

SD 2.1

PHYSICAL FIGHTING BY YOUTH

Physical violence is a major cause of injury and homicide among adolescents.¹⁷ In 1997, almost half of all male students and one-quarter of female students in grades 9 through 12 reported having been involved in a physical fight during the previous year. However, the percentage of all students who reported involvement in a fight decreased significantly between 1991 and 1997, from 43 percent to 37 percent. For males, the percentage decreased from 50 percent in 1991 to 46 percent in 1997 (see Figure SD 2.1).

Differences by Age. For all the years included in Table SD 2.1, the percentage of students who reported being involved in fights decreased with age. In 1997, 45 percent of 9th-grade students and 29 percent of 12th-grade students reported being involved in a fight. It is unclear, however, whether this pattern reflects the effects of increasing maturity, a change in the propensity to report having been in a fight, or a tendency for violence-prone youth to drop out of school, leaving a less violent pool of students in the higher grades.

Differences by Race.¹⁸ In 1997, 34 percent of white students reported involvement in a physical fight within the past year, compared with 43 percent of black students and 41 percent of Hispanic students (see Table SD 2.1).

¹⁷Injuries were the leading cause of death for 15- to 19-year-olds in 1995 and 1996, accounting for 80 percent of all deaths. Injury-related mortality includes death from motor vehicle crashes, fires and burns, drowning, suffocation, and accidents caused by firearms and other explosive materials, among others. The rate of death from homicide for youth ages 15 through 19 more than doubled between 1970 and 1994 but decreased 37 percent between 1994 and 1997. (See, for injury-related and homicide mortality, the report section “Health Conditions and Health Care,” indicators HC 1.2 and HC 1.4, this report). See also: University of California at Los Angeles, CDC (Centers for Disease Control and Prevention). “The Epidemiology of Homicide in Los Angeles, 1970-79.” Atlanta: U.S. Department of Health and Human Services, Public Health Service, CDC, 1985. Cited in *Chronic Disease and Health Promotion, Reprints from the Morbidity and Mortality Weekly Report: 1990-1991 Youth Risk Behavior Surveillance System*. Atlanta: U.S. Department of Health and Human Services, Public Health Service, CDC, 1992, p. 37.

¹⁸Estimates for whites and blacks exclude Hispanics of those races.

Table SD 2.1

Percentage of students in grades 9 through 12 in the United States reporting that they have been in a physical fight within the past year, by gender, grade, and race and Hispanic origin^a: 1991, 1993, 1995, and 1997

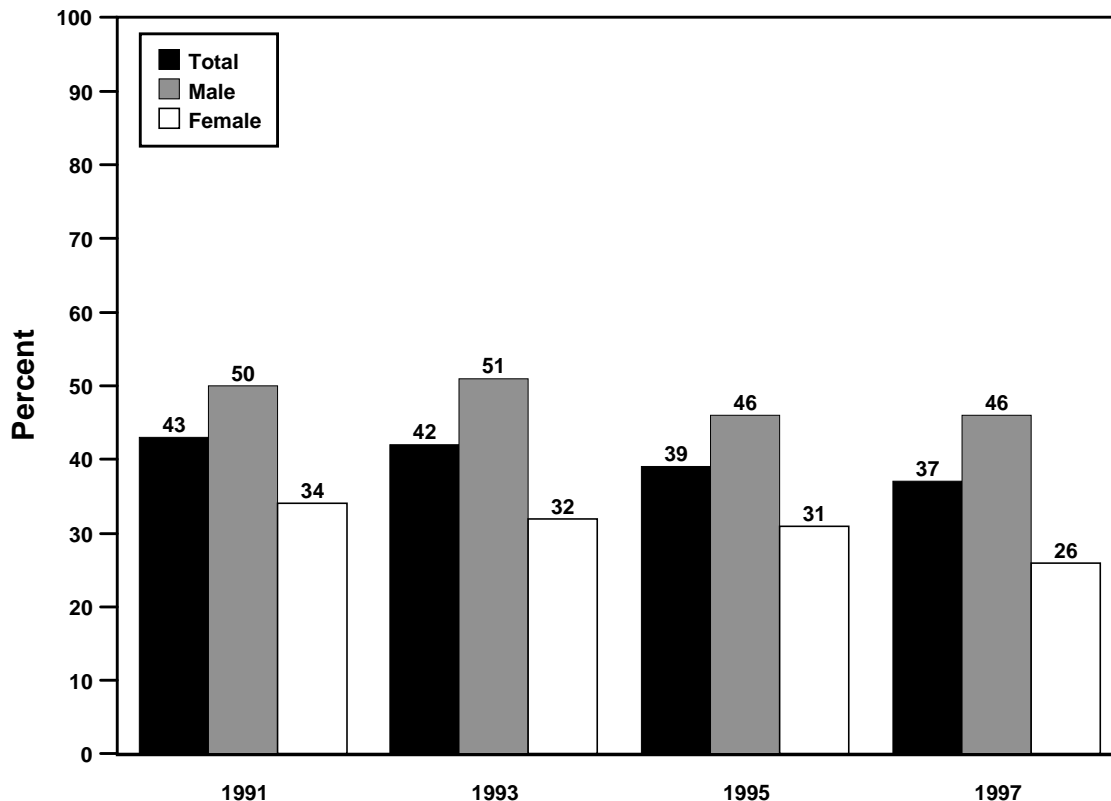
	1991			1993		
	Total	Male	Female	Total	Male	Female
Total	43	50	34	42	51	32
Grade						
9	51	58	43	50	59	41
10	43	50	35	42	52	32
11	43	51	35	41	52	28
12	34	42	25	35	43	27
Race and Hispanic origin^a						
White, non-Hispanic	41	49	32	40	50	30
Black, non-Hispanic	51	58	44	50	58	42
Hispanic	41	49	35	43	52	34
	1995			1997		
	Total	Male	Female	Total	Male	Female
Total	39	46	31	37	46	26
Grade						
9	47	55	37	45	56	32
10	40	46	34	40	48	30
11	37	46	28	34	44	23
12	31	38	24	29	37	19
Race and Hispanic origin^a						
White, non-Hispanic	36	44	27	34	43	21
Black, non-Hispanic	42	49	35	43	49	38
Hispanic	48	56	40	41	50	30

^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Unpublished tabulations of the Youth Risk Behavior Surveillance System (YRBSS) provided by the Division of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance—United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 6, p. 26; Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance—United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 6, p. 35; Kann, L., Kinchen, S.A., Williams, B.I., Ross, J.G., Lowry, R., Hill, C.V., Grunbaum, J.A., Blumson, P.S., Collins, J.L., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance—United States, 1997." In *CDC Surveillance Summaries*, August 14, 1998. *Morbidity and Mortality Weekly Report* 47 (SS-3): Table 6, p. 41.

Figure SD 2.1

Percentage of students in grades 9 through 12 in the United States reporting that they have been in a physical fight within the past year, by gender: 1991, 1993, 1995, and 1997



Sources: Unpublished tabulations of the Youth Risk Behavior Surveillance System (YRBSS) provided by the Division of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and prevention. Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS (Youth Risk Behavior Surveillance System) Coordinators. "Youth Risk Behavior Surveillance—United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 6, p. 26; Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance—United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 6, p. 35; Kann, L., Kinchen, S.A., Williams, B.I., Ross, J.G., Lowry, R., Hill, C.V., Grunbaum, J.A., Blumson, P.S., Collins, J.L., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance—United States, 1997." In *CDC Surveillance Summaries*, August 14, 1998. *Morbidity and Mortality Weekly Report* 47 (SS-3): Table 6, p. 41.

SD 2.2

WEAPON CARRYING AMONG HIGH SCHOOL YOUTH

Weapon carrying is associated with the most serious injuries resulting from violence. Carrying a weapon significantly increases the risk that a violent argument will result in death, disability, or other serious injury.¹⁹

Since 1991, the percentage of students who report carrying a weapon such as a gun, knife, or club at least once in the past month has declined; for example, in 1997, 18 percent of students in grades 9 through 12 reported carrying a weapon, compared with 26 percent in 1991 (see Table SD 2.2A).

Differences by Age. In general, students in the lower grades are more likely than students in the upper grades to carry a weapon. In 1997, 23 percent of 9th-graders reported having carried a weapon in the past 30 days, compared with 15 percent of 12th-graders.

Differences by Gender. High school males are much more likely than females to carry a weapon. This is true across all grades and for all racial and ethnic groups (see Figure SD 2.2.A); for example, in 1997, 28 percent of males in grades 9 through 12 reported carrying a weapon, compared with 7 percent of females.

Differences by Race and Hispanic Origin.²⁰ In 1997, 17 percent of white, 22 percent of black, and 23 percent of Hispanic students reported having carried a weapon. For white and black students, these represent reductions from 1991 rates of 25 and 33 percent, respectively.

Youth Who Report Carrying a Gun. The number of students who reported carrying a gun at some time in the past 30 days declined significantly between 1993 and 1997. In 1997, 6 percent of high school students reported having carried a gun, including 9 percent of black students, 10 percent of Hispanic students, and 4 percent of white students (see Table SD 2.2.B).

¹⁹“Measuring the Health Behavior of Adolescents: The Youth Risk Behavior Surveillance System and Recent Public Health Reports on High-Risk Adolescents.” *Public Health Reports* 108 (Supp. 1). Rockville, Md.: Public Health Service, 1993.

²⁰Estimates for whites and blacks exclude Hispanics of those races.

Table SD 2.2.A (Part 1)

Percentage of students in grades 9 through 12 in the United States who reported having carried a weapon^a at least once within the past 30 days, by gender, grade, and race and Hispanic origin^b: 1991, 1993, 1995, and 1997

	1991			1993		
	Total	Male	Female	Total	Male	Female
Total	26	41	11	22	34	9
Grade						
9	28	44	10	26	39	11
10	27	42	11	21	33	10
11	29	44	13	22	33	9
12	21	33	10	20	33	7
Race and Hispanic origin^b						
White, non-Hispanic	25	41	8	21	33	7
Black, non-Hispanic	33	43	24	29	38	19
Hispanic	26	40	13	24	37	12

Table SD 2.2.A (Part 2)

Percentage of students in grades 9 through 12 in the United States who reported having carried a weapon^a at least once within the past 30 days, by gender, grade, and race and Hispanic origin^b: 1991, 1993, 1995, and 1997

	1995			1997		
	Total	Male	Female	Total	Male	Female
Total	20	31	8	18	28	7
Grade						
9	23	34	9	23	33	11
10	21	32	9	17	27	6
11	20	32	8	18	29	6
12	16	26	6	15	23	5
Race and Hispanic origin^b						
White, non-Hispanic	19	31	6	17	27	4
Black, non-Hispanic	22	30	16	22	29	15
Hispanic	25	37	13	23	35	10

^aStudents were asked whether they carried a weapon "such as a gun, knife, or club" on at least one of the 30 days preceding the survey.

^bEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Centers for Disease Control and Prevention. "1990-1991 Youth Risk Behavior Surveillance System (YRBSS)." In *Chronic Disease and Health Promotion Reporting from the MMWR*, Table 2, p. 68; Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance—United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 4, p. 23; Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance—United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 4, p. 32; Kann, L., Kinchen, S.A., Williams, B.I., Ross, J.G., Lowry, R., Hill, C.V., Grunbaum, J.A., Blumson, P.S., Collins, J.L., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance—United States, 1997." In *CDC Surveillance Summaries*, August 14, 1998. *Morbidity and Mortality Weekly Report* 47 (SS-3): Table 4, p. 38.

Table SD 2.2.B

Percentage of students in grades 9 through 12 in the United States who reported having carried a gun at least once within the past 30 days, by gender, grade, and race and Hispanic origin^a: 1993, 1995, and 1997

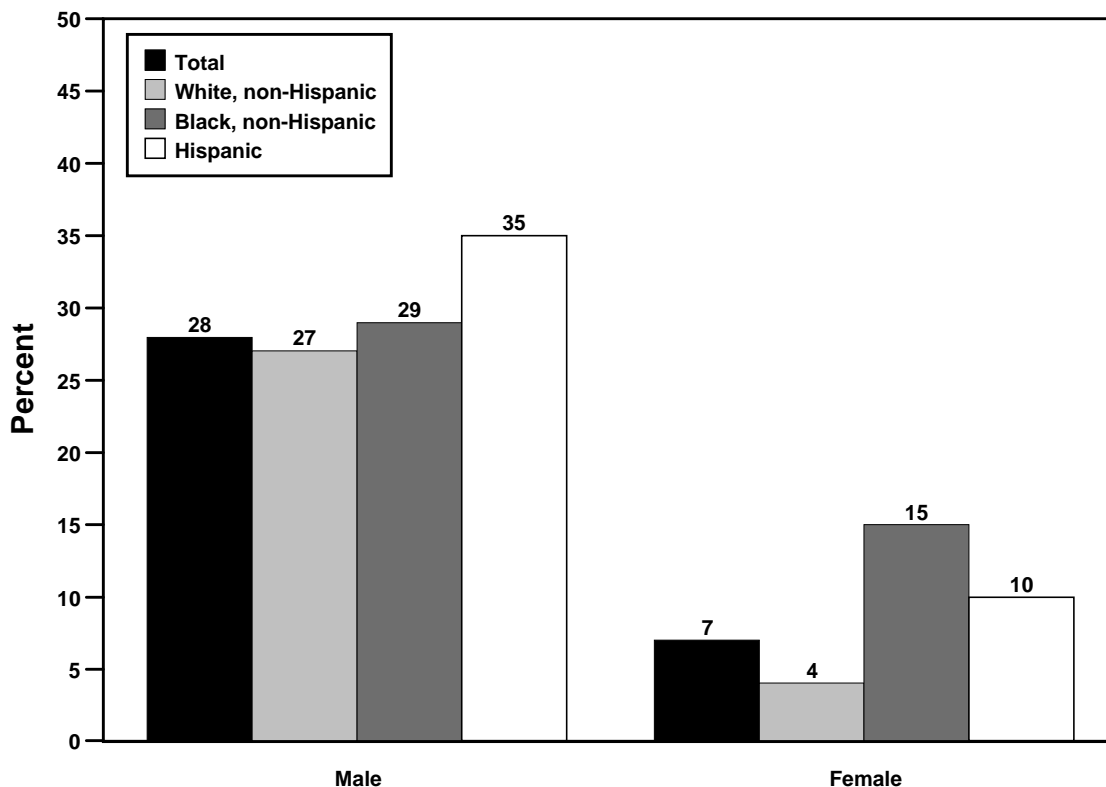
	1993			1995			1997		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	8	14	2	8	12	3	6	10	2
Grade									
9	9	16	2	9	14	3	8	13	3
10	9	15	2	8	13	3	6	10	1
11	7	13	1	7	12	1	6	9	1
12	7	12	1	6	11	2	5	8	1
Race and Hispanic origin^a									
White, non-Hispanic	7	12	1	6	10	2	4	7	1
Black, non-Hispanic	12	21	4	11	19	4	9	16	3
Hispanic	10	17	3	11	17	5	10	17	2

^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Sources: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS (Youth Risk Behavior Surveillance System) Coordinators. "Youth Risk Behavior Surveillance—United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 4, p. 23; Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance—United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 4, p. 32; Kann, L., Kinchen, S.A., Williams, B.I., Ross, J.G., Lowry, R., Hill, C.V., Grunbaum, J.A., Blumson, P.S., Collins, J.L., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance—United States, 1997." In *CDC Surveillance Summaries*, August 14, 1998, *Morbidity and Mortality Weekly Report* 47 (SS-3): Table 4, p. 38.

Figure SD 2.2.A

Percentage of students in grades 9 through 12 in the United States who reported having carried a weapon^a at least once within the past 30 days, by gender and by race and Hispanic origin^b: 1997



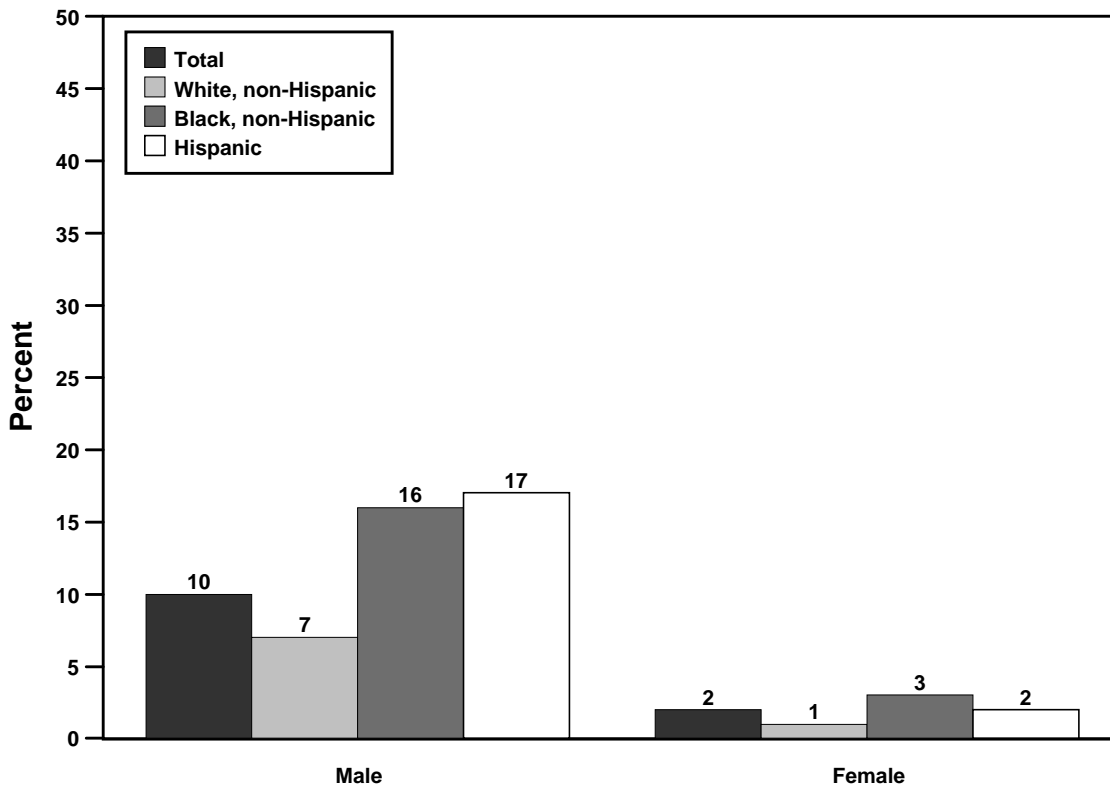
^aStudents were asked whether they carried a weapon “such as a gun, knife, or club” on at least one of the 30 days preceding the survey.

^bEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Source: Kann, L., Kinchen, S.A., Williams, B.I., Ross, J.G., Lowry, R., Hill, C.V., Grunbaum, J.A., Blumson, P.S., Collins, J.L., Kolbe, L.J., and State and Local YRBSS (Youth Risk Behavior Surveillance System) Coordinators. “Youth Risk Behavior Surveillance—United States, 1997.” In *CDC Surveillance Summaries*, August 14, 1998, *Morbidity and Mortality Weekly Report* 47 (SS-3): Table 4, p. 38.

Figure SD 2.2.B

Percentage of students in grades 9 through 12 in the United States who reported having carried a gun at least once within the past 30 days, by gender and by race and Hispanic origin^a: 1997



^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Source: Kann, L., Kinchen, S.A., Williams, B.I., Ross, J.G., Lowry, R., Hill, C.V., Grunbaum, J.A., Blumson, P.S., Collins, J.L., Kolbe, L.J., and State and Local YRBSS (Youth Risk Behavior Surveillance System) Coordinators. "Youth Risk Behavior Surveillance—United States, 1997." In *CDC Surveillance Summaries*, August 14, 1998, *Morbidity and Mortality Weekly Report* 47 (SS-3): Table 4, p. 38.

SD 2.3

SEAT BELT USE

Motor vehicle crashes are among the leading causes of death for children and youth.²¹ Consistent use of seat belts and child safety seats dramatically lessens the risk of injury or death in a motor vehicle crash. The National Highway Traffic Safety Administration estimates that in 1997, 54 percent of all children under age 5 who were killed while occupants of a motor vehicle were not protected by seat belts or child safety seats.²²

Table SD 2.3 presents data from the National Occupant Protection Use Survey (NOPUS), which gathers data through observation at intersections.²³ Between 1996 and 1998, seat belt use among toddlers ages 1 to 4 increased dramatically from 60 percent to 87 percent. Use among infants under one year old increased from 85 percent to 93 percent during the same time period. While these are promising trends, recent research indicates as many as 85 percent of parents and caregivers who do use car seats continue to install and use car seats incorrectly.²⁴

Between 1996 and 1998 rates of seat belt use increased modestly for persons ages 5 to 15 and 16 to 24, from 65 to 69 percent and 50 to 55 percent, respectively.

Differences by Age. The use of seat belts or child safety seats is substantially higher at younger ages. In 1998, rates were 93 percent for infants, 87 percent for children ages 1 to 4, 69 percent for children ages 5 to 15, and 55 percent for ages 16 to 24 (see Figure SD 2.3).

Table SD 2.3

Percentage of children and youth in the United States who are observed to have worn a seat belt or been placed in a child safety seat, by age:^a 1994, 1996, and 1998

	1994	1996	1998
Infants (under age 1) ^b	88	85	93
Toddlers (1-4 years) ^c	61	60	87
Youths (5-15 years)	58	65	69
Young adults (16-24 years)	53	50	55

^aAge group is based on the best judgment of the observers in the National Occupant Protection Use Survey (NOPUS) Controlled Intersection Study.

^bUse of restraints for infants refers to child safety seats.

^cUse of restraints for toddlers refers to safety belts or child safety seats.

Source: 1998 estimates from “Transportation Secretary Slater Hails Increased Seat Belt Use,” NHTSA 21-99, May 24, 1999. 1994 and 1996 estimates from “National Occupant Protection Use Survey—1996: Controlled Intersection Study.” Research Note. National Highway Traffic Safety Administration, U.S. Department of Transportation, August 1997.

²¹Hoyert, D.L., Kochanek, K.D., Murphy, S.L. “Deaths: Final Data for 1997.” National Vital Statistics Reports: Volume 47, No. 19, Table 8. Hyattsville, MD: National Center for Health Statistics. 1999.

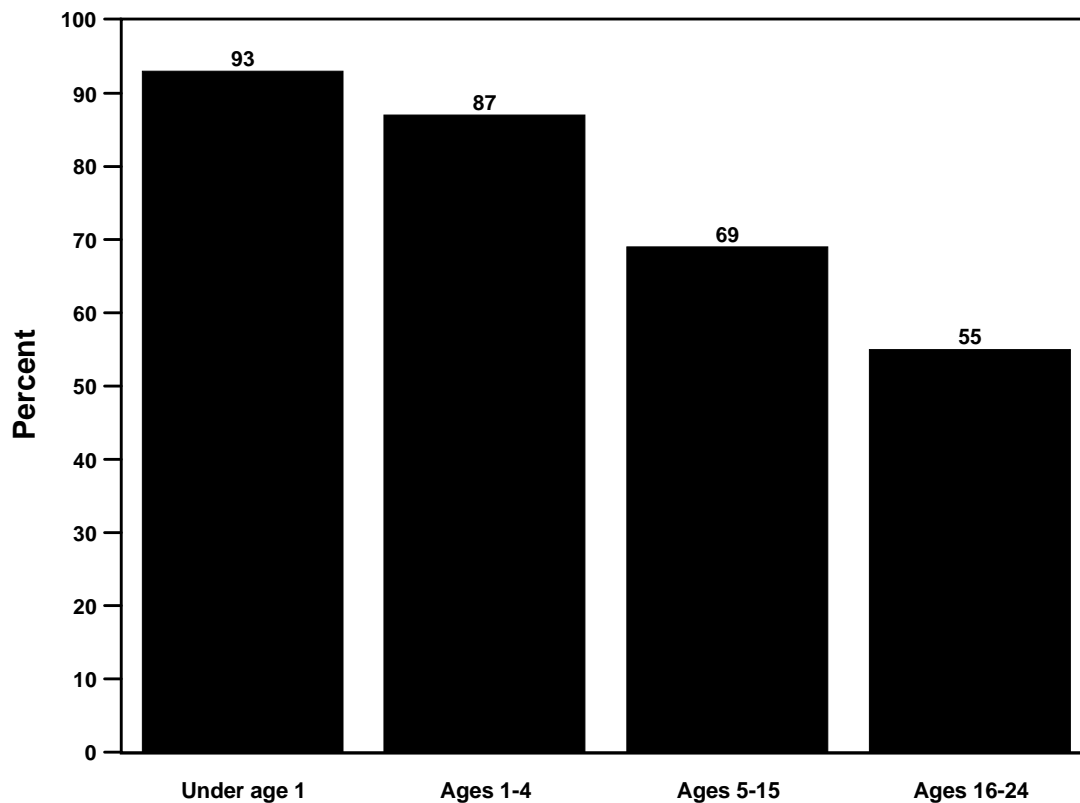
²²National Highway Traffic Safety Administration. *Traffic Safety Facts 1997*. DOT HS 808 765. Washington, D.C.: U.S. Department of Transportation.

²³ Previous editions of *Trends in the Well-Being of America’s Children and Youth* presented seat belt data based on parent report rather than observation. Estimates based on parent report are higher than those based on observation.

²⁴The study identified several frequent misuses of rear-facing, forward-facing, and booster seats for observed children, including 63 percent in seats not held tightly by safety belts, 33 percent with loose harness straps, and 20 percent with harness straps incorrectly routed through the seats. National SAFE KIDS Campaign. 1999. *Child Passengers at Risk in America: A National Study of Car Seat Misuse*. Washington, D.C.: National SAFE KIDS Campaign. Summary results online at: <http://www.safekids.org/buckleup/study.html>.

Figure SD 2.3

Percentage of children and youth in the United States who are observed to have worn a seat belt or been placed in a child safety seat, by age:^a 1998



^aAge group is based on the best judgment of the observers in the National Occupant Protection Use Survey (NOPUS) Controlled Intersection Study.

Source: "Transportation Secretary Slater Hails Increased Seat Belt Use," NHTSA 21-99, May 24, 1999.

SD 2.4

REGULAR PHYSICAL EXERCISE

Sixty percent of Americans do not exercise regularly, according to a 1996 report by the Surgeon General, despite the many health benefits associated with physical activity.²⁵ People of all ages, both male and female, benefit from regular physical activity. Significant health benefits can be obtained by including a moderate amount of physical activity (e.g., 30 minutes of brisk walking or raking leaves, 15 minutes of running, or 45 minutes of playing volleyball) on most, if not all, days of the week.

The percentage of 12th-grade students who report actively participating in sports or exercise “almost every day” has remained fairly stable since 1976, varying between 44 and 48 percent. Rates have also been stable for 8th- and 10th-grade students since 1991, the first year in which data were collected for those grades (see Table SD 2.4.A).

Differences by Age. The percentages of students who report that they actively participate in sports or exercise “almost every day” decreased with age. In 1997, for example, 55 percent of 8th-graders, 52 percent of 10th-graders, and 45 percent of 12th-graders reported daily or almost daily exercise (see Figure SD 2.4). A similar pattern emerged in a survey that asked teens whether they had exercised vigorously three or more times in the past week (see Table SD 2.4.B).

Differences by Gender. Males consistently report exercising or participating in sports more often than females. In 1997, for each age group, male rates were 15 to 20 percentage points higher than female rates, a trend that exists for nearly every year that data are available (see Table SD 2.4.A).

Differences by Race. Black and white students in the 8th and 10th grades are about equally likely to exercise regularly (see Table SD 2.4.A). Among 12th-grade students, blacks appeared to be less likely than whites to exercise regularly during most years in the 1990s. Other survey data, reported in Table SD 2.4.B, show larger differences by race and Hispanic origin. In 1997, 67 percent of non-Hispanic white teens reported exercising vigorously at least three times a week, compared with 54 percent of non-Hispanic black teens and 60 percent of Hispanic teens.

²⁵U.S. Department of Health and Human Services. 1996. *Physical Activity and Health: A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.

Table SD 2.4.A

Percentage of 8th-, 10th-, and 12th-grade students in the United States who report that they actively participate in sports or exercise "almost every day," by gender and race: selected years, 1976-1997

	1976	1981	1986	1991	1992	1993	1994	1995	1996	1997
8th Grade										
Total	—	—	—	57	55	55	53	56	54	55
Gender										
Male	—	—	—	65	65	65	63	66	63	63
Female	—	—	—	49	45	46	44	47	47	48
Race										
White	—	—	—	58	56	58	56	59	57	58
Black	—	—	—	61	57	54	52	55	56	56
10th Grade										
Total	—	—	—	54	54	53	53	53	52	52
Gender										
Male	—	—	—	63	64	62	62	62	60	60
Female	—	—	—	45	45	45	44	45	44	45
Race										
White	—	—	—	55	55	54	54	55	53	54
Black	—	—	—	54	52	56	50	52	53	52
12th Grade										
Total	44	48	44	46	46	44	45	45	45	45
Gender										
Male	52	56	54	55	59	55	56	55	58	56
Female	36	39	36	36	33	33	36	37	32	36
Race										
White	43	47	46	48	48	46	49	46	48	46
Black	49	53	43	43	41	39	39	48	40	38

Sources: Bachman, J.G., Johnston, L.D., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1976, 1981, 1986, 1991, 1992, 1993, 1994, 1995, 1996, and 1997 (prepublication tables). Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. 8th and 10th grade 1991 Questionnaire Forms 1 and 2, item A04E; 1992-1996 Questionnaire Forms 1 and 2, item A03E; and 1997 Questionnaire Forms 1-6, item A03E. 12th grade 1976, 1981, 1986, and 1991-1997 Questionnaire Form 2, item A02H.

Table SD 2.4.B

Percentage of students in grades 9 through 12 in the United States who report having exercised vigorously three or more times in the past seven days, by gender, grade, and race and Hispanic origin^a: 1993, 1995, and 1997

	1993			1995			1997		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	66	75	56	64	74	52	64	72	54
Grade									
9	75	81	68	72	80	62	73	79	66
10	70	77	61	69	79	59	66	74	56
11	63	71	53	60	72	47	60	69	49
12	58	70	45	55	67	42	58	68	44
Race and Hispanic origin^a									
White, non-Hispanic	68	76	59	67	76	57	67	73	58
Black, non-Hispanic	60	71	49	53	68	41	54	67	41
Hispanic	59	69	50	57	70	45	60	69	50

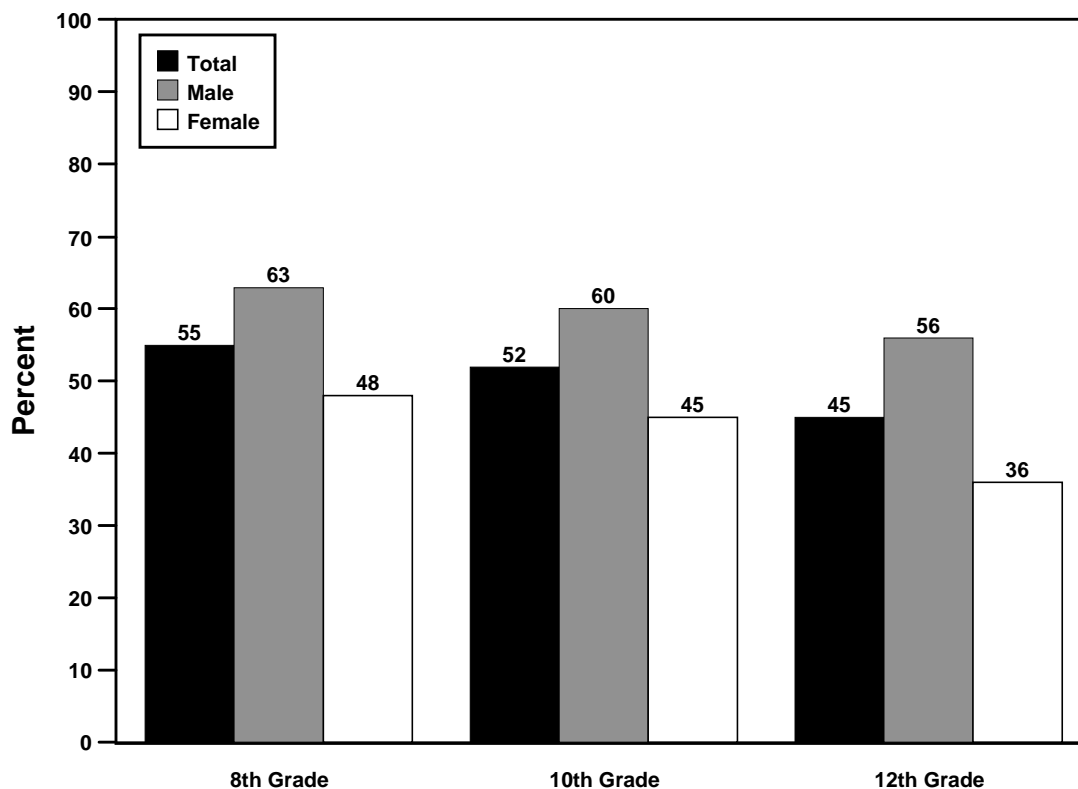
^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Note: Vigorous physical exercise is defined as activities that cause sweating and hard breathing for at least 20 minutes.

Sources: Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Douglas, K.A., Collins, M.E., Williams, B.I., Ross, J.G., Kolbe, L.J., and State and Local YRBSS (Youth Risk Behavior Surveillance System) Coordinators. "Youth Risk Behavior Surveillance—United States, 1993." In *CDC Surveillance Summaries*, March 24, 1995. *Morbidity and Mortality Weekly Report* 44 (SS-1): Table 24, p. 53; Kann, L., Warren, C.W., Harris, W.A., Collins, J.L., Williams, B.I., Ross, J.G., and Kolbe, L.J. "Youth Risk Behavior Surveillance—United States, 1995." In *CDC Surveillance Summaries*, September 27, 1996. *Morbidity and Mortality Weekly Report* 45 (SS-4): Table 36, p. 78; Kann, L., Kinchen, S.A., Williams, B.I., Ross, J.G., Lowry, R., Hill, C.V., Grunbaum, J.A., Blumson, P.S., Collins, J.L., Kolbe, L.J., and State and Local YRBSS Coordinators. "Youth Risk Behavior Surveillance—United States, 1997." In *CDC Surveillance Summaries*, August 14, 1998. *Morbidity and Mortality Weekly Report* 47 (SS-3): Table 36, p. 84.

Figure SD 2.4

Percentage of 8th-, 10th-, and 12th-grade students who report that they actively participate in sports or exercise "almost every day," by gender: 1997



Source: Bachman, J.G., Johnston, L.D., and O'Malley, P.M. *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors*. 1997 (prepublication tables). Ann Arbor, Mich.: Institute for Social Research, The University of Michigan. 8th and 10th grade Questionnaire Forms 1-6, item A03E. 12th grade Questionnaire Form 2, item A02H.

SD 2.5

SUFFICIENT HOURS OF SLEEP

Getting sufficient hours of sleep on a regular basis is important for optimum functioning throughout the day. Getting enough sleep is also linked to physical health. Individuals who are chronically sleep-deprived may be more susceptible to physical illness and more prone to accidents due to lack of concentration or inattention. Research indicates that sleep loss has a negative effect on motor performance, cognitive function, and mood.²⁶ For adolescents, not getting enough sleep may translate into lower performance in school or may affect socialization.

The number of hours that prove to be sufficient may differ between ages and individuals. A recent survey indicates that males ages 12 through 17 average 65.8 hours of sleep per week and females of the same age average 66.8 hours per week (approximately 9.5 hours of sleep a night for both sexes).²⁷ Analyses based on data from the 1995 National Longitudinal Study of Adolescent Health allow for an examination of youth perceptions of whether they obtain the sleep they need. In 1995, 74.1 percent of youth ages 12 through 17 reported that they got enough sleep (see Table SD 2.5).

Differences by Gender. Adolescent males are more likely to report getting enough sleep than their female peers. In 1995, 76.4 percent of males ages 12 through 17 reported getting enough sleep, compared with 71.8 percent of females.

Differences by Age and Grade. In 1995, approximately four out of every five (82.2 percent) youth ages 12 through 14 reported getting enough sleep, compared with 70.5 percent of youth ages 15 through 17. Similarly, in grades 7 and 8, 83.3 percent of students reported getting enough sleep, compared with 72.5 percent of students in grades 9 and 10 and 66.5 percent of students in grades 11 and 12.

Differences by Family Structure. Lower percentages of adolescents who live with a single father reported getting enough sleep (65.6 percent), compared with adolescents in other living arrangements (see Figure SD 2.5).

²⁶Pilcher, J., and Huffcut, A. 1996. "Effects of Sleep Deprivation on Performance: A Meta-analysis." *Sleep* 19 (4): 318-326.

²⁷Results from the Americans' Use of Time Project, University of Maryland, as reported in Robinson, J.P., and Bianchi, S. 1997. "The Children's Hours." *American Demographics* 12.

Table SD 2.5

Percentage of adolescents ages 12 through 17 in the United States who report that they get enough sleep, by gender, age, grade, race and Hispanic origin,^a and family structure: 1995

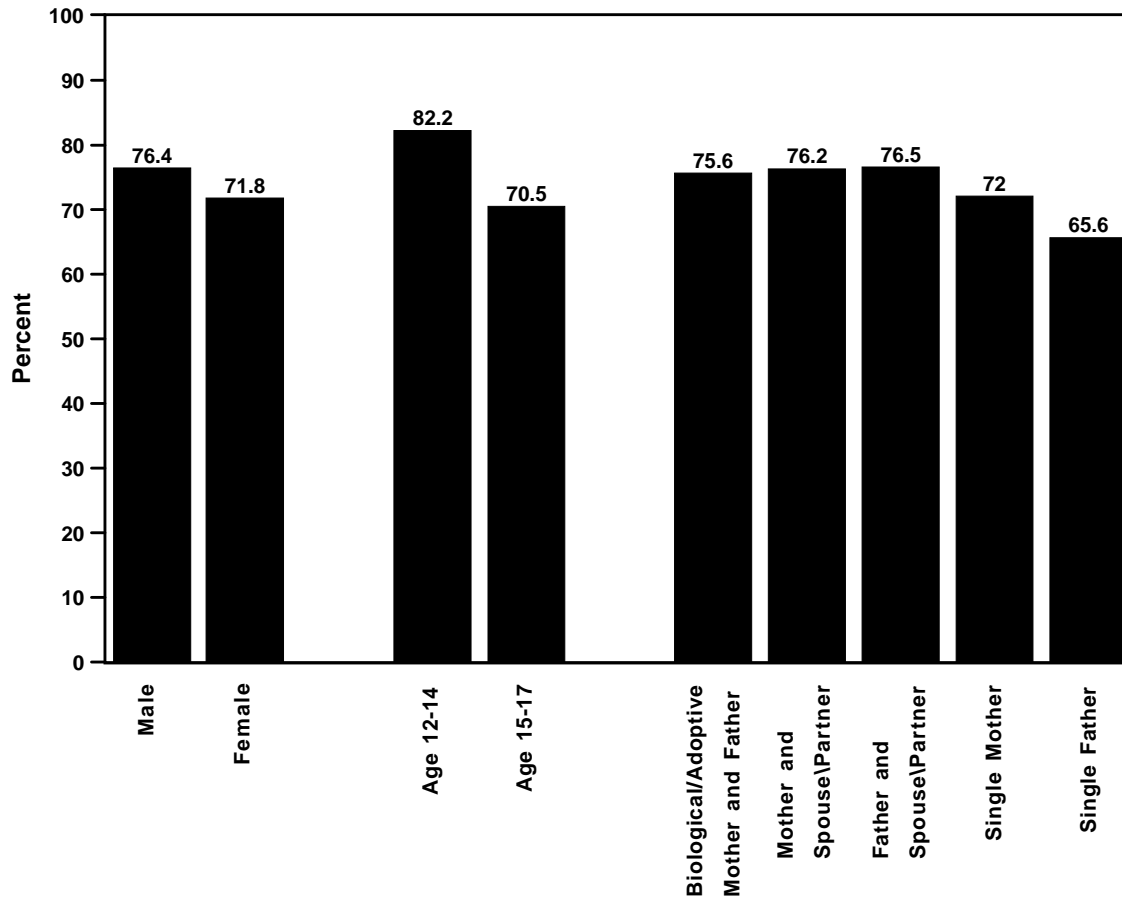
	1995
Total	74.1
Gender	
Male	76.4
Female	71.8
Age	
12-14	82.2
15-17	70.5
Grade	
7-8	83.3
9-10	72.5
11-12	66.5
Race and Hispanic Origin^a	
White, non-Hispanic	75.3
Black, non-Hispanic	72.8
Hispanic	73.5
Family Structure	
Biological/Adoptive Mother and Father	75.6
Mother and Spouse/Partner	76.2
Father and Spouse/Partner	76.5
Single Mother	72.0
Single Father	65.6

^aEstimates for whites and blacks exclude Hispanics of those races. Persons of Hispanic origin may be of any race.

Source: The National Longitudinal Study of Adolescent Health (Add Health) Wave 1, 1995, tabulations by Child Trends.

Figure SD 2.5

Percentage of adolescents ages 12 through 17 in the United States who report that they get enough sleep, by gender, age, and family structure: 1995



Source: The National Longitudinal Study of Adolescent Health (Add Health) Wave 1, 1995, tabulations by Child Trends.