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Youth Risk Behavior Survey

Introduction

The Alexandria Youth Risk Behavior Survey (YRBS), based on the original Youth Risk Behavior Surveillance System (YRBSS) developed by the Centers for Disease Control and Prevention (CDC), is a voluntary, anonymous, self-reported survey administered to adolescents in grades 8, 10, and 12. This survey of Alexandria’s public school youth was a result of the collaboration among a wide range of academic, government, volunteer and non-governmental organizations to improve the health and wellness of adolescents in Alexandria. The goal of the survey is to obtain information on youth behaviors in six risk areas identified as contributing to the leading cause of death and disability among youth in the United States.¹

1) Physical health
2) Behaviors that contribute to unintentional and intentional injuries
3) Alcohol and other drug use
4) Tobacco use
5) Sexual behaviors that contribute to unintended pregnancy or sexually transmitted infections, including HIV
6) Dietary behavior

The survey was conducted in November of 2016 among students in grades 8, 10, and 12. Notable risk behaviors reported among students in grades 8, 10, and 12 are highlighted graphically in this report. Comparable data from Alexandria’s 2011, 2013 (grade 8), and 2014 (grades 10 and 12) YRBS were included where possible; however, methodologies were different in that 2011 YRBS utilized a paper-based survey for data collection, while data for the 2013, 2014, and 2016 surveys were collected electronically.

The attached appendices provide a comprehensive summary of results from the Alexandria YRBS in all three grades surveyed. National estimates from the 2015 CDC National YRBSS were included in the appendices as a reference point, but various methodologies were utilized by states across the nation, which may account for some differences in outcomes.

Methodology

The sampling frame for the 2016 YRBS in Alexandria included all students in grades 8, 10, and 12 attending school at George Washington Middle School, Francis C. Hammond Middle School, Jefferson-Houston School, and T.C. Williams High School. The survey was offered to students in these grades who were present on days selected by each school’s administration.

Eighth grade students completed a 75-question survey in November, 2016. Tenth and twelfth grade students at T.C. Williams High School completed a longer survey of 110 questions in November, 2016. A total of 1,788 students from all three grades attempted the questionnaires.

Parents were notified about the survey one month prior to administration and given the opportunity to opt their children out of participation. Seventeen parents (0.62%) chose this option. Students were able to choose whether or not to take part in the survey, and those who participated could choose not to answer particular questions. The survey was administered electronically via each student’s laptop computer during a 50 minute class period.
Survey Data

Of the 1,788 students who attempted the questionnaires, 66 were not included in the analysis. Reasons for removal include blank or highly incomplete questionnaires, extreme/conflicting responses to questions, or incomplete information on grade level. Removing these questionnaires from analysis avoided inclusion of responses that would place known bias into survey results.

Grade 8
- 26 questionnaires were removed from analysis
- 78% of eighth graders registered for the 2016-2017 school year completed the survey ($n=738$)

Grade 10 and 12
- 40 questionnaires were removed from analysis
- 59% of tenth graders registered for the 2016-2017 school year completed the survey ($n=605$)
- 57% of twelfth graders registered for the 2016-2017 school year completed the survey ($n=445$)

Analysis

This report focuses on graphical portrayal of notable results from the YRBS conducted among grades 8, 10 and 12. The graphs present results stratified by grade level, race/ethnicity, and gender. Data analysis was conducted using SAS 9.4 and StataSE 14. Data was weighted to reflect the true population proportions according to race and gender using the Virginia Department of Education 2016-2017 enrollment numbers by school and grade. All bar graphs visually display statistically significant data.

Statistical Significance

The use of an asterisk next to an indicator highlights if there was a statistically significant difference between the high school grades, race/ethnicity or gender surveyed within the same year. Differences were statistically significant if the “p-value” in statistical analysis using the chi-square test resulted at or below 0.05. Such a low p-value means that there is a 5% or less probability that the observed difference is based on chance alone and would not be replicated if the survey were conducted again with the same population. Statistical significance in and of itself does not necessarily indicate public health significance. The use of a double asterisk indicates that an additional chi-square test was utilized to confirm that one group was statistically significantly different from the other groups.

Limitations

The response rates from the 2016 survey are comparable to 8th grade response rates in 2013 (82%) and 10th and 12th grade response rates in 2014 (53.5%). However, there may be some bias in the responses, given that roughly forty percent of eligible students in grades 10 and 12 opted to not participate in the survey or were not present at school that day. Inherent differences in the two populations, those who participated in the survey and those who did not, cannot be measured.
**CDC National Estimates**

National estimates from the 2015 CDC National YRBSS were included as a reference point at the right side of graphs for comparison with Alexandria City. Differences in administration and questions by states across the nation, may account for some differences in outcomes.

**Acknowledgements**

This report was a collaborative effort by Alexandria City Public Schools (ACPS), the Substance Abuse Prevention Coalition of Alexandria (SAPCA), Alexandria Health Department (AHD) and other community organizations. Data analysis was conducted by, and this report was prepared by, AHD Epidemiologists Melissa Arons MS, RN and George Washington Master in Public Health (Epidemiology) Intern Elizabeth Johns MPHc. The analyses and report were approved by AHD Deputy Health Director Tina Singh, MD, MPH and Director Stephen A. Haering, MD, MPH, FACP; any errors in the analysis are the responsibility of AHD.

Questions about this report may be directed to alex_epi@vdh.virginia.gov.
2016 Alexandria YRBS Results
Grades 8, 10 and 12
Figure 1: Alcohol, Marijuana, Cigarette, & E-cigarette Use in Last 30 Days 2011, 2014 and 2016, Grades 10 & 12

- Alcohol Use: 34.8% in 2011, 25.7% in 2014, and 23.2% in 2016.
- Marijuana Use: 24.5% in 2011, 21.4% in 2014, and 15.9% in 2016.
- Cigarette Use: 16.1% in 2011, 9.0% in 2014, and 7.5% in 2016.
- E-Cigarette Use: 5.4% in 2011, 3.9% in 2014, and 3.9% in 2016.

2016 Alexandria YRBS Results: Youth Substance Use – Grades 10 and 12

Substance Behaviors

- Current use of e-cigarettes was reported at higher levels in 2016 from 2014 when the question was first introduced into the survey.
- Current alcohol, marijuana, cigarette, and e-cigarette usage in Alexandria City schools was reported at lower levels when compared to CDC national estimates.

In 2016, ever smoking a cigarette, current use of cigarettes, alcohol and marijuana was reported at statistically higher levels among twelfth graders, relative to tenth graders.

Trying to quit smoking in the past 12 months, based on those who smoke, was reported at statistically higher levels among tenth graders relative to twelfth graders.

Figure 2: Substance Use, by Grade, 2016

- Ever tried smoking a cigarette: 14.9% in Grade 10, 23.0% in Grade 12, and 18.4% in Total.
- Tried to quit smoking in past 12 months (% based only on those who smoke): 20.5% in Grade 10, 32.1% in Grade 12, and 21.7% in Total.
- Current cigarette use (cigarette use in past 30 days): 2.7% in Grade 10, 5.6% in Grade 12, and 3.9% in Total.
- Current alcohol use (alcohol use in past 30 days): 18.3% in Grade 10, 30.0% in Grade 12, and 23.2% in Total.
- Current marijuana use: 12.7% in Grade 10, 20.3% in Grade 12, and 15.9% in Total.
- Ever used marijuana: 23.0% in Grade 10, 29.6% in Grade 12, and 26.8% in Total.
2016 Alexandria YRBS Results: Youth Substance Use – Grades 10 and 12

Figure 3: Substance Use, by Race/Ethnicity, 2016

- Current cigarette use (cigarette use in past 30 days)**
  - White: 4.4%
  - Black: 1.3%
  - Hispanic: 4.2%
  - Asian: 9.9%
  - Statistical significance: higher proportion of Asian students reported cigarette use in the past 30 days, relative to Hispanic, Black, and White students.

- Current alcohol use (alcohol use in past 30 days)**
  - White: 25.7%
  - Black: 13.1%
  - Hispanic: 17.5%
  - Asian: 5.0%
  - Statistical significance: higher proportion of White students reported alcohol use in the past 30 days, and ever using marijuana, relative to Asian, Hispanic, and Black students.

- Ever used marijuana**
  - White: 8.6%
  - Black: 8.6%
  - Hispanic: 16.2%
  - Asian: 21.7%
  - Statistical significance: higher proportion of White students reported ever using marijuana, relative to Asian, Hispanic, and Black students.

Figure 4: Substance Use, by Gender, 2016

- Current cigarette use (cigarette use in past 30 days)*
  - Female: 2.6%
  - Male: 5.0%
  - Statistical significance: higher proportion of females report cigarette use in the past 30 days, relative to males.

- Current alcohol use (alcohol use in past 30 days)*
  - Female: 28.0%
  - Male: 17.5%

- Current marijuana use*
  - Female: 18.2%
  - Male: 13.1%

- Ever used marijuana*
  - Female: 32.4%
  - Male: 25.7%

Substance Behaviors

- A statistically significant higher proportion of females report alcohol use in the past 30 days, current marijuana use, and ever using marijuana, relative to males.

- A statistically significant higher proportion of males report cigarette use in the past 30 days, relative to females.

* Statistically significant – see page 4 for details
2016 Alexandria YRBS Results: Youth Substance Use – Grade 8

Figure 5: History of Substance Use, 2011, 2013 & 2016, Grade 8

Substance Behaviors

- The proportion of eighth graders who reported ever using alcohol or cigarettes is lower in 2016 compared to 2011 and 2013.

Figure 6: Current Use of Marijuana, Alcohol, Cigarettes & E-cigarettes, 2011, 2013 & 2016, Grade 8

Substance Behaviors

- Of the students who reported alcohol use: approximately 30% also reported current marijuana use, 17% reported current cigarette use, and 30% reported current use of e-cigarettes.
- “Current” use is defined as the use of a product within the past 30 days.

* Statistically significant – see page 4 for details
Substance Behaviors

- White students reported statistically significant lower proportions of ever having smoked, current e-cigarette use, ever having used inhalants, ever having used marijuana, and current marijuana use when compared to Black, Hispanic, and Asian students.
- Statistically significant differences between genders were only observed for current alcohol use. Females (9.2%) reported statistically significant higher proportion of current alcohol use when compared to males (5.1%).

*Statistically significant – see page 4 for details
Figure 9: Daily Screen Time and Physical Activity, 2011, 2014 & 2016, Grades 10 & 12

- Uses a computer 3+ hours/day (not school related)
  - 2011: 33.5%
  - 2014: 45.8%
  - 2016: 46.7%

- Watches TV 3+ hours/day
  - 2011: 32.6%
  - 2014: 27.3%
  - 2016: 24.7%

- Physically active 5+ days/week
  - 2011: 48.6%
  - 2014: 42.7%
  - 2016: 30.6%

Figure 10: Daily Screen Time and Physical Activity, by Grade, 2016

- Physically active 5+ days/week*
  - Grade 10: 33.9%
  - Grade 12: 26.1%
  - Total: 30.6%

- Watches TV 3+ hours/day*
  - Grade 10: 21.8%
  - Grade 12: 16.5%
  - Total: 19.5%

- Used a computer 3+ hours/day (not school related)*
  - Grade 10: 49.4%
  - Grade 12: 42.9%
  - Total: 46.7%

Screen Time & Physical Activity

- Watching TV was reported at lower levels in 2016 than 2011 and 2014, while using a computer and physical activity remained stable from 2014.
- Reported levels of physical activity and watching TV in Alexandria City were lower when compared to CDC national estimates. However, reported levels of computer usage were higher when compared to CDC estimates.

Screen Time & Physical Activity

- A statistically significant higher proportion of tenth graders reported being physically active 60 minutes a day, 5+ days/week, watching TV 3+ hours/day, and using a computer 3+ hours/day, relative to twelfth graders.
2016 Alexandria YRBS Results: Wellness and Healthcare
Grades 10 and 12

Figure 11: Daily Screen Time and Physical Activity by Race/Ethnicity, 2016

- **Physically active 5+ days/week**
  - White: 26.0%
  - Black: 8.9%
  - Hispanic: 16.9%
  - Asian: 31.0%

- **Watches TV 3+ hours/day**
  - White: 39.1%
  - Black: 21.0%
  - Hispanic: *26.9%
  - Asian: *21.0%

- **Used a computer 3+ hours/day (not school related)**
  - White: 41.3%
  - Black: 35.2%
  - Hispanic: *51.6%
  - Asian: *48.9%

Screen Time & Physical Activity

- **A higher** statistically significant proportion of males reported being physically active for 60 minutes a day, at least 5 days per week, relative to females.
- Differences in proportions between males and females are consistent with CDC national estimates.

- **Physically active 5+ days/week**
  - Female: 23.2%
  - Male: 38.7%

Figure 12: Physical Activity, by Gender, 2016

* Statistically significant – see page 4 for details
2016 Alexandria YRBS Results: Wellness and Healthcare – Grade 8

Figure 13: Daily Screen Time & Physical Activity, 2011, 2013 & 2016, Grade 8

- Use of a computer for 3+ hours/day was reported at statistically significantly higher proportions among Asian and Hispanic students compared to Black and White students. \*Note: Use of a computer includes screen time spent on a smartphone.\*
- Statistically significant lower proportions of White students reported watching 3+ hours of TV/day, compared to Black, Hispanic, and Asian students.
- White students reported statistically significant higher levels of daily exercise, compared to Black, Hispanic, and Asian students.

Screen Time & Physical Activity

- Use of a computer for 3+ hours/day and watching TV for 3+ hours/day was reported at lower levels in 2016 from 2013.
- Physical activity, for 60 minutes, 5+ days/week, was reported at higher levels in 2016 from 2013.

Figure 14: Daily Screen Time & Physical Activity, by Race/Ethnicity, 2016, Grade 8

* Statistically significant – see page 4 for details
Sleep Habits

Less than 30% of all surveyed students reported sleeping 8 or more hours on a typical school night. These reported levels remained stable from 2014.

* Statistically significant – see page 4 for details
**Sleep Habits**

- **A higher, statistically significant proportion of males reported getting 8 or more hours of sleep on a typical school night when compared to females. This difference between males and females is consistent with CDC national estimates.**

- **A higher, statistically significant proportion of tenth graders reported getting 8 or more hours of sleep on a typical school night when compared to twelfth graders. This difference between tenth and twelfth graders is consistent with CDC national estimates.**

*Statistically significant – see page 4 for details*
Sleep Habits

- **Higher** proportions of White students report sleeping 8 or more hours per night when compared to Asian, Hispanic, and Black students.
- Approximately 25-28% of Asian, Hispanic, Black, and White students report sleeping 8 or more hours on a typical school night.
Figure 19: Daily Screen Time & Physical Activity, by Gender, 2016, Grade 8

- Watching TV for 3+ hours/day was reported at lower levels in 2016 from 2013 and 2011.
- Physical activity, for 60 minutes, 5+ days/week, was reported at higher levels in 2016 from 2013.

Figure 20: Daily Screen Time & Physical Activity, by Gender, 2016, Grade 8

- A statistically significant higher proportion of males reported exercising at least 60 minutes, 5+ days/week, compared to females.
Sleep Habits

- Nearly 80% of all surveyed eighth graders reported having at least 7 hours of sleep on a typical school night.
- Overall, eighth graders reported higher proportions (55.3%) of getting eight or more hours of sleep on a typical school night than 10th and 12th graders (27.0%).

Figure 21: Hours of Sleep on a Typical School Night, 2016, Grade 8

<table>
<thead>
<tr>
<th>Nightly Hours of Sleep</th>
<th>4 or less hours</th>
<th>5-6 hours</th>
<th>7-8 hours</th>
<th>9 or more hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male</strong></td>
<td>3.4%</td>
<td>18.4%</td>
<td>55.2%</td>
<td>23.0%</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td>3.1%</td>
<td>18.3%</td>
<td>28.4%</td>
<td>15.5%</td>
</tr>
</tbody>
</table>

Figure 22: Hours of Sleep on a Typical School Night, by Gender, 2016, Grade 8

- A higher proportion of male students report getting 7 or more hours of sleep on a typical school night when compared to female students.
- No statistically significant differences were found when stratified by race/ethnicity.
Figure 23: Healthcare Provider Usage, 2014 & 2016

Higher proportions of students reported having a physical or well check-up in the past 2 years and having a medical home or usual doctor or health center they go to when sick in 2016 than 2014.

No statistically significant differences in reported healthcare provider usage were observed between tenth and twelfth grade students or between male and female students.

Figure 24: Healthcare Provider Usage, by Race/Ethnicity, 2016

A higher, statistically significant, proportion of White students reported having a medical home or a usual doctor or health center they go to when they are sick and having had a physical or well check-up in the past 2 years, compared to Black, Hispanic, and Asian students.
Overall reports of sad or hopeless feelings, plans for suicide, and suicide attempts remained stable from 2014 to 2016. No statistically significant differences between tenth and twelfth grade students or between Race/Ethnicity were reported. Students reported levels of sad or hopeless feelings, seriously considering suicide, making a suicide plan, and attempting suicide at lower proportions when compared to CDC national estimates.

* Statistically significant – see page 4 for details
2016 Alexandria YRBS Results: Mental Health – Grades 10 and 12

Mental Health

- Reported levels of having an injury after attempting suicide was higher in Alexandria City (6.9%) than CDC national estimates.

**Figure 26: Depression & Thoughts of Suicide, 2016**

Had injury from suicide attempt needing medical attention

- 2011: 2.3%
- 2014: 6.5%
- 2016: 6.9%
- CDC: 2.8%

**Figure 27: Depression & Thoughts of Suicide, by Gender, 2016**

<table>
<thead>
<tr>
<th>Category</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Had injury from suicide attempt*</td>
<td>2.3%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Seriously considered suicide*</td>
<td>8.3%</td>
<td>15.3%</td>
</tr>
<tr>
<td>Made a suicide plan*</td>
<td>7.5%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Attempted Suicide*</td>
<td>5.5%</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

**Mental Health**

- A statistically significant higher proportion of female students reported they seriously considered suicide, made a suicide plan, and attempted suicide, relative to male students.

- A statistically significant higher proportion of female students reported self-injury from a suicide attempt relative to male students.
Mental Health

- A statistically significant higher proportion of students who identified as gay, lesbian, bisexual, and not sure reported sad or hopeless feelings, seriously considering suicide, making a suicide plan, or attempting suicide when compared to students who identified as heterosexual.

Figure 28: Depression & Thoughts of Suicide, by Sexual Identity, 2016

- Sad or hopeless feelings for 2+ weeks**
  - Heterosexual: 25.7%
  - Gay/Lesbian: 32.7%
  - Bisexual: 32.4%
  - Not sure: 33.3%

- Seriously considered suicide**
  - Heterosexual: 9.3%
  - Gay/Lesbian: 32.4%
  - Bisexual: 22.5%
  - Not sure: 33.3%

- Made a suicide plan**
  - Heterosexual: 2.7%
  - Gay/Lesbian: 33.3%
  - Bisexual: 24.7%
  - Not sure: 30.6%

- Attempted suicide**
  - Heterosexual: 7.2%
  - Gay/Lesbian: 15.2%
  - Bisexual: 10.4%
  - Not sure: 16.7%

* Statistically significant – see page 4 for details
### Mental Health

- **Figure 29: Depression & Thoughts of Suicide 2011, 2013 & 2016, Grade 8**

  - Sad or hopeless feelings in past 12 months:
    - 2011: 29.4%
    - 2013: 14.6%
    - 2016: 10.7%
  - Made a suicide plan:
    - 2011: 13.0%
    - 2013: 14.6%
    - 2016: 8.6%
  - Attempted suicide:
    - 2011: 10.7%
    - 2013: 11.4%
    - 2016: 7.4%

- **Figure 30: Depression & Thoughts of Suicide, by Sexual Identity, 2016, Grade 8**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Heterosexual</th>
<th>Gay/Lesbian</th>
<th>Bisexual</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sad or hopeless feelings for 2+ weeks*</td>
<td>19.1%</td>
<td>29.5%</td>
<td>40.0%</td>
<td>64.9%</td>
</tr>
<tr>
<td>Seriously considered suicide*</td>
<td>8.2%</td>
<td>23.3%</td>
<td>40.0%</td>
<td>50.9%</td>
</tr>
<tr>
<td>Made a suicide plan*</td>
<td>4.8%</td>
<td>15.0%</td>
<td>32.1%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Attempted suicide*</td>
<td>4.3%</td>
<td>10.0%</td>
<td>35.7%</td>
<td>35.7%</td>
</tr>
</tbody>
</table>

* Statistically significant – see page 4 for details

- Eighth grade students reported **lower** proportions of sad or hopeless feelings, plans for suicide, and suicide attempts in 2016 than 2013.

- A statistically significant **higher** proportion of eighth grade students who identified as gay, lesbian, bisexual, and not sure reported sad or hopeless feelings, seriously considering suicide, making a suicide plan, or attempting suicide when compared to students who identified as heterosexual.
2016 Alexandria YRBS Results: Aggressive Behavior, Injuries and Violence
Grades 10 and 12

Figure 31: Aggressive Behavior, Injuries & Violence 2011, 2014, & 2016, Grades 10 & 12

- Students reported carrying a weapon in the past month and ever being approached about joining a gang at lower levels in 2016 from 2014. Students reported being in a physical fight in the past year at higher levels in 2016 from 2014.
- Reports of being in a physical fight in the past year and carrying a weapon in the past month are lower than CDC national estimates.

Figure 32: Aggressive Behavior, Injuries & Violence 2011, 2014, & 2016, Grades 10 & 12

- Student reports of being bullied on school property and being electronically bullied in the past 12 months are at lower levels in 2016, as compared to 2014.
- Reported levels of being bullied on school property and being electronically bullied are lower than CDC national estimates.
2016 Alexandria YRBS Results: Aggressive Behavior, Injuries and Violence Grades 10 and 12

Figure 33: Aggressive Behavior, Injuries, & Violence, by Grade, 2016

Aggressive Behavior, Injuries & Violence

- A statistically significant higher proportion of tenth graders reported being bullied on school property in the past year, being electronically bullied in the past year, and being in a physical fight in the past year, relative to twelfth graders.

Figure 34: Aggressive Behavior, Injuries & Violence, by Race/Ethnicity, 2016

Aggressive Behavior, Injuries & Violence

- Statistically significant higher proportions of Asian and White students reported being bullied on school property in the past year, relative to Black and Hispanic students. (CDC national estimates show higher proportions of White and Black/African American students being bullied; data not shown).

* Statistically significant – see page 4 for details
Aggressive Behavior, Injuries & Violence

- A statistically significant higher proportion of females reported being electronically bullied and bullied on school property in the past year, relative to males.
- Statistically significant higher proportions of male students reported being approached about joining a gang, being in a physical fight in the past year, and carrying a weapon in the past month, relative to females.
- The differences between males and females regarding being electronically bullied, being bullied on school property, being in a physical fight in the past year, and carrying a weapon in the past month are consistent with CDC national estimates.
**Figure 36: Bullying on School Property, 2011, 2013 & 2016, Grade 8**

- **Electronically bullied**
  - 2011: 34.8%
  - 2013: 24.5%
  - 2016: 23.8%

- **Bullied on school property**
  - 2011: 13.4%
  - 2013: 10.1%
  - 2016: 10.1%

---

**Bullying**

- Reports of being bullied on school property are **lower** among eighth graders in 2016 from 2013. However, reports of being electronically bullied remained stable in 2016 from 2013.

*Statistically significant – see page 4 for details*
2016 Alexandria YRBS Results: Aggressive Behavior, Injuries and Violence Grades 10 and 12

Figure 37: Vehicle Safety Behavior, 2011, 2014 & 2016, Grades 10 and 12

Vehicle Safety

- Overall reports of texting or emailing while driving are stable in 2016 from 2014. However, reports of riding with a drunk driver are higher in 2016 when compared to 2014.
- Student reports of texting or emailing while driving and riding with a drunk driver in the past month are lower than CDC national estimates.

Vehicle Safety

- A statistically significant higher proportion of twelfth graders reported texting or emailing while driving, relative to tenth graders. The difference in findings between tenth and twelfth grade students is consistent with CDC national estimates.
- No statistically significant differences were found with regard to texting while driving or riding with a drunk driver when stratified by gender or race/ethnicity (not displayed).

Figure 38: Vehicle Safety Behavior, by Grade, 2016

Vehicle Safety

- Overall reports of texting or emailing while driving are stable in 2016 from 2014. However, reports of riding with a drunk driver are higher in 2016 when compared to 2014.
- Student reports of texting or emailing while driving and riding with a drunk driver in the past month are lower than CDC national estimates.
2016 Alexandria YRBS Results: Sexual Behavior
Grades 10 and 12

Figure 39: Sexual Behavior, 2011, 2014 & 2016, Grades 10 & 12

- The proportion of tenth and twelfth graders who reported ever having sex, being currently sexually active, or having sex prior to age 13 are at lower levels in 2016 from 2014 and 2011.
- Reported levels of sexual activity indicators are lower when compared to CDC national estimates.

Sexual Behavior

- Ever had sex:
  - 2011: 49.9%
  - 2014: 36.1%
  - 2016: 28.9%

- Currently sexually active:
  - 2011: 35.0%
  - 2014: 25.8%
  - 2016: 20.6%

- Sexual intercourse prior to age 13:
  - 2011: 10.3%
  - 2014: 6.1%
  - 2016: 2.9%

Note: “Currently sexually active” is defined on the survey as having sexual intercourse within the past three months.

Figure 40: Sexual Behavior, by Grade, 2016

- Ever had sex:
  - Grade 10: 21.1%
  - Grade 12: 39.5%
  - Total: 28.9%

- Currently sexually active:
  - Grade 10: 14.6%
  - Grade 12: 28.7%
  - Total: 20.6%

* Statistically significant – see page 4 for details

Statistically significant higher proportions of twelfth graders report ever having sex or being currently sexually active, relative to tenth graders.
### Figure 41: Sexual Behavior, by Race/Ethnicity, 2016

- A statistically significant **higher** proportion of Hispanic students reported ever having sex, relative to White, Black, and Asian students.
- CDC national estimates show Black students reported **higher** proportions of ever having sex, relative to White, Hispanic, and Asian students.

### Figure 42: Sexual Behavior, by Gender, 2016

- A statistically significant **higher** proportion of males reported ever having sex, relative to females. This is consistent with CDC national estimates.

*Statistically significant – see page 4 for details*
Figure 43: Sexual Behavior, 2011, 2013 & 2016, Grade 8

Sexual Behavior

- Reports of ever having sex and being currently sexually active are at lower levels among eighth graders in 2016 from 2013.

Note: “Currently sexually active” is defined on the survey as having sexual intercourse within the past three months.

Figure 44: Sexual Behavior, by Gender, 2016, Grade 8

Sexual Behavior

- A higher, statistically significant proportion of eighth grade males reported ever having sex and being currently sexually active, relative to females.

* Statistically significant – see page 4 for details
2016 Alexandria YRBS Results: Sexual Behavior – Grade 8

Figure 45: Sexual Behavior, by Race/Ethnicity 2016, Grade 8

- **Ever had sex***
  - White: 1.7%
  - Black: 8.8%
  - Hispanic: 6.5%
  - Asian: 8.1%

- **Currently sexually active***
  - White: 0.6%
  - Black: 5.0%
  - Hispanic: 3.5%
  - Asian: 6.5%

**Sexual Behavior**

- A higher, statistically significant proportion of eighth grade Black, Hispanic, and Asian students reported ever having sex, as compared to White students.

Note: “Currently sexually active” is defined on the survey as having sexual intercourse within the past three months.

* Statistically significant – see page 4 for details
2016 Alexandria YRBS Results: Sexual Behavior
Grades 10 and 12

Figure 46: Safety and Sexual Behavior, 2011, 2014 & 2016, Grades 10 and 12

- For those currently sexually active, condom use at last sexual encounter among tenth and twelfth grades was reported at higher levels in 2016 from 2014.
- When compared to CDC national estimates, reports of alcohol/drug use before last sex were lower and reports of condom use at last sex were higher by ACPS tenth and twelfth grade students who are currently sexually active.

Figure 47: Safety and Sexual Behavior, by Gender, 2016

- A statistically significant higher proportion of males reported condom use at last sexual encounter, relative to females.
- No statistically significant differences were observed for condom use and alcohol/drug use before last sexual intercourse when stratified by race/ethnicity or grade (not displayed).
Figure 48: Methods Used to Prevent Pregnancy, 2011, 2014 & 2016, Grades 10 and 12

Methods Used to Prevent Pregnancy

- Students reporting their method to prevent pregnancy as IUD, implant, shot, patch or birth control ring, were at higher levels in 2016 than 2011 and 2014.
- Students not sure of their method to prevent pregnancy were reported at higher proportions in males than females (data not shown).

* Statistically significant – see page 4 for details
In 2016, lower proportions of high school students report ever being tested for HIV, relative to 2014. Reports of ever being tested for an STI remained stable in 2016 from 2014.

* Statistically significant – see page 4 for details
Behaviors, both health-enhancing and health-threatening, are the result of complex biological, cognitive, psychological, familial, social, and cultural influences on individuals and on groups. One’s perceptions of risk, personal vulnerability and benefit are important determinants in behavior; it is well-known that such perceptions change over the life course and that risk-taking behaviors increase during adolescence. In this section, pages 37-40, respondents ‘perceptions of their weight status relative to their categorized reported weight status; perception of risks of using tobacco, alcohol and marijuana relative to reported use of these substances and perceptions of their peers’ behaviors relative to their reported behaviors. Students reported behaviors and reported substance use is provided in percentages for reference.
2016 Alexandria YRBS Results: Perception – Grades 10 and 12

Figure 50: Perception of Weight Status, by CDC Weight Status Category, 2016, Grades 10 and 12

<table>
<thead>
<tr>
<th>Weight Status</th>
<th>Described self as overweight</th>
<th>Does not describe self as overweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>31.3%</td>
<td>64.3%</td>
</tr>
<tr>
<td>Normal</td>
<td>9.5%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Overweight</td>
<td>64.3%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Obese</td>
<td>0%</td>
<td>11.6%</td>
</tr>
</tbody>
</table>

Please see page 41 for explanation of BMI calculations and Table 1 for weight status categories.

Perception and Reported Weight Status

- Overall, the proportion of those who did not describe themselves as overweight was statistically higher among those who were considered underweight and normal based on their Body Mass Index (BMI), when compared to those who were considered overweight or obese based on their BMI.
- The proportion of those who described themselves as overweight was statistically higher among those who were considered overweight or obese based on their BMI, when compared to those who were underweight or normal based on their BMI.
- However, it is important to note that 31.3% of students who were underweight based on their BMI described themselves as being overweight. (Note: See page 40 for CDC Weight Status Categories for Children and for AHD BMI calculation methodology.)
Perception and Reported Weight Status

- Overall, the proportion of eighth graders who did not describe themselves as overweight was statistically higher among those who were considered underweight and normal based on their BMI, when compared to those who were considered overweight or obese based on their BMI.
- The proportion of eighth graders who described themselves as overweight was statistically higher among those who were considered overweight or obese based on their BMI, when compared to those who were underweight or normal based on their BMI.
- However, it is important to note that 23.2% of students who were underweight based on their BMI described themselves as being overweight.

(Note: See page 40 for CDC Weight Status Categories for Children and for AHD BMI calculation methodology.)

* Statistically significant – see page 4 for details
Figure 52: Perception of Substances, 2014 & 2016, Grades 10 and 12

Perception of Substances
- From 2014 to 2016, students reported perceiving smoking 1+ packs/day, smoking marijuana regularly, and intake of 1-2 alcoholic drinks/day as a great risk to health at stable levels.
- However, students reporting currently drinking alcohol (23.2%), currently smoking cigarettes (3.9%) and currently smoking marijuana (15.9%) were at lower proportions in 2016 than 2014 (see page 7).

Perception of Others Behavior
- Although nearly 70% of 10th and 12th graders perceive that half or more of students in their grade currently drink alcohol, only 23.2% of those surveyed reported currently drinking alcohol (see page 7).
- Although 63.4% of 10th and 12th graders perceive that half or more of students in their grade are currently sexually active, only 20.6% reported currently being sexually active (see page 29).
Perception of Substances

- Despite lower levels of students perceiving smoking 1+ packs/day as a great risk to health from 2011 to 2016, lower proportions of 8th graders reported currently smoking cigarettes in 2016 (3.4%) than 2013 (6.0%).
- Despite lower levels of students perceiving smoking marijuana regularly as a great risk to health from 2011 to 2016, lower proportions of 8th graders reported currently smoking marijuana in 2016 (4.8%) than 2013 (11.3%).
- Despite lower levels of students perceiving intake of 1-2 alcoholic drinks/day as a great risk to health from 2011 to 2016, lower proportions of 8th graders reported currently smoking marijuana in 2016 (4.8%) than 2013 (11.3%), (see page 9).

Perception of Others Behavior

- Sixteen percent of 8th graders perceive that half or more of their fellow students currently drink alcohol, however only 7.4% report current alcohol use. Current alcohol use was reported at lower levels in 2016 than 2013 (see page 9).
### Alexandria YRBS 2016 – CDC Weight Status Categories

**Grades 8, 10 and 12**

#### Table 1: CDC Weight Status Categories for Children

<table>
<thead>
<tr>
<th>Weight Status Category</th>
<th>Percentile Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>Less than the 5th percentile</td>
</tr>
<tr>
<td>Healthy weight</td>
<td>5th percentile to less than the 85th percentile</td>
</tr>
<tr>
<td>Overweight</td>
<td>85th to less than the 95th percentile</td>
</tr>
<tr>
<td>Obese</td>
<td>Equal to or greater than the 95th percentile</td>
</tr>
</tbody>
</table>

AHD calculated the BMI and assigned appropriate weight status categories, using statistical analysis software. BMI was calculated using the English formula \( \text{BMI} = \frac{\text{weight in pounds}}{\text{height in inches}^2} \times 703 \) for each child using self-reported values. Each calculated BMI was then compared to the standard percentile distribution as defined by the gender-specific CDC growth charts and assigned to a weight status category.
Alexandria YRBS 2016 – Survey Respondent Demographics
Grades 10 and 12

Table 2: Response by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>547</td>
<td>52.2</td>
</tr>
<tr>
<td>Male</td>
<td>483</td>
<td>46.1</td>
</tr>
<tr>
<td>Transgender, male-to-female</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transgender, female-to-male</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Unsure</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>No response</td>
<td>11</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Table 3: Response by Race

<table>
<thead>
<tr>
<th>Race</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>77</td>
<td>7.4</td>
</tr>
<tr>
<td>Black</td>
<td>339</td>
<td>32.4</td>
</tr>
<tr>
<td>Multiracial*</td>
<td>81</td>
<td>7.7</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>11</td>
<td>1.1</td>
</tr>
<tr>
<td>White</td>
<td>342</td>
<td>32.6</td>
</tr>
</tbody>
</table>

*This group represents all respondents who self-identified into 14 distinct biracial/multiracial groups.

Table 4: Response by Hispanic Ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>316</td>
<td>30.2</td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>730</td>
<td>69.8</td>
</tr>
</tbody>
</table>

Table 5: Response by Sexual Identity

<table>
<thead>
<tr>
<th>Sexual Identity</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisexual</td>
<td>78</td>
<td>7.5</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>877</td>
<td>84.4</td>
</tr>
<tr>
<td>Homosexual</td>
<td>34</td>
<td>3.3</td>
</tr>
<tr>
<td>No sure</td>
<td>50</td>
<td>4.8</td>
</tr>
</tbody>
</table>

- Respondent counts 1 to 4, numbers and proportions, are suppressed to maintain confidentiality.
### Table 6: Response by Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>335</td>
<td>46.7</td>
</tr>
<tr>
<td>Male</td>
<td>383</td>
<td>53.3</td>
</tr>
<tr>
<td>Transgender, male-to-female</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transgender, female-to-male</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Unsure</td>
<td>7</td>
<td>0.95</td>
</tr>
<tr>
<td>No response</td>
<td>9</td>
<td>1.22</td>
</tr>
</tbody>
</table>

- Respondent counts 1 to 4, numbers and proportions, are suppressed to maintain confidentiality.

### Table 7: Response by Race

<table>
<thead>
<tr>
<th>Race</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>38</td>
<td>5.2</td>
</tr>
<tr>
<td>Black</td>
<td>216</td>
<td>29.4</td>
</tr>
<tr>
<td>Multiracial*</td>
<td>65</td>
<td>8.8</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>15</td>
<td>2.0</td>
</tr>
<tr>
<td>White</td>
<td>226</td>
<td>30.7</td>
</tr>
<tr>
<td>No response</td>
<td>163</td>
<td>22.2</td>
</tr>
</tbody>
</table>

*This group represents all respondents who self-identified into 14 distinct biracial/multiracial groups.

### Table 8: Response by Hispanic Ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hispanic</td>
<td>265</td>
<td>36.1</td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>469</td>
<td>63.9</td>
</tr>
</tbody>
</table>

### Table 9: Response by Sexual Identity

<table>
<thead>
<tr>
<th>Sexual Identity</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisexual</td>
<td>61</td>
<td>8.2</td>
</tr>
<tr>
<td>Heterosexual</td>
<td>589</td>
<td>81.4</td>
</tr>
<tr>
<td>Homosexual</td>
<td>15</td>
<td>2.1</td>
</tr>
<tr>
<td>No sure</td>
<td>61</td>
<td>8.4</td>
</tr>
</tbody>
</table>