

Youth Risk Behavior Survey (YRBS)

Item rationale for the 2005 core questionnaire

Behaviors That Result in Unintentional Injuries and Violence

QUESTION(S):

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 a bicycle. In 2000-2001, bicycle activities were the third leading type of sports and recreation-related activities in which 15-19 year old males were injured and treated at an emergency department.⁽¹⁾ Head injury is the leading cause of death in bicycle crashes,^(2;3) and helmet use protects against head injury.^(4;5) Estimates indicate bicycle helmets might prevent approximately 56% of bicycle related deaths,⁽⁶⁾ 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.⁽⁷⁻⁹⁾ In 2003, 62% of high school students reported riding a bicycle in the previous 12 months and 86% of those students reported never or rarely wearing a bicycle helmet.⁽¹⁰⁾

QUESTION(S):

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. Motor-vehicle related injuries kill more young adults aged 15-19 years than any other single cause in the United States.⁽¹¹⁾ Proper use of lap and shoulder belts reduces the risk of fatal injury to front-seat passengers by 45% and the risk of moderate-to-critical injury by 50%.⁽¹²⁾ In 2003, 18% of high school students reported rarely or never wearing a seat belt while riding in a car driven by someone else.⁽¹⁰⁾

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

15-19 Increase use of seatbelts to 92%.⁽¹³⁾ (pg. 15-29, 30)

QUESTION(S):

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 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 2000, 5% of 15-20 year old drivers who were involved in crashes that resulted in injuries had been drinking alcohol. In addition, 22% of 15-20 year old drivers involved in fatal crashes also had been drinking alcohol.⁽¹⁴⁾ Alcohol use is associated with 20% of fatalities among those less than 15 years old.⁽¹⁵⁾ In 2003, 12% of high school students nationwide reported having driven a vehicle one or more times after drinking alcohol in the past 30 days and 30% 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.⁽¹⁰⁾

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.⁽¹³⁾
(pg. 26-19, 20)
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QUESTION(S):

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

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 of 10 homicide victims in the United States are killed with a weapon, such as a gun, knife, or club.⁽¹⁶⁾ Homicide is the second leading cause of death among all youth aged 15-19 years (9.4 per 100,000) and is the leading cause of death among black youth aged 15-19 years (32.7 per 100,000).⁽¹¹⁾ Firearms intensify violence and increase the likelihood of fatality in a conflict.⁽¹⁷⁾ In 2001, 83% of homicide victims 15 to 19 years old were killed with firearms.⁽¹¹⁾ Of all violent deaths that occurred on school property between 1994 and 1999, 75% involved firearms.⁽¹⁶⁾ In 2003, 6% of high school students reported carrying a gun.⁽¹⁰⁾ Nearly 100% of school districts have a policy prohibiting weapon possession or use by high school students on school property.⁽¹⁸⁾ A significant decrease occurred in weapon carrying (e.g. a gun, knife, or club) among high school students on school property from 1993 to 2003 (12%-6%). In 2003, 5% of high school students felt unsafe at school or traveling to or from school.⁽¹⁰⁾ In 2001, about 1.2 million thefts of student property occurred at school.⁽¹⁹⁾

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

- 15-39 Reduce weapon carrying by adolescents on school property to 4.9%.⁽¹³⁾ (pg. 15-52)
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QUESTION(S):

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?

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.⁽²⁰⁾ In 2003, 33% of high school students reported that they had been in a physical fight anywhere and 13% had been in a physical fight on school property.⁽¹⁰⁾ Forced sexual intercourse has been associated with poorer physical⁽²¹⁾ and mental health among women.^(21;22) In 2003, 9% 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, and 9% ever experienced forced sex.⁽¹⁰⁾

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

15-38 Reduce physical fighting among adolescents students to 32%.⁽¹³⁾ (pg. 15-51)

QUESTION(S):

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.⁽¹¹⁾ The suicide rate for persons aged 15-19 was 7.9 per 100,000 in 2001 down from a high of 10.9 per 100,000 in 1994.⁽¹¹⁾ In 2003, 17% of high school students had made a specific plan to attempt suicide and 9% had attempted suicide one or more times in the past year. From 1991 to 2003, the percentage of high school students who seriously considered attempting suicide decreased significantly from 29% to 17%.⁽¹⁰⁾

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

18-02 Reduce the rate of suicide attempts by adolescents to 1%.⁽¹³⁾ (pg. 18-13)

Tobacco Use

QUESTION(S):

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⁽²³⁾ with 18% of all deaths attributable to tobacco use.⁽²⁴⁾ 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.⁽²³⁾ In addition, as compared to nonsmokers, cigarette smokers are more likely to drink alcohol, use marijuana and cocaine, engage in a physical fight, carry a weapon, and attempt suicide.⁽²⁵⁾ 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.⁽²⁶⁾ Approximately 46% of school districts in the United State prohibit tobacco use by students, staff, and visitors in buildings, on all school property, in school vehicles, and during school events on or off campus.⁽²⁷⁾ In 2003, 8% 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 (70%) and then decreased significantly from 70% in 1999 to 58% in 2003. Current cigarette use among high school students increased significantly from 1991 (28%) to 1997 (36%) and then decreased by 2003 to 22%.⁽¹⁰⁾

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

- 27-02a Reduce use of tobacco products in the past month by adolescents to 21%.⁽¹³⁾ (pg. 27-12)
- 27-02b Reduce use of cigarettes in the past month by adolescents to 16%.⁽¹³⁾ (pg. 27-12)

27-07 Increase tobacco use cessation attempts by adolescent smokers to 84%.⁽¹³⁾ (pg. 27-21)

RELATED LEADING HEALTH INDICATOR

Tobacco Use

QUESTION(S):

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 adolescence, with an average age of initiation of 16.7 years.⁽²⁸⁾ Approximately 75% of oral cavity and pharyngeal cancers are attributed to the use of smoked and smokeless tobacco.⁽²⁹⁾ Use of smokeless tobacco also causes gum recession and an increased risk of heart disease and stroke.⁽³⁰⁾ In 2003, 11% of male high school students reported smokeless tobacco use and 9% reported smokeless tobacco use on school property in the past 30 days.⁽¹⁰⁾ The overall risk of oral and pharyngeal cancer is 7-10 times higher among cigar smokers compared to those who never smoked.⁽³¹⁾ Additionally, cigar smoking can cause lung cancer, coronary heart disease, and chronic obstructive pulmonary disease.⁽³²⁾ In 2003, 20% of male high school students and 9% of female high school students used cigars in the past 30 days.⁽¹⁰⁾

RELATED NATIONAL HEALTH OBJECTIVES FOR THE YEAR 2010

- 27-02c Reduce use of spit tobacco in the past month by adolescents to 1%.⁽¹³⁾ (pg. 27-12)
- 27-02d Reduce use of cigars in the past month by adolescents to 8%.⁽¹³⁾ (pg. 27-12)

Alcohol and Other Drug Use

QUESTION(S):

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. Motor vehicle crashes are the leading cause of death among youth aged 15-19 in the United States.⁽¹¹⁾ Alcohol use is associated with 10% of all motor vehicle crashes that result in injury⁽¹⁴⁾ and more than one-third of all motor vehicle crash fatalities.⁽³³⁾ Heavy drinking among youth is associated with risky sexual behavior (including sexual initiation, multiple sex partners, condom use, and pregnancy)⁽³⁴⁾ and use of cigarettes,^(35;36) marijuana, cocaine, and other illegal drugs.⁽³⁵⁾ In 2003, 75% of high school students had one or more drinks of alcohol in their lifetime, 45% had one or more drinks of alcohol in the past 30 days, and 28% had 5 or more drinks of alcohol in a row on one or more days during the past 30 days.⁽¹⁰⁾

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 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?

50. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?
51. During your life, how many times have you used heroin (also called smack, junk, or China White)?
52. During your life, how many times have you used methamphetamines (also called speed, crystal, crank, or ice)?
53. During your life, how many times have you used ecstasy (also called MDMA)?
54. During your life, how many times have you taken steroid pills or shots without a doctor's prescription?
55. During your life, how many times have you used a needle to inject any illegal drug into your body?
56. 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. 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.⁽³⁷⁾ Drug use is greater among youth in the U.S. than has been documented in any other industrialized nation in the world.⁽³⁸⁾ In 2003, 40% of high school students had used marijuana in their lifetime and 9% had used some form of cocaine in their lifetime. From 1991 to 2003, the percentage of high school students who used cocaine during the past 30 days increased significantly from 2% to 4%.⁽¹⁰⁾

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

QUESTION(S):

57. Have you ever had sexual intercourse?
58. How old were you when you had sexual intercourse for the first time?
59. During your life, with how many people have you had sexual intercourse?
60. During the past 3 months, with how many people did you have sexual intercourse?
61. Did you drink alcohol or use drugs before you had sexual intercourse the last time?
62. The last time you had sexual intercourse, did you or your partner use a condom?
63. The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy?
85. 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, contraceptive use, and whether high school students 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.⁽³⁹⁾ 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).⁽⁴⁰⁾ Through 2002, 13% of persons diagnosed with HIV/AIDS were 13-24 years old at diagnosis.⁽⁴¹⁾ The percentage of high school students who ever had sexual intercourse decreased significantly from 54% in 1991 to 47% in 2003, while condom use among currently sexually active students increased significantly from 46% in 1991 to 63% in 2003.⁽¹⁰⁾ In 2000, 73% of senior high schools taught HIV prevention education in a required health education course.⁽⁴²⁾

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%.⁽¹³⁾ (pg. 25-25)

RELATED LEADING HEALTH INDICATOR

Responsible Sexual Behaviors

Dietary Behaviors

QUESTION(S):

71. 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.)
72. During the past 7 days, how many times did you eat fruit? (Do not count fruit juice.)
73. During the past 7 days, how many times did you eat green salad?
74. During the past 7 days, how many times did you eat potatoes? (Do not count french fries, fried potatoes, or potato chips.)
75. During the past 7 days, how many times did you eat carrots?
76. During the past 7 days, how many times did you eat other vegetables? (Do not count green salad, potatoes, or carrots.)
77. 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.⁽⁴³⁾ 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.⁽⁴⁴⁻⁴⁹⁾ Although data are limited, an increased intake of fruits and vegetables appears to be associated with a decreased risk of overweight.⁽⁵⁰⁻⁵²⁾ In 2003, only 24% of male high school students and 20% of female high school students met the minimum average daily goal of at least five servings per day of vegetables and fruits.⁽¹⁰⁾ Milk is by far the largest single source of calcium for high school students.⁽⁵³⁾ Only 55% of females aged 14 – 18 years old consumed the recommended daily amount of calcium (1300mg/day) with the average intake of calcium for girls in this age group being 713 mg/day.⁽⁵⁴⁾ Calcium is essential for the forming and maintaining healthy bones and teeth. Low calcium intake during the first two to three decades of life is an important risk factor in developing osteoporosis.^(48;55)

Physical Activity

QUESTION(S):

78. 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?
79. 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?
80. 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.)
81. On an average school day, how many hours do you watch TV?
82. In an average week when you are in school, on how many days do you go to physical education (PE) classes?
83. During an average physical education (PE) class, how many minutes do you spend actually exercising or playing sports?
84. 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.⁽⁵⁶⁾ Over time, regular physical activity decreases the risk of dying prematurely, dying of heart disease, and developing diabetes, colon cancer, and high blood pressure.⁽⁵⁶⁾ 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.⁽¹⁰⁾ School physical education classes can increase adolescent participation in moderate to vigorous physical activity⁽⁵⁷⁻⁵⁹⁾ and help high school students develop the knowledge, attitudes, and skills they need to engage in lifelong physical activity.⁽⁶⁰⁾ The percentage of high school students enrolled in physical education class did not change significantly from 1991 – 2003 (49% vs 56%, respectively).⁽¹⁰⁾ Television viewing is the principal sedentary leisure time behavior in the U.S and television viewing in young people is related to obesity.^(61;62)

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%.⁽¹³⁾ (pg. 22-17)
- 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%.⁽¹³⁾ (pg. 22-19)
- 22-09 Increase the proportion of adolescents who participate in daily school physical education to 50%.⁽¹³⁾ (pg. 22-20)
- 22-10 Increase the proportion of adolescents who spend at least 50% of school physical education class time being physically active to 50%.⁽¹³⁾ (pg. 22-21)
- 22-11 Increase the proportion of adolescents who view television 2 or fewer hours on a school day to 75%.⁽¹³⁾ (pg. 22-23)

RELATED LEADING HEALTH INDICATOR

Physical Activity

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?
64. How do you describe your weight?
65. Which of the following are you trying to do about your weight?
66. During the past 30 days, did you exercise to lose weight or to keep from gaining weight?
67. 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?
68. 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?
69. 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.)
70. 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,^(63;64) 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.⁽⁶⁵⁾ Overweight and obesity are increasing in both genders and among all population groups. In 2001-2002, 66% of adults were either overweight or obese and 16% of adolescents aged 12-19 years were overweight. In 2001-2002, there were more than twice as many overweight children and more than three times as many overweight adolescents as there were in 1980.⁽⁶⁶⁾ Approximately 400,000 deaths a year in the U.S. are currently associated with overweight and obesity and, left unabated, overweight and obesity may soon overtake tobacco as the leading cause of death.⁽²⁴⁾ Overweight or obesity acquired during childhood or adolescence may persist into adulthood.⁽⁶⁷⁾ In adolescence, obesity is associated with hyperlipidemia, hypertension, abnormal glucose tolerance, and adverse psychological and social consequences.⁽⁶⁹⁾ 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.^(69;70) It is estimated that as many as seven to eight percent of females in the U.S. suffer from anorexia nervosa and/or bulimia nervosa during their lifetime.⁽⁷¹⁾

Other Health-Related Topics

QUESTION(S):

5. How do you describe your health in general?
86. Has a doctor or nurse ever told you that you have asthma?
87. During the past 12 months, have you had an episode of asthma or an asthma attack?

RATIONALE:

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.⁽⁴³⁾ 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. In 2001, 6.3 million (9%) U.S. children had asthma as diagnosed by a health professional. In addition, children made 4.6 million visits to doctors' offices and hospital outpatient departments, made 728,000 visits to hospital emergency departments, and had 214,000 hospitalizations due to asthma.⁽⁷²⁾ An estimated 14 million lost school days are attributed to asthma among school-aged children.⁽⁷³⁾ The impact of illness and death due to asthma is disproportionately higher among low-income populations, racial and ethnic minorities, and children in inner cities than in the general population.⁽⁷³⁾

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