

Health Status - Adolescents



ADOLESCENT CHILDBEARING

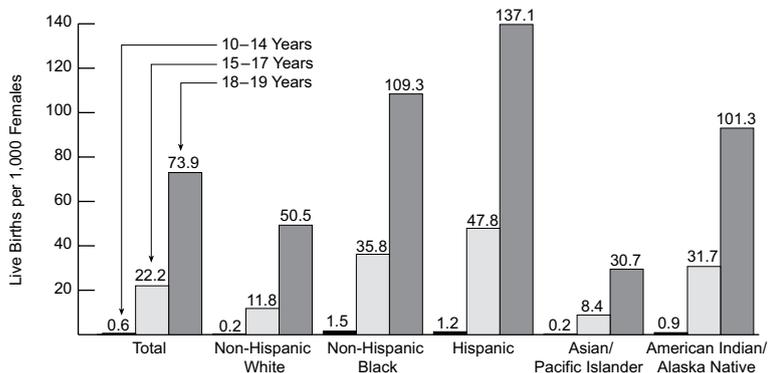
According to preliminary data, the birth rate among adolescents aged 15-19 years increased to 42.5 births per 1,000 females in 2007, from 41.9 per 1,000 the previous year. This was the first increase since the most recent peak in 1991 (61.8 births per 1,000), but still represents an overall decrease of 31 percent since that year. The birth rate among adolescents aged 10-14 years decreased to 0.6 per 1,000, which represents a decline of more than 50 percent since 1991. Teenage birth rates were highest among older adolescents, aged 18-19 years, at 73.9 per 1,000.

Teenage birth rates have historically varied considerably by race/ethnicity. Among adolescents aged 15-19 years, Asian/Pacific Islanders had the lowest birth rate in 2006 (17.3 per 1,000), followed by non-Hispanic Whites (27.2 per 1,000). Hispanic females had the highest birth rate in this age group (81.7 per 1,000), and also the lowest percentage decline since 1991 (21.9 percent). Non-Hispanic Black females had the second highest birth rate among those aged 15-19 years (64.3 per 1,000), but the highest percentage decline since 1991 (45.8 percent).

Among adolescents aged 10-14 years, non-Hispanic Black females had the highest birth rate (1.5 per 1,000), followed by Hispanic females (1.2 per 1,000) and American Indian/Alaska Native females (0.9 per 1,000). Non-Hispanic White and Asian/Pacific Islander females had the lowest birth rates among those aged 10-14 years (0.2 per 1,000).

Birth Rates Among Adolescent Females Aged 10-19, by Age and Race/Ethnicity, 2007*

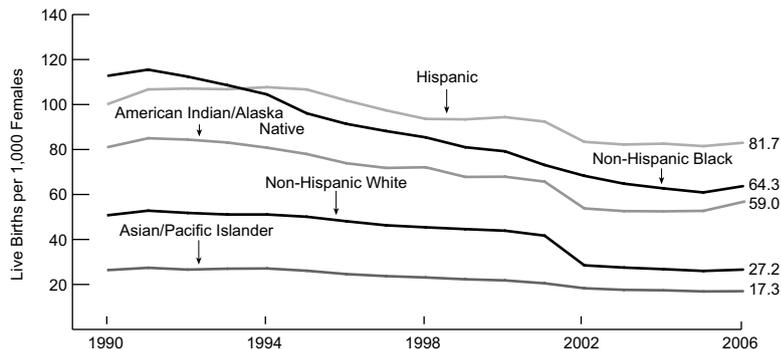
Source (1.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



*Preliminary data

Birth Rates Among Adolescent Females Aged 15-19, by Race/Ethnicity, 1990-2007*

Source (1.5): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



*Preliminary data

SEXUAL ACTIVITY

In 2007, 47.8 percent of high school students reported ever having had sexual intercourse, representing a slight increase from the previous year, while the remaining 52.2 percent were abstinent. Overall, 35 percent of students reported that they were currently sexually active (had intercourse at least once in the 3 months before the survey): 21.5 percent were currently sexually active and reported using a condom during their last sexual intercourse, while 13.5 percent were currently sexually active and reported not using a condom during their last encounter (i.e., 61 percent of

sexually active students used a condom during their last encounter).

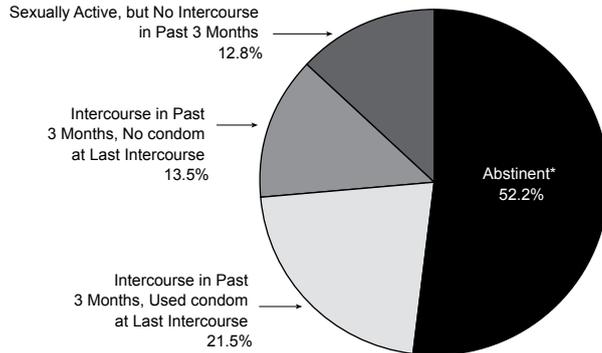
Sexual activity and condom use vary by race and ethnicity. In 2007, non-Hispanic Black students were most likely to report ever having sexual intercourse (66.5 percent), and most likely to report using a condom during their last sexual encounter (67.3 percent of currently sexually active students). Hispanic students were second most likely to report ever having had sexual intercourse (52.0 percent), followed by non-Hispanic White students (43.7 percent; data not shown).

In 2007, sexual activity increased with grade level, while condom use decreased. Among 12th

grade students, 52.6 percent reported being currently sexually active: 28.5 percent were currently sexually active and used a condom during their last intercourse, while 24.1 percent were sexually active and did not use a condom (i.e., just over half of sexually active 12th graders used a condom during their last encounter). In contrast, 20.1 percent of 9th graders were sexually active: 6.2 percent of 9th graders were sexually active and not using a condom, while 13.9 percent were sexually active and used a condom during their last sexual encounter (i.e., almost 70 percent of sexually active 9th graders used a condom during their last encounter).

Sexual Activity Among High School Students, 2007

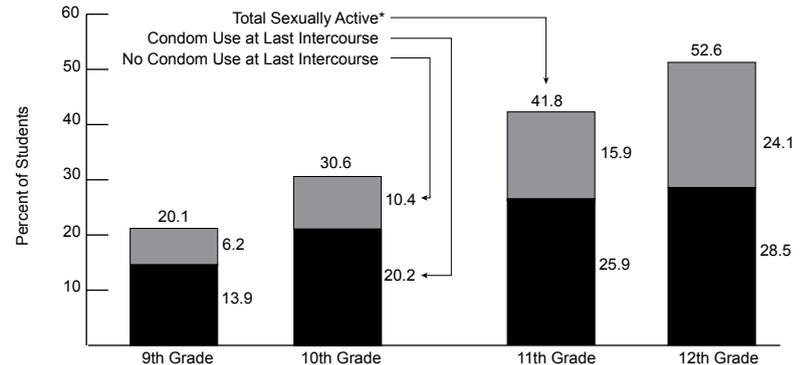
Source (II.9): Centers for Disease Control and Prevention, Youth Risk Behavior Survey



*Have never had sexual intercourse.

Condom Use Among Sexually Active High School Students, by Grade, 2007

Source (II.9): Centers for Disease Control and Prevention, Youth Risk Behavior Survey



*Had sexual intercourse during the three months preceding the survey.

SEXUALLY TRANSMITTED INFECTIONS

In general, adolescents (aged 15-19 years) and young adults (aged 20-24 years) are at much higher risk than older adults of contracting sexually transmitted infections (STIs), such as chlamydia, gonorrhea, and genital human papillomavirus (HPV).

Chlamydia continues to be the most common STI among adolescents and young adults, with rates of 1,674 and 1,796 cases per 100,000, respectively, in 2006. Rates were highest among non-Hispanic Blacks, followed by American Indian/Alaska Natives. Rates of gonorrhea were 459 and 528 per 100,000 adolescents and young

adults, respectively, and were also highest among non-Hispanic Blacks and American Indian/Alaska Natives.

HPV is the most common STI in the United States. Unlike chlamydia and gonorrhea, cases of HPV are not required to be reported to the CDC. However, a recent study indicated that 24.5 percent of females aged 14-19 years and 44.8 percent of those aged 20-24 years had an HPV infection in 2003-2004.¹ There are many different types of HPV, some of which can cause cancer. Although cervical cancer in women is the most serious health problem caused by HPV, it is highly preventable with routine Pap tests and follow-up care. A vaccine for certain types of HPV was first

approved in 2006 by the Food and Drug Administration (FDA) for use in females aged 9-26 years.² In 2007, 25 percent of females aged 13-17 years initiated the three-dose series.³

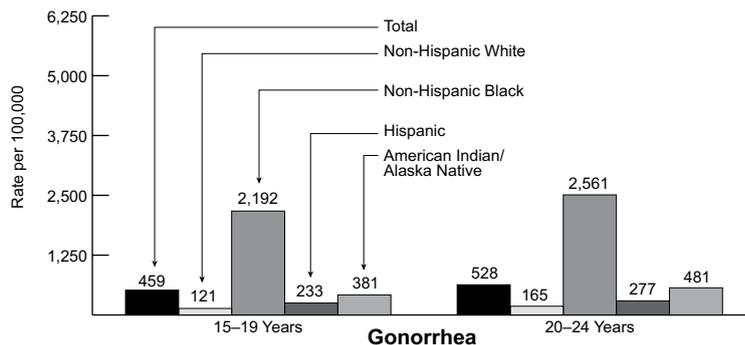
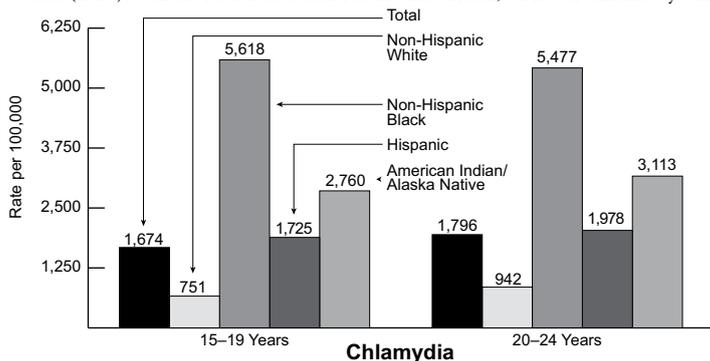
1 Dunne EF, Unger ER, Sternberg M, McQuillan G, Swan DC, Patel SS, Markowitz LE. Prevalence of HPV infection among females in the United States. *JAMA*. 2007 Feb;297(8):876-8.

2 Centers for Disease Control and Prevention, Division of STD Prevention. HPV and HPV vaccines: information for healthcare providers. June 2006. Available from: <http://www.cdc.gov/std/hpv/STDFact-HPV-vaccine-hcp.htm>, viewed 9/3/08.

3 Centers for Disease Control and Prevention. Vaccination coverage among adolescents aged 13-17 years - limited states, 2007. *MMWR* 2008; 57:1100.

Reported Rates of Sexually Transmitted Infections Among Adolescents and Young Adults, by Age and Race/Ethnicity, 2006

Source (II.10): Centers for Disease Control and Prevention, STD Surveillance System



ADOLESCENT AND YOUNG ADULT HIV/AIDS

Acquired immunodeficiency syndrome (AIDS) is caused by the human immunodeficiency virus (HIV), which damages or kills the cells that are responsible for fighting infection. AIDS is diagnosed when HIV has weakened the immune system enough that the body has a difficult time fighting infections.

An estimated 5,259 people aged 13-24 years were diagnosed with HIV/AIDS¹ in 2006, representing 14.3 percent of all new cases. While the number of diagnoses among children aged 13-14 years fluctuates from year to year, the number of diagnoses among the older age groups have increased steadily over the past few years. Diagnoses of HIV/AIDS among adolescents aged 15-19 years and young adults aged 20-24 years have increased 34 and 23 percent, respectively, since 2003.

In 2006, there were 211 deaths of adolescents and young adults with AIDS, representing 1.4 percent of all deaths of persons with AIDS. Since the beginning of the epidemic, an estimated 10,096 persons aged 13-24 years have died with the disease. Deaths of persons with AIDS have generally decreased in recent years, due in part to the availability of effective prescription drugs to

combat the disease.

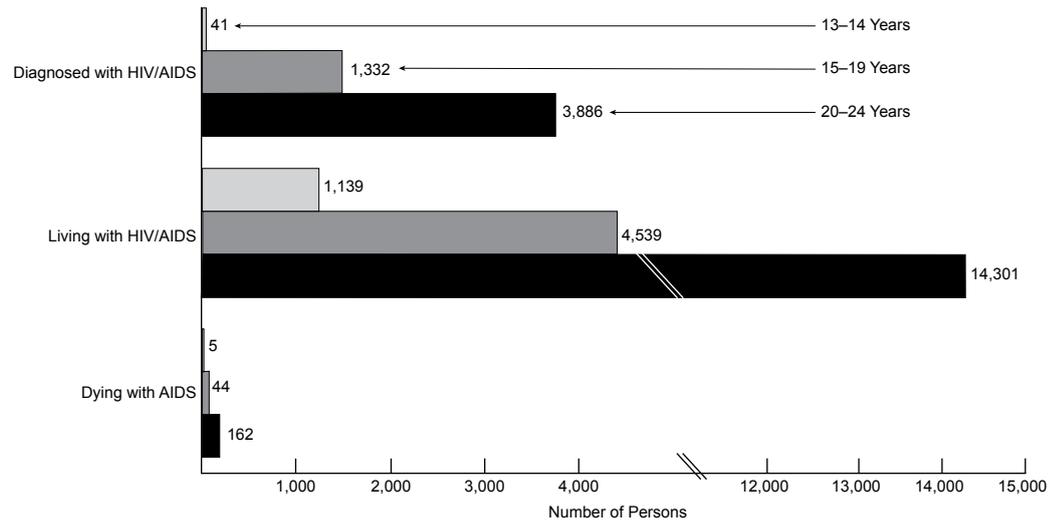
With an increase in diagnoses and a decrease in deaths, the number of people living with HIV/AIDS has increased. In 2006, there were an estimated 19,979 people aged 13-24 years living with HIV/AIDS, representing 3.9 percent of all cases. Overall, the number of adolescents and young

adults living with HIV/AIDS has increased 19 percent since 2003.

1 Includes persons with a diagnosis of HIV infection only, a diagnosis of HIV infection and a later AIDS diagnosis, and concurrent diagnoses of HIV infection and AIDS in 33 states and 5 dependent areas with confidential name-based reporting.

Number of Persons Aged 13-24 Diagnosed with and Living with HIV/AIDS* and Dying with AIDS, by Age, 2006

Source (II.5): Centers for Disease Control and Prevention, HIV/AIDS Surveillance System



**Includes persons with a diagnosis of HIV infection only, a diagnosis of HIV infection and a later AIDS diagnosis, and concurrent diagnoses of HIV infection and AIDS in 33 states and 5 dependent areas with confidential name-based reporting.*



PHYSICAL ACTIVITY

Results from the Youth Risk Behavior Surveillance System show that 34.7 percent of high school students met currently recommended levels of physical activity in 2007. At that time, the recommendation for this age group was any kind of physical activity that increases heart rate and causes the child to breathe hard for some of the time for a total of at least 60 minutes per day, 5 or more days per week. Non-Hispanic White students were the most likely to meet the recommended levels of physical activity (37.0 percent), followed by non-Hispanic Black students (31.1 percent); Hispanic students were least likely to meet recommended levels (30.2 percent). Overall, 24.9 percent of students did not participate in 60 or more minutes of physical activity on any day in the week before the survey.

Nationwide, 53.6 percent of high school students attended physical education classes on 1 or more days a week in 2007. This rate drops dramatically with increasing grade: 66.8 percent of 9th grade students attended PE class, compared to 41.5 percent of 12th grade students. The percentage of students attending daily physical education classes has dropped from 42 percent in 1991 to 30.3 percent in 2007. Again, younger students were much more likely to attend daily classes

than older students (40.1 percent of 9th graders compared to 23.8 percent of 12th graders; data not shown).

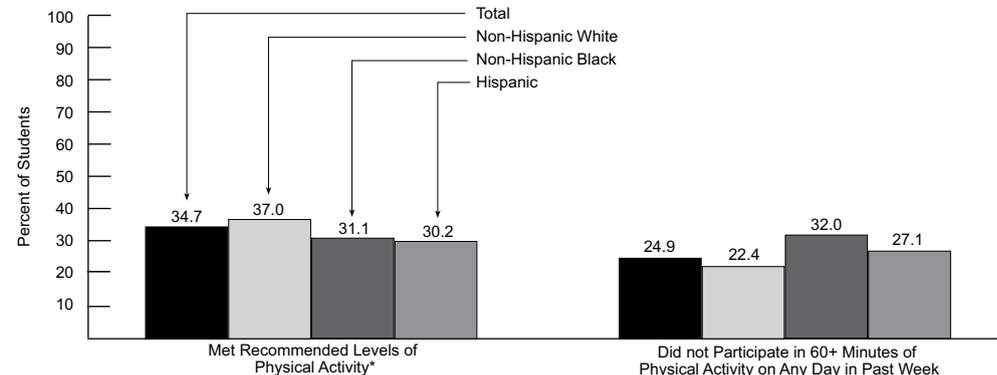
In 2007, 56.3 percent of high school students reported playing on at least one sports team in the past year. This was also more common among children in younger grades (59.2 percent of 9th graders) than in the older grades (49.0 percent of 12th graders; data not shown). High school students were also asked about sedentary activities, such as using a computer or watching television.

One-quarter of students reported using a computer for something other than school work for 3 or more hours per day on an average school day, while 35.4 percent of students reported watching television for 3 or more hours on an average school day.

The *HealthierUS* Initiative—available online at www.healthierus.gov—provides accurate information about physical fitness, nutrition, and disease prevention to help Americans of all ages make healthy decisions.

Physical Activity Among High School Students, by Race/Ethnicity, 2007

Source: (II.9): Centers for Disease Control and Prevention, Youth Risk Behavior Survey



*Any kind of physical activity that increases heart rate and makes the child breathe hard some of the time for a total of at least 60 minutes on 5 or more days during the preceding 7 days.

MENTAL HEALTH

In 2007, 8.2 percent of adolescents aged 12 to 17 years experienced a major depressive episode (MDE), which is defined as at least 2 weeks of depressed mood or loss of pleasure in daily activities, plus a majority of specific depression symptoms, such as altered sleeping patterns, fatigue, and feelings of worthlessness. Females were more likely than males to experience an MDE (11.9 versus 4.6 percent; data not shown). For both sexes, occurrence of MDE peaked at 16 years of

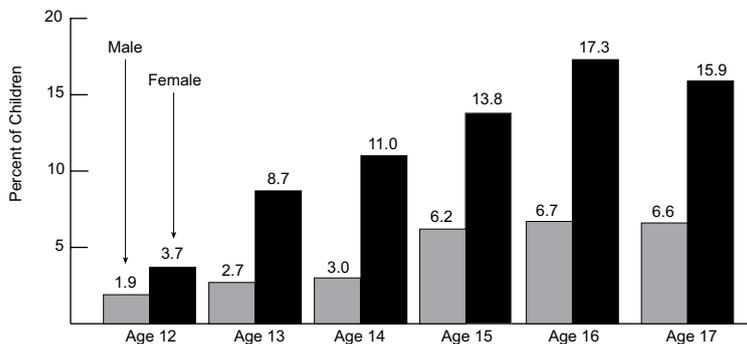
age; of females in that age group, 17.3 percent experienced at least one MDE in the past year. Adolescents of two or more races were most likely to experience an MDE (10.0 percent), followed by non-Hispanic White and non-Hispanic Black adolescents (8.7 and 7.8 percent, respectively); American Indian/Alaska Native adolescents were least likely to experience an MDE (4.6 percent; data not shown).

Among adolescents who received treatment or counseling for an emotional or behavioral prob-

lem (not including drug or alcohol use), depression was the most commonly reported problem (50.0 percent). Adolescents also commonly reported receiving treatment for problems with home or family (28.8 percent), breaking rules or acting out (25.1 percent), and contemplating or attempting suicide (20.2 percent).

Occurrence of Major Depressive Episode (MDE)* in the Past Year Among Adolescents Aged 12-17 Years, by Age and Gender, 2007

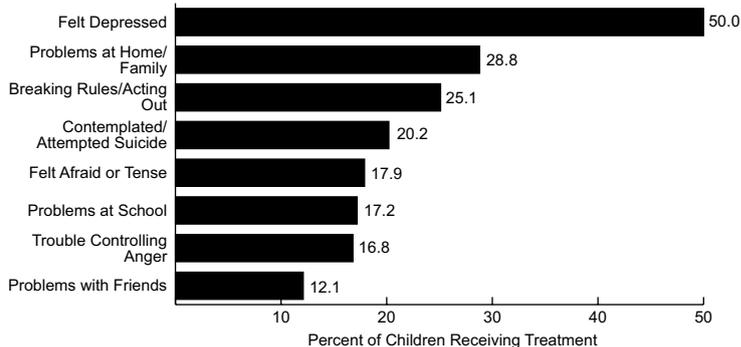
Source (II.13): Substance Abuse and Mental Health Service Administration, National Survey of Drug Use and Health



*MDE is defined as a period of at least two weeks when a person experienced a depressed mood or loss of pleasure in daily activities and had a majority of specific depression symptoms.

Commonly Reported Reasons for Receiving Mental Health Treatment* in the Past Year Among Adolescents Aged 12-17 Years Who Received Treatment, 2007

Source (II.13): Substance Abuse and Mental Health Service Administration, National Survey of Drug Use and Health



* Data are for most recent visit, and respondents could list more than one reason for treatment. Does not include treatment for problems caused by drug or alcohol use.

CIGARETTE SMOKING

In 2007, cigarette smoking among adolescents continued to decline, according to the annual Monitoring the Future Study. The largest decrease occurred among 8th graders, with the percentage of students who had smoked any cigarettes in the past 30 days falling from 8.7 to 7.1 percent since the previous year. Cigarette smoking in the past 30 days showed a smaller decline among 10th graders, dropping from 14.5 to 14.0 percent, while smoking among 12th graders remained steady at 21.6 percent.

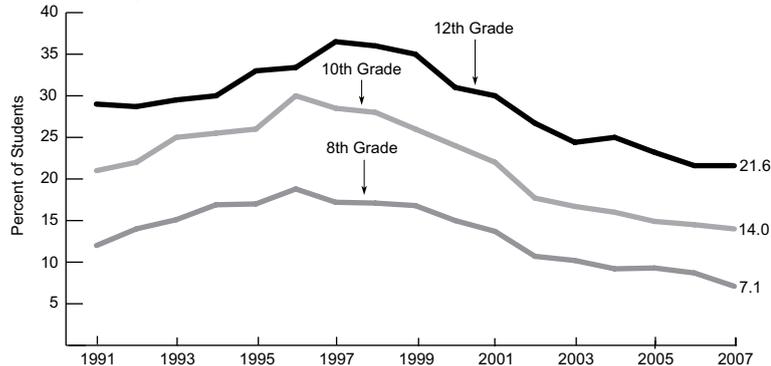
The percent of teens smoking in the past month began a rapid increase in the early 1990s, with the rates among 8th and 10th graders reaching a peak in 1996 (at 21.0 and 30.4 percent, respectively), and the rate among 12th graders peaking in 1997 at 36.5 percent. These increases occurred in virtually every sociodemographic group: male and female, those planning on attending a four-year college and those without such plans, those living in all four regions of the country, those living in rural and urban areas, and those of different racial and ethnic groups. Since the mid-1990s, overall rates

of smoking in the past month have dropped 66 percent among 8th graders, 54 percent among 10th graders, and 41 percent among 12th graders.

Despite this decline, certain subgroups of adolescents are still more likely than others to smoke. With regard to race and ethnicity, non-Hispanic White students are most likely to report smoking in the past month, followed by Hispanic students. Also, males are more likely than females to smoke, and adolescents without plans to attend a four-year college program are more likely to smoke than their college-bound peers (data not shown).

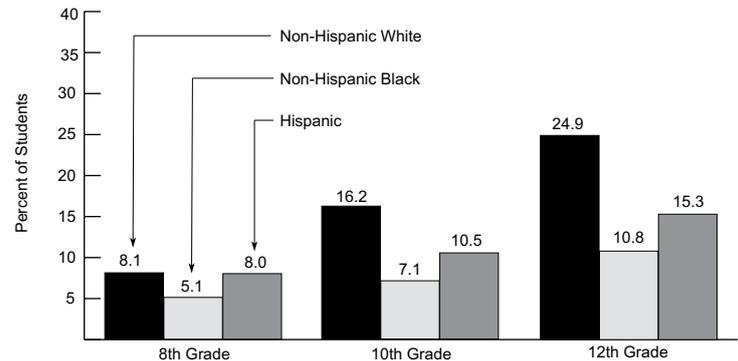
Any Cigarette Use Among Students in the Past 30 Days, by Grade, 1991–2007

Source (II.12): National Institutes of Health, National Institute on Drug Abuse, Monitoring the Future Study



Any Cigarette Use Among Students in the Past 30 Days, by Grade and Race/Ethnicity,* 2007

Source (II.12): National Institutes of Health, National Institute on Drug Abuse, Monitoring the Future Study



*Data for race represents a two-year average (2006 and 2007) to increase sample size and thus provide a more stable estimate.

SUBSTANCE ABUSE

In 2007, 9.5 percent of adolescents aged 12-17 years reported using illicit drugs in the past month. Illicit drug use varied by age, with 3.3 percent of youth aged 12-13 years reporting use in the past month, compared to 8.9 percent of youth aged 14-15 years and 16.0 percent of youth aged 16-17 years. There was also variation by race/ethnicity, with rates ranging from 6.0 percent among Asian youth to 18.7 percent¹ among American Indian/Alaska Native youth. Rates for non-Hispanic White, non-Hispanic Black, and Hispanic youth were 10.2 percent, 9.4 percent, and 8.1 percent, respectively (data not shown).

Marijuana was the most commonly used illicit drug among adolescents in 2007 (6.7 percent), followed by non-medical use of prescription-type psychotherapeutics, such as pain relievers, tranquilizers, and stimulants (3.3 percent). Adolescent males were slightly more likely than their female counterparts to report using illicit drugs in the past month (10.0 versus 9.1 percent, respectively). Illicit drug use is associated with other health risk behaviors. In 2007, 47.3 percent of adolescents who reported cigarette use in the past month also reported illicit drug use, compared to only 5.4 percent of adolescents who did not report smoking. Adolescents who reported heavy² alcohol use in the past month were also more

likely to use illicit drugs than adolescents who did not report alcohol use (60.1 versus 5.0 percent, respectively; data not shown).

Alcohol continues to be the most commonly used drug among adolescents, with 15.9 percent reporting past-month use in 2007. There was little difference in alcohol use among males and females (15.9 and 16.0 percent, respectively). Greater variation was evident by race, with rates ranging from 8.1 percent among Asian youth to 20.5 percent¹ among American Indian/Alaska Native youth; the rate for non-Hispanic White youth was 18.2 percent.

In 2007, 34.5 percent of adolescents perceived smoking marijuana once a month to be a great risk, while 49.6 percent perceived the same level

of risk with cocaine use. Smoking one or more packs of cigarettes a day was considered a great risk by 68.8 percent of youth. Drinking five or more drinks once or twice per week was considered a great risk by 39.4 percent of adolescents.

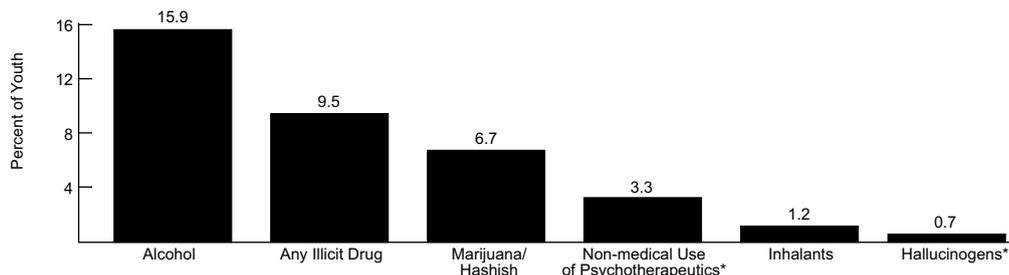
While fewer than 15 percent of adolescents reported being approached by someone selling drugs in the past month, 49.1 percent reported that marijuana would be fairly or very easy to obtain; the same was reported by 25.3 percent of youth regarding crack, 24.5 percent regarding cocaine, 14.4 percent regarding LSD, and 14.1 percent regarding heroin (data not shown).

¹ 2006; no estimate was reported for 2007 due to low precision.

² Heavy drinking is defined as drinking 5 or more drinks on the same occasion on each of 5 or more days in the past 30 days.

Past Month Drug Use Among Adolescents Aged 12-17 Years, by Drug Type, 2007

Source (II.13): Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health



*Psychotherapeutics include prescription-type pain relievers, tranquilizers, stimulants (including methamphetamine), and sedatives, but do not include over-the-counter drugs; hallucinogens include LSD, PCP, and Ecstasy.

VIOLENCE

Violence among adolescents is a critical public health issue in the United States. In 2006, homicide was the second leading cause of death among persons aged 15-24 years.

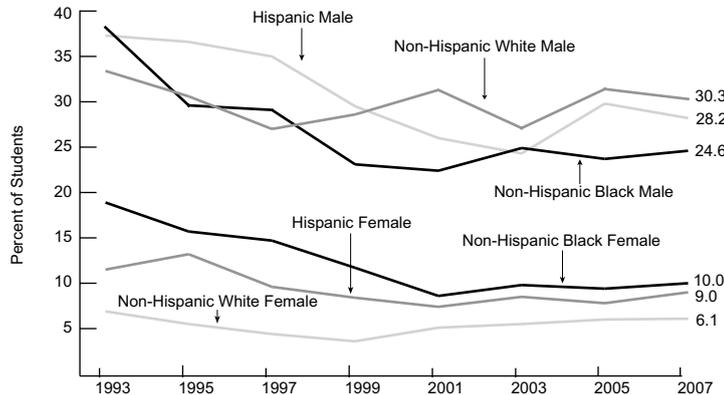
Results from the Youth Risk Behavior Surveillance System show that 18.0 percent of high school students had carried a weapon (such as a gun, club, or knife) at some point during the preceding 30 days in 2007. Males were about four times as likely as females to carry a weapon (28.5 versus 7.5 percent). Among male students, non-

Hispanic Whites were the most likely to carry a weapon (30.3 percent) followed by Hispanics (28.2 percent), while non-Hispanic Blacks were least likely to carry a weapon (24.6 percent). The opposite was true among females: non-Hispanic Blacks were the most likely to carry a weapon (10.0 percent), followed by Hispanics (9.0 percent), while non-Hispanic White females were least likely to carry a weapon (6.1 percent). Just over 5 percent of students reported carrying a gun in the preceding 30 days, and males were more than 7 times as likely as females to do so.

In 2007, 12.4 percent of high school students reported being in a physical fight on school property during the 12 months preceding the survey. Males were twice as likely as females to be in a fight; this sex disparity was most pronounced among non-Hispanic Whites, where males were almost three times as likely as females to be in a fight. Overall, non-Hispanic Black students were the most likely to be in a physical fight on school property (17.6 percent), followed by Hispanic students (15.5 percent); non-Hispanic White students were least likely to be in a fight (10.2 percent).

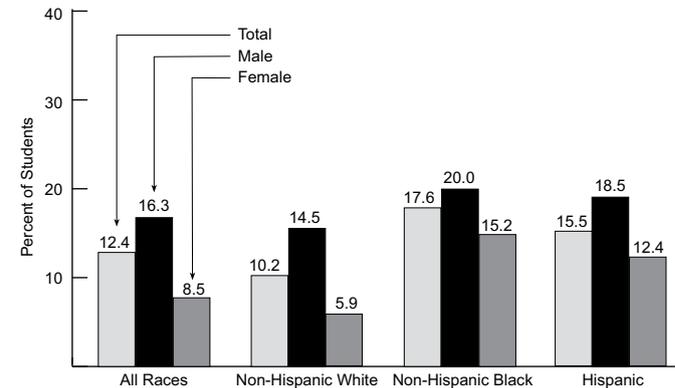
High School Students Who Carried a Weapon in the Past 30 Days, by Sex and Race/Ethnicity, 1993–2007

Source (II.9): Centers for Disease Control and Prevention, Youth Risk Behavior Survey



High School Students in a Physical Fight on School Property in the Past 12 Months, by Sex and Race/Ethnicity, 2007

Source (II.9): Centers for Disease Control and Prevention, Youth Risk Behavior Survey



ADOLESCENT MORTALITY

In 2006, 13,739 deaths were reported among adolescents aged 15-19 years, representing a rate of 64.4 per 100,000. The rate for males in this age group was notably higher than that for females (90.7 versus 36.8 per 100,000; data not shown). Unintentional injury remains the leading cause of death among this age group and accounted for nearly half of all deaths among adolescents in 2006, representing a rate of 31.3 per 100,000. The second and third leading causes of death among

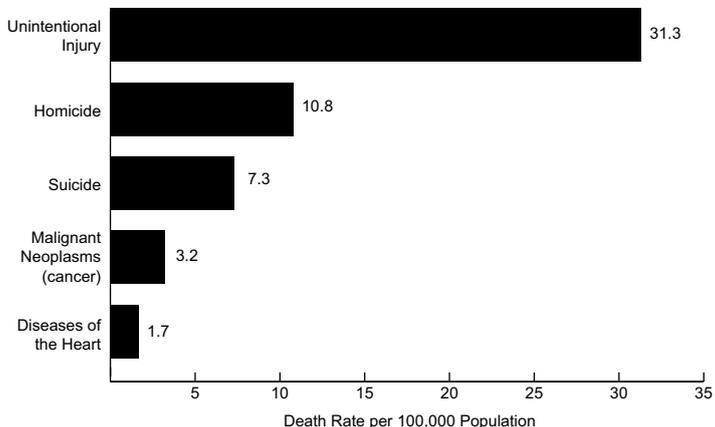
adolescents aged 15-19 years were homicide and suicide, with rates of 10.8 and 7.3 per 100,000, respectively. These causes accounted for 17 and 11 percent of deaths within this age group.

Within the general category of deaths due to injury or other external causes (including intentional injury), motor vehicle traffic was the leading cause of mortality among 15- to 19-year-olds in 2006, accounting for 45 percent of injury-related deaths among adolescents. Alcohol is a significant contributor to these deaths; recent data suggest

that nearly one-third of adolescent drivers killed in crashes had been drinking (data not shown). Firearms were the next leading cause of fatal injury, accounting for 26 percent of injury-related deaths in this age group, followed by poisoning, suffocation, and drowning. Within the category of unintentional injuries, firearm injury falls to the fifth leading cause of death (data not shown).

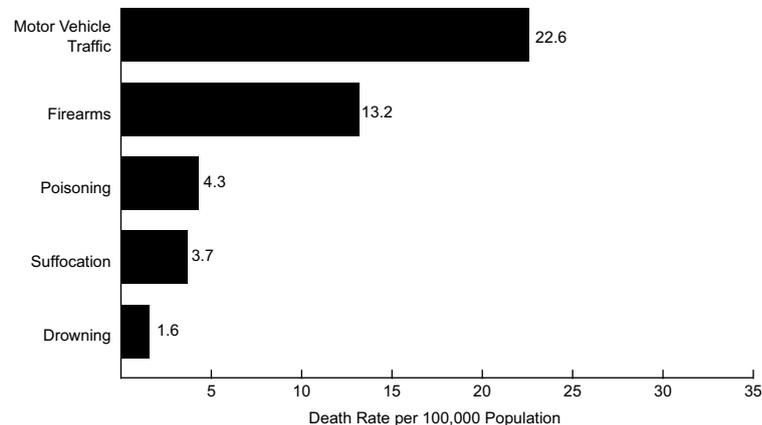
Leading Causes of Death Among Adolescents Aged 15–19, 2006

Source (II.8): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



Deaths Due to Injury* Among Adolescents Aged 15–19, 2006

Source (II.8): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System



*Includes intentional injury, such as homicide and suicide

ADOLESCENT MORTALITY FROM TRAFFIC AND FIREARM INJURIES

The two leading mechanisms of injury death among adolescents are motor vehicle traffic and firearms. In 2006, 4,814 adolescents aged 15 to 19 years were killed by motor vehicle traffic. Most of those were either involved as driver or passenger in the vehicle, while the remaining deaths occurred among pedestrians, motorcyclists, and pedal cyclists. The 2007 Youth Risk Behavior Survey revealed that 11.1 percent of high school students had rarely or never worn seat belts when riding in a car driven by someone else. Additionally, 29.1 percent of students had ridden at least once in the 30 days preceding the survey with a driver who had been drinking (data not shown).

Firearms were the second leading mechanism of injury death among adolescents in 2006. Overall, 2,809 adolescents were killed by firearms, representing a rate of 13.2 per 100,000 adolescents. Of these, homicide accounted for 70 percent and suicide accounted for 25 percent; the remainder were unintentional or of unknown intent. The 2007 Youth Risk Behavior Survey indicated that 5.2 percent of high school students carried a gun at least once in the month preceding the survey.

Adolescent Mortality from Traffic and Firearm Injuries, 2006

Source (II.8): Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System

Traffic Mortality by Person Injured



Firearms Mortality by Intent

