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**EMBARGOED FOR RELEASE AFTER 11:30 A.M. EST, TUESDAY, DEC. 21, 2004**

EDITORS: Results of this year's Monitoring the Future survey are being released jointly by the University of Michigan, which designed and conducted the study, and the National Institute on Drug Abuse, which sponsors the study, at a news conference to be held at the National Press Club in Washington, D.C. Participating will be the Director of the White House Office of National Drug Control Policy (ONDCP), John Walters; the Administrator of the Substance Abuse and Mental Health Services Administration (SAMHSA), Charles Curie; the Administrator of the Drug Enforcement Administration (DEA), Karen Tandy; the Director of the National Institute on Drug Abuse (NIDA), Nora Volkow; and the principal investigator of the study, Lloyd Johnston. For further information, contact Johnston, at (734) 763-5043.

**Cigarette smoking among American teens continues to decline, but more slowly than in the past**

ANN ARBOR, Mich.----Smoking rates among American teens continue an eight year long decline in 2004. The proportion who are current smokers in 2004 down from recent peak levels in the mid-1990s by one-half among the nation's 8th and 10th graders and by a third among its 12th graders.

"That's the good news, and it is good news indeed," says Lloyd Johnston, the University of Michigan researcher who is the principal investigator of the Monitoring the Future study that gave rise to these findings. "The bad news is that the decline has decelerated sharply in the past two years," though it still continues for the most part.

And the number of teen smokers is still substantial: 25 percent of 12th graders reported smoking in the prior 30 days, along with 16 percent of 10th graders and 9 percent of 8th graders.

Monitoring the Future, now in its 30th year, annually conducts in-school surveys of nationally representative samples of American young people in 8th, 10th, and 12th grades. This year nearly 50,000 students in over 400 secondary schools were surveyed.

The study has been funded by the National Institute on Drug Abuse under a series of investigator-initiated, competitive research grants made to the University of Michigan. The authors of the forthcoming report on the 2004 findings are Johnston, Patrick O'Malley, Jerald Bachman, and John Schulenberg—all psychologists and research professors at the University of Michigan's Institute for Social Research.

After a sharp increase in teen smoking rates in the early 1990s, there was a turnaround after 1996 in the lower grades and after 1997 among 12th graders. The investigators feel that a number of factors contributed to that turnaround and to the substantial decline that followed it, including:

- The intense adverse publicity suffered by the tobacco industry during the 1990s, as their practices were brought under public scrutiny.
- The master settlement agreement between the state attorneys general and the tobacco industry that led to a number of changes in marketing practices.
- A sharp rise in cigarette prices, partly as a result of the industry's need to recoup monies lost in the settlement.
- The ending of the Joe Camel logo.
- The cessation of billboard advertising as part of the settlement.
- The initiation of anti-smoking ads by a number of states and nationally by the American Legacy Foundation, which was created and funded under the settlement.

“We know that young people have come to see cigarette smoking as more dangerous, while they also have become less accepting of cigarette use; and these changes continued into 2004,” Johnston says.

A number of attitudes about smoking shifted in a negative direction. For example, the proportion of 12th graders who say that they prefer to date people who do not smoke rose from 64 percent in 1977 to 72 percent in 2002, where it remains in 2004.

“When smoking makes a teen less attractive to the great majority of the opposite sex, as now appears to be the case, one of the long-imagined benefits for adolescent smoking is seriously undercut,” Johnston adds.

In fact, the proportion of young people who have even tried cigarettes has declined quite dramatically since the recent peak rates reached in 1996 and 1997. For example, 49 percent of 8th-grade students in 1996 had tried cigarettes, whereas by 2004 “only” 28 percent had done so—a decline of more than four-tenths.

Nearly all measures of smoking showed some modest decline this year at all three grades—lifetime prevalence, daily prevalence, and half-pack-a-day prevalence. Thirty-day prevalence also declined modestly among 8th and 10th graders, but 12th graders showed a slight increase. Only the 10th grade declines in lifetime and half-pack-a-day prevalence rates reached statistical

significance, though, indicating a considerable slowdown in the improvements that had been occurring for some years.

There are some important subgroup differences in teen smoking. The gender differences in smoking are quite small at present, but the differences in smoking associated with planning to go to college, or not, are very large. Students who plan to complete a four-year college education are much less likely to smoke than those who do not have such plans. Youth living in rural areas and small town areas are considerably more likely to smoke than those living in metropolitan areas.

Those students with more educated parents are less likely to smoke, particularly at young ages. Finally, African American youngsters continue to have a substantially lower rate of smoking than do Whites or Hispanics, and Whites tend to have the highest rates of the three groups.

Students' perceptions about how easy it would be to get cigarettes if they wanted some have shown a considerable decline in the lower grades since the mid-1990s, perhaps in part because of the sharp decline in the number of active smokers. Most of the decline in perceived access, however, has occurred among those who have never smoked and among past smokers. Active smokers seem to know where to find access.

“Whether we will see teen smoking continue to decline in the future is likely to depend on what actions society and the tobacco companies take,” Johnston says. “The fact that a number of states have reduced their allocations of tobacco settlement monies to smoking prevention is likely to have an adverse effect, as is the scheduled decline in funding for the national anti-smoking campaign sponsored by the American Legacy Foundation. If more states and municipalities decide to raise tobacco taxes, that likely will bring youth smoking rates lower, based on past experience. And, if the tobacco companies avoid marketing techniques aimed at youth, I think that can make a big difference; however, their advertising and promotion expenditures have actually grown considerably in recent years.”\*

# # #

Monitoring the Future has been funded under a series of competing, investigator-initiated research grants from the National Institute on Drug Abuse. Surveys of nationally representative samples of American high school seniors were begun in 1975, making the class of 2004 the 30th such class surveyed. Surveys of 8th and 10th graders were added to the design in 1991, making the 2004 nationally representative samples the 14th such classes surveyed. The sample sizes in 2004 are 17,413 8th graders located in 147 schools, 16,839 10th graders located in 131 schools, and 15,222 12th graders located in 128 schools, for a total of 49,474 students in 406 secondary schools overall. The samples are drawn to be representative of students in public and private secondary schools across the coterminous United States, selected with probability proportionate to estimated class size, to yield separate, nationally representative samples of students from each of the three grade levels.

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\*According to a recent report from the Center for Tobacco-Free Kids, the Federal Trade Commission concludes that tobacco companies have increased their annual marketing expenditures by 84 percent since the tobacco settlement was reached in 1998, spending a new record level of 12.7 billion dollars per year.

The findings summarized here will be published in the forthcoming volume: Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2005). *Monitoring the Future national results on adolescent drug use: Overview of key findings, 2004*. (NIH Publication No. [yet to be assigned].) Bethesda MD: National Institute on Drug Abuse.

**TABLE 1**  
**Trends in Prevalence of Use of Cigarettes for Eighth, Tenth, and Twelfth Graders**

Cont'd

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>
<b>Lifetime</b>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	73.6	75.4	75.7	75.3	74.0	71.0	71.0	70.1	70.6	69.7	68.8	67.6	67.2	66.4	65.7
<b>Thirty-Day</b>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	36.7	38.8	38.4	36.7	34.4	30.5	29.4	30.0	30.3	29.3	30.1	29.6	29.4	28.7	28.6
<b>Daily</b>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	26.9	28.8	28.8	27.5	25.4	21.3	20.3	21.1	21.2	18.7	19.5	18.7	18.7	18.1	18.9
<b>1/2 Pack+ per Day</b>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	17.9	19.2	19.4	18.8	16.5	14.3	13.5	14.2	13.8	12.3	12.5	11.4	11.4	10.6	11.2
<b>Approx. Ns:</b>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	9400	15400	17100	17800	15500	15900	17500	17700	16300	15900	16000	15200	16300	16300	16700

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

'—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence of use estimates for the two most recent classes is due to rounding error.

SOURCE: The Monitoring the Future Study, the University of Michigan.

**TABLE 1 (cont'd)**  
**Trends in Prevalence of Use of Cigarettes for Eighth, Tenth, and Twelfth Graders**

	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	'03-'04 <u>change</u>
<b>Lifetime</b>																
8th Grade	—	44.0	45.2	45.3	46.1	46.4	49.2	47.3	45.7	44.1	40.5	36.6	31.4	28.4	27.9	-0.5
10th Grade	—	55.1	53.5	56.3	56.9	57.6	61.2	60.2	57.7	57.6	55.1	52.8	47.4	43.0	40.7	-2.3 s
12th Grade	64.4	63.1	61.8	61.9	62.0	64.2	63.5	65.4	65.3	64.6	62.5	61.0	57.2	53.7	52.8	-0.9
<b>Thirty-Day</b>																
8th Grade	—	14.3	15.5	16.7	18.6	19.1	21.0	19.4	19.1	17.5	14.6	12.2	10.7	10.2	9.2	-1.0
10th Grade	—	20.8	21.5	24.7	25.4	27.9	30.4	29.8	27.6	25.7	23.9	21.3	17.7	16.7	16.0	-0.7
12th Grade	29.4	28.3	27.8	29.9	31.2	33.5	34.0	36.5	35.1	34.6	31.4	29.5	26.7	24.4	25.0	+0.6
<b>Daily</b>																
8th Grade	—	7.2	7.0	8.3	8.8	9.3	10.4	9.0	8.8	8.1	7.4	5.5	5.1	4.5	4.4	-0.2
10th Grade	—	12.6	12.3	14.2	14.6	16.3	18.3	18.0	15.8	15.9	14.0	12.2	10.1	8.9	8.3	-0.6
12th Grade	19.1	18.5	17.2	19.0	19.4	21.6	22.2	24.6	22.4	23.1	20.6	19.0	16.9	15.8	15.6	-0.3
<b>1/2 Pack+ per Day</b>																
8th Grade	—	3.1	2.9	3.5	3.6	3.4	4.3	3.5	3.6	3.3	2.8	2.3	2.1	1.8	1.7	-0.1
10th Grade	—	6.5	6.0	7.0	7.6	8.3	9.4	8.6	7.9	7.6	6.2	5.5	4.4	4.1	3.3	-0.9 s
12th Grade	11.3	10.7	10.0	10.9	11.2	12.4	13.0	14.3	12.6	13.2	11.3	10.3	9.1	8.4	8.0	-0.3
<b>Approx. Ns:</b>																
8th Grade	—	17500	18600	18300	17300	17500	17800	18600	18100	16700	16700	16200	15100	16500	17000	
10th Grade	—	14800	14800	15300	15800	17000	15600	15500	15000	13600	14300	14000	14300	15800	16400	
12th Grade	15200	15000	15800	16300	15400	15400	14300	15400	15200	13600	12800	12800	12900	14600	14600	

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

'—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence of use estimates for the two most recent classes is due to rounding error.

SOURCE: The Monitoring the Future Study, the University of Michigan.

**TABLE 2**  
**Cigarettes: Trends in Thirty-Day Prevalence of Use by Subgroups for Eighth Graders**

	Percentage who used in last thirty days														'03-'04 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
<i>Approx. N =</i>	17500	18600	18300	17300	17500	17800	18600	18100	16700	16700	16200	15100	16500	17000	
Total	14.3	15.5	16.7	18.6	19.1	21.0	19.4	19.1	17.5	14.6	12.2	10.7	10.2	9.2	-1.0
Gender:															
Male	15.5	14.9	17.2	19.3	18.8	20.6	19.1	18.0	16.7	14.3	12.2	11.0	9.6	8.3	-1.3
Female	13.1	15.9	16.3	17.9	19.0	21.1	19.5	19.8	17.7	14.7	12.0	10.4	10.6	9.9	-0.8
College Plans:															
None or under 4 years	29.2	31.9	34.1	36.6	36.5	39.2	40.0	40.1	40.3	34.7	30.0	29.3	27.8	25.6	-2.3
Complete 4 years	11.8	13.1	14.3	16.1	16.8	18.2	16.9	16.5	14.5	12.2	10.0	8.9	8.3	7.4	-0.9
Region:															
Northeast	13.7	14.4	15.0	17.8	18.6	22.1	18.0	15.6	15.7	13.7	11.4	9.1	7.7	7.2	-0.5
North Central	15.5	16.5	16.3	18.5	20.9	23.2	20.0	22.3	21.3	17.1	12.0	11.0	12.2	10.8	-1.4
South	15.7	17.0	18.2	19.5	19.4	21.1	21.0	21.1	18.7	14.7	14.3	13.0	11.7	10.3	-1.5
West	10.0	12.2	16.4	18.0	16.5	17.1	17.1	15.1	12.1	12.2	9.3	7.5	7.0	7.4	+0.3
Population Density:															
Large MSA	12.8	15.0	14.1	15.5	16.5	19.4	15.8	16.4	12.7	12.1	9.3	7.5	7.7	7.7	0.0
Other MSA	14.9	15.3	17.8	20.7	19.4	21.4	19.7	17.7	16.0	13.1	11.6	10.6	9.8	8.9	-0.9
Non-MSA	14.8	16.4	17.9	17.8	21.5	22.1	22.8	24.8	26.1	21.1	16.9	14.9	14.4	11.6	-2.7
Parental Education: <sup>a</sup>															
1.0-2.0 (Low)	26.2	24.1	23.3	26.1	25.3	26.5	26.9	26.7	26.6	22.0	20.3	20.3	17.5	15.8	-1.7
2.5-3.0	16.4	16.9	19.8	20.6	22.7	24.4	22.4	23.9	23.5	19.6	16.4	14.5	14.8	12.2	-2.7 s
3.5-4.0	13.9	14.9	17.4	20.1	20.8	21.4	20.9	21.4	17.0	14.7	12.6	10.5	9.6	9.6	-0.1
4.5-5.0	10.1	13.3	12.5	14.9	14.9	18.4	16.2	14.2	12.3	10.2	8.3	7.8	6.7	6.7	0.0
5.5-6.0 (High)	11.3	11.5	13.3	15.1	14.5	17.3	15.3	13.8	12.2	9.8	6.9	5.8	6.0	5.2	-0.8
Race (2-year average): <sup>b</sup>															
White	—	16.2	17.8	18.9	20.7	22.7	22.8	21.5	20.1	17.7	14.7	12.0	10.9	10.0	-0.9
Black	—	5.3	6.6	8.7	8.9	9.6	10.9	10.6	10.7	9.6	8.2	7.7	6.9	6.9	0.0
Hispanic	—	16.7	18.3	21.3	21.6	19.6	19.1	20.1	20.5	16.6	13.0	12.7	11.9	10.1	-1.8

NOTES: Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . '—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence of use estimates for the two most recent classes is due to rounding error.

SOURCE: The Monitoring the Future Study, the University of Michigan.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See Appendix B for details.

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

**TABLE 3**  
**Cigarettes: Trends in Thirty-Day Prevalence of Use by Subgroups for Tenth Graders**

	Percentage who used in last thirty days														'03-'04 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
<i>Approx. N =</i>	14800	14800	15300	15800	17000	15600	15500	15000	13600	14300	14000	14300	15800	16400	
Total	20.8	21.5	24.7	25.4	27.9	30.4	29.8	27.6	25.7	23.9	21.3	17.7	16.7	16.0	-0.7
Gender:															
Male	20.8	20.6	24.6	26.6	27.7	30.1	28.2	26.2	25.2	23.8	20.9	16.7	16.2	16.2	0.0
Female	20.7	22.2	24.5	23.9	27.9	30.8	31.1	29.1	25.8	23.6	21.5	18.6	17.0	15.7	-1.3
College Plans:															
None or under 4 years	36.5	35.0	41.9	42.2	46.3	46.2	47.2	45.2	44.0	38.6	38.1	33.3	33.0	33.1	+0.1
Complete 4 years	17.3	18.6	21.0	21.7	24.7	27.8	26.8	24.5	22.7	21.5	18.5	15.1	14.0	13.6	-0.4
Region:															
Northeast	22.4	21.9	27.1	24.5	27.8	31.7	29.3	30.1	28.0	23.9	18.1	15.9	16.6	16.6	0.0
North Central	22.9	24.3	26.0	28.8	30.1	32.5	31.7	29.5	30.2	27.1	24.2	19.2	18.4	14.6	-3.7 s
South	21.2	19.8	24.0	25.7	30.8	33.4	32.2	29.8	26.3	25.5	23.5	19.6	18.2	20.4	+2.1
West	16.7	20.2	21.2	20.1	19.6	20.8	23.2	19.6	17.5	16.8	15.0	14.1	12.5	10.9	-1.6
Population Density:															
Large MSA	19.7	21.6	22.5	22.3	23.3	26.2	26.6	22.5	22.9	23.1	17.3	14.2	13.1	12.0	-1.1
Other MSA	20.3	20.3	23.8	26.3	28.9	31.1	28.9	26.6	25.0	21.3	20.5	17.6	16.6	16.6	0.0
Non-MSA	22.7	23.7	28.2	26.7	31.3	33.9	34.9	35.7	30.4	29.4	27.6	22.6	22.4	20.4	-2.0
Parental Education: <sup>a</sup>															
1.0-2.0 (Low)	23.5	28.4	29.5	26.4	30.9	28.7	28.2	28.0	30.5	29.3	22.5	21.4	23.4	19.3	-4.1
2.5-3.0	24.1	23.3	28.0	29.1	33.2	33.8	33.2	33.0	29.6	26.8	25.7	22.4	21.2	19.9	-1.3
3.5-4.0	20.4	20.6	24.8	26.0	27.8	31.6	30.9	27.3	26.0	25.3	21.1	17.4	16.2	17.8	+1.6
4.5-5.0	18.5	19.5	20.1	22.6	25.9	28.7	28.5	25.7	22.4	21.2	18.9	15.1	13.4	12.6	-0.8
5.5-6.0 (High)	18.5	18.9	21.4	20.7	21.8	27.8	24.6	22.5	21.4	19.1	17.1	12.7	11.6	10.8	-0.8
Race (2-year average): <sup>b</sup>															
White	—	24.1	26.0	27.8	29.7	32.9	34.4	33.2	30.8	28.2	25.7	22.4	20.0	18.7	-1.3
Black	—	6.6	7.5	9.8	11.5	12.2	12.8	13.7	12.5	11.1	11.1	9.8	8.9	9.2	+0.2
Hispanic	—	18.3	20.5	19.4	21.4	23.7	23.0	21.3	21.1	19.6	16.8	14.3	13.2	13.9	+0.8

NOTES: Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . '—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence of use estimates for the two most recent classes is due to rounding error.

SOURCE: The Monitoring the Future Study, the University of Michigan.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See Appendix B for details.

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



**TABLE 4**  
**Cigarettes: Trends in Thirty-Day Prevalence of Use by Subgroups for Twelfth Graders**

	Percentage who used in last thirty days														
	Class of:														
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<i>Approx. N =</i>	9400	15400	17100	17800	15500	15900	17500	17700	16300	15900	16000	15200	16300	16300	16700
Total	36.7	38.8	38.4	36.7	34.4	30.5	29.4	30.0	30.3	29.3	30.1	29.6	29.4	28.7	28.6
Gender:															
Male	37.2	37.7	36.6	34.5	31.2	26.8	26.5	26.8	28.0	25.9	28.2	27.9	27.0	28.0	27.7
Female	35.9	39.1	39.6	38.1	37.1	33.4	31.6	32.6	31.6	31.9	31.4	30.6	31.4	28.9	29.0
College Plans:															
None or under 4 years	—	46.3	46.2	44.6	43.0	39.6	38.1	38.7	38.0	37.9	40.5	38.5	39.7	37.5	38.0
Complete 4 years	—	29.8	29.4	27.4	26.0	22.3	22.3	22.1	23.3	22.7	22.8	24.0	24.3	24.4	24.1
Region:															
Northeast	40.1	41.8	43.0	40.6	37.0	34.1	31.5	32.1	34.6	33.5	34.2	35.2	34.1	31.2	29.4
North Central	39.5	41.3	40.5	39.0	36.6	31.5	32.4	33.5	33.2	31.4	34.1	32.5	31.7	31.1	34.9
South	36.2	39.1	37.6	35.7	35.4	31.8	28.9	29.4	28.7	28.6	25.6	26.1	26.0	28.0	26.4
West	26.3	28.3	27.7	27.3	24.8	21.2	21.8	20.4	21.8	22.9	26.3	23.3	26.6	23.9	22.7
Population Density:															
Large MSA	39.7	40.4	40.9	37.5	33.4	31.2	30.6	32.1	30.8	31.3	31.9	30.8	29.3	26.9	25.9
Other MSA	35.1	35.9	36.1	34.3	33.5	29.7	27.4	27.8	29.1	28.2	28.5	28.0	28.2	28.3	28.2
Non-MSA	36.7	40.9	39.2	39.4	36.4	30.9	30.9	31.2	31.5	29.3	30.8	31.0	31.8	31.4	32.2
Parental Education: <sup>a</sup>															
1.0-2.0 (Low)	37.2	43.2	39.6	38.1	38.1	32.7	32.5	32.6	32.7	33.6	32.3	28.6	28.8	28.1	25.4
2.5-3.0	37.0	41.2	40.8	39.3	35.9	34.2	31.7	32.0	32.2	31.8	32.3	32.3	31.4	29.9	30.8
3.5-4.0	31.9	35.3	37.3	34.0	33.3	28.0	28.2	29.0	28.0	28.1	29.7	29.7	28.8	27.8	29.4
4.5-5.0	32.3	35.0	33.0	32.6	30.1	25.7	26.0	25.5	27.8	25.2	27.7	26.4	27.6	28.6	27.0
5.5-6.0 (High)	26.8	30.8	32.8	31.9	29.6	24.0	22.5	25.1	25.5	23.7	22.6	26.7	29.3	27.8	26.3
Race (2-year average): <sup>b</sup>															
White	—	—	38.3	37.6	36.0	33.0	30.5	30.7	31.3	31.2	31.3	31.9	32.1	32.2	32.2
Black	—	—	36.7	32.7	30.2	26.8	23.7	21.8	21.2	19.3	18.1	16.9	14.2	13.3	12.6
Hispanic	—	—	35.7	32.8	26.8	22.6	23.2	24.7	24.7	25.3	25.5	23.7	22.7	21.9	20.6

Cont'd

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

'—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence of use estimates for the two most recent classes is due to rounding error.

SOURCE: The Monitoring the Future Study, the University of Michigan.

**TABLE 4 (cont'd)**  
**Cigarettes: Trends in Thirty-Day Prevalence of Use by Subgroups for Twelfth Graders**

		Percentage who used in last thirty days															
		Class of:														'03-'04	
<i>Approx. N =</i>		<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	change
		15200	15000	15800	16300	15400	15400	14300	15400	15200	13600	12800	12800	12900	14600	14600	
Total		29.4	28.3	27.8	29.9	31.2	33.5	34.0	36.5	35.1	34.6	31.4	29.5	26.7	24.4	25.0	+0.6
Gender:																	
Male		29.1	29.0	29.2	30.7	32.9	34.5	34.9	37.3	36.3	35.4	32.8	29.7	27.4	26.2	25.3	-0.9
Female		29.2	27.5	26.1	28.7	29.2	32.0	32.4	35.2	33.3	33.5	29.7	28.7	25.5	22.1	24.1	+2.0
College Plans:																	
None or under 4 years		37.5	38.1	38.6	37.3	40.9	43.5	45.0	45.7	46.7	44.9	43.6	40.8	37.5	36.2	36.8	+0.6
Complete 4 years		25.4	24.2	23.8	27.3	28.0	29.9	30.8	33.1	31.3	31.4	27.3	25.9	23.6	20.8	21.6	+0.8
Region:																	
Northeast		31.9	30.5	29.6	34.2	33.2	34.4	38.5	40.6	35.9	34.2	33.1	30.3	27.3	25.0	25.9	+0.9
North Central		34.0	34.6	31.7	33.2	36.2	37.8	37.7	39.3	40.0	37.8	35.6	35.9	31.7	27.3	28.3	+1.0
South		26.1	25.4	26.4	29.0	30.7	33.5	33.2	35.0	34.3	36.2	29.6	25.9	27.2	24.3	24.6	+0.4
West		25.1	23.2	22.8	22.9	24.0	26.5	24.4	30.5	29.1	27.6	28.1	25.2	19.4	20.7	20.1	-0.6
Population Density:																	
Large MSA		27.9	26.2	25.6	29.5	29.0	33.9	32.1	34.9	32.9	30.0	27.4	27.3	24.8	18.9	20.8	+1.9
Other MSA		29.6	29.3	26.9	29.8	31.1	31.7	32.6	35.7	34.2	35.0	31.5	28.2	26.2	25.1	26.3	+1.2
Non-MSA		30.4	28.6	31.5	30.3	33.8	36.2	38.2	40.0	39.7	38.7	36.3	34.3	30.1	30.4	27.6	-2.8
Parental Education: <sup>a</sup>																	
1.0-2.0 (Low)		26.3	31.3	27.1	26.5	26.2	31.2	31.5	31.2	32.3	33.0	31.3	24.8	20.9	23.5	21.0	-2.5
2.5-3.0		30.8	28.7	30.3	30.4	32.8	35.0	35.5	36.5	36.0	37.3	32.2	31.5	28.9	27.0	28.7	+1.7
3.5-4.0		29.3	28.4	27.8	29.9	31.4	33.2	33.2	35.6	36.7	35.0	32.8	30.3	28.6	24.3	26.3	+2.1
4.5-5.0		29.1	26.9	25.8	30.1	32.0	32.6	34.5	37.5	34.2	32.4	30.2	29.3	25.0	22.6	23.8	+1.2
5.5-6.0 (High)		28.6	27.1	25.5	30.5	30.4	34.0	32.9	38.5	33.1	34.4	27.4	25.0	25.3	21.0	19.9	-1.1
Race (2-year average): <sup>b</sup>																	
White		32.3	32.2	31.8	33.2	35.2	36.6	38.1	40.7	41.7	40.1	37.9	35.3	32.5	29.4	28.2	-1.3
Black		12.2	10.6	8.7	9.5	10.9	12.9	14.2	14.3	14.9	14.9	14.3	13.3	12.1	10.0	10.1	+0.1
Hispanic		21.7	24.0	25.0	24.2	23.6	25.1	25.4	25.9	26.6	27.3	27.7	23.8	21.3	19.0	18.5	-0.6

<sup>a</sup>Parental education is an average score of mother's education and father's education. See Appendix B for details.

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

**TABLE 5**  
**Trends in Availability and Attitudes about Smoking One or More Packs**  
**of Cigarettes per Day, for Eighth, Tenth, and Twelfth Graders**



	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Perceived Risk<sup>a</sup></b>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	51.3	56.4	58.4	59.0	63.0	63.7	63.3	60.5	61.2	63.8	66.5	66.0	68.6	68.0	67.2
<b>Disapproval<sup>b</sup></b>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	67.5	65.9	66.4	67.0	70.3	70.8	69.9	69.4	70.8	73.0	72.3	75.4	74.3	73.1	72.4
<b>Availability<sup>c</sup></b>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>Approx. Ns:</b>															
8th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10th Grade	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12th Grade	2800	2900	3100	3800	3300	3200	3600	3600	3300	3300	3300	3000	3300	3300	2800

NOTES: Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ .

'—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence of use estimates for the two most recent classes is due to rounding error.

SOURCE: The Monitoring the Future Study, the University of Michigan.

**TABLE 5 (cont'd)**  
**Trends in Availability and Attitudes about Smoking One or More Packs of Cigarettes per Day, for Eighth, Tenth, and Twelfth Graders**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	'03-'04 change
<b>Perceived Risk<sup>a</sup></b>																
8th Grade	—	51.6	50.8	52.7	50.8	49.8	50.4	52.6	54.3	54.8	58.8	57.1	57.5	57.7	62.4	+4.7 ss
10th Grade	—	60.3	59.3	60.7	59.0	57.0	57.9	59.9	61.9	62.7	65.9	64.7	64.3	65.7	68.4	+2.8 s
12th Grade	68.2	69.4	69.2	69.5	67.6	65.6	68.2	68.7	70.8	70.8	73.1	73.3	74.2	72.1	74.0	+1.9
<b>Disapproval<sup>b</sup></b>																
8th Grade	—	82.8	82.3	80.6	78.4	78.6	77.3	80.3	80.0	81.4	81.9	83.5	84.6	84.6	85.7	+1.2
10th Grade	—	79.4	77.8	76.5	73.9	73.2	71.6	73.8	75.3	76.1	76.7	78.2	80.6	81.4	82.7	+1.3
12th Grade	72.8	71.4	73.5	70.6	69.8	68.2	67.2	67.1	68.8	69.5	70.1	71.6	73.6	74.8	76.2	+1.5
<b>Availability<sup>c</sup></b>																
8th Grade	—	—	77.8	75.5	76.1	76.4	76.9	76.0	73.6	71.5	68.7	67.7	64.3	63.1	60.3	-2.8 sss
10th Grade	—	—	89.1	89.4	90.3	90.7	91.3	89.6	88.1	88.3	86.8	86.3	83.3	80.7	81.4	+0.7
<b>Approx. Ns:</b>																
8th Grade	—	17500	18600	18300	17300	17500	17800	18600	18100	16700	16700	16200	15100	16500	17000	
10th Grade	—	14800	14800	15300	15800	17000	15600	15500	15000	13600	14300	14000	14300	15800	16400	
12th Grade	2600	2600	2700	2800	2600	2600	2400	2600	2500	2300	2100	2100	2200	2400	2400	

<sup>a</sup>The question text was: How much do you think people risk harming themselves (physically or in other ways) if they smoke one or more packs of cigarettes per day? Answer alternatives were: (1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, and (5) Can't say, drug unfamiliar. The percentage saying "great risk" is shown. For 8th and 10th graders: Beginning in 1999, perceived risk data based on two of four forms; N is two-thirds of N indicated.

<sup>b</sup>The question text was: Do you disapprove of people smoking one or more packs of cigarettes per day? Answer alternatives were: (1) Don't disapprove, (2) Disapprove, and (3) Strongly disapprove. For 8th and 10th graders, there was another category— "Can't say, drug unfamiliar"— which was included in the calculation of these percentages. The percentage saying they "disapprove" or "strongly disapprove" is shown. For 8th and 10th graders: Beginning in 1999, disapproval data based on two of four forms; N is two-thirds of N indicated.

<sup>c</sup>The question text was: How difficult do you think it would be for you to get cigarettes, if you wanted some? Answer alternatives were: (1) Probably impossible, (2) Very difficult, (3) Fairly difficult, (4) Fairly easy, (5) Very easy, and (8) Can't say, drug unfamiliar (included in the calculation of these percentages). The percentage saying cigarettes are "fairly easy" or "very easy" to get is shown. In 1992 only, availability data based on one of two forms; N is one-half of N indicated. The question was not asked of the 12th graders.

**TABLE 6**  
**Trends in Prevalence of Use of Smokeless Tobacco for Eighth, Tenth, and Twelfth Graders**

	1975-85	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	'03-'04 change
<b>Lifetime</b>																					
8th Grade	—	—	—	—	—	—	22.2	20.7	18.7	19.9	20.0	20.4	16.8	15.0	14.4	12.8	11.7	11.2	11.3	11.0	-0.4
10th Grade	—	—	—	—	—	—	28.2	26.6	28.1	29.2	27.6	27.4	26.3	22.7	20.4	19.1	19.5	16.9	14.6	13.8	-0.8
12th Grade	—	31.4	32.2	30.4	29.2	—	—	32.4	31.0	30.7	30.9	29.8	25.3	26.2	23.4	23.1	19.7	18.3	17.0	16.7	-0.4
<b>Thirty-Day</b>																					
8th Grade	—	—	—	—	—	—	6.9	7.0	6.6	7.7	7.1	7.1	5.5	4.8	4.5	4.2	4.0	3.3	4.1	4.1	0.0
10th Grade	—	—	—	—	—	—	10.0	9.6	10.4	10.5	9.7	8.6	8.9	7.5	6.5	6.1	6.9	6.1	5.3	4.9	-0.4
12th Grade	—	11.5	11.3	10.3	8.4	—	—	11.4	10.7	11.1	12.2	9.8	9.7	8.8	8.4	7.6	7.8	6.5	6.7	6.7	0.0
<b>Daily</b>																					
8th Grade	—	—	—	—	—	—	1.6	1.8	1.5	1.9	1.2	1.5	1.0	1.0	0.9	0.9	1.2	0.8	0.8	1.0	+0.2
10th Grade	—	—	—	—	—	—	3.3	3.0	3.3	3.0	2.7	2.2	2.2	2.2	1.5	1.9	2.2	1.7	1.8	1.6	-0.2
12th Grade	—	4.7	5.1	4.3	3.3	—	—	4.3	3.3	3.9	3.6	3.3	4.4	3.2	2.9	3.2	2.8	2.0	2.2	2.8	+0.6
<b>Approx. Ns:</b>																					
8th Grade	—	—	—	—	—	—	17500	18600	18300	17300	17500	17800	18600	18100	16700	16700	16200	15100	16500	17000	
10th Grade	—	—	—	—	—	—	14800	14800	15300	15800	17000	15600	15500	15000	13600	14300	14000	14300	15800	16400	
12th Grade	—	15200	16300	16300	16700	15200	15000	15800	16300	15400	15400	14300	15400	15200	13600	12800	12800	12900	14600	14600	

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

'—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence of use estimates for the two most recent classes is due to rounding error.

For 8th and 10th graders: Data based on one of two forms for 1991-96 and on two of four forms beginning in 1997; N is one-half of N indicated.

For 12th graders: Data based on one form; N is one-fifth of N indicated in 1986-88 and one-sixth of N indicated beginning in 1989.

The prevalence of use of smokeless tobacco was not asked of 12th graders in 1990 and 1991. Prior to 1990 the prevalence of use question on smokeless tobacco was located near the end of one 12th-grade questionnaire form, whereas after 1991 the question was placed earlier and in a different form. This shift could explain the discontinuities between the corresponding data.

SOURCE: The Monitoring the Future Study, the University of Michigan.

**TABLE 7**  
**Smokeless Tobacco: Trends in Thirty-Day Prevalence of Use by Subgroups for Eighth Graders**

	Percentage who used in last thirty days														'03-'04 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
<i>Approx. N =</i>	17500	18600	18300	17300	17500	17800	18600	18100	16700	16700	16200	15100	16500	17000	
Total	6.9	7.0	6.6	7.7	7.1	7.1	5.5	4.8	4.5	4.2	4.0	3.3	4.1	4.1	0.0
Gender:															
Male	12.7	12.5	10.9	12.8	11.8	11.4	9.9	8.1	6.9	6.7	6.9	5.4	6.7	6.4	-0.3
Female	1.4	2.0	2.7	2.4	2.9	2.9	1.5	1.5	2.1	1.8	1.4	1.3	1.8	1.7	-0.1
College Plans:															
None or under 4 years	12.7	17.1	15.5	16.7	15.4	16.4	12.6	13.9	13.2	11.4	14.6	10.2	12.8	12.3	-0.6
Complete 4 years	6.1	5.5	5.3	6.5	6.0	5.6	4.6	3.8	3.5	3.4	2.9	2.6	3.3	3.2	0.0
Region:															
Northeast	5.0	4.9	3.4	6.1	5.4	4.9	3.2	2.7	2.5	2.7	3.7	2.7	3.1	3.4	+0.3
North Central	7.1	7.5	7.2	7.1	7.6	8.3	6.8	4.3	5.3	4.8	4.0	3.9	3.5	4.2	+0.8
South	9.5	9.3	8.0	9.9	8.7	8.1	6.7	6.9	5.9	5.8	5.4	4.1	5.9	5.5	-0.4
West	3.5	4.4	6.3	6.0	5.0	5.9	4.1	3.9	2.9	1.9	2.1	1.5	2.5	2.0	-0.6
Population Density:															
Large MSA	4.8	4.2	3.3	4.6	4.1	4.2	3.6	2.9	1.8	2.4	2.4	1.5	2.6	1.9	-0.7
Other MSA	6.2	6.9	6.8	6.4	6.7	7.1	4.7	4.1	3.9	3.9	3.5	2.9	3.7	3.6	-0.1
Non-MSA	10.4	10.3	9.9	13.0	11.2	10.6	9.0	8.5	8.9	7.0	7.0	6.2	6.9	7.7	+0.8
Parental Education: <sup>a</sup>															
1.0-2.0 (Low)	11.4	7.8	9.4	8.9	10.6	6.3	8.3	5.4	6.6	7.4	5.0	4.5	6.8	6.9	0.0
2.5-3.0	8.4	8.5	7.5	8.4	9.9	8.8	6.0	5.1	5.7	5.2	5.4	5.1	5.1	6.0	+1.0
3.5-4.0	6.7	7.0	7.5	8.7	7.0	7.2	6.5	5.9	4.5	4.5	3.7	3.2	4.1	3.5	-0.6
4.5-5.0	4.8	7.0	5.2	6.1	5.0	6.8	4.8	4.4	3.3	2.9	2.5	2.4	3.1	3.2	+0.1
5.5-6.0 (High)	6.1	4.6	4.9	6.8	5.8	5.9	3.7	3.9	3.1	3.0	4.2	2.5	2.7	2.9	+0.3
Race (2-year average): <sup>b</sup>															
White	—	8.3	8.0	8.1	8.9	8.8	7.6	6.1	5.4	5.2	4.8	4.1	3.9	4.4	+0.5
Black	—	1.8	2.7	3.2	2.6	2.2	2.6	2.3	2.3	2.7	2.2	1.6	2.7	3.0	+0.3
Hispanic	—	4.2	4.0	5.0	5.7	5.2	4.6	4.5	4.6	3.7	3.3	4.0	4.7	4.0	-0.7

NOTES: Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . '—' indicates data not available.  
 Any apparent inconsistency between the change estimate and the prevalence of use estimates for the two most recent classes is due to rounding error.

Data based on one of two forms in 1991–96 and on two of four forms beginning in 1997; N is one-half of N indicated.

SOURCE: The Monitoring the Future Study, the University of Michigan.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See Appendix B for details.

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

**TABLE 8**  
**Smokeless Tobacco: Trends in Thirty-Day Prevalence of Use by Subgroups for Tenth Graders**

	Percentage who used in last thirty days														'03-'04 change
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
<i>Approx. N =</i>	14800	14800	15300	15800	17000	15600	15500	15000	13600	14300	14000	14300	15800	16400	
Total	10.0	9.6	10.4	10.5	9.7	8.6	8.9	7.5	6.5	6.1	6.9	6.1	5.3	4.9	-0.4
Gender:															
Male	18.7	18.1	19.3	19.2	17.2	15.0	14.9	13.8	12.2	11.4	12.7	9.9	9.6	9.0	-0.5
Female	1.3	1.8	2.0	2.1	2.1	2.3	2.7	1.7	1.3	1.3	1.6	2.1	1.3	1.0	-0.3
College Plans:															
None or under 4 years	16.9	17.5	20.2	19.9	20.3	16.3	18.5	17.8	13.2	13.9	16.0	13.6	13.0	12.2	-0.8
Complete 4 years	8.4	8.0	8.4	8.5	7.8	7.2	7.2	5.7	5.4	4.8	5.4	4.8	4.1	3.9	-0.1
Region:															
Northeast	8.6	5.3	8.0	9.0	7.6	6.8	9.3	6.5	5.2	4.6	4.9	4.7	4.5	5.1	+0.6
North Central	11.0	9.6	10.0	10.0	11.0	9.5	7.1	7.9	8.1	6.2	7.0	4.8	4.9	3.7	-1.1
South	11.6	11.4	11.8	11.7	10.9	10.2	10.2	9.5	7.9	7.7	9.6	8.3	7.5	7.3	-0.2
West	7.8	10.9	11.1	10.9	7.7	6.0	8.2	4.6	4.0	4.5	3.0	5.1	3.5	3.0	-0.4
Population Density:															
Large MSA	5.9	6.4	6.5	6.2	5.9	5.5	4.2	3.7	4.6	5.6	4.1	4.5	3.7	3.0	-0.7
Other MSA	9.2	9.3	10.1	10.9	9.2	8.4	8.3	5.7	5.3	4.3	5.7	6.1	4.8	4.3	-0.5
Non-MSA	14.7	13.3	14.1	13.9	15.0	12.2	14.7	15.1	11.3	9.8	12.5	8.2	9.2	9.0	-0.2
Parental Education: <sup>a</sup>															
1.0-2.0 (Low)	6.6	10.1	10.9	9.4	9.6	8.1	9.0	6.8	7.2	7.4	6.9	6.7	7.4	3.7	-3.7
2.5-3.0	12.1	11.0	12.2	12.5	10.4	9.7	9.4	8.2	7.0	6.4	8.9	8.1	5.0	5.8	+0.7
3.5-4.0	10.6	10.5	10.9	10.2	10.9	8.3	10.3	8.6	7.3	6.3	7.1	5.5	4.9	5.2	+0.3
4.5-5.0	9.3	7.6	9.9	9.8	9.8	8.5	7.2	6.9	6.1	6.2	5.7	5.4	5.7	4.4	-1.3
5.5-6.0 (High)	8.6	8.1	7.0	8.9	6.0	7.7	8.3	5.2	4.8	4.0	4.8	5.2	4.3	4.4	+0.2
Race (2-year average): <sup>b</sup>															
White	—	11.4	12.0	12.5	12.0	11.0	10.4	10.0	8.7	7.5	7.5	7.7	6.9	6.1	-0.7
Black	—	2.9	2.3	2.3	2.5	2.5	2.8	2.3	1.6	2.0	3.2	2.6	2.5	2.7	+0.3
Hispanic	—	6.2	6.1	4.3	3.6	4.0	4.6	4.8	4.8	4.5	4.0	4.0	4.1	3.3	-0.8

NOTES: Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . '—' indicates data not available.

Any apparent inconsistency between the change estimate and the prevalence of use estimates for the two most recent classes is due to rounding error.

Data based on one of two forms in 1991–96 and on two of four forms beginning in 1997; N is one-half of N indicated.

SOURCE: The Monitoring the Future Study, the University of Michigan.

<sup>a</sup>Parental education is an average score of mother's education and father's education. See Appendix B for details.

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

**TABLE 9**  
**Smokeless Tobacco: Trends in Thirty-Day Prevalence of Use by Subgroups for Twelfth Graders**

	Percentage who used in last thirty days																				'03-'04 change
	1975-85	1986	1987	1988	1989	1990 <sup>a</sup>	1991 <sup>a</sup>	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	
	<i>Class of:</i>																				
<i>Approx. N =</i>	9400	15200	16300	16300	16700	15200	15000	15800	16300	15400	15400	14300	15400	15200	13600	12800	12800	12900	14600	14600	
Total	—	11.5	11.3	10.3	8.4	—	—	11.4	10.7	11.1	12.2	9.8	9.7	8.8	8.4	7.6	7.8	6.5	6.7	6.7	0.0
Gender:																					
Male	—	22.3	22.8	19.9	15.9	—	—	20.8	19.7	20.3	23.6	19.5	18.7	15.6	15.5	14.4	14.2	12.2	12.5	12.2	-0.3
Female	—	1.6	0.7	1.7	1.2	—	—	2.0	2.3	2.6	1.8	1.1	1.2	1.5	1.3	1.3	1.6	1.2	1.0	1.6	+0.5
College Plans:																					
None or under 4 years	—	14.5	15.5	13.1	9.6	—	—	18.0	14.9	15.8	18.7	17.6	16.9	14.3	10.5	15.8	13.0	10.8	12.8	11.9	-0.9
Complete 4 years	—	9.8	9.0	8.8	7.7	—	—	9.4	9.4	9.3	9.9	7.6	7.4	7.1	7.6	5.4	6.1	4.8	4.8	4.9	+0.1
Region:																					
Northeast	—	9.5	7.3	5.9	5.0	—	—	8.2	9.6	12.0	9.6	8.4	6.9	2.6	4.3	5.3	5.4	5.3	6.3	5.1	-1.2
North Central	—	13.5	11.3	10.8	8.3	—	—	12.3	13.6	14.7	16.7	12.6	13.4	11.8	8.9	11.1	9.9	7.8	5.7	7.4	+1.7
South	—	12.2	13.7	12.1	9.8	—	—	12.5	11.1	9.7	11.9	9.2	9.0	10.5	10.7	7.3	8.5	7.9	7.9	8.4	+0.5
West	—	9.3	11.7	10.9	9.1	—	—	11.1	7.0	8.5	8.6	8.5	9.1	7.3	7.0	6.3	6.2	3.9	6.0	4.3	-1.7
Population Density:																					
Large MSA	—	9.0	6.4	7.7	6.8	—	—	5.9	7.1	7.5	12.5	8.6	6.5	4.7	4.9	4.2	4.4	3.4	3.4	3.8	+0.4
Other MSA	—	8.9	10.5	8.5	7.6	—	—	11.1	9.9	11.3	9.5	7.4	7.4	7.7	8.5	7.9	8.0	5.7	6.9	5.6	-1.3
Non-MSA	—	17.1	17.5	16.1	11.7	—	—	16.9	15.0	14.7	16.7	15.3	17.9	16.1	11.7	11.4	11.5	11.9	10.4	12.1	+1.7
Parental Education: <sup>b</sup>																					
1.0-2.0 (Low)	—	8.6	11.7	10.7	5.3	—	—	14.9	7.0	12.3	9.8	6.3	5.8	6.1	5.4	4.3	6.3	4.1	9.3	6.1	-3.1
2.5-3.0	—	14.4	11.5	10.7	7.0	—	—	12.4	11.6	12.9	11.5	10.4	10.7	9.0	9.1	9.9	7.5	5.6	5.9	8.8	+2.9
3.5-4.0	—	11.5	12.1	10.6	9.0	—	—	12.4	10.8	9.8	12.8	9.1	10.4	9.8	8.8	8.9	8.6	7.4	6.5	4.6	-1.9
4.5-5.0	—	10.4	11.7	11.8	10.2	—	—	8.0	13.3	11.1	12.8	11.4	9.1	9.6	8.5	6.2	6.2	7.3	7.6	7.9	+0.3
5.5-6.0 (High)	—	7.7	8.1	7.2	8.4	—	—	10.6	7.8	10.2	11.6	8.1	9.9	7.4	7.9	5.7	10.3	4.6	6.2	5.4	-0.8
Race (2-year average): <sup>c</sup>																					
White	—	—	12.9	12.0	10.6	—	—	—	13.8	13.8	13.8	13.0	12.2	11.8	11.0	10.5	10.3	9.7	8.5	8.2	-0.3
Black	—	—	2.1	4.5	4.5	—	—	—	2.0	1.9	2.1	2.7	2.2	1.4	1.5	1.5	1.2	1.0	1.0	0.6	-0.4
Hispanic	—	—	4.4	5.2	5.1	—	—	—	6.0	5.4	7.6	8.1	5.3	4.3	3.9	3.8	3.2	2.6	3.1	3.9	+0.8

NOTES: Level of significance of difference between the two most recent classes:  $s = .05$ ,  $ss = .01$ ,  $sss = .001$ . '—' indicates data not available. Any apparent inconsistency between the change estimate and the prevalence of use estimates for the two most recent classes is due to rounding error. Data based on one of six forms; N is one-sixth of N indicated.

SOURCE: The Monitoring the Future Study, the University of Michigan.

**CAUTION: Limited sample sizes (see "Notes" above). Use caution in interpreting subgroup trends.**

<sup>a</sup>Prevalence of smokeless tobacco use was not asked of 12th graders in 1990 and 1991. Prior to 1990 the prevalence of use question on smokeless tobacco was located near the end of one 12th-grade questionnaire form, whereas after 1991 the question was placed earlier and in a different form. This shift could explain the discontinuities in the data.

<sup>b</sup>Parental education is an average score of mother's education and father's education. See Appendix B for details.

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



**TABLE 10**  
**Trends in Attitudes about Regular Smokeless Tobacco Use for Eighth, Tenth, and Twelfth Graders**

	1975-85	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	'03-'04 change
<b>Perceived Risk<sup>a</sup></b>																					
8th Grade	—	—	—	—	—	—	35.1	35.1	36.9	35.5	33.5	34.0	35.2	36.5	37.1	39.0	38.2	39.4	39.7	41.3	+1.6
10th Grade	—	—	—	—	—	—	40.3	39.6	44.2	42.2	38.2	41.0	42.2	42.8	44.2	46.7	46.2	46.9	48.0	47.8	-0.2
12th Grade	—	25.8	30.0	33.2	32.9	34.2	37.4	35.5	38.9	36.6	33.2	37.4	38.6	40.9	41.1	42.2	45.4	42.6	43.3	45.0	+1.7
<b>Disapproval<sup>b</sup></b>																					
8th Grade	—	—	—	—	—	—	79.1	77.2	77.1	75.1	74.0	74.1	76.5	76.3	78.0	79.2	79.4	80.6	80.7	81.0	+0.3
10th Grade	—	—	—	—	—	—	75.4	74.6	73.8	71.2	71.0	71.0	72.3	73.2	75.1	75.8	76.1	78.7	79.4	80.2	+0.9
<b>Approx. Ns:</b>																					
8th Grade	—	—	—	—	—	—	17500	18600	18300	17300	17500	17800	18600	18100	16700	16700	16200	15100	16500	17000	
10th Grade	—	—	—	—	—	—	14800	14800	15300	15800	17000	15600	15500	15000	13600	14300	14000	14300	15800	16400	
12th Grade	—	3000	3300	3300	2800	2600	2600	2700	2800	2600	2600	2400	2600	2500	2300	2100	2100	2200	2400	2400	

NOTES: Level of significance of difference between the two most recent classes: s = .05, ss = .01, sss = .001.

'—' indicates data not available.'

Any apparent inconsistency between the change estimate and the prevalence of use estimates for the two most recent classes is due to rounding error.

SOURCE: The Monitoring the Future Study, the University of Michigan.

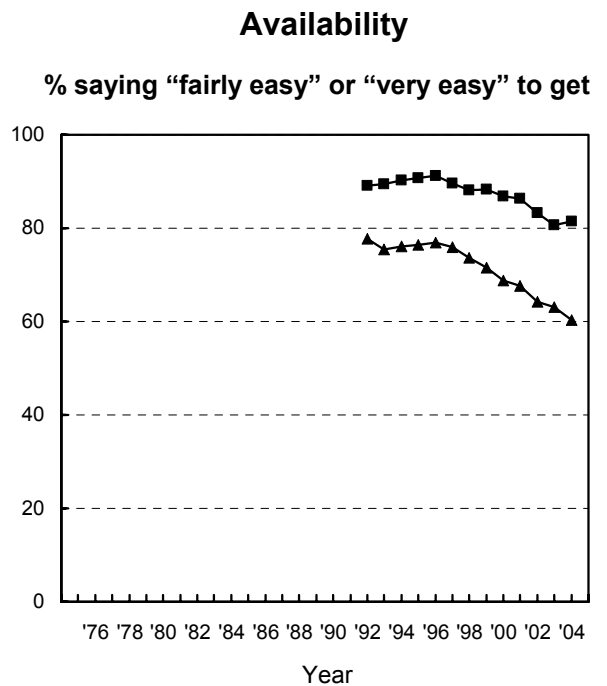
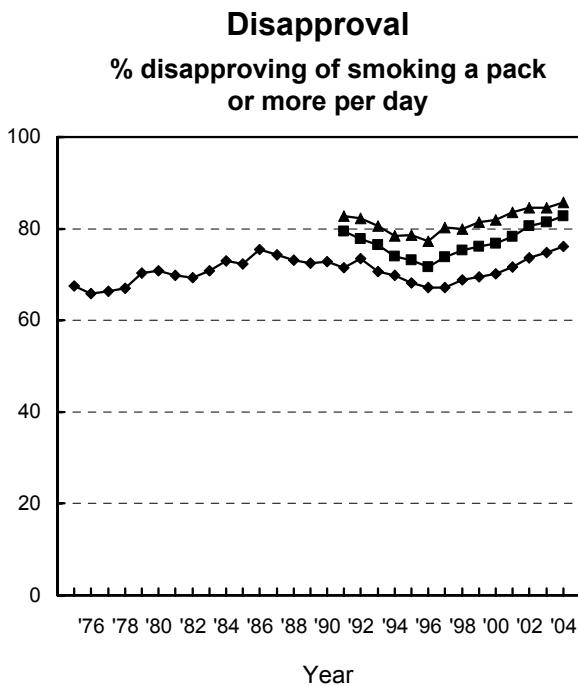
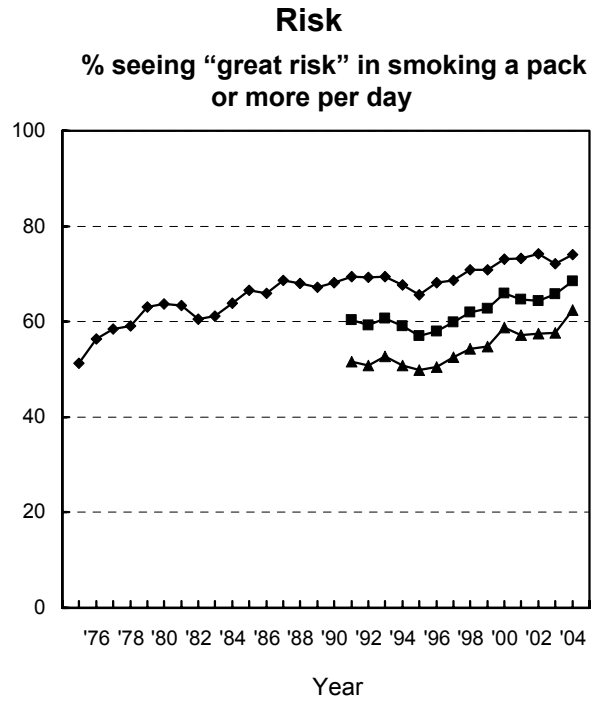
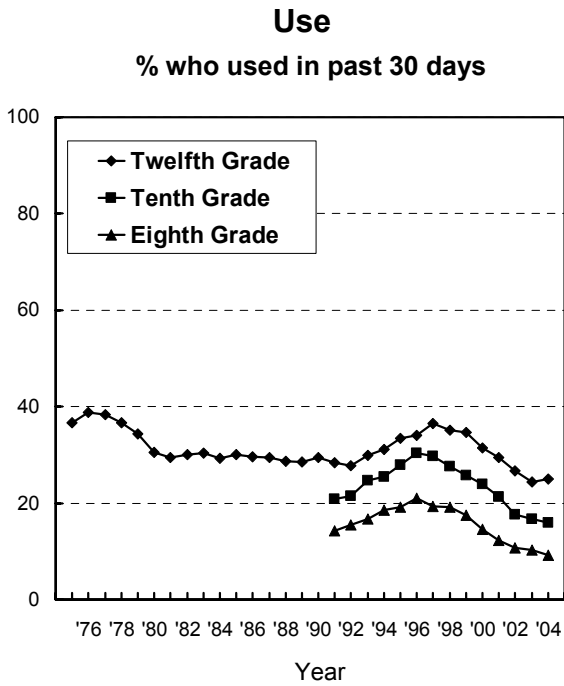
<sup>a</sup>The question text was: How much do you think people risk harming themselves (physically or in other ways) if they use smokeless tobacco regularly? Answer alternatives were:

(1) No risk, (2) Slight risk, (3) Moderate risk, (4) Great risk, and (5) Can't say, drug unfamiliar. The percentage saying "great risk" is shown.

<sup>b</sup>The question text was: Do you disapprove of people using smokeless tobacco regularly? Answer alternatives were: (1) Don't disapprove, (2) Disapprove, and (3) Strongly disapprove.

For 8th and 10th graders, there was another category— "Can't say, drug unfamiliar"—which was included in the calculation of these percentages. The percentage saying they "disapprove" or "strongly disapprove" is shown. This question was not asked of 12th graders.

**FIGURE 1**  
**Cigarettes: Trends in 30-Day Use, Risk, Disapproval, and Availability**  
 Eighth, Tenth, and Twelfth Graders



**FIGURE 2**  
**Smokeless Tobacco: Trends in 30-Day Use, Risk, Disapproval,**  
**and Availability**  
 Eighth, Tenth, and Twelfth Graders

