

## Daily Cigarette Use

### Headline

Overall, daily cigarette use among eighth, tenth, and twelfth grade students has declined dramatically in the last decade, falling by more than half among eighth and tenth graders between 1996 and 2006. In recent years, however, this decline has halted among eighth and tenth graders. ([See Figure 1](#))

### Importance

Cigarette smoking, an addictive behavior usually established in adolescence, is the primary preventable cause of death in the United States.<sup>1</sup> More than 430,000 people die each year from tobacco-related illnesses. A recent report by the Surgeon General found that reducing the prevalence of smoking to the levels suggested by the *Healthy People 2010* initiative would prevent 7.1 million premature deaths after the year 2010.<sup>2</sup>

Youth who smoke are more likely to drink, to use other drugs,<sup>3</sup> and to engage in a variety of other risky behaviors.<sup>4</sup> They are also less likely to be physically fit and more likely to suffer from respiratory problems.<sup>5</sup> The media can play a role in influencing adolescents' opinions on the acceptability of smoking. According to results from the National Youth Tobacco Survey in 2004, 78 percent of middle school students and 87 percent of high school students reported seeing actors using tobacco in movies or on television. A little more than a third (34 percent of middle school students and 39 percent of high school students) reported seeing advertisements for tobacco products on the internet.<sup>6</sup> According to other results from the survey, among middle- and high-school students in 2004, around two-thirds of current smokers were not asked to show proof of age when purchasing cigarettes nor were they refused purchase because of their age.<sup>7</sup>

### Trends

Daily cigarette use fell by more than half among eighth and tenth grade students between 1996 and 2006. In 2006, 4 percent of eighth graders and 8 percent of tenth graders reported smoking daily, compared with 10 percent and 18 percent, respectively, in 1996. This decline has come to a halt for these two age groups, however, remaining around the same percentage for the past three years. Among students in the twelfth grade, daily cigarette use continued to decline through 2006. Twelfth grade cigarette use peaked at 25 percent in 1997 during the 1990's, before falling to 12 percent in 2006. Data for twelfth grade students dating back to the mid-1970s indicate rates of smoking as high as 29 percent in 1976. ([See Figure 1](#))

### Differences by Gender

Rates of smoking for boys and girls in eighth, tenth, and twelfth grade have been similar in recent years\*. ([See Table 1](#))

\*Note: 2005 is the latest year for which these estimates are available.

### **Differences by Race and Ethnicity<sup>8</sup>**

White students have the highest levels of smoking, with rates among tenth and twelfth graders that are more than twice those of black students\*. Hispanic students' rates of daily smoking fall in between those of whites and blacks. For example, among twelfth graders, 17 percent of white students reported smoking daily in 2005, compared with 6 percent of black students and 8 percent of Hispanic students. ([See Figure 2](#))

\*Note: 2005 was the latest year for which these estimates are available.

### **Differences by Age**

Daily smoking among students increases with age. While only 4 percent of eighth graders reported daily cigarette use in 2006, by twelfth grade 12 percent of students reported daily cigarette use. ([See Figure 1](#))

### **Differences by Parental Education Level**

Students whose parents have a high level of education are less likely to smoke cigarettes daily than students whose parents have low levels of education. For example, in 2005, 8 percent of eighth grade students with a parent who did not complete high school smoked cigarettes, compared with between 1 and 2 percent of those with a parent who had completed college or graduate school\*. ([See Table 1](#))

\*Note: 2005 is the latest year for which these estimates are available.

### **Differences by College Plans**

Eighth grade students who plan to complete four years of college are nearly five times less likely than students who do not have such plans to smoke daily (14 percent versus 3 percent in 2005)\*. As students get older this gap decreases slightly. ([See Table 1](#))

\*Note: 2005 is the latest year for which these estimates are available.

### **State and Local Estimates**

2005 estimates for cigarette use are available for select states and cities from the Youth Risk Behavior Survey (YRBS) at: <http://www.cdc.gov/mmwr/PDF/SS/SS5505.pdf> (See Table 23)

Estimates of cigarette use in the past month among 12- to 17-year-olds are available for all 50 states for 2003-2004 from the National Household Survey of Drug Abuse at: <http://oas.samhsa.gov/2k4State/appB.htm#TabB.14> (See Table B.14)

NOTE: Estimates of drug use from the National Household Survey of Drug Abuse (NHSDA), used to generate these state-level estimates, are generally lower than estimates generated by the Monitoring the Future Survey (MTF). Since the MTF was the source of the national estimates presented in this indicator, users should not make direct comparisons of estimates made from the two sources. For information on methodological differences in the surveys that may be causing these differences in estimates, see Harrison, L.D. (2001). Understanding the differences in youth drug prevalence rates produced by the MTF, NHSDA, and YRBS studies. *Journal of Drug Issues*, 31(3), pp. 665-694.

### **International Estimates**

A cross country comparison of the percentage of youth who report smoking daily is available at: The Global Youth Tobacco Survey Collaborative Group. "Tobacco use among youth: a cross country comparison" *Tobacco Control* 2002 Sep. 11(3): 252-70. <http://tc.bmjournals.com/cgi/content/abstract/11/3/252>

Estimates for youth in European countries in 1999 are available at: <http://monitoringthefuture.org/pubs/espadssummary.pdf> (See Table 2c)

The percentage of students who report smoking daily is available for 28 countries from the WHO Policy Series: *Health policy for children and adolescents, Issue 1*. (Data from 1997/1998).

<http://www.childpolicyintl.org/siyouth/Table347.pdf>

### **National Goals**

Given the serious health consequences associated with adolescent smoking, the federal government has set a national goal through its *Healthy People 2010* initiative to reduce the percentage of high school students smoking one or more cigarettes in the prior month from the 1999 level of 35 percent to 16 percent by 2010. To reach this goal, the Center for Disease Control and Prevention (CDC) is advocating the use of education programs, which work to prevent smoking and to encourage cessation of smoking.<sup>9</sup>

More information available at:

<http://www.health.gov/healthypeople/document/html/objectives/27-02.htm>

<http://www.health.gov/healthypeople/Document/HTML/Volume2/27Tobacco.htm>

### **Definition**

Students are defined as daily cigarette smokers if they said that they smoked one or more cigarettes per day in the last 30 days.

### **Data Source**

Data for 2006: Johnston, L. D., O'Malley, P. M., Bachman, J. G. & Schulenberg, J. E. (December 21, 2006). *Decline in daily smoking by younger teens has ended*. University of Michigan News and Information Services: Ann Arbor, MI.[On-line]. Table 1. Available at: <http://www.monitoringthefuture.org/data/06data.html#2006data-cigs>; accessed 3/15/07.

Data for 2005 and 2004: Johnston, L. D., O'Malley, P. M., & Bachman, J. G. (2006). *Monitoring the Future national survey results on drug use, 1975-2005. Volume I: Secondary school students* (NIH Publication No. 06-5883). Bethesda, MD: National Institute on Drug Abuse. Tables D-90, D-91, and D-92. [http://www.monitoringthefuture.org/pubs/monographs/vol1\\_2005.pdf](http://www.monitoringthefuture.org/pubs/monographs/vol1_2005.pdf)

Data for 2003: *Monitoring the Future national survey results on drug use, 1975-2003. Volume I: Secondary school students* (NIH Publication No. 04-5507). Bethesda, MD: National Institute on Drug Abuse Online. Tables 4-7, 4-8, D-65, and D-66. Available at [http://www.monitoringthefuture.org/pubs/monographs/vol1\\_2003.pdf](http://www.monitoringthefuture.org/pubs/monographs/vol1_2003.pdf)

Data for 2002 and earlier years: Johnston, L. D., O'Malley, P. M., & Bachman, J. G. (2003). *Monitoring the Future national survey results on drug use, 1975-2002. Volume I: Secondary school students* (NIH Publication No. 03-5375). Bethesda, MD: National Institute on Drug Abuse. Tables D-54 and D-55. [http://www.monitoringthefuture.org/pubs/monographs/vol1\\_2002.pdf](http://www.monitoringthefuture.org/pubs/monographs/vol1_2002.pdf)

## Raw Data Source

The Monitoring the Future Survey  
<http://www.monitoringthefuture.org>

## Approximate Date of Next Update

Unknown

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<sup>1</sup> Youth Risk Behavior Survey. Item Rationale for the 2001 Questionnaire available at: <http://www.k-12.state.tn.us/yrebs/ciyrebs01/index.htm>

<sup>2</sup> U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. *The Health Consequences of Smoking: A Report of the Surgeon General*. Washington, D.C.: U.S. GPO, 2004. [http://www.cdc.gov/tobacco/sgr/sgr\\_2004/index.htm](http://www.cdc.gov/tobacco/sgr/sgr_2004/index.htm)

<sup>3</sup> U.S. Department of Health and Human Services. *Healthy People 2010. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health*. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000. <http://www.health.gov/healthypeople/Document/HTML/Volume2/27Tobacco.htm>

<sup>4</sup> U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General*. Washington, D.C.: U.S. GPO, 1994. [http://www.cdc.gov/tobacco/sgr/sgr\\_1994/index.htm](http://www.cdc.gov/tobacco/sgr/sgr_1994/index.htm)

<sup>5</sup> *ibid.*

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<sup>6</sup> Centers for Disease Control and Prevention. Tobacco use, access, and exposure to tobacco in media among middle and high school students—United States, 2004. *Morbidity and Mortality Weekly Report*, 54(12):297-305. <http://www.cdc.gov/mmwr/PDF/wk/mm5412.pdf>

<sup>7</sup> Ibid.

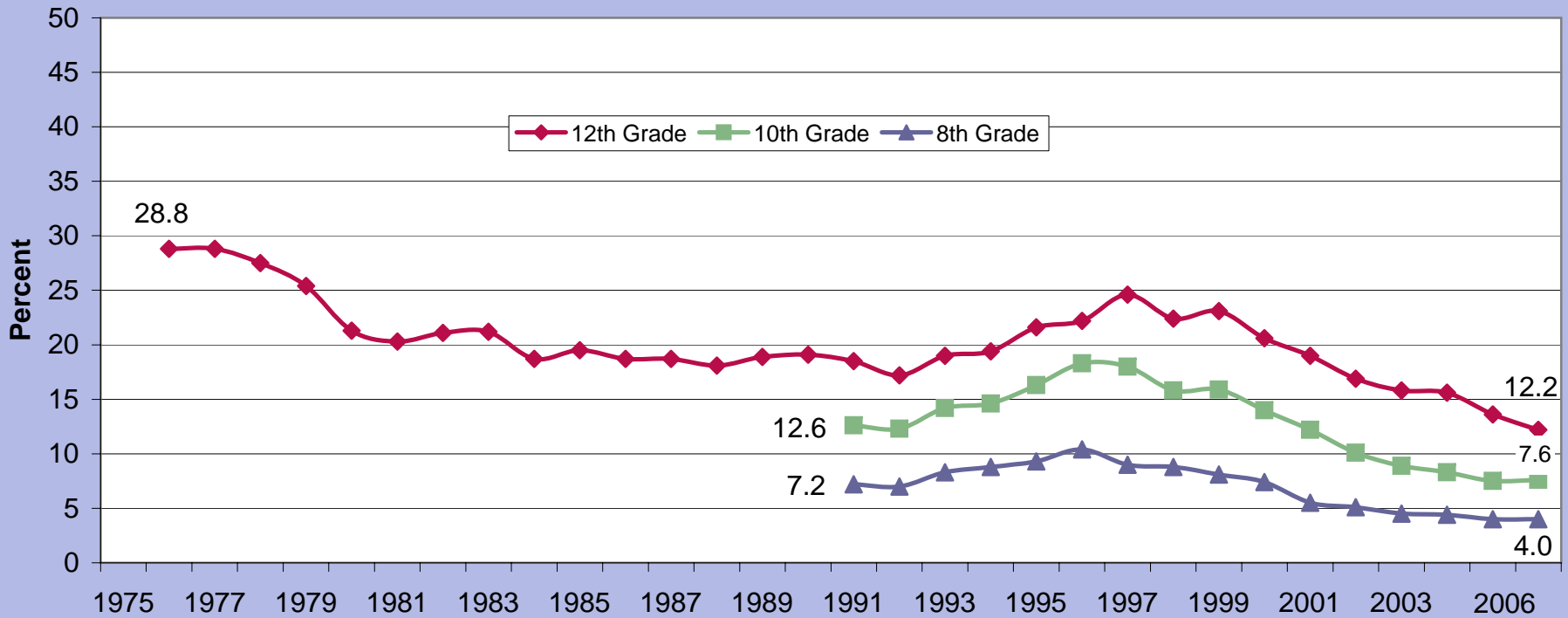
<sup>8</sup> Estimates for race and ethnicity are based on 2-year averages.

<sup>9</sup> U.S. Department of Health and Human Services. *Healthy People 2010. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health*. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.

<http://www.health.gov/healthypeople/Document/HTML/Volume2/27Tobacco.htm>

Figure 1

## Percentage of Students Who Smoke Cigarettes Daily, by Grade, 1975-2006

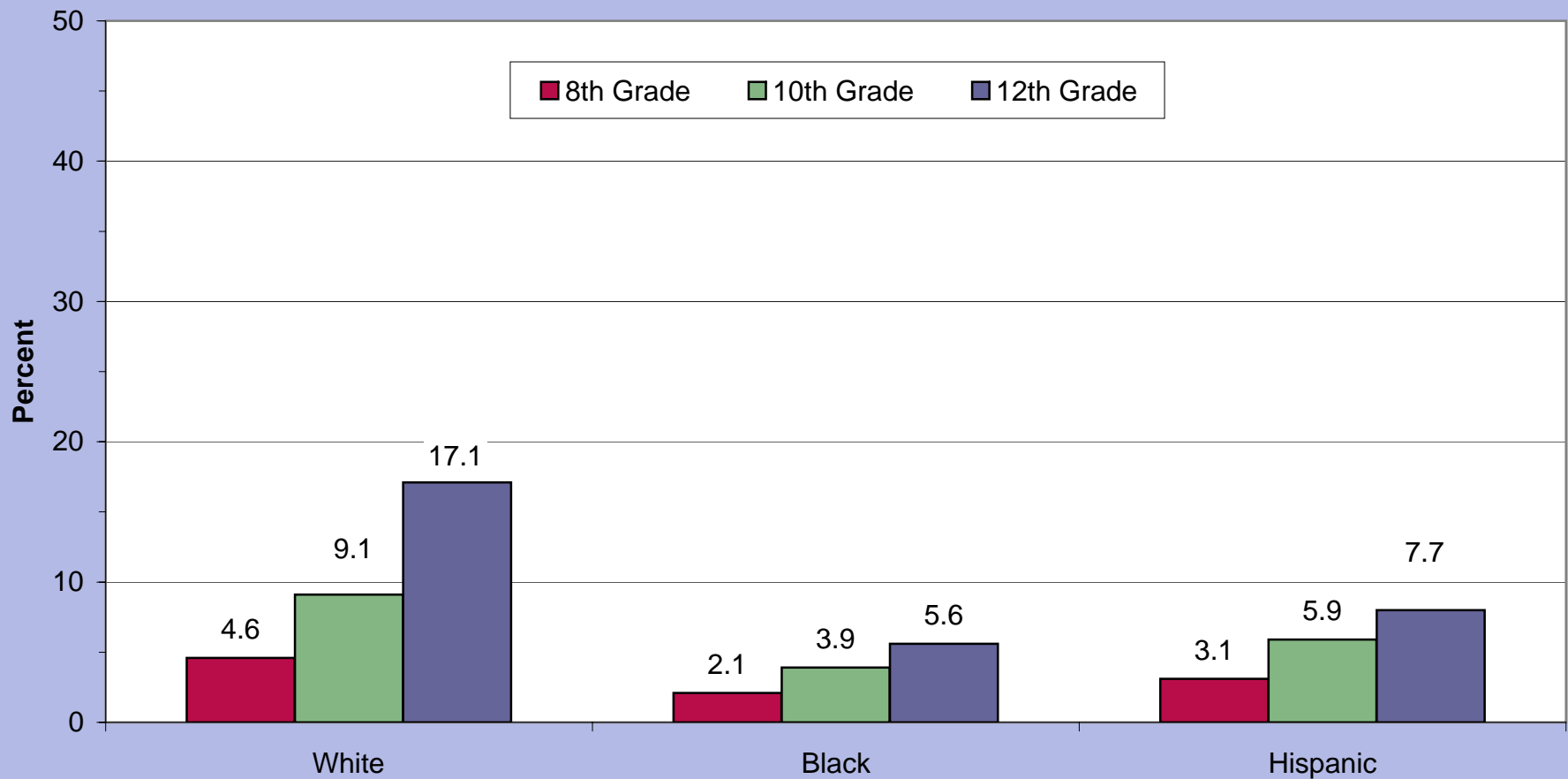


Source: Data for 1975-2002: Johnston, L. D., O'Malley, P. M., & Bachman, J. G. (2003). Monitoring the Future national survey results on drug use, 1975-2002. Volume I: Secondary school students (NIH Publication No. 03-5375). Bethesda, MD: National Institute on Drug Abuse. Tables D-54 and D-55. Data for 2003: The Monitoring the Future Study, University of Michigan. In-School Surveys of 8th, 10th, and 12th Grade Students, "Table 1: Long-Term Trends in Prevalence of Use of Cigarettes for Eighth, Tenth, and Twelfth Graders." Data for 2004 and 2005: Johnston, L. D., O'Malley, P. M., & Bachman, J. G. (2006). Monitoring the Future national survey results on drug use, 1975-2005. Volume I: Secondary school students (NIH Publication No. 06-5883). Bethesda, MD: National Institute on Drug Abuse. Tables D-90, D-91, and D-92. [http://www.monitoringthefuture.org/pubs/monographs/vol1\\_2005.pdf](http://www.monitoringthefuture.org/pubs/monographs/vol1_2005.pdf) Data for 2006: Johnston, L. D., O'Malley, P. M., Bachman, J. G. & Schulenberg, J. E. (December 21, 2006). Decline in daily smoking by younger teens has ended. University of Michigan News and Information Services: Ann Arbor, MI. [On-line]. Table 1. Available: <http://www.monitoringthefuture.org/data/06data.html#2006data-cigs>; accessed 3/15/07.



Figure 2

## Percentage of Students Who Smoke Cigarettes Daily, by Grade, Race and Hispanic Origin,<sup>1</sup> 2005\*



<sup>1</sup>Estimates for race and ethnicity are based on two-year averages.

\*2005 is the latest year for which these estimates are available.

Source: Johnston, L. D., O'Malley, P. M., & Bachman, J. G. (2006). Monitoring the Future national survey results on drug use, 1975-2005. Volume I: Secondary school students (NIH Publication No. 06-5883). Bethesda, MD: National Institute on Drug Abuse. Tables D-90, D-91, and D-92. [http://www.monitoringthefuture.org/pubs/monographs/vol1\\_2005.pdf](http://www.monitoringthefuture.org/pubs/monographs/vol1_2005.pdf)

Table 1

Cigarettes: Percentage of Students in Grades 8, 10, and 12 who Report Smoking Daily,<sup>1</sup> Selected Years 1976-2006

	1976	1981	1986	1991	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<b>Eighth Grade</b>	-	-	-	7.2	9.3	10.4	9.0	8.8	8.1	7.4	5.5	5.1	4.5	4.4	4.0	4.0
<b>Gender</b>																
Male	-	-	-	8.1	9.2	10.5	9.0	8.1	7.4	7.0	5.9	5.4	4.4	4.4	3.9	-
Female	-	-	-	6.2	9.2	10.1	8.7	9.0	8.4	7.5	4.9	4.9	4.5	4.3	4.0	-
<b>Race (2-year average)<sup>2</sup></b>																
White	-	-	-	-	10.5	11.7	11.4	10.4	9.7	9.0	7.5	6.0	5.3	4.7	4.6	-
Black	-	-	-	-	2.8	3.2	3.7	3.8	3.8	3.2	2.8	2.8	2.9	2.7	2.1	-
Hispanic	-	-	-	-	9.2	8.0	8.1	8.4	8.5	7.1	5.0	4.4	3.7	3.5	3.1	-
<b>Parental Education<sup>3</sup></b>																
Less than high school	-	-	-	15.9	15.8	13.6	14.3	13.0	14.7	13.1	11.1	10.6	9.1	10.1	7.8	-
Completed high school	-	-	-	8.6	11.3	14.0	11.7	12.0	11.4	11.3	7.5	7.1	6.6	5.6	6.3	-
Some college	-	-	-	6.5	9.4	10.1	9.2	9.7	8.1	6.7	5.1	5.4	4.4	4.2	4.3	-
Completed college	-	-	-	4.0	7.2	7.6	6.8	5.7	4.6	3.9	3.0	3.3	2.6	2.8	2.2	-
Graduate school	-	-	-	4.9	5.7	7.4	5.5	5.2	5.1	4.1	3.1	2.1	2.1	1.9	1.4	-
<b>College Plans</b>																
None or under 4 years	-	-	-	18.5	22.5	26.0	25.4	25.2	25.2	21.7	17.7	17.1	16.1	15.4	14.4	-
Complete 4 years	-	-	-	5.3	7.5	8.0	6.9	6.6	5.9	5.6	3.9	3.9	3.2	3.1	2.9	-
	1976	1981	1986	1991	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<b>Tenth Grade</b>	-	-	-	12.6	16.3	18.3	18.0	15.8	15.9	14.0	12.2	10.1	8.9	8.3	7.5	7.6
<b>Gender</b>																
Male	-	-	-	12.4	16.3	18.1	17.2	14.7	15.6	13.7	12.4	9.4	8.6	8.2	7.2	-
Female	-	-	-	12.5	16.1	18.6	18.5	16.8	15.9	14.1	11.9	10.8	9.0	8.2	7.7	-
<b>Race (2-year average)<sup>2</sup></b>																
White	-	-	-	-	17.6	20.0	21.4	20.3	19.1	17.7	15.5	13.3	11.4	10.0	9.1	-
Black	-	-	-	-	4.7	5.1	5.6	5.8	5.3	5.2	5.2	5.0	4.3	4.4	3.9	-
Hispanic	-	-	-	-	9.9	11.6	10.8	9.4	9.1	8.8	7.4	6.4	6.0	6.0	5.9	-
<b>Parental Education<sup>3</sup></b>																
Less than high school	-	-	-	16.0	20.0	19.3	17.7	17.4	20.1	18.9	12.9	14.1	15.3	11.4	9.9	-
Completed high school	-	-	-	15.5	21.6	23.1	22.1	21.3	19.1	17.6	16.2	14.7	12.7	11.5	11.1	-
Some college	-	-	-	12.0	17.0	19.4	18.9	14.9	16.6	14.2	12.2	10.0	8.8	9.3	7.9	-
Completed college	-	-	-	10.6	12.6	14.8	15.6	12.9	13.0	11.5	9.7	6.8	5.8	5.4	5.2	-
Graduate school	-	-	-	9.6	10.3	13.6	12.0	11.1	11.2	9.8	8.3	6.4	4.5	4.2	4.4	-
<b>College Plans</b>																
None or under 4 years	-	-	-	25.7	32.7	34.3	35.4	31.7	32.1	28.8	27.3	22.9	22.1	21.4	19.2	-
Complete 4 years	-	-	-	9.6	13.3	15.5	15.0	12.9	13.2	11.6	9.6	7.9	6.7	6.4	5.9	-
	1976	1981	1986	1991	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<b>Twelfth Grade</b>	28.8	20.3	18.7	18.5	21.6	22.2	24.6	22.4	23.1	20.6	19.0	16.9	15.8	15.6	13.6	12.2
<b>Gender</b>																
Male	28.0	18.1	16.9	18.8	21.7	22.2	24.8	22.7	23.6	20.9	18.4	17.2	17.0	15.4	14.6	-
Female	28.8	21.7	19.8	17.9	20.8	21.8	23.6	21.5	22.2	19.7	18.9	16.1	14.0	15.0	11.9	-
<b>Race (2-year average)<sup>2</sup></b>																
White	-	21.4	20.6	21.5	23.9	25.4	27.8	28.3	26.9	25.7	23.8	21.8	19.5	18.3	17.1	-
Black	-	14.6	9.4	5.1	6.1	7.0	7.2	7.4	7.7	8.0	7.5	6.4	5.4	5.2	5.6	-
Hispanic	-	13.6	11.3	11.5	11.6	12.9	14.0	13.6	14.0	15.7	12.0	9.2	8.0	8.2	7.7	-
<b>Parental Education<sup>3</sup></b>																
Less than high school	32.7	24.1	20.4	21.2	21.3	21.1	21.9	21.7	23.8	22.8	16.4	12.4	15.1	14.2	11.7	-
Completed high school	31.3	22.5	21.4	19.8	24.6	24.4	26.0	24.7	26.9	22.9	21.9	19.8	18.3	19.4	18.3	-
Some college	25.8	19.0	19.4	18.5	21.6	21.2	23.8	23.8	23.6	21.2	19.9	19.1	16.5	16.3	14.4	-
Completed college	24.5	16.1	13.9	16.2	19.7	22.4	24.9	20.6	20.6	18.6	17.9	14.1	13.0	13.7	11.7	-
Graduate school	22.8	13.9	13.6	16.1	18.5	20.0	22.9	17.4	19.0	15.2	13.4	14.3	11.3	10.3	8.1	-
<b>College Plans</b>																
None or under 4 years	36.5	29.3	28.2	28.4	33.7	33.2	35.6	34.6	34.2	31.7	30.1	27.6	27.9	26.9	24.9	-
Complete 4 years	19.8	12.9	12.8	14.1	17.4	18.9	20.6	18.4	19.5	16.6	15.5	13.8	12.1	12.2	10.5	-

"-" Indicates data not available.

<sup>1</sup> Respondents were asked about smoking habits over the past thirty-day period.

<sup>2</sup> To derive percentages for each racial subgroup, data for the specified year and the previous year have been combined to increase subgroup sample sizes and thus provide the most stable estimates.

<sup>3</sup> Parental education is calculated by the Institute of Social Research as the average of the mother's and father's education. Averages that fall between two levels were rounded up by Ch

Trends to reflect the attainment of the most educated parent.

Sources: Data for 1976-2002: Johnston, L. D., O'Malley, P. M., & Bachman, J. G. (2003). Monitoring the Future national survey results on drug use, 1975-2002. Volume I: Secondary school students (NIH Publication No. 03-5375 Bethesda, MD: National Institute on Drug Abuse. Tables D-54 and D-55; Data for 2003: Monitoring the Future national survey results on drug use, 1975-2003. Volume I: Secondary school students (NIH Publication No. 04-5507). Available at [http://www.monitoringthefuture.org/pubs/monographs/vol1\\_2003.pdf](http://www.monitoringthefuture.org/pubs/monographs/vol1_2003.pdf). Data for 2004 and 2005: Johnston, L. D., O'Malley, P. M., &

Bachman, J. G. (2006). Monitoring the Future national survey results on drug use, 1975-2005. Volume I: Secondary school students (NIH Publication

No. 06-5883). Bethesda, MD: National Institute on Drug Abuse. Tables D-90, D-91, and D-92.

[http://www.monitoringthefuture.org/pubs/monographs/vol1\\_2005.pdf](http://www.monitoringthefuture.org/pubs/monographs/vol1_2005.pdf). Data for 2006: Johnston, L. D., O'Malley, P. M., Bachman, J. G. & Schulenberg,

J. E. (December 21, 2006). Decline in daily smoking by younger teens has ended. University of Michigan News and Information Services: Ann Arbor,

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