

Youth Risk Behavior Survey (YRBS) 2017 Standard Questionnaire Item Rationale

Obesity, Overweight, and Weight Control

QUESTION(S):

6. How tall are you without your shoes on?
7. How much do you weigh without your shoes on?
68. How do you describe your weight?

RATIONALE:

These questions measure self-reported height and weight and perceived body weight. Data on self-reported height and weight are used to calculate body mass index (BMI) and determine the corresponding BMI-for-age percentile for adolescents. BMI-for-age percentile is a proxy measure of weight status, correlates with body fat,⁽¹⁾ and is recommended for assessing weight status in youth ages 2–20.⁽²⁾ Although BMI calculated from self-reported height and weight underestimates the prevalence of obesity compared to BMI calculated from measured height and weight,⁽³⁾ self-reported height and weight are useful for tracking BMI trends over time. In addition, obesity prevalence trends from national surveys of adults using self-reported height and weight⁽⁴⁾ have been consistent with trend data from national surveys using measured height and weight.⁽⁵⁾ Obesity during adolescence is associated with negative psychological and social consequences and health problems such as type 2 diabetes, obstructive sleep apnea, hypertension, dyslipidemia, and metabolic syndrome.⁽⁶⁾ Further, obese adolescents are more likely to become obese adults.^(7,8,9) Continued monitoring of height and weight data through the YRBS provides information at the national, state, and local levels that can be used to track progress in efforts to curb the spread of obesity. Nationwide in 2015, 14% of high school students were obese and 16% were overweight.⁽¹⁰⁾ During 1999–2015, significant linear increases occurred in the percentage of students who were obese (11%–14%) and who were overweight (14%–16%).⁽¹⁰⁾

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QUESTION(S):

69. Which of the following are you trying to do about your weight?

RATIONALE:

This question measures weight goals. The prevention of childhood obesity involves maintaining energy balance at a healthy weight while protecting overall health, growth and development, and nutritional status.⁽¹⁾ The weight goal for overweight and obese adolescents (12–18 years) is to achieve a body mass index (BMI) less than the 85th percentile for age and sex.⁽²⁾ The *Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child*

Item Rationale for the 2017 Standard High School YRBS

and Adolescent Overweight and Obesity recommend overweight adolescents (85th percentile < BMI < 95th percentile) achieve a healthy weight by maintaining their current weight while stature increases; obese adolescents (BMI >95th percentile) can pursue weight loss that is not to exceed an average of 2 pounds per week.⁽²⁾ The goals of obesity prevention in children and adolescents also include the avoidance of potentially harmful weight concern and restrictive eating behaviors. For these reasons, understanding adolescents' weight goals, both independently and relative to weight status, is of public health importance.⁽³⁾ Nationwide in 2015, 46% of high school students were trying to lose weight.⁽⁴⁾ The percentage of students who were trying to lose weight increased significantly during 1991–2015 (42%–46%).⁽⁴⁾

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Item Rationale for the 2017 Standard High School YRBS

Behaviors that Result in Unintentional Injuries

QUESTION(S):

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

RATIONALE:

This question measures the frequency with which seat belts are worn when riding in a car driven by someone else. Motor-vehicle crashes kill more adolescents aged 15–19 years than any other single cause in the United States.⁽¹⁾ In 2014, 2,450 adolescents were killed and more than 386,000 were treated in emergency departments for motor vehicle crash-related injuries.⁽¹⁾ Seat belts, when used appropriately, reduce the risk of fatal injury to front-seat passenger car occupants by 45% and the risk of moderate-to-critical injury by 50%.⁽²⁾ However, in 2014, among all fatally injured 16- to 19-year-old occupants, seat belt use among passengers (36%) was considerably lower than among drivers (48%).⁽³⁾ In 2015, 6% of high school students nationwide rarely or never wore a seat belt when riding in a car driven by someone else.⁽⁴⁾ During 1991–2015, among students nationwide, a significant linear decrease occurred in the prevalence of rarely or never wearing a seat belt (26%–6%).⁽⁴⁾

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Item Rationale for the 2017 Standard High School YRBS

QUESTION(S):

9. During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol?
10. During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol?

RATIONALE:

These questions measure the frequency with which high school students drove a motor vehicle while under the influence of alcohol or rode as a passenger in a motor vehicle operated by someone who was under the influence of alcohol. In 2013, 29% of 15- to 20-year-old drivers who were killed in motor vehicle crashes and 3% of those injured in crashes had been drinking alcohol.⁽¹⁾ In 2014, 15% of fatally injured passenger vehicle drivers aged 16–17 years old had a blood alcohol concentration equal to or above the illegal threshold for adults of 0.08% at the time of the crash.⁽²⁾ In 2015, among the 61% of high school students who had driven a car or other vehicle during the 30 days before the survey, 8% had driven one or more times when they had been drinking alcohol. During 2013–2015, among high school students who had driven a car or other vehicle during the 30 days before the survey, the prevalence of students who had driven one or more times when they had been drinking alcohol decreased from 10% to 8%.⁽³⁾ Among high school students nationwide, 20% had ridden in a car or other vehicle driven by someone who had been drinking alcohol one or more times during the 30 days before the survey.⁽³⁾ Among students nationwide, the prevalence of riding with a driver who had been drinking alcohol decreased during 1991–2015 (40%–20%).⁽³⁾

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Item Rationale for the 2017 Standard High School YRBS

QUESTION(S):

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

RATIONALE:

This question measures the frequency with which students engage in texting or e-mailing while driving a motor vehicle. Motor vehicle crashes are the leading cause of death among U.S. adolescents aged 15–19.⁽¹⁾ In 2014, 10% of all drivers aged 15–19 involved in fatal crashes were reported as distracted at the time of the crashes and 21% of these distracted teens were distracted by the use of cell phones.⁽²⁾ Teen drivers are at least as likely to engage in texting while driving as adults,⁽³⁾ are less willing to disengage from a distracting behavior even as more road hazards are presented,⁽⁴⁾ and are less adept at handling road hazards than adults.⁽⁴⁾ In 2015, among the 61% of high school students nationwide who had driven a car or other vehicle during the 30 days before the survey, the prevalence of texting while driving one or more times in the 30 days before the survey was 42%.⁽⁵⁾

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Item Rationale for the 2017 Standard High School YRBS

Behaviors that Result in Violence

QUESTION(S):

12. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club?
13. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club on school property?
14. During the past 12 months, on how many days did you carry a gun? (Do not count the days when you carried a gun only for hunting or for a sport, such as target shooting.)
15. During the past 30 days, on how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?
16. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club on school property?

RATIONALE:

These questions measure violence-related behaviors and school-related violent behaviors. Violence is a significant public health issue among youth, with homicide being the third leading cause of death among youth ages 13–19 years (5.1 per 100,000).⁽¹⁾ Homicide is the leading cause of death among non-Hispanic black youth ages 13–19 years (19.4 per 100,000) and the third leading cause of death for Hispanic youth ages 13–19 years (4.9 per 100,000).⁽¹⁾ Approximately 9% of homicide victims in the United States in 2014 were aged 13–19 years; of these victims, 87% were killed with a firearm.⁽¹⁾ Of all violent deaths that occurred on school property between 1994 and 2006, 65% involved firearms.⁽²⁾ Nearly 100% of school districts have a policy prohibiting weapon possession or use by high school students on school property.⁽³⁾ Also, in 2014, 214,304 (727.2 per 100,000) nonfatal, physical assault injuries among youth aged 13–19 years were treated in U.S. emergency departments.⁽¹⁾

Among high school students nationwide in 2015, 16% had carried a weapon, 5% had carried a gun, and 4% had carried a weapon on school property on at least 1 day during the 30 days before the survey.⁽⁴⁾ The prevalence of having carried a weapon decreased during 1991–1997 (26%–18%) and then did not change significantly during 1997–2015 (18%–16%).⁽⁴⁾ The prevalence of having carried a gun decreased during 1993–1997 (8%–6%) and then did not change significantly during 1997–2015 (6%–5%).⁽⁴⁾ The prevalence of having carried a weapon on school property decreased during 1993–2015 (12%–4%).⁽⁴⁾

Among high school students nationwide in 2015, 6% had not gone to school on at least 1 day during the 30 days before the survey because they felt they would be unsafe at school or on their way to or from school and 6% had been threatened or injured with a weapon on school property 1 or more times during the 12 months before the survey.⁽⁴⁾ Among students nationwide, the prevalence of having not gone to school because of safety concerns increased significantly during 1993–2015 (4%–6%).⁽⁴⁾ Among students nationwide, the prevalence of having been

Item Rationale for the 2017 Standard High School YRBS

threatened or injured with a weapon on school property did not change significantly during 1993–2003 (7%–9%) and then decreased during 2003–2015 (9%–6%).⁽⁴⁾

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QUESTION(S):

17. During the past 12 months, how many times were you in a physical fight?
18. During the past 12 months, how many times were you in a physical fight on school property?

RATIONALE:

These questions measure the frequency of physical fights in general and on school property. Physical fighting is a marker for other problem behaviors⁽¹⁾ and is associated with serious injury-related health outcomes.^(2,3) Among high school students nationwide in 2015, 23% had been in a physical fight and 8% had been in a physical fight on school property one or more times during the 12 months before the survey.⁽⁴⁾ The percentage of high school students who were in a physical fight decreased significantly during 1991–2015 (42%–23%).⁽⁴⁾ The percentage of high school students who were in a physical fight on school property also decreased significantly during 1993–2015 (16%–8%).⁽⁴⁾

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Item Rationale for the 2017 Standard High School YRBS

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QUESTION(S):

19. Have you ever been physically forced to have sexual intercourse when you did not want to?
20. During the past 12 months, how many times did anyone force you to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)
21. During the past 12 months, how many times did someone you were dating or going out with force you to do sexual things that you did not want to do? (Count such things as kissing, touching, or being physically forced to have sexual intercourse.)
22. During the past 12 months, how many times did someone you were dating or going out with physically hurt you on purpose? (Count such things as being hit, slammed into something, or injured with an object or weapon.)

RATIONALE:

These questions measure the frequency of sexual violence and dating violence experienced by students. Sexual and dating violence victimization are associated with a range of negative consequences,⁽¹⁻³⁾ including suicide ideation and attempts, major depressive episodes,^(4,5) increased alcohol and tobacco use, eating disorders, and risky sexual behavior.^(6,7) According to the Centers for Disease Control and Prevention's 2011 National Intimate Partner and Sexual Violence Survey, 19.3% of women have been raped in their lifetime, including 8.8% of women who were raped by an intimate partner. An estimated 44% of women and 23% of men have experienced other forms of sexual violence by any perpetrator and 15.8% of women and 9.5% of men have experienced other sexual violence by an intimate partner at some point in their lifetime.⁽⁸⁾ About 1 in 4 women (22.3%) and 1 in 7 men (14.0%) have experienced severe physical violence by an intimate partner (e.g., hit with a fist or something hard, beaten, slammed against something) at some point in their lifetime.⁽⁸⁾ Among adults who ever experienced rape, physical violence, and/or stalking by an intimate partner, 23% of women and 14% of men first experienced some form of partner violence between 11 and 17 years of age.⁽⁸⁾

Item Rationale for the 2017 Standard High School YRBS

All three sexual violence questions are important for understanding the public health burden of sexual violence against young people, guiding prevention strategies, and monitoring changes over time. These data are particularly useful for monitoring changes in trends and the effects of prevention efforts such as CDC's Rape Prevention Education Program.⁽⁹⁾ Data on forced sexual activity by any perpetrator — not just a dating partner — provides a better understanding of the burden of sexual violence among high school students because studies have shown that perpetrators can include current or former friends, acquaintances, family members, and other adults.^(8,10) Preventing sexual violence by any perpetrator is a focus area for CDC. Also, understanding the full extent of the burden of sexual violence among adolescents is a high priority for the Office of the Vice President.⁽¹¹⁾ Knowing the proportion who are sexually and physically victimized by a dating partner is also crucial because it provides a more complete measure of teen dating violence and prevention strategies often focus specifically on violence in dating relationships. These estimates are critically important for monitoring progress in this area.

In 2015, 7% of high school students nationwide had ever been physically forced to have sexual intercourse when they did not want to.⁽¹²⁾ The percentage of high school students who had ever been physically forced to have sexual intercourse when they did not want to decreased significantly during 2001–2015 (8%–7%).⁽¹²⁾ Among the 69% of students who dated or went out with someone during the 12 months before the survey, 10% experienced physical dating violence by a dating partner, and 11% experienced sexual dating violence by a dating partner.⁽¹²⁾

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Item Rationale for the 2017 Standard High School YRBS

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QUESTION(S):

23. During the past 12 months, have you ever been bullied on school property?
24. During the past 12 months, have you ever been electronically bullied? (Count being bullied through texting, Instagram, Facebook, or other social media.)

RATIONALE:

These questions measure the frequency of bullying behavior. Bullying victimization is associated with depression,^(1,2) suicidal ideation,^(1,2) self-injury,⁽²⁾ suicide attempts,⁽²⁾ increased odds of repeated common health problems,⁽³⁾ school absenteeism,⁽⁴⁾ psychological distress,⁽³⁾ and feeling unsafe at school.⁽⁴⁾ Electronic bullying victimization has been associated with discipline problems in school, skipping school, weapon carrying,⁽¹⁾ psychological distress,⁽⁶⁾ lower self-esteem,⁽⁷⁾ social anxiety,⁽⁸⁾ depression,⁽²⁾ suicidal ideation,⁽²⁾ self-injury,⁽²⁾ and suicide attempts.⁽²⁾ Among high school students nationwide in 2015, 20% reported that they had been bullied on

Item Rationale for the 2017 Standard High School YRBS

school property during the 12 months before the survey and 16% had been electronically bullied through e-mail, chat rooms, instant messaging, websites, or texting during the 12 months before the survey.⁽⁹⁾

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QUESTION(S):

25. During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?
26. During the past 12 months, did you ever seriously consider attempting suicide?

Item Rationale for the 2017 Standard High School YRBS

27. During the past 12 months, did you make a plan about how you would attempt suicide?
28. During the past 12 months, how many times did you actually attempt suicide?
29. If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?

RATIONALE:

These questions measure sadness, suicide ideation, attempted suicide, and the seriousness of those attempts. Suicide is the second leading cause of death among youth aged 13–19 years.⁽¹⁾ The suicide rate for persons aged 13–19 years was 7.3 per 100,000 in 2014.⁽¹⁾ A prior suicide attempt is one of the most significant risk factors for a suicide fatality.^(2,3) Among high school students nationwide in 2015, 30% felt so sad or hopeless almost every day for 2 or more weeks in a row that they stopped doing some usual activities.⁽⁴⁾ Among high school students nationwide in 2015, 18% had seriously considered attempting suicide, 15% had made a plan about how they would attempt suicide, and 9% had attempted suicide one or more times during the 12 months before the survey.⁽⁴⁾ The percentage of students who seriously considered attempting suicide decreased during 1991–2009 (29%–14%) and then increased during 2009–2015 (14%–18%).⁽⁴⁾ The prevalence of having made a suicide plan decreased from 1991–2009 (19%–11%) and then increased from 2009–2015 (11%–15%).⁽⁴⁾ The percentage of students who attempted suicide increased during 1991–2015 (7%–9%).⁽⁴⁾

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Item Rationale for the 2017 Standard High School YRBS

Tobacco Use

QUESTION(S):

30. Have you ever tried cigarette smoking, even one or two puffs?
31. How old were you when you first tried cigarette smoking, even one or two puffs?
32. During the past 30 days, on how many days did you smoke cigarettes?
33. During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?

RATIONALE:

These questions measure ever and current smoking patterns, and age of initiation. Cigarette smoking is the leading cause of preventable death in the United States⁽¹⁾ and accounts for approximately 440,000 deaths each year.⁽²⁾ Each day across the United States over 3,800 youth under 18 years of age start smoking and more than 80% of adult smokers begin before the age of 18.⁽³⁾ Cigarette smoking increases risk of heart disease; chronic obstructive pulmonary disease; acute respiratory illness; stroke; and cancers of the lung, larynx, oral cavity, pharynx, pancreas, and cervix.^(1,3) In addition, as compared to nonsmokers, cigarette smokers are more likely to drink alcohol, use marijuana and cocaine, engage in risky sexual behaviors, engage in physical fighting, carry a weapon, and attempt suicide.⁽³⁻⁵⁾ Among high school students nationwide in 2015, 32% had ever tried cigarette smoking and 11% had smoked cigarettes on at least 1 day during the 30 days before the survey.⁽⁶⁾ The percentage of high school students who had ever tried cigarette smoking did not change significantly during 1991–1999 (70%–70%) and then decreased during 1999–2015 (70%–32%).⁽⁶⁾ The percentage of high school students who had smoked cigarettes on at least 1 day during the 30 days before the survey increased significantly during 1991–1997 (28%–36%) and then decreased during 1997–2015 (36%–11%).⁽⁶⁾

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QUESTION(S):

34. Have you ever used an electronic vapor product?
35. During the past 30 days, on how many days did you use an electronic vapor product?
36. During the past 30 days, how did you usually get your own electronic vapor products?

RATIONALE:

These questions measure the prevalence of use of electronic vapor products and access to these products. Electronic vapor products are electronic devices that are usually shaped like a cigarette or cigar and contain a nicotine-based liquid that is vaporized and inhaled. Electronic vapor products include electronic cigarettes (e-cigarettes), electronic cigars (e-cigars), electronic hookahs (e-hookahs), and vape pens. E-cigarettes are battery-powered devices that provide doses of nicotine and other additives to the user in an aerosol. Depending on the brand, e-cigarette cartridges typically contain nicotine, a component to produce the aerosol (e.g., propylene glycol or glycerol), and flavorings (e.g., fruit, mint, or chocolate).⁽¹⁾ In 2016, the U.S. Food and Drug Administration finalized a rule to regulate e-cigarettes and other electronic vapor products as tobacco products.⁽²⁾ This rule will prevent sales to minors, prohibit few samples, prohibit vending machine sales (unless in a facility that never admits minors), and mandate warning labels on

Item Rationale for the 2017 Standard High School YRBS

packaging.⁽²⁾ Among high school students nationwide in 2015, 45% had ever tried electronic vapor products and 24% of high school students had used electronic vapor products on at least 1 day during the 30 days before the survey.⁽³⁾ According to the National Youth Tobacco Survey, 2015 marked the second year in a row that e-cigarettes were the most popular tobacco product among high school students.⁽⁴⁾

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QUESTION(S):

37. During the past 30 days, on how many days did you use chewing tobacco, snuff, dip, snus, or dissolvable tobacco products, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, Copenhagen, Camel Snus, Marlboro Snus, General Snus, Ariva, Stonewall, or Camel Orbs? (Do not count any electronic vapor products.)
38. During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?

RATIONALE:

These questions measure smokeless tobacco use and cigar use. Smokeless tobacco contains 28 known human carcinogens.⁽¹⁾ Use of smokeless tobacco products increases the risk of developing cancer of the oral cavity.⁽¹⁾ Other oral health problems strongly associated with smokeless tobacco use are leukoplakia (a lesion of the soft tissue that consists of a white patch or plaque that cannot be scraped off) and recession of the gums.^(2–4) Smokeless tobacco use also causes an increased risk of heart disease and stroke.⁽⁵⁾ In addition, adolescent smokeless tobacco users are

Item Rationale for the 2017 Standard High School YRBS

more likely than nonusers to become adult cigarette smokers.⁽³⁾ Among high school students nationwide in 2015, 7% had used smokeless tobacco (e.g., chewing tobacco, snuff, or dip) on at least 1 day during the 30 days before the survey.⁽⁶⁾ The percentage of students who reported smokeless tobacco use on at least 1 day during the 30 days before the survey decreased during 1995–1999 (11%–8%) and then did not change significantly during 1999–2015 (8%–7%).⁽⁶⁾ Cigar smoking can cause lung cancer, coronary heart disease, and chronic obstructive pulmonary disease.^(7–9) The overall risk of oral and pharyngeal cancer is 7–10 times higher among cigar smokers compared to those who never smoked.⁽¹⁰⁾ In 2015, 10% of high school students nationwide had smoked cigars, cigarillos, or little cigars on at least 1 day during the 30 days before the survey.⁽⁶⁾ The percentage of students who had smoked cigars, cigarillos, or little cigars on at least 1 day during the 30 days before decreased during 1997–2015 (22%–10%).⁽⁶⁾

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QUESTION(S):

39. During the past 12 months, did you ever try to quit using all tobacco products, including cigarettes, cigars, smokeless tobacco, shisha or hookah tobacco, and electronic vapor products?

RATIONALE:

This question measures attempts to quit using all tobacco products. Nicotine exposure during adolescence, a critical period for brain development, can cause addiction, might harm brain development, and could lead to sustained tobacco product use among youths.^(1,2,3) Therefore, among youth, there is no safe exposure to nicotine, be it from combustible, non-combustible, or electronic sources. Before 2017, the YRBS assessed the prevalence of high schools students who attempted to quit smoking cigarettes during the 12 months before the survey. The questionnaire item has now been expanded to include all tobacco products. In 2015, among high school students nationwide who currently smoked cigarettes during the 12 months before the survey, 45% had tried to quit smoking cigarettes during those 12 months.⁽⁴⁾ The percentage of current cigarette smokers who tried to quit smoking cigarettes during the 12 months before the survey decreased from 2001–2015 (57%–45%).⁽⁴⁾

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Item Rationale for the 2017 Standard High School YRBS

Alcohol and Other Drug Use

QUESTION(S):

40. During your life, on how many days have you had at least one drink of alcohol?
41. How old were you when you had your first drink of alcohol other than a few sips?
42. During the past 30 days, on how many days did you have at least one drink of alcohol?
43. During the past 30 days, how did you usually get the alcohol you drank?
44. During the past 30 days, on how many days did you have 4 or more drinks of alcohol in a row (if you are female) or 5 or more drinks of alcohol in a row (if you are male)?
45. During the past 30 days, what is the largest number of alcoholic drinks you had in a row?

RATIONALE:

These questions measure lifetime and current use of alcohol, age of initiation, binge drinking, the largest number of alcoholic drinks consumed during a drinking occasion, and access to alcohol. Excessive drinking, including underage and binge drinking, is responsible for more than 4,300 deaths among underage youth each year, and cost the U.S. \$24 billion in 2010.^(1,2) Underage drinking also contributes to a wide range of health and social problems, including motor vehicle crashes, suicide, interpersonal violence (e.g., homicides, assaults, rapes), unintentional injuries (e.g., burns, falls, drowning), brain impairment, alcohol dependence, risky sexual activity, academic problems, and alcohol and drug poisoning.^(3,4) Persons who start drinking before age 15 years are six times more likely to develop alcohol dependence or abuse later in life than those who begin drinking at or after age 21 years.⁽⁵⁾ Initiation of alcohol use before 13 years of age also has been associated with an increased risk for suicide.^(6,7) Binge drinking is the most common pattern of excessive alcohol use in the United States, and about 90% of the alcohol consumed by youth is in the form of binge drinks.^(8,9) The National Institute on Alcohol Abuse and Alcoholism defines binge drinking as a pattern of drinking that brings a person's blood alcohol concentration to 0.08% or above. This typically happens when males consume 5 or more drinks and when females consume 4 or more drinks in about 2 hours.⁽¹⁰⁾ Limiting youth access to alcohol has reduced underage alcohol use and alcohol-related problems.⁽¹¹⁻¹³⁾ However, youth continue to obtain alcohol from a variety of sources, particularly from adults of legal drinking age.⁽¹⁴⁾

Among high school students nationwide in 2015, 63% drank at least one drink of alcohol on at least 1 day during their life and 33% had had at least one drink of alcohol on at least 1 day during the 30 days before the survey.⁽¹⁴⁾ In addition, 18% of high school students had had 5 or more drinks of alcohol in a row on at least 1 day during the 30 days before the survey.⁽¹⁴⁾ The percentage of high school students who had at least one drink of alcohol on at least 1 day during their life decreased significantly during 1991–2015 (82%–63%).⁽¹⁴⁾ Likewise, the percentage of students who had at least one drink of alcohol on at least 1 day during the 30 days before the

Item Rationale for the 2017 Standard High School YRBS

survey decreased significantly during 1991–2015 (51%–33%).⁽¹⁴⁾ The percentage of students who had 5 or more drinks of alcohol in a row on at least 1 day during the 30 days before the survey increased from 1991–1999 (31%–32%) and then decreased from 1999–2015 (32%–18%).⁽¹⁴⁾

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QUESTION(S):

46. During your life, how many times have you used marijuana?
47. How old were you when you tried marijuana for the first time?
48. During the past 30 days, how many times did you use marijuana?
49. During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?
50. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?
51. During your life, how many times have you used heroin (also called smack, junk, or China White)?
52. During your life, how many times have you used methamphetamines (also called speed, crystal, crank, or ice)?
53. During your life, how many times have you used ecstasy (also called MDMA)?

Item Rationale for the 2017 Standard High School YRBS

54. During your life, how many times have you used synthetic marijuana (also called K2, Spice, fake weed, King Kong, Yucatan Fire, Skunk, or Moon Rocks)?
55. During your life, how many times have you taken steroid pills or shots without a doctor's prescription?
56. During your life, how many times have you taken prescription pain medicine without a doctor's prescription or differently than how a doctor told you to use it? (Count drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet.)
57. During your life, how many times have you used a needle to inject any illegal drug into your body?
58. During the past 12 months, has anyone offered, sold, or given you an illegal drug on school property?

RATIONALE:

These questions measure ever and current use of marijuana (including synthetic marijuana) and ever use of cocaine, inhalants, heroin, methamphetamines, ecstasy, steroids, and injected drugs; use of prescription pain medicine without a doctor's prescription, or used in a manner differently than instructed by the doctor; and illegal drug activity on school property. Among youth, illicit drug use is associated with heavy alcohol and tobacco use,⁽¹⁾ violence and delinquency,⁽²⁻⁴⁾ and suicide.⁽⁵⁾ Synthetic marijuana use has been linked with adverse effects such as increased heart rate and blood pressure, drowsiness, nausea, vomiting, chest pain, hallucinations, agitation, and acute kidney injury.⁽⁶⁻⁸⁾ All school districts prohibit illegal drug possession or use by students on school property.⁽⁹⁾

Among high school students nationwide in 2015, 39% had used marijuana, 9% had used synthetic marijuana, 5% had used any form of cocaine, 2% had used heroin, 3% had used methamphetamines, 5% had used ecstasy, and 4% had taken steroid pills or shots without a doctor's prescription one or more times during their life.⁽¹⁰⁾ According to data from the Monitoring the Future Study, among 12th grade high school students, the prevalence of lifetime use of narcotics other than heroin was 8.4% in 2015.⁽¹¹⁾ In 2015, 7% of high school students nationwide had sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high and 2% had used a needle to inject any illegal drug into their body one or more times during their life.⁽¹⁰⁾ Also, 22% of students had been offered, sold, or given an illegal drug on school property during the 12 months before the survey.⁽¹⁰⁾ The percentage of high school students who had used marijuana one or more times during their life increased during 1991–1997 (31%–47%) and then decreased during 1997–2015 (47%–39%).⁽¹⁰⁾ The percentage of high school students who had used cocaine one or more times during their life increased during 1991–1999 (6%–10%) and then decreased during 1999–2015 (10%–5%).⁽¹⁰⁾ The percentage of high school students who had used methamphetamines one or more times during their life decreased significantly during 1999–2015 (9%–3%).⁽¹⁰⁾ The percentage of high school students who had used ecstasy one or more times during their life increased during 2001–2005 (11%–6%) and then did not change during 2005–2015 (6%–5%).⁽¹⁰⁾

Item Rationale for the 2017 Standard High School YRBS

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Item Rationale for the 2017 Standard High School YRBS

Sexual Behaviors that Contribute to Unintended Pregnancy and Sexually Transmitted Diseases, Including HIV Infection

QUESTION(S):

59. Have you ever had sexual intercourse?
60. How old were you when you had sexual intercourse for the first time?
61. During your life, with how many people have you had sexual intercourse?
62. During the past 3 months, with how many people did you have sexual intercourse?
63. Did you drink alcohol or use drugs before you had sexual intercourse the last time?
64. The last time you had sexual intercourse, did you or your partner use a condom?
65. The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy?

RATIONALE:

These questions measure the prevalence of sexual activity, number of sexual partners, age at first intercourse, alcohol and other drug use related to sexual activity, condom use, and contraceptive use. Early initiation of sexual intercourse is associated with having a greater number of lifetime sexual partners.^(1,2) In addition, adolescents who initiate sexual intercourse early are less likely to use contraception^(2,3) and are at higher risk for STDs⁽⁴⁾ and pregnancy.^(5,6) Estimates suggest that while representing 25% of the ever sexually active population, persons aged 15 to 24 years acquire nearly half of all new STDs.⁽⁷⁾ Both chlamydia and gonorrhea rates are highest among young women between the ages of 20 and 24 years (2484.6 cases per 100,000 individuals and 533.7 cases per 100,000 individuals, respectively).⁽⁸⁾ In 2013, there were an estimated 1,908 persons ages 13–19 years newly diagnosed with HIV infection and 7,157 living with diagnosed HIV infection.⁽⁹⁾ In 2014, young people aged 13–24 accounted for 22% of all new HIV infections in the United States.⁽¹⁰⁾

Among high school students nationwide in 2015, 41% had ever had sexual intercourse, 12% had had sexual intercourse with four or more persons during their life, and 30% had had sexual intercourse with at least one person during the 3 months before the survey.⁽¹¹⁾ The percentage of students who ever had sexual intercourse decreased during 1991–2015 (54%–41%).⁽¹¹⁾ The percentage of students who had sexual intercourse with four or more persons during their life decreased during 1991–2015 (19%–12%).⁽¹¹⁾ During 1991–2015, there was a significant linear decrease in the percentage of students who had had sexual intercourse with at least one person during the 3 months before the survey (38%–30%).⁽¹¹⁾ In 2015, among the 30% of students who were currently sexually active, 57% reported that either they or their partner had used a condom during last sexual intercourse.⁽¹¹⁾ The percentage of sexually active students who used a condom during last sexual intercourse increased during 1991–2003 (46%–63%) and then did not change significantly during 2003–2015 (63%–57%).⁽¹¹⁾

Item Rationale for the 2017 Standard High School YRBS

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Item Rationale for the 2017 Standard High School YRBS

QUESTION(S):

85. Have you ever been tested for HIV, the virus that causes AIDS? (Do not count tests done if you donated blood.)

RATIONALE:

This question measures whether high school students have been tested for HIV. Too many people do not know they are infected with HIV. About 1.2 million people are living with HIV in the US, but 1 in 5 do not know they are infected.⁽¹⁾ Each year, about 50,000 people get infected with HIV in the U.S. HIV testing is an integral part of the National HIV/AIDS Strategy for the United States and routine testing is one of the most important strategies recommended for reducing the spread of HIV and improving the health outcomes for those already infected.^(2,3) State and local education agencies and schools are essential partners in this effort. Educating students about HIV and other STDs might increase students' likelihood of being tested.⁽⁴⁾ Further, schools have a critical role to play in facilitating delivery of HIV preventive services for adolescents.^(4,5) State and local data on HIV testing will help agencies examine local trends in testing behaviors, identify disparities in testing, and determine whether high risk youth are being tested.^(5,6) In 2015, 10% of high school students nationwide had ever tested for HIV.⁽⁷⁾ The percentage of high school students who have ever been tested for HIV did not change from 2005–2011 (12%–13%), but significantly decreased from 2011–2015 (13%–10%).⁽⁷⁾

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QUESTION(S):

66. During your life, with whom have you had sexual contact?
67. Which of the following best describes you?

RATIONALE:

These questions measure sexual identity and sex of sexual partners. Sexual minority youth—those who identify as gay, lesbian, or bisexual or who have sexual contact with persons of the same or both sexes—are part of every community and come from all walks of life. They are diverse, representing all races, ethnicities, socioeconomic statuses, and parts of the country. While many sexual minority youth cope with the transition from childhood to adulthood successfully and become healthy and productive adults, others struggle as a result of challenges such as stigma, discrimination, family disapproval, social rejection, violence.⁽¹⁾ YRBS data indicate that sexual minority students are more likely to engage in health-risk behaviors than other students.⁽²⁾ Sexual minority youth are also at increased risk for certain negative health outcomes. For example, young gay and bisexual males have disproportionately high rates of HIV and syphilis,^(3,4) and adolescent lesbian and bisexual females are more likely to have ever been pregnant than their heterosexual peers.⁽⁵⁾ Increasing attention has been given to the HIV prevention needs of young men who have sex with other men (YMSM) as they are more likely than males who have only had sexual contact with females to engage in sexual risk-taking behaviors and HIV infection rates among YMSM are disproportionately high.⁽⁶⁾ Data on the sexual minority status of young people are critical for continuing to demonstrate the disproportionate rates at which sexual minority students experience many health risks compared to non-sexual minority students and for developing, implementing, and evaluating policies and programs designed to mitigate these disparities. In 2015, 88.8% of high school students nationwide identified as heterosexual, 2.0% identified as gay or lesbian, 6.0% identified as bisexual, and 3.2% were not sure of their sexual identity.⁽⁷⁾ Also in 2015, 48.0% of high school students nationwide had had sexual contact with only the opposite sex, 1.7% had had sexual contact with only the same sex, 4.6% had had sexual contact with both sexes, and 45.7% had had no sexual contact.⁽⁷⁾

Item Rationale for the 2017 Standard High School YRBS

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Item Rationale for the 2017 Standard High School YRBS

Dietary Behaviors

QUESTION(S):

70. During the past 7 days, how many times did you drink 100% fruit juices such as orange juice, apple juice, or grape juice? (Do not count punch, Kool-Aid, sports drinks, or other fruit-flavored drinks.)
71. During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)
72. During the past 7 days, how many times did you eat green salad?
73. During the past 7 days, how many times did you eat potatoes? (Do not count french fries, fried potatoes, or potato chips.)
74. During the past 7 days, how many times did you eat carrots?
75. During the past 7 days, how many times did you eat other vegetables? (Do not count green salad, potatoes, or carrots.)
76. During the past 7 days, how many times per day did you usually drink a can, bottle, or glass of soda or pop, such as Coke, Pepsi, or Sprite? (Do not count diet soda or diet pop.)
77. During the past 7 days, how many glasses of milk did you drink? (Count the milk you drank in a glass or cup, from a carton, or with cereal. Count the half pint of milk served at school as equal to one glass.)
78. During the past 7 days, on how many days did you eat breakfast?

RATIONALE:

These questions measure dietary behaviors, including consumption of fruits and vegetables, and soda or pop. The fruit and vegetable questions are similar to questions asked of adults on the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System 2009 survey questionnaire.⁽¹⁾ Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances that are important for good health.⁽²⁾ There is probable evidence to suggest that dietary patterns with higher intakes of fruits and vegetables are associated with a decreased risk for some types of cancer,⁽³⁻⁵⁾ cardiovascular disease,⁽⁶⁾ and stroke.⁽⁷⁾ Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of being overweight.⁽⁸⁻¹⁰⁾ However, most youth do not meet the recommendations for fruit and vegetable consumption.^(11,12) In 2015, during the 7 days before the survey, 32% of high school students nationwide had eaten fruit or drunk 100% fruit juice two or more times per day and 15% of students had eaten vegetables three or more times per day.⁽¹³⁾ The percentage of students who ate vegetables three or more times per day increased significantly during 1999–2015 (14%–15%).⁽¹³⁾

Although total sugar-sweetened beverage consumption has significantly decreased in the

Item Rationale for the 2017 Standard High School YRBS

last decade mainly due to the decrease in regular soda intake, the calorie intake from sugar-sweetened beverages remain high.⁽¹⁴⁻¹⁶⁾ Furthermore, sugar-sweetened beverages are a primary source of added sugars in the diet of U.S. children,⁽¹⁷⁾ and contribute on average 155 kcal/day (8.0% of daily energy intake).⁽¹⁵⁾ Consumption of sugar-sweetened beverages is associated with a less healthy diet⁽¹⁸⁾ and dental decay,⁽¹⁹⁾ and appears to be associated with increased risk of being overweight among children^(20,21) and the development of metabolic syndrome and type 2 diabetes.⁽²²⁾ Nationwide in 2015, 20% of high school students had drunk a can, bottle, or glass of soda or pop (not counting diet soda or diet pop) one or more times per day during the 7 days before the survey.⁽¹³⁾ The percentage of students who drank soda or pop one or more times per day decreased significantly during 2007–2015 (34%–20%).⁽¹³⁾

Milk is an important source of many nutrients, including calcium.⁽²⁾ There is evidence that intake of milk and milk products is associated with bone health in children and adolescents and with a lower risk of cardiovascular disease and type 2 diabetes and with lower blood pressure in adults.⁽²⁾ Although the recommended intake of milk and milk products is 3 cups per day for adolescents, most adolescents consume far less.^(2,12) In 2015, 10% of high school students nationwide had drunk three or more glasses of milk per day.⁽¹³⁾ The percentage of students who drank three or more glasses of milk decreased significantly during 1999–2015 (18%–10%).⁽¹¹⁾

Eating breakfast is associated with weight loss and weight loss maintenance,⁽²⁾ improved nutrient intake,⁽²⁾ and better cognitive function, academic performance, school attendance rates, psychosocial function, and mood.⁽²³⁻²⁵⁾ In 2015, 36% of high school students nationwide ate breakfast on all 7 days before the survey.⁽¹³⁾

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Item Rationale for the 2017 Standard High School YRBS

Physical Activity

QUESTION(S):

79. During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per day? (Add up all the time you spend in any kind of physical activity that increases your heart rate and makes you breathe hard some of the time.)
80. On an average school day, how many hours do you watch TV?
81. On an average school day, how many hours do you play video or computer games or use a computer for something that is not school work? (Count time spent on things such as Xbox, PlayStation, an iPad or other tablet, a smartphone, texting, YouTube, Instagram, Facebook, or other social media.)
82. In an average week when you are in school, on how many days do you go to physical education (PE) classes?
83. During the past 12 months, on how many sports teams did you play? (Count any teams run by your school or community groups.)

RATIONALE:

These questions measure participation in physical activity and team sports and attendance in physical education classes. These questions also examine time spent watching television (TV) and using a computer or playing video games. Participation in regular physical activity among young people can help build and maintain healthy bones and muscles, maintain body weight and reduce body fat, reduce feelings of depression and anxiety, and promote psychological well-being.⁽¹⁾ Over time, regular physical activity decreases the risk of high blood pressure, heart disease, diabetes, obesity, some types of cancer, and premature death.⁽¹⁾ In 2008, the U.S. Department of Health and Human Services recommended that young people aged 6–17 years participate in at least 60 minutes of physical activity daily.⁽²⁾ In 2015, 27% of high school students were physically active doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time for a total of at least 60 minutes per day on each of the 7 days before the survey.⁽³⁾ In 2012, the U.S. Department of Health and Human Services released a mid-course report on the *Physical Activity Guidelines for Americans*.⁽⁴⁾ This report focused on strategies to increase physical activity among youth. The report concluded that school-based settings had the strongest evidence and multi-component physical activity programs, including physical education, had the most promise for increasing physical activity. In 2013, the Institute of Medicine (IOM) released *Educating the Student Body: Taking Physical Activity and Physical Education to School*.⁽⁵⁾ This report also stressed the importance of a comprehensive, multi-component, whole school approach to physical activity in schools. CDC and many other federal and national partners are promoting Comprehensive School Physical Activity Programs (CSPAP) to create school environments that offer many opportunities for students to be physically active throughout the school day.⁽⁶⁾ A CSPAP includes strong coordination across five components: physical education, physical activity during school,

Item Rationale for the 2017 Standard High School YRBS

physical activity before and after school, staff involvement, and family and community engagement. Physical education is the cornerstone of CSPAP with research showing that school physical education classes can increase adolescent participation in physical activity^(7–13) and help high school students develop the knowledge, attitudes, and skills they need to engage in lifelong physical activity.^(4,14–16) In 2015, 52% of high school students nationwide went to physical education classes on 1 or more days in an average week when they were in school.⁽³⁾

Watching TV and using a computer are considered sedentary behaviors. Among youth, time spent watching TV is associated with childhood and adult obesity, consumption of fast food, soft drinks, and high-fat snacks, and consumption of fewer fruits and vegetables.^(17–24) Youth who engage in less than two hours of TV viewing per day tend to be more active.⁽¹⁶⁾ Computer usage and video game playing are associated with physical inactivity among adolescents and young adults.⁽²⁵⁾ Among high school students nationwide in 2015, 42% of students played video or computer games or used a computer for something that was not school work for 3 or more hours per day on an average school day and 25% watched television 3 or more hours per day on an average school day.⁽³⁾ The percentage of students who used computers 3 or more hours per day increased significantly during 2003–2009 (22%–25%) and then increased more rapidly during 2009–2015 (25%–42%).⁽³⁾ During 1999–2015, a significant linear decrease occurred in the percentage of high school students who watched television 3 or more hours per day (43%–25%).⁽³⁾

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Item Rationale for the 2017 Standard High School YRBS

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QUESTION(S):

84. During the past 12 months, how many times did you have a concussion from playing a sport or being physically active?

Item Rationale for the 2017 Standard High School YRBS

RATIONALE:

In 2013, the Institute of Medicine (now National Academy of Sciences) produced a report entitled *Sports Related Concussions in Youth: Improving the Science, Changing the Culture* that challenged CDC to improve the surveillance of sports-related concussions among youth.⁽¹⁾ The report identified a number of gaps in current surveillance efforts. Specifically, current surveillance systems only captured concussions experienced in organized, school-based sports at the high school or college level, or only captured sports-related concussions seen in emergency departments.⁽¹⁾ As a result, there were no comprehensive national incidence estimates of sports- and recreation-related concussions experienced by youth.

States may be particularly interested in more comprehensive estimates of sports- and recreation-related concussions because legislation related to sports concussions was passed in all 50 states within the past 5–7 years. This legislation, commonly referred to as “Return to Play” laws, typically have three core components: concussion education for athletes, parents, and coaches; restrictions on returning to play on the same day of a suspected concussion; and medical clearance prior to returning to play after a concussion. Being able to monitor the incidence of sports- and recreation-related concussions at the state level could allow states to monitor the effects of this legislation as well as the impact of prevention efforts.

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Item Rationale for the 2017 Standard High School YRBS

Oral Health

QUESTION(S):

86. When was the last time you saw a dentist for a check-up, exam, teeth cleaning, or other dental work?

RATIONALE:

This question measures the prevalence of oral health care, provides data for one of the Leading Health Indicators for Healthy People 2020 (OH-7 “Increase the proportion of children, adolescents, and adults who used the oral health care system in the past 12 months”), and relates to OH-8 “Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year.”⁽¹⁾

Despite improvements in oral health status in the United States, disparities remain in some population groups as classified by sex, income, age, and race/ethnicity.⁽²⁾ Oral diseases and conditions can occur throughout the life span.⁽²⁾ Nearly every American has had the most common oral disease, dental caries.⁽²⁾ Over 50% of adolescents aged 12–19 year experienced dental caries in permanent teeth in 2011–2012.⁽³⁾ Oral health is related to general health. The examination of oral tissues may be used to determine the presence of disease, disease progression, or exposure to risk factors, and as a diagnostic tool.⁽²⁾ The mouth can be a portal of entry for infections that can affect local tissues and may spread to other parts of the body.⁽²⁾ Oral diseases may also be associated with other diseases such as diabetes, heart disease and stroke, and adverse pregnancy outcomes.⁽²⁾ According to 2015 YRBS data, nationwide, 74% of students saw a dentist for a check-up, teeth cleaning, or other dental work during the 12 months before the survey.⁽⁴⁾

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Item Rationale for the 2017 Standard High School YRBS

Asthma

QUESTION(S):

87. Has a doctor or nurse ever told you that you have asthma?

RATIONALE:

This question measures the prevalence of asthma. Approximately 9.9 million (13%) U.S. children <18 years have been diagnosed with asthma at some time in their lives.⁽¹⁾ From 2007–2009, children made 66.9 visits per 100 persons with current asthma to doctors' offices and 10.7 visits per 100 persons with current asthma to hospital emergency departments, and 2.1 children per 100 persons with current asthma were hospitalized due to asthma.⁽²⁾ In 2008, children aged 5–17 years with at least one asthma attack in the previous year were reported to miss 10.5 million school days in the past year. Nearly 60% had at least one asthma absence day in the past year, and 5.5% were reported to have an activity limitation due to asthma.⁽²⁾ Among high school students nationwide in 2015, 23% had ever been told by a doctor or nurse that they ever had asthma.⁽³⁾ The percentage of high school students who ever had asthma increased significantly from 2003–2015 (19%–23%).⁽³⁾

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Item Rationale for the 2017 Standard High School YRBS

Sleep

QUESTION(S):

88. On an average school night, how many hours of sleep do you get?

This question measures the amount of sleep students get on an average school night. Sleep is necessary for physical and mental health and is particularly important during adolescence, a phase of rapid biologic growth and development.⁽¹⁾ According to the 2006 Sleep in America poll, more than half of adolescents are getting insufficient sleep on school nights.⁽²⁾ Lack of adequate sleep among adolescents is associated with daytime sleepiness,^(3,4) falling asleep during class,⁽⁵⁾ general inattentiveness,⁽⁵⁾ classroom behavioral problems,⁽⁵⁾ drowsy driving,^(1,3) depressed mood,^(1,3,6) headaches,⁽⁶⁾ and poor school performance.⁽⁷⁾ Evidence tying insufficient sleep to poor health outcomes such as obesity, cardiovascular disease, and diabetes is also growing.⁽⁸⁻¹⁰⁾

Analysis of data from the national YRBS has shown that insufficient sleep is associated with higher odds of current use of cigarettes, marijuana, and alcohol; current sexual activity; seriously considering attempting suicide; feeling sad or hopeless; physical fighting; physical inactivity; obesity; engaging in injury-related risk behaviors; and engaging in unhealthy weight-control behaviors.⁽¹¹⁻¹⁴⁾

In 2015, the National Sleep Foundation recommended that teens aged 14-17 years get 8-10 hours of sleep per night.⁽¹⁵⁾ Healthy People 2020 contains four sleep health-related objectives, including one for adolescents. This objective is to “increase the proportion of students in grades 9 through 12 who get sufficient sleep (defined as 8 or more hours of sleep on an average school night).”⁽¹⁶⁾ According to 2015 YRBS data, nationwide, 27% of high school students got 8 or more hours of sleep on an average school night.⁽¹⁷⁾ The percentage of high school students who got 8 or more hours of sleep on an average school night decreased significantly from 2007–2015 (31%–27%).⁽¹⁷⁾

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Item Rationale for the 2017 Standard High School YRBS

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Item Rationale for the 2017 Standard High School YRBS

Grades

QUESTION(S):

89. During the past 12 months, how would you describe your grades in school?

RATIONALE:

This question measures academic grades in school. The academic success of America's youth is strongly linked with their health. Health-related factors such as hunger, physical and emotional abuse, and chronic illness can lead to poor school performance.⁽¹⁻⁴⁾ Health-risk behaviors such as early sexual initiation, violence, and physical inactivity are consistently linked to poor grades and test scores and lower educational attainment.⁽²⁻⁷⁾ In turn, academic success is an excellent indicator for the overall well-being of youth and a primary predictor and determinant of adult health outcomes.⁽⁸⁻¹⁰⁾ Leading national education organizations recognize the close relationship between health and education, as well as the need to foster health and well-being within the educational environment for all students.⁽¹¹⁻¹³⁾ This question provides data to monitor the important link between health-risk behaviors and academic achievement.

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Item Rationale for the 2017 Standard High School YRBS

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