

2003 YOUTH RISK BEHAVIOR SURVEY

Item Rationale

Behaviors That Result in Unintentional Injuries and Violence

Question

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

Rationale

This question measures the frequency of helmet use while riding bicycles. Head injury is the leading cause of death in bicycle crashes.^(1,2) Bicycle helmets might prevent approximately 56% of bicycle related deaths.⁽³⁾ Proper use of bicycle helmets can eliminate 65%-88% of bicycle-related brain injuries and 65% of serious (i.e., facial fractures and lacerations seen in the emergency department) injuries to the upper and middle regions of the face.⁽⁴⁻⁶⁾ In 2001, 65.1% of high school students reported riding a bicycle in the previous 12 months, while 84.7% of those students reported never or rarely wearing a bicycle helmet.⁽⁷⁾

Related National Health Objectives For the year 2010

- 15-24 Increase the number of States and the District of Columbia with laws requiring bicycle helmets for bicycle riders to include all States and the District of Columbia
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Question

9. How often do you wear a seatbelt when riding a car driven by someone else?

Rationale

This question measures the frequency with which seat belts are worn when riding in a car. Proper use of lap and shoulder belts could prevent approximately 60% of deaths to motor-vehicle occupants.⁽⁸⁾ Motor-vehicle related injuries kill more young adults aged 15-19 years than any other single cause in the United States.⁽⁹⁾ In 2001, 14.1% of high school students reported rarely or never wearing a seat belt while riding in a car driven by someone else.⁽⁷⁾

Related National Health Objectives For the year 2010

- 15-19 Increase use of safety belts to 92%.
-

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Questions

10. 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?
11. 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 while under the influence of drugs or alcohol or ride as a passenger in a motor vehicle operated by someone who is under the influence of alcohol or drugs. Approximately 30% of all motor vehicle crashes that result in injury involve alcohol.⁽¹⁰⁾ Alcohol use is associated with 36% of motor-vehicle related fatalities among those aged 15-20 years and 20% of fatalities among those less than 15 years old.⁽¹¹⁾ In 2001, 13.3% of high school students nationwide reported having driven a vehicle one or more times after drinking alcohol in the past 30 days and 30.7% of high school students reported riding on one or more occasions in the past 30 days in a car with a driver who had been drinking alcohol.⁽⁷⁾

Related National Health Objectives For the year 2010

- 26-6 Reduce to 30% the proportion of high school students who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol.
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Questions

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

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17. 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. Approximately 9 out of 10 homicide victims in the United States are killed with a weapon, such as a gun, knife, or club.⁽¹²⁾ Homicide is the second leading cause of death among all youth aged 15-19 years (10.6 per 100,000) and is the leading cause of death among black youth aged 15-19 years (37.2 per 100,000).⁽¹³⁾ Homicide rates increase substantially from 1.3 per 100,000 in youth aged 10-14 years to 10.6 per 100,000 in youth aged 15-19 years.⁽¹³⁾ Firearms markedly elevate the severity of the health consequences of violent behavior.⁽¹⁴⁾ In 1998, 82% of homicide victims 15 to 19 years old were killed with firearms.⁽¹²⁾ In 2001, 5.7% of high school students reported carrying a gun.⁽⁷⁾ In 1999, about 1.6 million thefts of student property occurred at school.⁽¹⁵⁾ Nearly 100% of school districts have a policy prohibiting weapon possession or use by high school students.⁽¹⁶⁾ A significant decrease in weapon carrying (e.g. a gun, knife, or club) among high school students on school property from 1993 to 2001 (11.8%-6.4%) occurred. In 2001, 6.6% of high school students felt unsafe at school or traveling to or from school.⁽⁷⁾

Related National Health Objectives For the year 2010

- 15-39 Reduce weapon carrying by high school students on school property to 6%.
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Questions

18. During the past 12 months, how many times were you in a physical fight?
19. 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?
20. During the past 12 months, how many times were you in a physical fight on school property?
21. During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?
22. Have you ever been physically forced to have sexual intercourse when you did not want to?

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Rationale

These questions measure the frequency and severity of physical fights, school-related fights, and abusive behavior. Physical fighting is an antecedent for many fatal and nonfatal injuries.⁽¹⁷⁾ During 1999, students aged 12-18 years were victims of 880,000 nonfatal violent crimes at school.⁽¹⁵⁾ In 2001, 33.2% of high school students reported that they had been in a physical fight anywhere and 12.5% had been in a physical fight on school property. Forced sexual intercourse has been associated with increased risk of chronic diseases and other health problems.⁽¹⁸⁾ In 2001, 9.5% of high school students had been hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend on one or more occasions in the past year, while 7.7% of high school students ever experienced forced sex.⁽⁷⁾

Related National Health Objectives For the year 2010

15-38 Reduce physical fighting among high school students to 32%.

Questions

23. 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?
24. During the past 12 months, did you ever seriously consider attempting suicide?
25. During the past 12 months, did you make a plan about how you would attempt suicide?
26. During the past 12 months, how many times did you actually attempt suicide?
27. 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 suicides, and the seriousness of those attempts. Suicide is the third leading cause of death among youth aged 15-19. The suicide rate for persons aged 15-19 was 8.2 per 100,000 in 1999 down from a high of 11.0 per 100,000 in 1994.^(9, 13) In 2001, 14.8% of high school students had made a specific plan to attempt suicide and 8.8% had attempted suicide one or more times in the past year. From 1991 to 2001, the percentage of high school students who seriously considered suicide decreased from 29% to 19%.⁽⁷⁾

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Related National Health Objectives For the year 2010

18-02 Reduce the rate of suicide attempts by high school students to a 12-month average of 1%.

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Tobacco Use

Questions

28. Have you ever tried cigarette smoking, even one or two puffs?
29. How old were you when you smoked a whole cigarette for the first time?
30. During the past 30 days, on how many days did you smoke cigarettes?
31. During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?
32. During the past 30 days, how did you usually get your own cigarettes?
33. During the past 30 days, on how many days did you smoke cigarettes on school property?
34. Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?
35. 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. Tobacco use is considered the chief preventable cause of death in the United States with approximately one fifth of all deaths attributable to tobacco use.⁽¹⁹⁾ Cigarette smoking is responsible for heart disease; cancers of the lung, larynx, mouth, esophagus, and bladder; stroke; and chronic obstructive pulmonary disease.⁽¹⁹⁾ In addition, cigarette smokers are more likely to drink alcohol and use marijuana and cocaine as compared to nonsmokers.⁽²⁰⁾ If current patterns of smoking behavior persist, an estimated 5 million United States persons who were under the age of 18 in 1995 could die prematurely from smoking-related illnesses.⁽²¹⁾ In 2001, despite laws prohibiting the sale of tobacco to minors in all states and the District of Columbia, 19.1% of high school students who were less than 18 years of age and who were current smokers reported that they usually bought cigarettes in a store or gas station in the past 30 days and, of those, 67.2% were not asked to show proof of age when buying cigarettes.⁽⁷⁾ Approximately 46% of school districts in the United State prohibit tobacco use in buildings, on all school property, in school vehicles, and during school events on or off campus.⁽²²⁾ In 2001, 9.9% of high school students reported smoking cigarettes in the last month on school property. The percentage of high school students who ever smoked cigarettes was steady from 1991-1999 and then decreased from 1999-2001. Current cigarette use among high school students increased from 1991 (27.5%) to 1997 (36.4%) and then decreased by 2001 to 28.5%.⁽⁷⁾

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Related National Health Objectives For the year 2010

- 27-02a Reduce use of tobacco products in the past month by high school students to 21%.
- 27-02b Reduce use of cigarettes in the past month by high school students to 16%.
- 27-07 Increase tobacco use cessation attempts by adolescent smokers to 84%.

Related Leading health Indicators

Tobacco Use

Questions

36. 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?
37. During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip on school property?
38. During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?

Rationale

These questions measure smokeless tobacco use, smokeless tobacco use on school property, and cigar use. Smokeless tobacco use primarily begins in early adolescence.⁽²³⁾ Approximately 75% of oral cavity and pharyngeal cancers are attributed to the use of smoked and smokeless tobacco.⁽²⁴⁾ In 2001, 14.8% of male high school students were current smokeless tobacco users and 9.4% of male high school students reported current smokeless tobacco use on school property.⁽⁷⁾ Cigar smoking also has been associated with cancers of the oral cavity, larynx, esophagus, and lung.⁽²⁵⁾ In 2001, the prevalence of cigar use in the past month was 22.1% among male high school students and 8.5% among female high school students.⁽⁷⁾

Related National Health Objectives For the year 2010

- 27-02c Reduce use of spit tobacco in the past month by high school students to 9%.
- 27-02d Reduce use of cigars in the past month by high school students to 22%.

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Alcohol and Other Drug Use

Questions

39. During your life, on how many days have you had at least one drink of alcohol?
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, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?
43. 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, and drinking on school property. Approximately 30% of all motor vehicle crashes that result in injury involve alcohol,⁽¹⁰⁾ and motor vehicle crashes are the leading cause of death among youth aged 15-19 in the United States.⁽⁹⁾ Heavy drinking among youth also has been linked to increased number of sexual partners, use of marijuana, and poor academic performance.⁽²⁶⁾ In 2001, 78.2% of high school students had one or more drinks of alcohol in their lifetime, 47.1% had one or more drinks of alcohol in the past 30 days, and 29.9% had 5 or more drinks of alcohol on one or more occasions during the past 30 days.⁽⁷⁾

Questions

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 the past 30 days, how many times did you use marijuana on school property?
48. During your life, how many times have you used any form of cocaine, including powder, crack, or freebase?
49. During the past 30 days, how many times did you use any form of cocaine, including powder, crack, or freebase?

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50. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?
51. During the past 30 days, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?
52. During your life, how many times have you used heroin (also called smack, junk, or China White)?
53. During your life, how many times have you used methamphetamines (also called speed, crystal, crank, or ice)?
54. During your life, how many times have you used ecstasy (also called MDMA)?
55. During your life, how many times have you taken steroid pills or shots without a doctor's prescription?
56. During your life, how many times have you used a needle to inject any illegal drug into your body?
57. 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, cocaine, and inhalants and lifetime use of heroin, methamphetamines, ecstasy, hallucinogens, steroids, and injected drugs. In addition to morbidity and mortality due to injury, drug use is related to suicide, early unwanted pregnancy, school failure, delinquency, and transmissions of sexually transmitted diseases (STD), including human immunodeficiency virus (HIV) infection.⁽²⁷⁾ Despite improvements in recent years, drug use is greater among youth in the United States than has been documented in any other industrialized nation in the world.⁽²⁸⁾ In 2001, 42.4% of high school students had used marijuana in their lifetime and 9.4% of high school students had used some form of cocaine in their lifetime. From 1991 to 2001, the percentage of high school students who used cocaine in the past month increased from 1.7% to 4.2%.⁽⁷⁾

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

Questions

58. Have you ever had sexual intercourse?
59. How old were you when you had sexual intercourse for the first time?
60. During your life, with how many people have you had sexual intercourse?
61. During the past 3 months, with how many people did you have sexual intercourse?
62. Did you drink alcohol or use drugs before you had sexual intercourse the last time?
63. The last time you had sexual intercourse, did you or your partner use a condom?
87. Have you ever been taught about AIDS or HIV infection in school?

Rationale

These questions measure the prevalence of sexual activity, number of sexual partners, age at first intercourse, alcohol and other drug use related to sexual activity, condom use, and whether high school students have received HIV prevention education. Age at first intercourse and number of sexual partners is associated with increased risk for unwanted pregnancy and other sexually transmitted diseases, including HIV infection.⁽²⁹⁾ Gonorrhea rates are highest among females between the ages of 15 and 19 (715.8 cases per 100,000 females) and males between the ages of 20 and 24 (589.7 cases per 100,000 males).⁽³⁰⁾ Between 1990 and 1995, AIDS incidence among people aged 13 to 25 years rose nearly 20%. In 2000, 1,688 young people (aged 13 to 24) were reported with AIDS, bringing the cumulative total to 31,293 cases of AIDS in this age group.⁽³¹⁾ The percentage of high school students who ever had sexual intercourse decreased from 54.1% in 1991 to 45.6% in 2001, while condom use among currently sexually active students increased from 46.2% in 1991 to 58.0% in 1999 and then leveled off in 2001 (57.9%). The prevalence of multiple sex partners decreased by 24% from 18.7% to 14.2% from 1991 to 2001.⁽⁷⁾ In 2000, 86% of high schools required HIV prevention education.⁽¹⁶⁾

Related National Health Objectives For the year 2010

- 25-11 Increase the proportion of high school students who abstain from sexual intercourse or use condoms if currently sexually active to 95%.

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Related Leading Health Indicators

Responsible sexual behaviors

Questions

64. The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy?
65. How many times have you been pregnant or gotten someone pregnant?

Rationale

These questions measure use of contraception and whether a student has been pregnant or gotten someone pregnant. In 1997, 840,000 females aged 15 – 19 years old became pregnant.⁽³²⁾ In 2000, among females aged 15-19, the birth rate was 48.5 per 1,000 and nearly 469,000 gave birth.⁽³³⁾ Sixty-six percent of all births among teenagers are the result of unintended pregnancy.⁽³⁴⁾ Among females aged 15-19 years, pregnancy rates decreased 19% from 116.5 per 1,000 in 1991 to 94.3 per 1,000 in 1997,⁽³⁵⁾ and birth rates decreased 26% from 62.1 per 1,000 in 1991 to 45.9 per 1,000 in 2001.⁽³⁶⁾ In 2001, 18.2% of currently sexually active high school students used birth control pills at last sexual intercourse.

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Height and Weight, Weight Control Behaviors, and Dietary Intake

Questions

6. How tall are you without your shoes on?
7. How much do you weigh without your shoes on?
66. How do you describe your weight?
67. Which of the following are you trying to do about your weight?
68. During the past 30 days, did you exercise to lose weight or to keep from gaining weight?
69. 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?
70. 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?
71. 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.)
72. 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, ^(37,38) they can be useful in tracking trends over time. Prevalence trends from national surveys of adults using self-reported height and weight have been consistent with trend data from national surveys using measured heights and weights.⁽³⁹⁾ Overweight and obesity are increasing in both genders and among all population groups. In 1999, an estimated 61% of United States adults and 14% of adolescents aged 12-19 years were overweight. In 1999, there were nearly twice as many overweight children and almost three times as many overweight adolescents as there were in 1980.⁽⁴⁰⁾ Approximately 300,000 deaths a year in the United States are currently associated with overweight and obesity. Left unabated, overweight and obesity may soon cause as much preventable disease and death as cigarette smoking.⁽⁴¹⁾ Overweight or

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obesity acquired during childhood or adolescence may persist into adulthood and increase the risk later in life for coronary heart disease, gallbladder disease, some types of cancer, and osteoarthritis of the weight-bearing joints.⁽⁴²⁾ In adolescence, obesity is associated with hyperlipidemia, hypertension, abnormal glucose tolerance, and adverse psychological and social consequences.⁽⁴³⁾ Studies have shown high rates of body dissatisfaction and dieting among adolescent females, with many engaging in unhealthy weight control behaviors, such as fasting and self-induced vomiting which can lead to abnormal physical and psychological development.⁽⁴⁴⁻⁴⁸⁾

Questions

73. 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.)
74. During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)
75. During the past 7 days, how many times did you eat green salad?
76. During the past 7 days, how many times did you eat potatoes? (Do not count french fries, fried potatoes, or potato chips.)
77. During the past 7 days, how many times did you eat carrots?
78. During the past 7 days, how many times did you eat other vegetables? (Do not count green salad, potatoes, or carrots.)
79. 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, and one addresses milk consumption. The fruit and vegetable questions are similar to questions asked of adults on CDC's Behavioral Risk Factor Survey.⁽⁴⁹⁾ Fruits and vegetables are good sources of complex carbohydrates, vitamins, minerals, and other substances that are important for good health. Dietary patterns with higher intakes of fruits and vegetables are associated with a decreased risk for some types of cancer.^(50-53,7) In 2001, only 23.3% of male high school students and 19.7% of female high school students met the minimum average daily goal of at least five servings per day of vegetables and fruits.⁽⁷⁾ Milk is by far the largest single source of calcium for high school students.⁽⁵⁴⁾ Only about half of male high school students and

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more than 80% of female high school students do not meet dietary recommendations for calcium intake.⁽⁵⁵⁾ Calcium is essential for the formation and maintenance of healthy bones and teeth. Low calcium intake during the first two to three decades of life is an important risk factor in the development of osteoporosis.^(56,57)

Related National Health Objectives For the year 2010

- 19-5 Increase to 78% the proportion of persons aged 2 years and older who consume at least two daily servings of fruit.
- 19-6 Increase to 50% the proportion of persons aged 2 years and older who consume at least three daily servings of vegetables, with at least one-third being dark green or orange vegetables.
- 19-7 Increase to 50% the proportion of persons aged 2 years and older who consume at least six daily servings of grain products, with at least three being whole grains.
- 19-8 Increase to 75% the proportion of persons aged 2 years and older who consume less than 10 % of calories from saturated fat.
- 19-9 Increase to 75% the proportion of persons aged 2 years and older who consume no more than 30 % of calories from total fat.
- 19-10 Increase to 65% the proportion of persons aged 2 years and older who consume 2,400 mg or less of sodium daily.
- 19-11 Increase to 75% the proportion of persons aged 2 years and older who meet dietary recommendations for calcium.

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Physical Inactivity

Questions

80. 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?
81. 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?
82. On how many of the past 7 days did you do exercises to strengthen or tone your muscles, such as push-ups, sit-ups, or weight lifting?
83. On an average school day, how many hours do you watch TV?
84. In an average week when you are in school, on how many days do you go to physical education (PE) classes?
85. During an average physical education (PE) class, how many minutes do you spend actually exercising or playing sports?
86. During the past 12 months, on how many sports teams did you play? (Include any teams run by your school or community groups.)

Rationale

These questions measure participation in physical activity, physical education classes, sports teams, and television watching. Participating 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.⁽⁵⁸⁾ Over time, regular physical activity decreases the risk of dying prematurely, dying of heart disease, and developing diabetes, colon cancer, and high blood pressure.⁽⁵⁸⁾ Decreases in vigorous physical activity occur during grades 9-12, particularly for girls; by 11th grade, half of female high school students do not participate in sufficient levels of vigorous physical activity.⁽⁷⁾ School physical education classes can increase adolescent participation in moderate to vigorous physical activity^(59,60) and help high school students develop the knowledge, attitudes, and skills they need to engage in lifelong physical activity.⁽⁶¹⁾ The percentage of high school students enrolled in daily physical education class decreased from 1991-1995 (from 41.6% to 25.4%) and increased from 1995-2001 (from 25.4% to 32.2%), but still remained far below the 1991 level.⁽⁷⁾ Television

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viewing is the principal sedentary leisure time behavior in the United States and television viewing in young people is related to obesity.^(62,63)

Related National Health Objectives For the year 2010

- 22-06 Increase the proportion of adolescents who engage in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days to 35%.
- 22-07 Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion to 85%.
- 22-09 Increase the proportion of adolescents who participate in daily physical education to 50%.
- 22-10 Increase the proportion of adolescents who spend at least 50% of school physical education class time being physically active to 50%.
- 22-11 Increase the proportion of children and adolescents who view television 2 or fewer hours on a school day to 75%.

Related Leading Health Indicators

Physical Activity

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