D. Rationale for Survey Questions

Rationale for Survey Questions

This document provides current literature support for including each question on the Youth Risk Behavior Survey questionnaire. For each behavior assessed on the questionnaire, this summary details the public health consequences of the behavior and the behavior prevalence. Also, for each question that is used to measure progress toward a Healthy People 2010 objective or Leading Health Indicator, the related 2010 National Health Objective is provided.

Behaviors That Result in Unintentional Injuries and Violence

QUESTION(S):

8. When you rode a motorcycle during the past 12 months, how often did you wear a helmet?
9. When you rode a bicycle during the past 12 months, how often did you wear a helmet?

RATIONALE:

These questions measure the frequency of helmet use while riding a motorcycle and bicycle. In 2000-2001, bicycle activities were the third leading type of sports and recreation-related activities in which 15- to 19-year-old males were injured and treated at an emergency department.[1] In 2004, children 14 years and younger accounted for 18% of all bicycle fatalities, making this one of the most frequent causes of injury-related deaths for young children.[2] Head injury is the leading cause of death in bicycle crashes[3,4] and use of bicycle helmets is the single most effective way of reducing head injuries and fatalities.[2] Estimates indicate bicycle helmets may prevent approximately 56% of bicycle-related deaths,[5] 65%-88% of bicycle-related brain injuries,[6,7] and 65% of serious facial injuries to the upper and middle regions of the face.[8] In 2005, among the 68% of high school students nationwide who reported riding a bicycle during the 12 months preceding the survey, 83% had rarely or never worn a bicycle helmet.[9] In 2005, among the 27.9% of students nationwide who had ridden a motorcycle during the 12 months preceding the survey, 36.5% had rarely or never worn a motorcycle helmet. [9]

QUESTION(S):

11. How often do you wear a seatbelt 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. Motor-vehicle related injuries kill more young adults aged 15 to19 years than any other single cause in the United States.[10] Safety belts, when used, reduce the risk of fatal injury to front-seat passenger car occupants by 45% and the risk of moderate-to-critical injury by 50%.[11] In 2005, 10% of high school students nationwide had rarely or never worn a seat belt when riding in a car driven by someone else.[9] During 1991–2005, a significant linear decrease occurred in the percentage of students who rarely or never wore a seat belt (26%–10%)[9]

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

15-19 Increase use of seatbelts to 92%. [12]

QUESTION(S):

11. 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?

12. 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 drugs or alcohol or rode as a passenger in a motor vehicle operated by someone who was under the influence of alcohol or drugs. In 2004, 5% of 15- to 20-year-old drivers who were involved in crashes that resulted in injuries had been drinking alcohol and 22% of 15- to 20-year-old drivers involved in fatal crashes had been drinking alcohol.[13] Alcohol use is associated with 24% of fatalities among those less than 15 years old.[14] In 2005, 10% of high school students nationwide had driven a car or other vehicle one or more times when they had been drinking alcohol and 29% of high school students nationwide had ridden one or more times in a car or other vehicle driven by someone who had been drinking alcohol during the 30 days preceding the survey.[9] During 1991–2005, a significant linear decrease occurred in the percentage of students who rode with a driver who had been drinking alcohol (40%–29%).[9]

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

26-6 Reduce the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol to 30 percent. [12]

QUESTION(S):

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

14. During the past 30 days, on how many days did you carry a gun?

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

16. 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?

17. 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?

18. During the past 12 months, how many times has someone stolen or deliberately damaged your property such as your car, clothing, or books on school property?

RATIONALE:

These questions measure violence-related behaviors and school-related violent behaviors. Homicide is the second leading cause of death among all youth aged 15-19 years (9.5 per 100,000) and is the leading cause of death among black youth aged 15-19 years (33.2 per 100,000).[10] Approximately 84% of homicide victims in the United States in 2004 were killed with a weapon, such as a gun, knife, or club.[15] In 2003, 82% of homicide victims 15 to 19 years old were killed with firearms.[10] Firearms intensify violence and increase the likelihood of fatality in a conflict.[16] Of all violent deaths that occurred on school property between 1994 and 1999, 75% involved firearms.[17] Nearly 100% of school districts have a policy prohibiting weapon possession or use by high school students on school property.[18] Among high school students nationwide in 2005, 19% had carried a weapon, 5% had carried a gun, and 7% had carried a weapon on school property on ≥ 1 of the 30 days preceding the survey.[9] The percentage of students who carried a weapon decreased during 1991-1999 (26%-17.3%) and then did not change significantly during 1999-2005 (17%-19%).[9] About 1.2 million thefts of student property occurred at school in 2003.[19] In 2005, 30% of high school students nationwide had their property stolen or deliberately damaged on school property one or more times during the 12 months preceding the survey.[9]

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

15-39 Reduce weapon carrying by adolescents on school property to 4.9%.[12]

QUESTION(S):

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

20. During the past 12 months, how many times were you in a physical fight in which you were injured and had to be treated by a doctor or nurse?

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

22. During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?

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

RATIONALE:

These questions measure the frequency and severity of physical fights, school-related fights, and abusive behavior. Physical fighting is a marker for other problem behaviors [20] and is associated with serious injury-related health outcomes.[21,22] Among high school students nationwide in 2005, 36% had been in a physical fight and 14% had been in a physical fight on school property one or more times during the 12 months preceding the survey.[9] The percentage of high school students who were in a physical fight decreased during 1991–2003 (43%–33%) and then increased during 2003–2005 (33%–36%).[9] Intimate partner abuse victimization is associated with participation in other high risk behaviors.[23] In 2005, 9% of high school students nationwide had been hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend during the 12 months preceding the survey.[9] Forced sexual intercourse is associated with negative psychosocial and mental health consequences.[24,25] In 2005, 7.5% of high school students nationwide had ever been physically forced to have sexual intercourse when they did not want to.

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

15-38 Reduce physical fighting among adolescents students to 32%.[12]

QUESTION(S):

24. 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?

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

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

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

28. 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 third leading cause of death among youth aged 15-19.[10] The suicide rate for persons aged 15-19 was 7.3 per 100,000 in 2003 down from a high of 10.9 per 100,000 in 1994.[10] Among high school students nationwide in 2005, 17% had seriously considered attempting suicide, 13% had made a plan about how they would attempt suicide, and 8% had actually attempted suicide one or more times during the 12 months preceding the survey.[9] The percentage of high school students who seriously considered attempting suicide decreased during 1991–2003 (29%–17%) and then did not change significantly during 2003– 2005 (17%-17%).[9]

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

18-02 Reduce the rate of suicide attempts by adolescents to 1%.[12]

Tobacco Use

QUESTION(S):

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

30. How old were you when you smoked a whole cigarette for the first time?

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

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

33. During the past 30 days, how did you usually get your own cigarettes?

34. During the past 30 days, on how many days did you smoke cigarettes on school property?

35. Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?

36. During the past 12 months, did you ever try to quit smoking cigarettes?

RATIONALE:

These questions measure lifetime and current smoking patterns, age of initiation, access to cigarettes, smoking on school property, and attempts to quit smoking. Cigarette smoking is the leading cause of preventable death in the United States[26] and accounts for approximately 440,000 deaths each year.[27] 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.[26] In addition, as compared to nonsmokers, cigarette smokers are more likely to drink alcohol, use marijuana and cocaine, engage in physical fighting, carry a weapon, and attempt suicide.[28,29] If current patterns of smoking behavior persist, an estimated 6.4 million U.S. persons who were under the age of 18 in 2000 could die prematurely from smoking-related illnesses.[30] Approximately 64% of school districts in the United State prohibit tobacco use by students, all school staff, and visitors on school property, in school vehicles, and during school events on or off campus.[31] Among high school students nationwide in 2005, 54% had ever tried cigarette smoking, 23% had smoked cigarettes on ≥ 1 of the 30 days preceding the survey, and 7% had smoked cigarettes on school property on ≥ 1 of the 30 days preceding the survey. The percentage of high school students who had ever tried cigarettes did not change significantly during 1991–1999 (70%–70%) and then decreased during 1999–2005

(70%–54%).[9] Current cigarette use among high school students increased significantly during 1991–1997 (28%–36%) and then decreased during 1997–2005 (36%–23%).[9]

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

27-02a Reduce use of tobacco products in the past month by adolescents to 21%.[12]

27-02b Reduce use of cigarettes in the past month by adolescents to 16%.[12]

27-07 Increase tobacco use cessation attempts by adolescent smokers to 84%.[12]

RELATED LEADING HEALTH INDICATOR

Tobacco Use

QUESTION(S):

37. During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?

38. During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip on school property?

39. During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?

RATIONALE:

These questions measure smokeless tobacco use, smokeless tobacco use on school property, and cigar use. Approximately 75% of oral cavity and pharyngeal cancers are attributed to the use of smoked and smokeless tobacco.[32] Use of smokeless tobacco also causes gum disease[33,34] and an increased risk of heart disease and stroke.[33,35] Among high school students nationwide in 2005, 8% had used smokeless tobacco and 5% had used smokeless tobacco on school property on ≥ 1 of the 30 days preceding the survey.[9] The overall risk of oral and pharyngeal cancer is 7-10 times higher among cigar smokers compared to those who never smoked.[36] Additionally, cigar smoking can cause lung cancer, coronary heart disease, and chronic obstructive pulmonary disease.[37,38] In 2005, 14% of high school students nationwide had smoked cigars, cigarillos, or little cigars on ≥ 1 of the 30 days preceding the survey.[9]

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

27-02c Reduce use of spit tobacco in the past month by adolescents to 1%.[12]

27-02d Reduce use of cigars in the past month by adolescents to 8%.[12]

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, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?

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

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

RATIONALE:

These questions measure lifetime and current use of alcohol, age of initiation, episodic heavy drinking, access to alcohol, and drinking on school property. Motor vehicle crashes are the leading cause of death among youth aged 15–19 years in the United States[10] and alcohol use is associated with 9% of all motor vehicle crashes that result in injury and more than one-third of all motor vehicle crash fatalities.[39] Heavy drinking among youth is associated with risky sexual behavior (including sexual initiation, multiple sex partners, condom use, and pregnancy)[39] and use of cigarettes,[40,41] marijuana, cocaine, and other illegal drugs.[40] Limiting youth access to alcohol has reduced underage drinking and alcohol-related problems.[42] However, youth continue to obtain alcohol from a variety of sources, reflecting the need for improved enforcement of underage drinking laws as well as greater public awareness of restrictions on drinking by underage youth. Among high school students nationwide in 2005, 74% had had at least one drink of alcohol on ≥ 1 day during their life and 43% had had at least one drink of alcohol and 26% had had ≥ 5 drinks of alcohol in a row on ≥ 1 of the 30 days preceding the survey.[9] The percentage of high school students who had had at least one drink of alcohol did not change significantly during 1991–1999 (82%–81%) and then decreased during 1999–2005 (81%–74%).[9]

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 the past 30 days, how many times did you use marijuana on school property?

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

51. During the past 30 days, how many times did you use any form of cocaine, including powder, crack, or freebase?

52. 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?

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

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

55. During your life, how many times have you used ecstasy (also called MDMA)?

56. During your life, how many times have you used hallucinogenic drugs, such as LSD, acid, PCP, angel dust, mescaline, or mushrooms?

57. During your life, how many times have you taken steroid pills or shots without a doctor's prescription?

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

59. During the past 12 months, has anyone offered, sold, or given you an illegal drug on school property?

RATIONALE:
These questions measure lifetime and current use of marijuana and cocaine, and lifetime use of inhalants, heroin, methamphetamines, ecstasy, steroids, and injected drugs. Among youth, illicit drug use is associated with heavy alcohol and tobacco use,[43] violence and delinquency,[44-46] and suicide.[47] Among high school students nationwide in 2005, 38% had used marijuana, 8% had used any form of cocaine, 2% had injected drugs, 12% had used inhalants, 4% had used steroids, 9% had used hallucinogenic drugs, 2% had used heroin, 6% had used methamphetamines, and 6% had used ecstasy one or more times during their life.[9] The percentage of high school students who had used marijuana during their life increased during 1991–1999 (31%–47%) and then decreased during 1999–2005 (47%–38%).[9]

Sexual Behaviors That Contribute to HIV Infection, Other Sexually Transmitted Diseases, and Unintended Pregnancies

QUESTION(S):

60. Have you ever had sexual intercourse?

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

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

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

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

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

66. The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy?

91. Have you ever been taught about AIDS or HIV infection in school?

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

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, contraceptive use, and whether high school students received HIV prevention education. Early initiation of sexual intercourse is associated with having a greater number of lifetime sexual partners.[48,49] In addition, adolescents who initiate sexual intercourse early are less likely to use contraception[51] and are at higher risk for pregnancy.[51,52] Each year, there are an estimated 9.1 million cases of sexually transmitted diseases among persons aged 15–24 years.[53] Gonorrhea rates are highest among females between the ages of 15 and 19 years (610.9 cases per 100,000 females) and males between the ages of 20 and 24 years (430.6 cases per 100,000 males).[54] In 2004, there were an estimated 4,842 cases of HIV/AIDS among persons aged 15–24 years.[55] Among high school students nationwide, 47% had had sexual intercourse and 14% had had sexual intercourse with ≥4 persons during their life and 34% had had sexual intercourse with ≥ 1 persons during the 3 months preceding the survey. During 1991–2005, a significant linear decrease occurred in the percentage of students who ever had sexual intercourse (54%–47%) and a significant linear increase occurred in the percentage of currently sexually active students who used a condom at least sexual intercourse (46%–63%).[9] In 2000, 73% of senior high schools taught HIV prevention education in a required health education course.[56]

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

25-11 Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active to 95%.[12]

RELATED LEADING HEALTH INDICATOR

Responsible Sexual Behaviors

Dietary Behaviors

QUESTION(S):

74. 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.)

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

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

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

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

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

80. 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** include diet soda or diet pop.)

81. During the past 7 days, how many glasses of milk did you drink? (Include 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.)

RATIONALE:

These questions measure food choices. Six of the questions address fruit and vegetable consumption, one addresses soda or pop consumption, and one addresses milk consumption. The fruit and vegetable questions are similar to questions asked of adults on CDC's Behavioral Risk Factor Survey.[57] Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances that are important for good health. 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,[58-60] cardiovascular disease,[61] and stroke.[62] Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of overweight.[63-65] In 2005, 20% of high school students nationwide ate fruits and vegetables five or more times per day.[9] During 1999–2005, a significant linear decrease occurred in the percentage of students who ate fruits and vegetables ≥5 times/day (24%–20%). Milk is an important source of calcium for adolescents.[66,67] Calcium is essential for the forming and maintaining healthy bones and low calcium intake during the first two to three decades of life is an important risk factor in developing osteoporosis.[68] Although the recommended intake of calcium is 1,300 mg/day,[69] most adolescents consume far less. National data indicate that the average calcium intake per day among persons aged 12 to 19 years was 1125 mg/day (among males) and 814 mg/day (among females).[67] In 2005, 21% of male and 12% of female high school students nationwide had drunk ≥ 3 glasses of milk per day.[9] In recent years, soft drink consumption has significantly increased among children and adolescents. Among persons aged 2 to 18 years, soft drinks comprised 3% of the total daily calories consumed in 1977–1978 compared to 7% in 1999–2001.[70] Consumption of sugar-sweetened drinks, including soft drinks, appears to be associated with being at increased risk for overweight in children.[71]

Physical Activity

QUESTION(S):

82. On how many of the past 7 days did you exercise or participate in physical activity for at least 20 minutes that made you sweat and breathe hard, such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activities?

83. On how many of the past 7 days did you participate in physical activity for at least 30 minutes that did not make you sweat or breathe hard, such as fast walking, slow bicycling, skating, pushing a lawn mower, or mopping floors?

84. 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.)

84. On an average school day, how many hours do you watch TV?

86. 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? (Include activities such as Nintendo, Game Boy, PlayStation, Xbox, computer games, and the Internet.)

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

88. During an average physical education (PE) class, how many minutes do you spend actually exercising or playing sports?

89. During the past 12 months, on how many sports teams did you play? (Include any teams run by your school or community groups.)

90. During the past 30 days, did you see a doctor or nurse for any injury that happened while exercising or playing sports?

RATIONALE:

These questions measure participation in physical activity, physical education classes, sports teams, television watching, and video game/computer use. Participation in regular physical activity helps build and maintain healthy bones and muscles, control weight, build lean muscle, and reduce fat; reduces feelings of depression and anxiety; and promotes psychological well-being.[72] Over time, regular physical activity decreases the risk of dying prematurely, dying of heart disease, and developing diabetes, colon cancer, and high blood pressure.[72] The 2005 Dietary Guidelines for Americans recommends that youth engage in at least 60 minutes of physical activity on most, preferably all, days of the week.[66] In 2005, 44% of male and 28% of female high school students nationwide had been 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/day on ≥ 5 of the 7 days preceding the survey.[9] School physical education classes can increase adolescent participation in physical activity[73-76] and help high school students develop the knowledge, attitudes, and skills they need to engage in lifelong physical activity.[77] In 2005, 54% of high school students nationwide went to physical education classes on one or more days in an average week when they were in school.[9] The percentage of high school students enrolled in physical education class did not change significantly from 1991 (49%) to 2005 (54%).[9] Television viewing, computer useage, and video game playing are associated with physical inactivity among adolescents[78] and young adults.[79] Television viewing during childhood and adolescence is associated with being overweight.[80,81] Among high school students nationwide in 2005, 37% watched television ≥ 3 hours/day on an average school day. During 1999–2005, a significant linear decrease occurred in the percentage of high school students who watched ≥ 3 hours/day of television (43%–37%).[9]

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

22-09 Increase the proportion of adolescents who participate in daily school physical education to 50%.[12]

22-10 Increase the proportion of adolescents who spend at least 50% of school physical education class time being physically active to 50%.[12]

22-11 Increase the proportion of adolescents who view television 2 or fewer hours on a school day to 75%.[12]

RELATED LEADING HEALTH INDICATOR

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?

67. How do you describe your weight?

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

69. During the past 30 days, did you exercise to lose weight or to keep from gaining weight?

70. During the past 30 days, did you eat less food, fewer calories, or foods low in fat to lose weight or to keep from gaining weight?

71. During the past 30 days, did you go without eating for 24 hours or more (also called fasting) to lose weight or to keep from gaining weight?

72. During the past 30 days, did you take any diet pills, powders, or liquids without a doctor's advice to lose weight or to keep from gaining weight? (Do not include meal replacement products such as Slim Fast.)

73. During the past 30 days, did you vomit or take laxatives to lose weight or to keep from gaining weight?

RATIONALE:

These questions measure self-reported height and weight, self-perception of body weight status, and specific weight control behaviors. Data on self-reported height and weight can be used to calculate body mass index and provide a proxy measure of whether high school students are overweight. Although overweight prevalence estimates derived from self-reported data are likely to be low,[82,83] they can be useful in tracking trends over time. Prevalence trends from national surveys of adults using self-reported height and weight[84] have been consistent with trend data from national surveys using measured heights and weights.[85] In 2003–2004, 66% of persons aged 20 years or older were either overweight or obese and 17% of adolescents aged 12–19 years were overweight.[86] In 2003–2004, there were more than three times as many overweight adolescents as there were in 1976–1980 (17% versus 5%, respectively).[87] Overweight or obesity acquired during childhood or adolescence may persist into adulthood.[88-90] Overweight during childhood and adolescence is associated with negative psychological and social consequences and adverse health outcomes, including type 2 diabetes, obstructive sleep apnea, hypertension, dyslipidemia, and the metabolic syndrome.[91] Studies have shown high rates of body dissatisfaction and dieting among adolescents, with many engaging in unhealthy weight control behaviors, such as fasting and self-induced vomiting which can lead to abnormal physical and psychological development.[92,93] It is estimated that 5 million Americans are affected by eating disorders every year.[94] Among high school students nationwide in 2005, 12% had gone without eating for ≥ 24 hours, 6% had taken diet pills, powders, or liquids without a doctor's advice, and 5% had vomited or taken laxatives to lose weight or keep from gaining weight during the 30 days preceding the survey.[9]

Other Health-Related Topics

QUESTION(S):

93. When you are outside for more than one hour on a sunny day, how often do you wear sunscreen with an SPF of 15 or higher?

94. When you are outside for more than one hour on a sunny day, how often do you do one or more of the following: stay in the shade, wear long pants, wear a long-sleeved shirt, or wear a hat that shades your face, ears, and neck?

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

96. Do you still have asthma?

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

98. How do you describe your health in general?

RATIONALE:

Exposure to UV radiation during childhood and adolescence plays a role in the future development of skin cancer, both melanoma and basal cell cancer.[95-105] Approximately 9 million (13%) U.S. children <18 years have been diagnosed with asthma at some time in their lives.[106] In 2002, children made 5 million visits to doctors' offices and hospital outpatient departments, made 727,000 visits to hospital emergency departments, and had 196,000 hospitalizations due to asthma.[107] Also, an estimated 14.7 million school days were lost due to asthma among school-aged children.[107] Among high school students nationwide, 17% had ever been told by a doctor or nurse that they had asthma.[9] Many U.S. adolescents get an insufficient amount of sleep each night. Drowsiness and fatigue are associated with increased risk of unintentional injuries, depressed moods, and increased use of alcohol and stimulants.[108] Perceived health status is a simple and easily understood measure that correlates very well with actual overall health status and is an important quality of life component. Perceived health status is measured as a part of the Behavioral Risk Factor Surveillance System.[57] It also is considered a key measure of accountability in the new accountability plan developed by the National Center for Chronic Disease Prevention and Health Promotion.

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