



Vermont Population Health Youth Risk Behavior Survey Behavioral Risk Factor Surveillance System

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Introduction

- This report attempts to look at youth and adult data from both the Vermont Youth Risk Behavior and Behavioral Risk Factor Surveillance System surveys.
 - The Youth Risk Behavior Survey (YRBS) includes two surveys, one of middle and one of high school students.
 - The Behavioral Risk Factor Surveillance System survey is conducted among the non-institutionalized adult population.
 - More detailed information on both surveys can be found on the following pages.
- The YRBS and BRFSS surveys do not always word questions in the same way or even include the same topics.
 - This report focuses on the topics that are included on both surveys.
- If similar topics are included, but asked differently the data for each population are both presented, but on different slides.
 - Separate reports on both surveys can be found:
 - YRBS: <http://healthvermont.gov/research/yrbs.aspx#reports>
 - BRFSS: <http://healthvermont.gov/research/brfss/reports.aspx>

Introduction

Behavioral Risk Factor Surveillance System (BRFSS)

- Since 1990, Vermont, along with the 49 other states and three territories, has participated in the BRFSS with support from the Centers for Disease Control and Prevention (CDC).
- The BRFSS is a telephone survey conducted annually, among adult (18 or older) non-institutionalized residents. While the sample size varies from year to year, Vermont typically surveys between 6,000 and 7,000 adults each year.
- Participants are asked a uniform set of questions and the results are weighted to represent the adult population of Vermont.
 - In 2011, the BRFSS weighting methodology was changed to more accurately represent the adult population, limiting the ability to compare results from 2011 and later with those from previous years. The Vermont Department of Health recommends that these comparisons be made with caution. Differences may be due to the methodological changes, rather than changes in opinion or behavior.
- For Frequently Asked Questions, survey reports, questionnaires, and any other additional information on the Vermont BRFSS, please visit: <http://healthvermont.gov/research/brfss/brfss.aspx>
- Additional information can be found on the CDC website: <http://www.cdc.gov/brfss/>

Introduction

Youth Risk Behavior Survey (YRBS)

- Since 1993, Vermont, along with over 40 other states, has participated in the YRBS with support from the CDC.
- In February of odd years (e.g., 2013, 2015), Vermont conducts the YRBS.
- Prior to 2011, the YRBS surveyed Vermont students in grades 8-12. Beginning In 2011, the methodology was changed to include students in grades 6-12.
 - For all respondents, Vermont now completes two surveys. One for middle school students (grades 6-8) and one for high school students (grades 9-12).
- In 2015, over 21,000 high school students and over 13,000 middle school students participated in the YRBS.
 - The high school response rate was 77% (schools and students)
 - The middle school response rate was 82% (schools and students)
- For Frequently Asked Questions, survey reports, questionnaires, and any other additional information on the Vermont YRBS, please visit: <http://healthvermont.gov/research/yrbs.aspx>
- Additional information can be found on the CDC website: <http://www.cdc.gov/HealthyYouth/yrbs/>

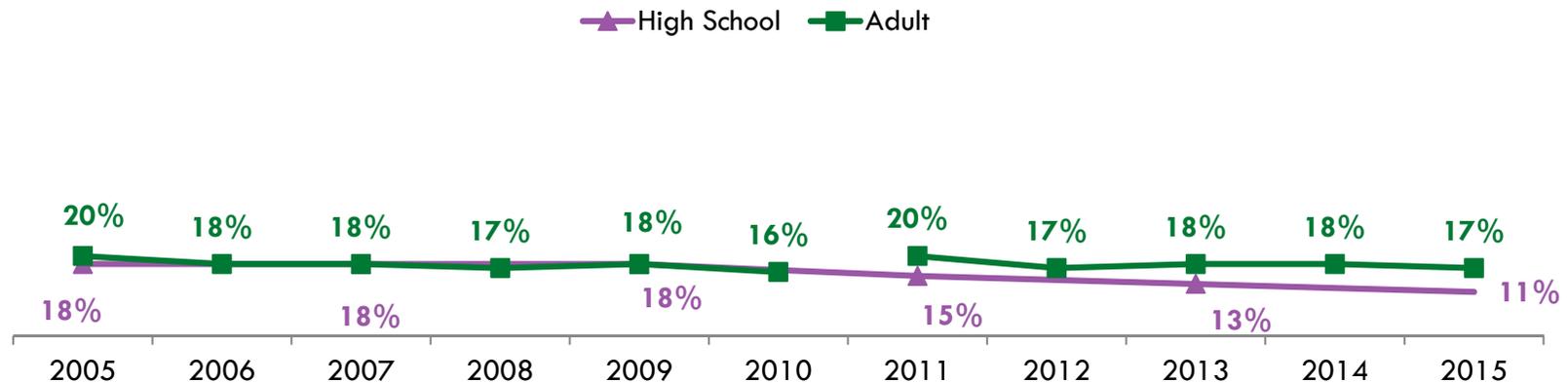


Substance Use

Tobacco Use - Cigarette Smoking*

- In 2015, eleven percent of high school students and seventeen percent of adults were current smokers.
 - Two percent of middle school students reported currently smoking.
- Youth cigarette smoking has decreased significantly in the past decade.
- Smoking prevalence among adults has decreased significantly since 2011.

Percent of students and adults who currently smoke cigarettes



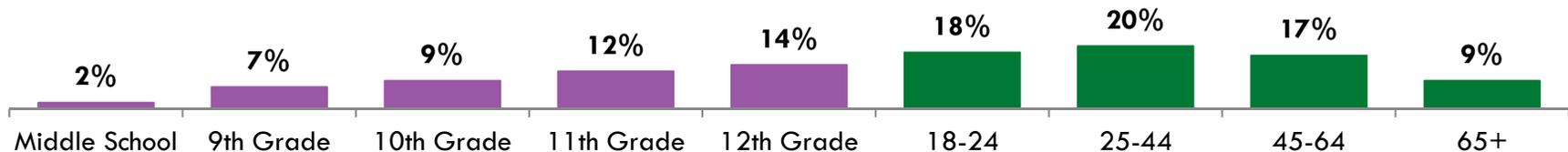
*Youth are defined as a current smoker if they smoked at all in the last 30 days. Adults are defined as current smokers if they have smoked at least 100 cigarettes in their lifetime and currently smoke every day or some days.

Note: adult smoking prevalence data is age adjusted to the U.S. 2000 population.

Tobacco Use - Cigarette Smoking*

- Current smoking increases significantly by grade among high school students.
 - Students in grade 12 are twice as likely to smoke as those in grade 9.
- Smoking prevalence continues to rise into adulthood, increasing among those 18-24 and 25-44, before decreasing among those 45 and older.
 - Adults 65 and older are significantly less likely to report smoking than any other adult age groups.
- High school males are significantly more likely than females to report current smoking (12% vs. 10%).
- Adult men and women report smoking at statistically similar rates (19% vs. 15%).

**Current smoking by grade and age
2015 YRBS and BRFSS**

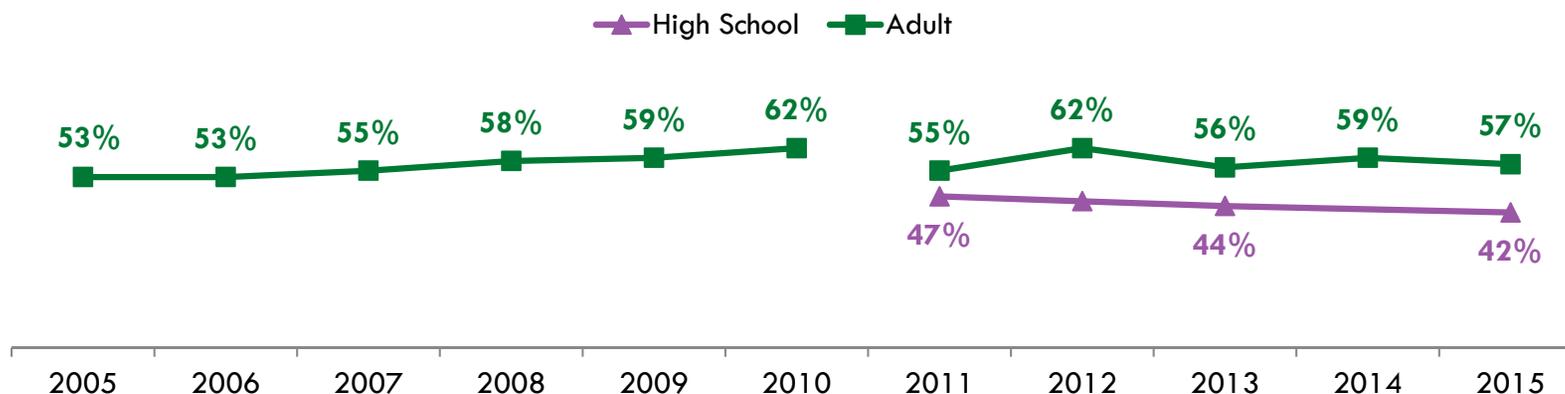


*Youth are defined as a current smoker if they smoked at all in the last 30 days. Adults are defined as current smokers if they have smoked at least 100 cigarettes in their lifetime and currently smoke every day or some days.

Tobacco Use – Quit Attempts

- Fewer than half of high school smokers reported attempting to stop during the previous year. Among adults, 57% said they made a quit attempt.
- Quit attempts among adults remain similar to 2011. Among youth, quit attempts in 2015 were statistically similar to 2013, but were lower than 2011.
 - The question wording for quit attempts on the YRBS previous to 2011 was different and is not comparable.

Percent of student and adult smokers who made a quit attempt in the last year

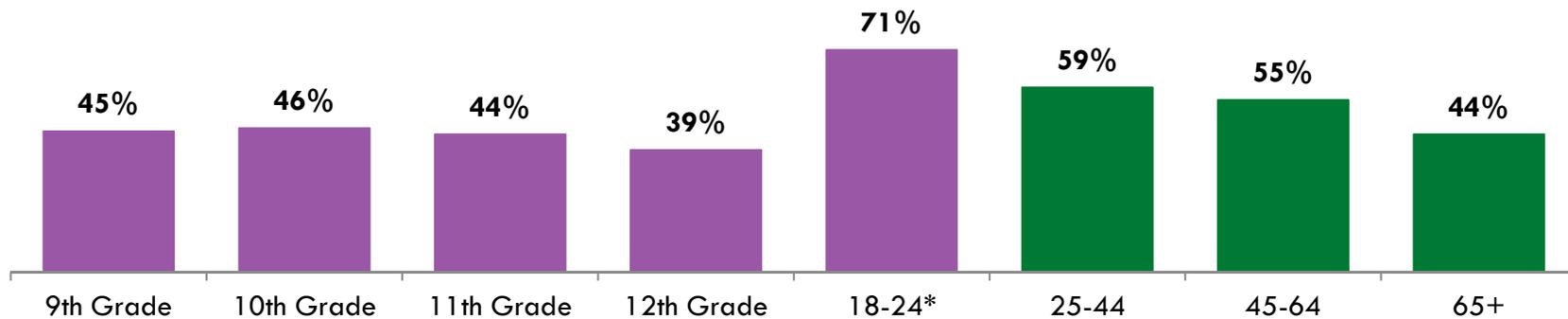


Note: quit attempt data is age adjusted to the U.S. 2000 population.

Tobacco Use – Quit Attempts

- There are no statistically significant differences in quit attempts among youth by grade. Among adults, those 18-24 are significantly more likely than those 65 and older to report making a quit attempt in the last year.
- High school females are more likely to make a quit attempt than males, however this difference is not statistically significant (43% vs. 41%).
- Adult women and men also report trying to stop at statistically similar rates (59% vs. 56%).

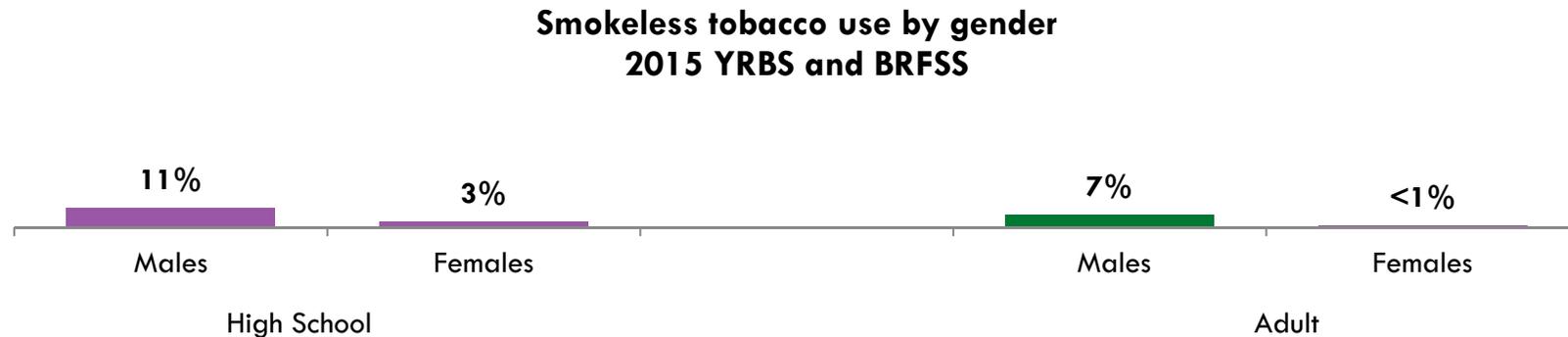
Quit attempts by grade and age
2015 YRBS and BRFSS



Note: quit attempt data is age adjusted to the U.S. 2000 population.

Tobacco Use - Smokeless Tobacco

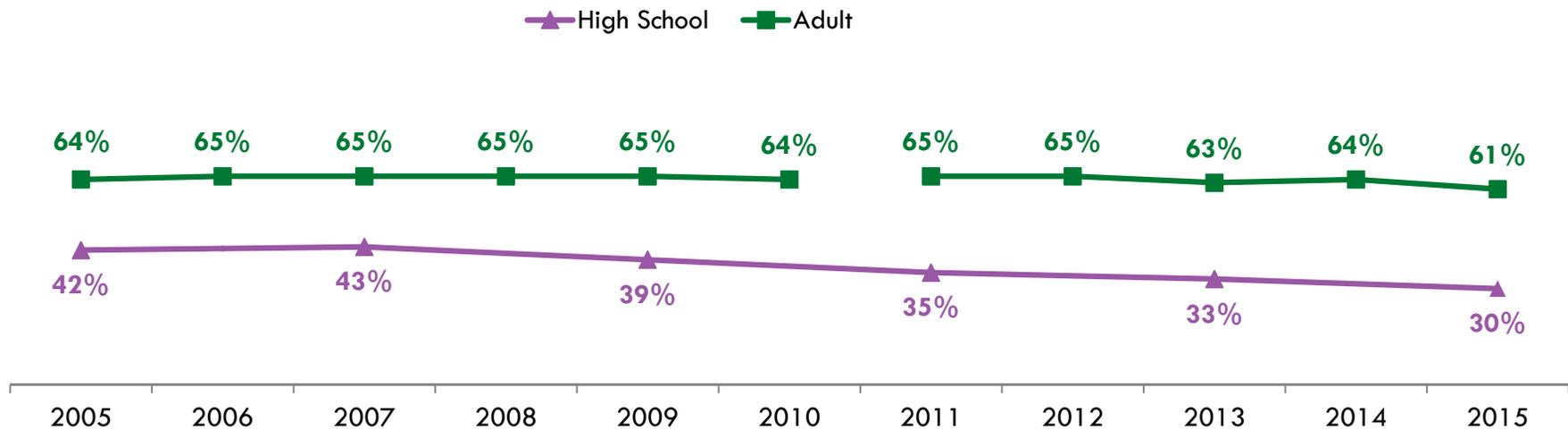
- Seven percent of high school students reported using chew, snuff, or dip in the last 30 days. Four percent of adults said they currently use smokeless tobacco on every day or on some days.
 - Smokeless tobacco use among youth decreased significantly from 8% in 2013 to 7% in 2015. Use among adults remained statistically similar to 2011 (3% vs. 4%).
- Use of smokeless tobacco increases significantly by grade among youth and decreases with age among adults.
 - Students in grades 9 (5%) and 10 (6%) are significantly less likely to report its use compared with those in grades 11 and 12 (8% each).
 - Adults 65 and older are least likely to report smokeless tobacco use (1%), compared to those 18-24 (9%) and 25-44 (5%). Adults 45-64 (2%) are also less likely than those 18-24 to report its use.
- Males, both youth and adults, are significantly more likely than females to use smokeless tobacco.



Alcohol Use - Any

- In 2015, three in ten high school students and six in ten adults drank alcohol in the last month.
 - Six percent of middle school students reported recent alcohol consumption.
- Youth alcohol consumption has decreased significantly since 2005.
- Consumption among adults has decreased significantly since 2011.

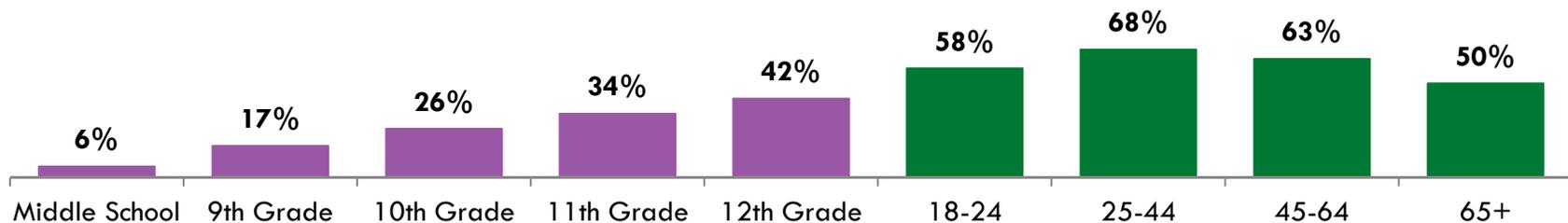
Percent of students and adults who drank any alcohol in the last month



Alcohol Use - Any

- Among youth, alcohol consumption increases significantly by grade.
 - Students in eleventh grade are twice as likely as ninth graders to have had alcohol in the last month. This increases to about two and a half times when compared with twelfth graders.
- Recent drinking of alcohol continues to increase after high school. The highest level is among adults 25-44 where nearly seven in ten (68%) drank in the last month. Alcohol consumption then decreases among those 45-64, and is lowest among those 65 and older.
 - Adults 25-64 reported alcohol consumption at a significantly higher rate than those 65 and older.
- Male and female high school students report consuming any alcohol in the last month at similar rates (30% vs. 29%).
- Adult males are significantly more likely to report recent alcohol consumption than females (65% vs. 56%).

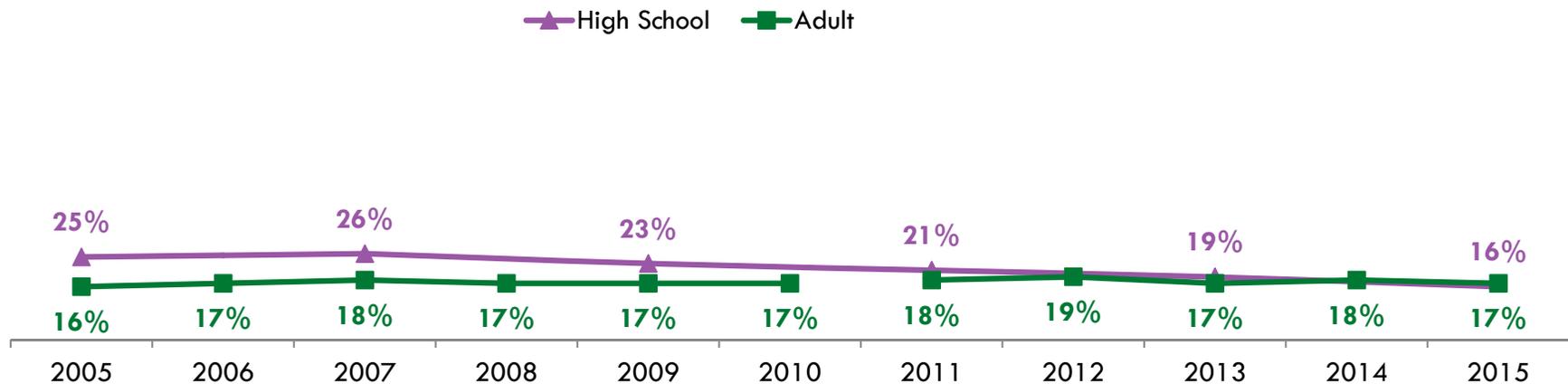
**Any alcohol consumption by grade and age
2015 YRBS and BRFSS**



Alcohol Use – Binge*

- Sixteen percent of high school students and seventeen percent of adults reported binge drinking in 2015.
 - Two percent of middle school students said they binge drank in the last month.
- Binge drinking among high school students has decreased significantly since 2005.
- Among adults, binge drinking has remained similar over time.

Percent of students and adults who binge drank in the last month

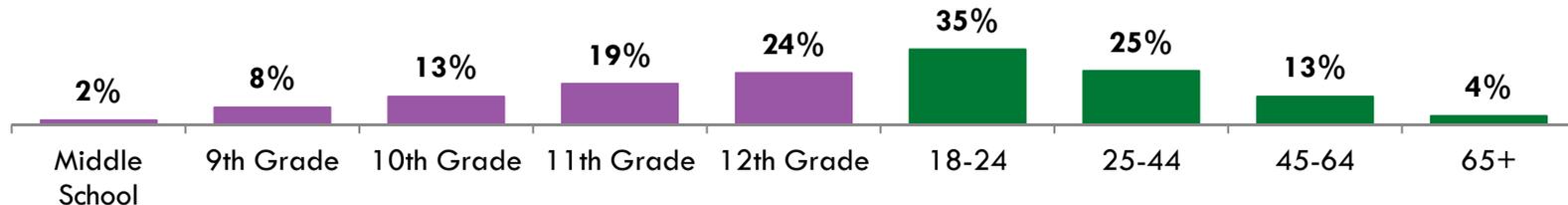


*Binge drinking among youth is defined as five or more drinks in a row. Among adults, binge drinking is defined as five or more drinks on an occasion for men and four or more for women.

Alcohol Use – Binge*

- Among youth, binge drinking increases significantly by grade.
 - Students in twelfth grade are three times as likely as ninth graders and nearly twice as likely as tenth graders to have binge drank in the last month.
- Binge drinking among adults is highest for those 18-24, where about a third participated in the behavior in the last month.
 - All differences by age group, among adults, are statistically significant.
- Males, both youth and adults, are more likely report binge drinking than females.
 - Seventeen percent of male high school students binge drank, compared with 15% of females.
 - Twenty-three percent of male adults recently binge drank, compared with 12% of female adults.

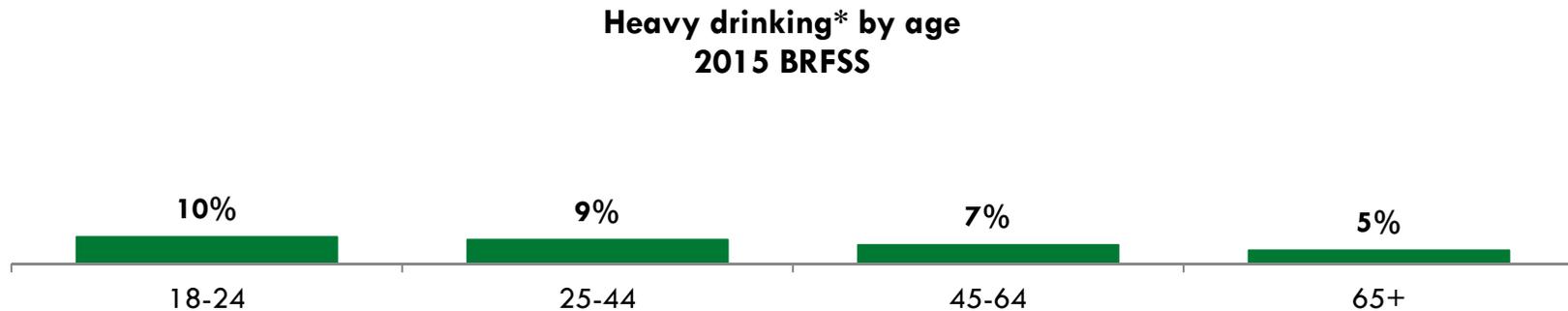
**Binge* drinking by grade and age
2015 YRBS and BRFSS**



*Binge drinking among youth is defined as five or more drinks in a row. Among adults, binge drinking is defined as five or more drinks on an occasion for men and four or more for women.

Alcohol Use – Heavy Drinking (Adults)*

- In 2015, eight percent of adults reported heavy drinking in the last month. This rate has not changed over time.
- Adults 65 and older are the least likely to report heavy drinking in the last month (5%), significantly lower than those 18-24.
- Men and women reported heavy drinking at similar rates (8% vs. 7%).

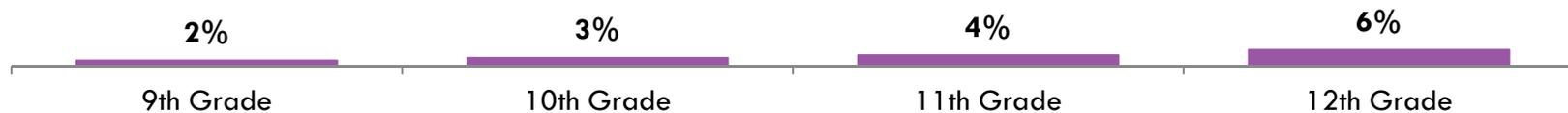


*Heavy drinking is defined as more than two drinks per day for men and more than one drink per day for women.

Alcohol Use – Extreme Binge Drinking (Youth)*

- In 2015, four percent of high school students reported extreme binge drinking in the last month.
 - Extreme binge drinking decreased significantly from 2013 to 2015 (5% vs. 4%); the question was first asked in 2013.
- Extreme binge drinking increased significantly by grade with two percent of ninth graders and six percent of twelfth graders having consumed 10 or more drinks in a row during the previous month.
- Male high school students are two and half times as likely as females to have had 10 plus drinks in the last month (5% vs. 2%).

**Extreme binge drinking* by grade
2015 YRBS**

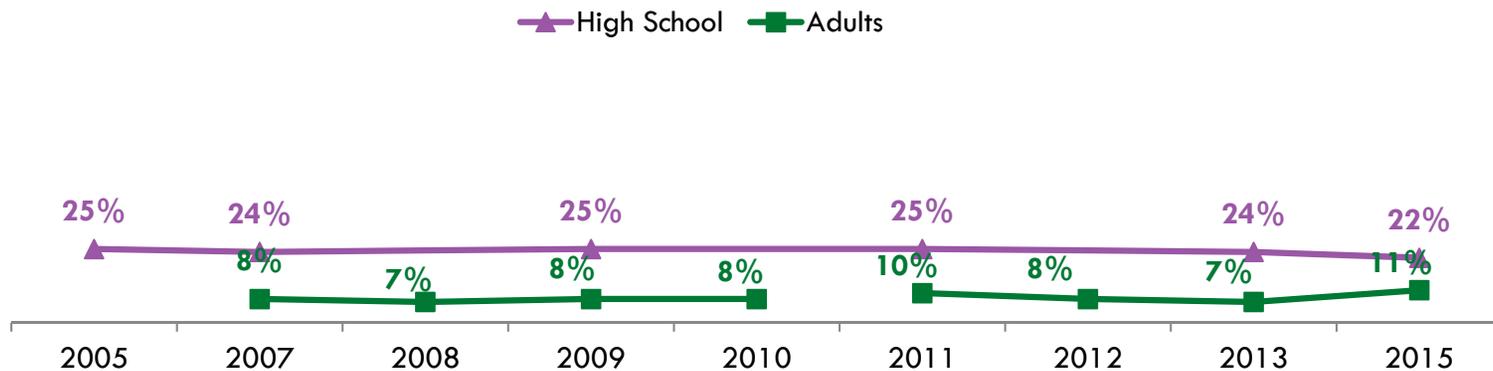


*Extreme binge drinking is defined as 10 or more drinks in a row.

Marijuana Use

- In 2015, more than two in ten (22%) high school students reported using marijuana at least once in the last 30 days. Fewer, about one in ten adults (11%) reported recent marijuana use.
 - Four percent of middle school students said they used marijuana in the last month.
- Marijuana use among high school students has not decreased significantly since 2005.
- Recent marijuana use among adults increased from 2013 to 2015, but remains similar to 2011.

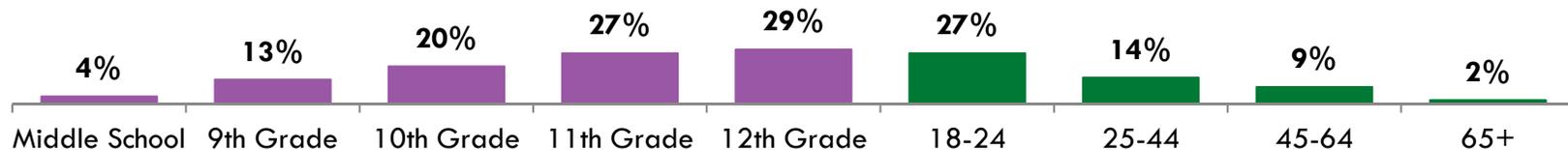
Percent of students and adults who used marijuana in the last month



Marijuana Use

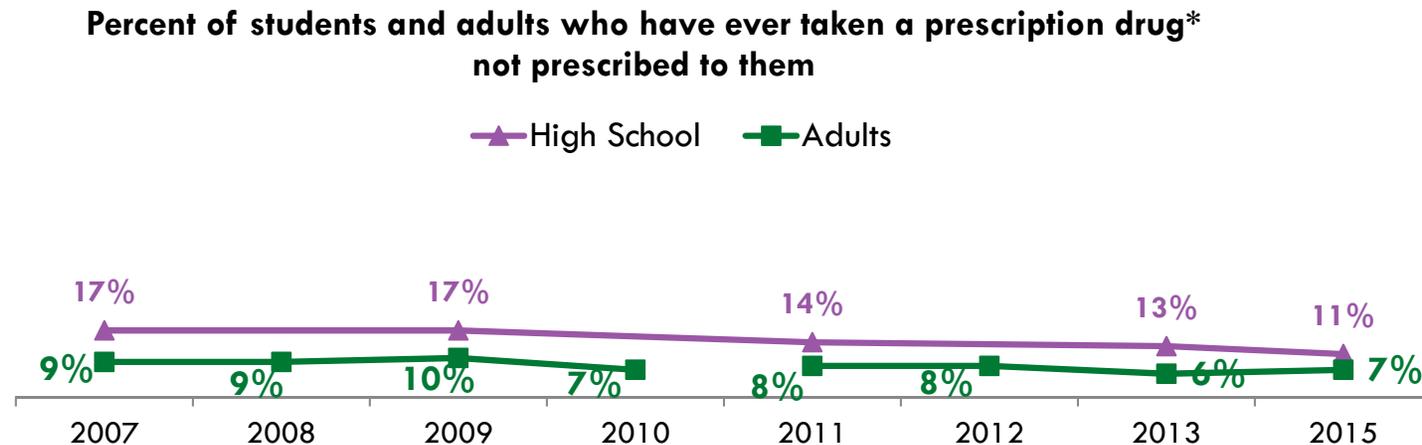
- Among youth, past 30 day use of marijuana increases significantly through eleventh grade.
 - Students in twelfth grade are more than twice as likely as those in ninth grade to have used marijuana in the last 30 days.
- Adult use of marijuana decreases with age.
 - All differences by age group are statistically significant.
- Males are significantly more likely to use marijuana than females, both as high school students and adults.
 - Among high school students, 24% of males and 21% of females used marijuana in the past 30 days.
 - Marijuana was used by 15% of adult males, compared with seven percent of females.

**Marijuana use in last 30 days by grade and age
2015 YRBS and BRFSS**



Prescription Drug Misuse*

- Overall, in 2015, 11% of high school students reported ever taking a prescription pain reliever or stimulant not prescribed to them. Seven percent of adults reported ever taking a prescription drug without a prescription.
 - Three percent of middle school students have ever taken a prescription drug without a doctor's prescription.
- Ever misuse of prescription drugs among youth has significantly declined since 2007, but remains statistically similar for adults.
- More recent misuse (in the last month) of a prescription pain reliever or stimulant was reported by five percent of high school students and one percent of adults in 2015.



*Note: YRBS specifies pain relievers or stimulants. The BRFSS does not specify the type of drug, only that it was prescribed.

Prescription Drug Misuse*

- Lifetime prescription drug misuse among youth increases significantly through eleventh grade.
 - Misuse almost doubles from 9th grade to 12th grade (8% vs. 14%).
- Adult ever misuse is highest among those 18-44. Prescription drug misuse among this age group is statistically higher than that among adults 45-64 and 65 and older. Misuse is also significantly higher among those 45-64, compared with those 65 and older.
- High school aged males and females are as likely to report having misused prescription drugs (12% vs. 11%).
- Adult men are significantly more likely to have misused prescription drugs than females (9% vs. 5%).

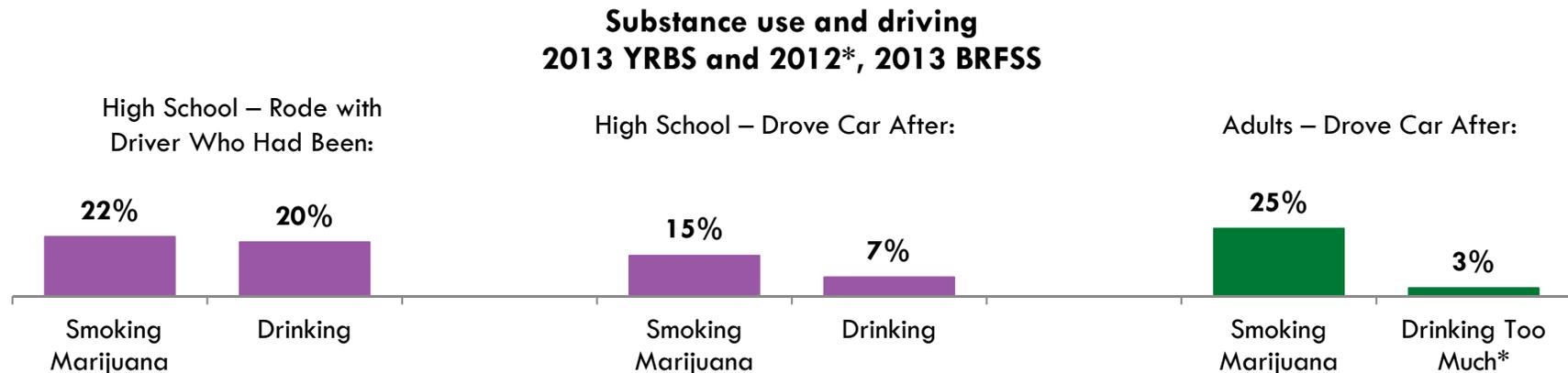
**Prescription Drug Misuse* by Grade and Age
2015 YRBS and BRFSS**



*Note: YRBS specifies pain relievers or stimulants. The BRFSS does not specify the type of drug, only that it was prescribed.

Impaired Driving

- More than two in ten (22%) Vermont high school students report riding with a driver who had been smoking marijuana at least once in the last month. Twenty percent had ridden with a driver who been drinking.
- Fifteen percent of driving high school students drove after using marijuana at least once in the last month. Half as many, seven percent, reported driving after drinking at least once in the past 30 days.
- Among adults, a quarter of those who used marijuana in the last month said they drove after its use at least once. Fewer, three percent, drove in the last month after drinking too much.



*Adult drinking and driving information is from the 2014 BRFSS.

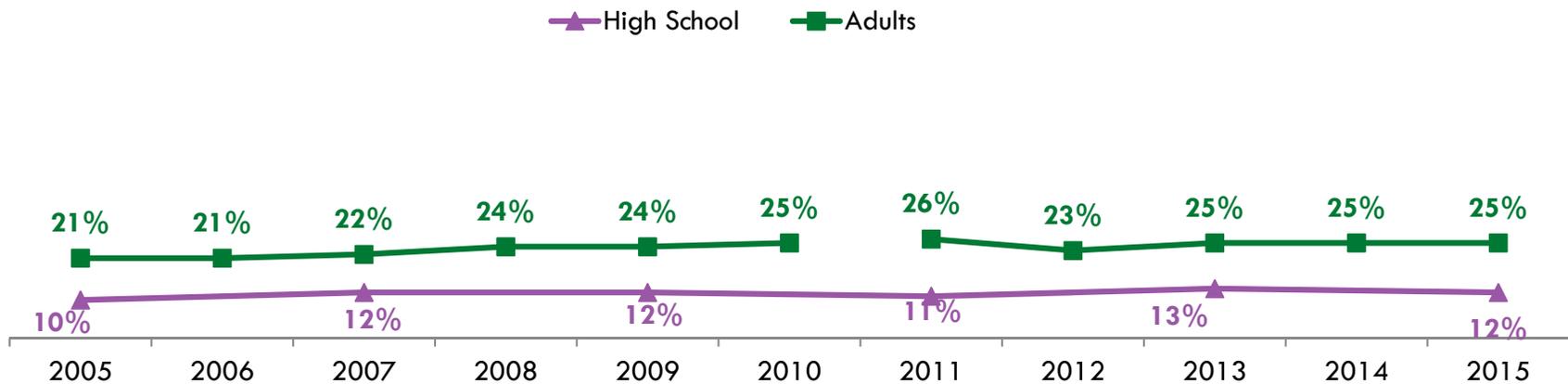


Chronic Conditions

Obesity*

- The percent of high school students who are obese was similar in 2013 and 2015 (13% vs. 12%).
- Among adults[#], obesity prevalence was 25% in 2015, similar to the 25% reported in 2014.
- Obesity among youth has increased significantly during the last decade.

Percent of students and adults[#] who are obese



*Note: Among youth, obesity is defined as BMI in the 95th percentile or above. Among adults, obesity is a BMI of 30 or above.

[#]Adult obesity prevalence is limited to adults ages 20 and older and is age adjusted to the U.S. 2000 population.

Obesity*

- Obesity prevalence among high school students does not vary significantly by age.
- Adults 20-24 are significantly less likely to be obese compared with those ages 25 and older#.
- High school males are significantly more likely than females to be obese (16% vs. 9%), while adult men and women report statistically similar obesity rates (25% vs. 26%).

**Obesity* by grade and age
2015 YRBS and BRFSS**

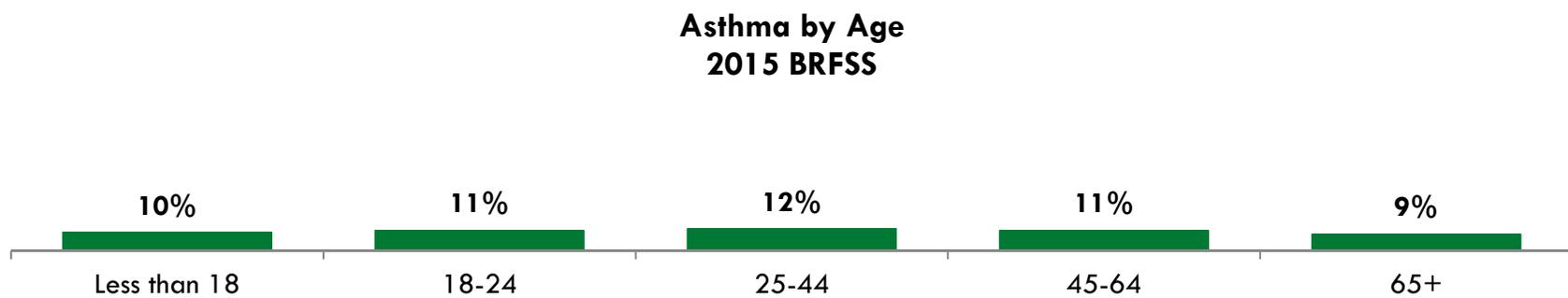


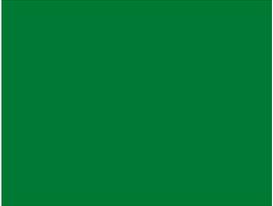
*Note: Among youth, obesity is defined as BMI in the 95th percentile or above. Among adults, obesity is a BMI of 30 or above.

#Adult obesity prevalence is limited to adults ages 20 and older and is age adjusted to the U.S. 2000 population.

Asthma

- One in ten (11%) Vermont adults report having current asthma in 2015.
- Prevalence of asthma among adults is lower among those 65 and older, however this difference is not statistically significant.
- Women are significantly more likely to report having current asthma compared to men (14% vs. 8%).
- Also measured through the BRFSS is youth asthma prevalence. In 2015, 10% of youth (<18) had current asthma.



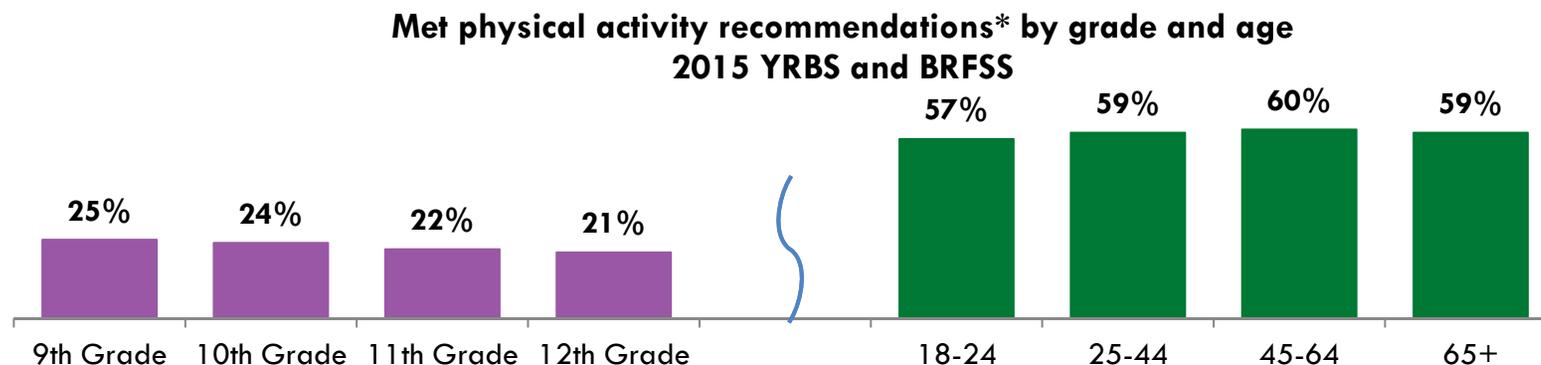


Physical Activity & Nutrition

Vermont Department of Health

Physical Activity Recommendations

- A quarter of high school students reported meeting physical activity recommendations and nearly six in ten (59%) adults reported meeting recommendations in 2015.
 - Thirty-one percent of middle school students met the recommendations.
- Among high school students physical activity decreases with increasing grade. Ninth and tenth graders are more likely than twelfth graders to meet recommendations. Male students are significantly more likely than females to report meeting physical activity recommendations (30% vs. 16%)
- There are no statistically significant differences in meeting physical activity recommendations among adults by age or gender.

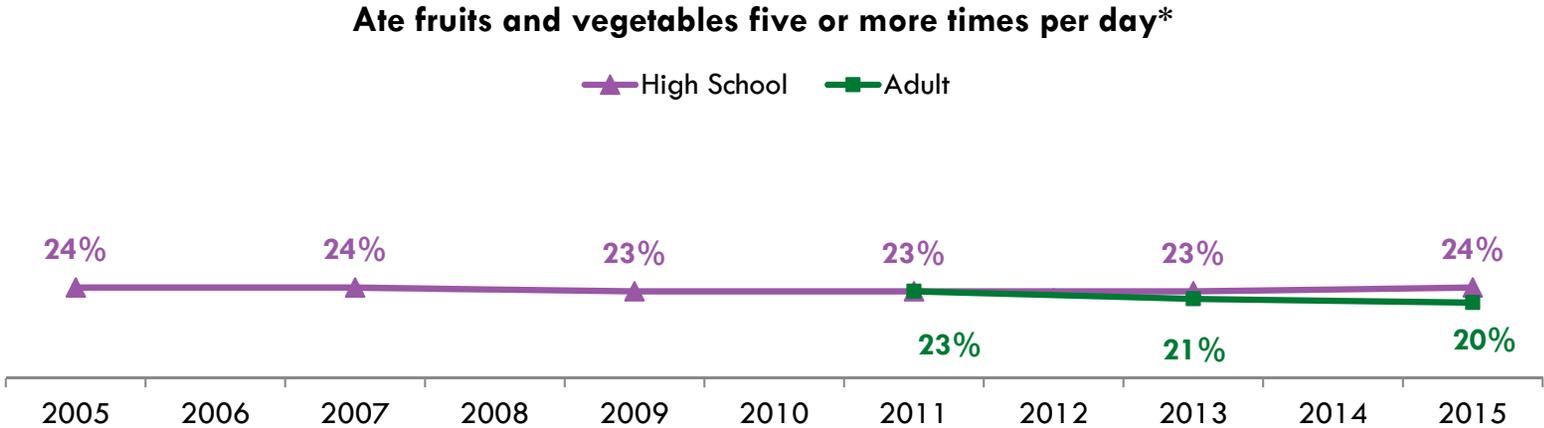


*Physical activity recommendations for youth are defined as 60 minutes of physical activity per day. For adults they are defined as 150 minutes of moderate activity or 75 minutes of vigorous activity per week.

Note: adults physical activity recommendation data is age adjusted to the U.S. 2000 population.

Fruit & Vegetable Consumption*

- In 2015, about a quarter (24%) of high school students said they ate fruits and vegetables at least five times per day, while 20% of adults reported the same.
- Youth consumption of fruits and vegetables in 2015 is similar to 2005.
- Fruit and vegetable consumption among adults decreased significantly from 2011 to 2015 (23% vs. 20%). Due to changes in both the survey methodology and fruit and vegetable consumption questions additional comparisons cannot be made for the adult population.



*Note: youth fruit and vegetable questions refer to consumption in the last week while the adult versions refer to the last month. Adult fruit and vegetable consumption data is age adjusted to the U.S. 2000 population.

Fruit & Vegetable Consumption*

- Consumption of fruits and vegetables five or more times per day does not vary by grade among youth or age among adults.
- Among high school students, 25% of males and 22% of females reported eating fruits and vegetables five or more times per day. This is a statistically significant difference.
- Among adults, however, women are significantly more likely than males to report eating fruits and vegetables five or more times per day (25% vs. 14%).

**Ate fruits and vegetables five or more times per day* by grade and age
2015 YRBS and BRFSS**



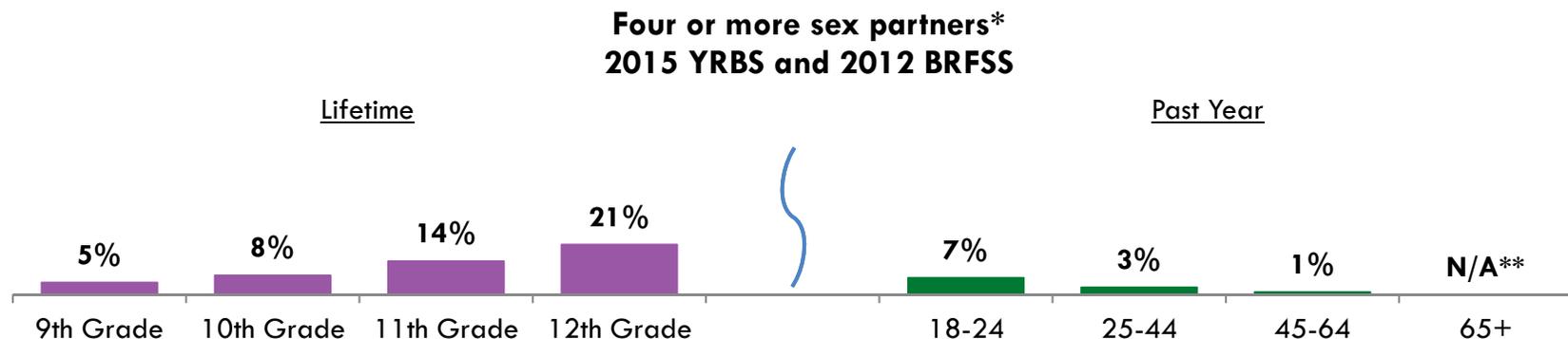
*Note: youth fruit and vegetable questions refer to consumption in the last week while the adult versions refer to the last month. Adult fruit and vegetable consumption data is age adjusted to the U.S. 2000 population.



Sexual Behavior & Condom Use

Sexual Behavior

- In 2015, 10% of high school students reported having four or more sexual partners in their lifetime.
 - The percentage of high school students reporting four or more partners in their lifetime increased significantly with each grade.
 - High school males and females are as likely to report having sexual intercourse with at least four partners in their lifetime (10% vs. 9%).
- Among adults, in 2012, three percent of adults 18-64 said they had at least four sexual partners in the last year.
 - Those 45-64 are significantly less likely than younger adults to report four or more sexual partners in the last year.
 - Men are significantly more likely than women to report at least four sexual partners in the last year (4% vs. 1%).



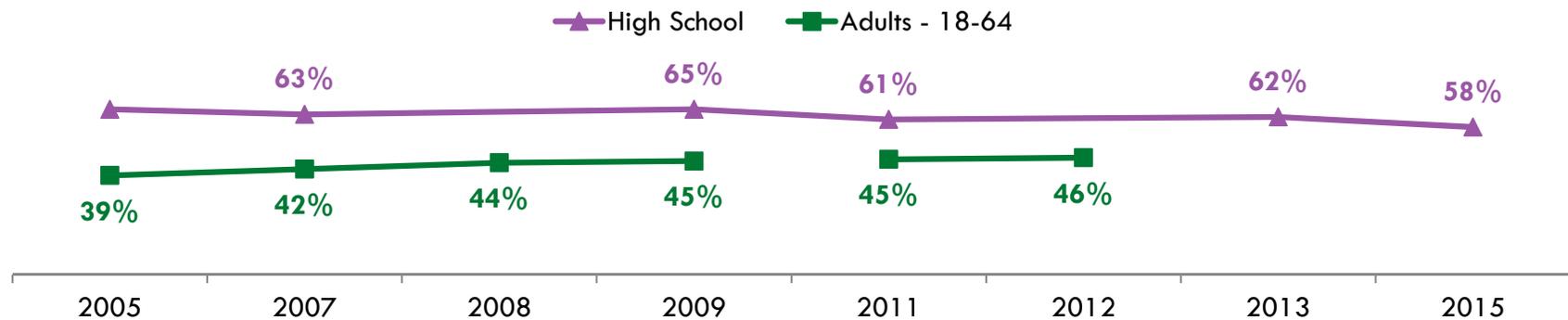
*Note: youth question asks the number of lifetime sexual partners, while the adult question asks about partners in the last year.

**Adults 65 and older were not asked about their sexual behavior.

Condom Use

- Nearly six in ten (58%) sexually active high school students and 46% of adults ages 18-64 reported using a condom during their last sexual experience.
 - Among high school students, condom use decreased significantly from 2005 to 2015, and 2013 to 2015.
 - The proportion of sexually active adults 18-64 who reported using a condom at their last sexual encounter has increased over time, from 39% in 2005 to 46% in 2012.
 - Nearly half (47%) of high school students used a moderately or highly effective contraception method* at most recent intercourse, statistically higher than the 42% reported in 2011.

Percent of sexually active students and adults (18-64) who used a condom at last sexual encounter

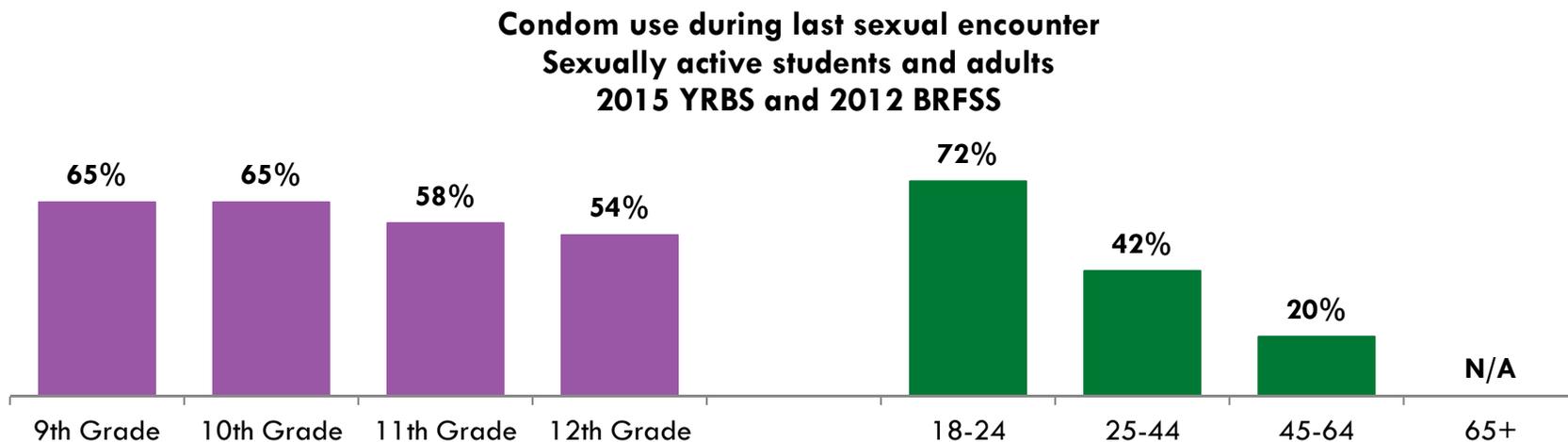


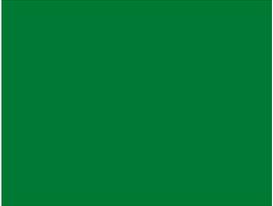
*Moderately and highly effective contraception methods include: birth control pills, shot, IUD, implant, or ring.

Note: Among youth, sexually active is defined as students who had sex in the last three months. Among adults, sexually active is defined as those who are not married and had sex with two or more people overall in the last year or had sex with at least one casual partner.

Condom Use

- Among sexually active high school students, use of condoms decreases with increasing grade level. Similarly, use decreases with increasing age among sexually active adults.
 - Older students, those in grades eleven and twelve, are significantly less likely to report using a condom than those in younger grades.
 - All differences by age among adults are statistically significant.
- Sexually active female students are significantly less likely to report condom use compared with males (55% vs. 62%).
- Among sexually active adults, there is no statistical difference in reported condom use by gender (58% males vs. 50% females).



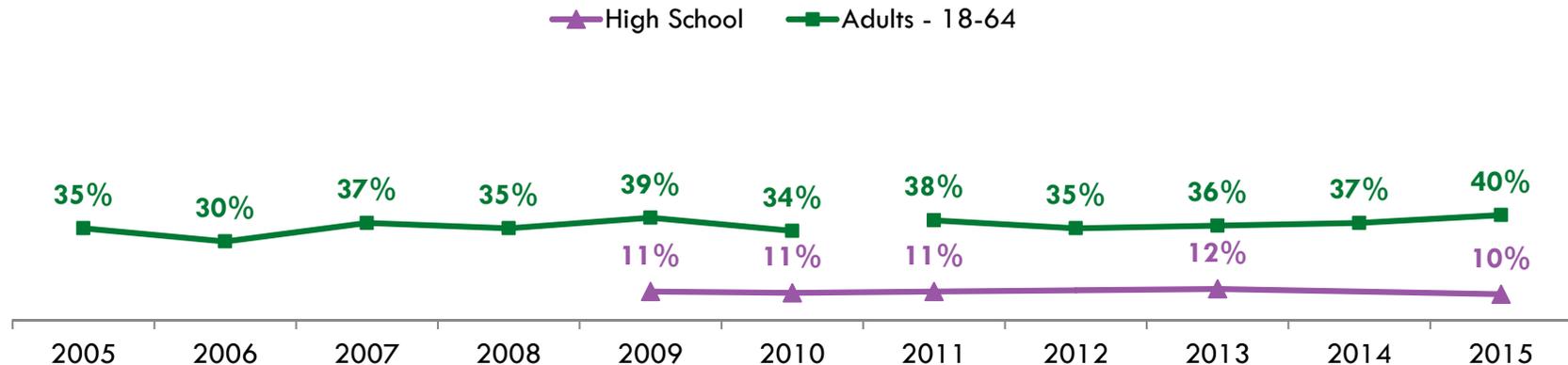


HIV Testing

HIV Testing – Ever*

- In 2015, ten percent of high school students reported they had ever been tested for HIV. Forty percent of adults ages 18-64 said the same.
 - Nine percent of adults 18-64 have been tested for HIV in the last year.
- Among youth, the proportion receiving HIV tests in 2015 was similar to that in 2009, the first year students were asked about receipt of HIV testing.
- Ever tested for HIV rates among adults 18-64, in 2015, were significantly higher compared with both 2014 and 2011.

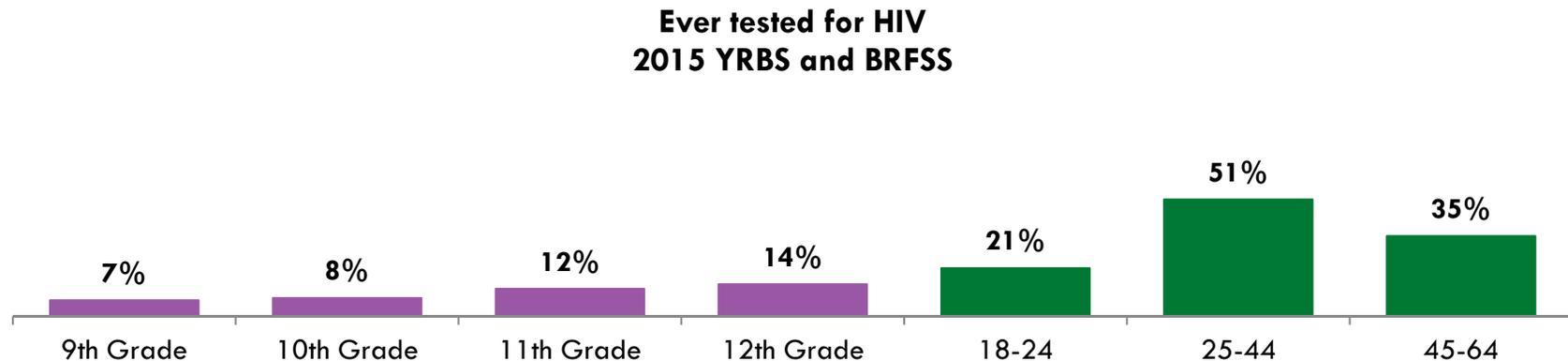
Percent of students and adults who have ever been tested for HIV



*Note: tests done as part of blood donations are not counted.

HIV Testing – Ever*

- Among high school students, testing for HIV increases significantly with each grade level.
- Adults 25-44 are significantly more likely to have ever been tested for HIV than those 18-24 and 45-64.
- Female high school students are more likely to report HIV tests compared with males (11% vs. 9%).
- Female adults 18-64 are as likely as men to have ever been tested for HIV (43% vs. 38%).



*Note: tests done as part of blood donations are not counted.

Thank you



- Contact Information for the YRBS Coordinator:
Kristen Murray, PhD
Kristen.Murray@Vermont.gov
802-763-6337
- Contact information for the BRFSS Coordinator:
Jessie Hammond, MPH
Jessie.Hammond@Vermont.gov
802-863-7663

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