2009 New Jersey Student Health Survey
New Jersey Department of Education
Division of Student Services | Office of Educational Support Services

STUDY FUNDING

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; the U.S. Department of Education Elementary and Secondary Education Act, as amended, (Title IV, Part A of No Child Left Behind Act) Safe and Drug-Free Schools and Communities grant awarded to the New Jersey Department of Education; and by the New Jersey Department of Health and Senior Services Comprehensive Tobacco Control Program.

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 NJDOE or NJDHSS. The summary report and detailed report can be downloaded from the Web site of the New Jersey Department of Education 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 Web site.

Reports on the survey can be downloaded at 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/nccdphp/dash/yrbs

Special requests for data should be directed to
New Jersey Department of Education
Division of Student Services
Office of Educational Support Services
PO Box 500, Trenton, NJ 08625-0500
(609)292-5935

http://www.state.nj.us/education
BACKGROUND

This brochure summarizes the findings of the 2009 New Jersey Student Health Survey of high school students. The New Jersey Department of Education (NJDOE) has conducted this survey among public high school students every other year since 1993 with funding from the Centers for Disease Control and Prevention (CDC). The findings help parents, schools, and youth-serving agencies to maintain awareness of current trends among teens and provide feedback on the impact of large-scale programs to influence teen behavior. The results are made available through printed and Web-based reports. This brochure and the full report can be downloaded at www.state.nj.us/education/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/nccdphp/dash/yrbs.

In 2009, the survey was funded by the NJDOE and the New Jersey Department of Health and Senior Services and administered by the Blountstein Center for Survey Research (BCSR) at Rutgers University. The instrument used for the 2009 New Jersey Student Health Survey drew questions largely from the core Youth Risk Behavior Survey (YRBS) instrument developed by the CDC. The 95-item high school survey asked students to answer questions about their health-related behavior in six areas that are highly related to preventable illness and injury among young people: unintentional injuries (safety) and violence; use of tobacco; use of alcohol and drugs; sexual behaviors; dietary behaviors; and physical activity.

USE OF COMPARISON STATISTICS

In presenting the results for the high school survey, this brochure makes comparisons between the proportions of students answering the same question in 1995, 2001, 2005, and 2009 - the four years when the results of the sample were “weighted,” or generalized, to the population of all public high school students in the state. Neither statistical significance nor practical significance is stated or implied in these comparisons.

Percentages for the population of high school students cited are, of course, estimates based upon the sample statistics. The statements are intended to juxtapose the percentages for the four years and characterize their relationship to one another. The presentation does not apply tests of statistical significance in order to compare the data from these years. Due to the large sample sizes (2,799 in 1995, 2,142 in 2001, 1,495 in 2005, and 1,756 in 2009), small differences, such as two to three percent, could be statistically significant but, because they are small, they may lack practical significance. Therefore, in tracking changes across years of the survey, we have chosen not to apply tests of significance because such an approach would lead some in the audience to interpret these small changes in behavior as major behavioral changes and thereby draw conclusions that may not be justified.

In a similar vein, failing to characterize a difference (e.g., as an increase or decrease) because it failed to reach a level indicating statistical significance would eliminate a description intended to provide the reader with context for the data.

SAMPLE AND PARTICIPATION

The survey was completed by 1,756 students in 34 New Jersey public high schools in the spring of 2009. Survey procedures were designed to protect the privacy of all students by allowing for anonymous and voluntary participation.

Documented parental consent was required. Overall, 87% of all sampled schools agreed to participate in the study (34 out of 39) and 76% of all sampled students supplied parental consent and completed the survey (1,756 of the 2,303), yielding an overall response rate of 66% (87% X 76%=66%). 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 2009 and, therefore, the CDC weighting procedure was used on the 2009 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 of the sample to the overall New Jersey student population.

The weighted results represent all regular public school students in grades 9 through 12 in New Jersey and permit comparison of findings related to priority health-risk behaviors across points in time. The other years in which a weightable sample was obtained for the New Jersey Student Health Survey were in 1995, 2001, and 2005. (The results from 2007 did not reach the 60% threshold and were weighted by BCSR. These results are not referenced in this report.) The weighted demographic characteristics of the sample are included in Table 1.

With or without indicators of statistical significance, it is incumbent upon the reader to exercise judgment as to the real or practical significance of any differences cited. CDC analysis of the statistical significance of selected New Jersey and other state survey data are provided at the CDC Web site referenced earlier. Unlike the CDC analysis, the analysis in this summary report and the full technical report of New Jersey’s Student Health Survey places an emphasis on the practical significance of the findings.

In addition, it should be noted that while survey results from four different years are compared in this document, only the surveys in 2005 and 2009 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.
Overall, high school students in 2009 reported more positive behavior with regard to vehicle safety than in previous years (Figure 1). Rates of drinking and driving and riding with a driver who had been drinking dropped slightly in 2009 to an all-time low of 8% and 23% respectively. In 2005, 10% of students reported drinking and driving within the previous 30 days while this figure was 13% in 2001 and 11% in 1995. The percentage of students who rode with a driver who had been drinking during the previous 30 days was lower in 2009 (23%) than in previous survey years (28%-30%).

Overall, the use of seat belts among high school students remained consistent after increasing from 1995 and 2001 levels. In 2009, only 8% of students either never or rarely wore a seat belt when riding as a passenger. This figure was similar to 2005 and lower than 1995 (24%) and 2001 (15%).

### Table 1: Profile of Students in the 2009 New Jersey Student Health Survey

<table>
<thead>
<tr>
<th>Sex</th>
<th>Sample (n)</th>
<th>Sample %</th>
<th>Weighted %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>980</td>
<td>55.9%</td>
<td>49.7%</td>
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<tr>
<td>Male</td>
<td>772</td>
<td>44.1%</td>
<td>50.3%</td>
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</table>

<table>
<thead>
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<th>Sample %</th>
<th>Weighted %</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 Years Old or Younger</td>
<td>4</td>
<td>0.2%</td>
<td>0.3%</td>
</tr>
<tr>
<td>14 Years Old</td>
<td>160</td>
<td>9.1%</td>
<td>10.1%</td>
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<tr>
<td>15 Years Old</td>
<td>394</td>
<td>22.4%</td>
<td>23.3%</td>
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<tr>
<td>16 Years Old</td>
<td>477</td>
<td>27.2%</td>
<td>25.4%</td>
</tr>
<tr>
<td>17 Years Old</td>
<td>488</td>
<td>27.8%</td>
<td>25.8%</td>
</tr>
<tr>
<td>18 Years Old or Older</td>
<td>233</td>
<td>13.3%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade</th>
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<th>Weighted %</th>
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<td>9th</td>
<td>409</td>
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<td>10th</td>
<td>391</td>
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<td>25.3%</td>
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<td>11th</td>
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<td>24.5%</td>
</tr>
<tr>
<td>12th</td>
<td>434</td>
<td>26.0%</td>
<td>23.6%</td>
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</table>

<table>
<thead>
<tr>
<th>Race /Ethnicity</th>
<th>Sample (n)</th>
<th>Sample %</th>
<th>Weighted %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>210</td>
<td>12.8%</td>
<td>16.5%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>260</td>
<td>15.8%</td>
<td>17.3%</td>
</tr>
<tr>
<td>White</td>
<td>1010</td>
<td>61.4%</td>
<td>58.2%</td>
</tr>
<tr>
<td>All other races</td>
<td>166</td>
<td>10.0%</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

### VEHICLE SAFETY

**VEHICLE SAFETY**

Overall, high school students in 2009 reported more positive behavior with regard to vehicle safety than in previous years (Figure 1). Rates of drinking and driving and riding with a driver who had been drinking dropped slightly in 2009 to an all-time low of 8% and 23% respectively. In 2005, 10% of students reported drinking and driving within the previous 30 days while this figure was 13% in 2001 and 11% in 1995. The percentage of students who rode with a driver who had been drinking during the previous 30 days was lower in 2009 (23%) than in previous survey years (28%-30%).

Overall, the use of seat belts among high school students remained consistent after increasing from 1995 and 2001 levels. In 2009, only 8% of students either never or rarely wore a seat belt when riding as a passenger. This figure was similar to 2005 and lower than 1995 (24%) and 2001 (15%).
DRUG USE

Marijuana and Cocaine Use

The percentage of New Jersey high school students who reported both lifetime and recent marijuana use was almost identical in 2009 and 2005 (Figure 2). In 2009, 35% of students reported lifetime use of marijuana, which was slightly less than the 2005 results (36%) and lower than the high of 41% reached in 2001. One in five students (20%) in 2009 used marijuana in the prior month (recent marijuana use), which was the same as 2005, and less than the one quarter of students who reported using it in 2001 (25%) and 1995 (24%).

The percentage of students reporting lifetime cocaine use was fairly consistent across survey years, with 6% of students in 2009 and 2005 having used cocaine at least once in their lifetime compared with 9% in 2001 and 7% in 1995. Recent cocaine use was not measured in 2009, but had dropped to 2% of students in 2005 from 4% in 2001 and 1995.

Other Lifetime Drug Use

Overall, lifetime use of other illegal drugs has declined since 1995, leveling off in 2005 to 2009 (Figure 3). The use of inhalants has decreased substantially over time – from 20% in 1995 to 10% in more recent survey years. Methamphetamine use sustained a low of 2% in 2009, down from 8% in 2001. The use of heroin was similar in 2009 (2%) as in 2005 (1%), but down from 4% in 2001. The percentage of students who used steroid pills or shots without a doctor’s prescription was at 3% in 2009, similar to its range in prior surveys (2% to 5%). The proportion of students who reported needle use for an illegal drug has ranged from 1% (2005) to 3% (2009 and 2001).

Lifetime Use of One or More Substances

Ten lifetime substance use questions were included in the study – marijuana, crack/cocaine, heroin, methamphetamines, hallucinogens, ecstasy, other club drugs, steroids, inhalants and injection drug use. Students were divided into three groups: those who had not used drugs of any kind, those who had used only one drug, and those who had used multiple drugs. Overall, the majority of students (59%) had not used any drugs in their lifetime, similar to 60% in 2005. Slightly more than one-fourth (28%) had used only one drug and the remaining 14% had used more than one drug.

Offered, Sold, or Given Drugs at School

The percentage of students who were offered, sold, or given an illegal drug on school property during the previous year remained stable between 2005 (33%) and 2009 (32%) which is a slight increase from the low of 29% seen in 2001.
**ALCOHOL USE**

Reporting of lifetime alcohol consumption declined in 2009 from levels in past surveys (Figure 4). This proportion was the lowest of all four years at 75%, compared to a high of 83% in 2001.

Similarly, recent alcohol use (past 30 day use) also declined. Less than half of students in 2009 (45%) reported having one or more drinks of alcohol within the prior 30 days (recent alcohol use), as compared to 47% in 2005, 56% in 2001, and 51% in 1995.

While lifetime rates and recent alcohol consumption rates decreased, recent binge drinking rates remained consistent with the 2005 rates. A little more than a quarter of students in 2009 (27%) had engaged in recent binge drinking – having five or more drinks on the same occasion. This rate is similar to 2005 (27%) but lower than the previous years (33-31%).

Although the 2009 survey did not ask about alcohol use on school property, the use of alcohol on school property has remained relatively consistent across survey years (4%-6%).

**TOBACCO USE**

Overall, reports of lifetime and recent cigarette use among New Jersey high school students have steadily declined over the years and reached a new low in 2009 (Figure 5). In the current year, 43% of students had tried cigarette smoking, even one or two puffs, as compared to 49% in 2005, 63% in 2001, and 70% in 1995.

Recent cigarette use showed a similar pattern of decline. The number of students reporting cigarette use during the previous month reached a low of 17% in 2009. This figure was 20% in 2005, 29% in 2001, and 36% in 1995.

A similar percentage of students in 2009 (4%) reported being daily smokers as in 2005 (4%), down from over 10% in 1995 and 2001.

Only 3% of students smoked heavily - that is, they smoked six or more cigarettes each day they smoked during the previous month. This figure is equal to 2005 and down from 9% in 2001 and 13% in 1995.
HEALTH CONDITIONS

In 2009, New Jersey high school students were asked if they had ever been diagnosed with asthma (Figure 6). Nearly one in four students (24%) had been diagnosed with asthma by a doctor or nurse, an increase from one in five students (20%) in 2005. The frequency of asthma diagnoses did not vary by age (23%-25%), race/ethnicity (24%-25%) or gender (23%-25%).

Three fourths (75%) of New Jersey high school students had been to a dentist for a check-up, exam, cleaning or other dental work within the past 12 months. Another 12% of students had been for a dental check-up, but it was between 1 and 2 years ago. More than one in ten students had either been to a dentist more than two years ago (5%), had never been to a dentist (2%), or were not sure when they had last been to the dentist (5%).

STUDENT EATING PATTERNS

One in five New Jersey high school students (20%) indicated that they drank soda/popl one or more times per day in the past seven days.

Only four in ten (44%) New Jersey high school students ate dinner with parents/guardians on five or more of the past seven days, including 21% who ate together on all seven days. Two in ten students (19%) ate with parents/guardians on none of the past seven days.

Overall, 12% of New Jersey high school students reported they had gone hungry sometimes, most of the time, or always in the past 30 days because there was not enough food in their home (Figure 7).

DIETARY BEHAVIORS

The percentage of New Jersey high school students who ate five or more servings of fruits and vegetables per day during the previous seven days has declined since 1995 (Figure 8). This includes servings of fruit, 100% fruit juice, potatoes (if not fried), salad, carrots, and other vegetables. This figure increased slightly to 20% in 2009 from a low of 17% in 2005, but remains below the high of 26% measured in 2001. Only 9% of students reported drinking three or more glasses of milk per day during the past week compared to 11% in 2005 and 12% in 2001.

BODY MASS INDEX (BMI)

Students’ self-reported height and weight was used to calculate a body mass index (BMI). BMI is calculated as weight in kilograms divided by height in meters squared. A BMI that is greater than the 95th percentile of the index population for gender and age is considered obese while a child in the 85th to 95th percentile is considered overweight. All others who are at the 85th percentile or below are considered normal. Overall, about one quarter of New Jersey high school students have reported having a BMI outside the normal range in the past 3 survey administrations - 2009 (25%), 2005 (27%), and 2001 (25%). In 2009, more males (14%) than females (7%) were classified as obese while a similar percentage of males and females were classified as overweight (15% vs. 14%, respectively) (Figure 9). It is recognized that factors such as muscle mass contribute to an individual’s weight.

FRUIT, VEGETABLE, AND MILK CONSUMPTION

Students who ate five or more servings of fruits and vegetables per day had a 17% lower percentage of obesity than those who ate less than this amount. Similarly, students who drank three or more glasses of milk per day had an 11% lower percentage of obesity than those who drank less.
SEXUAL BEHAVIOR

The percentage of New Jersey high school students who had sexual intercourse in their lifetime slightly increased to 46% in 2009 from a low of 44% in 2005 (Figure 10). Males (49%) were more likely than females (44%) to have had sexual intercourse. The likelihood of students having sexual intercourse increased with age. About three-fourths of students 18 years old or older (74%) had ever had intercourse, as compared to about half of 16-17 year olds (50%) and about one-fourth (28%) of those 15 years old and younger.

Over the years, about one-third of students reported having had intercourse during the past three months (33%-36%). This percentage (34%) showed little change in 2009 from the low of 33% in 2005.

The proportion of students who reported having multiple sexual partners (4 or more) in their lifetime remained consistent. This percentage (13%) showed little change in 2009 from a low of 12% in 2005, down from a high of 17% in 2001. Meanwhile, a low of 4% of students had sex before the age of 13 which was comparable to prior survey years (5% to 8%).

The percentage of New Jersey high school students who reported ever becoming pregnant, or causing a pregnancy, was 5% in 2009 compared to a low of 4% in 2005.

HIV/AIDS Education, HIV and STD Testing

The percentage of students who had been taught about AIDS or HIV infection in school dropped to 92% in 2009, from a high of 96% in 2005.

Slightly more than one in eight high school students had ever been tested for HIV (12%) and sexually transmitted diseases (STD) (15%) in 2009.

SEXUALLY ACTIVE STUDENTS

The following section pertains to only those students who had sex in the past three months (34% of students). In 2009, more than a third of sexually active students (35%) reported not using a condom the last time they had sexual intercourse, as compared to 29% in 2005. The 2009 figure is similar to proportions shown in 2001 (36%) and 1995 (37%) (Figure 11).

Students were also asked which birth control method they or their partner used the last time they had sexual intercourse. Among sexually active students, nearly three in four either used condoms (53%) or birth control pills (20%); this is slightly down from nearly eight in 10 who used either condoms (66%) or birth control pills (13%) in 2005. The 2009 figures more closely match the contraception patterns of 2001. In addition, more sexually active students in 2009 (10%) than in 2005 (6%) reported that they used no form of birth control when they last had sex. About one in 10 students used withdrawal (13%) the last time they had sex, which is similar to the rates in 2005 and 2001.

Among sexually active students, nearly one-fifth (19%) reported that they used drugs or alcohol prior to their last sexual encounter. This is a decline from the rates in 2001 (27%) and 1995 (30%) and slightly less than the 2005 findings (22%). Boys (25%) were more likely than girls (14%) to have used alcohol or drugs prior to their last sexual encounter.

SEXUALLY ACTIVE STUDENTS

% of all students who

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>No Condom Use</td>
<td>37%</td>
<td>36%</td>
<td>29%</td>
</tr>
<tr>
<td>Used Alcohol / Drugs prior to Sex</td>
<td>30%</td>
<td>27%</td>
<td>22%</td>
</tr>
<tr>
<td>No Birth Control*</td>
<td>11%</td>
<td>16%</td>
<td>7%</td>
</tr>
</tbody>
</table>

*No birth control refers to those who indicated they used no listed method among condom, pill, Depo-provera, withdrawal, some other method or not sure.
BULLYING

About one in five students were bullied on school property in the past 12 months (21%) and/or electronically bullied (17%) through either emails, chat rooms, instant messages, Web sites, or text messaging (Figure 12).

PHYSICAL VIOLENCE

Rates of violence on school property in 2009 were largely consistent with those in 2005 (Figure 13). The proportion of students who had been threatened or injured on school grounds during the previous year was 7%, comparable to 2005 (8%). In 2009, the percentage of high school students who did not attend at least one out of the last 30 days of school because they felt unsafe going to or from school was 5%, comparable to its low of 4% in 2005.

Past year fighting in general has steadily declined since 1995. In 2009, 28% indicated they had been involved in a fight in the past 12 months, down from 31% in 2005 and 36% in 1995. Seven percent of students were threatened or injured as a result of gang activity in 2009.

About one student in twelve (8%) in 2009 reported that they had ever been forced to have sex.

WEAPONS POSSESSION

The percentage of New Jersey high school students who had carried a weapon during the past 30 days decreased steadily across survey years. In 2009, one in 10 students (10%) reported that they carried a weapon, similar to 2005 (11%) and down from 13% in 2001 and a high of 18% in 1995. Likewise, only 2% of students carried a gun in the past 30 days in 2009 which is identical to results found in 2005.

The proportion of students who carried a weapon on school property during the previous month in 2009 was identical to the low reached in 2005 (3%) (Figure 14).

TV, INTERNET AND VIDEO GAMES

Fewer New Jersey high school students watched three or more hours of television on an average school day in 2009 (33%) than in previous years (36% in 2005; 41% in 2001). In 2009, about three in ten (29%) students also reported playing video games or using the computer for something that was not homework for three or more hours on an average school day.

It is unclear whether the decline in the number of hours students watch TV is offset by these other activities. After combining student responses to these activities, 63% watched TV, played video games or were on the Internet for 3 or more hours per school day including 33% who did so for 5 or more hours (Figure 15).

PHYSICAL ACTIVITY

Overall, students reported higher participation in both aerobic exercise and physical activity. Three-fourths (75%) of New Jersey high school students reported engaging in vigorous aerobic exercise for 20 or more minutes on three or more days per week. This is the highest rate of all the survey years which were consistently between 66% and 70% (Figure 16). In 2009, 42% of students had been physically active for at least 60 minutes per day in the previous week, as compared to 34% of students in 2005. Six in ten students (62%) played on at least one sports team in the past 12 months in 2009, the same percentage as participated in sports in 2005 but greater than the level seen in 1995 (56%). The percentage of students who reported exercising for more than 20 minutes during PE class remained unchanged between 2005 and 2009 (70%). These levels represent an increase from the level seen in 1995 (60%).

TOTAL HOURS OF ELECTRONIC VIEWING ON AVERAGE SCHOOL DAY

<table>
<thead>
<tr>
<th>None (3%)</th>
<th>Less than 1 (5%)</th>
<th>1 to under 3 (30%)</th>
<th>3 to under 5 (29%)</th>
<th>5 or more (33%)</th>
</tr>
</thead>
</table>

FIGURE 15

BULLIED, PAST YEAR

<table>
<thead>
<tr>
<th>None (3%)</th>
<th>Less than 1 (5%)</th>
<th>1 to under 3 (30%)</th>
<th>3 to under 5 (29%)</th>
<th>5 or more (33%)</th>
</tr>
</thead>
</table>

FIGURE 12

VIOLENCE ON SCHOOL PROPERTY

<table>
<thead>
<tr>
<th>None (3%)</th>
<th>Less than 1 (5%)</th>
<th>1 to under 3 (30%)</th>
<th>3 to under 5 (29%)</th>
<th>5 or more (33%)</th>
</tr>
</thead>
</table>

FIGURE 13

WEAPONS POSSESSION, PAST 30 DAYS

<table>
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<th>None (3%)</th>
<th>Less than 1 (5%)</th>
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<th>5 or more (33%)</th>
</tr>
</thead>
</table>

FIGURE 14

TRENDS IN PHYSICAL ACTIVITY

<table>
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<tr>
<th>None (3%)</th>
<th>Less than 1 (5%)</th>
<th>1 to under 3 (30%)</th>
<th>3 to under 5 (29%)</th>
<th>5 or more (33%)</th>
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</thead>
</table>

FIGURE 16