

**TABLE 11**  
**Trends in 30-Day Prevalence of Use of Smokeless Tobacco by Subgroups in Grade 12**

	Percentage who used in last 30 days																
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 <sup>a</sup>	1991 <sup>a</sup>
Approximate N =	—	—	—	—	—	—	—	—	—	—	—	15,200	16,300	16,300	16,700	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	11.5	11.3	10.3	8.4	—	—
Gender:																	
Male	—	—	—	—	—	—	—	—	—	—	—	22.3	22.8	19.9	15.9	—	—
Female	—	—	—	—	—	—	—	—	—	—	—	1.6	0.7	1.7	1.2	—	—
College Plans:																	
None or under 4 years	—	—	—	—	—	—	—	—	—	—	—	14.5	15.5	13.1	9.6	—	—
Complete 4 years	—	—	—	—	—	—	—	—	—	—	—	9.8	9.0	8.8	7.7	—	—
Region:																	
Northeast	—	—	—	—	—	—	—	—	—	—	—	9.5	7.3	5.9	5.0	—	—
Midwest	—	—	—	—	—	—	—	—	—	—	—	13.5	11.3	10.8	8.3	—	—
South	—	—	—	—	—	—	—	—	—	—	—	12.2	13.7	12.1	9.8	—	—
West	—	—	—	—	—	—	—	—	—	—	—	9.3	11.7	10.9	9.1	—	—
Population Density:																	
Large MSA	—	—	—	—	—	—	—	—	—	—	—	9.0	6.4	7.7	6.8	—	—
Other MSA	—	—	—	—	—	—	—	—	—	—	—	8.9	10.5	8.5	7.6	—	—
Non-MSA	—	—	—	—	—	—	—	—	—	—	—	17.1	17.5	16.1	11.7	—	—
Parental Education: <sup>b</sup>																	
1.0–2.0 (Low)	—	—	—	—	—	—	—	—	—	—	—	8.6	11.7	10.7	5.3	—	—
2.5–3.0	—	—	—	—	—	—	—	—	—	—	—	14.4	11.5	10.7	7.0	—	—
3.5–4.0	—	—	—	—	—	—	—	—	—	—	—	11.5	12.1	10.6	9.0	—	—
4.5–5.0	—	—	—	—	—	—	—	—	—	—	—	10.4	11.7	11.8	10.2	—	—
5.5–6.0 (High)	—	—	—	—	—	—	—	—	—	—	—	7.7	8.1	7.2	8.4	—	—
Race (2-year average): <sup>c</sup>																	
White	—	—	—	—	—	—	—	—	—	—	—	—	12.9	12.0	10.6	—	—
Black	—	—	—	—	—	—	—	—	—	—	—	—	2.1	4.5	4.5	—	—
Hispanic	—	—	—	—	—	—	—	—	—	—	—	—	4.4	5.2	5.1	—	—

Cont.

*Source.* The Monitoring the Future study, the University of Michigan.

*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 estimates for the two most recent years is due to rounding.

Data based on one of six forms;  $N$  is one sixth of  $N$  indicated.

**Caution. Limited sample sizes (see “Notes” above). Use caution in interpreting subgroup trends.**

<sup>a</sup>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 in the data.

<sup>b</sup>Parental education is an average score of mother’s education and father’s education. See appendix B in *Volume I* 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.

For the data beginning in 2005, see the race/ethnicity note at the end of appendix D in *Volume I*.

(Table continued on next page.)

**TABLE 11 (cont.)**  
**Trends in 30-Day Prevalence of Use of Smokeless Tobacco by Subgroups in Grade 12**

	Percentage who used in last 30 days																	2007– 2008 change
	<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>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	
<i>Approximate N =</i>	15,800	16,300	15,400	15,400	14,300	15,400	15,200	13,600	12,800	12,800	12,900	14,600	14,600	14,700	14,200	14,500	14,000	
Total	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	7.6	6.1	6.6	6.5	-0.1
Gender:																		
Male	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	12.7	11.0	11.9	11.8	0.0
Female	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	1.9	1.5	1.2	1.0	-0.3
College Plans:																		
None or under 4 years	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	15.2	13.4	11.7	12.4	+0.6
Complete 4 years	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	5.4	4.1	5.3	5.0	-0.3
Region:																		
Northeast	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	8.0	5.3	5.3	7.5	+2.2
Midwest	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	10.5	7.0	9.1	7.2	-1.9
South	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	7.5	7.5	7.9	6.1	-1.8
West	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	4.0	3.4	2.8	5.6	+2.8
Population Density:																		
Large MSA	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	4.3	4.8	3.9	2.6	-1.4
Other MSA	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	7.8	4.6	6.8	6.2	-0.6
Non-MSA	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	11.3	10.9	10.1	11.8	+1.7
Parental Education: <sup>b</sup>																		
1.0–2.0 (Low)	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	5.3	4.9	5.3	3.4	-2.0
2.5–3.0	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	9.7	8.0	9.8	7.2	-2.6
3.5–4.0	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	7.8	6.4	5.3	6.8	+1.6
4.5–5.0	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	8.0	6.1	6.6	6.5	-0.1
5.5–6.0 (High)	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	3.7	3.5	5.8	6.3	+0.5
Race (2-year average): <sup>c</sup>																		
White	—	13.8	13.8	13.8	13.0	12.2	11.8	11.0	10.5	10.3	9.7	8.5	8.2	8.7	8.8	8.3	8.6	+0.3
Black	—	2.0	1.9	2.1	2.7	2.2	1.4	1.5	1.5	1.2	1.0	1.0	0.6	0.3	0.5	1.8	2.0	+0.2
Hispanic	—	6.0	5.4	7.6	8.1	5.3	4.3	3.9	3.8	3.2	2.6	3.1	3.9	4.9	3.8	2.7	2.3	-0.3

Source. The Monitoring the Future study, the University of Michigan.

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

“—” indicates data not available.

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