## UNIVERSITY OF MICHIGAN

NEWS SERVICE

December 21, 2004
Contact: Joe Serwach, (734) 647-1844 or jserwach@umich.edu or Patti Meyer, (734) 647-1083 or pmeyer@umich.edu

Study Web site: www.monitoringthefuture.org

## 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 Director of the National Institutes of Health (NIH), Elias Zerhouni; the Administrator of the Substance Abuse and Mental Health Services Administration (SAMHSA), Charles Curie; 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 gradeslifetime 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 antismoking 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.

[^0]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

|  | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lifetime |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Thirty-Day |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Daily |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| 1/2 Pack+perDay |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Approx. Ns: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8th Grade | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 10th Grade | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 12th Grade | 9400 | 15400 | 17100 | 17800 | 15500 | 15900 | 17500 | 17700 | 16300 | 15900 | 16000 | 15200 | 16300 | 16300 | 16700 |
| NOTES: Leve <br> Any due | cance <br> data incon ing erro | f differ t a vail stency | ble. <br> betwee | n the ch | ange es | most rec <br> timate | ent clas <br> and the | ses: $\mathrm{s}=$ <br> prevale | $.05, s s=$ | .01, sss <br> use estim | $=.001 \text {. }$ <br> mates fo | the tw | most re | cent c | asses is |
| SOURCE: The M | the Fu | ture Stu | dy, the | University | of Mich | igan. |  |  |  |  |  |  |  |  |  |

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

|  | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | $\underline{2000}$ | $\underline{2001}$ | $\underline{2002}$ | $\underline{2003}$ | $\underline{2004}$ | '03-'04 <br> change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lifetime |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Thirty-Day |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Daily |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| 1/2 Pack+per Day |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Approx. Ns: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 signific ance of difference between the two most recent classes: $s=.05, s s=.01, s s s=.001$. '-' indic ates data not a vailable. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Any apparent inconsistency between the change estimate and the prevalence of use estimates for the two most recent classes is due to rounding emor. |
| SOURCE: The | g the Fu | ture Stud | dy, the U | University | of Michi | igan. |  |  |  |  |  |  |  |  |  |  |

## TABLE 2

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

|  | Percentage who used in last thirty days |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | $\underline{2000}$ | 2001 | 2002 | $\underline{2003}$ | 2004 | change |
| Approx. $\mathrm{N}=$ | 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: ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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-yearaverage): ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 signific ance of difference between the two most recent classes: $s=.05,5 s=.01,5 s s=.001$. '-' indicates data not available.
Any a pparent inconsistency between the change estimate and the prevalence of use estimates for the two most recent classes is due to rounding emor.
SOURCE: The Monitoring the Future Study, the University of Michigan.

${ }^{\mathrm{b}}$ To derive percentagesforeach racial subgroup, data forthe specified yearand the previous yearhave 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 |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { '03-'04 } \\ & \text { change } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | $\underline{2002}$ | 2003 | 2004 |  |
| Approx. $\mathrm{N}=$ | 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 Educ ation: ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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-yearaverage): ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 signific ance of difference between the two most recent classes: $s=.05,5 s=.01,5 s s=.001$. ' - ' 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.

${ }^{\text {b }}$ To derive percentages for each racial subgroup, data for the specified yearand 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 | $\underline{1989}$ |  |
| Approx. $\mathrm{N}=$ | 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 Educ ation: ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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): ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |  |
| NOTES: Level of signific a <br> '-' indic ates da <br> Any apparent in to rounding erro | NOTES: Level of signific ance of difference between the two most recent classes: $s=.05, s s=.01, s s s=.001$. '-' indicates data not a vailable. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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

|  | Percentage who used in last thirty days |  |  |  |  |  |  |  |  |  |  |  |  |  |  | '03-'04 <br> change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Class of: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | $\underline{2001}$ | 2002 | 2003 | 2004 |  |
| Approx. $\mathrm{N}=$ | 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 Educ ation: ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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): ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |

[^1]
## TABLE 5

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


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 | $\underline{2000}$ | $\underline{2001}$ | $\underline{2002}$ | $\underline{2003}$ | $\underline{2004}$ | '03-'04 <br> change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Perceived Risk ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Disapproval ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Availability ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |

Approx. Ns:
$\begin{array}{lllllllllllllllllllllllllll}\text { 8th Grade } & - & 17500 & 18600 & 18300 & 17300 & 17500 & 17800 & 18600 & 18100 & 16700 & 16700 & 16200 & 15100 & 16500 & 17000\end{array}$
 $\begin{array}{llllllllllllllllllllllll}\text { 12th Grade } & 2600 & 2600 & 2700 & 2800 & 2600 & 2600 & 2400 & 2600 & 2500 & 2300 & 2100 & 2100 & 2200 & 2400 & 2400\end{array}$
${ }^{\text {a }}$ The question text was: How much do you think people risk ha rming themselves (physic ally or in other ways) if they smoke one or more packs of cigarettes per day? Answer altematives 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.
${ }^{\mathrm{b}}$ The question text was: Do you disapprove of people smoking one ormore packs of cigarettes per day? Answer altematives were: (1) Don't disapprove, (2) Disapprove, and (3) Strongly disapprove. For 8th and 10th graders, there was another category- "Can't say, drug unfa miliar"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 indic ated.
${ }^{\text {c }}$ The question text was: How diffic ult do you think it would be for you to get cigarettes, if you wanted some? Answer altematives were:
(1) Probably impossible, (2) Very diffic ult, (3) Fairly diffic ult, (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


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 | $\underline{2000}$ | 2001 | 2002 | $\underline{2003}$ | $\underline{2004}$ |  |
| Approx. $\mathrm{N}=$ | 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 Educ ation: ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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-yearaverage): ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 signific ance of difference between the two most recent classes: $s=.05, s s=.01,5 s s=.001$. ' - ' indic ates 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.

${ }^{\text {b }}$ To derive percentagesforeach 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-'04change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | $\underline{2000}$ | 2001 | 2002 | $\underline{2003}$ | $\underline{2004}$ |  |
| Approx. $\mathrm{N}=$ | 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 Educ ation: ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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-yearaverage): ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 signific ance of difference between the two most recent classes: $s=.05, s s=.01, s s s=.001$. '-' indic ates 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.

${ }^{\text {b }}$ To derive percentagesforeach 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


NOTES: Level of signific ance of difference between the two most recent classes: $s=.05, s s=.01$, $s s s=.001$. ' - ' indic ates 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 emor. Data based on one of six forms; N is one-sixth of N indicated.
SOURCE: The Monitoring the Future Study, the University of Michigan.

## CAUION: Limited sample sizes (see "Notes" above). Use caution in intepreting subgroup trends.

${ }^{\text {a Prevalence of }}$ smokeless tobacco use was not asked of 12 th graders in 1990 and 1991. Priorto 1990 the prevalence of use question on smokeless tobacco waslocated near the end of one 12th-grade questionnaire form, whereas after 1991 the question wasplaced earlier and in a different form. This shift could explain the discontinuities in the data.
${ }^{\text {b }}$ Parental education is an average score of mother's education and father'seducation. See Appendix B fordetails.
${ }^{\text {c }}$ To derive percentages foreach racial subgroup, data for the specified yearand 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 | $\underline{2003}$ | 2004 | $\begin{aligned} & \text { '03-'04 } \\ & \text { change } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Perceived |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Risk ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Disapproval ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Approx. Ns: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 signific ance of difference between the two most recent classes: $s=.05, \varsigma s=.01,5 \$ s=.001$.
'-' 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.
${ }^{\text {a }}$ The question text was: How much do you think people risk harming themselves (physic ally or in other ways) if they use smokeless tobacco regularly? Answer altematives were:
(1) No nisk, (2) Slight nisk, (3) Moderate nisk, (4) Great nisk, and (5) Can't say, drug unfa miliar. The percentage saying "great nisk" is shown.
${ }^{\text {b }}$ The question text was: Do you disapprove of people using smokeless tobacco regularly? Answer altematives 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

## Disapproval

\% disapproving of smoking a pack or more per day


Year

Risk
\% seeing "great risk" in smoking a pack or more per day


## Availability

\% saying "fairly easy" or "very easy" to get


## FIGURE 2

## Smokeless Tobacco: Trends in 30-Day Use, Risk, Disapproval, and Availability

Eighth, Tenth, and Twelfth Graders

Use
\% who used in past 30 days


Year

## Disapproval

\% disapproving of using regularly


Year

Risk
\% seeing "great risk" in using regularly


Year

Availability
\% saying "fairly easy" or "very easy" to get


Year


[^0]:    *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.

[^1]:    ${ }^{\text {a }}$ Parental education is an average score of mother's education and father's seducation. See Appendix B for details
    ${ }^{\mathrm{b}}$ To derive percentagesforeach racial subgroup, data for the specified yearand the previous year have been combined to increase subgroup sample size and thus provide more stable estimates.

