as in 2009 (3.8%). This is a similar proportion as in 2005 (4.0%), but much less than in 2001 (11.5%) and 1995 (14.7%).
- The number of students smoking six or more cigarettes on each day that they smoked during the previous month in 2011 remained at the rate (2.5%) observed in 2009, which was down from 3.4% in 2005, 8.6% in 2001, and 12.6% in 1995.

### HEALTHY NEW JERSEY 2010 GOAL

Decrease the percentage of public high school students who say they are currently smoking to: 26% of ALL high school students; 26% for White non-Hispanic students; 15% for Black non-Hispanic students; and 26% for Hispanic students.

### 2011 NJSHS RESULTS

High school students overall (16.1%), White students (18.9%), Black students (6.7%) and Hispanic students (19.6%) all smoked at rates below the objective set for their racial/ethnic group.

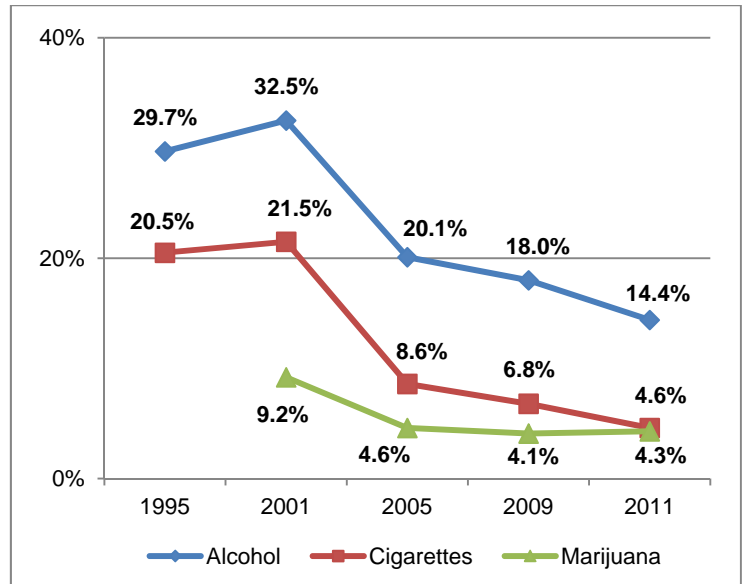
### HEALTHY PEOPLE 2010 NATIONAL GOAL

Reduce use of cigarettes in the past month by adolescents to 16%.

### 2011 NJSHS RESULTS

Recent cigarette use among New Jersey high school students was at the target set for 2010 (16.1%).

Figure 3.6: Trends In Early Adoption Of Substance Use (Before Age 13): 1995 - 2011



- Use of cigarettes, alcohol, and marijuana before the age of 13 among New Jersey high school students has decreased dramatically since the highs recorded in 2001.
- The rate of New Jersey high school students who drank alcohol before the age of 13 has fallen by more than half since its 1995 (29.7%) and 2001 (32.5%) levels. In 2011, 14.4% of students adopted use before age 13, also down from the levels in 2005 and 2009 (20.1% and 18.0%, respectively).
- Early use of cigarettes has fallen the most visibly, to 4.6% in 2011 from 6.8% in 2009, 8.6% in 2005, 21.5% in 2001, and 20.5% in 1995.
- Early adoption of marijuana has also fallen by more than half, down from 9.2% in 2001 to between 4.1%-4.6% between 2005 and 2011.



## CHAPTER 4: USE OF WEAPONS AND VIOLENCE

### Weapons

These questions measure violence-related behaviors and school-related violent behaviors. Homicide is the second leading cause of death among all youth ages 15-19 years (9.6 per 100,000) and is the leading cause of death among black youth ages 15-19 years (33.8 per 100,000).<sup>43</sup> Approximately 84% of homicide victims in the United States in 2004 were killed with a weapon, such as a gun, knife, or club.<sup>44</sup> In 2006, 85% of homicide victims 15-19 -years-old were killed with firearms.<sup>45</sup> Firearms intensify violence and increase the likelihood of fatality in a conflict.<sup>46</sup> Of all violent deaths that occurred on school property between 1994 and 2006, 65% involved firearms.<sup>47</sup> Nearly 100% of school districts have a policy prohibiting weapon possession or use by high school students on school property.<sup>48</sup> Among high school students nationwide in 2009, 17% had carried a weapon, 6% had carried a gun, and 6% had carried a weapon on school property at

least one day during the 30 days before the survey.<sup>49</sup> The percentage of students who carried a weapon decreased during 1991–1999 (26%–17%) and then did not change significantly during 1999–2009 (17%–17%).<sup>50</sup>

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<sup>43</sup> Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2010. Accessed April 13, 2010.

<sup>44</sup> Department of Justice. Crime in the United States, 2004. *Uniform Crime Reports*. Federal Bureau of Investigation Web site. Available at [http://www.fbi.gov/ucr/cius\\_04/](http://www.fbi.gov/ucr/cius_04/). Accessed May 19, 2010.

<sup>45</sup> Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2010. Accessed April 13, 2010.

<sup>46</sup> Cook PJ, Ludwig J. The costs of gun violence against children. *Future of Children* 2002; 12(2):87-99.

<sup>47</sup> Centers for Disease Control and Prevention. School-associated homicides – United States 1992-2006. *Morbidity and Mortality Weekly Report* 2008;57(02):33-36.

<sup>48</sup> Jones SE, Fisher CJ, Greene BZ, Hertz MF, Pritzl J. Healthy and safe school environment, part I: results from the School Health Policies and Programs Study 2006. *Journal of School Health* 2007;77(8):522-543.

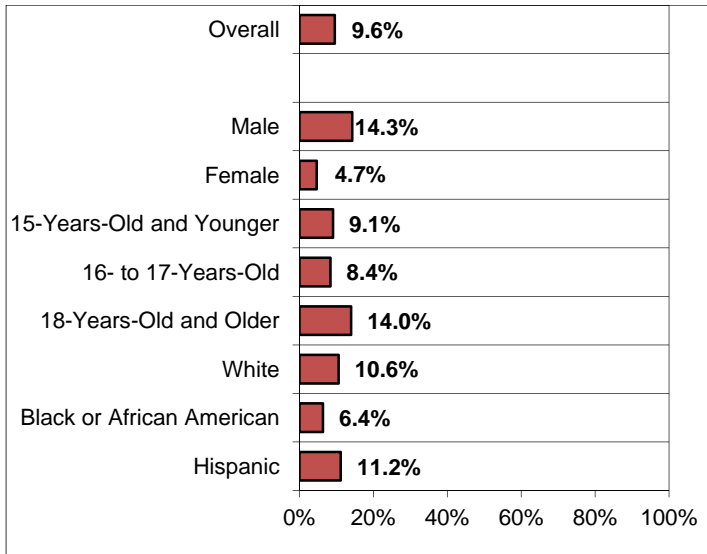
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<sup>49</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

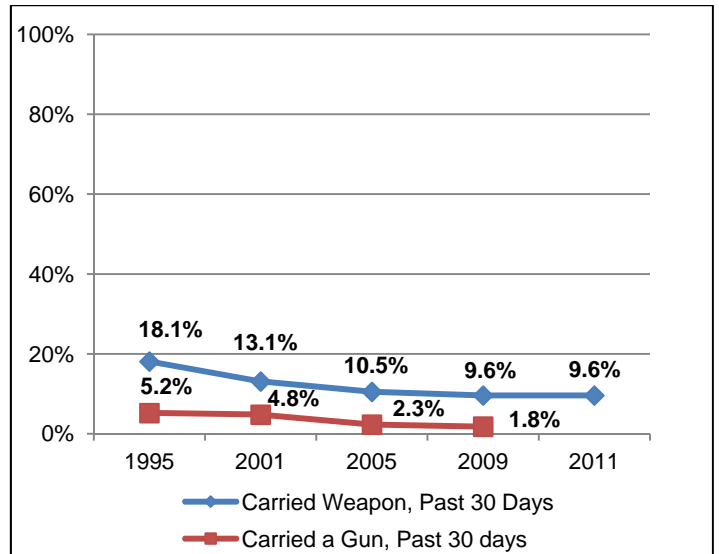
<sup>50</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.



**Figure 4.1: Carrying Any Weapon, One Or More Days, Last 30 Days**



**Figure 4.2: Trends In Weapon Carrying: 1995 - 2011**



- One in 10 New Jersey high school students (9.6%) reported carrying a weapon such as a gun, knife or club during the past 30 days (Figure 4.1); and 2.7% of all students carried one on six or more days of the last 30.
- About three times as many males (14.3%) as females (4.7%) reported carrying a weapon at least once during the previous month.
- Students aged 18-years-old and older (14.0%) were slightly more likely to carry a weapon in the past 30 days than 16- to 17-year-olds (8.4%) or those 15-years-old and under (9.1%).
- Hispanic and White students (11.2% and 10.6%, respectively) were slightly more likely to report carrying a weapon than Black students (6.4%).
- The percentage of New Jersey high school students who carried a weapon during the past 30 days decreased from 18.1% and 13.1% in 1995 and 2001, respectively, and has remained in the 9.6%-10.5% range for the last three survey years (Figure 4.2).
- The percentage of students who carried a gun in the past 30 days was not measured in 2011, but had reached a new low of 1.8% in 2009, continuing its decline from the high of 5.2%, recorded in 1995.

## Physical Fights

These questions measure the frequency and severity of physical fights, school-related fights, and abusive and bullying behavior. Physical fighting is a marker for other problem behaviors<sup>51</sup> and is associated with serious injury-related health outcomes.<sup>52 53</sup> Among high school students nationwide in 2009, 31% had been in a physical fight and 11% had been in a physical fight on school property one or more times during the 12 months before the survey.<sup>54</sup> The percentage of high school students who were in a physical fight decreased during 1991–2003 (42%–33%) and then did not change significantly during 2003–2009 (33%–31%).<sup>55</sup> During 1993–2009, a significant linear decrease occurred in the percentage of students who had been in a physical fight on school property (16%–11%).<sup>56</sup>

Intimate partner abuse victimization is associated with participation in other high risk behaviors,<sup>57</sup> including suicide ideation and attempts, as well as post traumatic stress disorder and major depressive episodes.<sup>58 59</sup> In 2009, 10% of high school students

<sup>51</sup> Sosin DM, Koepsell TD, Rivara FP, Mercy JA. Fighting as a marker for multiple problem behaviors in adolescents. *Journal of Adolescent Health* 1995;16:209-215.

<sup>52</sup> Borowsky IW, Ireland M. Predictors of future fight-related injury among adolescents. *Pediatrics* 2004;113:530-536.

<sup>53</sup> Pickett W, Craig W, Harel Y, et al. Cross-national study of fighting and weapon carrying as determinants of adolescent injury. *Pediatrics* 2005;116:855-863.

<sup>54</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>55</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>56</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>57</sup> Roberts TA, Klein J, Fisher S. Longitudinal effect of intimate partner abuse and high-risk behavior among adolescents. *Archives of Pediatrics & Adolescent Medicine* 2003;157:875-881.

<sup>58</sup> Wolitzky-Taylor KB, Ruggiero JK, Danielson CK, Resnick HS, Hanson RF, Smith DW, Saunders BE, Kilpatrick DG. Prevalence and correlates of dating violence in a national

sample of adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry* 2008;47(7):755-762.

<sup>59</sup> Coker AL, McKeown RE, Sanderson M, Davis KE, Valois RF, Huebner S. Severe dating violence and quality of life among South Carolina high school students. *American Journal of Preventive Medicine* 2000;19(4):220–227.

<sup>60</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>61</sup> Ackard DM, Neumark-Sztainer D. Date violence and date rape among adolescents: associations with disordered eating behaviors and psychological health. *Child Abuse & Neglect* 2002;26:455-473.

<sup>62</sup> Howard DE, Wang MQ. Psychosocial correlates of U.S. adolescents who report a history of forced sexual intercourse. *Journal of Adolescent Health* 2005;36:372-379.

<sup>63</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>64</sup> Van der Wal MF, de Wit CA, Hirasing RA. Psychosocial health among young victims and offenders of direct and indirect bullying. *Pediatrics* 2003;111(6):1312-1317.

<sup>65</sup> Van der Wal MF, de Wit CA, Hirasing RA. Psychosocial health among young victims and offenders of direct and indirect bullying. *Pediatrics* 2003;111(6):1312-1317.

<sup>66</sup> Rigby K. Consequences of bullying in school. *The Canadian Journal of Psychiatry* 2003;48(9):583-590.

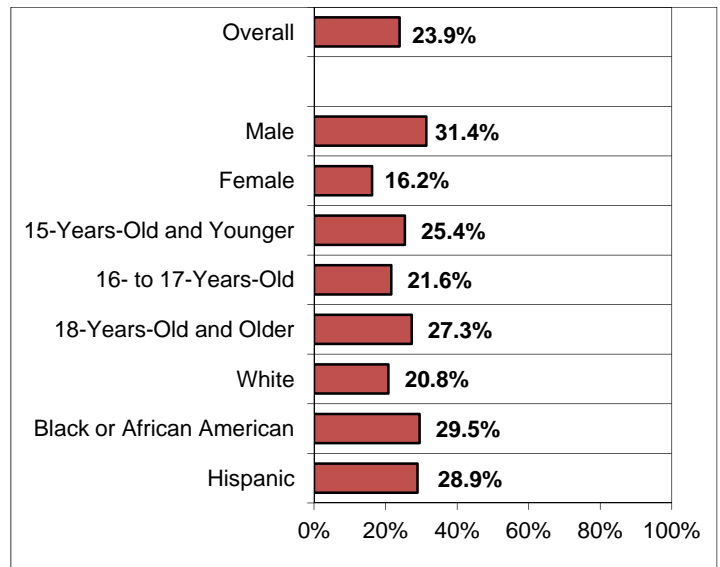
<sup>67</sup> Glew GM, Fan MY, Katon W, Rivara FR, Kernic MA. Bullying, psychosocial adjustment, and academic performance in elementary school. *Archives of Pediatrics & Adolescent Medicine* 2005;159:1026-1031.

<sup>68</sup> Rigby K. Consequences of bullying in school. *The Canadian Journal of Psychiatry* 2003;48(9):583-590.

<sup>69</sup> Glew GM, Fan MY, Katon W, Rivara FR, Kernic MA. Bullying, psychosocial adjustment, and academic performance in elementary school. *Archives of Pediatrics & Adolescent Medicine* 2005;159:1026-1031.

2009, 20% had been bullied on school property during the 12 months before the survey.<sup>70</sup> Electronic bullying victimization has been associated with discipline problems in school, skipping school, weapon carrying<sup>71</sup> and social anxiety.<sup>72</sup>

**Figure 4.3: Involved In One Or More Physical Fights, Last 12 Months**



- Overall, about one quarter (23.9%) of New Jersey high school students reported having been involved in at least one physical fight during the past year (Figure 4.3).
- More males (31.4%) than females (16.2%) were involved in one or more physical fights during the past year. However, a small proportion of males (3.4%) and females (1.0%) were involved in more than five fights during the previous year.
- Students aged 16- to 17-years-old (21.6%) were slightly less likely than students both younger (25.4%) and older (27.3%) than them to report being in a fight during the past 12 months.
- Black and Hispanic students (29.5 and 28.9%, respectively) were more likely than White students (20.8%) to report being in a fight last year.

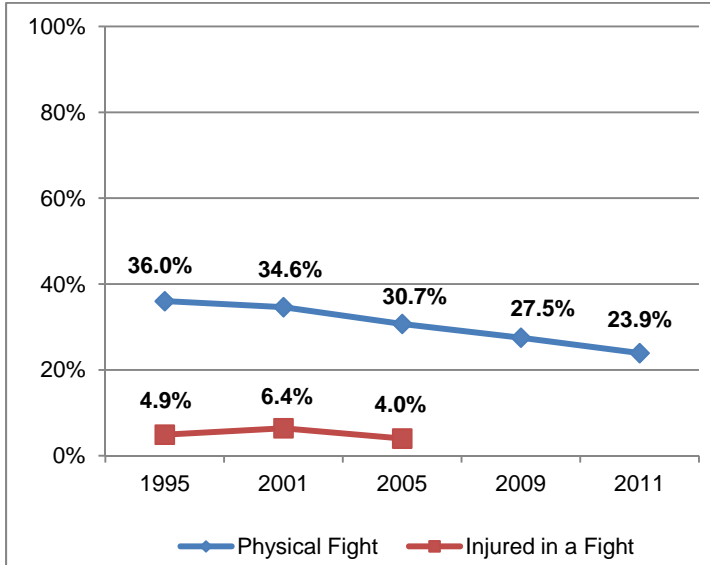
<sup>70</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>71</sup> Ybarra ML, Diener-West M, Leaf PJ. Examining the overlap in internet harassment and school bullying: Implications for school intervention. *Journal of Adolescent Health* 2007;41:S42–S50.

<sup>72</sup> Juvonen J, Gross EF. Extending the school grounds? Bullying experiences in cyberspace. *Journal of School Health* 2008;78:496-505.

## Bullying

**Figure 4.4: Trends In Physical Fighting: 1995 - 2011**



- The percentage of students reporting involvement in a physical fight during the previous year has steadily declined across survey years (Figure 4.4).
- In 2011, less than one in four students (23.9%) had been in a fight during the previous year, as compared to 27.5% in 2009, 30.7% in 2005, 34.6% in 2001, and 36.0% in 1995.
- Between 4.0% and 6.4% of students required medical attention from injuries sustained from fighting across the survey years in which this question was asked. This question was not asked in 2009 or 2011.

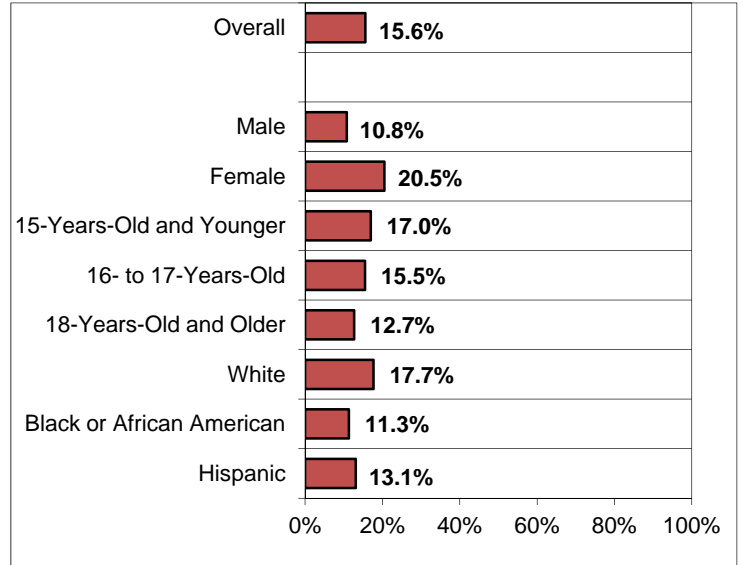
### **HEALTHY PEOPLE 2010 NATIONAL GOAL**

Reduce physical fighting among adolescent students to 32%.

### **2011 NJSHS RESULTS**

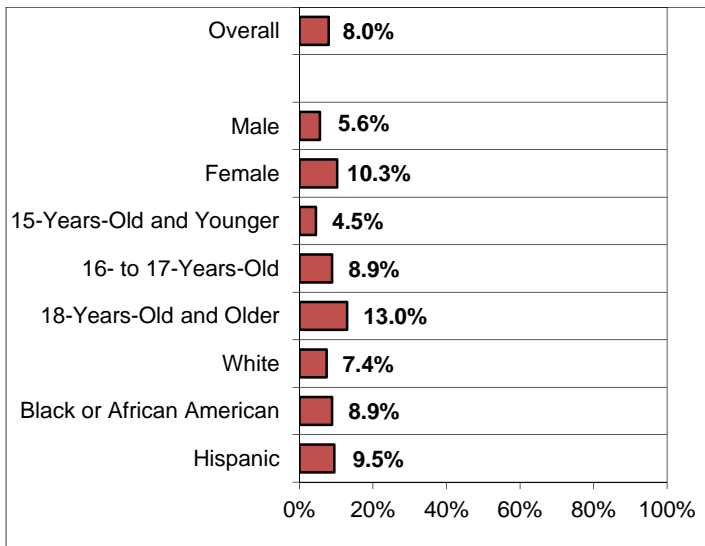
Satisfying the 2010 objective, 23.9% of New Jersey high school had been in a physical fight during the previous year.

**Figure 4.5: Electronically Bullied, Past 12 Months**



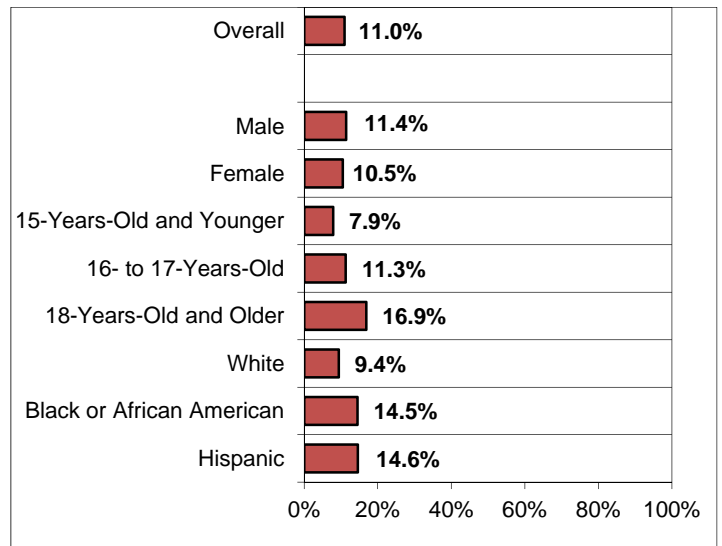
- One in six (15.6%) New Jersey high school students was electronically bullied during the past 12 months such as through e-mail, chat rooms, instant messaging, websites, or text messaging (Figure 4.5). This rate is virtually the same as the 16.6% figure recorded in 2009.
- Females (20.5%) were twice as likely as males (10.8%) to report such bullying in the past year.
- Students aged 15-years-old and under were most likely to report electronic bullying (17.0%) and those 18-years-old and older least likely (12.7%).
- White students (17.7%) were the most likely to report electronic bullying while Black students (11.3%) the least likely.

**Figure 4.6: Had Been Physically Forced To Have Sex Against Their Will, In Lifetime**



- About one in 12 New Jersey high school students (8.0%) report having been physically forced to have sex in their lifetime (Figure 4.6).
- Almost twice as many females (10.3%) than males (5.6%) had been forced to have sex.
- Older students aged 18-years-old and above (13.0%) were more likely to report forced sexual intercourse than 16- to 17-year-old students (8.9%) or those 15-years-old and under (4.5%).
- The frequency of physically forced sexual contact did not vary substantially by race/ethnicity (7.4%-9.5%).

**Figure 4.7: Was Slapped Or Hit By Boyfriend Or Girlfriend, Past 12 Months**



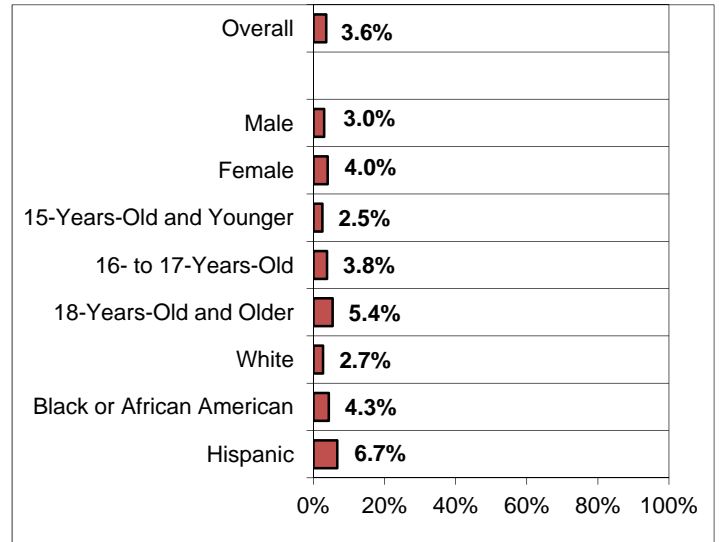
- One in nine (11.0%) New Jersey high school students reported that they had been slapped or hit by their boyfriend or girlfriend during the past 12 months (Figure 4.7).
- About as many males (11.4%) as females (10.5%) reported dating violence over the past year.
- Students aged 18-years-old and older (16.9%) were more likely than those aged 16- to 17-years-old (11.3%) or 15-years-old and younger (7.9%) to report partner abuse.
- Hispanic and Black students (14.6% and 14.5%, respectively) were more likely than White students (9.4%) to report being slapped or hit by their partner in the past 12 months.

## CHAPTER 5: SUBSTANCE USE, WEAPONS, AND VIOLENCE ON SCHOOL PROPERTY

### Weapons and Violence on School Property

Among high school students nationwide in 2009, 5% had not gone to school on at least one day during the 30 days before the survey because they felt they would be unsafe at school or on their way to or from school and 8% had been threatened or injured with a weapon on school property one or more times during the 12 months before the survey.<sup>73</sup> The percentage of students who did not go to school because of safety concerns increased during 1993–2001 (4%–7%) and then decreased during 2001–2009 (7%–5%).<sup>74</sup>

**Figure 5.1: Missed One Or More School Days Because Felt Unsafe, Last 30 Days**

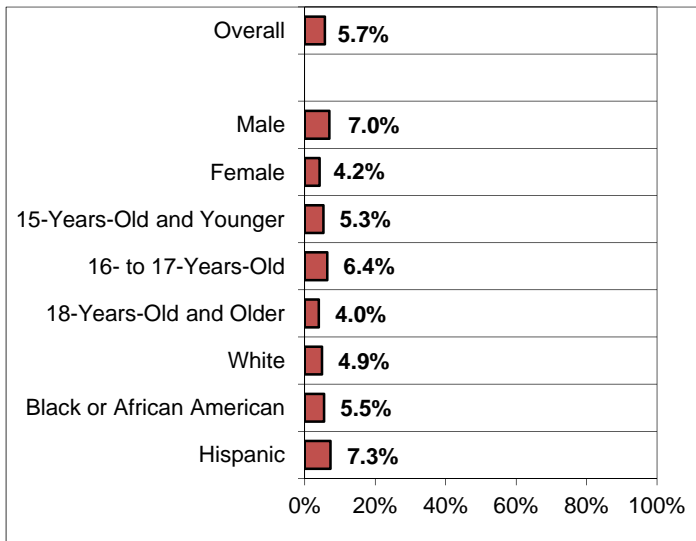


- Overall, 3.6% of New Jersey high school students reported that on at least one occasion during the last 30 days they did not attend school because they felt they would be unsafe at or on the way to or from school (Figure 5.1). Even fewer students (1.8%) felt unsafe and missed school on two or more days.
- Little variation was noted by gender (3.0%-4.0%) or by age (2.5%-5.4%).
- Hispanic students (6.7%) were most likely to report missing one or more days during the previous month because they felt unsafe.

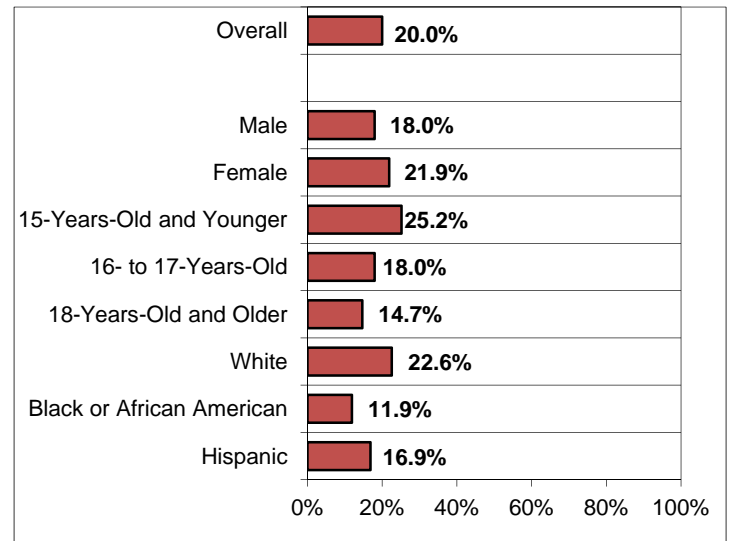
<sup>73</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>74</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

**Figure 5.2: Threatened Or Injured With A Weapon On School Property, One Or More Times, Last 12 Months**



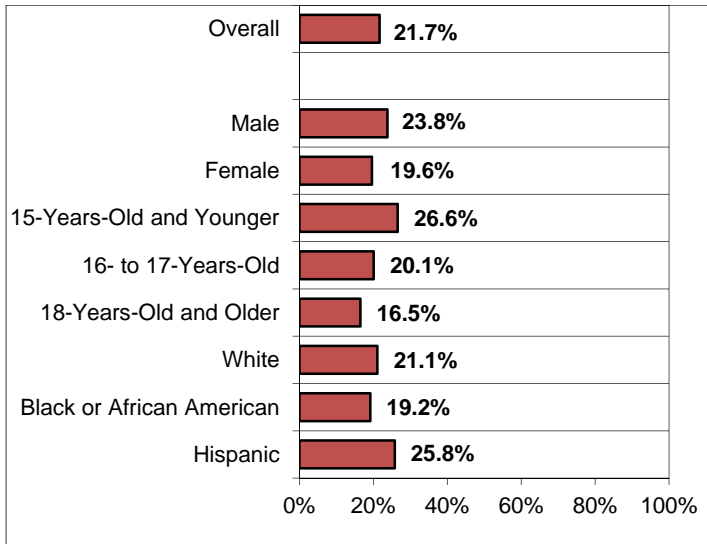
**Figure 5.3: Bullied On School Property, Last 12 Months**



- Approximately one in 20 New Jersey high school students (5.7%) reported that someone had threatened or injured them with a weapon such as a gun, knife, or a club on school property during the past 12 months (Figure 5.2). About half (2.6%) of these students were threatened or injured with a weapon such as a gun, knife, or a club on school property on more than one occasion.
- There was little variation in threats or injury on school property by gender (4.2%-7.0%), age (4.0%-6.4%), or race/ethnicity (4.9%-7.3%).

- One in five (20.0%) New Jersey high school students had been bullied on school property in the past year (Figure 5.3). This figure is almost identical to the 20.7% rate reported in 2009.
- Females were slightly more likely than males (21.9% vs. 18.0%) to report being bullied on school property.
- Young students, aged 15-years-old and under (25.2%), were more likely to experience bullying than 16- to 17-year-olds (18.0%) and those aged 18-years-old and above (14.7%).
- White students (22.6%) were most likely and Black students (11.9%) least likely to indicate they had been bullied on school property in the past 12 months.

**Figure 5.4: Property Stolen At School, One Or More Times, Last 12 Months**

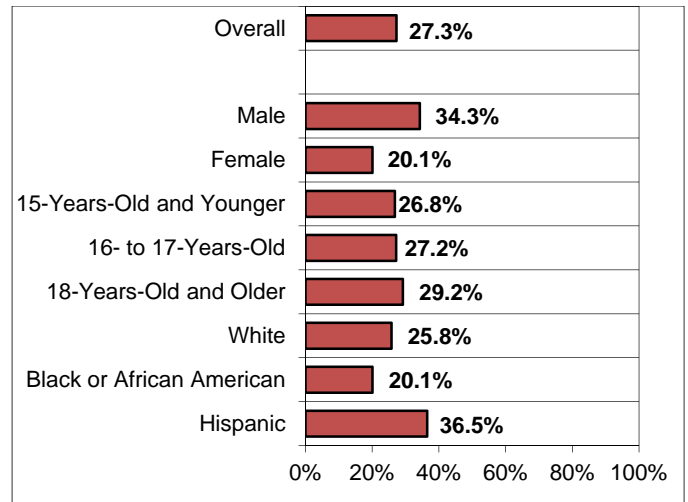


- Overall, 21.7% of New Jersey high school students reported that they had their property stolen at school at least once during the past 12 months (Figure 5.4). A small percentage of students (1.7%) reported having their property stolen on six or more of the previous 30 days.
- Males (23.8%) were more likely than females (19.6%) to report stolen property last year.
- Students aged 15-years-old and under (26.6%) were most likely to have their property stolen at school, followed by 16- to 17-year-olds (20.1%) and those aged 18-years-old and older (16.5%).
- Hispanic students (25.8%) were slightly more likely than White (21.1%) or Black (19.2%) students to report their property being stolen at school.

## Substances on School Property

The survey included one question regarding illegal drugs on school property.

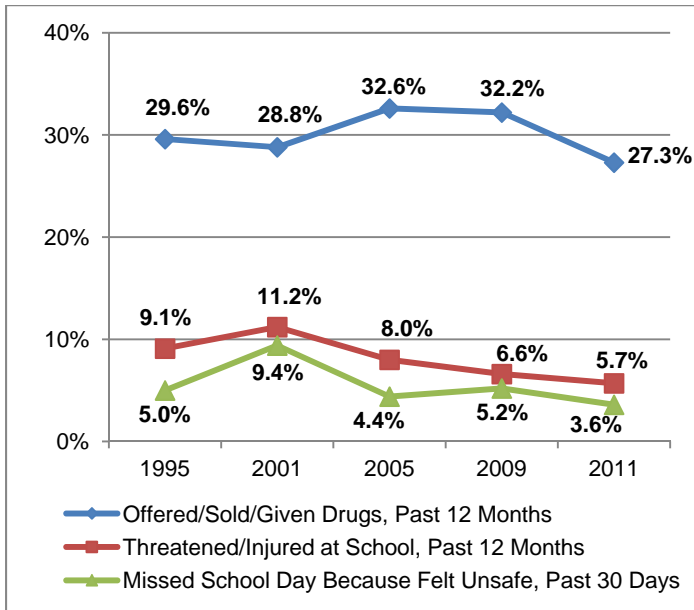
**Figure 5.5: Offered, Sold Or Given Illegal Drugs On School Property**



- More than one fourth (27.3%) of high school students reported being offered, sold, or given illegal drugs on school property in the past 12 months (Figure 5.5).
- Males were decidedly more likely than females to report being offered, sold or given drugs on school property (34.3% vs. 20.1%).
- There was no notable difference by age (26.8%-29.2%); however, Hispanic students (36.5%) were much more likely than White (25.8%) or Black (20.1%) students to report being offered, sold or given drugs on school property in the past 12 months.



**Figure 5.6: Trends In Risk Behavior On School Property: 1995 - 2011**



- In 2011, rates of being offered, sold, or given drugs at school dropped, while reports of being threatened or injured on school property and the number of students who said that they missed school for safety reasons remained essentially unchanged from 2009 (Figure 5.6).
- The percentage of high school students who said they were offered, sold, or given drugs on school property (27.3%) fell from the levels observed in 2009 (32.2%) and 2005 (32.6%) to more closely resemble the proportions recorded in 2001 (28.8%) and 1995 (29.6%).
- The number of students who reported being threatened or injured at school was 5.7% in 2011, similar to 2009 (6.6%), but down from levels observed between 1995 and 2005 (8.0%-11.2%).
- In 2011, the number of students who did not attend school on at least one out of the last 30 days because they felt unsafe (3.6%) was similar to all other survey years, except the high of 9.4%, reached in 2001.

## CHAPTER 6: PERSONAL SAFETY AND SUICIDE

### Automobile Seatbelt Use

This question measures the frequency with which seat belts are worn when riding in a car driven by someone else. In 2006, 1,537 young people ages 15 and under were killed and 203,819 were injured in passenger vehicle crashes; of those injured, approximately 9% had an injury that was so severe they were unable to walk, drive, or continue the activities they normally engaged in prior to the crash.<sup>75</sup> Motor-vehicle related injuries kill more young adults ages 5-19 years than any other single cause in the United States.<sup>76</sup> Safety belts, when used appropriately, reduce the risk of fatal injury to front-seat passenger car occupants by 45% and the risk of moderate-to-critical injury by 50%.<sup>77</sup> During 2006, a total of 1,537 children from birth to age 15 were killed in passenger vehicle crashes; in approximately 50% of these fatalities, the children were unrestrained: 40% of children 5 to 7 were unrestrained; 52% of children 8 to 12 were unrestrained; and 65% of children 13 to 15 were unrestrained.<sup>78</sup> In 2009, 10% of high school students

nationwide had rarely or never worn a seat belt when riding in a car driven by someone else.<sup>79</sup> During 1991–2009, a significant linear decrease occurred in the percentage of students who rarely or never wore a seat belt (26%–10%).<sup>80</sup>

Texting or using a cell phone while driving falls under the umbrella term, “distracted driving,” along with behaviors such as eating, grooming, or tuning a car radio. In 2009, 5,474 people were killed in crashes involving driver distraction, and an estimated 448,000 were injured.<sup>81</sup> Teen drivers are more likely than other age groups to be involved in a fatal crash where distraction is reported. In 2009, 16% of teen drivers involved in a fatal crash were reported to have been distracted.<sup>82</sup>

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<sup>75</sup> National Highway Traffic Safety Administration. *2006 Motor Vehicle Occupant Protection Facts*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2008. Available at <http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Associated%20Files/810654.pdf>. Accessed May 19, 2010.

<sup>76</sup> Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2010. Accessed April 13, 2010.

<sup>77</sup> National Highway Traffic Safety Administration. *Traffic Safety Facts, 2006 Data: Occupant Protection*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2007. Available at <http://www-nrd.nhtsa.dot.gov/Pubs/810807.PDF>. Accessed May 19, 2010.

<sup>78</sup> National Highway Traffic Safety Administration. *2006 Motor Vehicle Occupant Protection Facts*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration; 2008. Available at

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<http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Associated%20Files/810654.pdf>. Accessed May 19, 2010.

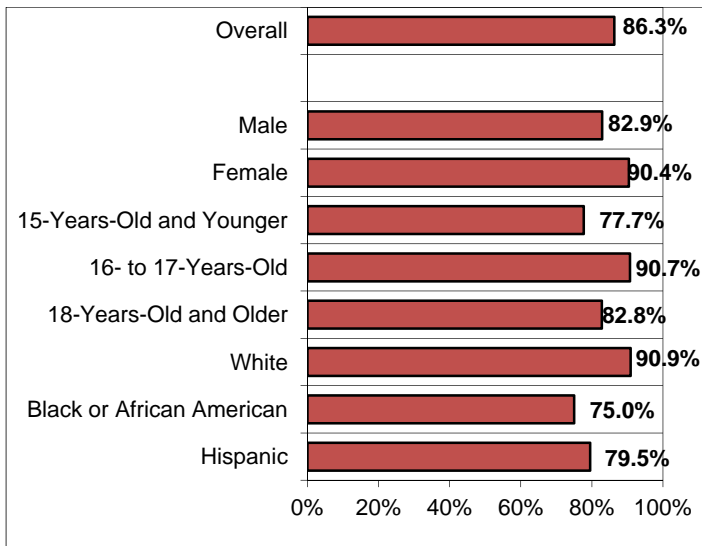
<sup>79</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>80</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>81</sup> National Highway Traffic Safety Administration. *Traffic Safety Facts: Distracted Driving 2009*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration, September 2010. Publication no. DOT-HS-811-379. Available at <http://www.distraction.gov/>. Accessed June 27, 2011.

<sup>82</sup> National Highway Traffic Safety Administration. *Traffic Safety Facts: Distracted Driving 2009*. Washington, DC: U.S. Department of Transportation, National Highway Traffic Safety Administration, September 2010. Publication no. DOT-HS-811-379. Available at <http://www.distraction.gov/>. Accessed June 27, 2011.

**Figure 6.1: When Driving A Car, Wore A Seatbelt Most Of The Time Or Always**



- Overall, almost nine in 10 of New Jersey high school students (86.3%) *most of the time* (16.1%) or *always* (70.2%) used seat belts when driving (Figure 6.1). Less than one in 10 students *never* (3.8%) or *rarely* (4.9%) using them.
- Females (90.4%) were more likely than males (82.9%) to report using seat belts *most of the time* or *always*.
- Students aged 16- to 17-years-old (90.7%) were more likely to report using a seat belt *most of the time* or *always* than those 18-years-old and above (82.8%).
- White students (90.9%) were most likely to report that they *most of the time* or *always* used seat belts when driving, followed by Hispanic and Black students (79.5% and 75.0%, respectively).

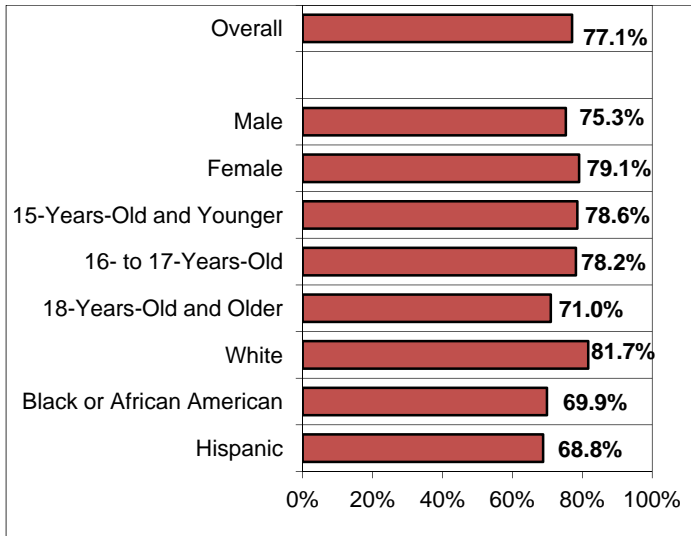
**HEALTHY PEOPLE 2010 NATIONAL GOAL**

Increase use of seat belts among drivers and front-seat passengers to 92%.

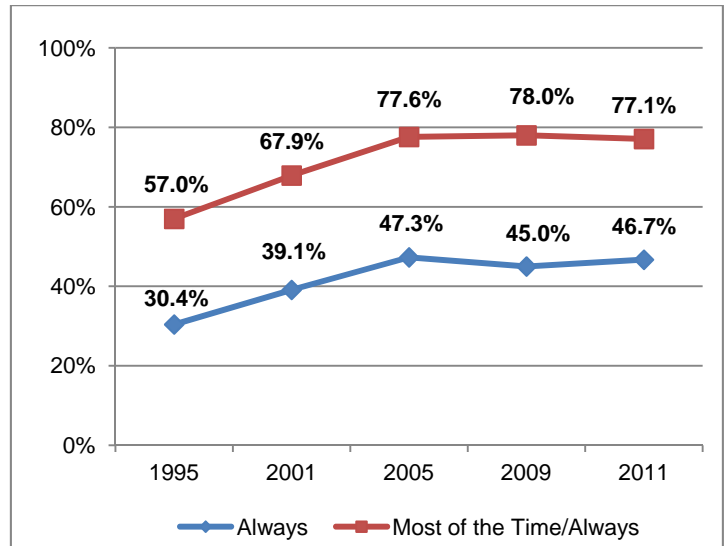
**2011 NJSHS RESULTS**

Although more than three fourths of students (77.1%) wear their seat belts either always (46.9%) or most of the time (30.2%), seat belt use among New Jersey high school students falls short of the objective set for adults.

**Figure 6.2: When Passenger In A Car, Wore A Seatbelt *Most Of The Time Or Always***

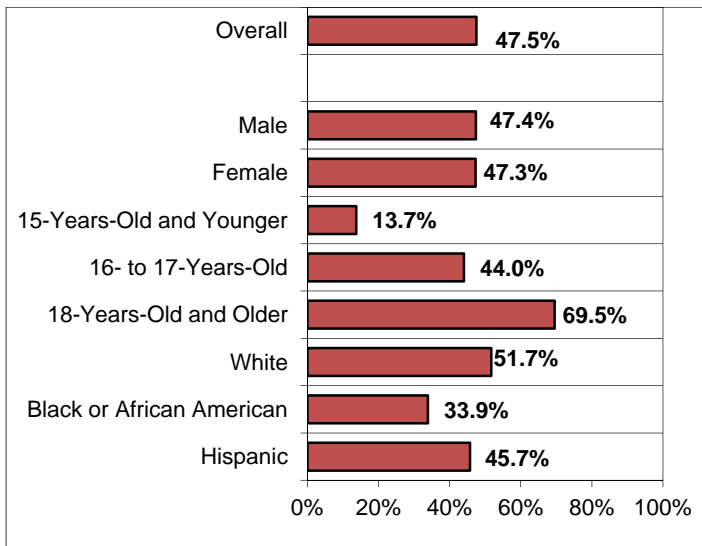


**Figure 6.3: Trends In Seat Belt Use: 1995 - 2011**

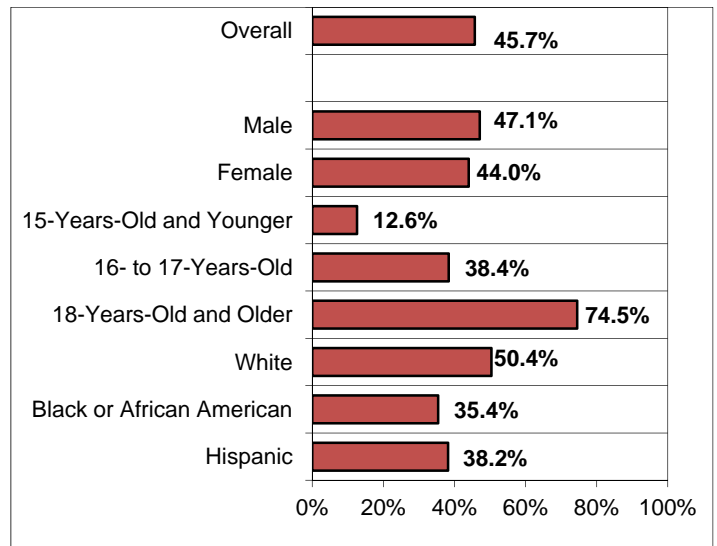


- Overall, more than three fourths (77.1%) of New Jersey high school students *most of the time* (30.2%) or *always* (46.9%) used seat belts when riding in a car driven by someone else (Figure 6.2), while around one in 10 students reported *never* (4.3%) or *rarely* (6.2%) using them.
- Females (79.1%) were slightly more likely than males (75.3%) to report using seat belts as passengers *most of the time or always*.
- A lesser proportion of students aged 18-years-old and older (71.0%) reported that they use seat belts *most of the time or always* when riding in a car driven by someone else, as compared to 78.6% of those aged 15-years-old and younger and 78.2% of students aged 16- to 17-years-old.
- White students (81.7%) were most likely to report that they *most of the time or always* used seat belts when riding as a passenger, followed by Black and Hispanic students (69.9% and 68.8%, respectively).
- Students' reporting of seat belt use increased steadily between 1995 and 2005 before leveling off between 2005 and 2011 (Figure 6.3).
- More than three fourths (77.1%) of students wore their seat belts either *always* or *most of the time*, similar to 2009 (78.0%) and 2005 (77.6%), but up from 67.9% in 2001 and 57.0% in 1995.
- In 2011, 46.7% of students reported that they *always* wore a seat belt when riding as a passenger. This rate is clearly higher than the 39.1% and 30.4% recorded in 2001 and 1995, respectively.

**Figure 6.4: Texted Or E-mailed When Driving, Past 30 Days**



**Figure 6.5: Used Cell Phone When Driving, Past 30 Days**



- Almost half of New Jersey high school students (47.5%) who had driven a car during the past 30 days reported texting or e-mailing while driving (Figure 6.4).
- Males and females were equally likely to text or e-mail while driving.
- A greater proportion of students aged 18-years-old and older (69.5%) reported using messaging technology while driving than did 16- to 17-year-olds (44.0%).
- White students (51.7%) were more likely to report that they have texted or e-mailed while driving than Hispanic and Black students (45.7% and 33.9%, respectively).
- Among those who drove in the past 30 days, almost half (45.7%) of New Jersey high school students reported that they used a cell phone while driving (Figure 6.5).
- Males were slightly more likely than females to use a cell phone while driving (47.1% vs. 44.0%).
- Almost twice as many students aged 18-years-old and above reported talking on a cell phone while driving than did 16- to 17-year-olds (74.5% vs. 38.4%).
- White students (50.4%) were more likely to report mixing driving with cell phone use than Hispanic (38.2%) or Black students (35.4%).

## Depression and Suicide

These questions measure sadness, suicide ideation, attempted suicide, and the seriousness of those attempts. Suicide is the third leading cause of death among youth ages 15-19 years.<sup>83</sup> The suicide rate for persons ages 15-19 was 7.3 per 100,000 in 2006 down from 8.2 per 100,000 in 2003.<sup>84</sup> A prior suicide attempt is one of the most significant risk factors for a fatal adolescent suicide attempt.<sup>85</sup> <sup>86</sup> Among high school students nationwide in 2009, 26% felt so sad or hopeless almost every day for two or more weeks in a row that they stopped doing some usual activities.<sup>87</sup> Among high school students nationwide in 2009, 14% had seriously considered attempting suicide, 11% had made a plan about how they would attempt suicide, and 6% had attempted suicide one or more times during the 12 months before the survey.<sup>88</sup> The percentage of students who seriously considered attempting suicide decreased rapidly during 1991–1993 (29%–24%) and then decreased less rapidly during 1993–2009 (24%–14%).<sup>89</sup>

<sup>83</sup> Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2010. Accessed April 13, 2010.

<sup>84</sup> Web-based Injury Statistics Query and Reporting System (WISQARS) [database online]. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2010. Accessed April 13, 2010.

<sup>85</sup> Borowsky IW, Ireland M, Resnick, MD; Adolescent suicide attempts: risks and protectors. *Pediatrics* 2001; 107:485– 493.

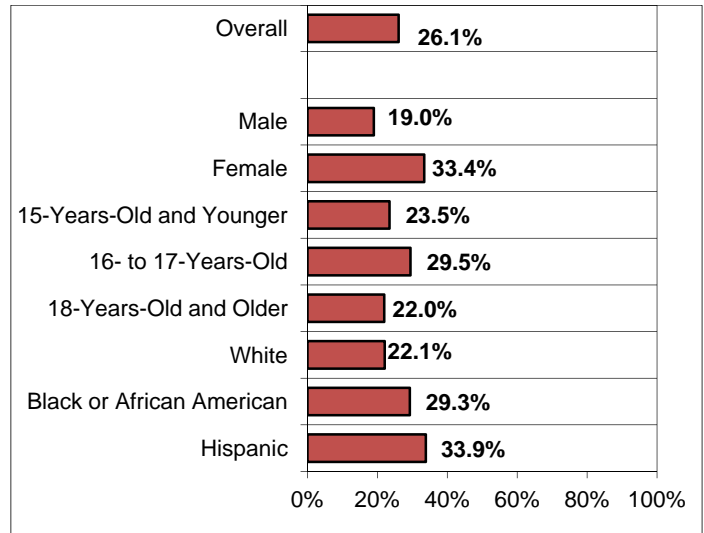
<sup>86</sup> Bridge JA, Goldstein TR, Brent DA. Adolescent suicide and suicidal behavior. *Journal of Child Psychology and Psychiatry* 2006;47(3/4):372–394.

<sup>87</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>88</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

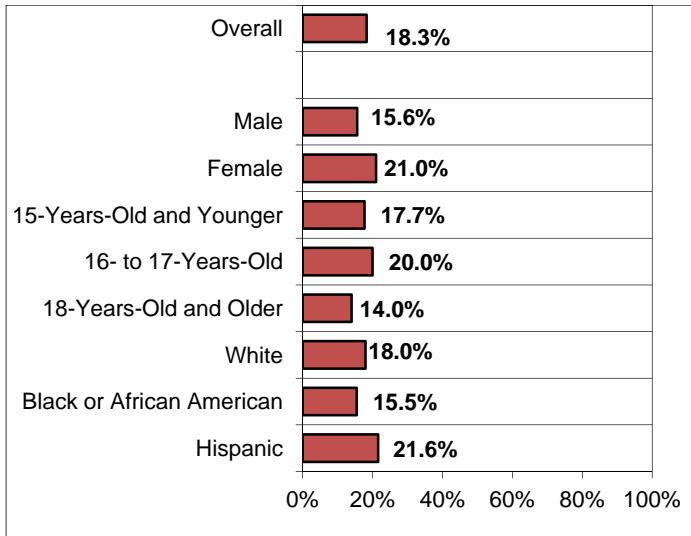
<sup>89</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

**Figure 6.6: Felt Sad Or Hopeless Almost Every Day For Two Weeks Straight, Past 12 Months**



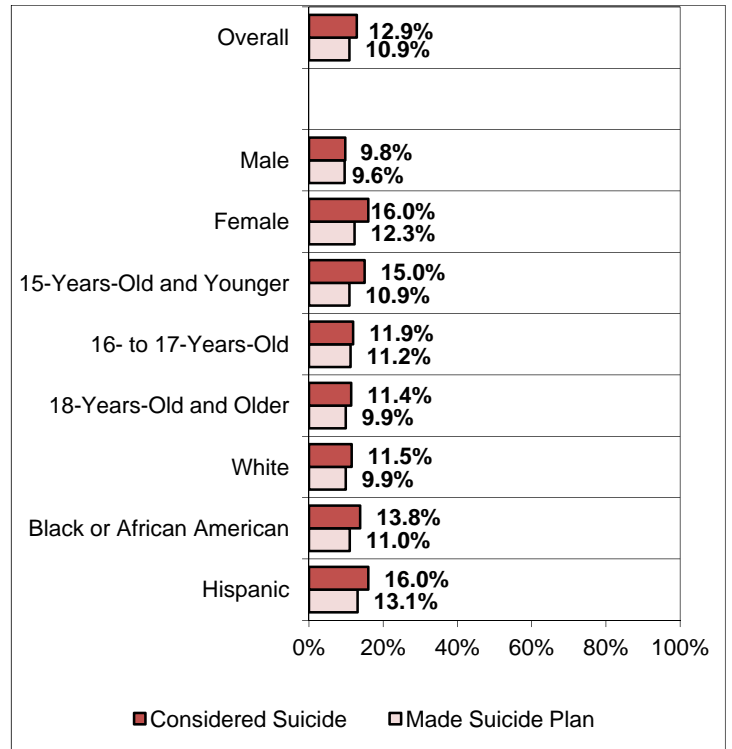
- Fully one quarter (26.1%) of students reported having felt sad or hopeless almost every day for two straight weeks within the past year (Figure 6.6).
- Female students were more likely to feel depressed than males (33.4% vs. 19.0%).
- Students aged 16- to 17-years-old were most likely to report feeling sad or hopeless (29.5%), while those aged 15-years-old and younger or 18-years-old and older were about equally likely to feel that way (23.5% and 22.0%, respectively).
- Hispanic (33.9%) and Black (29.3%) students were more likely than White students (22.1%), to feel sad or hopeless for two weeks straight.

**Figure 6.7: Hurt Self On Purpose One Or More Times Without Wanting To Die, Past 12 Months**



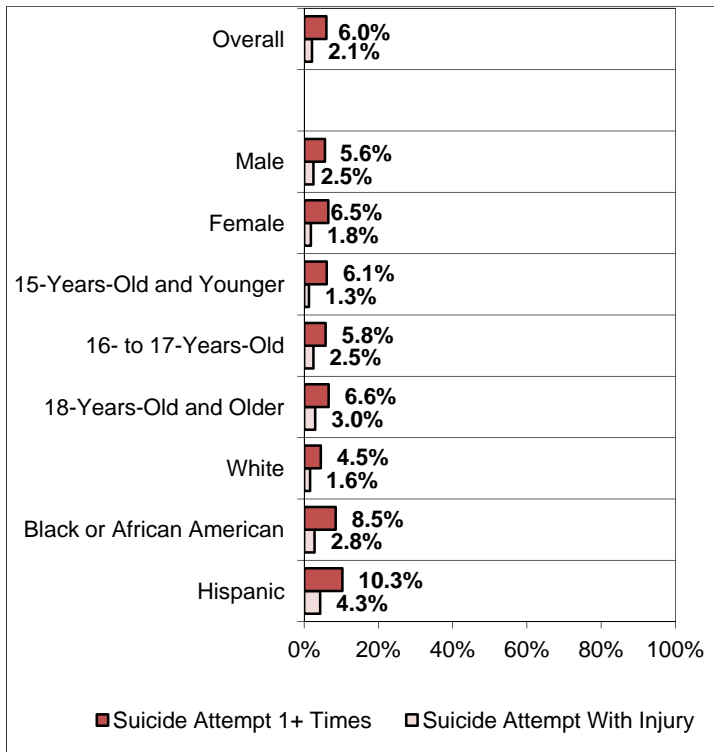
- Less than one in five (18.3%) students reported having hurt themselves on purpose during the past 12 months (Figure 6.7).
- Females (21.0%) were slightly more likely than males (15.6%) to hurt themselves.
- New Jersey high school students 16- to 17-years-old (20.0%) were slightly more likely than those aged 15-years-old and younger (17.7%) or those aged 18-years-old and older (14.0%) to hurt themselves on purpose.
- Hispanic students (21.6%) were slightly more likely than White or Black students (18.0% and 15.5%, respectively) to report hurting themselves on purpose.

**Figure 6.8: Suicidal Thoughts In Last 12 Months**



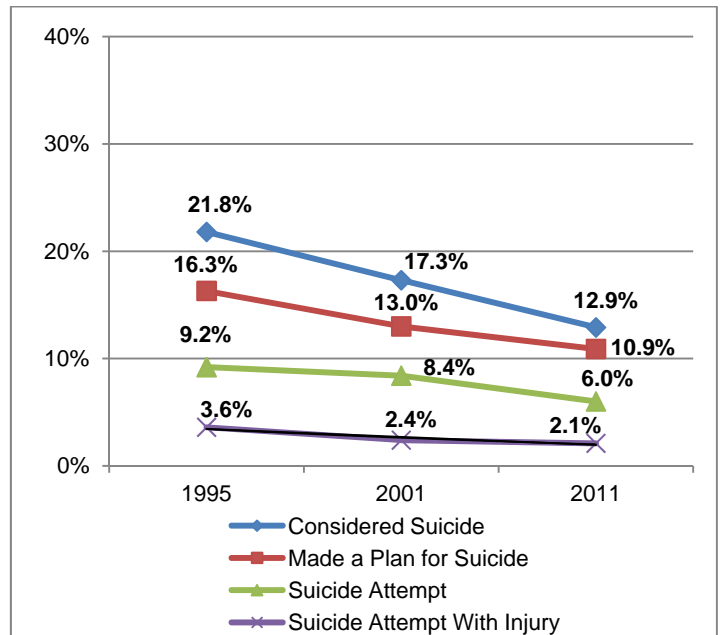
- When asked if they had experienced suicidal thoughts during the past year, over one in 10 students reported having considered it (12.9%) or having made a suicide plan (10.9%) (Figure 6.8).
- Females were slightly more likely than males to have both considered suicide (16.0% vs. 9.8%) and to have made a plan (12.3% vs. 9.6%).
- There was little meaningful difference in suicidal thoughts by age or race/ethnicity.

**Figure 6.9: Suicidal Attempts In Last 12 Months**



- About one in 20 New Jersey high school students (6.0%) reported having attempted suicide in the past year, and even fewer (2.1%) sustained an injury as a result of an attempt (Figure 6.9).
- Males and females were about equally likely to have attempted suicide and to have sustained a suicide-related injury.
- There was very little difference in suicidal behavior by age.
- Hispanic (10.3%) and Black (8.5%) students were slightly more likely to attempt suicide than White students (4.5%), but there was little difference in terms of injury by race/ethnicity.

**Figure 6.10: Trends In Suicide: 1995, 2001, 2011**



- Reports of considering, planning, attempting, and being injured as a result of suicide all dropped to their lowest levels in 2011 (Figure 6.10). However, none of these indicators were measured in the 2005 and 2009 survey.
- Since 1995, reports of suicide consideration dropped from 21.8% to 12.9%, suicide planning fell from 16.3% to 10.9%, and suicide attempts dipped from 9.2% to 6.0%. Injuries received from suicide attempts technically hit their lowest level, falling from 3.6% in 2001 to 2.1% in 2011.





## CHAPTER 7: SEXUAL BEHAVIORS, PREGNANCY, AND HIV/AIDS

### Sexual Behaviors

These questions measure the prevalence of sexual activity, number of sexual partners, age at first intercourse, alcohol and other drug use related to sexual activity, condom use, contraceptive use, and whether high school students received HIV prevention education. Early initiation of sexual intercourse is associated with having a greater number of lifetime sexual partners.<sup>90 91 92 93 94 95</sup> In addition, adolescents who initiate sexual intercourse early are less likely to use contraception<sup>96 97 98</sup> and are at higher risk for

pregnancy.<sup>99 100</sup> Recent estimates suggest that while representing 25% of the ever sexually active population, persons ages 15-24 years acquire nearly half of all new STDs.<sup>101</sup> Gonorrhea rates are highest among females between the ages of 15 and 19 years (636.8 cases per 100,000 females) and males between the ages of 20 and 24 years (433.6 cases per 100,000 males).<sup>102</sup> In 2007, there were an estimated 6,610 cases of HIV/AIDS among persons ages 15–24 years.<sup>103</sup> Among high school students nationwide in 2009, 46% had sexual intercourse in their lifetime, 14% had sexual intercourse with four or more persons during their life, and 34% had sexual intercourse with at least one person during the three months before the survey.<sup>104</sup> During 1991–2009, significant linear decreases occurred in the percentage of students who ever had sexual intercourse (54%–46%), who had sexual intercourse with four or more persons

<sup>90</sup> Coker AL, Richter DL, Valois RF, McKeown RE, Garrison CZ, Vincent ML. Correlates and consequences of early initiation of sexual intercourse. *The Journal of School Health* 1994;64(9):372-377.

<sup>91</sup> Kaestle CE, Halpern CT, Miller WC, Ford CA. Young age at first sexual intercourse and sexually transmitted infections in adolescents and young adults. *American Journal of Epidemiology* 2005;161(8):774-780.

<sup>92</sup> Sandfort TGM, Orr M, Hirsch JS, Santelli J. Long-term health correlates of timing of sexual debut: results from a national U.S. study. *American Journal of Public Health* 2008;98(1):155-161.

<sup>93</sup> French, DC, and Dishion, TJ. Predictors of early initiation of sexual intercourse among high-risk adolescents. *The Journal of Early Adolescence* 2003;23:295.

<sup>94</sup> Santelli JS, Brener ND, Lowry R, et al. Multiple sexual partners among U.S. adolescents and young adults. *Family Planning Perspectives* 1998;30:271–5.

<sup>95</sup> Santelli JS, Kaiser J, Hirsch L, Radosh A, Simkin L, Middlestadt S. Initiation of sexual intercourse among middle school adolescents: the influence of psychosocial factors. *Journal of Adolescent Health* 2004;34(3):200-208.

<sup>96</sup> Santelli JS, Kaiser J, Hirsch L, Radosh A, Simkin L, Middlestadt S. Initiation of sexual intercourse among middle school adolescents: the influence of psychosocial factors. *Journal of Adolescent Health* 2004;34(3):200-208.

<sup>97</sup> Manning WD, Longmore MA, Giordano PC. The relationship context of contraceptive use at first intercourse. *Family Planning Perspectives* 2000;32(3):104–110.

<sup>98</sup> Manlove, J., Ryan, S., Franzetta, K. Patterns of contraceptive use within teenagers' first sexual

relationships. *Perspectives on Sexual and Reproductive Health* 2003, 35(6):246-255.

<sup>99</sup> Manlove J, Terry E, Gitelson L, Papillo AR, Russell S. Explaining demographic trends in teenage fertility, 1980–1995. *Family Planning Perspectives* 2000;32(4):166–175.

<sup>100</sup> Thornberry TP, Smith CA, Howard GJ. Risk factors for teenage fatherhood. *Journal of Marriage & Family* 1997;59:505–522.

<sup>101</sup> Weinstock H, Berman S, Cates W. Sexually transmitted disease among American youth: Incidence and prevalence estimates, 2000. *Perspectives on Sexual and Reproductive Health* 2004;36(1):6–10.

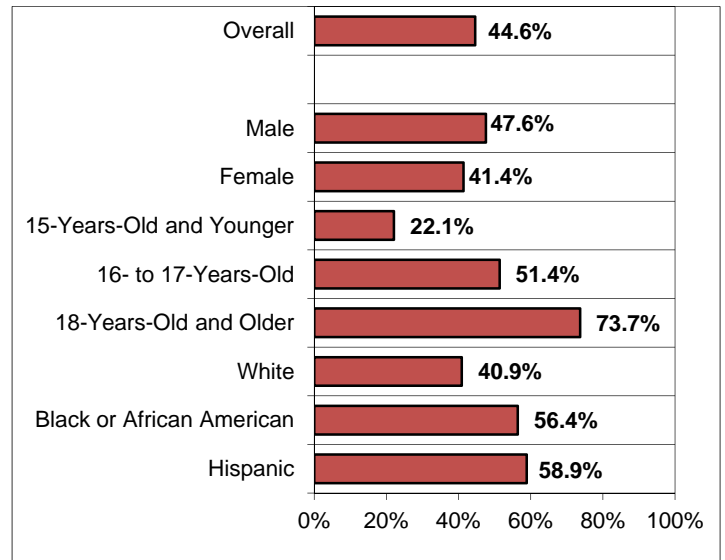
<sup>102</sup> CDC. *Sexually Transmitted Disease Surveillance, 2008*. Atlanta, GA: U.S. Department of Health and Human Services; 2009. Available at <http://www.cdc.gov/std/stats08/surv2008-Complete.pdf>. Accessed May 10, 2010.

<sup>103</sup> CDC. *HIV/AIDS Surveillance Report, 2007. Vol. 19*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2009. Available at <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/2007report/default.htm>. Accessed May 10, 2010.

<sup>104</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

during their life (19%–14%), and who had sexual intercourse with at least one person during the three months before the survey (37%–34%).<sup>105</sup> In 2009, among the 34% of students who were currently sexually active, 61% reported that either they or their partner had used a condom during their last sexual intercourse.<sup>106</sup> The percentage of sexually active students who used a condom during their last sexual intercourse increased during 1991–2003 (46%–63%) and then did not change significantly during 2003–2009 (63%–61%).<sup>107</sup> In 2006, 88% of high schools taught HIV prevention education in a required health education course.<sup>108</sup> Among high school students nationwide in 2009, 87.0% of students had been taught about AIDS or HIV infection while in high school.<sup>109</sup> The percentage of students who were taught in school about AIDS or HIV infection increased during 1991–1997 (83.3%–91.5%) and then decreased during 1997–2009 (91.5%–87.0%).<sup>110</sup>

**Figure 7.1: Sexual Intercourse In Lifetime**



- Overall, less than half (44.6%) of New Jersey high school students have had sexual intercourse in their lifetime (Figure 7.1).
- Males (47.6%) were more likely than females (41.4%) to have had sexual intercourse.
- The likelihood that students had sexual intercourse increased with age. Three fourths (73.7%) of students aged 18-years-old and older ever had intercourse, as compared to half (51.4%) of 16- to 17-year-olds and less than one fourth (22.1%) of those aged 15-years-old and younger.
- A greater proportion of Hispanic (58.9%) and Black (56.4%) students than White students (40.9%) indicated they had engaged in sexual intercourse.

<sup>105</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>106</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

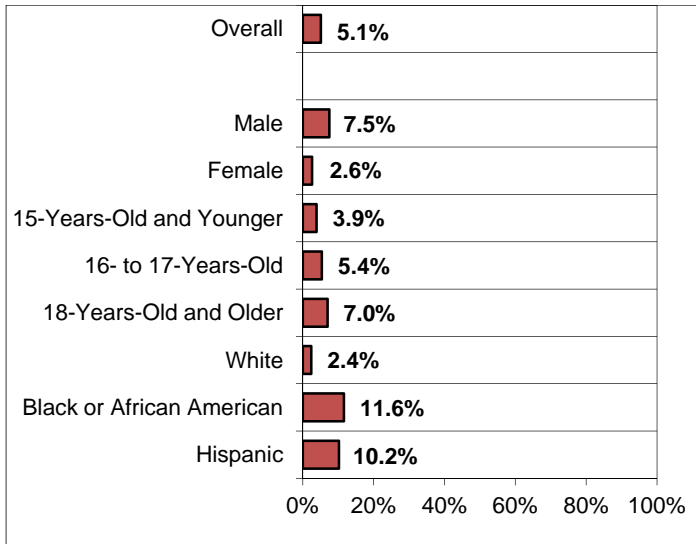
<sup>107</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>108</sup> Kann L, Telljohann SK, Wooley SF. Health education: results from the School Health Policies and Programs Study 2006. *Journal of School Health* 2007;77: 408-434.

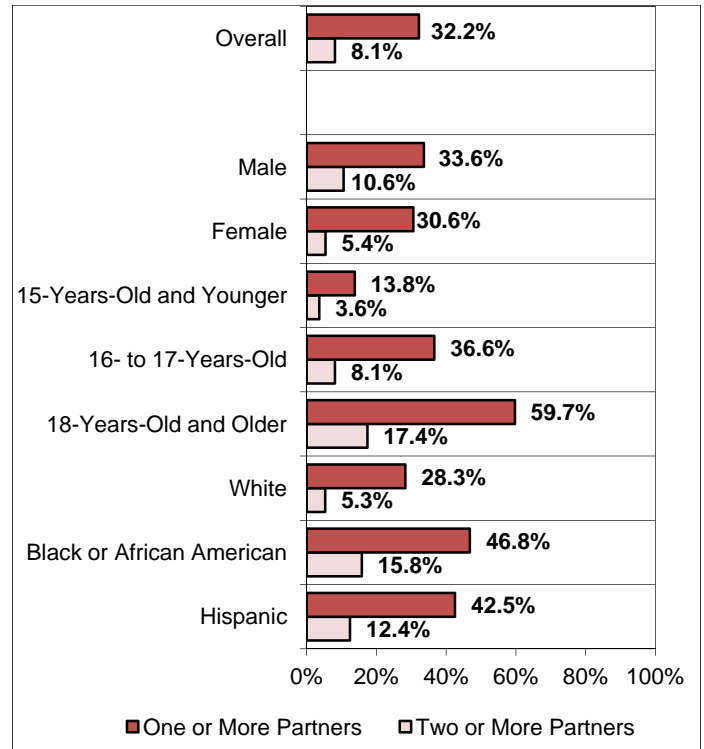
<sup>109</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>110</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

**Figure 7.2: First Sexual Intercourse Occurred Before Age 13**



**Figure 7.3: One Or More Sexual Partners, Past Three Months**



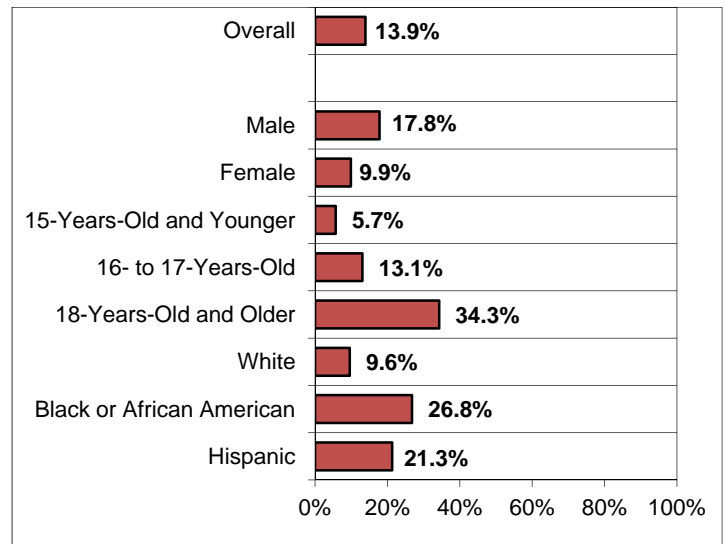
- Overall, 5.1% of New Jersey high school students had sexual intercourse for the first time before the age of 13 (Figure 7.2).
- Males were more likely than females to have had sexual intercourse for the first time before the age of 13 (7.5% vs. 2.6%).
- Students aged 18-years-old and older were the most likely to report having had sex before the age of 13 (7.0%).
- Higher percentages of Black (11.6%) and Hispanic (10.2%) students than White students (2.4%) reported having sexual intercourse for the first time before the age of 13.

- While less than one half (44.6%) of New Jersey high school students reported having had sexual intercourse in their lifetime, one-third (32.2%) were “sexually active” – meaning they had sexual intercourse during the past three months (Figure 7.3). However, less than one in 10 students (8.1%) had sex with multiple sexual partners in the last three months.
- Males were slightly more likely than females to have had sex in their lifetime (47.6% vs. 41.4%) and within the last three months (33.6% vs. 30.6%). Further, they were twice as likely as females to have more than two sexual partners during the past three months (10.6% vs. 5.4%).
- The proportion of students who had sex during the past three months increased with age. Six in 10 students (59.7%) aged 18-years-old and older had sex during the past three months. This figure dropped to 36.6% among 16- to 17-year-olds and 13.8% among those aged 15-years-old and younger. Older students were also more likely to have had multiple partners in

this period than were younger students. Those aged 18-years-old and above (17.4%) reported having two or more sexual partners more frequently than 16- to 17-year-olds (8.1%) or those aged 15-years-old and younger (3.6%).

- Black students (46.8%) were the most likely and White students (28.3%) the least likely to have engaged in sexual intercourse during the past three months. Also, Black students were more likely than White students (15.8% vs. 5.3%) to have multiple partners during this time frame.

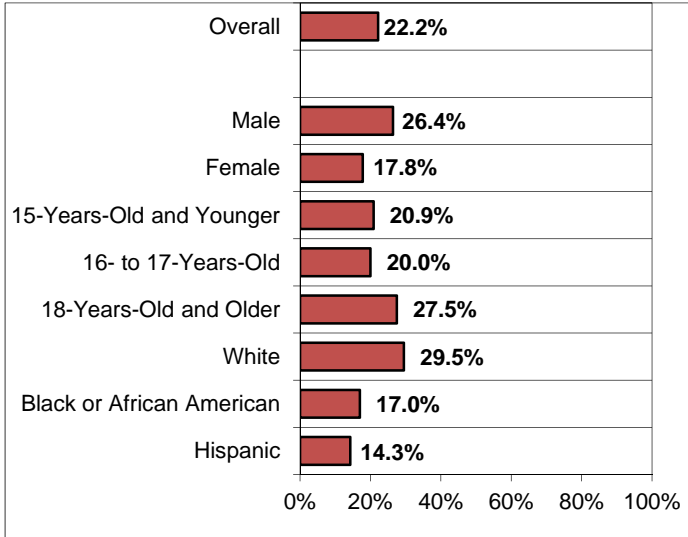
**Figure 7.4: Four Or More Sexual Partners In Lifetime**



- Overall, 13.9% of New Jersey high school students had four or more sexual partners in their lifetime (Figure 7.4).
- Males were almost twice as likely as females to report having four or more lifetime sexual partners (17.8% vs. 9.9%).
- Older students were more likely than younger students to report multiple sexual partners. Over one third (34.3%) of students 18-years-old and older reported having four or more sexual partners in their lifetime, as compared to 13.1% of 16- to 17-year-olds and 5.7% of those aged 15-years-old and under.
- More Black (26.8%) and Hispanic (21.3%) students than White students (9.6%) indicated having four or more sexual partners in their lifetime.

## Contraceptives and Pregnancy

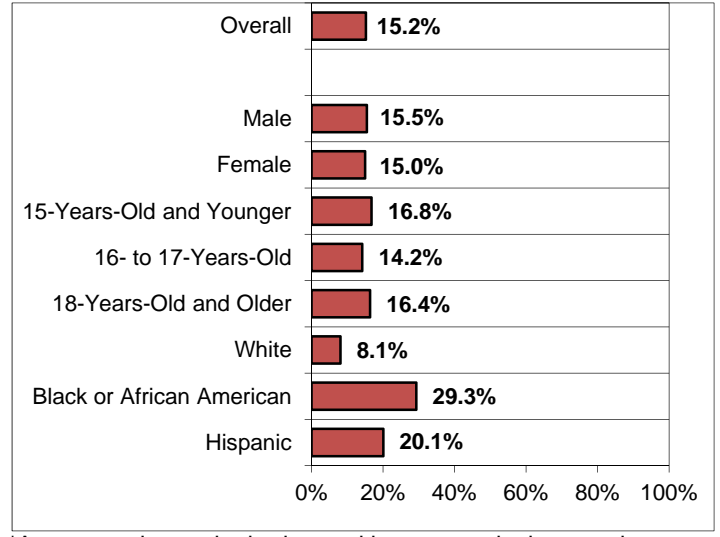
**Figure 7.5: Used Alcohol Or Drugs Prior To Last Sexual Encounter\***



\*Among students who had sexual intercourse in the past three months.

- Among students who had sexual intercourse in the past three months, over one in five (22.2%) reported that they used drugs or alcohol prior to their last sexual encounter (Figure 7.5).
- Among sexually active students, a greater proportion of males (26.4%) than females (17.8%) reported using alcohol or drugs when last having sex.
- Students aged 15-years-old and under as well as those 16- to 17-years-old (20.9% and 20.0%, respectively) were less likely than those aged 18-years-old and older (27.5%) to report that they used alcohol or drugs prior to having sex the last time.
- White students (29.5%) were the most likely and Hispanic students (14.3%) least likely to report the use of alcohol or drugs prior to their last sexual encounter.

**Figure 7.6: No Birth Control Method, Last Sexual Encounter\***

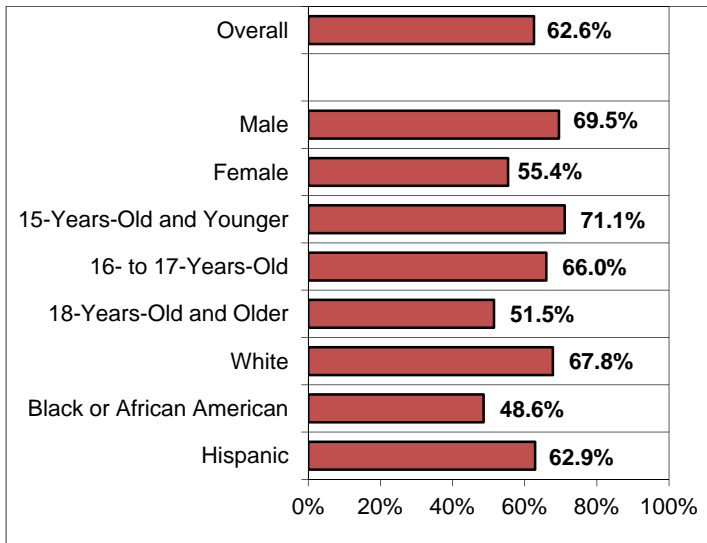


\*Among students who had sexual intercourse in the past three months.

- One in six (15.2%) sexually active students reported that they used no form of birth control the last time that they had sex (Figure 7.6). No birth control refers to those who indicated they used no listed method when given the choice of condoms, birth control pills, Depo-Provera, withdrawal, some other method, or not sure.
- Males (15.5%) and females (15.0%) were equally likely to report that they did not use any form of birth control the last time they had sex.
- There was no significant difference by age, however more Black (29.3%) and Hispanic (20.1%) students than White students (8.1%) reported that they did not use any listed form of birth control the last time they had sex.
- Sexually active students were asked which birth control method they used the *last* time they had sexual intercourse. Among these students, condoms (51.4%) were the primary method of birth control. Birth control pills (17.4%) were the second most popular method, followed by Depo-Provera (2.1%) or some other method (1.5%).

- Over one in four (27.6%) sexually active students used either no method of birth control (15.2%) during their last sexual encounter or used an inadequate pregnancy prevention method – students who identified the withdrawal method (10.6%) or were not sure (1.8%). The survey did not ask specifically about use of the contraceptive patch or vaginal ring.

**Figure 7.7: Used Condom, Last Sexual Encounter\***

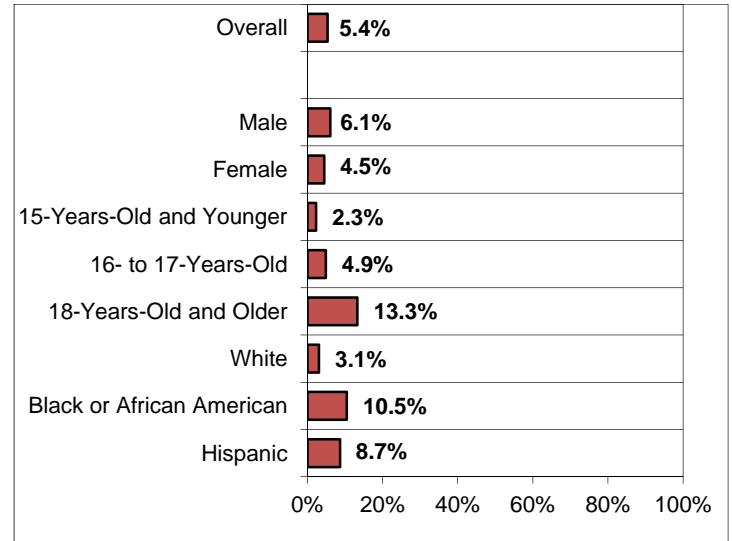


\*Among students who have had sexual intercourse in the last three months.

- Regardless of the birth control method they primarily depended on during their last sexual encounter, students were also asked whether they or their partner used a condom the last time they had sexual intercourse (Figure 7.7). The majority of sexually active students reported that they, or their partner, used a condom during their last sexual encounter (62.6%).
- A greater proportion of males (69.5%) than females (55.4%) reported condom use during their last sexual encounter.
- Students aged 15-years-old and under (71.1%) reported the greatest frequency of condom use the last time they had sex compared to 16- to 17-year-olds (66.0%) and those aged 18-years-old and above (51.5%).

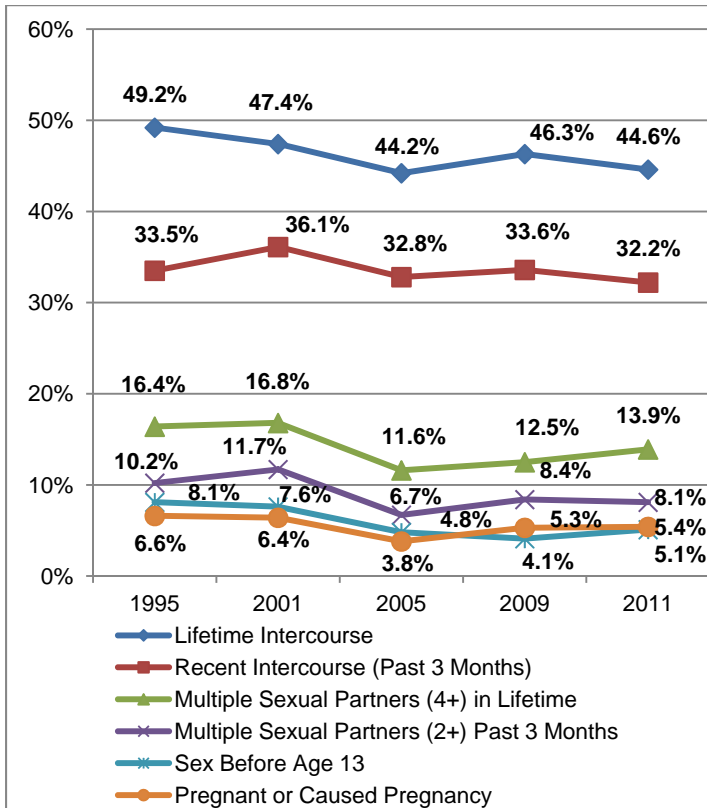
- White (67.8%) and Hispanic (62.9%) students were far more likely than Black students (48.6%) to report condom use the last time they had sex.

**Figure 7.8: Ever Pregnant Or Caused A Pregnancy**



- About one in 20 students (5.4%) indicated that they had been pregnant or had caused someone to become pregnant (Figure 7.8).
- There was little variation on this item by gender (4.5%-6.1%).
- The frequency of pregnancy increased with age. Almost three times as many students aged 18-years-old and older (13.3%) reported causing a pregnancy or being pregnant, as compared to 4.9% of 16- to 17-year-olds. Those students 15-years-old and under were least likely to report a pregnancy (2.3%).
- A greater proportion of Black (10.5%) and Hispanic (8.7%) students than White (3.1%) students reported having ever been pregnant or causing a pregnancy.

**Figure 7.9: Trends In Sexual Behaviors: 1995 - 2011**



- The percentage of students having sex before the age of 13 remained about the same in 2011 (5.1%) as in 2009 (4.1%) and 2005 (4.8%). However, these levels are below those recorded in 1995 and 2001 (8.1% and 7.6%, respectively).
- The percentage of students who reported ever being pregnant or causing someone to be pregnant has remained fairly stable across the years, from a high of 6.6% in 1995 to a low of 3.8% in 2005 and the current level of 5.4% in 2011.

**HEALTHY PEOPLE 2010 NATIONAL GOAL**

Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active to 95%.

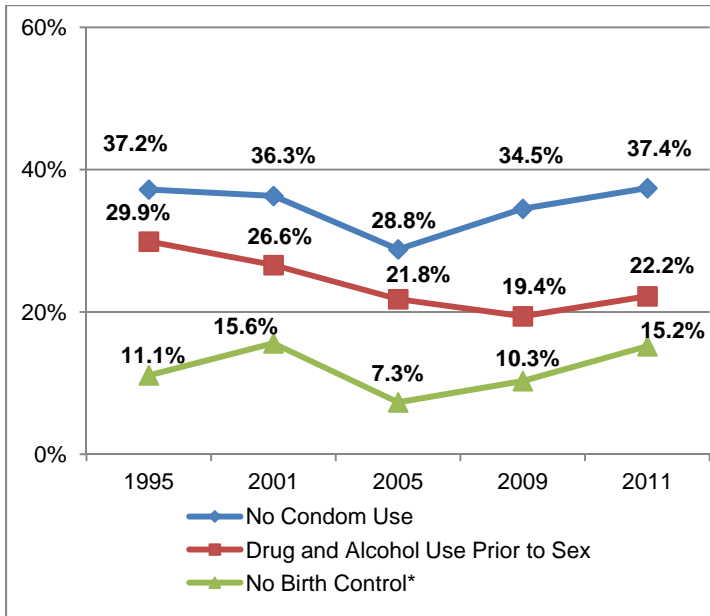
**2011 NJSHS RESULTS**

New Jersey high school students abstained from sexual intercourse (55.4%) and used condoms during their last sexual encounter (62.6%) at rates much lower than the 2010 national goal. A total of 85.1% of New Jersey high school students either have not had sex in their lifetime or they or their partner used a condom during their last sexual encounter.

- The percentage of New Jersey high school students who had sexual intercourse in their lifetime decreased slightly from 46.3% in 2009 to 44.6% in 2011 (Figure 7.9).
- Over the years, about one third of students had intercourse during the past three months. This figure was 32.2% in 2011, about the same as in prior survey years (32.8%-36.1%).
- The proportion of students who reported having more than one sexual partner in the past three months (8.1%) has remained essentially unchanged since 2005, a year when it was slightly lower than earlier levels (10.2%-11.7%). The number of students having four or more sexual partners in their lifetime (13.9%) increased slightly from 2009 (12.5%) and 2005 (11.6%), approaching levels reported in 2001 (16.8%) and 1995 (16.4%).

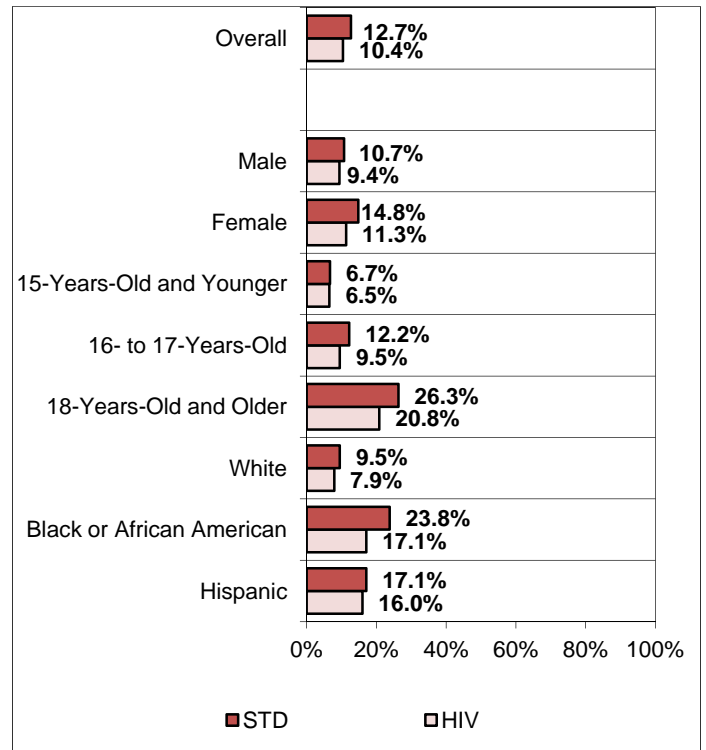


**Figure 7.10: Trends In Birth Control And Pregnancy: 1995 - 2011**



\*Among students who have had sexual intercourse in the past three months.

**Figure 7.11: Ever Tested For HIV Or STD**



- While almost half (44.6%) of New Jersey high school students reported having had sexual intercourse in their lifetime, approximately one in 10 have been tested for an STD or the HIV virus (12.7% and 10.4%, respectively) (Figure 7.11).
- Females were slightly more likely than males to report being tested for an STD (14.8% vs. 10.7%), but about as likely to be tested for HIV.
- Older students, aged 18-years-old and older were the most likely to be tested for an STD and HIV (26.3% and 20.8%, respectively), while students aged 15-years-old and under were least likely (6.7% and 6.5%, respectively).
- Black students (23.8%) were more likely than both Hispanic (17.1%) and White (9.5%) students to be tested for an STD. However, Black and Hispanic students were equally likely (17.1% and 16.0%, respectively) to be tested for HIV, and were both more likely to be tested than White students (7.9%).

## CHAPTER 8: PHYSICAL ACTIVITY

These questions measure participation in physical activity, physical education classes, sports teams, time spent watching television (TV), and time spent using a computer or playing video games. Participation in regular physical activity among young people can help build and maintain healthy bones and muscles, maintain body weight and reduce body fat, reduce feelings of depression and anxiety, and promote psychological well-being.<sup>111 112</sup> Over time, regular physical activity decreases the risk of high blood pressure, heart disease, diabetes, obesity, some types of cancer, and premature death.<sup>113</sup> In 2008, the U.S. Department of Health and Human Services recommended that young people ages 6–17 participate in at least 60 minutes of physical activity daily.<sup>114</sup> In 2009, 18% of high school students were physically active doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes per day on each of the seven days before the survey (i.e., physically active at least 60 minutes on all seven days).<sup>115</sup> School physical education classes can increase adolescent

participation in physical activity<sup>116 117 118 119</sup> and help high school students develop the knowledge, attitudes, and skills they need to engage in lifelong physical activity.<sup>120 121</sup> In 2009, 56% of high school students nationwide went to physical education classes on one or more days in an average week when they were in school.<sup>122</sup> Watching TV and using a computer are considered sedentary behaviors. Among youth, the amount of time spent watching TV, in particular, is associated with childhood and adult obesity<sup>123 124 125 126 127</sup> and youth who engage in less

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<sup>111</sup> Physical Activity Guidelines Advisory Committee. *Physical Activity Guidelines Advisory Committee Report, 2008*. Washington, DC: U.S. Department of Health and Human Services; 2008.

<sup>112</sup> Strong WB, Malina RM, Blimke CJR, et al. Evidence based physical activity for school-age youth. *Journal of Pediatrics* 2005;146:732-737.

<sup>113</sup> Physical Activity Guidelines Advisory Committee. *Physical Activity Guidelines Advisory Committee Report, 2008*. Washington, DC: U.S. Department of Health and Human Services; 2008.

<sup>114</sup> U.S. Department of Health and Human Services. *2008 Physical Activity Guidelines for Americans*. Washington, DC, U.S. Department of Health and Human Services; 2008. Available at <http://www.health.gov/PAGuidelines/pdf/paguide.pdf>. Accessed April 14, 2010.

<sup>115</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

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<sup>116</sup> Trudeau F, Shephard RJ. Contribution of school programmes to physical activity levels and attitudes in children and adults. *Sports Medicine* 2005;35(2):89-105.

<sup>117</sup> McKenzie TL, Li DL, Derby CA, Webber LS, Luepker RV, Cribb P. Maintenance of effects of the CATCH physical education program: results from the CATCH-ON Study. *Health Education & Behavior* 2003;30:447-462.

<sup>118</sup> McKenzie TL, Sallis JF, Prochaska JJ, Conway TL, Marshall SJ, Rosengard P. Evaluation of a two-year middle-school physical education intervention: M-SPAN. *Medicine & Science in Sports & Exercise* 2004;36:1382-1388.

<sup>119</sup> Pate R, Ward DS, Saunders RP, Felton G, Dishman RK, Dowda M. Promotion of physical activity among high school girls: a randomized controlled trial. *American Journal of Public Health* 2005;95:1582-87.

<sup>120</sup> Trudeau F, Shephard RJ. Contribution of school programmes to physical activity levels and attitudes in children and adults. *Sports Medicine* 2005;35(2):89-105.

<sup>121</sup> Dishman RK, Motl RW, Saunders R, et al. Enjoyment mediates effects of a school-based physical-activity intervention. *Medicine & Science in Sports & Exercise* 2005;37(3):478-487.

<sup>122</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>123</sup> Fulton JE, Wang X, Yore MM, Carlson SA, Galuska DA, Caspersen CJ. Television viewing, computer usage, and BMI among U.S. children and adolescents. *Journal of Physical Activity and Health* 2009;6(Suppl 1): S28-S35.

<sup>124</sup> Gordon-Larson P, Adair LS, Popkin BM. Ethnic differences in physical activity and inactivity patterns and overweight status. *Obesity Research* 2002;10(3):141-149.

<sup>125</sup> Kaur H, Choi WS, Mayo MS, Harris KJ. Duration of television watching is associated with increased body mass index. *Journal of Pediatrics* 2003;143(4):506-511.

than two hours of TV viewing per day tend to be more active.<sup>128</sup> Computer usage and video game playing are associated with physical inactivity among adolescents<sup>129</sup> and young adults.<sup>130</sup> Among high school students nationwide in 2009, 25% of students played video or computer games or used a computer for something that was not school work for three or more hours per day on an average school day and 33% watched television three or more hours per day on an average school day.<sup>131</sup> During 2003–2009, a significant linear increase occurred in the percentage of students who used computers three or more hours per day (22%–25%).<sup>132</sup> During 1999–2009, a significant linear decrease occurred in the percentage of high school students who watched television three or more hours per day (43%–33%).<sup>133</sup>

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<sup>126</sup> Lowry R, Wechsler H, Galuska D, Fulton J, Kann L. Television viewing and its associations with overweight, sedentary lifestyle, and insufficient consumption of fruits and vegetables among U.S. high school students: differences by race, ethnicity, and gender. *Journal of School Health* 2002; 72(10):413-421.

<sup>127</sup> Utter J, Neumark-Sztainer D, Jeffery R, Story M. Couch potatoes or french fries: are sedentary behaviors associated with body mass index, physical activity, and dietary behaviors among adolescents? *Journal of the American Dietetic Association* 2003;103(10):1298-1305.

<sup>128</sup> Lowry R, Wechsler H, Galuska D, Fulton J, Kann L. Television viewing and its associations with overweight, sedentary lifestyle, and insufficient consumption of fruits and vegetables among U.S. high school students: differences by race, ethnicity, and gender. *Journal of School Health* 2002; 72(10):413-421.

<sup>129</sup> Gordon-Larson P, Adair LS, Popkin BM. Ethnic differences in physical activity and inactivity patterns and overweight status. *Obesity Research* 2002;10(3):141-149.

<sup>130</sup> Fotheringham MJ, Wonnacott RL, Owen N. Computer use and physical inactivity in young adults: public health perils and potentials of new information technologies. *Annals of Behavioral Medicine* 2000;22:269-275.

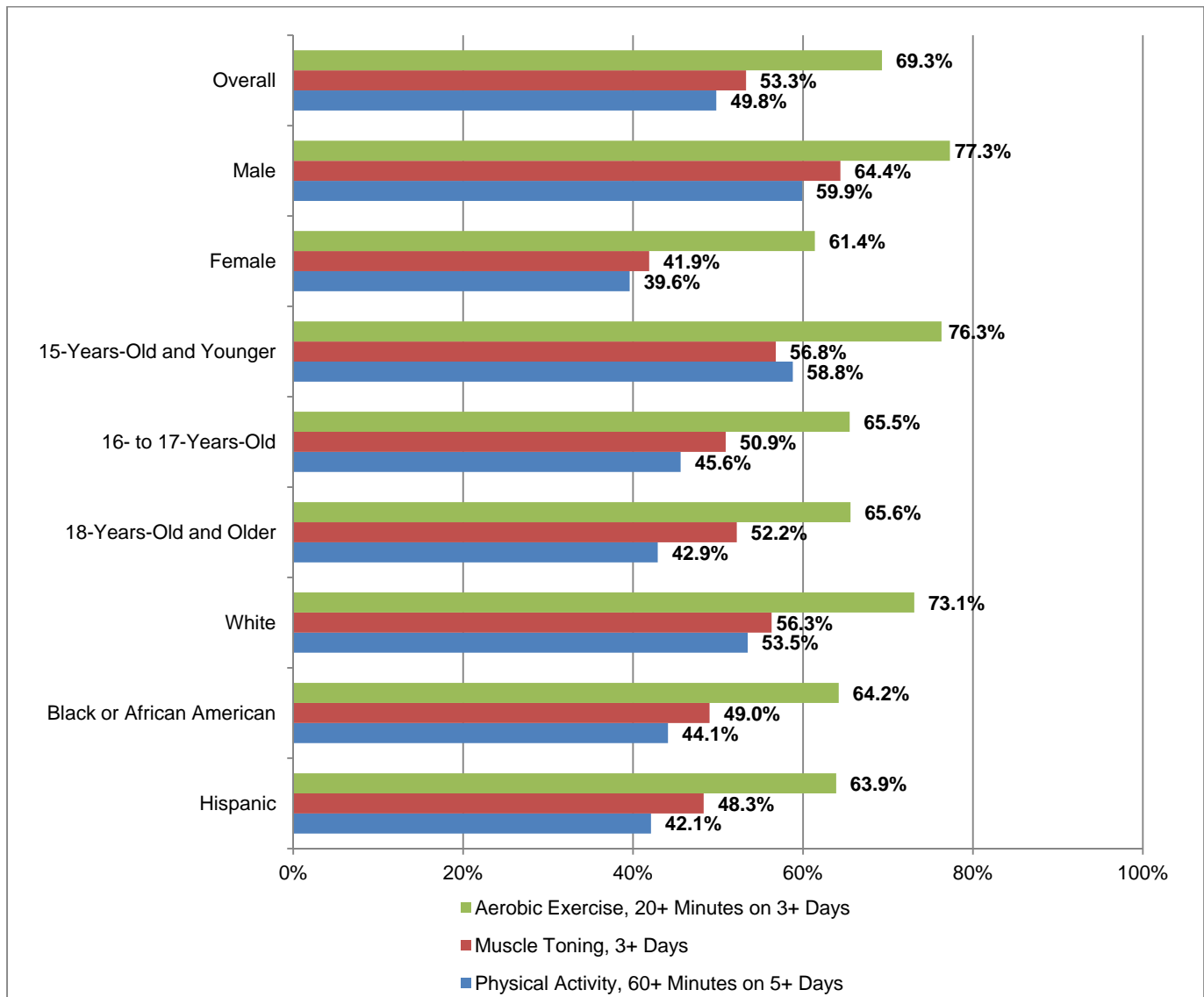
<sup>131</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>132</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>133</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

## Physical Fitness

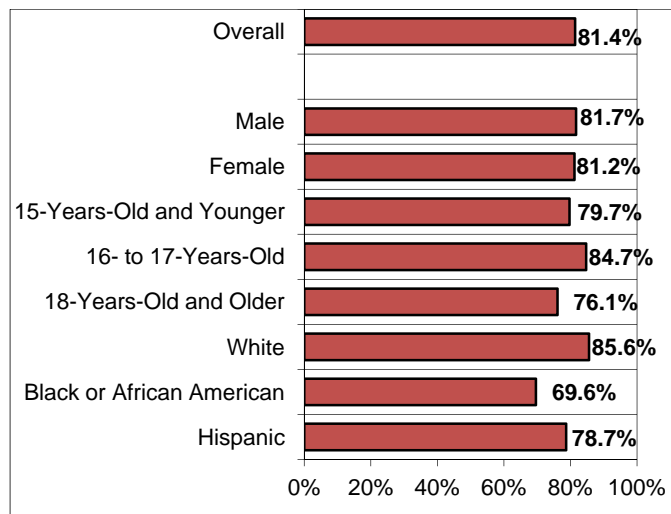
Figure 8.1: Exercise Practices, Past Seven Days



- Overall, about seven in 10 of New Jersey high school students (69.3%) performed *aerobic exercise* – that is they spent three or more of the past seven days engaging in physical activity for at least 20 minutes that made them sweat and breathe hard, such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activities (Figure 8.1).
- About half of students performed exercises which contributed to *muscle toning* on three or more days during the previous week (53.3%) and roughly the same percentage (48.5%) participated in *physical activity* – that is stayed physically active for at least 60 minutes or more during an activity that increased their heart rate and made them breathe hard some of the time on five or more of the previous seven days.
- Males were more likely than females to engage in *aerobic exercise* on three or more days (77.3% vs. 61.4%), *muscle toning* on three or more days (64.4% vs. 41.9%) and *physical activity* on five or more days (59.9% vs. 39.6%).

- Younger students aged 15-years-old and under (76.3%) were more likely than those 16- to 17-years-old or those aged 18-years-old and older to engage in *aerobic exercise* (65.5% and 65.6%, respectively). Similarly, those aged 15-years-old and under were more likely to engage in both *muscle toning* (56.8% vs. 50.9% and 52.2%, respectively) and *physical activity* (58.8% vs. 45.6% and 42.9%, respectively).
- White students were more likely than Black or Hispanic students to participate in *aerobic exercise* (73.1% vs. 64.2% and 63.9%, respectively), *muscle toning* (56.3% vs. 49.0% and 48.3%, respectively), and *physical activity* (53.5% vs. 44.1% and 42.1%, respectively).

**Figure 8.2: Spent Three Days Or More In Physical Education Class During Average Week**



**HEALTHY NEW JERSEY 2010 GOAL**

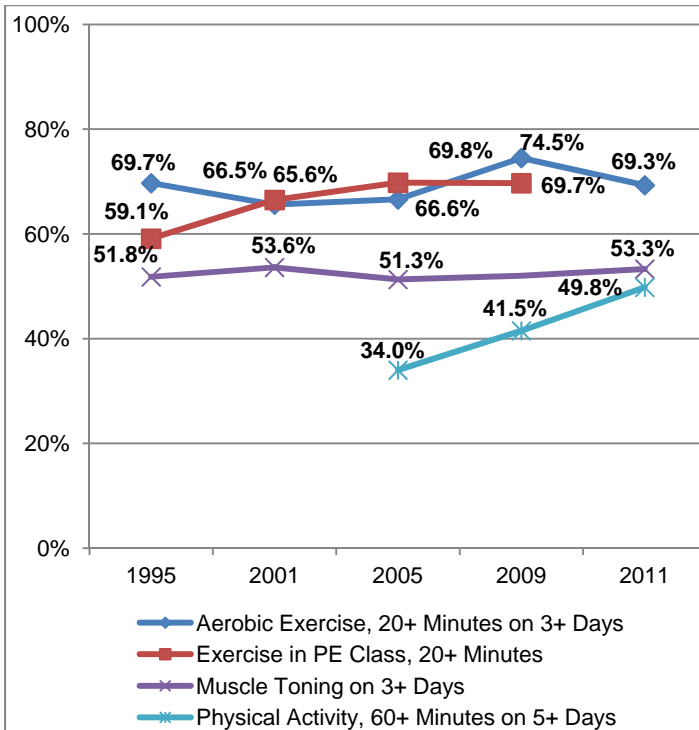
Increase the proportion of adolescents who engage in aerobic physical activity that promotes cardio respiratory fitness three or more days per week for 20 or more minutes per occasion to 85%.

**2011 NJSHS RESULTS**

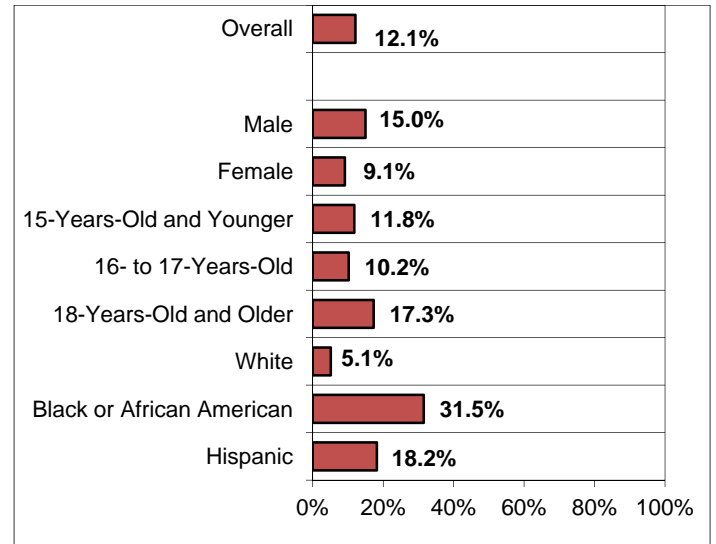
Seven in 10 New Jersey high school students (69.3%) engaged in 20 minutes of vigorous aerobic exercise on three or more of the previous seven days, falling short of the objective. Males (77.3%) and Whites (73.1%) were the groups most likely to report aerobic exercise.

- Overall, eight in 10 New Jersey high school students (81.4%) spent three days or more in a physical education (PE) class during an average week (Figure 8.2).
- There was no difference in the rate of PE attendance by gender.
- Students aged 16- to 17-years-old were most likely (84.7%) to report attending three or more PE classes in the average week, and those aged 18- years-old and older were least likely (76.1%).
- White students (85.6%) were more likely than Hispanic (78.7%) or Black (69.6%) students to attend three or more PE classes per week.

**Figure 8.3: Trends In Physical Activity: 1995 - 2011**



**Figure 8.4: Walking Or Bicycling To School**

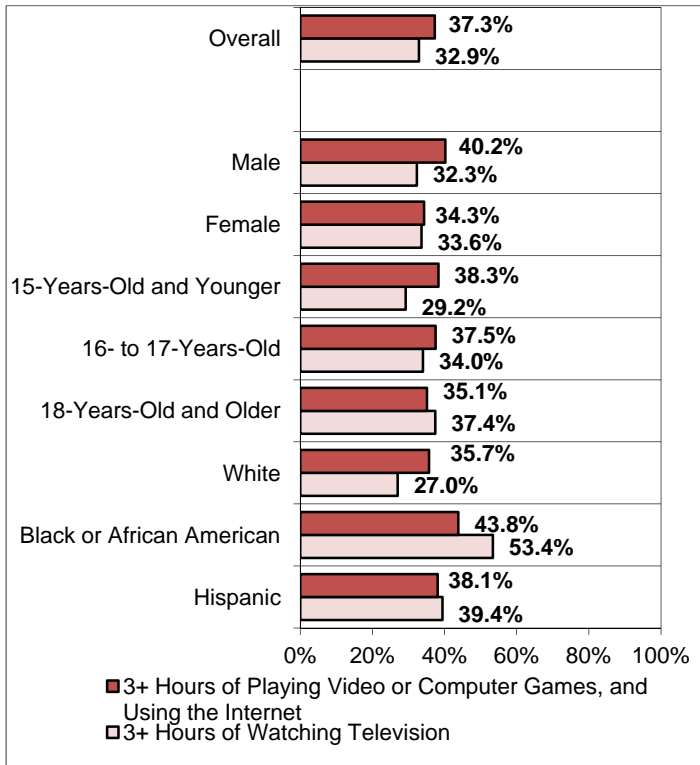


- In 2011, the number of students who reported engaging in *aerobic exercise* for 20 or more minutes on three or more days per week fell to 69.2%, from 74.5% in 2009; a level that more closely resembles the rates reported between 1995 and 2005 (65.6%-69.7%) (Figure 8.3).
- The percentage of students who reported exercising or playing sports for more than 20 minutes during PE class was not asked in 2011, but had remained largely unchanged between 2001 and 2009 (66.5%-69.7%).
- Reported levels of *muscle toning* have remained similar across all survey years (51.3%- 53.6%).
- In 2011, half of all students (49.8%) had been *physically active* for at least 60 minutes five or more days in the previous week, up sharply from 41.5% in 2009 and 34.0% in 2005.

- When asked how they usually get to school, 12.1% of students said they walked or rode a bicycle (Figure 8.4). Most students reported riding in a car (47.8%), with others saying they ride the school bus (35.9%). Fewer students took a public bus or train (3.2%), or used some other mode of transportation (1.0%).
- Males (15.0%) were more likely than females (9.1%) to have walked or rode a bicycle to school.
- Black students (31.5%) were more likely than Hispanic students (18.2%), and far more likely than White students (5.1%), to report walking or riding a bicycle to school.
- Students aged 15-years-old and younger (11.8%) along with 16- to 17-year-olds (10.2%) were slightly less likely than those aged 18-years-old and above (17.3%) to walk or ride a bicycle to school.

## Watching Television, Playing Video Games and Computer Use

**Figure 8.5: Three Or More Hours Of Electronic Viewing, Average School Day**



- Black students (43.8%) were most likely and White students (35.7%) were least likely to use video games or the computer for three or more hours on an average school day. The same pattern was evident for television viewing (Black students 53.4% and White students 27.0%).

### HEALTHY PEOPLE 2010 NATIONAL GOAL

Increase the proportion of adolescents who view television two or fewer hours on an average school day to 75%.

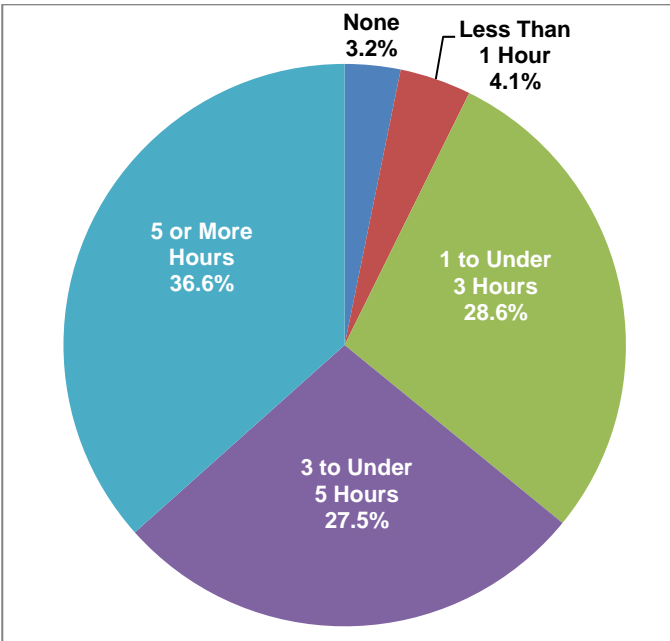
### 2011 NJSHS RESULTS

More than two in three New Jersey high school students (67.0%) viewed television two or fewer hours per day, falling short of the objective.

- Overall, more than one in three (37.3%) New Jersey high school students reported playing video games or using the computer for purposes other than school work for three or more hours on an average school day. Additionally, about one in three (32.9%) students watched three or more hours of television on an average school day (Figure 8.5).
- On an average school day, males generally used video games or the computer more than females (40.2% vs. 34.3%) but watched roughly the same amount of TV (32.3% vs. 33.6%).
- The number of hours spent using video games or the computer was similar across age groups (35.1%-38.3%); however, students aged 18-years-old and older were the most likely to watch three or more hours of television (37.4%).

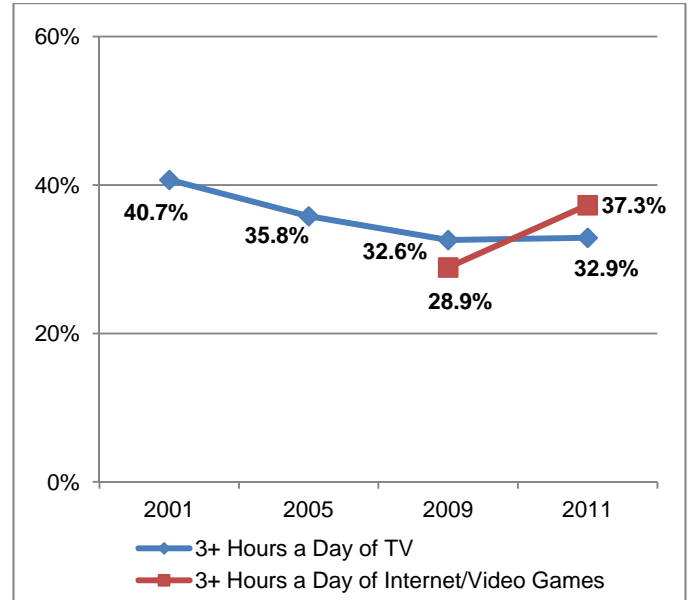
Student responses in regards to the activities mentioned in these two questions were combined to analyze how much time students spent watching television or using video games or the Internet. Results of this analysis are presented in Figure 8.6.

**Figure 8.6: Total Hours Of Electronic Viewing On An Average School Day**



- Over one third (36.6%) of New Jersey high school students reported five or more total hours of electronic viewing on an average school day. An additional 27.5% reported from three to slightly less than five hours of electronic viewing and the remaining 35.9% watched fewer than three hours a day.

**Figure 8.7: Trends In Electronic Viewing: 2001 - 2011**



- The number of New Jersey high school students who played video games or used the computer for purposes other than school work for more than three hours a day jumped sharply in 2011 to 37.3% from 28.9% in 2009. However, the number of students who watched three or more hours of television on an average school day remained virtually unchanged between 2009 (32.6%) and 2011 (32.9%) (Figure 8.7).





## CHAPTER 9: HEALTH AND DIETARY PATTERNS

### Weight and Body Mass Index

These questions measure self-reported height, weight and perceived body weight. Data on self-reported height and weight is used to calculate body mass index (BMI) and determine the corresponding BMI-for-age percentile for adolescents. BMI-for-age percentile is a proxy measure of weight status and correlates with body fat.<sup>134</sup> BMI is also recommended for assessing weight status in youth ages 2-20.<sup>135</sup> Although BMI calculated from self-reported height and weight underestimate the prevalence of obesity compared to BMI calculated from measured height and weight,<sup>136</sup> self-reported height and weight are useful for tracking BMI trends over time. In addition, obesity prevalence trends from national surveys of adults using self-reported height and weight<sup>137</sup> have been consistent with trend data from national surveys using measured height and weight.<sup>138</sup> It is critical to continue monitoring height and weight because the prevalence of obesity among adolescents has tripled since 1980.<sup>139</sup> Obesity

during adolescence is associated with negative psychological and social consequences and health problems such as type 2 diabetes, obstructive sleep apnea, hypertension, dyslipidemia, and metabolic syndrome.<sup>140</sup> Further, obese adolescents are more likely to become obese adults.<sup>141 142</sup> Nationwide in 2009, based on national YRBS data, 12% of high school students were obese and 16% were overweight.<sup>143</sup> During 1999–2009, significant increases occurred in the percentage of students who were obese (11%–12%) and who were overweight (14%–16%).<sup>144</sup>

Data on student self-reported height and weight was used to calculate a body mass index (BMI) and was compared to an index population established by the CDC for age and gender. BMI is calculated as weight in kilograms, divided by height in meters squared. For adults, a BMI of 25 or greater is considered *overweight*, while a BMI of 30 or more is considered *obese*. For children, the BMI is expected to increase with age and to differ for boys and girls. A child's BMI that is in the 85<sup>th</sup> to 95<sup>th</sup> percentile of the index population for gender and age is characterized as *overweight*, while a BMI greater

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<sup>134</sup> Mei Z, Grummer-Strawn LM, Pietrobelli A, Goulding A, Goran MI, Dietz WH. Validity of body mass index compared with other body-composition screening indexes for assessment of body fatness in children and adolescents. *American Journal of Clinical Nutrition* 2002;75(6):978-985.

<sup>135</sup> Krebs NF, Himes JH, Jacobson D, Nicklas TA, Guilday P, Styne D. Assessment of child and adolescent overweight and obesity. *Pediatrics* 2007;120:S193-S228.

<sup>136</sup> Sherry B, Jefferds ME, Grummer-Strawn LM. Accuracy of adolescent self-report of height and weight in assessing overweight status: a literature review. *Archives of Pediatric and Adolescent Medicine* 2007;161(12):1154-1161.

<sup>137</sup> Galuska DA, Serdula M, Pamuk E, Siegel PZ, Byers T. Trends in overweight among U.S. adults from 1987 to 1993: a multistate telephone survey. *American Journal of Public Health* 1996;86:1729-1735.

<sup>138</sup> CDC. Update: Prevalence of overweight among children, adolescents, and adults – United States, 1988-1994. *Morbidity and Mortality Weekly Report* 1997; 46(9):199-202.

<sup>139</sup> Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. Prevalence of high body mass index in U.S. children

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and adolescents, 2007-2008. *JAMA* 2010;303(3):242.

<sup>140</sup> Daniels SR, Arnett DK, Eckel RH, et. al. Overweight in children and adolescents: Pathophysiology, consequences, prevention, and treatment. *Circulation* 2005;111:1999-2012.

<sup>141</sup> Guo SS, Wu W, Cameron W, Roche AF. Predicting overweight and obesity in adulthood from body mass index values in childhood and adolescence. *American Journal of Clinical Nutrition* 2002;76:653-658.

<sup>142</sup> Freedman DS, Khan, LK, Serdula MK, Dietz WH, Srinivasan SR, Berenson GS. The relation of childhood BMI to adult adiposity: The Bogalusa Heart Study. *Pediatrics* 2005;115(1):22-27.

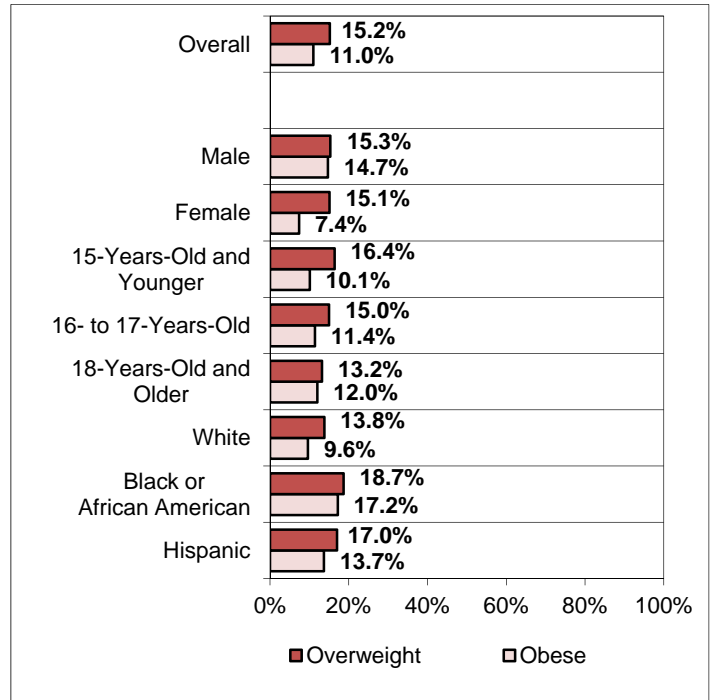
<sup>143</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>144</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

than the 95<sup>th</sup> percentile is considered as *obese*. All others who are at the 85<sup>th</sup> percentile or below are considered *normal*. For example, a 15-year-old boy with a height of 5 feet 7 inches and a weight of 175 pounds would have a BMI of 27.4. A BMI of 27 or greater for a boy of this age is at the 95<sup>th</sup> percentile and considered *overweight*. For a 15-year-old girl of the same height (5 feet 7 inches) to meet the 95<sup>th</sup> percentile level marking obesity, she would have to weigh 179 pounds for a BMI of 28.

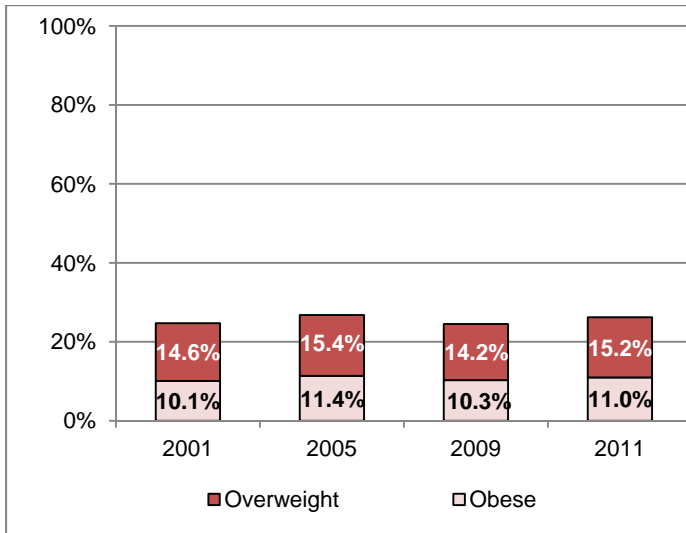
These BMI findings may under-identify overweight students. Thus, a greater percentage of students may be overweight than are indicated in the following table.

**Figure 9.1: Student Body Mass Index (BMI)**

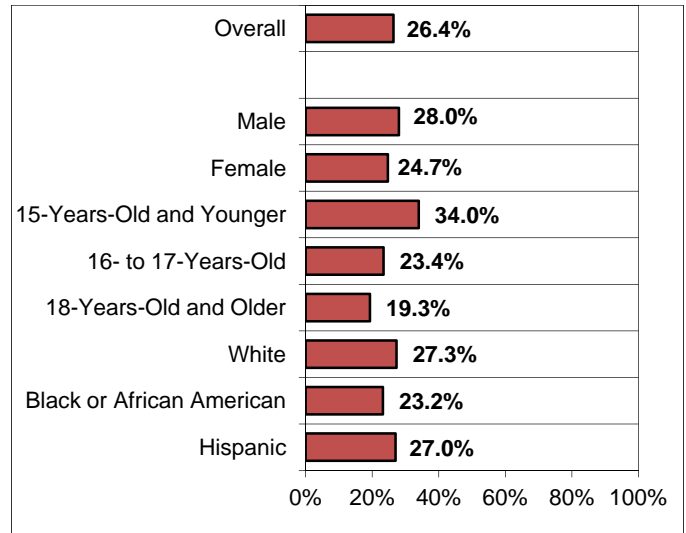


- Overall, one fourth (26.2%) of New Jersey high school students have a Body Mass Index (BMI) that would classify them as either overweight (15.2%) or obese (11.0%) (Figure 9.1).
- There is no substantial difference in the percentage of males and females who were classified as overweight (15.3% vs. 15.1%), but more males (14.7%) than females (7.4%) were classified as obese.
- There were no substantial differences in the percentages of students classified as overweight or obese by age group.
- White students were least likely to be classified as overweight (13.8%) or obese (9.6%), while Black students were most likely to be overweight (18.7%) or obese (17.2%).

**Figure 9.2: Trends In Student Body Mass Index (BMI): 2001 - 2011**



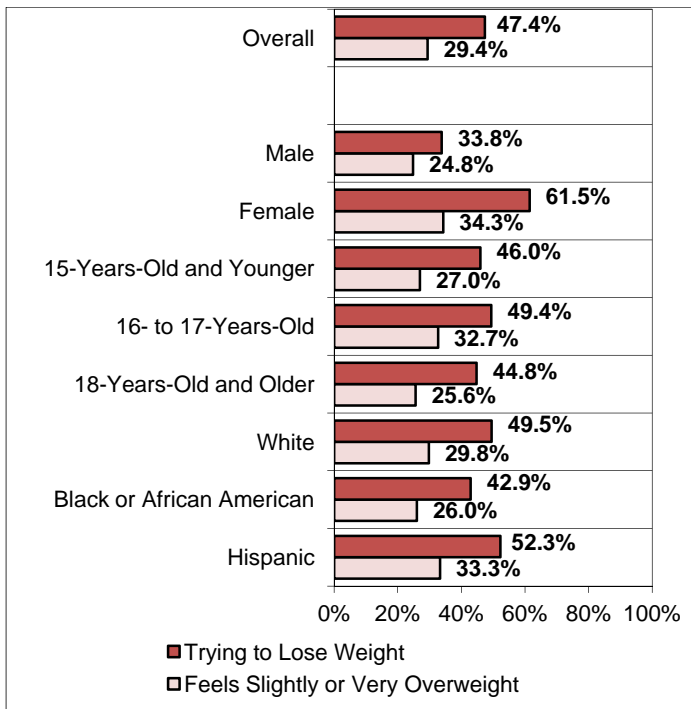
**Figure 9.3: Gets Eight Or More Hours Of Sleep On School Nights**



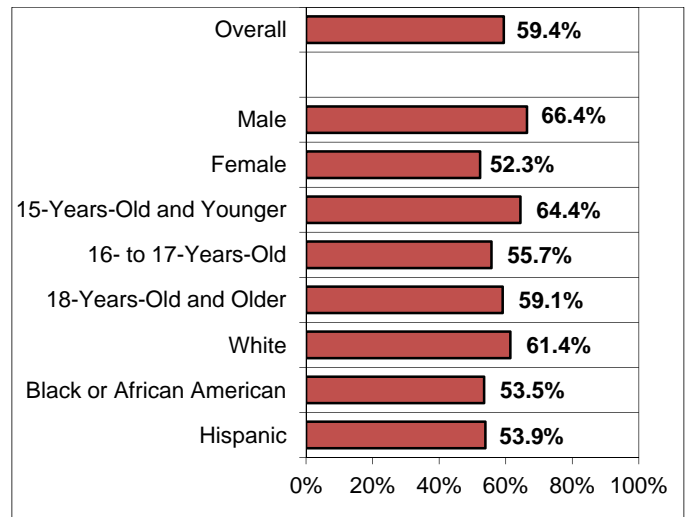
- The percentage of New Jersey high school students who have a BMI that would classify them as overweight has mostly remained the same over the four survey periods, ranging from 14.2% to 15.4% (Figure 9.2).
- The percentage of students who have a BMI that would classify them as obese has also stayed about the same over this period (10.1%-11.4%).
- Overall, the combined percentages of students having a BMI outside the normal range has remained essentially the same over the four survey periods from 24.7% in 2001 to 26.8% in 2005, 24.5% in 2009, and 26.2% in 2011.

- When asked how much sleep they typically get on school nights, over one in four (26.4%) New Jersey high school students said that they receive more than eight hours (Figure 9.3).
- Males (28.0%) were slightly more likely than females (24.7%) to report getting more than eight hours of sleep.
- Younger students aged 15-years-old and under (34.0%) were more likely to get eight hours of sleep on school nights than 16- to 17-year-olds and those 18-years-old and above (23.4% and 19.3%, respectively).
- By race/ethnicity, Black students (23.2%) were slightly less likely to report receiving eight hours of sleep on school nights than Hispanic (27.0%) or White (27.3%) students.

**Figure 9.4: Student Perception Of Weight**



**Figure 9.5: Describes Health As Good Or Excellent**



- Overall, about half (47.4%) of New Jersey high school students say they are trying to lose weight and an additional three in 10 students (29.4%) feel slightly or very overweight (Figure 9.4).
- Females were far more likely than males to report that they are trying to lose weight (61.5% vs. 33.8%). They were also more likely to say that they feel slightly or very overweight (34.3% vs. 24.8%).
- There was no significant difference in weight perception by age, although 16- to 17-year-olds were most likely to both say they are trying to lose weight and to report that they feel overweight (49.4% and 32.7%, respectively).
- Hispanic students were most likely and Black students least likely to say they are trying to lose weight (52.3% and 42.9%, respectively). A similar pattern was found in terms of Hispanic and Black students feeling slightly or very overweight (33.3% and 26.0%, respectively).

- About six in 10 New Jersey high school students (59.4%) described their personal health as either good or excellent (Figure 9.5).
- Males were more likely than females to say their health was good or excellent (66.4% vs. 52.3%).
- Students aged 15-years-old and younger were most likely (64.4%) to describe their personal health as either good or excellent while 16- to 17-year-olds were least likely (55.7%).
- White students (61.4%) were more likely to report positively on their own health than Hispanic or Black students (53.9% vs. 53.5%, respectively).

## Dietary Habits

These questions measure dietary behaviors, including consumption of fruits and vegetables, and soda or pop. The fruit and vegetable questions are similar to questions asked of adults on the CDC's Behavioral Risk Factor Survey 2009 questionnaire.<sup>145</sup> Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances that are important for good health. There is probable evidence to suggest that dietary patterns with higher intakes of fruits and vegetables are associated with a decreased risk for some types of cancer,<sup>146 147 148</sup> cardiovascular disease,<sup>149</sup> and stroke.<sup>150</sup> Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of being overweight.<sup>151 152 153</sup> In 2009, 22% of high school

students nationwide had eaten fruits and vegetables five or more times per day during the seven days before the survey.<sup>154</sup> The percentage of students who ate fruits and vegetables five or more times per day decreased during 1999–2005 (24%–20%) and then did not change significantly during 2005–2009 (20%–22%).<sup>155</sup> In recent years, soft drink consumption has significantly increased among children and adolescents. Among persons ages 2–18 years, soft drinks comprised 3% of the total daily calories consumed in 1977–1978 compared to 7% in 1999–2001.<sup>156</sup> In 1999–2004, U.S. youth ages 2–19 years, consumed an average of 224 kcal per capita per day from sugar sweetened beverages (11% of their daily energy intake).<sup>157</sup> Consumption of sugar sweetened beverages, including soft drinks, appears to be associated with increased risk of being overweight among children<sup>158 159</sup> and is associated with a less healthy diet,<sup>160</sup> decreased bone

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<sup>145</sup> Centers for Disease Control and Prevention.

Behavioral Risk Factor Surveillance System Survey Questionnaire. Atlanta, GA, U.S. Department of Health and Human Services; Centers for Disease Control and Prevention; 2009. Available at <http://www.cdc.gov/brfss/questionnaires/english.htm>. Accessed May 19, 2010.

<sup>146</sup> Key T, Schatzkin A, Willett WC, Allen NE, Spencer EA, Travis RC. Diet, nutrition, and the prevention of cancer. *Public Health Nutrition* 2004;7(1A):187-200.

<sup>147</sup> Kushi LH, Byers T, Doyle C, Bandera EV, McCullough M, McTiernan A, Gansler T, Andrews KS, Thun MJ; American Cancer Society 2006 Nutrition and Physical Activity Guidelines Advisory Committee. American Cancer Society Guidelines on Nutrition and Physical Activity for cancer prevention: reducing the risk of cancer with healthy food choices and physical activity. *CA: A Cancer Journal for Clinicians* 2006; 56:254-281.

<sup>148</sup> Vainio H, Weiderpass E. Fruit and vegetables in cancer prevention. *Nutrition and Cancer* 2006;54(1):111-42.

<sup>149</sup> Bazzano LA, He J, Ogden LG, Loria CM, Vupputuri S, Myers L, Whelton PK. Fruit and vegetable intake and risk of cardiovascular disease in U.S. adults: the first National Health and Nutrition Examination Survey Epidemiologic Follow-up Study. *American Journal of Clinical Nutrition* 2002;76(1):93-99.

<sup>150</sup> He FJ, Nowson CA, MacGregor GA. Fruit and vegetable consumption and stroke: meta-analysis of cohort studies. *Lancet* 2006;367(9507):320-326.

<sup>151</sup> Rolls BJ, Ello-Martin JA, Tohill BC. What can intervention studies tell us about the relationship between fruit and vegetable consumption and weight management. *Nutrition Reviews* 2004;62(1):1-17.

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<sup>152</sup> He K, Hu FB, Colditz GA, Manson JE, Willett WC, Liu S. Changes in intake of fruits and vegetables in relation to risk of obesity and weight gain among middle-aged women. *International Journal of Obesity* 2004;28:1569-1574.

<sup>153</sup> Goss J, Grubbs L. Comparative analysis of body mass index, consumption of fruits and vegetables, smoking, and physical activity among Florida residents. *Journal of Community Health Nursing* 2005;22(1):37-46.

<sup>154</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>155</sup> CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

<sup>156</sup> Nielsen SJ, Popkin BS. Changes in beverage intake between 1977 and 2001. *American Journal of Preventive Medicine* 2004;27(3):205-210.

<sup>157</sup> Wang YC, Bleich SN, Gortmaker SL. Increasing caloric contribution from sugar-sweetened beverages and 100% fruit juices among U.S. children and adolescents, 1988–2004. *Pediatrics* 2008;121(6):1604-1614.

<sup>158</sup> Vartanian LR, Schwartz MB, Brownell KD. Effects of soft drink consumption on nutrition and health: a systematic review and meta-analysis. *American Journal of Public Health* 2007;97(4):667-675.

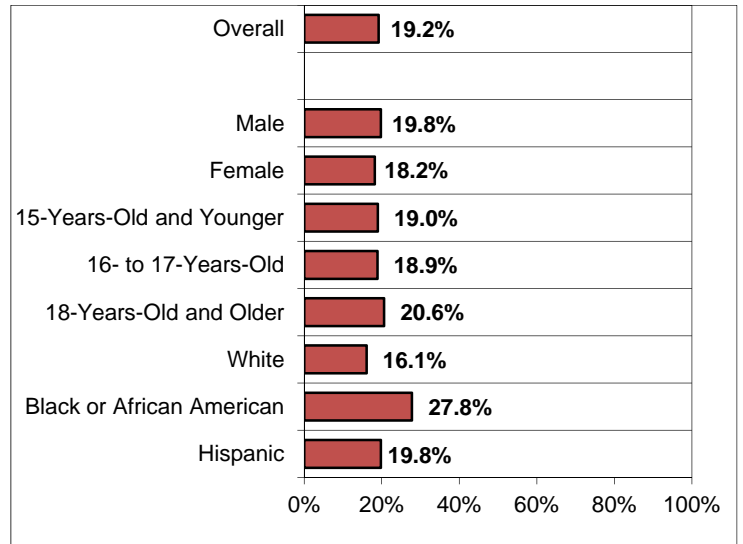
<sup>159</sup> Malik V, Schulze M, Hu F. Intake of sugar sweetened beverages and weight gain: a systematic review. *American Journal of Public Health* 2007;97(4):667-675.

<sup>160</sup> Marshall T, Gilmore J, Broffitt B, et al. Diet quality in young children is influenced by beverage consumption.

density,<sup>161</sup> and dental decay.<sup>162</sup> Nationwide in 2009, 29% of high school students had drunk a can, bottle, or glass of soda or pop (not counting diet soda or diet pop) at least one time per day during the seven days before the survey.<sup>163</sup>

A composite item for fruit and vegetable consumption was created by combining the six questions included in the survey. The composite item was created by averaging the daily intake in the past week so that fruits or vegetables include the following six items: fruits, 100% fruit juices, potatoes, carrots, green salad and other vegetables.

**Figure 9.6: Combined Fruit And Vegetable Consumption, Five Or More Servings Per Day**



- Overall, one in five (19.2%) high school students consumed five or more servings of fruits and vegetables per day over the preceding seven days (Figure 9.6).
- A similar proportion of males (19.8%) and females (18.2%) reported daily consumption of five or more servings of fruits and vegetables.
- There was little difference in fruit and vegetable consumption by age.
- Black students (27.8%) were more likely than Hispanic (19.8%) or White (16.1%) students to report they had consumed five or more servings of fruits and vegetables per day over the past seven days.

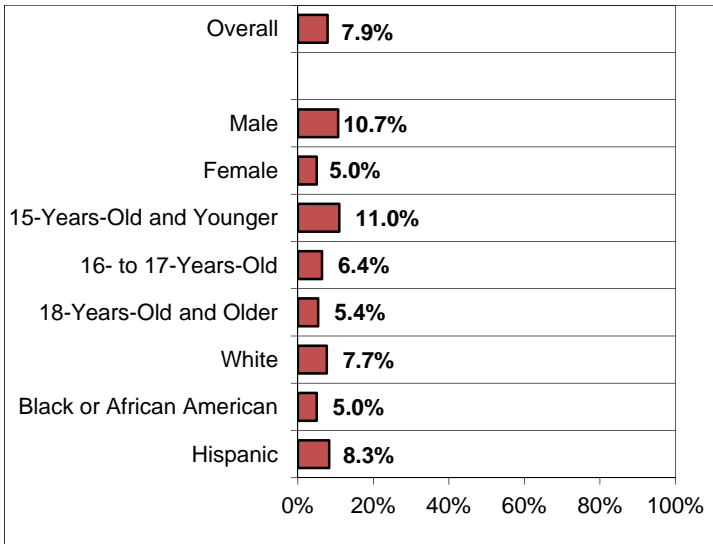
*Journal of the American College of Nutrition* 2005;24(1):65-75.

<sup>161</sup> Whiting S, Healey A, Psiuk S, et al. Relationship between carbonated and other low nutrient dense beverages and bone mineral content of adolescents. *Nutrition Research* 2001; 21(8):1107-1115.

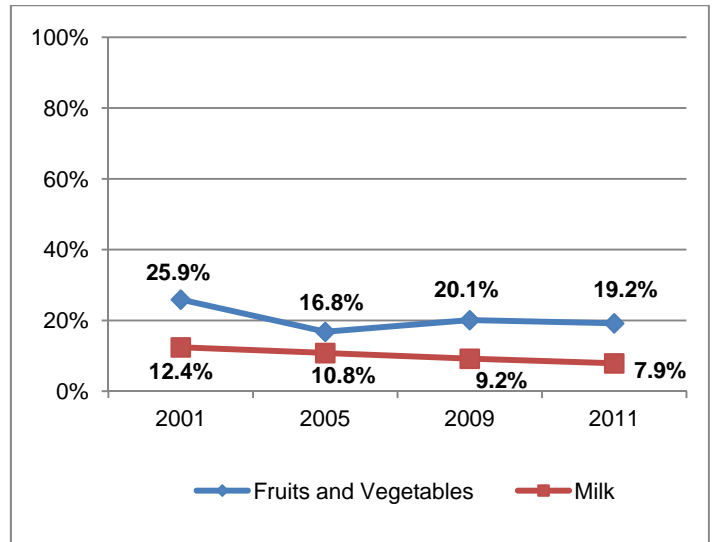
<sup>162</sup> Tahmassebi J, Duggal M, Malik-Kotru G, et al. Soft drinks and dental health: a review of the current literature. *Journal of Dental Research* 2006;34(1):2-11.

<sup>163</sup> . CDC. Youth Risk Behavior Surveillance – United States, 2009. *MMWR Surveillance Summary* 2010;59(No. SS-5):1-142.

**Figure 9.7: Three Or More Glasses Of Milk Per Day, Past Seven Days**



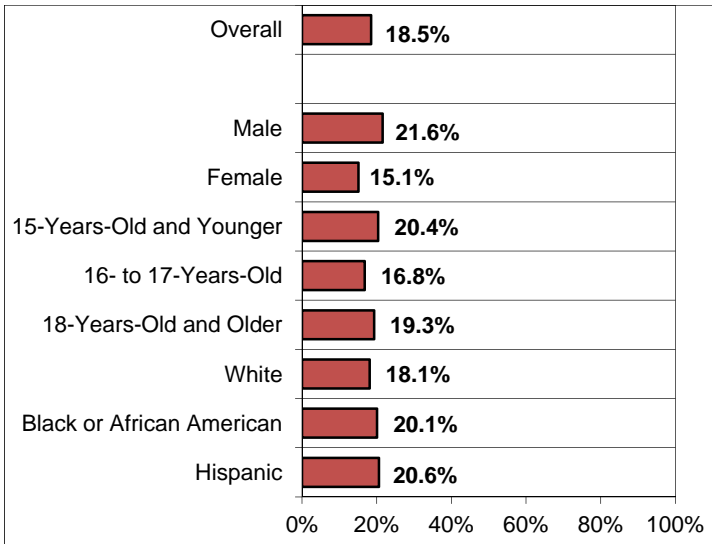
**Figure 9.8: Trends In Fruits, Vegetables, And Milk Consumption: 2001 - 2011**



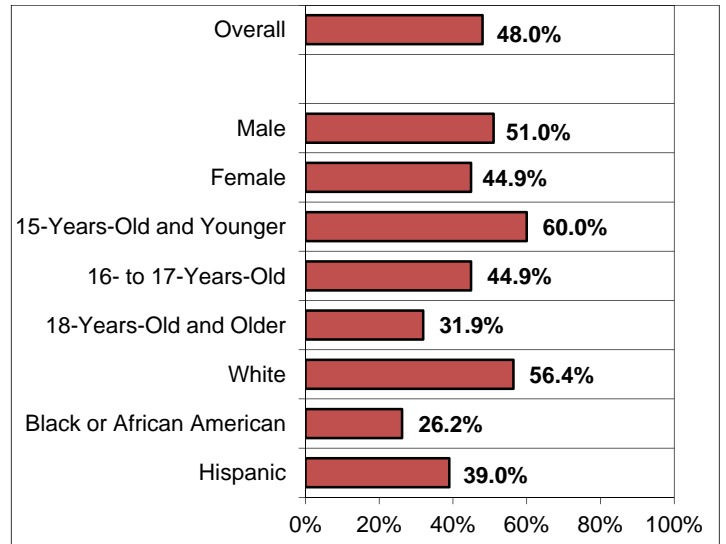
- Overall, about one in 12 students (7.9%) drank three or more glasses of milk per day during the past week (Figure 9.7). However, about one fifth (21.0%) indicated not drinking any milk at all.
- About twice as many males as females (10.7% vs 5.0%) had consumed three or more glasses of milk per day.
- Students aged 15-years-old and under (11.0%) were about twice as likely to drink three or more glasses of milk per day over the past week as 16- to 17-year-olds and those aged 18-years-old and older (6.4% and 5.4%, respectively).
- There were no notable differences in milk consumption by race/ethnicity (5.0%-8.3%).
- Fruit and vegetable consumption (five or more servings per day) in 2011 (19.2%) was similar to 2009 (20.1%) (Figure 9.8).
- Milk consumption (three or more glasses per day) has shown a slight decline over the years, ranging from a high of 12.4% in 2001 to a low of 7.9% in 2011.



**Figure 9.9: Drank Soda Or Pop One Or More Times Per Day, Past Seven Days**



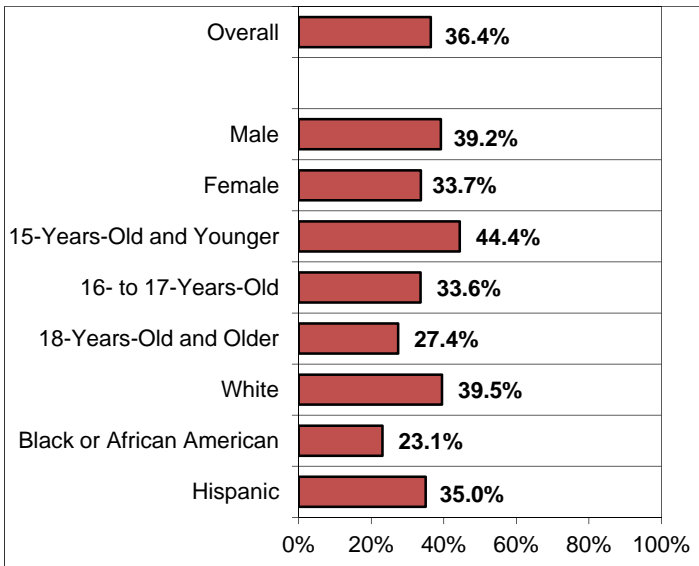
**Figure 9.10: Ate Dinner With Parents/Guardians Five Or More Times, Past Seven Days**



- Overall, about one in five (18.5%) New Jersey high school students indicated that they drank soda or pop one or more times per day in the past seven days (Figure 9.9). This figure did not differ much from the 19.9% rate recorded in 2009, or the 21.0% reported in 2005 (21.0%).
- A greater proportion of males (21.6%) than females (15.1%) drank soda or pop one or more times per day in the past seven days.
- There was little significant variation by age in soda or pop consumption, although 16- to 17-year-olds were least likely (16.8%) to report drinking a soda or pop each of the past seven days.
- There was no notable difference in soda or pop consumption by race/ethnicity (18.1%-20.6%).

- Almost half (48.0%) of New Jersey high school students ate dinner with their parents/guardians on five or more of the past seven days (Figure 9.10), including 25.4% who ate together on all seven days. However, one in six students (16.4%) ate with their parents/guardians on none of the past seven days.
- Males were more likely than females (51.0% vs. 44.9%) to report having dinner with their family five or more times in the past week.
- The percentage of students who ate with parents/guardians on five or more of the previous seven days decreased with age. Six out of ten (60.0%) students aged 15-years-old and younger ate with parent/guardians five or more days, compared with 44.9% of those 16- to 17-years-old and 31.9% of those aged 18-years-old and above.
- Over half (56.4%) of White students ate with their parents on five or more days a week, as compared with 39.0% of Hispanic and 26.2% of Black students.

**Figure 9.11: Ate Breakfast, Past Seven Days**



- Overall, over one third (36.4%) of New Jersey high school students ate breakfast on each of the preceding seven days (Figure 9.11).
- Male students were more likely than female students to eat breakfast every day during the past week (39.2% vs. 33.7%).
- The percentage of students who ate breakfast on each of the previous seven days decreased with age. Over four in 10 students (44.4%) 15-years-old and under ate breakfast every day, compared with 33.6% of those students 16- to 17-years-old and 27.4% of those aged 18-years-old and older.
- Four in 10 White students (39.5%) ate breakfast each day, compared with 35.0% of Hispanic and 23.1% of Black students.



## CHAPTER 10: RISK FACTORS

The 2011 New Jersey Student Health Survey incorporated concepts from the risk and protective factor series of questions from the Communities That Care Youth Survey (CTCYS) instrument developed out of a multi-state study funded by the Center for Substance Abuse Prevention (CSAP). Prior research had shown that a number of constructs exist to adequately predict the initiation of substance use and anti-social behaviors.<sup>164 165 166 167 168 169</sup> During the CSAP project it was determined that no existing instrument measured the necessary array of risk and protective factors needed to focus prevention programs across geographic areas and subpopulations.<sup>170</sup> The instrument includes risk and protective factors that show the strongest correlations to drug use, including feelings about

school and their neighborhood; self-reported and peer use of tobacco, drugs, and alcohol; and the availability of such substances. The original CTCYS includes 333 items measuring 32 constructs, or risk and protective factors depending on whether behavior is influenced negatively or positively.

Since the development of the Communities That Care Youth Survey in 1992, the instrument has been revised and condensed into the Risk and Protective Factors Survey (RPF). The founder of Pride Surveys, Dr. Jack Pollard, one of the original developers of the CTCYS, shortened the original 12-page survey into a more manageable four pages. In all, the final four-page RPF survey included 121 items measuring 29 risk and protective factor constructs.<sup>171</sup>

### ***Risk and Protective Factor Scales***

*Risk factors* are characteristics of the students' community, family, school, and peer relationships that predict the likelihood of experimentation with alcohol, tobacco, and other drugs and participation in antisocial behavior. *Protective factors* are characteristics of the students' school, and peer relationships that have been associated with reducing the likelihood of experimentation with alcohol, tobacco, and other drugs and antisocial behavior. Risk and protective factors are important for prevention planning. While one may not be able to eliminate the risk factors in a students' environment, it is possible that risks may be

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<sup>164</sup> Coie, J.D., Watt, N.F., West, S.G., Hawkins, J.D., Asarnow, J.R., Markman, H.J., Ramey, S.L., Shure, M.B., & Long, B. 1993. The Science Of Prevention. A Conceptual Framework And Some Directions For A National Research Program. *American Psychologist* 48 (10): 1013-22.

<sup>165</sup> Durlak, J. A. 1998. Common Risk And Protective Factors In Successful Prevention Programs. *American Journal of Orthopsychiatry* 68 (4): 512-20.

<sup>166</sup> Hawkins, J.D., Arthur, M.W., & Catalano, R.F. 1995. Preventing substance abuse. In *Crime and justice: Vol. 19. Building A Safer Society: Strategic Approaches To Crime Prevention*, edited by M. Tonry and D. Farrington, 343-427. Chicago: University of Chicago Press.

<sup>167</sup> Hawkins, J.D., Catalano, R.F., & Miller, J.Y. 1992. Risk And Protective Factors For Alcohol And Other Drug Problems In Adolescence And Early Adulthood: Implications For Substance Abuse Prevention. *Psychological Bulletin* 112 (1): 64-105.

<sup>168</sup> Kellam, S. G., D. Koretz, & E. K. Moscicki. 1999. Core Elements Of Developmental Epidemiologically Based Prevention Research. *American Journal of Community Psychology* 27 (4): 463-82.

<sup>169</sup> Mrazek, P.J., Haggerty, R.J. eds., & Committee on Prevention of Mental Disorders, Institute of Medicine. 1994. *Reducing Risks For Mental Disorders: Frontiers For Prevention Intervention Research*. Washington, DC: National Academy Press.

<sup>170</sup> Arthur, M.W., Hawkins, J.D., Pollard, J.A., Catalano, R.F., & Baglioni, A.J. 2002. Measuring Risk and Protective Factors For Substance Use, Delinquency, And Other

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Adolescent Problem Behaviors: The Communities That Care Youth Survey. *Evaluation Review*, 26, 575-601.

<sup>171</sup> Pollard, Jack. *Rationale for Inclusion/Exclusion of Risk and Protective Factor Items in the Development of the Pride Surveys Risk and Protective Factor Survey* from <http://www.pridesurveys.com/>.

mitigated and that the number of protective factors can be increased.

Because of practical considerations of survey administration and limits to the number of questions that could be added, the New Jersey Student Health Survey only included questions related to two risk factors – one related to the peer-individual domain and the other to the family domain. Multiple survey items comprise each of these factors and a minimum number of questions must be answered in order to calculate a score for each factor.

Scores on these two factors have been standardized to a 0 to 1 scale. Standardization is commonly achieved by subtracting the lowest outcome value from all values in an array, which forces the low value to equal 0. Then, all values in the array are divided by the upper end of the adjusted array range. This second step forces the high value to equal 1. For risk factors, each question was scored so that the most pro-social orientation toward substance use received the lowest score.

The higher the score on a risk factor, the more likely the student is to be at greater ‘risk’ for negative behaviors, such as using drugs and participating in antisocial activities. These scores represent characteristics in the students’ environment that will increase risk for substance use and participation in antisocial behavior. For example, a student whose parents are perceived to be more open to substance use may result in a student who is more willing to engage in such behavior.

The first section of this chapter describes the two risk factors, their specific survey items, and their respective mean scores. The second section provides the average risk factor score for the State based on combining these two factors. The final section shows graphs of the relationships between the average risk factor score and cigarette, alcohol and marijuana use.

Table 10.1 presents the mean scores for the two risk factors, and the larger domain in which they reside.

**Table 10.1: Summary Of All Risk Factors By Domain**

<i>Domain</i>	<i>Risk Factors</i>	<b>(n)</b>	<b>Mean</b>
<i>Peer-Individual</i>	Perceived Risks of Drug Use	1649	0.32
<i>Family</i>	Parental Attitudes toward Drug Use	1622	0.19
<b>Statewide Risk Factor Average</b>		<b>1619</b>	<b>0.25</b>

## Statewide Risk Factors

This section presents the two risk domains and their respective risk factor, including the individual questions from the survey. As mentioned previously, risk factors are characteristics of the students’ family or individual-peer relationships that have been associated with increasing the likelihood of experimentation with alcohol, tobacco, and other drugs and antisocial behavior.

Each question was scored so that the most positive beliefs received the lowest score. For example, if a student indicated that they think smoking marijuana regularly is a great risk, then this would be scored as a zero. Conversely, a student who indicated no perceived risk at all from such behavior would receive a score of 1. Mean scores for each factor were then computed on a scale of 0 to 1, with a higher score indicating that the student has a greater chance of risk by that factor. Therefore, the lower the mean score for each factor, the more likely that the student is participating in positive risk behavior.

### ***Peer-Individual Domain Risk Factors***

The *Peer-Individual Risk Factor* refers to youths’ attitudes about drug use and antisocial behavior, the age which they began using drugs and engaging in antisocial behavior, whether or not their friends engage in such behavior and if they perceive peer rewards through such behavior. This survey explored one such risk factor in the *Peer-Individual Domain Risk Factor*, presented in Table 10.2.

### Perceived Risks of Drug Use

- How much do you think people risk harming themselves if they smoke one or more packs of cigarettes a day?
- How much do you think people risk harming themselves if they smoke marijuana regularly?
- How much do you think people risk harming themselves if they have one or two drinks of alcohol (beer, wine, or liquor) nearly every day?

Higher mean scores on the *Perceived Risks of Drug Use* factor indicate that the demographic is at greater risk of using drugs and participating in antisocial behaviors because they believe that using alcohol or other drugs presents little risk to their health.

The overall mean was 0.32. The mean for students 18-years-old and over was higher than the mean for students 15-years-old and younger (0.37 vs. 0.28), indicating that the older students perceive less risk in substance use than younger students. A similar difference is seen between males and females with males slightly more likely to have to have a risky attitude on substance use (0.36 vs. 0.27). By race/ethnicity, White, African-American, and Hispanic students all have the same mean (0.33) compared to students of other races, who see much more risk in the use of substances (0.17).

### **Family Domain Risk Factors**

The *Family Domain Risk Factor* is defined by students who have dysfunctional family dynamics as defined by the following characteristics: little parental supervision, unclear behavioral expectations, and inconsistent rewards/punishments for behavior, parents that are tolerant of children's antisocial behaviors and/or drug/alcohol use, and parents who engage in criminal behavior and/or drug/alcohol use. This survey explored one of these: the *Parental Attitudes Favorable toward Drug Use* domain, which is also presented in Table 10.2.

### Parental Attitudes Favorable toward Drug Use

- How wrong do your parents feel it would be for you to drink beer, wine or liquor at least once or twice a month?
- How wrong do your parents feel it would be for you to smoke cigarettes?
- How wrong do your parents feel it would be for you to smoke marijuana?

Higher mean scores on the *Parental Attitudes Favorable toward Drug Use* factor indicate that the group is at greater risk for using drugs and participating in antisocial behaviors because their parents' attitudes are favorable toward drug use.

**Table 10.2: Family And Peer-Individual Domain Risk Factor Demographics – Perceived Risks Of Drug Use And Parental Attitudes Favorable Toward Drug Use**

	<i>Perceived Risks of Drug Use</i>		<i>Parental Attitudes Favorable toward Drug Use</i>	
	(n)	Mean	(n)	Mean
<b>NJ High School Students</b>	1649	0.32	1622	0.19
<b>Age</b>				
<i>15-years-old and younger</i>	620	0.28	617	0.14
<i>16- to 17-years-old</i>	784	0.32	765	0.21
<i>18-years-old and older</i>	243	0.37	237	0.24
<b>Sex</b>				
<i>Male</i>	749	0.36	732	0.21
<i>Female</i>	897	0.27	886	0.17
<b>Ethnicity</b>				
<i>White</i>	880	0.33	868	0.22
<i>African-American</i>	173	0.33	170	0.11
<i>Hispanic</i>	365	0.33	355	0.20
<i>Other</i>	200	0.17	197	0.09

The overall mean was 0.19. The mean for students 18-years-old and over was higher than the mean for students 15-years-old and younger (0.24 vs. 0.14), indicating that older students think their parents are more favorable toward drug use than younger students. Males have slightly higher scores on this factor than females (0.21 vs. 0.17). By race/ethnicity, White (0.22) and Hispanic (0.20) students have a risk score greater than both African-American (0.11) students and students of other races (0.09).

### Statewide Risk Factor Averages

Table 10.3 presents the average score for both risk factors combined. Hence, both the student's perceived risk of drug use and perception of parents' attitudes on drug use are combined to produce one overall risk factor. This risk factor is again standardized, so the scores range from 0 to 1.

*Average of all Risk Factors:* Higher mean scores indicate that the group has a greater chance for exhibiting risk behavior with regard to using drugs and participating in antisocial activity.

The overall mean for the statewide risk factor was 0.25. There were some small differences in mean scores for the overall risk factor by age, gender, or race/ethnicity. For gender, the males scored slightly higher (0.28 vs. 0.22); among age groups, scores ranged from 0.30 for those aged 18-years-old and older to 0.21 for those 15-years-old and younger; and among race/ethnicity groups, the range was between 0.27 and 0.26 for Whites and Hispanics, respectively, to 0.13 for those of other racial/ethnic backgrounds.

**Table 10.3: Average Of The Risk Factors By Demographic Subgroups**

<i>Risk Factors</i>		
	<b>(n)</b>	<b>Mean</b>
<b>NJ High School Students</b>	1619	0.25
<b>Age</b>		
<i>15-years-old and younger</i>	615	0.21
<i>16- to 17-years-old</i>	765	0.26
<i>18-years-old and older</i>	237	0.30
<b>Sex</b>		
<i>Male</i>	731	0.28
<i>Female</i>	885	0.22
<b>Ethnicity</b>		
<i>White</i>	868	0.27
<i>African-American</i>	169	0.22
<i>Hispanic</i>	355	0.26
<i>Other</i>	196	0.13

## Impact of Average Risk Factor Score on Substance Use

In order to better interpret the risk factor mean scores, student risk scores were divided into four categories – *very low*, *low*, *high*, and *very high*. These categories were based on a normal distribution of scores, such that approximately 68% of the scores are within one standard deviation of the mean. Risk categories were determined by examining the mean and standard deviations of the average risk factor scores (0.25). As mentioned, both risk factor questions deal with substance use – the student’s perception of harm in substance use and the student’s perception of their parents’ opinions on substance use.

Each quartile division of the following graphs was created using standard deviations. The *low* division represents one standard deviation *below* the mean while the *high* division represents scores one standard deviation *above* the mean. The *very low* division represents scores more than one standard deviation *below* the mean. Similarly, the *very high*

division includes scores more than one standard deviation *above* the mean.

The relationship between the average risk factor score and substance use is illustrated in Figures 10.1 through 10.3 below. It is important to note that these are direct relationships. In other words, as the risk factor scores increase, patterns related to substance use and other risk behaviors also increase.

As shown in Figure 10.1, as the risk scores increase, rates of lifetime and past 30 day use of tobacco increase significantly. Increases in risk scores result in increases of tobacco use at all levels of risk and for all time periods. However, slightly larger increases in lifetime tobacco use are seen as risk scores increase from *high* to *very high*. About half of students (47.4%) in the *high* risk factor have smoked in their lifetime compared to about three fourths (72.0%) in the *very high* group. Similarly, 16.5% in the *high* factor have smoked in the past 30 days compared to 46.3% in the *very high* risk factor.

**Figure 10.1: Prevalence Of Cigarette Smoking By Risk Factor Groupings**

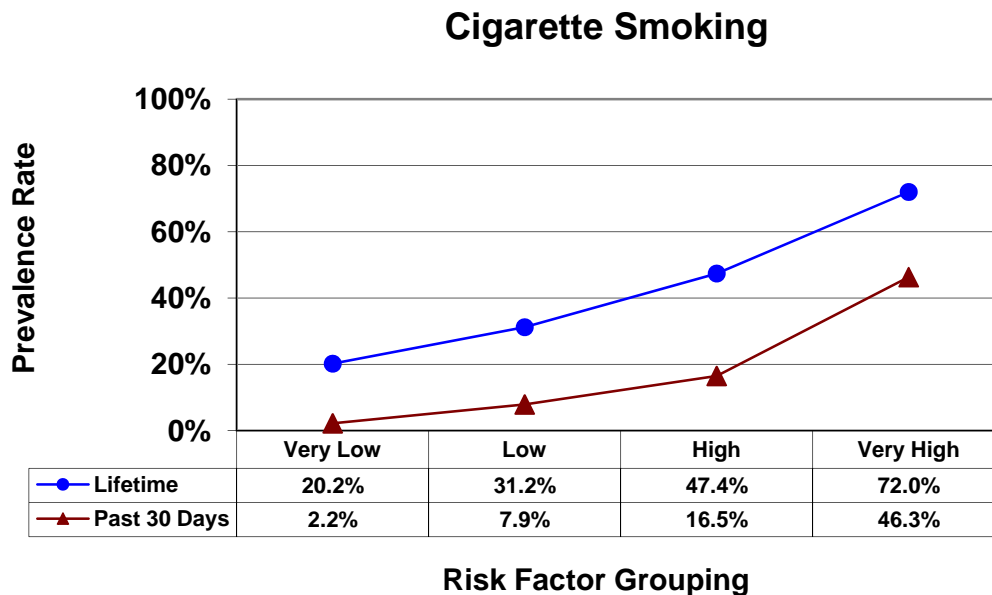
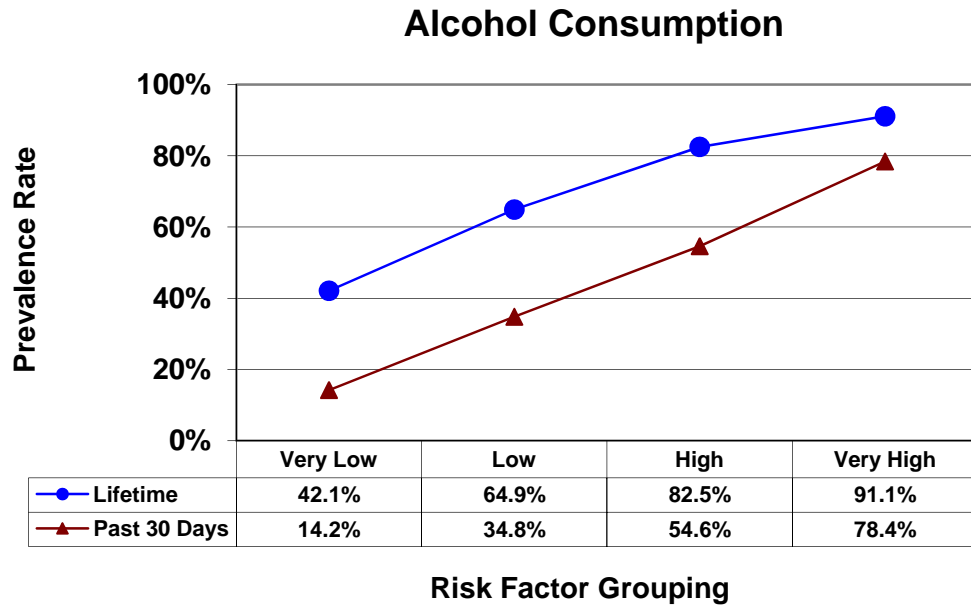




Figure 10.2: Prevalence Of Alcohol Consumption By Risk Factor Groupings



As risk factor scores increase, alcohol consumption increases (Figure 10.2). This trend is comparable to the data shown in the prior figure with cigarette smoking. Even among students with *very low* risk scores, almost half of these students (42.1%) still consumed alcohol in their lifetime. This may indicate that adolescents are likely to experiment with alcohol in the face of family and individual factors not in favor of such usage. The rate of lifetime alcohol use

increases by 49.0% from the very low to the very high risk groups (from 42.1% to 91.1%) which is very comparable to the increase in lifetime cigarette usage between these two groups, which rose from 20.8% to 72.0% – a total of 51.8%. However, for lifetime alcohol use, the largest increase in usage is from the *very low* (42.1%) to the *low* (64.9%) risk group.

Figure 10.3: Prevalence Of Marijuana Use By Risk Factor Groupings

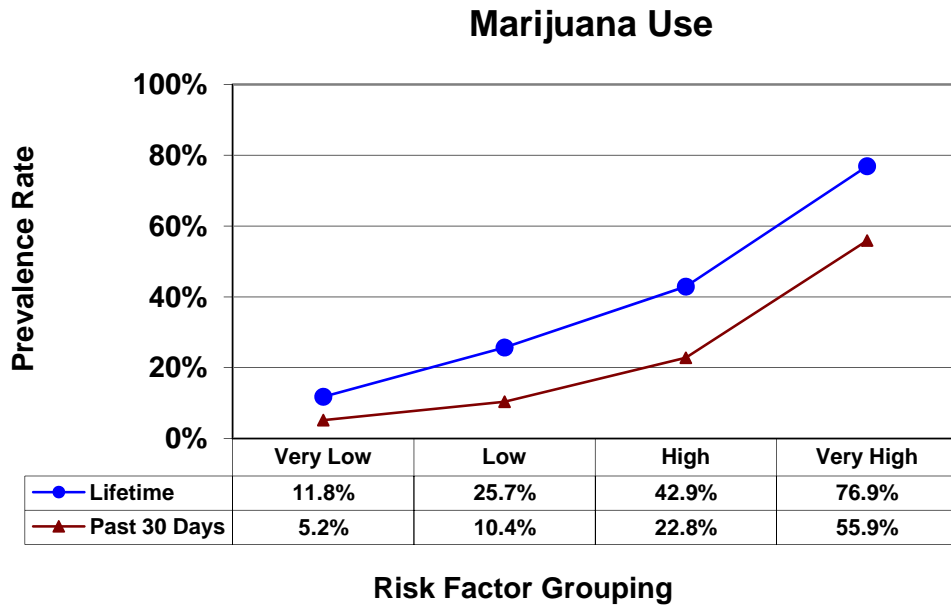


Figure 10.3 indicates the same pattern for marijuana use as with alcohol and cigarettes - that as risk scores increase use of marijuana significantly increases. Notably, over three fourths (76.9%) of students with *very high* risk scores have used marijuana in their lifetime, as compared to one in 10 students (11.8%) with *very low* risk scores. Change in prevalence rates increases along each gradient on

the risk factor grouping from *very low* to *very high*, indicating that increasing risk scores has an increasing effect on the use of marijuana. This pattern is similar for recent marijuana use. Slightly larger increases in past 30 day marijuana use are seen as risk scores increase from *high* (22.8%) to *very high* (55.9%) - mirroring the pattern for lifetime tobacco use.

# APPENDIX A: 2011 New Jersey Student Health Survey - Frequency Distributions

## Student Health Survey: High School

Frequency distributions included in this Appendix are based on survey of a random sample of 1,657 New Jersey high school students, conducted in the spring of 2011. CDC weighted the results by age, gender, and race so that they represent the entire New Jersey high school population. Percentages in the tables below are based on these weighted results.

### Q1 How old are you?

		Frequency	Valid Percent
Valid	1 12 years old or younger	421	.1
	2 13 years old	944	.2
	3 14 years old	42638	10.6
	4 15 years old	97167	24.2
	5 16 years old	108093	26.9
	6 17 years old	85452	21.3
	7 18 years old or older	66807	16.6
	Total	401522	100.0
Missing	System	678	
Total		402199	

### Q2 What is your sex?

		Frequency	Valid Percent
Valid	1 Female	198786	49.6
	2 Male	202341	50.4
	Total	401127	100.0
Missing	System	1072	
Total		402199	

### Q3 In what grade are you?

		Frequency	Valid Percent
Valid	1 9th grade	105483	26.3
	2 10th grade	101621	25.3
	3 11th grade	98245	24.5
	4 12th grade	94783	23.6
	5 Ungraded or other grade	802	.2
	Total	400934	100.0
Missing	System	1265	
Total		402199	

### Q4 Are you Hispanic or Latino?

		Frequency	Valid Percent
Valid	1 Yes	73031	18.3
	2 No	326784	81.7
	Total	399815	100.0
Missing	System	2384	
Total		402199	

### Q5 What is your race? (Select one or more responses.)

		Frequency	Valid Percent
Valid	1 Am Indian/Alaska Native	313	.1
	2 Asian	31629	8.0
	3 Black/African American	63890	16.2
	4 Native Hawaiian/Other PI	430	.1
	5 White	224945	56.9
	6 Hispanic/Latino	30887	7.8
	7 Multiple Hispanic	41260	10.4
	8 Multiple Non-Hispanic	1853	.5
	Total	395206	100.0
Missing	System	6993	
Total		402199	

**Q6 How tall are you without your shoes on?**

		Frequency	Valid Percent
Valid	1 Under 5 feet	22935	5.8
	2 5 ft - 5 ft 3 in	81315	20.6
	3 5 ft 4 in - 5 ft 6 in	107082	27.1
	4 5 ft 7 in - 5 ft 9 in	85109	21.6
	5 5 ft 10 in - 6 ft	72705	18.4
	6 6 ft - 6 ft 3 in	22386	5.7
	7 Over 6 ft 3 in	3086	.8
	Total	394619	100.0
Missing	System	7580	
Total		402199	

**Q7 How much do you weigh without your shoes on?**

		Frequency	Valid Percent
Valid	1 Under 110 lbs	40370	10.2
	2 110 to 125 lbs	91447	23.2
	3 125 to 140 lbs	86677	22.0
	4 141 to 155 lbs	56053	14.2
	5 156 to 170 lbs	45317	11.5
	6 171 to 185 lbs	29082	7.4
	7 186 to 200 lbs	18608	4.7
	8 201 to 220 lbs	11328	2.9
	9 Over 220 lbs	15563	3.9
	Total	394445	100.0
Missing	System	7755	
Total		402199	

**Q8 During the past 12 months, how would you describe your grades in school?**

		Frequency	Valid Percent
Valid	1 Mostly A's	138894	34.6
	2 Mostly B's	169312	42.2
	3 Mostly C's	68716	17.1
	4 Mostly D's	11897	3.0
	5 Mostly F's	3055	.8
	6 None of these grades	362	.1
	7 Not sure	9142	2.3
	Total	401379	100.0
Missing	System	820	
Total		402199	

**Q9 How do you describe your health in general?**

		Frequency	Valid Percent
Valid	1 Excellent	77437	19.3
	2 Very good	161149	40.1
	3 Good	126355	31.5
	4 Fair	31988	8.0
	5 Poor	4751	1.2
	Total	401680	100.0
Missing	System	519	
Total		402199	

**Q10 On an average school night, how many hours of sleep do you get?**

		Frequency	Valid Percent
Valid	1 4 or less hours	15960	4.0
	2 5 hours	48357	12.1
	3 6 hours	106355	26.5
	4 7 hours	124260	31.0
	5 8 hours	85566	21.3
	6 9 hours	17151	4.3
	7 10 or more hours	3215	.8
	Total	400865	100.0
Missing	System	1335	
Total		402199	

**Q11 How often do you wear a seat belt when driving a car?**

		Frequency	Valid Percent
Valid	1 I do not drive a car	172723	43.0
	2 Never	8784	2.2
	3 Rarely	11122	2.8
	4 Sometimes	11502	2.9
	5 Most of the time	36817	9.2
	6 Always	160789	40.0
	Total	401737	100.0
Missing	System	463	
Total		402199	

**Q12 How often do you wear a seat belt when riding in a car driven by someone else?**

		Frequency	Valid Percent
Valid	1 Never	16992	4.3
	2 Rarely	24418	6.2
	3 Sometimes	49146	12.4
	4 Most of the time	119500	30.2
	5 Always	185570	46.9
	Total	395625	100.0
Missing	System	6574	
Total		402199	

**Q13 During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol**

		Frequency	Valid Percent
Valid	1 0 times	314613	78.6
	2 1 time	34631	8.7
	3 2 or 3 times	30335	7.6
	4 4 or 5 times	6941	1.7
	5 6 or more times	13651	3.4
	Total	400171	100.0
Missing	System	2029	
Total		402199	

**Q14 During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol?**

		Frequency	Valid Percent
Valid	1 0 times	373084	93.6
	2 1 time	12990	3.3
	3 2 or 3 times	7971	2.0
	4 4 or 5 times	1656	.4
	5 6 or more times	3062	.8
	Total	398764	100.0
Missing	System	3436	
Total		402199	

**Q15 During the past 30 days, on how many days did you text or e-mail while driving a car or other vehicle?**

		Frequency	Valid Percent
Valid	1 I have not driven a car or other vehicle in the past 30 days.	206444	51.5
	2 0 days	101922	25.4
	3 1 or 2 days	24470	6.1
	4 3 to 5 days	9420	2.4
	5 6 to 9 days	11135	2.8
	6 10 to 19 days	12547	3.1
	7 20 to 29 days	12069	3.0
	8 All 30 days	22579	5.6
	Total	400586	100.0
Missing	System	1614	
Total		402199	

**Q16 During the past 30 days, on how many days did you talk on a cell phone while driving a car or other vehicle?**

		Frequency	Valid Percent
Valid	1 I have not driven a car or other vehicle in the past 30 days.	207087	51.9
	2 0 days	104099	26.1
	3 1 or 2 days	30019	7.5
	4 3 to 5 days	14687	3.7
	5 6 to 9 days	13066	3.3
	6 10 to 19 days	12544	3.1
	7 20 to 29 days	8823	2.2
	8 All 30 days	8454	2.1
	Total	398778	100.0
Missing	System	3421	
Total		402199	

**Q17 During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club?**

		Frequency	Valid Percent
Valid	1 0 days	363435	90.4
	2 1 day	11902	3.0
	3 2 or 3 days	11529	2.9
	4 4 or 5 days	4088	1.0
	5 6 or more days	11044	2.7
	Total	401998	100.0
Missing	System	201	
Total		402199	

**Q18 During the past 30 days, on how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?**

		Frequency	Valid Percent
Valid	1 0 days	387284	96.4
	2 1 day	7488	1.9
	3 2 or 3 days	4831	1.2
	4 4 or 5 days	473	.1
	5 6 or more days	1846	.5
	Total	401922	100.0
Missing	System	277	
Total		402199	

**Q19 During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club on school property?**

		Frequency	Valid Percent
Valid	1 0 times	377425	94.3
	2 1 time	11973	3.0
	3 2 or 3 times	4972	1.2
	4 4 or 5 times	1960	.5
	5 6 or 7 times	823	.2
	6 8 or 9 times	554	.1
	7 10 or 11 times	251	.1
	8 12 or more times	2137	.5
	Total	400094	100.0
Missing	System	2105	
Total		402199	

**Q20 During the past 12 months, how many times has someone stolen or deliberately damaged your property such as your car, clothing, or books on school property?**

		Frequency	Valid Percent
Valid	1 0 times	314516	78.3
	2 1 time	46896	11.7
	3 2 or 3 times	29135	7.2
	4 4 or 5 times	4707	1.2
	5 6 or 7 times	1536	.4
	6 8 or 9 times	1072	.3
	7 10 or 11 times	26	.0
	8 12 or more times	4051	1.0
	Total	401938	100.0
Missing	System	262	
Total		402199	

**Q21 During the past 12 months, how many times were you in a physical fight?**

		Frequency	Valid Percent
Valid	1 0 times	305967	76.1
	2 1 time	46843	11.7
	3 2 or 3 times	30079	7.5
	4 4 or 5 times	10365	2.6
	5 6 or 7 times	2142	.5
	6 8 or 9 times	1875	.5
	7 10 or 11 times	639	.2
	8 12 or more times	4128	1.0
	Total	402038	100.0
Missing	System	161	
Total		402199	

**Q22 During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?**

		Frequency	Valid Percent
Valid	1 Yes	44033	11.0
	2 No	356381	89.0
	Total	400414	100.0
Missing	System	1785	
Total		402199	

**Q23 Have you ever been physically forced to have sexual intercourse when you did not want to?**

		Frequency	Valid Percent
Valid	1 Yes	32115	8.0
	2 No	369285	92.0
	Total	401400	100.0
Missing	System	799	
Total		402199	

**Q24 During the past 12 months, have you ever been bullied on school property?**

		Frequency	Valid Percent
Valid	1 Yes	80154	20.0
	2 No	321459	80.0
	Total	401614	100.0
Missing	System	586	
Total		402199	

**Q25 During the past 12 months, have you ever been electronically bullied? (Include being bullied through e-mail, chat rooms, instant messaging, Web sites, or texting.)**

		Frequency	Valid Percent
Valid	1 Yes	62430	15.6
	2 No	338689	84.4
	Total	401119	100.0
Missing	System	1080	
Total		402199	

**Q26 During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?**

		Frequency	Valid Percent
Valid	1 Yes	104813	26.1
	2 No	296544	73.9
	Total	401357	100.0
Missing	System	843	
Total		402199	

**Q27 During the past 12 months, on how many times did you do something to purposely hurt yourself without wanting to die, such as cutting or burning yourself on purpose?**

		Frequency	Valid Percent
Valid	1 0 times	327872	81.7
	2 1 time	36582	9.1
	3 2 or 3 times	16418	4.1
	4 4 or 5 times	8521	2.1
	5 6 or more times	11860	3.0
	Total	401253	100.0
Missing	System	946	
Total		402199	

**Q28 During the past 12 months, did you ever seriously consider attempting suicide?**

		Frequency	Valid Percent
Valid	1 Yes	51460	12.9
	2 No	348390	87.1
	Total	399850	100.0
Missing	System	2349	
Total		402199	

**Q29 During the past 12 months, did you make a plan about how you would attempt suicide?**

		Frequency	Valid Percent
Valid	1 Yes	43621	10.9
	2 No	356997	89.1
	Total	400617	100.0
Missing	System	1582	
Total		402199	

**Q30 During the past 12 months, how many times did you actually attempt suicide?**

		Frequency	Valid Percent
Valid	1 0 times	334946	94.0
	2 1 time	13490	3.8
	3 2 or 3 times	5749	1.6
	4 4 or 5 times	712	.2
	5 6 or more times	1465	.4
	Total	356362	100.0
Missing	System	45837	
Total		402199	

**Q31 If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?**

		Frequency	Valid Percent
Valid	1 Did not attempt suicide	333985	94.1
	2 Yes	7558	2.1
	3 No	13218	3.7
	Total	354762	100.0
Missing	System	47437	
Total		402199	

**Q32 Have you ever tried cigarette smoking, even one or two puffs?**

		Frequency	Valid Percent
Valid	1 Yes	161315	40.6
	2 No	236116	59.4
	Total	397431	100.0
Missing	System	4768	
Total		402199	



**Q33 How old were you when you smoked a whole cigarette for the first time?**

		Frequency	Valid Percent
Valid	1 Never smoked a cigarette	283622	71.6
	2 8 years old or younger	4859	1.2
	3 9 or 10 years old	2126	.5
	4 11 or 12 years old	11197	2.8
	5 13 or 14 years old	39359	9.9
	6 15 or 16 years old	42440	10.7
	7 17 years old or older	12603	3.2
	Total	396207	100.0
Missing	System	5992	
Total		402199	

**Q34 During the past 30 days, on how many days did you smoke cigarettes?**

		Frequency	Valid Percent
Valid	1 0 days	329326	83.9
	2 1 or 2 days	17327	4.4
	3 3 to 5 days	13073	3.3
	4 6 to 9 days	5194	1.3
	5 10 to 19 days	8336	2.1
	6 20 to 29 days	4430	1.1
	7 All 30 days	14890	3.8
	Total	392577	100.0
Missing	System	9622	
Total		402199	

**Q35 During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?**

		Frequency	Valid Percent
Valid	1 Did not smoke cigarettes	330172	83.9
	2 Less than 1 cigarette	19069	4.8
	3 1 cigarette	9163	2.3
	4 2 to 5 cigarettes	25475	6.5
	5 6 to 10 cigarettes	5221	1.3
	6 11 to 20 cigarettes	2292	.6
	7 More than 20 cigarettes	2189	.6
	Total	393579	100.0
Missing	System	8620	
Total		402199	

**Q36 During your life, on how many days have you had at least one drink of alcohol?**

		Frequency	Valid Percent
Valid	1 0 days	122005	30.9
	2 1 or 2 days	59313	15.0
	3 3 to 9 days	63153	16.0
	4 10 to 19 days	40995	10.4
	5 20 to 39 days	38690	9.8
	6 40 to 99 days	31108	7.9
	7 100 or more days	39390	10.0
	Total	394654	100.0
Missing	System	7545	
Total		402199	

**Q37 How old were you when you had your first drink of alcohol other than a few sips?**

		Frequency	Valid Percent
Valid	1 Never drank alcohol	126174	31.7
	2 8 years old or younger	13224	3.3
	3 9 or 10 years old	11202	2.8
	4 11 or 12 years old	33045	8.3
	5 13 or 14 years old	99864	25.1
	6 15 or 16 years old	96871	24.3
	7 17 years old or older	18178	4.6
	Total	398559	100.0
Missing	System	3641	
Total		402199	

**Q38 During the past 30 days, on how many days did you have at least one drink of alcohol?**

		Frequency	Valid Percent
Valid	1 0 days	214920	57.1
	2 1 or 2 days	77446	20.6
	3 3 to 5 days	42848	11.4
	4 6 to 9 days	24229	6.4
	5 10 to 19 days	14099	3.7
	6 20 to 29 days	683	.2
	7 All 30 days	2195	.6
	Total	376421	100.0
Missing	System	25778	
Total		402199	

**Q39 During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?**

		Frequency	Valid Percent
Valid	1 0 days	302539	76.3
	2 1 day	30966	7.8
	3 2 days	23323	5.9
	4 3 to 5 days	25066	6.3
	5 6 to 9 days	10171	2.6
	6 10 to 19 days	2442	.6
	7 20 or more days	1898	.5
	Total	396405	100.0
Missing	System	5794	
Total		402199	

**Q40 During the past 30 days, how did you usually get the alcohol you drank?**

		Frequency	Valid Percent
Valid	1 Did not drink in past 30 days	213923	56.4
	2 Bought in store	9967	2.6
	3 Bought in restaurant	2668	.7
	4 Bought at public event	1587	.4
	5 I gave someone money to buy	57597	15.2
	6 Someone gave it to me	54848	14.5
	7 Took from store/family	13891	3.7
	8 I got it some other way	24697	6.5
	Total	379178	100.0
Missing	System	23021	
Total		402199	

**Q41 During your life, how many times have you used marijuana?**

		Frequency	Valid Percent
Valid	1 0 times	248397	63.1
	2 1 or 2 times	31868	8.1
	3 3 to 9 times	29954	7.6
	4 10 to 19 times	15911	4.0
	5 20 to 39 times	16316	4.1
	6 40 to 99 times	15986	4.1
	7 100 or more times	35215	8.9
	Total	393647	100.0
Missing	System	8552	
Total		402199	

**Q42 How old were you when you tried marijuana for the first time?**

		Frequency	Valid Percent
Valid	1 Never tried marijuana	248630	63.0
	2 8 years old or younger	3191	.8
	3 9 or 10 years old	1657	.4
	4 11 or 12 years old	12066	3.1
	5 13 or 14 years old	47359	12.0
	6 15 or 16 years old	65528	16.6
	7 17 years old or older	16433	4.2
	Total	394864	100.0
Missing	System	7336	
Total		402199	

**Q43 During the past 30 days, how many times did you use marijuana?**

		Frequency	Valid Percent
Valid	1 0 times	312660	78.9
	2 1 or 2 times	29497	7.4
	3 3 to 9 times	20708	5.2
	4 10 to 19 times	10250	2.6
	5 20 to 39 times	9866	2.5
	6 40 or more times	13209	3.3
	Total	396189	100.0
Missing	System	6010	
Total		402199	

**Q44 During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?**

		Frequency	Valid Percent
Valid	1 0 times	383884	95.6
	2 1 or 2 times	7207	1.8
	3 3 to 9 times	4105	1.0
	4 10 to 19 times	2638	.7
	5 20 to 39 times	1460	.4
	6 40 or more times	2260	.6
	Total	401555	100.0
Missing	System	645	
Total		402199	

**Q45 During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?**

		Frequency	Valid Percent
Valid	1 0 times	361553	90.1
	2 1 or 2 times	19734	4.9
	3 3 to 9 times	11014	2.7
	4 10 to 19 times	4818	1.2
	5 20 to 39 times	1874	.5
	6 40 or more times	2360	.6
	Total	401353	100.0
Missing	System	846	
Total		402199	

**Q46 During your life, how many times have you used heroin (also called smack, junk, or China White)?**

		Frequency	Valid Percent
Valid	1 0 times	391706	98.4
	2 1 or 2 times	2373	.6
	3 3 to 9 times	882	.2
	4 10 to 19 times	343	.1
	5 20 to 39 times	560	.1
	6 40 or more times	2169	.5
	Total	398033	100.0
Missing	System	4166	
Total		402199	

**Q47 During your life, how many times have you used methamphetamines (also called speed, crystal, crank, or ice)?**

		Frequency	Valid Percent
Valid	1 0 times	390206	97.3
	2 1 or 2 times	5053	1.3
	3 3 to 9 times	2700	.7
	4 10 to 19 times	909	.2
	5 20 to 39 times	833	.2
	6 40 or more times	1433	.4
	Total	401135	100.0
Missing	System	1064	
Total		402199	

**Q48 During your life, how many times have you used ecstasy (also called MDMA)?**

		Frequency	Valid Percent
Valid	1 0 times	372110	92.9
	2 1 or 2 times	14592	3.6
	3 3 to 9 times	8044	2.0
	4 10 to 19 times	1736	.4
	5 20 to 39 times	1805	.5
	6 40 or more times	2325	.6
	Total	400611	100.0
Missing	System	1588	
Total		402199	

**Q49 During your life, how many times have you taken steroid pills or shots without a doctor's prescription?**

		Frequency	Valid Percent
Valid	1 0 times	390786	97.7
	2 1 or 2 times	4499	1.1
	3 3 to 9 times	1076	.3
	4 10 to 19 times	918	.2
	5 20 to 39 times	611	.2
	6 40 or more times	2236	.6
	Total	400126	100.0
Missing	System	2074	
Total		402199	

**Q50 During your life, how many times have you used a needle to inject any illegal drug into your body?**

		Frequency	Valid Percent
Valid	1 0 times	391741	97.7
	2 1 times	5642	1.4
	3 2 or more times	3509	.9
	Total	400892	100.0
Missing	System	1308	
Total		402199	

**Q51 During the past 12 months, has anyone offered, sold, or given you an illegal drug on school property?**

		Frequency	Valid Percent
Valid	1 Yes	109131	27.3
	2 No	290184	72.7
	Total	399315	100.0
Missing	System	2884	
Total		402199	

**Q52 During your life, how many times have you taken a prescription drug (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription?**

		Frequency	Valid Percent
Valid	1 0 times	339023	84.9
	2 1 or 2 times	26163	6.5
	3 3 to 9 times	16286	4.1
	4 10 to 19 times	6702	1.7
	5 20 to 39 times	4929	1.2
	6 40 or more times	6405	1.6
	Total	399509	100.0
Missing	System	2691	
Total		402199	

**Q53 During your life, how many times have you taken over-the-counter drugs to get high?**

		Frequency	Valid Percent
Valid	1 0 times	368006	91.7
	2 1 or 2 times	14781	3.7
	3 3 to 9 times	9295	2.3
	4 10 to 19 times	5432	1.4
	5 20 to 39 times	1665	.4
	6 40 or more times	2274	.6
	Total	401452	100.0
Missing	System	747	
Total		402199	

**Q54 How much do you think people risk harming themselves (physically or in other ways) if they smoke one or more packs of cigarettes a day?**

		Frequency	Valid Percent
Valid	1 No risk	17993	4.5
	2 Slight risk	25655	6.4
	3 Moderate risk	80831	20.2
	4 Great risk	275462	68.9
	Total	399941	100.0
Missing	System	2259	
Total		402199	

**Q55 How much do you think people risk harming themselves (physically or in other ways) if they have one or two drinks of alcohol (beer, wine, or liquor) nearly every day?**

		Frequency	Valid Percent
Valid	1 No risk	32818	8.2
	2 Slight risk	119313	29.9
	3 Moderate risk	130656	32.8
	4 Great risk	115667	29.0
	Total	398455	100.0
Missing	System	3745	
Total		402199	

**Q56 How much do you think people risk harming themselves (physically or in other ways) if they smoke marijuana regularly?**

		Frequency	Valid Percent
Valid	1 No risk	67303	16.8
	2 Slight risk	87777	22.0
	3 Moderate risk	101668	25.4
	4 Great risk	143099	35.8
	Total	399846	100.0
Missing	System	2353	
Total		402199	

**Q57 How wrong do your parents feel it would be for you to smoke cigarettes?**

		Frequency	Valid Percent
Valid	1 Very wrong	302995	75.7
	2 Wrong	58594	14.6
	3 A little bit wrong	22967	5.7
	4 Not wrong at all	6622	1.7
	5 Not sure	9137	2.3
	Total	400315	100.0
Missing	System	1884	
Total		402199	

**Q58 How wrong do your parents feel it would be for you to drink beer, wine or liquor at least once or twice a month?**

		Frequency	Valid Percent
Valid	1 Very wrong	159224	39.9
	2 Wrong	87143	21.9
	3 A little bit wrong	90783	22.8
	4 Not wrong at all	46318	11.6
	5 Not sure	15225	3.8
	Total	398692	100.0
Missing	System	3507	
Total		402199	

**Q59 How wrong do your parents feel it would be for you to smoke marijuana?**

		Frequency	Valid Percent
Valid	1 Very wrong	309851	77.3
	2 Wrong	45715	11.4
	3 A little bit wrong	24120	6.0
	4 Not wrong at all	9922	2.5
	5 Not sure	11492	2.9
	Total	401100	100.0
Missing	System	1099	
Total		402199	

**Q60 Have you ever had sexual intercourse?**

		Frequency	Valid Percent
Valid	1 Yes	164958	44.6
	2 No	205298	55.4
	Total	370256	100.0
Missing	System	31943	
Total		402199	

**Q61 How old were you when you had sexual intercourse for the first time?**

		Frequency	Valid Percent
Valid	1 Never had sex	204490	55.3
	2 11 years old or younger	9741	2.6
	3 12 years old	9182	2.5
	4 13 years old	15016	4.1
	5 14 years old	34989	9.5
	6 15 years old	42429	11.5
	7 16 years old	35434	9.6
	8 17 years old or older	18434	5.0
	Total	369714	100.0
Missing	System	32485	
Total		402199	

**Q62 During your life, with how many people have you had sexual intercourse?**

		Frequency	Valid Percent
Valid	1 Never had sex	205229	55.5
	2 1 person	64328	17.4
	3 2 people	27736	7.5
	4 3 people	20980	5.7
	5 4 people	12538	3.4
	6 5 people	9774	2.6
	7 6 or more people	29239	7.9
	Total	369824	100.0
Missing	System	32376	
Total		402199	

**Q63 During the past 3 months, with how many people did you have sexual intercourse?**

		Frequency	Valid Percent
Valid	1 Never had sex	205053	55.4
	2 None during past 3 months	45910	12.4
	3 1 person	89492	24.2
	4 2 people	15851	4.3
	5 3 people	6229	1.7
	6 4 people	2142	.6
	7 5 people	1387	.4
	8 6 or more people	3915	1.1
	Total	369979	100.0
Missing	System	32220	
Total		402199	

**Q64 Did you drink alcohol or use drugs before you had sexual intercourse the last time?**

		Frequency	Valid Percent
Valid	1 Never had sex	203926	55.7
	2 Yes	34159	9.3
	3 No	128303	35.0
	Total	366387	100.0
Missing	System	35812	
Total		402199	

**Q65 The last time you had sexual intercourse, did you or your partner use a condom?**

		Frequency	Valid Percent
Valid	1 Never had sex	205229	56.1
	2 Yes	106093	29.0
	3 No	54722	14.9
	Total	366044	100.0
Missing	System	36155	
Total		402199	

**Q66 The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy?**

		Frequency	Valid Percent
Valid	1 Never had sex	205229	56.1
	2 No method was used	23364	6.4
	3 Birth control pills	26125	7.1
	4 Condoms	87611	23.9
	5 Depo-Provera	2804	.8
	6 Withdrawal	14863	4.1
	7 Some other method	3210	.9
	8 Not sure	2871	.8
	Total	366077	100.0
Missing	System	36122	
Total		402199	

**Q67 How many times have you been pregnant or gotten someone pregnant?**

		Frequency	Valid Percent
Valid	1 0 times	369638	92.8
	2 1 time	15796	4.0
	3 2 or more times	5644	1.4
	4 Not sure	7142	1.8
	Total	398221	100.0
Missing	System	3979	
Total		402199	

**Q68 Have you ever been tested for a sexually transmitted disease (STD) such as genital herpes, gonorrhea, chlamydia, syphilis, or genital warts?**

		Frequency	Valid Percent
Valid	1 Yes	50810	12.7
	2 No	324026	81.2
	3 Not sure	24202	6.1
	Total	399038	100.0
Missing	System	3162	
Total		402199	

**Q69 Have you ever been tested for HIV, the virus that causes AIDS?**

		Frequency	Valid Percent
Valid	1 Yes	41399	10.4
	2 No	330640	83.0
	3 Not sure	26245	6.6
	Total	398284	100.0
Missing	System	3916	
Total		402199	

**Q70 How do you describe your weight?**

		Frequency	Valid Percent
Valid	1 Very underweight	7090	1.8
	2 Slightly underweight	57750	14.5
	3 About the right weight	217104	54.3
	4 Slightly overweight	101934	25.5
	5 Very overweight	15654	3.9
	Total	399533	100.0
Missing	System	2666	
Total		402199	

**Q71 Which of the following are you trying to do about your weight?**

		Frequency	Valid Percent
Valid	1 Lose weight	189722	47.4
	2 Gain weight	75046	18.8
	3 Stay the same weight	72185	18.1
	4 I am not trying to do anything about my weight	62929	15.7
	Total	399882	100.0
Missing	System	2318	
Total		402199	

**Q72 During the past 7 days, how many times did you drink 100% fruit juices such as orange juice, apple juice, or grape juice? (Do not count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks.)**

		Frequency	Valid Percent
Valid	1 Did not drink fruit juice	65928	16.5
	2 1 to 3 times	159614	39.9
	3 4 to 6 times	65281	16.3
	4 1 time per day	40641	10.2
	5 2 times per day	33523	8.4
	6 3 times per day	15857	4.0
	7 4 or more times per day	18721	4.7
	Total	399564	100.0
Missing	System	2635	
Total		402199	

**Q73 During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)**

		Frequency	Valid Percent
Valid	1 Did not eat fruit	49150	12.4
	2 1 to 3 times	148313	37.4
	3 4 to 6 times	86254	21.8
	4 1 time per day	44687	11.3
	5 2 times per day	37509	9.5
	6 3 times per day	14522	3.7
	7 4 or more times per day	15653	4.0
	Total	396087	100.0
Missing	System	6112	
Total		402199	



**Q74 During the past 7 days, how many times did you eat green salad?**

		Frequency	Valid Percent
Valid	1 Did not eat green salad	135512	33.9
	2 1 to 3 times	167900	42.0
	3 4 to 6 times	49814	12.5
	4 1 time per day	34183	8.6
	5 2 times per day	6134	1.5
	6 3 times per day	1857	.5
	7 4 or more times per day	4383	1.1
	Total	399782	100.0
Missing	System	2417	
Total		402199	

**Q75 During the past 7 days, how many times did you eat potatoes? (Do not count french fries, fried potatoes, or potato chips.)**

		Frequency	Valid Percent
Valid	1 Did not eat potatoes	122616	30.7
	2 1 to 3 times	208242	52.2
	3 4 to 6 times	45673	11.4
	4 1 time per day	16093	4.0
	5 2 times per day	3992	1.0
	6 3 times per day	697	.2
	7 4 or more times per day	1917	.5
	Total	399229	100.0
Missing	System	2970	
Total		402199	

**Q76 During the past 7 days, how many times did you eat carrots?**

		Frequency	Valid Percent
Valid	1 Did not eat carrots	209722	52.8
	2 1 to 3 times	140119	35.3
	3 4 to 6 times	28222	7.1
	4 1 time per day	12311	3.1
	5 2 times per day	4096	1.0
	6 3 times per day	1610	.4
	7 4 or more times per day	1404	.4
	Total	397484	100.0
Missing	System	4715	
Total		402199	

**Q77 During the past 7 days, how many times did you eat other vegetables? (Do not count green salad, potatoes, or carrots.)**

		Frequency	Valid Percent
Valid	1 Did not eat other vegetables	60496	15.1
	2 1 to 3 times	146094	36.6
	3 4 to 6 times	99083	24.8
	4 1 time per day	51447	12.9
	5 2 times per day	25826	6.5
	6 3 times per day	9508	2.4
	7 4 or more times per day	7187	1.8
	Total	399641	100.0
Missing	System	2558	
Total		402199	

**Q78 During the past 7 days, how many times did you drink a can, bottle, or glass of soda or pop, such as Coke, Pepsi, or Sprite? (Do not include diet soda or diet pop.)**

		Frequency	Valid Percent
Valid	1 Did not drink soda or pop	112756	28.2
	2 1 to 3 times	145209	36.3
	3 4 to 6 times	67562	16.9
	4 1 time per day	26504	6.6
	5 2 times per day	23720	5.9
	6 3 times per day	10463	2.6
	7 4 or more times per day	13276	3.3
	Total	399490	100.0
Missing	System	2710	
Total		402199	

**Q79 During the past 7 days, how many glasses of milk did you drink? (Include the milk you drank in a glass or cup, from a carton, or with cereal. Count the half pint of milk served at school as equal to one glass.)**

		Frequency	Valid Percent
Valid	1 Did not drink milk	83112	21.0
	2 1 to 3 glasses	106821	27.0
	3 4 to 6 glasses	65733	16.6
	4 1 glass per day	60323	15.3
	5 2 glasses per day	48381	12.2
	6 3 glasses per day	20535	5.2
	7 4 or more glasses per day	10518	2.7
	Total	395423	100.0
Missing	System	6776	
Total		402199	

**Q80 During the past 7 days, on how many days did you eat breakfast?**

		Frequency	Valid Percent
Valid	1 0 days	57039	14.3
	2 1 day	30447	7.6
	3 2 days	45443	11.4
	4 3 days	34516	8.6
	5 4 days	28891	7.2
	6 5 days	30346	7.6
	7 6 days	27224	6.8
	8 7 days	145409	36.4
	Total	399315	100.0
Missing	System	2884	
Total		402199	

**Q81 During the past 7 days, on how many days did you and your parents or guardians eat dinner together?**

		Frequency	Valid Percent
Valid	1 0 days	65099	16.4
	2 1 day	32594	8.2
	3 2 days	32530	8.2
	4 3 days	36263	9.1
	5 4 days	40128	10.1
	6 5 days	54069	13.6
	7 6 days	35776	9.0
	8 7 days	100727	25.4
	Total	397186	100.0
Missing	System	5013	
Total		402199	

**Q82 During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spent in any kind of physical activity that increased your heart rate and made you breathe hard some of the time.)**

		Frequency	Valid Percent
Valid	1 0 days	44792	11.3
	2 1 day	30958	7.8
	3 2 days	42478	10.7
	4 3 days	38396	9.7
	5 4 days	42176	10.6
	6 5 days	51609	13.0
	7 6 days	35090	8.9
	8 7 days	110862	28.0
	Total	396360	100.0
Missing	System	5840	
Total		402199	

**Q83 On how many of the past 7 days did you exercise or participate in physical activity for at least 20 minutes that made you sweat and breathe hard, such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activities?**

		Frequency	Valid Percent
Valid	1 0 days	45211	11.4
	2 1 day	35882	9.0
	3 2 days	40764	10.3
	4 3 days	47838	12.0
	5 4 days	42780	10.8
	6 5 days	53148	13.4
	7 6 days	31493	7.9
	8 7 days	100095	25.2
	Total	397212	100.0
Missing	System	4988	
Total		402199	

**Q84 On how many of the past 7 did you do exercises to strengthen or tone your muscles, such as push-ups, sit-ups, or weight lifting?**

		Frequency	Valid Percent
Valid	1 0 days	88952	22.5
	2 1 day	44424	11.2
	3 2 days	51480	13.0
	4 3 days	52251	13.2
	5 4 days	44473	11.2
	6 5 days	42064	10.6
	7 6 days	20223	5.1
	8 7 days	51822	13.1
	Total	395689	100.0
Missing	System	6510	
Total		402199	

**Q85 On an average school day, how many hours do you watch TV?**

		Frequency	Valid Percent
Valid	1 No TV on average school day	43711	11.1
	2 Less than 1 hour per day	65885	16.7
	3 1 hour per day	65131	16.5
	4 2 hours per day	89432	22.7
	5 3 hours per day	68324	17.4
	6 4 hours per day	31370	8.0
	7 5 or more hours per day	29920	7.6
	Total	393774	100.0
Missing	System	8425	
Total		402199	

**Q86 On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Include activities such as Xbox, PlayStation, Nintendo DS, iPod touch, Facebook, and the Internet.)**

		Frequency	Valid Percent
Valid	1 No playing video/computer game	42873	10.8
	2 Less than 1 hour per day	69441	17.6
	3 1 hour per day	68389	17.3
	4 2 hours per day	66962	16.9
	5 3 hours per day	61559	15.6
	6 4 hours per day	37915	9.6
	7 5 or more hours per day	48080	12.2
	Total	395219	100.0
Missing	System	6980	
Total		402199	

**Q87 In an average week when you are in school, on how many days do you go to physical education (PE) classes?**

		Frequency	Valid Percent
Valid	1 0 days	52213	13.3
	2 1 day	7902	2.0
	3 2 days	12775	3.3
	4 3 days	26824	6.8
	5 4 days	76091	19.4
	6 5 days	217043	55.2
	7 6 days	0	.0
	8 7 days	0	.0
	Total	392848	100.0
Missing	System	9352	
Total		402199	

**Q88 How do you usually get to school?**

		Frequency	Valid Percent
Valid	1 In a car or other vehicle driven by yourself or someone else	187426	47.8
	2 In a school bus	140871	35.9
	3 By walking	45335	11.6
	4 By riding a bicycle	2126	.5
	5 On a public bus or train	12391	3.2
	6 On a skateboard, scooter, or roller blades	3506	.9
	7 Some other way	774	.2
	Total	392429	100.0
Missing	System	9770	
Total		402199	

## STUDY FUNDING

Funding for the survey was provided by the New Jersey Department of Education (NJDOE) through a cooperative agreement with the Centers for Disease Control and Prevention #5U87DP001263; by the U.S. Department of Education under Title IV, Part A of No Child Left Behind Act; and by the New Jersey Department of Human Services (NJ DHS), Division of Mental Health and Addiction Services.

The Bloustein Center for Survey Research (BCSR) at the Edward J. Bloustein School of Planning and Public Policy, Rutgers, The State University of New Jersey, administered the survey, analyzed the findings, and prepared this summary report. The interpretation of data, conclusions, and recommendations expressed in the report are those of the authors and may or may not represent the views of the NJDOE or the NJ DHS. The summary report and detailed report can be downloaded from the website of the NJDOE and reproduced without restriction.

Comments concerning the survey and this report may be directed to the New Jersey Department of Education through the **Contact Us** button at the bottom of every page on the NJDOE website.

Reports on the survey can be downloaded at  
[www.nj.gov/njded/students/yrbs/index.html](http://www.nj.gov/njded/students/yrbs/index.html)

More information about the CDC survey and tools for comparing results from various locations can be found at  
[www.cdc.gov/HealthyYouth/yrbs/index.htm](http://www.cdc.gov/HealthyYouth/yrbs/index.htm)

### Special requests for data should be directed to

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