Youth Risk Behavior Survey (YRBS)
2025 Standard Questionnaire
Item Rationale

Obesity, Overweight, and Weight Control

QUESTION(S):

5. How tall are you without your shoes on?

6. How much do you weigh without your shoes on?

64. 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 percentile for adolescents. BMI percentile takes into account that young people are still growing and are growing at different rates depending on their age and sex. There are different ways that BMI data can be presented; CDC recommends using BMI percentile when assessing weight status for youth ages 2–20. Although BMI calculated from self-reported height and weight underestimates the prevalence of obesity compared to BMI calculated from measured height and weight,[1,2] self-reported height and weight are useful for tracking BMI trends over time at a population level.[3-5]

Children with obesity are at higher risk of having other chronic health conditions and diseases that influence physical health.[6,7] Obesity has psychological consequences as well; many youth with obesity experience weight stigma, including being bullied and teased.[8,9] In the long term, youth with obesity are more likely to have obesity as an adult than children or adolescents who did not have obesity.[10]

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 reduce the prevalence of obesity.[3] Nationwide in 2021, 16% of high school students had obesity and 16% were overweight.[11] During 1999–2021, significant linear increases occurred in the percentage of students with obesity (11%–16%) and who were overweight (14%–16%).

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QUESTION(S):

65. 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 a healthy weight while protecting overall health, growth and development, and nutritional status.[1] The goals of obesity prevention in children and adolescents also include the avoidance of potentially harmful weight concerns and restrictive eating behaviors.[2] For these reasons, understanding adolescents' weight goals, both independently and relative to weight status, is of public health importance. Nationwide in 2021, 46% of high school students were trying to lose weight. During 1999–2021, significant linear decreases occurred in the percentage of students who were trying to lose weight (42%–46%).[3]

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Behaviors that Result in Unintentional Injuries

QUESTION(S):

7. 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 are a leading cause of death among adolescents aged 13–19 years in the United States, with more than 2,800 adolescents killed in 2022.(1) In addition, approximately 254,000 adolescents aged 13–19 years were treated in emergency departments for motor vehicle crash-related injuries in 2021.(1) When used correctly, seat belts reduce the risk of death and serious injury in crashes for passenger car occupants by about half.(2,3) In 2021, approximately 40% of high school students nationwide did not always wear a seat belt when riding in a car driven by someone else.(4) Additionally, there is evidence of disparities in the prevalence of adolescent seat belt use by geographic location that are important to monitor. For example, a CDC study using national YRBS data found that students in the Northeast were 40% *more likely* than students in the Midwest to not always wear a seat belt.(5)

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QUESTION(S):

8. 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**?

9. 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 drive a motor vehicle after drinking alcohol or ride as a passenger in a motor vehicle operated by someone who has been drinking alcohol. In 2021, 21% of 15- to 20-year-old drivers who were involved in fatal motor vehicle crashes had been drinking alcohol.(1) Among those young drivers who were killed in fatal motor vehicle crashes and had been drinking alcohol, 84% had a blood alcohol concentration (BAC) equal to or above the legal threshold for adults (which is 0.08% in all states but Utah).(1) Approximately one-fourth of the young drivers who were killed in motor vehicle crashes had BACs at or above 0.08%.(1) Even at BACs of 0.050%–0.079%, drivers 16–20 years of age are about 6 times as likely to be involved in a fatal crash as their sober counterparts.(2) In 2021, among U.S. high school students who had driven a car or other vehicle during the 30 days before the survey, 4.6% drove one or more times when they had been drinking alcohol during that same time period.(3) The prevalence of driving when the student had been drinking alcohol decreased during 2013–2021 (10.0%–4.6%).(3)

Riding with a driver of any age who has been drinking alcohol is dangerous. Riding with a drinking driver is also associated with adolescent drinking and driving.(4,5) In addition, longitudinal research indicates that adolescents who ride with impaired drivers at a young age are more likely to drive while impaired themselves as they get older and start driving.(6) In 2021 among U.S. high school students, 14% had ridden in a car or other vehicle driven by someone who had been drinking alcohol at least once during the 30 days before the survey.(3) The prevalence of riding with a driver who had been drinking alcohol decreased during 1991–2009 (39.9%–28.3%) and then further decreased from 2009–2021 (28.3%–14.1%).(3)

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QUESTION(S):

10. 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 a leading cause of death among U.S. adolescents aged 13–19 years in the United States.[1,2] In 2022, 6% of all drivers aged 15–20 years involved in fatal crashes were reported as distracted at the time of the crash, and 14% of these distracted teens were distracted by the use of cell phones.[3] The performance of distracting secondary tasks while driving, such as texting while driving, significantly increases risk for a crash or near-crash among novice, inexperienced drivers.[2,4,5] Texting while driving is an especially risky type of distracted driving, as it involves three types of driver distraction: visual, physical/manual, and cognitive.[6] Teen drivers are more vulnerable to the effects of distraction[2,7,8,9] and are less able to disengage from distracting behaviors as road hazards emerge than adults.[10] In 2021, among 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 during the same time period was 36.1%.[11] The prevalence of texting or emailing while driving decreased during 2013–2021 (41.4%–36.1%).[11] In addition, there are disparities in the prevalence of texting/e-mailing while driving among adolescent drivers by geographic location that need to be monitored. For example, a CDC study using national YRBS data found that high school students (aged ≥16 years) in the Northeast who drove were 20% *less likely* than students in the Midwest to text/e-mail while driving.[12] Also, students (aged ≥16 years) attending suburban or town schools who drove were 20%–30% *more likely* to text/e-mail while driving than students attending urban schools.[12]

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Violence-Related Behaviors

QUESTION(S):

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

12. **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.)

13. 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?

14. 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 second leading cause of death among youth ages 13 –19 years (10.0 per 100,000) in 2022.(1) Homicide is the leading cause of death among non-Hispanic black youth ages 13–19 years (45.7 per 100,000) and the second leading cause of death for Hispanic youth ages 13–19 years (8.8 per 100,000).(1) Approximately 12% of homicide victims in the United States in 2022 were aged 13–19 years; of these victims, 94% were killed with a firearm.(1) More than 62% of all single-victim and 95% of all multiple-victim school-associated youth homicides involve 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 2021, more than 145,000 (477.5 per 100,000) nonfatal, physical assault injuries among youth ages 13–19 years were treated in U.S. emergency departments.(1)

Among high school students nationwide in 2021, 3.1% had carried a weapon (i.e., gun, knife, or club) on school property on at least 1 day during the 30 days before the survey.(4) The prevalence of having carried a weapon on school property decreased significantly from 11.8% in 1993 to 3.1% in 2021.(4) For the first time in 2017, the question assessing the prevalence of having carried a gun during the 12 months before the survey instructed respondents not to count the days when they carried a gun only for hunting or for a sport, such as target shooting. In 2021, 3.5% of high school students carried a gun (excluding the days when they carried a gun only for hunting or for a sport, such as target shooting) during the 12 months before the survey. This represents a significant decrease from 4.8% in 2017 to 3.5% in 2021.(4)

Among high school students nationwide in 2021, 8.6% 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 6.6% had been threatened or injured with a weapon on school property one or more times during the 12 months before the survey.(4) The prevalence of students nationwide having not gone to school because of safety concerns increased significantly from 4.4% in 1993 to 8.6% in 2021. (4) The prevalence of students nationwide having been

threatened or injured with a weapon on school property did not change significantly during 1993–2003 (7.3%–9.2%), but then decreased from 9.2% in 2003 to 6.6% in 2021.[4]

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QUESTION(S):

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

16. 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 during the 12 months before the survey. Physical fighting is associated with increased likelihood of serious injury-related health outcomes, including being hospitalized for fighting-related injuries, other forms of violence (e.g., bullying), and health risk behaviors (e.g., substance use).[1,2,3] Physical fighting is also a marker for problem behaviors and outcomes related to education, including school absenteeism and suspension,[4-9] and has implications for adolescent mental health.[10] Among high school students nationwide in 2021, 18.3% had been in a physical fight and 5.8% had been in a physical fight on school property one or more times during the 12 months before the survey.[11] The percentage of high school students who were in a physical fight decreased during 1991–2011 (42.5%–32.8%) and then decreased further during 2011–2021 (32.8%-18.3%).[11] The percentage of high school students who were in a physical fight on school property also decreased significantly during 1993–2021 (16.2%–5.8%).[11]

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QUESTION(S):

17. Have you ever seen someone get physically attacked, beaten, stabbed, or shot in your neighborhood?

RATIONALE:

This question measures exposure to community violence. Among high school students nationwide in 2021, 20% had ever seen someone get physically attacked, beaten, stabbed, or shot

in their neighborhood.[1] Data from the 2014 National Survey of Children's Exposure to Violence found that 33% of adolescents ages 14-17 reported witnessing an assault in their community (58% in their lifetime) and 5% reported being exposed to a shooting (including hearing gunshots or seeing someone shot) in the past year (13% in their lifetime).[2] In addition, data from a 2009 survey of New York State adult residents found that 25% of adults sampled indicated they were exposed to violence in their community before age 18.[3] Witnessing community violence is associated with suicidal ideation, suicide attempts, binge drinking, substance use, and gun carrying among high school students.[1] The World Health Organization considers exposure to community violence to be an adverse childhood experience that can have lifelong consequences.[4-7] Measuring exposure to community violence is important because adverse childhood experiences are a focus area of CDC, and this measure seeks to capture the community context for violence.

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QUESTION(S):

18. Have you ever been physically forced to have sexual intercourse when you did not want to?

19. 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.)

20. 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.)

21. 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 including suicide ideation and attempts, major depressive episodes, increased alcohol, tobacco, and other substance use, eating disorders, and risky sexual behavior.[1-6] According to the Centers for Disease Control and Prevention's National Intimate Partner and Sexual Violence Survey, 1 in 4 U.S. women have experienced (completed or attempted) rape and 1 in 9 U.S. men have been made to sexually penetrate someone else (completed or attempted) in their lifetime; among female victims of rape, 49.0% were under 18 years old at the time of their first victimization, and among male victims of being made to penetrate, 41.1% were under 18 at the time of the first victimization.[7] About 1 in 3 women (32.5%) and 1 in 4 men (24.6%) 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 contact sexual violence, physical violence, and/or stalking by an intimate partner, 25.9% of women and 20.5% of men first experienced some form of violence by that partner between 11 and 17 years of age.[8]

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.[7,10,11] Preventing sexual violence by any perpetrator and dating violence are focus areas for CDC because they are types of adverse childhood experiences. Knowing the proportion of high school students 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 2021, 8.5% 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 changed significantly during 2001–2021 (7.7%–8.5%).[12] Among the students who dated or went out with someone during the 12 months before the survey, 8.5% experienced physical dating violence by a dating partner, and 9.7% experienced sexual dating violence by a dating partner.[12] The percentage of high school students who experienced physical dating violence and sexual dating violence both decreased significantly during 2013–2021 (10.3%–8.5% and 10.4%–9.7%).[12] Nationwide, 11.0% of students experienced sexual violence by anyone one or more times during the 12 months before the survey.[12] The percentage of students who experienced sexual violence by anyone increased significantly during 2017-2021 (9.7%-11.0%).[12]

Data from the YRBS has also been critical in understanding which youth are at highest risk of experiencing sexual violence and dating violence. For example, AI/AN students reported higher prevalence of sexual violence and dating violence compared to students of other race/ethnicities.[13] Students who identified as gay, lesbian, or bisexual were at significantly higher risk of experiencing sexual violence and dating violence compared to heterosexual students.[13] Transgender youth also reported significantly higher levels of sexual violence and dating violence victimization compared to cisgender counterparts.[14]

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QUESTION(S):

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

24. uring the past 12 months, have you ever been **electronically** bullied? (Count being bullied through texting, Instagram, Facebook, or other social media.)

RATIONALE:

Bullying is a form of youth violence and an adverse childhood experience (ACE). Bullying is "any unwanted aggressive behavior(s) by another youth or group of youths, who are not siblings or current dating partners, that involves an observed or perceived power imbalance, and is repeated multiple times or is highly likely to be repeated. Bullying may inflict harm or distress on the targeted youth including physical, psychological, social, or educational harm." [1] These questions assess experiencing bullying victimization on school property or anywhere via electronic mechanisms during the past 12 months. Bullying victimization is associated with depression,[1-4] anxiety,[4] suicidal ideation,[1,4-6] self-injury,[2,4] suicide attempts,[2,4-6] increased odds of repeated common health problems,[5,7] school absenteeism,[8] academic difficulties,[9] psychological distress,[5,7] externalizing problems,[10] sleep disturbances,[5] tobacco and illicit drug use,[4] and feeling unsafe at school.[6,8] Electronic bullying victimization – commonly referred to as cyberbullying – has been associated with discipline problems in school, skipping school, weapon carrying,[11] psychological distress,[8,12] lower self-esteem,[13] depression,[12,14] suicidal ideation,[6,15] self-injury,[12,15] and suicide attempts.[2,6,15] Among high school students nationwide in 2019, 19.5% reported that they had been bullied on school property during the 12 months before the survey and 15.7% had been electronically bullied through texting, Instagram, Facebook, or other social media during the 12 months before the survey.[15]

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QUESTION(S):

22. During your life, how often have you felt that you were treated badly or unfairly **in school** because of your race or ethnicity?

RATIONALE:

Being treated badly or unfairly in school because of one's race or ethnicity is a self-reported measure of experiencing racial discrimination at school. This experience can also be referred to as perceived racism. The item was adapted from the Perceptions of Racism in Children and Youth (PRaCY) scale, which has shown validity and reliability among youth of color who were ethnically and racially diverse.(1) Racism, defined as "a system of structuring opportunity and assigning value based on the social interpretation of how one looks (i.e., race) that unfairly disadvantages some individuals and communities, unfairly advantages other individuals and communities, and saps the strength of the whole society through the waste of human resources,"(2) is a critical social determinant of health and a key driver of systemic inequities in health outcomes.(2,3) Racism influences the health and well-being of racial and ethnic minority persons and families throughout the lifespan and contributes to racial and ethnic disparities in health outcomes.(3,4) Experiences of racial discrimination are associated with poor mental health (e.g., anxiety, depression, and low self-esteem), health risk behaviors, reduced social and adaptive functioning, and delinquent behaviors among youths.(5,6) Racial discrimination in educational settings contributes to racial disparities in academic achievement and educational attainment, which are important markers for long-term health outcomes.(6) The 2021 Adolescent Behaviors and Experiences Survey (ABES) used this measure and found that approximately one third (35.6%) of U.S. high school students reported perceived racism. Perceived racism was highest among Asian (63.9%), Black (55.2%), and multiracial students (54.5%). Students who reported perceived racism had higher prevalence of poor mental health (38.1%); difficulty concentrating, remembering, or making decisions (44.1%); and not feeling close to people at school (40.7%). Perceived racism was higher among those students who reported poor mental health than those who did not report poor mental health during the pandemic among Asian (67.9% versus 40.5%), Black (62.1% versus 38.5%), Hispanic (45.7% and 22.9%), and White students (24.5% versus 12.7%).(7)

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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:

Bullying is a form of youth violence and an adverse childhood experience (ACE). Bullying is "any unwanted aggressive behavior(s) by another youth or group of youths, who are not siblings or current dating partners, that involves an observed or perceived power imbalance, and is repeated multiple times or is highly likely to be repeated. Bullying may inflict harm or distress on the targeted youth including physical, psychological, social, or educational harm."[1] These questions assess experiencing bullying victimization on school property or anywhere via electronic mechanisms during the past 12 months. Bullying victimization is associated with depression,[1-4] anxiety,[4] suicidal ideation,[1,4-6] self-injury,[2,4] suicide attempts,[2,4-6] increased

odds of repeated common health problems,[5,7] school absenteeism,[8] academic difficulties,[9] psychological distress,[5,7] externalizing problems,[10] sleep disturbances,[5] tobacco and illicit drug use,[4] and feeling unsafe at school.[6,8] Electronic bullying victimization – commonly referred to as cyberbullying – has been associated with discipline problems in school, skipping school, weapon carrying,[11] psychological distress,[8,12] lower self-esteem,[13] depression,[12,14] suicidal ideation,[6,15] self-injury,[12,15] and suicide attempts.[2,6,15] Among high school students nationwide in 2019, 19.5% reported that they had been bullied on school property during the 12 months before the survey and 15.7% had been electronically bullied through texting, Instagram, Facebook, or other social media during the 12 months before the survey.[15]

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Self Harm

QUESTION(S):

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

RATIONALE:

This question assesses the risk behavior of purposely hurting oneself without wanting to die. This type of self-harm behavior, also referred to as non-suicidal self-injury, tends to begin during adolescence.[1,2] While the behavior is most frequently used as a means of coping with emotions,[1,2] self-harm is also used to communicate distress to others.[2] This type of behavior occurs in the context of multiple mental health disorders, including depression, eating disorders, and substance use disorders.[3] In addition, self-harm has been shown to be an important risk factor for suicide.[4] Regardless of its association with other negative outcomes, the behavior itself is important to monitor.[5] It is indicative of the mental health challenges and experiences of emotional distress among young people, which remains a national concern.[6]

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Suicide

QUESTION(S):

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

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

29. During the past 12 months, how many times did you actually attempt suicide?

30. **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 suicidal thoughts and behaviors. Suicide is a serious public health problem that can have long-lasting effects on individuals, families, and communities. There is no single cause of suicide – it is influenced by many factors at the individual, relationship, community, and societal levels.

The high prevalence of suicidal thoughts and behaviors among young people remains a national concern.(1) In 2022, suicide was the third leading cause of death among U.S. high school age youth (14-18 years)(2,3) The 2021 Youth Risk Behavior Survey (YRBS) data revealed that approximately 30% of female high school students and 14% of male high school students seriously considered attempting suicide during the past year.(4) Such findings and surveillance of other behaviors related to suicide are critically important for understanding trends and for directing public health efforts.(5-7) YRBS data have been used to guide national decision-making, primary prevention resources and updates to the HHS National Strategy for Suicide Prevention.(8-10)

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Mental Health

QUESTION(S):

26. 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?

81. During the past 30 days, how often was your mental health not good? (Poor mental health includes stress, anxiety, and depression.)

82. During the past 12 months, when you have felt sad, empty, hopeless, angry, or anxious, how often did you get the kind of help you needed?

RATIONALE:

These three questions measure thoughts and behaviors that are associated with mental health problems among adolescents. Included in this set of questions is the assessment of feeling sad or hopeless, mental health quality of life, and receipt of help for emotional problems. The high prevalence of mental health challenges and risk for suicide among young people remains a national concern.[1] The 2021 Youth Risk Behavior Survey (YRBS) revealed that more than 42% of high school students experienced persistent feelings of sadness or hopelessness during the past year, and 29% reported their mental health in the past 30 days was not good most of the time or always.[2] Such findings and surveillance of other experiences and behaviors related to mental health are critically important for understanding trends and for directing public health efforts.[3,4] These questions have been included on the YRBS previously and resulting data have been used to guide national decision-making, including efforts to expand school-based primary prevention[5,6] and updates to the HHS National Strategy for Suicide Prevention.[7]

The mental health needs of many adolescents go unmet as they and their families can face significant challenges navigating mental health care systems through complex networks of schools, primary care, community-based providers, and public and private insurers.[8] Even among those adolescents able to access services, the services provided may not meet their needs due to reasons such as a dearth of providers offering services tailored to meet the needs of adolescents, stigma, and structural barriers to accessing services that are provided.[9-11] To better understand the extent to which adolescents perceive that they are receiving help in response to negative emotions, a question assessing adolescent perceptions about whether they received help in response to feelings of mental and emotional distress is also included in this section. The question has been designed to be inclusive of primary prevention, early intervention, and multidisciplinary models of care provided in various settings, including schools. [12-14]

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Tobacco Product Use

QUESTION(S):

31. Have you ever tried cigarette smoking, even one or two puffs?

32. How old were you when you first smoked a cigarette, even one or two puffs?

33. During the past 30 days, on how many days did you smoke cigarettes?

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

RATIONALE:

These questions measure lifetime and current smoking patterns, and age of initiation. Cigarette smoking is the leading cause of preventable death in the United States, accounting for more than 480,000 deaths each year.(1) Nearly 90% of adult smokers begin before the age of 18,(1) and about 1,200 youth under 18 years smoke their first cigarette every day in the United States.(2) Cigarette smoking increases the risk of heart disease; chronic obstructive pulmonary disease; acute respiratory illness; stroke; and 12 cancers, including cancers of the lung, larynx, oral cavity, pharynx, pancreas, and cervix.(1,3) Compared to nonsmokers, cigarette smokers are more likely to drink alcohol, use marijuana and illicit drugs, engage in risky sexual behaviors, engage in physical fighting, carry a weapon, and attempt suicide.(3–4)

The use of cigarettes among youth continues to be a public health concern. Among high school students nationwide in 2021, 17.8% had ever tried cigarette smoking and 3.8% had smoked cigarettes on at least 1 day during the 30 days before the survey.(5) In 2023, cigarettes were the second most used tobacco product among middle and high school students.(6) The percentage of high school students who had ever tried cigarette smoking did not change during 1991–1999 and then decreased during 1999–2019 (70%–24.0%), and further decreased in 2021 to 17.8%.(5,7) 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 1997–2019 (36%–6.0%), and further decreased in 2021 to 3.8%.(5,7)

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QUESTION(S):

35. Have you ever used an electronic vapor product?

36. During the past 30 days, on how many days did you use an electronic vapor product?

37. During the past 30 days, how did you **usually** get your electronic vapor products?

RATIONALE:

These questions measure the prevalence of electronic vapor product use and how youth obtain these products. Electronic vapor products are battery-powered electronic devices that usually contain a nicotine-based liquid that is vaporized and inhaled by the user.[1] Electronic vapor products come in many shapes and sizes and may be shaped like cigarettes or other tobacco products, USB devices, pen-shaped devices, or tank-style devices. Electronic vapor products include electronic cigarettes (e-cigarettes), vapes, vape pens, electronic cigars (e-cigars), electronic hookahs (e-hookahs), hookah pens, and mods. Depending on the brand, e-cigarette

cartridges or refillable e-liquids typically contain nicotine, a component to produce the aerosol (e.g., propylene glycol or glycerol), and flavorings (e.g., fruit, mint, or chocolate).[2] Manufacturers, distributors, and retailers market a wide range of products that appeal directly to school-age users, such as candy and fruit flavors, some of which come in devices designed to be easily concealed.[3]

According to the National Youth Tobacco Survey (NYTS), e-cigarettes have remained the most commonly used tobacco product among high school students since 2014.[4,5] Recognizing this as a key component of youth tobacco product use surveillance, the YRBS has assessed the use of electronic vapor products since 2015.[6] Among high school students nationwide in 2021, 36.2% had ever tried electronic vapor products and 18% had used electronic vapor products on at least 1 day during the 30 days before the survey.[7] Although there was a decline in ever use of electronic vapor products (EVP) from 2015–2021, daily use of EVPs increased from 2.0% to 5.0% among high school students during this time period.[7] NYTS data showed that in 2023, about 2.1 million middle and high school students used an e-cigarette during the past 30 days, and among those students, 25.2% used e-cigarettes daily.[5]

In 2016, the U.S. Food and Drug Administration finalized a rule to regulate e-cigarettes and other electronic vapor products as tobacco products.[8] This rule prevented sales to minors, prohibited samples, prohibited vending machine sales (unless in a facility that never admits minors), and mandated warning labels on packaging.[8] On December 20, 2019, legislation amended the Federal Food, Drug, and Cosmetic Act and raised the federal minimum age of sale of tobacco products from 18 to 21 years of age.[9] Given this evolving landscape, continued monitoring of how youth usually get their e-cigarettes will be important to inform surveillance and evaluation efforts in identifying potential shifts in youth e-cigarette access patterns. The question assessing access to electronic vapor products was revised for 2021 to provide more distinct response options for social sources inclusive of both paid and unpaid means of obtaining e-cigarettes.

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QUESTION(S):

38. During the past 30 days, on how many days did you use **chewing tobacco, snuff, dip, snus, dissolvable tobacco products, or nicotine pouches** such as Copenhagen, Grizzly, Skoal, Camel Snus, on!, ZYN, or Velo? (Do not count any electronic vapor products.)

39. During the past 30 days, on how many days did you smoke **cigars, cigarillos, or little cigars**, such as Swisher Sweets, Middleton's (including Black & Mild), or Backwoods?

RATIONALE:

These questions measure smokeless tobacco use and cigar use. Smokeless tobacco products include chewing tobacco, snuff, dip, snus, or dissolvable tobacco products. [1] The smokeless tobacco brands provided as examples reflect the most commonly used brands based on market-share data. [2] Additionally, brands were updated for 2025 to include the nicotine pouch ZYN due to increasing popularity among youth, and on! due to FDA interest.

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.[1,3,4] Smokeless tobacco use also causes an increased risk of heart disease and stroke.[5] In addition, adolescent smokeless tobacco users are more likely than nonusers to become adult cigarette smokers.[4] Smokeless tobacco may appeal to youth because it can come in flavors such as mint, fruit, or spice.[4] Among high school students nationwide in 2021, 2.5% had used smokeless tobacco (e.g., chewing tobacco, snuff, or dip) on at least 1 day during the 30 days before the survey.[6]

Although there was a decline in current cigar use among high school students from 1999 to 2021 (from 17.7% to 3.1%),[6] cigar use remains a concern. 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] The question assessing cigar use includes examples of commonly used brands.[2]

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Alcohol Use

QUESTION(S):

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

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

42. During the past 30 days, what is the largest number of alcoholic drinks you had in a row, that is, within a couple of hours?

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

RATIONALE:

These questions measure lifetime and current use of alcohol, age of initiation, the largest number of alcoholic drinks consumed during a drinking occasion, and access to alcohol. Excessive drinking is responsible for about 4,000 deaths among underage youth each year, and drinking by individuals younger than age 21 years cost the U.S. $24 billion in 2010.(1,2) Underage drinking contributes to a wide range of health and social problems, including motor vehicle crashes, interpersonal violence (e.g., physical and sexual assaults), unintentional injuries (e.g., burns, falls, drownings), sexual risk behaviors, academic and memory problems, alcohol poisonings and other substance use.(3-5) Early initiation of drinking is also associated with suicide and an increased risk of developing alcohol and substance use disorders later in life.(3,6,7)

Binge drinking (i.e., the consumption of 5 or more drinks for males, or 4 or more drinks for females, on an occasion) is the most common pattern of excessive alcohol use in the United States, and most people younger than age 21 who drink alcohol report binge drinking, often consuming large amounts of alcohol.(4,8) More than two in five high school students who reported binge drinking consumed eight or more drinks in a row.(8) Limiting youth access to alcohol has reduced underage alcohol use and alcohol-related problems.(9,10) However, youth continue to obtain alcohol from a variety of sources, particularly from adults of legal drinking age.(8,11)

Among high school students nationwide in 2021, 15% reported they had their first drink of alcohol (more than a few sips) before age 13 and 23% reported they drank at least one drink of alcohol during the 30 days before the survey.(11) The percentage of high school students who reported current alcohol use decreased significantly during 1991–2021 (from 51% to 23%).(11) Likewise, the percentage of high school students reporting alcohol initiation younger than 13 years decreased significantly during 1991-2021 and the percentage reporting 10 or more drinks as the largest number of drinks during an occasion decreased significantly during 2013-2021.(11)

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Drug Use

QUESTION(S):

44. During your life, how many times have you used marijuana?

45. How old were you when you tried marijuana for the first time?

46. During the past 30 days, how many times did you use marijuana?

47. 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?

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

49. 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?

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

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

52. During your life, how many times have you used **ecstasy** (also called MDMA or Molly)?

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

RATIONALE:

These questions measure lifetime and current use of marijuana and ever use of cocaine, inhalants, heroin, methamphetamines, ecstasy, and injected drugs; and use of prescription pain medicine without a doctor's prescription or used in a manner differently than instructed by a doctor. Among youth, illegal drug use is associated with heavy alcohol and tobacco use,(1) violence and delinquency,(2-4) and suicide.(5) Marijuana use among youth—especially among youth who use marijuana more frequently—may harm the developing brain,(6,7) increase risk of mental health issues,(6) and increase the potential for addiction.(8) All school districts prohibit illegal drug possession or use by students on school property.(9)

Among high school students nationwide in 2021, 28% had used marijuana, 12% had taken prescription opioids without a doctor's prescription or differently than how a doctor told them to use it, 3% had used any form of cocaine, 3% had used ecstasy, 2% had used methamphetamines, and 1% had used heroin one or more times during their life.(10) In 2021, 8% 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 1% had used a needle to inject any illegal drug into their body one or more times during their life.[10] The percentage of high school students who had used marijuana, alcohol, cocaine, and misused prescription opioids one or more times during their life decreased during 2019–2021. The percentage of high school students who had sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life increased during 2019–2021. All other lifetime drug use (i.e., ecstasy, methamphetamine, heroin, injection drug use, synthetic marijuana) did not change during 2019-2021.[10]

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

QUESTION(S):

54. Have you ever had sexual intercourse?

55. How old were you when you had sexual intercourse for the first time?

56. During your life, with how many people have you had sexual intercourse?

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

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

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

60. The **last time** you had sexual intercourse with an opposite-sex partner, what **one** method did you or your partner use to **prevent pregnancy**?

RATIONALE:

These questions measure the prevalence of sexual activity, age at first sexual intercourse, number of sexual partners, and alcohol and other drug use, condom use, and contraceptive use at last sexual intercourse. Early initiation of sexual intercourse is associated with having a greater number of lifetime sexual partners,[1,2] decreased use of contraception[3] and higher risk for sexually transmitted infections (STIs)[4] and pregnancy.[5] Further, evidence connects adolescent sexual activity and substance use risk behaviors.[6]

Continued surveillance of HIV, other STIs, and unintended pregnancy among adolescents and young adults is needed to inform public health practice.[7,8] Estimates suggest that while representing 25% of the ever sexually active population, persons aged 15 to 24 years acquire more than half of all new STIs.[9] Both chlamydia and gonorrhea rates are high among adolescent females between the ages of 15 to 19 years (2,652.3 cases per 100,000 individuals and 525.7 cases per 100,000 individuals, respectively in 2022).[9] Similarly, young adult women (ages of 20 to 24) also reported high chlamydia and gonorrhea rates in 2022 (3,532.3 cases per 100,000 individuals and 739.4 cases per 100,000 individuals, respectively).[9] Annual HIV incidence in 2022, compared with 2018, decreased among persons aged 13–24 years; [10] yet in the United States and dependent areas, there were an estimated 6,400 persons ages 13–24 years newly diagnosed with HIV infection [10] and 42,200 living with HIV infection.[10] In 2022, young people aged 13–24 accounted for 20% of all new HIV infections in the United States.[10]

From 2011 to 2021, data showed declines in sexual risk behaviors among U.S. high school students.[10] Nationwide, in 2021, 30% of high school students had ever had sexual intercourse, 6% had had sexual intercourse with four or more persons during their life, and 21% had had sexual intercourse with at least one person during the 3 months before the survey.[11, 12] The percentage of students who ever had sexual intercourse decreased during 2011–2021 (females:

46-31%, males: 39-29%).[11, 12] The percentage of students who had sexual intercourse with four or more persons during their life decreased during 2011–2021 (females: 13-5%, males: 18-7%).[11, 12] Most recently, in 2021, among the 21.6% of students who were currently sexually active, 57.5% of male students reported that either they or their partner had used a condom during last sexual intercourse.[13] Moreover, compared with female students' report of contraceptive method used (self or partner), male students were less likely to report they or their partner used no contraceptive method (15.2% versus 11.3%) and shot, patch, or birth control ring (4.6% versus 2.3%) at last sexual intercourse in 2021.[13] To reach STI/HIV and pregnancy prevention goals for all adolescents, monitoring condom and contraceptive use behaviors among sexually active youth is essential.[7, 14-16]

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HIV/STI Testing

QUESTION(S):

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

79. During the past 12 months, have you been tested for a sexually transmitted infection (STI) other than HIV, such as chlamydia or gonorrhea?

RATIONALE:

These questions measure whether high school students have ever been tested for HIV and if they have been tested for an STI during the 12 months before the survey. Because adolescents and young people contract HIV and other STIs at high rates,[1-4] national recommendations and clinical guidelines suggest HIV testing and regular STI testing for sexually active young people.[5-7] 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.[5,8] State and local education agencies and schools are essential partners in this effort. In particular, schools have a critical role to play in facilitating delivery of HIV and STI prevention for adolescents.[9,10] State and local data on HIV and STI testing will help agencies examine local trends in testing behaviors, identify disparities in testing, and determine whether high risk youth are being tested.[9,10] In 2021, 5.8% of high school students nationwide had ever been tested for HIV.[11] The percentage of high school students who have ever been tested for HIV did not change from 2005–2013 (11.9%–12.9%), but significantly decreased from 2013–2021 (12.9–5.8%).[11] A similar trend was seen in STI testing, where a decrease in high school students who were tested for STIs (other than HIV) during the 12 months prior to the survey was observed from 2019-2021 (8.6%-5.2%).[11] In 2019, 20.4% of sexually active high school students reporting having been tested for an STI during the 12 months before the survey.[12]

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Sexual Identity

QUESTION(S):

61. During your life, with whom have you had sexual contact?

62. Which of the following best describes you?

63. Some people describe themselves as transgender when their sex at birth does not match the way they think or feel about their gender. Are you transgender?

RATIONALE:

These questions measure sex of sexual partners, sexual identity, and gender identity. Measuring sex of sexual partners and sexual identity enables identification of youth who are sexual minorities. Sexual minority refers to individuals who identify as gay, lesbian, bisexual, or some other non-heterosexual identity, as well as those who have sexual contact with persons of the same or both sexes. Measuring gender identity enables identification of youth who are gender minorities. Gender minority refers to individuals who identify as transgender or another gender identity that is different from their sex assigned at birth, as opposed to cisgender individuals whose gender identity aligns with their sex assigned at birth. Both sexual and gender minority youth are diverse populations, representing all races, ethnicities, socioeconomic statuses, and all parts of the country.

While many sexual and gender 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, and violence.[1,2] YRBS data support this reality, finding that sexual minority youth, both by sexual identity and sex of sexual contacts, have higher rates of violence victimization than youth who identify as heterosexual or only report opposite-sex sexual contacts.[3] State and local YRBS data also reveal that transgender youth have higher rates of violence victimization than cisgender youth.[4] Sexual and gender minority youth also face well-documented health disparities. For example, young gay and bisexual males ages 13–24 made up 25% of new HIV diagnoses among gay and bisexual men in the US in 2021,[5] adolescent bisexual females are more likely engage in sexual risk behaviors such as not using condoms or other contraceptives compared to heterosexual females,[6] and transgender youth are at increased risk of suicidality, substance use, and sexual risk behaviors compared to their cisgender peers.[4] Data on the sexual and gender minority status of young people are critical for documenting the disproportionate rates at which sexual and gender minority students experience many health risks compared to sexual and gender majority students and for developing, implementing, and evaluating policies and programs designed to mitigate these disparities. In 2021, 74% of high school students nationwide identified as heterosexual, 3% identified as gay or lesbian, 12% identified as bisexual, and 9% reported another sexual identity or questioning their sexual identity.[7] Also in 2021, 35% of high school students nationwide had had sexual contact with only the opposite sex, 2% had had sexual contact with only the same sex, 6% had had sexual contact with both sexes, and 57% had had no

sexual contact.[7] Among the eighteen states measuring gender identity in 2021, 2.9% of youth identified as transgender and 2.6% reported questioning if they were transgender.[4]

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Dietary Behaviors

QUESTION(S):

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

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

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

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

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

71. 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.)

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

RATIONALE:

These questions are used to measure population-level trends in dietary behaviors, including consumption of fruits, vegetables, beverages, and breakfast. 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, fiber, 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, cardiovascular disease, and stroke.(2,3) Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of being overweight.(2,4) However, most youth do not meet the recommendations for fruit and vegetable consumption.(5–7) In 2021, during the 7 days before the survey, 47% of high school students nationwide had eaten fruit or drunk 100% fruit juice less than one time per day and 45% of students had eaten vegetables less than one time per day.(8) During 2019–2021, the percentage of students who had eaten fruit or drunk 100% fruit juices less than one time per day increased (42%–47%).(8) There was also a significant increase in the percentage of students who had eaten vegetables less than one time per day between 2019 and 2021 (41%–45%).(8)

Although total sugar-sweetened beverage consumption has significantly decreased during the last decade, mainly due to the decrease in regular soda intake, the calorie intake from sugar-sweetened beverages remain high.(9) Furthermore, sugar-sweetened beverages are a primary source of added sugars in the diet of U.S. children,(10) and contribute on average 132 kcal/day.(9) Consumption of sugar-sweetened beverages is associated with a less healthy diet,(11) increased risk of dental decay (12) and obesity among children,(13) and the development of metabolic syndrome and type 2 diabetes.(14) Nationwide in 2021, 15% 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.[8] The percentage of students who drank soda or pop one or more times per day did not change significantly during 2019–2021 .[8]

Eating breakfast is associated with improved nutrient intake[2] and better cognitive function, academic performance, school attendance rates, psychosocial function, and mood.[14-18] In 2021, 75% of high school students nationwide did not eat breakfast on all 7 days before the survey.[8] The percentage of students who did not eat breakfast on all 7 days increased significantly during 2019–2021 (67%–75%).[8]

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Physical Activity

QUESTION(S):

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

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

75. 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. 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) Physical activity has also been documented as a protective factor that promotes students' health and well-being.(2) In 2018, the U.S. Department of Health and Human Services recommended that children and adolescents ages 6 through 17 years do 60 minutes (1 hour) or more of moderate-to-vigorous physical activity daily.(3) In 2021, 23.9% of students were physically active for ≥60 minutes/day on all 7 days, 19.0% had attended physical education classes on all 5 days of school, and 49.1% had played on ≥1 sports team.(4)

In 2023, the Centers for Disease Control and Prevention published a physical activity report as part of a special issue of the *Journal of School Health* presenting a decade of school-based physical activity intervention research conducted across multiple Whole School, Whole Community, Whole Child components.(5) This report reinforces the use of a Comprehensive School Physical Activity Program (CSPAP) to increase student physical activity before, during, and after school.(5,6) A CSPAP includes strong coordination across five components: physical education, physical activity during school, physical activity before and after school, staff involvement, and family and community engagement.(6) 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.(3,14,15) Healthy People 2030, a U.S. government health initiative, has also indicated that increasing youth sports participation to 63.3% is a priority in the U.S.(16)

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Concussion

QUESTION(S):

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

RATIONALE:

This question measures the prevalence of self-reported concussions from playing sports or being physically active. Among high school students nationwide in 2019, 15% of students experienced a sports- or physical activity-related concussion during the 12 months before the survey.(1) Compared with older athletes, high school athletes have shown increased susceptibility to concussions and longer recovery times,(2) making concussions among youths playing a sport or being physically active an area of concern. Also of concern are the short-term and long-term sequelae of concussions, which can include cognitive, affective, and behavioral changes.(2) 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.(2) 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.(2) 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 10-15 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 allows states to monitor the effects of this legislation as well as the impact of prevention efforts.

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Social Media

QUESTION(S):

77. How often do you use social media?

RATIONALE:

This question measures frequency of social media use. Recent findings from a nationally representative survey showed that young adults aged 18 to 29 are more likely to use social media platforms than older adults, with use ranging from 62% to 93% across the most common platforms.(1) Among adolescents aged 13 to 17, research found similar usage across these platforms (59% to 93%), with one in five teens reporting near constant social media use on some platforms.(2) Social media use has been linked to a number of mental health risk behaviors and outcomes among youth including chronic sleep deprivation,(3) mental distress,(4) and suicidal behavior,(5) although many of these studies have been cross-sectional.(6) At least one longitudinal study that followed youth and young adults across eight years found no association between social media use and mental health outcomes.(7) However, there is evidence that there may be a dose-response relationship between social media use and mental health outcomes among youth, with poor outcomes such as sleep disturbance and depression being more likely among youth who report the highest frequency of social media use.(3,8) Young people's experiences with social media and its impact on their mental health may also differ across race/ethnicity, sex, and sexual orientation.(9,10,11) For example, among youth of color (Black, East/Southeast Asian, Indigenous, Latinx), social media use has been associated with experiencing racial discrimination online and higher levels of depressive symptoms and anxiety.(10) Youth with LGBTQ+ identities report using social media platforms for identity development and communication more often than their heterosexual peers, and also reported more positive mental health outcomes.(11)

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Oral Health

QUESTION(S):

80. 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 use of oral health care. YRBS is the only surveillance data source to monitor use of oral health care among high school students at the national, state, and local levels. Past-year dental visits among high school students from YRBS is a key indicator included in the National Oral Health Surveillance System.(1) Increasing use of the oral health system is also a Leading Health Indicator, a high-priority objective identified by Healthy People 2030.(2)

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.(3,4) Oral diseases and conditions can occur throughout the life span.(3,4) Nearly every American has experienced the most common oral disease, dental caries.(4) Among adolescents aged 12–19 years, more than half experienced dental caries in permanent teeth and 1 in 6 had untreated tooth decay in 2011–2016.(4)

Oral health is related to general health. Studies suggest that oral diseases are associated with other diseases such as diabetes, heart disease and stroke, and adverse pregnancy outcomes.(3) General health risk factors, such as tobacco use and poor dietary behaviors, are also major risk factors for oral diseases.(3) Regular access to oral health care is important for prevention and early detection and control of oral diseases. Dental settings also offer a unique venue to integrate oral health into coordinated prevention and control of chronic diseases.(3) According to 2021 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.(5) Practicing healthy behaviors (e.g., not using tobacco, not using illegal substances, not drinking soda) is associated with receiving dental care in the past year among high school students.(6)

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Sleep

QUESTION(S):

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

RATIONALE:

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) In 2021, three quarters of high school students reported getting less than eight hours of sleep on an average school night.(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.(8–12)

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; engaging in unhealthy weight-control behaviors; and perceived cognitive impairment.(13-17)

In 2016, the American Academy of Sleep Medicine recommended that children aged 6–12 years should regularly sleep 9–12 hours per 24 hours and teens aged 13–18 years should sleep 8–10 hours per 24 hours.(18) Among high school students nationwide in 2021, 23% of students got 8 or more hours of sleep on an average school night.(19) The percentage of students getting 8 or more hours of sleep did not change significantly during 2007–2013 (31%–32%) and then decreased significantly during 2013–2021 (32%–23%).(19)

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Homelessness

QUESTION:

84. During the past 12 months, where did you usually sleep?

RATIONALE:

This question measures the percentage of students self-identifying as experiencing homelessness under the definition that applies to all public schools under the McKinney-Vento Act.[1] The Act requires every local education agency (LEA) in the United States to identify homeless youth in the LEA, and to collect and provide data to the state regarding the number of homeless students in the LEA. Schools use multiple strategies to identify students experiencing homelessness, but even the most robust strategies miss a large segment of the homeless population, because many parents and students strive to keep their housing situation private, fearing stigma, judgment, child welfare or law enforcement involvement, or other repercussions.

When schools do not identify students experiencing homelessness, those students do not receive critical services available to them under the McKinney-Vento Act, such as school meals, school health and mental health services, access to transportation, and the ability to remain stable in one school. Including this question on the YRBS has helped states and LEAs generate a more accurate estimate of the extent of student homelessness, giving district administrators the impetus to evaluate and improve their methods for identifying homeless students.

In addition to helping jurisdictions generate a more accurate estimate of the extent of student homelessness, the data resulting from this question has helped illuminate the health risks associated with homelessness. For example, compared to their housed peers, high school students experiencing homelessness are significantly more likely to attempt suicide, to be forced to have sexual intercourse, and to use alcohol and other drugs, and they are less likely to eat breakfast and get adequate sleep.[2-4] This information highlights the importance of implementing interventions to mitigate those risks. By revealing the supports needed for students experiencing homelessness, YRBS data can help schools increase high school graduation rates of these students, which can help prevent continued homelessness into their young adulthood.[5]

The time period for the homelessness question was changed from 30 days to 12 months to better align with the McKinney-Vento Act definition of homelessness.[1] Recently, there have been changes in how homelessness has been referenced, using such terms as “housing instability,” “housing insecurity,” “unstable housing,” “unhoused,” and “houseless,” in efforts to reduce stigma.[6,7]

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Food Insecurity

QUESTION(S):

85. During the past 12 months, how often was your family worried that your food would run out before you got money to buy more?

86. During the past 12 months, how often did the food your family bought run out and they did not have money to buy more?

RATIONALE:

The Centers for Disease Control and Prevention identifies food and nutrition security as a social determinant of health that influences chronic disease and health disparities. [1] Chronic food insecurity among children can negatively impact development; however, even acute food insecurity is harmful, with implications for youth health behaviors as well as academic outcomes. Food insecurity is associated with lower school attendance and the inability to concentrate and stay on task—all of which are associated with academic achievement.[2,3] Additionally, the documented co-occurrence of food insecurity and risky sexual behaviors and substance use, and the association between food insecurity and poor mental health among adolescents,[4-8] point to the value of monitoring the prevalence of food insecurity alongside youth risk behaviors and protective factors.

It is important to ask adolescents about food insecurity instead of solely relying on estimates from household heads because adolescents and adult family members may answer differently,[9,10] and it is not clear which data are more reliable.[10] Moreover, adolescents are aware of household dynamics and have the awareness and independence to modify their behaviors in response to household scarcity.[11]

These two questions are modeled after the Hunger Vital Sign and adapted to have the same response format as other YRBS questions. The Hunger Vital Sign has been validated for self-report among adolescents and is promoted by the American Academy of Pediatrics for use in screening in pediatric and clinical settings. [6,12] In analyzing responses to these two items, students who affirmed either or both items (i.e., respond "sometimes", "most of the time", or "always") are identified as being at risk for food insecurity. [6]

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