

Chapter 3 Appendices

The Epidemiology of Tobacco Use Among Young People in the United States and Worldwide

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Appendix 3.1. Additional Analyses

This appendix provides additional analyses that describe the epidemiology of tobacco use among young people in the United States and worldwide. It starts with cigarette smoking and then describes the epidemiology of other forms of tobacco use (e.g., smokeless tobacco, cigars, and other emerging products) in this population and concludes with new information on tobacco use among young people worldwide. When possible, appropriate statistical tests have been conducted to determine differences in

tobacco use between groups of young people. The results of these tests are presented in tables and text. The results of these analyses should be generalizable to the populations represented (e.g., U.S. youth), given that the surveillance systems from which these data are drawn are based on nationally representative samples. Across surveillance systems, the analyses were purposely restricted to particular age ranges and/or grade levels to ensure as much consistency in analyses and results as possible.

Cigarette Smoking Among Young People in the United States

Recent Patterns of Cigarette Smoking

Ever Smoking a Cigarette

The prevalence of ever smoking a cigarette (see varied definitions in “Ever Smoking,” Appendix 3.3) among youth living in the United States is presented in Table 3.1.1. Overall, estimates suggest that almost one-third (28.2%, National Survey on Drug Use and Health [NSDUH]; 30.9%, Monitoring the Future [MTF]) to somewhat less than one-half (42.7%, National Youth Tobacco Survey [NYTS] (high school); 46.3%, Youth Risk Behavior Surveys [YRBS]) of high school students have ever smoked part or all of a cigarette. Per the younger NYTS sample (6th–8th grades), about one-fifth of middle school students have ever smoked a cigarette (18.2%). Among all measures of tobacco use considered in this report, the discrepancies between surveillance systems presented here are the largest. Possible explanations include differences in the composition of the study samples and variability in the question posed by the surveys. Because the prevalence of having ever smoked increases with age (see discussion below), the estimates reported for YRBS and NYTS–high school might be higher than those reported in MTF and NSDUH. The NYTS–middle school estimates are lower because this survey represents a younger population. In addition, the question that YRBS and NYTS ask (“Have you ever tried cigarette smoking, even one or two puffs?”) may have been more likely to draw an affirmative response than the questions for MTF (“Have you ever smoked cigarettes?”) and NSDUH (“Have you ever smoked part or all of a cigarette?”). Appendices 3.2 and 3.3 further discuss how

the four surveillance systems and their measures of smoking might differ. Overall, patterns and trends in other measures of tobacco use, as revealed in the remainder of this Appendix and chapter, are more similar.

The prevalence of ever smoking a cigarette was higher for males than for females in MTF (32.2% vs. 29.3%, $p < 0.05$), NSDUH (29.6% vs. 26.7%, $p < 0.05$), and NYTS (middle school: 19.4% vs. 16.9%, $p < 0.05$; high school: 44.4% vs. 41.1%, $p < 0.05$), but no differences by gender were detected in YRBS (46.3% vs. 46.1%, $p > 0.05$). According to these surveys, the prevalence of ever smoking a cigarette increased significantly with each increase in age (NSDUH) or grade level (MTF, YRBS, NYTS) ($p < 0.05$ for each increase in age or grade in all surveys) except between 11th and 12th grades for NYTS–high school ($p > 0.05$). By 18 years of age or the 12th grade, about one-half of adolescents had ever smoked (44.0%, NSDUH; 42.2%, MTF; 55.5%, YRBS; 52.1%, NYTS–high school).

Differences in ever smoking across racial and ethnic subgroups varied between surveillance systems. Generally speaking, the prevalence of ever smoking was highest among White and Hispanic youth and lowest among Black youth and youth in the Other category. Note that Other includes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races/ethnicities, which likely mask important differences between these groups. Data from multiple years must be combined to provide reliable estimates for each of these subgroups (see Table 3.1.3). For NSDUH, Whites and Hispanics had the highest prevalence of ever smoking (30.3% vs. 28.4%, respectively, $p > 0.05$), and both were significantly higher than those for Blacks and Other youth (22.1% vs. 23.1%, respectively, $p > 0.05$).

($p < 0.05$ for all White and Hispanic comparisons with Black and Other youth). For MTF, Hispanic and White students had the highest prevalence of ever smoking (32.9% vs. 31.3%, respectively; $p > 0.05$), significantly higher than Other students and Black students (26.4% vs. 24.8%, respectively; $p > 0.05$) ($p < 0.05$ for all White and Hispanic comparisons with Black and Other students). For YRBS, Hispanic and White students again had the highest prevalence of ever smoking (51.0% vs. 46.1%, respectively), followed by Black and Other students (43.5% vs. 39.4%, respectively) ($p < 0.05$ for all Hispanic comparisons with Black and Other students; $p > 0.05$ for all White comparisons with Black and Other students). For NYTS, among middle school students, Whites had the lowest prevalence of ever smoking (14.3%, $p < 0.05$ for all racial/ethnic comparisons with Whites), while among high school students, the prevalence of ever smoking was highest among Hispanics (50.3%, $p < 0.05$ for all racial/ethnic comparisons with Hispanics). Differences between other racial groups for high school and middle school students were not significant for NYTS.

The prevalence of ever cigarette smoking was generally highest in the South and Midwest regions of the United States. In NSDUH, youth living in the South had the highest prevalence of ever cigarette smoking (29.7%) and those living in the Northeast had the lowest prevalence (26.6%) ($p < 0.05$ for comparison between South and Northeast). For MTF, ever use was highest in the South (34.6%) and lowest in the Northeast (27.5%) and West (27.1%) ($p < 0.05$ for comparison of South with Northeast and West). For YRBS, the prevalence of ever smoking among youth was also highest in the South (51.3%) and lowest in the West (41.7%) ($p < 0.05$ for comparison between South and West).

Current Cigarette Smoking

The prevalence of current cigarette smoking (i.e., having smoked a cigarette in the last 30 days; see Appendix 3.3 for further detail on this definition) among youth living in the United States is presented in Table 3.1.2. These estimates suggest that as many as one in five adolescents in the United States overall are current cigarette smokers.

The prevalence of current cigarette smoking was higher for males than for females for MTF (14.2% vs. 11.2%, $p < 0.05$), NSDUH (13.9% vs. 12.4%, $p < 0.05$), and NYTS—high school (19.6% vs. 14.8%, $p < 0.05$), but no differences by gender were detected in YRBS (19.8% vs. 19.1%, $p > 0.05$) or NYTS—middle school (5.6% vs. 4.7%, $p > 0.05$). As with ever cigarette smoking, current cigarette smoking also increased as either age (NSDUH) or grade level (MTF, YRBS, and NYTS) increased. The differences between each subsequent age or grade level were

significant for MTF, NSDUH, and YRBS ($p < 0.05$ for each increase in age or grade in all three surveys) and between most grade levels for NYTS. By 18 years of age or the 12th grade, approximately one-quarter of adolescents were current smokers (23.5%, NSDUH; 19.2%, MTF; 25.2%, YRBS; 23.2%, NYTS).

As was the case with ever smoking, differences across racial/ethnic subgroups varied between surveillance systems, but here the variation was not as great. For NSDUH, White youth had the highest prevalence of current smoking (15.2%), which was significantly higher than that of Hispanic youth (12.2%), Other youth (9.9%), and Black youth (8.2%) ($p < 0.05$ for all racial/ethnic comparisons with Whites). For NSDUH, the prevalence of current smoking among Black youth was also significantly lower than among Hispanic youth ($p < 0.05$). For MTF, White students again had the highest prevalence of current smoking (14.4%), which was significantly higher than the prevalence among Other students (11.1%), Hispanic students (11.0%), and Black students (7.0%) ($p < 0.05$ for all racial/ethnic comparisons with White students). Again, the prevalence among Black students was significantly lower than among other racial/ethnic groups ($p < 0.05$ for all racial/ethnic comparisons with Black students). For YRBS, White students had the highest prevalence of current smoking (22.5%) as well, which was significantly higher than the prevalence for Hispanic students (18.0%), Other students (16.5%), and Black students (9.5%) ($p < 0.05$ for all racial/ethnic comparisons with White students). For NYTS—middle school, White students had the lowest prevalence of current smoking (4.3%), and Other students had the highest prevalence (7.2%), but this difference was not statistically significantly different ($p > 0.05$). For NYTS—high school, White and Hispanic students had the highest prevalence of current smoking (19.2%, each), and Black students had the lowest prevalence (7.5%; $p < 0.05$ for all racial/ethnic comparisons with Black students).

Tables 3.1.3 and 3.1.4 provide estimates on current smoking for more specific racial/ethnic subgroups from NSDUH data collapsed for multiple years (2008–2010); these estimates are provided for adolescents (Table 3.1.3) and young adults (Table 3.1.4) separately. Among both adolescents and young adults, American Indians/Alaska Natives had the highest prevalence of current smoking (15.2% and 47.9%, respectively). Although significance testing was not performed for these data, the confidence intervals indicate that the prevalence of current smoking among American Indian/Alaska Native adolescents was significantly higher than among all other racial/ethnic subgroups, except Cuban adolescents. For young adults, the prevalence among American Indians/Alaska Natives was significantly higher than all other racial/ethnic subgroups. Both tables show variability within the Asian

and Hispanic subcategories that also should be noted. The numbers of racial/ethnic minorities in other surveys (YRBS, NYTS, MTF) were too small to conduct similar, meaningful analyses.

The prevalence of current cigarette smoking across the United States is reported by region in Table 3.1.2 and illustrated by state in Figures 3.1.1 and 3.1.2. In each survey with available data, the prevalence of current cigarette smoking was highest in the Midwest or the South. For NSDUH, the Midwest had the highest prevalence of current smoking (14.7%), which was significantly higher than the prevalence in the Northeast (12.1%) and West (12.5%) ($p < 0.05$ for comparisons with the Northeast and West). For MTF, the Midwest (14.3%) and South (14.3%) had the highest prevalence, which was significantly higher than in the Northeast (11.6%; $p < 0.05$ for comparisons with Midwest and South) and West (9.7%; $p < 0.05$ for comparisons with Midwest and South). For YRBS, the prevalence of current smoking was highest in the South (22.0%), and Midwest (20.2%) and this was significantly higher than in the West only (15.5%) ($p < 0.05$). The maps provided in Figures 3.1.1 and 3.1.2 illustrate by state the prevalence of current cigarette smoking by age (Figure 3.1.1) and by gender and age (Figure 3.1.2) from NSDUH data collapsed over multiple years (2006–2010). Among youth, current cigarette smoking was lowest in Utah (5.4%) and California (6.8%) and highest in Wyoming (15.8%) and Kentucky (14.1%). For young adults, current cigarette smoking was lowest in Utah (20.6%) and California (28.6%) and highest in Kentucky (46.7%) and West Virginia (46.7%). For persons 26 years of age or older, prevalence was lowest in Utah (14.4%) and Massachusetts (18.0%) and highest in West Virginia (31.3%). Using NSDUH data from 2008–2010, Figure 3.1.3 illustrates the association between the prevalence of current smoking among older adults (≥ 26 years of age) and the prevalence of current smoking among youth (12–17 years of age) nationwide. This strong relationship ($\beta = 0.41$, $p < 0.05$) suggests that current smoking among youth resembled that of adults across the nation during this time period.

Data from MTF (Table 3.1.5) show that current cigarette smoking in 2002–2007 was more prevalent in rural areas (i.e., not part of a metropolitan statistical area [MSA]) than in large MSAs (e.g., among 12th-grade students, 27.8% vs. 20.9%, $p < 0.05$). In addition, current cigarette smoking was less prevalent in large MSAs than in smaller MSAs (“Other MSA”) (e.g., among 12th-grade students, 20.9% vs. 23.5%, $p < 0.05$). Table 3.1.5 also presents the prevalence of current cigarette smoking by other sociodemographic risk factors. Among 8th-grade students, current cigarette smoking was strongly and inversely related to the level of parental education (e.g.,

low vs. high, 16.3% vs. 4.7%, $p < 0.05$). This relationship was weaker among older students (e.g., among those in the 12th grade, the difference between high and low was no longer significant: 21.0% vs. 19.8%, $p > 0.05$). These data also show that across all grade levels, current cigarette smoking was inversely related to students’ academic performance. Prevalence was highest among those with the poorest grades (e.g., among 12th-grade students, D vs. A, 46.1% vs. 14.9%, $p < 0.05$). These differences were most pronounced in 8th grade (prevalence ratio of 8 to 1) and least pronounced in 12th grade (prevalence ratio of 3 to 1). Across all grade levels, students who lived alone had a higher prevalence of current smoking than did students with other arrangements (e.g., for 12th grade, 41.3% for those living alone vs. 22.1% for those living with both parents, $p < 0.05$). Current cigarette smoking was least prevalent among youth for whom religion was very important (e.g., among 12th-grade students, 15.0% vs. 30.8% among those for whom religion was not important or only somewhat important; $p < 0.05$). This observation was consistent across all grade levels. More information and research regarding sociodemographic risk factors for cigarette smoking can be found in Chapter 4 (“Social, Environmental, Cognitive, and Genetic Influences on the Use of Tobacco Among Youth”), which focuses on the etiology of tobacco use.

Frequency and Intensity of Cigarette Smoking

The prevalence of frequent cigarette smoking (having smoked on ≥ 20 of the previous 30 days; see Appendix 3.3) among youth living in the United States is presented in Table 3.1.6, and the prevalence of heavy cigarette smoking (smoking at least one-half pack a day; see Appendix 3.3) is presented in Table 3.1.7. For both measures of smoking intensity, estimates were similar across data sources. Overall, these estimates suggest that up to 7% of adolescents are frequent cigarette smokers and up to 3% are heavy cigarette smokers.

Frequent cigarette smoking was more prevalent among males than females for NSDUH (6.2% vs. 5.3%, $p < 0.05$), YRBS (8.0% vs. 6.4%, $p < 0.05$), and NYTS (middle school: 2.0% vs. 0.8%, $p < 0.05$; high school: 7.4% vs. 5.1%, $p < 0.05$). Heavy cigarette smoking was more prevalent among males than females for NSDUH (2.9% vs. 2.2%, $p > 0.05$), MTF (3.0% vs. 1.9%, $p < 0.05$), and NYTS—high school (2.5% vs. 1.0%, $p < 0.05$). For all surveys except NYTS—middle school, the prevalence of frequent and heavy cigarette smoking was higher with each increase in age (NSDUH) or grade level (MTF, YRBS, NYTS—high school). By 18 years of age or the 12th grade, up to 12% of adolescents were frequent smokers (Table 3.1.6: 11.5%, NSDUH; 11.2%, YRBS; 10.0%, NYTS) and up to 6% of adolescents

were smoking at least one-half pack per day (Table 3.1.7: 5.4%, NSDUH; 4.7%, MTF; 3.0%, NYTS).

For all surveillance systems except NYTS, the prevalence of frequent and heavy cigarette smoking was highest among White youth, followed by Other, Hispanic, and Black youth. For NSDUH, the prevalence of frequent smoking (Table 3.1.6) was significantly higher among White youth (7.4%) than among Other (4.6%), Hispanic (3.5%), and Black (2.9%) youth ($p < 0.05$ for all racial/ethnic comparisons with Whites). None of the other racial/ethnic comparisons in NSDUH were significant. For YRBS, the prevalence of frequent smoking (Table 3.1.6) was significantly higher among White students (9.5%) than among Other (5.7%), Hispanic (4.2%), and Black (2.1%) students ($p < 0.05$ for all racial/ethnic comparisons with White students). For NSDUH, the prevalence of heavy smoking (Table 3.1.7) was significantly higher among White youth (3.7%) than among Black (1.0%), Hispanic (0.9%), and Other (0.8%) youth ($p < 0.05$ for all racial/ethnic comparisons with Whites). None of the other racial/ethnic comparisons for NSDUH were significant. For MTF, the prevalence of heavy smoking (Table 3.1.7) was higher among White students (3.2%) than among Other (2.0%), Black (1.3%) and Hispanic (1.1%) students ($p < 0.05$ for all racial/ethnic comparisons with White students). For NYTS—middle school, there were no significant racial/ethnic differences for frequent or heavy cigarette smoking. For NYTS—high school, White students (7.9%) and Other students (6.2%) had the highest prevalence of frequent cigarette smoking (Table 3.1.6), and both were significantly greater than that for Black students (1.8%, $p < 0.05$ for comparisons of Black with White and Other students). For heavy cigarette smoking (Table 3.1.7) for NYTS—high school, the only significant racial/ethnic difference was between White (1.9%) and Black (1.0%) students ($p < 0.05$).

The prevalence of frequent and heavy cigarette smoking was generally highest in the Midwest and lowest in the West. For NSDUH, the prevalence of frequent smoking was highest in the Midwest (7.2%), followed by the South (6.0%) and the Northeast (5.5%), and lowest in the West (4.2%; $p < 0.05$ for all regional comparisons with the Midwest and the West). For YRBS, the prevalence of frequent cigarette smoking was highest in the Northeast (8.7%), South (8.5%), and Midwest (8.3%), and lowest in the West (3.5%) ($p < 0.05$ for all regional comparisons with the West). For NSDUH, the prevalence of heavy cigarette smoking was highest in the Midwest (3.6%) followed by the South (2.6%) and the Northeast (2.6%), and was lowest in the West (1.6%) ($p < 0.05$ for all regional comparisons with the Midwest and with the West). For MTF, heavy smoking was most prevalent in the South (3.1%), Midwest (3.0%), and Northeast (2.4%), and was least prevalent in

the West (1.2%) ($p < 0.05$ for all regional comparisons with the West).

Table 3.1.8 uses data from YRBS to describe the intensity of cigarette smoking among adolescents. Here, the frequency of cigarette smoking (the number of days in the last 30 days that a person smoked a cigarette) is cross-tabulated with the number of cigarettes smoked per day. Although significance testing for these data was not performed, nonoverlapping confidence intervals suggest daily smokers (smoked a cigarette on all 30 preceding days) were more likely to smoke more than one-half pack per day (i.e., 11–20 and >20 cigarettes per day in Table 3.1.8) than all other categories of smoking frequency. Among these daily smokers, 26.0% smoked more than one-half pack per day, 34.1% smoked 6–10 cigarettes per day, and 35.8% smoked 2–5 cigarettes per day. Nondaily smokers (smoked on 1–29 of the 30 preceding days) were the lightest smokers. Most of the nondaily smokers smoked 2–5 cigarettes per day; this was the range for 76.5% of those who smoked on 20–29 days, 62.8% of those who smoked on 10–19 days, and 52.2% of those who smoked on 6–9 days (in the last 30 days). Further information about the intensity of smoking among daily smokers can be found in Caraballo and associates (2009), which confirms these findings.

Research on other patterns of cigarette smoking among young people, such as intermittent smoking (smoking on “some days,” or less than daily or frequently), has become more common in recent years. An analysis of a nationally representative sample of persons 15–25 years of age suggested that almost one-fourth of current smokers (23.7%) could be classified as “some day” smokers (i.e., intermittent smokers) (Hassmiller et al. 2003). On average in that analysis, intermittent smokers smoked cigarettes on 15 days and a total of 102 cigarettes per month (vs. 30 days and 566 cigarettes per month among daily smokers) (Hassmiller et al. 2003).

In the United States, nondaily smoking (smoking on some days but not every day) is increasing overall at the same time that daily smoking is decreasing (Schane et al. 2009). To date, however, there has been no consensus on how to define and study nondaily smoking, although it is a distinct pattern that falls under the broader category of light (i.e., low-volume) or intermittent smoking (Husten 2009). The phenomenon of light or intermittent smoking is more clearly defined among adults and may be a stable behavior in some. Studies of adolescents and young adults, in contrast, suggest this phenomenon may be quite different in earlier years of the life span and much less stable than it is in older men and women (White et al. 2009). For example, those who are light and intermittent smokers in the 12th grade are more likely to end up heavy smokers 2 years later, in young adulthood, than they are

to remain light and intermittent smokers (White et al. 2009). A special issue of *Nicotine & Tobacco Research* was focused entirely on this topic (Fagan and Rigotti 2009); the reader is directed there for further information, which is beyond the scope of this report.

Cigarette Smoking Among Young Adults

Increasingly, attention is being focused on cigarette smoking behaviors among young adults (18–25 years of age), as this age group has the highest prevalence of cigarette smoking of any age group in the United States (Green et al. 2007; Lawrence et al. 2007; Ling et al. 2009) and because the tobacco industry targets young adult consumers (Katz and Lavack, 2002; Ling and Glantz, 2002). Analyses suggest that 20% (Green et al. 2007) and 22.7% (Table 3.1.9) of adult smokers became regular and daily smokers, respectively, during young adulthood. Separate analyses of the Tobacco Use Supplement to the Current Population Survey in 1998–1999 and 2003 demonstrate that the prevalence of current cigarette smoking is highest among non-college-educated young adults (Green et al. 2007) and blue-collar and service workers (Lawrence et al. 2007). In these groups, the prevalence of current cigarette smoking is twice that of college-educated and white-collar workers (Green et al. 2007; Lawrence et al. 2007). As among adolescents, the prevalence of current cigarette smoking among young adults is highest among American Indians/Alaska Natives and Whites (Green et al. 2007; Lawrence et al. 2007). More young adult males are current cigarette smokers than are young adult females (Green et al. 2007; Lawrence et al. 2007). About one-third of young adults fall into each of the light smoker (<10 cigarettes per day), moderate smoker (10–19 cigarettes per day), and heavy smoker (≥ 20 cigarettes per day) categories (Lawrence et al. 2007). To date, however, few interventions for preventing or quitting tobacco use have been directed at young adults, particularly among non-college-educated young adults, and young adults are not consumers of evidence-based cessation treatments (Curry et al. 2007, Solberg et al. 2007). Additional studies of predictors of tobacco use in this subpopulation will be required to develop effective interventions for this age group.

Preferences for Particular Cigarette Brands

Knowing what brands of cigarettes are preferred by adolescent and young adult smokers can provide insight into the influence that the marketing practices of the tobacco industry and the design of its products may have on young people and, importantly, aid the development of programs to prevent smoking (Cummings et al. 2002; Wayne and Connolly 2002; Carpenter et al. 2005; Klein et al. 2008; National Cancer Institute [NCI] 2008). More

information on the relationship between the marketing practices of the tobacco industry and tobacco use among young people can be found in Chapter 5 (“The Tobacco Industry’s Influences on the Use of Tobacco Among Youth”) of this report. Here, Tables 3.1.10 and 3.1.11 provide evidence of which cigarette brands were preferred most often by adolescents (12–17 years of age) and young adults (18–25 years of age) in 2008–2010, by drawing on data from recent NSDUH surveys stratified by important demographic variables. These analyses are restricted to current smokers—that is, adolescents and young adults who smoked in the last 30 days.

Among adolescents, all 10 of the most commonly preferred brands of cigarettes were subbrands of Marlboro (46.2%), Newport (21.8%), or Camel (12.4%), making these the preferred brands of 80.4% of adolescent smokers. Marlboro full flavor (19.7%) was the most preferred brand overall, followed by Marlboro Lights (17.5%). Other Marlboro subbrands in the top 10 included Marlboro Mediums (7.3%) and Marlboro Ultra Lights (1.7%). Subbrands of Newport, a menthol cigarette, in the top 10 included Newport full flavor (14.1%), Newport Lights (5.0%), and Newport Mediums (2.7%). Subbrands of Camel in the top 10 included Camel full flavor (5.2%), Camel Lights (5.1%), and Camel Mediums (2.1%). Among the five most preferred brands overall, boys ranked Newport full flavor (15.2%) over Marlboro Lights (15.1%), and girls ranked Marlboro Lights (20.1%) over Marlboro full flavor (16.8%). Among Whites and Other adolescents, the top two choices were the same as in the overall rankings. Among Hispanics, Marlboro Lights ranked first. Among Blacks, Newport full flavor (42.4%) was preferred most often, followed by Newport Lights (16.9%). Among older (15–17 years of age) adolescents, the top three choices were the same as the overall choices. Younger adolescents (12–14 years of age) preferred Marlboro Light most often (18.4%) followed by Marlboro full flavor (13.8%) and Marlboro Mediums (10.2%). There was some regional variation in brand preference. Newport full flavor, for example, was the most preferred brand in the Northeast (25.0%). Marlboro Lights ranked first in the South (20.9%), with Marlboro full flavor (18.1%) next. Marlboro full flavor (23.0%), Marlboro Mediums (10.4%), Camel full flavor (8.6%), Camel Lights (7.3%) and Camel Mediums (4.2%) were more commonly preferred in the West compared with other regions, while Newport full flavor (4.0%) was much less commonly preferred in the West than in other regions.

There were differences between adolescents and young adults in the brands they preferred. Among young adults, 9 of the 10 most commonly preferred brands (Table 3.1.11) were subbrands of Marlboro (46.1%), Newport (19.5%), or Camel (14.9%). Marlboro Lights (22.7%) was,

by a large margin, the most preferred brand. Other Marlboro subbrands in the top 10 for young adults included Marlboro full flavor (16.3%), Marlboro Mediums (5.0%), and Marlboro Ultra Lights (2.1%). Newport full flavor (15.7%) was the third most preferred brand overall, and Newport Lights (2.2%) and Newport Medium (1.6%) were also in the top 10. Camel Lights (9.3%) was preferred by more young adults than was Camel full flavor (5.6%). Parliament Lights (2.6%) was also included in the 10 most preferred brands among young adults. These preferences were largely consistent across gender, with one major exception being that females preferred Newport full flavor (16.2%) over Marlboro full flavor (13.2%), while males did not. Preferences were also generally consistent among young adults for Whites, Hispanics, and Other. Among Black young adults, Newport full flavor (61.2%) was by far the most preferred brand, followed by Newport Mediums (9.0%) and Newport Lights (8.1%). Among the younger (18–20 years) group of young adults, Marlboro full flavor (19.8%) was preferred over Marlboro Lights (19.1%). The older (21–25 years of age) group preferred Newport full flavor (15.5%) over Marlboro full flavor (14.2%). Regional differences were minimal. In the West, Newport full flavor (5.0%) was preferred much less commonly than in the other regions, and Camel full flavor (9.7%) was preferred more commonly than in the other regions.

It is helpful to look at the overall market share that each brand of cigarettes secured in the United States in 2008, the first year of the NSDUH data presented in Tables 3.1.10 and 3.1.11, to compare this market share with brand preferences of adolescents and young adults (Maxwell 2009c). Market share, noted as a percentage, represents the portion of total cigarette sales that a certain brand accounted for in the United States. This information was not available for subbrands of cigarettes (e.g., Marlboro Lights) but was available for major brands (e.g., Marlboro overall). The market share data were closely aligned with the data for brand preference among both adolescents (Table 3.1.10) and young adults (Table 3.1.11). In 2008, Marlboro accounted for 41.0% of cigarette sales in the United States, followed by Newport (9.7%) and Camel (6.7%) (Maxwell 2009c). As noted earlier, these three brands were the ones most preferred by adolescents and young adults. These three brands accounted for 57.4% of overall market share, which is influenced mostly by the preferences of adults and not adolescents. These figures indicate that the combined share of Marlboro, Newport, and Camel is not as concentrated among adults overall as it is among adolescents (80.4%) and young adults (80.5%). Overall, other brands each secured less than 5% of the total cigarette market (Maxwell 2009c), which is consistent with the findings from the NSDUH surveys of youth.

Mentholated cigarettes deserve special note in this section and are the focus of a report by the U.S. Food and Drug Administration's (FDA's) Tobacco Product Scientific Advisory Committee (TPSAC 2011). Menthol is an additive in cigarettes; those brands (e.g., Newport) that are marketed as a menthol cigarette contain sufficient levels of menthol to warrant describing them as having a "characterizing flavor" (USFDA 2011). Some studies suggest that mentholated cigarettes increase the addictive potential of smoking among youth (Wackowski and Delnovo, 2007; Hersey et al. 2010). Furthermore, because mentholation can improve the taste of cigarettes for smokers, this additive may facilitate initiation or inhibit quitting (Giovino et al. 2004). Adolescent and young adult smokers smoke menthol cigarettes at a higher percentage than any other age group (Substance Abuse and Mental Health Services Administration [SAMHSA] 2009d; Lawrence et al. 2010; TPSAC 2011). In the 2006 NYTS, 51.7% (95% confidence interval [CI], 45.8–57.5%) of middle school smokers and 43.1% (95% CI, 37.0–49.1%) of high school smokers usually smoked a menthol brand of cigarettes (Hersey et al. 2010). (Note these percentages are much higher than the preference data reported in Table 3.1.10 [21.8%] of 12- to 17-year-olds preferred menthol brand cigarettes—Newports. The reason for this discrepancy is not clear). In the NYTS data, the prevalence of smoking menthol cigarettes was higher among established smokers in middle school (i.e., those who had been smoking for 1 year or more) than among those who had just initiated smoking (Hersey et al. 2010). Consistent with the data on preferences for Newport cigarettes among Black adolescents, mentholated cigarettes are especially popular among Black smokers generally (Lawrence et al. 2010). Continued surveillance of this type of cigarette product is warranted. At present, cigarettes with characterizing flavors are banned, except those with menthol flavoring. Studies indicate that mentholated cigarettes are as dangerous as nonmentholated ones (Giovino et al. 2004) though other studies suggest lower risk of lung cancer (TPSAC 2011). Further information on mentholated cigarettes can be found in a special supplement published in 2010 (see Ahijevych and Garret, 2010; Foulds et al. 2010; Gardiner and Clark 2010; Hersey et al. 2010).

Summary

About one-third to one-half of all adolescents in the United States have ever smoked part or all of a cigarette. One in four (25%) high school seniors and one in three (33%) young adults are current cigarette smokers. The prevalence of current cigarette smoking is highest among American Indian/Alaska Native adolescents, followed by

White and Hispanic adolescents and Asian and Black adolescents. Among American Indian/Alaskan Native, White, and Asian adolescents, the prevalence of current smoking is essentially the same for boys as for girls. Among Hispanics and Blacks, it is higher for boys than girls. By the end of 12th grade, more than 10% of current smokers are smoking at least 20 days per month (i.e., they can be classified as frequent smokers), and more than 5% are smoking at least a half-pack of cigarettes or more per day (i.e., they can be categorized as heavy smokers). The prevalence of frequent and heavy smoking is highest among White adolescents in high school (American Indians/Alaska Natives were not considered here), while racial/ethnic differences are less prominent among middle school youth. Marlboro, Camel, and Newport are the most preferred brands of cigarettes for adolescents and young adults alike. Newport, a menthol cigarette brand, is particularly preferred by Blacks (note that Newport Red, a new brand of Newports, is nonmentholated). Continued surveillance of menthol cigarettes is warranted.

Developmental Patterns of Cigarette Smoking

Adolescence and young adulthood represent a time of heightened vulnerability for both the initiation of tobacco use and the development of nicotine dependence (see Chapter 2 “The Health Consequences of Tobacco Use Among Young People”). Identifying factors that distinguish between young people who experiment with smoking and desist after relatively few trials and those who experiment, escalate, and become dependent smokers can inform the design of interventions. This section describes developmental patterns that would be relevant to these etiologic studies, especially during adolescence. Young adulthood should not be overlooked, however, as recent data suggest at least 20% of smokers begin smoking regularly in young adulthood (Green et al. 2007) and the average consumption per smoker increases in the decade following adolescence (Hammond 2005).

Age or Grade When Smoking Begins

The initiation of cigarette smoking at a young age increases the risk of later heavy smoking and of subsequent smoking-attributable mortality (Tailoi and Wynder 1991; Escobedo et al. 1993; Everett et al. 1999, Lando et al. 1999). Initiation is a complex process that can occur over a number of weeks or years. This section of the chapter focuses on two points in the process of uptake and progression: the age a young person first tries a cigarette and

the age at which a young person begins to smoke cigarettes daily. In addition, it considers susceptibility to start smoking cigarettes among never smokers. Susceptibility is defined as the absence of a firm decision to not start smoking.

Table 3.1.12 uses data from recent NSDUH surveys (2008–2010) to estimate the percentage of nonsmoking adolescents who were susceptible to starting to smoke in those years. Susceptibility to smoking, which is a strong predictor of the onset of smoking (Evans et al. 1995; Pierce et al. 1996), was measured with two questions: (1) “If one of your best friends offered you a cigarette, would you smoke it?” and (2) “At any time during the next 12 months, do you think that you will smoke a cigarette?” Those answering “definitely not” to both questions were categorized as not susceptible. Overall, 19.9% of nonsmoking adolescents were classified as susceptible, with boys (20.4%) slightly more susceptible than girls (19.3%). Hispanics had the highest prevalence of susceptibility (24.2%), which was significantly higher than among Blacks (19.4%), Whites (19.0%), and Asians (15.1%) (95% confidence intervals do not overlap).

Because initiation can occur after the adolescent years, this section continues with data from adults in the 2010 NSDUH (Table 3.1.9). The analysis was restricted to adults 30–39 years of age because virtually all initiation ultimately occurs before the age of 30 years (USDHHS 1994), and because in the United States, the majority of the increased mortality that results from cigarette smoking occurs after the age of 40 years (Lopez et al. 1994). Because the recalled age of initiation is often 10 or more years less than the age of the adult respondent at the time of the survey, recall bias may affect the reliability of these estimates. Moreover, these estimates represent initiation that occurred up to 30 years earlier (i.e., from the early 1980s onward). According to the 2010 NSDUH, more than one-half (56.3%) of adults 30–39 years of age (including those who had smoked and those who had not) had first tried a cigarette while they were an adolescent or child (≤ 18 years of age). Of all adults 30–39 years of age who had ever tried a cigarette, 81.5% tried their first cigarette during adolescence or earlier, with 15.9 years the mean age of first trying a cigarette. Among all adults 30–39 years of age, 24.3% became daily smokers while they were under 18 years of age. Of those who had ever smoked daily, 88.2% tried their first cigarette by 18 years of age, and two-thirds (65.1%) started smoking daily by the time they were 18 years old. The mean age of becoming a daily smoker was 17.9 years. Some initiation does occur in young adulthood (19–26 years of age), and the estimate in this survey was that 11.5% of all persons 30–39 years of age (ever smokers or not) tried their first cigarette as a young adult. Of all

adults 30–39 years of age who had ever tried a cigarette, 16.5% tried their first cigarette in young adulthood. In all, 11.6% of adults (30–39 years of age) became daily smokers when in young adulthood. Of those who had ever smoked daily, 10.8% tried their first cigarette as a young adult and 31.1% started smoking daily in young adulthood.

Surveys conducted in 2009 and 2010 among youth (Table 3.1.13), although lacking information on post-adolescent initiation, provide information on more recent patterns of initiation (i.e., from the mid-1990s onward). Among all 12th-grade students (mostly 17–19 years of age), estimates were that 16.0% (MTF), 19.0% (YRBS), and 18.4% (NYTS) first tried a cigarette by 14 years of age or by the end of 8th grade. Per the NSDUH survey, among 17- and 18-year-olds who had completed the 11th grade, 16.2% first tried a cigarette by the age of 14 years. In all, the estimated percentages of young people who had tried smoking were 43.9% for NSDUH (17 or 18 years of age and completed 11th grade), 39.0% for MTF (12th-grade students), 45.1% for YRBS (12th-grade students), and 41.5% for NYTS (12th-grade students). Daily cigarette use (Table 3.1.14) began by the age of 16 years (or the 10th grade) for 7.4% of 12th-grade students, per MTF, and for 9.3% of those 17 years of age, per NSDUH. Among these youth, by 17 years of age or 10th grade, 13.2% (NSDUH) and 11.7% (MTF) were smoking daily.

Transitions and Trajectories in Smoking

Tobacco use among adolescents and young adults, including use specific to cigarette smoking, is increasingly being conceptualized as a developmental pathway(s) characterized by “transitions and trajectories ... from no use to dependence” (Clayton et al. 2000, p. S1). Fortunately, the analysis of these more sophisticated models of smoking onset and progression is now possible because of advances in statistical theory and techniques (Collins and Sayer 2001). A more extensive review of these types of studies is provided in Chapters 2 and 4. In the present chapter, a brief overview of these new analytic approaches is provided, followed by the presentation of data from Add Health, a nationally representative longitudinal study of adolescents and young adults. These data are used to describe “transitions and trajectories” of tobacco use in youth.

Trajectories of Cigarette Smoking

Most research to date describes the natural history of cigarette smoking as a process that begins in adolescence, increases as an adolescent ages and grows into a young adult, then peaks and either stabilizes or declines with time (Chen and Kandel 1995). This conceptualization of the onset and progression of cigarette smoking,

however, is limited. It describes only a single trajectory of age-related changes in smoking behavior over time, averaged across all adolescents, and thus it obscures any heterogeneity in this process that is likely to exist.

By using sophisticated statistical procedures, such as growth mixture modeling, recent studies have started to empirically identify multiple trajectories of cigarette smoking behavior. Some have focused only on cigarette smoking in adolescence (e.g., Bernat et al. 2008), while others have described cigarette smoking in young adulthood (e.g., Colder et al. 2006), and still others have characterized cigarette smoking from adolescence through young adulthood (e.g., Chassin et al. 2000). In addition, some studies have considered special populations such as Blacks (e.g., Fergus et al. 2005). In each study, multiple subgroups of youth have been identified who shared a common pathway(s) with regard to the onset and progression of smoking over time; subgroups have usually been defined by measures of the frequency and/or quantity of cigarette smoking across time. Chassin and colleagues (2000), for example, identified six subgroups: (1) abstainers, (2) experimenters, (3) early stable smokers, (4) late stable smokers, (5) quitters, and (6) erratics. These subgroups differed by the intensity of smoking and by the age at which the intensity of cigarette smoking increased or decreased as respondents aged across time. In addition, Chassin and coworkers (2000) used key correlates of tobacco use to differentiate these subgroups in adolescence or young adulthood.

In this chapter, one of several ways to characterize trajectories of cigarette smoking is presented. Multiple trajectories of cigarette smoking are identified using data from Add Health (University of North Carolina [UNC], 2009). These trajectories describe different developmental pathways specific to the onset and progression of smoking from early adolescence through young adulthood. In Add Health, data were collected from a nationally representative sample of youth in three waves. Wave I was collected in 1994–1995, when students were in the 7th–12th grades (11–17 years of age); Wave II in 1996, when students were in the 8th–12th grades (12–18 years of age); and Wave III in 2001–2002, when the youth were young adults (18–26 years of age). At the time this chapter was being developed, data from Wave IV (2007–2008; 24–32 years of age) were not yet available for analysis. The present analysis makes use of only those who participated in Wave I and Wave III. The analysis uses a single measure: “During the past 30 days, on how many days did you smoke cigarettes?” These data were combined through the use of a cohort sequential design to map developmental pathways of smoking from 11 to 26 years of age. Age was included as the only covariate in all models.

Overall, four distinct trajectories were identified in these analyses: (1) nonsmokers, (2) early establishers, (3) late establishers, and (4) quitters (Figure 3.1.4). Nonsmokers had no past-month cigarette use at any time point from adolescence through young adulthood; 48.3% fit this description. Early establishers had an early onset of smoking (ages of 12 or 13 years), which escalated quickly to daily use (smoking on all 30 days before the survey) by age 17 years and remained there throughout young adulthood; 14.5% could be characterized as early establishers. Late establishers had a later onset of smoking, at 15 or 16 years of age, escalating to intermittent use (smoking on no more than 20 of the 30 days before the survey) by the age of 21 years, peaking at 23 years of age, and then falling through the age of 26 years; 25.0% fit this description. Quitters had the earliest onset of smoking, before the age of 11 years, which escalated to less than daily use by 16 years of age then fell throughout the rest of adolescence and young adulthood to the lowest levels among those who reported smoking in the last 30 days; 12.0% of the sample could be characterized in this way. Nonsmokers could be identified by a linear model, early and late establishers with a quadratic model, and quitters by a cubic model.

Some of these trajectories varied by gender and race/ethnicity (Table 3.1.15). Boys, for example, were significantly more likely than girls to be late establishers (odds ratio [OR] = 1.87, 95% CI = 1.55–2.25). Boys and girls were equally likely, however, to belong to the early establisher group and to be quitters. Blacks were significantly less likely than Whites to be members of the late establisher, early establisher, or quitter groups (e.g., for late establishers, OR = 0.55, 95% CI = 0.42–0.72). Comparisons of Hispanics versus Whites yielded similar results (e.g., for late establishers, OR = 0.62, 95% CI = 0.45–0.85).

Levels of nicotine dependence in young adulthood (Wave III), as measured by a modified version of the Fagerström Tolerance Questionnaire (Payne et al. 1994), were highest for early establishers (scale score = 4.04), followed by late establishers (2.94), and then quitters (1.18) (Table 3.1.16). The differences in scale scores between all of these smoking trajectory groups were significant, according to the 95% confidence intervals. A scale score above 4.0 is typically used to identify adults who are dependent on nicotine (Breslau and Johnson 2000). The score on the Fagerström scale was significantly and positively correlated with being an early establisher and being a late establisher ($p < 0.05$), and it was significantly and negatively correlated with being a quitter and being a nonsmoker ($p < 0.05$).

These findings suggest that early—and sustained—intervention throughout adolescence is critical. This includes prevention and cessation initiatives. In Add

Health, for example, those who became daily smokers in late adolescence (i.e., early establishers), started smoking before the age of 13 years, on average. Once they became daily smokers, at the age of 18 years, on average, they remained daily smokers throughout young adulthood (26 years of age). The escalation in smoking for early establishers occurred during early adolescence (i.e., as they transitioned from middle school to high school, then throughout high school), while the escalation in smoking for late establishers occurred in late adolescence (i.e., during the latter years of high school, to the transition into college, or to other pursuits of young adulthood). Efforts to prevent the onset of tobacco use and progression to regular use/established smoking, therefore, should begin early in adolescence (e.g., middle school) and be sustained over time (e.g., through young adulthood), to maximize their impact.

Transitions in Cigarette Smoking

The 1994 Surgeon General's report on preventing tobacco use among young people described the continuum of smoking behavior as one that has five stages: (1) preparation, (2) trying, (3) experimentation, (4) regular use, and (5) dependence (USDHHS 1994). To date, however, these stages are still based mostly on theory (Flay 1993), with limited empirical evidence to validate them. Not all young people advance through these stages, but those who become smokers as adults appear to experience similar steps in the onset and progression of cigarette smoking (Caraballo et al. 2009).

Several models of the stages of smoking onset and progression have been proposed; the model presented in the 1994 Surgeon General's report is based on the work of Flay and colleagues (1983). Adolescents begin to develop positive attitudes and beliefs about smoking in the preparation stage, although they have yet to try a single puff of a cigarette. That occurs in the second stage, trying, and can progress to experimentation, the third stage, depending on the physiological effects of initial attempts and social reinforcements. In this model, experimentation is defined by repeated, but irregular, use of cigarettes over an extended period of time. Young people advance to the fourth stage, regular use, when they begin to smoke more often—at least weekly across a variety of personal and social situations. The final stage, dependence, is defined by the physiological need for nicotine. Other models of the onset and progression of smoking include the stages of change (the Transtheoretical Model) (Prochaska and DiClemente 1983), which has been adapted for use with adolescents (Pallonen et al. 1998); and a model specific to susceptibility to smoking (Pierce et al. 1996). These two

models have been combined into a single model (Prokhorov et al. 2002) that further subdivides the preparation stage, above, according to one's susceptibility.

In this chapter, the stages of smoking onset and progression were identified using data from Add Health (UNC 2009). As with the presentation on trajectories (above), data for this analysis included data collected in Wave I (1994–1995, when students were 11–17 years of age) and Wave III (2001–2002, when they were 18–26 years of age), but not Wave II. The two groups of youth considered for the present analysis were those 12–14 years of age at Wave I and those 15–18 years of age at Wave I. These analyses, which included a latent class analysis (LCA) and latent transition analysis (LTA), used four measures: (1) "Have you ever tried cigarette smoking, even one or two puffs?" (2) "During the past 30 days, on how many days did you smoke cigarettes?" (3) "During the past 30 days, on the days you smoked, how many cigarettes did you smoke each day?" and (4) "During the past 6 months, have you tried to quit smoking cigarettes?" LCA and LTA, which are advanced statistical techniques useful in furthering the study of stage-sequential behavior, allow one to empirically identify stages of behavioral change (LCA) and examine movement through them sequentially (LTA) (Lanza et al. 2007).

Data for the younger cohort (12–14 years of age in Wave I) are provided in Tables 3.1.17 and 3.1.19. In this cohort, three statuses, or stages, of cigarette smoking/smokers were empirically identified in the analysis: (1) never smokers, (2) current smokers, and (3) former smokers (Table 3.1.17). Never smokers were those who reported never trying to smoke a cigarette, no cigarette smoking in the past 30 days, and no quit attempts in the last 6 months. Current smokers were those who reported having ever tried to smoke a cigarette and some cigarette smoking in the past 30 days. Some current smokers reported a quit attempt in the last 6 months, while others did not. Former smokers were most likely to report having ever tried a cigarette but reported no use in the last 30 days.

At Wave I (12–14 years of age), 84.8% of these adolescents were never smokers, 12.2% were current smokers, and 3.1% were former smokers. At Wave III (when they were 19–21 years of age), 53.4% of these young adults were never smokers, 38.3% were current smokers, and 8.3% were former smokers. Differences by gender were minimal in Wave I, but at Wave III, substantially more women (57.4%) than men (48.5%) were never smokers, and more men (44.1%) than women were current smokers (33.7%). At Wave I, more Blacks (95.2%) were never smokers than were White (86.2%), Hispanic (85.1%), and Other youth (80.3%). At Wave III, Blacks (76.8%) were also more often never smokers than were White (57.1%), Hispanic (51.9%), or Other youth (44.0%).

Table 3.1.18 presents the probabilities of transitioning from one stage to another time from Wave I (12–14 years of age) to Wave III (19–21 years of age). Estimates in the diagonals (noted in bold) represent stability, or the proportion of young people who stayed in the same stage over time. Estimates in the off-diagonals (noted in plain text) represent change, or the proportion of young people in one stage who moved to a different stage over time. Overall, for example, 63% of those who were never smokers at Wave I remained never smokers at Wave III, while 31% of them had become current smokers. Another 6%, in turn, were former smokers at Wave III, having become current smokers at some point between Wave I and Wave III. Of those who were current smokers at Wave I, 79% remained current smokers at Wave III, and 21% had become former smokers. Of those who had been former smokers at Wave I, only 20% remained in this category at Wave III, and the rest (80%) had become current smokers (again) by Wave III. Differences in transitions across time by gender and race/ethnicity are also presented in Table 3.1.18.

Data for the older cohort (15–18 years of age at Wave I) are provided in Tables 3.1.19 and 3.1.20. In this cohort, four classes, or stages, of smoking/smokers were empirically identified (1) never smokers, (2) former smokers, (3) nondaily smokers, and (4) daily smokers (Table 3.1.19). Never smokers were those who reported never trying to smoke a cigarette, no smoking in the past 30 days, and no quit attempts in the last 6 months. Former smokers reported having ever tried a cigarette but no smoking in the past 30 days. Nondaily smokers reported having ever tried to smoke a cigarette and smoking on 1–29 of the past 30 days. Some nondaily smokers reported a quit attempt in the last 6 months, while others did not. Daily smokers reported having ever tried to smoke a cigarette and smoking on all of the past 30 days. Some daily smokers reported a quit attempt in the last 6 months, but others did not.

At Wave I (15–18 years of age), 63.3% of these adolescents were never smokers; 5.5%, former smokers; 20.3%, nondaily smokers; and 11.0%, daily smokers. At Wave III (22–25 years of age), 48.9% of these adolescents were never smokers; 11.1%, former smokers; 16.7%, nondaily smokers; and 23.3%, daily smokers. Differences by gender were small at Wave I, but at Wave III, more women (53.6%) than men (44.0%) were never smokers, as more men than women fell into the nondaily and daily smoker categories at Wave III (e.g., nondaily smokers, 19.0% of men and 14.8% of women). At Wave I, more Blacks (82.4%) were never smokers than were Whites (70.0%), Hispanics (70.4%), or Other youth (50.9%). More Blacks (61.2%) were never smokers at Wave III, as well, than were Whites (53.8%), Hispanics (58.6%), or Other youth (36.4%).

Table 3.1.20 presents the probabilities of transitioning from one stage to another from Wave I (15–18 years

of age) to Wave III (22–25 years of age). As in Table 3.1.18, estimates in the diagonals (in bold) represent stability, or the proportion of young people who stayed in the same stage over time. Estimates in the off-diagonals (plain text) represent change, or the proportion of young people in one stage who moved to a different stage over time. Overall, for example, 77% of those who were never smokers at Wave I remained never smokers at Wave III; 10% of these earlier never smokers had become nondaily smokers by Wave III, and 8% had become daily smokers. Another 4% were former smokers at Wave III, having been current smokers at some point between Wave I and Wave III. Of those who were nondaily smokers at Wave I, 38% remained nondaily smokers at Wave III, while another 38% became daily smokers and 24% became former smokers. Of those who were daily smokers at Wave I, 82% remained daily smokers at Wave III, while 6% became nondaily smokers and 12% became former smokers. Of those who were former smokers at Wave I, only 37% remained in this category at Wave III, while 34% became nondaily smokers and 29% became daily smokers. Differences by gender and race/ethnicity are also shown in Table 3.1.20.

Measures of cigarette smoking related to early stages of use (e.g., preparation and/or susceptibility) were not available for this study as these measures were not used in Add Health. Having such measures would have allowed for empirical identification of these early stages in theoretical models designed to describe the onset and progression of smoking over time during adolescence. In using the measures available, however, the current analysis does depict the variability inherent in this process, reinforcing the concept of other “stages” of smoking reflected elsewhere in this chapter (e.g., current smoking, frequent smoking, and former smoking). The findings presented here again underscore the need for early intervention, prior to onset, if possible. In the younger cohort, for example, 79% of current smokers at Wave I remained current smokers at Wave III. In the older cohort, 38% of nondaily smokers at Wave I were nondaily smokers at Wave III, and 38% of them became daily smokers. Less than 25% of either of these groups (current smokers at Wave I in the younger cohort, nondaily smokers at Wave I in the older cohort) moved backwards to become former smokers by Wave III. Furthermore, in the older cohort, only 12% of the daily smokers had quit and become former smokers by Wave III.

Implications of Smoking During Adolescence for Young Adults

Some notable findings from MTF regarding young people’s expectations to smoke, or to abstain from smoking, are presented in Tables 3.1.21–3.1.24, which use data from students originally surveyed in 1996–2001 as high

school seniors. In their senior year, respondents were asked, “Do you think you will be smoking cigarettes five years from now?” In all, an estimated 1.4% of the seniors reported that they would definitely be smoking in 5 years, 11.4% probably would, 24.3% probably would not, and 62.9% definitely would not (Table 3.1.21). This distribution varied by the intensity of smoking. Almost all (98.2%) of those who were not smoking at the time reported that they would probably or definitely not be smoking in 5 years. Among those who were smoking one to five cigarettes per day as a high school senior, two-thirds (67.1%) said they would not be smoking (“probably not” or “definitely not”) in 5 years. Just over one-half (53.3%) of the half-pack per day smokers said they would probably or definitely not be smoking in 5 years, and somewhat more than one-third (36.8%) of those smoking one or more packs per day said they would probably or definitely not be smoking at that point. As with any forecasts based on personal predictions, the percentages must be viewed cautiously but are still illustrative of intention.

This group of high school seniors was followed and then surveyed 5–6 years later in 2001–2007 (Table 3.1.22). Of students who were not smoking in their senior year, 86.1% were still not smoking 5–6 years later (Table 3.1.22), well below the predicted 98.2% for this group (probably or definitely not smoking in 5 years) (Table 3.1.21). Among those who were smoking one to five cigarettes a day as a senior, only 30.1% were not smoking 5–6 years later, less than one-half of the prediction of 67.1% for this group (again, “probably or definitely not”) in 5 years (Table 3.1.21). As young adults, 21.3% of those who had smoked one to five cigarettes per day as seniors were still smoking one to five cigarettes per day, and 31.0% had begun to smoke a half-pack or more per day (Table 3.1.22). Among those who were smoking one-half pack of cigarettes as a senior, just 22.7% were not smoking 5–6 years later. This, again, was well below the prediction for this group (53.3% for probably or definitely not smoking in 5 years) (Table 3.1.21). In young adulthood, 26.5% were smoking at the same intensity level, and 25.1% had begun to smoke one pack or more each day (Table 3.1.22). Among those who were smoking one pack or more as a senior, only 15.2% were not smoking 5–6 years later (Table 3.1.22), far below the prediction of 36.8% for this group (Table 3.1.21). Almost one-half (48.3%) were still smoking one pack or more a day, and over one-third (36.6%) were still smoking cigarettes but less frequently. This change over time is also summarized in Table 3.1.23.

When earlier smoking behavior was controlled statistically in the analysis, seniors’ expectations about quitting (“Will not smoke” in the table) had very limited power to predict their subsequent smoking behavior

(Table 3.1.24). For seniors who smoked one pack per day, for example, only 27.2% of those in the “Will not smoke” classification were not smoking 5–6 years later. The same phenomenon was true for those seniors who smoked one-half pack daily (only 13.3% were not smoking) and those smoking one to five cigarettes per day in high school (just 26.2% were not smoking). In fact, only slightly more than one-half (55.8%) of those who smoked less than one cigarette per day as a senior and were in the “Will not smoke” group were not smokers at follow-up.

Thus, the expectation to avoid smoking seemed to have some impact among those who were nonsmokers and very light smokers in high school, but very few seniors in these two groups had an expectation to smoke. However, among light, moderate, and heavy daily smokers, the expectation to abstain from smoking in the future was not realized in young adulthood. One key implication of these results is that young people should be made aware of the strongly addictive nature of nicotine and its ability to cast aside good expectations about the future. Clearly, prevention is a key goal, but encouraging tobacco cessation is also critically important for adolescents and young adults at all stages.

Nicotine Addiction in Adolescence and Young Adulthood

To date, our understanding of the pathways and processes of nicotine addiction among young people is limited, especially when compared to the findings from decades of research on nicotine addiction among adults (USDHHS 2010). Compared with adults, adolescents appear to display evidence of addiction at much lower levels of cigarette consumption (USDHHS 2010), and thus, attempts to quit smoking may be more difficult for young people. More information about nicotine dependence is provided in Chapter 2. This section presents data from NSDUH that is relevant to nicotine dependence among youth.

Understanding the patterns of addiction among current smokers can inform studies of its etiology and guide interventions to help young smokers quit. As discussed more fully in Chapter 2, indicators of dependence can appear early in the uptake process (CDC 1994; DiFranza et al. 2002, 2007; O’Loughlin et al. 2003). Tables 3.1.25–3.1.27 present data for three indicators of dependence for 12- to 17-year-olds (adolescents), 18- to 25-year-olds (young adults), and older smokers (26 years of age or older), respectively, using data from multiple NSDUH surveys (2007–2010). The first indicator, the percentage of smokers who smoke more than 15 cigarettes per day, is used because the number of cigarettes smoked per day predicts quitting, with heavier smoking associated with lower prevalence of cessation (USDHHS 1988; Hymowitz

et al. 1997). The second indicator, the percentage of smokers who smoke their first cigarette within 30 minutes of awakening, is used because time to first cigarette also predicts quitting, with earlier smoking associated with fewer successful quit attempts (Hymowitz et al. 1997; West 2004; Baker et al. 2007). The third indicator is SAMHSA’s adaptation of the Nicotine Dependence Syndrome Scale (NDSS) (Shiffman et al. 2004), which uses multiple items to assess dependence on nicotine (for further explanation of these items, see SAMHSA 2009b).

As shown in Tables 3.1.25–3.1.27, all three indicators varied significantly with age of first use (“first puffed” in tables) and age of first daily use, with younger age of first puffing and younger age of first daily smoking associated with increased likelihood of dependence (significance based on 95% confidence intervals). Among 12- to 17-year-olds (Table 3.1.25), the duration (in years) of transitioning from first cigarette use to first daily smoking was not significantly associated with smoking more than 15 cigarettes per day, time to first cigarette or NDSS score (significance based on 95% confidence intervals). For 18- to 25-year-old smokers (Table 3.1.26) and older smokers (Table 3.1.27), there was an inverse relationship between the duration of the transition from first use to first daily smoking and all three indicators of dependence, with a rapid transition from initial trial to daily smoking associated with a higher probability of dependence in later years. The relationship between current smoking behavior and nicotine dependence was strong as well. For the 12- to 17-year-old (Table 3.1.25) and 18- to 25-year-old smokers (Table 3.1.26), the average NDSS score and the percentage who had their first cigarette within 30 minutes of waking increased significantly as the frequency and heaviness of smoking increased. Dependence also varied as a function of use of alcohol, marijuana, or other illicit substances. For example, among 12- to 17-year-olds (Table 3.1.25), the three indicators of dependence were significantly more prevalent or higher among persons who had used alcohol or engaged in binge drinking on 11 or more of the previous 30 days compared to those who engaged in these behaviors on 1–10 of the previous 30 days (significance based on 95% confidence intervals). The same was observed for past month marijuana use (≥ 11 days vs. 1–10 days and ≥ 11 days vs. never used) and past month illicit drug use other than marijuana (used in past month vs. never used). Among 18- to 25-year-olds (Table 3.1.26), the prevalence or mean of all three indicators of dependence was significantly higher among persons who smoked marijuana on 11 or more days during the previous month compared to persons who had smoked marijuana on 1–10 days during the previous month or who had never used marijuana (significance based on 95% confidence intervals). In this

age group, dependence was also significantly more likely among persons who used any illicit substances other than marijuana during the previous month compared to never users. The situation with alcohol, however, was different. Two of the three indicators (first cigarette within 30 minutes and the NDSS) were especially high among persons who had previously used alcohol but had not done so during the previous month, while these two indicators were relatively low for the most frequent users of alcohol. For the other indicator (smoke >15 cigarettes per day), the prevalence was significantly higher for the most frequent alcohol users and binge drinkers when compared to the less frequent and never alcohol users and binge drinkers.

Summary

Initiation of cigarette smoking usually occurs during adolescence, although initiating cigarette smoking as a young adult is not uncommon. Among U.S. adults (30–39 years old) who have ever smoked daily, 88.2% did so as an adolescent (≤ 18 years old), while 10.8% tried their first cigarette in young adulthood (19–26 years old). Moreover, 65% began smoking daily in adolescence, while 31% began smoking daily as a young adult. There is heterogeneity in the developmental pathways that characterize the onset and progression of cigarette smoking during adolescence and young adulthood. For example, some young people begin smoking in early adolescence (12–13 years old), progress to daily smoking in late adolescence (17 years old), and stay daily smokers throughout young adulthood (18–26 years old), while others begin smoking later in adolescence (15–16 years old) and escalate to less than daily use in young adulthood (21 years old). Compared with adults, adolescents appear to display evidence of nicotine addiction at much lower levels of consumption, making quit attempts potentially more difficult for them (USDHHS 2010). Many young smokers have strong expectations of discontinuing use in the near future, but relatively few are able to do so.

Trends in Cigarette Smoking

This section describes trends in the prevalence and initiation of cigarette smoking among young people over time. Again, it relies primarily on data from MTF, YRBS, and NSDUH. Long-term trends in the prevalence of cigarette smoking among adolescents and young adults alike have been nonlinear during the last two decades, particularly since the publication in 1994 of the last Surgeon General's report focused on tobacco use among young people (USDHHS 1994; Nelson et al. 2008; CDC 2010a).

In the early 1990s, the prevalence of cigarette smoking began increasing until it hit a peak in the late 1990s, at the time of the Master Settlement Agreement (1998), when it began to decline for both adolescents (Nelson et al. 2008; CDC 2010a) and young adults (Nelson et al. 2008). Since 2003, however, the decline in the prevalence of cigarette smoking among young people overall has slowed considerably, and may have stopped altogether for some subgroups. Between 2003 and 2009, for example, the prevalence of current cigarette use declined more slowly than it did between 1997 and 2003 among female and Black high school students, while it remained stable (i.e., did not decline at all) among male, White, and Hispanic high school students, overall (CDC 2010e). Data from NYTS show that there has been no change between 2000 and 2009 in the percentage of middle and high school students who are susceptible to initiate smoking (CDC 2010e). Those who are susceptible to begin smoking are defined as never smokers who report being willing to try smoking cigarettes. Trends in susceptibility are not discussed in detail in this section; however, cross-sectional data are presented earlier in the chapter. Further details on these more recent trends in cigarette smoking over time are provided below. To achieve the national health objectives outlined for 2020, further reductions in cigarette smoking are necessary and will require sustained support. The target referenced in *Healthy People 2020* for current smoking among adolescents (9th–12th grades) is 16% (USDHHS 2000); in 2009, YRBS indicated that 19.5% of these students were current smokers (Table 3.1.2).

Ever Smoking a Cigarette

Trends over time in the prevalence of ever smoking a cigarette are provided in Figures 3.1.5–3.1.7 using data from MTF (Figures 3.1.5 and 3.1.6A–C) and YRBS (Figures 3.1.6D and 3.1.7). These figures present trends by grade level, gender, and race/ethnicity.

Figure 3.1.5A presents data from MTF that are stratified by grade level (8th, 10th, and 12th grades) and gender. Among 12th-grade students, the prevalence of ever smoking decreased from 1977 to 1992 by an average of about 1% per year (0.9% boys; 1.0%, girls). Then, from 1992 to 1997, it increased by an average of 0.7% per year (0.5%, boys; 0.8%, girls). From 1997 to 2010, it decreased again, but at a much higher average rate of about 2% per year (1.6%, boys; 2.0%, girls). In 1976, approximately three-quarters (75.6%, boys; 74.8%, girls) of 12th-grade students had ever smoked a cigarette, but by 1992, this figure had fallen to about five-eighths (63.5%, boys; 60.2%, girls). After increasing to 65.9% for boys and 64.4% for girls in 1997, the prevalence of ever smoking fell to less

than one-half (44.8%, boys; 38.9%, girls) of 12th-grade students in 2010. Among 10th-grade students (Figure 3.1.5C), from 1991 to 1996, ever smoking increased by an average of 1.2% (1.2%, boys; 1.3%, girls) per year. It then declined by an average of 2.5% per year (2.4%, boys; 2.5%, girls) from 1996 to 2008, and increased (overall) by 1.3% between 2008 and 2010 (1.9%, boys; 0.7%, girls). In 1991, more than one-half (55.5%, boys; 54.8%, girls) of all 10th-grade students were ever cigarette smokers. In 1996, this figure peaked (60.3%, boys; 60.3%, girls), then fell to about one-third (32.3%, boys; 31.0%, girls) in 2008, after which it rose slightly for boys to 34.2% in 2010 while reaching 31.8% for girls in that year. Among 8th-grade students (Figure 3.1.5B), from 1991 to 1996, ever smoking increased more steeply for girls (1.4% per year) than for boys (0.7% per year). The decline from 1996 to 2008, however, was the same for both genders, at 2.4% per year on average. Between 2008 and 2010, the decline in ever smoking among 8th-grade students stalled at about 21% for males and about 20% for females. In 1991, in 8th grade, 46.1% of boys and 41.7% of girls were ever smokers. After peaking in 1996 (49.5%, boys; 48.5%, girls), this figure also declined through 2008, when essentially one in five (20.8%, boys; 19.9%, girls) 8th-grade students had ever smoked. This decline in ever smoking stalled between 2008 and 2010, however, and remained at about 20% for both boys and girls.

Figure 3.1.6 presents data from MTF but this time stratified by grade level and race/ethnicity. Among 12th-grade students (Figure 3.1.6C), the decline in the prevalence of ever smoking from 1976 to 1990 was highest among Black students (2.0% per year), while the prevalence among White and Hispanic students decreased more slowly during this period (0.6% per year). From 1991 to 1997, the prevalence of ever smoking remained essentially flat for Black and Hispanic students but increased among White students (0.6% per year). From 1998 to 2010, prevalence decreased at similar rates for all three of the groups (per year: 1.5%, Blacks; 1.6%, Hispanics; 2.1%, Whites). In 1976, Black students had the highest prevalence of ever smoking among 12th-grade students (76.4% vs. 75.2% for White students and 70.1% for Hispanic students), but in 2010, they had the lowest prevalence (30.6% vs. 42.6% for Hispanic students and 44.5% for White students). Among 10th-grade students (Figure 3.1.6B), the annual increase from 1991 to 1996 in ever smoking was largest among Hispanic students (1.6 percentage points), followed by White (1.2 percentage points) and Black students (0.4 percentage points). Among Black 10th-grader students, the prevalence decreased by an average of 1.7% per year

between 1997 and 2009, then increased by 1.2% in 2010. White and Hispanic students decreased at a faster annual rate during 1996 to 2007 (2.6% and 2.5%, respectively). Between 2008 and 2010, White students increased their rate and Hispanic students stalled. In 1991, among 10th-grade students, Black students had the lowest prevalence of ever cigarette smoking (42.7% vs. 57.8% for Whites and 55.1% for Hispanics); in 2010, Black students continued to have the lowest prevalence (25.7% vs. 33.4% for Whites and 36.9% for Hispanics). For 8th-grade students (Figure 3.1.6A), the average increase in ever smoking from 1991 to 1997 was larger for Blacks (1.4% per year) than for Whites (0.7% per year), with the prevalence among Hispanic students remaining essentially flat during this period. From 1997 to 2010, annual declines were similar among White (2.3%) and Hispanic students (2.2%), with Black students at 1.8% per year. In 1991, among 8th-grade students, Blacks had the lowest prevalence of ever smoking (34.7% vs. 44.5% for White students and 50.8% for Hispanic students), but in 2010, White students had the lowest prevalence of ever smoking (19.2% vs. 19.5% for Black students and 21.6% for Hispanic students). Between 2008 and 2010, the rate of decline in ever cigarette smoking appears to have slowed in certain racial/ethnic subgroups and may have begun to increase again in others, such as White and Hispanic 10th-grade students.

YRBS data for high school students (9th–12th grade) shows that for ever smoked cigarettes, the prevalence did not change from 1991 (70.1%) to 1999 (70.4%), declined to 58.4% in 2003, and then declined more gradually, to 46.3% in 2009. Figure 3.1.7 presents YRBS data stratified by gender. In 1991, 70.6% of boys and 69.5% of girls had ever smoked cigarettes. The prevalence did not change through 1999 but then declined so that by 2009, less than one-half of high school students (46.3% of boys; 46.1% of girls) were ever smokers. Figure 3.1.6D also presents data from the YRBS, this time stratified by race/ethnicity. In 1991, Hispanic students had the highest prevalence of ever smoking cigarettes (75.3% vs. 67.2% for Black and 70.4% for White students). The prevalence of students who had ever smoked cigarettes did not change through 1999 among White and Black students, but then declined so that in 2009, 46.1% of White students and 43.5% of Black students were ever smokers. The prevalence of ever smoking cigarettes among Hispanic students did not change from 1991 to 1995, and then declined to 51.0% in 2009. In 2009, the prevalence of ever smoking cigarettes was still higher among Hispanic students than Black students, but there were no longer any statistically significant differences between Hispanic students and White students.

Current Cigarette Smoking

Trends in current cigarette smoking over time are presented separately here for adolescents and young adults. As with ever cigarette smoking, trends in current smoking have been nonlinear over time.

Adolescents

Trends in the prevalence of current cigarette smoking over the last three decades are provided in Figures 3.1.7–3.1.10, again using data from MTF (Figures 3.1.8 and 3.1.9) and YRBS (Figures 3.1.7, 3.1.9, and 3.1.10). These four figures present trends by several important demographic subgroups, including grade level, gender, race/ethnicity, and/or geographic region.

Figure 3.1.8 presents data from MTF that are stratified by grade level (8th, 10th, and 12th grades) and gender. In 1976, among 12th-grade students (Figure 3.1.8D), the prevalence of current cigarette smoking was somewhat higher for girls (39.1%) than for boys (37.7%). Among both male and female 12th-grade students, current smoking declined sharply through the remainder of the 1970s. In 1980, this decline stopped for boys and slowed considerably for girls. Across the 1980s, current cigarette smoking continued its decline among girls, but the prevalence began to rise slowly among boys, such that by 1990, male and female 12th-grade students were smoking at the same prevalence (29.1%). Then, in the early 1990s, current cigarette smoking began to escalate rapidly among both male and female 12th-grade students. This upturn peaked in 1997, when boys (37.3%) were smoking slightly more than girls (35.2%). Since 1997, current cigarette smoking has declined in both groups. In 2010, male 12th-grade students (21.9%) were more likely to smoke than were female 12th-grade students (15.7%). Trend data for current cigarette smoking among 8th and 10th-grade students are available only from 1991 onward; trends in these grade levels paralleled those of the 12th-grade students until 2008. In brief, the prevalence of current cigarette smoking in these groups also rose rapidly in the early- to mid-1990s, at which time it began to fall. Current smoking increased among 10th-grade male students (Figure 3.1.8C) from 2008 to 2010 and among 8th-grade students overall between 2009 and 2010. In 2010, 10th-grade male students (15.0%) were smoking at a higher prevalence than female students (12.1%), and male 8th-grade students (7.4%) (Figure 3.1.8B) were smoking at a slightly higher prevalence than were female 8th-grade students (6.8%). Like many of the trends in ever smoking reported above, the prevalence of current cigarette smoking from 2007 to 2010 in certain subgroups appears to have leveled off completely (e.g., female 10th-grade students and male 12th-grade students).

Figure 3.1.9 presents data from MTF, this time stratified by grade level and race/ethnicity. Among 12th-grade students (Figure 3.1.9C), the prevalence of current smoking declined sharply among all racial/ethnic groups from 1976 to 1980. For Black students, this decline continued for more than a decade, until 1992 (8.7%). For White students, the prevalence remained almost level throughout the 1980s and into the early 1990s. The prevalence of current cigarette smoking among Hispanic 12th-grade students, in contrast, remained steady through the mid-1980s, then declined until 1989. Although the prevalence of current smoking was relatively similar across 12th-grade students groups in 1976 (33.1.7%, Hispanics; 38.3%, Whites; 39.7%, Blacks), by the early 1990s, the three groups differed considerably. In 1990, Black students had the lowest prevalence of current smoking (12.0%), well below that of Hispanic students (23.2%) or White students (32.5%). The differences remained through much of the 1990s, and by 1999, the highest post-1990 values had been reached for all three ethnic groups. From 1999 to 2010, the prevalence of current smoking dropped particularly precipitously among White and Hispanic 12th-grade students—from 39.1% to 22.2% for Whites and from 29.6% to 14.4% for Hispanics. In contrast, among Black 12th-grade students, the prevalence of current smoking leveled out between 2004 and 2010. Among 8th (Figure 3.1.9A) and 10th-grade students (Figure 3.1.9B), the prevalence of current smoking declined from the mid- to late-1990s until about 2007, particularly among White and Hispanic students. Between 2007 and 2010, the decline slowed. In 2010, among 10th-grade students, 7.0% of Blacks, 12.3% of Hispanics, and 14.8% of Whites were current smokers. For Black and Hispanic students, these represented increases since 2007, when 5.8% of Black students and 10.1% of Hispanic students were current smokers. Among 8th-grade students Hispanics and Whites were much more closely aligned over time than they were for the other grade levels. In 2010, among 8th-grade students, 4.0% of Blacks, 7.0% of Hispanics, and 7.9% of Whites were current smokers. For White and Hispanic students, these represented slight increases from 2008.

Further information regarding trends in the prevalence of current cigarette smoking among 9th–12th-grade students by state is provided in Figure 3.1.10 using data from the state YRBS's (1991–2009). Figures 3.1.7 and 3.1.9D also present trend data from YRBS that are stratified by gender (Figure 3.1.7) and race/ethnicity (Figure 3.1.9D). Both figures underscore the trends observed in the MTF data, specifically the increase in current smoking from 1991 to 1997, followed by a substantial decline across strata of gender and race/ethnicity. In 1991, just over one-quarter (27.6% of boys, 27.3% of girls) of these high school students were current smokers (Figure 3.1.7).

In 1997, this figure had increased to more than one-third (37.7%, boys; 34.7%, girls). Among girls, current smoking decreased to 21.9% in 2003 and then continued to decline, but more slowly, to 19.1% in 2009. Among boys, current smoking decreased to 21.8% in 2003 and then remained stable through 2009 when 19.8% of boys were current smokers (CDC 2010a). In 1991, 12.6% of Black, 25.3% of Hispanic, and 30.9% of White students were current smokers (Figure 3.9D). Among Black students, current smoking increased from 1991 to 22.7% in 1997, declined to 15.1% in 2003, and then continued to decline, but more gradually, to 9.5% in 2009. Among Hispanic students, current smoking increased from 25.3% in 1991 to 34.0% in 1995, declined to 18.4% in 2003, and then remained stable through 2009 so that in 2009, 18.0% of Hispanic students were current smokers. Among White students, current smoking increased from 1991 to 39.7% in 1997, declined to 24.9% in 2003, and then remained stable so that in 2009, 22.5% of White students were current smokers (CDC 2010a).

Table 3.1.28 combines data from MTF across multiple years to provide reliable estimates of the prevalence of current smoking over time, from 1976 to 2007, for the three racial/ethnic groups described above among boys and girls separately (high school seniors only). These data mimic trends (for older age groups shown) in Figures 3.1.11 and 3.1.12. Among high school senior boys, the prevalence of current cigarette smoking among Black students was highest in 1976–1979 (33.1%) and lowest in 1990–1994 (11.6%). For White senior boys, current smoking peaked at 39.7% in 1995–1999 and reached its nadir in 1980–1984 (27.5%). Current smoking among Hispanic boys was highest in 1976–1979 (30.3%) and lowest in 2000–2007 (21.2%). Among high school senior girls, the prevalence of current smoking among Blacks was highest in 1976–1979 (33.6%) and lowest in 1990–1994 (8.6%) and 2000–2004 (8.8%). For White girls, current smoking peaked in 1995–1999 (39.5%), then fell to its lowest level, 28.5%, in 2000–2007. Current smoking among Hispanic girls was highest in 1976–1979 (31.4%) and lowest in 2000–2007 (15.9%).

As shown in Tables 3.1.2 and 3.1.3, among the three groups described above, the most recent estimates showed that the prevalence of current cigarette smoking among adolescents is generally lowest among Blacks, intermediate among Hispanics, and highest among Whites. Among adults in 2006 and 2007, the prevalence of cigarette smoking was statistically similar among Whites and Blacks and lower among Hispanics (CDC 2008a). Historically, the age of initiation has been slightly older in Black youth than among White youth (CDC 1991; Geronimus et al. 1993; USDHHS 1998; Moon-Howard 2003; Trinidad et al. 2004), raising the issue of whether the gains made in reducing

the prevalence of smoking among Black youth in the 1970s and 1980s could have been lost as they matured into young adulthood (NCI 2001). The 1998 Surgeon General's report on tobacco use among U.S. racial/ethnic minority groups presented data from NHIS for Black and White adults aged 20–24 years, 25–29 years, and 30–34 years that covered 1978–1980 to 1994–1995 (USDHHS 1998); the analyses there indicated that the prevalence of current smoking among those in the age ranges of 20–24 years, 25–29 years, and 30–34 years declined more for Blacks, regardless of gender, than for Whites, from 1978–1980 to 1994–1995. Here, Figures 3.1.11A–E and 3.1.12A–C and Table 3.1.29 update the previous analyses to 2009 and expand them to include Hispanics and persons 35–39 years of age and 40–44 years of age.

As revealed in Figures 3.1.11A–E, in 1978–1980, among persons in all five age groups (i.e., from 20–24 years up through 40–44 years), the prevalence of smoking was at least as high among Blacks as among Whites. Among 20- to 24-year-olds, prevalence among Blacks dropped below that of Whites by 1983–1985. In addition, prevalence among Blacks dropped below that of Whites by 1990–1992 for 25- to 29-year-olds, by 1997–1998 among 30- to 34-year-olds, and by 1999–2001 among 35- to 39-year-olds. Among 40- to 44-year-olds, prevalence was higher among Blacks than among Whites during 1990–1995, but it dropped to be marginally lower than that of Whites in 2005–2009. The trend lines for Blacks in all five age groups are presented in Figure 3.1.12B, which suggests that the drops observed among Black high school seniors during the 1970s and 1980s (Figure 3.1.9C) persisted as these seniors matured into young adulthood and even through the ages of 35–39 years.

Jemal and colleagues (2009) charted gender-specific incidence and mortality rates for lung cancer during 1992–2006 among 20- to 39-year-old Blacks and Whites. Although incidence and mortality decreased significantly for male and female Blacks and Whites, prevalence decreased more rapidly among Blacks of both genders. For example, from 1992–1994 to 2004–2006, the Black/White mortality rate ratio (with 95% CI) decreased from 2.16 (1.90–2.44) to 1.28 (1.05–1.55) among men and from 1.47 (1.25–1.71) to 0.97 (0.78–1.19) among women. The authors concluded that the steeper declines in incidence of lung cancer and related mortality rates among young Blacks were due primarily to the steeper decline in smoking prevalence among Black adolescents and young adults.

Similar patterning of trends among young adults on the basis of trends for 12th-grade students was not observed for Hispanics (Figure 3.1.12A) or for Whites (Figure 3.1.12C). For example, the sharp decline in prevalence among Hispanic 12th-grade students observed after 2000 (Figure 3.1.9C) was not reflected in NHIS data for

20- to 24-year-old Hispanics in 2002–2004 or 2005–2006 (Figures 3.1.11A and 3.1.12A). In addition, the sharp increase observed among White 12th-grade students during 1992–1998 (Figure 3.1.9C) was not observed among 20- to 24-year-old Whites (Figure 3.1.11A). The slight increase in prevalence among 20- to 24-year-old Whites that began in 1987–1988 and ended in 1997–1998 might have been influenced during 1994–1998 by trends in cigarette smoking among White 12th-grade students (NCI 2008). However, the increase in the prevalence among White 12th-grade students during this time period (1997–1998) did not then transfer to higher prevalence estimates among 20- to 24-year-olds subsequent to 1998, as might be expected.

Because trends in current cigarette smoking over time by socioeconomic status are difficult to distinguish for adolescents, they are not shown here. Recent publications from the MTF group (Bachman et al. 2010, 2011) suggest that differences in current cigarette smoking (and the use of smokeless tobacco and cigars, as well) by socioeconomic status are modified by race/ethnicity. The effect of lower socioeconomic status (as defined by parental education levels) on tobacco use among adolescents is most pronounced among White and younger (8th and 10th grades) adolescents (Bachman et al. 2010, 2011). However, the large proportions of Blacks and Hispanics in the lowest socioeconomic group may mask effects for these subpopulations that can be readily discerned among Whites.

Young Adults

The trends over time in current cigarette smoking among adolescents described above are consistent with the trends among young adults reported recently by Nelson and colleagues (2008). In that report, Nelson and coworkers described long-term trends in current cigarette smoking among adolescents and young adults by using data from MTF and NHIS, respectively. The analysis of the NHIS data considered young adults 18–24 years of age and used responses from NHIS (an annual survey) for 1974 to 2005. Overall, the long-term trends in current smoking for young adults were similar to the trends described above for adolescents. Notably, changes in the prevalence of current smoking among young adults lagged a few years behind the changes for adolescents, providing evidence for a cohort effect (Nelson et al. 2008). This might also reflect changes in patterns of smoking behavior among young adults, as the percentage of ever smokers who become regular smokers between the ages of 19 and 21 has increased since the last Surgeon General's report in 1994 (Lantz 2003).

During much of the period of interest, the gender gap in cigarette smoking was wider for young adults than for adolescents (Nelson et al. 2008). In 1974, the prevalence of current cigarette smoking was higher for young adult men than for young adult women. Throughout the rest of the 1970s, into the mid-1980s, the prevalence rate remained steady among young adult women but declined for young adult men. As a result, through much of the 1980s, the prevalence of current cigarette smoking was about the same for young adult women and their male counterparts. Toward the end of the 1980s, however, the prevalence of current smoking began to decline at a faster speed for young adult women than for young adult men. In the 1990s, most of the increase in the prevalence of current smoking among young adults occurred in men; because of this increase, the prevalence of current cigarette smoking was about 5% higher among young adult men than in their female counterparts from the mid-1990s to 2005 (Nelson et al. 2008).

The trends in current cigarette smoking among young adults during the period researched by Nelson and colleagues (2008) differed by race/ethnicity as well. Figures 3.1.13 and 3.1.14 update the study by Nelson and colleagues (2008). Using NSDUH data, the prevalence of current cigarette smoking was plotted from 2002 to 2010 by gender (Figure 3.1.13) and race/ethnicity (Figure 3.1.14). Declines in current cigarette smoking began to stall among young adult males in 2006 and young adult females in 2007, but these declines continued between 2009 and 2010. The estimated prevalence of current cigarette smoking among young adult males in 2010 was significantly lower than the estimate in 2009 ($p < 0.05$). Similarly, for young adult females, the prevalence of current cigarette smoking in 2010 was significantly lower than the prevalence estimate in 2009 ($p < 0.05$). These phenomena are also reflected in Figure 3.1.14. Decreases among Whites, Blacks, and Hispanics between 2009 and 2010 were not significant. Although no statistical tests were applied across the entire 2002–2010 period, prevalence may have decreased among Blacks and may be increasing, by comparison, among Hispanics, after what may have been a significant drop for that group from 2003 to 2006. Figure 3.1.15 also presents data from NSDUH that show differences in current cigarette smoking from 2005 to 2010 by socioeconomic status. Across all time points, smoking was least prevalent in the highest socioeconomic group (defined as 200% or more of the poverty level).

Table 3.1.29 provides estimates of 20- to 44-year-olds who identified themselves as current smoker from 1978–2009. For Whites, the prevalence of current smoking among young adults was consistent from the late 1970s

through the early 1980s; from there, it declined slightly over time through the early 1990s, when it began to rise slowly through the late 1990s before decreasing slightly through 2005. For Blacks, current cigarette smoking declined precipitously from the early 1980s through the mid-1990s, then increased through the late 1990s, after which it began to decline again to 2005. For Hispanics, the prevalence of current cigarette smoking declined rapidly from the late 1970s through the late 1980s; from there, it remained steady through the 1990s, then began to decline again to 2005. In 2005, the prevalence of current cigarette smoking was highest for Whites and very similar for Blacks and Hispanics (Nelson et al. 2008).

The differences by educational level in current cigarette smoking over time (Nelson et al. 2008) among young adults are striking. Compared with those having at least a high school education, current cigarette smoking among those with less than a high school education has declined more rapidly over time, and this decline has been consistent since the early 1980s. In addition, the increases in the prevalence of current cigarette smoking for young adults in the late 1990s were observed only among those subgroups with at least a high school diploma. In 2005, current cigarette smoking was least prevalent among young adults with more than a high school diploma, and the prevalence was reasonably similar between young adults with just a high school diploma and those who had not graduated from high school. By contrast, in 1974 the prevalence of current cigarette smoking was approximately 15% higher among those with less than a high school diploma than among those who had graduated from high school (Nelson et al. 2008).

Intensity of Cigarette Smoking

Trends in the intensity of smoking among high school seniors, as derived from MTF data, indicate that all levels of smoking have declined since 1976 (Figure 3.1.16). The drop in heavy smoking (one-half pack or more of cigarettes per day in the last 30 days) has been steepest. In 1976, 19.2% of seniors were heavy smokers, but in 2010, only 4.7% were. The decreases in light smoking (<1 cigarette per day in the last 30 days) and intermittent smoking (1–5 cigarettes per day in the last 30 days) have been more subtle. In 1976, 10.0% of seniors were light smokers, and in 2010, 8.5% were. In 1976, 9.6% of seniors were intermittent smokers; in 2010, 6.1% were. The proportion of seniors who were ever smokers but had not smoked in the past 30 days declined from 36.5% in 1976 to 23.0% in 2010.

Preferences for Particular Cigarette Brands

Trends in preferences for cigarette brands over time, from 2002 to 2010, are illustrated in Figure 3.1.17 for current smokers 12–17 years of age and in Figure 3.1.18 for current smokers 18–25 years of age; the data are stratified by gender and based on NSDUH. These data are based on responses to a question about the brand that interviewees smoked most often. Over this period, Marlboro, Newport, and Camel, respectively, were the three brands of cigarettes preferred by adolescents and young adults alike. Marlboro was preferred by about 50% of adolescent smokers, while approximately 25% preferred Newport and 10% Camel. Among young adults, Marlboro was also preferred by about 50% of smokers, while about 20% preferred Newport and about 15% preferred Camel. From 2008 to 2010, preference for Newports increased among adolescent females, while preference for Camels decreased slightly and for Marlboros by a somewhat larger amount. Among adolescent males during the same time period, preference for Marlboros increased slightly, while preference for Camels declined.

There is evidence to suggest that the use of mentholated brands of cigarettes has increased in recent years. For example, according to a recent report from SAMHSA (2009d), the prevalence of smoking menthol cigarettes among current smokers aged 12 and older increased from 31.0% in 2004 to 33.9% in 2008. The most pronounced increases were among adolescents aged 12–17 years and young adults aged 18–25 years. In 2008, 47.7% of current adolescent smokers smoked menthol cigarettes, as did 40.8% of young adult smokers (SAMHSA 2009d). Among adolescent smokers, this was an 11% increase over the prevalence in 2004, a statistically significant increase. This increase was driven exclusively by a jump in the use of mentholated cigarettes among White adolescents and young adults. Importantly, this study also showed that past-month smoking of mentholated cigarettes was more prevalent among recent initiates than among longer-term smokers. This is in contrast to findings from a prior analysis of 2006 NYTS data (Hersey et al. 2010).

Age or Grade When Smoking Begins

Tracking the initiation of cigarette smoking over time can provide helpful information to policymakers and researchers alike, as these trends reveal emerging patterns of tobacco use. In turn, these patterns can be used to drive the development of appropriate policies and programs focused on reducing tobacco use among youth. Historical data suggest that, over the last century (the 1900s), young people living in the United States started to smoke at

progressively younger ages. By 1955–1966, women, especially, were smoking at younger ages (USDHHS 1994). This report focuses on trends in the initiation of smoking during the twenty-first century.

Tables 3.1.30 and 3.1.31 provide estimates of the initiation of cigarette smoking using data from NSDUH (2006–2010). Here, initiates are defined as those who started smoking cigarettes in the 12 months before the survey. Estimates for each year were produced separately using data obtained from the survey conducted that year. This approach minimizes recall bias and provides particularly timely information on the incidence of smoking among youth. Table 3.1.30 focuses on adolescents only; overall, the prevalence of initiation in this group decreased over time, between 2006 and 2010 ($p < 0.05$). In 2006, 6.9% of girls began smoking cigarettes, compared with 6.3% of boys. In 2010, the prevalence of initiation was 5.7% for boys and 6.0% for girls. The decrease among girls was statistically significant ($p < 0.05$) as was the decrease among Whites overall. Table 3.1.31 focuses on young adults only; overall, the prevalence of initiation in this group was steady over time, with no significant differences from 2006 to 2010 ($p > 0.05$). In 2006, 8.7% of young adults began to smoke cigarettes, and in 2010, this figure was 7.9%.

Although the percentage of Black initiates among adolescents and young adults was smaller than that for Whites and Hispanics, other data show that smoking remains a problem among Black adults (Table 3.1.29). Although Table 3.1.30 reveals a lower rate of initiation among Black youth than among their White counterparts, Black adults (especially men) have a prevalence of smoking that is similar to that for White adults, experience a higher burden of tobacco-related disease (e.g., lung cancer), and quit smoking less successfully (USDHHS 1998).

Attempts to Quit Smoking

According to multiple surveys of high school seniors conducted by MTF over time, a substantial percentage of seniors who smoked wanted to stop immediately (“now” in the survey) (Table 3.1.32). In 1990–1994, 42.7% and 45.5% of high school seniors who were current and daily smokers, respectively, wanted to stop smoking cigarettes immediately. For 2000–2004, those figures were 44.8% and 47.4%, respectively, but for 2005–2009, they decreased significantly to 34.4% and 37.7% (significance determined by 95% confidence intervals). In 1990–1994, just under one-third (31.7%) of students who were current smokers had tried at least once to stop smoking; for 2005–2009, this estimate was 26.5%. In 1990–1994, 44.4% of students who were daily smokers had tried at least once to stop smoking, but failed; in 2005–2009, this

figure was down to 38.9%. Trends in the percentage of high school seniors who at some time had smoked regularly but had not smoked during the preceding 30 days (i.e., were former smokers) have been erratic over time (Figure 3.1.19), but generally speaking, they have followed trends in the prevalence of current smoking over time. In the 1970s, as the percentage of current smokers declined, the percentage of former smokers went up, in turn. Over the aggregate period of 1980 to 1990, both figures did not change much. In the early 1990s, the percentage of former smokers decreased as the percentage of current smokers increased. By the mid- to late 1990s, however, the percentage of former smokers again began to increase as current smoking, in turn, decreased. The differential in these trends by gender (male vs. female) seems to have been negligible (Figure 3.1.19). In 2010, more females than males were classified as former smokers.

Summary

Declines in cigarette smoking among young people since the Master Settlement Agreement have slowed and may have begun to stall. This is true for adolescents and young adults alike. Since the last Surgeon General’s report on tobacco use among young people (USDHHS 1994) was published, the prevalence of cigarette smoking among adolescents has remained highest among Whites, followed by Hispanics and then Blacks (some racial subgroups such as American Indian/Alaskan Native are not large enough to provide reliable estimates and trend data for comparison). Overall, the prevalence of smoking has been reasonably similar for boys and girls during this time period. Differences over time in the prevalence of cigarette smoking by gender within racial/ethnic subgroups were not considered in this chapter. The rates for initiation of cigarette smoking have remained essentially flat among adolescents and young adults in recent years (2006–2010). Interest in quitting smoking among adolescents has fallen. Marlboro, Camel, and Newport have consistently been the most preferred brands of cigarettes for adolescents and young adults in recent years (2002–2010). The order of preference of these three brands has remained consistent over this time period as well.

Trends in Knowledge and Attitudes About Smoking

Trends in the Perceived Health Risks of Cigarette Smoking

Data from MTF allow trends in beliefs about the health risks associated with cigarette smoking to be

compared with trends in actual smoking behavior. As illustrated in Figure 3.1.20, during the last three and one-half decades, these trends mirrored each other among high school seniors. From 1976 to 2010, the overall decline in the prevalence of ever smoking (defined here as having smoked a cigarette at least once or twice during one's lifetime) was accompanied by an increase in the percentage of high school seniors who believed that smoking cigarettes was a serious health risk. This trend was observed for both male and female students and for White, Black, and Hispanic students (MTF, unpublished data). The proportion of seniors who believed that cigarette smoking entails a great risk to health increased from 56.4% in 1976 to 75.0% in 2010; during the same period, the percentage of high school seniors who had ever smoked a cigarette fell from 75.4% to 42.2%. Regardless, as the figures for 2010 show, almost one-fourth of seniors in that year still did not believe that cigarette smoking presented a great risk to health.

Trends in Perceptions of Cigarette Smoking

According to MTF surveys, the percentage of high school students who considered smoking a "dirty habit" increased slightly, but steadily, over time, from 1991 to 2010. As shown in Figure 3.1.21, differences in perceptions across grade levels (8th, 10th, and 12th) were negligible over time. In 2010, 72.4% of 8th-grade students, 71.7% of 10th-grade students, and 73.1% of 12th-grade students believed that cigarette smoking is a "dirty habit," up from 71.4%, 70.7%, and 71.6%, respectively, in 1991.

Throughout the 1980s, the proportion of high school seniors who believed that their close friends would disapprove of their smoking heavily remained quite steady (Figure 3.1.22). This figure declined in the first half of the 1990s, however, as smoking climbed. Then, from 1997 it increased, peaking in 2008, after which it declined slightly to 2010. In 1980, 74.4% of seniors believed their friends would not approve of their smoking one pack or more of cigarettes; in 2008, this figure was 82.5% (and in 2010, it was 81.4%).

Trends in Perceptions of Cigarette Smokers

Data from MTF indicate that most high school seniors prefer to date nonsmokers. Over time, the trends in this preference have inversely paralleled those for cigarette smoking (Figure 3.1.23). In 1990, the proportion of high school seniors who preferred to date nonsmokers was somewhat higher than it was in 1980, but this figure dropped in the early 1990s as smoking became more prevalent, and it increased in the late 1990s as smoking began

its decline. After about 1988, the differences between male and female students were quite modest (Figure 3.1.23). In 1981, 61.9% of female students and 71.6% of male students preferred to date nonsmokers; this discrepancy narrowed over time (fairly rapidly in the 1980s) while the overall prevalence of this preference increased, such that by 2007, 76.0% of female students and 77.5% of male students preferred to date nonsmokers. In 2010, these figures had dropped slightly to 73.7% of female students and 73.5% of male students. These trends were also consistent across racial/ethnic categories (Figure 3.1.24), although the data from these annual surveys for Black and Hispanic students indicated much more variability for these groups than for White students. In 1981, 67.4% of White students, 61.4% of Black students, and 61.1% of Hispanic students preferred to date nonsmokers; in 2007, these proportions had increased to 76.9%, 73.5%, and 77.9%, respectively. In 2010, these figures decreased slightly again to 74.0% of White students, 69.7% of Black students, and 73.2% of Hispanic students. Recalling the results above for perceived health risks of cigarette smoking, in 2010, about one-fourth of seniors were willing to date smokers.

In 2010, about two-thirds of adolescents were concerned about other people smoking around them, while about one-third were not (Figure 3.1.25). Trends in the proportion of high school students who did not mind being around others who smoked also paralleled those of cigarette smoking over time. For example, as smoking increased in the 1990s, young people's tolerance of others smoking around them did, too. When smoking began its decline around 1997, so, also, did students' willingness to be around others who smoked (Figure 3.1.25). These trends were similar across grade levels over time, with students in higher grades (10th or 12th) appearing to be more tolerant of other smokers than were students in 8th-grade students. According to the 2010 MTF, 27.1% of 8th-grade students, 30.3% of 10th-grade students, and 32.4% of 12th-grade students did not mind being around other people who smoked.

Summary

The percentages of high school seniors who believe that (a) cigarette smoking is a serious health risk and (b) their close friends would disapprove of their heavy smoking of cigarettes have consistently increased since the publication of the last Surgeon General's report on tobacco use among young people, in 1994. The percentages of high school seniors who (a) believe that smoking is a "dirty habit" and (b) prefer to date nonsmokers have also increased since 1994, although not to the same degree as the other two attitudes.

Cigarette Smoking, Smokeless Tobacco Use, and the Use of Other Drugs

In this part of the chapter, detailed information on high school seniors' usage patterns for cigarettes, smokeless tobacco, and other drugs (i.e. alcohol, marijuana, cocaine, and inhalants) is provided. As noted in the 1994 Surgeon General's report on preventing tobacco use among young people, the use of these substances often covaries among youth (USDHHS 1994). In addition, cigarette smoking is often considered a "gateway drug" and can precede smokeless tobacco use and other types of drug use (USDHHS 1994). The prevalence of past-month use of each substance will be considered in this section, and the ages at first use of each substance (based on self-reports) will be compared. Data from MTF are presented in Tables 3.1.33–3.1.37.

Prevalence of Cigarette Smoking, Smokeless Tobacco Use, and the Use of Other Drugs

Among high school senior males in 2002–2007, smoking was quite common among smokeless tobacco users and users of other licit and illicit drugs (Table 3.1.33). In all, 41.6% of male students who were alcohol users were also cigarette smokers, while 56.6%, 59.9%, and 64.0% of those who smoked marijuana, used smokeless tobacco, and used inhalants, respectively, were cigarette smokers as well. Three-quarters of those who used cocaine (75.7%) also smoked cigarettes. The prevalence of cigarette smoking was 2.6 (for inhalants) to 5.2 (for alcohol) times as high among users of these drugs as among nonusers.

Although more than one-half of high school senior male drinkers (58.4%) did not smoke, the great majority (83.9%) of smokers in this population were drinkers (Table 3.1.33). Just over one-half (53.0%) of cigarette smokers were marijuana smokers, 8.2% were cocaine users, 4.7% used inhalants, and 29.3% used smokeless tobacco (see also "Co-occurrence of Tobacco Use Behaviors" later in this chapter). The prevalence of other drug use was from 2.2 (for alcohol use) to 9.1 (for cocaine use) times as high among cigarette smokers as among nonsmokers.

Patterns were very similar among high school senior females (Table 3.1.34). Two of every five (39.7%) senior girls who drank alcohol smoked cigarettes, and 60.6%, 78.0%, and 62.3% of those who smoked marijuana, used cocaine, and used inhalants, respectively, were cigarette smokers as well (Table 3.1.34). The prevalence of cigarette smoking was 2.9 (for inhalants) to 4.8 (for alcohol) times

as high among users of these drugs as among nonusers. Although three-fifths of female students who drank (60.3%) did not smoke cigarettes, four out of five female students who smoked cigarettes (78.8%) drank alcohol. An estimated 45.4% of cigarette smokers were marijuana users, 6.2% were cocaine users, and 3.3% used inhalants (see also "Co-occurrence of Tobacco Use Behaviors" later in this chapter). Among female high school seniors, the prevalence of other drug use was from 2.3 (for alcohol use) to 12.4 (for cocaine use) times as high among cigarette smokers as among nonsmokers (Table 3.1.34).

Grade When Cigarette Smoking, Smokeless Tobacco Use, and Other Drug Use Begins

Data from several recent MTF surveys were merged to provide reliable estimates of the grade at which seniors tried cigarettes, smokeless tobacco, alcohol, marijuana, and cocaine for the first time (Figure 3.1.26). Among those who had ever smoked a cigarette, 22.1% had tried one by the sixth grade and 52.4% by the eighth grade. Among those who had ever used smokeless tobacco, 10.7% had done so by the sixth grade and 28.5% by the eighth grade. Compared with cigarettes, proportionately fewer users of alcohol and marijuana initiated use before the ninth grade. Similarly, proportionately fewer cocaine users than users of smokeless tobacco had initiated use this early.

Per data from the MTF, by the 12th grade, 19.8% of high school seniors had not tried cigarettes or alcohol, 48.4% had tried both, 1.2% had tried cigarettes but not alcohol, and 30.6% had tried alcohol but not cigarettes (Table 3.1.35). Of those students who had tried both cigarettes and alcohol by 12th grade, 40.8% had tried cigarettes before trying alcohol, while 36.4% had tried alcohol and cigarettes at about the same time. In all, 44.8% of these high school seniors had not tried cigarettes or marijuana by the 12th grade (Table 3.1.36), 35.2% had tried both, 12.5% had tried cigarettes but not marijuana, and 7.5% had tried marijuana but not cigarettes. Of those who had tried both by the 12th grade, more than one-half (53.6%) had tried cigarettes before marijuana, and 35.3% had tried marijuana and cigarettes at about the same time. Overall, 52.3% had not tried cigarettes or cocaine, 6.7% had tried both, 40.7% had tried cigarettes but not cocaine, and 0.3% had tried cocaine but not cigarettes (Table 3.1.37). Of those who had tried both by 12th grade, 84.9% tried cigarettes before trying cocaine, and 12.5% tried the two about the same time. These data support the contention that the use of tobacco occurs early in the sequence of drug use for young adolescents and may be considered a "gateway" drug.

Summary

Cigarettes are often considered a “gateway drug,” and smoking cigarettes frequently precedes the use of smokeless tobacco and other types of drugs. Use of cigarettes, at a minimum, often covaries with smokeless tobacco and the use of other drugs. Among high school male cigarette smokers, for example, an estimated 84% also drink alcohol, 53% smoke marijuana, 29% use smokeless tobacco, 8% use cocaine, and 5% use inhalants. These percentages are much higher than the percentages of smokeless tobacco use and other types of drug use among male nonsmokers attending high school. Similar differences are observed among high school girls. Although cigarette smoking and the use of alcohol are initiated at a similar age, the initiation of cigarette smoking typically precedes the use of marijuana or cocaine.

Cigarette Smoking, Other Health-Related Behaviors, and Obesity

Research suggests that health-compromising behaviors co-occur among adolescents (Brener and Collins 1998; Weden and Zabin 2005). Incorporating data collected from repeated surveys by YRBS of high school seniors from 1991 to 2009, Figure 3.1.27 illustrates how some of these health-compromising behaviors covary with cigarette smoking. Here, behaviors are considered that relate to (1) drug use (i.e., use of alcohol, marijuana, cocaine), (2) smokeless tobacco and cigar use, (3) sexual activity, (4) suicidal ideation (i.e., seriously contemplating suicide), (5) violence (i.e., carrying a weapon, engaging in a physical fight), and (6) weight and weight-related behaviors. The prevalence of each behavior is mapped over time to compare current smokers with nonsmokers. Here, current smokers were defined as those who smoked on at least 1 or 2 days during the past 30 days and nonsmokers are defined as those who did not smoking during the past 30 days. Statistical tests of the trends across time are reported below, as are statistical tests at the earliest (i.e., 1991) and latest (i.e., 2009) survey points, so as to compare the two groups of interest. Covariation in health risk behaviors can have important implications for designing interventions.

Some evidence suggests that adolescent cigarette smokers have “hardened”—or become more prone to deviant behaviors, like alcohol use—over the last few decades (Chassin et al. 2007; Curry et al. 2009). For example, in a study comparing adolescent smokers in 1980 with adolescent smokers in 2001, Chassin and colleagues (2007) found some evidence to suggest that adolescent smokers were more “deviance prone” in 2001 than in 1980.

This finding was especially strong for regular smokers in middle school who, over this period of time, showed the largest increase in tolerance of deviance and significant decreases in positive beliefs about academics, positive parental influences, and positive peer relations (Chassin et al. 2007). With the decreasing prevalence of smoking in the population as a whole, particularly among adolescents, youth who smoke today may be more committed to smoking than were adolescents in previous decades. They might also be more dependent on nicotine and have more difficulty in quitting smoking (Curry et al. 2009).

Drug Use

As shown in Figure 3.1.27, the prevalence of current alcohol use among high school seniors from 1991 to 2009 remained consistent over time for both current smokers and nonsmokers, with the prevalence of current alcohol use much higher for current smokers than for nonsmokers. In 1991, the prevalence of current alcohol use was 87.7% among current smokers but only 46.9% among nonsmokers ($p < 0.05$ for comparison between current smokers and nonsmokers); in 2009, the corresponding figures were 85.0% and 39.4% ($p < 0.05$ for comparison between current smokers and nonsmokers). By comparison, the percentage of students who ever rode with a driver who had been drinking alcohol among high school seniors declined from 1991 to 2009 for both current smokers ($p < 0.05$, linear trend) and nonsmokers ($p < 0.05$, linear trend). Again, in each year, the prevalence of riding with a driver who had been drinking alcohol among high school seniors was higher for current smokers than for nonsmokers. In 1991, just over two-thirds (69.9%) of current smokers had ever ridden with someone who had been drinking alcohol among high school seniors versus just under one-third (32.7%) of nonsmokers who had done so ($p < 0.05$ for comparison between current smokers and nonsmokers). By 2009, the figures had declined to essentially one-half (50.4%) of current smokers and 19.7% of nonsmokers ($p < 0.05$ for comparison between current smokers and nonsmokers).

The prevalence of current marijuana use among high school seniors increased over time from 1991 to 2009 for both current cigarette smokers ($p < 0.05$, linear trend; $p < 0.05$, quadratic trend) and nonsmokers ($p < 0.05$, linear trend; $p < 0.05$, quadratic trend). As with the first two behaviors discussed above, in each year the prevalence of current marijuana use among high school seniors was higher for current smokers than for nonsmokers. In 1991, the prevalence of current marijuana use among high school seniors was 41.9% for current smokers and 7.1% among nonsmokers ($p < 0.05$ for comparison between current smokers and nonsmokers); in 2009, these rates were

45.0% and 11.8%, respectively ($p < 0.05$ for comparison between current smokers and nonsmokers). By comparison, from 1991 to 2009 the prevalence of current cocaine use among high school seniors stayed flat among nonsmokers, but it increased and then declined somewhat for current smokers ($p < 0.05$, linear trend; $p < 0.05$, quadratic trend). In each year, the prevalence of current cocaine use among high school seniors was higher among current smokers than among nonsmokers. For example, in 1991, among high school seniors an estimated 5.2% of current cigarette smokers currently used cocaine, compared with 0.7% of nonsmokers ($p < 0.05$ for comparison between current smokers and nonsmokers). By 2009, the prevalence of cocaine use among high school seniors had risen to 9.5% among current smokers, but among nonsmokers it was 0.4% ($p < 0.05$ for comparison between current smokers and nonsmokers).

Smokeless Tobacco and Cigar Use

From 1995 to 2009, the prevalence of smokeless tobacco use among high school seniors remained generally steady among nonsmokers, with a slight decrease in 2003 ($p < 0.05$, quadratic trend); among current smokers, it declined in the late 1990s but then began to increase in the early 2000s ($p < 0.05$, quadratic trend). At each survey, the prevalence of smokeless tobacco use was higher among current smokers than among nonsmokers. In 1995, 20.8% of current smokers used smokeless tobacco versus 5.0% of nonsmokers ($p < 0.05$ for comparison between current smokers and nonsmokers); in 2009, these values were 24.9% and 4.2%, respectively ($p < 0.05$ for comparison between current smokers and nonsmokers). From 1997 to 2009, the prevalence of cigar smoking did not change significantly for either current smokers or nonsmokers, with prevalence always higher for current smokers. In 1997, the prevalence of cigar smoking was 42.3% among current cigarette smokers compared with 11.6% among nonsmokers ($p < 0.05$ for comparison between current smokers and nonsmokers); in 2009, these figures were 46.8% and 7.5%, respectively ($p < 0.05$ for comparison between current smokers and nonsmokers).

Sexual Activity

Just as other tobacco use and many forms of other drug use are more common among young cigarette smokers than among nonsmokers, so, too, is sexual activity more common among young smokers. The percentage of high school seniors who had ever had sexual intercourse decreased through the mid-1990s among current smokers and nonsmokers alike, but for both groups there was a significant increase from 2001 to 2009 ($p < 0.05$, linear

trends; $p < 0.05$, quadratic trends). At each survey, sexual activity among high school seniors was more prevalent among current smokers. In 1991, 83.2% of current cigarette smokers had ever had intercourse versus 59.3% of nonsmokers ($p < 0.05$ for comparison between current smokers and nonsmokers); these figures dipped to 75.9% and 50.7%, respectively, in 1997. In 2009, the percentages were 85.5% of current smokers and 53.1% of nonsmokers ($p < 0.05$ for comparison between current smokers and nonsmokers). Use of a condom at last intercourse increased significantly from 1991 to 2009 for both current smokers ($p < 0.05$, linear trend; $p < 0.05$, quadratic trend) and nonsmokers ($p < 0.05$, linear trend), with use of a condom always more prevalent among those who did not smoke. In 1991, 44.8% of nonsmokers had used a condom at last intercourse compared with 35.9% of current cigarette smokers ($p < 0.05$ for comparison between current smokers and nonsmokers); in 2009, these figures were statistically similar at 56.6% and 50.9%, respectively ($p < 0.05$).

Suicide Ideation and Violence

From 1991 to 2009, suicidal ideation among high school seniors (defined as seriously considering attempting suicide) decreased significantly among both nonsmokers ($p < 0.05$, linear trend; $p < 0.05$, quadratic trend) and current smokers ($p < 0.05$, linear trend). At each survey, suicidal ideation was more prevalent among current smokers than among nonsmokers. In 1991, about one in every three (35.6%) current cigarette smokers had seriously considered attempting suicide in the last year, compared with one in five (21.5%) nonsmokers ($p < 0.05$ for comparison between current smokers and nonsmokers); in 2009, these figures were 17.4% and 10.1%, respectively ($p < 0.05$ for comparison between current smokers and nonsmokers). The prevalence of carrying a weapon fluctuated from 1991 to 2009 for both current smokers ($p < 0.05$, linear trend; $p < 0.05$, quadratic trend) and nonsmokers ($p < 0.05$, quadratic trend). In addition, the prevalence of engaging in a physical fight changed from 1991 to 2009 for both current smokers ($p < 0.05$, linear trend; $p < 0.05$) and nonsmokers ($p < 0.05$, quadratic trend). In 1991, among high school seniors 31.3% of current smokers had carried a weapon and 44.6% had engaged in a physical fight over the last 12 months versus 16.7% and 28.4% of nonsmokers, respectively ($p < 0.05$ for comparisons between current smokers and nonsmokers). In 1997, these percentages were 19.9% and 34.3%, respectively, for current smokers; in 1999, they were down to 10.8% and 20.9% for nonsmokers. In 2009, prevalence of the two behaviors had increased to 28.4% and 42.1% for current smokers,

but there was relatively little change for nonsmokers, as shown by their prevalence of 12.1% and 17.8%, respectively ($p < 0.05$ for comparisons between current smokers and nonsmokers).

Obesity and Weight-Related Behaviors

The prevalence of obesity (defined as ≥ 95 th percentile for body mass index (BMI; weight in kilograms divided by height in meters squared) by age and gender among high school senior current smokers and nonsmokers is considered over time from 1999 to 2009, in Figure 3.1.27M. At the first survey, obesity was significantly more prevalent among nonsmokers than among current smokers, but this situation had reversed itself by 2009. In 1999, 6.2% of current smokers and 9.3% of nonsmokers were categorized as obese ($p < 0.05$ for comparison between current smokers and nonsmokers), but by 2009, the prevalence of obesity had risen to 16.5% among current smokers compared with 12.3% of nonsmokers (difference not significant). During the same 8-year period, the prevalence of overweight (defined as ≥ 85 th but < 95 th percentile for BMI, by age and gender) did not change significantly for either nonsmokers or current smokers. Furthermore, there were no significant differences between these two groups at either the first or last survey. In 1999, 13.4% of current smokers were categorized as overweight versus 15.0% of nonsmokers; in 2009, the figures were 14.1% and 15.1%, respectively.

Also from 1999 to 2009, the percentage high school seniors who watched television for 3 or more hours per day was similar for both current smokers and nonsmokers, and there were no significant changes over time for either group. At each survey, a higher percentage of nonsmokers than current smokers engaged in this amount of TV watching, but the differences at each survey were not significant. In 1999, 34.8% of nonsmokers watched television 3 or more hours per day versus 29.7% of current smokers; in 2009, these figures were 30.5% and 27.1%, respectively. Over this same period, differences were seen between current smokers and nonsmokers in the percentage who had not engaged in any moderate-to-vigorous intensity physical activity (MVPA) over the last week (defined as any kind of physical activity that increases the heart rate and makes one breathe hard). Among nonsmokers, the prevalence of no MVPA rose from 1999 to 2003, then dropped from 2003 to 2009 ($p < 0.05$, quadratic trend). Among current smokers, in contrast, the prevalence of no MVPA increased from 1999 to 2007, then decreased substantially in 2009 ($p < 0.05$, quadratic trend). In 1999, 31.7% of current smokers and 33.0% of nonsmokers had not participated in any MVPA over the last week; by 2009, this behavior had become more prevalent among current

smokers (33.2%) than among nonsmokers (31.8%). The differences between current smokers and nonsmokers in both of these years were not significant.

From 1999 to 2009, at each survey, the percentage of high school seniors who did not eat fruits and vegetables five or more times a day did not differ significantly between current smokers and nonsmokers. In 1999, 21.8% of current smokers and 24.7% of nonsmokers did not eat fruits and vegetables five or more times a day; in 2009, these figures were 20.7% and 20.3%, respectively. During the same time period, the percentage of high school seniors who drank three or more glasses of milk per day did not change significantly for either current smokers or nonsmokers. In addition, at each survey, the prevalence of this behavior did not differ significantly between current smokers and nonsmokers. In 1999, 13.7% of current smokers and 13.5% of nonsmokers drank three or more glasses of milk each day; in 2009, the figures for this healthy behavior were 14.4% and 12.7%, respectively.

From 1991 to 2009, the percentage of students who were trying to lose weight increased significantly among nonsmokers, although there was a small dip from 2001 to 2003 ($p < 0.05$, linear trend; $p < 0.05$, quadratic trend). Among current smokers, there was a decrease between 1991 and 1999 and then an increase from 1999 to 2009 in this percentage ($p < 0.05$, linear trend). In 1991, significantly more current smokers (49.9%) than nonsmokers (36.7%) were trying to lose weight ($p < 0.05$ for comparison between current smokers and nonsmokers), but by 2009, the difference between current smokers (49.3%) and nonsmokers (45.9%) was not significant. Finally, from 1999 to 2009 the percentage of nonsmokers who engaged in unhealthy weight-control behaviors (defined as fasting, taking diet pills, powders, or liquids, or vomiting/taking laxatives to lose weight or to keep from gaining weight) decreased significantly ($p < 0.05$, quadratic trend); in contrast, among current smokers the percentage of students who engaged in these behaviors rose from 1999 to 2003, then decreased from 2003 to 2009 ($p < 0.05$, linear trend). At each survey, the prevalence of this unhealthy behavior was higher among current smokers than among nonsmokers. In 1999, 22.7% of current smokers and 16.4% of nonsmokers engaged in unhealthy weight-control behaviors ($p < 0.05$ for comparison between current smokers and nonsmokers); in 2009, these figures were 24.0% and 10.5%, respectively ($p < 0.05$ for comparison between current smokers and nonsmokers).

Summary

Cigarette smoking often covaries with other health-risk behaviors. In addition to alcohol use, other tobacco use, and other drug use, the percentage of high school

seniors who have ever engaged in sexual intercourse is higher among current smokers than among nonsmokers, although the use of a condom at last intercourse does not differ between these two groups. Suicidal ideation is more prevalent among current smokers than nonsmokers, as is the prevalence of carrying a weapon and engaging in a physical fight. When behaviors related to weight and weight management are considered, few differences between current smokers and their nonsmoking peers are observed. The percentage of high school seniors who are overweight or obese does not vary between current smokers and nonsmokers, nor does the percentage who watch television 3 or more hours per day, engage in *no* physical activity of moderate to vigorous intensity, eat five or more fruits or vegetables per day, or consume three or more glasses of milk a day. The percentage of high school seniors who are trying to lose weight does not differ between current smokers and nonsmokers, although the percentage who engages in unhealthy weight control behaviors is significantly higher among current smokers than nonsmokers. The findings cited here have been consistent since the publication of the last Surgeon General's report on tobacco use among young people (USDHHS 1994).

Cigarette Smoking, Body Mass Index, and Depression

Cigarette Smoking and Body Mass Index

BMI, a measure of relative adiposity (i.e., body fat), is often used in epidemiologic studies to identify individuals as underweight, normal weight, overweight, or obese, often by using age- and gender-specific cutpoints (e.g., Cole et al. 2000, 2007). A higher BMI usually indicates more adiposity. Having a higher BMI has been linked to increased morbidity and mortality in adults, including a higher prevalence of heart disease, diabetes, and cancer, among other diseases (National Institutes of Health 1998).

Among adults, the inverse relationship between cigarette smoking and BMI is strong and reliable across studies; adult smokers typically weigh less and have less body fat (i.e., have a lower BMI) than do nonsmokers. In an analysis of the second National Health and Nutrition Examination Survey (1976–1980) data, BMI decreased with the duration of smoking but not with the intensity of smoking after adjustment for age and gender (Albanes et al. 1987). Later, in an analysis of 2005 NHIS data, current cigarette smoking was more prevalent among adults who were of normal weight (22.0%, men; 15.3%, women) than among overweight (16.2%, men; 13.2%, women) or obese (15.7%, men; 11.3%, women) adults (Kruger et al. 2009). In that study, after adjustment for demographic

factors and other behavioral variables, current cigarette smokers were significantly less likely to be overweight ($p < 0.05$) or obese ($p < 0.05$) than were nonsmokers (Kruger et al. 2009). In contrast, among men, former smokers were significantly more likely to be overweight ($p < 0.05$) or obese ($p < 0.05$) than were nonsmokers (Kruger et al. 2009). Such a relationship was not significant for women (Kruger et al. 2009).

Among adolescents, the association between cigarette smoking and BMI is less clear. In a gender-focused review of 19 related studies, Potter and colleagues (2004) concluded that while some of the studies supported a positive correlation (i.e., as cigarette smoking increases, so does BMI), some did not. For example, in three of the U.S. studies, BMI was higher among both male and female smokers compared to nonsmokers. Another study found this relationship among males only, and four others observed no relationship between smoking and BMI among either males or females. The study outcomes appeared to depend upon ethnicity, age, and/or how smoking was defined in the study (Potter et al. 2004). The findings of research conducted since that review have been more consistent and seem to suggest that adolescent smokers, in contrast to adults, weigh more and have more body fat than do their nonsmoking counterparts. Findings from an analysis of repeated YRBS surveys (1999–2005) indicate that BMI was higher for smokers than for nonsmokers (Seo et al. 2009), and the evidence from this analysis indicates that this association has grown stronger with each (more recent) cohort of youth. Cooper and colleagues (2003) found that adolescents' weight increased for 2 years after initiation of smoking, but they found no difference in BMI between smokers and nonsmokers at the 3-year mark.

Table 3.1.38, using data from YRBS collapsed across the 2003, 2005, 2007, and 2009 surveys, illustrates the relationship between cigarette smoking and mean BMI among high school seniors according to smoking status by gender and race/ethnicity. Among female students, there were no differences in BMI by smoking status; among male students, never smokers had a significantly lower BMI than current infrequent smokers, current frequent smokers, and former nondaily smokers ($p < 0.05$, all comparisons with never smokers). Among Whites, BMI was significantly lower among never smokers than among current infrequent smokers ($p < 0.05$), but there were no other significant differences among White students. Among Black students, the mean BMI of former daily smokers and never smokers was significantly lower than current infrequent smokers, current frequent smokers, and former nondaily smokers ($p < 0.05$ for comparisons between these three groups and former daily smokers/never smokers). Among Hispanic students, former nondaily smokers and never

smokers had a significantly lower mean BMI than current infrequent smokers ($p < 0.05$ for both comparisons); all other comparisons by smoking status among Hispanic students were not significant.

Cigarette Smoking and Depression

Adolescents who show symptoms of depression are at higher risk of starting to smoke than are nondepressed adolescents. In an analysis of the Teenage Attitudes and Practices Survey (1989–1993), adolescent never smokers, male and female ($p < 0.05$ for both), were more likely to begin smoking at follow-up if they had symptoms of depression at baseline (Escobedo et al. 1998). Adolescents who smoke are also more likely to develop symptoms of depression than are adolescents who do not smoke. Similarly, Choi and colleagues (1997) found that nondepressed nonsmokers were more likely to become depressed if they started smoking. Later, in an analysis of Add Health data (1995–1996), Steuber and Danner (2006) found that adolescents who were current smokers or former smokers at baseline were 1.5–2.0 times as likely to show symptoms of depression at follow-up as were nonsmokers. These analyses (Steuber and Danner 2006) controlled for depression at baseline. For females in this study, depression increased at the onset of smoking and decreased during a quit attempt, but these findings were not observed among males.

Other research supports a bidirectional relationship between cigarette smoking and depression. In a longitudinal study of adolescents, Brown and colleagues (1996) found that lifetime prevalence of a major depressive disorder (MDD) predicted smoking uptake at 1-year follow-up. In addition, adolescents who smoked at baseline were twice as likely as nonsmokers to have an MDD episode in the next 12 months. These analyses also controlled for depression at baseline. In their cross-sectional analysis, in contrast, the authors found no significant relationship between smoking status and MDD after adjusting for other psychiatric disorders. The authors, therefore, hypothesized that a “*specific* relationship between smoking and MDD exists only in smokers who are nicotine-dependent” (Brown et al. 1996, p. 1607). This may explain why a stronger relationship between smoking and depression has been observed in adults, who are more likely to be addicted to nicotine than are adolescents (Breslau et al. 1991, 1993).

Table 3.1.39 uses NSDUH data to illustrate the relationship between cigarette smoking and a major depressive episode among adolescents and young adults. Here,

the prevalence of a major depressive episode is presented by smoking status, stratified by gender as well as race/ethnicity. Across all strata, the prevalence of a major depressive episode was lowest for adolescents and young adults who had never smoked a cigarette (never smokers). This result was significant for male and female adolescents and for female young adults, as well as for White adolescents and Hispanic young adults ($p < 0.05$ for all comparisons of never smokers with other smoking statuses within these subgroups). Among adolescents, the prevalence of a major depressive episode was highest among current infrequent smokers across all strata except Blacks. Among young adults, the highest prevalence was among current frequent smokers across all strata. Across age, gender, and race/ethnicity, however, differences in the prevalence of a major depressive episode between classes of ever smokers (former, current infrequent, current frequent) were often small and not always significant. Among adolescent boys, the prevalence of a major depressive episode was about 2 times as high for current infrequent smokers as for never smokers; among adolescent girls, it was about 3 times as high. Among young adult males, it was about 1 times as high for current frequent smokers as for never smokers, and among young adult females it was about 2 times as high.

Summary

Chapter 2 considers the relationship between cigarette smoking and weight status among adolescents. Here, the relationship between cigarette smoking and BMI using a nationally representative sample has been considered. Few differences in BMI by smoking status were observed. Among Whites, BMI was lowest among adolescents who had never smoked, while among Blacks and Hispanics, former daily smokers and never smokers tied for the lowest BMI.

Chapter 2 also considers the relationship between cigarette smoking and depression. In the present chapter, the association between cigarette smoking and a major depressive episode has been considered using representative samples of adolescents (12–17 years old) and young adults (18–25 years old). Across age, gender, and race/ethnicity, the prevalence of a major depressive episode was lowest among those who had never smoked a cigarette. There was often little difference between the other three types of smokers (former, current infrequent, current frequent) in the prevalence of a major depressive episode.

The Use of Other Tobacco Products Among Young People in the United States

Cigarettes remain the most popular form of tobacco among adults and youth in the United States and most industrialized nations, but the use of other tobacco products, such as cigars and smokeless tobacco, is still common. The U.S. Department of Agriculture (USDA) and industry trade data indicate that although the consumption of cigarettes has declined substantially, consumption and sales of smokeless tobacco, specifically moist snuff and cigars has risen (USDA 2007; Maxwell 2009a,b). Although cigars and smokeless tobacco are predominantly featured in this section, it should be noted that other emerging forms of tobacco, such as bidis, kreteks, and hookahs, have been shown in some local and state surveys to be popular with youth (Soldz et al. 2003a; Hrywna et al. 2004; Primack et al. 2009). Measures of the use of other emerging tobacco products like snus and dissolvables were not available on surveys that had been implemented before production of this chapter was complete, so these products are not addressed here.

The use of smokeless tobacco has been linked to both localized oral health consequences at the site of tobacco placement and systemic effects. Smokeless tobacco contains at least 28 carcinogens (International Agency for Research on Cancer [IARC] 2007), and there is strong evidence to show that users have an increased risk of developing leukoplakia, a precancerous lesion on oral soft tissue, as well as oral cancers (IARC 1998, 2007; Walsh and Epstein 2000). Other undesirable oral health outcomes that have been linked to smokeless tobacco use include gingival recession, periodontal disease, and tooth decay (USDHHS 1986; Walsh and Epstein 2000; Fisher et al. 2005). Less serious outcomes include staining of teeth and halitosis (Christen et al. 1982; Walsh and Epstein 2000).

The systemic effects of using smokeless tobacco include nicotine addiction and dependence (NCI 1992; IARC 2007) and acute cardiovascular effects like an elevated heart rate and high blood pressure (Westman 1995; Winn 1997). Use of smokeless tobacco may also be related to long-term cardiovascular effects and mortality, although the evidence on such associations is mixed (Winn 1997; Gupta et al. 2004). A recent meta-analysis found heightened relative risks for fatal myocardial infarction (MI) and fatal stroke from ever using smokeless tobacco, while the risk estimates for nonfatal MI and stroke were not as large (Boffetta and Straif 2009). One large longitudinal study in Sweden found an elevated prevalence of hypertension

among users of oral snuff compared with nonusers and a greater risk of death from cardiovascular disease (Bolinder 1997). Other studies have found no associations with cardiovascular variables, as was the case in Siegel and colleagues' (1992) study of cardiovascular risk factors among professional baseball players. Although there is some discussion in the medical literature on whether the harmful consequences of using smokeless tobacco are as severe as those from smoking, the literature confirms both short- and long-term negative consequences for using smokeless tobacco. The majority of these studies have focused on health outcomes occurring in adulthood.

Recent Patterns of Smokeless Tobacco Use

Ever Use of Smokeless Tobacco

Overall, national estimates for adolescents for ever trying smokeless tobacco were 10.2% for youth 13–18 years of age in the 2010 NSDUH, 14.5% for 8th, 10th, and 12th-grade students in the 2010 MTF, 6.1% for 6th–8th-grade students in the 2009 NYTS, and 14.1% for 9th–12th-grade students in the 2009 NYTS (Table 3.1.40). In all surveys, males were significantly more likely than females to have ever tried smokeless tobacco ($p < 0.05$ for comparisons between genders in all surveys). White males had the highest prevalence of any subgroup in NSDUH, MTF, and NYTS—high school, with ever use exceeding 20% in all three surveys. In NYTS—middle school, Other male students had the highest prevalence (13.7%). In NSDUH, MTF, and NYTS—middle school, Black youth had the lowest prevalence of ever using smokeless tobacco among the four racial/ethnic categories ($p < 0.05$ for all racial/ethnic comparisons with Blacks in these three surveys). In NSDUH, the percentage of ever use rose significantly with increasing age; those 13 and 14 years of age (3.9%) were significantly less likely to be ever users than were those 15 and 16 years of age (9.7%; $p < 0.05$), and 15- and 16-year-olds were significantly less likely to be ever users than were 17- and 18-year-olds (16.1%; $p < 0.05$). In MTF, 8th-grade students (9.8%) were significantly less likely than 10th-grade (16.8%; $p < 0.05$) and 12th-grade (17.6%; $p < 0.05$) students to be ever users of smokeless tobacco. In NYTS, ever use increased significantly between 7th and 8th grade (5.0% vs. 8.3%, $p < 0.05$) and 10th and 11th

grade (13.2% vs. 17.5%, $p < 0.05$). The prevalence of ever using smokeless tobacco varied by regions. Significantly higher percentages were noted in the Midwest and South than in the Northeast and West in both NSDUH and MTF ($p < 0.05$ for comparisons between Midwest and South vs. Northeast and West).

Current Use of Smokeless Tobacco

Overall, national estimates for current use of smokeless tobacco were 3.7% for youth 13–18 years of age in the 2010 NSDUH; 6.5% for 8th, 10th, and 12th-grade students in the 2010 MTF; 8.9% for 9th–12th-grade students in the 2009 YRBS; 6.7% for 9th–12th-grade students in the 2009 NYTS; and 2.6% for 6th–8th-grade students in the 2009 NYTS (Table 3.1.41). Patterns of current use were fairly consistent with those previously described for ever use. Current use was significantly more prevalent among males than among females: 6.3% versus 0.8% in NSDUH ($p < 0.05$), 11.3% versus 1.9% in MTF ($p < 0.05$), 15.0% versus 2.2% in YRBS ($p < 0.05$), 11.6% versus 1.8% in NYTS–high school ($p < 0.05$), and 3.7% versus 1.4% in NYTS–middle school ($p < 0.05$). The prevalence of current use of smokeless tobacco was significantly higher among White than Black, Hispanic, or Other youth in all surveys ($p < 0.05$ for all racial/ethnic comparisons with Whites in NSDUH, MTF, YRBS, and NYTS–high school). The percentage of youth who were current users of smokeless tobacco increased significantly between each age level in NSDUH ($p < 0.05$ for all comparisons between age levels), but significant between-grade increases were not consistent in MTF, YRBS, and NYTS. In MTF, 8th-grade students were significantly less likely than 10th ($p < 0.05$) and 12th-grade students ($p < 0.05$) to currently use smokeless tobacco. In YRBS, 9th-grade students were significantly less likely to use smokeless tobacco than were 11th and 12th-grade students ($p < 0.05$ for both comparisons). In NYTS–high school, 9th-grade students were significantly less likely to use smokeless tobacco than were 10th, 11th, and 12th-grade students ($p < 0.05$ for comparisons with 9th-grade students). These findings perhaps suggest that most initiation of smokeless tobacco use occurs in the earlier high school years. As with ever use of smokeless tobacco, current use varied by region, with the highest prevalence in NSDUH seen in the South and Midwest, and the highest prevalence in YRBS and MTF found in the South, Midwest, and Northeast. In all three surveys, the West had the lowest prevalence ($p < 0.05$ when compared with the South and Midwest).

Given the regional variations noted, it is not surprising that there was considerable variation at the state level in current use of smokeless tobacco. Figure 3.1.28 illustrates the percentages of youth (12–17), young adults

(18–25), and adults (26 years of age and older) who were current users of smokeless tobacco by state, from 2006 to 2010. Figure 3.1.29 shows similar data for the same time period, further separated by gender within each of the age groups. Based on NSDUH data from 2006 to 2010, the prevalence ranged from 0.4% to 6.9% for those 12–17 years of age, from 1.7% to 16.1% for the 18- to 25-year-olds, and from 0.6% to 9.5% for those 26 years of age and older. The states with the highest prevalence among youth were Wyoming (6.9%), Kentucky (6.4%), West Virginia (6.0%), Montana (5.4%), and Tennessee (5.0%), while the states with the lowest prevalence (all at or below 1.0%) were Maryland, California, Arizona, Hawaii, and Rhode Island (the District of Columbia [DC], also had a prevalence below 1.0%). Among young adults, Wyoming (15.8%) and Montana (16.1%) had the highest prevalence of smokeless tobacco use, while the states with the lowest prevalence (all below 3.0%) included Hawaii, California, Rhode Island, and New Jersey (DC, also had a prevalence below 3.0%).

The use of smokeless tobacco is predominantly a male behavior, but in some states the use of smokeless by young girls is not inconsequential. For example, the prevalence of current smokeless tobacco use among girls 12–17 years of age was notable in Alaska (3.1%), Montana (2.5%), Wyoming (2.0%), New Mexico (1.5%) and South Dakota (1.3%) (Figure 3.1.29). It is particularly striking that use of smokeless tobacco by young girls in Alaska exceeded use among young boys in 12 states and DC, in 2006–2010. The high percentages among girls in the states listed above may be partially attributable to their racial/ethnic composition. American Indians and Alaska Natives are known to have a high prevalence of smokeless tobacco use, even among females, compared with the general population (Kaplan et al. 1997), and Alaska, Montana, and South Dakota are among the top five states with respect to the proportion of American Indians and Alaska Natives in their populations (U.S. Census Bureau 2009).

Data pooled from the years 2002–2007 from MTF surveys suggest that current use of smokeless tobacco among male youth varies by several sociodemographic risk factors (Table 3.1.42). Among 8th-grade males, current use of smokeless tobacco increased as parental education decreased. Although fewer significant differences can be seen for 10th- and 12th-grade students and the incremental effects are less pronounced, those males whose parents had the highest level of education had the lowest prevalence of using smokeless tobacco. The prevalence of current use of smokeless tobacco was significantly highest among 8th- and 10th-grade boys who lived alone (37.4% and 31.7%, respectively) than among those with any other household structure ($p < 0.05$ for all comparisons with

other household structures). In addition, use of smokeless tobacco was significantly higher among 8th-grade boys living in father-only households (10.2%) than in boys who lived with both parents (4.7%, $p < 0.05$) or in a mother-only household (3.8%, $p < 0.05$). The lowest prevalence by household structure was noted for 8th-, 10th-, and 12th-grade male students living in mother-only households. Among 12th-grade males, those who lived in such households had a significantly lower prevalence of current smokeless tobacco use (8.6%) than those living with both parents (12.9%, $p < 0.05$) or other relatives (15.5%, $p < 0.05$).

By residence, living in rural (non-MSA) areas was associated with the highest prevalence of using smokeless tobacco and living in a large MSA was associated with the lowest prevalence of smokeless tobacco use; this was significant for all three grades ($p < 0.05$ for all comparisons between population densities). In addition, the percentage of males who currently used smokeless tobacco was negatively associated with academic performance (based on self-rated performance by participants) in both the 8th and 10th grades. In those two grades, the prevalence of current smokeless tobacco use differed significantly between each level of academic performance ($p < 0.05$ for all comparisons). In the 12th grade, while the pattern was similar, only students with the highest levels of performance (A, 7.5%) differed significantly from other levels (B, 13.1%; C, 15.1%; D, 17.9%; $p < 0.05$ for all comparisons with A). The perceived importance of religion was not associated with the prevalence of use among 8th-grade students, but among 10th-grade students, those viewing religion as very important had significantly lower usage (8.2%) than those believing it was not/somewhat important (11.3%, $p < 0.05$) or important (12.7%, $p < 0.05$). Among 12th-grade males, those viewing religion as important were significantly more likely to use smokeless tobacco (15.7%) than those believing religion was very important (10.7%, $p < 0.05$) or not/somewhat important (13.0%, $p < 0.05$).

When the Use of Smokeless Tobacco Begins

MTF data from 2002 through 2007 were merged to observe the grade at which 12th-grade students reported trying tobacco, including smokeless tobacco, and other drugs (Figure 3.1.26). According to these data, 10.7% of ever users of smokeless tobacco had done so by the 6th grade, 43.5% by the 9th grade, and 85% by 11th grade (Figure 3.1.26). This pattern differed notably from that for cigarettes, where initiation occurred in earlier grades; more than two-thirds of those who ever used cigarettes had tried them by 9th grade. The findings for smokeless tobacco are replicated in the 2009 NYTS; there, among 12th-grade students who ever used smokeless tobacco,

16.2% first tried it before 13 years of age, 23.2% at 13 or 14 years of age, 35.2% at the age of 15 or 16 years, and 25.4% at the age of 17 years or older (Table 3.1.43). Whether the use of smokeless tobacco serves as a gateway to using cigarettes has been debated in the research literature (Kozlowski et al. 2003; Tomar 2003; O'Connor et al. 2005). Cigarettes, however, may serve as a gateway for smokeless tobacco use, too (SAMSHA 2009b). It is interesting to note that statewide prevalence data from the 2009 Behavioral Risk Factor Surveillance System (BRFSS) show that use of smokeless tobacco is more common among young adults (ages 18–24) than among other adults (CDC 2010d).

Preferences for Particular Brands of Smokeless Tobacco

In the United States, smokeless tobacco is usually consumed in one of two forms: chewing tobacco or moist snuff. Chewing tobacco is made up of long strands of tobacco, and snuff tobacco is a fine-grain product that comes in a moist blend (used orally) as well as in dry varieties (the latter are taken through the nostrils). Moist snuff is the most popular of all of today's smokeless tobacco products (Maxwell 2009b). The different types of smokeless tobacco as well as the specific brands within each type vary widely in the amount of nicotine and carcinogens (primarily tobacco-specific nitrosamines) they contain (Henningfield et al. 1995; Richter and Spierto 2003; McNeill et al. 2006; Stepanov et al. 2006; Alpert et al. 2008; Richter et al. 2008). As shown in Table 3.1.44, youth 12–17 years of age greatly prefer moist snuff brands to chewing tobacco (about 80.0% for moist snuff vs. about 9.0% for chew), and this is consistent with the preference for moist snuff revealed in overall U.S. market share (all ages) as shown in Table 3.1.45 (Maxwell 2009b). Skoal, which was the most popular brand of smokeless tobacco among young people per the 1994 Surgeon General's report, is now the second most popular brand (24.1%) among young people (Table 3.1.44), with Grizzly (32.1%) first and Copenhagen (15.8%) third; Red Man is the most popular chewing tobacco (5.3%).

Considerable variation in the smokeless brands preferred by youth can be seen by region (Table 3.1.44). Youth in the Northeast overwhelmingly favor Skoal (50.1%), while youth in the Midwest and South prefer Grizzly (36.7% and 38.1%, respectively) over any other single brand, and youth in the West choose Copenhagen (29.2%) more than other brands. Among young adults (18–25 years of age), Skoal (30.1%) is the most popular smokeless brand, followed by Grizzly (28.6%) and Copenhagen (17.9%); again, Red Man is the most popular chewing tobacco (4.5%) (Table 3.1.46). Regional patterns for young adults (18–25 years of age) are similar to those for

youth 12–17 years of age; Skoal is the preferred brand in the Northeast (52.9%). In the Midwest and South, Grizzly and Skoal are the top choices (see Table 3.1.47), while in the West, Copenhagen and Skoal rank very close together as the top choices (31.4% and 28.6%, respectively) (Table 3.1.47).

It is worth noting that Grizzly, introduced by the American Snuff Company in 2002, is a fairly new brand and is known as a deep-discount or subvalue item. Deep-discount brands retail at less than \$2 per can, while premium brands, such as Skoal and Copenhagen, average closer to \$5 per can (Covino 2006). Previous research has demonstrated that youth, particularly males, are price sensitive to smokeless tobacco (Ohsfeldt and Boyle 1994; Ohsfeldt et al. 1997). The growth in deep-discount brands like Grizzly in the last few years is disturbing. Clearly, making smokeless tobacco products available more cheaply could promote their use among price-sensitive youth. In addition, disparities in tobacco taxation (i.e., higher taxes for cigarettes than for smokeless tobacco) could result in a switch to smokeless tobacco among young males (Ohsfeldt and Boyle 1994; Ohsfeldt et al. 1997).

Trends Over Time in the Use of Smokeless Tobacco

Using NSDUH data, the prevalence of current use of smokeless tobacco was plotted for young adults (18–25 years of age) from 2002 to 2010 by gender (Figure 3.1.30) and race/ethnicity (Figure 3.1.31). From 2002 to 2008, current use of smokeless tobacco remained stable among young adult females and then increased significantly from 0.4% in 2008 to 0.8% in 2009 ($p < 0.05$), and remained stable at 0.7% in 2010 ($p > 0.05$ vs 2009). Among young adult males, current use of smokeless tobacco increased from 8.9% in 2003 to 10.3% in 2008 ($p < 0.05$), with an additional significant jump from 10.3% in 2008 to 11.4% in 2009 ($p < 0.05$), then stabilized at 12.0% in 2010 ($p > 0.05$ vs. 2009). As will be seen among adolescents (Figures 3.1.33–34), the jump between 2008 and 2009 was particularly notable for White young adults (Figure 3.1.31). Figure 3.1.32 presents additional data from NSDUH that examine differences in current use of smokeless tobacco from 2005 to 2010 by socioeconomic status. Across all points of time, use of smokeless tobacco was most prevalent in the highest socioeconomic group (defined as $\geq 200\%$ of the poverty level). Increases in the use of smokeless tobacco from 2005 to 2010, however, were not limited to this group, as they also occurred in the lowest (below the poverty level) and middle (100–199% or more of the poverty level) socioeconomic groups (Figure 3.1.32).

Trends in the prevalence of current use of smokeless tobacco among adolescents (12–17 years of age) indicate that, for males, use in the past month rose in the early 1990s, peaked around 1995, and then declined in the late 1990s (Figure 3.1.33). Per MTF, progress in reducing use among male students slowed considerably between 2000 and 2008, and current use increased among 10th- and 12th-grade students overall between 2008 and 2010. Per YRBS, the increase in current use of smokeless tobacco among male students began in 2003 and continued through 2009 (Figure 3.1.33C). The prevalence of current use of smokeless tobacco among females, on the other hand, has remained low and constant (between 1% and 3%) since 1995 (Figure 3.1.33C). Use of smokeless tobacco among males over time has differed by race/ethnicity, with White male students in the 8th, 10th, and 12th grades having a consistently higher prevalence of use than their Hispanic and Black counterparts (Figure 3.1.34). Historically, young Black males have had a low prevalence of use, and the contrast with young White male students is particularly striking among 12th-grade students. Especially noteworthy are the increases in the current use of smokeless tobacco among White and Hispanic 12th-grade males between 2008 and 2010 and among White 10th-grade males from 2009 to 2010.

The MTF surveys have monitored perceptions of risk concerning smokeless tobacco since 1986. Overall, in 2010, 41.2% of 12th-grade students believed there is great risk of harm associated with the regular use of smokeless tobacco (Figure 3.1.35). Previous research suggests that perceptions that smokeless tobacco is a serious health risk vary by gender and race/ethnicity, with females more likely than males and Blacks more likely than Whites to hold this opinion (USDHHS 1994; Tomar and Hatsukami 2007). Since 1986, there was a gradual but substantial increase in the proportion of 12th-grade students believing that there is a great risk in using smokeless tobacco regularly (Figure 3.1.35), but the increasing trend stalled after 1999, with the percentage holding this perception essentially the same in 1999 and 2010. The smokeless tobacco industry has participated in the debate about reducing harm by switching from cigarettes to smokeless, and subtle marketing of its products that may suggest they are safer than cigarettes (Myers 2003; Alpert et al. 2008) could have contributed to the stagnant levels of risk perception. Per the MTF surveys, when the overall percentage of 12th-grade students who believed that great risk is associated with use of smokeless tobacco is plotted against the percentage of 12th-grade students who have ever used the product, the trends are inversely related (Figure 3.1.35).

Prevalence of the Use of Smokeless Tobacco, Cigarette Smoking, and Other Drugs

According to the 2002–2007 MTF surveys, the majority of male 12th-grade students who used alcohol, marijuana, or cocaine did not use smokeless tobacco as well (Table 3.1.46). Regardless, use of smokeless tobacco was from 2.2 (for marijuana) to 6.1 times (for alcohol) as high among users of these drugs as among nonusers. Similarly, the prevalence of other drug use was higher among users of smokeless tobacco than among those who did not use smokeless tobacco. Most notably, 85.4% of smokeless users were also alcohol drinkers, 39.3% used marijuana, and 6.5% used cocaine; three-fifths (59.9%) smoked cigarettes. The prevalence of other drug use was from 1.9 (for marijuana) to 3.0 times (for cigarettes) as great among users of smokeless tobacco as among nonusers. Similar trends were observed in the same analyses by NSDUH (Table 3.1.46).

Summary

The prevalence of smokeless tobacco use is highest among males, Whites, and older youth, and lowest among females and Blacks. At present, about 1 out of 5 high school males has ever used smokeless tobacco, and about 1 out of 8 currently uses smokeless tobacco. There is considerable regional variation in use, with those residing in rural areas using smokeless more frequently than those living in large urban areas. Initiation of smokeless tobacco use appears to occur somewhat later in adolescence than does cigarette smoking. Over time, use among female adolescents and young adults has remained constant, but it has increased among male adolescents and young adults since 2003, particularly in older age groups and among Whites. Moist snuff is the most popular type of smokeless tobacco among youth, and discount brands like Grizzly have become popular among young people in recent years.

Recent Patterns of Cigar Use

Historically, cigar smoking in the United States has been a behavior of older men, but the industry's increased marketing of cigars during the 1990s to targeted groups increased the prevalence of use among adolescents (NCI 1998). Thus, the rise in the prevalence of cigar use during the mid-1990s was not limited to adults; instead, as documented by numerous local, state, and national surveys, cigar use and experimentation with this product have been widespread among both male and female adolescents (CDC 1997; Rigotti et al. 2000; Delnevo et al. 2002; Marshall et al. 2006). By definition, large cigars are any roll of tobacco wrapped in leaf tobacco or in any substance

containing tobacco and weighing more than 3 pounds per 1,000 cigars; whereas little or small cigars weigh no more than 3 pounds per 1,000 cigars. Little or small cigars have other characteristics that set them apart from large cigars and make them similar to cigarettes, such as shape, size, filters, and packing (i.e., 20 sticks to a pack). In recent years, marketing strategies have blurred the line between cigarettes and little cigars (Delnevo and Hrywna 2007).

Ever Use of Cigars

According to the 2010 NSDUH, an estimated 16.7% of youth 13–18 years of age have ever tried a cigar. In the 2009 NYTS, 10.1% of 6th–8th grade students and 28.6% of 9th–12th-grade students were ever cigar smokers (Table 3.1.48). Per both surveys, males were much more likely than females to have ever smoked a cigar ($p < 0.05$). In NSDUH, White youth (19.5%) had a significantly higher prevalence than Hispanic (14.9%), Black (11.3%), or Other youth (9.9%) ($p < 0.05$ for all comparisons with White youth). In NYTS—high school, White (32.5%) and Hispanic (29.2%) students had a significantly higher prevalence of ever smoking a cigar than Other youth (22.0%) and Black students (16.3%) ($p < 0.05$ for each comparison with White and Hispanic students). In NYTS—middle school, prevalence was lowest among White students (8.1%) ($p < 0.05$ for comparisons with Black and Hispanic students) and highest among Hispanic students (14.9%) ($p < 0.05$ for comparisons with White and Black students). The percentage of youth who had ever used a cigar rose significantly with increasing age in NSDUH ($p < 0.05$, for all age comparisons) and with increasing grade level in NYTS ($p < 0.05$ for all grade comparisons) except between 11th and 12th grades ($p > 0.05$). In NSDUH, 28.1% of 17- and 18-year-olds had ever used a cigar, and 37.4% of 12th-grade students had done so per NYTS. The prevalence of ever use did not notably vary by region.

Current Use of Cigars

Per 2010 NSDUH, 5.6% of 13- to 18-year-olds currently smoked cigars, while 14.0% of 9th–12th-grade students did so per the 2009 YRBS, 3.9% of 6th–8th-grade students did so according to the 2009 NYTS, and 10.9% of 9th–12th-grade students were current cigar smokers per the 2009 NYTS (Table 3.1.49). Current cigar use differed significantly by gender ($p < 0.05$) and was approximately 1.5 times more common for males as for females students per NYTS—middle school and 2.5 times greater for males as for females according to the other surveys. In the 2010 NSDUH, White youth 13–18 years of age had a significantly higher prevalence of current cigar use (6.6%) than did Blacks (4.6%), Hispanics (9.4%), and Other youth (3.0%) ($p < 0.05$ for all comparisons with White youth).

In the 2009 YRBS, White students (14.9%) had a significantly higher prevalence of current use than did students in the Other group (11.1%, $p < 0.05$ vs. White students). The NYTS—middle school survey found that Hispanic students (6.2%) had the highest prevalence of current cigar use, which was significantly greater than the prevalence among White (2.9%) and Black (4.5%) ($p < 0.05$) but not Other students (4.6%, $p > 0.05$). The NYTS—high school survey found that prevalence was significantly higher among White (12.0%) and Hispanic (11.8%) students than among Black (7.3%) or Other (8.0%) ($p < 0.05$ for the comparisons with White and Hispanic students). It is important to note here that recently, some have questioned whether the prevalence of cigar use among adolescents may be underestimated, particularly among Black youth; research suggests that some cigar users know their product only by its brand name and may not even consider it a cigar or tobacco (Malone et al. 2001; Page and Evans 2004; Delnevo and Hrywna 2006; Terchek et al. 2009). Moreover, there is a paradoxical finding regarding the use of blunts (hollowed-out cigars filled with marijuana), with Black youth having the highest prevalence of current blunt use but the lowest prevalence of current cigar use (Delnevo and Hrywna 2006).

White males had the highest prevalence of any racial/ethnic subgroup in terms of current cigar use in NSDUH (9.1%), YRBS (21.0%), and NYTS—high school (17.2%). In fact, the prevalence of current cigar use by White male students according to YRBS (21.0%), did not differ appreciably from their prevalence of current cigarette smoking (22.3%) (Table 3.1.2). Moreover, in some states, current cigar use among adolescent males actually exceeds the prevalence of current cigarette smoking in this population (Delnevo et al. 2005; Eaton et al. 2010). Although males have a higher prevalence of cigar use, the use of cigars by females is not insubstantial. In stark contrast to what has been found for cigarettes, the prevalence of cigar use among adolescent females has been found to exceed that of adult women nationally (Delnevo et al. 2002). Not surprisingly, the percentage of current cigar users rose with increasing age. Per the 2010 NSDUH, each 2-year age group through 17–18 years of age differed significantly from the one below it ($p < 0.05$). Similarly, in the 2009 YRBS, 9th-grade students had a significantly lower rate of use than did 10th-, 11th-, or 12th-grade students, and 10th- and 11th-grade students had significantly lower use than did 12th-grade students ($p < 0.05$). A similar relationship was noted in NYTS. In the 2010 NSDUH and 2009 YRBS, the highest prevalence of current cigar use was in the Midwest region. In NSDUH, the prevalence in the Midwest was significantly higher than in the Northeast only ($p < 0.05$), while in YRBS, the prevalence in the Midwest

was significantly higher than the prevalence in the Northeast and West ($p < 0.05$) but not in the South ($p > 0.05$).

The prevalence of current cigar use at the state level varied considerably, with prevalence rates ranging from 1.8% to 6.7% for 12- to 17-year-olds (Figure 3.1.36A), from 6.3% to 15.8% for 18- to 25-year-olds (Figure 3.1.36B), and from 2.1% to 6.1% for adults 26 years of age or older (Figure 3.1.36C). The states with the highest cigar use among youth (12–17 years of age) were Wyoming (6.7%), Colorado (6.1%), Montana (5.8%), Ohio (5.6%), and Indiana (5.6%) while the states with the lowest prevalence were Utah (1.8%), Hawaii (2.5%), and California (2.7%) (Figure 3.1.36A). The states with the highest use among young adults (18–25 years of age) were Ohio (15.8%), Kansas (15.7%), Missouri (14.9%), Indiana (14.5%), and Kentucky (14.5%); the lowest prevalence was again found in Utah (6.3%) and Hawaii (7.7%) (Figure 3.1.36B).

Using NSDUH data, the prevalence of current cigar smoking was plotted over time for young adults (18–25 years of age) from 2002 to 2010 by gender (Figure 3.1.37) and race/ethnicity (Figure 3.1.38). Over the period, current cigar smoking remained stable among young adult females. Among young adult males, in contrast, current cigar smoking was little different at the end of the period and the beginning, but it rose from 2002 to 2004, when it peaked. The prevalence of current cigar smoking was stable among Whites across the period but showed somewhat more variability for Blacks and Hispanics (Figure 3.1.38). Figure 3.1.39 also presents data from NSDUH that illustrate differences in cigar smoking from 2005 to 2010 by socioeconomic status. During 2006–2008, cigar smoking was most prevalent in the highest socioeconomic group (defined as 200% or more of the poverty level) (Figure 3.1.39). In the lowest socioeconomic group (below poverty level) and the middle group (100–199% of poverty level), cigar smoking increased from 2008 to 2009 after a slight decline from 2006 to 2008 (Figure 3.1.39). In 2009, cigar smoking was equally prevalent among the three socioeconomic groups represented here. In 2010, cigar smoking increased among the lowest socioeconomic group only and was most prevalent in this group compared to the other two for the first since 2005.

Current cigar use is predominantly a male behavior; as noted previously, among youth, male cigar use overall is approximately 2.5 times that of females. However, some states had a notable prevalence of cigar use by young girls (12–17 years of age), such as Kansas (4.8%) (Figure 3.1.40B). This prevalence exceeded that for cigar use by young males in 12 states, including Kansas (4.6% for males) (Figure 3.1.40A). As noted earlier, the prevalence of cigar use among adolescent females has been found to exceed that among adult females (Delnevo et al.

2002). Indeed, the NSDUH data indicate that, with the exception of Idaho, Louisiana, Mississippi, Oklahoma and the District of Columbia (DC), current cigar use by 12- to 17-year-old girls exceeded cigar use by adult women (≥ 26 years of age or older) in their respective states and DC (Figures 3.1.40B and 3.1.40F). In general, however, this pattern did not hold for males; in most states, cigar use was higher among adult men (≥ 26 years of age) than for adolescent boys 12–17 years of age (Figures 3.1.40A, 3.1.40C, 3.1.40E). In all states, young adults 18–25 years of age (both genders) had the highest prevalence of current cigar use (Figures 3.1.40C and 3.1.40D).

Preferences for Particular Cigar Brands

There are many different types of cigars, including large premium cigars, cigarillos, and small or little cigars; the last type is the same size as cigarettes and often includes a filter. Despite the wide variety of cigar products, however, there is no universally accepted classification system (Baker et al. 2000). As shown in Table 3.1.50, among current cigar smokers, the most popular brand of cigars among young people 12–17 years of age, as reported in the 2008–2010 NSDUH, was Black & Mild (42.9%). These cigars were somewhat more popular among girls (48.8%) than among boys (40.3%), and were overwhelmingly preferred by Black youth (58.4%), a finding consistent with previous reports (Yerger et al. 2001; Soldz et al. 2003b; Page and Evans 2004). Consistent with industry data for market share (Table 3.1.51), other popular brands among youth in 2008–2010 were Swisher Sweets (20.3%), Phillies (5.6%), White Owl (3.7%), and Dutch Masters (3.1%) (Table 3.1.50). In all regions, Black & Mild was the most preferred brand. Swisher Sweets was next in all regions except the Northeast, where Dutch Masters ranked second in adolescent preferences. Data for market share for all ages (Table 3.1.51) showed that Swisher Sweets (29.7%) was the leader, followed by Dutch Masters (11.1%) and Phillies (8.4%) (Maxwell 2009c). Preferences by demographic characteristics among 18- to 25-year-olds (Table 3.1.52) were similar to those for adolescents, but it is interesting to note that preference for Black & Mild diminished somewhat with increasing age (35.6% for this group vs. 42.9% for the younger group). With the exception of Black & Mild, the top brands for both age groups include various flavorings, such as peach, grape, apple, and chocolate. In addition, they are commonly sold as a single stick, often for around \$1.00 (Delnevo 2007). The use of such flavors in cigarettes has raised much concern in the public health and tobacco control community for fear that these products may be especially appealing to youth (Klein et al. 2008). Clearly, these concerns should

extend to cigars, as these products are even more commonly flavored. Notably, the *Family Smoking Prevention and Control Act* banned cigarettes with characterizing flavors in 2009, and some products subsequently became flavored cigars. For example, Djarum clove cigarettes re-emerged in the market as clove flavored cigars, and Sweet Dreams flavored cigarettes re-emerged as Sweet Dreams flavored cigars (Purple Haze 2011). Finally, it bears noting that some of these brands, such as Dutch Masters, White Owl, and Phillies, are particularly known for their use as blunts (Sifaneck et al. 2005), and as such, the popularity of such brands may be associated with marijuana use. This practice reinforces that the use of tobacco products occurs with other substances.

Trends Over Time in the Use of Cigars

As shown in Figure 3.1.41 (data from YRBS), current cigar use declined in the late 1990s for young male students, but appears to have stalled since 2003. Among young female students, slight declines in current use can be seen in Figure 3.1.41A during the 1997–2007 period, but there was an increase between 2007 and 2009. Current use among all racial/ethnic groups, as noted in Figure 3.1.41B, declined from 1997 to 2007, but there appears to have been a flattening among White students and, among Black students, a sharp increase between 2007 and 2009.

Prevalence of the Use of Cigars, Other Tobacco Products, and Other Drugs

According to the 2010 NSDUH, adolescents who used other drugs, such as alcohol, marijuana, and inhalants, had a much higher prevalence of cigar use than did nonusers of those products (Table 3.1.53). Similarly, current cigar use was higher among users of other tobacco products, such as cigarettes and smokeless tobacco, than among those who did not use those products. Current blunt users had a considerably higher usage of cigars than did nonusers, but because those cigars may be used as a device for delivering marijuana, it is surprising that the estimate for cigar use was not even higher (30.1% among users of blunts, 24.1% among users of marijuana) (Table 3.1.53). Some argue, however, that use of a blunt does not constitute cigar use because much of the cigar's content is discarded during preparation of the blunt, while others note that smoking a blunt is an important form of the initiation and regular use of tobacco (Soldz et al. 2003b; Sifaneck et al. 2005; Delnevo and Hrywna 2006). Regardless, the estimate for use of cigars by blunt users must be treated with caution, given the real possibility of underreporting. Not surprisingly, the prevalence of other drug use was higher among cigar users than among nonusers. Most

notably, 65.3% of cigar users were also alcohol drinkers, 55.3% used marijuana, and 39.7% used blunts. Concurrent use of cigarettes and smokeless tobacco was noted for 60.8% and 19.1% of cigar users, respectively.

Summary

Nearly one of three high school seniors has ever tried smoking a cigar. Like smokeless tobacco, the prevalence of cigar smoking is highest among males, Whites, and older youth. The prevalence of cigar use among adolescent females is substantial and especially troubling, with estimates exceeding the prevalence of cigar smoking among adult women in some states. From 2007 to 2009, however cigar use increased significantly among female Black students, according to YRBS. From 2002 to 2010, current cigar smoking has remained stable among young adult females, overall. Likewise, among young adult males, current cigar smoking has remained stable across this period, after peaking in 2004. Cigar use appears to covary with use of other substances, such as cigarettes, smokeless tobacco, alcohol, marijuana, and blunts. The cigar data in this chapter reflect the use of large cigars, little cigars, and cigarillos.

Recent Patterns of Emerging Tobacco Products Use

Since the last Surgeon General's report on tobacco use among youth was issued, other emerging forms of tobacco, such as bidis, kreteks, and hookah, have been shown to be popular with youth in local and state surveys (CDC 1999; Taylor and Biener 2001; Soldz et al. 2003a; Hrywna et al. 2004; Primack et al. 2009). In general, documented prevalence of the use of bidis and kreteks is low (Soldz et al. 2003a; Hrywna et al. 2004; CDC 2005; Eissenberg et al. 2008; Barnett et al. 2009; Primack et al. 2009), while the use of hookahs appears to be more prevalent. Unfortunately, data collection on these emerging tobacco products has been limited to date (i.e., through 2010).

Ever Use of Specialty Cigarettes: Bidis and Kreteks

Bidis, manufactured primarily in Southeast Asia, are small brown cigarettes that are hand rolled and unfiltered; they consist of tobacco flakes rolled in a tendu leaf. According to the 2009 NYTS (Table 3.1.54), 3.1% of students in middle school (6th–8th grades) and 5.1% of students in high school (9th–12th grades) have ever smoked bidis. Male students were significantly more likely than female students to be ever users in middle school

(3.8% vs. 2.3%; $p < 0.05$) and high school (5.9% vs. 4.3%; $p < 0.05$). The highest prevalence of ever use of bidis was among Hispanic students in both middle school (5.1%) and high school (7.4%), and the lowest prevalence was among White students (2.1%, middle school; 4.3%, high school) ($p < 0.05$ for Hispanic vs. White comparisons).

Kreteks were slightly less likely to have ever been used than were bidis. According to the 2009 NYTS, 1.8% of middle school students and 4.6% of high school students had ever smoked kreteks. Again, male students had a significantly higher prevalence of ever use than female students in middle school (2.4% vs. 1.2%; $p < 0.05$) and high school (5.8% vs. 3.4%; $p < 0.05$). Differences between racial/ethnic sub-groups in ever kretek use were small and generally nonsignificant ($p > 0.05$) in middle school and high school.

Current Use of Specialty Cigarettes: Bidis and Kreteks

According to the 2009 NYTS, 1.6% of middle school students (6th–8th grades) and 2.4% of high school students (9th–12th grades) were current smokers of bidis, with male students more likely than female students to be current users in both middle school (2.0% vs. 1.2%; $p < 0.10$) and high school (2.7% vs. 2.1%; $p < 0.05$) (Table 3.1.54). Differences by race/ethnicity were small and generally nonsignificant ($p > 0.05$) in middle school and high school.

Patterns for current use of kreteks (or clove cigarettes) were similar to those for bidis (Table 3.1.54). According to the 2009 NYTS, 1.2% of middle school students and 2.4% of high school students were current users of kreteks, with males more likely than females to be users in both middle school (1.6% vs. 0.7%; $p < 0.05$) and high school (2.9% vs. 1.9%; $p < 0.10$). Differences by race/ethnicity were small and generally nonsignificant ($p > 0.05$) in middle school and high school.

Current Use of Water Pipes (Hookahs)

The use of water pipes, also known as hookahs, originated in the Middle East/ancient Persia and is an emerging trend in the twenty-first century. The MTF survey for 12th-grade students first included a question about hookah use in 2010 and found that 17% of high school seniors in the United States had used hookahs in the past year (data not shown in tables) (Johnston et al. 2011). This rate was slightly higher among boys (19%) than girls (15%) (Johnston et al. 2011). According to the 2007 Florida Youth Tobacco Survey, 4% of middle school students and 11% of high school students in that state had ever used water pipes (Barnett et al. 2009). In Florida, the prevalence of water pipe use was significantly higher for boys

and for students who were ever or current smokers. Other small-scale studies on young adults indicate that the use of a water pipe is more prevalent among university students in the United States, with estimates for past-year use ranging from 22% to 40% (Primack et al. 2008; Dugas et al. 2010).

Although research on the health effects of using a hookah is limited, studies have shown that hookah smoke contains many of the same harmful components found in cigarette smoke, such as nicotine, tar, and heavy metals (Shihadeh 2003). Moreover, the heat sources used to burn hookah tobacco release other dangerous substances, including carbon monoxide and metals, that may impart additional risks to the user (World Health Organization [WHO] 2005; American Lung Association [ALA] 2007). In a typical 1-hour hookah smoking session, users may inhale 100–200 times the amount of smoke they would inhale from a single cigarette (WHO 2005). In addition, in a single water pipe session, users are exposed to up to 9 times the carbon monoxide and 1.7 times the nicotine of a single cigarette (Eissenberg and Shihadeh 2009; Maziak et al. 2009). Accordingly, over time, hookah users may be exposed to higher concentrations of toxins than are cigarette smokers. Existing studies also indicate that hookah smoking is linked to many of the same adverse health effects as cigarette smoking, including lung, oral, and bladder cancers, low birth weight in offspring, and heart disease (Knishkowsky and Amitai 2005; WHO 2005; ALA 2007).

Trends Over Time in Use of Bidis and Kreteks

National trend data for the use of bidis and kreteks are available only since 1999 via NYTS. As shown in Figure 3.1.42A–H, current use of bidis and kreteks among middle school students remained relatively constant between 1999 and 2009. Current use of bidis and kreteks among high school students declined between 1999 and 2002, and then progress stalled, with no significant changes overall between 2002 and 2009. Few differences in these trends by gender or race/ethnicity were observed during this time period. Notably, the *Family Smoking Prevention and Tobacco Control Act* (2009) gave FDA the authority to regulate tobacco products and included a ban on cigarettes with characterizing flavorings. However, in anticipation of FDA regulation, some of these products, kreteks in particular, have reappeared in the marketplace as “little cigars.”

Summary

The prevalence of bidi and kretek use is low and has declined over the last decade, while hookah use is higher. Surveillance data on these products are limited, however.

Among middle school students, an estimated 3.1% have ever used bidis and 1.6% currently use bidis. Estimates for ever use and current use of kreteks among middle school students are slightly less (1.8% and 1.2%). Five percent of high school students have ever used bidis or kreteks, and an estimated 2% are currently using these products. Among high school seniors, 17% have smoked a hookah in the past year (Johnston et al. 2011). Other emerging tobacco products, like snus, e-cigarettes, and dissolvables, are not considered in this chapter, as nationally representative surveillance data were unavailable when this report was prepared.

Co-occurrence of Tobacco Use Behaviors

Concurrent Use of Multiple Tobacco Products

A relatively small, but not inconsequential, number of American youth use cigarettes and smokeless tobacco concurrently. According to the 2010 NSDUH, 2.0% of all youth 13–18 years of age were current users of both cigarettes and smokeless tobacco (Table 3.1.55). Per the 2009 YRBS, 5.1% of 9th- to 12th-grade students were concurrent users of these two products, and according to the 2010 MTF, 3.6% of those in 8th, 10th, and 12th grade combined. Per the 2009 NYTS, 1.3% of 6th–8th grade students and 3.8% of 9th–12th-grade students were current users of both cigarettes and smokeless tobacco (Table 3.1.55). According to the NSDUH, YRBS, MTF, and NYTS–high school, males were significantly more likely than females ($p < 0.05$) to use the products concurrently; the gender difference in NYTS–middle school was not significant. According to NSDUH, MTF, YRBS, and NYTS–high school, concurrent use of cigarettes and smokeless tobacco was highest among White students; differences between White students and other classifications were always significant in NSDUH, MTF, and YRBS ($p < 0.05$, for all comparisons between White and other racial/ethnic subgroups of students) but not in NYTS–high school. As was the case in YRBS, according to NSDUH, White youth (3.1%) were more likely to be concurrent users than were Other (0.9%), Hispanic (0.7%), or Black youth (0.2%) ($p < 0.05$ for all comparisons with White students). According to MTF, the estimates were 4.8%, White; 2.3%, Other; 2.0%, Hispanic; and 1.0%, Black ($p < 0.05$ for all comparisons with White students). In NYTS–high school, White students had the highest prevalence of concurrent use (4.7%), and this was significantly greater than the prevalence among Black (1.2%, $p < 0.05$) but not among Hispanic (3.3%) or Other students (3.3%) ($p > 0.05$). Concurrent use increased with greater age in NSDUH ($p < 0.05$

for all age comparisons). In MTF, 8th-grade students (2.1%) were significantly less likely to be concurrent users than were 10th-grade students (3.9%, $p < 0.05$ vs. 8th-grade students) or 12th-grade students (5.2%, $p < 0.05$ vs. 8th-grade students). In YRBS, concurrent use was significantly greater among 11th-grade (6.2%, $p < 0.05$ vs. 9th-grade students) and 12th-grade students (5.2%, $p < 0.05$ vs. 9th-grade students) than among 9th-grade students (3.4%). According to NYTS—middle school, there were no significant differences by age, but per NYTS—high school, 9th-grade students (2.4%) were significantly less likely to use both products than were 10th- (3.6%), 11th- (4.8%), and 12th-grade students (4.5%) ($p < 0.05$ for all comparisons). Regional variations were found in all surveys; the highest prevalence of concurrent use was in the Midwest and South per NSDUH, YRBS, and MTF, and the prevalence in these regions was significantly higher than in the other regions in all three surveys ($p < 0.05$).

The previous Surgeon General's report on preventing tobacco use among youth suggested that adolescents who use smokeless tobacco are more likely to become cigarette smokers (USDHHS 1994). Since that time there has been much debate on whether using smokeless tobacco serves as a gateway to later cigarette use (Kozlowski et al. 2003; Tomar 2003; O'Connor et al. 2005); data from MTF on grade of first use of cigarettes and smokeless tobacco among male high school seniors are presented in Table 3.1.56. By the 12th grade, 47.7% of seniors had not tried cigarettes or smokeless tobacco, 24.2% had tried both, 24.3% had tried cigarettes but not smokeless tobacco, and 3.8% had tried smokeless tobacco but not cigarettes. Of those students who had tried both cigarettes and smokeless tobacco by 12th grade, 50.5% had tried cigarettes before trying smokeless tobacco, 35.0% had tried both smokeless tobacco and cigarettes at about the same time, and 14.6% had tried smokeless first.

The use of multiple tobacco products is fairly common among adolescent males, as illustrated in Figure 3.1.43. Overall, 29.9% of high school male students for YRBS and 19.4% of high school males for NSDUH were current users of at least one type of tobacco product. Among males of high school age who were users of at least one tobacco product, use of cigarettes alone was more common than any other combination of tobacco products for NSDUH (39.3%), and combined use of cigarettes and cigars was the most common combination for YRBS (21.2%). Although few male student users of tobacco solely combined cigars and smokeless products (5.0%) or cigarettes and smokeless products (9.6%) for YRBS, a considerable percentage combined use of cigarettes, cigars, and smokeless tobacco (19.2%).

Figure 3.1.44 illustrates trends in the percentage of high school students who were current users (i.e., in

the past 30 days) of two or more different types of tobacco products (dual use or concurrent use) between 1997 and 2009 according to YRBS. Among students who used at least one type of tobacco product, males were about twice as likely as females to be concurrent users in each year from 1997 to 2009 (Figure 3.1.44A). Among male tobacco users, Blacks had a lower prevalence of at least dual use during this time period than White or Hispanic males (Figure 3.1.44B). In the same time period among female tobacco users, Hispanics had the highest prevalence, followed by Black and then White females (Figure 3.1.44C). In 2009, 58.0% of Hispanic male tobacco users and 55.8% of White male tobacco users were concurrent users, as were 43.4% of Hispanic female tobacco users, according to YRBS.

Tables 3.1.57 and 3.1.58 illustrate the initiation of smokeless tobacco use among 12- to 17-year-olds (Table 3.1.57) and 18- to 25-year-olds (Table 3.1.58) between 2006 and 2010. The percentage of adolescents who were initiates remained stable at 2.4% from 2006 to 2010. The percentage of young adults who were initiates also remained stable from 2.1% in 2006 to 2.3%. While the market for moist snuff overall grew by 18% between 2005 and 2007, the "value" and deep-discount brands sold grew by 70% (Delnevo et al. 2009; Maxwell 2009b). Moreover, although deep-discount brands were responsible for 81% of the growth in moist snuff overall, one brand, Grizzly, accounted for 55% of the overall growth in consumption of moist snuff between 2005 and 2007.

Data for cigars over the same 5-year period (2006–2010) show a higher rate of initiation, roughly 4–5% per year for youth 12–17 years of age (Table 3.1.59) and 6% per year for young adults 18–25 years of age (Table 3.1.60). The percentage of initiates declined significantly between 2006 and 2010 among adolescents overall, and among male and White adolescents ($p < 0.05$); among females, it rose significantly ($p < 0.05$). The difference among young adults between 2006 and 2010 was only significant for Hispanics ($p < 0.05$); this was an increase. Taken together, the number of adolescents and young adults who began using cigars in 2010 was about 2.3 million. Perhaps the most disconcerting trend in cigar use initiation is that, among youth, girls made up roughly 40% of the initiates every year.

The number of initiates of "any tobacco product" can be seen to be less than the number of initiates of cigarettes, cigars, and smokeless tobacco combined, suggesting that when youth and young adults initiate tobacco use, some do so with more than one product, or they quickly switch to another product. Among youth, initiation of any tobacco product fluctuated between 7.3% and 7.9% during 2006 to 2010. In 2010, an estimated 1.48 million youth 12–17 years of age tried at least one tobacco product for

the first time (Table 3.1.61). The initiation rate for any tobacco products among young adults was higher than that for youth (Table 3.1.62). The rate for young adults remained stable during the 5-year period from 2006 to 2010 ($p > 0.05$) overall.

Summary

Among adolescent and young adult tobacco users, concurrent use of cigarettes, smokeless tobacco, and/or cigars is common. Males, Whites, Hispanics, and older youth are most likely to use these products concurrently, and Blacks are the least likely. In 2009, among tobacco users, more than 50% of high school White males and Hispanic males were concurrent users, as were more than

40% of high school Hispanic females. The data are mixed as to whether users of smokeless tobacco are more likely to begin smoking cigarettes than are nonusers of smokeless tobacco. The initiation rates of smokeless tobacco among adolescents and young adults did not increase significantly between 2006 and 2010. Initiation of cigar use decreased significantly among adolescents during this time and remained constant among young adults. For all tobacco products combined (cigarettes, smokeless tobacco, and cigars), White youth had the highest rates of initiation except in 2009, when Hispanic youth reported rates of initiation similar to Whites. The rate of initiation of any tobacco product during this time period was considerably higher among adolescents than for young adults.

Tobacco Use Among Young People Worldwide

Global Youth Tobacco Survey

This section of Chapter 3 focuses on tobacco use among adolescents worldwide. Since the 1994 Surgeon General's report on reducing tobacco use among young people, a new global surveillance system, the Global Youth Tobacco Survey (GYTS), developed by CDC and WHO at the end of 1998, has become available. GYTS is part of the Global Tobacco Surveillance System (GTSS), which monitors tobacco use among various populations (e.g., youth, school personnel, adults, health professionals) worldwide. Since 1999, GYTS has been conducted at least once in all six of the WHO regions, across more than 140 countries and 11 territories (Warren et al. 2008). All participating countries can repeat the survey once every 4–5 years (Warren et al. 2008). A core questionnaire is used across all sites, as is a common survey methodology. The survey is administered to 13- to 15-year-old students enrolled in a random sample of schools drawn from the sampling frame.

The data presented in this chapter update and/or complement data presented in previous publications from GYTS (e.g., CDC 2006; Warren et al. 2008). The data presented below focus on cigarette smoking and the use of other tobacco products (e.g., smokeless tobacco, bidis). Estimates are presented for each site that participated in the survey (i.e., each country, territory). Weighted aggregate estimates are also provided for each of the six WHO regions: Africa (AFRO), the Americas (PAHO), the Eastern Mediterranean (EMRO), Europe (EURO), South-East Asia (SEARO), and the Western Pacific (WPRO). These data are

presented in Tables 3.1.63–3.1.66 (also see Figures 3.1.45–3.1.48).

Cigarette Smoking

Overall, per the 1999–2009 GYTS, about one in four (27.3%) students aged 13–15 years had ever smoked a cigarette (Table 3.1.63). The prevalence of ever smoking was highest in EURO (39.7%) and lowest in AFRO (11.5%). In general, the proportion of students who had ever smoked a cigarette was higher among boys (34.2%) than girls (18.2%). This pattern was observed in all six regions, with the differential ranging from 6.0 percentage points in PAHO to 21.1 percentage points in WPRO. Almost one in every four (23.2%) ever smokers had tried their first cigarette before the age of 10 years. Early initiation (<10 years of age) was most prevalent in EURO (26.8%) and least prevalent in PAHO (16.1%). The proportion of ever smokers who tried their first cigarette before the age of 10 years was higher for boys in all regions, except for SEARO, where it was higher for girls. Among students who had never smoked, one in six (17.6%) was susceptible (i.e., had no firm decision not to smoke) to initiating the smoking of cigarettes in the next year. The prevalence of susceptibility was highest in EURO (25.1%) and lowest in AFRO (10.1%). Boys were more susceptible to starting to smoke in AFRO, EMRO, and PAHO, while girls were more susceptible in SEARO, EURO, and WPRO.

Overall, 7.1% of youth (9.3% of boys and 4.0% of girls) currently smoked cigarettes (Table 3.1.64). The prevalence of current smoking was highest in WPRO

(13.7%) and lowest in AFRO (4.0%). Frequent smoking was highest in EURO (1.9%) and lowest in EMRO and AFRO (0.6%). The proportion of current smokers who smoked frequently was higher for boys in all six regions.

Overall, 9.6% of current smokers either always had or felt like having a cigarette the first thing in the morning (Table 3.1.65); this measure can be used as an indicator of nicotine dependence (Chapter 2). This prevalence was highest in EMRO (10.5%) and lowest in PAHO (4.6%). It was higher among boys than for girls in all regions except for AFRO. Three-quarters (75.6%) of current smokers wanted to quit smoking, and 74.7% of current smokers had tried to quit smoking at least once in the past year.

Other Tobacco Products

Overall, 7.1% of the 13- to 15-year-old students were current users of a tobacco product other than a cigarette (e.g., pipes, smokeless tobacco, bidis) (Table 3.1.66). This prevalence was highest in EMRO (16.5%) and lowest in EURO (4.9%). The proportion of students who currently used a tobacco product other than cigarettes was higher among boys than girls in all six regions, although this differential was relatively small in all of the regions. Current use of other tobacco products was more common than use of cigarettes in AFRO, EMRO, and SEARO, while in EURO, WPRO, and PAHO, cigarette use was more common (Tables 3.1.64, 3.1.66).

European School Survey Project on Alcohol and Other Drugs

At present, the only part of the world that GYTS does not cover comprehensively is Western Europe, where

other surveillance systems are used. The European School Survey Project on Alcohol and Other Drugs (ESPAD), which is coordinated by the Swedish Council for Information on Alcohol and Other Drugs, is one example. Data were first collected on this project from 16-year-olds in 1995, and subsequent data collections have been made every fourth year. The overarching goal of ESPAD is to study substance use among adolescents throughout Europe by using a standardized epidemiological survey to compare these data between countries. Data from ESPAD are provided in Table 3.1.67. In contrast to GYTS, which surveys youth 13–15 years of age, ESPAD surveys youth at 16 years of age only. Thus, the estimates presented below for current cigarette smoking would be expected to exceed those presented above from GYTS.

The latest survey available from ESPAD is for 2007 (Hibell et al. 2009); with a few exceptions, the prevalence of current (i.e., past 30 days) cigarette smoking exceeded 20% across the countries included in the survey. Prevalence was highest in Austria (45%) and several Eastern European countries (Czech Republic, 41%; Latvia, 41%; Bulgaria, 40%) and lowest in Armenia (7%). The other countries with low levels were in the north (Iceland, 16%; Norway, 19%; Sweden, 21%) and in Portugal (19%) and Poland (21%). In 13 countries, current smoking was higher among boys (e.g., in Russia, 41% of boys and 29% of girls were current smokers), and in 21 countries, current smoking was higher among girls (e.g., in Ireland, 27% of girls and 19% of boys were current smokers).

Appendix 3.2. Sources of Data

Global Youth Tobacco Survey

The World Health Organization (WHO), the Centers for Disease Control and Prevention (CDC), and the Canadian Public Health Association developed the Global Tobacco Surveillance System (GTSS) to assist countries in establishing tobacco control surveillance and monitoring programs (CDC 2010b). GTSS includes the collection of data through four surveys: the Global Youth Tobacco Survey (GYTS), the Global School Personnel Survey, the Global Health Professions Students Survey, and the Global

Adult Tobacco Survey. This report of the Surgeon General uses data from GYTS that countries rely on to enhance their capacity to monitor tobacco use among youth and to guide national programs in preventing and controlling tobacco use; the data are also used to facilitate comparison of tobacco-related data at the national, regional, and global levels. Since 1999, GYTS has been conducted in 140 countries and 11 territories across all six WHO regions and has become the most comprehensive system for youth tobacco surveillance ever developed and implemented (Warren et al. 2008).

The target population for a GYTS can be national or regional, or the survey can focus on specific urban or rural areas, depending on data requirements, resources, and safety considerations. The standard GYTS uses a two-stage cluster sample design that produces samples of students enrolled in the grades that students 13–15 years of age typically attend. Each sampling frame includes all schools (usually both public and private) in a geographically defined area that contain any of the identified grades. In the first sampling stage, schools are selected with a probability that matches their enrollment in the identified grades. In the second sampling stage, classes within the selected schools are randomly selected. All students in selected classes who are enrolled the day the survey is administered are eligible to participate. Schools that decline to participate in the original sample are not replaced. The standard GYTS sample design is tailored to meet the needs of participating countries, territories, and regions. All data are weighted to produce estimates representative of students in each country, territory, or region (Warren et al. 2008).

GYTS questionnaires are translated into local languages as needed and back-translated to check them for accuracy. Country coordinators for GYTS conduct focus groups of students 13–15 years of age to further test the accuracy of the translation and the students' comprehension of the questions. Trained personnel administer the questionnaires to students in their classrooms. Students complete self-administered paper-and-pencil questionnaires and record their responses on computer-scannable answer sheets; participation is voluntary and anonymous (Warren et al. 2008).

The sample sizes for students aged 13–15 years among the 170 GYTS sites included in this report of the Surgeon General ranged from 129 to 15,420. Student response rates ranged from 53.2% to 100.0%, class response rates ranged from 53.0% to 100.0%, school response rates ranged from 50.0% to 100.0%, and the overall response rate (the product of the rates for students, classes, and schools) ranged from 32.3% to 100.0% (median: 84.9%). GYTS data from 1999 to 2008 are available by registering at the CDC Web site (CDC 2009a).

Monitoring the Future Study

Monitoring the Future (MTF): A Continuing Study of American Youth is a study of American adolescents, college students, and adults through the age of 45 years. The purpose of this study is to monitor changes in the beliefs, attitudes, and behavior of young people in the United States that are relevant to drug use and other health and social issues. Self-administered paper-and-pencil

questionnaires are used to survey nationally representative samples of 12th-grade students in public and private schools in 48 of the 50 states (all but Alaska and Hawaii). Follow-up surveys using self-administered paper-and-pencil questionnaires mailed to the residence of a randomly selected subsample of the respondents in each 12th-grade sample are conducted biennially through 30 years of age and then every 5 years through 45 years of age. Since 1991, self-administered paper-and-pencil questionnaires also have been used to survey separate nationally representative samples of 8th- and 10th-grade students in public and private schools (Johnston et al. 2007). The MTF study, ongoing on an annual basis since its inception in 1975, is conducted by the University of Michigan's Institute for Social Research and supported through grants from the National Institute on Drug Abuse (Johnston et al. 2008).

The 12th-grade surveys and follow-up surveys in MTF have always used confidential questionnaires. From 1991 to 1997, the 8th- and 10th-grade surveys also used confidential questionnaires, but in 1998, one-half of the 8th- and 10th-grade samples used confidential questionnaires (name provided but confidentiality assured) and the remaining half used anonymous questionnaires. Since 1999, the 8th- and 10th-grade surveys have used anonymous questionnaires. A study of the 1998 split-sample results revealed no effect of the change in methods among 10th-grade students and a modest effect on self-reported substance use among 8th-grade students (i.e., prevalence was slightly higher for anonymous surveys) (Johnston et al. 2007).

For the 8th-, 10th-, and 12th-grade samples, a three-stage cluster sample design is used to select (1) geographic areas within the 48 contiguous states, (2) schools with a probability proportional to their enrollment, and (3) students. Students are selected either randomly by classroom or by some other unbiased random method. Schools are invited to participate in the study for a 2-year period. To maintain an adequate sample size, for each school that declines to participate in the original school sample a similar school (in terms of gender, geographic area, level of urbanization, and other demographic characteristics) is recruited as a replacement for that slot (Johnston et al. 2007). Schools are provided \$1,000 each year to increase their incentive to participate (Bachman et al. 2006).

In 2009, 15,509 8th-grade students, 16,320 10th-grade students, and 14,268 12th-grade students participated in the MTF study. In all, 389 schools participated: 145, 119, and 125 in the 8th-, 10th-, and 12th-grade surveys, respectively. Response rates for the students were 88%, 89%, and 82% for the 8th, 10th, and 12th grades, respectively (Johnston et al. 2010). In the MTF design, one slot is identified for each selected sample unit. For each slot, 55% of originally selected 8th-grade schools,

52% of originally selected 10th-grade schools, and 55% of originally selected 12th-grade schools agreed to participate in the survey; for those slots where originally selected schools did not participate, a replacement school was selected such that of the school slots for grades 8, 10, and 12, 97%, 99%, and 99%, respectively, were filled (personal communication, Patrick O'Malley, MTF, July 2010). MTF study data from the cross-sectional in-school surveys conducted from 1976 to 2008 are available at the Substance Abuse & Mental Health Data Archive (University of Michigan 2012).

National Health Interview Survey

The National Health Interview Survey (NHIS) is a multipurpose survey conducted by the National Center for Health Statistics of the CDC and is the principal source of information on the health of the civilian, noninstitutionalized population of the United States. NHIS has been conducted continuously since 1957. Questions on smoking have been included in selected survey years only since 1965, and detailed items allowing classification by race and ethnicity have been included only since 1978. Face-to-face interviews are used to collect confidential data from a representative sample of the population at their place of residence (National Center for Health Statistics 2008).

The sampling plan follows a multistage area probability design that permits the representative sampling of households and noninstitutional group quarters (e.g., college dormitories) in all 50 states and the District of Columbia (DC). African American or Black, Hispanic or Latino, and Asian persons are oversampled. For each family in NHIS, one sample child (<18 years of age) and one sample adult are randomly selected, and information on each is collected. For children and those adults not at home during the interview, information is provided by a knowledgeable adult family member. Since 1974, only self-reports of cigarette smoking and use of other tobacco products have been employed. Thus, no proxy data have been used since 1974 on questions of import to this report. NHIS is conducted using computer-assisted personal interviewing by interviewers from the U.S. Census Bureau; sampling and interviewing are continuous throughout each year (National Center for Health Statistics 2008).

The interviewed sample for the 2009 NHIS consisted of 33,856 households, which yielded 88,446 persons in 34,640 families. The 2009 NHIS obtained data on health behaviors for 27,731 sampled adults. These data were collected by an interview administered in person to this group of adults, who constitute a nationally representative sample of the noninstitutionalized U.S. civilian population 18 years of age or older. The total household response

rate was 82.2%, and the overall survey response rate for the adult component of the NHIS survey, which was used here, was 65.4%. NHIS data from 1978 to 2009 are available at the CDC Web site (CDC 2009b).

National Longitudinal Study of Adolescent Health

The National Longitudinal Study of Adolescent Health (Add Health) is a nationally representative study that explores the causes of health-related behaviors of adolescents in grades 7–12 and the outcomes of these behaviors in young adulthood. Add Health examines how social contexts (families, friends, peers, schools, neighborhoods, and communities) influence adolescents' health and risk behaviors. The study was designed and continues to be conducted by the Carolina Population Center at the University of North Carolina at Chapel Hill and is funded by a grant from the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development. The study also receives funding from 17 other federal agencies (University of North Carolina 2009).

Add Health uses a longitudinal design; data were collected at baseline (Wave I, conducted during 1994 and 1995), for a second time at a 1-year interval (Wave II, conducted during 1996), and for a third time at a 6-year interval (Wave III, conducted during 2001 and 2002). The study includes in-school and in-home questionnaires for students and questionnaires for parents and school administrators (University of North Carolina 2009).

Wave I, Stage 1: A stratified random sample of 80 U.S. high schools was selected to participate in Stage 1 of Wave I. A school was eligible for the sample if it included an 11th grade and had a minimum of 30 students. More than 70% of the originally sampled high schools participated. Each school that declined to participate was replaced by a school within the stratum. A feeder school—a school that sent graduates to the high school and that included a 7th grade—was also recruited from the community. Because some high schools spanned grades 7–12, they functioned as their own feeder school, and the “pair” was in fact a single school. In total, 132 schools participated in Wave I. Students and school administrators both completed confidential computer-scannable questionnaires that were self-administered and used paper and pencil.

Wave I, Stage 2: An in-home sample of 27,000 adolescents was selected for Stage 2, Wave I, consisting of a core sample from each school plus selected special oversamples. Oversamples were drawn to explore additional study questions such as examining the influence of

genetic factors on adolescent health. Eligibility for oversamples was determined by an adolescent's responses on the in-school questionnaire. Adolescents could qualify for more than one oversample. In the analyses reported here, information from only the core sample of adolescents was used, not the oversamples. Data collected in the home from adolescents were recorded on laptop computers. For less sensitive sections, trained interviewers read the questions and entered the adolescent's answers. For more sensitive sections, such as tobacco use, the adolescent listened to prerecorded questions through earphones and entered the answers directly using ACASI (audio computer-assisted self-interviewing). In addition, parents were asked to complete an interviewer-assisted, computer-scannable questionnaire.

Wave II: The in-home sample for Wave II was the same group included in the Wave I in-home sample, with a few exceptions. The mode of data collection also was the same. In addition, school administrators were contacted by telephone to update information on their schools.

Wave III: The in-home Wave III sample consisted of 15,170 Wave I respondents who could be located and reinterviewed 6 years later. A sample of 1,507 partners of the original respondents were also interviewed. Release forms to obtain high school transcripts as well as samples of urine and saliva were collected during Wave III.

National Survey on Drug Use and Health

The National Survey on Drug Use and Health (NSDUH) is an annual survey of the civilian, noninstitutionalized population of the United States 12 years of age or older. Before 2002, this survey, which has been conducted by the federal government since 1971, was called the National Household Survey on Drug Abuse. NSDUH is the primary source of statistical information on the use of illegal drugs by the U.S. population; face-to-face interviews are used to collect confidential data from a representative sample of the population at their place of residence. The survey is sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA) of the U.S. Department of Health and Human Services and is planned and managed by SAMHSA's Office of Applied Studies (SAMHSA 2009b).

Since 1999, SAMHSA has implemented major improvements in the methods used in this survey (SAMHSA 2009a). Because of changes in the survey instrument, recent trends over time are available only from 2002 to 2010 (SAMHSA 2010). Data are collected using computer-assisted interviewing (CAI), and respon-

dents are given a US\$30 incentive payment for participation. The total targeted sample size of 67,500 for each year is equally allocated across three age groups: 12–17 years, 18–25 years, and 26 years of age or older. The 2010 NSDUH sampling frame included residents of noninstitutional group quarters (e.g., shelters, rooming houses, dormitories, and group homes), residents of Alaska and Hawaii as well as those in the other 48 states plus DC, and civilians living on military bases. Persons excluded from the 2010 universe were those with no fixed household address (e.g., homeless transients not in shelters) and residents of institutional group quarters (e.g., jails and hospitals). The 2010 NSDUH employed a state-based design with an independent, multistage area probability sample within each state and DC. The eight states with the largest population (which together account for about one-half of the total U.S. population 12 years old or older) were designated as large-sample states (California, Florida, Illinois, Michigan, New York, Ohio, Pennsylvania, and Texas) and had a sample size of about 3,600 each. For the remaining 42 states and DC, the sample size was about 900 per state (SAMHSA 2010). However, combining data over multiple survey years allows direct estimates for all states. The 2010 NSDUH was conducted from January to December of that year. The overall weighted response rate in 2010, defined as the product of the weighted screening response rate, was 88.8%, and the weighted interview response rate, 74.7%, was 66.3%. A total of 68,487 persons were included in the main sample. The NSDUH public use microdata files from 2002 to 2010 are available for download and online analysis (University of Michigan 2012).

National Youth Tobacco Survey

The National Youth Tobacco Survey (NYTS) was developed by CDC to assist with the evaluation of the national tobacco prevention and control program (TCP) and state TCPs. The NYTS provides nationally representative data on tobacco-related behaviors among middle school (grades 6–8) and high school (grades 9–12) students. NYTS was first conducted in the fall of 1999 and has since been conducted in 2000, 2002, 2004, 2006, and 2009. The NYTS sampling frame consists of all students enrolled in public, Catholic, and other private middle schools and high schools (grades 6–12) in the 50 states and DC. In the 2009 NYTS, Black and Hispanic students were oversampled. The survey uses a three-stage cluster sample design, with units in the first stage stratified by racial composition and urban/rural classification. In the first sampling stage, primary sampling units (PSUs), defined as a county, a group of smaller counties, or a portion of a very large

county, within each stratum are randomly sampled without replacement, with probability proportional to the total number of eligible students enrolled in all eligible schools within the PSU. In the second stage, schools within each selected PSU are randomly selected with probability proportional to the number of eligible students enrolled in the school. In the third and final stage, classes within each selected school are randomly selected. All students in the chosen classes are eligible to participate in the survey, although participation is voluntary and anonymous. Participants complete a self-administered paper-and-pencil questionnaire and record their responses on a computer-scannable questionnaire booklet (CDC 2009d).

In the 2009 NYTS, 205 of the 222 selected schools participated (92.3% school response rate) and 22,679 of the 24,666 selected students participated (91.9% student response rate), resulting in an overall response rate of 84.8% (CDC 2009d).

Youth Risk Behavior Surveillance System

The Youth Risk Behavior Surveillance System (YRBSS) monitors six categories of priority health-risk behaviors among adolescents in the United States: (1) behaviors that contribute to unintentional injuries and violence; (2) tobacco use; (3) alcohol and other drug use; (4) sexual behaviors that result in unintended pregnancy and sexually transmitted infections, including HIV; (5) unhealthy dietary behaviors; and (6) physical inactivity. In addition, YRBSS monitors the prevalence of asthma and obesity and overweight calculated from self-reported height and weight (CDC 2004). YRBSS consists of Youth Risk Behavior Surveys (YRBSs) conducted by state, local, territorial, and tribal health and education agencies and a national YRBS conducted by CDC. CDC developed YRBSS in 1990 and provides cooperative agreement funding and technical assistance for the state, local, territorial, and tribal surveys (CDC 2004). The current report includes data from the national YRBS and the state YRBSs.

The sampling frame for the national YRBS is all public and private school students in grades 9–12 in the 50 states and DC. A three-stage cluster sample design is used to sample (1) large-sized counties or groups of smaller adjacent counties, (2) public and private schools with a probability proportional to the schools' enrollment, and (3) one or two randomly selected classes in each grade. Examples of classes include homerooms, classes of a required discipline (e.g., English or social studies), and all classes meeting during a required period (e.g., second period). All students in a sampled class are eligible to par-

ticipate. Oversampling is used to achieve sufficiently large subsamples of Black or African American and Hispanic or Latino students to enable separate analyses of these subgroups. Schools that decline to participate in the original sample are not replaced (CDC 2004).

The target population for the state YRBSs comprises all public school students in grades 9–12 in all but a few participating states. A two-stage cluster sample design is used to produce representative samples of students in grades 9–12 in each jurisdiction. In the first sampling stage in all but a few states, schools are selected with probability proportional to school enrollment or size. In the second sampling stage, intact classes of a required subject or intact classes during a required period (e.g., second period) are selected randomly. All students in sampled classes are eligible to participate. Certain states modify these procedures to meet their individual needs, such as selecting all schools rather than a sample of schools to participate (CDC 2004).

For both the national and state surveys, students complete self-administered paper-and-pencil questionnaires and record their answers directly on the questionnaire booklet or a separate computer-scannable answer sheet (CDC 2004). Local procedures to obtain the permission of parents are followed. Trained personnel administer the questionnaires to students in their classrooms for the national survey and most state surveys. The participation of students is both voluntary and anonymous (CDC 2004). The national YRBS and most state YRBSs are conducted during the spring of odd-numbered years (CDC 2004).

In 2009, 16,410 students in grades 9–12 from 158 schools participated in the national YRBS. The student response rate was 88%, the school response rate was 81%, and the overall response rate (the product of the student and school response rates) was 71%. National YRBS data from 1991 to 2009 are available at CDC's Web site (CDC 2010c). The number of states conducting a YRBS has varied each cycle, from a low of 26 in 1991 to a high of 47 in 2009 (Eaton et al. 2010). States must meet three criteria (a scientifically selected sample at the school and student levels, appropriate documentation, and an overall response rate of 60% or more) before their data are weighted to be representative of all students in grades 9–12 attending public schools in their jurisdiction (CDC 2004). In 2009, 42 states (and 20 local municipalities) conducted a YRBS that met the criteria for weighting and were included in an analyses reported here. The size of the student samples across these surveys ranged from 965 to 14,870. Student response rates ranged from 61% to 94%, the response rate for schools ranged from 73% to 100%, and overall response rates ranged from 60% to 94% (Eaton et al. 2010). Additional information about YRBS is available at CDC's Web site (CDC 2010b).

Appendix 3.3. Measures of Tobacco Use

Validity of Measures of Tobacco Use

All of the data on tobacco use among youth that are presented in this report are based on retrospective self-reported responses to questionnaires. Because of the retrospective nature of data collection, and because tobacco use is viewed by many as a socially undesirable behavior, there is a risk of inaccurate or dishonest responses. Because it was not feasible to verify the self-reported data included here, it is important for researchers to interpret these data with some caution and an understanding of possible sources of inaccuracy. Many factors can affect the validity of self-reported data—factors that can be categorized as cognitive or situational. Cognitive processes that affect responses include comprehension of the question, retrieval of relevant information from memory, decision making about the adequacy of the information retrieved, and the generation of a response (Brener et al. 2003). Each of these processes can contribute to errors in responses and, subsequently, to problems with validity.

Situational factors that affect the validity of self-reported data refer to characteristics of the external environment in which the survey is being conducted. These include the setting (i.e., school or home based), the method (i.e., self-administered questionnaire or in-person interview), the social desirability of the behavior being reported, and the perception of privacy and/or confidentiality of responses (U.S. Department of Health and Human Services [USDHHS] 1994; Brener et al. 2003). Many studies have found that youth report a higher number of sensitive behaviors when a survey is completed in a school setting rather than in their homes (Gfroerer et al. 1997; Hedges and Jarvis 1998; Kann et al. 2002). One study in particular compared the school-based national Youth Risk Behavior Survey (YRBS) with the household-based YRBS supplement to the National Health Interview Survey (NHIS). That study found that the school-based survey produced a significantly higher reporting of many sensitive behaviors, such as driving after drinking alcohol, binge drinking, and current use of marijuana and cocaine (Kann et al. 2002). Four measures of various stages of the smoking uptake process were higher in the school-based survey, but current cigarette use and frequent cigarette use, while elevated in the school-based survey, were not significantly different from estimates generated in the

household-based survey. Few differences in nonsensitive behaviors were observed. Two other studies indicate that while self-reported estimates of current use of alcohol and illicit drugs were higher in school-based versus household-based surveys, estimates of current cigarette smoking were quite similar across settings (Gfroerer et al. 1997; Brener et al. 2006). It is noteworthy that all three of these studies used self- rather than interviewer-administered interviews/questionnaires. Nevertheless, the provision of privacy that school surveys provide is important, especially if smoking becomes more socially unacceptable over time. However, household-based surveys are more likely to include youth who drop out of school or are frequently absent from school, and these groups are more likely to smoke.

Self-administered methods of data collection have generally produced higher reporting of sensitive behaviors, including tobacco use, than have interviewer-administered methods (Turner et al. 1992; Aquilino 1994; Brittingham et al. 1998). For example, Turner and colleagues (1992) found that the prevalence of current smoking among 12- to 17-year-olds reported on the self-administered version of the National Household Survey on Drug Abuse (NSDUH) home-based survey was considerably higher (by 10–30%) than on the interviewer-administered version. The absence of personal interaction with an interviewer on self-administered surveys may reduce the reporting biases associated with perceived privacy and the social desirability of a behavior (Brener et al. 2003).

Another situational influence is the use of the “bogus pipeline” (Brener et al. 2003). This method has been used to improve the validity of self-reported measures of smoking, especially in school-based surveys. Respondents are told that a biochemical test will be used to accurately evaluate their smoking behavior after the questionnaire is completed, although in fact such a test will not be employed. This method has been associated with higher reported smoking prevalence (Aguinis et al. 1993). None of the surveys used in this report make use of the bogus pipeline, but each survey has taken alternate steps to ensure that the survey setting is private and that the data collected are at least confidential if not anonymous.

In conclusion, the factors described above may affect the point estimate of smoking prevalence. However, if these factors remain stable over the years, they should not affect the trends seen over time.

Measures of Cigarette Smoking

Information on the measures of cigarette smoking used in this report is provided below and in Appendix Table 3.3.1.

Ever Smoking

The definitions for ever smoking vary slightly in the four surveys used in this report. In the NSDUH, an ever smoker is defined as someone who has ever smoked “part or all of a cigarette.” In Monitoring the Future (MTF), respondents who report having smoked cigarettes at least “once or twice” are considered ever users. In the YRBSS and the National Youth Tobacco Survey (NYTS), an ever smoker is one who has “ever tried cigarette smoking, even one or two puffs.”

Current Smoking

Five surveys—NSDUH, the Global Youth Tobacco Survey (GYTS), NYTS, MTF, and YRBSS—define current smoking as having smoked cigarettes during the 30 days preceding the survey. NSDUH asks whether the respondent has smoked “part or all of a cigarette” in the past 30 days to determine current usage. GYTS and NYTS regard current smokers as those who smoked cigarettes on 1 or more of the past 30 days. MTF asks how frequently students have smoked cigarettes during the past 30 days, and the choices range from “not at all” to “two packs or more per day.” A response other than “not at all” categorizes that respondent as a current smoker. For YRBSS, a student who reports having smoked on at least 1 or 2 days during the past 30 days is considered a current smoker.

Intensity of Smoking

Intensity of smoking is characterized by the frequency and heaviness of cigarette smoking. NSDUH, YRBSS, and NYTS include separate measures for these two factors, while MTF measures only heaviness. In this Surgeon General's report, frequent smoking is defined as smoking on at least 20 of the 30 days preceding the survey. For NSDUH, respondents are asked to enter the total number of days smoked (Appendix Table 3.3.1). In YRBSS and NYTS, students are asked to report how many days they smoked during the past 30 days; they are considered frequent smokers if they choose either “20 to 29 days” or “all 30 days.”

In this report, heavy smoking is generally defined as smoking at least one-half of a pack of cigarettes per day during the past 30 days. NSDUH asks for the average number of cigarettes smoked per day on the days smoked,

and respondents who choose “6 to 15 cigarettes (about ½ pack)” or above fall into the heavy smoker category. For YRBSS and NYTS, students are asked: “During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?” Students who choose 11 or more cigarettes per day are considered heavy smokers. MTF asks how “frequently” students have smoked during the past 30 days. Students who answer with at least “about one-half pack per day” are categorized as heavy smokers (Appendix Table 3.2.1).

Initiation of Smoking

This report provides information about the initiation of cigarette smoking from five surveys—NSDUH, MTF, YRBSS, NYTS, and NHIS—three of which use age. The age of initiation is measured in NSDUH as when a participant first smoked “part or all of a cigarette,” in YRBSS and NYTS it is when the subject first smoked a whole cigarette, and in NHIS it is when the person first started to “smoke fairly regularly.” MTF asks for the school grade in which a student (1) first smoked a cigarette and (2) began to smoke “on a daily basis.”

Brand Preference

In NSDUH, participants are asked to select the brand of cigarettes smoked most often during the past 30 days. They are given a list of 25 common brands, with the additional option of “A brand not on this list.” They are also asked to select the type of cigarettes most often smoked, either lights, ultra lights, mediums, or full flavor. These two responses were combined to determine the most popular subbrands among young people.

Attempts to Quit Smoking

Attempts to quit smoking are measured by MTF and YRBSS. MTF asks participants: “Have you ever tried to stop smoking and found that you could not?” and “How many times (if any) have you tried to stop smoking?” YRBSS asks: “During the past 12 months, did you ever try to quit smoking cigarettes?”

Measures of the Use of Smokeless Tobacco

Ever Use of Smokeless Tobacco

The definitions for ever use of smokeless tobacco vary slightly in the three surveys used in this report. For NSDUH, two questions are asked that address chewing tobacco and moist snuff separately; an ever user of smoke-

less tobacco is defined as someone who reports having “ever used snuff, even once” and/or has “ever used chewing tobacco, even once.” For MTF and NYTS, one survey question is used. Respondents on MTF who report ever having taken or used smokeless tobacco (defined for the participant as “chewing tobacco, plug, dipping tobacco, snuff”) at least “Once or twice” are considered ever users. For NYTS, a similar question is used, but smokeless tobacco is defined as “chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen.”

Current Use of Smokeless Tobacco

NSDUH, MTF, YRBSS, and NYTS each define current use of smokeless tobacco as having used it during the 30 days preceding the survey. NSDUH asks whether the respondent has “used snuff, even once” and/or “used chewing tobacco, even once” in the past 30 days to determine current usage. An affirmative answer to either question categorizes that respondent as a current user. MTF asks how often students have taken smokeless tobacco during the past 30 days; a response other than “Not at all” categorizes that respondent as a current user. For YRBSS and NYTS, a student who reports having used chewing tobacco, snuff, or dip on at least 1 or 2 days during the past 30 days is considered a current user.

Initiation of Smokeless Tobacco

This report provides information about the initiation of smokeless tobacco use from four surveys: NSDUH, MTF, NYTS, and GYTS. The age of initiation is measured as the age when a participant first used “chewing tobacco” and/or “snuff” (NSDUH) or, similarly, used chewing tobacco, snuff, or dip for the first time (NYTS and GYTS). MTF asks for the school grade in which a student first tried smokeless tobacco.

Brand Preference

In NSDUH, participants are asked to select the brand of snuff and/or the brand of chewing tobacco they used most often during the past 30 days. They are given a list of 13 common moist snuff brands and 11 chewing tobacco brands with the additional option of “A brand not on this list.”

Measures of Cigar Use

Ever Use of Cigars

The NSDUH and NYTS surveys are used to report ever use of cigars. In NSDUH, an ever user is defined as

someone who reports having “smoked part or all of any type of cigar.” Respondents are instructed to consider big cigars, cigarillos, and little cigars that look like cigarettes. In NYTS, an ever user is one who reports having “tried smoking cigars, cigarillos, or little cigars, even one or two puffs.”

Current Cigar Use

NSDUH, YRBSS, and NYTS each define current cigar use as having smoked cigars during the 30 days preceding the survey. NSDUH asks whether the respondent has “smoked part or all of any type of cigar” in the past 30 days to determine current usage. An affirmative answer categorizes that respondent as a current cigar smoker. For YRBSS and NYTS, a student who reports having smoked cigars, cigarillos, or little cigars on at least 1 or 2 of the past 30 days is considered a current cigar smoker.

Initiation of Cigars

This report provides information about the initiation of cigar use from NSDUH, NYTS, and GYTS. The age of initiation in NSDUH is the age when a participant first smoked part or all of any type of cigar; in NYTS and GYTS, it is when the participant smoked a cigar, cigarillo, or little cigar for the first time.

Brand Preference

In NSDUH, participants are asked to select the brand of cigars used most often during the past 30 days; they are given a list of 28 common brands, with the additional option of “A brand not on this list.”

Measures of Bidi and Kretek Use

The NYTS is used to provide information about ever and current use of bidis and kreteks. For each product, an ever user is defined as someone who reports having ever tried smoking bidis or kreteks. A student who reports having smoked bidis on at least 1 or 2 of the past 30 days is considered a current bidi smoker. The product is defined for participants as “small brown cigarettes from India made of tobacco wrapped in a leaf tied with a thread.” For kreteks, current smoking is defined in the same manner as for bidis: at least 1 or 2 days during the past 30 days. The product is defined for participants as “clove cigarettes or cigarettes containing tobacco and clove extract.”

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Table 3.1.1 Percentage of young people who have ever smoked cigarettes, by gender, race/ethnicity, age/grade, and region; National Survey on Drug Use and Health (NSDUH) 2010, Monitoring the Future (MTF) 2010, National Youth Risk Behavior Survey (YRBS) 2009, and National Youth Tobacco Survey (NYTS) 2009; United States

Characteristic	NSDUH 13–18 years of age ^a		MTF 8th, 10th, and 12th grades ^b		YRBS 9th–12th grades ^c		NYTS 9th–12th grades ^d		NYTS 6th–8th grades ^d	
	% (95% CI)	SN ^e	% (95% CI)	SN ^e	% (95% CI)	SN ^e	% (95% CI)	SN ^e	% (95% CI)	SN ^e
Overall	28.2 (27.32–29.10)		30.9 (28.8–32.9)		46.3 (43.7–48.9)		42.7 (39.4–46.1)		18.2 (16.0–20.4)	
Gender										
Male	29.6 (28.39–30.83)	a	32.2 (29.9–34.5)	a	46.3 (42.6–50.0)	a	44.4 (40.6–48.2)	a	19.4 (16.7–22.0)	a
Female	26.7 (25.51–27.96)	b	29.3 (27.0–31.5)	b	46.1 (43.7–48.6)	a	41.1 (37.8–44.3)	b	16.9 (14.8–19.1)	b
Race/ethnicity										
White	30.3 (29.16–31.42)	a	31.3 (28.7–33.9)	a	46.1 (42.3–50.0)	a,b	43.2 (38.3–48.1)	a	14.3 (11.7–16.9)	a
Male	30.6 (29.07–32.17)		32.3 (29.2–35.5)		45.2 (39.7–50.9)		44.4 (39.2–49.7)		15.1 (12.1–18.0)	
Female	29.9 (28.37–31.56)		30.2 (27.4–32.9)		47.2 (43.9–50.5)		41.9 (37.0–48.8)		13.5 (10.6–16.4)	
Black or African American	22.1 (20.13–24.17)	b	24.8 (21.7–27.9)	b	43.5 (39.0–48.0)	a	34.6 (27.2–42.0)	a	24.5 (21.4–27.6)	b
Male	25.5 (22.58–28.72)		27.6 (23.4–31.9)		43.5 (39.2–47.9)		35.3 (23.8–46.9)		26.6 (22.0–31.1)	
Female	18.5 (16.09–21.14)		22.4 (18.9–25.9)		43.4 (37.3–49.7)		33.8 (29.2–38.3)		22.5 (18.9–26.1)	
Hispanic or Latino	28.4 (26.42–30.53)	a	32.9 (30.1–35.7)	a	51.0 (47.4–54.6)	b	50.3 (46.0–54.5)	b	24.2 (20.9–27.4)	b
Male	31.6 (29.02–34.33)		36.0 (32.2–39.7)		54.5 (50.4–58.6)		51.8 (47.3–56.2)		26.5 (22.5–30.6)	
Female	24.8 (22.00–27.84)		30.3 (27.0–33.7)		47.6 (43.4–51.8)		48.9 (42.9–54.9)		21.8 (18.5–25.2)	
Other ^f	23.1 (20.09–26.33)	b	26.4 (19.3–33.6)	b	39.4 (32.9–46.3)	a	38.6 (33.4–43.8)	a	20.9 (15.4–26.5)	b
Male	23.6 (19.40–28.49)		28.0 (20.2–35.8)		39.9 (34.2–45.8)		45.0 (37.8–52.2)		21.2 (12.3–30.1)	
Female	22.5 (18.49–26.98)		24.6 (16.7–32.5)		38.7 (30.2–48.0)		32.3 (26.7–37.8)		20.6 (16.0–25.2)	
Age (in years)/grade										
13–14	11.8 (10.87–12.84)	a	NA		NA		NA		NA	
15–16	26.8 (25.49–28.18)	b	NA		NA		NA		NA	
17–18	44.0 (42.31–45.70)	c	NA		NA		NA		NA	
6th	NA		NA		NA		NA		11.6 (9.2–13.9)	a
7th	NA		NA		NA		NA		16.2 (13.8–18.6)	b
8th	NA		20.0 (18.3–21.8)	a	NA		NA		26.8 (23.6–30.1)	c
9th	NA		NA		37.7 (34.6–40.8)	a	32.4 (26.3–38.5)	a	NA	
10th	NA		33.0 (30.7–35.2)	b	44.0 (39.9–48.3)	b	40.3 (36.9–43.8)	b	NA	
11th	NA		NA		50.0 (46.2–53.8)	c	48.8 (45.7–51.8)	c	NA	
12th	NA		42.2 (40.2–44.3)	c	55.5 (52.0–58.9)	d	52.1 (48.9–55.3)	c	NA	

Table 3.1.1 Continued

Characteristic	NSDUH 13–18 years of age ^a		MTF 8th, 10th, and 12th grades ^b		YRBS 9th–12th grades ^c		NYTS 9th–12th grades ^d		NYTS 6th–8th grades ^d	
	% (95% CI)	SN ^e	% (95% CI)	SN ^e	% (95% CI)	SN ^e	% (95% CI)	SN ^e	% (95% CI)	SN ^e
Region										
Northeast	26.6 (24.85–28.32)	a	27.5 (23.3–31.7)	a	45.7 (38.5–53.1)	a,b	NA		NA	
Midwest	28.1 (26.65–29.55)	b	31.2 (27.5–35.0)	a,b	44.2 (38.1–50.5)	a,b	NA		NA	
South	29.7 (28.17–31.23)	b	34.6 (31.8–37.5)	b	51.3 (47.8–54.8)	a	NA		NA	
West	27.2 (25.24–29.31)	a	27.1 (21.7–32.6)	a	41.7 (37.0–46.7)	b	NA		NA	

Source: 2010 NSDUH, Substance Abuse and Mental Health Services Administration (unpublished data); 2010 MTF: University of Michigan, Institute for Social Research (unpublished data); 2009 YRBS: Centers for Disease Control and Prevention (CDC 2011a); 2009 NYTS: CDC (unpublished data).

Note: **CI** = confidence interval; **NA** = not applicable; **SN** = statistical note.

^aBased on responses to the question, “Have you ever smoked part or all of a cigarette?” Respondents who chose “Yes” were classified as ever smokers.

^bBased on responses to the question, “Have you ever smoked cigarettes?” Respondents who reported that they had smoked “Once or twice,” “Occasionally but not regularly,” or “Regularly in the past” were classified as ever smokers.

^cBased on responses to the question, “Have you ever tried cigarette smoking, even one or two puffs?” Respondents who chose “Yes” were classified as ever smokers.

^dEstimates are based on responses to the question, “Have you ever tried cigarette smoking, even one or two puffs?”

^eThis column represents the results of statistical tests that were run separately within each surveillance system (e.g., NSDUH). These tests were performed to examine differences in estimates within specific demographic subgroups (e.g., gender). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, statistically significantly different from one another ($p < 0.05$).

^fIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.2 Percentage of young people who currently smoke cigarettes, by gender, race/ethnicity, age/grade, and region; National Survey on Drug Use and Health (NSDUH) 2010, Monitoring the Future (MTF) 2010, National Youth Risk Behavior Survey (YRBS) 2009, and National Youth Tobacco Survey (NYTS) 2009; United States

Characteristic	NSDUH 13–18 years of age ^a		MTF 8th, 10th, and 12th grades ^b		YRBS 9th–12th grades ^c		NYTS 9th–12 grades ^d		NYTS 6th–8th grades ^d	
	% (95% CI)	SN ^e	% (95% CI)	SN ^e	% (95% CI)	SN ^e	% (95% CI)	SN ^e	% (95% CI)	SN ^e
Overall	13.2 (12.57–13.87)		12.8 (11.6–14.0)		19.5 (17.9–21.2)		17.2 (15.0–19.4)		5.2 (4.2–6.1)	
Gender										
Male	13.9 (13.05–14.90)	a	14.2 (12.7–15.7)	a	19.8 (17.8–21.9)	a	19.6 (16.6–22.5)	a	5.6 (4.3–6.9)	a
Female	12.4 (11.53–13.37)	b	11.2 (9.8–12.5)	b	19.1 (17.2–21.0)	a	14.8 (12.8–16.7)	b	4.7 (3.9–5.5)	a
Race/ethnicity										
White	15.2 (14.38–16.14)	a	14.4 (12.9–15.8)	a	22.5 (20.0–25.2)	a	19.2 (16.4–21.9)	a	4.3 (3.1–5.5)	a
Male	15.3 (14.16–16.57)		15.4 (13.6–17.3)		22.3 (18.9–26.0)		21.2 (18.0–24.5)		4.5 (3.0–5.9)	
Female	15.1 (13.92–16.45)		13.2 (11.5–14.8)		22.8 (20.3–25.5)		17.1 (14.5–19.8)		4.1 (2.7–5.6)	
Black or African American	8.2 (6.99–9.53)	b	7.0 (5.3–8.7)	b	9.5 (8.2–11.1)	b	7.5 (4.6–10.3)	b	5.1 (3.6–6.6)	a,b
Male	10.4 (8.59–12.57)		9.2 (6.5–11.9)		10.7 (8.4–13.5)		8.6 (3.6–13.6)		5.8 (3.6–8.0)	
Female	5.8 (4.46–7.57)		4.7 (3.2–6.3)		8.4 (6.5–10.9)		6.3 (3.0–9.6)		4.4 (2.7–6.1)	
Hispanic or Latino	12.2 (10.75–13.73)	c	11.0 (9.3–12.7)	c	18.0 (16.0–20.2)	c	19.2 (16.5–21.9)	a	6.7 (5.2–8.2)	b
Male	14.2 (12.15–16.50)		13.5 (10.9–16.0)		19.4 (16.7–22.5)		22.6 (19.9–25.4)		7.0 (5.3–8.7)	
Female	9.8 (8.06–11.97)		8.8 (6.9–10.8)		16.7 (14.4–19.2)		15.7 (12.0–19.4)		6.4 (4.5–8.3)	
Other ^f	9.9 (7.83–12.38)	c	11.1 (7.0–15.1)	c	16.5 (13.1–20.5)	c	16.4 (13.2–19.5)	a	7.2 (2.5–12.0)	a,b
Male	9.1 (6.67–12.21)		12.6 (7.3–17.8)		15.9 (12.4–20.2)		21.7 (16.6–26.8)		8.7 (0.2–17.2)	
Female	10.7 (7.89–14.41)		9.4 (5.4–13.3)		16.7 (12.5–21.9)		11.2 (6.7–15.8)		5.7 (3.0–8.5)	
Age (in years)/grade										
13–14	4.0 (3.44–4.68)	a	NA		NA		NA		NA	
15–16	10.9 (9.94–11.84)	b	NA		NA		NA		NA	
17–18	23.5 (22.21–24.91)	c	NA		NA		NA		NA	
6th	NA		NA		NA		NA		3.3 (2.1–4.5)	a
7th	NA		NA		NA		NA		4.5 (3.4–5.6)	a
8th	NA		7.1 (6.1–8.1)	a	NA		NA		7.7 (6.1–9.3)	b
9th	NA		NA		13.5 (12.0–15.3)	a	11.1 (8.1–14.1)	a	NA	
10th	NA		13.6 (12.4–14.8)	b	18.3 (15.9–21.0)	b	15.3 (13.0–17.6)	b	NA	
11th	NA		NA		22.3 (19.6–25.2)	c	20.7 (18.2–23.3)	c	NA	
12th	NA		19.2 (17.7–20.7)	c	25.2 (22.5–28.1)	d	23.2 (19.2–27.1)	c	NA	

Table 3.1.2 Continued

Characteristic	NSDUH 13–18 years of age ^a		MTF 8th, 10th, and 12th grades ^b		YRBS 9th–12th grades ^c		NYTS 9th–12 grades ^d		NYTS 6th–8th grades ^d	
	% (95% CI)	SN ^e	% (95% CI)	SN ^e	% (95% CI)	SN ^e	% (95% CI)	SN ^e	% (95% CI)	SN ^e
Region										
Northeast	12.1 (10.81–13.49)	a	11.6 (8.9–14.3)	a	19.6 (15.1–25.1)	a,b	NA		NA	
Midwest	14.7 (13.68–15.88)	b	14.3 (12.1–16.5)	b	20.2 (16.7–24.2)	a,b	NA		NA	
South	13.2 (12.14–14.44)	a	14.3 (12.4–16.3)	b	22.0 (19.4–24.8)	a	NA		NA	
West	12.5 (11.08–14.17)	a	9.7 (7.4–12.1)	a	15.5 (12.9–18.5)	b	NA		NA	

Source: 2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data); 2010 MTF: University of Michigan, Institute for Social Research (unpublished data); 2009 YRBS: Centers for Disease Control and Prevention (CDC 2011a); 2009 NYTS: CDC (unpublished data).

Note: CI = confidence interval; NA = not applicable; SN = statistical note.

^aBased on responses to the question, “During the past 30 days, have you smoked part or all of a cigarette?” Respondents who chose “Yes” were classified as current smokers.

^bBased on responses to the question, “How frequently have you smoked cigarettes during the past 30 days?” Respondents who reported that they had smoked less than 1 cigarette per day or more were classified as current smokers.

^cBased on responses to the question, “During the past 30 days, on how many days did you smoke cigarettes?” Respondents who reported that they had smoked on at least 1 or 2 days were classified as current smokers.

^dEstimates are based on responses to the question, “During the past 30 days, on how many days did you smoke cigarettes?” The estimates are compared and matched the ones reported by CDC (2010e).

^eThis column represents the results of statistical tests that were run separately within each surveillance system (e.g., NSDUH). These tests were performed to examine differences in estimates within specific demographic subgroups (e.g., gender). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, statistically significantly different from one another ($p < 0.05$).

^fIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.3 Percentage of current cigarette use among 12- to 17-year-olds, by race/ethnicity and gender; National Survey on Drug Use and Health (NSDUH) 2008–2010;^a United States

Race/ethnicity	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Overall	8.8 (8.5–9.1)	8.9 (8.5–9.3)	8.6 (8.2–9.0)
All non-Hispanic	9.0 (8.7–9.3)	8.9 (8.5–9.3)	9.2 (8.7–9.6)
White	10.3 (10.0–10.7)	10.0 (9.5–10.5)	10.7 (10.2–11.3)
Black or African American	4.9 (4.3–5.4)	5.7 (4.9–6.6)	4.0 (3.4–4.8)
American Indian/Alaska Native	15.2 (12.6–18.2)	14.3 (10.9–18.4)	16.3 (11.9–22.1)
Hawaiian or Other Pacific Islander	8.6 (4.3–16.6)	NR	NR
Asian	3.3 (2.3–4.6)	3.7 (2.3–5.9)	2.9 (1.8–4.6)
Chinese	0.6 (0.2–2.0)	1.0 (0.2–4.0)	0.3 (0.1–1.4)
Filipino	4.4 (2.3–8.5)	3.7 (1.2–11.1)	5.3 (2.5–10.9)
Japanese	NR	NR	NR
Asian Indian	3.6 (1.7–7.6)	3.9 (1.3–10.9)	3.3 (1.2–9.0)
Korean	3.0 (1.0–8.4)	NR	NR
Vietnamese	5.5 (2.2–13.1)	NR	NR
Hispanic	7.8 (7.1–8.5)	9.1 (8.1–10.2)	6.4 (5.6–7.4)
Mexican	7.7 (6.9–8.6)	9.5 (8.3–10.9)	5.8 (4.8–6.9)
Puerto Rican	8.6 (6.7–10.9)	8.8 (6.2–12.3)	8.3 (5.8–11.8)
Central or South American	6.6 (5.1–8.7)	6.7 (4.6–9.6)	6.6 (4.4–9.8)
Cuban	10.3 (6.6–15.8)	12.2 (7.2–19.9)	8.4 (4.0–16.7)

Source: 2008–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: **CI** = confidence interval; **NR** = low precision, no estimate reported.

^aBased on responses to the question, “During the past 30 days, have you smoked part or all of a cigarette?” Respondents who chose “Yes” were classified as current smokers.

Table 3.1.4 Percentage of current cigarette use among 18- to 25-year-olds, by race/ethnicity and gender; National Survey on Drug Use and Health (NSDUH) 2008–2010;^a United States

Race/ethnicity	Total % (95% CI)	Male % (95% CI)	Female % (95% CI)
Overall	35.2 (34.7–35.8)	39.3 (38.6–40.1)	31.1 (30.4–31.8)
All non-Hispanic	36.6 (36.0–37.2)	40.3 (39.5–41.1)	33.0 (32.3–33.7)
White	40.1 (39.4–40.7)	43.0 (42.0–43.9)	37.1 (36.3–37.9)
Black or African American	26.5 (25.2–27.9)	32.4 (30.5–34.4)	21.2 (19.7–22.8)
American Indian/Alaska Native	47.9 (42.2–53.7)	50.0 (41.9–58.0)	46.1 (38.5–53.8)
Hawaiian or Other Pacific Islander	37.7 (29.7–46.5)	41.1 (30.4–52.6)	NR
Asian	20.2 (18.1–22.5)	26.0 (22.9–29.4)	14.3 (11.7–17.2)
Chinese	13.0 (9.9–17.0)	18.9 (14.1–25.0)	6.0 (3.5–10.2)
Filipino	24.7 (19.5–30.7)	28.1 (20.1–37.6)	21.8 (15.0–30.6)
Japanese	21.4 (15.0–29.5)	NR	NR
Asian Indian	15.0 (11.7–19.1)	23.3 (17.9–29.6)	6.9 (4.0–11.4)
Korean	30.0 (22.7–38.4)	NR	28.4 (19.8–38.9)
Vietnamese	20.2 (13.4–29.1)	NR	NR
Hispanic	29.1 (27.9–30.3)	35.2 (33.4–37.1)	22.1 (20.6–23.8)
Mexican	28.5 (27.0–30.0)	36.0 (33.8–38.3)	20.2 (18.4–22.2)
Puerto Rican	34.1 (30.5–37.9)	36.3 (30.8–42.2)	32.0 (27.2–37.1)
Central or South American	24.3 (21.1–27.9)	28.1 (23.8–32.8)	19.0 (14.8–24.0)
Cuban	29.3 (24.2–34.9)	35.3 (27.8–43.7)	22.5 (15.9–30.8)

Source: 2008–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: **CI** = confidence interval; **NR** = low precision, no estimate reported.

^aBased on responses to the question, “During the past 30 days, have you smoked part or all of a cigarette?” Respondents who chose “Yes” were classified as current smokers.

Table 3.1.5 Percentage of current cigarette smoking, by various sociodemographic risk factors among 8th, 10th, and 12th graders; Monitoring the Future (MTF) 2002–2007;^a United States

Sociodemographic risk factor	8th graders		10th graders		12th graders	
	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b
Population density						
Large MSA	6.8 (6.0–7.5)	a	12.4 (11.2–13.5)	a	20.9 (19.2–22.6)	a
Other MSA	9.2 (7.3–11.1)	b	15.4 (13.4–17.4)	b	23.5 (20.7–26.3)	b
Non-MSA	12.3 (10.1–14.6)	c	20.8 (18.2–23.3)	c	27.8 (25.6–30.0)	c
Parental education^c						
1.0–2.0 (low)	16.3 (13.6–18.9)	a	19.8 (15.7–23.8)	a	21.0 (18.3–23.7)	a
2.5–3.0	13.0 (11.7–14.2)	b	20.2 (18.7–21.8)	a	26.9 (24.8–29.0)	b,c
3.5–4.0	9.5 (8.6–10.3)	c	16.2 (15.1–17.3)	b	24.7 (22.8–26.6)	c
4.5–5.0	6.1 (5.3–6.8)	d	12.5 (11.6–13.4)	c	22.1 (20.8–23.3)	d
5.5–6.0 (high)	4.7 (4.0–5.4)	e	10.9 (9.5–12.2)	d	19.8 (18.6–21.0)	a,c
Academic performance						
A	3.6 (2.9–4.2)	a	7.1 (6.2–8.0)	a	14.9 (13.7–16.1)	a
B	7.9 (7.0–8.7)	b	14.4 (13.0–15.8)	b	25.0 (23.1–27.0)	b
C	17.3 (15.5–19.1)	c	24.5 (21.5–27.4)	c	34.2 (30.8–37.5)	c
D	30.1 (26.9–33.3)	d	38.9 (33.8–43.9)	d	46.1 (40.7–51.5)	d
Household structure						
Lives with both parents	7.6 (6.4–8.6)	a	14.1 (12.7–15.5)	a	22.1 (20.4–23.7)	a
Lives with father only	15.9 (14.5–17.3)	b	24.4 (22.4–26.5)	b	30.8 (28.2–33.3)	b
Lives with mother only	11.7 (10.4–13.0)	c	17.1 (15.2–19.0)	c	23.9 (22.1–25.8)	c
Lives alone	27.1 (21.3–32.9)	d	33.2 (26.2–40.3)	d	41.3 (36.8–45.7)	d
Other	17.7 (15.0–20.3)	b	24.6 (22.7–26.6)	b	31.4 (28.8–33.9)	b
Importance of religion						
Very important	5.8 (5.0–6.5)	a	9.4 (8.3–10.4)	a	15.0 (13.5–16.4)	a
Important	8.6 (7.3–9.8)	b	15.8 (14.4–17.2)	b	24.8 (23.0–26.6)	b
Not/somewhat important	13.8 (12.2–15.3)	c	22.2 (20.2–24.2)	c	30.8 (29.3–32.2)	c

Source: 2002–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

Note: CI = confidence interval; MSA = metropolitan statistical area; SN = statistical note.

^aBased on responses to the question, “How frequently have you smoked cigarettes during the past 30 days?” Respondents who reported that they had smoked less than 1 cigarette per day or more were classified as current smokers.

^bThis column represents the results of statistical tests that were performed to examine differences in estimates within specific demographic subgroups (e.g., gender). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, statistically significantly different from one another ($p < 0.05$).

^cParental education is an average score of mother’s education and father’s education. Response categories are (1) completed some grade school or less, (2) some high school, (3) completed high school, (4) some college, (5) completed college, and (6) graduate or professional school after college.

Table 3.1.6 Percentage of frequent cigarette smoking, by gender, race/ethnicity, age/grade, and region; National Survey on Drug Use and Health (NSDUH) 2010, National Youth Risk Behavior Survey (YRBS) 2009, and National Youth Tobacco Survey (NYTS) 2009; United States

Characteristic	NSDUH 13–18 years of age ^a		YRBS 9th–12th grades ^b		NYTS 9th–12th grades ^c		NYTS 6th–8th grades ^c	
	% (95% CI)	SN ^d	% (95% CI)	SN ^d	% (95% CI)	SN ^d	% (95% CI)	SN ^d
Overall	5.8 (5.37–6.23)		7.3 (6.4–8.3)		6.2 (4.9–7.6)		1.4 (0.9–1.9)	
Gender								
Male	6.2 (5.63–6.90)	a	8.0 (7.1–9.0)	a	7.4 (5.8–8.9)	a	2.0 (1.1–3.0)	a
Female	5.3 (4.74–5.91)	a	6.4 (5.4–7.6)	b	5.1 (3.7–6.4)	b	0.8 (0.5–1.1)	b
Race/ethnicity								
White	7.4 (6.85–8.06)	a	9.5 (8.2–11.1)	a	7.9 (6.3–9.4)	a	1.2 (0.7–1.6)	a
Male	7.7 (6.89–8.65)		10.0 (8.5–11.8)		9.1 (7.2–10.9)		1.4 (0.7–2.2)	
Female	7.1 (6.30–8.03)		9.0 (7.5–10.8)		6.7 (5.0–8.3)		0.9 (0.4–1.4)	
Black or African American	2.9 (2.11–4.03)	b	2.1 (1.4–3.2)	b	1.8 (0.4–3.2)	b	0.8 (0.3–2.2)	a
Male	3.5 (2.26–5.29)		2.9 (1.8–4.6)		1.9 (0.4–3.5)		1.0 (0.0–2.0)	
Female	2.3 (1.42–3.86)		1.4 (0.7–2.5)		1.6 (0.5–4.6)		0.6 (0.2–2.5)	
Hispanic or Latino	3.5 (2.80–4.42)	b,c	4.2 (3.3–5.3)	c	4.7 (3.7–5.6)	c	1.4 (0.8–1.9)	a
Male	4.5 (3.42–5.98)		5.2 (3.8–7.0)		5.8 (4.4–7.2)		2.2 (1.2–3.2)	
Female	2.4 (1.66–3.37)		3.2 (2.4–4.3)		3.5 (2.5–4.5)		0.6 (0.2–0.9)	
Other ^e	4.6 (3.28–6.40)	c	5.7 (3.7–8.8)	c	6.2 (4.4–7.9)	a,c	4.0 (1.2–12.2)	a
Male	4.7 (3.10–7.14)		6.9 (4.3–11.0)		8.5 (5.4–11.5)		6.2 (1.5–22.8)	
Female	4.5 (2.79–7.07)		4.5 (2.6–7.7)		3.9 (1.8–5.9)		1.6 (0.5–4.4)	
Age (in years)/grade								
13–14	0.9 (0.65–1.19)	a	NA		NA		NA	
15–16	4.3 (3.72–4.92)	b	NA		NA		NA	
17–18	11.5 (10.57–12.55)	c	NA		NA		NA	
6th	NA		NA		NA		1.2 (0.2–2.1)	a
7th	NA		NA		NA		1.1 (0.5–1.8)	a
8th	NA		NA		NA		2.0 (1.3–2.7)	a
9th	NA		4.7 (3.7–5.9)	a	3.0 (2.0–4.0)	a	NA	
10th	NA		5.7 (4.7–7.0)	a	5.7 (4.2–7.3)	b	NA	
11th	NA		8.3 (7.0–9.8)	b	7.0 (4.9–9.1)	b	NA	
12th	NA		11.2 (9.5–13.2)	c	10.0 (7.2–12.8)	c	NA	

Table 3.1.6 Continued

Characteristic	NSDUH 13–18 years of age ^a		YRBS 9th–12th grades ^b		NYTS 9th–12th grades ^c		NYTS 6th–8th grades ^c	
	% (95% CI)	SN ^d	% (95% CI)	SN ^d	% (95% CI)	SN ^d	% (95% CI)	SN ^d
Region					NA		NA	
Northeast	5.5 (4.64–6.56)	a,b	8.7 (5.8–12.8)	a	NA		NA	
Midwest	7.2 (6.41–8.12)	a	8.3 (6.7–10.2)	a	NA		NA	
South	6.0 (5.29–6.87)	b	8.5 (6.8–10.5)	a	NA		NA	
West	4.2 (3.47–5.18)	c	3.5 (2.4–5.1)	b	NA		NA	

Source: 2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data); 2009 YRBS: Centers for Disease Control and Prevention (CDC 2011a); 2009 NYTS: CDC (unpublished data).

Note: CI = confidence interval; NA = not applicable; SN = statistical note.

^aBased on responses to the question, “During the past 30 days... on how many days did you smoke part or all of a cigarette?” Respondents who reported that they had smoked on at least 20 days were classified as frequent smokers.

^bBased on responses to the question, “During the past 30 days, on how many days did you smoke cigarettes?” Respondents who reported that they had smoked on “20 to 29 days” or “all 30 days” were classified as frequent smokers.

^cEstimates are based on responding “20 to 29 days” or “all 30 days” to the question, “During the past 30 days, on how many days did you smoke cigarettes?” Nonsmokers are counted in the denominator of the reported percentages.

^dThis column represents the results of statistical tests that were run separately within each surveillance system (e.g., NSDUH). These tests were performed to examine differences in estimates within specific demographic subgroups (e.g., gender). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, statistically significantly different from one another ($p < 0.05$).

^eIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.7 Percentage of heavy cigarette smoking, by gender, race/ethnicity, age/grade, and region; National Survey on Drug Use and Health (NSDUH) 2010, Monitoring the Future (MTF) 2010, and National Youth Tobacco Survey (NYTS) 2009; United States

Characteristic	NSDUH 13–18 years of age ^a		MTF 8th, 10th, and 12th grades ^b		NYTS 9th–12th grades ^c		NYTS 6th–8th grades ^c	
	% (95% CI)	SN ^d	% (95% CI)	SN ^d	% (95% CI)	SN ^d	% (95% CI)	SN ^d
Overall	2.6 (2.29–2.85)		2.5 (2.1–3.0)		1.8 (1.2–2.3)		0.7 (0.3–1.2)	
Gender								
Male	2.9 (2.48–3.36)	a	3.0 (2.4–3.6)	a	2.5 (1.7–3.3)	a	1.2 (0.3–2.1)	a
Female	2.2 (1.86–2.59)	a	1.9 (1.4–2.4)	b	1.0 (0.5–1.4)	b	0.3 (0.1–0.5)	a
Race/ethnicity								
White	3.7 (3.33–4.21)	a	3.2 (2.6–3.8)	a	1.9 (1.2–2.6)	a	0.3 (0.1–0.6)	a
Male	4.1 (3.51–4.83)		3.6 (2.8–4.4)		2.7 (1.5–3.9)		0.6 (0.2–1.1)	
Female	3.3 (2.82–3.97)		2.7 (2.0–3.4)		1.1 (0.6–1.6)		0.0002 (0.0–0.002)	
Black or African American	1.0 (0.51–1.81)	b	1.3 (0.7–1.9)	b,c	1.0 (0.1–1.9)	b	0.6 (0.1–2.3)	a
Male	1.4 (0.65–2.88)		1.7 (0.8–2.7)		0.7 (0.1–1.3)		0.6 (0.2–2.4)	
Female	0.5 (0.15–1.80)		0.7 (0.1–1.2)		1.3 (0.4–4.4)		0.5 (0.0–2.7)	
Hispanic or Latino	0.9 (0.56–1.43)	b	1.1 (0.5–1.6)	b	1.6 (1.0–2.1)	a,b	0.7 (0.2–1.1)	a
Male	1.2 (0.64–2.16)		1.7 (0.7–2.8)		2.4 (1.5–3.3)		1.1 (0.4–1.9)	
Female	0.6 (0.30–1.07)		0.5 (0.0–1.0)		0.8 (0.2–1.3)		0.3 (0.0–0.5)	
Other ^e	0.8 (0.45–1.33)	c	2.0 (0.7–3.4)	c	2.5 (0.8–4.1)	a,b	3.3 (0.8–12.7)	a
Male	0.9 (0.48–1.65)		2.5 (0.7–4.3)		4.7 (1.5–7.9)		5.2 (0.9–24.4)	
Female	0.6 (0.30–1.38)		1.5 (0.0–2.9)		0.3 (-0.3–1.0)		1.4 (0.4–4.5)	
Age (in years)/grade								
13–14	0.3 (0.20–0.50)	a	NA					
15–16	1.6 (1.28–1.97)	b	NA					
17–18	5.4 (4.79–6.16)	c	NA					
6th	NA						0.9 (0.3–2.5)	a
7th	NA						0.6 (0.1–1.1)	a
8th	NA		0.9 (0.7–1.1)	a		v	0.7 (0.3–1.2)	a
9th	NA		NA		0.7 (0.3–1.2)	a		
10th	NA		2.4 (2.0–2.9)	b	1.7 (0.9–2.5)	b		
11th	NA	v	NA		1.8 (1.1–2.5)	b,c		
12th	NA		4.7 (3.9–5.5)	c	3.0 (1.8–4.3)	c		

Table 3.1.7 Continued

Characteristic	NSDUH 13–18 years of age ^a		MTF 8th, 10th, and 12th grades ^b		NYTS 9th–12th grades ^c		NYTS 6th–8th grades ^c	
	% (95% CI)	SN ^d	% (95% CI)	SN ^d	% (95% CI)	SN ^d	% (95% CI)	SN ^d
Region								
Northeast	2.6 (2.06–3.35)	a	2.4 (1.3–3.4)	a				
Midwest	3.6 (2.99–4.21)	a	3.0 (2.3–3.7)	a				
South	2.6 (2.10–3.10)	a	3.1 (2.2–4.0)	a				
West	1.6 (1.08–2.29)	b	1.2 (0.5–1.8)	b				

Source: 2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data); 2010 MTF: University of Michigan, Institute for Social Research (unpublished data); 2009 NYTS: Centers for Disease Control and Prevention (unpublished data).

Note: CI = confidence interval; NA = not applicable; SN = statistical note.

^aBased on responses to the question, “On the [number of] days you smoked cigarettes during the past 30 days, how many cigarettes did you smoke per day, on average?” Respondents who reported smoking “6 to 15 cigarettes per day (about ½ pack)” or more were classified as heavy smokers.

^bBased on responses to the question, “How frequently have you smoked cigarettes during the past 30 days?” Respondents who reported smoking at least “about one-half pack per day” were classified as heavy smokers.

^cEstimates are based on responding “11 to 20 cigarettes per day” or “more than 20 cigarettes per day” to the question, “During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?” Current smokers who usually smoked Marlboro were considered to be heavy smokers even if they reported 11–20 cigarettes per day. Nonsmokers are counted in the denominator of the reported percentages.

^dThis column represents the results of statistical tests that were run separately within each surveillance system (e.g., NSDUH). These tests were performed to examine differences in estimates within specific demographic subgroups (e.g., gender). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, statistically significantly different from one another ($p < 0.05$).

^eIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.8 Percentage distribution of smoking intensity among 9th–12th graders, by the number of cigarettes smoked per day during the 30 days preceding the survey; National Youth Risk Behavior Survey (YRBS) 2009;^a United States

Number of days	<1 cigarette smoked per day % (95% CI)	1 cigarette smoked per day % (95% CI)	2–5 cigarettes smoked per day % (95% CI)	6–10 cigarettes smoked per day % (95% CI)	11–20 cigarettes smoked per day % (95% CI)	>20 cigarettes smoked per day % (95% CI)
1–2	52.2 (48.2–56.2)	31.9 (28.5–35.5)	14.4 (12.0–17.2)	1.3 (0.5–2.9)	0.0	0.3 (0.1–1.0)
3–5	22.6 (17.7–28.5)	33.8 (27.1–41.4)	40.5 (35.2–46.0)	2.3 (1.1–5.0)	0.4 (0.1–2.1)	0.3 (0.0–2.4)
6–9	17.6 (12.0–25.2)	23.3 (17.8–29.8)	52.2 (43.9–60.4)	6.0 (3.2–11.0)	0.8 (0.1–4.8)	0.1 (0.0–0.4)
10–19	6.8 (4.5–10.2)	21.4 (16.3–27.5)	62.8 (55.6–69.5)	7.8 (5.1–11.7)	1.2 (0.5–3.1)	0.0
20–29	0.5 (0.1–2.1)	8.9 (4.8–15.8)	76.5 (68.8–82.8)	12.5 (8.3–18.6)	1.5 (0.5–4.6)	0.0
All 30	0.3 (0.1–1.3)	3.8 (2.4–6.0)	35.8 (32.1–39.7)	34.1 (30.1–38.4)	15.3 (12.8–18.1)	10.7 (7.4–15.2)
All current smokers	20.0 (18.4–21.8)	20.1 (18.3–22.0)	39.3 (37.2–41.5)	12.8 (11.1–14.8)	4.7 (3.8–5.7)	3.1 (2.2–4.2)

Source: 2009 YRBS: Centers for Disease Control and Prevention, Division of Adolescent and School Health (unpublished data).

Note: CI = confidence interval.

^aBased on responses to the questions, “During the past 30 days, on how many days did you smoke cigarettes?” and “During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?”

Table 3.1.9 Cumulative percentages of recalled age at which a respondent first used a cigarette and began smoking daily, by smoking status among 30- to 39-year-olds; National Survey on Drug Use and Health (NSDUH) 2010;^a United States

Recalled age (years)	All persons		Persons who had ever tried a cigarette	Persons who had ever smoked daily	
	First tried a cigarette % (95% CI)	Began smoking daily % (95% CI)	First tried a cigarette % (95% CI)	First tried a cigarette % (95% CI)	Began smoking daily % (95% CI)
≤10	4.1 (3.54–4.77)	0.4 (0.24–0.61)	5.9 (5.12–6.90)	6.7 (5.60–8.09)	1.0 (0.65–1.64)
≤11	5.8 (5.16–6.58)	0.7 (0.48–1.01)	8.4 (7.47–9.51)	9.6 (8.25–11.14)	1.9 (1.29–2.70)
≤12	12.1 (11.13–13.19)	1.8 (1.40–2.23)	17.5 (16.14–19.02)	20.9 (18.85–23.14)	4.7 (3.75–5.93)
≤13	18.5 (17.36–19.78)	3.5 (2.95–4.07)	26.8 (25.18–28.53)	32.4 (30.15–34.71)	9.3 (7.93–10.82)
≤14	25.4 (24.02–26.78)	6.0 (5.30–6.72)	36.7 (34.89–38.56)	43.6 (41.17–46.09)	16.0 (14.31–17.81)
≤15	34.4 (32.94–35.93)	10.5 (9.57–11.52)	49.8 (47.87–51.72)	58.5 (56.03–61.00)	28.1 (25.89–30.46)
≤16	43.9 (42.31–45.42)	15.3 (14.22–16.39)	63.5 (61.59–65.27)	72.9 (70.55–75.07)	40.9 (38.53–43.26)
≤17	49.4 (47.76–50.95)	19.2 (18.08–20.40)	71.4 (69.64–73.10)	80.3 (78.21–82.27)	51.4 (49.09–53.74)
≤18	56.3 (54.75–57.90)	24.3 (23.03–25.66)	81.5 (79.91–82.98)	88.2 (86.45–89.81)	65.1 (62.67–67.41)
≤19	59.3 (57.72–60.86)	27.4 (26.06–28.88)	85.8 (84.37–87.10)	91.8 (90.30–93.11)	73.5 (71.14–75.65)
≤20	61.9 (60.38–63.41)	30.0 (28.55–31.44)	89.6 (88.33–90.68)	93.2 (91.75–94.38)	80.2 (78.11–82.16)
≤21	64.2 (62.67–65.72)	32.0 (30.53–33.50)	92.9 (91.81–93.86)	95.9 (94.78–96.77)	85.6 (83.82–87.27)
≤22	65.2 (63.72–66.75)	33.1 (31.63–34.61)	94.4 (93.40–95.25)	96.6 (95.61–97.43)	88.6 (86.92–90.08)
≤23	65.9 (64.39–67.39)	33.9 (32.40–35.40)	95.3 (94.45–96.11)	97.3 (96.34–98.00)	90.7 (89.13–92.02)
≤24	66.5 (65.03–68.02)	34.6 (33.09–36.12)	96.3 (95.42–96.97)	97.9 (97.02–98.50)	92.6 (91.14–93.78)
≤25	67.6 (66.11–69.04)	35.7 (34.22–37.27)	97.8 (97.14–98.30)	98.8 (98.23–99.23)	95.6 (94.56–96.49)
≤26	67.8 (66.28–69.20)	35.9 (34.43–37.47)	98.0 (97.39–98.53)	99.0 (98.39–99.36)	96.2 (95.18–96.96)
≤27	67.9 (66.44–69.36)	36.1 (34.62–37.68)	98.3 (97.64–98.73)	99.1 (98.46–99.42)	96.7 (95.74–97.44)
≤28	68.1 (66.61–69.52)	36.5 (34.98–38.04)	98.5 (97.90–98.94)	99.3 (98.75–99.60)	97.7 (96.90–98.27)
≤29	68.2 (66.69–69.59)	36.7 (35.14–38.20)	98.6 (98.01–99.03)	99.3 (98.81–99.64)	98.1 (97.39–98.63)
≤30	68.7 (67.28–70.14)	37.0 (35.50–38.56)	99.4 (98.98–99.69)	99.8 (99.44–99.93)	99.1 (98.50–99.43)
31–39	69.1 (67.68–70.53)	37.4 (35.85–38.91)	100.0	100.0	100.0
Never smoked	100.0	100.0	NA	NA	NA
Mean age (years)	15.9	17.9	15.9	15.1	17.9

Source: 2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: **CI** = confidence interval; **NA** = not applicable.

^aBased on responses to the following questions: “Have you ever smoked part or all of a cigarette?” “How old were you the first time you smoked part or all of a cigarette?” “Has there ever been a period in your life when you smoked cigarettes every day for at least 30 days?” “How old were you when you first started smoking cigarettes every day?”

Table 3.1.10 Percentage distribution of cigarette brands that 12- to 17-year-olds who were current smokers preferred, by gender, race/ethnicity, age, and region; National Survey on Drug Use and Health (NSDUH) 2008–2010;^a United States

Characteristic	Marlboro full flavor % (95% CI)	Marlboro Lights % (95% CI)	Newport full flavor % (95% CI)	Marlboro Mediums % (95% CI)	Camel full flavor % (95% CI)	Camel Lights % (95% CI)
Overall	19.7 (18.3–21.0)	17.5 (16.3–18.9)	14.1 (13.0–15.3)	7.3 (6.5–8.2)	5.2 (4.6–5.9)	5.1 (4.4–6.0)
Gender						
Male	22.3 (20.4–24.2)	15.1 (13.4–17.1)	15.2 (13.6–16.9)	6.7 (5.6–7.9)	6.3 (5.3–7.4)	4.5 (3.6–5.5)
Female	16.8 (15.1–18.7)	20.1 (18.4–22.0)	12.9 (11.5–14.6)	8.0 (6.9–9.3)	4.1 (3.3–5.0)	5.8 (4.6–7.3)
Race/ethnicity						
White	22.9 (21.2–24.6)	18.0 (16.6–19.5)	11.2 (10.0–12.6)	8.0 (7.1–9.1)	5.7 (4.9–6.6)	5.8 (4.9–6.8)
Male	26.5 (24.2–29.0)	14.4 (12.5–16.6)	12.0 (10.3–13.8)	7.3 (6.1–8.8)	7.2 (5.9–8.7)	5.3 (4.3–6.6)
Female	19.3 (17.2–21.6)	21.5 (19.4–23.8)	10.5 (9.0–12.2)	8.7 (7.3–10.4)	4.3 (3.4–5.4)	6.3 (4.9–8.0)
Black or African American	1.7 (0.8–3.6)	4.3 (2.1–8.3)	42.4 (36.8–48.1)	0.7 (0.2–1.9)	0.8 (0.3–2.3)	0.5 (0.2–1.5)
Male	1.4 (0.5–3.7)	5.1 (2.0–12.2)	44.2 (37.2–51.4)	0.3 (0.0–2.0)	NR	NR
Female	2.3 (0.8–6.5)	3.1 (1.3–7.0)	39.8 (31.6–48.7)	1.2 (0.4–4.0)	1.4 (0.4–4.5)	1.3 (0.5–3.6)
Hispanic or Latino	15.6 (12.7–19.0)	21.6 (17.9–25.7)	12.5 (9.9–15.8)	7.2 (5.3–9.6)	5.1 (3.7–7.1)	5.4 (3.6–8.1)
Male	18.8 (14.8–23.6)	21.0 (16.4–26.5)	12.9 (9.4–17.5)	7.5 (5.1–10.9)	6.1 (4.2–8.8)	4.6 (2.6–7.9)
Female	10.9 (7.5–15.5)	22.4 (16.6–29.6)	12.0 (8.3–17.0)	6.7 (4.1–10.6)	3.7 (1.8–7.5)	6.6 (3.5–12.3)
Other ^b	19.3 (13.9–26.0)	19.2 (13.6–26.4)	12.5 (8.3–18.3)	8.7 (5.6–13.3)	5.8 (3.6–9.2)	3.0 (1.6–5.8)
Male	19.3 (11.9–29.6)	NR	11.8 (6.5–20.3)	6.7 (3.7–11.8)	6.9 (3.6–12.7)	1.9 (0.5–6.4)
Female	19.3 (12.3–28.9)	18.4 (13.0–25.3)	13.0 (7.4–21.9)	10.5 (5.7–18.4)	4.9 (2.4–9.6)	4.0 (1.9–8.5)
Age (years)						
12–14	13.8 (11.2–16.8)	18.4 (15.3–22.1)	9.4 (7.2–12.0)	10.2 (7.9–13.1)	3.6 (2.4–5.3)	4.1 (2.7–6.0)
15–17	20.8 (19.3–22.3)	17.4 (16.0–18.8)	15.0 (13.8–16.4)	6.8 (6.0–7.7)	5.5 (4.8–6.3)	5.3 (4.5–6.3)
Region						
Northeast	14.9 (12.4–17.7)	13.8 (11.2–16.7)	25.0 (21.8–28.6)	4.9 (3.6–6.7)	3.3 (2.3–4.9)	3.6 (2.5–5.2)
Midwest	22.0 (19.9–24.2)	14.8 (13.0–16.7)	16.4 (14.5–18.5)	8.0 (6.7–9.6)	5.0 (4.0–6.2)	4.7 (3.7–5.9)
South	18.1 (15.9–20.5)	20.9 (18.7–23.3)	13.8 (11.8–16.0)	6.0 (4.9–7.4)	4.2 (3.2–5.4)	4.8 (3.7–6.4)
West	23.0 (19.6–26.8)	18.0 (14.9–21.4)	4.0 (2.7–5.9)	10.4 (8.3–13.1)	8.6 (6.9–10.7)	7.3 (5.3–9.8)

Table 3.1.10 Continued

Characteristic	Newport Lights % (95% CI)	Newport Mediums % (95% CI)	Camel Mediums % (95% CI)	Marlboro Ultra Lights % (95% CI)	All other brands/ types % (95% CI)	Unknown brand % (95% CI)
Overall	5.0 (4.4–5.8)	2.7 (2.2–3.3)	2.1 (1.6–2.7)	1.7 (1.3–2.1)	16.0 (14.9–17.3)	3.5 (2.9–4.2)
Gender						
Male	4.6 (3.8–5.7)	2.7 (2.0–3.6)	1.9 (1.3–2.8)	1.4 (1.0–2.0)	15.4 (13.8–17.2)	3.9 (3.1–4.9)
Female	5.5 (4.5–6.6)	2.7 (2.0–3.6)	2.3 (1.7–3.1)	1.9 (1.3–2.7)	16.7 (15.0–18.5)	3.1 (2.4–4.0)
Race/ethnicity						
White	3.5 (2.9–4.2)	1.3 (0.9–1.8)	2.4 (1.8–3.1)	1.7 (1.3–2.2)	16.6 (15.2–18.1)	3.0 (2.4–3.7)
Male	2.6 (1.8–3.7)	1.4 (0.8–2.3)	2.3 (1.5–3.6)	1.6 (1.1–2.4)	15.9 (14.0–18.1)	3.4 (2.6–4.5)
Female	4.4 (3.4–5.6)	1.2 (0.7–1.8)	2.4 (1.7–3.4)	1.7 (1.1–2.5)	17.2 (15.3–19.4)	2.5 (1.9–3.5)
Black or African American	16.9 (13.2–21.4)	10.3 (7.6–13.9)	NR	0.3 (0.0–1.8)	16.8 (12.3–22.3)	4.3 (2.4–7.8)
Male	17.4 (12.5–23.7)	8.7 (5.6–13.1)	NR	NR	17.4 (12.0–24.6)	3.2 (1.4–6.9)
Female	16.1 (11.1–22.7)	12.6 (7.9–19.6)	0.3 (0.0–2.1)	NR	15.8 (9.7–24.7)	6.0 (2.6–13.4)
Hispanic or Latino	6.4 (4.6–9.0)	4.4 (2.8–6.9)	1.4 (0.8–2.6)	1.9 (1.0–3.5)	13.3 (10.7–16.5)	5.0 (3.4–7.4)
Male	6.3 (4.1–9.5)	3.6 (2.0–6.6)	0.8 (0.3–2.5)	1.4 (0.7–3.0)	12.3 (8.9–16.6)	4.7 (2.6–8.2)
Female	6.7 (4.1–10.7)	5.6 (2.9–10.7)	2.3 (1.1–5.0)	2.6 (1.1–6.3)	14.9 (10.9–20.0)	5.5 (3.2–9.2)
Other ^b	2.4 (1.3–4.6)	3.5 (1.6–7.2)	2.5 (1.0–6.0)	2.7 (0.9–7.7)	16.3 (12.3–21.3)	4.1 (1.8–8.9)
Male	1.5 (0.4–5.1)	4.8 (1.9–11.6)	NR	0.1 (0.0–0.6)	17.3 (11.7–24.7)	NR
Female	3.2 (1.5–6.7)	NR	3.4 (1.2–9.2)	NR	15.5 (10.2–22.9)	0.5 (0.1–2.0)
Age (years)						
12–14	7.5 (5.6–9.9)	3.4 (2.0–5.6)	1.6 (0.8–3.3)	2.4 (1.5–3.8)	19.2 (16.3–22.4)	6.6 (4.7–9.3)
15–17	4.6 (3.9–5.4)	2.5 (2.0–3.2)	2.2 (1.7–2.9)	1.5 (1.1–2.0)	15.4 (14.2–16.8)	2.9 (2.4–3.6)
Region						
Northeast	9.0 (7.2–11.3)	4.0 (2.5–6.4)	1.0 (0.4–2.4)	1.9 (1.1–3.5)	15.2 (12.5–18.4)	3.2 (2.1–4.7)
Midwest	5.3 (4.2–6.8)	3.5 (2.7–4.5)	1.5 (1.0–2.3)	1.4 (0.9–2.2)	14.7 (12.9–16.8)	2.7 (2.0–3.7)
South	5.1 (4.0–6.4)	2.5 (1.7–3.6)	1.7 (1.0–2.8)	1.6 (1.1–2.4)	17.5 (15.6–19.7)	3.8 (2.8–5.1)
West	1.7 (0.7–4.3)	1.1 (0.5–2.4)	4.2 (2.9–6.2)	1.8 (1.0–3.3)	15.6 (13.0–18.7)	4.2 (2.9–6.1)

Source: 2008–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: CI = confidence interval; NR = low precision, no estimate reported.

^aBased on responses to the questions, “During the past 30 days, what brand of cigarettes did you smoke most often?” and “During the past 30 days, what type of cigarettes did you smoke most often?”

^bIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.11 Percentage distribution of cigarette brands that young adults 18–25 years of age who were current smokers preferred, by gender, race/ethnicity, age, and region; National Survey on Drug Use and Health (NSDUH) 2008–2010;^a United States

Characteristic	Marlboro Lights % (95% CI)	Marlboro full flavor % (95% CI)	Newport full flavor % (95% CI)	Camel Lights % (95% CI)	Camel full flavor % (95% CI)	Marlboro Mediums % (95% CI)
Overall	22.7 (21.9–23.4)	16.3 (15.7–17.0)	15.7 (15.0–16.4)	9.3 (8.8–9.8)	5.6 (5.2–6.0)	5.0 (4.7–5.4)
Gender						
Male	20.9 (20.0–22.0)	18.8 (17.9–19.7)	15.4 (14.5–16.2)	9.1 (8.5–9.8)	6.4 (5.9–7.0)	5.2 (4.7–5.7)
Female	24.9 (23.8–26.0)	13.2 (12.4–14.0)	16.2 (15.2–17.2)	9.6 (8.9–10.4)	4.5 (4.0–5.1)	4.9 (4.4–5.5)
Race/ethnicity						
White	24.1 (23.3–25.0)	18.5 (17.7–19.3)	9.1 (8.5–9.7)	11.3 (10.7–11.9)	6.8 (6.3–7.3)	5.7 (5.3–6.2)
Male	21.6 (20.4–22.8)	21.4 (20.3–22.6)	8.8 (8.0–9.5)	11.3 (10.5–12.2)	7.9 (7.2–8.6)	6.1 (5.5–6.7)
Female	27.1 (25.9–28.4)	15.0 (14.1–16.0)	9.5 (8.7–10.4)	11.2 (10.4–12.2)	5.5 (4.8–6.2)	5.4 (4.7–6.0)
Black or African American	3.7 (2.7–5.1)	2.1 (1.5–3.0)	61.2 (58.5–63.8)	1.3 (0.8–2.0)	0.3 (0.2–0.5)	1.1 (0.6–1.7)
Male	3.7 (2.5–5.4)	2.2 (1.4–3.4)	59.8 (56.4–63.2)	1.3 (0.7–2.3)	0.3 (0.2–0.7)	0.8 (0.4–1.5)
Female	3.7 (2.2–6.3)	2.1 (1.2–3.5)	63.0 (58.8–67.1)	1.2 (0.6–2.4)	0.3 (0.1–0.6)	1.4 (0.7–3.0)
Hispanic or Latino	28.2 (26.0–30.5)	17.5 (15.7–19.5)	14.2 (12.6–16.0)	6.9 (5.7–8.3)	4.2 (3.3–5.4)	4.7 (3.7–5.9)
Male	28.4 (25.6–31.4)	20.3 (17.9–23.1)	13.2 (11.3–15.3)	6.2 (4.9–8.0)	4.9 (3.7–6.4)	4.3 (3.2–5.8)
Female	27.6 (24.1–31.5)	12.5 (10.2–15.3)	16.1 (13.3–19.3)	8.0 (5.9–10.8)	3.0 (1.8–5.1)	5.4 (3.8–7.6)
Other ^b	26.4 (23.3–29.8)	13.9 (11.9–16.2)	13.8 (11.1–17.0)	7.4 (5.7–9.5)	5.0 (3.6–6.8)	5.0 (3.9–6.4)
Male	24.2 (20.4–28.5)	16.1 (13.2–19.6)	12.5 (9.6–16.1)	7.1 (5.1–9.8)	6.0 (4.1–8.8)	5.4 (3.9–7.5)
Female	29.7 (24.7–35.2)	10.6 (8.2–13.6)	15.7 (11.7–20.6)	7.7 (5.1–11.6)	3.5 (2.0–6.0)	4.4 (2.9–6.6)
Age (years)						
18–20	19.1 (18.0–20.2)	19.8 (18.7–21.0)	16.1 (15.1–17.2)	8.3 (7.6–9.1)	6.9 (6.2–7.6)	5.7 (5.2–6.4)
21–25	24.8 (23.9–25.7)	14.2 (13.5–15.0)	15.5 (14.7–16.3)	9.9 (9.3–10.6)	4.8 (4.4–5.3)	4.6 (4.2–5.1)
Region						
Northeast	19.7 (18.1–21.4)	14.9 (13.6–16.4)	24.6 (22.6–26.7)	6.8 (5.8–7.9)	3.5 (3.0–4.2)	4.1 (3.5–4.9)
Midwest	22.7 (21.5–24.0)	16.8 (15.8–17.9)	14.5 (13.5–15.5)	11.1 (10.3–12.1)	5.6 (5.0–6.3)	4.9 (4.4–5.6)
South	25.4 (24.1–26.8)	14.9 (13.8–16.1)	18.3 (17.0–19.6)	8.2 (7.4–9.2)	4.2 (3.7–4.9)	4.5 (4.0–5.2)
West	20.4 (18.7–22.2)	19.5 (17.9–21.2)	5.0 (4.0–6.2)	11.3 (10.0–12.7)	9.7 (8.5–10.9)	6.8 (5.8–8.1)

Table 3.1.11 Continued

Characteristic	Parliament Lights % (95% CI)	Newport Lights % (95% CI)	Marlboro Ultra Lights % (95% CI)	Newport Mediums % (95% CI)	All other brands/ types % (95% CI)	Unknown brands % (95% CI)
Overall	2.6 (2.3–2.9)	2.2 (2.0–2.5)	2.1 (1.9–2.4)	1.6 (1.3–1.8)	15.2 (14.6–15.8)	1.6 (1.4–1.9)
Gender						
Male	2.3 (2.0–2.7)	2.2 (1.9–2.6)	1.7 (1.4–2.1)	1.7 (1.4–2.1)	14.5 (13.8–15.3)	1.7 (1.5–2.0)
Female	2.9 (2.4–3.5)	2.2 (1.8–2.6)	2.6 (2.3–3.0)	1.3 (1.1–1.7)	16.1 (15.3–17.0)	1.5 (1.2–1.9)
Race/ethnicity						
White	3.2 (2.8–3.7)	0.9 (0.8–1.1)	2.2 (2.0–2.6)	0.5 (0.3–0.6)	16.2 (15.5–17.0)	1.4 (1.2–1.7)
Male	3.0 (2.6–3.5)	0.8 (0.6–1.1)	1.6 (1.3–2.0)	0.5 (0.3–0.7)	15.4 (14.5–16.4)	1.6 (1.3–2.0)
Female	3.5 (2.9–4.2)	1.0 (0.8–1.3)	3.0 (2.5–3.5)	0.4 (0.3–0.6)	17.2 (16.1–18.3)	1.2 (0.9–1.6)
Black or African American	0.2 (0.1–0.4)	8.1 (6.8–9.6)	0.7 (0.3–1.5)	9.0 (7.6–10.8)	10.4 (8.9–12.0)	2.1 (1.5–2.9)
Male	0.2 (0.1–0.7)	7.9 (6.2–10.1)	0.6 (0.2–1.8)	9.9 (7.8–12.4)	10.8 (8.9–13.0)	2.5 (1.7–3.6)
Female	0.1 (0.0–0.5)	8.3 (6.1–11.0)	0.9 (0.4–1.8)	7.9 (5.9–10.4)	9.8 (7.8–12.2)	1.5 (0.7–3.0)
Hispanic or Latino	1.2 (0.7–2.0)	3.7 (2.8–4.8)	2.5 (1.8–3.5)	1.5 (1.1–2.1)	12.9 (11.4–14.7)	2.5 (1.8–3.4)
Male	0.7 (0.3–1.3)	3.8 (2.7–5.2)	2.8 (1.8–4.3)	1.5 (1.0–2.4)	12.0 (10.1–14.2)	1.9 (1.2–2.9)
Female	2.0 (1.0–4.2)	3.5 (2.3–5.3)	2.1 (1.4–3.2)	1.4 (0.8–2.6)	14.7 (12.2–17.6)	3.7 (2.4–5.6)
Other ^b	2.9 (1.9–4.3)	2.6 (1.6–4.3)	2.5 (1.5–4.2)	0.9 (0.4–1.9)	18.7 (16.2–21.5)	1.0 (0.6–1.7)
Male	3.0 (1.7–5.0)	2.5 (1.3–4.8)	2.3 (1.1–4.7)	1.0 (0.4–2.4)	19.0 (15.8–22.7)	0.9 (0.4–2.2)
Female	2.7 (1.4–5.3)	2.8 (1.3–5.7)	2.7 (1.3–5.8)	0.8 (0.2–3.2)	18.4 (14.7–22.7)	1.1 (0.6–1.9)
Age (years)						
18–20	1.3 (1.0–1.7)	2.9 (2.4–3.4)	1.5 (1.2–1.9)	1.7 (1.4–2.1)	14.7 (13.8–15.7)	1.9 (1.5–2.4)
21–25	3.3 (2.9–3.8)	1.8 (1.5–2.1)	2.5 (2.2–2.9)	1.5 (1.2–1.8)	15.5 (14.8–16.3)	1.5 (1.2–1.8)
Region						
Northeast	5.3 (4.4–6.3)	3.7 (3.0–4.5)	1.8 (1.4–2.5)	1.6 (1.1–2.2)	12.5 (11.3–13.8)	1.5 (1.1–2.1)
Midwest	2.4 (2.0–2.9)	1.5 (1.2–1.8)	2.2 (1.8–2.8)	1.3 (1.1–1.6)	15.6 (14.7–16.6)	1.2 (0.9–1.5)
South	1.3 (0.9–1.7)	2.2 (1.8–2.7)	2.3 (1.8–2.8)	2.1 (1.7–2.6)	15.0 (14.0–16.1)	1.6 (1.3–2.0)
West	2.8 (2.0–3.8)	1.7 (1.2–2.3)	2.0 (1.5–2.8)	0.9 (0.6–1.6)	17.5 (16.0–19.2)	2.4 (1.8–3.2)

Source: 2008–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: CI = confidence interval.

^aBased on responses to the questions, “During the past 30 days, what brand of cigarettes did you smoke most often?” and “During the past 30 days, what type of cigarettes did you smoke most often?”

^bIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.12 Percentage of 12- to 17-year-olds who had never smoked but were susceptible to starting to smoke cigarettes, by race/ethnicity and gender; National Survey on Drug Use and Health (NSDUH) 2008–2010;^a United States

Race/ethnicity	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Overall	19.9 (19.5–20.4)	20.4 (19.8–21.1)	19.3 (18.7–20.0)
All non-Hispanic	18.9 (18.4–19.3)	19.6 (18.9–20.3)	18.1 (17.4–18.8)
White	19.0 (18.4–19.6)	19.7 (18.9–20.5)	18.2 (17.4–19.1)
Black or African American	19.4 (18.5–20.5)	20.3 (18.8–21.9)	18.6 (17.2–20.2)
American Indian/Alaska Native	19.7 (14.8–25.7)	18.9 (12.5–27.6)	20.7 (14.6–28.4)
Hawaiian or Other Pacific Islander	16.0 (10.3–24.0)	NR	NR
Asian	15.1 (12.9–17.6)	15.3 (12.2–18.9)	15.0 (12.0–18.5)
Chinese	11.7 (8.2–16.5)	12.3 (7.6–19.4)	11.2 (7.1–17.2)
Filipino	18.6 (13.5–25.0)	16.6 (9.9–26.4)	21.0 (13.1–32.0)
Japanese	NR	NR	NR
Asian Indian	12.8 (9.3–17.3)	11.1 (7.2–16.6)	14.5 (9.3–22.0)
Korean	NR	NR	NR
Vietnamese	15.8 (9.5–24.9)	NR	NR
Hispanic	24.2 (22.9–25.5)	24.1 (22.4–25.9)	24.3 (22.6–26.1)
Mexican	25.8 (24.1–27.5)	26.1 (23.9–28.4)	25.5 (23.3–27.8)
Puerto Rican	18.3 (15.3–21.8)	15.7 (12.0–20.3)	20.7 (16.3–25.9)
Central or South American	22.1 (18.9–25.7)	23.2 (18.4–28.8)	21.0 (17.0–25.7)
Cuban	22.0 (16.9–28.1)	21.1 (14.2–30.3)	22.9 (15.1–33.0)

Source: 2008–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: **CI** = confidence interval; **NR** = low precision, no estimate reported.

^aSusceptibility to starting to smoke among self-reported nonsmokers was determined by the following 2 questions: “If one of your best friends offered you a cigarette, would you smoke it?” and “At any time during the next 12 months do you think you will smoke a cigarette?” Possible answers were “definitely not,” “probably not,” “probably yes,” and “definitely yes.” Those who answered “definitely not” to both questions were classified as nonsusceptible to starting to smoke; respondents who had unknown information for both susceptibility questions were excluded from the analysis. Those who answered with any other combination of responses were classified as susceptible to starting to smoke.

Table 3.1.13 Age or grade when respondents first used a cigarette, among those aged 17–18 years who had completed 11th grade, National Survey on Drug Use and Health (NSDUH) 2010; and among 12th graders, Monitoring the Future (MTF) 2010, National Youth Risk Behavior Survey (YRBS) 2009, and National Youth Tobacco Survey (NYTS) 2009; United States

Age or grade	NSDUH ^a % (95% CI)	MTF ^b % (95% CI)	YRBS ^c % (95% CI)	NYTS ^d % (95% CI)
≤12 years or ≤ grade 6	7.2 (6.3–8.1)	5.9 (5.0–6.9)	8.6 (6.9–10.6)	7.1 (5.0–9.2)
13–14 years or grades 7–8	9.0 (7.9–10.1)	10.1 (9.0–11.1)	10.4 (9.0–11.9)	11.3 (9.9–12.7)
15–16 years or grades 9–10	17.3 (16.0–18.7)	13.8 (12.4–15.2)	16.1 (14.6–17.8)	15.0 (12.9–17.2)
≥17 years or > grade 10	10.4 (9.3–11.6)	9.2 (8.2–10.2)	10.1 (8.6–11.7)	8.0 (6.3–9.8)
Never smoked	56.1 (54.2–58.1)	61.0 (58.4–63.7)	54.9 (51.1–58.6)	58.5 (55.4–61.6)

Source: 2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data); 2010 MTF: University of Michigan, Institute for Social Research (unpublished data); 2009 YRBS: Centers for Disease Control and Prevention, Division of Adolescent and School Health (unpublished data); 2009 NYTS: Centers for Disease Control and Prevention (unpublished data).

Note: CI = confidence interval.

^aBased on responses to the question, “How old were you the first time you smoked part or all of a cigarette?”

^bBased on responses to the question, “When (if ever) did you first do each of the following things?...Smoke your first cigarette.” Data based on one questionnaire form only, which explains any inconsistency between the “never smoked” category above and the results from the question on smoking in lifetime.

^cBased on responses to the question, “How old were you when you smoked a whole cigarette for the first time?”

^dEstimates are based on responses to the question “How old were you when you smoked a whole cigarette for the first time?” Analyses are restricted among youth who reported being in 12th grade.

Table 3.1.14 Age or grade when respondents first began smoking daily, among 17- to 18-year-olds who had completed 11th grade, National Survey on Drug Use and Health (NSDUH) 2010; and among 12th graders, Monitoring the Future (MTF) 2010; United States

Age (in years) or grade	NSDUH ^a % (95% CI)	MTF ^b % (95% CI)
≤12 years or ≤ grade 6	0.8 (0.5–1.3)	0.9 (0.6–1.2)
13–14 years or grades 7–8	2.1 (1.7–2.6)	2.1 (1.7–2.6)
15–16 years or grades 9–10	6.4 (5.5–7.5)	4.4 (3.5–5.2)
≥17 years or > grade 10	3.9 (3.2–4.7)	4.3 (3.6–4.9)
Never smoked daily	30.7 (28.8–32.6)	88.3 (86.8–89.9)
Never smoked	56.1 (54.2–58.1)	NA

Sources: 2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data); 2010 MTF: University of Michigan, Institute for Social Research (unpublished data).

Note: CI = confidence interval; NA = not available.

^aBased on responses to the question, “How old were you when you first started smoking cigarettes every day?”

^bBased on responses to the question, “When (if ever) did you FIRST do each of the following things?...Smoke cigarettes on a daily basis.”

Table 3.1.15 Distribution of developmental trajectories of cigarette smoking across adolescence and young adulthood, 11–26 years of age, by gender and race/ethnicity; National Longitudinal Study of Adolescent Health (Add Health) 1994–2002; United States

Demographic	Nonsmokers (48.5% overall) versus			χ^2
	Quitters (12.0% overall) OR (95% CI) ^a	Late established (25.0% overall) OR (95% CI)	Early established (14.5% overall) OR (95% CI)	
By gender^b				
Male	0.83 (0.67–1.04)	1.87 (1.55–2.25)*	1.06 (0.86–1.31)	38.49*
By race/ethnicity^c				
Black	0.13 (0.06–0.28)*	0.55 (0.42–0.72)*	0.06 (0.03–0.13)*	41.64*
Other ^d	0.61 (0.38–0.95)*	0.87 (0.63–1.22)	0.40 (0.27–0.59)*	9.78*
Hispanic	0.48 (0.31–0.74)*	0.62 (0.45–0.85)*	0.22 (0.14–0.32)*	17.44*

Source: 1994–2002 Add Health: *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (unpublished data).

Note: CI = confidence interval; OR = odds ratio.

^aGeneralized logit model using nonsmokers as the reference group.

^bFemales are the reference group.

^cWhites are the reference group.

^dIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

*p < 0.05 (statistically significant).

Table 3.1.16 Distribution of developmental trajectories of cigarette smoking across adolescence and young adulthood, 11–26 years of age, by level of nicotine dependence (Fagerström scale); National Longitudinal Study of Adolescent Health (Add Health) 1994–2002; United States

Fagerström scale	Smoking trajectory groups			
	Nonsmokers	Quitters	Late established	Early established
Pearson correlation coefficient	-0.63*	-0.05*	0.31*	0.51*
Average scale score (95% CI)	0.05 (0.03–0.08)	1.18 (0.90–1.46)	2.94 (2.78–3.1)	4.04 (3.87–4.21)

Source: 1994–2002 Add Health: *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (unpublished data).

Note: CI = confidence interval.

*p < 0.01 (statistically significant).

Table 3.1.17 Percentage of young people (12–14 years of age at Wave I and 19–21 years of age at Wave III) who were characterized as never smokers, current smokers, or former smokers, by gender and race/ethnicity; National Longitudinal Study of Adolescent Health (Add Health) 1994–2002; United States

Stage of smoking (type of smoker)	Wave I (12–14 years of age) %	Wave III (19–21 years of age) %
Overall		
Never	84.8	53.4
Former	3.1	8.3
Current	12.2	38.3
Male		
Never	85.8	48.5
Former	2.7	7.5
Current	11.5	44.1
Female		
Never	84.0	57.4
Former	3.3	8.9
Current	12.7	33.7
Hispanic		
Never	85.1	51.9
Former	3.7	15.3
Current	11.2	32.8
White		
Never	86.2	57.1
Former	2.0	8.5
Current	11.9	34.5
Black		
Never	95.2	76.8
Former	1.2	4.2
Current	3.6	19.0
Other^a		
Never	80.3	44.0
Former	3.8	8.7
Current	15.9	47.3

Source: 1994–2002 Add Health; Eunice Kennedy Shriver National Institute of Child Health and Human Development (unpublished data).

^aIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.18 Probability of transitioning from one stage of cigarette smoking to another, from Wave I (12–14 years of age) to Wave III (19–21 years of age); National Longitudinal Study of Adolescent Health (Add Health) 1994–2002; United States

Stage of smoking (type of smoker) at Wave I	Stage of smoking at Wave III		
	Never smoker	Former smoker	Current smoker
Overall			
Never	0.63	0.06	0.31
Former	0.00	0.20	0.80
Current	0.00	0.21	0.79
Male			
Never	0.56	0.06	0.37
Former	0.00	0.11	0.89
Current	0.00	0.16	0.84
Female			
Never	0.68	0.06	0.26
Former	0.00	0.26	0.74
Current	0.00	0.25	0.75
Hispanic			
Never	0.61	0.11	0.28
Former	0.00	0.38	0.63
Current	0.00	0.38	0.62
White			
Never	0.66	0.06	0.28
Former	0.00	0.50	0.50
Current	0.00	0.23	0.77
Black			
Never	0.81	0.03	0.16
Former	0.00	0.29	0.71
Current	0.00	0.27	0.73
Other^a			
Never	0.55	0.07	0.39
Former	0.00	0.15	0.85
Current	0.00	0.18	0.82

Source: 1994–2002 Add Health; Eunice Kennedy Shriver National Institute of Child Health and Human Development (unpublished data).

Note: Estimates in the diagonals (noted in bold) represent stability or the proportion of young people who stayed in the same stage over time.

^aIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.19 Percentage of young people (15–18 years of age at Wave I and 22–25 years of age at Wave III) who were characterized as never smokers, former smokers, nondaily smokers, or daily smokers, by gender and race/ethnicity; National Longitudinal Study of Adolescent Health (Add Health) 1994–2002; United States

Stage of smoking (type of smoker)	Wave I (15–18 years of age) %	Wave III (22–25 years of age) %
Overall		
Never	63.3	48.9
Former	5.5	11.1
Nondaily	20.3	16.7
Daily	11.0	23.3
Male		
Never	63.3	44.0
Former	5.2	11.7
Nondaily	21.2	19.0
Daily	10.4	25.3
Female		
Never	63.2	53.6
Former	5.7	10.5
Nondaily	19.0	14.8
Daily	12.0	21.2
Hispanic		
Never	70.4	58.6
Former	5.1	11.2
Nondaily	19.0	19.6
Daily	5.5	10.7
White		
Never	70.0	53.8
Former	4.4	10.6
Nondaily	15.7	14.8
Daily	9.8	20.8
Black		
Never	82.4	61.2
Former	2.6	6.4
Nondaily	4.4	10.6
Daily	10.6	21.9
Other^a		
Never	50.9	36.4
Former	6.8	13.0
Nondaily	25.6	17.0
Daily	16.7	33.6

Source: 1994–2002 Add Health: Eunice Kennedy Shriver National Institute of Child Health and Human Development (unpublished data).

^aIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.20 Probability of transitioning from one stage of cigarette smoking to another, from Wave I (15–18 years of age) to Wave III (22–25 years of age); National Longitudinal Study of Adolescent Health (Add Health) 1994–2002; United States

Stage of smoking (type of smoker) at Wave I	Stage of smoking at Wave III			
	Never smoker	Former smoker	Nondaily smoker	Daily smoker
Overall				
Never	0.77	0.04	0.10	0.08
Former	0.00	0.37	0.34	0.29
Nondaily	0.00	0.24	0.38	0.38
Daily	0.00	0.12	0.06	0.82
Male				
Never	0.70	0.06	0.15	0.09
Former	0.00	0.40	0.28	0.31
Nondaily	0.00	0.23	0.34	0.44
Daily	0.00	0.12	0.06	0.82
Female				
Never	0.85	0.03	0.06	0.05
Former	0.00	0.35	0.37	0.28
Nondaily	0.00	0.26	0.40	0.33
Daily	0.00	0.12	0.07	0.81
Hispanic				
Never	0.83	0.04	0.09	0.04
Former	0.00	0.48	0.47	0.05
Nondaily	0.00	0.26	0.56	0.18
Daily	0.00	0.14	0.05	0.81
White				
Never	0.77	0.06	0.08	0.09
Former	0.00	0.39	0.27	0.34
Nondaily	0.00	0.25	0.47	0.28
Daily	0.00	0.09	0.05	0.86
Black				
Never	0.73	0.03	0.12	0.12
Former	0.00	0.21	0.00	0.79
Nondaily	0.28	0.02	0.07	0.63
Daily	0.00	0.29	0.00	0.71
Other^a				
Never	0.72	0.05	0.11	0.13
Former	0.00	0.38	0.30	0.32
Nondaily	0.00	0.23	0.32	0.46
Daily	0.00	0.13	0.08	0.80

Source: 1994–2002 Add Health: *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (unpublished data).

Note: Estimates in the diagonals (noted in bold) represent stability or the proportion of young people who stayed in the same stage over time.

^aIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.21 Predicted likelihood (%) of smoking in young adulthood (5 years later), by intensity of smoking among 1996–2001 high school seniors; Monitoring the Future (MTF) 1996–2007;^a United States

Intensity of smoking	Definitely will % (95% CI)	Probably will % (95% CI)	Probably will not % (95% CI)	Definitely will not % (95% CI)	Total	
					%	Weighted number
Not smoking	0.3 (0.2–0.4)	1.5 (1.2–1.8)	15.6 (14.6–16.6)	82.6 (81.5–83.7)	66.2	9,388
<1 cigarette per day	1.1 (0.4–1.8)	13.5 (10.7–16.3)	49.2 (46.4–52.0)	36.2 (33.1–39.4)	11.5	1,637
1–5 cigarettes per day	1.2 (0.6–1.9)	31.6 (28.3–35.0)	45.1 (41.9–48.3)	22.0 (19.2–24.9)	9.5	1,349
About ½ pack per day	3.5 (2.2–4.8)	43.2 (39.2–47.2)	39.0 (35.9–42.0)	14.3 (11.3–17.3)	6.9	973
≥1 pack per day	11.0 (8.9–13.1)	52.2 (47.3–57.1)	25.0 (21.0–29.1)	11.8 (8.9–14.8)	5.8	827
Total	1.4 (1.2–1.6)	11.4 (10.5–12.2)	24.3 (23.4–25.2)	62.9 (61.5–64.4)	100.0	14,175

Source: 1996–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

Note: CI = confidence interval.

^aBased on responses to the questions, “How frequently have you smoked cigarettes during the past 30 days?” and “Do you think you will be smoking cigarettes five years from now?”

Table 3.1.22 Intensity of smoking (%) in young adulthood (5–6 years later), by intensity of smoking among 1996–2001 high school seniors; Monitoring the Future (MTF) 1996–2007;^a United States

Intensity of smoking	Not smoking % (95% CI)	<1 cigarette per day % (95% CI)	1–5 cigarettes per day % (95% CI)	About ½ pack per day % (95% CI)	≥1 pack per day % (95% CI)	Total %
Not smoking	86.1 (85.0–87.1)	6.5 (5.7–7.2)	3.2 (2.7–3.8)	2.4 (1.9–2.8)	1.9 (1.5–2.3)	66.9
<1 cigarette per day	56.5 (52.9–60.0)	17.5 (14.9–20.2)	12.2 (9.8–14.6)	8.7 (6.8–10.7)	5.1 (3.6–6.6)	11.4
1–5 cigarettes per day	30.1 (26.6–33.6)	17.6 (14.8–20.4)	21.3 (18.2–24.5)	19.4 (16.3–22.5)	11.6 (9.1–14.1)	9.5
About ½ pack per day	22.7 (18.6–26.8)	8.6 (6.0–11.2)	17.1 (13.6–20.5)	26.5 (22.4–30.7)	25.1 (20.8–29.5)	6.5
≥1 pack per day	15.2 (11.3–19.2)	7.4 (4.7–10.0)	8.2 (5.4–11.0)	21.0 (16.3–25.6)	48.3 (42.8–53.7)	5.8
Total	69.2 (67.9–70.5)	9.0 (8.2–9.7)	7.2 (6.5–7.8)	7.3 (6.6–8.1)	7.4 (6.6–8.1)	100.0

Source: 1996–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

Note: CI = confidence interval.

^aBased on responses to the questions, “How frequently have you smoked cigarettes during the past 30 days?” and “How frequently have you smoked cigarettes during the past 30 days?”

Table 3.1.23 Percentage change in the direction of intensity of smoking between senior year of high school and young adulthood (5–6 years later), among 1996–2001 high school seniors; Monitoring the Future (MTF) 1996–2007;^a United States

Intensity of smoking	Quit % (95% CI)	Less use % (95% CI)	Same level % (95% CI)	More use % (95% CI)	Total %
Not smoking	NA	NA	86.1 (85.0–87.1)	13.9 (12.9–15.0)	66.9
<1 cigarette per day	56.5 (52.9–60.0)	NA	17.5 (14.9–20.2)	26.0 (22.8–29.2)	11.4
1–5 cigarettes per day	30.1 (26.6–33.6)	17.6 (14.8–20.4)	21.3 (18.2–24.5)	31.0 (27.2–34.8)	9.5
About ½ pack per day	22.7 (18.6–26.8)	25.7 (21.3–30.0)	26.5 (22.4–30.7)	25.1 (20.8–29.5)	6.5
≥1 pack per day	15.2 (11.3–19.2)	44.4 (38.8–50.0)	29.9 (25.3–34.5)	10.5 (7.2–13.8)	5.8
Total	11.6 (10.8–12.4)	5.9 (5.3–6.5)	65.0 (63.6–66.4)	17.5 (16.4–18.5)	100.0

Source: 1996–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

Note: CI = confidence interval; NA = not applicable.

^aBased on responses to the questions, “How frequently have you smoked cigarettes during the past 30 days?” and “How frequently have you smoked cigarettes during the past 30 days?”

Table 3.1.24 Intensity of smoking in young adulthood (5–6 years later), by intensity of smoking in senior year of high school and expectation to smoke within 5 years, among 1996–2001 high school seniors; Monitoring the Future (MTF) 1996–2007;^a United States

Intensity of smoking and expectation to smoke within 5 years	Not smoking % (95% CI)	<1 cigarette per day % (95% CI)	1–5 cigarettes per day % (95% CI)	About ½ pack per day % (95% CI)	≥1 pack per day % (95% CI)	Total %
Not smoking						
Will smoke	85.4 (59.1–100.0)	14.6 (0.0–40.9)	0.0 (0.0–0.0)	0.0 (0.0–0.0)	0.0 (0.0–0.0)	1.1
Will not smoke	84.6 (82.0–87.2)	8.4 (6.2–10.6)	3.0 (1.7–4.3)	2.4 (1.3–3.6)	1.6 (0.6–2.5)	98.9
Total	84.6 (82.1–87.2)	8.5 (6.3–10.7)	3.0 (1.7–4.2)	2.4 (1.2–3.6)	1.5 (0.6–2.5)	67.1
<1 cigarette per day						
Will smoke	36.0 (11.1–61.0)	14.0 (0.0–34.6)	21.3 (0.0–42.5)	9.6 (0.0–27.7)	19.1 (0.0–43.0)	9.6
Will not smoke	55.8 (46.1–65.5)	16.5 (9.2–23.7)	10.7 (4.5–16.8)	10.6 (5.1–16.1)	6.4 (1.7–11.2)	90.4
Total	53.9 (44.8–63.0)	16.2 (9.2–23.2)	11.7 (5.7–17.7)	10.5 (5.3–15.7)	7.6 (2.9–12.4)	13.2
1–5 cigarettes per day						
Will smoke	27.5 (9.9–45.1)	8.7 (0.0–20.4)	35.9 (16.8–55.0)	22.3 (4.2–40.4)	5.6 (0.0–13.8)	34.4
Will not smoke	26.2 (13.9–38.5)	23.0 (10.1–36.0)	18.4 (6.4–30.4)	18.5 (6.8–30.2)	13.8 (4.2–23.5)	65.6
Total	26.6 (16.7–36.6)	18.1 (8.5–27.7)	24.4 (14.0–34.9)	19.8 (9.8–29.8)	11.0 (4.0–18.0)	8.1
About ½ pack per day						
Will smoke	26.0 (8.5–43.5)	16.9 (2.8–31.0)	15.5 (0.9–30.1)	24.1 (7.2–40.9)	17.6 (0.1–35.0)	43.9
Will not smoke	13.3 (1.3–25.2)	14.4 (3.1–25.6)	17.1 (4.4–29.8)	20.0 (4.9–35.1)	35.2 (18.7–51.8)	56.1
Total	18.8 (8.6–29.1)	15.5 (6.9–24.1)	16.4 (6.8–25.9)	21.8 (9.9–33.7)	27.5 (14.4–40.6)	6.2
≥1 pack per day						
Will smoke	6.5 (0.0–13.0)	16.3 (0.0–33.2)	10.4 (0.0–21.1)	11.6 (0.6–22.5)	55.3 (34.4–76.2)	55.6
Will not smoke	27.2 (6.6–47.7)	1.9 (0.0–5.7)	16.4 (0.0–34.9)	17.3 (1.5–33.1)	37.3 (14.4–60.1)	44.4
Total	15.7 (4.5–26.9)	9.9 (0.0–19.9)	13.0 (2.7–23.4)	14.1 (4.8–23.4)	47.3 (31.1–63.4)	5.4
Total	68.1 (65.1–71.1)	10.8 (8.6–13.0)	7.2 (5.6–8.8)	6.7 (4.9–8.5)	7.2 (5.4–9.0)	100.0

Source: 1996–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

Note: CI = confidence interval.

^aBased on responses to the questions, “How frequently have you smoked cigarettes during the past 30 days?” and “Do you think you will be smoking cigarettes 5 years from now?”

Table 3.1.25 Indicators of cigarette smoking and nicotine dependence among 12- to 17-year-olds smoking cigarettes during the previous 30 days; National Survey on Drug Use and Health (NSDUH) 2007–2010; United States

	Percentage by category % (95% CI)	Smoke >15 cigarettes per day ^a % (95% CI)	First cigarette within 30 minutes of waking % (95% CI)	Nicotine Dependence Syndrome Scale Mean % (95% CI)
Overall	100.0	5.5 (4.9–6.1)	29.7 (28.4–31.1)	2.29 (2.27–2.30)
Gender				
Male	51.8 (50.5–53.2)	6.6 (5.7–7.6)	30.3 (28.5–32.2)	2.28 (2.25–2.30)
Female	48.2 (46.8–49.5)	4.3 (3.6–5.2)	29.1 (27.2–31.0)	2.30 (2.27–2.32)
Race/ethnicity				
White	70.2 (68.8–71.6)	6.6 (5.9–7.5)	31.6 (30.1–33.2)	2.33 (2.31–2.35)
Black or African American	8.6 (7.8–9.5)	1.3 (0.7–2.4)	34.3 (29.4–39.5)	2.18 (2.13–2.23)
Hispanic	16.0 (14.9–17.3)	2.9 (1.8–4.7)	19.9 (16.8–23.3)	2.18 (2.13–2.22)
Other ^b	5.1 (4.5–5.8)	4.8 (2.7–8.3)	26.2 (21.0–32.2)	2.24 (2.18–2.30)
Age first puffed (years)				
<12	20.4 (19.3–21.4)	10.0 (8.4–11.9)	42.7 (39.6–45.9)	2.49 (2.45–2.53)
12–14	51.8 (50.4–53.2)	5.5 (4.7–6.5)	29.6 (27.8–31.5)	2.31 (2.28–2.33)
15–17	27.8 (26.6–29.1)	2.1 (1.5–3.0)	20.1 (17.8–22.6)	2.10 (2.08–2.13)
Age first smoked daily (years)				
<15	55.2 (53.1–57.2)	13.9 (12.2–15.9)	56.2 (53.5–58.9)	2.76 (2.73–2.79)
15–17	44.8 (42.8–46.9)	9.0 (7.4–11.1)	40.8 (37.8–43.9)	2.57 (2.54–2.61)
Transition (in years) from first cigarette to daily smoking				
≤1	55.8 (53.8–57.9)	10.8 (9.2–12.5)	51.0 (48.3–53.8)	2.68 (2.64–2.71)
2–3	31.1 (29.2–33.1)	12.9 (10.6–15.7)	46.1 (42.3–50.0)	2.68 (2.64–2.73)
≥4	13.1 (11.8–14.5)	13.2 (10.0–17.2)	49.1 (43.4–54.8)	2.65 (2.59–2.71)
Number of days smoked in past month				
<10	47.1 (45.7–48.4)	1.0 (0.7–1.5)	12.1 (10.7–13.6)	1.95 (1.94–1.97)
10–19	14.6 (13.6–15.6)	2.1 (1.3–3.3)	18.4 (15.9–21.3)	2.17 (2.13–2.20)
20–29	14.7 (13.7–15.7)	3.1 (2.2–4.4)	30.4 (27.4–33.7)	2.44 (2.40–2.47)
30	23.7 (22.6–24.8)	18.0 (15.9–20.2)	65.2 (62.6–67.7)	2.92 (2.89–2.95)
Average number of cigarettes smoked on days smoked				
≤1	46.8 (45.5–48.1)	NA	11.7 (10.3–13.3)	1.97 (1.95–1.98)
2–5	34.1 (32.8–35.4)	NA	28.7 (26.7–30.8)	2.35 (2.32–2.38)
6–15	13.6 (12.7–14.5)	NA	65.7 (62.1–69.1)	2.89 (2.85–2.93)
16–25	4.3 (3.8–4.8)	100.0	79.8 (74.5–84.3)	3.14 (3.06–3.22)
≥26	NR	100.0	NR	2.99 (2.82–3.16)

Table 3.1.25 Continued

	Percentage by category % (95% CI)	Smoke >15 cigarettes per day ^a % (95% CI)	First cigarette within 30 minutes of waking % (95% CI)	Nicotine Dependence Syndrome Scale Mean % (95% CI)
Use of alcohol (past month)				
Never used alcohol	8.7 (8.0–9.5)	4.8 (3.1–7.4)	28.0 (23.4–33.1)	2.20 (2.16–2.25)
Lifetime alcohol use (but not in past month)	30.9 (29.6–32.2)	4.2 (3.4–5.2)	30.0 (27.7–32.4)	2.28 (2.26–2.31)
1–10 days	50.3 (48.9–51.7)	5.4 (4.6–6.3)	28.1 (26.4–30.0)	2.27 (2.24–2.29)
≥11 days	10.1 (9.3–10.9)	10.6 (8.3–13.6)	38.0 (33.7–42.5)	2.45 (2.40–2.51)
Binge drinking (past month)				
Never used alcohol	8.7 (8.0–9.5)	4.8 (3.1–7.4)	28.0 (23.4–33.1)	2.20 (2.16–2.25)
Lifetime alcohol use (but not in past month)	30.9 (29.6–32.2)	4.2 (3.4–5.2)	30.0 (27.7–32.4)	2.28 (2.26–2.31)
Used alcohol in past month (no binge drinking)	12.5 (11.6–13.5)	3.9 (2.6–5.6)	25.3 (21.7–29.2)	2.21 (2.16–2.27)
1–10 days	44.0 (42.6–45.4)	6.1 (5.1–7.1)	29.6 (27.8–31.6)	2.30 (2.28–2.33)
≥11 days	3.9 (3.4–4.5)	15.8 (11.4–21.6)	45.5 (38.4–52.9)	2.56 (2.47–2.64)
Marijuana use (past month)				
Never used marijuana	24.6 (23.4–25.7)	3.2 (2.3–4.4)	22.5 (20.0–25.1)	2.12 (2.10–2.15)
Lifetime marijuana use (but not in past month)	31.1 (29.9–32.4)	5.8 (4.7–7.1)	30.4 (28.0–32.9)	2.32 (2.29–2.36)
1–10 days	24.0 (22.8–25.3)	3.7 (2.9–4.8)	26.8 (24.2–29.5)	2.24 (2.21–2.27)
≥11 days	20.2 (19.2–21.4)	10.0 (8.4–11.8)	39.9 (36.8–43.1)	2.48 (2.44–2.52)
Illicit drug use other than marijuana (past month)				
Never used any other illicit drug	43.0 (41.7–44.4)	4.0 (3.3–4.9)	25.1 (23.2–27.2)	2.16 (2.14–2.18)
Lifetime illicit drug use (but not in past month)	36.0 (34.6–37.3)	5.5 (4.5–6.6)	31.1 (29.0–33.2)	2.34 (2.31–2.36)
Used in past month	21.0 (19.9–22.1)	8.5 (7.1–10.2)	36.3 (33.5–39.1)	2.46 (2.42–2.50)

Source: 2008–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: CI = confidence interval; NA = not applicable; NR = low precision, no estimate reported.

^aCigarettes per day on days smoked; n = 9,500.

^bIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.26 Indicators of cigarette smoking and nicotine dependence among 18- to 25-year-olds smoking cigarettes during the previous 30 days; National Survey on Drug Use and Health (NSDUH) 2007–2010; United States

	Percentage by category % (95% CI)	Smoke >15 cigarettes per day ^a % (95% CI)	First cigarette within 30 minutes of waking % (95% CI)	Nicotine Dependence Syndrome Scale Mean % (95% CI)
Overall	100.0	16.1 (15.6–16.6)	35.4 (34.7–36.2)	2.43 (2.42–2.44)
Gender				
Male	56.3 (55.6–57.1)	18.6 (17.9–19.4)	35.8 (34.8–36.8)	2.40 (2.39–2.42)
Female	43.7 (42.9–44.4)	12.8 (12.2–13.5)	34.9 (33.9–36.0)	2.46 (2.44–2.47)
Race/ethnicity				
White	69.1 (68.2–70.0)	20.3 (19.6–20.9)	37.7 (36.7–38.6)	2.48 (2.47–2.50)
Black or African American	10.5 (10.0–11.1)	6.4 (5.5–7.6)	44.9 (42.6–47.2)	2.39 (2.36–2.42)
Hispanic	15.0 (14.3–15.7)	6.1 (5.2–7.3)	19.4 (17.6–21.2)	2.22 (2.19–2.24)
Other ^b	5.4 (5.0–5.7)	9.1 (7.6–10.9)	31.5 (28.7–34.5)	2.35 (2.32–2.39)
Education (years)				
<12	23.3 (22.6–24.0)	21.2 (20.0–22.3)	50.3 (48.8–51.9)	2.63 (2.61–2.65)
12	38.1 (37.3–38.9)	18.6 (17.7–19.4)	39.6 (38.5–40.8)	2.48 (2.47–2.50)
≥13	38.6 (37.7–39.6)	10.6 (9.9–11.3)	22.1 (21.1–23.2)	2.25 (2.23–2.27)
Age first puffed (years)				
<12	9.6 (9.2–10.0)	30.0 (28.2–31.9)	52.5 (50.3–54.7)	2.72 (2.69–2.75)
12–14	31.5 (30.8–32.2)	21.5 (20.6–22.5)	42.1 (40.7–43.5)	2.56 (2.55–2.58)
15–17	38.8 (38.1–39.5)	12.7 (12.0–13.5)	31.7 (30.7–32.9)	2.36 (2.35–2.38)
≥18	20.1 (19.5–20.7)	7.4 (6.5–8.3)	23.3 (21.9–24.7)	2.20 (2.18–2.22)
Age first smoked daily (years)				
<15	16.3 (15.7–17.0)	37.7 (35.9–39.6)	64.2 (62.2–66.1)	2.93 (2.90–2.95)
15–17	44.5 (43.6–45.4)	24.4 (23.4–25.4)	49.9 (48.7–51.2)	2.70 (2.69–2.72)
≥18	39.2 (38.3–40.0)	14.6 (13.6–15.6)	34.2 (32.9–35.5)	2.49 (2.48–2.51)
Transition (in years) from first cigarette to daily smoking: first tried at ≤16 years				
≤1	34.0 (33.2–34.7)	28.6 (27.4–29.8)	55.8 (54.4–57.2)	2.78 (2.76–2.80)
2–3	36.7 (35.9–37.5)	25.5 (24.4–26.7)	46.8 (45.5–48.2)	2.69 (2.67–2.71)
≥4	29.4 (28.6–30.2)	22.0 (20.8–23.4)	40.5 (39.0–42.1)	2.58 (2.56–2.60)
Transition (in years) from first cigarette to daily smoking: first tried at >16 years				
≤1	76.5 (75.1–77.9)	17.3 (16.0–18.8)	41.4 (39.6–43.1)	2.57 (2.55–2.59)
2–3	19.5 (18.3–20.8)	10.2 (8.2–12.6)	31.2 (28.0–34.7)	2.42 (2.38–2.46)
≥4	3.9 (3.2–4.7)	6.7 (3.4–12.6)	21.8 (15.2–30.2)	2.37 (2.27–2.46)
Number of days smoked in past month				
<10	28.7 (28.0–29.5)	1.9 (1.6–2.3)	11.1 (10.2–12.0)	1.90 (1.89–1.91)
10–19	10.8 (10.4–11.3)	2.6 (2.0–3.4)	14.6 (13.0–16.4)	2.02 (2.00–2.04)
20–29	13.2 (12.7–13.7)	5.4 (4.6–6.3)	22.9 (21.3–24.7)	2.30 (2.28–2.32)
30	47.3 (46.5–48.1)	30.7 (29.8–31.7)	56.9 (55.8–57.9)	2.87 (2.86–2.88)

Table 3.1.26 Continued

	Percentage by category % (95% CI)	Smoke >15 cigarettes per day ^a % (95% CI)	First cigarette within 30 minutes of waking % (95% CI)	Nicotine Dependence Syndrome Scale Mean % (95% CI)
Average number of cigarettes smoked on days smoked				
≤1	27.4 (26.8–28.1)	NA	9.0 (8.2–10.0)	1.91 (1.90–1.92)
2–5	31.4 (30.7–32.1)	NA	20.8 (19.8–21.9)	2.23 (2.22–2.25)
6–15	25.0 (24.4–25.7)	NA	53.7 (52.3–55.1)	2.79 (2.77–2.80)
16–25	13.5 (13.1–14.0)	100.0	74.6 (73.0–76.1)	3.10 (3.08–3.12)
≥26	2.6 (2.4–2.8)	100.0	81.9 (78.5–84.8)	3.23 (3.19–3.28)
Alcohol use (past month)				
Never used alcohol	3.7 (3.4–4.0)	14.3 (11.8–17.2)	42.8 (39.0–46.7)	2.43 (2.39–2.48)
Lifetime alcohol use (but not in past month)	17.4 (16.8–18.0)	17.9 (16.7–19.1)	44.3 (42.7–46.0)	2.60 (2.58–2.62)
1–10 days	55.3 (54.6–56.0)	14.6 (14.0–15.3)	33.5 (32.5–34.5)	2.39 (2.38–2.40)
≥11 days	23.6 (22.9–24.3)	18.5 (17.4–19.7)	32.1 (30.6–33.7)	2.38 (2.36–2.40)
Binge drinking (past month)				
Never used alcohol	3.7 (3.4–4.0)	14.3 (11.8–17.2)	42.8 (39.0–46.7)	2.43 (2.39–2.48)
Lifetime alcohol use (but not in past month)	17.4 (16.8–18.0)	17.9 (16.7–19.1)	44.3 (42.7–46.0)	2.60 (2.58–2.62)
Used alcohol in past month (no binge drinking)	15.8 (15.3–16.3)	13.5 (12.3–14.7)	34.4 (32.7–36.1)	2.42 (2.40–2.44)
1–10 days	54.4 (53.6–55.1)	15.3 (14.6–16.0)	32.2 (31.2–33.2)	2.37 (2.36–2.38)
≥11 days	8.7 (8.3–9.2)	23.3 (21.2–25.4)	36.3 (33.8–38.9)	2.46 (2.42–2.50)
Marijuana use (past month)				
Never used marijuana	22.2 (21.6–22.9)	12.9 (12.0–13.9)	33.6 (32.2–35.0)	2.33 (2.31–2.35)
Lifetime marijuana use (but not in past month)	44.1 (43.4–44.8)	16.6 (15.9–17.4)	35.1 (34.1–36.2)	2.46 (2.45–2.48)
1–10 days	15.1 (14.6–15.7)	13.0 (11.9–14.3)	30.5 (28.7–32.3)	2.33 (2.30–2.35)
≥11 days	18.6 (18.0–19.2)	21.0 (19.7–22.4)	42.2 (40.4–44.0)	2.54 (2.52–2.56)
Illicit drug use other than marijuana (past month)				
Never used any other illicit drug	40.3 (39.5–41.0)	12.2 (11.6–12.9)	31.8 (30.7–32.9)	2.32 (2.31–2.33)
Lifetime illicit drug use (but not in past month)	43.5 (42.8–44.2)	17.5 (16.7–18.3)	36.8 (35.7–37.9)	2.49 (2.47–2.51)
Used in past month	16.3 (15.7–16.8)	22.1 (20.7–23.5)	40.6 (38.7–42.6)	2.53 (2.50–2.55)

Source: 2008–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: CI = confidence interval; NA = not applicable.

^aCigarettes per day on days smoked; n = 34,400.

^bIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.27 Indicators of cigarette use and nicotine dependence among adults 26 years of age or older smoking cigarettes during the previous 30 days; National Survey on Drug Use and Health (NSDUH) 2007–2010; United States

	Percentage by category % (95% CI)	Smoke >15 cigarettes per day ^a % (95% CI)	First cigarette within 30 minutes of waking % (95% CI)	Nicotine Dependence Syndrome Scale Mean % (95% CI)
Overall	100.0	37.9 (37.1–38.8)	53.0 (52.0–53.9)	2.66 (2.65–2.67)
Age first puffed (years)				
<12	9.3 (8.8–9.9)	50.0 (47.3–52.8)	63.2 (60.4–65.9)	2.85 (2.81–2.89)
12–14	29.4 (28.6–30.2)	44.9 (43.4–46.4)	57.6 (56.1–59.1)	2.76 (2.74–2.78)
15–17	34.7 (33.9–35.6)	37.3 (35.8–38.7)	53.3 (51.8–54.9)	2.65 (2.63–2.67)
≥18	26.5 (25.7–27.3)	26.8 (25.2–28.4)	43.8 (41.9–45.6)	2.50 (2.48–2.52)
Age first smoked daily (years)				
<15	15.1 (14.4–15.7)	58.7 (56.5–60.9)	73.9 (71.8–75.9)	3.02 (2.99–3.05)
15–17	33.6 (32.7–34.6)	49.4 (47.9–51.0)	65.2 (63.7–66.7)	2.84 (2.82–2.86)
≥18	51.3 (50.3–52.2)	33.0 (31.8–34.2)	48.1 (46.7–49.4)	2.61 (2.59–2.63)
Transition (in years) from first cigarette to daily smoking: First tried at ≤16 years				
≤1	38.3 (37.4–39.2)	54.1 (52.6–55.6)	70.1 (68.6–71.6)	2.92 (2.90–2.94)
2–3	26.9 (26.1–27.8)	48.7 (46.9–50.6)	59.9 (58.0–61.7)	2.84 (2.81–2.86)
≥4	34.8 (33.9–35.7)	38.5 (37.0–40.1)	49.7 (48.1–51.3)	2.66 (2.64–2.68)
Transition (in years) from first cigarette to daily smoking: First tried at >16 years				
≤1	63.9 (62.3–65.4)	38.8 (36.9–40.8)	56.9 (55.0–58.8)	2.68 (2.65–2.70)
2–3	16.5 (15.4–17.6)	30.2 (27.1–33.6)	49.3 (45.6–53.0)	2.61 (2.57–2.65)
≥4	19.6 (18.4–21.0)	21.0 (18.2–24.1)	38.8 (35.2–42.5)	2.51 (2.47–2.55)

Source: 2008–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: **CI** = confidence interval.

^aCigarettes per day on days smoked; n = 25,400.

Table 3.1.28 Percentage of high school seniors who were smokers during the previous month, by gender and race/ethnicity; Monitoring the Future (MTF) 1976–2007;^a United States

Gender and race/ethnicity	1976–1979 % (95% CI)	1980–1984 % (95% CI)	1985–1989 % (95% CI)	1990–1994 % (95% CI)	1995–1999 % (95% CI)	2000–2007 % (95% CI)
Male	34.9 (32.8–37.0)	26.8 (24.9–28.7)	27.8 (26.1–29.4)	30.1 (28.1–32.2)	35.7 (33.4–38.0)	26.3 (24.7–27.9)
Black or African American	33.1 (28.6–37.6)	19.4 (17.5–21.4)	15.6 (12.3–19.0)	11.6 (8.5–14.8)	19.3 (17.4–21.2)	14.0 (10.9–17.0)
White	35.0 (32.8–37.2)	27.5 (25.5–29.5)	29.8 (28.3–31.4)	33.4 (31.6–35.1)	39.7 (37.6–41.8)	29.5 (27.7–31.3)
Hispanic	30.3 (26.6–33.9)	23.8 (20.0–27.6)	23.3 (20.7–25.8)	28.0 (21.9–34.0)	28.8 (26.2–31.3)	21.2 (19.2–23.2)
American Indian and Alaska Native ^b	NA	NA	NA	NA	NA	NA
Asian American and Pacific Islander ^c	NA	NA	NA	NA	NA	NA
Female	38.4 (36.0–40.8)	32.3 (30.0–34.5)	30.3 (27.5–33.0)	28.1 (25.4–30.8)	33.3 (30.6–36.0)	23.6 (21.8–25.5)
Black or African American	33.6 (29.3–37.9)	22.8 (20.2–25.4)	13.3 (10.7–15.9)	8.6 (6.2–11.0)	10.8 (8.9–12.7)	8.8 (7.3–10.3)
White	39.1 (36.6–41.5)	34.3 (32.1–36.4)	34.0 (31.9–36.1)	33.1 (31.4–34.9)	39.5 (37.3–41.7)	28.5 (26.9–30.1)
Hispanic	31.4 (26.4–36.4)	25.1 (21.8–28.4)	20.6 (15.4–25.7)	19.9 (15.7–24.0)	24.4 (21.1–27.7)	15.9 (14.2–17.6)
American Indian and Alaska Native ^b	55.3 (50.5–60.0)	50.0 (42.6–57.4)	43.6 (36.2–50.9)	39.4 (32.7–46.0)	51.7 (43.6–59.8)	35.5 (30.9–40.0)
Asian American and Pacific Islander ^c	24.3 (18.5–30.1)	16.2 (12.5–19.9)	14.3 (11.6–17.0)	13.8 (9.4–18.3)	17.5 (13.6–21.5)	12.8 (10.6–15.1)

Source: 1976–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

Note: CI = confidence interval; NA = not applicable.

^aBased on responses to the question, “How frequently have you smoked cigarettes during the past 30 days?” Respondents who reported that they had smoked less than 1 cigarette per day or more were classified as previous-month smokers.

^bResponse categories did not include “Alaska Native” before 2005. For years before 2005, data are based on responses for “American Indian” only.

^cResponse categories did not include “Pacific Islander” before 2005. For years before 2005, data are based on responses for “Asian American” only.

Table 3.1.29 Percentage of 20- to 44-year-olds who identified themselves as current smokers, by age group, race/ethnicity, and gender; National Health Interview Surveys (NHIS) 1978–2009; United States

Age group, race/ethnicity, gender	1978–1980 % (95% CI)	1983–1985 % (95% CI)	1987–1988 % (95% CI)	1990–1992 % (95% CI)	1993–1995 % (95% CI)
20–24 years					
Black or African American: total	37.0 (32.4–41.5)	32.9 (29.0–36.7)	24.7 (21.6–27.9)	16.0 (12.4–19.5)	14.1 (10.9–17.2)
Male	44.5 (37.6–51.4)	32.9 (26.7–39.1)	26.0 (20.8–31.1)	20.2 (14.3–26.2)	20.3 (14.0–26.5)
Female	31.4 (26.4–36.6)	32.8 (28.7–37.0)	23.8 (19.8–27.7)	12.5 (9.5–15.6)	9.0 (6.5–11.4)
Hispanic: total	33.1 (28.2–38.0)	25.4 (22.1–28.7)	23.4 (19.1–27.7)	16.6 (13.5–19.6)	20.9 (17.2–24.6)
Male	36.7 (29.9–43.5)	30.4 (24.8–36.0)	28.9 (21.7–36.1)	19.1 (15.6–22.6)	26.2 (20.2–32.2)
Female	29.8 (23.6–35.9)	20.2 (16.1–24.4)	18.4 (13.2–23.6)	14.3 (10.1–18.4)	15.0 (11.2–18.9)
White: total	35.7 (33.8–37.5)	35.9 (34.6–37.2)	30.7 (29.1–32.3)	31.1 (29.2–33.1)	32.5 (30.5–34.6)
Male	37.5 (35.0–40.1)	34.5 (32.4–36.6)	31.0 (28.4–33.6)	31.1 (28.4–33.8)	33.4 (30.5–36.4)
Female	33.8 (31.7–36.0)	37.2 (35.0–39.4)	30.4 (28.5–32.4)	31.1 (28.8–33.5)	31.7 (28.9–34.4)
25–29 years					
Black or African American: total	43.3 (38.4–48.1)	38.6 (34.9–42.3)	38.9 (35.0–42.7)	26.4 (23.1–29.8)	20.9 (17.5–24.3)
Male	49.1 (42.3–55.9)	40.9 (34.5–47.4)	43.8 (36.9–50.6)	28.7 (22.7–34.7)	21.8 (15.5–28.2)
Female	38.6 (32.4–44.9)	36.6 (32.4–40.7)	34.8 (31.3–38.3)	24.5 (20.8–28.2)	20.1 (15.9–24.3)
Hispanic: total	31.2 (25.8–36.6)	28.8 (24.4–33.3)	23.7 (20.6–26.8)	24.4 (21.4–27.4)	18.7 (14.8–22.7)
Male	38.5 (30.2–46.8)	33.1 (24.7–41.5)	26.9 (22.1–31.8)	29.1 (24.0–34.1)	26.1 (19.5–32.7)
Female	24.6 (19.2–30.1)	24.8 (21.0–28.7)	20.8 (16.4–25.3)	20.5 (16.3–24.6)	11.1 (7.8–14.3)
White: total	38.3 (36.6–40.0)	36.3 (35.1–37.4)	35.0 (33.7–36.3)	31.5 (30.0–33.0)	31.6 (29.8–33.3)
Male	41.7 (39.1–44.3)	38.5 (36.4–40.6)	34.4 (32.4–36.5)	32.5 (30.6–34.4)	31.6 (28.8–34.3)
Female	34.9 (32.8–37.0)	34.1 (31.9–36.3)	35.6 (33.9–37.2)	30.6 (28.6–32.6)	31.6 (29.4–33.7)
30–34 years					
Black or African American: total	42.5 (36.8–48.2)	41.0 (36.8–45.2)	40.8 (37.4–44.2)	35.8 (32.6–39.0)	32.1 (28.2–35.9)
Male	50.7 (42.0–59.3)	45.2 (37.7–52.7)	44.2 (38.8–49.6)	38.6 (33.3–43.9)	33.7 (28.1–39.4)
Female	36.2 (28.7–43.6)	37.7 (33.3–42.1)	37.9 (34.3–41.5)	33.5 (29.5–37.5)	30.7 (25.7–35.7)
Hispanic: total	38.5 (31.5–45.5)	29.8 (23.9–35.7)	27.1 (23.6–30.6)	24.2 (21.0–27.4)	24.0 (20.8–27.3)
Male	51.4 (42.2–60.7)	38.9 (27.8–49.9)	31.9 (25.4–38.4)	29.9 (24.7–35.1)	28.6 (23.7–33.5)
Female	25.1 (17.3–32.9)	22.1 (17.7–26.4)	22.5 (18.1–26.9)	18.3 (15.0–21.6)	19.1 (14.8–23.3)
White: total	38.2 (36.2–40.2)	34.6 (33.1–36.0)	32.7 (31.4–34.0)	32.9 (31.6–34.3)	30.8 (29.3–32.3)
Male	42.9 (40.5–45.3)	37.5 (35.1–39.9)	35.4 (33.4–37.3)	33.5 (31.5–35.5)	31.5 (29.5–33.6)
Female	33.6 (30.7–36.5)	31.7 (30.0–33.5)	30.1 (28.4–31.8)	32.3 (30.6–34.1)	30.0 (28.1–32.0)
35–39 years					
Black or African American: total	47.9 (41.5–54.2)	40.2 (35.7–44.7)	38.7 (35.1–42.3)	28.1 (25.2–30.9)	20.0 (17.5–22.5)
Male	54.9 (46.1–63.8)	46.0 (38.4–53.6)	44.6 (38.7–50.5)	29.0 (24.7–33.3)	22.2 (18.2–26.3)
Female	42.8 (34.8–50.8)	36.0 (31.5–40.5)	33.8 (30.1–37.4)	27.4 (23.6–31.1)	18.3 (15.5–21.2)
Hispanic: total	31.1 (26.1–36.1)	29.2 (24.6–33.8)	27.0 (23.3–30.7)	19.9 (17.9–21.9)	17.3 (15.4–19.2)
Male	40.5 (34.0–47.0)	36.1 (25.0–47.1)	33.3 (27.3–39.3)	25.7 (22.4–29.0)	23.8 (20.5–27.0)
Female	22.9 (15.9–29.9)	23.6 (18.3–28.9)	21.0 (17.3–24.8)	14.0 (11.6–16.4)	10.4 (8.2–12.5)
White: total	40.4 (38.5–42.4)	35.8 (34.1–37.2)	31.6 (30.3–32.9)	29.0 (27.8–30.2)	26.8 (25.5–28.2)
Male	44.0 (41.2–46.8)	38.7 (36.6–40.8)	34.8 (32.8–36.8)	28.7 (26.9–30.5)	29.2 (27.2–31.2)
Female	37.0 (34.5–39.5)	32.9 (30.8–35.1)	28.5 (27.0–30.1)	29.3 (27.6–31.0)	24.6 (22.9–26.2)

Table 3.1.29 Continued

Age group, race/ethnicity, gender	1978–1980 % (95% CI)	1983–1985 % (95% CI)	1987–1988 % (95% CI)	1990–1992 % (95% CI)	1993–1995 % (95% CI)
40–44 years					
Black or African American: total	38.8 (33.9–43.7)	41.5 (36.2–46.8)	36.7 (32.4–41.1)	31.0 (27.9–34.1)	27.9 (25.2–30.6)
Male	44.3 (34.9–53.7)	45.4 (39.0–51.8)	42.9 (35.6–50.1)	34.8 (30.2–39.4)	30.5 (25.9–35.1)
Female	34.7 (29.0–40.5)	38.1 (30.9–45.2)	32.0 (27.0–37.1)	27.6 (24.0–31.2)	25.8 (22.6–28.9)
Hispanic: total	31.5 (25.6–37.4)	32.0 (27.5–36.5)	25.5 (21.8–29.2)	19.7 (17.6–21.8)	20.4 (17.8–23.0)
Male	39.6 (29.6–49.7)	38.2 (32.3–44.2)	35.8 (28.3–43.3)	25.1 (21.8–28.4)	25.7 (21.9–29.5)
Female	24.5 (15.1–33.8)	25.9 (18.7–33.1)	17.5 (12.4–22.5)	14.3 (11.7–16.9)	15.0 (12.2–17.8)
White: total	38.1 (35.9–40.3)	36.3 (34.5–38.1)	34.6 (33.1–36.2)	28.9 (27.6–30.3)	28.3 (26.9–29.6)
Male	38.6 (35.5–41.8)	38.9 (36.9–40.9)	38.0 (35.6–40.4)	30.5 (28.6–32.4)	29.0 (27.1–31.0)
Female	37.6 (34.8–40.3)	33.9 (30.8–36.9)	31.3 (29.4–33.2)	27.4 (25.8–28.9)	27.6 (25.8–29.3)
1997–1998					
Age group, race/ethnicity, gender	1997–1998 % (95% CI)	1999–2001 % (95% CI)	2002–2004 % (95% CI)	2005–2006 % (95% CI)	2007–2009 % (95% CI)
20–24 years					
Black or African American: total	15.2 (12.4–17.9)	19.1 (16.3–21.9)	18.9 (16.2–21.5)	22.4 (18–26.8)	16.3 (12.8–19.7)
Male	22.4 (17.0–27.8)	24.8 (19.7–29.8)	24.0 (18.6–29.4)	28.2 (20.6–35.8)	20.7 (14.4–27.1)
Female	9.9 (7.0–12.7)	14.5 (11.5–17.6)	14.8 (12.2–17.4)	17.5 (12.8–22.2)	12.8 (9.1–16.5)
Hispanic: total	22.4 (19.3–25.5)	18.9 (16.6–21.1)	16.7 (14.6–18.8)	16.6 (14.1–19.1)	14.1 (11.1–17.2)
Male	30.4 (25.5–35.4)	24.5 (20.7–28.2)	24.0 (20.6–27.3)	23.6 (19.2–28.0)	19.9 (14.8–24.9)
Female	13.6 (10.5–16.6)	13.2 (10.5–15.8)	8.9 (7.0–10.8)	9.4 (6.8–11.9)	8.0 (5.7–10.3)
White: total	35.2 (33.1–37.3)	32.9 (31.2–34.7)	32.2 (30.2–34.3)	31.0 (28.7–33.4)	27.9 (25.2–30.7)
Male	38.7 (35.5–41.9)	34.5 (32.1–36.9)	34.6 (31.9–37.3)	35.4 (31.5–39.3)	32.8 (28.7–36.9)
Female	31.7 (29.0–34.3)	31.4 (29.1–33.7)	29.8 (27.5–32.2)	26.7 (23.8–29.7)	23.0 (19.9–26.1)
25–29 years					
Black or African American: total	21.3 (18.3–24.2)	18.4 (16.1–20.7)	20.6 (17.6–23.5)	24.7 (21.0–28.5)	24.5 (20.6–28.4)
Male	25.8 (20.8–30.9)	20.8 (16.9–24.7)	25.7 (20.1–31.4)	32.5 (26.1–38.9)	34.4 (27.0–41.8)
Female	17.9 (14.4–21.4)	16.4 (13.1–19.7)	16.5 (13.6–19.4)	18.4 (14.6–22.1)	16.1 (12.6–19.7)
Hispanic: total	18.7 (16.7–20.7)	18.2 (16.1–20.2)	15.4 (13.5–17.3)	14.7 (12.2–17.1)	15.2 (12.4–17.9)
Male	24.7 (21.4–28.1)	23.7 (20.1–27.2)	20.2 (17.2–23.2)	19.7 (15.9–23.5)	20.6 (16.1–25.1)
Female	11.9 (9.7–14.0)	12.7 (10.5–14.9)	9.9 (7.9–11.9)	8.6 (5.8–11.4)	8.3 (5.7–11.0)
White: total	30.6 (28.9–32.2)	30.5 (29.0–32.0)	30.1 (28.6–31.7)	30.7 (28.5–33.0)	31.9 (29.0–34.7)
Male	31.9 (29.6–34.2)	32.8 (30.6–34.9)	31.5 (29.2–33.8)	33.2 (29.7–36.6)	34.3 (30.1–38.4)
Female	29.3 (27.0–31.6)	28.3 (26.4–30.1)	28.8 (26.8–30.7)	28.3 (25.4–31.2)	29.5 (26.1–32.9)

Table 3.1.29 Continued

Age group, race/ethnicity, gender	1997–1998 % (95% CI)	1999–2001 % (95% CI)	2002–2004 % (95% CI)	2005–2006 % (95% CI)	2007–2009 % (95% CI)
30–34 years					
Black or African American: total	27.5 (24.2–30.8)	21.1 (18.0–24.1)	21.0 (18.5–23.6)	19.0 (15.3–22.8)	20.9 (16.9–24.9)
Male	29.9 (24.4–35.3)	25.7 (20.9–30.4)	27.1 (22.9–31.4)	24.9 (18.0–31.8)	23.0 (17.8–28.2)
Female	25.4 (21.4–29.4)	17.3 (14.5–20.2)	16.0 (12.9–19.1)	14.0 (10.7–17.3)	19.2 (14.1–24.2)
Hispanic: total	20.6 (18.4–22.9)	17.8 (15.8–19.8)	15.4 (13.7–17.1)	15.9 (13.3–18.5)	13.6 (11.3–15.9)
Male	27.0 (23.2–30.9)	23.1 (19.8–26.4)	21.4 (18.4–24.3)	20.8 (16.9–24.7)	17.7 (13.9–21.6)
Female	13.3 (10.6–16.0)	12.4 (10.5–14.3)	8.9 (7.2–10.6)	10.1 (7.6–12.7)	8.9 (6.0–11.7)
White: total	28.3 (26.9–29.8)	27.8 (26.5–29.0)	26.1 (24.7–27.6)	26.7 (24.8–28.7)	26.0 (24.0–27.9)
Male	29.1 (27.0–31.2)	29.0 (27.1–30.9)	28.2 (26.1–30.2)	27.1 (24.2–30.1)	29.3 (26.3–32.3)
Female	27.6 (25.6–29.5)	26.5 (24.9–28.2)	24.1 (22.4–25.9)	26.4 (23.7–29.1)	22.7 (20.2–25.1)
35–39 years					
Black or African American: total	18.9 (15.7–22.2)	28.1 (25.2–30.9)	20.0 (17.5–22.5)	18.9 (15.7–22.2)	17.7 (13.9–21.6)
Male	22.8 (16.9–28.8)	29.0 (24.7–33.3)	22.2 (18.2–26.3)	22.8 (16.9–28.8)	18.7 (13.1–24.3)
Female	15.4 (11.7–19.2)	27.4 (23.6–31.1)	18.3 (15.5–21.2)	15.4 (11.7–19.2)	17.0 (12.2–21.8)
Hispanic: total	19.4 (16.7–22.2)	19.9 (17.9–21.9)	17.3 (15.4–19.2)	19.4 (16.7–22.2)	15.4 (12.2–18.5)
Male	25.2 (21.0–29.4)	25.7 (22.4–29.0)	23.8 (20.5–27.0)	25.2 (21.0–29.4)	19.5 (14.3–24.7)
Female	12.5 (9.4–15.6)	14.0 (11.6–16.4)	10.4 (8.2–12.5)	12.5 (9.4–15.6)	10.5 (7.2–13.7)
White: total	24.4 (22.6–26.3)	29.0 (27.8–30.2)	26.8 (25.5–28.2)	24.4 (22.6–26.3)	25.6 (23.7–27.5)
Male	25.7 (23.1–28.2)	28.7 (26.9–30.5)	29.2 (27.2–31.2)	25.7 (23.1–28.2)	25.8 (22.9–28.7)
Female	23.2 (20.6–25.8)	29.3 (27.6–31.0)	24.6 (22.9–26.2)	23.2 (20.6–25.8)	25.4 (22.5–28.4)
40–44 years					
Black or African American: total	24.2 (20.9–27.5)	31.0 (27.9–34.1)	27.9 (25.2–30.6)	24.2 (20.9–27.5)	22.2 (18.5–25.9)
Male	24.0 (18.6–29.4)	34.8 (30.2–39.4)	30.5 (25.9–35.1)	24.0 (18.6–29.4)	23.8 (18.2–29.5)
Female	24.3 (20.1–28.5)	27.6 (24.0–31.2)	25.8 (22.6–28.9)	24.3 (20.1–28.5)	20.9 (15.8–26.0)
Hispanic: total	15.9 (13.3–18.6)	19.7 (17.6–21.8)	20.4 (17.8–23.0)	15.9 (13.3–18.6)	15.9 (12.9–18.9)
Male	18.1 (14.2–22.1)	25.1 (21.8–28.4)	25.7 (21.9–29.5)	18.1 (14.2–22.1)	21.7 (16.8–26.7)
Female	13.8 (10.5–17.1)	14.3 (11.7–16.9)	15.0 (12.2–17.8)	13.8 (10.5–17.1)	9.8 (7.0–12.6)
White: total	25.7 (23.9–27.5)	28.9 (27.6–30.3)	28.3 (26.9–29.6)	25.7 (23.9–27.5)	25.2 (22.9–27.4)
Male	27.4 (24.9–29.9)	30.5 (28.6–32.4)	29.0 (27.1–31.0)	27.4 (24.9–29.9)	27.0 (24.0–30.0)
Female	24.1 (21.7–26.5)	27.4 (25.8–28.9)	27.6 (25.8–29.3)	24.1 (21.7–26.5)	23.4 (20.5–26.3)

Source: 1978–2009 NHIS: Centers for Disease Control and Prevention, National Center for Health Statistics (unpublished data).

Table 3.1.30 Trends in the initiation of cigarette smoking over time among 12- to 17-year-olds at risk for initiation—number (in thousands) and percentage of initiates—by gender and race/ethnicity; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

Gender and race/ ethnicity	2006		2007		2008		2009		2010	
	N	% (95% CI)								
Overall	1,328	6.6 (6.1–7.1)	1,197	5.9 (5.4–6.3)	1,268	6.2 (5.7–6.7)	1,259	6.2 (5.7–6.7)	1,196	5.5 (5.4–6.3)
Gender										
Male	644	6.3 (5.7–6.9)	592	5.7 (5.2–6.4)	592	5.7 (5.1–6.3)	642	6.2 (5.6–6.9)	592	5.7 (5.1–6.3)
Female	685	6.9 (6.3–7.6)	606	6.0 (5.3–6.7)	676	6.7 (6.0–7.5)	617	6.1 (5.5–6.8)	604	6.0 (5.4–6.6)
Race/ethnicity										
White	879	7.5 (6.9–8.1)	819	6.9 (6.3–7.6)	819	6.9 (6.3–7.5)	770	6.6 (6.0–7.2)	751	6.4 (5.8–7.0)
Black or African American	149	4.6 (3.7–5.7)	121	3.7 (2.9–4.7)	138	4.3 (3.4–5.5)	127	4.0 (3.0–5.3)	107	3.5 (2.7–4.5)
Hispanic or Latino	250	6.8 (5.6–8.1)	213	5.4 (4.5–6.6)	243	6.2 (5.1–7.5)	303	7.6 (6.4–9.0)	265	6.4 (5.3–7.6)

Source: 2006–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: At risk for initiation is defined as persons who did not use the substance(s) in their lifetime or used the substance(s) for the first time in the past year. CI = confidence interval; N = number (in 1,000s).

Table 3.1.31 Trends in the initiation of cigarette smoking over time among 18- to 25-year-olds at risk for initiation—number (in thousands) and percentage of initiates—by gender and race/ethnicity; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

Gender and race/ethnicity	2006		2007		2008		2009		2010	
	N	% (95% CI)	N	% (95% CI)	N	% (95% CI)	N	% (95% CI)	N	% (95% CI)
Overall	1,038	8.7 (7.9–9.5)	989	7.9 (7.2–8.7)	1,062	8.3 (7.4–9.2)	1,144	8.6 (7.8–9.5)	1,110	7.9 (7.2–8.7)
Gender										
Male	544	9.6 (8.4–11.0)	497	8.7 (7.6–9.9)	584	9.7 (8.4–11.1)	595	9.9 (8.7–11.2)	597	9.3 (8.1–10.6)
Female	495	7.8 (6.8–8.9)	492	7.2 (6.3–8.2)	478	7.0 (6.0–8.1)	549	7.5 (6.5–8.7)	513	6.8 (5.9–7.7)
Race/ethnicity										
White	650	10.7 (9.6–12.0)	601	9.0 (8.0–10.1)	657	9.7 (8.6–10.9)	728	10.4 (9.2–11.8)	634	8.8 (7.9–9.9)
Black or African American	103	4.5 (3.4–6.0)	127	5.5 (4.2–7.0)	122	4.7 (3.6–6.3)	138	5.3 (4.0–7.0)	161	5.8 (4.5–7.3)
Hispanic or Latino	203	7.9 (6.0–10.3)	173	6.9 (5.3–8.8)	217	9.1 (6.9–11.7)	216	8.3 (6.3–10.7)	245	8.4 (6.8–10.4)

Source: 2006–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: At risk for initiation is defined as persons who did not use the substance(s) in their lifetime or used the substance(s) for the first time in the past year. CI = confidence interval; N = number (in 1,000s).

Table 3.1.32 Percentage of high school senior smokers who answered “yes” to questions about interest in quitting smoking and attempts to quit smoking, by frequency of smoking during the past 30 days; Monitoring the Future (MTF) 1990–2009; United States

Question and frequency of smoking	1990–1994 % (95% CI)	1995–1999 % (95% CI)	2000–2004 % (95% CI)	2005–2009 % (95% CI)
Do you want to stop smoking now?				
Among those who smoked at all during the past 30 days	42.7 (40.9–44.5)	42.3 (40.0–44.7)	44.8 (41.4–48.1)	34.4 (30.9–37.9)
Among those who smoked ≥1 cigarette per day during the past 30 days	45.5 (43.1–48.0)	43.1 (40.4–45.7)	47.4 (43.8–50.9)	37.7 (33.7–41.8)
Have you ever tried to stop smoking and found that you could not?				
Among those who smoked at all during the past 30 days	31.7 (29.4–34.0)	31.3 (29.1–33.4)	33.6 (30.6–36.7)	26.5 (23.4–29.6)
Among those who smoked ≥1 cigarette per day during the past 30 days	44.4 (41.9–47.0)	43.1 (40.9–45.3)	46.2 (43.0–49.4)	38.9 (35.3–42.5)

Source: 1990–2009 MTF: University of Michigan, Institute for Social Research (unpublished data).

Note: CI = confidence interval.

Table 3.1.33 Prevalence of cigarette smoking among users of smokeless tobacco and among users of drugs (e.g., alcohol, marijuana, cocaine, and inhalants) and prevalence of other drug use among cigarette smokers, among male high school seniors; Monitoring the Future (MTF) 2002–2007; United States

Other drug	Prevalence of cigarette smoking among users of smokeless tobacco and users of drugs % (95% CI)	Prevalence of cigarette smoking among nonusers of smokeless tobacco and nonusers of drugs % (95% CI)	Prevalence of smokeless tobacco use and drug use among cigarette smokers % (95% CI)	Prevalence of smokeless tobacco use and drug use among cigarette nonsmokers % (95% CI)
Alcohol	41.6 (39.5–43.7)	8.0 (7.0–8.9)	83.9 (82.3–85.4)	38.8 (36.5–41.1)
Marijuana	56.6 (53.4–59.9)	15.0 (13.6–16.4)	53.0 (50.0–56.0)	13.3 (11.8–14.7)
Cocaine	75.7 (71.2–80.1)	23.3 (21.6–24.9)	8.2 (7.2–9.2)	0.9 (0.7–1.0)
Inhalants	64.0 (59.4–68.7)	24.5 (22.7–26.3)	4.7 (4.0–5.5)	0.9 (0.7–1.1)
Smokeless tobacco	59.9 (57.2–62.6)	19.7 (18.3–21.1)	29.3 (26.4–32.3)	6.4 (5.0–7.7)

Source: 2002–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

Note: CI = confidence interval.

Table 3.1.34 Prevalence of cigarette smoking among users of other drugs (e.g., alcohol, marijuana, cocaine, and inhalants) and prevalence of other drug use among cigarette smokers, among female high school seniors; Monitoring the Future (MTF) 2002–2007; United States

Other drug	Prevalence of cigarette smoking among users of other drugs % (95% CI)	Prevalence of cigarette smoking among nonusers of other drugs % (95% CI)	Prevalence of drug use among cigarette smokers % (95% CI)	Prevalence of drug use among cigarette nonsmokers % (95% CI)
Alcohol	39.7 (37.2–42.1)	8.3 (7.3–9.2)	78.8 (77.0–80.6)	33.7 (31.9–35.5)
Marijuana	60.6 (56.9–64.2)	14.3 (12.9–15.6)	45.4 (43.2–47.7)	8.3 (7.2–9.3)
Cocaine	78.0 (74.2–81.7)	20.9 (19.1–22.7)	6.2 (5.2–7.1)	0.5 (0.4–0.6)
Inhalants	62.3 (53.2–71.4)	21.6 (19.9–23.2)	3.3 (2.6–4.0)	0.6 (0.5–0.7)

Source: 2002–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

Note: CI = confidence interval.

Table 3.1.35 Percentage distribution of grade in which high school seniors first (if ever) used cigarettes or alcohol, or both; Monitoring the Future (MTF) 2002–2007; United States

Grade first (if ever) used cigarettes	First used alcohol in ≤6th grade (%)	First used alcohol in 7th or 8th grade (%)	First used alcohol in 9th grade (%)	First used alcohol in 10th grade (%)	First used alcohol in 11th grade (%)	First used alcohol in 12th grade (%)	Never used alcohol (%)
≤6th	3.13 ^a	4.50 ^b	1.92 ^b	0.81 ^b	0.90 ^b	0.43 ^b	0.30 ^d
7th or 8th	1.22 ^c	7.12 ^a	3.91 ^b	2.04 ^b	0.85 ^b	0.55 ^b	0.34 ^d
9th	0.27 ^c	1.86 ^c	3.38 ^a	1.45 ^b	0.75 ^b	0.39 ^b	0.10 ^d
10th	0.18 ^c	0.77 ^c	1.77 ^c	1.86 ^a	0.71 ^b	0.22 ^b	0.10 ^d
11th	0.17 ^c	0.57 ^c	0.89 ^c	1.17 ^c	1.46 ^a	0.33 ^b	0.21 ^d
12th	0.07 ^c	0.34 ^c	0.51 ^c	0.57 ^c	0.66 ^c	0.70 ^a	0.11 ^d
Never used cigarettes	1.68 ^e	4.62 ^e	6.04 ^e	6.44 ^e	6.90 ^e	4.92 ^e	19.82 ^f

Source: 2002–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

^aTried both cigarettes and alcohol in the same grade.

^bTried both, cigarettes first;

^cTried both, alcohol first.

^dTried only cigarettes.

^eTried only alcohol.

^fTried neither.

Table 3.1.36 Percentage distribution of grade in which high school seniors first (if ever) used cigarettes or marijuana, or both; Monitoring the Future (MTF) 2002–2007; United States

Grade first (if ever) used cigarettes	First used marijuana in ≤6th grade (%)	First used marijuana in 7th or 8th grade (%)	First used marijuana in 9th grade (%)	First used marijuana in 10th grade (%)	First used marijuana in 11th grade (%)	First used marijuana in 12th grade (%)	Never used marijuana (%)
≤6th	1.55 ^a	3.80 ^b	1.63 ^b	0.83 ^b	0.71 ^b	0.42 ^b	2.58 ^d
7th or 8th	0.23 ^c	4.51 ^a	3.74 ^b	2.06 ^b	1.01 ^b	0.43 ^b	3.50 ^d
9th	0.09 ^c	0.81 ^c	2.61 ^a	1.41 ^b	0.69 ^b	0.38 ^b	1.89 ^d
10th	0.06 ^c	0.26 ^c	0.56 ^c	1.85 ^a	0.85 ^b	0.38 ^b	1.37 ^d
11th	0.02 ^c	0.25 ^c	0.27 ^c	0.56 ^c	1.26 ^a	0.53 ^b	1.74 ^d
12th	0.02 ^c	0.14 ^c	0.18 ^c	0.19 ^c	0.27 ^c	0.65 ^a	1.37 ^d
Never used cigarettes	0.17 ^e	0.98 ^e	1.38 ^e	1.62 ^e	1.96 ^e	1.43 ^e	44.83 ^f

Source: 2002–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

^cTried both cigarettes and marijuana in the same grade.

^bTried both, cigarettes first.

^cTried both, marijuana first.

^dTried only cigarettes.

^eTried only marijuana.

^fTried neither.

Table 3.1.37 Percentage distribution of grade in which high school seniors first (if ever) used cigarettes or cocaine, or both; Monitoring the Future (MTF) 2002–2007; United States

Grade first (if ever) used cigarettes	First used cocaine in ≤6th grade (%)	First used cocaine in 7th or 8th grade (%)	First used cocaine in 9th grade (%)	First used cocaine in 10th grade (%)	First used cocaine in 11th grade (%)	First used cocaine in 12th grade (%)	Never used cocaine (%)
≤6th	0.15 ^a	0.32 ^b	0.46 ^b	0.57 ^b	0.49 ^b	0.51 ^b	8.93 ^d
7th or 8th	0.01 ^c	0.25 ^a	0.23 ^b	0.52 ^b	0.64 ^b	0.45 ^b	13.05 ^d
9th	0.02 ^c	0.02 ^c	0.16 ^a	0.25 ^b	0.40 ^b	0.36 ^b	6.71 ^d
10th	0.00 ^c	0.00 ^c	0.01 ^c	0.10 ^a	0.16 ^b	0.17 ^b	4.91 ^d
11th	0.00 ^c	0.00 ^c	0.02 ^c	0.04 ^c	0.11 ^a	0.16 ^b	4.30 ^d
12th	0.00 ^c	0.00 ^c	0.01 ^c	0.03 ^c	0.01 ^c	0.07 ^a	2.77 ^d
Never used cigarettes	0.03 ^e	0.02 ^e	0.06 ^e	0.06 ^e	0.05 ^e	0.09 ^e	52.34 ^f

Source: 2002–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

^aTried both cigarettes and cocaine in the same grade.

^bTried both, cigarettes first.

^cTried both, cocaine first.

^dTried only cigarettes.

^eTried only cocaine.

^fTried neither.

Table 3.1.38 Body mass index by smoking status/frequency among high school seniors, by gender and race/ethnicity; National Youth Risk Behavior Survey (YRBS) 2003–2009; United States

Smoking status/frequency ^a	Males		Females		White		Black or African American		Hispanic or Latino	
	Mean (95% CI)	SN ^b	Mean (95% CI)	SN ^b	Mean (95% CI)	SN ^b	Mean (95% CI)	SN ^b	Mean (95% CI)	SN ^b
Never smoker	23.0 (22.8–23.2)	a	24.5 (24.0–24.9)	a	23.4 (23.0–23.8)	a	24.8 (24.4–25.2)	a	24.3 (24.0–24.7)	a
Current infrequent smoker	23.9 (23.5–24.3)	b	25.0 (24.6–25.4)	a	24.2 (23.8–24.6)	b	25.9 (25.0–26.9)	b	25.1 (24.6–25.7)	b
Current frequent smoker	23.8 (23.3–24.4)	b	24.5 (23.8–25.1)	a	23.9 (23.4–24.4)	a,b	26.7 (25.5–27.9)	b	25.3 (24.1–26.6)	a,b
Former daily smoker	23.5 (22.6–24.4)	a,b	24.2 (22.9–25.4)	a	23.7 (22.8–24.5)	a,b	23.6 (22.1–25.2)	a	24.3 (23.2–25.3)	a,b
Former nondaily smoker	23.7 (23.4–23.9)	b	24.7 (24.4–24.9)	a	23.8 (23.5–24.1)	a,b	25.5 (25.0–25.9)	b	24.4 (24.0–24.8)	a

Source: 2003–2009 YRBS: Centers for Disease Control and Prevention, Division of Adolescent and School Health (unpublished data).

Note: CI = confidence interval; SN = statistical note.

^aDefinitions for these categories are as follows: Students who answered “no” to ever smoke were categorized as nonsmokers. Students who answered “yes” to ever smoke and “yes” to currently smoke were categorized as (a) current infrequent smokers for smoking 1–19 days during the past 30 days or (b) current frequent smokers for smoking >19 days during the past 30 days. Students who answered “yes” to ever smoke and “no” to currently smoke were categorized as (a) former daily smokers if they answered “yes” to daily or (b) former nondaily smokers if they answered “no” to daily.

^bThese tests were performed to examine differences in estimates within specific demographic subgroups (e.g., gender). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, statistically significantly different from one another ($p < 0.05$).

Table 3.1.39 Percentage of 12- to 17-year-olds and 18- to 25-year-olds who have experienced a major depressive episode, by smoking status/frequency, gender, and race/ethnicity; National Survey on Drug Use and Health (NSDUH) 2009–2010; United States

Smoking status/ frequency among youth 12–17 years old	Males		Females		White		Black or African American		Hispanic or Latino	
	% (95% CI)	SN ^a	% (95% CI)	SN ^a	% (95% CI)	SN ^a	% (95% CI)	SN ^a	% (95% CI)	SN ^a
Never smoker ^b	3.6 (3.3–4.0)	a	8.7 (8.2–9.3)	a	6.2 (5.8–6.7)	a	6.3 (5.4–7.3)	a	6.1 (5.4–7.0)	a
Former smoker ^c	7.4 (6.1–8.9)	b	23.4 (21.3–25.6)	b,c	15.6 (14.0–17.3)	b	12.9 (10.1–16.5)	b	13.8 (11.2–16.9)	b
Current infrequent smoker ^d	8.7 (6.8–11.0)	c	26.3 (23.0–29.8)	b	18.6 (16.3–21.1)	c	10.8 (6.4–17.6)	a,b	14.6 (10.8–19.4)	b
Current frequent smoker ^e	7.8 (6.0–10.0)	b,c	19.2 (16.1–22.9)	c	13.2 (11.2–15.5)	b	NR		10.3 (5.9–17.6)	a,b

Smoking status/ frequency among young adults 18–25 years old	Males		Females		White		Black or African American		Hispanic or Latino	
	% (95% CI)	SN ^a	% (95% CI)	SN ^a	% (95% CI)	SN ^a	% (95% CI)	SN ^a	% (95% CI)	SN ^a
Never smoker ^b	4.0 (3.4–4.6)	a	7.9 (7.2–8.6)	a	7.0 (6.4–7.7)	a	5.6 (4.7–6.8)	a	4.8 (3.9–5.9)	a
Former smoker ^c	4.7 (4.1–5.5)	a	10.2 (9.3–11.2)	b	7.7 (7.0–8.4)	a	7.3 (5.7–9.2)	b	7.5 (6.1–9.1)	b
Current infrequent smoker ^d	6.2 (5.2–7.5)	b	14.9 (13.1–16.8)	b	9.8 (8.7–11.2)	a	6.1 (4.3–8.7)	a,b	10.3 (8.0–13.2)	b,c
Current frequent smoker ^e	7.2 (6.3–8.2)	b	16.3 (14.9–17.7)	c	11.4 (10.4–12.4)	b	10.6 (8.1–13.9)	b	10.8 (8.4–13.8)	c

Source: 2009–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: For “depressive episode,” see SAMHSA 2005. CI = confidence interval; NR = low precision, no estimate reported; SN = statistical note.

^aThis column represents the results of statistical tests that were run within NSDUH. These tests were performed to examine differences in estimates within specific demographic subgroups (e.g., gender). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, statistically significantly different from one another ($p < 0.05$).

^bNever smoker: reported no use of cigarettes in his or her lifetime.

^cFormer smoker: reported cigarette use in his or her lifetime but no cigarette use in the past month.

^dCurrent infrequent smoker: reported smoking fewer than 20 cigarettes in the past 30 days.

^eCurrent frequent smoker: reported smoking 20 or more cigarettes in the past 30 days.

Table 3.1.40 Percentage of young people who have ever used smokeless tobacco, by gender, race/ethnicity, age/grade, and region; National Survey on Drug Use and Health (NSDUH) 2010, Monitoring the Future (MTF) 2010, and National Youth Tobacco Survey (NYTS) 2009; United States

Characteristic	NSDUH 13–18 years of age		MTF 8th, 10th, and 12th grades		NYTS 9th–12 grades ^a		NYTS 6th–8th grades ^a	
	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b
Overall	10.2 (9.61–10.74)		14.5 (12.2–16.8)		14.1 (10.7–17.5)		6.1 (5.2–7.1)	
Gender						a		
Male	15.8 (14.91–16.80)	a	23.2 (19.5–26.8)	a	22.5 (16.6–28.3)	b	8.5 (7.0–10.1)	a
Female	4.1 (3.63–4.65)	b	6.1 (4.7–7.6)	b	5.7 (4.3–7.0)		3.5 (2.8–4.3)	b
Race/ethnicity						a		
White	14.3 (13.53–15.19)	a	18.6 (15.7–21.5)	a	17.8 (13.7–21.8)		6.2 (4.8–7.6)	a
Male	22.7 (21.39–24.08)		29.3 (24.8–33.7)		28.7 (22.3–35.2)		9.0 (6.9–11.1)	
Female	5.5 (4.83–6.35)		7.8 (5.8–9.9)		6.7 (4.7–8.8)	b	3.2 (2.0–4.3)	
Black or African American	2.4 (1.82–3.17)	b	5.7 (3.3–8.1)	b	7.7 (5.3–10.1)		3.8 (2.4–5.2)	b
Male	3.3 (2.40–4.52)		9.1 (5.1–13.2)		10.3 (5.1–15.5)		4.9 (2.9–6.9)	
Female	1.5 (0.84–2.54)		2.4 (0.5–4.4)		5.1 (0.9–9.4)	b	2.7 (1.4–3.9)	
Hispanic or Latino	5.3 (4.46–6.32)	c	8.4 (5.1–11.6)	c	9.4 (6.8–11.9)		6.0 (5.0–6.9)	a
Male	8.2 (6.72–9.96)		13.7 (8.4–19.0)		14.2 (10.9–17.5)		8.1 (6.2–9.9)	
Female	2.0 (1.32–3.13)		3.8 (1.9–5.6)		4.5 (2.2–6.8)	b	3.9 (2.6–5.2)	
Other ^c	5.6 (4.36–7.25)	c	10.7 (4.0–17.3)	c	9.5 (4.6–14.3)		10.5 (5.3–15.6)	a
Male	7.6 (5.50–10.51)		16.4 (6.1–26.7)		16.7 (8.5–25.0)		13.7 (4.5–23.0)	
Female	3.5 (2.47–5.02)		5.2 (1.0–9.0)		2.3 (0.5–4.0)		7.0 (4.1–9.9)	
Age (in years)/grade								
13–14	3.9 (3.38–4.60)	a	NA		NA		NA	
15–16	9.7 (8.90–10.60)	b	NA		NA		NA	
17–18	16.1 (14.98–17.26)	c	NA		NA		NA	
6th	NA		NA		NA		5.1 (3.8–6.5)	a
7th	NA		NA		NA		5.0 (3.8–6.2)	a
8th	NA		9.9 (8.1–11.8)	a	NA	a	8.3 (6.6–10.1)	b
9th	NA		NA		10.3 (7.2–13.4)	a	NA	
10th	NA		16.8 (14.4–19.2)	b	13.2 (9.6–16.8)	b	NA	
11th	NA		NA		17.5 (12.8–22.3)	a,b	NA	
12th	NA		17.6 (14.9–20.4)	b	16.3 (10.7–22.0)		NA	

Table 3.1.40 Continued

Characteristic	NSDUH 13–18 years of age		MTF 8th, 10th, and 12th grades		NYTS 9th–12 grades ^a		NYTS 6th–8th grades ^a	
	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b
Region								
Northeast	8.5 (7.50–9.61)	a	12.0 (7.6–16.3)	a	NA		NA	
Midwest	11.8 (10.88–12.85)	b	18.9 (13.8–24.1)	b	NA		NA	
South	11.7 (10.60–12.82)	b	16.0 (11.9–20.0)	b	NA		NA	
West	7.5 (6.46–8.70)	a	9.7 (6.4–13.0)	a	NA		NA	

Source: 2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data); 2010 MTF: University of Michigan, Institute for Social Research (unpublished data); 2009 NYTS: Centers for Disease Control and Prevention (unpublished data).

Note: CI = confidence interval; NA = not applicable; SN = statistical note.

^aEstimates are based on responses to the question, “Have you ever used chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal Bandits, or Copenhagen?”

^bThis column represents the results of statistical tests that were run separately within each surveillance system (e.g., NSDUH). These tests were performed to examine differences in estimates within specific demographic subgroups (e.g., gender). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, statistically significantly different from one another ($p < 0.05$).

^cIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.41 Percentage of young people who currently use smokeless tobacco, by gender, race/ethnicity, age/grade, and region; National Survey on Drug Use and Health (NSDUH) 2010, Monitoring the Future (MTF) 2010, National Youth Risk Behavior Survey (YRBS) 2009, and National Youth Tobacco Survey (NYTS) 2009; United States

Characteristic	NSDUH 13–18 years of age		MTF 8th, 10th, and 12th grades		YRBS 9th–12th grades		NYTS 9th–12th grades ^a		NYTS 6th–8th grades ^a	
	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b
Overall	3.7 (3.33–4.03)		6.5 (5.2–7.8)		8.9 (7.3–10.8)		6.7 (4.5–8.9)		2.6 (2.0–3.2)	
Gender										
Male	6.3 (5.73–6.96)	a	11.3 (9.0–13.6)	a	15.0 (12.1–18.5)	a	11.6 (7.7–15.4)	a	3.7 (2.6–4.8)	a
Female	0.8 (0.56–1.22)	b	1.9 (1.2–2.6)	b	2.2 (1.8–2.7)	b	1.8 (1.2–2.3)	b	1.4 (1.0–1.9)	b
Race/ethnicity										
White	5.5 (5.01–6.09)	a	8.7 (6.9–10.4)	a	11.9 (9.5–14.6)	a	8.7 (6.1–11.2)	a	2.5 (1.8–3.3)	a
Male	9.6 (8.74–10.61)		15.0 (11.9–18.1)		20.1 (15.8–25.4)		15.6 (11.2–20.0)		3.7 (2.5–4.8)	
Female	1.2 (0.80–1.84)		2.3 (1.3–3.4)		2.3 (1.7–3.2)		1.7 (0.8–2.6)		1.3 (0.7–2.0)	
Black or African American	0.4 (0.25–0.77)	b	2.1 (0.9–3.3)	b	3.3 (2.3–4.6)	b	1.7 (0.1–3.2)	b	1.5 (0.8–2.2)	b
Male	0.7 (0.36–1.20)		3.2 (1.1–5.4)		5.2 (3.7–7.4)		2.1 (0.4–3.7)		1.9 (1.1–2.8)	
Female	0.2 (0.06–0.81)		0.9 (0.0–1.9)		1.3 (0.8–2.3)		1.3 (0.3–4.8)		1.1 (0.1–2.1)	
Hispanic or Latino	1.3 (0.90–1.83)	c	3.2 (1.4–5.0)	b,c	5.1 (4.1–6.3)	c	4.8 (3.2–6.5)	c	2.5 (1.8–3.2)	a
Male	2.1 (1.44–3.10)		5.3 (2.2–8.3)		7.5 (5.7–9.8)		6.8 (4.2–9.5)		3.4 (2.3–4.6)	
Female	0.3 (0.15–0.80)		1.5 (0.3–2.7)		2.6 (1.9–3.5)		2.8 (1.4–4.3)		1.6 (0.7–2.5)	
Other ^c	1.7 (1.04–2.93)	c	4.0 (0.9–7.1)	c	5.7 (3.4–9.3)	b,c	5.3 (2.2–8.4)	c	5.1 (0.5–9.8)	a,b
Male	3.2 (1.81–5.47)		7.0 (1.0–13.0)		10.1 (6.3–15.7)		9.5 (4.0–15.0)		7.9 (2.6–21.8)	
Female	0.3 (0.12–0.57)		1.2 (0.0–2.9)		1.3 (0.5–3.6)		1.1 (0.0–2.2)		2.2 (0.4–3.9)	
Age (in years)/grade							NA		NA	
13–14	1.2 (0.89–1.57)	a	NA		NA		NA		NA	
15–16	3.1 (2.69–3.64)	b	NA		NA		NA		NA	
17–18	6.4 (5.58–7.22)	c	NA		NA		NA		NA	
6th	NA		NA		NA		NA		2.4 (1.4–3.4)	a
7th	NA		NA		NA		NA		2.2 (1.5–3.0)	a
8th	NA		4.1 (3.0–5.1)	a	NA		NA	v	3.1 (2.1–4.1)	a
9th	NA		NA		7.2 (5.7–9.0)	a	4.3 (2.2–6.3)	a	NA	
10th	NA		7.5 (6.2–8.9)	b	8.1 (6.3–10.5)	a,c	7.2 (4.9–9.5)	b	NA	
11th	NA		NA		10.7 (8.7–13.1)	b	7.8 (5.3–10.4)	b	NA	
12th	NA		8.5 (6.9–10.1)	b	10.0 (7.6–13.1)	b,c	8.0 (4.7–11.3)	b	NA	

Table 3.1.41 Continued

Characteristic	NSDUH 13–18 years of age		MTF 8th, 10th, and 12th grades		YRBS 9th–12th grades		NYTS 9th–12th grades ^a		NYTS 6th–8th grades ^a	
	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b
Region										
Northeast	3.3 (2.67–3.98)	a	5.9 (2.7–9.2)	a,c	10.7 (5.3–20.4)	a,b	NA		NA	
Midwest	4.0 (3.38–4.61)	b	8.4 (5.7–11.1)	b	9.3 (7.5–11.5)	b	NA		NA	
South	4.2 (3.56–4.89)	b	7.2 (4.9–9.5)	a,b	10.7 (8.5–13.4)	b	NA		NA	
West	2.9 (2.22–3.77)	a	4.0 (2.0–6.0)	c	4.6 (3.1–6.7)	a	NA		NA	v

Source: 2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data); 2010 MTF: University of Michigan, Institute for Social Research (unpublished data); 2009 YRBS: Centers for Disease Control and Prevention, Division of Adolescent and School Health (CDC 2011a); 2009 NYTS: Centers for Disease Control and Prevention (unpublished data).

Note: **CI** = confidence interval; **NA** = not applicable; **SN** = statistical note.

^aEstimates are based on responses to the question, “During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?” The estimates were compared and matched the ones reported by CDC (2010e).

^bThis column represents the results of statistical tests that were run separately within each surveillance system (e.g., NSDUH). These tests were performed to examine differences in estimates within specific demographic subgroups (e.g., gender). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, statistically significantly different from one another ($p < 0.05$).

^cIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.42 Prevalence of 8th-, 10th-, and 12th-grade males who currently use smokeless tobacco, by various sociodemographic risk factors; Monitoring the Future (MTF) 2002–2007; United States

Sociodemographic risk factors	8th graders		10th graders		12th graders	
	% (95% CI)	SN ^a	% (95% CI)	SN ^a	% (95% CI)	SN ^a
Parental education^b						
1.0–2.0 (low)	8.4 (3.5–13.3)	a	9.6 (5.5–13.7)	a,c	10.4 (6.1–14.6)	a,b
2.5–3.0	6.7 (5.0–8.4)	a,b	13.1 (11.2–15.0)	b	15.4 (12.2–18.6)	a,b
3.5–4.0	5.4 (3.8–7.0)	b,c	10.4 (8.7–12.2)	a	12.0 (10.1–13.9)	a
4.0–5.0	4.2 (2.9–5.5)	c	9.4 (7.9–10.9)	a,c	12.9 (10.0–15.8)	b
5.5–6.0 (high)	3.9 (2.3–5.4)	c	7.8 (5.8–9.7)	c	8.4 (5.9–10.8)	a,b
Household structure						
Lives with both parents	4.7 (3.1–6.3)	a,d	9.8 (8.3–11.3)	a	12.9 (10.9–14.9)	a
Lives with father only	10.2 (5.6–14.9)	b	12.4 (9.3–15.5)	a	10.8 (6.4–15.2)	a,b
Lives with mother only	3.8 (2.8–4.8)	a	9.2 (6.9–11.5)	a	8.6 (6.4–10.7)	b
Lives alone	37.4 (18.1–56.7)	c	31.7 (21.9–41.4)	b	12.3 (3.6–20.9)	a,b
Other relations	7.8 (4.1–11.5)	b,d	12.0 (7.7–16.3)	a	15.5 (9.6–21.3)	a
Population density						
Large MSA	2.3 (1.8–2.7)	a	6.8 (5.2–8.3)	a	7.5 (5.2–9.9)	a
Other MSA	4.3 (2.8–5.8)	b	9.3 (7.8–10.8)	b	10.9 (8.2–13.6)	b
Non-MSA	10.6 (5.5–15.8)	c	16.4 (11.8–21.0)	c	20.3 (17.8–22.8)	c
Academic performance						
A	2.9 (1.7–4.0)	a	6.4 (5.2–7.6)	a	7.5 (5.5–9.5)	a
B	4.7 (3.4–6.0)	b	9.3 (7.9–10.7)	b	13.1 (11.3–14.9)	b
C	7.3 (5.0–9.6)	c	13.4 (10.7–16.1)	c	15.1 (11.9–18.4)	b
D	13.0 (8.5–17.5)	d	19.2 (10.7–27.7)	d	17.9 (6.8–28.9)	b
Importance of religion						
Very important	5.9 (3.7–8.0)	a	8.2 (6.0–10.4)	a	10.7 (8.1–13.3)	a
Important	5.2 (3.2–7.2)	a	12.7 (10.2–15.2)	b	15.7 (13.5–17.8)	b
Not/somewhat important	5.4 (3.9–6.8)	a	11.3 (9.7–12.9)	b	13.0 (11.2–14.8)	a

Source: 2002–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

Note: **CI** = confidence interval; **MSA** = metropolitan statistical area; **SN** = statistical note.

^aThese tests were performed to examine differences in estimates within specific demographic subgroups (e.g., parental education). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, statistically significantly different from one another ($p < 0.05$).

^bParental education is an average score of mother's education and father's education. Response categories are (1) completed some grade school or less, (2) some high school, (3) completed high school, (4) some college, (5) completed college, and (6) graduate or professional school after college.

Table 3.1.43 Age at which high school senior respondents first used smokeless tobacco or cigars; National Youth Tobacco Survey (NYTS) 2009; United States

Age (years) ^a	Smokeless tobacco ^b % (95% CI)	Cigars ^b % (95% CI)
≤12	16.2 (7.5–24.9)	13.2 (10.0–16.4)
13–14	23.2 (14.8–31.5)	12.8 (10.0–15.6)
15–16	35.2 (26.4–44.0)	40.0 (35.5–44.6)
≥17	25.4 (17.8–33.0)	34.0 (29.7–38.3)

Source: 2009 NYTS, Centers for Disease Control and Prevention (unpublished data).

Note: CI = confidence interval.

^aEstimates for age when first used smokeless tobacco are based on responding to the question, “How old were you when you used chewing tobacco, snuff, or dip for the first time?” The estimates for age when first smoked a cigar are based on responding to the question “How old were you when you smoked a cigar, cigarillo, or little cigars for the first time?” Those who reported never having used the relevant tobacco product were excluded from the denominator.

^bPercentages calculated from those who reported ever having used smokeless tobacco or cigars.

Table 3.1.44 Percentage distribution of smokeless tobacco brands that youth 12–17 years of age who were current users of smokeless tobacco preferred, by gender, race/ethnicity, age, and region; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

Characteristic	Grizzly (MS) % (95% CI)	Skoal (MS) % (95% CI)	Copenhagen (MS) % (95% CI)	Red Man (Chew) % (95% CI)	Red Seal (MS) % (95% CI)	Levi Garrett (Chew) % (95% CI)
Overall	32.1 (29.9–34.3)	24.1 (22.2–26.2)	15.8 (14.3–17.5)	5.3 (4.3–6.6)	2.7 (2.0–3.7)	2.4 (1.7–3.3)
Gender						
Male	33.2 (30.9–35.6)	24.3 (22.2–26.5)	15.9 (14.2–17.7)	5.6 (4.5–6.9)	3.0 (2.2–4.0)	2.6 (1.8–3.6)
Female	22.1 (16.6–28.8)	22.5 (17.4–28.5)	15.7 (11.7–20.7)	2.8 (1.0–7.8)	0.7 (0.2–2.9)	0.9 (0.3–2.9)
Race/ethnicity						
White	33.2 (30.9–35.6)	24.7 (22.6–26.9)	16.1 (14.4–17.9)	4.9 (3.9–6.1)	3.0 (2.2–4.0)	2.6 (1.9–3.6)
Male	34.1 (31.6–36.6)	24.8 (22.7–27.2)	16.3 (14.5–18.3)	5.1 (4.1–6.4)	3.2 (2.3–4.3)	2.7 (1.9–3.9)
Female	24.3 (17.8–32.2)	22.8 (16.9–30.0)	13.7 (9.3–19.5)	NR	0.8 (0.2–3.6)	1.1 (0.3–3.6)
Black or African American	NR	NR	NR	NR	NR	NR
Male	NR	NR	NR	NR	NR	NR
Female	NR	NR	NR	NR	NR	NR
Hispanic or Latino	23.6 (15.9–33.7)	22.1 (15.0–31.4)	14.5 (9.0–22.6)	NR	1.3 (0.4–4.1)	1.1 (0.3–3.8)
Male	26.5 (17.5–38.0)	23.4 (15.5–33.9)	11.0 (6.2–18.8)	NR	1.5 (0.5–4.9)	1.4 (0.4–4.6)
Female	NR	NR	NR	NR	NR	NR
Other ^a	16.9 (10.7–25.7)	28.5 (20.1–38.7)	NR	9.4 (4.4–19.0)	1.1 (0.3–3.6)	NR
Male	16.4 (10.6–24.4)	NR	NR	9.1 (4.2–18.5)	1.6 (0.5–5.1)	NR
Female	NR	NR	NR	NR	NR	NR
Age (years)						
12–14	29.0 (24.1–34.5)	20.3 (16.3–25.1)	12.9 (9.5–17.3)	6.9 (4.6–10.3)	3.1 (1.9–5.2)	2.9 (1.0–7.7)
15–17	32.7 (30.4–35.2)	24.9 (22.7–27.2)	16.5 (14.7–18.4)	5.0 (3.9–6.3)	2.7 (1.9–3.8)	2.3 (1.7–3.1)
Region						
Northeast	14.6 (11.4–18.6)	50.1 (43.9–56.4)	11.5 (8.3–15.7)	5.8 (3.3–10.1)	1.1 (0.5–2.4)	0.6 (0.2–1.8)
Midwest	36.7 (32.8–40.8)	26.2 (22.9–29.8)	11.2 (8.9–14.0)	5.3 (3.8–7.4)	1.1 (0.4–2.7)	1.5 (0.7–3.1)
South	38.1 (34.6–41.7)	17.1 (14.5–20.2)	15.0 (12.6–17.7)	3.8 (2.6–5.5)	5.0 (3.6–7.0)	3.2 (2.1–4.9)
West	22.7 (17.7–28.7)	18.8 (14.6–23.8)	29.2 (24.1–34.8)	9.2 (5.9–14.0)	NR	2.9 (1.3–6.2)

Table 3.1.44 Continued

Characteristic	Timber Wolf (MS) % (95% CI)	Beech-Nut (MS) % (95% CI)	Camel-Snus (Chew) % (95% CI)	Kodiak (MS) % (95% CI)	All other brands % (95% CI)	Unknown % (95% CI)
Overall	1.8 (1.3–2.5)	1.4 (1.0–2.1)	1.4 (0.9–2.2)	1.3 (1.0–1.9)	6.0 (5.0–7.3)	5.5 (4.4–6.8)
Gender						
Male	1.9 (1.3–2.6)	1.3 (0.9–2.0)	1.1 (0.7–1.6)	1.4 (1.0–1.9)	5.3 (4.3–6.6)	4.6 (3.6–6.0)
Female	1.2 (0.4–3.4)	2.7 (0.9–8.2)	NR	1.2 (0.4–3.4)	12.6 (8.2–18.9)	13.2 (9.1–18.8)
Race/ethnicity						
White	2.0 (1.5–2.7)	1.4 (0.9–2.2)	1.5 (0.9–2.4)	1.4 (1.0–2.0)	5.1 (4.1–6.3)	4.1 (3.4–5.1)
Male	2.0 (1.5–2.8)	1.2 (0.8–1.9)	1.1 (0.7–1.7)	1.4 (1.0–2.1)	4.8 (3.8–6.0)	3.1 (2.5–4.0)
Female	1.6 (0.6–4.3)	3.3 (1.0–10.3)	NR	1.5 (0.5–4.3)	8.7 (5.2–14.4)	14.3 (9.5–21.0)
Black or African American	NR	NR	NR	NR	NR	NR
Male	NR	NR	NR	NR	NR	NR
Female	NR	NR	NR	NR	NR	NR
Hispanic or Latino	0.3 (0.0–2.2)	NR	0.8 (0.2–3.4)	0.6 (0.1–3.2)	NR	NR
Male	0.4 (0.1–2.6)	NR	NR	NR	6.0 (2.3–14.5)	NR
Female	NR	NR	NR	NR	NR	NR
Other ^a	0.2 (0.0–1.6)	5.1 (1.9–12.9)	1.6 (0.4–6.2)	0.9 (0.2–3.9)	12.6 (6.7–22.5)	4.0 (1.8–8.6)
Male	NR	NR	NR	NR	NR	4.6 (1.8–11.2)
Female	NR	NR	NR	NR	NR	NR
Age (years)						
12–14	2.0 (1.0–4.0)	1.4 (0.4–4.3)	0.7 (0.2–2.0)	1.6 (0.5–4.4)	9.0 (6.3–12.6)	10.3 (6.5–15.9)
15–17	1.8 (1.2–2.5)	1.5 (1.0–2.2)	1.5 (0.9–2.5)	1.3 (0.9–1.9)	5.4 (4.3–6.8)	4.5 (3.5–5.7)
Region						
Northeast	1.6 (0.8–3.2)	1.0 (0.4–2.7)	1.1 (0.4–3.2)	1.8 (0.8–3.8)	5.1 (3.1–8.4)	5.6 (3.2–9.6)
Midwest	0.6 (0.2–1.4)	1.2 (0.5–2.7)	2.5 (1.4–4.4)	1.5 (0.8–2.6)	6.5 (4.7–9.1)	5.7 (4.1–7.8)
South	3.0 (2.1–4.3)	1.3 (0.7–2.4)	1.1 (0.4–3.0)	1.3 (0.8–2.3)	6.3 (4.8–8.4)	4.7 (3.1–7.1)
West	0.4 (0.1–1.2)	2.5 (1.1–5.6)	0.9 (0.4–2.0)	0.8 (0.3–2.3)	5.2 (2.8–9.3)	7.5 (4.9–11.5)

Source: 2006–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: **CI** = confidence interval; **MS** = moist snuff; **NR** = low precision, no estimate reported.

^aIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.45 Share of the smokeless tobacco market in 2008 by type and brand; the Maxwell Report; United States

Type/brand	Market share (%)
Moist snuff	
Skoal	25.0
Copenhagen	24.0
Grizzly	24.0
Red Seal	7.0
Timber Wolf	6.0
Longhorn	5.0
Kodiak	4.0
Other	5.0
Total	100.0
Chew	
Red Man	34.0
Levi Garrett	18.0
Stoker's chew	11.0
Other	37.0
Total	100.0

Source: Adapted from Maxwell 2009b with permission from John C. Maxwell, Jr., ©2009.

^aRepresents market share within type of product (i.e., moist snuff or chew).

Table 3.1.46 Prevalence of smokeless tobacco use among cigarette smokers and users of drugs and prevalence of cigarette smoking and drug use among users of smokeless tobacco in the past 30 days, among male high school seniors; Monitoring the Future (MTF) 2002–2007 and National Survey on Drug Use and Health (NSDUH) 2010; United States

Other drugs	Prevalence of smokeless tobacco use among cigarette smokers and users of drugs % (95% CI)	Prevalence of smokeless tobacco use among cigarette nonsmokers and nonusers of drugs % (95% CI)	Prevalence of cigarette smoking and drug use among smokeless tobacco users % (95% CI)	Prevalence of cigarette smoking and drug use among smokeless tobacco nonusers % (95% CI)
MTF				
Alcohol	20.7 (17.9–23.6)	3.4 (2.2–4.6)	85.4 (80.4–90.4)	44.0 (41.6–46.4)
Marijuana	20.4 (17.3–23.4)	9.4 (7.6–11.2)	39.3 (34.3–44.4)	20.8 (19.1–22.4)
Cocaine	26.3 (18.4–34.1)	11.7 (9.7–13.6)	6.5 (4.5–8.5)	2.5 (2.0–3.0)
Cigarettes	29.3 (26.4–32.3)	6.4 (5.0–7.7)	59.9 (57.0–62.6)	19.7 (18.3–21.1)
NSDUH^a				
Alcohol	21.8 (17.5–26.7)	4.1 (2.9–5.8)	70.7 (61.2–78.7)	27.3 (24.3–30.4)
Marijuana	18.2 (13.3–24.6)	7.5 (6.0–9.4)	38.1 (28.9–48.2)	18.3 (15.7–21.2)
Cocaine	NR	9.6 (7.9–11.5)	1.9 (0.6–6.1)	0.3 (0.1–1.4)
Inhalants	NR	9.7 (8.0–11.7)	NR	0.8 (0.3–1.8)
Cigarettes	25.6 (20.3–31.8)	5.6 (4.1–7.5)	54.4 (44.7–63.9)	17.0 (14.5–19.7)

Source: 2002–2007 MTF: University of Michigan, Institute for Social Research (unpublished data); 2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: **CI** = confidence interval; **NR** = low precision, no estimate reported.

^aExcluded male respondents who reported being currently enrolled in 12th grade but were older than 19 years of age.

Table 3.1.47 Percentage distribution of smokeless tobacco brands that young adults 18–25 years of age who were current users of smokeless preferred, by gender, race/ethnicity, age, and region; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

Characteristic	Skoal (MS) % (95% CI)	Grizzly (MS) % (95% CI)	Copenhagen (MS) % (95% CI)	Red Man (Chew) % (95% CI)	Kodiak (MS) % (95% CI)	Red Seal (Chew) % (95% CI)
Overall	30.1 (28.7–31.5)	28.6 (27.0–30.2)	17.9 (16.7–19.1)	4.5 (3.9–5.2)	2.6 (2.2–3.1)	2.4 (2.0–2.9)
Gender						
Male	30.2 (28.7–31.7)	28.8 (27.2–30.4)	18.0 (16.8–19.3)	4.5 (3.9–5.2)	2.5 (2.1–3.0)	2.6 (2.1–3.1)
Female	27.9 (22.0–34.7)	24.2 (18.6–30.9)	14.9 (11.1–19.8)	5.2 (2.4–10.6)	3.5 (1.8–6.6)	0.2 (0.0–1.3)
Race/ethnicity						
White	29.8 (28.4–31.3)	29.9 (28.3–31.6)	17.6 (16.4–18.8)	4.5 (3.9–5.3)	2.6 (2.1–3.1)	2.6 (2.1–3.1)
Male	30.1 (28.6–31.6)	30.1 (28.4–31.8)	17.7 (16.5–19.0)	4.5 (3.8–5.2)	2.5 (2.1–3.1)	2.7 (2.2–3.3)
Female	25.1 (19.5–31.6)	27.5 (21.2–34.8)	15.0 (10.8–20.3)	5.8 (2.7–12.2)	3.3 (1.6–6.6)	0.2 (0.0–1.5)
Black or African American	NR	NR	NR	NR	NR	NR
Male	NR	NR	NR	NR	NR	NR
Female	NR	NR	NR	NR	NR	NR
Hispanic or Latino	33.0 (26.1–40.7)	12.0 (8.1–17.6)	22.8 (17.2–29.5)	4.9 (2.6–9.0)	2.3 (1.0–5.5)	1.3 (0.4–4.1)
Male	32.5 (25.5–40.3)	12.7 (8.5–18.7)	23.7 (17.8–30.9)	5.3 (2.8–9.6)	2.5 (1.0–5.9)	1.4 (0.4–4.4)
Female	NR	NR	NR	NR	NR	NR
Other ^a	34.6 (27.2–42.7)	20.7 (14.4–28.8)	21.5 (16.2–27.9)	3.9 (2.3–6.5)	2.8 (1.3–5.9)	1.5 (0.6–3.3)
Male	32.6 (25.4–40.6)	22.3 (15.5–31.0)	21.2 (15.8–27.9)	4.1 (2.4–7.0)	2.7 (1.2–6.0)	1.6 (0.7–3.6)
Female	NR	NR	NR	NR	NR	NR
Age (years)						
18–20	27.3 (25.3–29.5)	32.0 (29.7–34.4)	17.0 (15.2–19.0)	5.8 (4.8–7.0)	1.8 (1.3–2.5)	2.5 (1.9–3.3)
21–25	32.3 (30.4–34.2)	25.8 (23.8–27.9)	18.5 (17.1–20.1)	3.5 (2.9–4.3)	3.2 (2.6–3.9)	2.4 (1.9–3.1)
Region						
Northeast	52.9 (49.0–56.6)	13.9 (11.5–16.7)	12.9 (10.5–15.7)	2.9 (2.0–4.2)	2.7 (1.8–4.2)	1.5 (1.0–2.4)
Midwest	27.7 (25.5–30.0)	36.5 (34.0–39.1)	9.8 (8.5–11.2)	5.7 (4.6–7.1)	3.7 (2.9–4.7)	0.7 (0.4–1.3)
South	24.2 (22.0–26.5)	31.8 (28.7–34.9)	19.0 (16.8–21.3)	4.1 (3.2–5.4)	1.8 (1.2–2.7)	5.2 (4.2–6.4)
West	28.6 (25.0–32.5)	21.2 (18.0–24.9)	31.4 (28.1–34.8)	4.8 (3.3–6.9)	2.3 (1.4–3.7)	0.2 (0.0–0.6)

Table 3.1.47 Continued

Characteristic	Camel-Snus (Chew) % (95% CI)	Timber Wolf (MS) % (95% CI)	Levi Garrett (Chew) % (95% CI)	Beech-Nut (MS) % (95% CI)	All other brands % (95% CI)	Unknown % (95% CI)
Overall	2.2 (1.8–2.7)	2.1 (1.6–2.6)	2.0 (1.6–2.4)	0.9 (0.6–1.2)	4.9 (4.3–5.6)	1.9 (1.6–2.4)
Gender						
Male	2.1 (1.7–2.6)	2.1 (1.7–2.7)	2.1 (1.7–2.5)	0.9 (0.7–1.2)	4.6 (4.0–5.3)	1.7 (1.3–2.2)
Female	4.9 (2.9–8.2)	0.8 (0.3–2.6)	0.4 (0.1–1.5)	0.3 (0.1–1.2)	11.2 (7.2–17.1)	6.5 (4.2–9.9)
Race/ethnicity						
White	2.2 (1.8–2.7)	2.2 (1.7–2.8)	2.0 (1.6–2.6)	0.7 (0.5–1.0)	4.3 (3.7–5.0)	1.6 (1.2–2.0)
Male	2.0 (1.6–2.5)	2.3 (1.8–2.8)	2.1 (1.7–2.7)	0.7 (0.5–1.0)	4.0 (3.4–4.7)	1.4 (1.0–1.8)
Female	5.7 (3.3–9.6)	1.0 (0.3–3.1)	0.5 (0.1–1.8)	0.2 (0.0–1.7)	10.1 (6.8–14.8)	5.7 (3.4–9.5)
Black or African American	NR	NR	NR	NR	NR	NR
Male	NR	NR	NR	NR	NR	NR
Female	NR	NR	NR	NR	NR	NR
Hispanic or Latino	2.7 (1.4–5.2)	0.6 (0.2–1.8)	1.4 (0.5–4.0)	2.2 (0.7–6.6)	9.7 (5.4–16.8)	7.0 (3.9–12.3)
Male	2.9 (1.5–5.5)	0.7 (0.2–1.9)	1.5 (0.5–4.3)	2.3 (0.7–7.0)	8.2 (4.5–14.5)	6.3 (3.3–12.0)
Female	NR	NR	NR	NR	NR	NR
Other ^a	2.3 (0.7–6.9)	1.4 (0.4–5.5)	1.6 (0.6–4.2)	1.3 (0.6–3.0)	6.5 (3.9–10.7)	2.0 (1.1–3.7)
Male	2.5 (0.8–7.5)	1.6 (0.4–6.0)	1.8 (0.7–4.6)	1.3 (0.5–3.2)	6.5 (3.7–11.1)	1.9 (1.0–3.8)
Female	NR	NR	NR	NR	NR	NR
Age (years)						
18–20	1.6 (1.1–2.2)	1.7 (1.2–2.4)	2.4 (1.8–3.2)	1.0 (0.6–1.5)	4.8 (3.9–5.9)	2.1 (1.5–2.9)
21–25	2.7 (2.1–3.5)	2.4 (1.8–3.1)	1.6 (1.2–2.2)	0.8 (0.5–1.2)	5.0 (4.1–5.9)	1.8 (1.4–2.4)
Region						
Northeast	2.3 (1.3–3.8)	0.9 (0.5–1.6)	1.4 (0.8–2.4)	1.0 (0.5–1.9)	5.0 (3.4–7.3)	2.7 (1.7–4.1)
Midwest	3.4 (2.6–4.3)	2.4 (1.5–3.7)	1.8 (1.2–2.6)	1.0 (0.6–1.6)	5.6 (4.4–7.0)	1.9 (1.4–2.6)
South	1.4 (0.8–2.3)	3.2 (2.5–4.3)	2.4 (1.7–3.3)	0.6 (0.3–1.1)	4.7 (3.8–5.8)	1.6 (1.1–2.6)
West	2.1 (1.3–3.5)	0.1 (0.0–0.5)	1.9 (1.2–3.2)	1.2 (0.6–2.1)	4.2 (2.9–6.1)	2.1 (1.4–3.2)

Source: 2006–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: **CI** = confidence interval; **MS** = moist snuff; **NR** = low precision, no estimate reported.

^aIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.48 Percentage of young people who have ever smoked cigars, by gender, race/ethnicity, age/grade, and region; National Survey on Drug Use and Health (NSDUH) 2010 and National Youth Tobacco Survey (NYTS) 2009; United States

Characteristic	NSDUH 13–18 years of age		NYTS 9th–12th grades ^a		NYTS 6th–8th grades ^a	
	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b
Overall	16.7 (16.04–17.41)		28.6 (25.4–31.8)		10.1 (9.2–11.1)	
Gender						
Male	20.7 (19.64–21.76)	a	35.4 (30.7–40.0)	a	12.4 (11.1–13.8)	a
Female	12.5 (11.62–13.40)	b	21.8 (19.2–24.4)	b	7.7 (6.6–8.7)	b
Race/ethnicity						
White	19.5 (18.62–20.51)	a	32.5 (29.4–35.5)	a	8.1 (6.9–9.3)	a
Male	24.4 (23.03–25.74)		40.4 (36.7–44.2)		10.6 (8.8–12.4)	
Female	14.5 (13.32–15.74)		24.4 (21.3–27.5)		5.4 (4.3–6.6)	
Black or African American	11.3 (9.75–12.99)	b	16.3 (10.1–22.4)	b	11.6 (10.0–13.3)	b
Male	14.1 (11.69–16.81)		20.4 (11.7–29.1)		14.6 (12.1–17.0)	
Female	8.3 (6.73–10.31)		12.3 (6.4–18.2)		8.6 (6.1–11.2)	
Hispanic or Latino	14.9 (13.44–16.42)	c	29.2 (26.5–31.8)	a	14.9 (13.0–16.8)	c
Male	18.1 (15.87–20.50)		33.5 (29.1–37.8)		16.9 (14.4–19.3)	
Female	11.2 (9.27–13.51)		24.9 (21.3–28.5)		12.9 (9.8–16.1)	
Other ^c	9.9 (7.96–12.16)	b	22.0 (16.9–27.0)	c	10.1 (7.1–13.0)	a,b
Male	11.7 (8.95–15.15)		28.7 (21.7–35.7)		11.8 (7.6–15.9)	
Female	7.9 (5.74–10.86)		15.5 (11.6–19.3)		8.2 (5.5–11.0)	
Age (in years)/grade						
13–14	5.3 (4.65–6.02)	a	NA		NA	
15–16	15.4 (14.39–16.43)	b	NA		NA	
17–18	28.1 (26.64–29.55)	c	NA		NA	
6th	NA		NA		6.1 (4.8–7.5)	a
7th	NA		NA		9.8 (8.3–11.3)	b
8th	NA		NA		14.5 (13.0–16.0)	c
9th	NA		18.8 (14.4–23.2)	a	NA	
10th	NA		26.9 (23.9–30.0)	b	NA	
11th	NA		33.8 (29.2–38.3)	c	NA	
12th	NA		37.4 (32.5–42.3)	c	NA	
Region						
Northeast	16.7 (15.22–18.24)	a	NA		NA	
Midwest	18.2 (17.03–19.35)	b	NA		NA	
South	16.1 (14.92–17.29)	a	NA		NA	
West	16.4 (14.88–18.10)	a	NA		NA	

Source: 2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data); 2009 NYTS: Centers for Disease Control and Prevention (unpublished data).

Note: CI = confidence interval; NA = not applicable; SN = statistical note.

^aEstimates are based on responses to the question, “Have you ever tried smoking cigars, cigarillos, or little cigars, even one or two puffs?”

^bThese tests were performed to examine differences in estimates within specific demographic subgroups (e.g., gender). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, statistically significantly different from one another ($p < 0.05$).

^cIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.49 Percentage of young people and young adults 18–25 years of age who currently smoke cigars, by gender, race/ethnicity, age/grade, and region; National Survey on Drug Use and Health (NSDUH) 2010, National Youth Risk Behavior Survey (YRBS) 2009, and National Youth Tobacco Survey (NYTS) 2009; United States

Characteristic	NSDUH 13–18 years of age		YRBS 9th–12th grades		NSDUH 18–25 years of age		NYTS 6th–8th grades ^a		NYTS 9th–12 grades ^a	
	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b
Overall	5.6 (5.20–6.03)		14.0 (12.8–15.4)		11.2 (10.63–11.79)		3.9 (3.4–4.5)		10.9 (8.9–12.9)	
Gender										
Male	7.6 (6.93–8.28)	a	18.6 (17.0–20.5)	a	16.6 (15.72–17.63)	a	4.6 (3.8–5.5)	a	15.0 (12.1–18.0)	a
Female	3.5 (3.07–3.96)	b	8.8 (7.7–10.1)	b	5.6 (5.04–6.19)	b	3.2 (2.5–3.9)	b	6.7 (5.4–8.1)	b
Race/ethnicity										
White	6.6 (6.01–7.16)	a	14.9 (13.3–16.7)	a	12.5 (11.78–13.34)	a	2.9 (2.2–3.6)	a	12.0 (9.8–14.2)	a
Male	9.1 (8.24–10.11)		21.0 (18.7–23.4)		19.5 (18.26–20.80)		3.8 (2.6–4.9)		17.2 (14.1–20.3)	
Female	3.9 (3.31–4.50)		8.0 (6.8–9.3)		5.5 (4.80–6.22)		2.0 (1.2–2.8)		6.7 (5.0–8.3)	
Black or African American	4.6 (3.74–5.68)	b	12.8 (10.9–15.0)	a,b	11.5 (10.10–13.08)	b	4.5 (3.2–5.8)	b	7.3 (3.6–10.9)	b
Male	5.7 (4.34–7.52)		13.9 (11.6–16.5)		14.6 (12.27–17.33)		5.2 (3.4–7.0)		7.7 (2.6–12.8)	
Female	3.5 (2.48–4.79)		11.5 (8.8–14.8)		8.7 (7.12–10.54)		3.7 (1.8–5.7)		6.9 (3.4–10.3)	
Hispanic or Latino	4.4 (3.64–5.32)	b	12.7 (10.9–14.7)	a,b	8.4 (7.30–9.67)	c	6.2 (5.0–7.3)	c	11.8 (9.6–14.0)	a
Male	5.9 (4.64–7.44)		15.8 (13.1–19.1)		11.9 (10.13–14.00)		6.6 (5.2–8.0)		16.1 (13.4–18.7)	
Female	2.7 (2.00–3.68)		9.5 (7.6–11.9)		4.2 (3.22–5.57)		5.7 (3.6–7.8)		7.5 (5.5–9.4)	
Other ^c	3.0 (2.05–4.45)	b	11.1 (8.4–14.5)	b	6.6 (5.26–8.35)	c	4.6 (2.5–6.7)	a,b,c	8.0 (4.8–11.1)	b
Male	3.5 (2.25–5.39)		14.4 (10.9–18.9)		10.0 (7.51–13.19)		5.4 (2.0–8.9)		10.7 (6.2–15.2)	
Female	2.5 (1.39–4.59)		7.5 (4.8–11.7)		3.3 (2.08–5.16)		3.7 (1.6–5.9)		5.3 (2.1–8.4)	
Age (in years)/grade										
13–14	1.2 (0.88–1.54)	a	NA		NA		NA		NA	
15–16	4.4 (3.83–4.98)	b	NA		NA		NA		NA	
17–18	10.7 (9.74–11.66)	c	NA		NA		NA		NA	
18–20	NA		NA		12.8 (11.93–13.73)	a	NA		NA	
21–25	NA		NA		10.1 (9.43–10.86)	b	NA		NA	
6th	NA		NA		NA		2.8 (2.1–3.5)	a	NA	
7th	NA		NA		NA		3.4 (2.5–4.2)	a	NA	
8th	NA		NA		NA		5.7 (4.7–6.7)	b	NA	
9th	NA		9.6 (8.3–11.2)	a	NA		NA		6.2 (4.3–8.1)	a
10th	NA		13.2 (11.4–15.3)	b	NA		NA		10.8 (8.4–13.2)	b
11th	NA		15.8 (13.6–18.2)	b	NA		NA		13.0 (10.2–15.9)	b,c
12th	NA		18.5 (15.5–21.8)	c	NA		NA		14.6 (11.3–18.0)	c

Table 3.1.49 Continued

Characteristic	NSDUH 13–18 years of age		YRBS 9th–12th grades		NSDUH 18–25 years of age		NYTS 6th–8th grades ^a		NYTS 9th–12 grades ^a	
	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b
Region										
Northeast	5.1 (4.38–6.04)	a	11.5 (8.6–15.2)	a	10.5 (9.41–11.80)	a	NA		NA	
Midwest	6.4 (5.74–7.18)	b	16.3 (14.0–18.9)	b	13.8 (12.72–14.89)	b	NA		NA	
South	5.5 (4.80–6.28)	a	15.9 (14.3–17.6)	b	11.5 (10.41–12.71)	a	NA		NA	
West	5.3 (4.53–6.26)	a	11.5 (9.5–13.7)	a	8.8 (7.81–9.96)	a	NA		NA	

Source: 2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data); 2009 YRBS: Centers for Disease Control and Prevention, Division of Adolescent and School Health (unpublished data); 2009 NYTS: Centers for Disease Control and Prevention (unpublished data).

Note: **CI** = confidence interval; **NA** = not applicable; **SN** = statistical note.

^aEstimates are based on responses to the question, “During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?”

^bThis column represents the results of statistical tests that were run separately within each surveillance system (e.g., NSDUH). These tests were performed to examine differences in estimates within specific demographic subgroups (e.g., gender). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, statistically significantly different from one another ($p < 0.05$).

^cIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.50 Percentage distribution of cigar brands that youth 12–17 years of age who currently smoke cigars preferred, by gender, race/ethnicity, age, and region; National Survey on Drug Use and Health (NSDUH) 2008–2010; United States

Characteristic	Black & Mild % (95% CI)	Swisher Sweets % (95% CI)	Phillies % (95% CI)	White Owl % (95% CI)	Dutch Masters % (95% CI)	Al Capone % (95% CI)
Overall	42.9 (40.3–45.6)	20.3 (18.3–22.4)	5.6 (4.5–6.8)	3.7 (2.8–4.8)	3.1 (2.4–4.1)	2.0 (1.4–2.8)
Gender						
Male	40.3 (37.0–43.7)	22.7 (20.2–25.3)	6.5 (5.1–8.1)	4.5 (3.3–6.0)	3.9 (2.9–5.2)	1.8 (1.2–2.7)
Female	48.8 (44.3–53.2)	14.9 (12.0–18.3)	3.6 (2.2–5.8)	1.8 (1.0–3.5)	1.5 (0.7–3.0)	2.3 (1.3–4.2)
Race/ethnicity						
White	39.4 (36.5–42.4)	22.8 (20.4–25.5)	5.5 (4.3–7.0)	3.8 (2.9–5.0)	2.8 (2.0–3.8)	2.2 (1.4–3.4)
Male	37.1 (33.6–40.8)	24.9 (21.9–28.2)	6.4 (4.9–8.2)	4.9 (3.6–6.5)	3.4 (2.4–4.7)	2.1 (1.3–3.3)
Female	45.1 (39.8–50.4)	17.6 (13.8–22.3)	3.2 (1.8–5.9)	1.3 (0.6–2.8)	1.3 (0.5–3.5)	2.4 (1.1–5.3)
Black or African American	58.4 (50.3–66.1)	16.7 (12.1–22.5)	4.3 (2.3–8.0)	6.0 (2.7–13.0)	5.5 (2.9–10.3)	0.9 (0.3–2.2)
Male	54.1 (43.8–64.1)	18.9 (13.0–26.6)	5.0 (2.4–10.1)	NR	6.3 (2.8–13.4)	1.2 (0.4–3.4)
Female	NR	12.9 (7.1–22.4)	NR	1.8 (0.5–7.0)	4.2 (1.5–11.4)	0.4 (0.1–1.6)
Hispanic or Latino	46.8 (39.1–54.6)	12.8 (9.2–17.6)	6.8 (4.0–11.3)	0.4 (0.1–1.4)	2.4 (1.0–6.1)	1.9 (0.8–4.6)
Male	46.6 (37.1–56.3)	14.5 (9.7–21.2)	7.0 (3.7–12.8)	0.2 (0.0–1.4)	3.4 (1.3–8.8)	1.4 (0.4–5.0)
Female	NR	9.1 (5.0–16.1)	NR	NR	0.4 (0.1–1.8)	NR
Other ^a	NR	19.2 (12.3–28.7)	5.7 (2.4–12.8)	NR	NR	1.9 (0.5–6.4)
Male	NR	NR	NR	NR	NR	0.3 (0.1–1.1)
Female	NR	NR	NR	NR	NR	NR
Age (years)						
12–14	44.1 (36.9–51.6)	12.4 (8.8–17.3)	2.6 (1.2–5.4)	1.3 (0.5–3.2)	1.7 (0.8–3.6)	2.2 (1.0–5.0)
15–17	42.7 (40.0–45.5)	21.5 (19.4–23.8)	6.0 (4.9–7.5)	4.0 (3.1–5.3)	3.4 (2.5–4.5)	1.9 (1.3–2.8)
Region						
Northeast	36.8 (30.2–43.9)	10.0 (7.4–13.3)	8.9 (6.1–12.8)	3.7 (2.0–6.8)	11.9 (8.5–16.5)	2.9 (1.4–5.8)
Midwest	41.2 (37.3–45.1)	27.4 (23.6–31.5)	5.2 (3.6–7.4)	5.3 (3.7–7.6)	0.7 (0.3–1.6)	1.0 (0.5–1.9)
South	52.6 (47.9–57.3)	15.0 (12.2–18.2)	6.2 (4.3–8.9)	4.1 (2.5–6.6)	2.6 (1.5–4.4)	1.7 (1.0–3.1)
West	33.7 (27.5–40.6)	28.1 (22.8–34.1)	2.5 (1.4–4.4)	0.9 (0.3–2.6)	0.3 (0.1–2.0)	2.9 (1.4–5.7)

Table 3.1.50 Continued

Characteristic	Prime Time Little Cigars % (95% CI)	Backwoods % (95% CI)	Garcia y Vega % (95% CI)	Cohiba % (95% CI)	All other brands % (95% CI)	Unknown % (95% CI)
Overall	1.5 (1.0–2.1)	1.2 (0.8–1.8)	0.6 (0.4–1.1)	0.6 (0.2–1.5)	6.9 (5.7–8.2)	11.7 (10.1–13.6)
Gender						
Male	1.1 (0.7–1.9)	1.4 (0.9–2.3)	0.6 (0.3–1.2)	0.8 (0.3–2.1)	6.4 (5.1–8.0)	9.9 (8.1–12.2)
Female	2.2 (1.3–3.7)	0.7 (0.3–1.6)	0.6 (0.2–1.8)	NR	7.9 (5.9–10.5)	15.7 (12.8–19.2)
Race/ethnicity						
White	1.1 (0.6–1.8)	1.3 (0.8–2.2)	0.7 (0.3–1.3)	0.8 (0.3–2.2)	7.2 (5.8–8.8)	12.4 (10.6–14.5)
Male	0.7 (0.3–1.5)	1.7 (1.0–2.9)	0.6 (0.2–1.3)	1.2 (0.4–3.0)	7.3 (5.7–9.3)	9.9 (7.9–12.3)
Female	2.0 (1.1–3.8)	0.3 (0.1–1.9)	1.0 (0.3–2.8)	NR	6.9 (4.8–9.8)	18.8 (14.9–23.4)
Black or African American	NR	1.7 (0.7–3.9)	1.4 (0.4–4.2)	NR	3.4 (1.6–7.2)	1.1 (0.4–3.0)
Male	NR	1.0 (0.3–3.6)	2.2 (0.7–6.5)	NR	1.6 (0.4–5.8)	1.4 (0.4–4.2)
Female	NR	2.9 (1.0–8.5)	NR	NR	6.6 (2.7–15.6)	NR
Hispanic or Latino	3.1 (1.7–5.5)	0.5 (0.1–2.1)	NR	0.1 (0.0–0.7)	8.5 (5.5–12.8)	16.6 (11.5–23.6)
Male	3.5 (1.7–7.0)	0.8 (0.2–3.1)	NR	0.2 (0.0–1.1)	6.6 (3.6–11.8)	15.9 (9.7–24.9)
Female	2.2 (1.0–4.8)	0.1 (0.0–0.5)	NR	NR	12.6 (6.8–22.0)	NR
Other ^a	NR	0.8 (0.2–2.5)	NR	NR	5.1 (2.0–12.3)	11.4 (5.9–21.0)
Male	NR	0.9 (0.2–3.9)	0.0 (0.0–0.1)	NR	3.0 (1.1–7.7)	NR
Female	NR	NR	NR	NR	NR	NR
Age (years)						
12–14	2.3 (1.0–4.8)	1.3 (0.5–3.4)	0.8 (0.2–3.1)	0.6 (0.2–2.5)	9.4 (6.3–14.0)	21.2 (16.0–27.7)
15–17	1.3 (0.9–2.0)	1.2 (0.8–1.9)	0.6 (0.3–1.1)	0.6 (0.2–1.7)	6.4 (5.3–7.9)	10.2 (8.6–12.1)
Region						
Northeast	NR	3.5 (1.9–6.6)	1.2 (0.4–3.4)	0.2 (0.0–1.0)	8.5 (6.1–11.8)	12.3 (8.4–17.9)
Midwest	0.1 (0.0–0.4)	0.8 (0.3–1.9)	0.4 (0.1–1.3)	0.5 (0.2–1.5)	6.7 (5.0–9.0)	10.8 (8.6–13.5)
South	0.3 (0.1–1.2)	0.6 (0.3–1.6)	0.9 (0.4–2.1)	1.1 (0.3–4.0)	5.7 (4.0–8.2)	9.1 (6.8–11.9)
West	6.3 (4.2–9.2)	0.9 (0.4–1.9)	NR	0.1 (0.0–0.6)	7.6 (5.1–11.1)	16.8 (12.3–22.4)

Source: 2008–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: **CI** = confidence interval; **NR** = low precision, no estimate reported.

^aIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.51 Share of cigar market in 2008, by brand; the Maxwell Report; United States

Brand	Market share (%) ^a
Swisher Sweets ^b	29.7
Phillies	8.4
Dutch Masters	11.1
White Owl	5.1
Backwoods	4.6
Other little or large cigars	41.1

Source: Adapted from Maxwell 2009a with permission from John C. Maxwell, Jr., ©2009.

Note: By definition, large cigars are any roll of tobacco wrapped in leaf tobacco or in any substance containing tobacco and weighing more than 3 pounds per 1,000 cigars, whereas little or small cigars weigh no more than 3 pounds per 1,000 cigars. Little or small cigars have other characteristics that set them apart from large cigars, most notably characteristics common to cigarettes, such as shape, size, filters, and packaging (i.e., 20 sticks to a pack).

^aRepresents market share within type of product (i.e., moist snuff or chew).

^bBrand available in both large and small cigars.

Table 3.1.52 Percentage distribution of cigar brands that young adults, 18–25 years of age who currently smoke cigars preferred, by gender, race/ethnicity, age, and region; National Survey on Drug Use and Health (NSDUH) 2008–2010; United States

Characteristic	Black & Mild % (95% CI)	Swisher Sweets % (95% CI)	Dutch Masters % (95% CI)	Phillies % (95% CI)	White Owl % (95% CI)	Romeo y Julieta % (95% CI)
Overall	35.6 (34.2–37.0)	18.4 (17.3–19.6)	5.1 (4.5–5.8)	5.0 (4.4–5.6)	3.7 (3.2–4.3)	3.0 (2.6–3.6)
Gender						
Male	33.4 (31.8–35.0)	17.2 (15.9–18.5)	5.2 (4.5–6.1)	5.4 (4.7–6.2)	3.8 (3.2–4.5)	3.7 (3.1–4.4)
Female	42.8 (40.1–45.6)	22.4 (20.1–24.9)	4.7 (3.6–6.1)	3.7 (2.8–4.8)	3.4 (2.6–4.5)	0.9 (0.5–1.6)
Race/ethnicity						
White	30.7 (29.2–32.4)	18.9 (17.5–20.3)	4.6 (3.9–5.5)	5.3 (4.6–6.0)	4.6 (3.9–5.3)	3.5 (2.9–4.2)
Male	28.7 (27.0–30.5)	17.5 (16.0–19.1)	5.0 (4.2–6.0)	5.7 (4.8–6.6)	4.7 (4.0–5.5)	4.2 (3.5–5.0)
Female	38.5 (35.0–42.0)	24.0 (21.0–27.3)	3.1 (2.0–4.8)	3.8 (2.8–5.2)	4.0 (2.9–5.6)	1.1 (0.5–2.2)
Black or African American	62.6 (58.8–66.3)	16.7 (14.0–19.9)	8.2 (6.1–10.8)	2.3 (1.4–3.9)	2.9 (1.9–4.5)	0.2 (0.0–1.2)
Male	64.7 (59.7–69.5)	15.3 (11.9–19.5)	7.9 (5.3–11.7)	1.6 (0.8–2.9)	2.6 (1.3–4.9)	0.3 (0.0–1.9)
Female	59.0 (53.1–64.6)	19.2 (15.1–24.1)	8.6 (5.4–13.4)	3.6 (1.7–7.6)	3.6 (2.1–6.0)	NR
Hispanic or Latino	31.9 (28.1–36.0)	17.5 (14.4–21.2)	5.0 (3.5–7.2)	6.1 (4.4–8.4)	1.3 (0.6–2.9)	3.5 (2.1–5.8)
Male	30.2 (25.9–34.9)	16.7 (13.1–21.0)	4.8 (3.2–7.2)	7.3 (5.1–10.3)	1.3 (0.5–3.5)	4.3 (2.5–7.3)
Female	37.4 (29.8–45.7)	20.4 (14.1–28.5)	5.7 (2.8–11.3)	2.2 (0.9–5.3)	1.5 (0.5–3.9)	* (* –*)
Other ^a	36.5 (30.3–43.2)	19.8 (14.7–26.1)	2.6 (1.3–5.2)	5.8 (3.6–9.2)	1.1 (0.5–2.8)	3.3 (1.6–6.9)
Male	35.4 (28.1–43.4)	18.5 (13.1–25.4)	2.2 (1.0–4.8)	5.6 (3.1–9.7)	1.2 (0.4–3.1)	3.6 (1.6–7.8)
Female	NR	NR	NR	6.5 (2.8–14.4)	NR	NR
Age (years)						
18–20	39.5 (37.5–41.5)	20.8 (19.1–22.6)	4.9 (3.9–6.0)	5.5 (4.7–6.5)	4.1 (3.4–4.9)	2.2 (1.7–2.9)
21–25	32.3 (30.5–34.1)	16.3 (14.9–17.9)	5.3 (4.5–6.3)	4.5 (3.8–5.4)	3.4 (2.8–4.2)	3.8 (3.0–4.7)
Region						
Northeast	27.7 (24.8–30.8)	5.9 (4.6–7.4)	16.3 (13.7–19.3)	5.8 (4.4–7.5)	3.9 (2.9–5.3)	5.0 (3.5–7.0)
Midwest	33.5 (31.3–35.7)	24.7 (22.8–26.6)	1.2 (0.7–2.2)	6.2 (5.1–7.5)	4.9 (4.0–5.9)	2.3 (1.7–3.1)
South	43.9 (41.5–46.5)	15.5 (13.7–17.5)	5.2 (4.1–6.6)	4.8 (3.8–5.9)	4.0 (3.2–5.1)	3.0 (2.3–4.1)
West	29.8 (26.2–33.6)	26.0 (22.6–29.6)	0.7 (0.3–1.7)	3.2 (2.2–4.7)	1.5 (0.8–2.6)	2.4 (1.5–3.9)

Table 3.1.52 Continued

	Backwoods % (95% CI)	Cohiba % (95% CI)	Al Capone % (95% CI)	Garcia y Vega % (95% CI)	All other brands % (95% CI)	Unknown % (95% CI)
Overall	2.3 (1.9–2.8)	2.3 (1.9–2.8)	2.2 (1.9–2.7)	1.4 (1.1–1.8)	12.7 (11.7–13.8)	8.1 (7.3–8.9)
Gender						
Male	2.8 (2.3–3.4)	2.9 (2.4–3.5)	2.6 (2.1–3.1)	1.7 (1.3–2.1)	14.2 (13.0–15.4)	7.2 (6.3–8.1)
Female	0.7 (0.4–1.2)	0.4 (0.2–1.0)	1.1 (0.7–1.9)	0.7 (0.4–1.2)	8.1 (6.7–9.8)	11.0 (9.3–13.1)
Race/ethnicity						
White	2.9 (2.4–3.5)	2.6 (2.1–3.2)	2.4 (2.0–3.0)	1.6 (1.2–2.1)	15.2 (14.0–16.5)	7.8 (6.9–8.7)
Male	3.4 (2.8–4.2)	3.2 (2.6–3.9)	2.8 (2.2–3.5)	1.8 (1.4–2.4)	16.8 (15.4–18.4)	6.2 (5.4–7.1)
Female	0.7 (0.4–1.4)	0.4 (0.1–1.2)	1.1 (0.6–2.1)	0.6 (0.3–1.4)	9.0 (7.3–11.2)	13.7 (11.3–16.4)
Black or African American	1.3 (0.6–2.6)	0.3 (0.1–0.7)	0.9 (0.5–1.5)	0.9 (0.5–1.7)	1.7 (1.0–2.7)	2.1 (1.2–3.4)
Male	1.4 (0.6–3.6)	0.2 (0.1–0.8)	1.2 (0.7–2.3)	0.9 (0.4–2.0)	1.7 (0.9–3.2)	2.1 (1.1–3.8)
Female	1.0 (0.4–2.7)	0.3 (0.0–1.9)	0.2 (0.0–0.8)	0.9 (0.3–2.5)	1.5 (0.6–3.7)	2.1 (0.9–4.7)
Hispanic or Latino	1.0 (0.4–2.2)	3.1 (1.8–5.1)	2.7 (1.7–4.1)	1.0 (0.4–2.0)	13.2 (10.4–16.6)	13.8 (10.8–17.4)
Male	1.2 (0.5–2.8)	3.7 (2.2–6.3)	2.8 (1.7–4.4)	1.2 (0.5–2.6)	12.8 (9.7–16.8)	13.7 (10.4–17.8)
Female	0.1 (0.0–1.0)	NR	2.4 (0.9–6.4)	0.3 (0.0–1.8)	14.4 (9.4–21.5)	14.1 (8.7–22.0)
Other ^a	1.2 (0.5–3.0)	2.1 (1.0–4.3)	2.3 (1.0–5.0)	2.4 (1.0–5.8)	9.0 (6.2–12.8)	13.8 (9.4–19.8)
Male	1.6 (0.6–4.0)	2.9 (1.4–5.9)	2.2 (0.8–5.7)	2.7 (1.0–7.3)	9.1 (5.9–13.8)	15.1 (9.7–22.7)
Female	0.1 (0.0–1.1)	NR	NR	NR	8.5 (3.9–17.4)	NR
Age (years)						
18–20	2.3 (1.8–3.1)	1.2 (0.8–1.8)	2.2 (1.6–2.9)	1.0 (0.7–1.4)	9.6 (8.4–10.9)	6.7 (5.8–7.8)
21–25	2.3 (1.8–2.9)	3.2 (2.6–4.1)	2.3 (1.8–3.0)	1.8 (1.3–2.5)	15.5 (14.1–17.0)	9.3 (8.1–10.5)
Region						
Northeast	2.6 (1.9–3.6)	2.7 (1.8–4.1)	1.5 (1.0–2.4)	3.1 (2.1–4.6)	15.9 (13.5–18.6)	9.6 (7.9–11.5)
Midwest	3.2 (2.4–4.2)	1.8 (1.3–2.6)	2.5 (1.8–3.5)	1.5 (1.0–2.4)	11.9 (10.5–13.5)	6.3 (5.3–7.4)
South	1.2 (0.8–1.9)	2.4 (1.7–3.3)	2.4 (1.8–3.3)	1.0 (0.6–1.6)	9.6 (8.2–11.3)	6.9 (5.7–8.2)
West	3.0 (1.9–4.5)	2.4 (1.4–4.1)	2.2 (1.5–3.2)	0.6 (0.3–1.3)	16.9 (14.1–20.0)	11.4 (9.1–14.3)

Source: 2008–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: CI = confidence interval; NR = low precision, no estimate reported.

^aIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons reporting two or more races.

Table 3.1.53 Prevalence of cigar use among users of other tobacco products and drugs and prevalence of other tobacco products and drug use among cigar users, among youth 12–17 years of age; National Survey on Drug Use and Health (NSDUH) 2010; United States

Other drugs	Cigar use among users of other tobacco products and drugs % (95% CI)	Cigar use among nonusers of other tobacco products and drugs % (95% CI)	Other tobacco product and drug use among cigar users % (95% CI)	Other tobacco product and drug use among cigar nonusers % (95% CI)
Alcohol	15.4 (13.9–17.1)	1.3 (1.1–1.5)	65.3 (60.7–69.5)	11.9 (11.3–12.5)
Marijuana	24.1 (21.6–26.8)	1.6 (1.4–1.8)	55.3 (50.7–59.8)	5.8 (5.3–6.3)
Cocaine	NR	3.1 (2.9–3.4)	2.8 (1.7–4.5)	0.2 (0.1–0.3)
Inhalants	12.3 (7.7–19.2)	3.1 (2.8–3.4)	4.1 (2.5–6.8)	1.0 (0.8–1.2)
Cigarettes	23.4 (21.0–26.0)	1.4 (1.2–1.6)	60.8 (56.3–65.1)	6.6 (6.1–7.1)
Smokeless	26.6 (22.2–31.6)	2.7 (2.4–2.9)	19.1 (15.9–22.8)	1.7 (1.5–2.0)
Blunt	30.1 (26.4–34.0)	2.0 (1.8–2.3)	39.7 (35.3–44.3)	3.1 (2.7–3.4)

Source: 2010 NSDUH; Substance Abuse and Mental Health Services Administration (unpublished data).

Note: **CI** = confidence interval; **NR** = low precision, no estimate reported.

Table 3.1.54 Prevalence of the use of bidis and kreteks among youth in grades 6–12, by gender and race/ethnicity; National Youth Tobacco Survey (NYTS) 2009; United States

Characteristic	Bidis 6th–8th grades		Bidis 9th–12th grades		Kreteks 6th–8th grades		Kreteks 9th–12th grades	
	% (95% CI)	SN	% (95% CI)	SN	% (95% CI)	SN	% (95% CI)	SN
Ever use								
Overall	3.1 (2.6–3.6)		5.1 (4.4–5.8)		1.8 (1.5–2.2)		4.6 (3.7–5.5)	
Gender								
Male	3.8 (3.0–4.7)	a	5.9 (5.1–6.8)	a	2.4 (1.8–3.1)	a	5.8 (4.8–6.8)	a
Female	2.3 (1.7–2.9)	b	4.3 (3.4–5.2)	b	1.2 (0.8–1.6)	b	3.4 (2.3–4.6)	b
Race/ethnicity								
White	2.1 (1.5–2.6)	a	4.3 (3.3–5.2)	a	1.4 (1.1–1.8)	a	5.0 (3.8–6.3)	a
Black or African American	3.4 (2.3–4.6)	b	5.4 (3.2–7.7)	a,b	1.8 (1.0–2.5)	a,b	3.0 (1.4–4.5)	a
Hispanic or Latino	5.1 (4.1–6.1)	c	7.4 (5.3–9.4)	b	2.5 (1.7–3.3)	b	4.7 (3.3–6.1)	a
Other ^a	4.0 (1.9–6.1)	a,b,c	5.9 (3.4–8.5)	a,b	2.8 (0.8–4.9)	a,b	4.5 (2.3–6.6)	a
Current use								
Overall	1.6 (1.2–2.0)		2.4 (1.9–2.9)		1.2 (0.8–1.5)		2.4 (2.0–2.9)	
Gender								
Male	2.0 (1.4–2.6)	a	2.7 (2.0–3.4)	a	1.6 (1.1–2.1)	a	2.9 (2.3–3.6)	a
Female	1.2 (0.7–1.7)	b	2.1 (1.6–2.6)	a	0.7 (0.3–1.0)	b	1.9 (1.1–2.7)	a
Race/ethnicity								
White	1.0 (0.6–1.4)	a	1.7 (1.1–2.2)	a	0.8 (0.5–1.1)	a	2.4 (1.9–3.0)	a
Black or African American	1.7 (0.8–2.5)	a,b	3.8 (1.6–5.9)	a,b	1.2 (0.6–1.9)	a,b	1.8 (0.8–2.8)	a
Hispanic or Latino	2.6 (1.8–3.5)	b	3.7 (2.5–4.8)	b	1.8 (1.0–2.5)	b	2.9 (1.9–3.9)	a
Other ^a	3.3 (1.3–5.3)	b	2.6 (0.5–4.6)	a,b	1.9 (0.0–3.7)	a,b	2.4 (1.0–3.9)	a

Source: 2009 NYTS, Centers for Disease Control and Prevention (unpublished data).

Note: CI = confidence interval.

^aThese tests were performed to examine differences in estimates within specific demographic subgroups (e.g., gender). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, statistically significantly different from one another ($p < 0.05$).

^bIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.55 Percentage of young people currently using both cigarettes and smokeless tobacco, by gender, race/ethnicity, age/grade, and region; National Survey on Drug Use and Health (NSDUH) 2010, Monitoring the Future (MTF) 2010, National Youth Risk Behavior Survey (YRBS) 2009, and National Youth Tobacco Survey (NYTS) 2009; United States

Characteristic	NSDUH 13–18 years of age		MTF 8th, 10th, and 12th grades		YRBS 9th–12th grades		NYTS 9th–12 grades ^a		NYTS 6th–8th grades ^a	
	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b
Overall	2.0 (1.77–2.34)		3.6 (2.8–4.4)		5.1 (4.2–6.1)		3.8 (2.5–5.0)		1.3 (0.7–1.8)	
Gender										
Male	3.3 (2.90–3.86)	a	5.9 (4.5–7.3)	a	8.4 (6.8–10.3)	a	6.5 (4.3–8.6)	a	1.7 (0.7–2.7)	a
Female	0.6 (0.39–1.02)	b	1.3 (0.8–1.9)	b	1.5 (1.1–2.0)	b	1.0 (0.6–1.4)	b	0.8 (0.4–1.1)	a
Race/ethnicity										
White	3.1 (2.68–3.57)	a	4.8 (3.7–5.9)	a	6.6 (5.2–8.2)	a	4.7 (3.2–6.1)	a	1.1 (0.7–1.5)	a
Male	5.1 (4.39–5.88)		7.7 (5.8–9.7)		10.9 (8.4–14.1)		8.4 (5.9–10.9)		1.4 (0.8–2.0)	
Female	1.0 (0.61–1.63)		1.7 (0.9–2.6)		1.6 (1.1–2.4)		0.8 (0.2–1.5)		0.7 (0.3–1.2)	
Black or African American	0.2 (0.09–0.38)	b	1.0 (0.1–1.9)	b	1.6 (1.0–2.6)	b	1.2 (0.4–3.7)	b	0.8 (0.1–1.4)	a
Male	0.4 (0.18–0.74)		1.6 (0.0–3.3)		3.0 (1.8–4.8)		1.3 (0.5–3.6)		0.7 (0.1–1.3)	
Female	NR		0.4 (0.0–1.1)		0.4 (0.2–0.8)		1.0 (0.2–4.7)		0.8 (0.3–2.5)	
Hispanic or Latino	0.7 (0.44–1.16)	c	2.0 (0.7–3.2)	c	3.4 (2.5–4.5)	c	3.3 (2.3–4.2)	a	1.0 (0.6–1.5)	a
Male	1.2 (0.68–1.96)		3.0 (0.8–5.1)		4.8 (3.4–6.7)		4.8 (2.7–6.8)		1.5 (0.8–2.1)	
Female	0.2 (0.06–0.66)		1.1 (0.0–2.2)		2.0 (1.3–3.1)		1.7 (0.6–2.8)		0.6 (0.1–1.0)	
Other ^c	0.9 (0.42–2.02)	c	2.3 (0.4–4.3)	c	3.1 (1.8–5.2)	b,c	3.3 (1.2–5.3)	a,b	3.9 (1.2–12.2)	a
Male	1.7 (0.76–3.86)		3.6 (0.0–7.1)		5.5 (3.3–9.1)		5.5 (1.8–9.2)		5.7 (1.2–23.0)	
Female	0.1 (0.02–0.37)		1.1 (0.0–2.8)		0.8 (0.3–2.1)		1.0 (0.4–2.8)		1.9 (0.2–3.6)	
Age (in years)/grade										
13–14	0.6 (0.40–0.97)	a	NA		NA		NA		NA	
15–16	1.3 (1.06–1.66)	b	NA		NA		NA		NA	
17–18	3.9 (3.32–4.69)	c	NA		NA		NA		NA	
6th	NA		NA		NA		NA		1.2 (0.3–2.2)	a
7th	NA		NA		NA		NA		1.1 (0.5–1.6)	a
8th	NA		2.1 (1.5–2.7)	a	NA		NA		1.5 (0.8–2.1)	a
9th	NA		NA		3.4 (2.6–4.3)	a	2.4 (1.3–3.6)	a	NA	
10th	NA		3.9 (3.2–4.7)	b	4.8 (3.7–6.3)	a,c	3.6 (2.1–5.1)	b	NA	
11th	NA		NA		6.2 (5.1–7.6)	b	4.8 (3.2–6.4)	b	NA	
12th	NA		5.2 (4.0–6.3)	b	6.2 (4.6–8.4)	b,c	4.5 (2.5–6.5)	b	NA	

Table 3.1.55 Continued

Characteristic	NSDUH 13–18 years of age		MTF 8th, 10th, and 12th grades		YRBS 9th–12th grades		NYTS 9th–12 grades ^a		NYTS 6th–8th grades ^a	
	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b	% (95% CI)	SN ^b
Region										
Northeast	1.7 (1.28–2.27)	a	3.1 (1.3–5.0)	a,c	5.3 (2.7–10.3)	a,b	NA		NA	
Midwest	2.4 (1.95–2.92)	b	4.6 (3.0–6.2)	b	5.7 (4.3–7.4)	a	NA		NA	
South	2.3 (1.86–2.92)	c	4.1 (2.6–5.5)	a,b	6.3 (5.0–7.8)	a	NA		NA	
West	1.5 (0.98–2.26)	a,c	2.3 (0.7–3.9)	c	2.8 (1.9–4.0)	b	NA		NA	

Source: 2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data); 2010 MTF: University of Michigan, Institute for Social Research (unpublished data); 2009 YRBS: Centers for Disease Control and Prevention, Division of Adolescent and School Health (unpublished data); 2009 NYTS: Centers for Disease Control and Prevention (unpublished data).

Note: **CI** = confidence interval; **NA** = not applicable; **NR** = low precision, no estimate reported; **SN** = statistical note.

^aEstimates are based on responses to the questions, “During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?” and “During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?”

^bThis column represents the results of statistical tests that were run separately within each surveillance system (e.g., NSDUH). These tests were performed to examine differences in estimates within specific demographic subgroups (e.g., gender). Estimates with the same letter (e.g., a and a) are not statistically significantly different from one another ($p > 0.05$). Estimates with different letters (e.g., a and b) are, in contrast, significantly different from one another ($p < 0.05$).

^cIncludes Asians, American Indians or Alaska Natives, Native Hawaiians or Other Pacific Islanders, and persons of two or more races.

Table 3.1.56 Percentage distribution of grade in which male high school seniors first (if ever) used smokeless tobacco and cigarettes; Monitoring the Future (MTF) 2002–2007; United States

Grade in which first (if ever) tried cigarette	First tried smokeless tobacco in ≤6th grade (%)	First tried smokeless tobacco in 7th or 8th grade (%)	First tried smokeless tobacco in 9th grade (%)	First tried smokeless tobacco in 10th grade (%)	First tried smokeless tobacco in 11th grade (%)	First tried smokeless tobacco in 12th grade (%)	Never used smokeless tobacco (%)
≤6th	2.20 ^a	1.66 ^b	0.80 ^b	0.93 ^b	0.62 ^b	0.43 ^b	5.25 ^d
7th or 8th	0.76 ^c	2.73 ^a	1.88 ^b	1.28 ^b	0.92 ^b	0.49 ^b	7.05 ^d
9th	0.26 ^c	0.42 ^c	1.47 ^a	0.85 ^b	0.60 ^b	0.39 ^b	3.82 ^d
10th	0.10 ^c	0.16 ^c	0.57 ^c	0.90 ^a	0.60 ^b	0.34 ^b	3.13 ^d
11th	0.08 ^c	0.08 ^c	0.20 ^c	0.41 ^c	0.66 ^a	0.43 ^b	2.91 ^d
12th	0.01 ^c	0.02 ^c	0.11 ^c	0.08 ^c	0.27 ^c	0.51 ^a	2.16 ^d
Never used cigarettes	0.33 ^e	0.51 ^e	0.64 ^e	0.68 ^e	0.90 ^e	0.76 ^e	47.65 ^f

Source: 2002–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

^aTried both cigarettes and smokeless tobacco in the same grade.

^bTried both, cigarettes first.

^cTried both, smokeless tobacco first.

^dTried only cigarettes.

^eTried only smokeless tobacco.

^fTried neither cigarettes nor smokeless tobacco.

Table 3.1.57 Trends in the initiation of smokeless tobacco use over time among youth 12–17 years of age at risk for initiation—number (in thousands) and percentage of initiates—by gender and race/ethnicity; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

Gender and race/ethnicity	2006		2007		2008		2009		2010	
	N	% (95% CI)								
Overall	589	2.4 (2.2–2.7)	619	2.6 (2.3–2.9)	603	2.5 (2.3–2.8)	654	2.8 (2.5–3.1)	566	2.4 (2.2–2.7)
Gender										
Male	473	3.9 (3.5–4.4)	474	4.0 (3.5–4.6)	462	3.9 (3.5–4.4)	516	4.4 (4.0–5.0)	430	3.7 (3.3–4.3)
Female	116	1.0 (0.8–1.2)	146	1.2 (1.0–1.5)	146	1.2 (1.0–1.5)	137	1.2 (1.0–1.4)	136	1.2 (0.9–1.5)
Race/ethnicity										
White	474	3.3 (3.0–3.7)	519	3.7 (3.3–4.2)	495	3.6 (3.2–4.1)	519	3.9 (3.5–4.3)	4731	3.6 (3.2–4.1)
Black or African American	23	0.6 (0.3–1.2)	21	0.6 (0.3–1.2)	31	0.8 (0.5–1.5)	15	0.4 (0.2–0.9)	20	0.4 (0.3–1.0)
Hispanic or Latino	68	1.5 (1.1–2.2)	66	1.4 (0.9–2.2)	56	1.2 (0.8–1.8)	94	2.0 (1.4–2.8)	61	1.3 (0.9–1.8)

Source: 2006–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: At risk for initiation is defined as persons who did not use the substance(s) in their lifetime or used the substance(s) for the first time in the past year. **CI** = confidence interval; **N** = number (in 1,000s).

Table 3.1.58 Trends in the initiation of smokeless tobacco use over time among young adults 18–25 years of age at risk for initiation—number (in thousands) and percentage of initiates—by gender and race/ethnicity; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

Gender and race/ethnicity	2006		2007		2008		2009		2010	
	N	% (95% CI)								
Overall	567	2.1 (1.8–2.4)	597	2.2 (2.0–2.5)	577	2.2 (1.9–2.5)	658	2.4 (2.1–2.7)	645	2.3 (2.1–2.6)
Gender										
Male	456	3.9 (3.4–4.6)	457	3.9 (3.4–4.6)	435	3.8 (3.2–4.4)	487	4.2 (3.6–4.8)	480	4.0 (3.5–4.7)
Female	111	0.7 (0.6–1.0)	140	0.9 (0.7–1.2)	142	0.9 (0.7–1.2)	172	1.1 (0.9–1.4)	164	1.1 (0.8–1.3)
Race/ethnicity										
White	434	2.9 (2.5–3.3)	484	3.2 (2.8–3.7)	459	3.0 (2.6–3.5)	506	3.4 (2.9–3.9)	493	3.3 (2.9–3.8)
Black or African American	22	0.5 (0.3–0.9)	15	0.3 (0.2–0.7)	38	0.8 (0.5–1.5)	17	0.4 (0.2–0.7)	33	0.7 (0.4–1.2)
Hispanic or Latino	66	1.2 (0.7–2.0)	77	1.4 (1.0–2.1)	61	1.2 (0.8–1.8)	91	1.6 (1.1–2.4)	105	1.8 (1.2–2.5)

Source: 2006–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: At risk for initiation is defined as persons who did not use the substance(s) in their lifetime or used the substance(s) for the first time in the past year. **CI** = confidence interval; **N** = number (in 1,000s).

Table 3.1.59 Trends in the initiation of cigar smoking over time among youth 12–17 years of age at risk for initiation—number (in thousands) and percentage of initiates—by gender and race/ethnicity; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

Gender and race/ethnicity	2006		2007		2008		2009		2010	
	N	% (95% CI)	N	% (95% CI)						
Overall	1,212	5.2 (4.9–5.6)	1,144	5.0 (4.6–5.3)	1,108	4.8 (4.5–5.2)	1,076	4.8 (4.4–5.1)	933	4.1 (3.8–4.5)
Gender										
Male	711	6.2 (5.7–6.8)	705	6.2 (5.6–6.8)	645	5.6 (5.1–6.2)	686	6.1 (5.5–6.7)	538	4.8 (4.2–5.3)
Female	501	4.3 (3.8–4.8)	440	3.8 (3.3–4.3)	464	4.0 (3.6–4.6)	390	3.4 (3.0–3.9)	395	3.5 (3.1–4.0)
Race/ethnicity										
White	915	6.7 (6.2–7.2)	865	6.4 (5.9–6.9)	786	5.9 (5.4–6.4)	735	5.6 (5.1–6.2)	655	5.1 (4.6–5.6)
Black or African merican	89	2.5 (1.8–3.3)	80	2.2 (1.6–3.0)	99	2.8 (2.1–3.7)	77	2.2 (1.6–3.0)	88	2.6 (1.9–3.5)
Hispanic or Latino	163	3.9 (3.1–4.9)	153	3.6 (2.9–4.4)	180	4.1 (3.3–5.2)	214	4.8 (4.0–5.8)	161	3.5 (2.9–4.4)

Source: 2006–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: At risk for initiation is defined as persons who did not use the substance(s) in their lifetime or used the substance(s) for the first time in the past year.

CI = confidence interval; N = number (in 1,000s).

Table 3.1.60 Trends in the initiation of cigar smoking over time among young adults, 18–25 years of age at risk for initiation—number (in thousands) and percentage of initiates—by gender and race/ethnicity; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

Gender and race/ethnicity	2006		2007		2008		2009		2010	
	N	% (95% CI)	N	% (95% CI)	N	% (95% CI)	N	% (95% CI)	N	% (95% CI)
Overall	1,279	6.4 (5.9–7.0)	1,376	6.8 (6.3–7.4)	1,261	6.1 (5.6–6.7)	1,406	6.7 (6.2–7.3)	1,371	6.4 (5.8–7.0)
Gender										
Male	747	9.2 (8.2–10.2)	784	9.5 (8.5–10.5)	751	8.8 (7.9–9.8)	832	9.6 (8.7–10.7)	769	8.5 (7.5–9.7)
Female	532	4.5 (4.0–5.1)	591	4.9 (4.4–5.6)	510	4.2 (3.7–4.8)	574	4.7 (4.0–5.4)	602	4.8 (4.2–5.5)
Race/ethnicity										
White	995	9.3 (8.5–10.1)	965	8.7 (7.9–9.5)	911	8.1 (7.4–8.9)	984	8.7 (7.9–9.6)	934	8.2 (7.4–9.0)
Black or African American	77	2.3 (1.7–3.1)	104	3.0 (2.2–4.0)	102	2.8 (2.1–3.8)	135	3.6 (2.8–4.7)	79	2.1 (1.4–3.0)
Hispanic or Latino	121	2.9 (2.1–3.9)	202	5.0 (3.9–6.2)	162	4.0 (3.0–5.3)	183	4.2 (3.3–5.4)	250	5.4 (4.2–6.8)

Source: 2006–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: At risk for initiation is defined as persons who did not use the substance(s) in their lifetime or used the substance(s) for the first time in the past year.

CI = confidence interval; N = number (in 1,000s).

Table 3.1.61 Trends in the initiation of cigarettes, smokeless tobacco, and cigars over time among youth 12–17 years of age at risk for initiation—number (in thousands) and percentage of initiates—by gender and race/ethnicity; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

Gender and race/ethnicity	2006		2007		2008		2009		2010	
	N	% (95% CI)	N	% (95% CI)						
Overall	1,495	7.7 (7.2–8.2)	1,445	7.3 (6.8–7.9)	1,519	7.7 (7.2–8.3)	1,551	7.9 (7.4–8.5)	1,475	7.5 (7.0–8.0)
Gender										
Male	771	8.0 (7.3–8.7)	785	8.1 (7.3–8.9)	757	7.7 (7.0–8.4)	886	9.2 (8.4–10.0)	798	8.1 (7.4–8.9)
Female	724	7.5 (6.8–8.3)	660	6.7 (6.0–7.4)	762	7.8 (7.0–8.6)	665	6.8 (6.1–7.4)	677	6.8 (6.2–7.6)
Race/ethnicity										
White	1,013	9.0 (8.4–9.7)	993	8.8 (8.1–9.5)	988	8.7 (8.1–9.5)	996	8.9 (8.3–9.7)	962	8.6 (7.9–9.3)
Black or African American	171	5.4 (4.4–6.6)	150	4.7 (3.8–5.9)	176	5.6 (4.6–7.0)	146	4.7 (3.7–6.1)	156	5.2 (4.1–6.5)
Hispanic or Latino	250	7.0 (5.9–8.4)	252	6.6 (5.5–7.9)	278	7.3 (6.0–8.8)	337	8.7 (7.4–10.3)	283	7.0 (5.9–8.2)

Source: 2006–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: At risk for initiation is defined as persons who did not use the substance(s) in their lifetime or used the substance(s) for the first time in the past year.

CI = confidence interval; N = number (in 1,000s).

Table 3.1.62 Trends in the initiation of cigarettes, smokeless tobacco, or cigars over time among young adults 18–25 years of age at risk for initiation—number (in thousands) and percentage of initiates—by gender and race/ethnicity; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

Gender and race/ethnicity	2006		2007		2008		2009		2010	
	N	% (95% CI)								
Overall	1,136	11.0 (10.0–12.0)	1,103	10.2 (9.3–11.2)	1,199	10.9 (9.9–11.9)	1,223	10.7 (9.7–11.7)	1,212	10.2 (9.3–11.1)
Gender										
Male	587	13.2 (11.6–15.0)	550	12.3 (10.7–14.0)	654	13.8 (12.2–15.6)	625	13.2 (11.6–14.9)	651	13.1 (11.6–14.8)
Female	549	9.3 (8.1–10.5)	553	8.7 (7.7–9.9)	545	8.7 (7.6–9.9)	599	8.9 (7.8–10.2)	561	8.1 (7.1–9.1)
Race/ethnicity										
White	741	15.0 (13.6–16.6)	685	12.6 (11.2–14.0)	765	13.8 (12.4–15.4)	739	13.0 (11.6–14.6)	714	12.4 (11.1–13.9)
Black or African American	118	5.7 (4.3–7.6)	135	6.3 (4.9–8.1)	124	5.4 (4.1–7.2)	156	6.6 (5.2–8.5)	182	7.3 (5.7–9.2)
Hispanic or Latino	188	7.9 (6.0–10.3)	190	8.1 (6.4–10.3)	221	10.0 (7.8–12.8)	243	10.1 (7.9–12.8)	238	9.0 (7.3–11.2)

Source: 2006–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: At risk for initiation is defined as persons who did not use the substance(s) in their lifetime or used the substance(s) for the first time in the past year.

CI = confidence interval; N = number (in 1,000s).

Table 3.1.63 Percentage of youth 13–15 years of age who have ever smoked cigarettes, who first tried smoking when younger than 10 years of age, and among never smokers who are susceptible to starting to smoke within the next year, by gender; Global Youth Tobacco Survey 1999–2009; worldwide

WHO region and WHO member state, territory, or special administrative region, and year	% Ever smoked cigarettes (ever smokers)			% Ever smokers who first tried smoking at <10 years of age			% Never smokers susceptible to starting to smoke within the next year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Africa	11.5 (11.0–11.9)	16.6 (15.9–17.2)	7.8 (7.4–8.3)	26.8 (26.7–27.9)	28.3 (27.1–29.5)	27.7 (25.6–29.8)	10.1 (9.7–10.6)	11.8 (11.2–12.4)	9.2 (8.7–9.7)
Algeria, 2007 (Constantine)	20.2 (16.4–24.5)	40.2 (34.4–46.3)	6.2 (3.8–10.1)	32.8 (29.2–36.7)	31.5 (27.5–35.8)	42.4 (28.1–58.1)	14.9 (12.8–17.3)	22.7 (17.4–29.0)	11.5 (9.5–13.8)
Benin, 2003 (Atlantique Littoral)	15.4 (12.0–19.6)	22.8 (17.6–29.0)	5.3 (2.8–9.6)	18.9 (11.0–30.5)	21.9 (13.7–33.2)	4.4 (0.6–27.2)	13.1 (10.3–16.6)	12.4 (9.6–15.8)	13.7 (9.7–18.9)
Botswana, 2008	15.5 (12.2–19.6)	21.3 (16.7–26.8)	11.1 (7.6–15.9)	32.4 (26.9–38.5)	30.8 (23.6–39.1)	36.7 (25.2–50.0)	27.1 (22.8–32.0)	33.3 (28.1–38.9)	22.5 (18.0–27.8)
Burkina Faso, 2006 (Ouagadougou)	18.8 (16.7–21.2)	29.5 (25.1–34.3)	8.1 (6.3–10.2)	18.0 (13.1–24.3)	16.5 (11.9–22.4)	25.2 (12.7–43.8)	9.4 (6.8–12.7)	15.0 (10.7–20.6)	5.1 (3.5–7.4)
Burundi, 2008	19.1 (14.6–24.5)	23.9 (18.4–30.3)	14.1 (10.3–19.0)	53.3 (41.2–65.1)	47.9 (31.2–65.0)	65.1 (46.1–80.2)	17.8 (12.2–25.1)	20.1 (14.5–27.1)	16.2 (10.3–24.6)
Cameroon, 2008 (Yaoude)	15.0 (11.9–18.7)	21.7 (17.9–26.0)	10.1 (6.4–15.5)	33.1 (27.8–38.8)	31.4 (24.7–39.0)	35.9 (28.1–44.6)	10.2 (8.0–12.8)	13.0 (9.9–16.9)	7.9 (5.9–10.5)
Cape Verde, 2007	10.2 (7.5–13.7)	12.3 (8.4–17.6)	7.8 (5.2–11.7)	31.5 (21.9–43.1)	38.6 (24.5–54.9)	24.9 (13.9–40.6)	15.3 (12.4–18.8)	16.4 (12.1–21.9)	14.6 (11.6–18.3)
Central African Republic, 2008 (Bangui)	27.6 (12.6–50.1)	23.8 (19.1–29.4)	30.4 (8.4–67.6)	14.1 (8.2–23.1)	17.3 (9.3–29.8)	NR	17.0 (13.0–22.1)	16.1 (11.7–21.8)	18.3 (12.6–25.8)
Comoros, 2007	26.5 (21.9–31.7)	39.3 (28.5–51.3)	17.2 (13.8–21.3)	25.0 (17.9–33.8)	24.9 (16.8–35.2)	22.7 (14.4–33.9)	9.9 (6.8–14.2)	11.3 (6.3–19.4)	9.5 (6.1–14.4)
Congo, 2006	22.0 (17.3–27.5)	26.6 (20.6–33.6)	17.2 (12.1–23.8)	20.9 (15.1–28.1)	20.4 (13.1–30.3)	23.8 (14.7–36.1)	15.1 (12.0–18.8)	17.7 (12.7–24.0)	12.9 (9.4–17.3)
Côte D'Ivoire, 2003 (Abidjan)	35.4 (31.8–39.1)	50.0 (45.1–54.9)	18.5 (16.5–20.6)	12.0 (8.6–16.4)	11.4 (7.5–16.9)	13.6 (8.6–20.9)	11.2 (9.3–13.4)	13.0 (9.9–16.9)	9.9 (7.8–12.4)
Democratic Republic of the Congo, 2008 (Kinshasa)	19.5 (15.4–24.5)	27.3 (19.5–36.8)	9.1 (6.4–12.8)	27.9 (18.1–40.3)	29.0 (16.5–45.6)	NR	30.1 (17.6–46.5)	35.3 (19.3–55.4)	25.2 (14.6–39.8)
Equatorial Guinea, 2008	15.9 (13.2–19.1)	20.5 (16.6–25.1)	10.5 (7.1–15.4)	23.8 (17.5–31.5)	17.4 (10.7–27.1)	36.3 (21.9–53.8)	16.1 (11.1–22.8)	17.2 (12.1–23.8)	15.4 (9.9–23.2)

Table 3.1.63 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Ever smoked cigarettes (ever smokers)			% Ever smokers who first tried smoking at <10 years of age			% Never smokers susceptible to starting to smoke within the next year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Eritrea, 2006	3.3 (2.5–4.3)	4.3 (3.2–5.7)	1.4 (0.8–2.5)	21.4 (11.3–36.9)	19.2 (9.9–34.2)	37.2 (20.1–58.2)	12.8 (11.1–14.8)	15.1 (12.9–17.7)	9.5 (7.7–11.7)
Ethiopia, 2003 (Addis Ababa)	7.6 (4.4–12.8)	10.8 (5.4–20.4)	4.6 (3.0–7.1)	12.7 (4.6–30.7)	6.3 (1.3–26.0) NR	28.9 (8.4–64.3)	12.0 (10.0–14.3)	12.8 (10.1–16.0)	11.0 (8.8–13.6)
Gambia, 2008 (Banjul)	24.5 (19.4–30.5)	28.1 (22.1–34.9)	20.3 (14.6–27.5)	46.4 (38.3–54.8)	44.0 (34.2–54.3)	44.8 (30.9–59.5)	21.5 (18.0–25.4)	21.4 (17.2–26.4)	19.7 (15.9–24.3)
Ghana, 2006	9.2 (7.8–10.9)	9.4 (7.5–11.7)	8.0 (6.1–10.3)	44.4 (34.0–55.2)	35.1 (25.9–45.6)	55.9 (37.3–72.9)	14.2 (11.1–18.1)	13.8 (10.5–17.9)	14.1 (11.1–17.8)
Guinea, 2008	13.3 (10.0–17.5)	19.1 (13.6–26.1)	6.4 (4.4–9.1)	31.2 (20.0–45.3)	29.0 (17.5–43.9)	NR	16.5 (13.3–20.2)	15.4 (11.7–19.9)	17.1 (12.9–22.4)
Guinea-Bissau, 2008 (Bissau)	5.4 (4.4–6.6)	7.7 (6.0–9.9)	3.0 (1.8–5.0)	6.0 (1.5–20.6)	3.5 (0.8–14.8)	NR	24.5 (20.0–29.6)	25.4 (20.7–30.7)	23.7 (18.1–30.5)
Kenya, 2007	21.2 (15.5–28.4)	29.5 (22.2–38.1)	13.5 (10.5–17.2)	38.4 (32.6–44.5)	36.7 (34.0–39.4)	43.0 (28.5–58.8)	19.5 (16.0–23.5)	19.8 (13.9–27.5)	19.1 (14.6–24.8)
Lesotho, 2008	22.3 (18.5–26.6)	29.0 (24.7–33.7)	16.7 (12.3–22.1)	31.8 (24.9–39.6)	20.7 (12.0–33.4)	41.0 (25.7–58.2)	33.7 (27.4–40.6)	33.7 (25.6–43.0)	33.1 (26.4–40.5)
Liberia, 2008 (Monrovia)	8.3 (5.6–12.0)	8.4 (5.7–12.3)	7.3 (4.3–12.3)	NR	NR	NR	4.8 (2.4–9.3)	6.4 (2.7–14.1)	3.4 (1.8–6.5)
Madagascar, 2008	27.6 (21.4–34.7)	42.3 (32.3–53.0)	15.6 (10.8–22.1)	14.6 (11.0–19.1)	13.4 (8.8–19.9)	17.1 (8.5–31.5)	12.5 (8.7–17.7)	12.3 (7.3–20.0)	12.5 (8.0–19.2)
Malawi, 2005	7.8 (5.4–11.0)	10.2 (7.4–13.8)	5.6 (3.2–9.6)	55.3 (34.1–74.7)	54.7 (38.2–70.2)	56.4 (25.8–82.8)	2.8 (2.0–3.9)	3.6 (2.2–5.7)	2.1 (1.1–3.8)
Mali, 2008	29.0 (24.0–34.6)	44.6 (36.0–53.6)	10.1 (6.6–15.2)	22.9 (15.3–32.9)	24.3 (16.0–35.0)	12.6 (4.7–29.6)	5.6 (3.4–9.1)	8.6 (4.5–15.9)	3.4 (1.9–6.2)
Mauritania, 2006	29.2 (25.1–33.7)	32.4 (28.2–36.9)	24.9 (19.5–31.2)	43.7 (35.9–51.9)	44.7 (37.4–52.1)	43.4 (32.5–54.9)	19.9 (16.8–23.4)	18.8 (15.6–22.5)	20.6 (16.2–26.0)
Mauritius, 2008	28.4 (22.7–34.7)	37.7 (29.5–46.6)	19.9 (14.4–26.9)	13.4 (8.9–19.8)	12.4 (7.3–20.1)	15.0 (7.3–28.3)	11.2 (8.8–14.3)	12.1 (9.2–15.8)	10.7 (6.3–17.6)
Mozambique, 2007 (Maputo City)	6.3 (4.8–8.2)	9.0 (6.1–13.1)	3.6 (2.2–5.7)	51.2 (33.8–68.4)	58.2 (39.5–74.8)	NR	22.9 (19.5–26.8)	24.1 (19.6–29.2)	21.5 (16.7–27.1)
Namibia, 2004	38.3 (34.2–42.5)	42.3 (37.6–47.2)	34.9 (30.2–40.0)	23.0 (20.3–26.0)	23.1 (19.6–27.1)	23.1 (18.2–28.8)	36.4 (32.2–40.7)	37.4 (31.3–44.0)	35.5 (30.8–40.5)

Table 3.1.63 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Ever smoked cigarettes (ever smokers)			% Ever smokers who first tried smoking at <10 years of age			% Never smokers susceptible to starting to smoke within the next year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Niger, 2006	14.9 (12.0–18.5)	26.2 (20.6–32.6)	4.0 (2.4–6.7)	18.8 (10.8–30.6)	16.0 (7.8–29.9)	48.7 (19.6–78.7)	11.5 (6.7–19.0)	15.6 (8.3–27.3)	8.1 (5.0–13.0)
Nigeria, 2008 (Cross River State)	13.4 (8.4–20.7)	13.9 (7.8–23.6)	9.9 (5.6–16.9)	NR	NR	NR	10.4 (6.1–17.3)	12.9 (6.6–23.7)	8.7 (3.7–18.9)
Rwanda, 2008	16.3 (12.7–20.6)	23.5 (19.0–28.6)	9.5 (6.6–13.3)	40.9 (30.1–52.8)	40.5 (29.8–52.2)	NR	10.0 (7.5–13.3)	12.0 (8.6–16.5)	7.8 (5.3–11.4)
Senegal, 2007	12.8 (8.5–18.9)	20.7 (13.8–29.9)	5.2 (3.1–8.7)	25.9 (18.3–35.2)	24.3 (18.2–31.5)	38.9 (19.6–62.4)	31.0 (20.0–44.6)	37.2 (24.4–52.2)	27.7 (17.6–40.8)
Seychelles, 2007	48.4 (42.4–54.4)	54.1 (46.8–61.3)	42.4 (35.2–49.9)	19.4 (15.1–24.6)	18.9 (14.1–24.9)	20.5 (14.7–27.9)	15.4 (12.1–19.4)	14.4 (9.5–21.2)	16.2 (12.4–20.9)
Sierra Leone, 2008 (Western Area)	15.5 (11.7–20.2)	19.4 (13.4–27.2)	11.9 (7.9–17.6)	32.1 (18.5–49.6)	19.0 (8.0–38.8)	48.3 (32.9–64.1)	15.5 (12.0–19.8)	17.5 (10.7–27.2)	13.6 (11.1–16.6)
South Africa, 2008	30.7 (27.1–34.6)	38.2 (34.3–42.3)	25.3 (21.1–30.1)	19.2 (15.4–23.7)	20.3 (15.3–26.4)	18.0 (13.5–23.6)	15.4 (13.3–17.7)	17.4 (14.5–20.7)	14.3 (11.8–17.2)
Swaziland, 2005	13.3 (11.9–14.9)	19.8 (17.4–22.3)	9.0 (7.7–10.5)	33.4 (30.4–36.6)	36.1 (31.2–41.3)	29.1 (24.0–34.9)	8.0 (7.0–9.0)	9.1 (7.4–11.0)	7.4 (6.5–8.3)
Togo, 2007	12.6 (9.4–16.8)	17.4 (12.3–24.0)	5.4 (3.7–7.9)	33.3 (24.2–43.9)	31.2 (21.4–43.1)	NR	9.1 (6.7–12.2)	9.6 (6.6–13.6)	8.2 (5.9–11.2)
Uganda, 2007	15.6 (13.1–18.4)	19.2 (15.7–23.3)	11.2 (9.3–13.6)	43.4 (36.9–50.2)	42.7 (35.1–50.8)	44.7 (33.2–56.9)	6.7 (5.4–8.3)	8.1 (6.3–10.4)	5.1 (3.5–7.5)
United Republic of Tanzania, 2008 (Arusha)	6.2 (3.6–10.6)	7.5 (3.9–13.9)	4.9 (2.5–9.1)	31.2 (17.5–49.2)	NR	NR	3.0 (2.0–4.5)	3.3 (2.3–4.7)	2.8 (1.4–5.8)
Zambia, 2007 (Lusaka)	22.3 (17.0–28.8)	25.3 (19.9–31.5)	20.4 (14.4–28.0)	43.7 (34.9–53.0)	48.2 (37.8–58.7)	39.5 (26.7–54.0)	22.6 (17.7–28.3)	21.1 (15.3–28.3)	23.4 (17.7–30.3)
Zimbabwe, 2008 (Harare)	10.8 (8.4–13.8)	13.2 (9.3–18.4)	8.1 (5.5–11.7)	32.3 (20.1–47.5)	40.1 (29.7–51.5)	NR	30.0 (24.8–35.8)	29.5 (26.0–33.4)	30.4 (22.7–39.5)
The Americas	34.3 (33.7–35.0)	37.6 (36.8–38.5)	31.6 (30.8– 2.4)	16.1 (15.4–16.8)	18.2 (17.2–19.2)	12.9 (12.0–13.8)	17.0 (16.5–17.6)	17.1 (16.3–17.8)	16.5 (15.9–17.2)
Antigua & Barbuda, 2004	19.2 (16.5–22.2)	20.4 (16.4–25.0)	17.6 (14.0–21.8)	26.0 (20.2–32.7)	25.6 (17.6–35.7)	25.8 (17.1–36.8)	11.5 (9.5–13.9)	12.6 (9.4–16.7)	9.6 (7.5–12.1)
Argentina, 2007	52.0 (49.5–54.5)	48.9 (45.6–52.2)	54.8 (50.6–58.9)	8.7 (6.9–10.8)	10.9 (7.9–14.8)	6.8 (5.4–8.7)	28.1 (25.2–31.1)	24.3 (20.8–28.1)	31.6 (28.3–35.0)

Table 3.1.63 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Ever smoked cigarettes (ever smokers)			% Ever smokers who first tried smoking at <10 years of age			% Never smokers susceptible to starting to smoke within the next year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Bahamas, 2004	25.3 (21.2–29.9)	27.7 (22.5–33.5)	23.0 (17.1–30.1)	34.3 (27.3–42.2)	37.5 (27.7–48.5)	30.8 (20.4–43.7)	20.2 (16.9–23.9)	21.1 (16.2–27.1)	19.1 (13.7–25.9)
Barbados, 2007	32.4 (28.3–36.9)	40.2 (34.8–45.8)	25.3 (19.7–31.9)	32.0 (26.1–38.5)	33.1 (25.1–42.2)	29.3 (21.8–38.1)	21.5 (18.0–25.5)	20.4 (15.7–26.0)	22.4 (17.4–28.2)
Belize, 2008	26.6 (22.1–31.7)	36.2 (28.8–44.3)	18.6 (15.4–22.4)	22.1 (16.3–29.3)	24.2 (17.4–32.7)	18.6 (10.1–31.6)	21.3 (18.6–24.3)	25.1 (20.6–30.2)	18.8 (14.5–23.9)
Bolivia, 2003 (La Paz)	41.3 (37.7–45.1)	46.5 (41.6–51.4)	35.8 (32.6–39.3)	15.4 (13.4–17.6)	15.1 (12.9–17.7)	15.6 (12.0–20.1)	25.0 (22.0–28.3)	27.0 (22.6–31.9)	23.2 (18.8–28.2)
Brazil, 2005 (Rio de Janeiro)	34.5 (30.9–38.3)	29.5 (23.7–36.2)	36.5 (30.9–42.4)	14.2 (10.1–19.7)	14.5 (9.5–21.6)	13.5 (7.5–23.2)	17.9 (15.2–21.0)	11.0 (7.9–15.0)	22.7 (19.7–26.0)
British Virgin Islands, 2001 ^a	21.9 (16.2–28.8)	26.2 (18.3–35.9)	18.2 (12.5–25.9)	27.1 (17.2–39.9)	23.3 (10.9–42.9)	31.3 (18.3–48.0)	9.9 (6.8–14.0)	9.1 (4.7–17.0)	10.1 (6.5–15.3)
Chile, 2008 (Santiago)	66.2 (62.6–69.7)	60.2 (55.4–64.8)	72.2 (68.4–75.6)	16.9 (15.1–18.8)	19.1 (16.4–22.1)	15.0 (12.3–18.0)	28.5 (25.6–31.6)	27.3 (23.1–31.9)	30.0 (26.0–34.4)
Colombia, 2007 (Bogota)	57.1 (52.3–61.7)	58.7 (54.1–63.1)	55.6 (48.1–62.8)	13.5 (10.4–17.4)	17.2 (11.0–25.8)	10.5 (7.0–15.3)	32.0 (28.7–35.5)	31.9 (25.9–38.6)	31.8 (27.5–36.5)
Costa Rica, 2008	26.4 (23.0–30.1)	26.5 (22.5–30.8)	26.2 (22.2–30.7)	13.2 (10.4–16.7)	15.5 (11.5–20.5)	10.8 (7.8–14.7)	17.4 (15.4–19.5)	16.5 (14.0–19.3)	18.3 (15.2–21.8)
Cuba, 2004 (Havana)	25.5 (20.7–30.9)	27.2 (21.7–33.4)	23.6 (18.5–29.7)	11.3 (7.0–17.7)	16.0 (9.5–25.7)	6.2 (3.3–11.3)	9.5 (7.1–12.6)	7.3 (4.8–10.8)	11.7 (8.5–16.0)
Dominica, 2004	32.4 (27.9–37.3)	36.8 (30.2–44.0)	26.2 (21.7–31.3)	27.7 (22.2–33.9)	29.0 (21.3–38.1)	25.8 (18.6–34.5)	13.8 (11.3–16.7)	15.8 (11.9–20.7)	11.5 (8.5–15.4)
Dominican Republic, 2004	21.4 (18.5–24.6)	22.3 (19.3–25.7)	20.4 (16.8–24.4)	24.9 (18.4–32.7)	24.7 (16.9–34.5)	24.4 (18.3–31.7)	14.1 (11.0–17.9)	14.4 (11.2–18.3)	13.8 (10.2–18.4)
Ecuador, 2007 (Quito)	56.0 (50.1–61.7)	62.6 (57.0–67.9)	50.2 (41.2–59.3)	16.6 (13.4–20.4)	18.4 (13.4–24.7)	14.7 (12.3–17.5)	28.0 (23.4–33.2)	26.1 (21.7–31.1)	28.8 (22.6–36.0)
El Salvador, 2003	34.5 (25.9–44.3)	44.4 (33.5–55.8)	27.5 (19.7–36.9)	17.1 (13.2–21.7)	19.3 (15.6–23.7)	14.6 (9.4–22.0)	10.7 (6.3–17.5)	11.8 (6.1–21.8)	10.0 (6.0–16.4)
Grenada, 2004	33.5 (29.3–38.0)	36.5 (30.6–42.9)	30.8 (26.6–35.3)	32.8 (26.9–39.3)	36.4 (28.6–45.0)	28.4 (21.2–36.9)	10.9 (8.6–13.6)	11.7 (8.4–16.1)	10.2 (7.5–13.8)
Guatemala, 2008	32.8 (28.9–37.1)	39.2 (33.4–45.2)	26.4 (22.6–30.6)	16.8 (14.6–19.3)	17.6 (15.2–20.4)	15.2 (10.7–21.2)	14.8 (12.3–17.6)	16.4 (13.3–20.1)	13.7 (11.1–16.7)

Table 3.1.63 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Ever smoked cigarettes (ever smokers)			% Ever smokers who first tried smoking at <10 years of age			% Never smokers susceptible to starting to smoke within the next year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Guyana, 2004	27.7 (23.8–31.9)	34.7 (28.8–41.2)	20.4 (15.1–27.0)	33.8 (26.4–42.0)	32.2 (24.0–41.6)	36.7 (22.8–53.3)	9.9 (7.2–13.4)	11.5 (7.3–17.7)	8.9 (5.8–13.5)
Haiti, 2005 (Port au Prince)	30.9 (27.1–35.1)	34.2 (31.5–37.0)	27.9 (21.8–35.1)	19.3 (14.4–25.5)	13.7 (9.7–18.9)	23.6 (14.5–36.0)	24.9 (16.7–35.3)	23.7 (14.1–37.1)	26.8 (19.2–36.0)
Honduras, 2003 (Tegucigalpa)	46.3 (39.7–53.0)	47.3 (39.1–55.6)	44.8 (38.4–51.3)	16.5 (13.8–19.8)	19.7 (14.1–26.9)	14.5 (10.3–20.0)	25.9 (20.8–31.6)	19.7 (13.6–27.7)	30.7 (23.1–39.6)
Jamaica, 2006	35.1 (29.4–41.2)	40.8 (33.5–48.5)	29.7 (23.4–36.7)	29.5 (23.4–36.5)	25.6 (18.8–33.9)	34.8 (25.2–45.8)	18.7 (14.4–23.8)	21.8 (15.7–29.4)	16.3 (12.5–21.0)
Mexico, 2006 (Mexico City)	60.2 (56.8–63.6)	61.7 (57.8–65.4)	58.2 (54.0–62.3)	NA	NA	NA	31.5 (28.2–35.1)	31.5 (26.6–36.8)	29.6 (24.5–35.2)
Montserrat, 2000 ^a	20.6	20.7	18.5	NR	NR	NR	13.1	15.6	11.3
Nicaragua, 2003 (Centro Managua)	51.2 (44.6–57.8)	55.9 (48.2–63.3)	47.4 (39.2–55.7)	19.5 (14.7–25.5)	21.5 (16.0–28.2)	17.4 (10.6–27.1)	21.3 (17.0–26.3)	27.0 (20.1–35.3)	17.1 (12.3–23.4)
Panama, 2008	17.1 (14.5–20.0)	21.7 (18.4–25.4)	13.0 (9.8–16.9)	16.2 (12.7–20.4)	15.9 (10.9–22.7)	17.0 (12.1–23.4)	10.0 (8.8–11.4)	12.3 (10.6–14.3)	8.3 (6.5–10.4)
Paraguay, 2008	21.6 (19.2–24.3)	26.0 (22.5–30.0)	17.6 (14.7–20.8)	17.1 (12.9–22.4)	17.5 (12.3–24.4)	16.5 (12.2–22.0)	14.2 (12.1–16.7)	15.4 (12.4–18.9)	13.3 (11.3–15.7)
Peru, 2007 (Lima)	45.9 (40.6–51.2)	44.6 (37.2–52.2)	46.1 (41.0–51.3)	9.2 (6.2–13.4)	10.1 (5.7–17.3)	8.7 (5.2–14.2)	26.2 (22.2–30.7)	27.6 (22.7–33.1)	25.2 (20.7–30.3)
Puerto Rico, 2004 ^b	24.0 (18.9–30.1)	23.1 (16.2–31.8)	24.9 (14.5–39.4)	NA	NA	NA	24.2 (19.3–29.9)	25.6 (19.6–32.5)	23.2 (17.7–30.0)
Saint Kitts & Nevis, 2002	17.3 (14.1–21.2)	24.7 (18.7–31.8)	11.5 (8.4–15.5)	39.3 (28.8–51.0)	36.5 (23.8–51.5)	37.8 (20.0–59.7)	15.6 (12.5–19.3)	19.2 (13.8–25.9)	12.8 (9.7–16.6)
Saint Lucia, 2007	33.5 (29.6–37.7)	44.6 (37.4–52.0)	25.5 (21.7–29.7)	24.9 (18.9–32.0)	22.9 (14.9–33.5)	26.7 (19.7–35.1)	16.8 (13.6–20.7)	17.1 (11.8–24.2)	16.1 (12.4–20.7)
Saint Vincent & the Grenadines, 2007	32.4 (27.7–37.4)	37.7 (30.4–45.6)	27.9 (23.1–33.3)	28.8 (22.6–36.0)	31.9 (23.7–41.4)	25.4 (18.4–33.8)	19.7 (16.8–23.0)	22.8 (17.9–28.6)	17.4 (14.2–21.2)
Suriname, 2004	37.4 (33.8–41.1)	47.8 (42.0–53.7)	27.8 (23.0–33.2)	27.5 (20.6–35.6)	26.0 (18.5–35.2)	30.3 (20.5–42.2)	18.7 (14.8–23.4)	18.8 (13.0–26.5)	18.7 (14.9–23.3)
Trinidad & Tobago, 2007	34.4 (28.9–40.4)	37.3 (30.4–44.6)	29.9 (23.5–37.1)	26.3 (22.4–30.5)	26.0 (21.1–31.4)	24.9 (18.4–32.8)	14.4 (11.6–17.7)	11.9 (8.5–16.3)	15.8 (11.9–20.6)

Table 3.1.63 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Ever smoked cigarettes (ever smokers)			% Ever smokers who first tried smoking at <10 years of age			% Never smokers susceptible to starting to smoke within the next year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
U.S. Virgin Islands, 2004 ^b	25.0 (22.0–28.1)	23.3 (19.8–27.2)	26.2 (22.1–30.9)	NA	NA	NA	19.3 (16.6–22.2)	22.2 (18.6–26.2)	16.2 (12.8–20.5)
Uruguay, 2007	48.9 (45.9–51.8)	45.0 (41.1–48.9)	51.9 (48.1–55.6)	8.8 (7.1–11.0)	12.0 (8.7–16.2)	6.7 (4.8–9.4)	25.8 (23.0–28.8)	17.8 (15.0–21.0)	33.0 (28.9–37.5)
Venezuela, 1999	21.9 (18.8–25.4)	24.1 (19.5–29.4)	20.3 (17.5–23.5)	12.1 (8.7–16.4)	13.2 (8.7–19.6)	11.2 (7.6–16.3)	12.5 (10.5–14.8)	10.9 (8.4–14.0)	13.6 (10.7–17.1)
Eastern Mediterranean	17.8 (16.9–18.7)	25.5 (24.4–26.5)	10.4 (9.7–11.1)	24.4 (23.3–25.6)	24.0 (22.8–25.2)	22.9 (20.8–25.1)	15.3 (14.7–15.8)	16.6 (15.8–17.4)	14.4 (13.7–15.1)
Afghanistan, 2004 (Kabul)	22.7 (14.3–34.1)	27.4 (17.1–40.9)	15.5 (6.0–34.8)	23.3 (12.6–39.2)	20.7 (10.2–37.5)	37.6 (7.8–81.0)	8.8 (5.6–13.6)	9.0 (4.8–16.2)	8.9 (5.0–15.4)
Bahrain, 2002	23.9 (19.5–29.1)	34.2 (28.7–40.1)	13.7 (9.9–18.7)	20.4 (15.8–25.9)	22.0 (16.5–28.6)	15.3 (9.1–24.7)	23.1 (19.6–27.1)	26.0 (19.7–33.4)	20.9 (17.5–24.7)
Djibouti, 2003	12.5 (9.0–17.1)	16.7 (11.9–23.1)	6.8 (3.9–11.5)	20.1 (12.3–31.1)	17.6 (10.7–27.8)	28.8 (13.1–52.1)	19.7 (16.6–23.2)	22.3 (17.9–27.4)	16.7 (12.4–22.1)
Egypt, 2005	13.3 (9.8–17.9)	19.0 (14.6–24.5)	5.6 (4.2–7.3)	29.8 (24.6–35.5)	28.2 (23.1–33.9)	41.7 (31.6–52.5)	18.3 (15.7–21.3)	22.3 (18.7–26.5)	14.1 (10.9–18.0)
Gaza Strip, 2008 ^c	14.2 (9.8–20.1)	20.9 (14.8–28.5)	6.8 (5.3–8.8)	35.0 (27.8–43.0)	32.9 (26.5–39.9)	NR	12.9 (9.3–17.7)	14.7 (10.2–20.8)	10.1 (6.8–14.8)
Iran, 2007	17.5 (12.8–23.4)	23.7 (16.1–33.5)	11.0 (7.2–16.3)	36.1 (27.1–46.1)	40.7 (32.7–49.3)	27.0 (15.1–43.5)	8.7 (7.0–10.6)	10.3 (7.9–13.4)	7.0 (4.9–9.9)
Iraq, 2008 (Baghdad)	7.4 (5.2–10.6)	7.4 (5.1–10.7)	6.8 (3.6–12.3)	23.3 (12.6–39.2)	23.8 (10.9–44.4)	21.8 (10.9–38.7)	13.0 (10.1–16.5)	13.7 (10.0–18.5)	11.8 (9.3–14.8)
Jordan, 2008 ^c	32.6 (23.5–43.3)	43.9 (34.4–53.8)	20.0 (14.9–26.4)	18.5 (13.2–25.3)	16.2 (10.4–24.3)	19.5 (12.9–28.4)	18.3 (15.3–21.7)	19.4 (12.9–28.1)	16.8 (15.2–18.6)
Kuwait, 2005	25.9 (21.0–31.6)	36.7 (32.0–41.8)	16.3 (13.4–19.8)	21.5 (18.3–25.0)	18.6 (15.9–21.7)	24.1 (17.4–32.4)	17.3 (15.3–19.4)	19.5 (16.2–23.2)	15.9 (13.8–18.3)
Lebanon, 2008 ^c	22.1 (15.8–29.9)	33.0 (26.8–39.9)	12.9 (8.7–18.8)	20.9 (13.4–31.0)	21.7 (12.9–34.2)	19.0 (11.0–30.7)	15.6 (12.6–19.2)	18.2 (13.6–24.0)	13.8 (10.2–18.5)
Libya, 2007	13.1 (9.7–17.4)	19.9 (14.4–26.8)	5.8 (3.5–9.4)	36.9 (25.6–49.7)	37.9 (23.8–54.5)	32.7 (13.1–61.1)	18.5 (15.2–22.3)	22.1 (18.0–26.9)	15.0 (11.5–19.3)
Morocco, 2006	9.5 (7.3–12.2)	13.6 (10.4–17.5)	4.6 (2.9–7.2)	27.3 (18.0–39.2)	27.3 (17.1–40.5)	28.5 (14.1–49.2)	NA	NA	NA

Table 3.1.63 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Ever smoked cigarettes (ever smokers)			% Ever smokers who first tried smoking at <10 years of age			% Never smokers susceptible to starting to smoke within the next year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Oman, 2007	10.0 (6.7–14.6)	14.5 (9.5–21.5)	5.7 (3.3–9.4)	32.5 (19.3–49.3)	28.8 (18.3–42.2)	41.5 (14.5–74.8)	12.5 (9.3–16.5)	14.2 (10.6–18.7)	10.7 (6.6–16.7)
Pakistan, 2003 (Islamabad)	7.1 (4.5–10.9)	10.8 (6.9–16.6)	3.8 (1.7–8.2)	35.9 (27.1–45.7)	35.6 (27.4–44.9)	32.1 (11.7–62.9)	9.2 (6.7–12.5)	13.3 (9.5–18.4)	5.9 (3.5–9.8)
Qatar, 2007	20.7 (17.2–24.7)	29.9 (24.3–36.2)	15.5 (11.5–20.6)	20.9 (14.8–28.8)	18.7 (11.6–28.9)	22.2 (14.5–32.5)	13.1 (10.4–16.4)	19.0 (12.5–27.8)	10.4 (7.8–13.9)
Saudi Arabia, 2007	26.1 (22.9–29.7)	35.8 (30.2–41.8)	16.1 (12.8–20.1)	21.6 (17.9–25.9)	24.3 (19.8–29.4)	16.5 (11.7–22.7)	19.2 (17.1–21.5)	19.9 (17.4–22.7)	17.3 (14.1–20.9)
Somalia, 2007 (Somaliland)	12.6 (9.5–16.6)	11.0 (8.3–14.4)	10.4 (5.1–20.0)	46.2 (20.1–74.5)	46.8 (17.0–79.1)	29.4 (6.2–72.3)NR	24.1 (17.8–31.8)	25.1 (18.1–33.8)	22.2 (15.4–30.8)
Sudan, 2005	19.3 (13.7–26.6)	26.5 (19.5–34.9)	12.6 (8.9–17.6)	37.3 (32.5–42.5)	32.6 (28.0–37.6)	49.3 (37.5–61.2)	13.9 (10.5–18.3)	14.4 (12.4–16.7)	13.2 (8.4–20.3)
Syrian Arab Republic, 2008 ^c	29.6 (23.3–36.7)	39.5 (33.0–46.5)	18.5 (12.7–26.1)	17.1 (12.9–22.4)	18.4 (13.7–24.2)	15.1 (8.7–24.8)	20.7 (16.9–25.1)	21.7 (16.0–28.8)	19.7 (16.1–23.8)
Tunisia, 2007	24.6 (21.4–28.1)	39.8 (33.4–46.5)	9.5 (6.8–13.3)	24.3 (18.6–31.0)	25.2 (19.5–31.7)	16.8 (7.8–32.5)	19.9 (16.5–23.9)	26.7 (21.9–32.1)	15.5 (11.8–20.3)
United Arab Emirates, 2005	22.6 (20.1–25.3)	30.7 (27.9–33.7)	14.2 (12.2–16.6)	28.0 (25.4–30.8)	26.5 (23.5–29.6)	31.4 (25.8–37.6)	12.5 (11.4–13.7)	14.3 (13.1–15.7)	11.1 (9.6–12.8)
West Bank, 2008 ^c	41.1 (30.2–53.0)	58.5 (52.9–63.9)	27.6 (22.5–33.5)	22.1 (16.7–28.7)	23.7 (18.8–29.4)	17.5 (12.4–24.1)	19.9 (14.8–26.0)	20.1 (12.0–31.8)	19.8 (14.3–26.6)
Yemen, 2008	14.0 (10.2–18.9)	15.3 (10.0–22.5)	9.6 (6.1–14.8)	28.8 (13.8–50.5)	NR	NR	24.1 (19.2–29.8)	22.1 (14.6–32.1)	27.4 (21.1–34.7)
Europe	39.7 (40.2.9)	50.2 (49.5–50.8)	31.3 (30.7–31.9)	26.8 (26.2–27.4)	33.1 (32.3–33.8)	20.3 (19.5–21.0)	25.1 (24.8–25.4)	26.3 (25.8–26.8)	44.5 (44.1–44.9)
Albania, 2004	31.3 (27.7–35.1)	40.6 (35.8–45.5)	23.9 (20.5–27.6)	25.3 (21.2–29.9)	28.5 (23.8–33.8)	20.9 (14.1–29.9)	14.0 (11.4–17.1)	15.5 (12.2–19.3)	13.1 (10.3–16.6)
Armenia, 2004	23.9 (20.0–28.4)	41.0 (34.0–48.3)	10.4 (7.6–14.1)	46.5 (40.7–52.4)	44.3 (37.7–51.1)	53.4 (36.1–70.0)	98.2 (96.2–99.1)	97.7 (93.6–99.2)	98.4 (97.1–99.1)
Belarus, 2004	62.5 (59.2–65.7)	70.2 (66.1–73.9)	54.8 (50.7–58.9)	30.3 (27.6–33.1)	38.0 (34.5–41.6)	20.4 (16.7–24.7)	48.9 (43.7–54.2)	43.4 (36.5–50.6)	52.6 (47.1–57.9)
Bosnia & Herzegovina, 2008	42.2 (39.1–45.3)	47.9 (44.4–51.3)	36.9 (33.4–40.5)	39.2 (35.9–42.6)	42.5 (39.1–46.0)	35.6 (31.1–40.4)	27.5 (25.0–30.0)	25.3 (22.4–28.5)	28.8 (26.2–31.6)

Table 3.1.63 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Ever smoked cigarettes (ever smokers)			% Ever smokers who first tried smoking at <10 years of age			% Never smokers susceptible to starting to smoke within the next year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Bulgaria, 2008	58.8 (53.3–64.1)	56.1 (49.8–62.2)	61.3 (54.5–67.7)	21.2 (19.4–23.2)	26.6 (23.9–29.4)	16.3 (14.2–18.7)	31.2 (28.8–33.7)	27.0 (24.3–29.9)	36.4 (31.2–42.0)
Croatia, 2007	67.1 (63.3–70.6)	66.3 (61.9–70.4)	67.4 (62.8–71.7)	31.1 (27.5–35.0)	35.2 (30.2–40.6)	26.9 (22.7–31.5)	19.7 (16.4–23.6)	15.3 (12.2–18.9)	24.7 (19.5–30.9)
Cyprus, 2005	30.6 (29.7–31.4)	35.5 (34.3–36.8)	25.7 (24.6–26.8)	17.6 (16.3–18.9)	20.4 (18.6–22.3)	13.6 (11.9–15.5)	15.3 (14.6–16.1)	15.0 (13.9–16.2)	15.5 (14.5–16.6)
Czech Republic, 2007	71.2 (66.9–75.1)	72.2 (67.4–76.4)	70.0 (65.4–74.3)	23.6 (20.4–27.0)	28.0 (24.8–31.5)	18.2 (14.3–22.8)	26.8 (23.0–31.0)	18.4 (14.3–23.4)	35.9 (30.1–42.2)
Estonia, 2007	78.0 (74.3–81.4)	83.0 (79.5–86.0)	73.0 (67.3–78.0)	37.3 (34.4–40.3)	45.6 (41.3–49.9)	27.9 (24.4–31.6)	30.8 (25.5–36.6)	25.3 (20.0–31.4)	34.3 (27.4–41.9)
Georgia, 2008	28.2 (18.9–39.9)	41.3 (28.0–55.9)	16.4 (10.2–25.4)	41.1 (29.1–54.3)	46.0 (32.7–59.9)	27.5 (13.4–48.1)	26.4 (18.0–36.8)	33.1 (22.6–45.7)	22.0 (13.9–33.1)
Greece, 2005	32.1 (29.4–35.0)	34.6 (30.8–38.7)	28.9 (26.4–31.5)	23.3 (20.2–26.6)	25.5 (21.8–29.5)	21.4 (17.1–26.5)	19.5 (17.5–21.7)	19.4 (17.1–22.0)	19.4 (17.0–22.1)
Hungary, 2008	57.9 (52.8–62.9)	56.5 (50.2–62.6)	58.4 (54.1–62.7)	18.0 (15.8–20.3)	19.7 (16.1–23.9)	15.7 (12.3–19.8)	18.5 (16.4–20.9)	16.2 (13.4–19.4)	21.0 (16.7–26.0)
Kazakhstan, 2004	28.5 (24.5–32.8)	36.6 (32.1–41.3)	21.8 (17.9–26.3)	34.8 (32.5–37.3)	41.1 (38.4–43.9)	25.3 (21.7–29.2)	36.5 (31.5–41.9)	33.8 (29.0–39.0)	38.6 (33.2–44.3)
Kosovo, 2004 ^d	27.4 (22.9–32.4)	35.5 (29.6–41.8)	19.9 (15.2–25.5)	23.9 (18.6–30.2)	26.8 (20.5–34.2)	19.2 (12.8–27.8)	11.2 (8.1–15.2)	12.0 (8.6–16.6)	10.7 (7.2–15.5)
Kyrgyzstan, 2008	17.7 (15.3–20.4)	25.7 (20.9–31.1)	10.6 (8.0–13.9)	28.7 (23.7–34.2)	35.5 (28.3–43.5)	12.6 (7.1–21.4)	70.1 (64.6–75.0)	64.6 (57.0–71.6)	74.2 (68.0–79.5)
Latvia, 2007	80.6 (77.3–83.6)	82.8 (79.8–85.4)	78.8 (73.9–83.0)	32.4 (29.0–36.0)	39.6 (33.8–45.7)	26.0 (21.4–31.2)	22.3 (16.0–30.2)	25.8 (17.0–37.2)	20.0 (13.9–27.8)
Lithuania, 2005	72.3 (68.4–75.9)	80.0 (76.4–83.1)	65.6 (60.0–70.8)	32.8 (28.7–37.1)	41.5 (36.1–47.2)	23.5 (18.9–28.9)	18.2 (14.2–23.0)	18.3 (11.3–28.4)	18.1 (14.0–22.9)
Macedonia, former Yugoslav Republic of, 2008	26.0 (21.6–30.8)	27.7 (23.3–32.5)	24.2 (19.2–29.9)	16.3 (12.8–20.5)	19.7 (14.7–25.7)	12.6 (8.9–17.5)	16.7 (15.0–18.5)	15.4 (13.4–17.7)	17.9 (15.5–20.5)
Moldova, Republic of, 2008	39.2 (34.6–43.9)	57.7 (51.6–63.6)	24.3 (19.7–29.5)	49.2 (45.3–53.2)	54.1 (50.2–57.9)	40.5 (32.8–48.6)	18.7 (15.8–22.0)	19.7 (15.6–24.5)	18.1 (14.7–22.1)
Montenegro, 2008	31.3 (27.3–35.7)	30.7 (27.1–34.7)	31.9 (25.7–38.7)	39.6 (34.6–44.9)	40.6 (34.4–47.0)	38.8 (32.9–45.0)	16.0 (14.1–18.2)	15.7 (12.3–19.9)	16.5 (13.9–19.4)

Table 3.1.63 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Ever smoked cigarettes (ever smokers)			% Ever smokers who first tried smoking at <10 years of age			% Never smokers susceptible to starting to smoke within the next year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Poland, 2003	54.0 (49.7–58.2)	58.6 (53.8–63.2)	49.6 (44.1–55.0)	27.4 (23.5–31.8)	31.4 (26.9–36.4)	22.8 (18.3–28.1)	24.0 (20.6–27.6)	20.6 (16.5–25.4)	26.6 (22.2–31.5)
Romania, 2004	49.9 (44.3–55.4)	60.2 (54.7–65.5)	40.7 (33.9–47.8)	29.9 (26.2–33.8)	35.7 (31.0–40.7)	22.1 (17.3–27.9)	28.5 (19.4–39.7)	19.7 (12.9–28.9)	33.7 (22.6–46.9)
Russian Federation, 2004	55.0 (53.2–56.7)	61.5 (57.1–65.8)	48.1 (44.1–52.3)	30.9 (28.1–33.8)	40.7 (36.5–45.0)	17.8 (16.1–19.7)	46.8 (42.3–51.3)	42.3 (36.0–48.8)	50.3 (43.7–57.0)
Serbia, 2008	42.7 (37.8–47.7)	41.4 (35.6–47.4)	43.3 (38.5–48.2)	36.8 (32.4–41.4)	43.5 (36.3–50.9)	32.8 (26.9–39.3)	19.0 (16.8–21.4)	16.2 (12.8–20.3)	20.9 (18.1–24.0)
Slovakia, 2007	64.4 (61.5–67.2)	68.7 (65.4–71.9)	60.2 (56.4–63.8)	28.8 (26.4–31.2)	34.9 (31.5–38.5)	21.8 (19.1–24.8)	24.5 (21.4–27.9)	17.7 (14.6–21.4)	29.5 (24.8–34.6)
Slovenia, 2007	57.3 (52.1–62.4)	56.1 (48.0–64.0)	56.7 (51.5–61.8)	23.9 (20.1–28.2)	27.8 (22.8–33.4)	19.8 (14.8–26.0)	20.6 (17.1–24.6)	17.2 (12.0–24.0)	24.1 (20.7–27.9)
Tajikistan, 2004	7.1 (5.2–9.6)	9.8 (7.0–13.7)	3.6 (2.3–5.6)	45.2 (29.3–62.2)	44.9 (29.4–61.5)	39.0 (16.9–66.7)	77.6 (65.8–86.1)	75.8 (62.8–85.4)	79.8 (68.8–87.7)
Turkey, 2003	26.3 (24.3–28.4)	31.7 (29.0–34.5)	19.7 (17.6–22.0)	30.7 (28.0–33.4)	34.9 (32.4–37.4)	23.7 (19.5–28.5)	7.0 (6.5–7.5)	8.2 (7.3–9.2)	5.3 (4.6–6.1)
Ukraine, 2005	57.5 (54.6–60.3)	64.5 (60.9–68.0)	50.6 (47.1–54.2)	31.8 (28.4–35.5)	40.4 (35.7–45.2)	21.4 (17.9–25.4)	61.6 (56.5–66.4)	55.1 (47.9–62.1)	66.0 (60.1–71.5)
Uzbekistan, 2008 (Tashkent)	7.7 (4.6–12.5)	10.4 (5.6–18.5)	5.0 (2.5–9.7)	17.1 (7.4–34.5)	25.2 (11.5–46.8)	NR	45.1 (40.0–50.4)	46.0 (40.8–51.2)	45.9 (39.2–52.8)
South East Asia	15.6 (14.4 – 16.8)	19.2 (17.8 – 20.5)	8.1 (7.0 – 9.3)	23.3 (24.2 – 28.5)	22.0 (20.0 – 23.9)	28.8 (25.1 – 32.5)	16.8 (16.0 – 17.6)	12.0 (11.2 – 12.8)	23.7 (22.7 – 24.7)
Bangladesh, 2007	9.3 (6.2–13.6)	15.8 (10.6–23.0)	4.8 (2.4–9.3)	38.6 (25.4–53.6)	47.6 (34.6–60.9)	23.5 (5.0–64.0)	13.2 (10.7–16.2)	13.4 (9.8–17.9)	12.9 (9.3–17.7)
Bhutan, 2006 (country)	22.0 (18.3–26.2)	33.0 (26.0–40.8)	12.2 (9.3–15.7)	31.1 (21.6–42.5)	33.5 (24.4–44.0)	28.0 (12.2–52.2)	11.0 (8.4–14.1)	15.2 (11.1–20.6)	7.8 (4.9–12.2)
East Timor, 2006	41.5 (34.3–49.0)	59.9 (50.5–68.6)	26.0 (19.1–34.3)	20.1 (12.6–30.4)	16.7 (8.4–30.6)	25.6 (15.6–38.9)	48.8 (41.4–56.1)	51.3 (40.5–62.0)	47.2 (39.4–55.2)
India, 2006	12.0 (9.1–15.7)	14.4 (11.4–18.1)	8.7 (5.4–13.9)	36.9 (31.8–42.3)	32.1 (26.9–37.9)	55.1 (43.6–66.1)	15.1 (13.1–17.4)	16.4 (13.8–19.3)	13.5 (10.7–16.8)
Indonesia, 2006	37.7 (32.8–42.8)	62.9 (54.6–70.5)	15.6 (11.5–20.9)	30.0 (25.8–34.6)	27.1 (23.4–31.1)	41.1 (28.6–54.8)	95.1 (88.8–97.9)	93.9 (80.8–98.3)	95.5 (90.7–97.9)

Table 3.1.63 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Ever smoked cigarettes (ever smokers)			% Ever smokers who first tried smoking at <10 years of age			% Never smokers susceptible to starting to smoke within the next year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Maldives, 2007	16.0 (12.6–20.0)	8.1 (6.2–10.5)	24.5 (18.6–31.6)	30.5 (24.7–37.0)	31.3 (14.7–54.6)	29.0 (22.8–36.1)	6.7 (5.2–8.6)	3.8 (2.5–5.6)	10.6 (7.8–14.1)
Myanmar, 2007	14.7 (11.5–18.6)	23.4 (17.9–30.1)	6.3 (4.8–8.2)	19.0 (12.6–27.7)	14.0 (7.6–24.4)	47.1 (33.3–61.3)	11.4 (9.4–13.8)	15.9 (12.5–20.0)	8.1 (6.2–10.6)
Nepal, 2007	7.9 (5.9–10.4)	11.4 (8.6–15.1)	3.8 (2.2–6.4)	37.1 (27.5–47.9)	31.8 (21.9–43.8)	57.0 (40.4–72.1)	7.5 (5.7–9.8)	8.6 (5.4–13.3)	6.3 (4.2–9.2)
Sri Lanka, 2007	5.1 (2.9–9.0)	6.9 (3.5–12.9)	3.4 (1.6–7.4)	39.5 (21.6–60.8)	31.7 (16.1–52.7)NR	58.3 (25.2–85.3)	3.7 (2.4–5.6)	5.2 (3.1–8.7)	2.2 (1.2–4.3)
Thailand, 2005	26.7 (23.5–30.2)	37.9 (34.6–41.3)	15.1 (11.7–19.2)	16.9 (13.8–20.6)	15.7 (13.4–18.4)	15.6 (11.0–21.7)	10.0 (5.5–17.3)	8.7 (7.6–9.9)	10.0 (4.0–23.0)
Western Pacific	37.3 (36.7–37.9)	44.6 (43.8–45.4)	23.5 (22.9–24.1)	22.8 (22.0–23.6)	24.0 (22.9–25.1)	22.5 (21.2–23.8)	17.6 (17.4–17.8)	17.8 (17.5–18.0)	23.1 (22.8–3.3)
American Samoa, 2005 ^b	40.7 (36.5–45.0)	44.7 (39.2–50.4)	37.0 (32.1–42.1)	NA	NA	NA	23.7 (19.6–28.3)	29.6 (23.7–36.1)	19.2 (14.7–24.6)
Cambodia, 2003	3.2 (1.7–6.0)	5.8 (3.2–10.4)	0.4 (0.1–1.9)	33.2 (11.9–64.7)NR	33.2 (11.9–64.7)NR	NA NR	7.1 (5.4–9.2)	10.3 (7.5–14.0)	3.9 (2.1–7.1)
China, 2005 ^e (Macau)	31.2 (27.2–35.6)	33.8 (29.6–38.3)	28.3 (22.4–35.1)	35.6 (30.5–41.0)	40.8 (33.6–48.4)	28.2 (23.1–34.0)	15.1 (12.6–18.0)	14.0 (11.2–17.3)	16.3 (11.7–22.2)
China, 2005 (Shanghai)	17.5 (13.9–21.9)	23.1 (17.0–30.6)	12.4 (9.3–16.3)	43.8 (34.1–53.9)	43.4 (31.8–55.8)	44.5 (28.7–61.3)	4.9 (3.4–7.0)	7.0 (4.9–9.9)	3.2 (2.0–5.0)
Cook Islands, 2008	60.5 (59.3–61.7)	59.0 (57.2–60.7)	61.5 (59.9–63.1)	38.0 (36.5–39.6)	42.7 (40.4–45.0)	33.9 (31.8–36.0)	20.8 (19.3–22.4)	22.8 (20.5–25.3)	18.9 (16.9–21.1)
Fiji, 2005	17.3 (10.6–26.9)	22.4 (12.9–36.0)	11.7 (7.0–18.7)	14.2 (8.9–21.9)	17.5 (11.0–26.9)	9.2 (4.5–18.1)	16.9 (11.1–25.0)	16.9 (8.5–30.7)	17.0 (13.1–21.8)
Guam, 2002 ^b	61.6 (58.1–65.0)	62.9 (58.7–66.9)	60.2 (55.2–64.9)	NA	NA	NA	26.8 (22.8–31.3)	26.9 (21.9–32.7)	26.6 (21.2–32.7)
Lao People's Democratic Republic, 2007 (Vientiane Capital)	6.9 (4.9–9.6)	11.9 (7.5–18.4)	2.6 (1.6–4.3)	12.7 (6.3–24.1)	12.8 (6.4–24.1)	NR	4.8 (3.7–6.1)	6.5 (4.6–9.2)	3.5 (2.2–5.5)
Malaysia, 2003	33.1 (29.1–37.3)	54.6 (48.5–60.5)	11.5 (9.3–14.1)	16.4 (12.7–20.9)	14.1 (10.6–18.5)	28.8 (20.2–39.3)	15.5 (13.0–18.2)	21.4 (17.2–26.3)	12.4 (10.0–15.2)
Micronesia, 2007	45.6 (41.4–49.8)	56.2 (49.7–62.6)	34.7 (29.9–39.7)	24.3 (21.0–28.0)	26.3 (21.8–31.3)	20.5 (14.9–27.5)	30.1 (26.3–34.3)	34.1 (25.9–43.5)	27.4 (23.9–31.3)

Table 3.1.63 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Ever smoked cigarettes (ever smokers)			% Ever smokers who first tried smoking at <10 years of age			% Never smokers susceptible to starting to smoke within the next year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Mongolia, 2007	23.4 (15.7–33.3)	35.2 (25.3–46.7)	13.3 (7.2–23.1)	15.6 (10.7–22.1)	18.3 (12.1–26.8)	9.1 (4.3–18.2)	8.1 (5.9–11.2)	8.8 (5.5–13.7)	7.8 (4.6–12.8)
New Zealand, 2008	39.7 (32.1–47.8)	40.0 (31.7–48.9)	39.4 (31.0–48.5)	27.0 (14.8–44.2)	31.2 (16.0–51.9)	22.5 (11.8–38.7)	26.5 (18.0–37.3)	21.4 (14.4–30.5)	31.8 (21.8–43.8)
Northern Mariana Islands, 2004 ^f	70.1 (67.3–72.9)	68.2 (64.7–71.6)	72.0 (68.2–75.5)	NA	NA	NA	22.3 (18.3–27.0)	23.7 (18.2–30.3)	20.5 (15.7–26.5)
Palau, 2005	64.7 (61.3–68.0)	68.3 (63.4–72.9)	61.2 (56.5–65.8)	NA	NA	NA	20.0 (15.4–25.6)	22.4 (16.2–30.1)	18.3 (12.7–25.7)
Papua New Guinea, 2007	55.3 (50.7–59.9)	64.4 (59.7–68.8)	47.0 (40.6–53.5)	8.7 (6.6–11.5)	10.6 (7.0–15.8)	6.6 (4.2–10.3)	16.0 (12.2–20.8)	17.8 (12.1–25.5)	14.8 (10.4–20.8)
Philippines, 2007	39.5 (36.1–43.1)	51.2 (47.4–55.0)	29.9 (25.7–34.4)	13.6 (10.9–16.8)	11.7 (8.6–15.7)	15.4 (11.6–20.1)	12.9 (11.1–15.0)	15.0 (12.0–18.7)	11.6 (9.6–13.9)
Republic of Korea (South), 2008	26.1 (24.0–28.5)	31.3 (28.6–34.0)	20.3 (17.9–22.9)	14.5 (12.5–16.8)	15.5 (13.1–18.3)	12.9 (9.2–17.7)	20.1 (18.6–21.6)	20.3 (18.5–22.2)	19.8 (17.4–22.4)
Samoa, 2007	21.9 (16.6–28.3)	25.9 (17.4–36.6)	17.0 (12.1–23.2)	25.9 (16.9–37.4)	35.3 (22.6–50.3)	15.0 (6.4–31.2)	26.9 (22.3–32.0)	28.6 (21.8–36.5)	24.6 (18.5–31.9)
Singapore, 2000	21.5 (20.1–23.0)	23.9 (21.5–26.5)	18.8 (16.7–21.2)	22.7 (20.8–24.6)	24.1 (21.5–26.9)	21.0 (17.8–24.6)	8.9 (8.1–9.8)	9.2 (7.8–10.8)	8.6 (7.5–9.7)
Solomon Islands, 2008	41.2 (36.8–45.8)	42.8 (37.9–47.8)	39.1 (31.3–47.5)	12.8 (9.4–17.1)	9.3 (5.0–16.7)	16.1 (9.7–25.5)	25.6 (19.9–32.3)	24.6 (13.5–40.5)	27.1 (19.0–37.0)
Tuvalu, 2006	36.5 (36.3–36.7)	45.1 (44.8–45.5)	30.4 (30.1–30.7)	19.6 (19.3–19.9)	26.9 (26.4–27.4)	13.9 (13.5–14.3)	14.6 (14.4–14.8)	18.4 (18.0–18.7)	12.8 (12.6–13.1)
Vanuatu, 2007	27.1 (25.8–28.5)	39.3 (37.0–41.6)	18.6 (17.1–20.2)	15.2 (13.0–17.7)	16.0 (13.3–19.2)	13.9 (10.5–18.2)	38.7 (37.0–40.4)	42.7 (39.8–45.6)	36.4 (34.3–38.5)
Viet Nam, 2007 (Hanoi)	9.7 (6.9–13.5)	13.4 (9.7–18.1)	6.2 (3.5–10.6)	35.4 (22.9–50.3)	27.5 (17.6–40.2)	55.1 (28.3–79.3)	6.8 (5.4–8.6)	10.0 (7.5–13.2)	4.0 (2.6–6.2)

Source: CDC 2010b.

Note: **CI** = confidence interval; **NA** = question not asked; **NR** = cell size less than 35; **WHO** = World Health Organization.

^aTerritory of United Kingdom

^bTerritory of United States

^cUnited Nations Relief and Works Agency

^dUnited Nations Administered Province

^eSpecial Administrative Region of China

^fCommonwealth in political union with the United States

Table 3.1.64 Percentage of youth 13–15 years of age who have smoked cigarettes on 1 or more days during the past 30 days, and of those who have smoked cigarettes on 20 or more of the past 30 days, by gender; Global Youth Tobacco Survey 1999–2009; worldwide

WHO region and WHO member state, territory, or special administrative region, and year	% Smoked cigarettes on ≥ 1 days of the past 30 days (current smokers)			% Smoked cigarettes on ≥ 20 days of the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Africa	4.0 (3.8–4.3)	6.2 (5.8–6.6)	2.7 (2.4–3.0)	0.6 (0.5–0.7)	0.9 (0.7–1.1)	0.4 (0.2–0.5)
Algeria, 2007 (Constantine)	8.3 (6.4–10.7)	18.3 (14.1–23.5)	1.5 (0.6–3.6)	1.5 (0.8–2.8)	2.9 (1.5–5.5)	0.5 (0.1–1.8)
Benin, 2003 (Atlantique Littoral)	7.2 (5.1–10.1)	11.2 (7.4–16.5)	1.8 (0.9–3.6)	0.3 (0.1–0.9)	0.5 (0.1–1.7)	0.0
Botswana, 2008	14.3 (11.2–18.1)	18.1 (13.4–23.9)	10.9 (7.8–15.0)	4.2 (2.7–6.5)	4.5 (2.8–6.9)	3.7 (2.1–6.5)
Burkina Faso, 2006 (Ouagadougou)	8.4 (6.3–11.1)	14.1 (10.4–18.7)	2.4 (1.3–4.3)	0.4 (0.2–0.9)	0.8 (0.3–2.0)	0.0
Burundi, 2008	4.6 (2.6–7.9)	5.8 (2.8–11.8)	3.2 (1.6–6.4)	0.5 (0.2–1.3)	0.3 (0.0–2.5)	0.5 (0.1–1.8)
Cameroon, 2008 (Yaoude)	4.8 (3.4–6.8)	7.6 (5.5–10.5)	2.8 (1.5–5.2)	0.6 (0.3–1.1)	0.9 (0.4–1.7)	0.5 (0.1–2.0)
Cape Verde, 2007	3.5 (2.6–4.8)	3.7 (2.2–6.1)	3.1 (1.8–5.4)	0.3 (0.1–0.8)	0.4 (0.1–1.7)	0.0
Central African Republic, 2008 (Bangui)	8.1 (5.9–11.0)	10.4 (6.7–15.7)	4.3 (2.2–8.3)	0.1 (0.0–1.0)	0.0	0.3 (0.0–2.1)
Comoros, 2007	9.6 (6.8–13.4)	13.5 (8.3–21.3)	6.9 (3.7–12.6)	0.6 (0.2–2.0)	1.0 (0.2–4.4)	0.4 (0.1–1.9)
Congo, 2006	11.4 (7.7–16.6)	15.0 (9.8–22.2)	8.1 (4.3–14.7)	0.0 (0.0–0.3)	0.1 (0.0–0.7)	0.0
Côte D'Ivoire, 2003 (Abidjan)	13.6 (11.4–16.2)	19.3 (16.1–23.0)	7.1 (5.1–9.9)	0.8 (0.5–1.2)	1.3 (0.8–2.2)	0.2 (0.0–1.0)
Democratic Republic of the Congo, 2008 (Kinshasa)	8.1 (6.0–10.9)	11.5 (8.1–16.1)	3.7 (2.8–4.7)	0.6 (0.3–1.2)	0.7 (0.4–1.3)	0.2 (0.0–1.5)
Equatorial Guinea, 2008	7.0 (4.8–10.1)	9.9 (6.2–15.4)	3.4 (2.0–5.5)	0.1 (0.0–0.8)	0.2 (0.0–1.6)	0.0
Eritrea, 2006	1.6 (1.2–2.0)	2.0 (1.5–2.7)	0.6 (0.2–1.4)	0.3 (0.2–0.5)	0.3 (0.1–0.7)	0.1 (0.0–0.5)
Ethiopia, 2003 (Addis Ababa)	1.9 (0.8–4.3)	2.5 (1.1–5.3)	0.7 (0.2–2.4)	0.4 (0.2–0.9)	0.3 (0.0–2.2)	0.2 (0.0–1.8)

Table 3.1.64 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Smoked cigarettes on ≥1 days of the past 30 days (current smokers)			% Smoked cigarettes on ≥20 days of the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Gambia, 2008 (Banjul)	10.8 (8.5–13.6)	12.7 (9.6–16.5)	8.6 (5.8–12.6)	2.8 (1.8–4.3)	3.3 (2.2–5.0)	2.3 (1.1–4.8)
Ghana, 2006	2.7 (1.9–4.0)	2.8 (1.7–4.7)	2.3 (1.4–3.5)	0.9 (0.5–1.4)	0.8 (0.4–1.6)	0.8 (0.5–1.4)
Guinea, 2008	7.1 (4.8–10.4)	11.6 (7.9–16.7)	1.6 (0.7–3.7)	0.8 (0.4–1.6)	1.2 (0.5–3.0)	0.2 (0.0–1.3)
Guinea-Bissau, 2008 (Bissau)	5.1 (4.1–6.3)	7.2 (5.5–9.5)	3.0 (1.7–5.1)	0.0	0.0	0.0
Kenya, 2007	8.2 (6.1–11.1)	11.2 (8.9–14.0)	5.2 (3.5–7.6)	1.2 (0.6–2.0)	0.7 (0.4–1.5)	1.3 (0.6–2.5)
Lesotho, 2008	10.1 (6.9–14.4)	11.8 (7.0–19.3)	7.5 (4.9–11.2)	3.3 (1.8–5.8)	3.8 (1.6–8.6)	2.2 (1.4–3.4)
Liberia, 2008 (Monrovia)	2.1 (1.1–4.1)	2.0 (0.7–5.5)	1.2 (0.3–4.3)	0.1 (0.0–1.3)	0.3 (0.0–2.9)	0.0
Madagascar, 2008	19.3 (15.0–24.6)	30.7 (23.0–39.7)	10.2 (5.9–17.0)	1.7 (0.4–6.5)	3.9 (1.0–13.9)	0.0
Malawi, 2005	2.9 (1.8–4.7)	3.8 (2.2–6.4)	2.2 (1.3–3.6)	0.3 (0.1–1.1)	0.7 (0.2–2.3)	0.0 (0.0–0.2)
Mali, 2008	10.4 (7.3–14.6)	17.4 (12.2–24.3)	2.5 (1.4–4.5)	1.0 (0.6–1.6)	1.4 (0.8–2.4)	0.4 (0.1–1.9)
Mauritania, 2006	19.5 (16.3–23.2)	20.3 (17.5–23.4)	18.3 (13.4–24.5)	3.0 (2.1–4.4)	3.5 (2.5–4.8)	2.5 (1.3–4.7)
Mauritius, 2008	13.7 (9.3–19.8)	20.3 (13.9–28.6)	7.7 (4.1–14.0)	3.1 (1.7–5.6)	5.6 (3.0–10.1)	0.7 (0.4–1.5)
Mozambique, 2007 (Maputo City)	2.7 (1.6–4.7)	4.5 (2.6–7.9)	1.2 (0.4–3.5)	0.1 (0.0–0.7)	0.2 (0.0–1.4)	0.0
Namibia, 2004	18.8 (16.5–21.4)	21.9 (18.9–25.2)	16.1 (13.3–19.3)	5.3 (4.2–6.7)	6.2 (4.4–8.6)	4.3 (3.3–5.7)
Niger, 2006	6.3 (4.2–9.2)	11.7 (7.6–17.4)	1.1 (0.3–3.9)	0.4 (0.2–1.2)	0.7 (0.2–2.3)	0.2 (0.0–1.6)
Nigeria, 2008 (Cross River State)	4.1 (1.4–11.1)	6.8 (2.4–17.7)	1.2 (0.2–6.4)	0.6 (0.1–2.9)	0.7 (0.1–5.9)	0.6 (0.1–5.7)

Table 3.1.64 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Smoked cigarettes on ≥ 1 days of the past 30 days (current smokers)			% Smoked cigarettes on ≥ 20 days of the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Rwanda, 2008	1.8 (1.0–3.4)	3.0 (1.7–5.2)	0.9 (0.2–3.0)	0.2 (0.0–1.3)	0.0	0.3 (0.0–2.5)
Senegal, 2007	7.5 (4.6–12.1)	12.1 (7.6–18.9)	2.7 (1.3–5.4)	1.5 (0.5–4.1)	1.9 (0.7–5.0)	0.0
Seychelles, 2007	21.5 (16.7–27.2)	23.2 (17.4–30.2)	20.0 (15.0–26.2)	0.5 (0.2–1.6)	0.4 (0.1–2.6)	0.6 (0.1–2.6)
Sierra Leone, 2008 (Western Area)	5.8 (3.7–9.1)	6.6 (3.8–11.3)	5.0 (3.0–8.0)	1.8 (0.8–4.0)	1.8 (0.8–4.1)	1.3 (0.4–4.1)
South Africa, 2008	13.6 (11.6–16.0)	17.9 (15.2–21.0)	10.6 (8.0–13.8)	3.0 (2.1–4.1)	4.2 (3.0–6.0)	2.0 (1.4–3.0)
Swaziland, 2005	5.6 (4.9–6.4)	8.9 (7.8–10.2)	3.2 (2.5–4.2)	0.8 (0.6–1.0)	1.2 (0.8–1.6)	0.4 (0.3–0.6)
Togo, 2007	6.2 (3.6–10.2)	9.1 (5.1–15.6)	1.7 (1.1–2.6)	0.4 (0.1–1.6)	0.5 (0.2–1.9)	0.0
Uganda, 2007	5.5 (4.2–7.1)	6.6 (5.2–8.5)	4.0 (2.7–5.8)	1.0 (0.5–1.8)	1.1 (0.4–2.5)	0.6 (0.2–1.8)
United Republic of Tanzania, 2008 (Arusha)	1.7 (0.9–3.5)	2.2 (0.9–5.5)	1.1 (0.3–3.6)	0.0	0.0	0.0
Zambia, 2007 (Lusaka)	6.8 (4.3–10.5)	6.7 (4.0–11.1)	6.8 (4.0–11.3)	2.1 (0.9–4.6)	1.7 (0.5–5.7)	2.3 (1.0–5.4)
Zimbabwe, 2008 (Harare)	3.2 (1.7–5.7)	4.8 (2.6–9.0)	1.5 (0.5–4.6)	0.1 (0.0–1.3)	0.3 (0.0–2.7)	0.0
The Americas	9.3 (8.9–9.7)	10.1 (9.5–10.7)	8.8 (8.3–9.3)	0.7 (0.6–0.8)	1.0 (0.8–1.2)	0.3 (0.2–0.3)
Antigua & Barbuda, 2004	3.6 (2.4–5.4)	2.7 (1.7–4.3)	4.4 (2.3–8.2)	0.1 (0.0–0.7)	0.2 (0.0–1.5)	0.0
Argentina, 2007	24.5 (22.2–27.0)	21.1 (18.5–23.8)	27.3 (23.4–31.6)	5.6 (4.2–7.4)	4.9 (3.8–6.4)	6.0 (3.7–9.5)
Bahamas, 2004	5.2 (4.0–6.7)	6.2 (3.8–10.1)	3.7 (2.1–6.6)	0.5 (0.2–1.4)	0.4 (0.1–1.9)	0.3 (0.1–1.5)
Barbados, 2007	11.6 (8.9–15.0)	14.3 (10.4–19.3)	9.3 (6.4–13.2)	0.3 (0.1–1.0)	0.4 (0.1–1.5)	0.2 (0.0–1.2)

Table 3.1.64 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Smoked cigarettes on ≥1 days of the past 30 days (current smokers)			% Smoked cigarettes on ≥20 days of the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Belize, 2008	7.7 (5.7–10.4)	11.7 (8.3–16.2)	4.4 (2.6–7.5)	0.4 (0.1–1.1)	0.8 (0.3–2.4)	0.0
Bolivia, 2003 (La Paz)	16.3 (13.4–19.6)	20.3 (16.5–24.7)	12.0 (9.3–15.3)	0.9 (0.6–1.5)	1.3 (0.7–2.6)	0.5 (0.2–1.2)
Brazil, 2005 (Rio de Janeiro)	12.3 (10.0–15.1)	9.1 (6.5–12.5)	12.9 (9.6–17.1)	1.0 (0.5–2.2)	0.5 (0.2–1.3)	1.1 (0.5–2.4)
British Virgin Islands, 2001 ^a	3.5 (2.0–5.9)	4.1 (1.7–9.2)	2.8 (1.1–6.7)	0.3 (0.0–1.9)	0.0	0.4 (0.1–3.0)
Chile, 2008 (Santiago)	34.2 (31.3–37.3)	28.0 (24.3–32.0)	39.9 (36.0–43.9)	7.6 (6.0–9.6)	6.4 (4.8–8.4)	8.9 (6.8–11.7)
Colombia, 2007 (Bogota)	26.2 (22.5–30.3)	25.4 (21.0–30.3)	26.6 (20.9–33.1)	2.1 (1.4–3.2)	2.9 (1.7–4.8)	1.3 (0.6–3.0)
Costa Rica, 2008	9.6 (7.9–11.7)	9.4 (7.2–12.0)	9.7 (7.8–12.1)	1.0 (0.7–1.6)	1.1 (0.6–1.8)	1.0 (0.6–1.5)
Cuba, 2004 (Havana)	10.0 (7.6–13.1)	11.2 (8.3–15.1)	8.8 (6.5–11.9)	1.1 (0.7–1.8)	1.3 (0.6–2.8)	0.8 (0.5–1.4)
Dominica, 2004	11.5 (9.0–14.7)	11.8 (8.1–16.9)	9.6 (7.0–13.0)	1.1 (0.6–2.0)	1.3 (0.5–2.9)	0.7 (0.3–1.9)
Dominican Republic, 2004	6.6 (5.4–7.9)	7.3 (5.9–9.0)	5.8 (4.0–8.2)	0.4 (0.2–0.8)	0.4 (0.1–1.2)	0.4 (0.2–1.0)
Ecuador, 2007 (Quito)	20.5 (15.6–26.6)	23.2 (19.4–27.6)	18.1 (11.1–28.0)	0.9 (0.4–1.9)	0.9 (0.4–2.3)	0.8 (0.2–2.9)
El Salvador, 2003	14.0 (9.7–19.7)	18.4 (13.4–24.8)	10.9 (6.8–17.1)	2.0 (1.0–3.8)	4.1 (2.2–7.6)	0.5 (0.1–2.6)
Grenada, 2004	10.2 (8.2–12.8)	10.9 (7.4–15.8)	9.5 (7.4–12.2)	0.5 (0.2–1.2)	0.4 (0.1–1.6)	0.6 (0.2–1.8)
Guatemala, 2008	11.4 (9.5–13.6)	13.7 (10.9–17.0)	9.1 (7.0–11.6)	1.0 (0.7–1.3)	1.1 (0.7–1.7)	0.9 (0.5–1.5)
Guyana, 2004	8.1 (5.3–12.3)	11.0 (7.4–16.0)	5.4 (3.1–9.3)	0.6 (0.2–1.9)	0.3 (0.0–2.1)	0.8 (0.2–3.5)
Haiti, 2005 (Port au Prince)	17.6 (13.6–22.6)	17.2 (12.4–23.5)	17.7 (13.3–23.0)	1.9 (0.8–4.3)	2.9 (1.1–7.6)	0.8 (0.2–3.1)

Table 3.1.64 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Smoked cigarettes on ≥ 1 days of the past 30 days (current smokers)			% Smoked cigarettes on ≥ 20 days of the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Honduras, 2003 (Tegucigalpa)	14.2 (10.6–18.8)	14.4 (10.9–18.8)	14.1 (9.8–19.9)	1.8 (0.9–3.6)	2.3 (1.1–4.7)	1.5 (0.6–3.6)
Jamaica, 2006	15.4 (10.2–22.6)	20.6 (14.1–29.3)	10.9 (6.5–17.7)	1.2 (0.8–1.9)	1.7 (1.0–3.1)	0.7 (0.3–1.7)
Mexico, 2006 (Mexico City)	27.1 (23.8–30.8)	26.3 (22.0–31.0)	27.1 (23.7–30.8)	2.3 (1.5–3.4)	2.8 (1.5–4.9)	1.5 (0.7–3.0)
Montserrat, 2000 ^a	5.6	3.5	6.3	0.0	0.0	0.0
Nicaragua, 2003 (Centro Managua)	21.2 (17.2–25.8)	25.6 (21.4–30.3)	17.4 (12.6–23.6)	1.6 (0.9–2.8)	2.7 (1.2–6.1)	0.6 (0.2–2.0)
Panama, 2008	4.3 (3.0–6.2)	5.9 (4.0–8.5)	2.8 (1.7–4.6)	0.4 (0.2–0.9)	0.6 (0.2–1.5)	0.3 (0.1–1.0)
Paraguay, 2008	8.3 (6.9–9.9)	11.3 (9.3–13.6)	5.5 (3.7–8.2)	0.4 (0.2–0.7)	0.7 (0.3–1.5)	0.1 (0.1–0.2)
Peru, 2007 (Lima)	16.5 (13.0–20.7)	16.7 (12.8–21.6)	15.2 (11.0–20.7)	1.9 (1.0–3.6)	1.5 (0.7–3.3)	2.3 (1.1–4.7)
Puerto Rico, 2004 ^b	7.3 (4.2–12.4)	5.7 (2.8–11.2)	9.0 (4.9–16.0)	1.0 (0.3–3.4)	1.7 (0.6–4.3)	0.4 (0.0–4.4)
Saint Kitts & Nevis, 2002	4.6 (3.0–7.0)	7.0 (4.2–11.3)	1.9 (0.9–4.1)	1.0 (0.5–2.2)	1.4 (0.5–3.9)	0.3 (0.1–1.2)
Saint Lucia, 2007	12.7 (10.4–15.3)	17.0 (12.2–23.1)	9.6 (7.4–12.4)	0.8 (0.3–1.7)	1.2 (0.5–3.2)	0.4 (0.1–1.9)
Saint Vincent & The Grenadines, 2007	12.0 (9.0–15.9)	14.8 (9.8–21.7)	9.5 (6.6–13.4)	0.6 (0.3–1.1)	1.3 (0.7–2.4)	0.0
Suriname, 2004	6.9 (5.2–9.1)	9.3 (6.3–13.5)	4.7 (2.7–8.2)	0.5 (0.2–1.6)	0.8 (0.2–2.9)	0.3 (0.0–2.2)
Trinidad & Tobago, 2007	12.9 (9.9–16.7)	14.7 (10.9–19.6)	10.3 (6.9–15.1)	1.2 (0.6–2.3)	1.3 (0.6–2.6)	0.8 (0.3–2.8)
U.S. Virgin Islands, 2004 ^b	3.4 (2.5–4.6)	3.1 (2.0–4.7)	3.5 (2.4–5.2)	0.1 (0.0–0.5)	0.1 (0.0–1.0)	0.1 (0.0–1.0)
Uruguay, 2007	20.2 (18.0–22.6)	16.4 (13.5–19.8)	22.9 (20.1–26.0)	5.4 (3.9–7.4)	4.3 (2.7–6.8)	6.2 (4.3–8.9)

Table 3.1.64 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Smoked cigarettes on ≥1 days of the past 30 days (current smokers)			% Smoked cigarettes on ≥20 days of the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Venezuela, 1999	7.4 (5.8–9.3)	6.0 (4.3–8.4)	8.4 (6.6–10.7)	0.5 (0.3–0.8)	0.1 (0.0–1.1)	0.8 (0.5–1.3)
Eastern Mediterranean	5.6 (5.1 – 6.0)	8.9 (8.2 – 9.5)	2.5 (2.2 – 2.9)	0.6 (0.5 – 0.7)	1.2 (0.9 – 1.4)	0.3 (0.1 – 0.4)
Afghanistan, 2004 (Kabul)	4.8 (2.7–8.6)	7.6 (4.5–12.7)	0.0	0.0	0.0	0.0
Bahrain, 2002	10.6 (8.3–13.4)	17.5 (14.5–20.8)	3.9 (2.2–6.7)	2.2 (1.3–3.5)	3.3 (2.0–5.5)	0.9 (0.3–2.4)
Djibouti, 2003	6.1 (4.0–9.0)	8.6 (5.3–13.6)	2.6 (1.3–5.4)	1.9 (1.0–3.6)	2.9 (1.5–5.7)	0.7 (0.1–3.1)
Egypt, 2005	4.0 (2.7–5.8)	5.9 (4.4–7.9)	1.4 (0.9–2.3)	0.2 (0.1–0.5)	0.4 (0.2–0.9)	0.0
Gaza Strip, 2008 ^c	5.7 (4.1–7.8)	8.0 (5.9–10.9)	2.8 (1.6–4.9)	0.8 (0.3–2.5)	1.1 (0.3–4.0)	0.1 (0.0–1.0)
Iran, 2007	3.0 (1.7–5.5)	5.1 (2.8–9.1)	0.9 (0.4–1.9)	0.6 (0.2–1.3)	1.1 (0.5–2.6)	0.0
Iraq, 2008 (Baghdad)	3.2 (2.1–4.8)	3.3 (1.9–5.7)	2.7 (1.5–4.8)	0.3 (0.1–1.0)	0.4 (0.1–1.6)	0.1 (0.0–0.6)
Jordan, 2008 ^c	12.7 (7.6–20.4)	18.9 (12.1–28.2)	5.8 (3.7–9.0)	2.5 (0.9–6.9)	3.9 (1.6–9.5)	0.9 (0.3–3.0)
Kuwait, 2005	10.8 (7.7–15.1)	17.7 (14.2–21.7)	4.5 (3.0–6.9)	2.2 (1.3–3.9)	3.6 (2.4–5.4)	0.8 (0.4–1.6)
Lebanon, 2008 ^c	10.6 (7.0–15.6)	16.6 (11.1–24.0)	5.5 (3.3–9.0)	1.2 (0.6–2.2)	2.2 (1.2–4.1)	0.2 (0.0–2.0)
Libya, 2007	4.6 (2.9–7.2)	7.7 (4.9–11.9)	0.9 (0.3–2.5)	0.4 (0.1–1.1)	0.5 (0.1–2.2)	0.1 (0.0–1.0)
Morocco, 2006	3.5 (2.7–4.6)	4.3 (2.9–6.4)	2.1 (1.1–3.9)	0.3 (0.1–0.9)	0.5 (0.2–1.6)	0.0
Oman, 2007	2.3 (1.1–4.8)	3.5 (1.8–6.6)	1.2 (0.3–4.1)	0.3 (0.0–2.5)	0.4 (0.0–2.8)	0.2 (0.0–2.3)
Pakistan, 2003 (Islamabad)	1.4 (0.6–3.3)	2.3 (0.9–5.4)	0.6 (0.2–1.9)	0.2 (0.1–0.7)	0.3 (0.1–1.5)	0.0

Table 3.1.64 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Smoked cigarettes on ≥1 days of the past 30 days (current smokers)			% Smoked cigarettes on ≥20 days of the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Qatar, 2007	6.5 (4.7–8.9)	13.4 (9.5–18.7)	2.3 (1.0–5.1)	0.7 (0.3–1.8)	1.6 (0.5–4.5)	0.2 (0.0–1.8)
Saudi Arabia, 2007	6.7 (5.2–8.7)	10.2 (7.9–13.2)	2.6 (1.3–5.4)	1.4 (0.9–2.2)	2.2 (1.4–3.6)	0.2 (0.1–0.7)
Somalia, 2007 (Somaliland)	5.8 (4.0–8.4)	4.9 (3.2–7.4)	4.5 (1.6–11.8)	1.4 (0.4–5.1)	0.7 (0.1–5.6)	2.5 (0.5–10.9)
Sudan, 2005	6.0 (3.6–10.0)	10.2 (6.6–15.5)	2.1 (1.4–3.2)	0.5 (0.2–1.3)	0.2 (0.0–0.8)	0.7 (0.2–2.5)
Syrian Arab Republic, 2008 ^c	13.3 (9.6–18.0)	19.6 (15.7–24.2)	6.3 (4.1–9.6)	1.4 (0.7–2.6)	2.3 (1.3–3.9)	0.3 (0.1–1.7)
Tunisia, 2007	8.3 (6.6–10.4)	15.1 (12.3–18.4)	1.6 (0.8–3.1)	1.0 (0.5–2.3)	2.1 (1.0–4.5)	0.0
United Arab Emirates, 2005	8.0 (6.6–9.7)	12.1 (10.3–14.1)	3.6 (2.9–4.4)	1.3 (1.0–1.8)	2.0 (1.6–2.5)	0.3 (0.2–0.6)
West Bank, 2008 ^c	21.7 (15.1–30.2)	32.8 (27.0–39.1)	12.3 (9.1–16.4)	3.9 (1.8–8.1)	6.6 (4.3–10.0)	0.7 (0.2–2.8)
Yemen, 2008	3.9 (2.5–6.2)	4.2 (2.3–7.5)	1.6 (0.8–3.1)	0.5 (0.3–0.8)	0.4 (0.1–2.7)	0.4 (0.1–2.8)
Europe	8.4 (8.1 – 8.7)	11.0 (10.5 – 11.4)	4.2 (4.0 – 4.5)	1.9 (1.8 – 2.1)	2.6 (2.4 – 2.8)	1.4 (1.3 – 1.6)
Albania, 2004	8.5 (6.8–10.5)	11.9 (9.0–15.5)	5.8 (4.5–7.5)	0.6 (0.3–1.0)	1.1 (0.6–2.1)	0.2 (0.0–0.9)
Armenia, 2004	5.0 (3.9–6.6)	10.3 (7.7–13.5)	0.9 (0.4–2.2)	1.4 (0.7–2.9)	3.3 (1.6–6.6)	0.0
Belarus, 2004	26.5 (24.0–29.1)	31.2 (27.7–35.0)	21.7 (19.0–24.8)	8.3 (6.9–10.0)	10.8 (8.4–13.6)	5.9 (4.8–7.3)
Bosnia and Herzegovina, 2008	11.7 (9.9–13.9)	14.3 (12.3–16.6)	9.4 (7.3–12.0)	3.2 (2.3–4.5)	4.4 (3.2–6.0)	2.2 (1.4–3.4)
Bulgaria, 2008	28.2 (24.1–32.7)	24.4 (20.2–29.2)	31.6 (25.9–37.9)	14.3 (12.0–17.0)	11.7 (9.6–14.2)	16.8 (13.3–21.0)
Croatia, 2007	24.1 (19.9–28.7)	21.7 (17.9–26.0)	25.6 (20.6–31.2)	8.9 (7.0–11.4)	7.8 (6.1–10.0)	9.2 (6.5–12.9)

Table 3.1.64 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Smoked cigarettes on ≥ 1 days of the past 30 days (current smokers)			% Smoked cigarettes on ≥ 20 days of the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Cyprus, 2005	10.3 (9.7–10.8)	12.3 (11.5–13.2)	8.2 (7.5–8.9)	3.8 (3.5–4.1)	5.2 (4.7–5.8)	2.3 (1.9–2.7)
Czech Republic, 2007	31.1 (27.2–35.3)	29.8 (25.1–35.0)	32.7 (27.6–38.1)	9.0 (6.8–11.9)	7.9 (5.3–11.5)	10.4 (7.4–14.5)
Estonia, 2007	27.2 (23.5–31.2)	28.2 (23.5–33.3)	26.2 (21.6–31.4)	10.4 (8.6–12.4)	11.6 (8.8–15.0)	9.2 (6.8–12.3)
Georgia, 2008	8.6 (5.5–13.2)	15.2 (9.9–22.8)	2.8 (1.0–7.8)	1.5 (0.8–2.9)	3.0 (1.7–5.2)	0.3 (0.0–2.1)
Greece, 2005	10.4 (8.8–12.4)	11.3 (9.4–13.6)	9.0 (7.2–11.3)	3.1 (2.3–4.2)	3.3 (2.3–4.6)	2.5 (1.7–3.6)
Hungary, 2008	23.2 (19.2–27.7)	21.5 (16.6–27.4)	23.6 (19.4–28.3)	8.6 (6.3–11.7)	8.5 (6.1–11.6)	7.7 (5.5–10.9)
Kazakhstan, 2004	9.4 (7.7–11.4)	12.7 (10.5–15.3)	6.6 (5.1–8.5)	2.6 (1.8–3.8)	3.5 (2.4–5.1)	1.9 (1.2–2.9)
Kosovo, 2004 ^d	6.5 (5.3–8.0)	7.7 (5.6–10.4)	5.4 (4.1–7.2)	1.1 (0.6–1.9)	1.0 (0.6–1.7)	1.2 (0.5–2.5)
Kyrgyzstan, 2008	4.4 (3.3–5.7)	6.8 (5.0–9.4)	2.2 (1.4–3.6)	0.6 (0.4–1.1)	0.8 (0.4–1.7)	0.5 (0.2–1.1)
Latvia, 2007	32.9 (27.2–39.0)	36.3 (30.9–42.1)	30.2 (24.1–37.0)	13.8 (10.1–18.5)	16.6 (13.0–20.9)	11.5 (7.5–17.2)
Lithuania, 2005	29.6 (26.5–32.8)	33.8 (29.4–38.6)	25.9 (21.2–31.2)	10.4 (8.3–13.0)	13.9 (10.7–17.9)	7.5 (5.0–11.1)
Macedonia, former Yugoslav Republic of, 2008	9.8 (7.4–12.7)	9.7 (7.3–12.9)	9.8 (7.2–13.1)	3.7 (2.6–5.2)	4.0 (2.7–6.1)	3.4 (2.4–4.8)
Moldova, Republic of, 2008	11.3 (9.3–13.7)	18.5 (15.0–22.6)	5.6 (4.3–7.2)	3.1 (2.3–4.1)	5.6 (4.0–7.8)	0.9 (0.6–1.4)
Montenegro, 2008	5.1 (4.0–6.4)	5.7 (4.3–7.6)	4.4 (3.1–6.1)	1.0 (0.6–1.6)	1.3 (0.7–2.2)	0.7 (0.2–2.1)
Poland, 2003	18.6 (15.7–22.0)	19.6 (15.1–25.1)	17.1 (14.1–20.5)	6.8 (5.2–8.7)	8.5 (6.2–11.7)	5.3 (3.9–7.2)
Romania, 2004	17.6 (14.0–21.9)	21.5 (16.1–28.0)	14.3 (11.4–17.7)	3.8 (2.6–5.5)	4.9 (3.1–7.7)	2.8 (1.7–4.8)

Table 3.1.64 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Smoked cigarettes on ≥ 1 days of the past 30 days (current smokers)			% Smoked cigarettes on ≥ 20 days of the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Russian Federation, 2004	25.4 (23.2–27.8)	26.9 (23.5–30.6)	23.9 (20.6–27.4)	10.5 (8.9–12.4)	11.5 (8.6–15.2)	9.5 (7.2–12.4)
Serbia, 2008	9.3 (6.9–12.5)	9.3 (6.3–13.4)	8.9 (6.6–11.9)	1.9 (1.1–3.2)	2.7 (1.5–4.7)	1.3 (0.7–2.3)
Slovakia, 2007	25.0 (22.6–27.6)	26.5 (23.2–29.9)	23.4 (20.7–26.4)	8.0 (6.4–10.1)	9.9 (7.7–12.7)	6.2 (4.7–8.2)
Slovenia, 2007	20.3 (16.3–24.9)	15.2 (10.7–21.2)	23.0 (18.7–27.9)	7.7 (5.5–10.8)	5.5 (3.2–9.5)	9.0 (6.3–12.7)
Tajikistan, 2004	1.1 (0.7–1.7)	1.5 (0.9–2.5)	0.5 (0.3–0.9)	0.1 (0.0–0.4)	0.1 (0.0–0.6)	0.1 (0.0–0.9)
Turkey, 2003	6.9 (6.1–7.9)	9.4 (8.2–10.9)	3.5 (2.9–4.3)	1.5 (1.2–1.8)	2.2 (1.7–2.7)	0.5 (0.3–0.8)
Ukraine, 2005	24.0 (21.0–27.3)	27.6 (24.0–31.5)	20.6 (16.9–24.8)	7.7 (6.4–9.3)	10.4 (8.2–13.2)	5.1 (3.9–6.7)
Uzbekistan, 2008 (Tashkent)	1.8 (0.6–5.1)	2.4 (0.7–7.3)	1.2 (0.3–4.3)	0.6 (0.2–2.1)	0.7 (0.2–3.3)	0.5 (0.1–2.5)
South East Asia	4.7 (4.2 – 5.2)	4.7 (4.1 – 5.4)	2.2 (1.7 – 2.7)	0.8 (0.5 – 1.0)	1.5 (1.1 – 1.9)	0.4 (0.1 – 0.8)
Bangladesh, 2007	2.0 (1.1–3.6)	2.9 (1.7–5.0)	1.1 (0.3–3.2)	0.3 (0.1–1.0)	0.5 (0.1–2.4)	0.2 (0.0–0.8)
Bhutan, 2006	12.1 (9.6–15.2)	18.3 (13.8–23.8)	6.3 (4.1–9.6)	0.6 (0.3–1.3)	1.0 (0.3–3.0)	0.2 (0.0–2.0)
East Timor, 2006	32.4 (25.5–40.2)	50.6 (41.6–59.6)	17.3 (10.7–26.8)	6.8 (4.3–10.5)	9.7 (5.8–15.9)	3.7 (1.9–6.8)
India, 2006	3.8 (3.1–4.7)	5.4 (4.3–6.7)	1.6 (1.0–2.6)	NA	NA	NA
Indonesia, 2006	11.8 (9.5–14.5)	23.9 (18.5–30.3)	1.9 (1.2–2.8)	1.5 (1.0–2.2)	3.3 (2.2–4.9)	0.0
Maldives, 2007	3.8 (2.7–5.3)	0.9 (0.4–2.0)	6.6 (4.6–9.6)	0.9 (0.6–1.5)	0.6 (0.2–1.6)	1.4 (0.8–2.5)
Myanmar, 2007	4.9 (3.6–6.5)	8.5 (6.2–11.6)	1.3 (0.6–2.6)	0.4 (0.2–0.9)	0.7 (0.3–1.6)	0.1 (0.0–0.7)

Table 3.1.64 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Smoked cigarettes on ≥ 1 days of the past 30 days (current smokers)			% Smoked cigarettes on ≥ 20 days of the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Nepal, 2007	3.9 (2.7–5.6)	5.7 (3.9–8.3)	1.9 (1.0–3.5)	0.2 (0.0–0.9)	0.4 (0.1–1.6)	0.0
Sri Lanka, 2007	1.2 (0.5–2.9)	1.6 (0.7–3.7)	0.9 (0.2–3.5)	0.4 (0.1–2.1)	0.2 (0.0–1.7)	0.6 (0.1–2.7)
Thailand, 2005	11.7 (10.0–13.7)	17.4 (15.2–20.0)	4.8 (3.6–6.4)	1.7 (1.3–2.4)	2.7 (2.1–3.4)	0.7 (0.4–1.4)
Western Pacific	13.7 (13.2 – 14.1)	18.3 (17.6 – 19.1)	6.4 (6.0 – 6.8)	1.7 (1.5 – 1.8)	2.1 (1.9 – 2.4)	0.7 (0.6 – 0.9)
American Samoa, 2005 ^b	16.7 (13.9–19.9)	18.3 (14.6–22.8)	15.1 (11.7–19.3)	2.9 (1.9–4.4)	3.4 (2.1–5.6)	2.3 (1.3–4.2)
Cambodia, 2003	2.5 (1.3–4.6)	4.6 (2.4–8.6)	0.2 (0.0–1.6)	0.7 (0.3–1.4)	1.3 (0.6–2.6)	0.0
China, 2005 (Macau) ^e	10.4 (8.1–13.4)	11.0 (8.1–14.8)	9.8 (7.0–13.6)	2.7 (1.6–4.5)	2.7 (1.5–4.7)	2.7 (1.5–4.8)
China, 2005 (Shanghai)	1.7 (1.0–3.0)	2.7 (1.4–5.2)	0.8 (0.3–1.8)	0.2 (0.1–0.8)	0.5 (0.1–1.5)	0.0 (0.0–0.3)
Cook Islands, 2008	30.0 (28.9–31.2)	28.2 (26.5–29.9)	31.5 (29.9–33.1)	2.0 (1.7–2.3)	2.6 (2.1–3.2)	1.4 (1.1–1.9)
Fiji, 2005	5.0 (2.9–8.5)	6.7 (3.8–11.6)	3.1 (1.6–6.0)	0.2 (0.1–0.8)	0.2 (0.1–0.8)	0.1 (0.0–0.7)
Guam, 2002 ^b	22.6 (19.9–25.5)	25.2 (21.7–29.2)	19.7 (16.3–23.5)	9.2 (7.3–11.5)	10.4 (7.7–13.8)	7.7 (5.5–10.8)
Lao People's Democratic Republic, 2007 (Vientiane Capital)	3.0 (1.9–4.6)	4.9 (2.7–8.6)	1.3 (0.7–2.5)	0.2 (0.1–0.8)	0.6 (0.2–1.7)	0.0
Malaysia, 2003	20.2 (16.6–24.3)	36.3 (30.6–42.5)	4.2 (3.0–5.9)	3.7 (2.7–5.0)	7.2 (5.5–9.5)	0.2 (0.1–0.6)
Micronesia, 2007	28.3 (23.9–33.2)	36.9 (29.9–44.5)	19.8 (15.9–24.5)	3.7 (2.7–5.0)	4.4 (2.7–7.1)	2.4 (1.6–3.7)
Mongolia, 2007	6.9 (4.4–10.5)	11.0 (7.6–15.6)	3.3 (1.4–7.3)	1.6 (0.9–2.8)	2.9 (1.5–5.4)	0.5 (0.2–1.7)
New Zealand, 2008	17.6 (12.1–24.8)	14.5 (8.6–23.4)	20.6 (15.5–26.9)	8.0 (4.3–14.4)	8.1 (3.0–20.2)	7.8 (5.4–11.2)

Table 3.1.64 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Smoked cigarettes on ≥ 1 days of the past 30 days (current smokers)			% Smoked cigarettes on ≥ 20 days of the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Northern Mariana Islands, 2004 ^f	29.1 (26.6–31.7)	26.6 (23.6–29.9)	31.5 (28.2–34.9)	4.8 (3.8–6.1)	4.4 (3.4–5.9)	5.2 (3.8–7.2)
Palau, 2005	26.7 (23.3–30.3)	31.0 (26.9–35.5)	22.6 (18.1–27.8)	4.1 (3.0–5.7)	5.3 (3.4–8.1)	3.1 (1.8–5.0)
Papua New Guinea, 2007	43.8 (39.4–48.2)	52.1 (47.3–56.8)	35.8 (30.0–42.0)	7.0 (5.3–9.0)	11.8 (9.0–15.4)	2.1 (1.5–3.0)
Philippines, 2007	17.5 (14.7–20.6)	23.4 (19.7–27.7)	12.0 (9.4–15.1)	1.8 (1.3–2.5)	2.5 (1.8–3.5)	1.0 (0.3–3.0)
Republic of Korea (South), 2008	8.8 (7.3–10.5)	10.8 (8.8–13.2)	6.3 (4.9–7.9)	2.8 (2.0–4.0)	3.9 (2.8–5.4)	1.5 (0.9–2.6)
Samoa, 2007	15.2 (11.5–19.8)	16.0 (10.3–24.0)	12.7 (8.2–19.2)	2.4 (1.3–4.7)	3.5 (1.6–7.5)	1.1 (0.3–3.4)
Singapore, 2000	9.1 (8.1–10.3)	10.5 (8.8–12.4)	7.5 (6.2–9.1)	2.4 (2.0–2.9)	3.0 (2.4–3.8)	1.7 (1.3–2.3)
Solomon Islands, 2008	24.2 (18.1–31.6)	24.3 (17.2–33.3)	23.4 (16.3–32.3)	3.1 (1.4–6.7)	4.3 (2.1–8.3)	2.5 (0.9–7.0)
Tuvalu, 2006	26.6 (26.4–26.8)	33.2 (32.9–33.6)	22.1 (21.9–22.4)	1.3 (1.3–1.4)	3.4 (3.3–3.6)	0.0
Vanuatu, 2007	18.2 (17.0–19.4)	28.2 (26.1–30.3)	11.4 (10.1–12.7)	1.3 (1.0–1.7)	2.2 (1.6–2.9)	0.8 (0.5–1.2)
Viet Nam, 2007 (Hanoi)	3.0 (1.7–5.2)	5.0 (2.8–8.9)	1.0 (0.5–1.9)	1.0 (0.5–1.9)	1.7 (1.0–2.8)	0.4 (0.1–1.4)

Source: CDC 2010b.

Note: CI = confidence interval; NA = question not asked; WHO = World Health Organization.

^aTerritory of United Kingdom

^bTerritory of United States

^cUnited Nations Relief and Works Agency

^dUnited Nations Administered Province

^eSpecial Administrative Region of China

^fCommonwealth in political union with the United States

Table 3.1.65 Percentage of youth 13–15 years of age who currently smoke and always have or feel like having a cigarette first thing in the morning, who want to stop smoking, and who have tried to stop smoking during the past year, by gender; Global Youth Tobacco Survey 1999–2009; worldwide

WHO region and WHO member state, territory, or special administrative region, and year	% Always have or feel like having a cigarette first thing in the morning			% Want to stop smoking			% Tried to stop smoking during the past year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Africa	9.6 (7.9–11.2)	9.1 (6.7–11.5)	13.1 (9.4–16.7)	82.9 (81.5–84.3)	89.9 (88.6–91.3)	75.2 (71.8–78.6)	77.9 (76.3–79.4)	77.3 (75.3–79.3)	73.2 (69.8–76.6)
Algeria, 2007 (Constantine)	18.5 (9.9–31.7)	18.6 (10.2–31.5)	NR	80.9 (71.1–87.9)	81.6 (71.0–89.0)	NR	64.5 (47.5–78.4)	66.3 (50.3–79.3)	NR
Benin, 2003 (Atlantique Littoral)	NR	NR	NR	79.6 (51.8–93.4)	83.4 (52.1–95.9)	NR	67.8 (52.0–80.3)	NR	NR
Botswana, 2008	14.8 (9.9–21.5)	16.1 (9.3–26.5)	11.0 (6.1–19.2)	78.0 (67.7–85.7)	78.1 (64.8–87.4)	83.0 (70.1–91.1)	72.6 (61.7–81.4)	74.5 (56.5–86.8)	72.0 (55.7–84.0)
Burkina Faso, 2006 (Ouagadougou)	14.7 (7.3–27.2)	NR	NR	95.5 (82.9–98.9)	97.0 (81.5–99.6)	NR	89.9 (80.1–95.1)	87.5 (75.1–94.2)	NR
Burundi, 2008	NR	NR	NR	NR	NR	NR	NR	NR	NR
Cameroon, 2008 (Yaoude)	17.5 (8.7–31.9)	NR	NR	73.2 (49.1–88.6)	NR	NR	72.9 (48.9–88.3)	NR	NR
Cape Verde, 2007	NR	NR	NR	NR	NR	NR	NR	NR	NR
Central African Republic, 2008 (Bangui)	7.0 (2.0–21.4)	NR	NR	84.9 (66.8–94.0)	NR	NR	90.3 (75.2–96.6)	NR	NR
Comoros, 2007	NR	NR	NR	NR	NR	NR	NR	NR	NR
Congo, 2006	12.5 (4.9–28.5)	15.7 (5.3–38.3)	NR	77.1 (61.9–87.4)	84.3 (71.2–92.1)	NR	84.1 (69.3–92.5)	78.3 (65.8–87.1)	NR
Côte D'Ivoire, 2003 (Abidjan)	3.6 (1.3–9.3)	3.8 (1.3–10.3)	NR	92.7 (84.6–96.7)	96.2 (88.7–98.8)	NR	87.5 (78.0–93.2)	88.0 (76.3–94.4)	NR
Democratic Republic of the Congo, 2008 (Kinshasa)	2.1 (0.2–18.3)	2.8 (0.3–22.0)	NR	76.0 (57.9–87.9)	75.0 (55.9–87.6)	NR	77.3 (58.0–89.4)	74.0 (52.9–87.8)	NR
Equatorial Guinea, 2008	NR	NR	NR	NR	NR	NR	NR	NR	NR

Table 3.1.65 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Always have or feel like having a cigarette first thing in the morning			% Want to stop smoking			% Tried to stop smoking during the past year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Eritrea, 2006	13.5 (4.6–33.6)	NR	NR	80.7 (65.3–90.3)	76.2 (52.8–90.1)	NR	84.6 (66.6–93.7)	NR	NR
Ethiopia, 2003 (Addis Ababa)	NR	NR	NR	NR	NR	NR	NR	NR	NR
Gambia, 2008 (Banjul)	26.9 (20.2–34.8)	22.2 (13.8–33.6)	31.3 (17.8–48.8)	60.4 (40.3–77.6)	NR	NR	63.2 (47.1–76.7)	NR	NR
Ghana, 2006	16.4 (8.3–29.8)	6.0 (2.6–13.5)	25.6 (12.2–46.0)	80.2 (72.2–86.3)	87.4 (72.2–94.9)	78.7 (65.5–87.8)	61.2 (46.6–74.1)	73.9 (54.9–86.8)	45.2 (24.2–68.1)
Guinea, 2008	NR	NR	NR	85.5 (75.5–91.8)	84.1 (73.4–91.1)	NR	80.4 (66.1–89.6)	NR	NR
Guinea-Bissau, 2008 (Bissau)	4.7 (1.1–18.3)	NR	NR	81.0 (65.3–90.6)	NR	NR	87.2 (74.7–94.1)	84.3 (71.6–92.0)	NR
Kenya, 2007	14.7 (9.3–22.4)	16.7 (9.6–27.4)	14.3 (8.1–24.1)	85.3 (71.4–93.1)	90.3 (72.8–97.0)	76.9 (59.0–88.5)	75.9 (67.3–82.8)	76.3 (64.2–85.3)	NR
Lesotho, 2008	12.7 (5.1–28.4)	13.0 (2.2–49.5)	10.9 (4.0–26.2)	82.0 (72.9–88.5)	81.7 (58.5–93.4)	82.2 (67.4–91.1)	66.8 (48.3–81.2)	59.4 (35.9–79.3)	76.2 (49.6–91.2)
Liberia, 2008 (Monrovia)	NR	NR	NR	NR	NR	NR	NR	NR	NR
Madagascar, 2008	1.8 (0.4–8.4)	2.5 (0.5–11.2)	NR	87.8 (53.9–97.8)	84.9 (44.0–97.6)	NR	72.7 (50.4–87.4)	70.5 (46.3–86.9)	NR
Malawi, 2005	17.5 (5.9–41.7)	NR	NR	68.0 (46.8–83.6)	NR	NR	61.4 (38.9–79.9)	NR	NR
Mali, 2008	29.4 (13.4–53.0)	22.7 (9.7–44.6)	NR	62.8 (35.5–83.8)	64.9 (35.9–85.9)	NR	60.4 (33.9–82.0)	58.2 (34.3–78.8)	NR
Mauritania, 2006	16.8 (10.7–25.6)	13.8 (7.2–24.8)	20.7 (11.3–34.6)	73.7 (61.9–82.9)	76.3 (61.1–86.8)	70.2 (54.5–82.3)	78.1 (68.3–85.5)	72.9 (59.7–83.1)	83.0 (71.6–90.5)
Mauritius, 2008	12.1 (6.6–21.4)	14.4 (7.3–26.5)	5.4 (1.8–15.3)	62.3 (46.0–76.2)	70.3 (52.2–83.7)	44.3 (22.6–68.4)	58.5 (45.5–70.4)	66.1 (53.1–77.0)	48.0 (32.1–64.3)
Mozambique, 2007 (Maputo City)	NR	NR	NR	NR	NR	NR	NR	NR	NR
Namibia, 2004	13.6 (9.8–18.4)	11.7 (6.7–19.9)	15.9 (9.0–26.6)	73.4 (65.4–80.1)	79.3 (66.7–88.0)	67.6 (57.6–76.3)	73.8 (67.5–79.3)	76.7 (67.5–83.9)	71.2 (58.1–81.6)

Table 3.1.65 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Always have or feel like having a cigarette first thing in the morning			% Want to stop smoking			% Tried to stop smoking during the past year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Niger, 2006	6.0 (1.5–20.6)	6.5 (1.7–21.9)	NR	73.1 (54.1–86.2)	74.8 (55.0–87.8)	NR	61.7 (41.6–78.4)	63.9 (42.1–81.1)	NR
Nigeria, 2008 (Cross River State)	NR	NR	NR	NR	NR	NR	NR	NR	NR
Rwanda, 2008	NR	NR	NR	NR	NR	NR	NR	NR	NR
Senegal, 2007	4.6 (1.3–15.2)	7.5 (2.3–21.8)	NR	77.4 (45.6–93.3)	87.3 (62.3–96.6)	NR	71.2 (42.2–89.3)	79.2 (56.8–91.7)	NR
Seychelles, 2007	0.0	0.0	0.0	73.4 (63.2–81.5)	NR	NR	74.1 (64.2–82.0)	76.3 (62.6–86.1)	70.9 (51.9–84.6)
Sierra Leone, 2008 (Western Area)	11.3 (3.3–32.1)	NR	NR	74.9 (52.6–89.0)	NR	NR	79.6 (60.9–90.8)	NR	NR
South Africa, 2008	11.8 (7.6–17.8)	13.3 (7.3–23.0)	9.6 (5.0–17.7)	77.0 (68.8–83.6)	78.6 (68.1–86.4)	75.2 (62.5–84.7)	79.6 (73.5–84.6)	80.9 (72.4–87.2)	78.1 (68.6–85.4)
Swaziland, 2005	0.5 (0.1–4.2)	0.9 (0.1–7.1)	0.0	72.2 (63.5–79.5)	74.5 (62.0–83.9)	66.1 (53.0–77.1)	69.9 (63.7–75.4)	72.6 (64.7–79.3)	66.4 (56.6–74.9)
Togo, 2007	0.0	0.0	NR	78.5 (69.8–85.2)	81.1 (70.7–88.5)	NR	60.7 (50.1–70.4)	60.8 (50.5–70.3)	NR
Uganda, 2007	24.0 (12.1–41.8)	14.5 (6.1–30.5)	NR	70.3 (57.1–80.8)	81.1 (59.2–92.7)	NR	76.6 (63.0–86.3)	79.0 (61.2–90.0)	NR
United Republic of Tanzania, 2008 (Arusha)	NR	NR	NR	NR	NR	NR	NR	NR	NR
Zambia, 2007 (Lusaka)	13.3 (5.3–29.7)	NR	NR	71.8 (49.8–86.7)	NR	NR	65.6 (45.9–81.1)	NR	NR
Zimbabwe, 2008 (Harare)	NR	NR	NR	NR	NR	NR	NR	NR	NR
The Americas	4.6 (3.6–5.6)	4.3 (2.9–5.7)	1.1 (0.4–1.8)	80.1 (79.0–81.2)	79.8 (78.2–81.5)	54.0 (51.7–56.3)	65.0 (63.5–66.4)	67.2 (65.2–69.1)	62.2 (60.2–64.3)
Antigua & Barbuda, 2004	NR	NR	NR	NR	NR	NR	NR	NR	NR
Argentina, 2007	9.7 (7.0–13.2)	10.7 (6.1–17.9)	8.4 (5.2–13.5)	50.2 (44.1–56.2)	47.3 (38.0–56.9)	52.3 (45.7–58.9)	62.5 (57.0–67.7)	63.2 (54.6–71.0)	62.5 (56.8–67.9)

Table 3.1.65 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Always have or feel like having a cigarette first thing in the morning			% Want to stop smoking			% Tried to stop smoking during the past year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Bahamas, 2004	NR	NR	NR	NR	NR	NR	NR	NR	NR
Barbados, 2007	6.7 (2.3–17.9)	9.0 (2.5–27.1)	NR	54.7 (39.3–69.3)	52.7 (36.7–68.2)	NR	57.2 (44.3–69.2)	53.4 (41.1–65.4)	NR
Belize, 2008	3.2 (0.8–12.6)	NR	NR	74.7 (55.5–87.5)	NR	NR	65.0 (52.4–75.9)	58.9 (43.0–73.2)	NR
Bolivia, 2003 (La Paz)	3.0 (1.4–6.5)	2.9 (1.1–7.5)	3.3 (1.0–10.7)	60.7 (51.0–69.6)	65.5 (54.8–74.8)	50.9 (41.8–60.0)	72.5 (67.6–76.8)	75.3 (68.8–80.8)	66.7 (58.0–74.5)
Brazil, 2005 (Rio de Janeiro)	5.8 (2.5–12.7)	2.7 (1.3–5.6)	6.1 (2.0–17.1)	39.2 (27.0–52.9)	NR	40.4 (30.4–51.4)	51.8 (36.0–67.1)	55.8 (39.0–71.3)	48.7 (30.8–67.0)
British Virgin Islands, 2001 ^a	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chile, 2008 (Santiago)	3.7 (2.2–6.2)	4.3 (2.5–7.4)	3.5 (1.8–6.5)	49.7 (45.8–53.5)	48.5 (41.9–55.2)	49.3 (44.7–54.0)	59.3 (54.1–64.3)	60.9 (51.3–69.7)	57.9 (53.4–62.3)
Colombia, 2007 (Bogota)	0.0	0.0	0.0	64.7 (56.5–72.1)	65.5 (54.2–75.3)	63.1 (49.9–74.6)	63.5 (56.9–69.6)	63.6 (55.1–71.2)	63.8 (54.3–72.4)
Costa Rica, 2008	6.1 (2.9–12.6)	5.9 (1.9–17.0)	6.5 (2.9–13.7)	57.5 (49.4–65.2)	55.2 (43.3–66.5)	59.7 (47.3–71.0)	55.7 (47.5–63.6)	57.2 (44.8–68.7)	54.5 (42.6–65.9)
Cuba, 2004 (Havana)	3.8 (1.5–9.5)	2.1 (0.3–13.4)	5.6 (1.6–17.5)	56.8 (47.1–66.0)	65.8 (55.0–75.1)	46.3 (30.5–62.9)	54.5 (42.5–65.9)	68.8 (51.5–82.1)	37.9 (27.6–49.3)
Dominica, 2004	12.1 (5.8–23.5)	NR	NR	58.6 (44.7–71.2)	NR	NR	50.8 (38.6–63.0)	NR	NR
Dominican Republic, 2004	1.9 (0.5–7.6)	1.7 (0.2–12.1)	2.0 (0.3–13.9)	50.9 (31.6–69.9)	NR	54.0 (27.4–78.5)	55.1 (36.4–72.4)	57.7 (41.8–72.2)	52.5 (27.1–76.6)
Ecuador, 2007 (Quito)	0.0	0.0	0.0	59.2 (48.9–68.8)	64.5 (53.2–74.4)	54.1 (36.9–70.4)	62.4 (56.0–68.5)	66.9 (56.2–76.0)	57.3 (45.4–68.4)
El Salvador, 2003	1.1 (0.2–5.3)	2.2 (0.5–10.1)	0.0	97.7 (93.9–99.2)	96.2 (90.3–98.5)	NR	78.2 (68.8–85.4)	77.2 (63.1–87.0)	80.3 (65.0–90.0)
Grenada, 2004	12.3 (6.2–22.7)	NR	NR	64.8 (51.5–76.2)	NR	61.0 (40.7–78.1)	57.2 (44.0–69.4)	55.8 (37.0–73.1)	NR
Guatemala, 2008	5.7 (3.0–10.5)	4.9 (2.0–11.2)	5.7 (1.8–17.2)	60.1 (51.9–67.9)	65.6 (55.9–74.1)	53.4 (40.6–65.7)	72.1 (66.3–77.2)	75.4 (65.1–83.5)	66.9 (59.2–73.7)

Table 3.1.65 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Always have or feel like having a cigarette first thing in the morning			% Want to stop smoking			% Tried to stop smoking during the past year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Guyana, 2004	NR	NR	NR	NR	NR	NR	NR	NR	NR
Haiti, 2005 (Port au Prince)	13.9 (5.8–29.8)	6.6 (3.0–13.9)	18.7 (5.3–48.6)	72.6 (56.6–84.4)	NR	77.0 (54.0–90.6)	65.6 (49.8–78.6)	52.4 (38.9–65.5)	77.4 (54.6–90.8)
Honduras, 2003 (Tegucigalpa)	6.4 (2.8–14.1)	4.2 (0.8–19.9)	8.2 (3.3–18.8)	58.8 (44.5–71.7)	70.2 (44.6–87.3)	50.2 (38.4–61.9)	64.7 (55.5–72.9)	72.7 (60.2–82.5)	57.7 (40.3–73.3)
Jamaica, 2006	5.9 (2.3–14.5)	9.3 (3.0–25.5)	1.6 (0.2–13.5)	73.3 (58.4–84.2)	75.6 (57.3–87.8)	69.6 (51.8–83.0)	60.5 (47.9–71.9)	61.3 (47.2–73.7)	60.4 (40.3–77.6)
Mexico, 2006 (Mexico City)	4.2 (2.3–7.5)	4.3 (2.0–9.0)	4.6 (1.7–11.8)	42.2 (36.3–48.4)	42.5 (34.9–50.4)	45.7 (37.8–53.8)	53.3 (46.1–60.4)	52.8 (43.6–61.7)	53.0 (42.2–63.5)
Montserrat, 2000 ^a	NR	NR	NR	88.0	82.6	92.5	NR	NR	NR
Nicaragua, 2003 (Centro Managua)	3.1 (1.2–7.8)	3.8 (1.2–11.5)	2.1 (0.2–15.9)	60.4 (44.5–74.3)	65.0 (43.9–81.6)	53.0 (31.2–73.7)	69.4 (59.0–78.1)	67.6 (55.6–77.6)	73.8 (57.6–85.3)
Panama, 2008	5.3 (2.1–12.7)	4.5 (1.2–15.3)	NR	65.9 (47.8–80.3)	69.7 (51.3–83.5)	NR	75.9 (63.3–85.2)	81.2 (67.8–89.9)	NR
Paraguay, 2008	2.2 (0.7–6.9)	3.2 (1.0–10.4)	0.4 (0.1–1.8)	59.0 (42.2–74.0)	57.2 (36.7–75.6)	63.4 (46.0–77.9)	69.0 (55.1–80.1)	67.1 (48.7–81.5)	72.7 (56.7–84.4)
Peru, 2007 (Lima)	0.9 (0.1–6.9)	1.8 (0.2–12.9)	0.0	69.1 (59.7–77.1)	67.3 (50.8–80.4)	69.2 (57.1–79.2)	64.7 (56.4–72.2)	71.7 (59.9–81.2)	NR
Puerto Rico, 2004 ^b	NA	NA	NA	NR	NR	NR	NR	NR	NR
Saint Kitts & Nevis, 2002	NR	NR	NR	NR	NR	NR	NR	NR	NR
Saint Lucia, 2007	3.9 (0.9–14.9)	NR	NR	57.8 (41.0–72.9)	NR	NR	60.5 (41.7–76.7)	NR	NR
Saint Vincent & The Grenadines, 2007	3.4 (0.7–14.8)	NR	NR	67.5 (46.9–83.0)	NR	NR	72.4 (57.6–83.5)	NR	NR
Suriname, 2004	0.0	NR	NR	NR	NR	NR	NR	NR	NR
Trinidad & Tobago, 2007	3.0 (0.9–9.1)	3.8 (0.9–14.4)	0.2 (0.0–1.2)	83.4 (76.2–88.7)	88.4 (73.5–95.5)	NR	79.7 (68.2–87.7)	81.1 (68.2–89.6)	77.0 (52.5–91.0)

Table 3.1.65 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Always have or feel like having a cigarette first thing in the morning			% Want to stop smoking			% Tried to stop smoking during the past year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Oman, 2007	NR	NR	NR	NR	NR	NR	NR	NR	NR
Pakistan, 2003 (Islamabad)	NR	NR	NR	NR	NR	NR	NR	NR	NR
Qatar, 2007	NR	NR	NR	59.6 (37.4–78.5)	NR	NR	55.4 (38.7–71.0)	NR	NR
Saudi Arabia, 2007	15.5 (9.8–23.5)	16.7 (9.2–28.3)	NR	71.7 (61.7–80.0)	75.9 (62.4–85.7)	NR	62.3 (51.2–72.3)	66.9 (56.7–75.7)	NR
Somalia, 2007 (Somaliland)	NR	NR	NR	NR	NR	NR	NR	NR	NR
Sudan, 2005	3.6 (1.0–12.0)	2.2 (0.7–6.9)	NR	66.4 (49.9–79.7)	72.9 (55.9–85.1)	NR	60.9 (36.6–80.8)	65.6 (38.2–85.5)	NR
Syrian Arab Republic, 2008 ^c	5.1 (1.7–14.5)	4.8 (1.5–14.2)	NR	73.1 (63.6–80.8)	76.0 (67.7–82.8)	NR	71.3 (60.0–80.5)	74.7 (63.7–83.2)	NR
Tunisia, 2007	2.0 (0.5–7.9)	2.2 (0.5–8.8)	NR	84.0 (71.0–91.8)	82.3 (69.0–90.7)	NR	71.4 (56.1–83.0)	68.0 (50.9–81.3)	NR
United Arab Emirates, 2005	14.5 (11.0–18.8)	16.4 (12.0–21.9)	7.9 (4.0–14.7)	60.5 (54.8–66.0)	62.3 (55.6–68.5)	52.3 (43.2–61.2)	62.2 (55.6–68.4)	62.7 (55.8–69.2)	58.7 (48.2–68.4)
West Bank, 2008 ^c	12.2 (6.1–23.0)	11.7 (5.2–24.4)	5.9 (1.4–22.2)	56.1 (44.0–67.5)	58.3 (44.9–70.6)	48.3 (28.9–68.3)	62.6 (50.3–73.4)	66.3 (55.1–75.9)	49.5 (28.8–70.5)
Yemen, 2008	NR	NR	NR	NR	NR	NR	NR	NR	NR
Europe	10.2 (9.4–11.1)	11.7 (10.5–12.9)	9.0 (7.7–10.3)	61.1 (60.1–62.1)	66.2 (64.8–67.5)	62.6 (61.1–64.1)	71.7 (70.8–72.6)	70.7 (69.6–71.8)	73.8 (71.3–82.9)
Albania, 2004	1.1 (0.2–4.7)	2.0 (0.4–8.9)	0.0	68.0 (57.8–76.8)	71.9 (60.1–81.3)	60.9 (43.8–75.8)	80.4 (73.2–86.1)	78.6 (70.8–84.7)	84.6 (65.3–94.1)
Armenia, 2004	13.8 (5.5–30.4)	14.5 (5.8–31.7)	NR	80.3 (65.8–89.6)	81.4 (66.2–90.7)	NR	71.3 (54.5–83.7)	72.1 (55.3–84.4)	NR
Belarus, 2004	6.0 (4.2–8.4)	7.0 (4.5–10.6)	4.6 (2.7–7.8)	72.1 (67.8–76.1)	72.8 (66.4–78.4)	71.2 (63.7–77.6)	77.4 (72.8–81.4)	74.7 (69.0–79.6)	81.5 (75.1–86.6)
Bosnia and Herzegovina, 2008	NA	NA	NA	52.4 (48.1–56.7)	55.8 (50.4–61.2)	48.6 (42.3–55.0)	68.9 (65.7–71.8)	67.0 (62.3–71.3)	71.9 (66.2–76.9)

Table 3.1.65 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Always have or feel like having a cigarette first thing in the morning			% Want to stop smoking			% Tried to stop smoking during the past year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Bulgaria, 2008	15.6 (10.6–22.3)	17.3 (9.3–29.9)	14.4 (9.1–21.9)	49.1 (42.5–55.8)	48.8 (40.9–56.7)	48.8 (38.0–59.7)	57.8 (52.5–63.0)	53.5 (45.3–61.5)	60.0 (53.5–66.2)
Croatia, 2007	11.1 (7.2–16.7)	12.7 (7.1–21.5)	8.9 (5.6–13.9)	41.2 (37.6–44.9)	43.6 (33.9–53.9)	38.5 (32.5–44.7)	66.4 (61.9–70.7)	66.9 (58.4–74.4)	66.1 (61.7–70.3)
Cyprus, 2005	23.3 (20.6–26.3)	26.8 (23.1–31.0)	17.8 (14.2–22.1)	48.6 (44.9–52.2)	49.8 (44.9–54.7)	46.0 (40.5–51.6)	61.4 (58.0–64.6)	57.6 (53.0–62.1)	66.0 (61.1–70.6)
Czech Republic, 2007	11.5 (7.5–17.2)	11.0 (6.4–18.3)	11.9 (7.1–19.2)	52.6 (47.7–57.5)	57.3 (49.5–64.8)	48.4 (41.7–55.1)	77.1 (74.1–79.8)	73.1 (69.6–76.3)	80.7 (75.7–84.9)
Estonia, 2007	10.1 (6.1–16.1)	12.4 (6.9–21.4)	7.1 (3.2–15.1)	69.8 (61.1–77.3)	70.4 (62.5–77.2)	69.6 (56.1–80.4)	69.0 (64.4–73.3)	70.5 (64.3–76.1)	67.1 (61.4–72.4)
Georgia, 2008	0.0	0.0	NR	67.0 (47.5–81.9)	NR	NR	73.6 (54.6–86.6)	74.8 (50.0–89.9)	NR
Greece, 2005	10.5 (7.2–15.1)	8.8 (4.5–16.5)	10.9 (5.9–19.2)	37.6 (31.3–44.4)	37.5 (28.0–48.0)	37.2 (29.1–46.1)	57.9 (50.6–64.9)	56.9 (48.4–65.0)	60.6 (49.7–70.5)
Hungary, 2008	17.4 (12.0–24.5)	15.3 (9.7–23.3)	15.5 (9.9–23.4)	41.0 (34.7–47.7)	39.5 (29.8–50.1)	40.7 (30.1–52.3)	66.3 (59.4–72.6)	64.3 (54.0–73.5)	68.6 (58.2–77.5)
Kazakhstan, 2004	7.9 (5.1–12.1)	7.9 (4.6–13.0)	8.0 (3.0–19.5)	75.7 (70.8–79.9)	74.0 (67.6–79.5)	79.1 (72.6–84.4)	69.7 (61.7–76.7)	68.7 (60.7–75.8)	71.7 (60.9–80.4)
Kosovo, 2004 ^d	10.6 (4.4–23.2)	16.3 (5.4–39.6)	4.6 (0.9–19.7)	76.3 (61.2–86.8)	77.5 (55.3–90.6)	74.5 (56.6–86.8)	73.2 (59.3–83.6)	71.2 (57.6–81.8)	76.1 (48.1–91.6)
Kyrgyzstan, 2008	14.0 (5.7–30.4)	17.7 (6.4–40.2)	5.9 (1.6–19.6)	86.2 (72.0–93.8)	83.3 (63.9–93.4)	92.1 (80.2–97.1)	48.2 (25.7–71.4)	51.1 (26.2–75.5)	NR
Latvia, 2007	9.4 (7.3–11.9)	9.0 (6.6–12.3)	9.3 (5.7–14.8)	71.5 (66.7–75.8)	72.7 (66.8–77.9)	69.7 (64.0–74.8)	75.8 (70.6–80.3)	76.0 (68.3–82.4)	75.3 (65.0–83.4)
Lithuania, 2005	6.2 (3.4–11.0)	9.0 (4.7–16.8)	3.4 (1.3–9.0)	70.9 (63.4–77.5)	75.2 (66.1–82.4)	66.0 (55.9–74.9)	63.5 (57.3–69.3)	63.9 (59.3–68.2)	61.7 (50.6–71.8)
Macedonia, former Yugoslav Republic of, 2008	16.5 (12.7–21.1)	18.0 (13.0–24.4)	15.0 (9.1–23.7)	66.2 (58.4–73.1)	65.7 (57.0–73.4)	66.7 (55.3–76.4)	77.5 (70.4–83.3)	79.2 (70.4–85.9)	75.6 (64.3–84.2)
Moldova, Republic of, 2008	9.0 (5.0–15.7)	10.9 (5.6–20.1)	4.9 (1.3–16.7)	79.7 (74.1–84.4)	84.7 (79.2–88.9)	66.8 (48.5–81.1)	79.6 (69.5–87.0)	78.1 (67.8–85.7)	81.8 (63.0–92.3)
Montenegro, 2008	7.9 (3.7–16.0)	12.0 (5.0–25.9)	2.1 (0.2–16.1)	41.2 (30.9–52.3)	39.9 (26.2–55.5)	NR	75.6 (62.3–85.2)	70.7 (53.7–83.5)	NR

Table 3.1.65 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Always have or feel like having a cigarette first thing in the morning			% Want to stop smoking			% Tried to stop smoking during the past year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Poland, 2003	10.8 (6.3–17.9)	12.4 (7.2–20.6)	7.5 (3.2–16.4)	51.3 (42.5–60.0)	50.3 (38.6–62.0)	52.7 (40.9–64.3)	61.5 (55.8–66.9)	61.3 (53.0–69.0)	62.3 (53.3–70.6)
Romania, 2004	4.7 (2.5–8.8)	6.1 (2.5–14.1)	3.3 (1.1–9.5)	55.4 (44.8–65.5)	46.5 (33.2–60.2)	66.0 (53.1–76.9)	76.3 (67.9–83.1)	72.9 (64.6–79.8)	80.8 (61.7–91.6)
Russian Federation, 2004	10.6 (6.7–16.3)	13.4 (7.2–23.7)	7.4 (4.6–11.8)	65.5 (59.0–71.5)	65.9 (59.5–71.8)	65.0 (57.2–72.1)	78.1 (73.2–82.3)	74.1 (70.8–77.1)	82.4 (73.7–88.7)
Serbia, 2008	11.9 (7.0–19.6)	13.2 (5.7–27.7)	12.0 (5.1–26.0)	47.5 (37.3–57.9)	51.7 (36.4–66.6)	44.1 (30.0–59.3)	52.5 (41.2–63.5)	40.4 (29.7–52.2)	68.9 (54.0–80.7)
Slovakia, 2007	16.6 (13.7–20.0)	19.0 (15.1–23.5)	13.4 (9.4–18.7)	64.8 (61.0–68.4)	63.3 (58.0–68.4)	67.3 (61.4–72.6)	78.2 (75.3–80.9)	76.5 (71.5–80.8)	80.7 (76.9–84.0)
Slovenia, 2007	11.6 (7.3–18.0)	12.8 (7.0–22.4)	11.3 (5.3–22.7)	39.7 (34.6–45.0)	49.5 (38.5–60.5)	34.2 (26.9–42.4)	67.0 (58.1–74.8)	66.3 (49.3–79.9)	70.8 (60.1–79.6)
Tajikistan, 2004	NR	NR	NR	NR	NR	NR	NR	NR	NR
Turkey, 2003	13.1 (9.6–17.6)	12.8 (9.0–17.8)	13.6 (7.2–24.3)	65.3 (60.4–69.9)	68.9 (63.0–74.3)	60.2 (50.6–69.1)	61.4 (55.7–66.8)	66.9 (60.5–72.7)	44.8 (31.9–58.4)
Ukraine, 2005	7.5 (5.8–9.6)	8.0 (5.8–10.9)	6.7 (3.6–12.2)	74.5 (70.2–78.4)	75.4 (68.2–81.5)	73.8 (66.3–80.2)	82.1 (77.5–86.0)	80.6 (75.9–84.6)	84.3 (76.9–89.7)
Uzbekistan, 2008 (Tashkent)	NR	NR	NR	NR	NR	NR	NR	NR	NR
South East Asia	5.2 (3.5–6.9)	7.5 (5.0–10.0)	4.9 (1.5–8.3)	82.2 (79.8–84.7)	79.7 (76.9–82.5)	70.8 (62.4–79.3)	85.1 (83.1–87.2)	84.7 (82.4–87.0)	77.1 (71.3–82.9)
Bangladesh, 2007	1.0 (0.3–3.9)	NR	NR	70.7 (45.4–87.5)	89.5 (63.3–97.7)	NR	85.0 (57.2–96.0)	92.6 (73.4–98.2)	NR
Bhutan, 2006	7.5 (2.7–19.4)	6.4 (1.3–26.0)	NR	91.7 (81.0–96.7)	89.1 (76.6–95.3)	NR	85.4 (72.4–92.9)	82.7 (70.2–90.7)	NR
East Timor, 2006	13.0 (8.9–18.8)	14.2 (9.3–21.2)	8.7 (3.1–22.0)	73.7 (63.9–81.5)	73.0 (62.0–81.8)	NR	73.6 (58.8–84.5)	72.1 (55.4–84.4)	NR
India, 2006	8.7 (5.8–12.8)	8.1 (5.3–12.4)	11.1 (4.7–23.9)	70.3 (61.6–77.8)	70.0 (60.6–77.9)	72.2 (49.7–87.3)	55.5 (44.0–66.4)	57.0 (44.0–69.1)	48.3 (29.5–67.6)
Indonesia, 2006	2.1 (0.7–6.1)	2.0 (0.6–6.5)	NR	78.1 (68.5–85.4)	80.2 (70.4–87.4)	NR	85.6 (75.1–92.1)	86.6 (75.2–93.2)	NR

Table 3.1.65 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Always have or feel like having a cigarette first thing in the morning			% Want to stop smoking			% Tried to stop smoking during the past year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Maldives, 2007	23.8 (12.8–39.9)	NR	22.6 (9.3–45.3)	65.0 (46.9–79.6)	NR	69.1 (46.1–85.4)	54.4 (32.4–74.8)	NR	54.1 (32.5–74.3)
Myanmar, 2007	5.8 (1.6–18.7)	6.8 (1.9–21.7)	NR	83.0 (66.8–92.2)	NR	NR	88.1 (78.8–93.6)	86.3 (75.7–92.7)	NR
Nepal, 2007	NR	NR	NR	92.0 (77.5–97.4)	NR	NR	93.8 (80.8–98.2)	NR	NR
Sri Lanka, 2007	NR	NR	NR	NR	NR	NR	NR	NR	NR
Thailand, 2005	7.8 (5.1–11.8)	11.3 (7.2–17.3)	3.6 (1.7–7.3)	72.3 (63.2–79.9)	75.5 (69.4–80.7)	70.9 (53.2–84.0)	83.3 (78.8–86.9)	84.3 (79.9–87.9)	82.6 (73.6–89.0)
Western Pacific	6.5 (5.5–7.4)	6.3 (4.9–7.7)	4.3 (3.0–5.6)	81.6 (80.7–82.6)	85.4 (84.2–86.6)	81.2 (79.7–82.7)	80.9 (79.8–81.9)	80.8 (79.5–82.1)	82.6 (81.2–84.0)
American Samoa, 2005 ^b	NA	NA	NA	83.6 (77.4–88.4)	85.2 (75.9–91.3)	81.8 (72.9–88.2)	80.3 (73.3–85.9)	79.0 (67.8–87.1)	82.0 (71.3–89.3)
Cambodia, 2003	NR	NR	NR	NR	NR	NR	NR	NR	NR
China, 2005 ^e (Macau)	NR	NR	NR	NR	NR	NR	NR	NR	NR
China, 2005 (Shanghai)	2.6 (0.8–8.1)	4.9 (1.4–15.2)	0.0	42.1 (32.9–51.9)	38.4 (27.7–50.3)	46.7 (31.0–63.1)	55.2 (45.3–64.6)	52.1 (38.3–65.7)	58.9 (47.7–69.2)
Cook Islands, 2008	6.4 (5.2–7.9)	6.1 (4.4–8.5)	6.8 (5.1–8.9)	78.2 (75.6–80.6)	88.1 (84.8–90.8)	71.1 (67.4–74.5)	82.6 (80.3–84.6)	77.9 (74.0–81.3)	85.4 (82.6–87.9)
Fiji, 2005	7.8 (2.8–20.1)	6.4 (1.7–21.7)	NR	88.2 (80.0–93.3)	89.5 (82.8–93.8)	NR	83.1 (71.8–90.5)	85.4 (71.0–93.4)	NR
Guam, 2002 ^b	NA	NA	NA	75.7 (69.6–80.8)	74.2 (64.7–81.8)	77.5 (69.9–83.6)	74.7 (68.3–80.3)	69.1 (60.1–76.8)	82.5 (74.8–88.1)
Lao People's Democratic Republic, 2007 (Vientiane Capital)	NR	NR	NR	NR	NR	NR	NR	NR	NR
Malaysia, 2003	9.0 (6.0–13.2)	9.0 (5.8–13.9)	8.5 (3.7–18.4)	80.2 (75.0–84.5)	79.5 (74.0–84.1)	NR	88.3 (84.6–91.2)	87.8 (83.3–91.3)	92.1 (78.0–97.5)
Micronesia, 2007	8.4 (5.1–13.5)	10.0 (5.1–18.9)	6.8 (3.4–13.3)	86.5 (82.8–89.4)	86.4 (78.8–91.6)	91.7 (85.1–95.5)	83.2 (75.0–89.1)	79.3 (67.2–87.7)	91.9 (83.3–96.3)

Table 3.1.65 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Always have or feel like having a cigarette first thing in the morning			% Want to stop smoking			% Tried to stop smoking during the past year		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Mongolia, 2007	2.4 (0.8–7.4)	3.5 (1.2–9.9)	NR	88.6 (74.7–95.3)	90.0 (79.3–95.5)	NR	84.4 (76.2–90.2)	89.6 (82.3–94.1)	NR
New Zealand, 2008	NA	NA	NA	42.6 (34.1–51.6)	26.7 (10.9–52.1)	54.2 (34.9–72.3)	52.0 (35.7–68.0)	37.4 (17.2–63.3)	62.0 (47.3–74.8)
Northern Mariana Islands, 2004 ^f	NA	NA	NA	79.4 (75.1–83.2)	81.4 (75.2–86.3)	77.8 (71.3–83.1)	78.2 (73.8–82.1)	77.9 (72.1–82.8)	78.8 (72.6–83.9)
Palau, 2005	NA	NA	NA	78.1 (70.3–84.3)	72.9 (62.5–81.3)	86.3 (73.8–93.4)	NA	NA	NA
Papua New Guinea, 2007	8.8 (6.5–11.9)	11.1 (7.6–15.9)	5.6 (2.9–10.7)	82.3 (77.9–86.1)	82.6 (75.8–87.9)	81.4 (75.5–86.1)	84.7 (81.8–87.3)	85.3 (80.4–89.2)	83.6 (78.4–87.7)
Philippines, 2007	3.0 (1.1–7.6)	3.2 (0.9–11.1)	0.3 (0.0–2.4)	88.1 (83.0–91.7)	88.0 (81.3–92.5)	89.3 (80.3–94.5)	86.0 (79.7–90.6)	88.2 (82.2–92.4)	82.9 (67.8–91.8)
Republic of Korea (South), 2008	14.4 (9.6–21.0)	17.1 (11.0–25.5)	7.4 (3.3–16.1)	66.1 (60.8–71.1)	70.7 (64.0–76.6)	59.5 (46.8–71.1)	77.1 (70.5–82.6)	79.2 (72.0–84.9)	74.7 (60.8–84.9)
Samoa, 2007	4.6 (1.4–14.0)	NR	NR	66.2 (50.0–79.4)	NR	NR	70.1 (50.4–84.5)	NR	NR
Singapore, 2000	NA	NA	NA	NA	NA	NA	61.9 (56.7–66.9)	62.0 (55.7–67.9)	61.3 (54.3–67.9)
Solomon Islands, 2008	9.4 (4.6–18.3)	13.4 (5.4–29.5)	5.7 (0.9–29.4)	90.8 (85.8–94.2)	95.9 (81.4–99.2)	85.4 (73.1–92.6)	85.4 (74.1–92.3)	84.5 (64.0–94.4)	87.6 (67.2–96.1)
Tuvalu, 2006	2.9 (2.8–3.1)	NR	NR	98.7 (98.6–98.8)	NR	NR	93.0 (92.7–93.2)	91.5 (91.1–91.9)	NR
Vanuatu, 2007	5.4 (3.8–7.6)	3.8 (2.2–6.3)	7.0 (4.1–11.5)	84.5 (81.3–87.2)	83.8 (79.7–87.3)	85.4 (79.9–89.6)	72.1 (68.3–75.7)	72.9 (68.1–77.3)	NR
Viet Nam, 2007 (Hanoi)	17.6 (6.4–40.2)	NR	NR	51.9 (24.8–77.9)	NR	NR	67.9 (44.4–84.9)	NR	NR

Source: CDC 2010b.

Note: **CI** = confidence interval; **NA** = question not asked; **NR** = cell size less than 35; **WHO** = World Health Organization.

^aTerritory of United Kingdom

^bTerritory of United States

^cUnited Nations Relief and Works Agency

^dUnited Nations Administered Province

^eSpecial Administrative Region of China

^fCommonwealth in political union with the United States

Table 3.1.66 Percentage of youth 13–15 years of age who have used any form of tobacco during the past 30 days and who have used any form of tobacco other than cigarettes during the past 30 days, by gender; Global Youth Tobacco Survey (GYTS) 1999–2009; worldwide

WHO region and WHO member state, territory, or special administrative region, and year	% Used any form of tobacco in the past 30 days			% Used any form of tobacco other than cigarettes in the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Africa	14.1 (13.6–14.6)	17.5 (16.8–18.1)	10.5 (10.0–11.1)	9.0 (8.6–9.4)	10.0 (9.5–10.5)	7.9 (7.4–8.4)
Algeria, 2007 (Constantine)	13.8 (11.3–16.8)	25.5 (21.9–29.5)	5.7 (3.8–8.5)	8.0 (6.4–10.0)	12.7 (10.2–15.6)	4.8 (3.2–7.2)
Benin, 2003 (Atlantique Littoral)	11.0 (8.8–13.6)	14.6 (11.4–18.5)	5.8 (3.9–8.7)	5.6 (4.3–7.3)	6.7 (5.0–9.0)	4.2 (2.5–6.9)
Botswana, 2008	23.6 (20.2–27.3)	27.0 (21.7–33.0)	20.5 (17.1–24.5)	15.2 (12.8–18.0)	16.3 (13.0–20.2)	14.3 (11.7–17.5)
Burkina Faso, 2006 (Ouagadougou)	13.6 (11.3–16.3)	19.9 (16.1–24.3)	6.7 (5.0–9.0)	7.2 (5.6–9.1)	9.3 (7.1–12.1)	4.8 (3.0–7.5)
Burundi, 2008	19.3 (13.2–27.3)	20.7 (13.2–30.9)	16.8 (10.6–25.6)	16.1 (10.2–24.4)	17.1 (10.8–26.0)	14.3 (8.0–24.2)
Cameroon, 2008 (Yaoude)	10.9 (8.1–14.4)	14.0 (10.1–19.2)	8.2 (5.6–11.8)	7.3 (5.5–9.8)	8.7 (5.9–12.6)	6.0 (4.1–8.6)
Cape Verde, 2007	13.4 (11.9–15.1)	14.7 (12.3–17.5)	11.7 (9.5–14.4)	10.6 (9.1–12.4)	11.6 (8.8–15.2)	9.3 (7.6–11.2)
Central African Republic, 2008 (Bangui)	32.4 (18.0–51.1)	29.5 (23.4–36.4)	34.5 (12.8–65.4)	28.2 (13.8–49.0)	24.0 (18.2–30.9)	31.3 (10.0–65.1)
Comoros, 2007	18.1 (14.4–22.5)	21.8 (15.1–30.4)	14.8 (10.6–20.5)	11.4 (8.5–15.1)	12.5 (8.3–18.4)	9.9 (6.5–14.8)
Congo, 2006	23.8 (18.4–30.2)	26.1 (19.8–33.5)	21.9 (16.9–27.9)	16.7 (12.7–21.6)	15.6 (12.1–19.9)	17.7 (12.5–24.4)
Côte D'Ivoire, 2003 (Abidjan)	16.5 (14.7–18.5)	21.7 (19.1–24.5)	10.3 (8.0–13.3)	5.1 (4.3–6.1)	5.6 (4.6–6.9)	4.4 (3.4–5.6)
Democratic Republic of the Congo, 2008 (Kinshasa)	33.6 (26.5–41.6)	36.2 (26.1–47.8)	29.5 (22.0–38.4)	29.0 (22.2–36.8)	29.3 (19.6–41.3)	27.8 (20.2–36.9)
Equatorial Guinea, 2008	22.1 (16.5–28.9)	25.1 (18.1–33.7)	17.3 (12.6–23.2)	17.8 (12.5–24.7)	19.5 (13.2–27.9)	14.8 (10.4–20.8)
Eritrea, 2006	6.6 (5.5–7.9)	7.8 (6.4–9.6)	4.6 (3.4–6.1)	5.5 (4.4–6.9)	6.4 (5.0–8.2)	4.2 (3.0–5.8)
Ethiopia, 2003 (Addis Ababa)	7.9 (4.9–12.5)	9.9 (6.3–15.4)	4.9 (3.1–7.7)	6.6 (4.1–10.6)	8.4 (4.8–14.3)	4.4 (2.6–7.4)
Gambia, 2008 (Banjul)	36.1 (29.8–42.9)	34.0 (28.5–40.0)	36.6 (28.9–44.9)	32.7 (26.3–39.7)	29.5 (23.6–36.1)	34.3 (26.8–42.7)
Ghana, 2006	11.7 (8.9–15.2)	11.6 (8.5–15.5)	10.9 (8.2–14.4)	10.4 (7.8–13.7)	10.1 (7.3–13.8)	10.1 (7.6–13.2)
Guinea, 2008	26.1 (18.2–35.9)	30.8 (22.2–41.1)	20.0 (12.5–30.4)	21.6 (13.7–32.3)	23.4 (14.6–35.4)	18.9 (11.4–29.7)
Guinea-Bissau, 2008 (Bissau)	10.9 (9.1–13.0)	11.5 (8.7–15.0)	10.3 (7.5–13.9)	6.1 (4.4–8.6)	4.5 (2.9–6.9)	7.8 (5.0–12.1)

Table 3.1.66 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Used any form of tobacco in the past 30 days			% Used any form of tobacco other than cigarettes in the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Kenya, 2007	15.1 (11.3–19.8)	14.9 (12.8–17.2)	14.5 (8.0–24.9)	10.1 (6.5–15.4)	8.2 (6.1–11.0)	11.4 (5.2–23.2)
Lesotho, 2008	24.8 (19.9–30.5)	26.4 (19.9–34.2)	21.7 (17.2–27.0)	19.5 (16.1–23.4)	20.4 (15.2–26.9)	17.9 (14.6–21.8)
Liberia, 2008 (Monrovia)	13.6 (8.9–20.1)	14.2 (6.9–27.1)	11.8 (7.7–17.6)	13.3 (8.6–20.0)	14.1 (6.7–27.1)	11.5 (7.6–17.3)
Madagascar, 2008	22.8 (16.4–30.7)	33.2 (24.0–43.8)	14.3 (8.3–23.4)	7.0 (3.2–14.6)	8.5 (4.5–15.6)	5.8 (1.8–16.6)
Malawi, 2005	18.4 (14.3–23.4)	19.1 (15.9–22.7)	17.9 (11.6–26.5)	17.1 (13.0–22.2)	17.1 (14.0–20.8)	17.1 (10.8–25.9)
Mali, 2008	16.6 (12.3–22.0)	23.1 (16.6–31.2)	8.8 (6.4–12.0)	9.0 (6.0–13.4)	10.7 (6.4–17.5)	7.2 (5.1–10.1)
Mauritania, 2006	30.7 (26.7–35.1)	31.5 (26.8–36.7)	29.5 (23.8–36.0)	18.0 (14.4–22.2)	18.4 (14.3–23.4)	17.3 (12.1–24.1)
Mauritius, 2008	13.7 (9.3–19.8)	20.3 (13.9–28.6)	7.7 (4.1–14.0)	NA	NA	NA
Mozambique, 2007 (Maputo City)	10.0 (7.5–13.1)	12.7 (9.4–16.9)	7.4 (4.7–11.4)	8.2 (6.2–10.7)	9.6 (6.8–13.3)	6.8 (4.3–10.4)
Namibia, 2004	25.8 (23.4–28.3)	28.6 (25.6–31.8)	22.9 (20.2–26.0)	15.0 (12.6–17.6)	15.1 (12.3–18.4)	14.0 (11.5–16.9)
Niger, 2006	11.7 (8.4–16.0)	15.2 (10.9–20.9)	8.0 (5.1–12.5)	6.6 (4.4–9.6)	6.1 (3.8–9.5)	7.0 (4.6–10.5)
Nigeria, 2008 (Cross River State)	26.1 (18.2–36.0)	29.6 (20.0–41.6)	18.6 (10.3–31.2)	23.3 (16.6–31.6)	23.9 (16.2–33.9)	17.5 (9.9–29.0)
Rwanda, 2008	11.5 (8.8–15.0)	13.3 (8.5–20.1)	9.5 (6.5–13.6)	10.5 (7.9–13.9)	12.0 (7.4–19.0)	8.7 (6.1–12.1)
Senegal, 2007	14.9 (9.9–21.8)	20.4 (14.7–27.8)	9.6 (4.5–19.2)	9.3 (5.5–15.3)	11.7 (8.4–15.9)	7.7 (3.0–18.0)
Seychelles, 2007	26.6 (21.7–32.1)	27.1 (20.6–34.7)	25.3 (20.4–30.9)	10.5 (7.7–14.1)	10.6 (6.9–16.0)	9.2 (6.4–13.0)
Sierra Leone, 2008 (Western Area)	23.5 (19.3–28.3)	20.3 (14.5–27.8)	24.1 (19.9–28.8)	20.7 (16.4–25.8)	16.7 (11.6–23.5)	21.8 (17.2–27.4)
South Africa, 2008	24.0 (21.6–26.6)	29.3 (26.6–32.1)	20.1 (17.2–23.4)	14.6 (12.9–16.5)	16.9 (14.8–19.3)	12.8 (10.9–15.0)
Swaziland, 2005	11.3 (10.2–12.6)	14.7 (13.0–16.5)	9.0 (7.8–10.3)	7.5 (6.5–8.7)	8.5 (7.1–10.1)	6.9 (5.8–8.2)
Togo, 2007	14.0 (11.2–17.2)	17.7 (13.3–23.1)	7.9 (5.5–11.1)	10.4 (8.5–12.8)	12.1 (9.3–15.7)	7.4 (5.2–10.4)
Uganda, 2007	16.6 (14.4–19.2)	17.3 (14.7–20.2)	15.3 (12.8–18.2)	13.9 (11.9–16.2)	13.8 (11.5–16.4)	13.5 (11.0–16.5)

Table 3.1.66 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Used any form of tobacco in the past 30 days			% Used any form of tobacco other than cigarettes in the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
United Republic of Tanzania, 2008 (Arusha)	10.6 (8.1–13.8)	12.4 (9.0–16.7)	8.8 (5.8–13.2)	9.5 (7.2–12.4)	10.8 (8.1–14.3)	8.2 (5.5–12.1)
Zambia, 2007 (Lusaka)	25.6 (20.0–32.2)	25.7 (19.5–33.1)	25.6 (19.6–32.7)	22.8 (17.3–29.4)	22.8 (16.7–30.2)	22.8 (16.9–30.1)
Zimbabwe, 2008 (Harare)	12.0 (9.0–15.7)	14.9 (10.9–20.1)	8.2 (5.4–12.2)	9.6 (6.9–13.3)	10.9 (7.7–15.1)	7.5 (4.8–11.6)
The Americas	17.0 (16.5–17.5)	19.7 (19.1–20.3)	14.7 (14.1–15.3)	8.1 (7.8–8.4)	9.9 (9.5–10.4)	6.5 (6.1–6.8)
Antigua & Barbuda, 2004	14.1 (11.4–17.2)	15.1 (12.1–18.8)	12.5 (9.2–16.8)	12.4 (9.9–15.4)	13.4 (10.1–17.5)	10.9 (8.0–14.7)
Argentina, 2007	28.0 (25.9–30.3)	26.1 (23.6–28.8)	29.7 (25.7–34.0)	8.9 (7.4–10.5)	11.6 (9.6–13.9)	6.5 (4.9–8.5)
Bahamas, 2004	11.9 (10.1–13.8)	12.9 (10.3–16.1)	10.2 (7.6–13.5)	8.4 (6.9–10.3)	9.4 (7.4–11.8)	7.4 (5.5–9.9)
Barbados, 2007	28.6 (25.2–32.2)	34.5 (30.1–39.3)	23.2 (19.4–27.5)	24.2 (21.3–27.3)	30.2 (26.1–34.6)	18.7 (15.6–22.1)
Belize, 2008	18.3 (15.6–21.5)	21.8 (18.2–26.0)	15.3 (12.1–19.0)	13.3 (10.5–16.7)	14.5 (10.7–19.5)	12.1 (9.8–15.0)
Bolivia, 2003 (La Paz)	20.8 (18.0–23.8)	24.7 (20.6–29.3)	16.6 (14.3–19.1)	8.2 (7.0–9.7)	9.5 (7.8–11.5)	6.9 (5.7–8.3)
Brazil, 2005 (Rio de Janeiro)	17.2 (14.6–20.2)	17.2 (14.0–21.0)	15.7 (12.3–19.8)	6.1 (4.8–7.7)	10.0 (7.0–14.0)	3.3 (2.2–5.0)
British Virgin Islands, 2001 ^a	10.5 (7.4–14.7)	11.3 (6.7–18.3)	10.1 (6.8–14.7)	8.2 (5.5–12.0)	8.3 (4.5–15.0)	8.4 (5.5–12.8)
Chile, 2008 (Santiago)	35.1 (32.4–37.9)	29.8 (26.2–33.7)	39.8 (35.8–43.8)	9.2 (8.1–10.4)	9.5 (8.1–11.1)	8.8 (7.0–11.0)
Colombia, 2007 (Bogota)	27.6 (23.7–31.8)	27.0 (22.7–31.7)	27.8 (22.2–34.1)	5.0 (3.7–6.8)	6.7 (4.7–9.7)	3.6 (2.4–5.4)
Costa Rica, 2008	14.6 (13.1–16.2)	15.9 (14.0–17.9)	13.1 (11.2–15.3)	7.7 (6.6–8.9)	9.3 (8.1–10.8)	5.9 (4.5–7.7)
Cuba, 2004 (Havana)	14.6 (11.2–18.9)	15.7 (11.8–20.6)	13.6 (10.1–18.2)	5.8 (3.3–10.0)	6.0 (3.0–11.8)	5.7 (3.3–9.7)
Dominica, 2004	17.2 (14.1–20.9)	19.3 (14.8–24.8)	13.5 (10.4–17.3)	9.3 (7.6–11.4)	12.0 (9.0–15.9)	6.3 (4.5–8.9)
Dominican Republic, 2004	14.9 (13.3–16.8)	18.4 (15.9–21.1)	11.9 (9.8–14.3)	10.0 (8.5–11.8)	12.9 (10.6–15.8)	7.4 (6.0–9.0)
Ecuador, 2007 (Quito)	28.6 (23.8–33.9)	31.2 (27.9–34.8)	26.1 (18.9–34.8)	15.3 (12.7–18.3)	15.9 (12.9–19.5)	14.6 (11.1–19.0)
El Salvador, 2003	19.0 (14.7–24.3)	24.4 (19.2–30.4)	15.4 (11.2–20.7)	8.4 (6.4–10.9)	10.5 (8.4–13.0)	7.0 (5.0–9.9)

Table 3.1.66 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Used any form of tobacco in the past 30 days			% Used any form of tobacco other than cigarettes in the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Grenada, 2004	16.7 (14.1–19.6)	17.6 (14.0–21.9)	15.7 (12.9–19.1)	10.5 (8.5–12.9)	11.6 (9.0–14.8)	9.3 (7.1–12.1)
Guatemala, 2008	16.6 (14.5–18.9)	19.7 (16.8–22.9)	13.3 (11.0–16.1)	7.9 (7.1–8.9)	9.5 (8.0–11.3)	6.2 (5.3–7.2)
Guyana, 2004	14.9 (11.0–19.9)	17.6 (12.9–23.5)	12.2 (8.1–18.0)	8.3 (6.4–10.7)	9.1 (6.3–12.9)	7.7 (4.9–11.9)
Haiti, 2005 (Port au Prince)	23.2 (19.7–27.1)	21.7 (17.0–27.2)	23.9 (19.2–29.3)	10.4 (8.3–13.1)	9.0 (6.5–12.3)	11.1 (7.4–16.3)
Honduras, 2003 (Tegucigalpa)	20.4 (16.9–24.4)	22.8 (19.3–26.7)	18.2 (13.8–23.7)	9.9 (8.2–11.9)	12.1 (9.3–15.6)	8.0 (5.8–10.9)
Jamaica, 2006	19.5 (14.2–26.3)	24.0 (17.8–31.6)	15.3 (10.6–21.6)	8.9 (6.5–11.9)	10.2 (7.1–14.5)	7.2 (4.8–10.8)
Mexico, 2006 (Mexico City)	28.6 (25.2–32.2)	27.8 (23.6–32.4)	28.5 (25.2–32.0)	4.8 (3.6–6.4)	5.5 (3.3–9.0)	4.0 (3.0–5.3)
Montserrat, 2000 ^a	12.5	10.2	13.6	9.4	10.2	7.7
Nicaragua, 2003 (Centro Managua)	25.1 (21.1–29.6)	30.4 (26.3–34.9)	20.5 (15.6–26.4)	9.6 (7.0–12.9)	12.8 (9.8–16.5)	6.7 (3.9–11.3)
Panama, 2008	8.4 (6.4–11.0)	10.5 (7.7–14.1)	6.5 (4.8–8.7)	5.8 (4.5–7.3)	7.1 (5.3–9.5)	4.5 (3.3–6.0)
Paraguay, 2008	16.7 (15.3–18.1)	20.8 (18.9–22.7)	12.9 (11.3–14.6)	10.3 (8.9–12.0)	12.4 (10.3–14.8)	8.4 (7.0–10.0)
Peru, 2007 (Lima)	19.6 (15.5–24.5)	19.9 (15.5–25.1)	18.2 (13.5–24.0)	3.4 (2.4–4.9)	3.8 (2.3–6.4)	3.1 (1.8–5.4)
Puerto Rico, 2004 ^b	11.9 (7.9–17.7)	12.8 (8.7–18.6)	10.9 (6.5–17.6)	7.7 (4.9–11.9)	9.6 (5.9–15.4)	5.5 (2.8–10.6)
Saint Kitts & Nevis, 2002	16.6 (13.4–20.4)	18.2 (13.5–24.2)	13.6 (10.9–17.0)	13.7 (11.2–16.5)	14.6 (10.5–20.0)	12.1 (9.6–15.2)
Saint Lucia, 2007	17.9 (14.8–21.4)	22.4 (16.9–29.2)	14.5 (11.3–18.4)	10.2 (7.2–14.3)	13.0 (8.4–19.6)	8.4 (5.7–12.2)
Saint Vincent & The Grenadines, 2007	19.1 (15.5–23.4)	22.0 (16.8–28.2)	16.6 (13.1–20.9)	10.3 (8.2–13.0)	11.2 (8.2–15.2)	9.6 (7.1–12.9)
Suriname, 2004	10.5 (8.7–12.6)	12.6 (9.3–16.9)	8.6 (6.1–11.8)	4.4 (3.3–6.0)	4.4 (2.7–7.1)	4.4 (3.2–6.2)
Trinidad & Tobago, 2007	19.9 (16.1–24.4)	20.8 (16.2–26.4)	17.8 (12.8–24.1)	8.9 (6.8–11.5)	8.9 (6.2–12.6)	8.7 (6.1–12.1)
U.S. Virgin Islands, 2004 ^b	7.8 (6.4–9.5)	9.9 (7.6–12.7)	5.7 (4.1–7.9)	6.2 (4.9–7.8)	9.0 (6.9–11.5)	3.7 (2.3–5.7)
Uruguay, 2007	23.2 (21.0–25.5)	21.4 (18.1–25.1)	24.5 (21.8–27.4)	7.9 (6.6–9.4)	10.3 (8.1–13.0)	6.1 (4.6–8.0)
Venezuela, 1999	14.8 (12.6–17.2)	15.3 (12.3–18.8)	13.9 (11.8–16.4)	8.7 (7.3–10.4)	10.5 (8.3–13.3)	6.8 (5.5–8.3)

Table 3.1.66 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Used any form of tobacco in the past 30 days			% Used any form of tobacco other than cigarettes in the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Eastern Mediterranean	18.5 (17.9–19.1)	25.7 (24.9–26.5)	13.6 (13.0–14.2)	16.5 (16.0–17.1)	19.9 (19.3–20.5)	12.2 (11.6–12.8)
Afghanistan, 2004 (Kabul)	9.8 (6.7–14.0)	13.1 (9.2–18.3)	3.2 (1.6–6.3)	5.9 (3.6–9.5)	7.0 (3.8–12.3)	3.2 (1.6–6.4)
Bahrain, 2002	19.9 (16.5–23.8)	28.0 (23.5–32.9)	11.7 (8.6–15.8)	15.3 (12.6–18.3)	19.9 (16.3–24.0)	10.5 (8.0–13.8)
Djibouti, 2003	14.9 (11.6–18.9)	17.9 (13.4–23.5)	10.7 (7.1–15.9)	11.1 (8.8–14.0)	12.3 (9.4–16.0)	9.6 (6.4–14.3)
Egypt, 2005	12.6 (10.1–15.5)	16.0 (13.0–19.6)	7.6 (6.1–9.3)	10.1 (8.1–12.4)	12.3 (9.5–15.8)	6.7 (5.1–8.6)
Gaza Strip, 2008 ^c	23.6 (20.3–27.2)	26.3 (21.1–32.2)	19.2 (13.7–26.2)	21.9 (18.3–26.0)	23.8 (17.9–30.9)	18.3 (13.0–25.2)
Iran, 2007	26.6 (20.9–33.1)	32.9 (25.3–41.4)	19.5 (15.6–24.2)	26.1 (20.6–32.4)	31.9 (24.4–40.4)	19.5 (15.6–24.2)
Iraq, 2008 (Baghdad)	17.2 (15.1–19.5)	17.7 (15.4–20.3)	15.2 (12.1–18.9)	15.3 (13.2–17.6)	15.7 (13.8–17.9)	13.6 (10.7–17.2)
Jordan, 2008 ^c	32.5 (26.0–39.7)	39.7 (34.7–45.0)	23.0 (20.1–26.1)	28.5 (23.2–34.4)	33.7 (29.1–38.5)	21.3 (18.6–24.2)
Kuwait, 2005	20.9 (17.3–25.1)	28.0 (24.3–32.1)	14.3 (12.3–16.7)	14.5 (12.3–16.9)	17.4 (15.0–20.1)	11.7 (9.9–13.9)
Lebanon, 2008 ^c	41.4 (36.0–47.1)	48.2 (43.2–53.3)	35.8 (28.6–43.7)	38.9 (33.7–44.4)	44.1 (39.3–49.0)	34.6 (27.2–42.9)
Libya, 2007	11.1 (8.9–13.7)	15.5 (11.5–20.5)	6.1 (4.5–8.3)	7.2 (5.4–9.5)	8.6 (5.2–14.0)	5.6 (4.1–7.7)
Morocco, 2006	11.0 (9.3–13.0)	12.5 (9.6–16.1)	8.2 (6.5–10.3)	9.0 (7.5–10.8)	10.3 (7.8–13.5)	6.9 (5.5–8.7)
Oman, 2007	15.2 (11.9–19.2)	17.8 (13.4–23.3)	11.3 (8.6–14.7)	14.4 (11.4–18.0)	16.9 (12.8–22.0)	10.6 (8.1–13.7)
Pakistan, 2003 (Islamabad)	10.1 (8.0–12.8)	12.4 (9.2–16.5)	7.5 (5.4–10.2)	9.5 (7.4–12.1)	11.2 (7.9–15.6)	7.3 (5.3–10.1)
Qatar, 2007	17.9 (14.9–21.5)	25.2 (19.8–31.4)	13.1 (9.6–17.7)	15.6 (13.1–18.6)	19.4 (15.7–23.8)	12.6 (9.3–16.8)
Saudi Arabia, 2007	15.9 (13.8–18.3)	20.2 (17.7–22.8)	10.7 (7.9–14.4)	11.9 (10.3–13.8)	13.3 (12.2–14.4)	9.4 (6.8–12.9)
Somalia, 2007 (Somaliland)	15.6 (13.4–18.2)	15.5 (12.7–18.7)	12.3 (6.7–21.3)	12.5 (10.1–15.4)	12.7 (10.2–15.8)	9.8 (5.2–17.6)
Sudan, 2005	14.0 (10.8–17.9)	18.0 (13.4–23.7)	10.1 (8.0–12.8)	10.2 (8.0–12.9)	11.0 (7.8–15.4)	9.3 (7.0–12.2)
Syrian Arab Republic, 2008 ^c	42.4 (37.4–47.6)	49.6 (44.7–54.5)	33.8 (27.5–40.7)	37.7 (34.0–41.7)	42.7 (37.6–47.9)	31.3 (25.3–38.1)
Tunisia, 2007	18.3 (15.8–21.2)	27.8 (23.5–32.4)	8.8 (6.6–11.7)	13.9 (11.6–16.5)	19.9 (16.1–24.3)	7.8 (5.8–10.4)

Table 3.1.66 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Used any form of tobacco in the past 30 days			% Used any form of tobacco other than cigarettes in the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
United Arab Emirates, 2005	19.5 (17.5–21.6)	25.2 (23.2–27.4)	13.2 (11.6–15.0)	28.8 (26.7–30.9)	32.7 (30.4–35.1)	24.7 (21.9–27.7)
West Bank, 2008 ^c	45.6 (38.1–53.3)	57.6 (53.9–61.1)	35.3 (30.8–40.0)	39.4 (32.9–46.3)	49.6 (46.9–52.2)	30.6 (26.3–35.4)
Yemen, 2008	14.1 (9.8–19.8)	14.5 (8.5–23.6)	10.5 (6.1–17.6)	12.4 (8.7–17.4)	12.1 (7.2–19.6)	10.1 (5.5–18.0)
Europe	12.5 (12.1–12.8)	15.8 (15.3–16.3)	9.2 (8.8–9.6)	4.9 (4.7–5.1)	7.1 (6.8–7.5)	3.1 (2.9–3.4)
Albania, 2004	13.0 (11.0–15.3)	17.3 (13.6–21.8)	9.4 (7.8–11.3)	8.9 (7.3–10.7)	11.5 (9.0–14.6)	6.7 (5.4–8.2)
Armenia, 2004	7.3 (5.8–9.0)	13.0 (9.5–17.5)	2.7 (1.5–4.7)	5.6 (4.4–7.0)	10.0 (6.9–14.4)	1.9 (0.9–4.3)
Belarus, 2004	26.9 (24.6–29.4)	31.6 (28.3–35.0)	22.2 (19.6–25.0)	12.9 (11.3–14.6)	15.2 (13.1–17.6)	10.4 (8.7–12.4)
Bosnia and Herzegovina, 2008	13.3 (11.5–15.5)	16.3 (14.1–18.7)	10.5 (8.4–13.1)	7.5 (6.4–8.8)	9.3 (7.9–10.8)	5.8 (4.4–7.6)
Bulgaria, 2008	29.3 (25.3–33.6)	26.4 (21.9–31.5)	31.8 (26.6–37.6)	8.8 (7.0–10.9)	10.5 (7.8–13.9)	6.8 (5.6–8.3)
Croatia, 2007	24.9 (21.0–29.2)	23.3 (19.8–27.1)	25.6 (20.9–30.9)	13.9 (11.9–16.2)	14.6 (13.1–16.2)	13.0 (10.0–16.9)
Cyprus, 2005	10.9 (10.3–11.4)	13.2 (12.4–14.1)	8.4 (7.7–9.1)	3.3 (3.0–3.6)	5.2 (4.7–5.8)	1.3 (1.1–1.7)
Czech Republic, 2007	35.0 (31.9–38.2)	35.8 (31.8–39.9)	34.1 (29.3–39.2)	14.5 (12.0–17.3)	17.2 (14.3–20.7)	11.2 (8.4–15.0)
Estonia, 2007	30.8 (27.2–34.5)	33.8 (29.6–38.2)	27.8 (23.2–33.0)	21.1 (18.5–23.9)	25.4 (21.6–29.7)	16.7 (13.6–20.4)
Georgia, 2008	8.6 (5.5–13.2)	15.2 (9.9–22.8)	2.8 (1.0–7.8)	NA	NA	NA
Greece, 2005	16.2 (14.3–18.4)	17.1 (15.0–19.4)	14.4 (12.1–16.9)	10.9 (9.4–12.5)	11.8 (10.1–13.8)	8.9 (7.2–11.0)
Hungary, 2008	27.8 (24.6–31.2)	27.9 (23.6–32.6)	26.7 (23.4–30.2)	13.8 (11.4–16.5)	16.8 (13.2–21.0)	10.4 (8.0–13.3)
Kazakhstan, 2004	11.4 (9.6–13.4)	15.2 (13.0–17.7)	8.1 (6.4–10.1)	6.6 (5.5–7.9)	9.3 (7.8–11.0)	4.2 (3.2–5.6)
Kosovo, 2004 ^d	10.3 (8.6–12.2)	12.7 (10.1–15.8)	7.9 (6.2–10.0)	7.0 (5.7–8.6)	9.4 (7.2–12.2)	4.6 (3.5–5.9)
Kyrgyzstan, 2008	7.2 (5.4–9.5)	10.3 (7.8–13.6)	4.4 (2.9–6.6)	5.5 (3.9–7.7)	7.3 (5.1–10.4)	3.8 (2.5–5.8)
Latvia, 2007	37.6 (32.3–43.2)	41.8 (36.3–47.5)	33.9 (28.4–39.8)	37.5 (32.8–42.5)	42.0 (36.1–48.1)	33.6 (29.2–38.4)

Table 3.1.66 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Used any form of tobacco in the past 30 days			% Used any form of tobacco other than cigarettes in the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Lithuania, 2005	32.1 (29.6–34.8)	36.8 (32.6–41.2)	28.1 (24.0–32.7)	9.1 (7.1–11.6)	13.2 (9.9–17.2)	5.7 (3.7–8.7)
Macedonia, former Yugoslav Republic of, 2008	11.8 (9.7–14.4)	11.9 (9.6–14.7)	11.7 (9.2–14.9)	4.9 (4.0–6.0)	5.2 (4.0–6.7)	4.6 (3.4–6.1)
Moldova, Republic of, 2008	13.4 (11.3–15.7)	20.8 (17.3–24.7)	7.1 (5.6–9.0)	8.2 (6.6–10.1)	11.6 (9.0–14.8)	5.1 (3.7–7.0)
Montenegro, 2008	6.3 (5.2–7.5)	6.6 (5.1–8.5)	5.9 (4.6–7.5)	3.6 (2.9–4.5)	3.7 (2.6–5.2)	3.5 (2.6–4.8)
Poland, 2003	19.5 (16.5–22.9)	21.4 (16.6–27.0)	17.3 (14.5–20.6)	7.0 (5.6–8.7)	9.0 (6.6–12.2)	4.8 (3.6–6.5)
Romania, 2004	18.3 (14.7–22.6)	22.2 (17.0–28.4)	14.8 (12.0–18.2)	5.9 (4.5–7.6)	7.7 (5.4–10.8)	4.3 (3.4–5.3)
Russian Federation, 2004	27.3 (25.0–29.8)	30.1 (26.6–33.8)	24.4 (21.5–27.6)	14.7 (13.3–16.2)	18.1 (16.0–20.4)	11.1 (9.1–13.5)
Serbia, 2008	10.4 (8.0–13.4)	10.8 (7.7–15.0)	9.6 (7.6–12.2)	5.8 (4.7–7.2)	5.5 (3.8–8.0)	5.8 (4.4–7.6)
Slovakia, 2007	26.6 (24.3–28.9)	28.5 (25.8–31.4)	24.5 (21.7–27.5)	12.9 (11.6–14.4)	15.1 (13.5–16.9)	10.6 (9.1–12.3)
Slovenia, 2007	21.8 (17.6–26.6)	16.9 (12.2–23.0)	24.2 (19.4–29.8)	8.4 (5.8–12.0)	8.3 (5.3–12.7)	7.4 (5.0–10.7)
Tajikistan, 2004	5.1 (3.1–8.3)	6.8 (3.9–11.6)	2.8 (1.4–5.7)	6.0 (3.9–9.2)	8.0 (4.9–12.9)	3.4 (1.8–6.3)
Turkey, 2003	8.4 (7.5–9.4)	11.1 (9.8–12.5)	4.4 (3.7–5.3)	3.4 (3.0–3.9)	4.4 (3.8–5.1)	1.5 (1.1–1.9)
Ukraine, 2005	26.0 (22.0–30.4)	29.8 (25.0–35.1)	22.2 (18.3–26.6)	12.9 (9.6–17.3)	15.2 (10.8–20.9)	10.5 (8.0–13.8)
Uzbekistan, 2008 (Tashkent)	2.2 (0.9–5.4)	2.7 (0.9–7.5)	1.6 (0.6–4.4)	0.6 (0.3–1.5)	0.3 (0.1–1.6)	0.8 (0.3–2.6)
South East Asia	12.2 (11.3–13.1)	13.6 (12.5–14.6)	6.9 (6.0–7.7)	7.4 (6.7–8.0)	9.1 (8.2–10.0)	4.9 (4.2–5.6)
Bangladesh, 2007	6.9 (4.7–10.1)	9.1 (6.7–12.1)	5.1 (2.5–10.3)	6.0 (4.0–8.9)	8.0 (5.9–10.8)	4.2 (1.9–9.1)
Bhutan, 2006	20.2 (17.3–23.4)	28.6 (23.2–34.7)	12.4 (9.6–15.8)	14.2 (11.7–17.0)	19.7 (14.7–25.8)	9.1 (6.7–12.3)
East Timor, 2006	41.0 (33.8–48.6)	54.5 (46.4–62.3)	29.8 (21.3–40.1)	24.1 (18.9–30.1)	29.0 (22.6–36.4)	20.2 (14.4–27.6)
India, 2006	13.7 (11.6–16.3)	16.8 (14.2–19.9)	9.4 (7.1–12.5)	11.9 (9.8–14.3)	14.3 (11.8–17.2)	8.5 (6.4–11.3)
Indonesia, 2006	13.5 (11.0–16.4)	24.1 (19.0–30.1)	4.0 (3.0–5.4)	3.8 (2.8–5.1)	5.3 (3.6–7.7)	2.4 (1.5–3.7)

Table 3.1.66 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Used any form of tobacco in the past 30 days			% Used any form of tobacco other than cigarettes in the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Maldives, 2007	5.9 (4.4–7.9)	3.4 (2.1–5.3)	8.5 (6.0–11.8)	3.5 (2.2–5.5)	2.7 (1.6–4.7)	4.3 (2.5–7.4)
Myanmar, 2007	15.3 (12.4–18.7)	22.5 (18.1–27.4)	8.2 (5.9–11.3)	14.1 (11.4–17.3)	20.3 (16.3–25.0)	7.9 (5.7–10.9)
Nepal, 2007	9.4 (7.2–12.2)	13.0 (9.8–16.9)	5.3 (3.0–9.1)	8.0 (6.2–10.2)	11.1 (8.5–14.4)	4.4 (2.5–7.7)
Sri Lanka, 2007	9.1 (6.8–12.2)	12.4 (8.7–17.5)	5.8 (3.6–9.4)	8.6 (6.4–11.5)	11.6 (8.0–16.6)	5.6 (3.5–8.7)
Thailand, 2005	15.7 (13.8–17.7)	21.7 (19.4–24.2)	8.4 (6.9–10.2)	7.7 (6.6–9.0)	10.4 (8.7–12.3)	4.9 (3.9–6.0)
Western Pacific	15.2 (14.9–15.3)	19.0 (18.7–19.3)	11.3 (11.1–11.5)	7.3 (7.0–7.6)	8.5 (8.1–9.0)	7.3 (6.9–7.7)
American Samoa, 2005 ^b	20.3 (17.3–23.8)	23.8 (19.5–28.7)	16.6 (13.0–21.0)	9.1 (7.3–11.4)	12.1 (9.3–15.7)	5.8 (4.0–8.3)
Cambodia, 2003	5.1 (3.6–7.4)	7.2 (4.7–10.8)	3.0 (1.5–5.9)	3.1 (2.0–4.8)	3.3 (1.9–5.6)	3.0 (1.5–5.9)
China, 2005 (Macau) ^e	11.9 (9.6–14.7)	12.8 (10.0–16.2)	11.0 (8.2–14.7)	2.1 (1.4–3.0)	2.4 (1.5–3.9)	1.7 (0.9–3.1)
China, 2005 (Shanghai)	5.5 (4.1–7.4)	7.1 (5.2–9.4)	4.1 (2.3–7.0)	3.9 (2.9–5.4)	4.5 (3.4–5.9)	3.4 (1.7–6.5)
Cook Islands, 2008	35.1 (34.0–36.3)	33.7 (32.1–35.4)	36.3 (34.7–37.9)	15.3 (14.4–16.2)	17.1 (15.8–18.5)	13.8 (12.7–15.0)
Fiji, 2005	11.5 (7.4–17.6)	11.6 (7.0–18.8)	10.2 (6.4–16.0)	7.7 (4.8–12.2)	6.7 (3.8–11.4)	7.6 (4.6–12.3)
Guam, 2002 ^b	27.8 (24.6–31.2)	31.5 (27.4–35.9)	23.8 (20.2–27.9)	14.1 (11.9–16.6)	17.6 (14.2–21.7)	10.1 (8.0–12.7)
Lao People's Democratic Republic, 2007 (Vientiane Capital)	5.7 (4.6–7.2)	7.8 (5.4–11.3)	3.9 (2.6–5.9)	3.1 (2.2–4.2)	3.3 (2.1–4.9)	2.7 (1.9–4.0)
Malaysia, 2003	25.8 (21.9–30.1)	40.0 (34.6–45.7)	11.5 (9.4–13.9)	8.1 (6.6–10.1)	8.8 (6.8–11.3)	7.5 (6.1–9.2)
Micronesia, 2007	46.2 (41.1–51.5)	51.9 (43.8–59.9)	39.8 (34.7–45.1)	37.0 (32.2–42.1)	41.8 (34.6–49.3)	32.1 (27.3–37.4)
Mongolia, 2007	20.7 (13.1–31.1)	25.7 (19.2–33.4)	16.0 (7.5–31.1)	15.4 (7.3–29.5)	17.9 (10.3–29.3)	12.9 (4.6–31.6)
New Zealand, 2008	20.1 (13.4–29.2)	18.7 (9.9–32.4)	21.5 (16.8–27.2)	7.7 (4.4–13.1)	10.1 (4.3–22.1)	5.1 (3.8–6.9)
Northern Mariana Islands, 2004 ^f	53.4 (50.3–56.5)	57.1 (53.4–60.7)	49.8 (45.6–53.9)	45.3 (42.4–48.3)	52.3 (48.8–55.9)	38.3 (34.7–42.1)
Palau, 2005	33.1 (29.7–36.6)	38.0 (33.3–42.9)	28.4 (24.1–33.1)	20.5 (17.6–23.9)	25.0 (20.6–29.9)	16.3 (13.2–20.0)

Table 3.1.66 Continued

WHO region and WHO member state, territory, or special administrative region, and year	% Used any form of tobacco in the past 30 days			% Used any form of tobacco other than cigarettes in the past 30 days		
	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)	Total % (95% CI)	Males % (95% CI)	Females % (95% CI)
Papua New Guinea, 2007	47.7 (43.7–51.7)	55.4 (51.0–59.7)	40.3 (34.9–45.9)	15.9 (13.2–18.9)	21.1 (17.3–25.6)	11.1 (9.1–13.5)
Philippines, 2007	22.7 (19.8–25.8)	28.3 (24.5–32.4)	17.5 (14.6–20.7)	7.7 (6.2–9.5)	8.2 (6.1–10.9)	7.2 (5.6–9.2)
Republic of Korea (South), 2008	13.0 (11.4–14.7)	14.9 (12.5–17.6)	10.6 (9.4–11.9)	6.2 (5.4–7.1)	7.2 (6.1–8.6)	5.0 (4.2–6.0)
Samoa, 2007	23.5 (19.0–28.7)	25.8 (19.0–33.9)	20.4 (16.1–25.5)	16.1 (12.4–20.6)	19.5 (13.6–27.1)	13.5 (9.5–19.0)
Singapore, 2000	9.1 (8.1–10.3)	10.5 (8.8–12.4)	7.5 (6.2–9.1)	NA	NA	NA
Solomon Islands, 2008	40.2 (34.1–46.6)	43.9 (34.5–53.8)	37.0 (28.0–46.9)	23.4 (18.2–29.5)	27.7 (17.4–40.9)	19.9 (15.1–25.8)
Tuvalu, 2006	36.4 (36.2–36.7)	41.6 (41.2–41.9)	32.7 (32.4–32.9)	27.1 (26.9–27.3)	33.3 (33.0–33.7)	22.4 (22.1–22.6)
Vanuatu, 2007	25.6 (24.4–26.9)	34.1 (32.0–36.3)	19.6 (18.1–21.2)	13.8 (12.8–14.8)	17.5 (15.8–19.2)	11.3 (10.2–12.6)
Viet Nam, 2007 (Hanoi)	3.3 (1.9–5.7)	5.5 (3.1–9.6)	1.1 (0.5–2.2)	1.2 (0.8–1.9)	2.0 (1.3–3.1)	0.5 (0.1–2.1)

Source: WHO 2009.

Note: These data are based on GYTS questions: (1) During the past 30 days (one month), on how many days did you smoke cigarettes? and (2) During the past 30 days (one month) have you ever used any form of tobacco products other than cigarettes (e.g., chewing tobacco, snuff, dip, cigars, cigarillos, little cigars, pipe)? **CI** = confidence interval; **NA** = question not asked; **WHO** = World Health Organization.

^aTerritory of United Kingdom

^bTerritory of United States

^cUnited Nations Relief and Works Agency

^dUnited Nations Administered Province

^eSpecial Administrative Region of China

^fCommonwealth in political union with the United States

Table 3.1.67 Percentage of youth 16 years of age who have smoked 40 or more cigarettes in their lifetime and who currently smoke cigarettes, overall and by gender; European School Survey Project on Alcohol and other Drugs (ESPAD) 2007; Europe

Country	Lifetime \geq 40 cigarettes			Last 30 days (current smoker)		
	Males %	Females %	Average %	Males %	Females %	Average %
Armenia	10	0	4	17	1	7
Austria	33	38	35	42	48	45
Belgium (Flanders)	17	16	17	24	23	23
Bulgaria	26	32	29	36	44	40
Croatia	30	27	28	38	38	38
Cyprus	21	12	17	29	17	23
Czech Republic	32	37	34	36	45	41
Denmark ^a	24	27	26	30	34	32
Estonia	32	22	27	32	27	29
Faroe Islands	33	33	33	31	34	33
Finland	27	25	26	29	31	30
France	20	20	20	29	31	30
Germany ^b	27	28	27	31	35	33
Greece	16	13	14	23	21	22
Greenland	NA	NA	NA	NA	NA	NA
Hungary	24	24	24	31	34	33
Iceland	13	15	14	15	18	16
Ireland	13	18	16	19	27	23
Isle of Man	16	21	18	19	28	24
Italy	24	24	24	34	39	37
Latvia	37	28	32	44	39	41
Lithuania	31	20	26	39	29	34
Malta	16	15	15	26	26	26
Monaco	11	26	18	16	35	25
Netherlands	22	26	24	27	33	30
Norway	12	16	14	17	22	19
Poland	18	15	16	22	20	21
Portugal	15	10	12	20	18	19
Romania	18	14	16	26	23	25
Russia	37	22	29	41	29	35
Slovak Republic	30	28	29	35	38	37
Slovenia	21	23	22	28	31	29
Spain ^c	17	23	20	23	29	26
Sweden	17	18	17	19	24	21
Switzerland	20	15	18	30	29	29
Turkey	NA	NA	NA	NA	NA	NA

Table 3.1.67 Continued

Country	Lifetime ≥ 40 cigarettes			Last 30 days (current smoker)		
	Males %	Females %	Average %	Males %	Females %	Average %
Ukraine	27	15	21	38	24	31
United Kingdom	13	18	15	17	25	22

Source: Adapted from Hibell et al. 2009 with permission from the Swedish Council for Information on Alcohol and Other Drugs, © 2009.

Note: **NA** = not applicable.

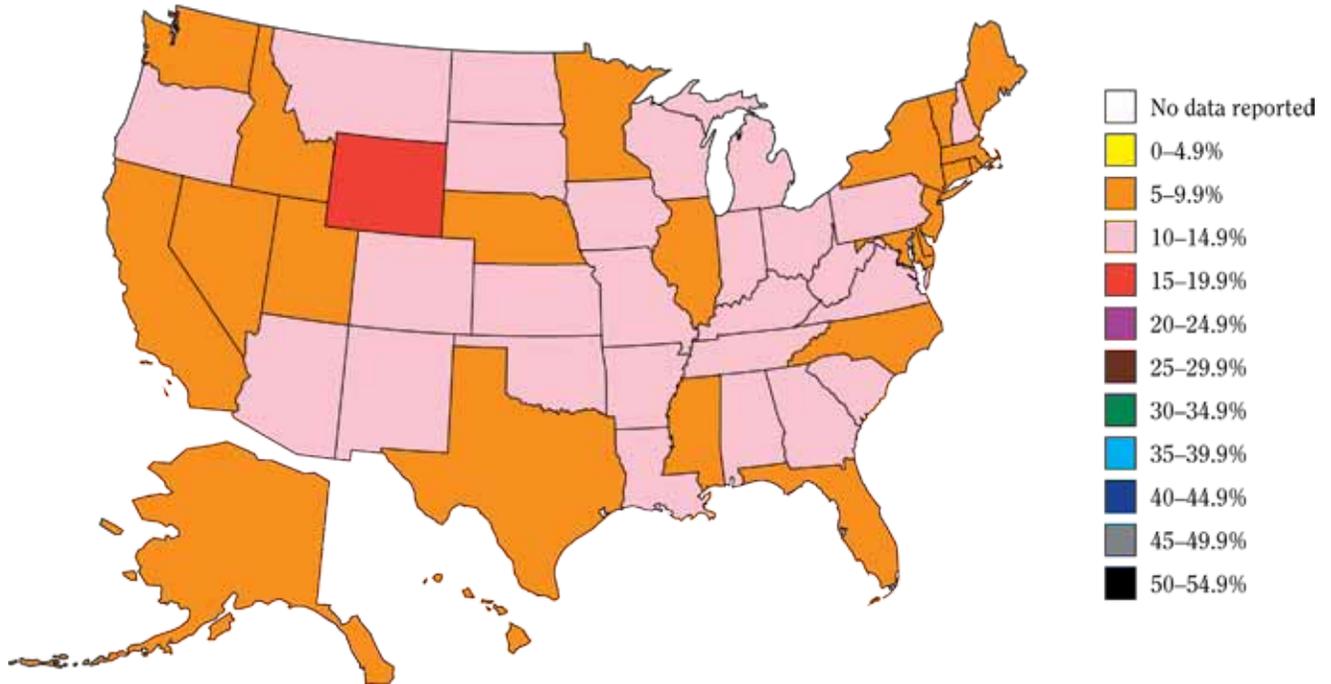
^aFor methodological reasons, data may not be completely comparable with other ESPAD countries.

^bData are included from seven bundesländer (federated states).

^cSpain is not an ESPAD country, and data may not be completely comparable with the ESPAD countries.

Figure 3.1.1 Percentage who currently smoke cigarettes, by age group and state; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

A. 12–17 years of age



B. 18–25 years of age

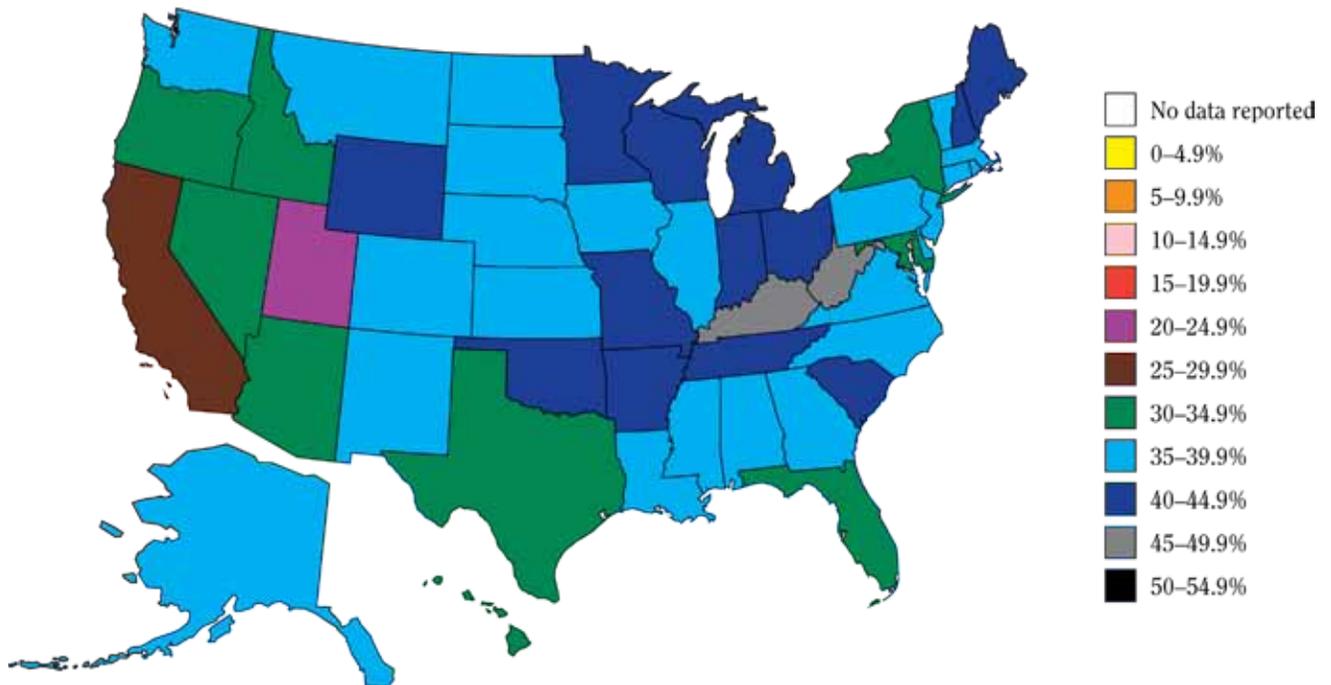
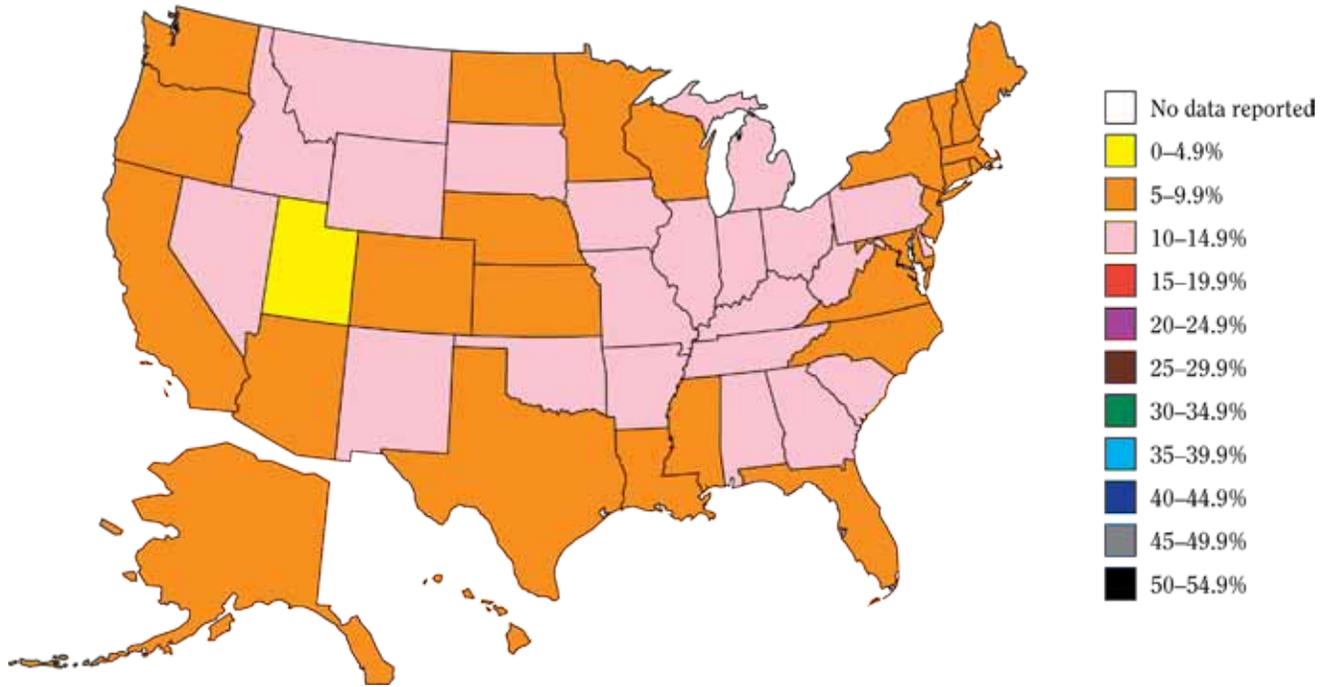
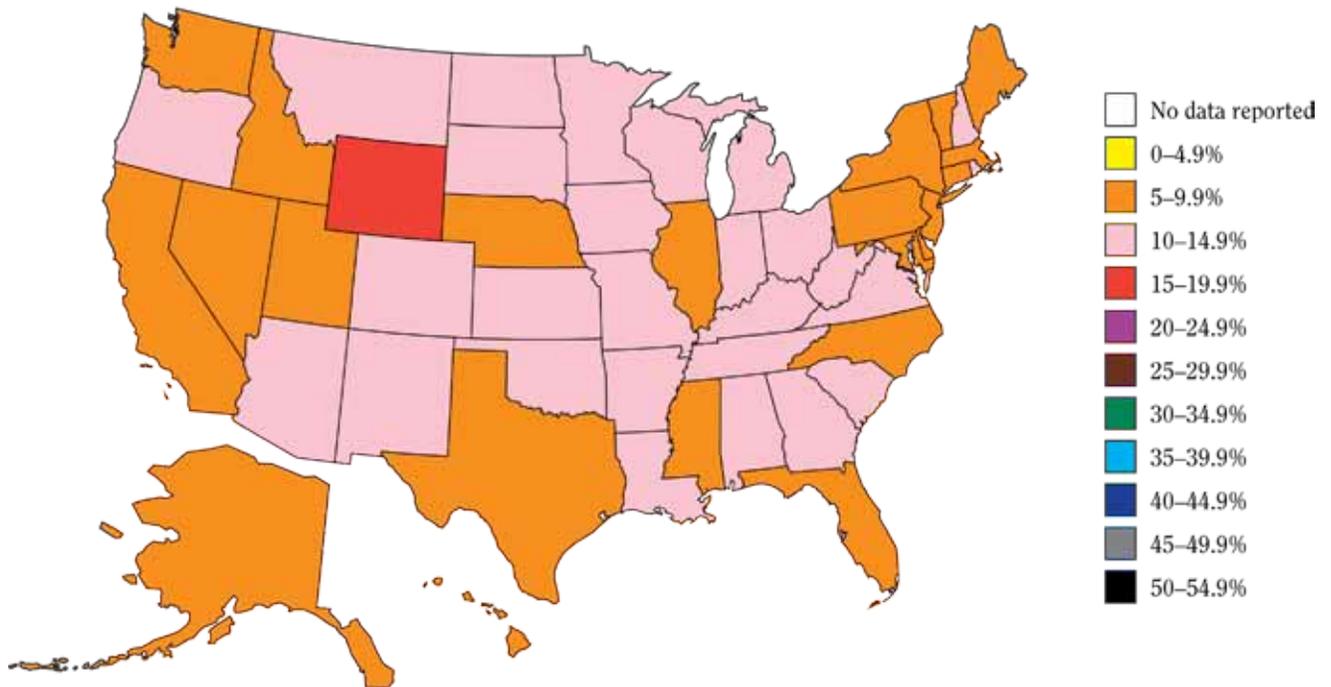


Figure 3.1.2 Percentage who currently smoke cigarettes, by age group, state and gender; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

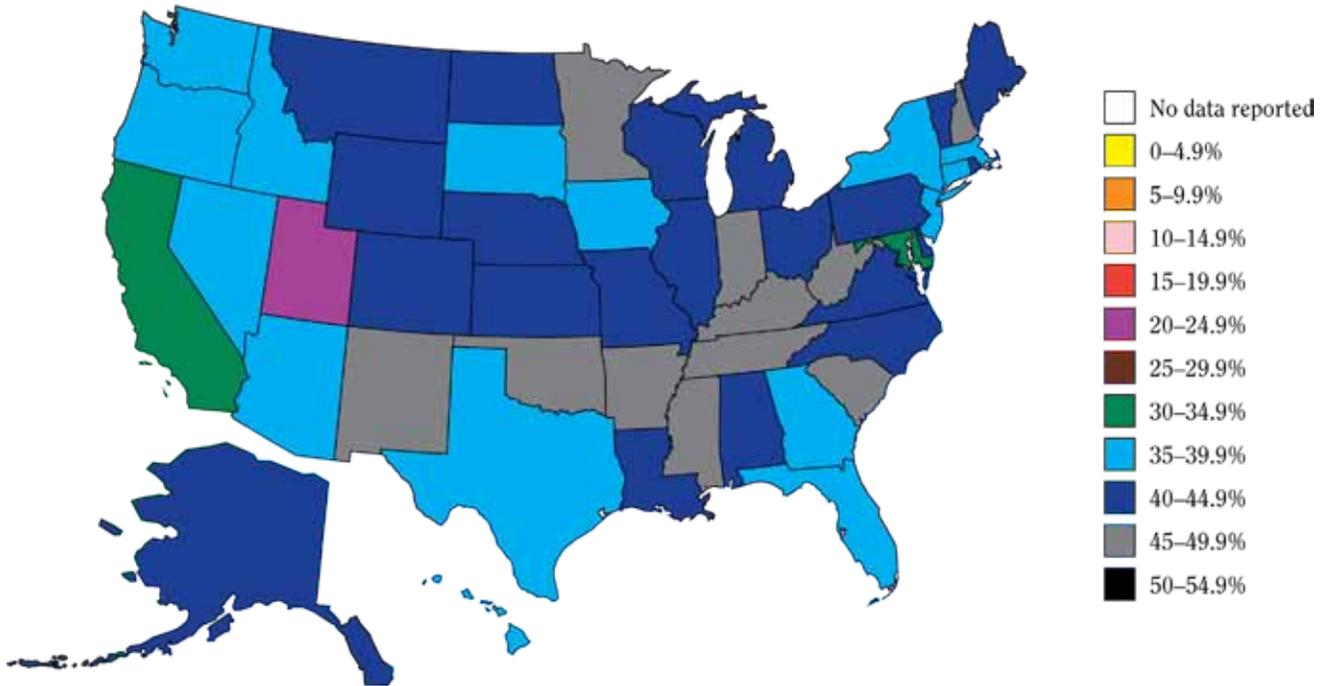
A. 12–17 years of age, males



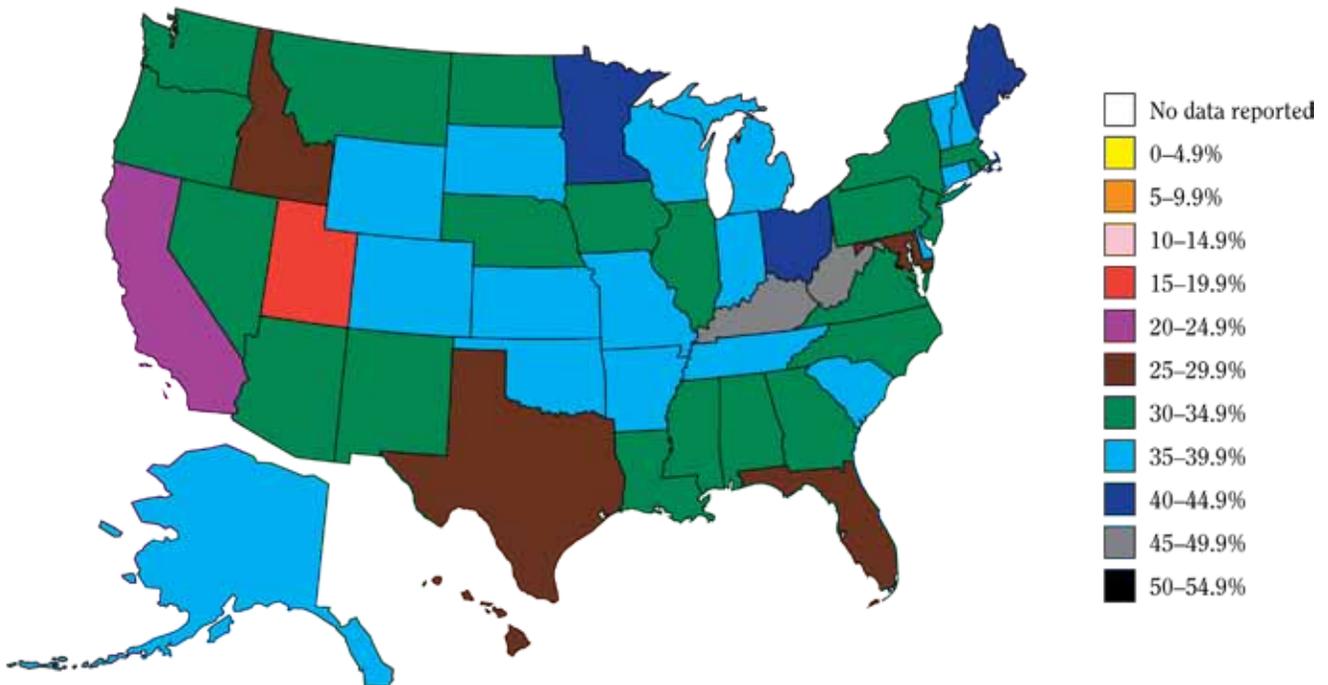
B. 12–17 years of age, females



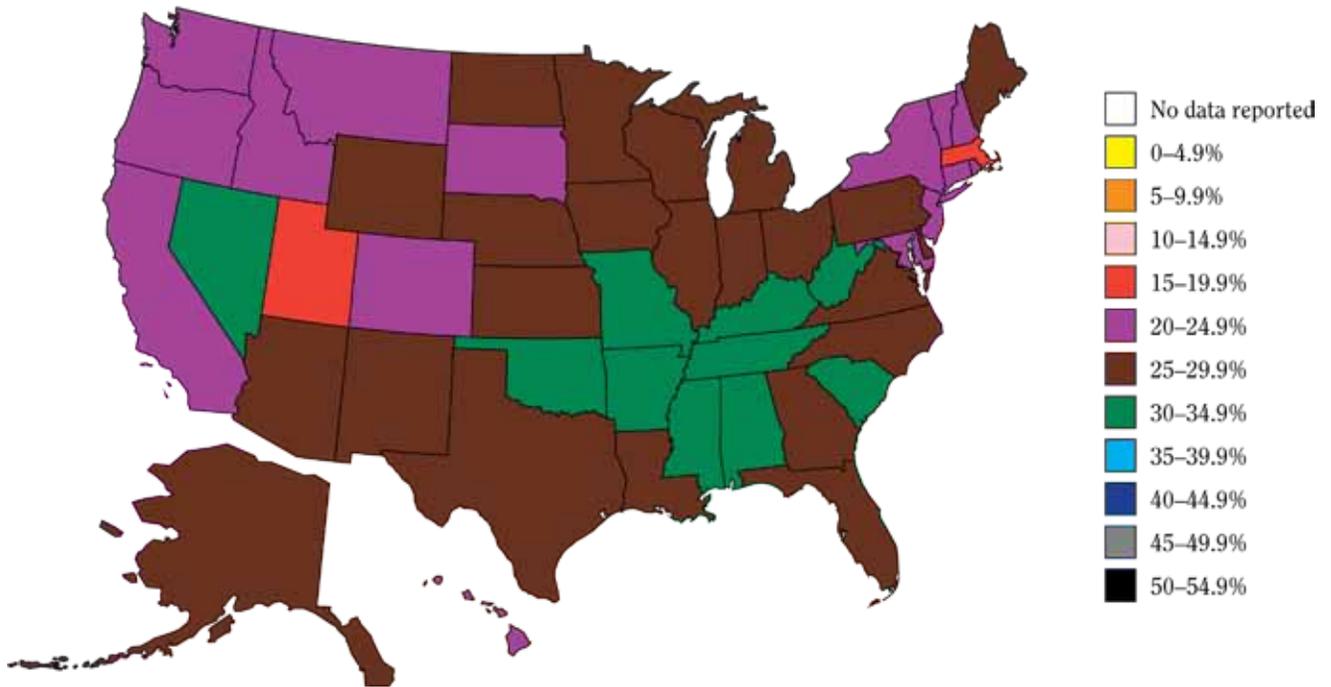
C. 18–25 years of age, males



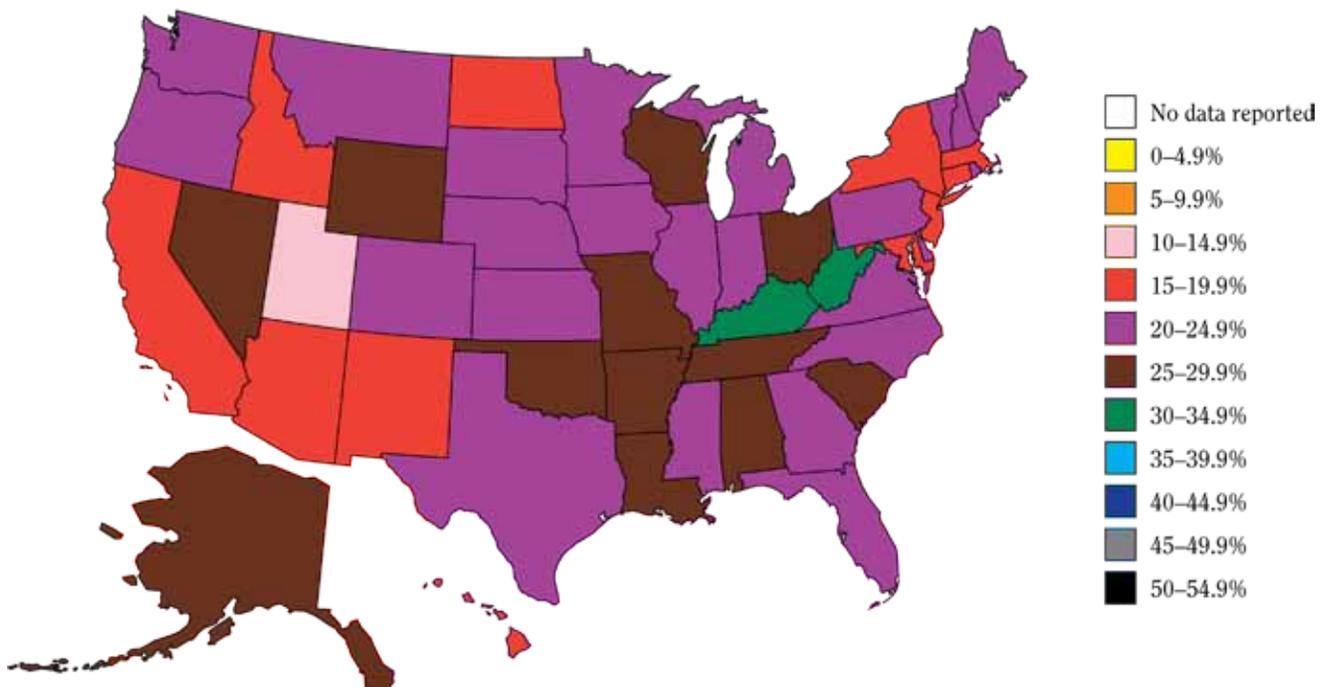
D. 18–25 years of age, females



E. 26 years of age or older, males

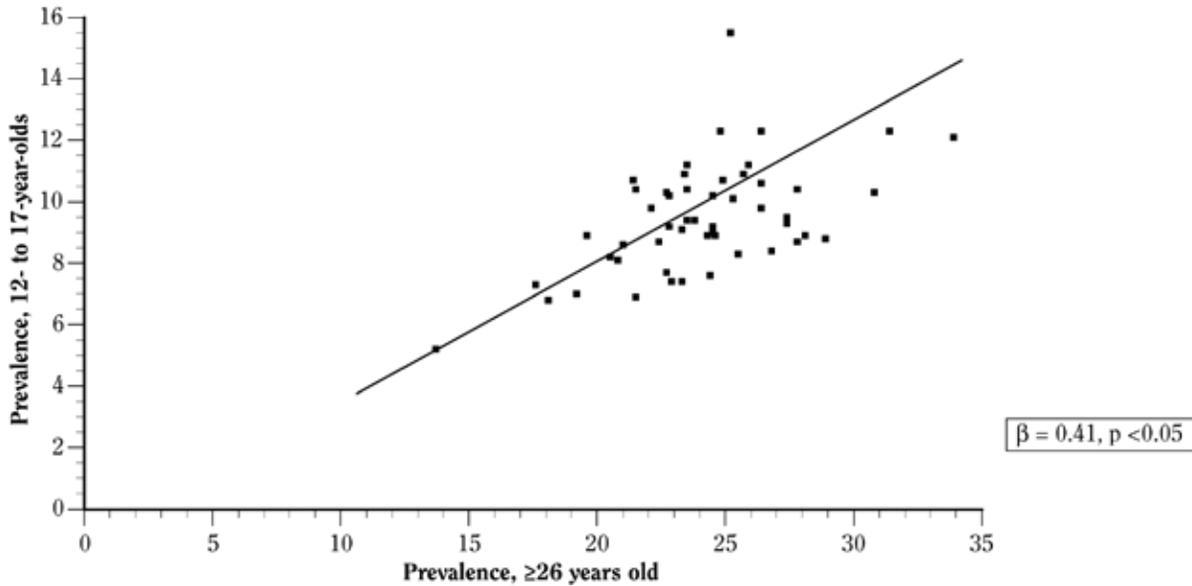


F. 26 years of age or older, females



Source: 2006–2010 NSDUH; Substance Abuse and Mental Health Services Administration (unpublished data).

Figure 3.1.3 Prevalence of current cigarette smoking^a among 12- to 17-year-olds and those 26 years of age or older, by state; National Survey on Drug Use and Health (NSDUH) 2008–2010; United States

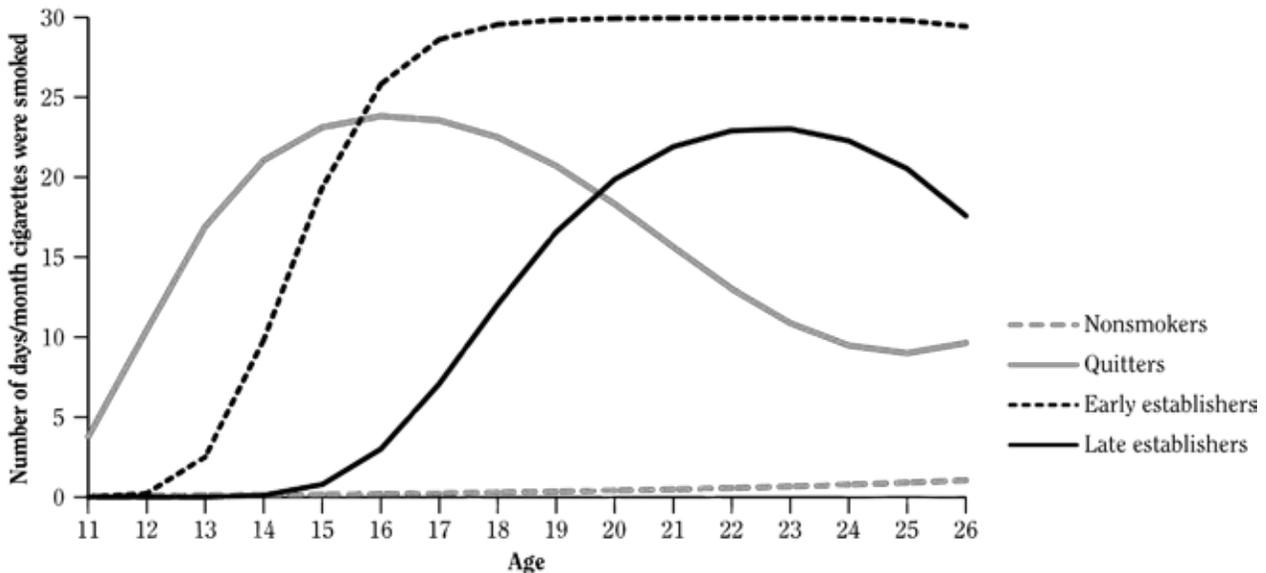


Source: 2008–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Note: Each dot represents a state.

^aBased on responses to the question, “During the past 30 days, have you smoked part or all of a cigarette?” Respondents who chose “Yes” were classified as current cigarette smokers.

Figure 3.1.4 Distribution of developmental trajectories of cigarette smoking across adolescence and young adulthood, from 11 to 26 years of age, overall; National Longitudinal Study of Adolescent Health (Add Health) 1994–1996, 2001–2002; United States

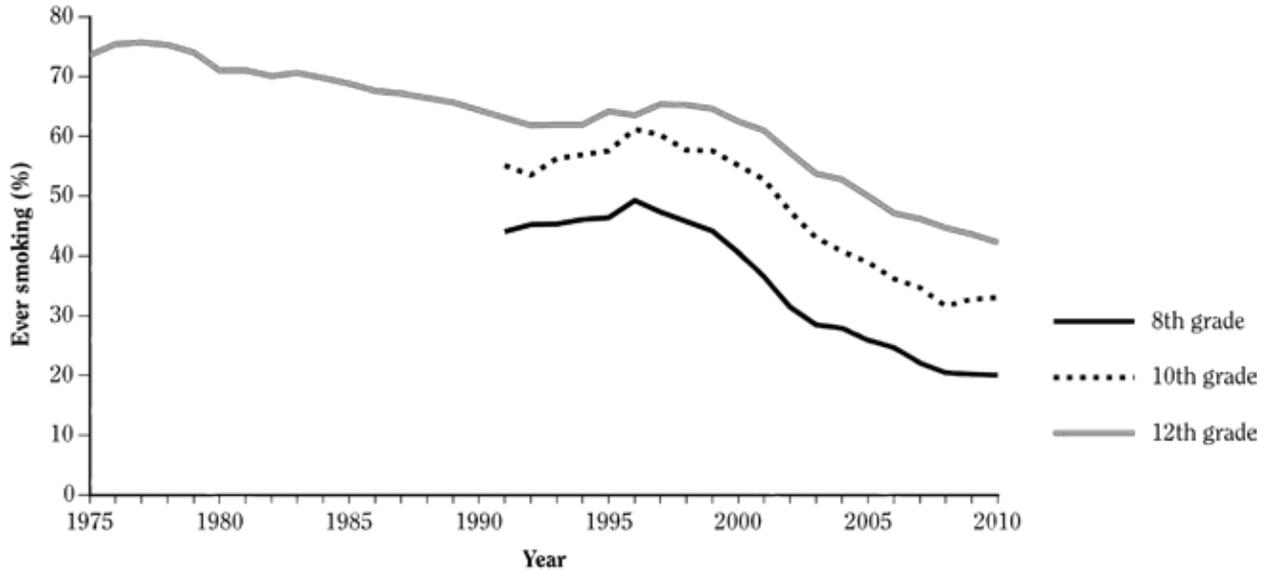


Source: 1994–1996, 2001–2002 Add Health: public use data sets.

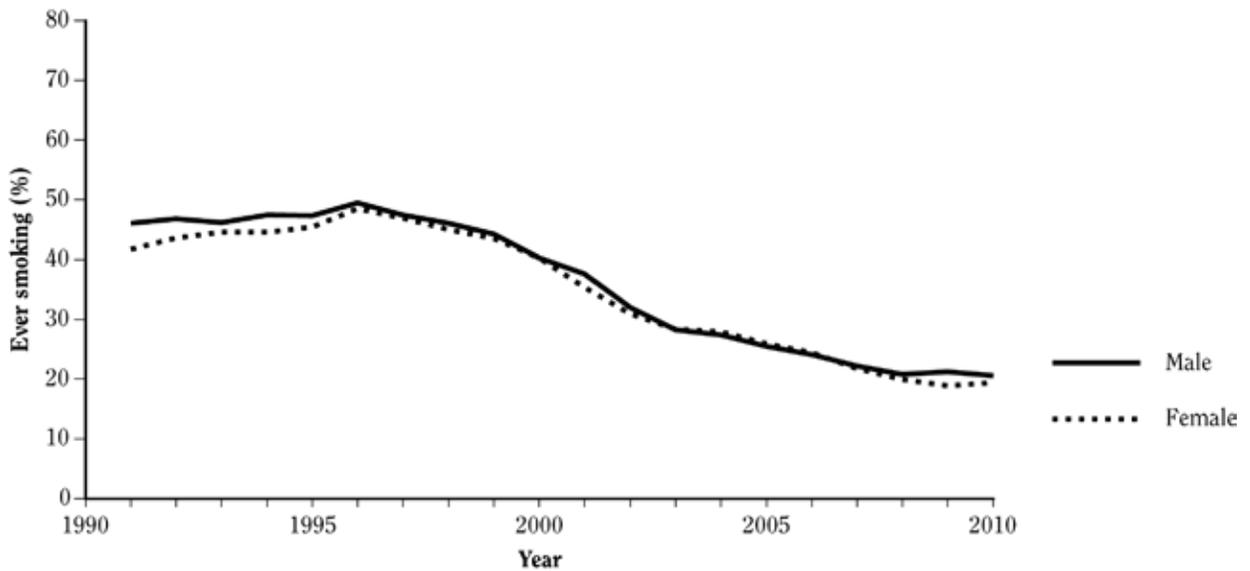
Note: Quitters are so named because their intensity of cigarette smoking increases early in adolescence, then declines rapidly and consistently later in adolescence and early adulthood.

Figure 3.1.5 Trends in prevalence (%) of ever smoking among young people over time, by grade level and gender; Monitoring the Future (MTF) 1975–2010; United States

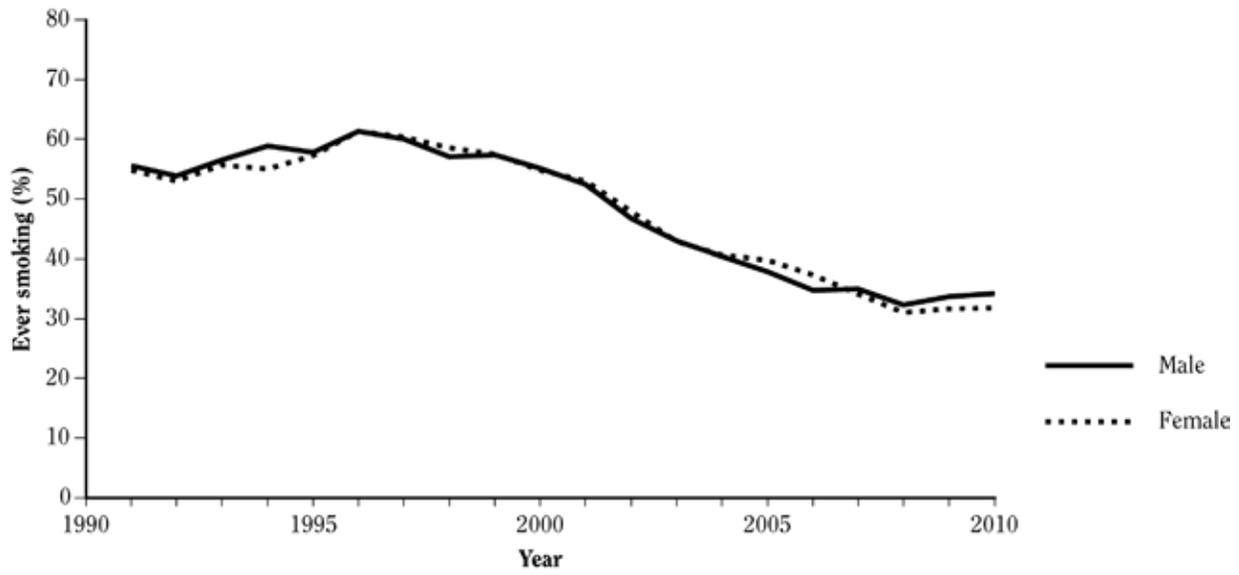
A. 8th, 10th, and 12th grades, 1975–2010



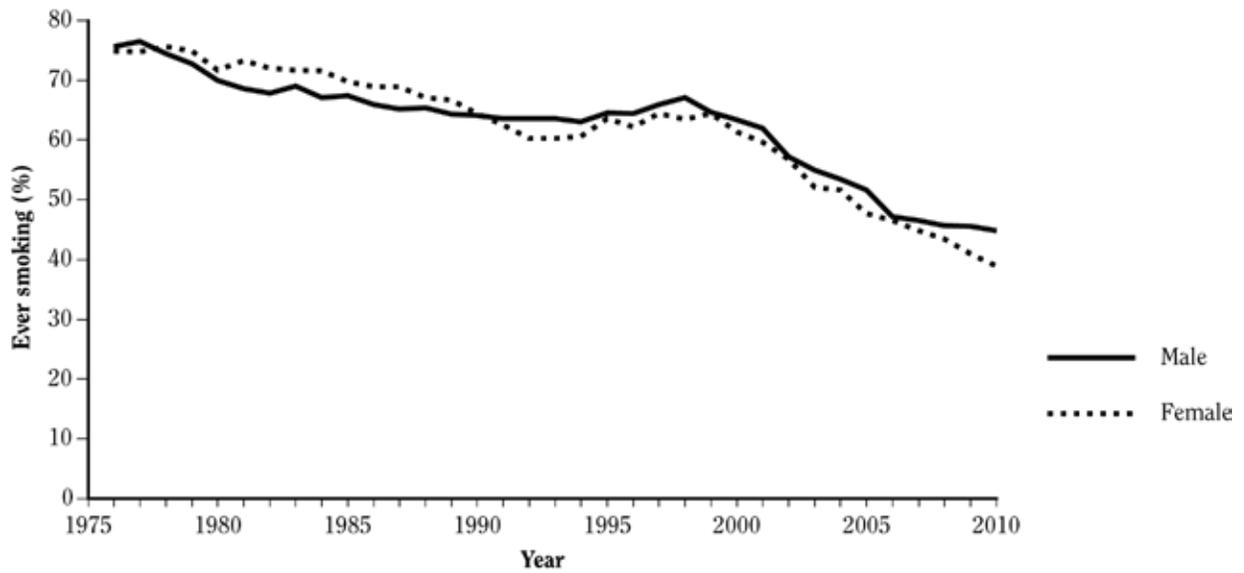
B. 8th grade, 1991–2010



C. 10th grade, 1991–2010



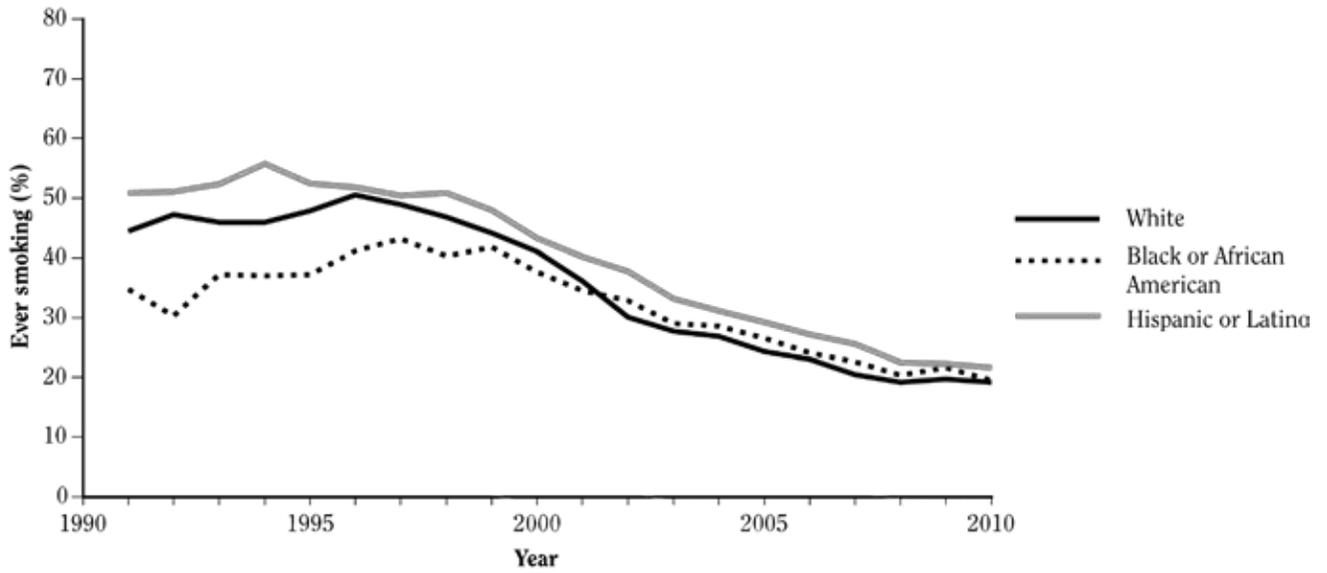
D. 12th grade, 1976–2010



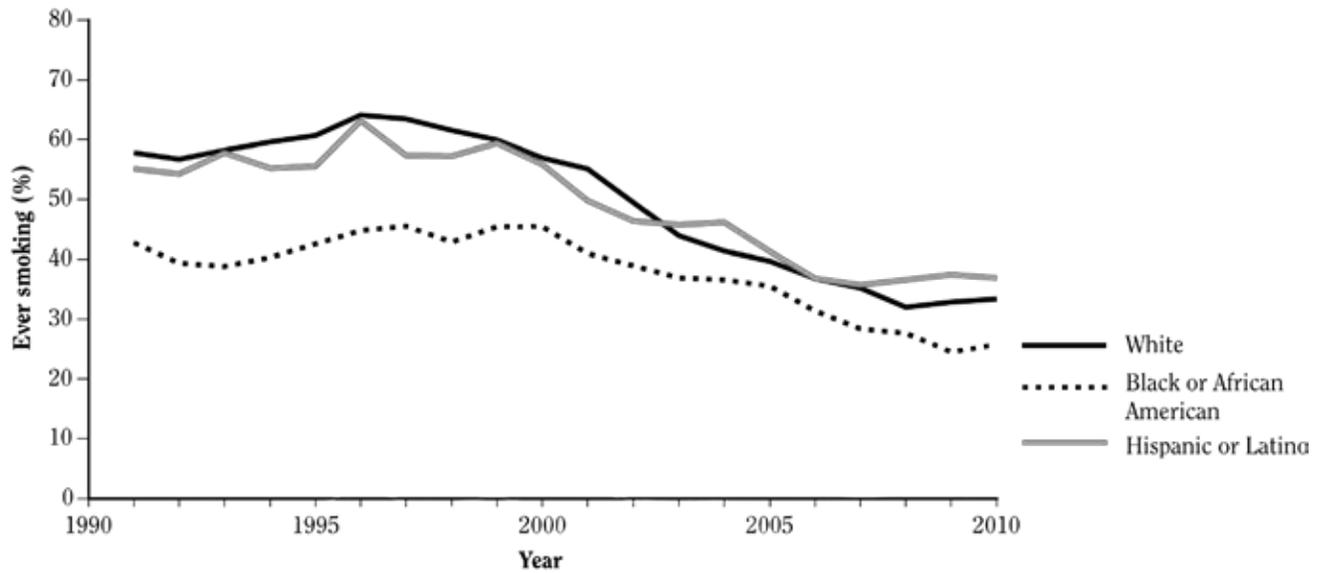
Source: 1975–2010 MTF: University of Michigan, Institute for Social Research (unpublished data).

Figure 3.1.6 Trends in prevalence (%) of ever smoking among young people, by grade level and race/ethnicity; Monitoring the Future (MTF) 1976–2010, and National Youth Risk Behavior Survey (YRBS) 1991–2009; United States

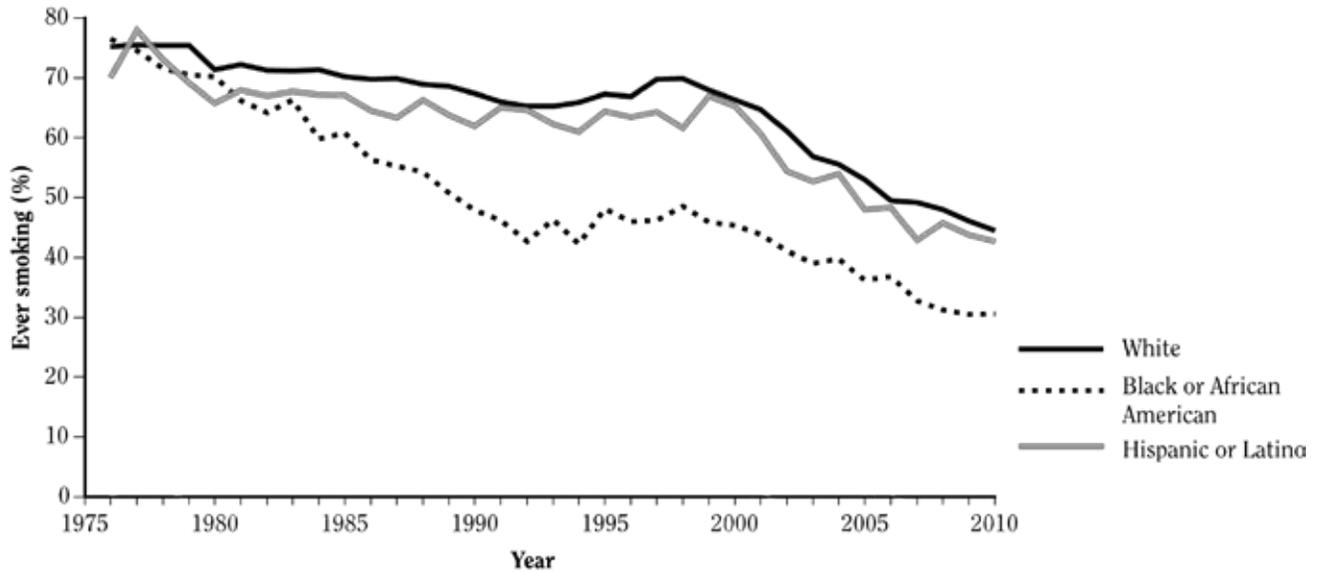
A. 8th grade, MTF, 1991–2010



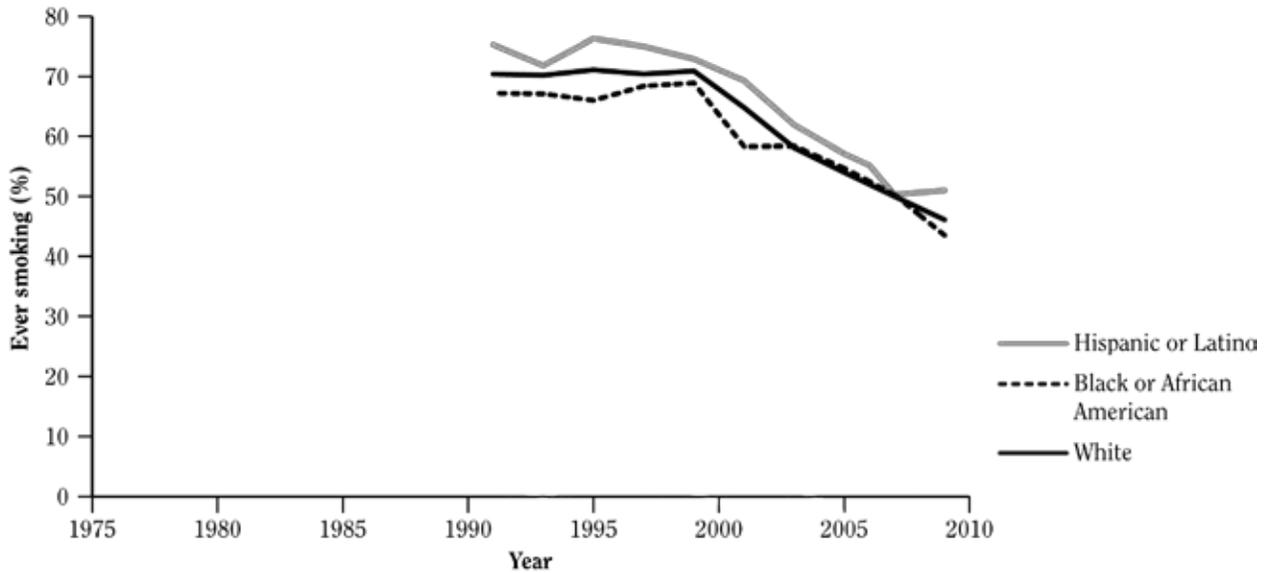
B. 10th grade, MTF, 1991–2010



C. 12th grade, MTF, 1976–2010

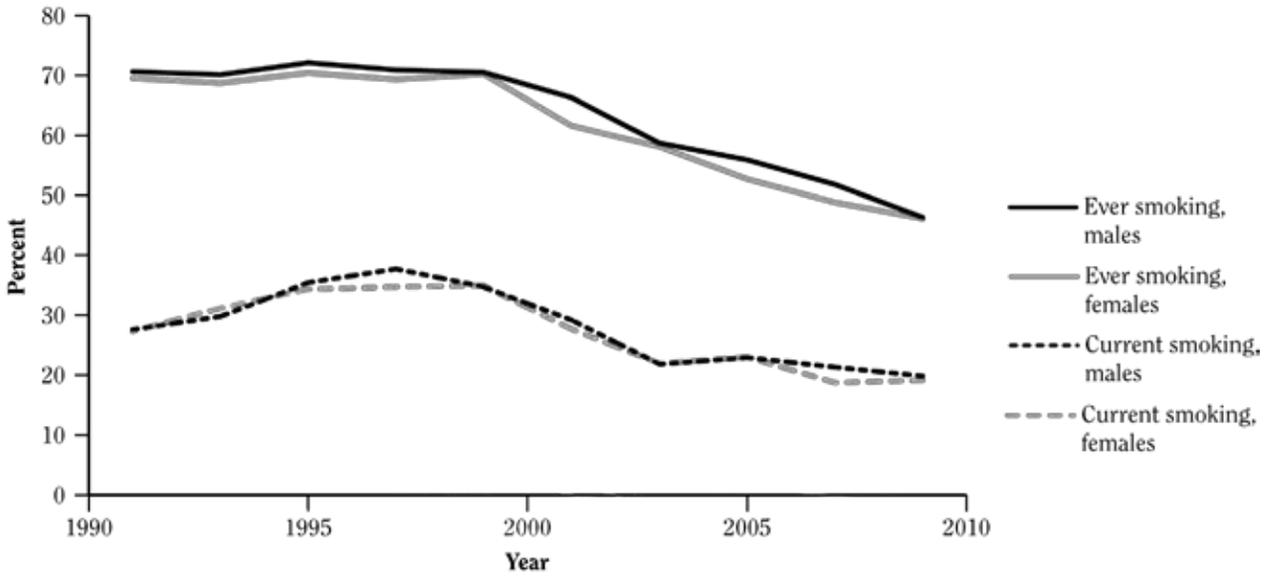


D. 9th–12th grade, YRBS, 1991–2009



Source: 1976–2010 MTF: University of Michigan, Institute for Social Research (unpublished data); 1991–2009 YRBS: Centers for Disease Control and Prevention (CDC 2011a).

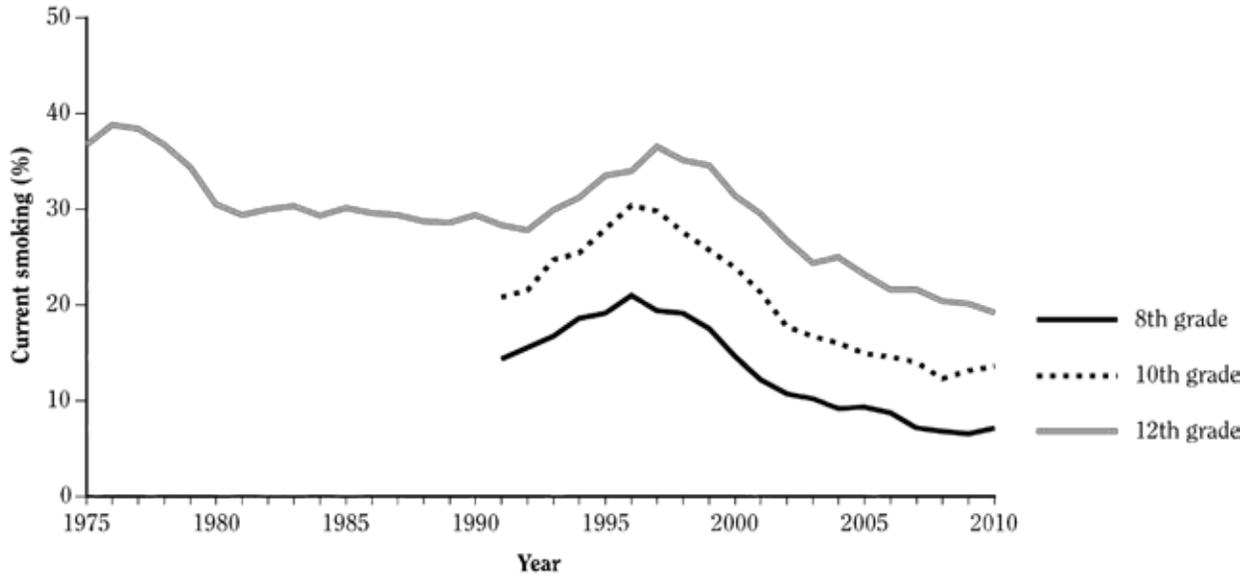
Figure 3.1.7 Trends in prevalence (%) of ever smoking and current smoking among 9th–12th grade students, by gender; National Youth Risk Behavior Survey (YRBS) 1991–2009; United States



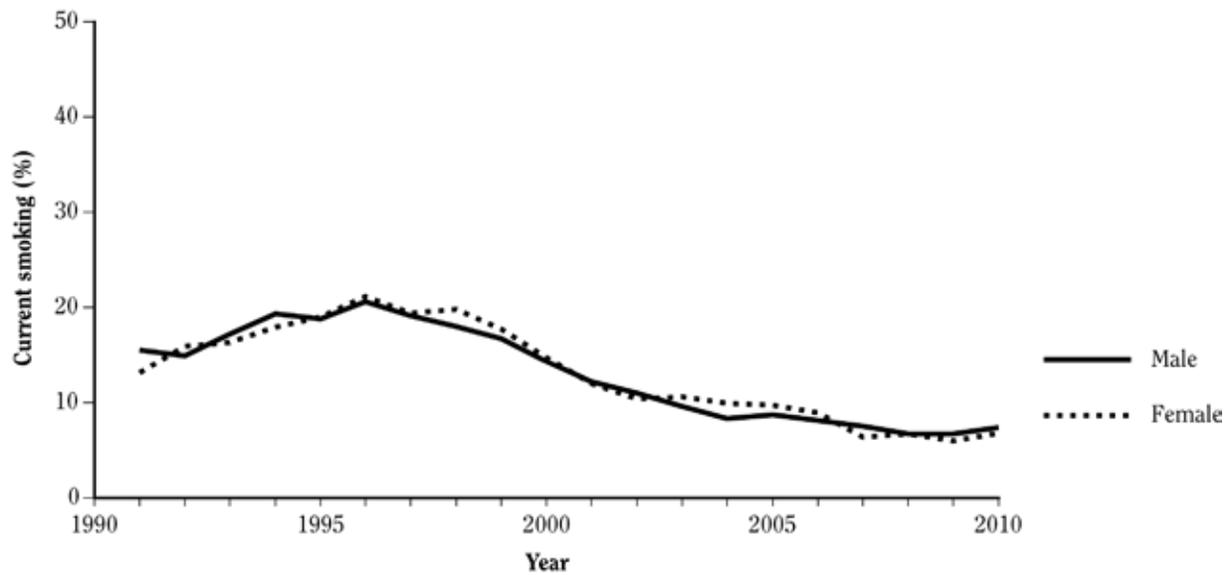
Source: 1991–2009 YRBS; Centers for Disease Control and Prevention (CDC 2011a).

Figure 3.1.8 Trends in prevalence (%) of current smoking among young people over time, by grade level; Monitoring the Future (MTF) 1975–2010; United States

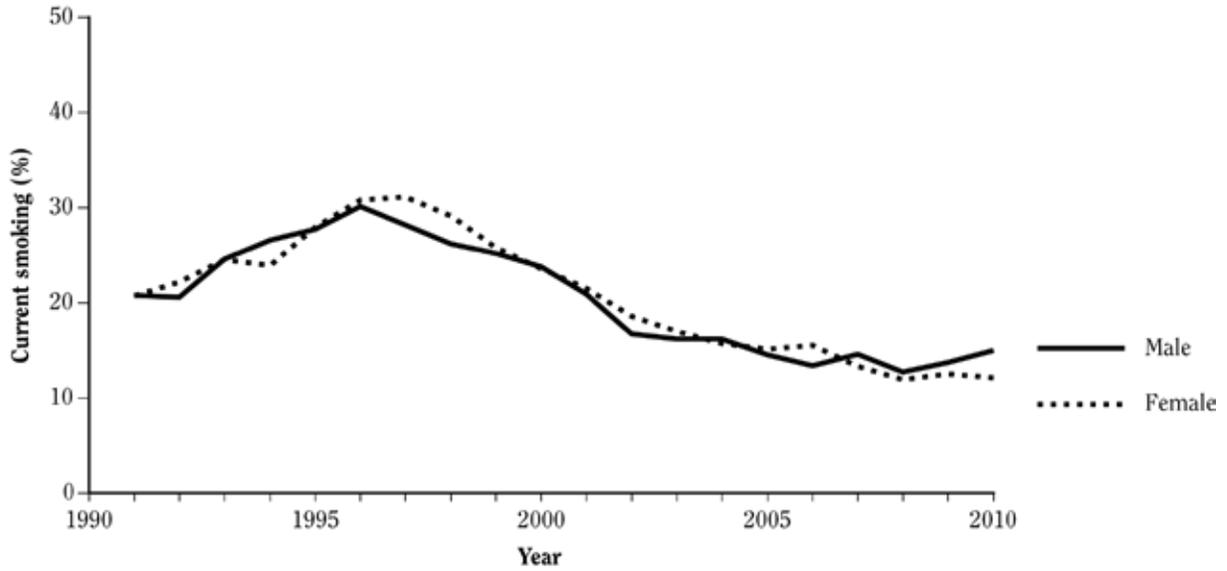
A. 8th, 10th, and 12th grades, 1975–2010



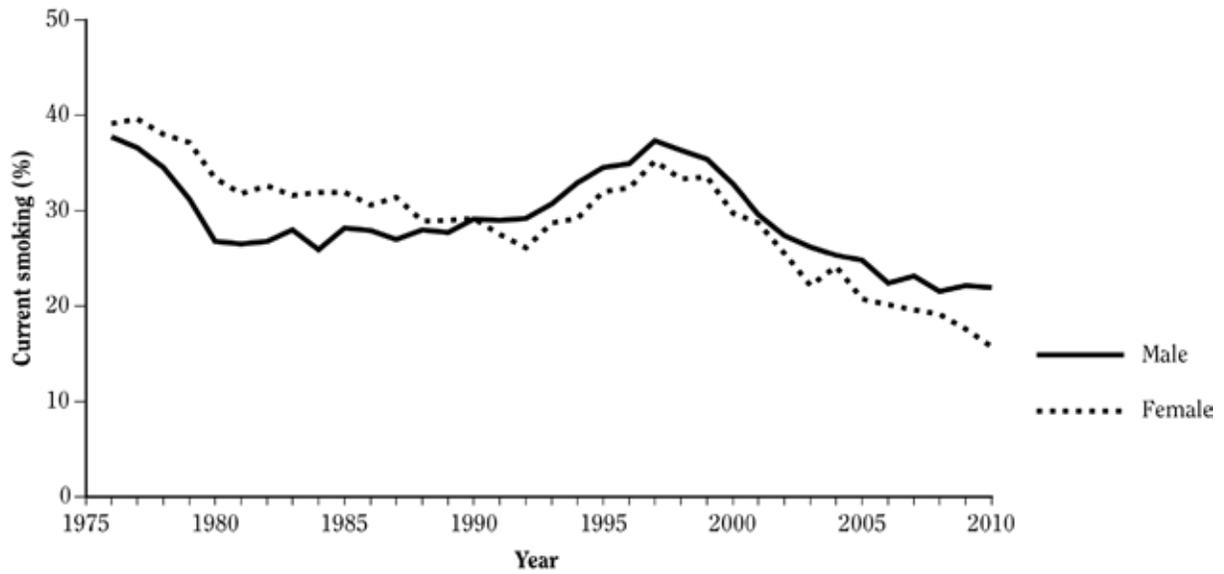
B. 8th grade, 1991–2010



C. 10th grade, 1991–2010



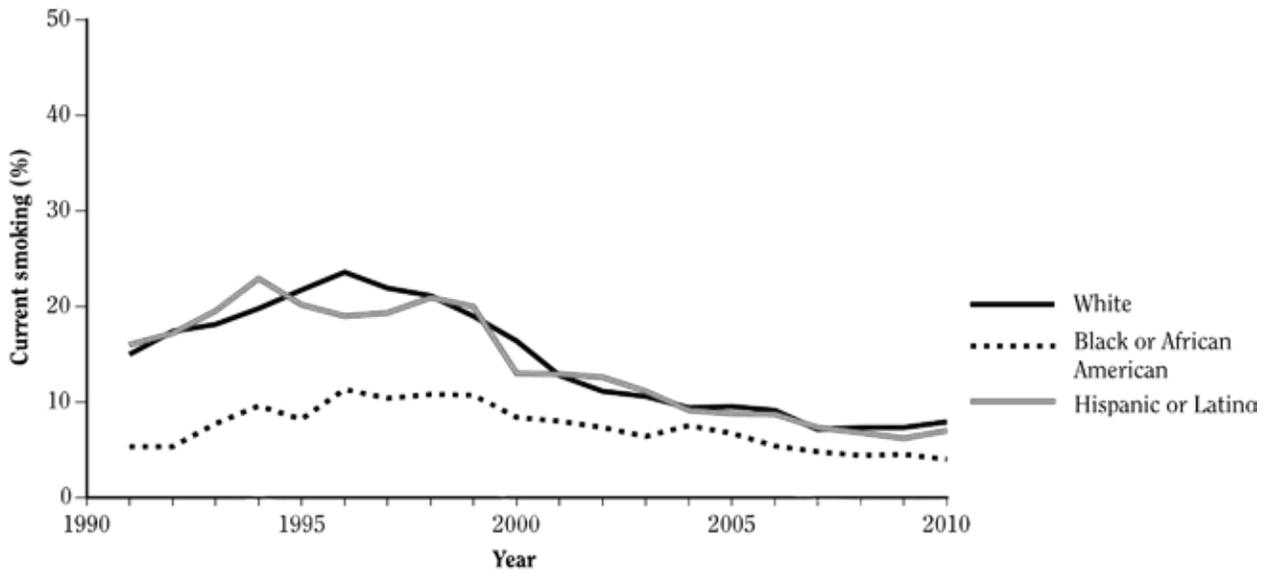
D. 12th grade, 1976–2010



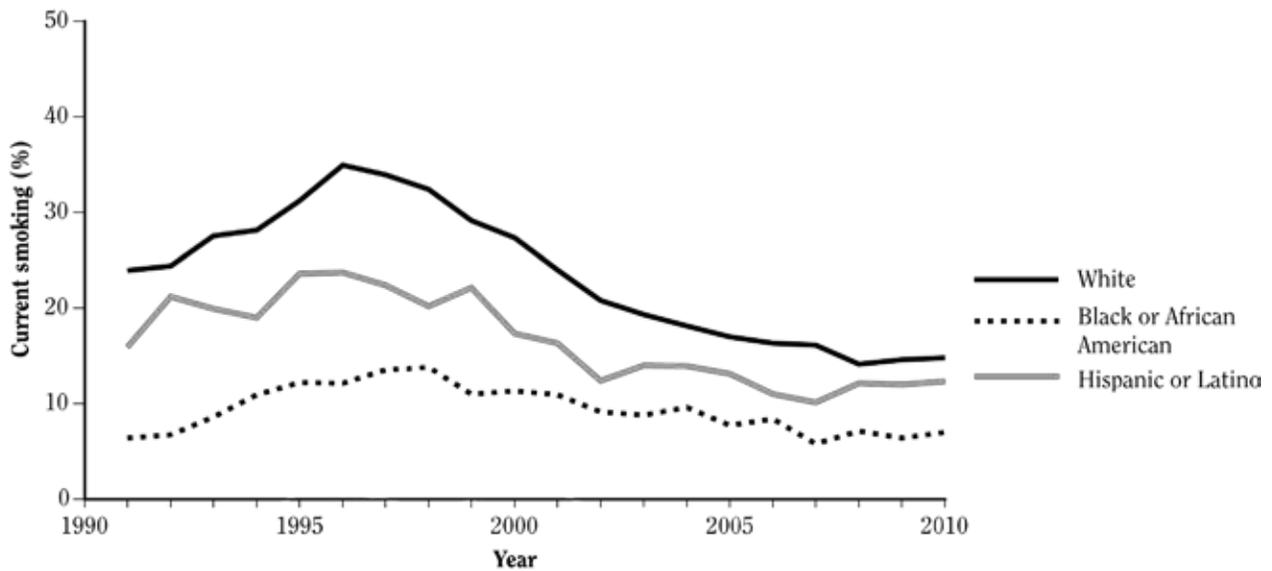
Source: 1975–2010 MTF: University of Michigan, Institute for Social Research (unpublished data).

Figure 3.1.9 Trends in prevalence (%) of current cigarette smoking among young people over time, by grade level and race/ethnicity; Monitoring the Future (MTF) 1976–2010, and National Youth Risk Behavior Survey (YRBS) 1991–2009; United States

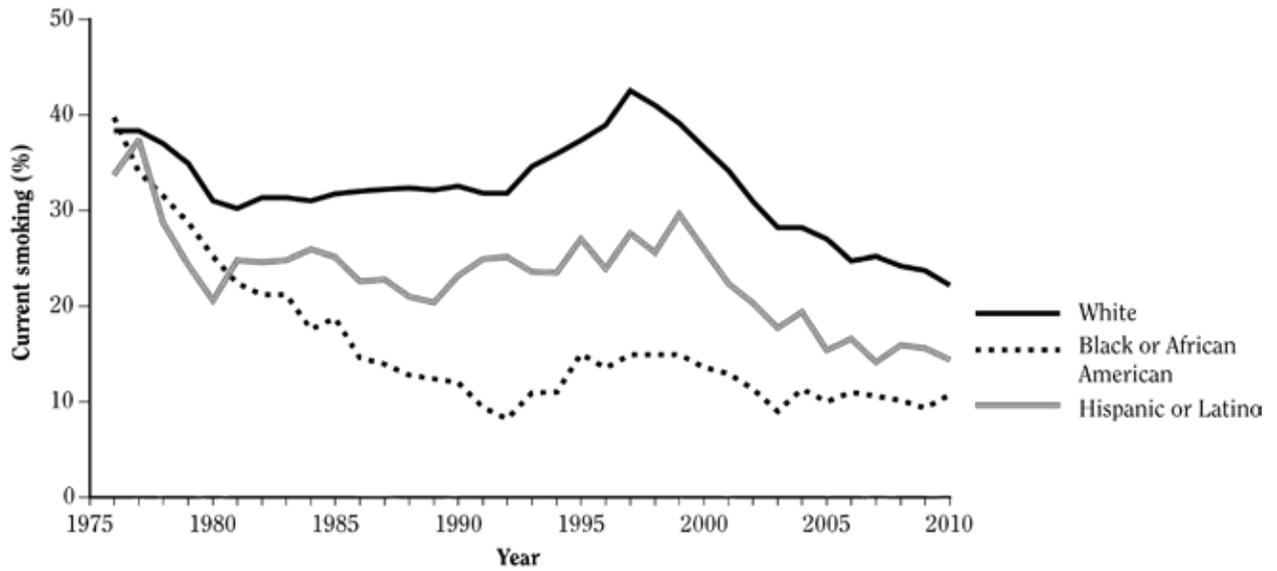
A. 8th grade, MTF, 1991–2010



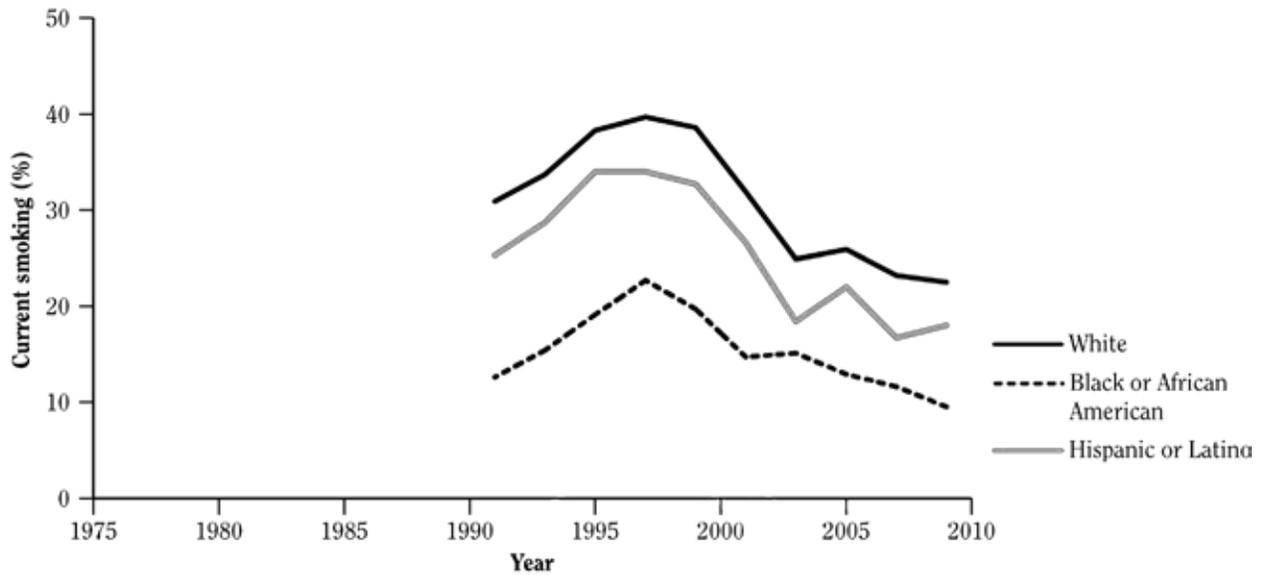
B. 10th grade, MTF, 1991–2010



C. 12th grade, MTF, 1976–2010



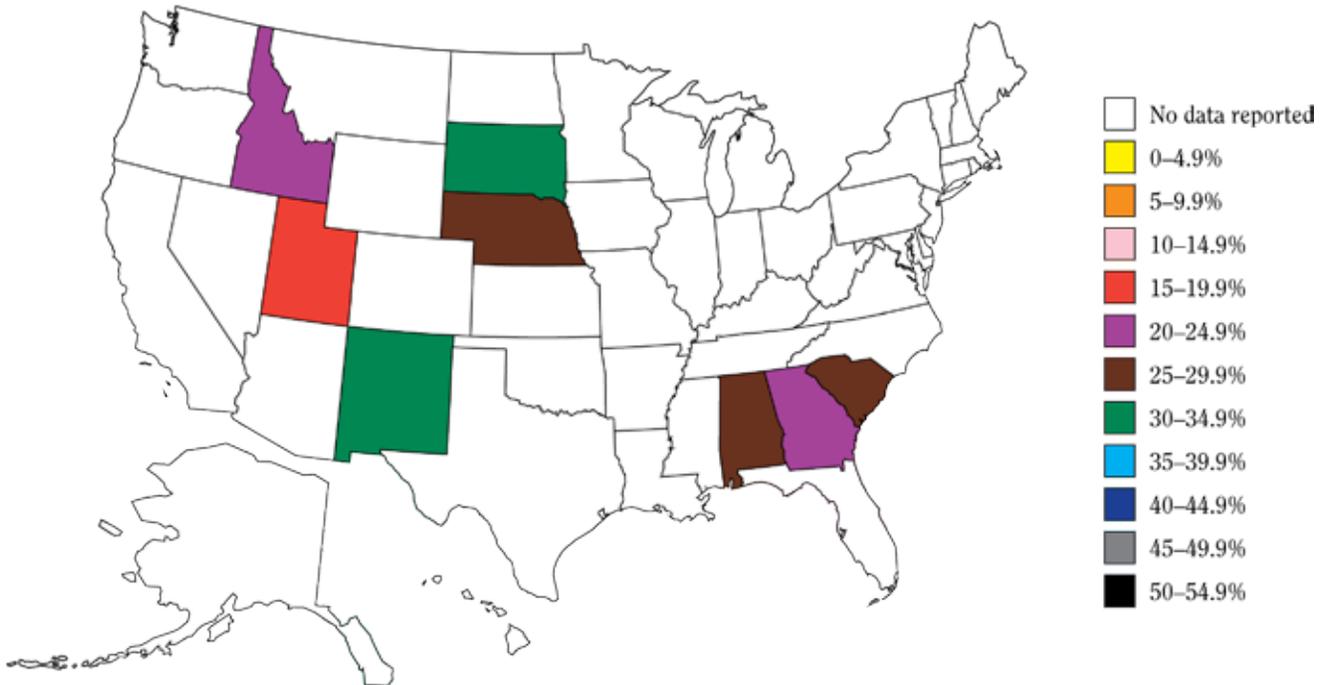
D. 9th–12th grade, YRBS, 1991–2009



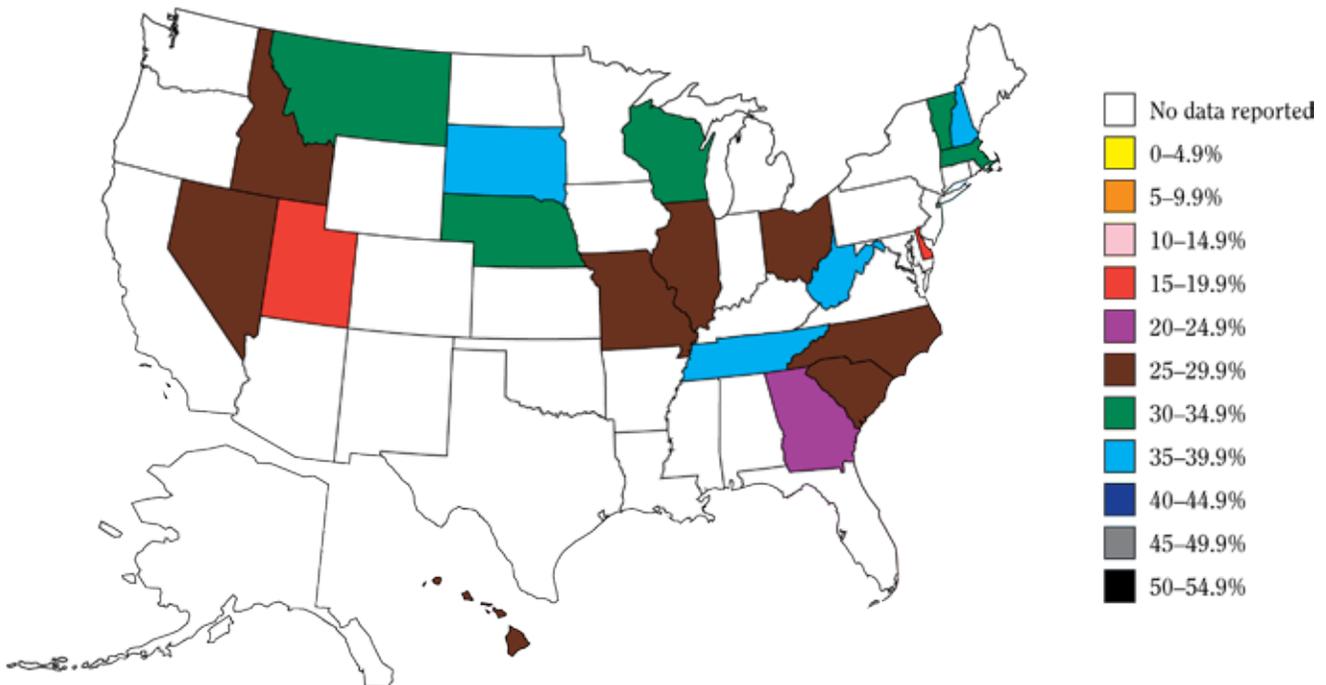
Source: 1976–2010 MTF: University of Michigan, Institute for Social Research (unpublished data); 1991–2009 YRBS: Centers for Disease Control and Prevention (CDC 2011a.)

Figure 3.1.10 Trends in the prevalence (%) of current smoking among 9th- to 12th-grade students, by state; Youth Risk Behavior Survey (YRBS) 1991–2009; United States

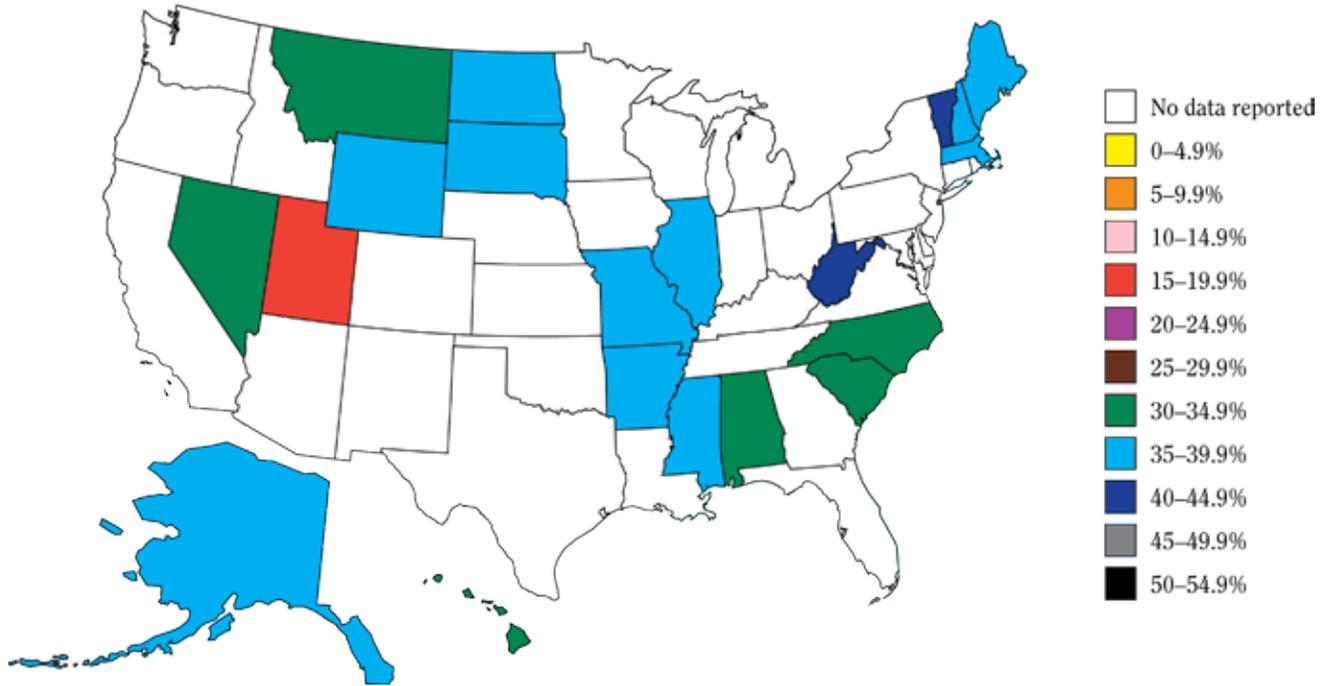
A. 1991



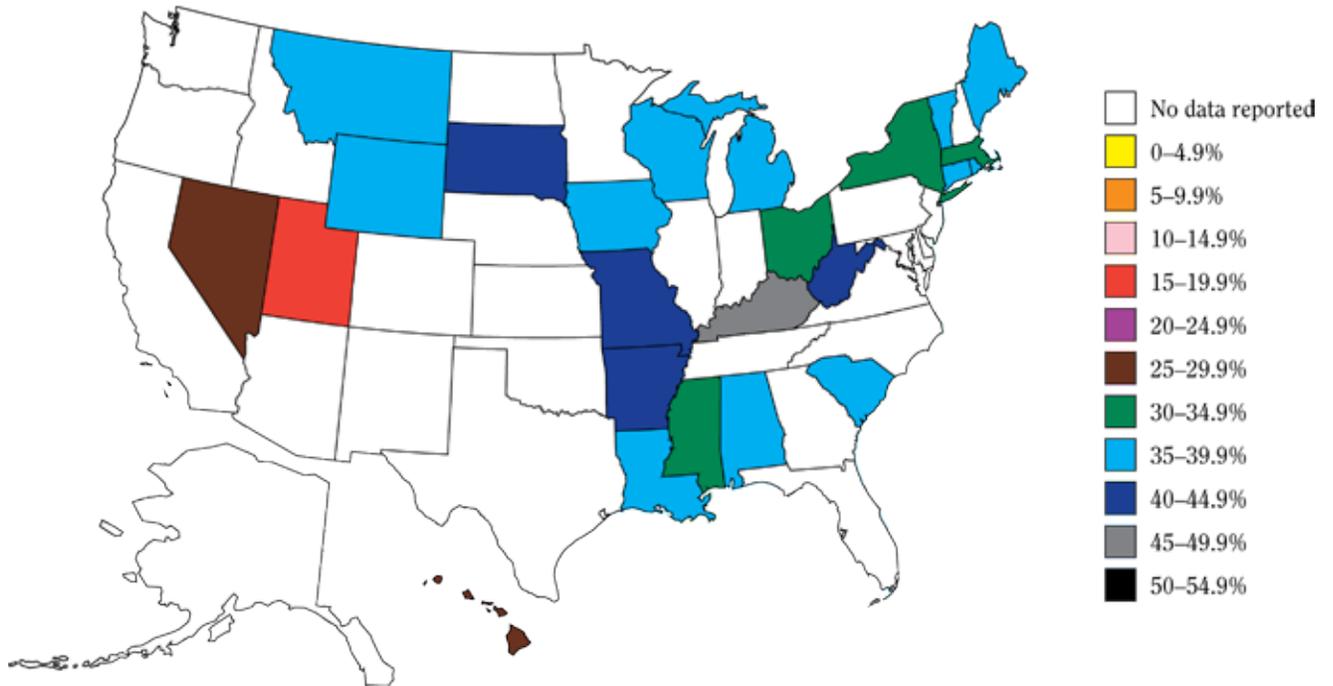
B. 1993



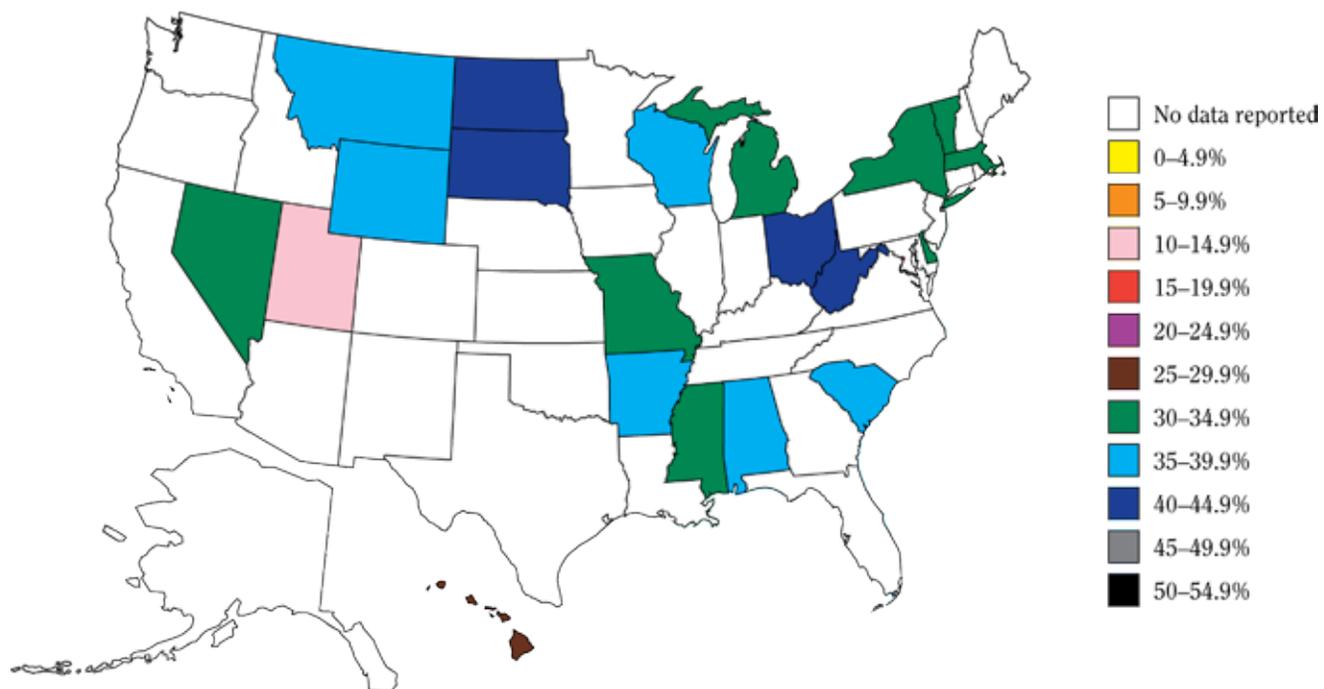
C. 1995



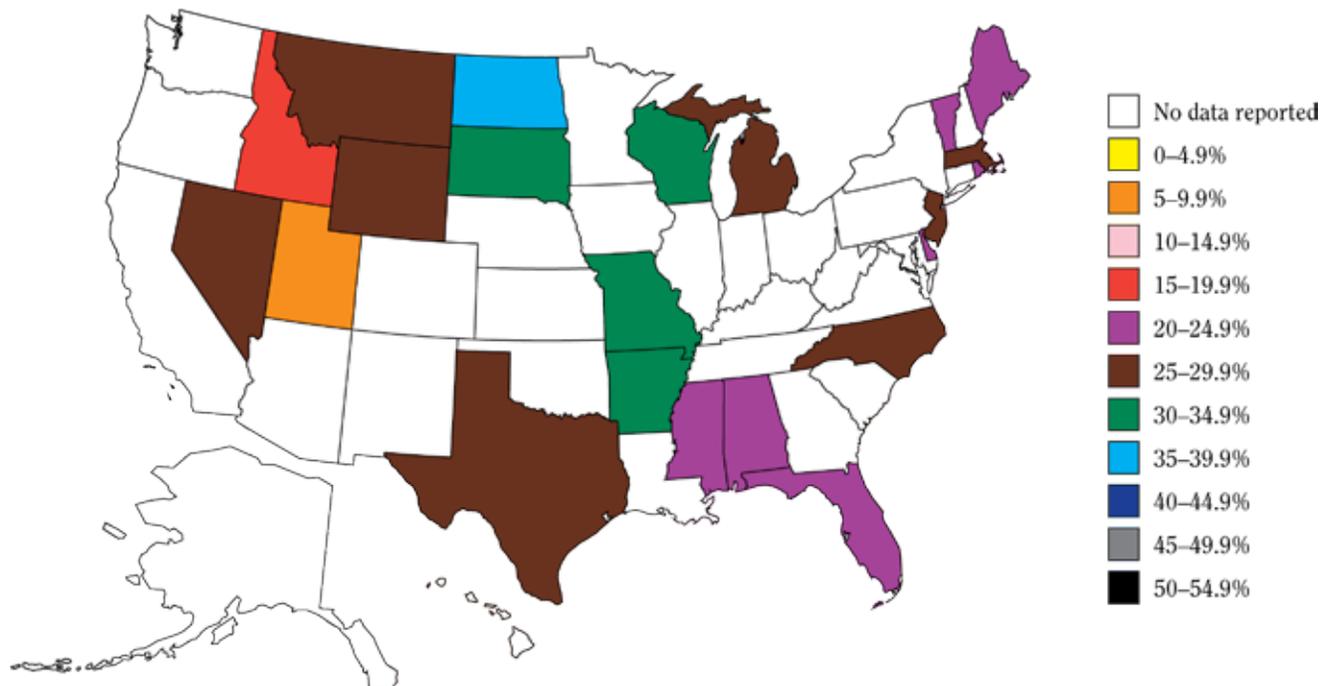
D. 1997



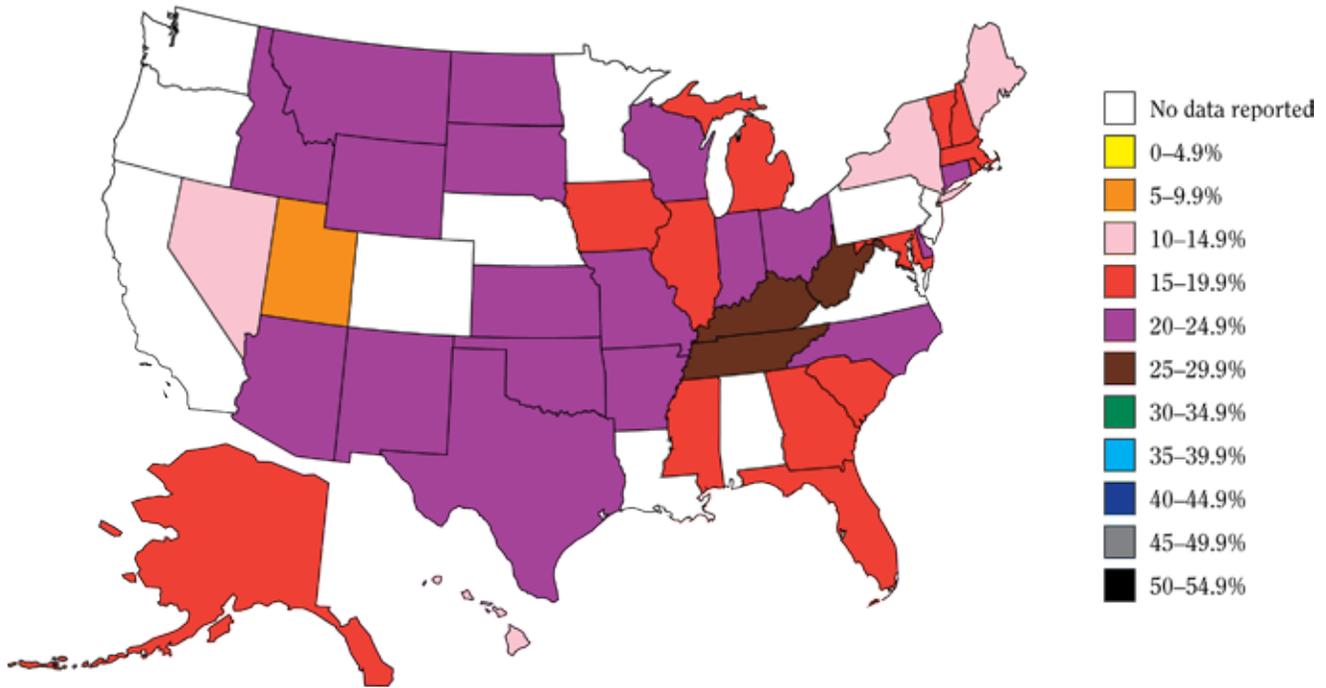
E. 1999



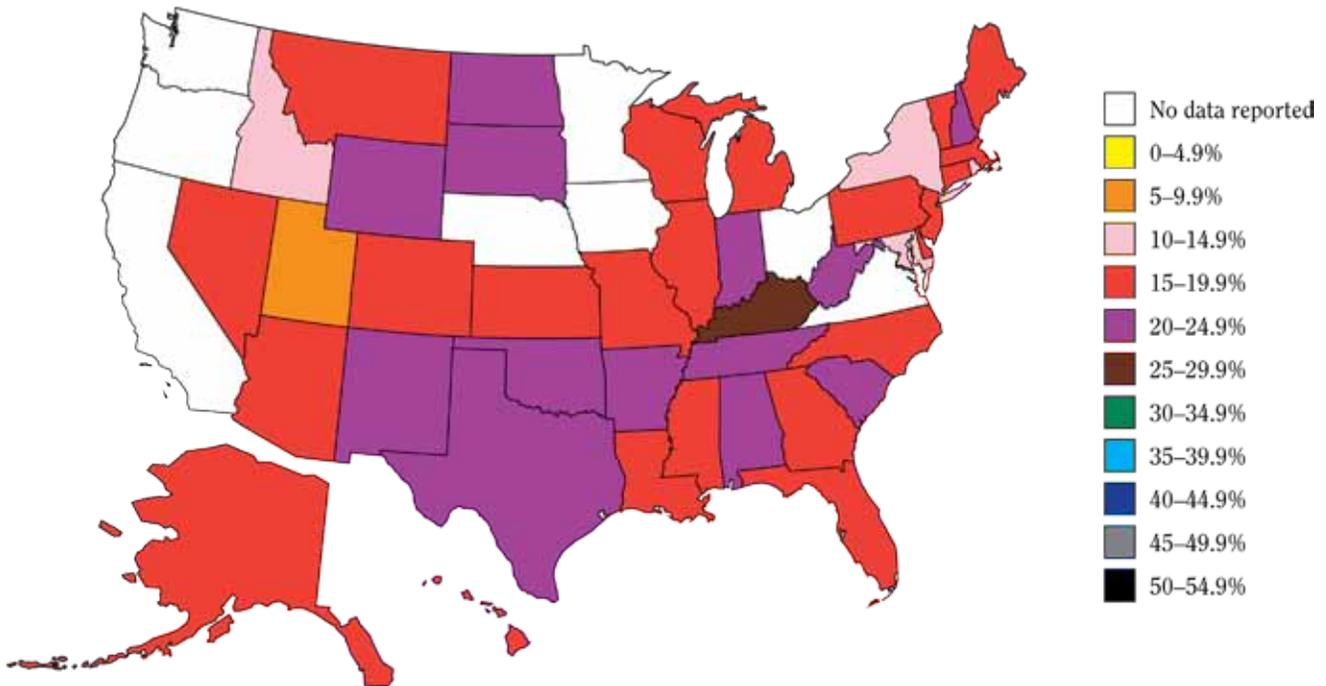
F. 2001



I. 2007



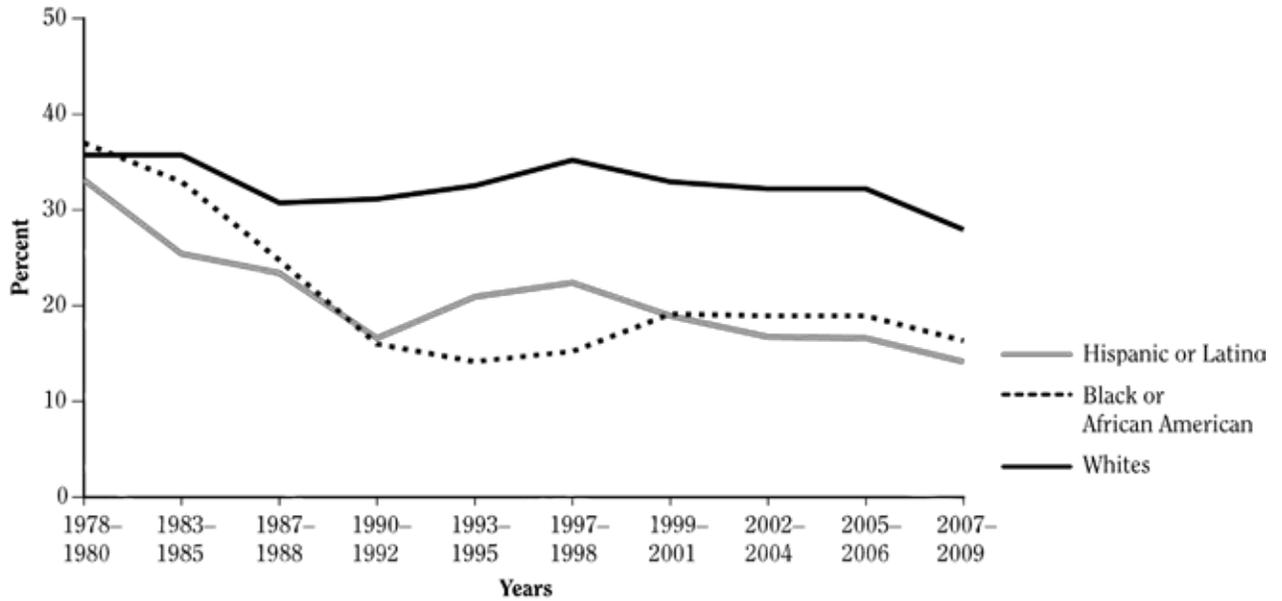
J. 2009



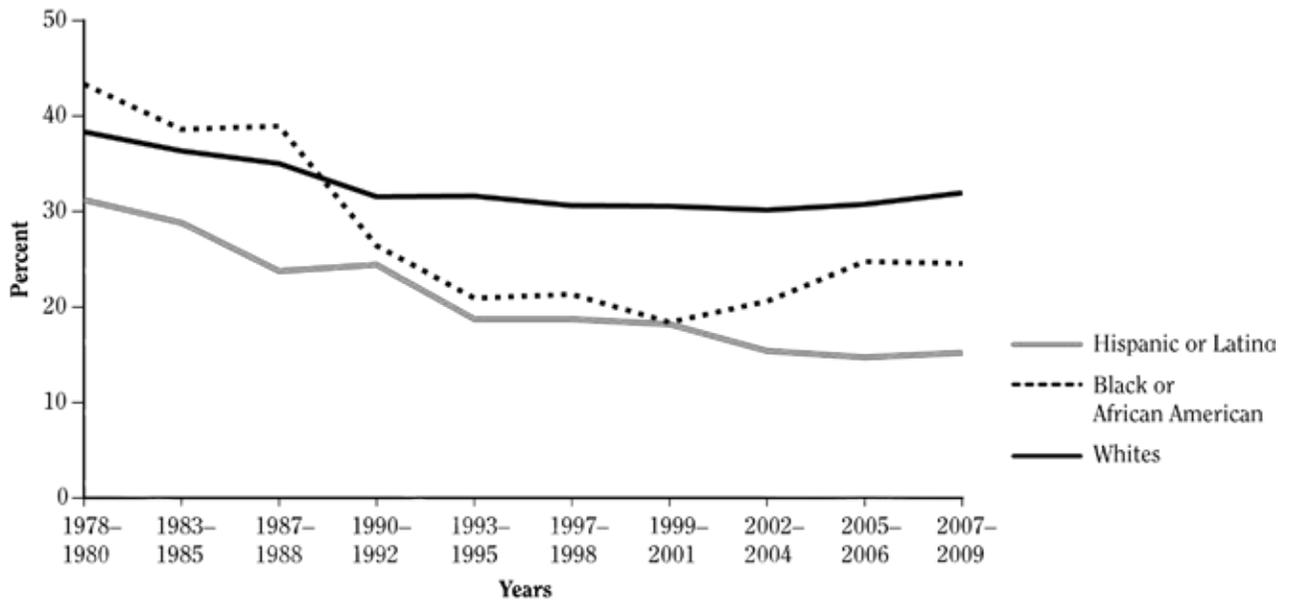
Source: 1991-2009 YRBS: Centers for Disease Control and Prevention, Division of Adolescent and School Health (CDC 2011a).

Figure 3.1.11 Trends in prevalence (%) of cigarette smoking among Hispanics, Blacks, and Whites, by age group; National Health Interview Survey (NHIS) 1978–2009; United States

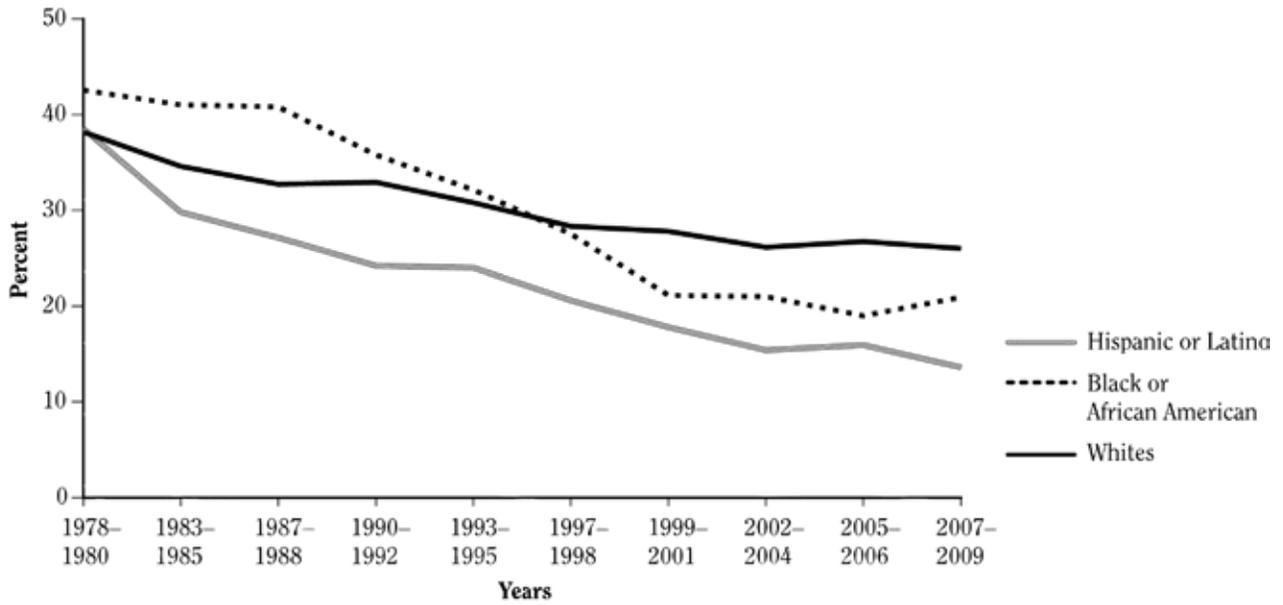
A. 20–24 years of age



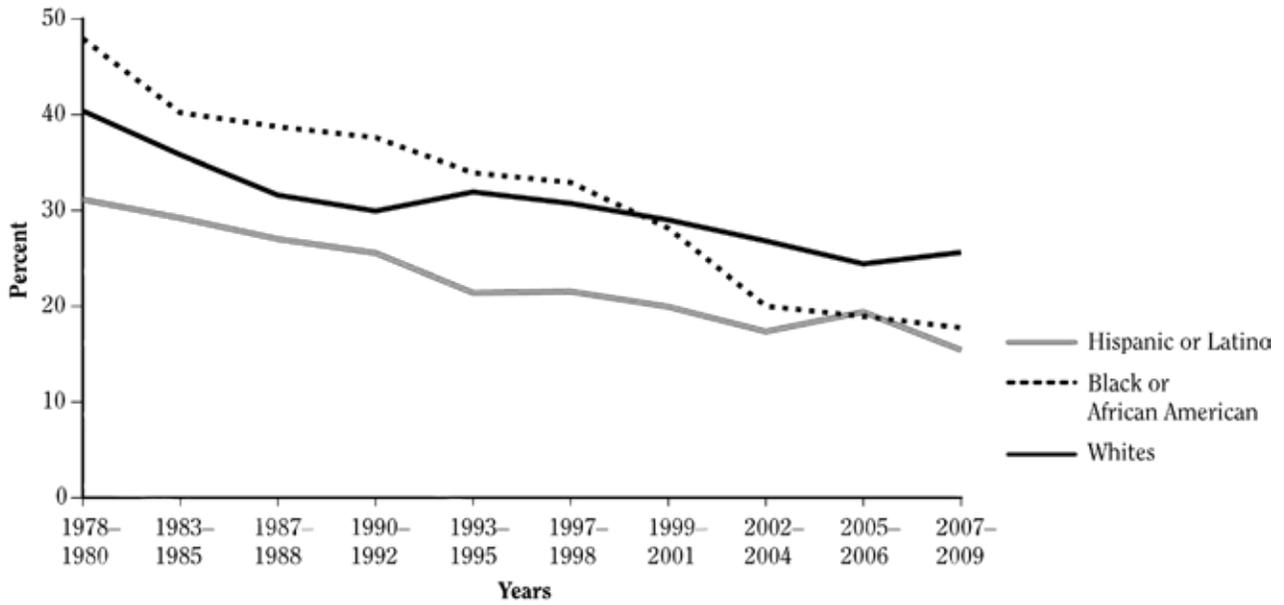
B. 25–29 years of age



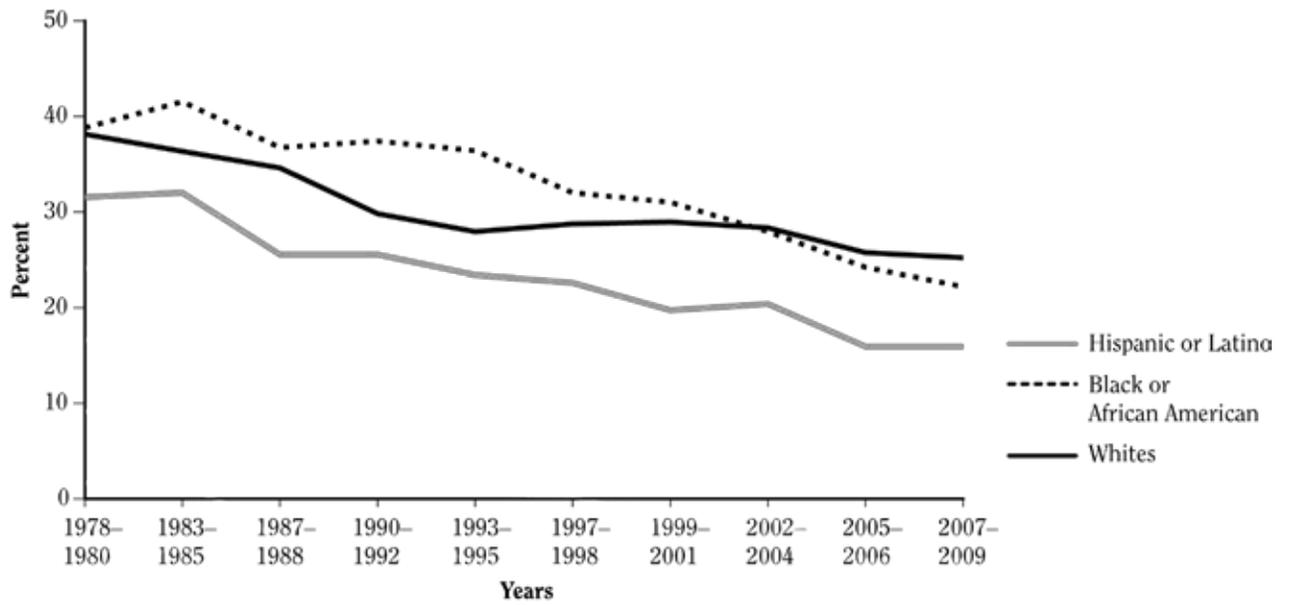
C. 30–34 years of age



D. 35–39 years of age



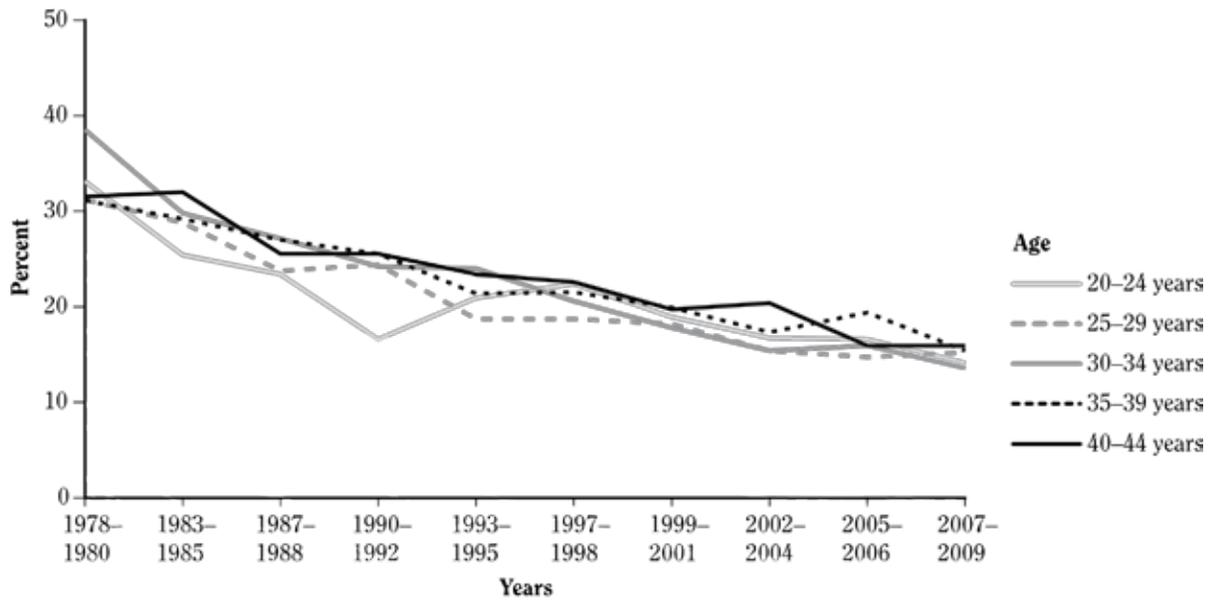
E. 40–44 years of age



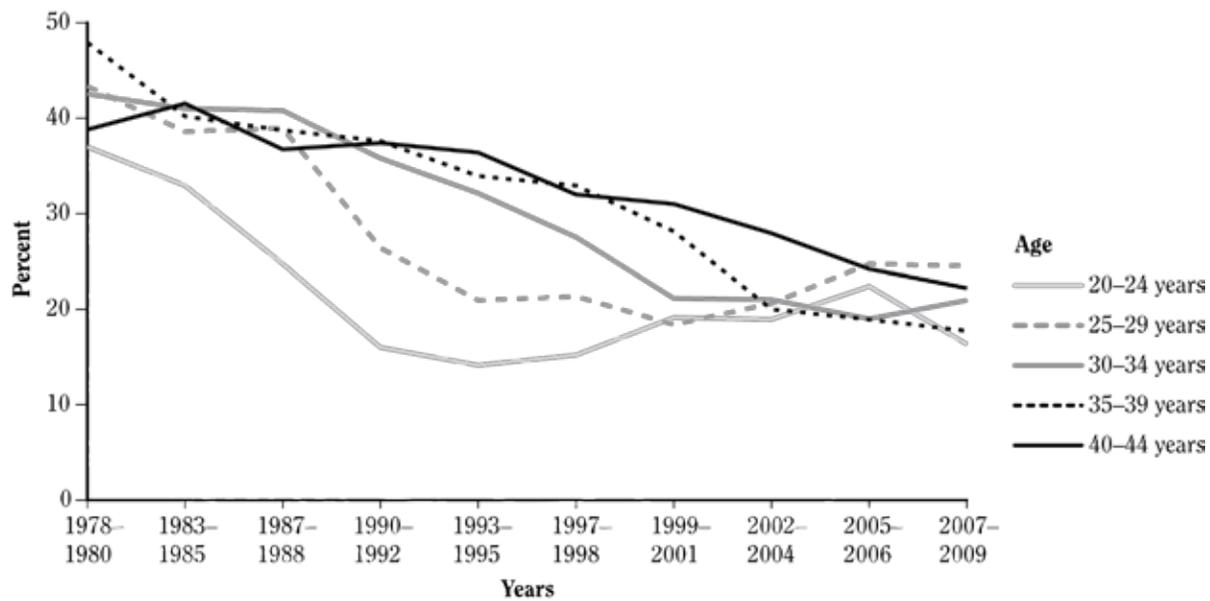
Source: 1978–2009 NHIS; Centers for Disease Control and Prevention, National Center for Health Statistics (unpublished data).

Figure 3.1.12 Trends in prevalence (%) of cigarette smoking among persons 20 years of age or older, by age group and race/ethnicity; National Health Interview Survey (NHIS) 1978–2009; United States

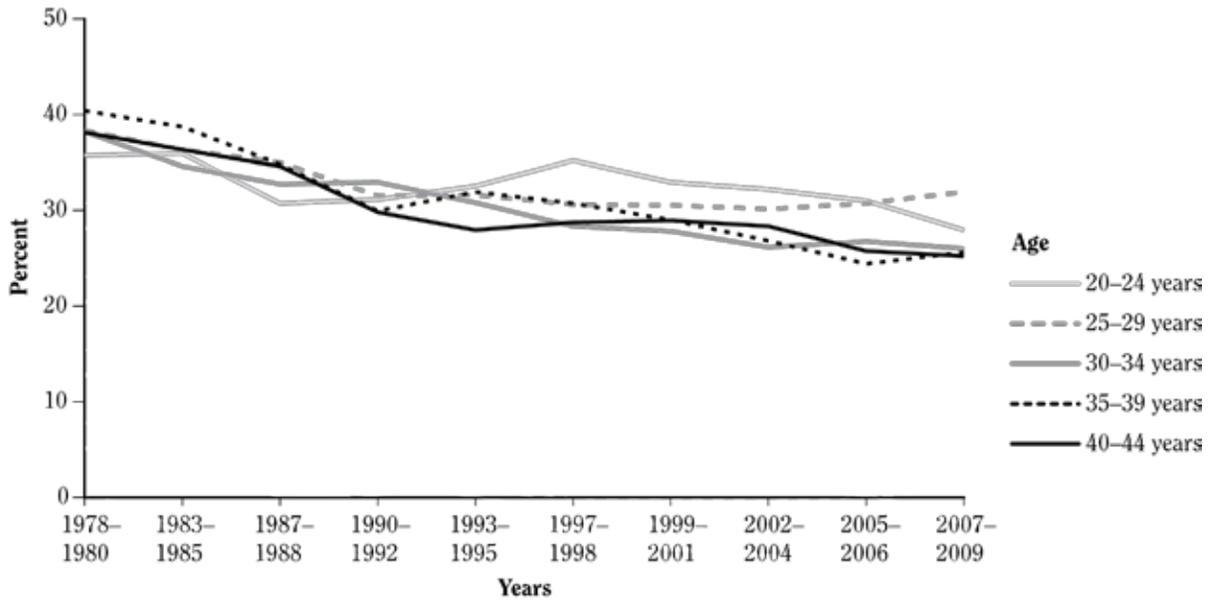
A. Hispanics



B. Blacks

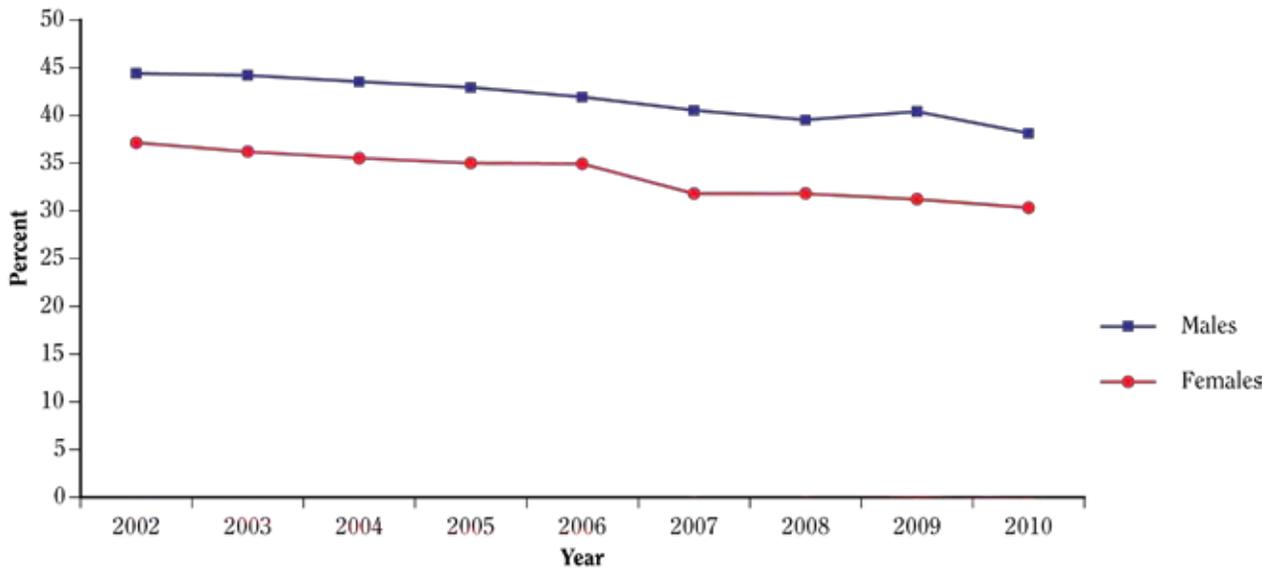


C. Whites



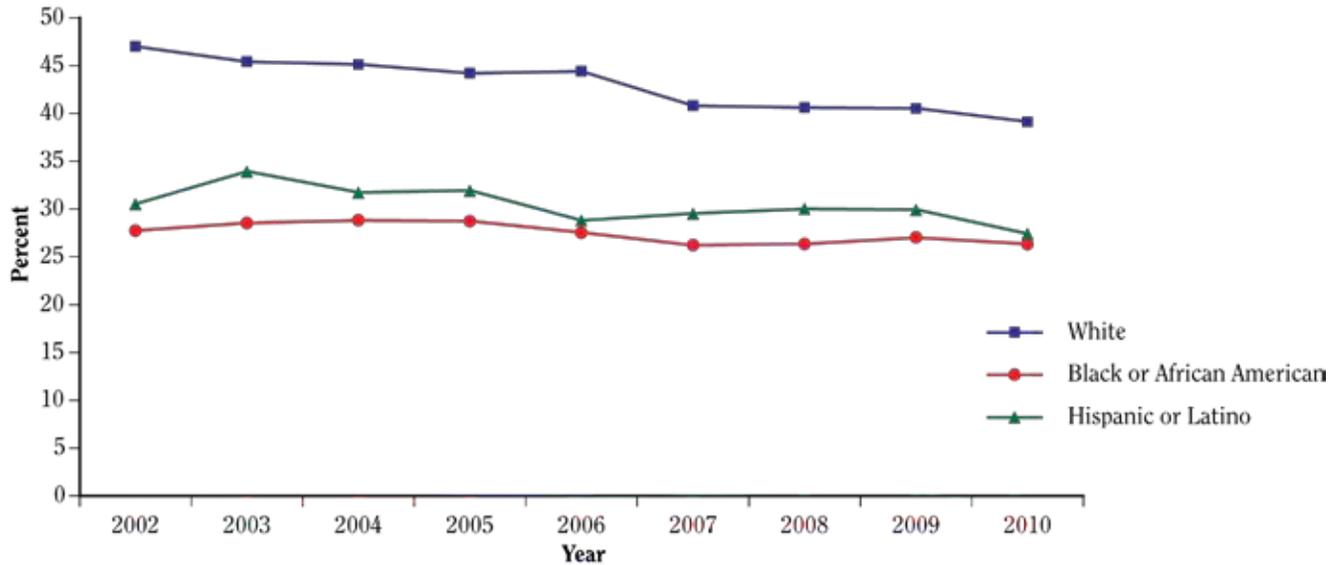
Source: 1978–2009 NHIS: Center for Disease Control and Prevention, National Center for Health Statistics (unpublished data).

Figure 3.1.13 Past-month cigarette use among young adults (18–25 years of age), by gender; National Survey on Drug Use and Health (NSDUH) 2002–2010; United States



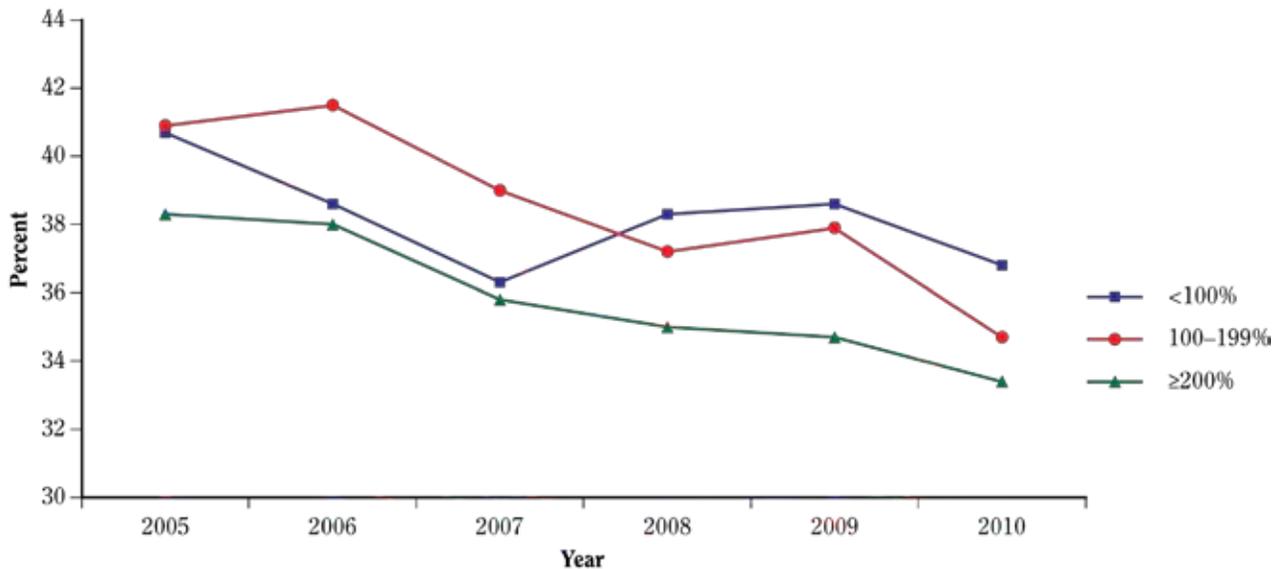
Source: 2002–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Figure 3.1.14 Past-month cigarette use among young adults (18–25 years of age), by race/ethnicity; National Survey on Drug Use and Health (NSDUH) 2002–2010; United States



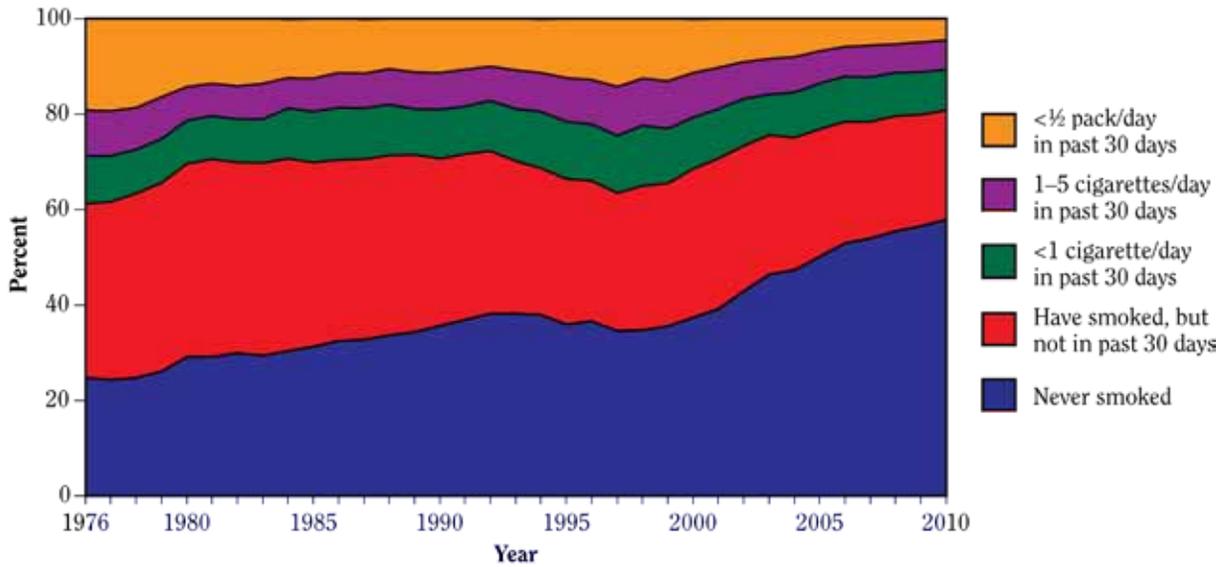
Source: 2002–2010 NSDUH: Substance Abuse and Mental Health Services Administration (detailed reports).

Figure 3.1.15 Past-month cigarette use among young adults (18–25 years of age), by poverty level; National Survey on Drug Use and Health (NSDUH) 2005–2010; United States



Source: 2005–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

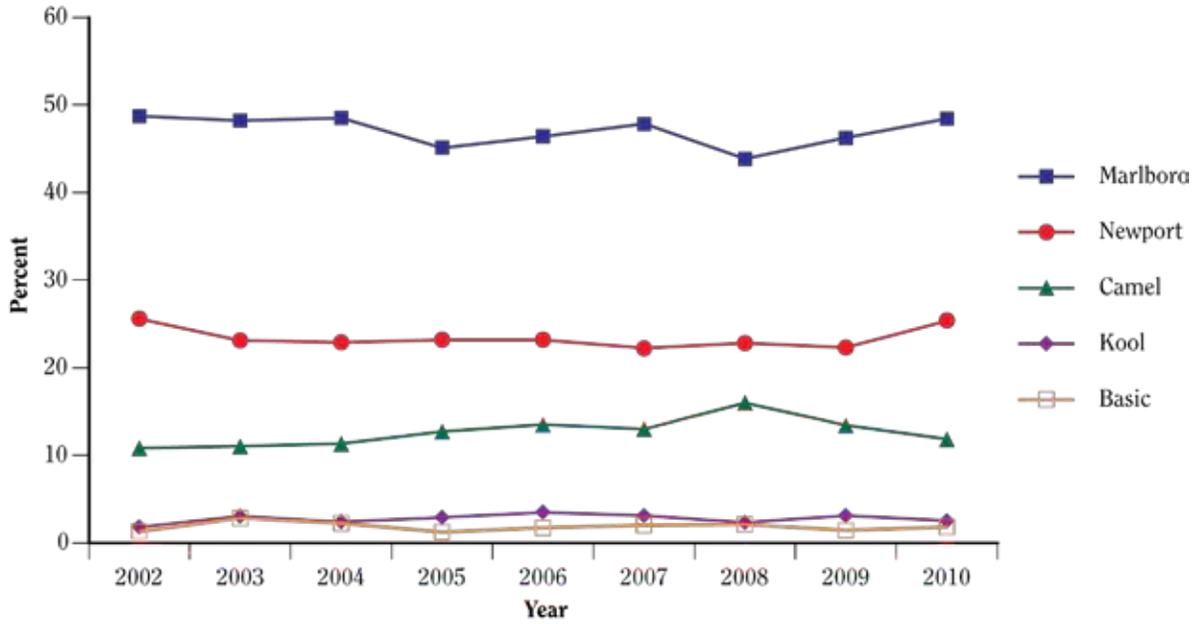
Figure 3.1.16 Trends in the intensity of smoking among high school seniors; Monitoring the Future (MTF) 1976–2010; United States



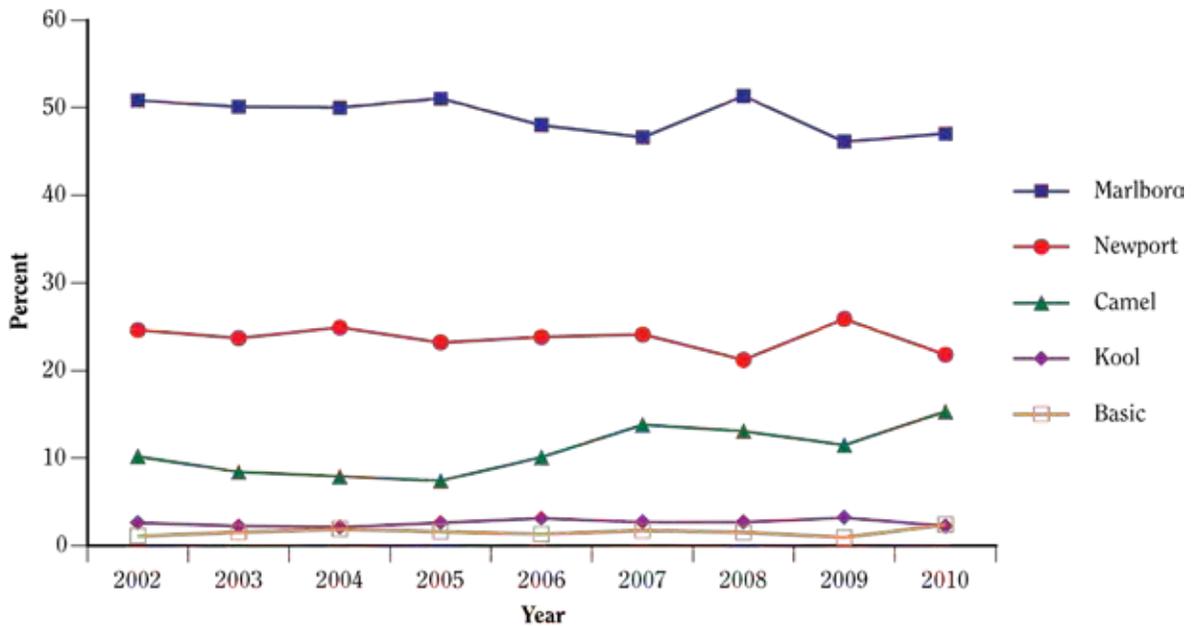
Source: 1976–2010 MTF: University of Michigan, Institute for Social Research (unpublished data).

Figure 3.1.17 Trends in cigarette brand preference for the top five cigarette brands among 12- to 17-year-olds who are current smokers, by gender; National Survey on Drug Use and Health (NSDUH) 2002–2010; United States

A. Males



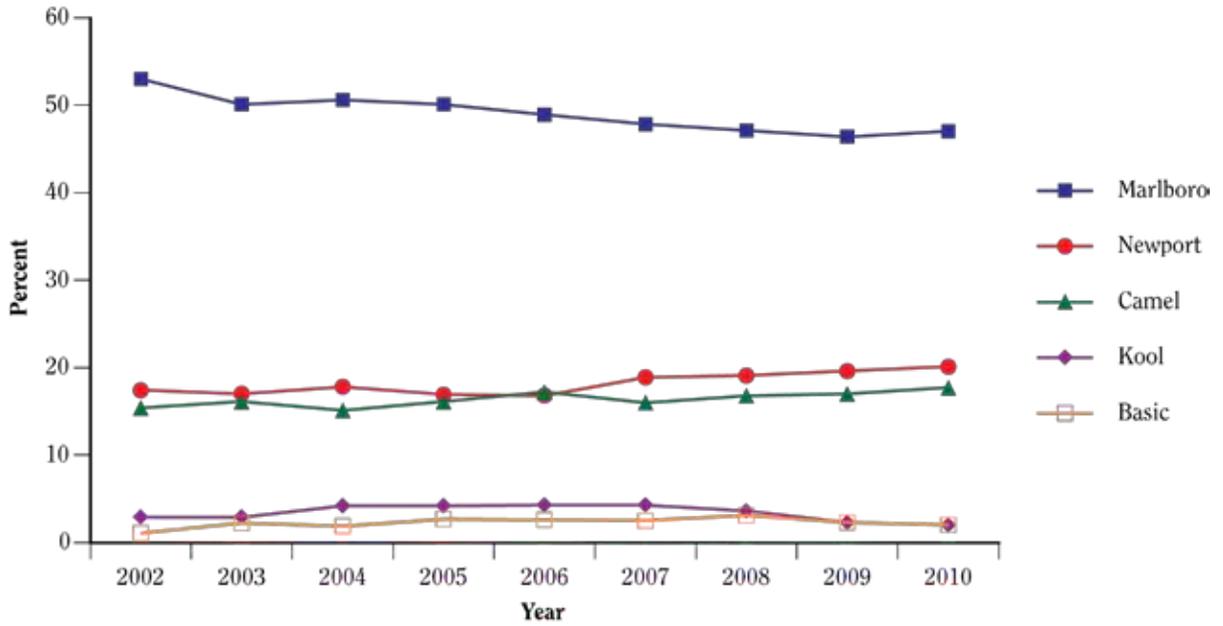
B. Females



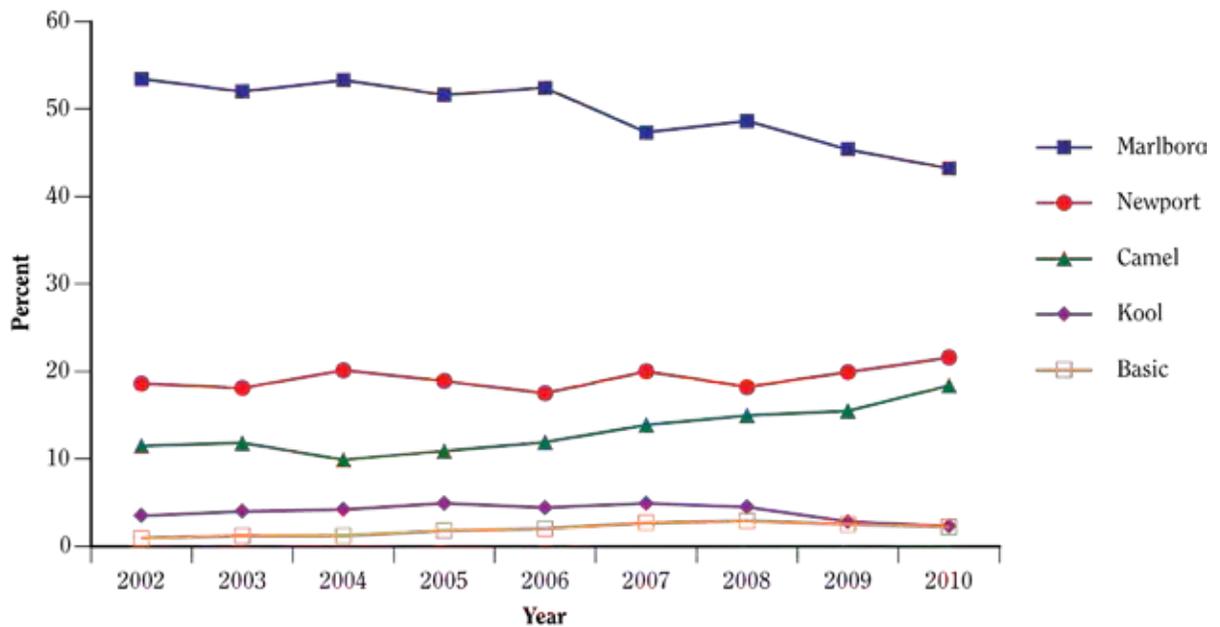
Source: 2002–2010 NSDUH; Substance Abuse and Mental Health Services Administration (unpublished data).

Figure 3.1.18 Trends in cigarette brand preference for the top five cigarette brands among 18- to 25-year-olds who are current smokers, by gender; National Survey on Drug Use and Health (NSDUH) 2002–2010; United States

A. Males

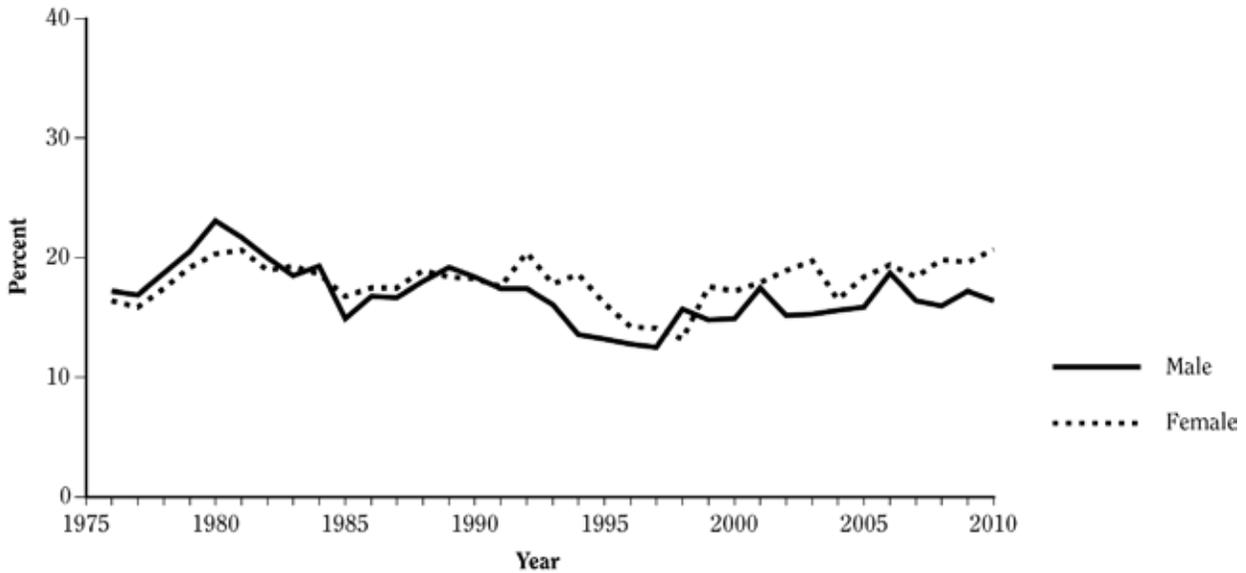


B. Females



Source: 2002–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

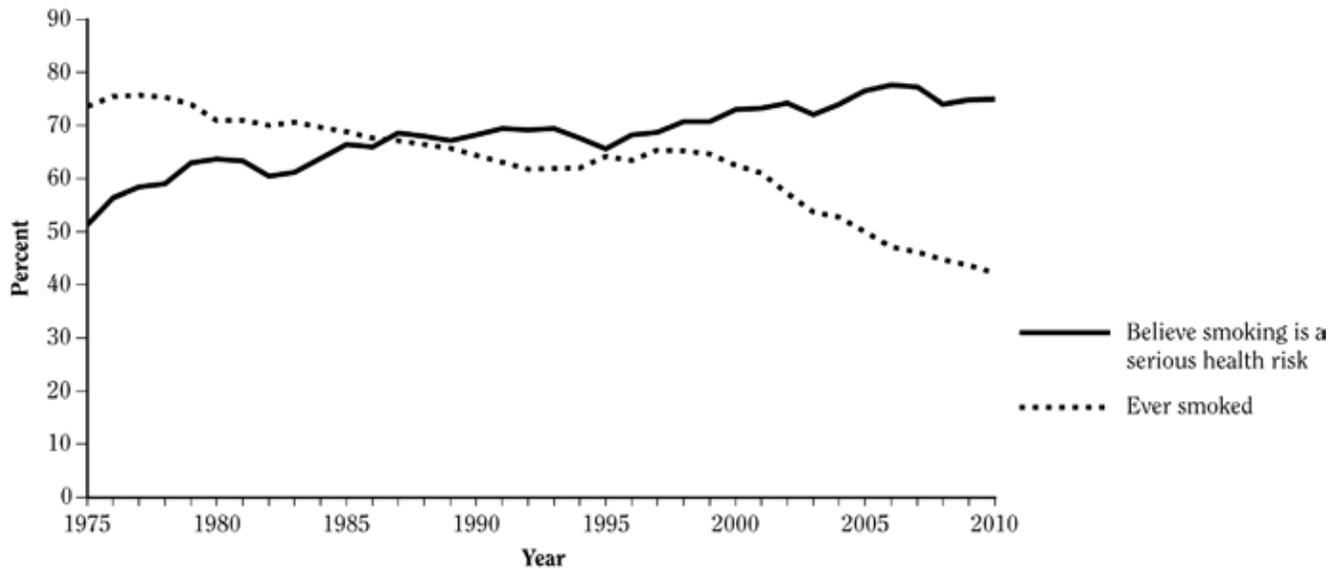
Figure 3.1.19 Trends in the percentage of former smokers among ever regular smokers^a who are high school seniors, over time, by gender; Monitoring the Future (MTF) 1976–2010; United States



Source: 1976–2010 MTF: University of Michigan, Institute for Social Research (unpublished data).

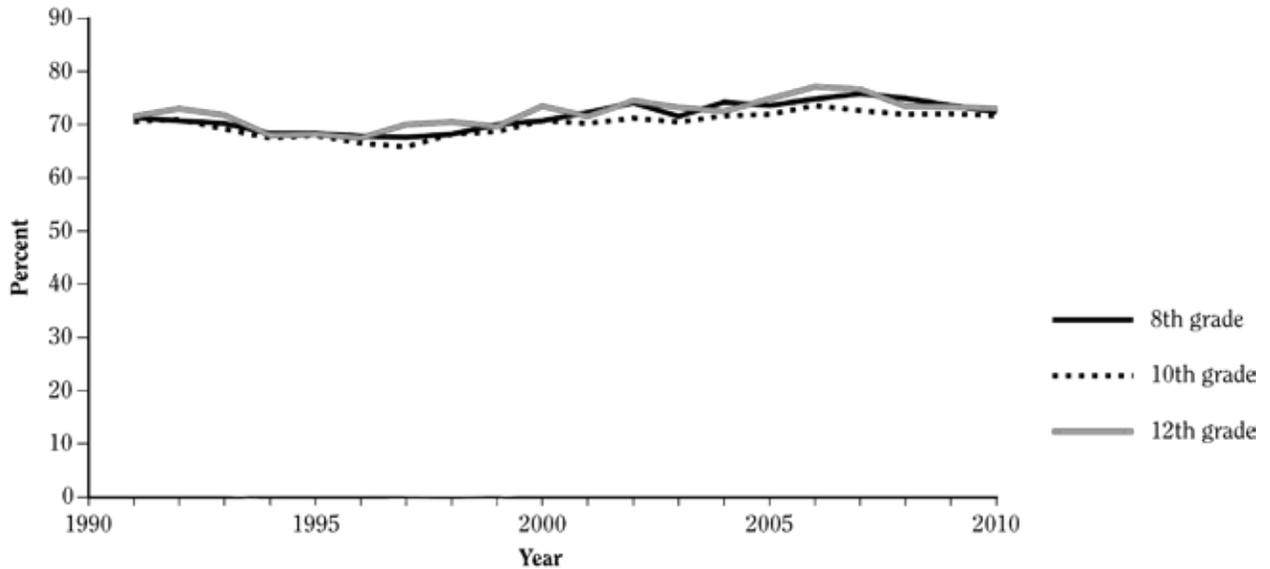
^aPercentage of those who had ever smoked regularly and who had not smoked during the previous 30 days.

Figure 3.1.20 Trends in the percentage of high school seniors who believe that smoking is a serious health risk and percentage of high school seniors who have ever smoked; Monitoring the Future (MTF) 1975–2010; United States



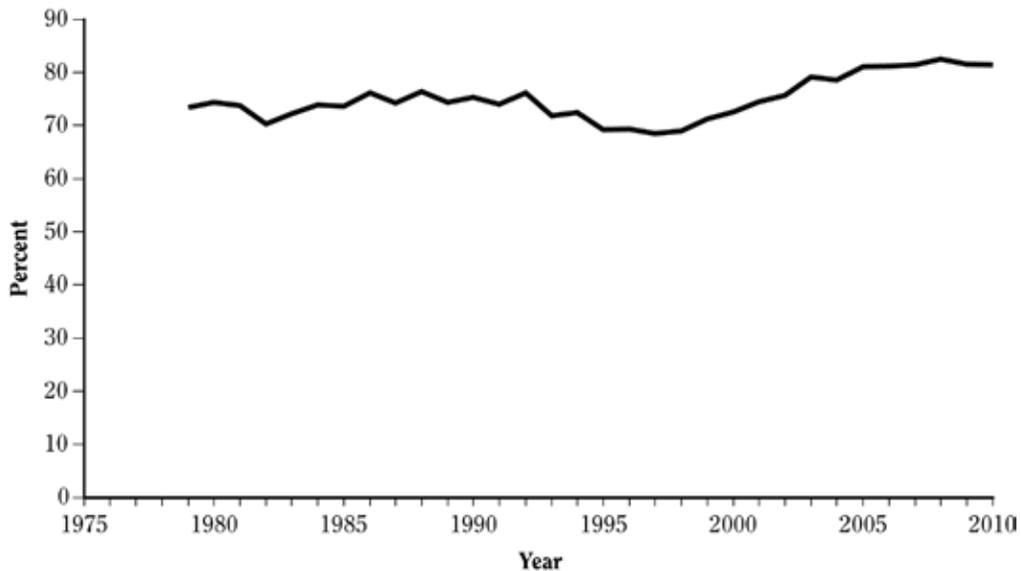
Source: 1975–2010 MTF: University of Michigan, Institute for Social Research (unpublished data).

Figure 3.1.21 Trends in the percentage of young people who believe smoking is a “dirty habit,” by grade level; Monitoring the Future (MTF) 1991–2010; United States



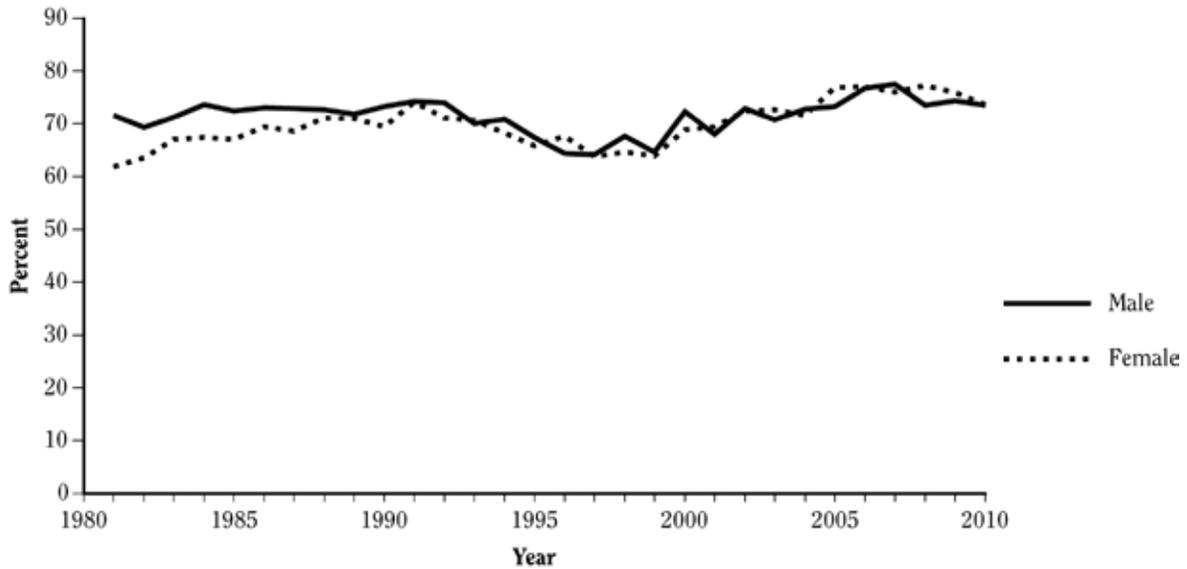
Source: 1991–2010 MTF: University of Michigan, Institute for Social Research (unpublished data).

Figure 3.1.22 Trends in the percentage of high school seniors who believe their close friends would disapprove of their smoking one or more packs of cigarettes per day; Monitoring the Future (MTF) 1979–2010; United States



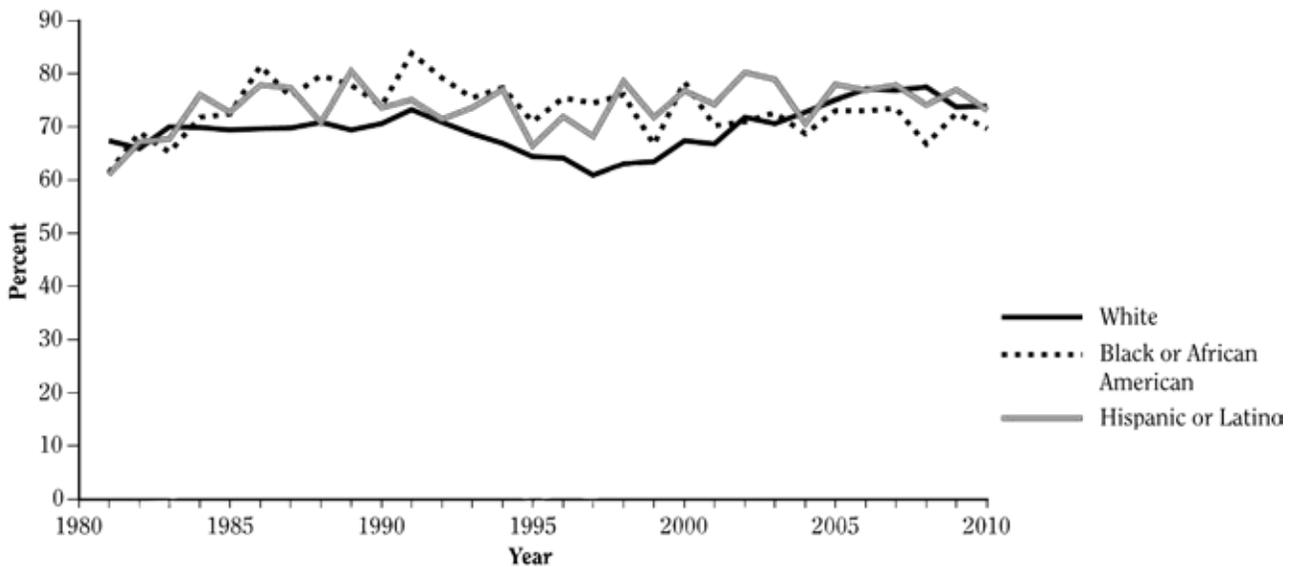
Source: 1979–2010 MTF: University of Michigan, Institute for Social Research (unpublished data).

Figure 3.1.23 Trends in the percentage of high school seniors who prefer to date nonsmokers, over time, by gender; Monitoring the Future (MTF) 1981–2010; United States



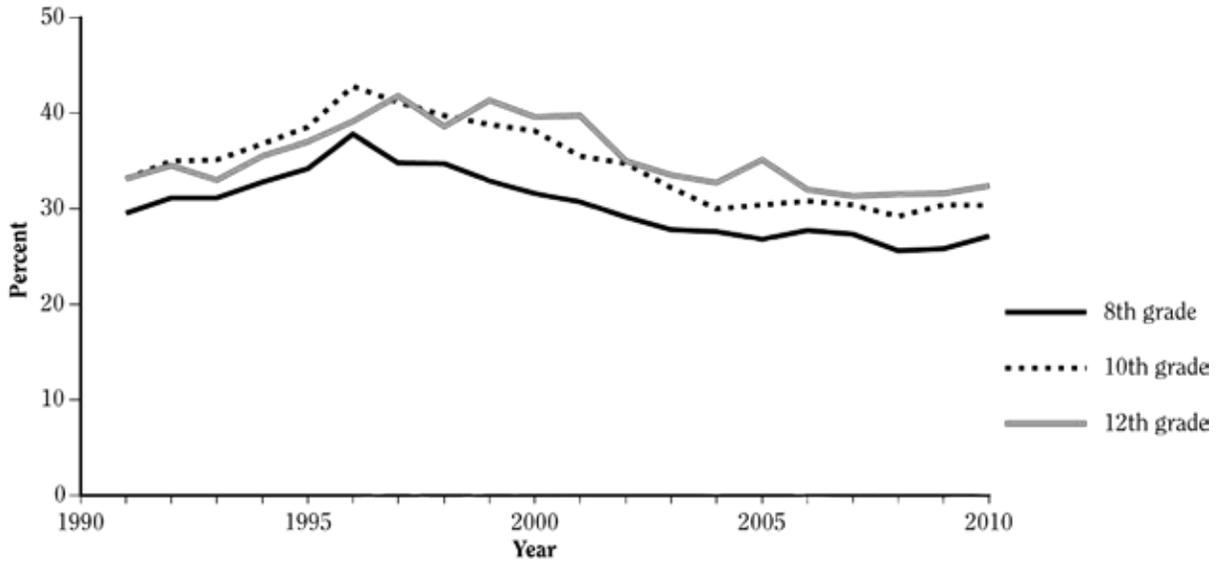
Source: 1981–2010 MTF: University of Michigan, Institute for Social Research (unpublished data).

Figure 3.1.24 Trends in the percentage of high school seniors who prefer to date nonsmokers, over time, by race/ethnicity; Monitoring the Future (MTF) 1981–2010; United States



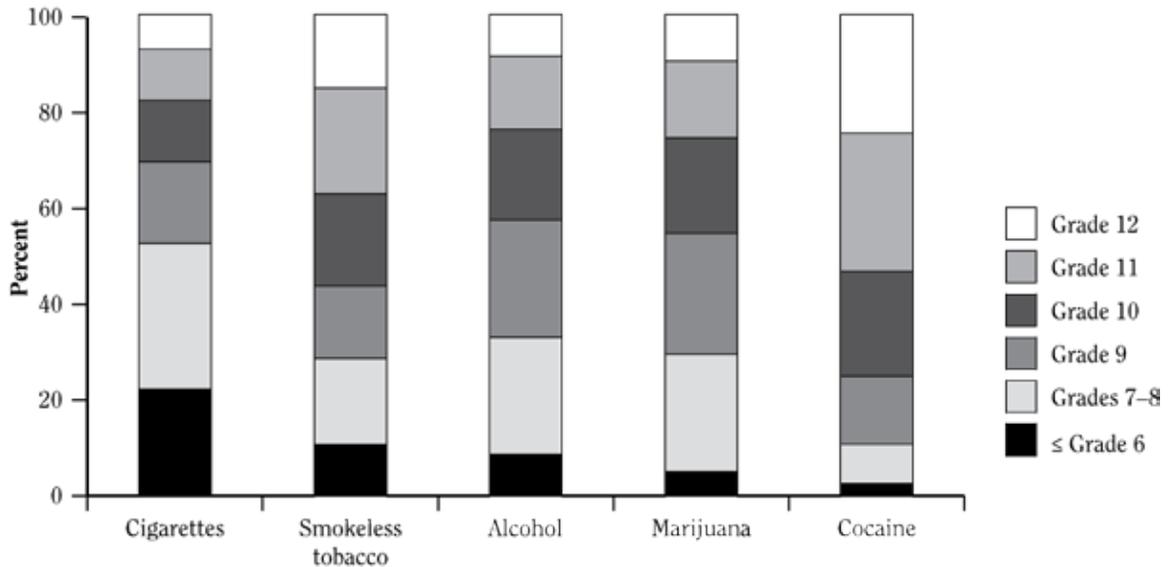
Source: 1981–2010 MTF: University of Michigan, Institute for Social Research (unpublished data).

Figure 3.1.25 Trends in the percentage of young people who do not mind being around people who smoke, by grade level; Monitoring the Future (MTF) 1991–2010; United States



Source: 1991–2010 MTF: University of Michigan, Institute for Social Research (unpublished data).

Figure 3.1.26 Grade in which high school seniors had first tried cigarettes, smokeless tobacco, alcohol, marijuana, and cocaine among respondents who had ever used these substances by 12th grade; Monitoring the Future (MTF) 2002–2007; United States

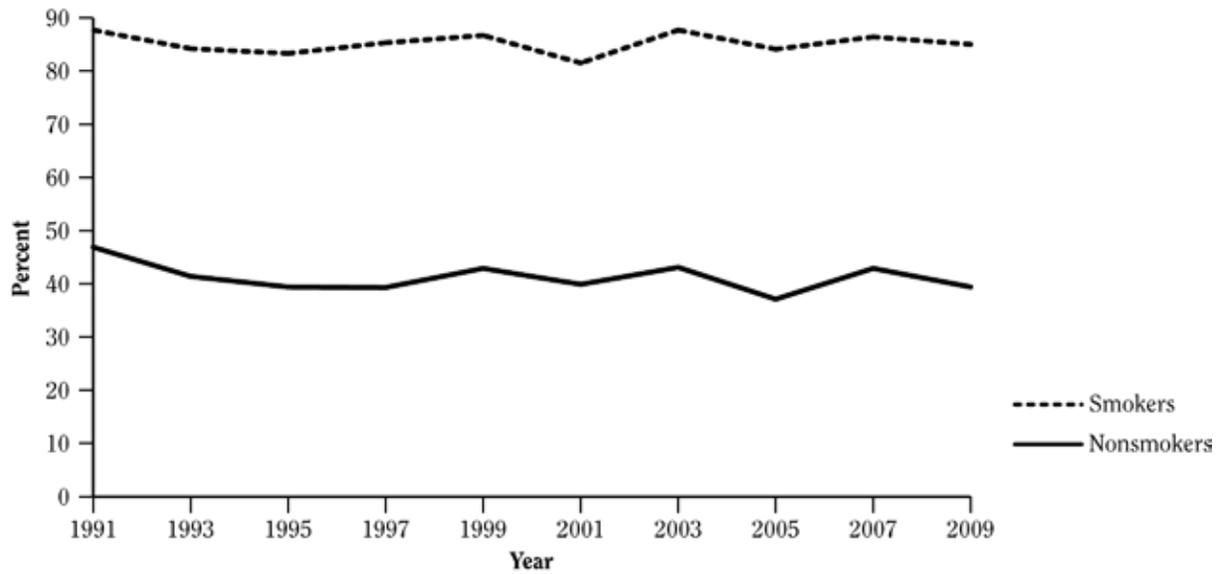


Source: 2002–2007 MTF: University of Michigan, Institute for Social Research (unpublished data).

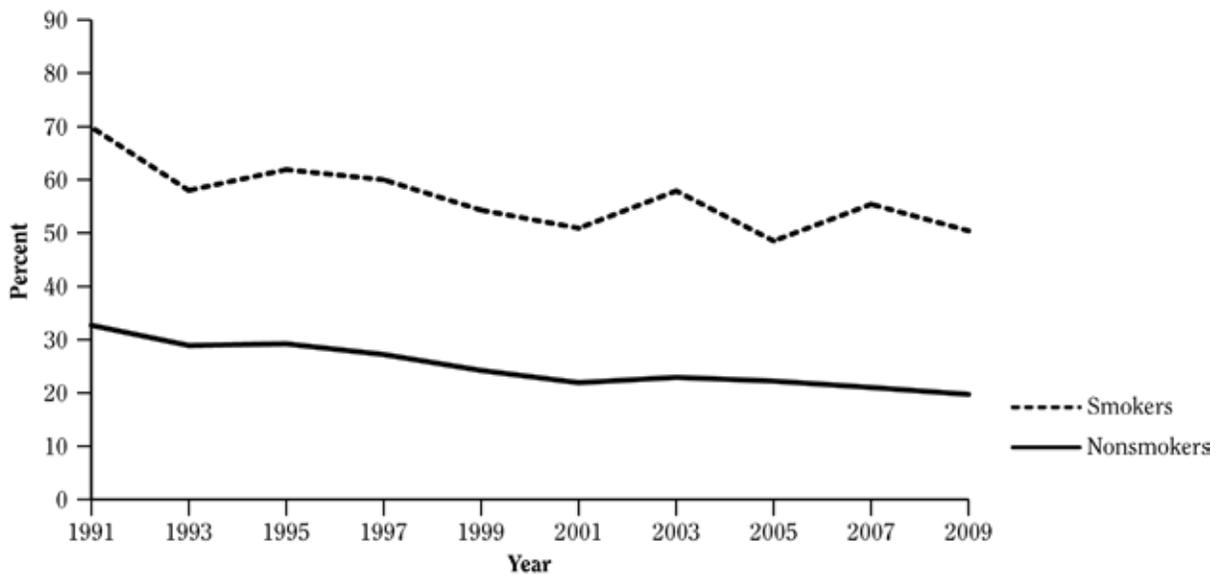
Figure 3.1.27 Trends in health risk outcomes and behaviors among high school senior cigarette smokers and nonsmokers; National Youth Risk Behavior Survey (YRBS) 1991–2009; United States

Behaviors related to other drug use

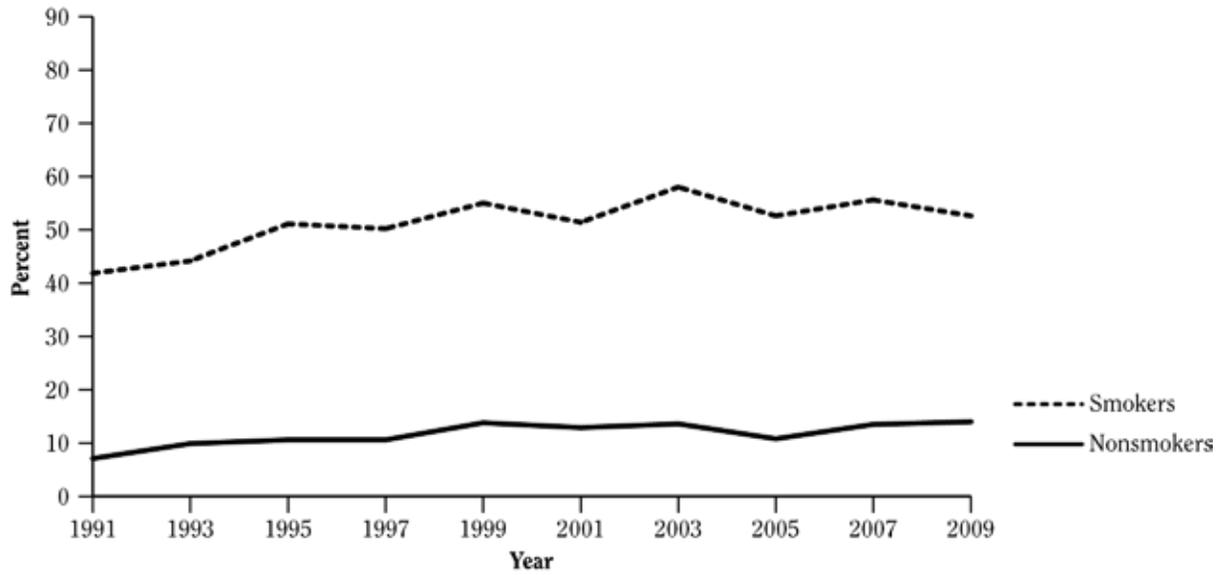
A. Current alcohol use



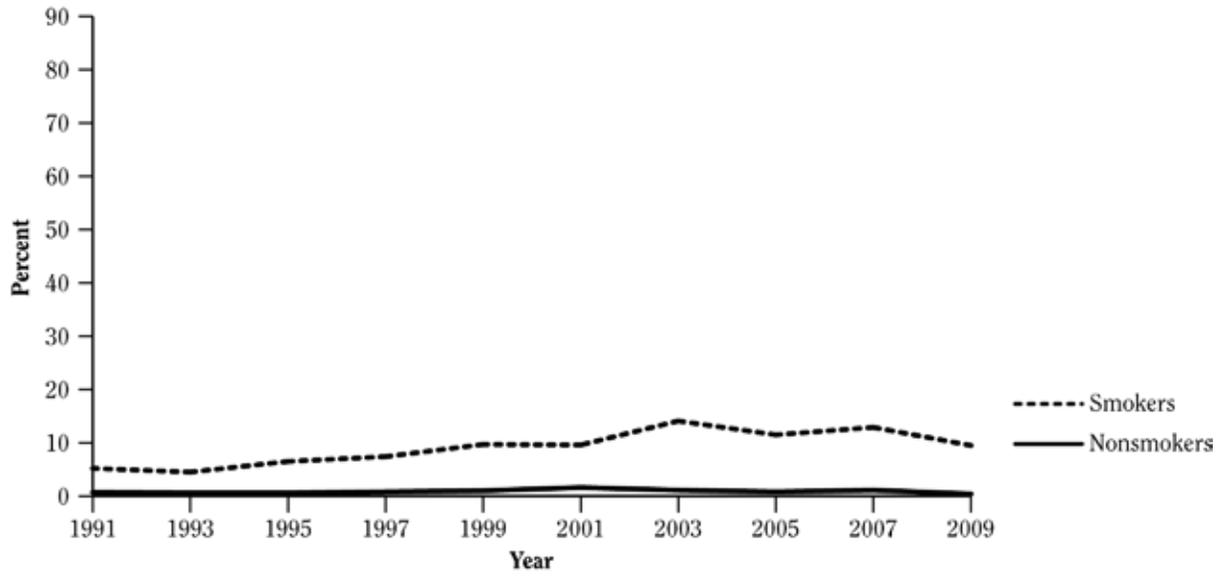
B. Rode with a driver using alcohol in the past 30 days



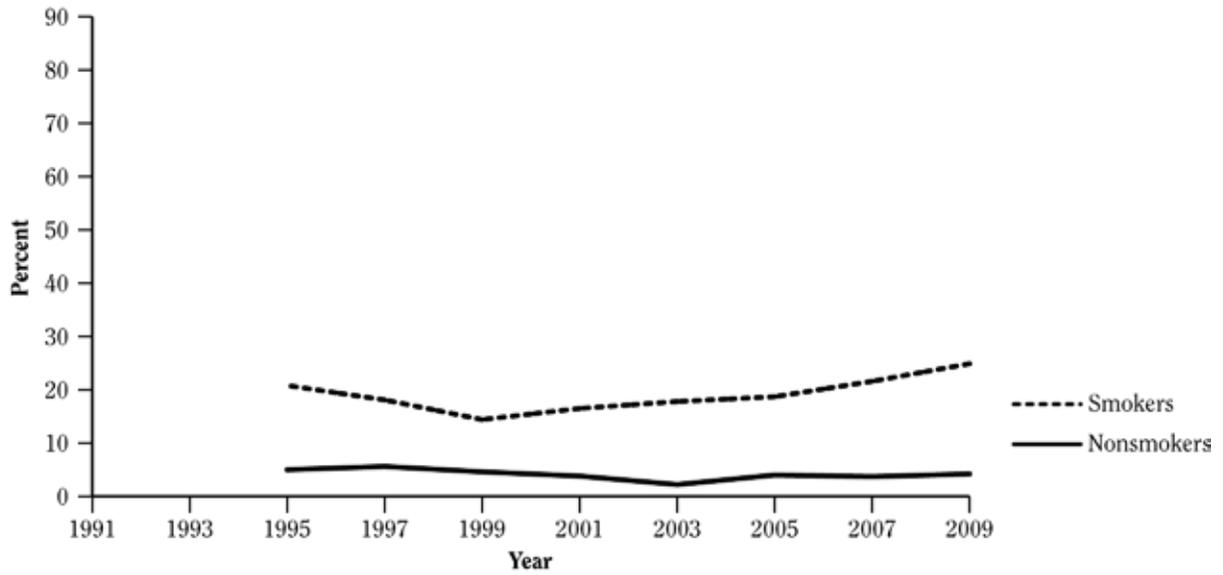
C. Current marijuana use



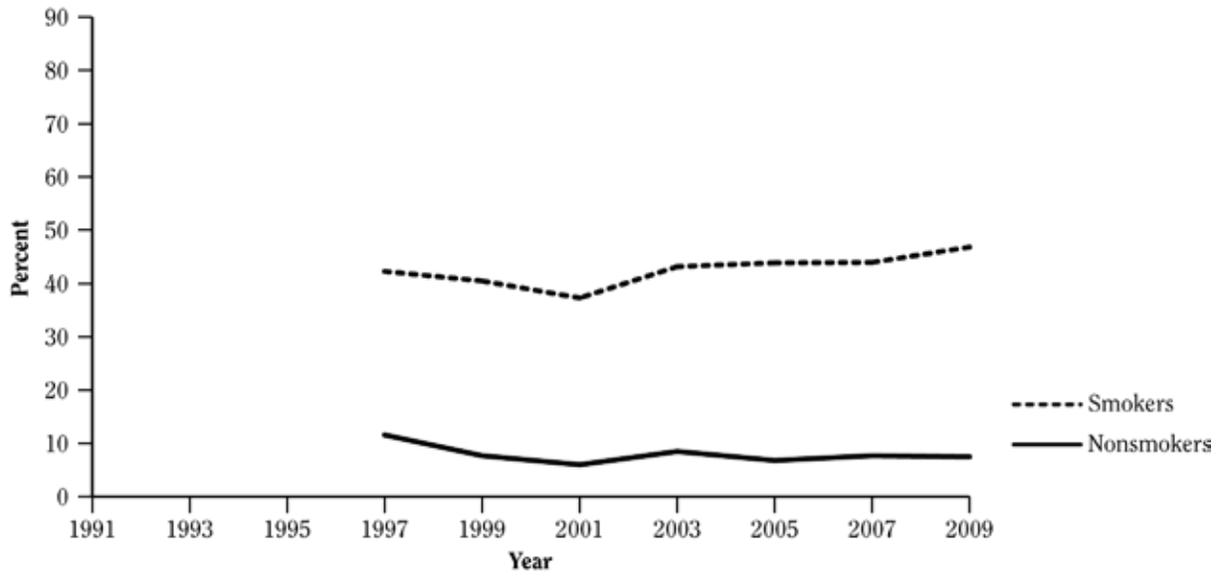
D. Current cocaine use



E. Current smokeless tobacco use

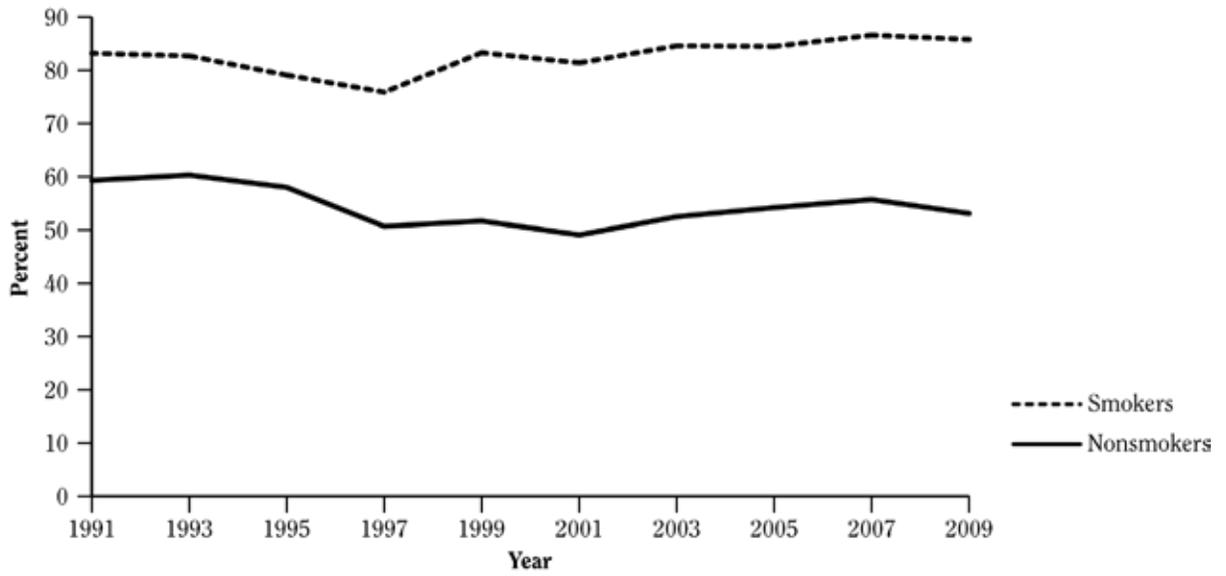


F. Current cigar use

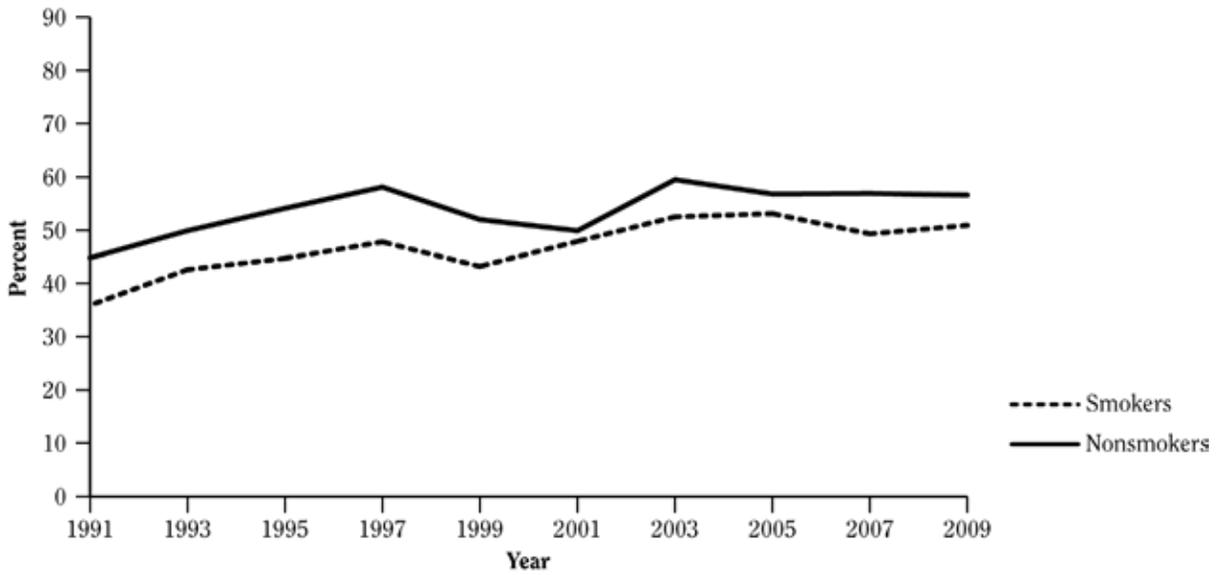


Behaviors related to sexual activity

G. Ever had sexual intercourse

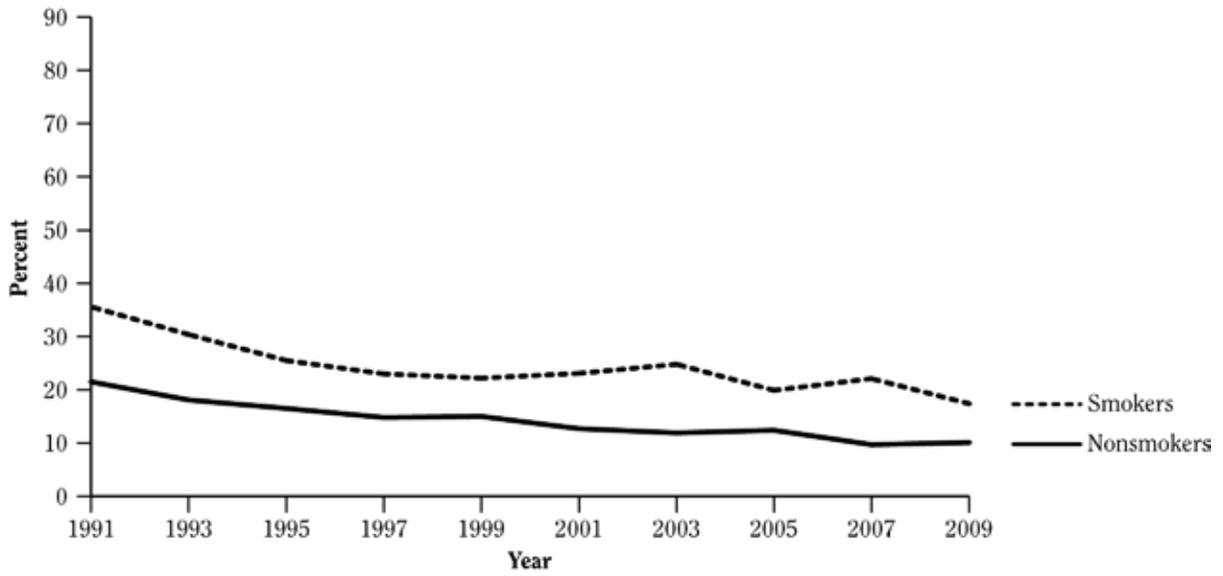


H. Used condom at last sexual intercourse



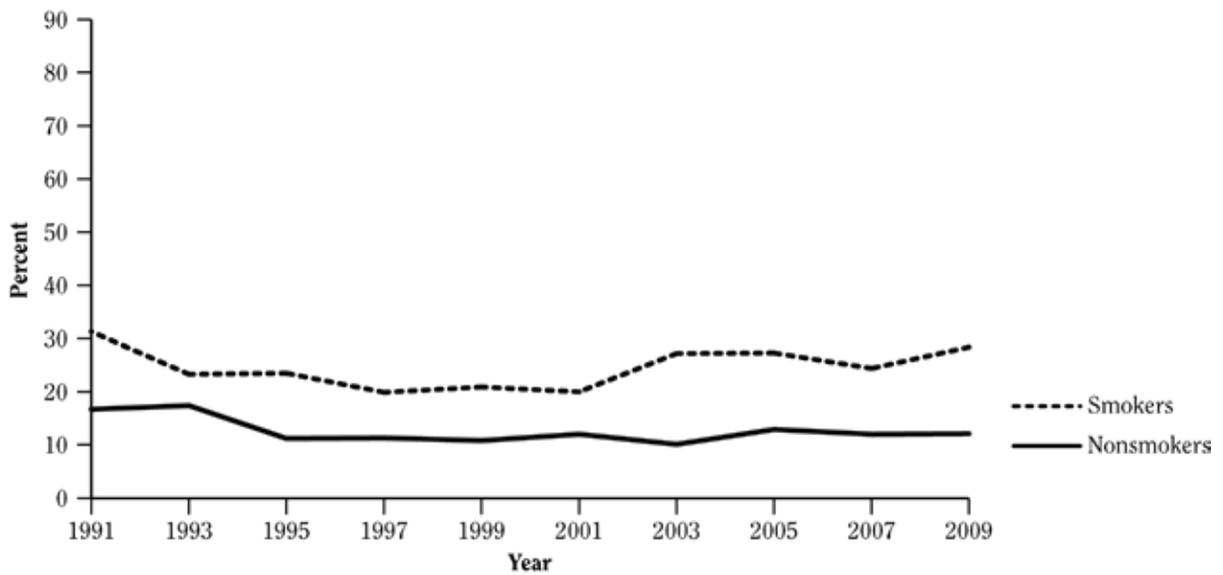
Behaviors related to suicide

I. Seriously contemplating suicide

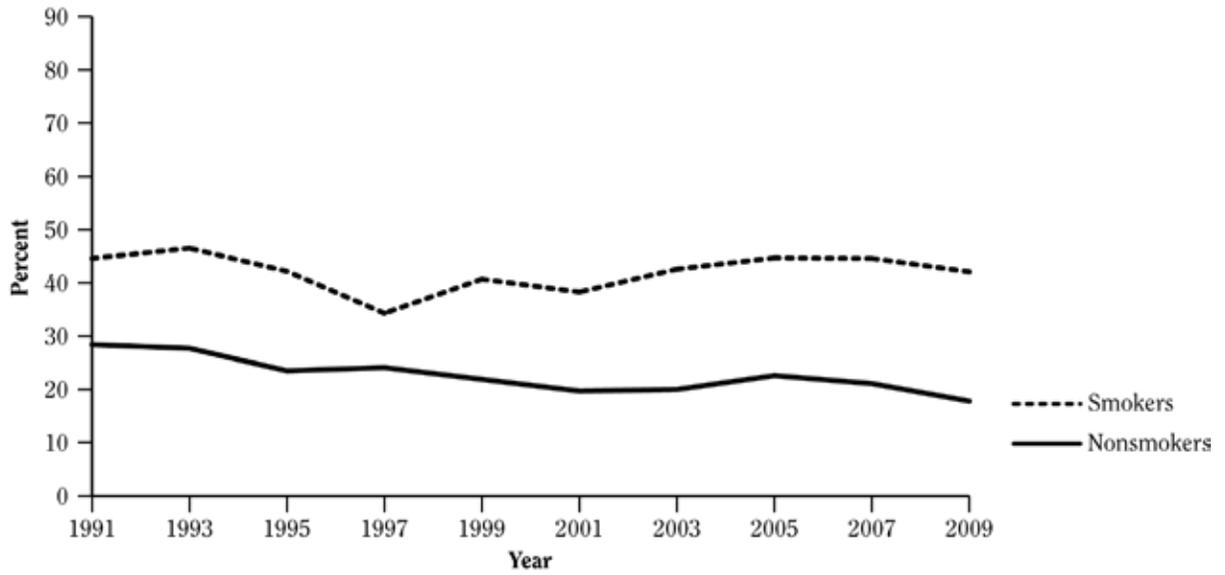


Behaviors that contribute to violence

J. Carried a weapon

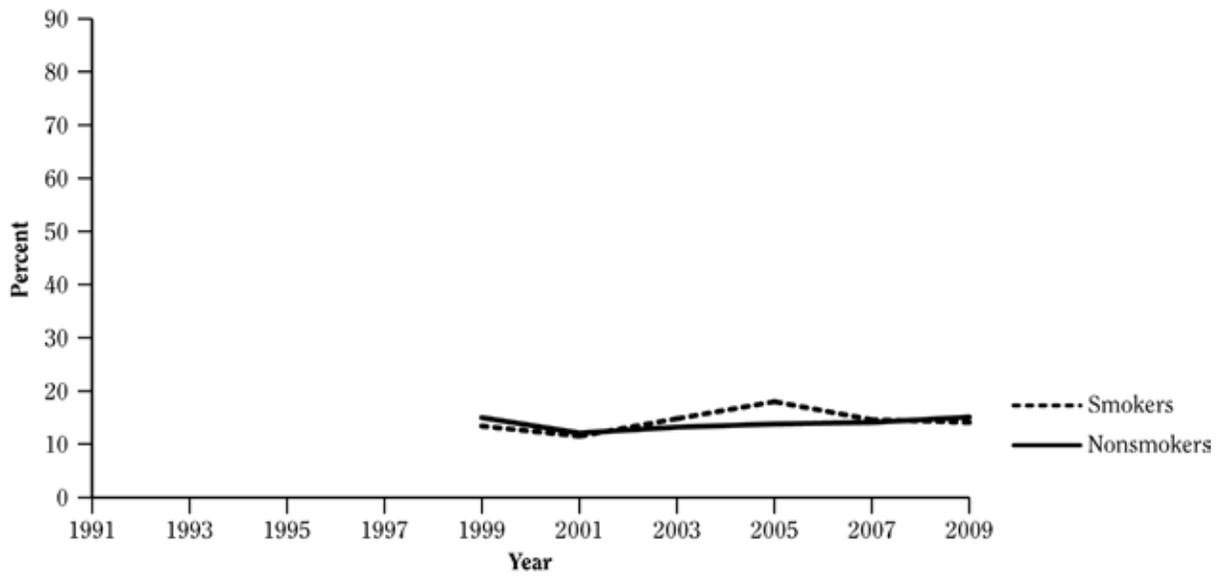


K. In a physical fight

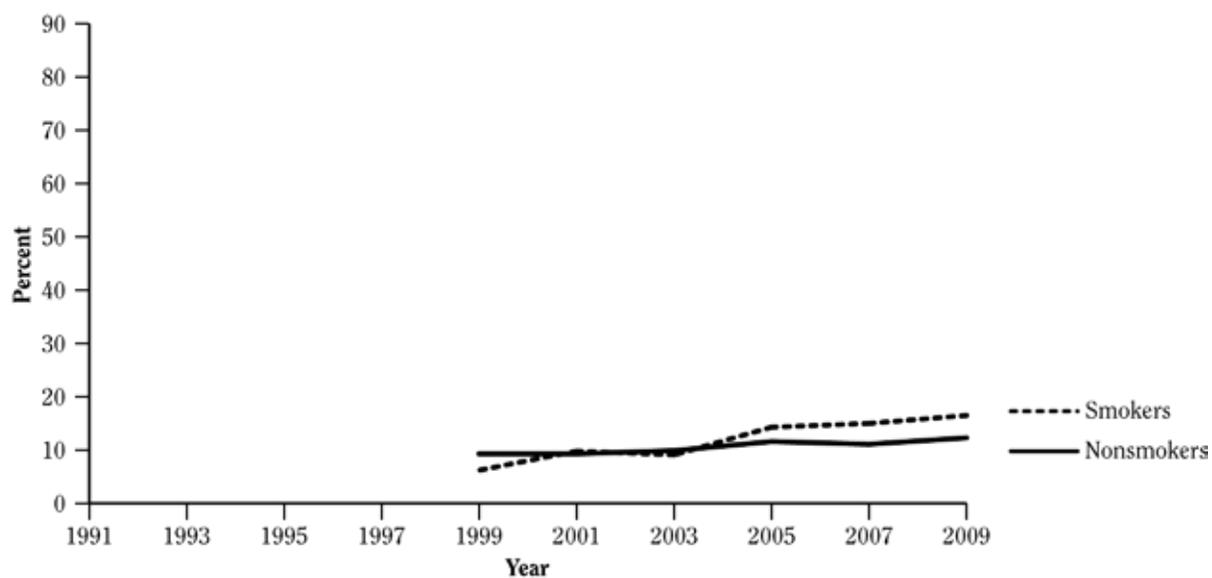


Outcomes and behaviors related to weight and weight management

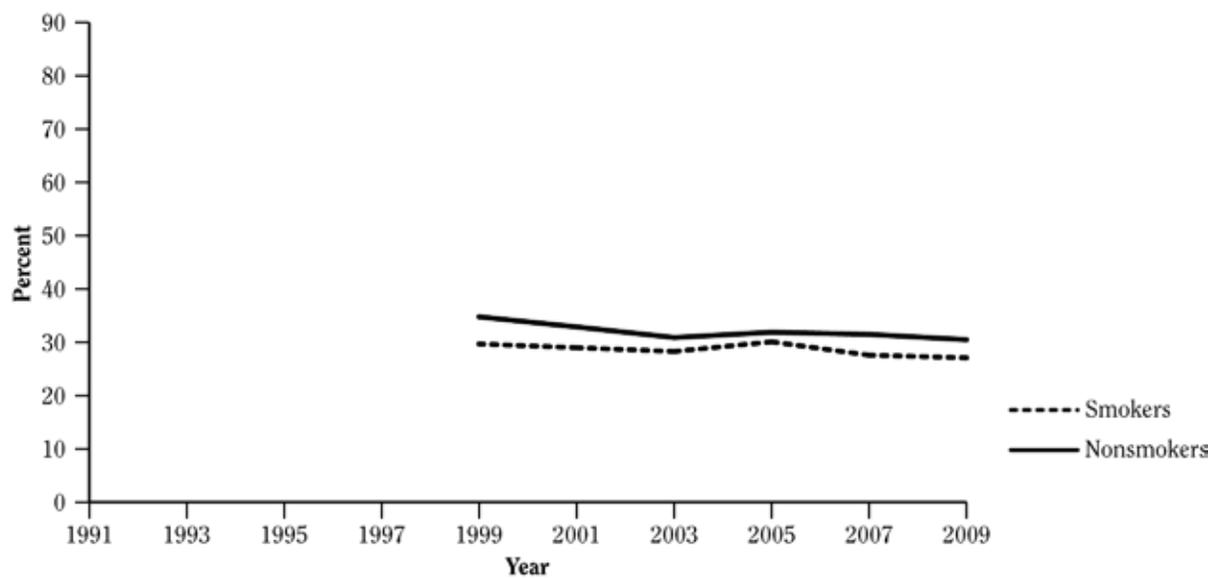
L. Overweight



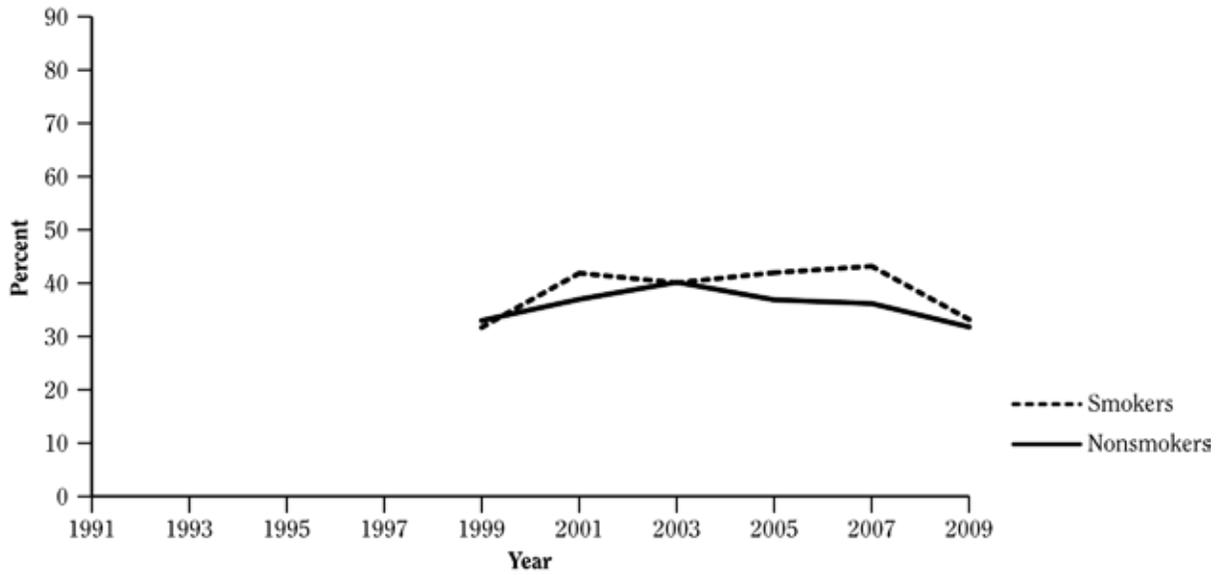
M. Obese



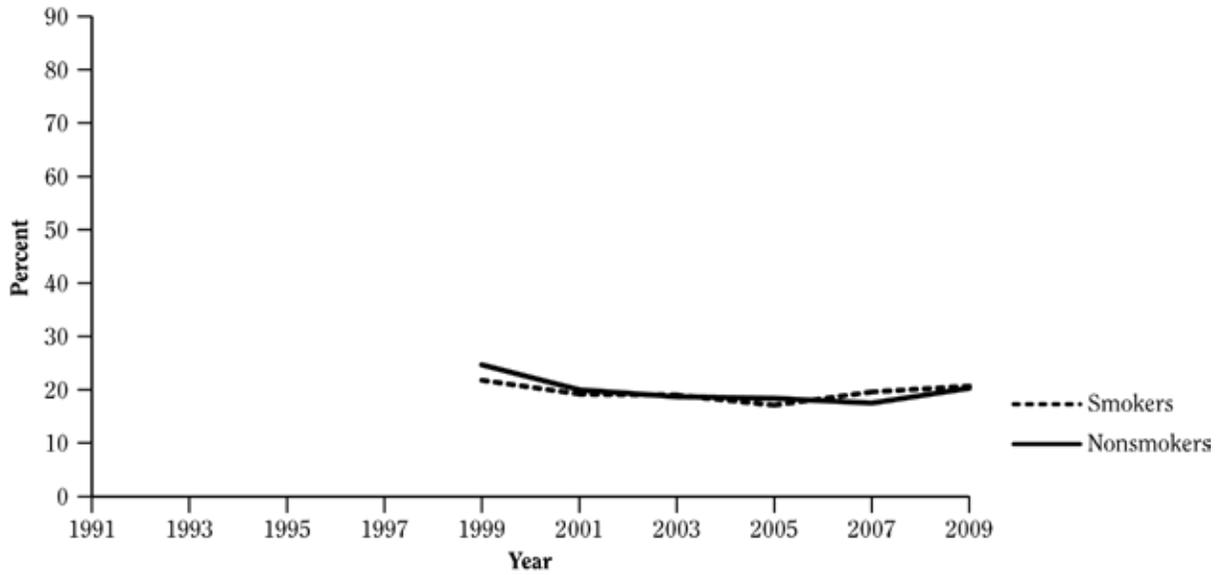
N. Television viewing for 3 or more hours per day



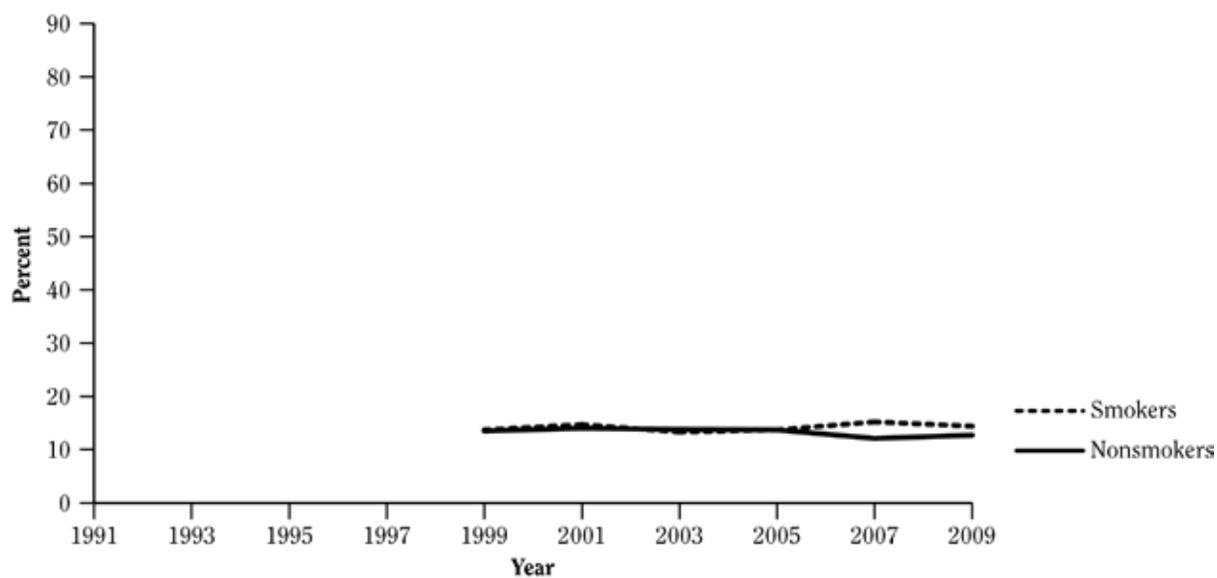
O. No moderate or vigorous physical activity participation in last 7 days



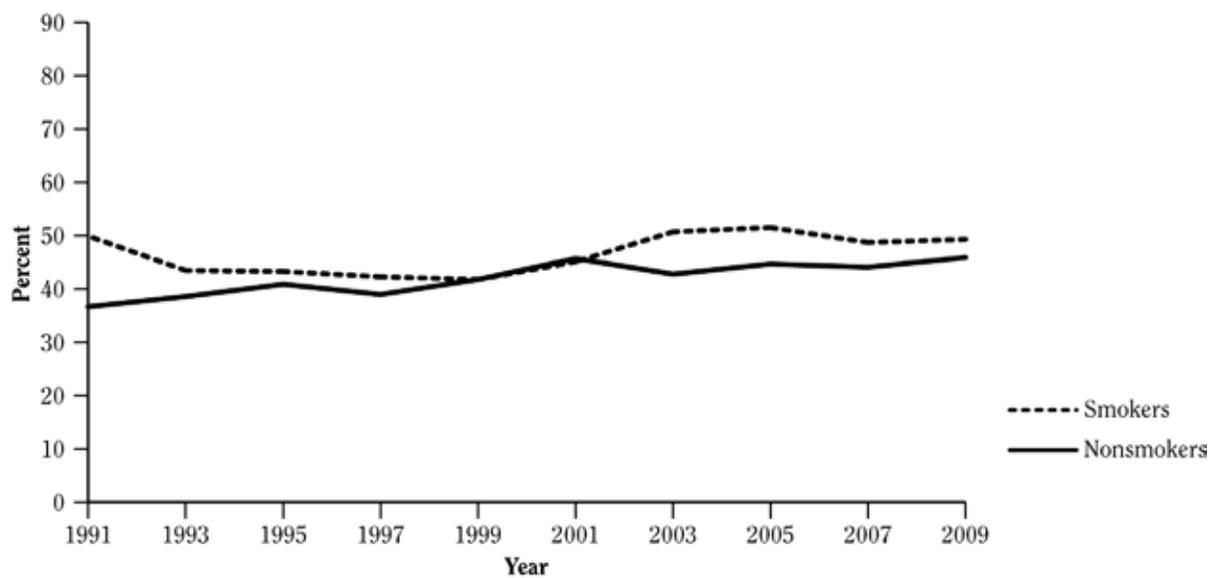
P. Fruit and vegetable intake five or more times per day



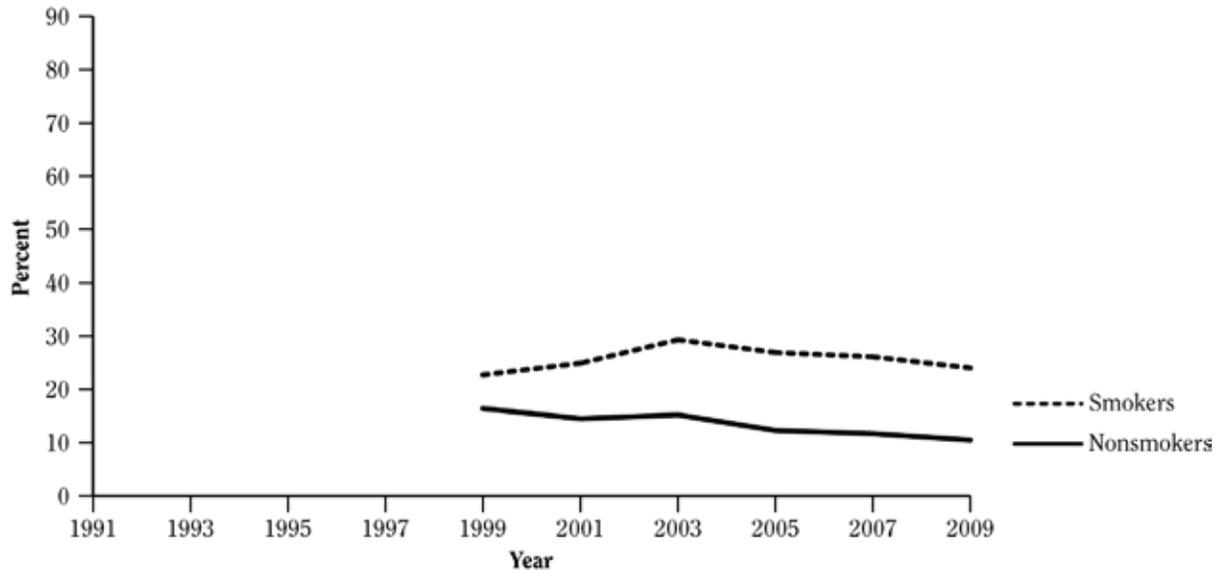
Q. Milk consumption of three or more glasses per day



R. Trying to lose weight



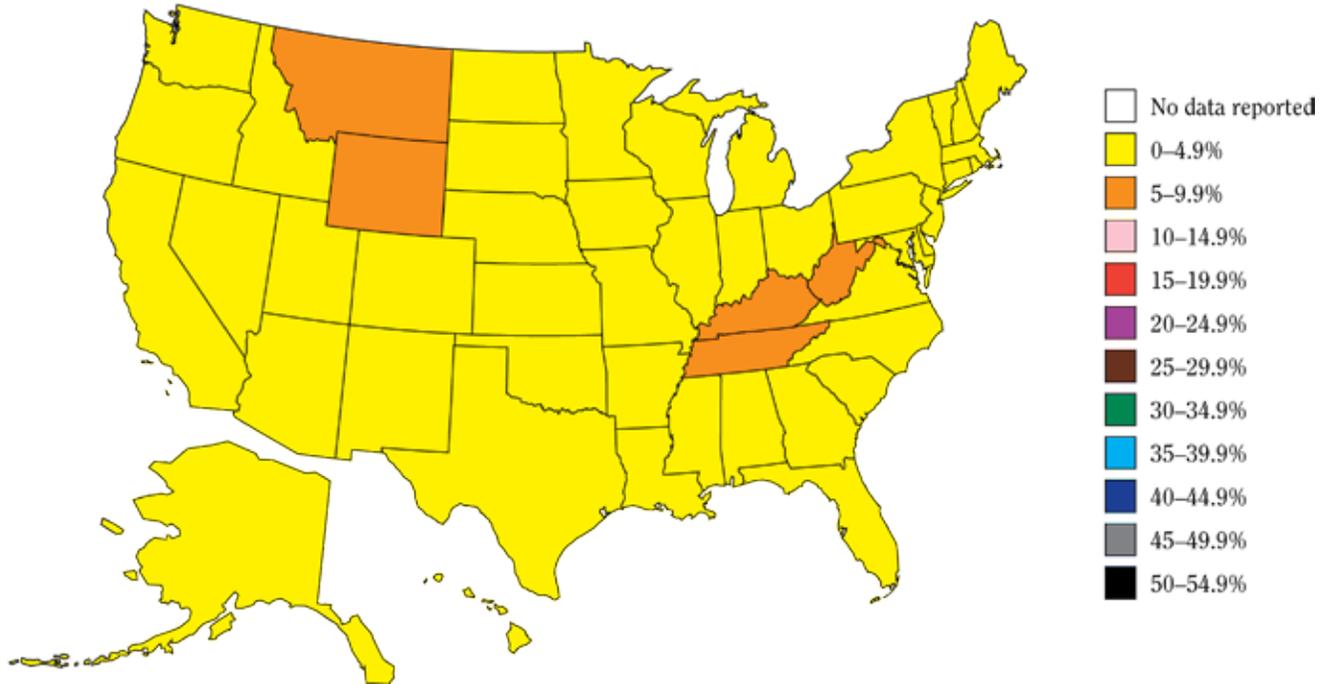
S. Engaged in unhealthy weight control behavior



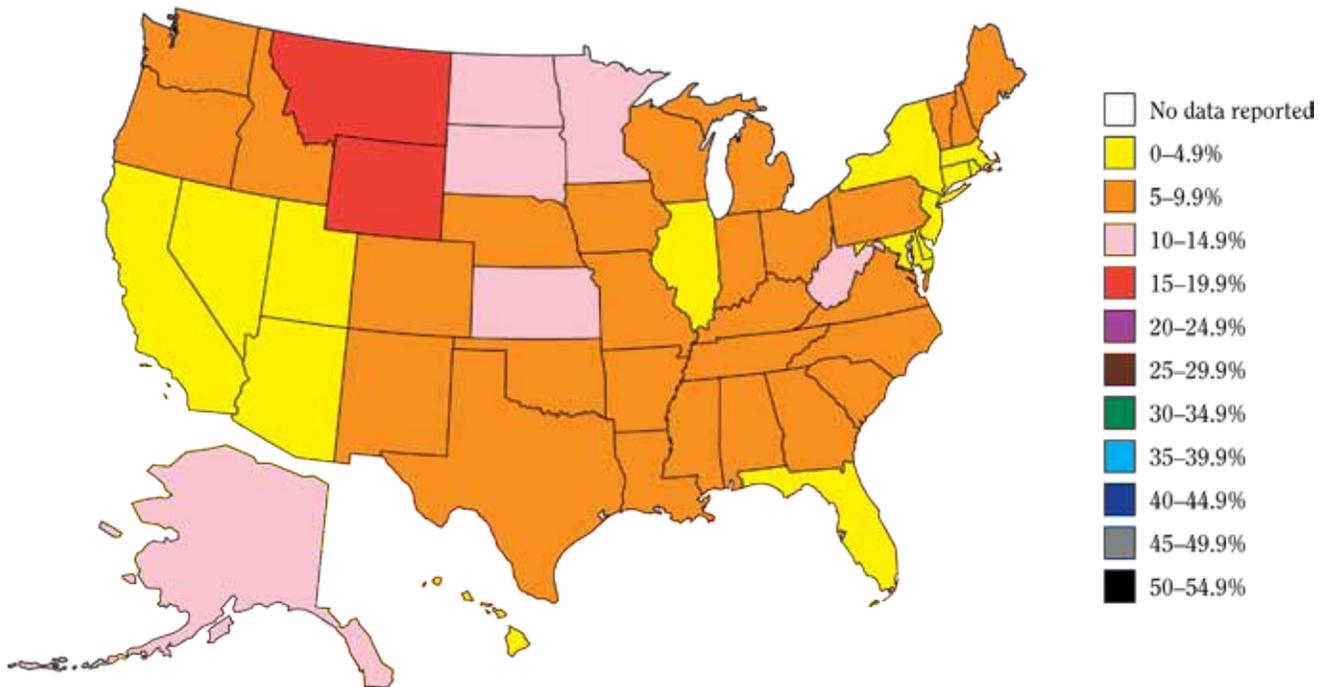
Source: 1991–2009 YRBS: Centers for Disease Control and Prevention, Division of Adolescent and School Health (unpublished data).
Note: “Overweight” and “obese” figures are based on self-reported data (figures 3.1.27L and 3.1.27M), that is, based on self-reported weight and height.

Figure 3.1.28 Percentage who currently use smokeless tobacco, by age group and state; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

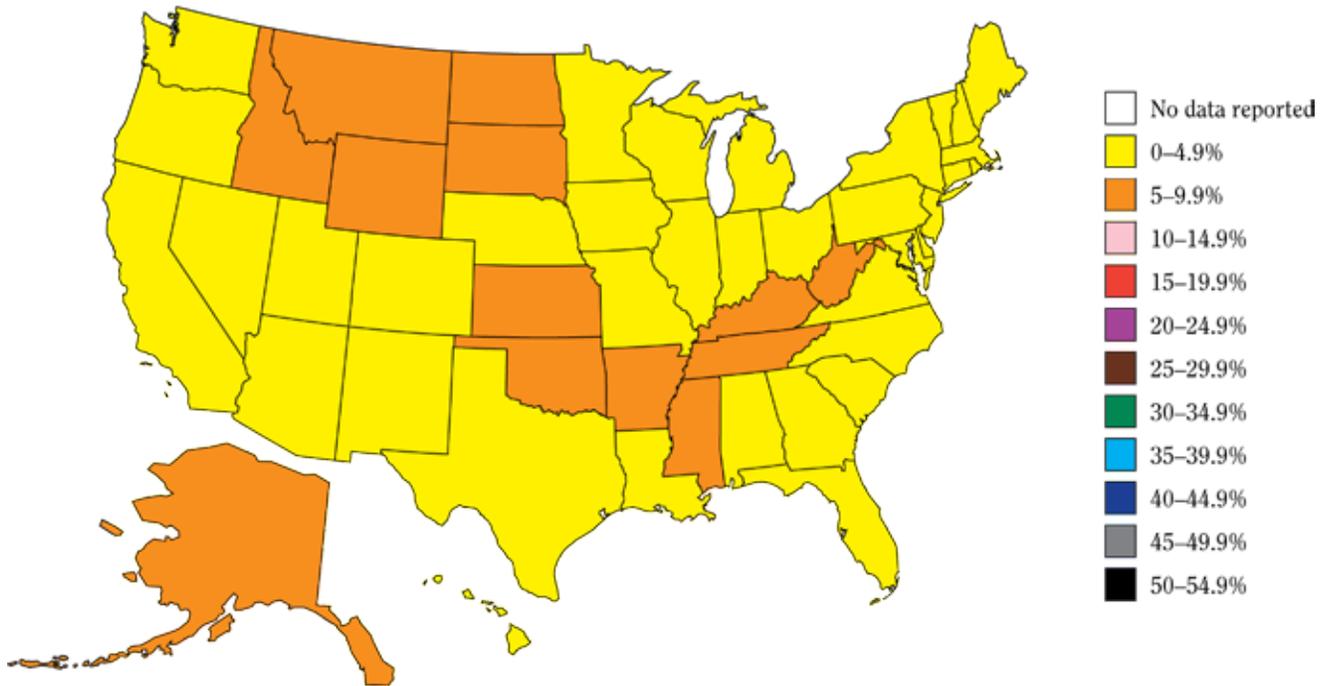
A. 12–17 years of age, males



B. 18–25 years of age, male



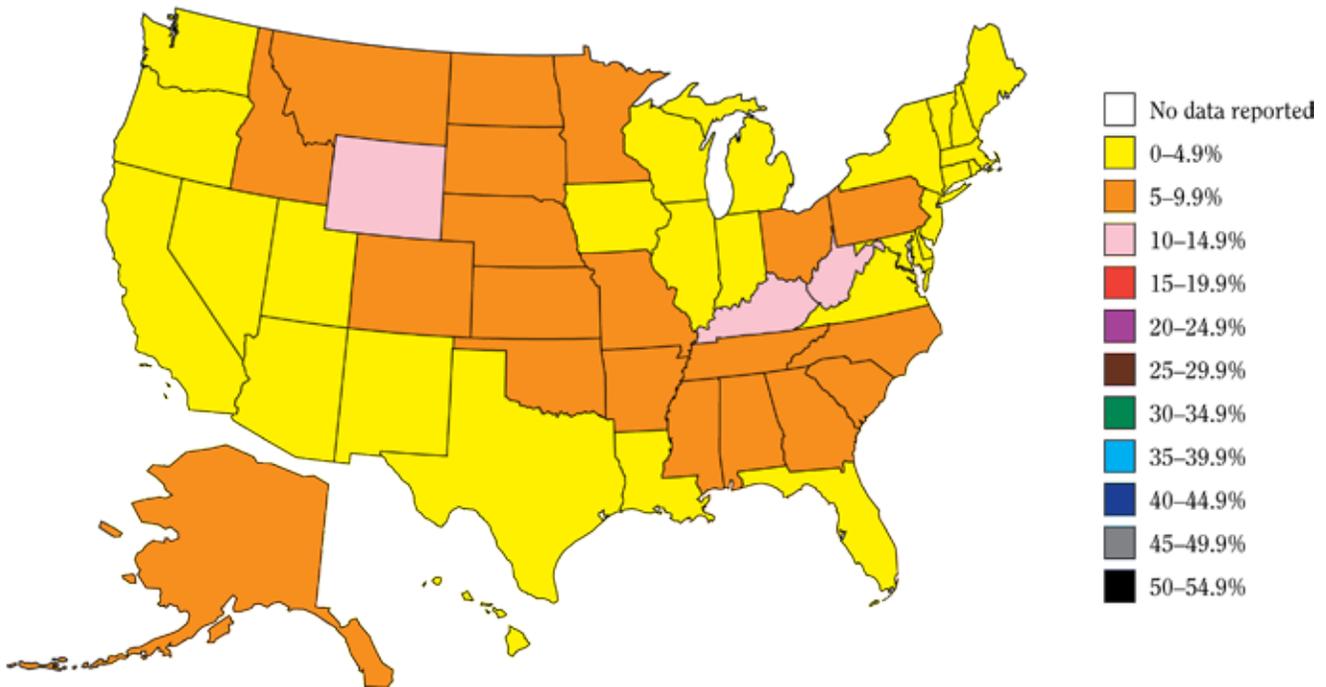
C. 26 years of age or older, male



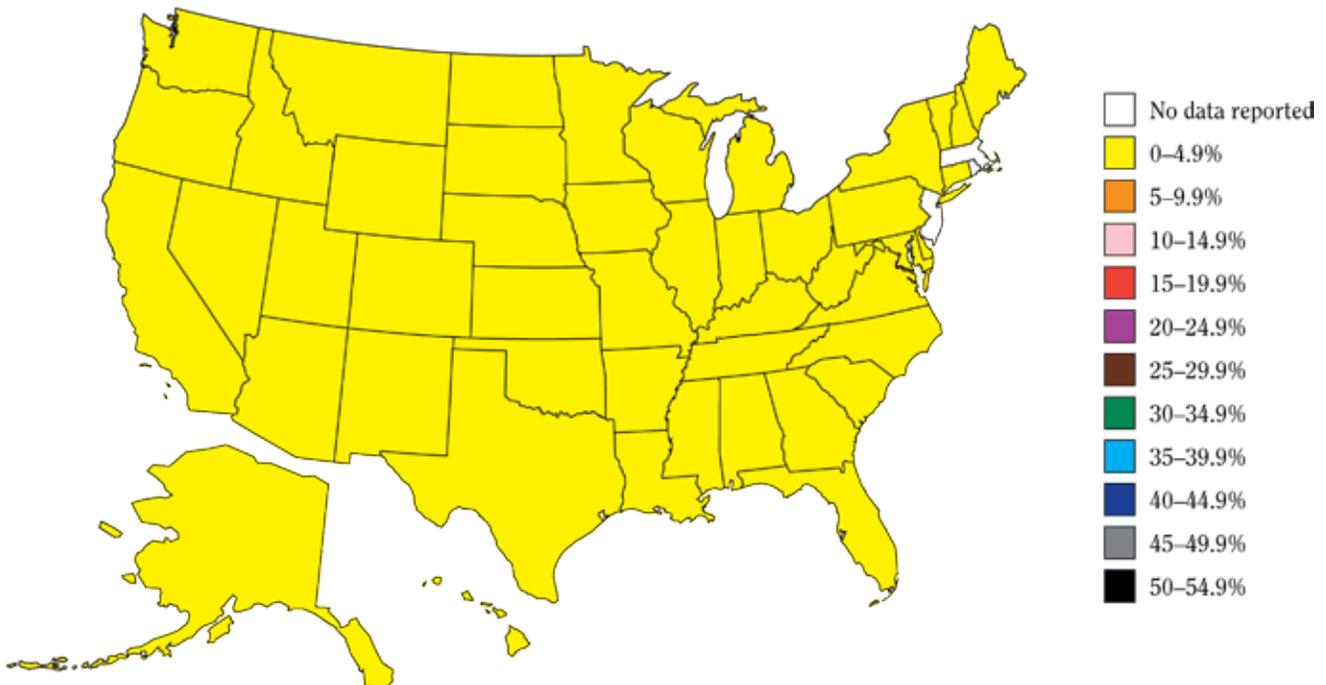
Source: 2006-2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Figure 3.1.29 Percentage who currently use smokeless tobacco, by age group, state, and gender; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

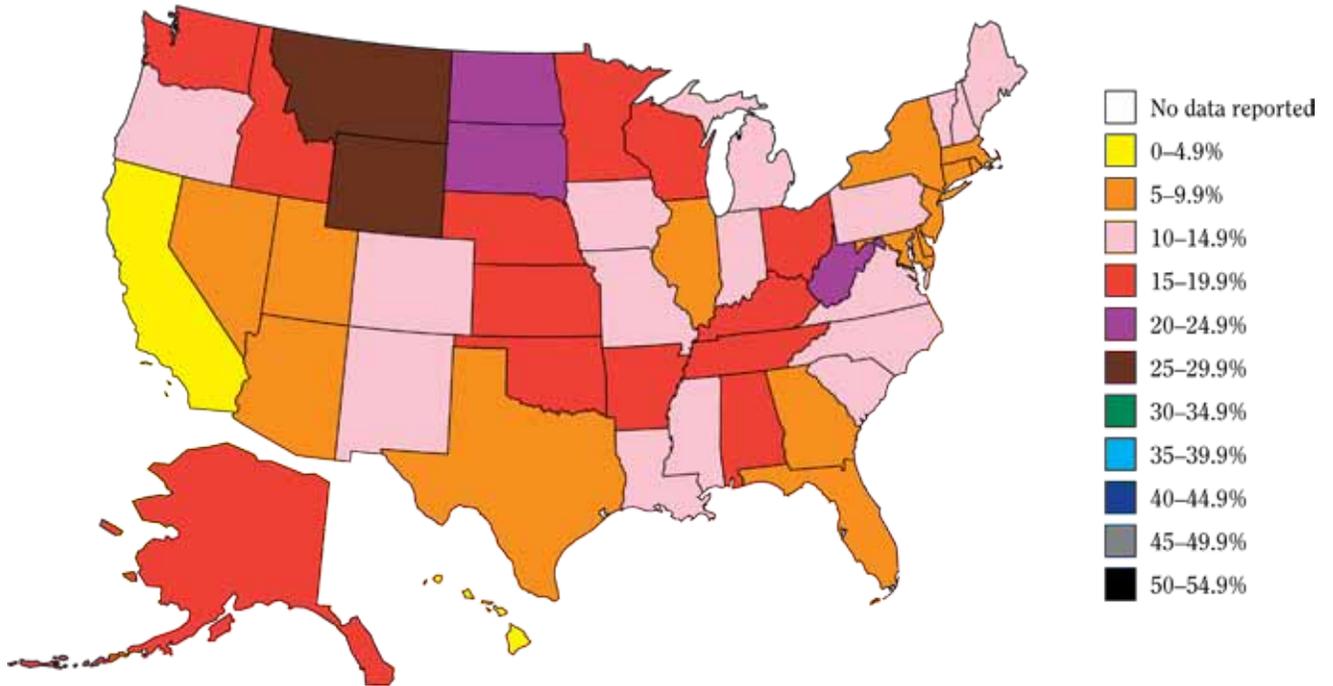
A. 12–17 years of age, males



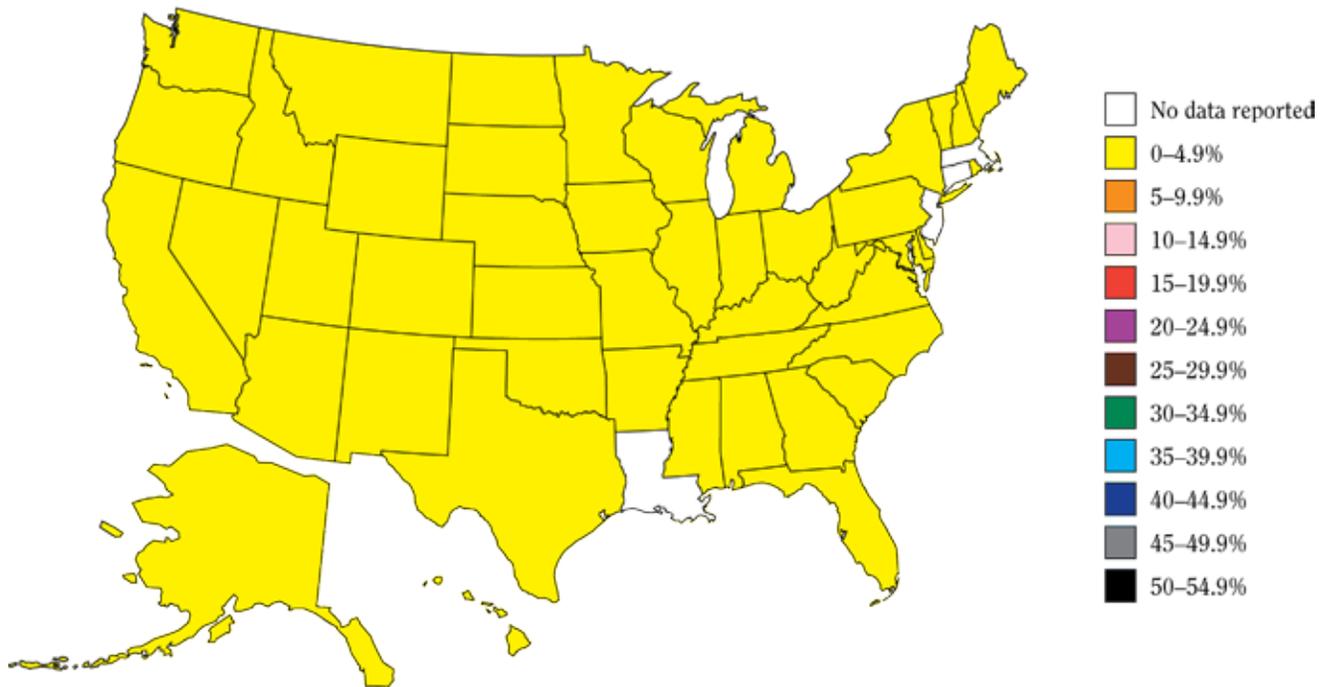
B. 12–17 years of age, females



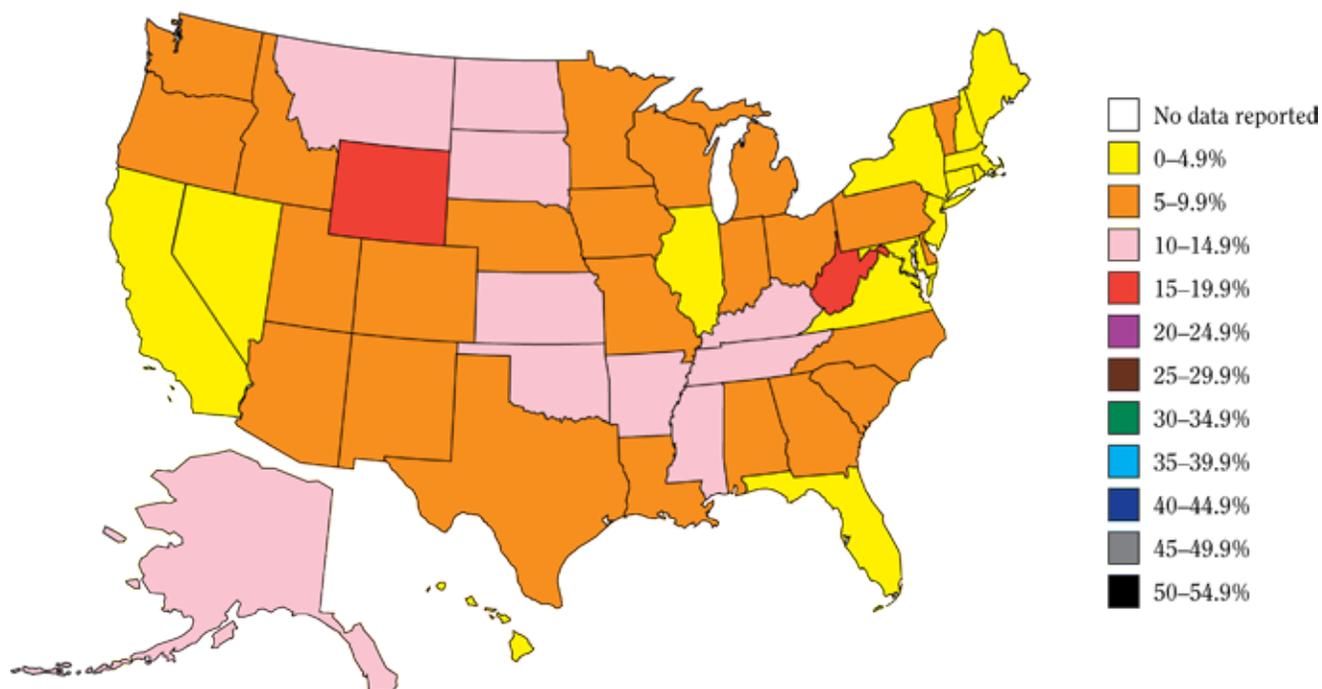
C. 18–25 years of age, males



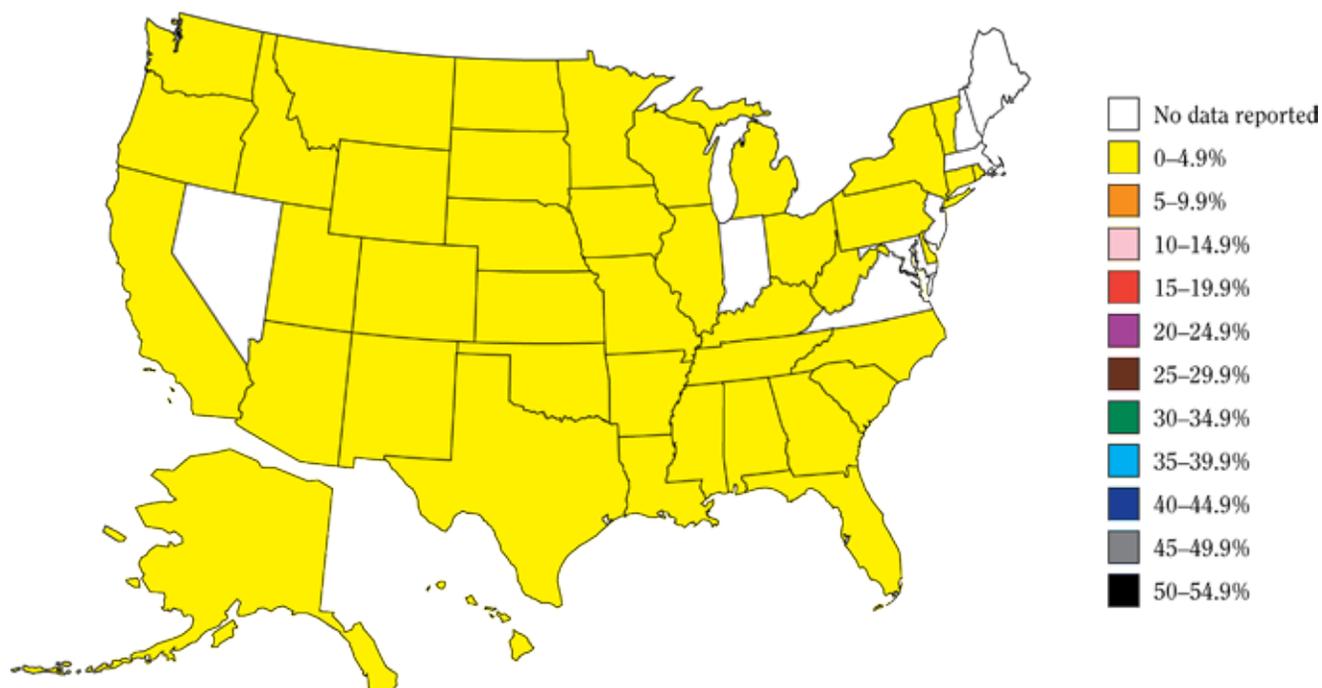
D. 18–25 years of age, females



E. 26 years of age or older, males

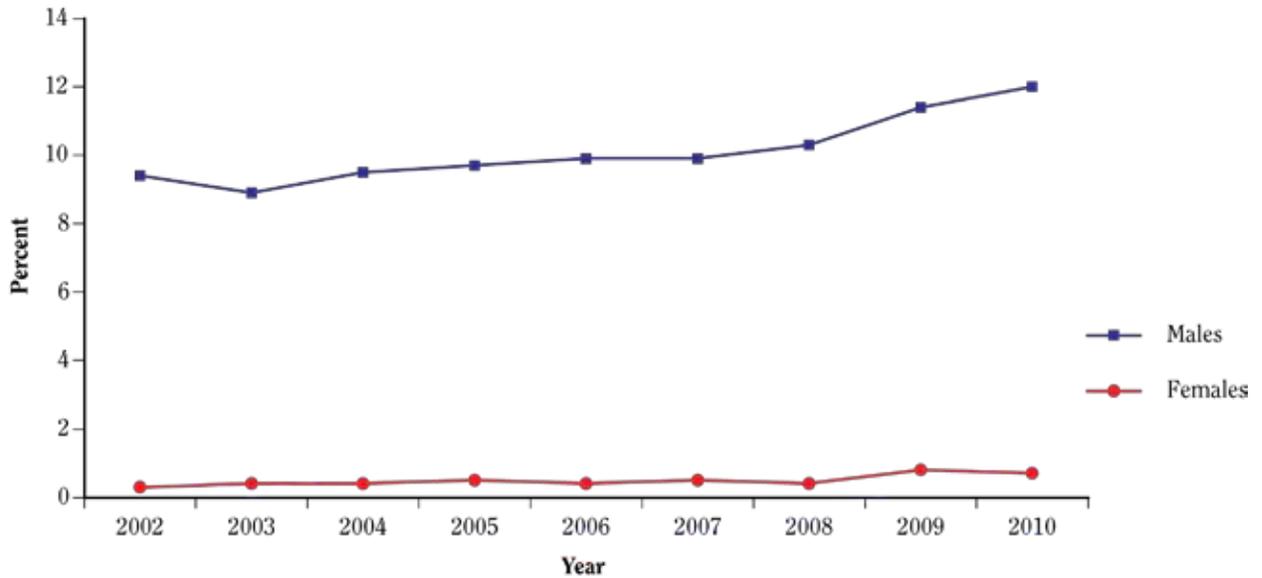


F. 26 years of age or older, females



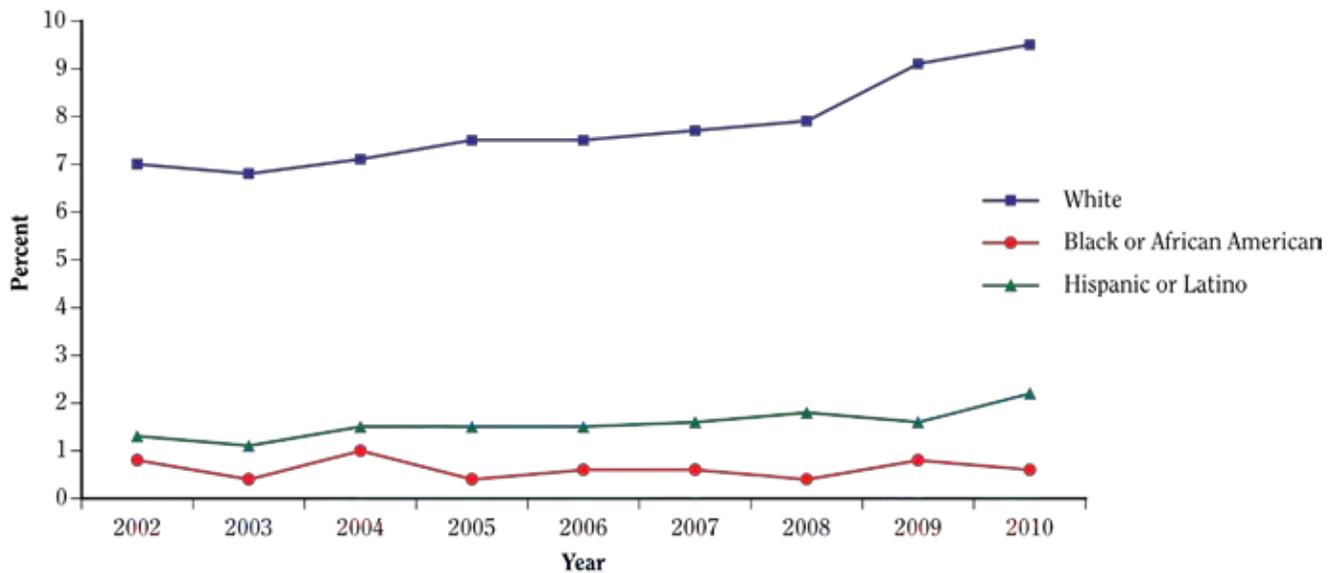
Source: 2006-2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Figure 3.1.30 Past-month smokeless tobacco use among young adults (18–25 years of age), by gender; National Survey on Drug Use & Health (NSDUH) 2002–2010; United States



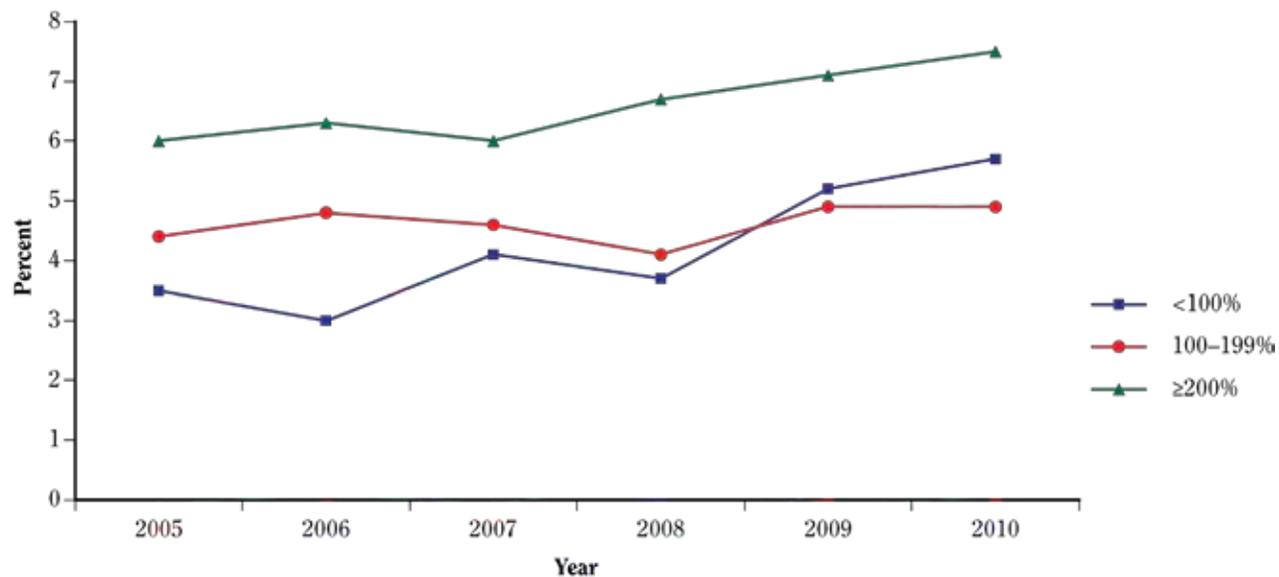
Source: 2002–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Figure 3.1.31 Past-month smokeless tobacco use among young adults (18–25 years of age), by race/ethnicity; National Survey on Drug Use and Health (NSDUH) 2002–2010; United States



Source: 2002–2010 NSDUH: Substance Abuse and Mental Health Services Administration (detailed reports).

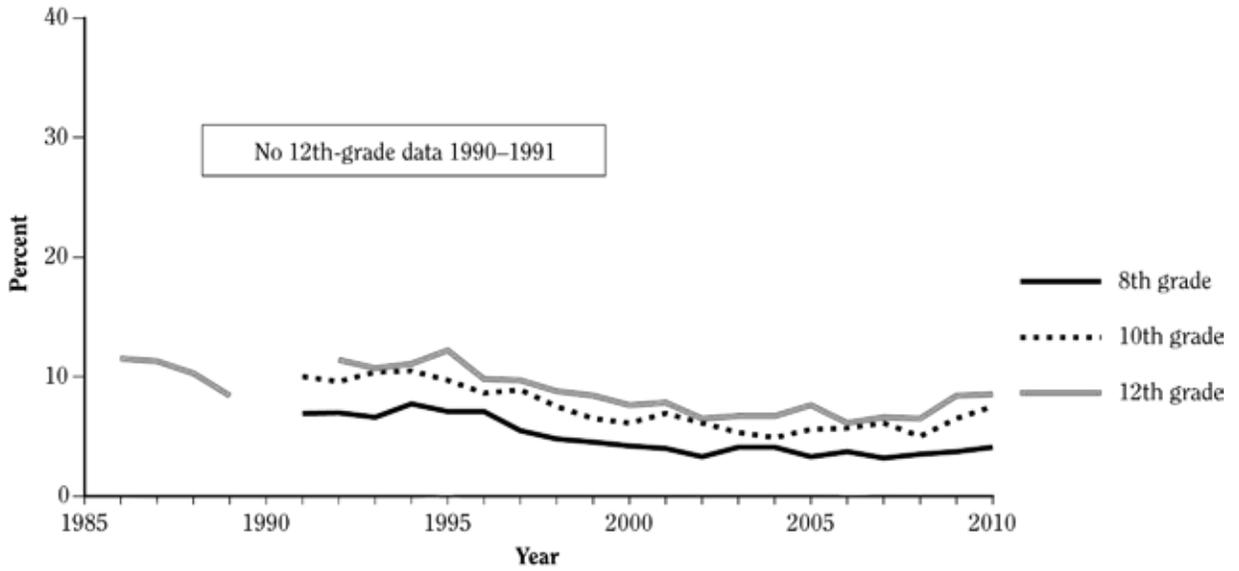
Figure 3.1.32 Past-month smokeless tobacco use among young adults (18–25 years of age), by poverty level; National Survey on Drug Use and Health (NSDUH) 2005–2010; United States



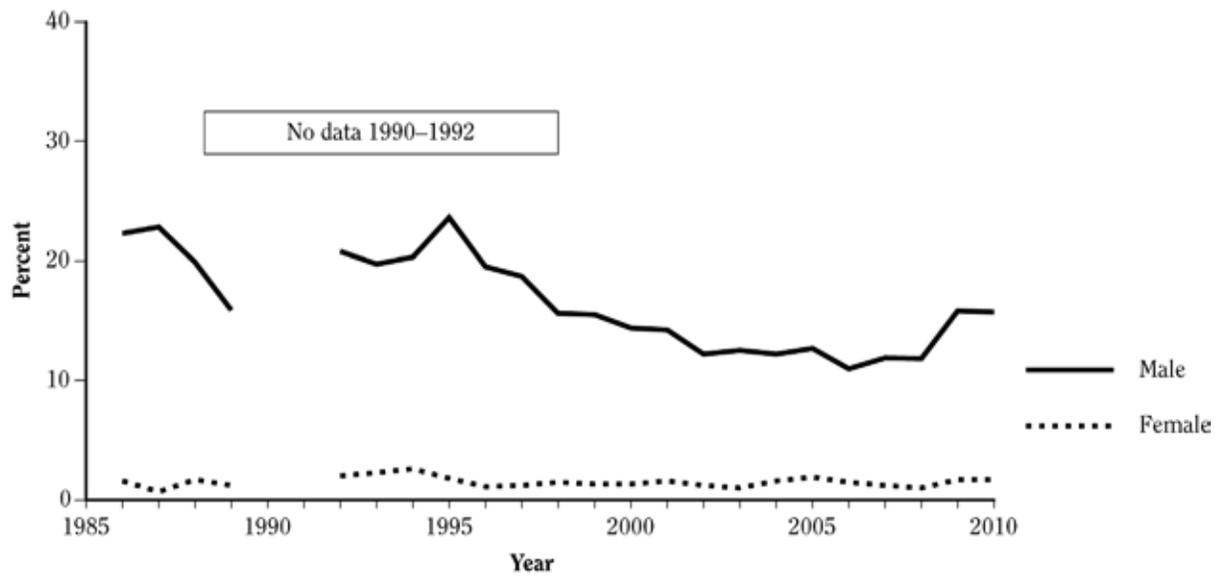
Source: 2005–2010 NSDUH; Substance Abuse and Mental Health Services Administration (unpublished data).

Figure 3.1.33 Trends in prevalence (%) of current smokeless tobacco use among young people, by grade level; Monitoring the Future (MTF) 1986–2010 and National Youth Risk Behavior Survey (YRBS) 1995–2009; United States

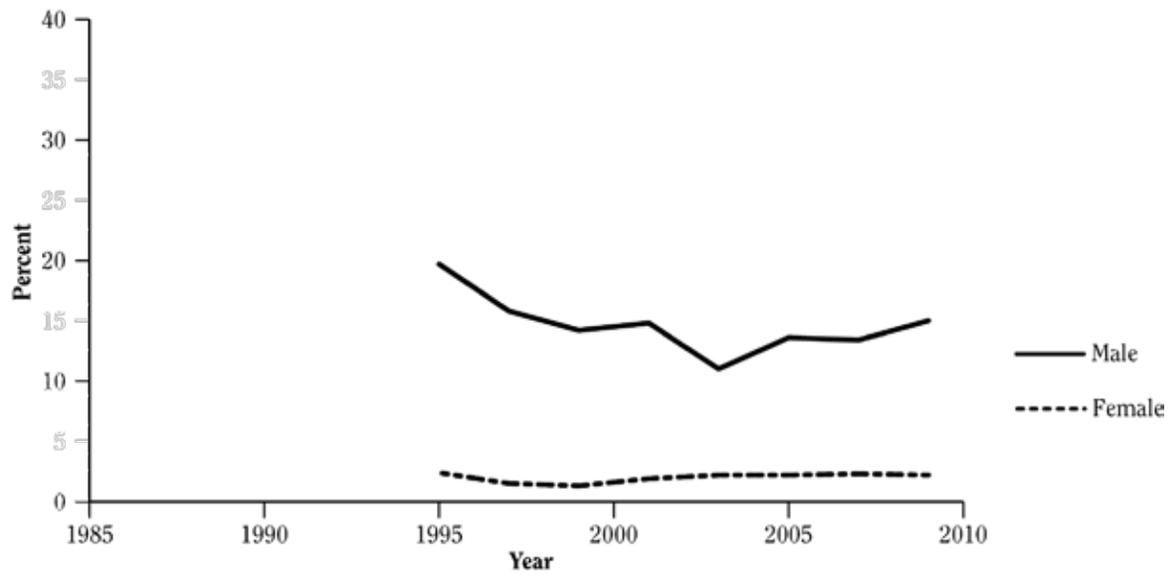
A. Males, 8th, 10th, and 12th grades, MTF



B. Males and females, 12th grade, MTF



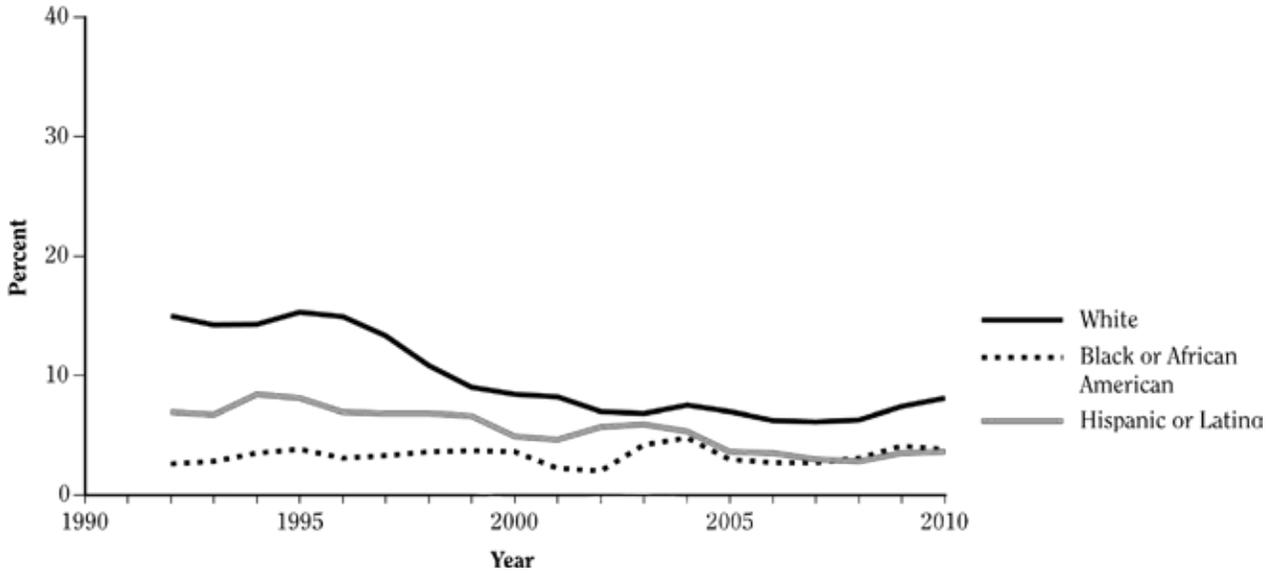
C. Males and females, 9th–12th grades, YRBS



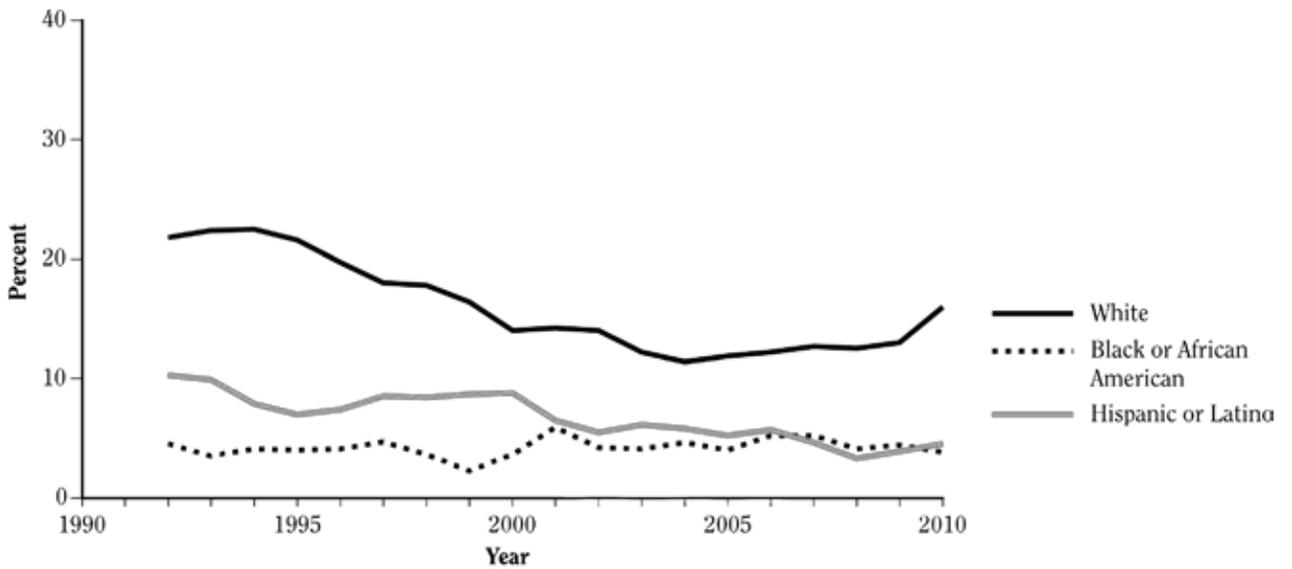
Source: 1986–2010 MTF: University of Michigan, Institute for Social Research (unpublished data); 1995–2009 YRBS: Centers for Disease Control and Prevention (CDC 2011a).

Figure 3.1.34 Trends in prevalence (%) of current smokeless tobacco use^a among males, by grade level and race/ethnicity; Monitoring the Future (MTF) 1987–2010; United States

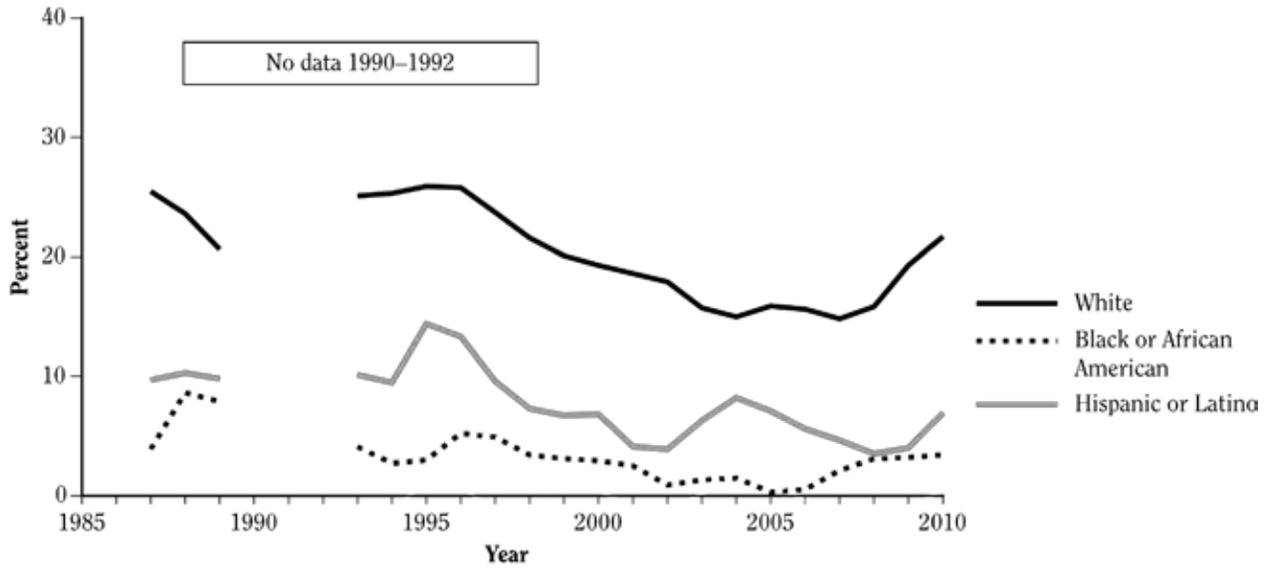
A. 8th grade, 1992–2010



B. 10th grade, 1992–2010



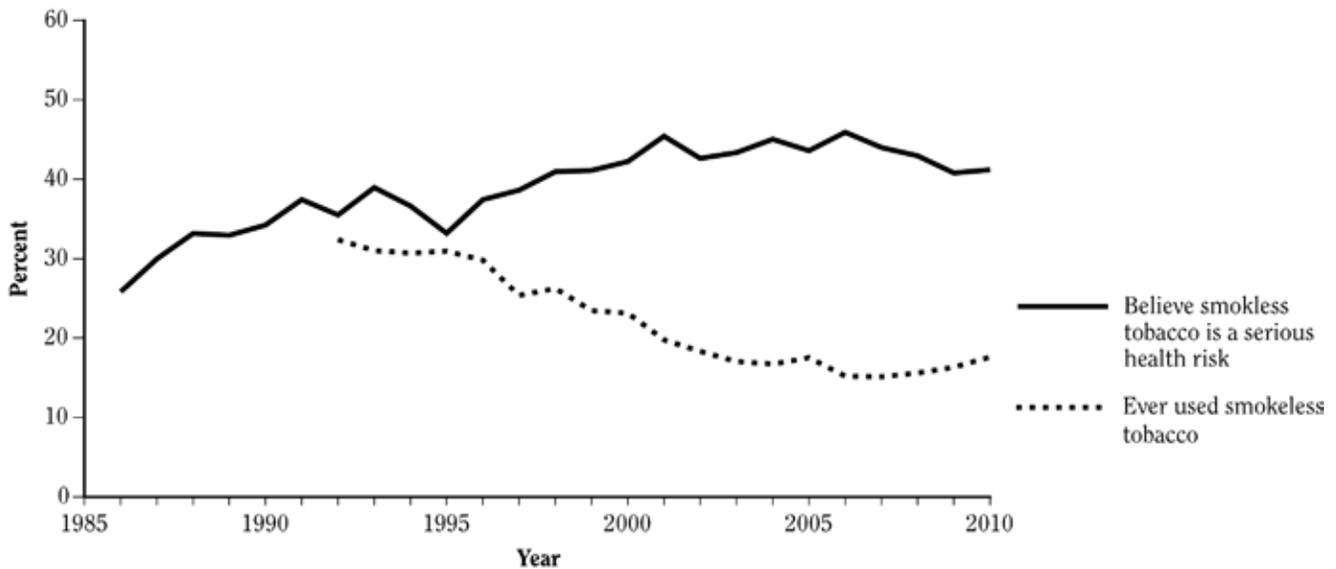
C. 12th grade, 1987–2010



Source: 1987–2010 MTF: University of Michigan, Institute for Social Research (unpublished data).

^aData presented here represent current year and previous year combined (e.g., data from 1994 and 1995 are presented as data from 1995).

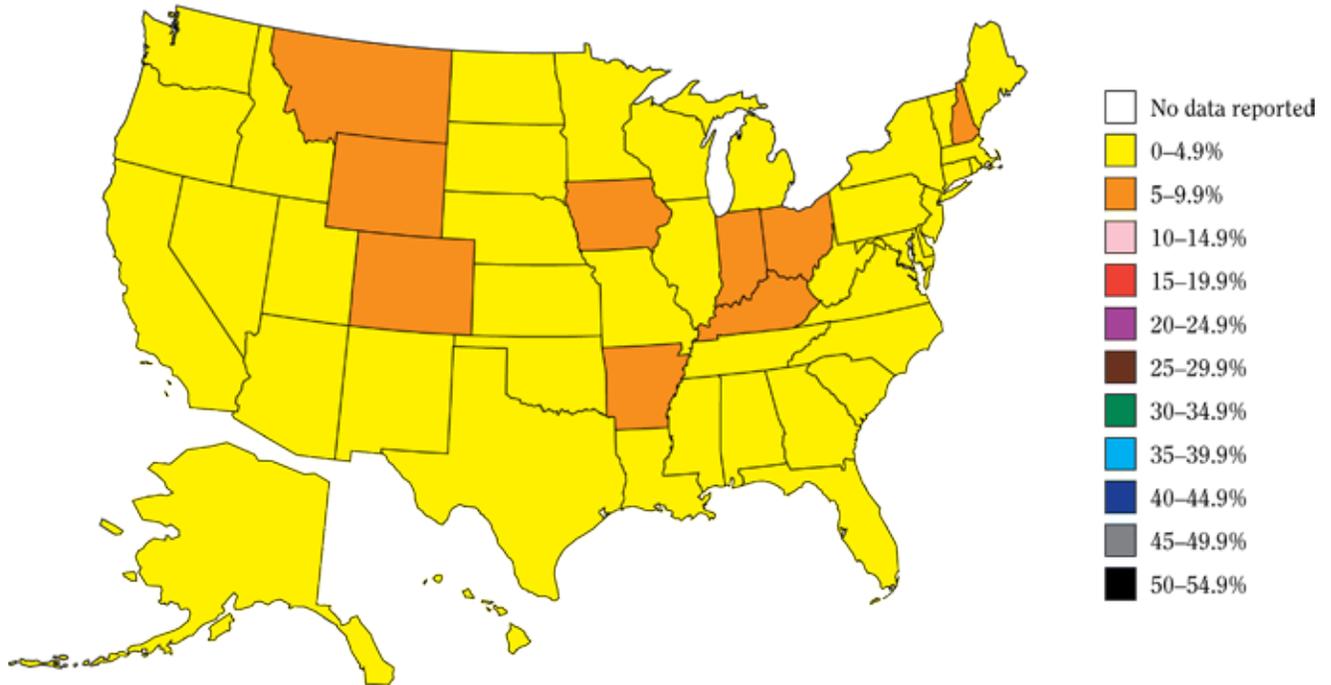
Figure 3.1.35 Trends in the percentage of young people who believe that smokeless tobacco is a serious health risk and in the percentage of high school seniors who have ever used smokeless tobacco; Monitoring the Future (MTF) 1986–2010; United States



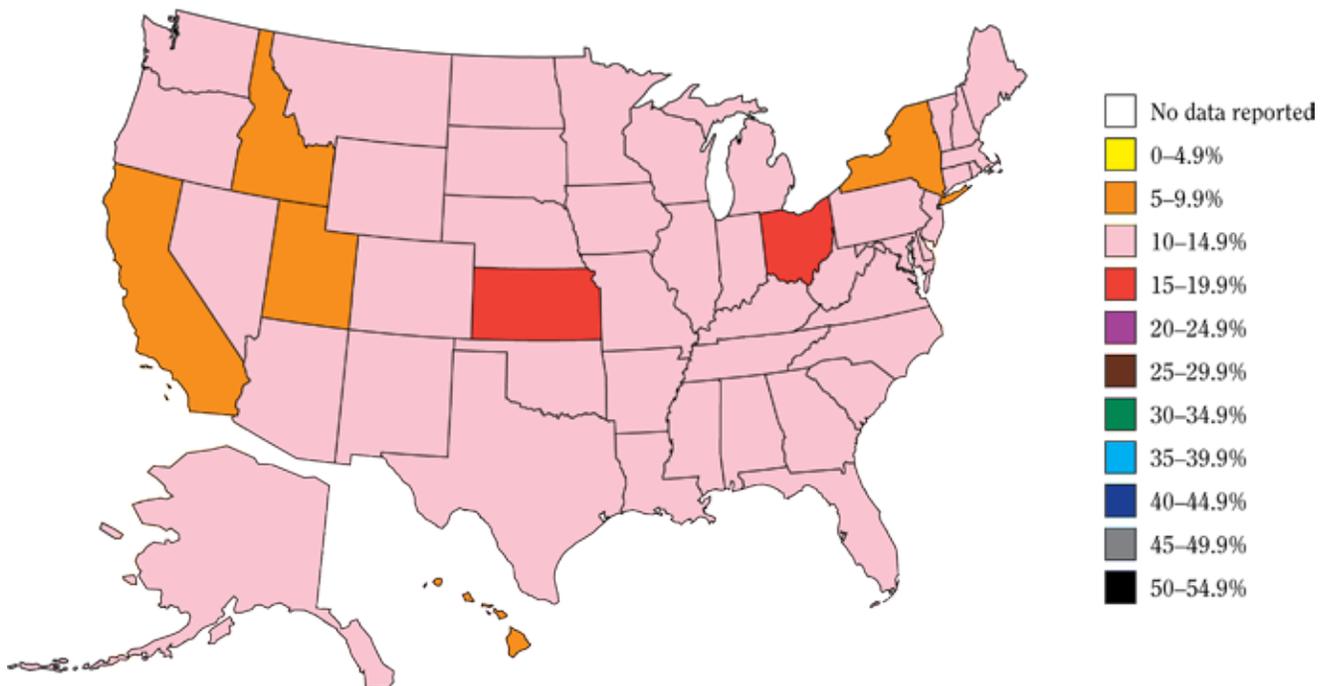
Source: 1986–2010 MTF: University of Michigan, Institute for Social Research (unpublished data).

Figure 3.1.36 Percentage who currently smoke cigars, by age group and state; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

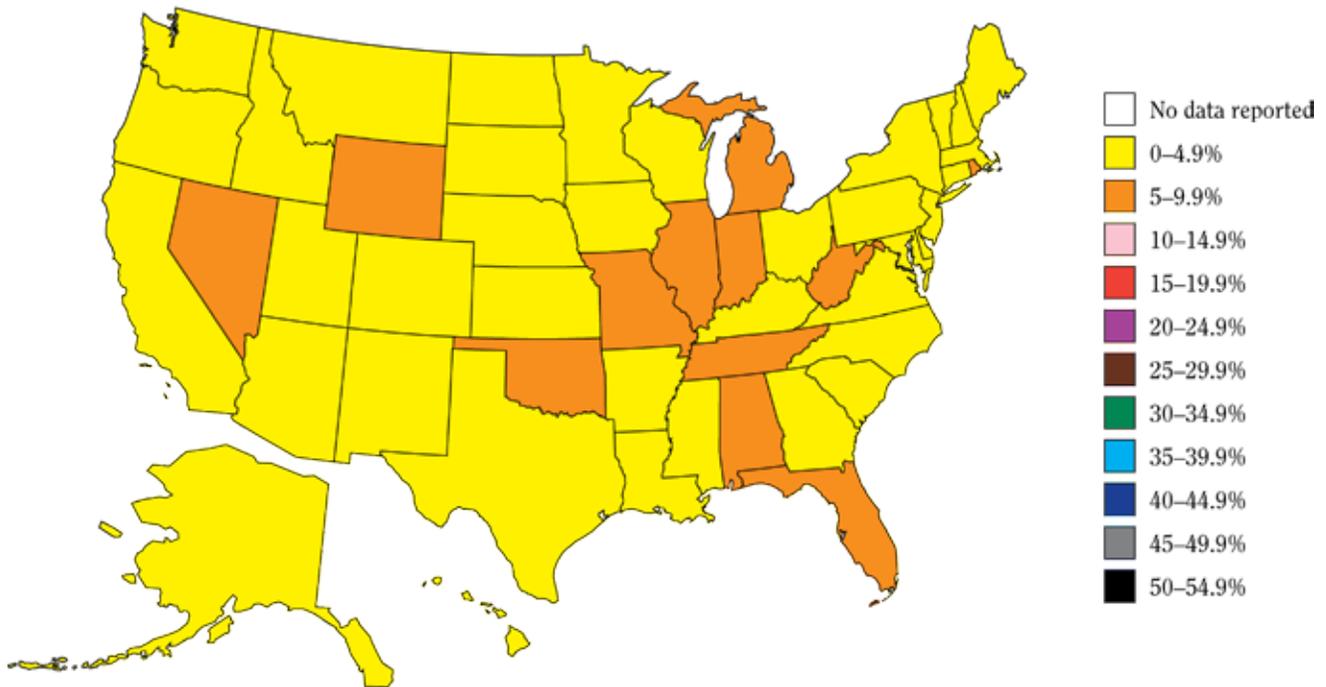
A. 12–17 years of age



B. 18–25 years of age

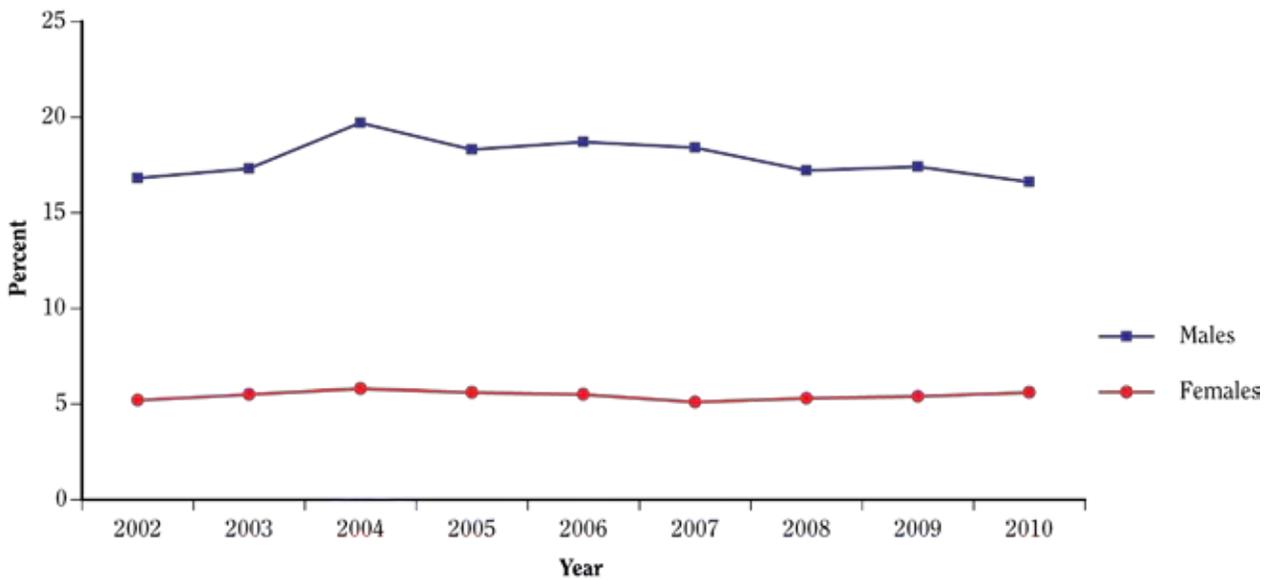


C. 26 years of age or older



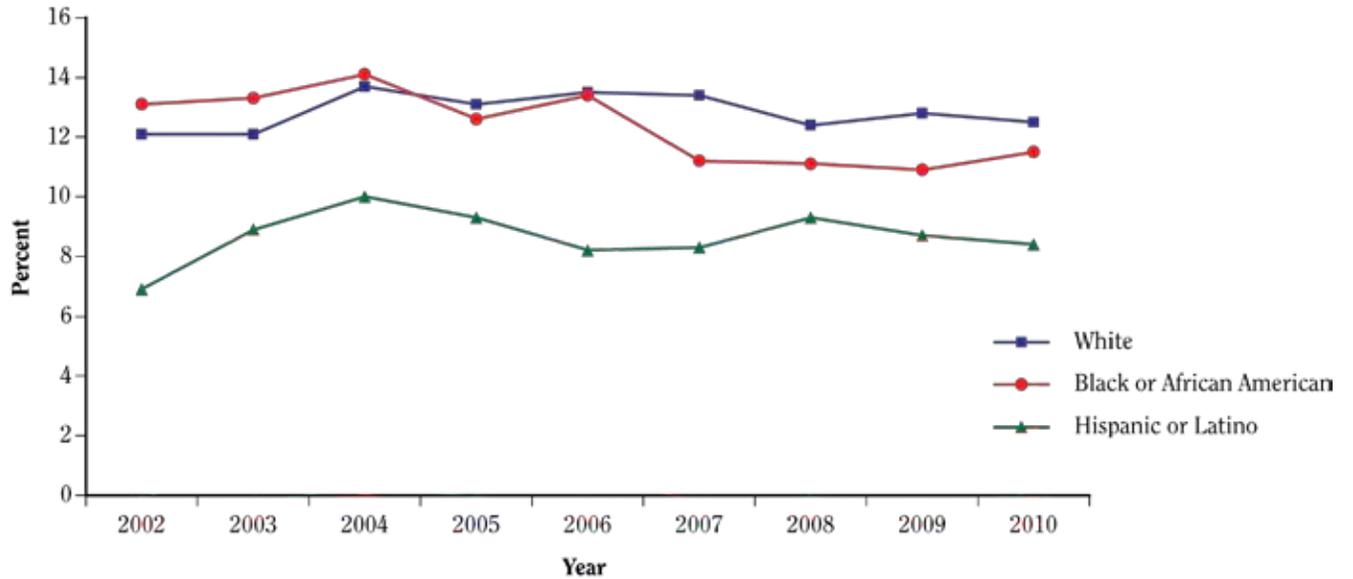
Source: 2006-2010 NSDUH; Substance Abuse and Mental Health Services Administration (unpublished data).

Figure 3.1.37 Past-month cigar use among young adults (18-25 years of age), by gender; National Survey on Drug Use and Health (NSDUH) 2002-2010; United States



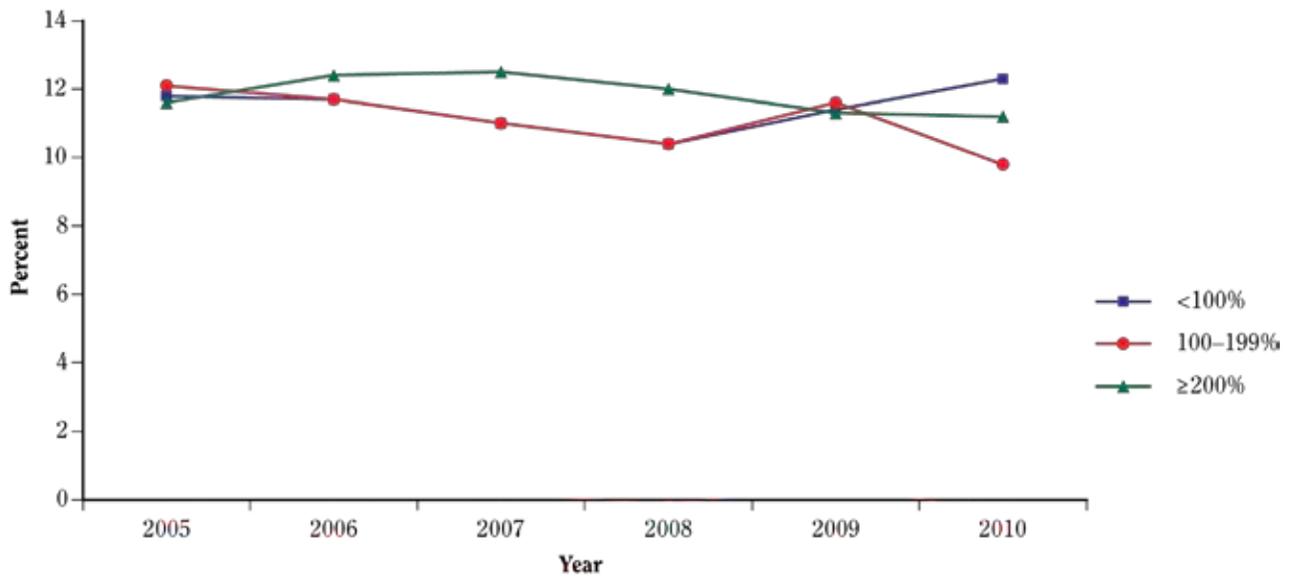
Source: 2002-2010 NSDUH; Substance Abuse and Mental Health Services Administration (unpublished data).

Figure 3.1.38 Past-month cigar use among young adults (18–25 years of age), by race/ethnicity; National Survey on Drug Use and Health (NSDUH) 2002–2010; United States



Source: 2002–2010 NSDUH: Substance Abuse and Mental Health Services Administration (detailed reports).

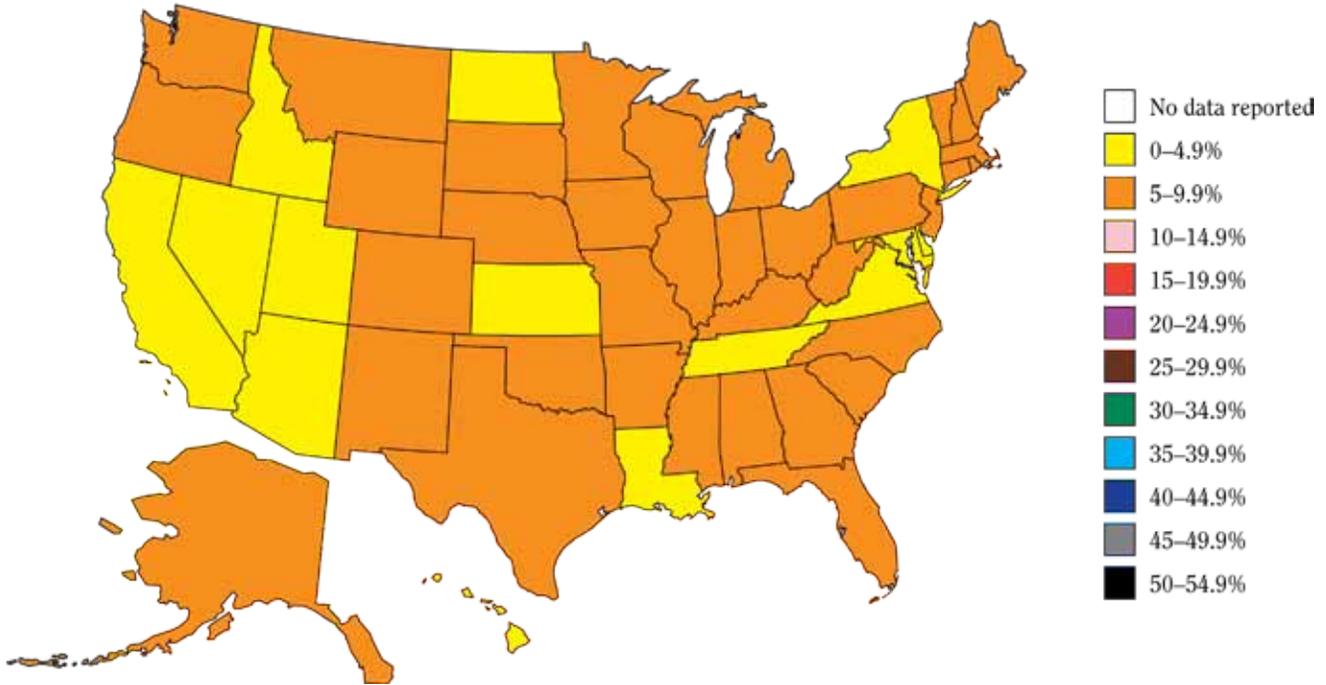
Figure 3.1.39 Past-month cigar use among young adults (18–25 years of age), by poverty level; National Survey on Drug Use and Health (NSDUH) 2005–2010; United States



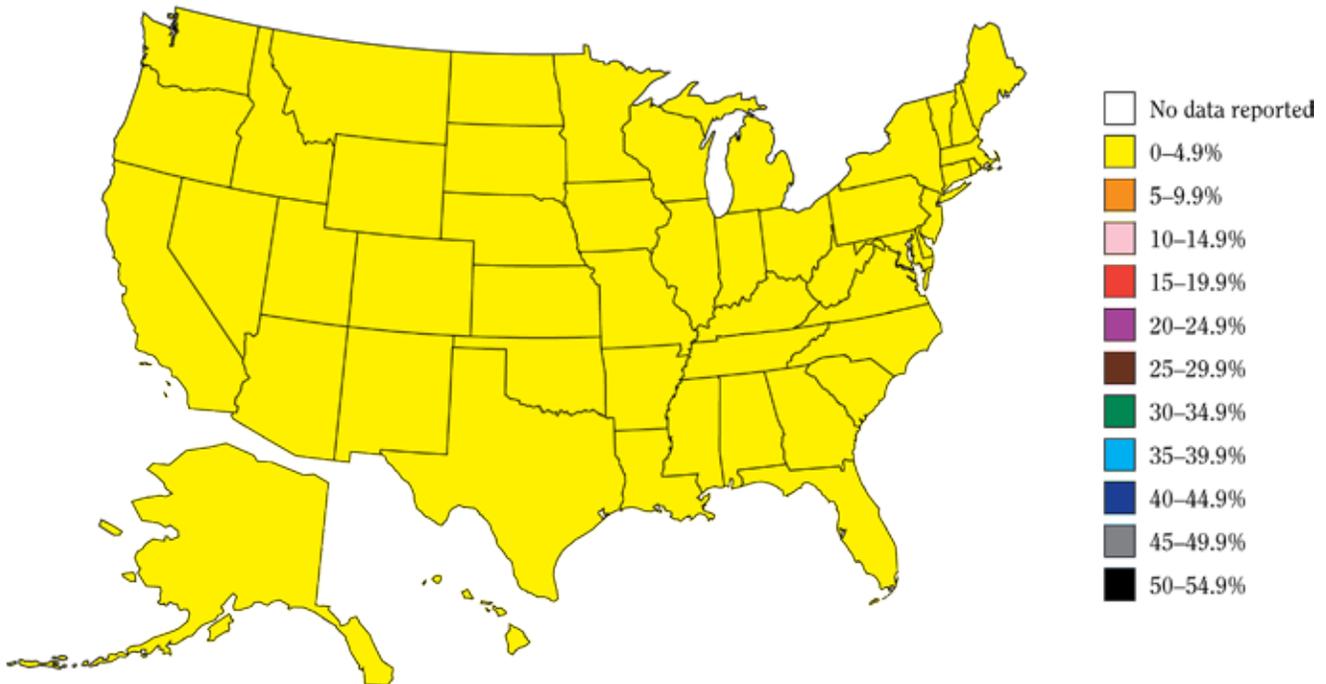
Source: 2005–2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data).

Figure 3.1.40 Percentage who currently smoke cigars, by age group, state, and gender; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

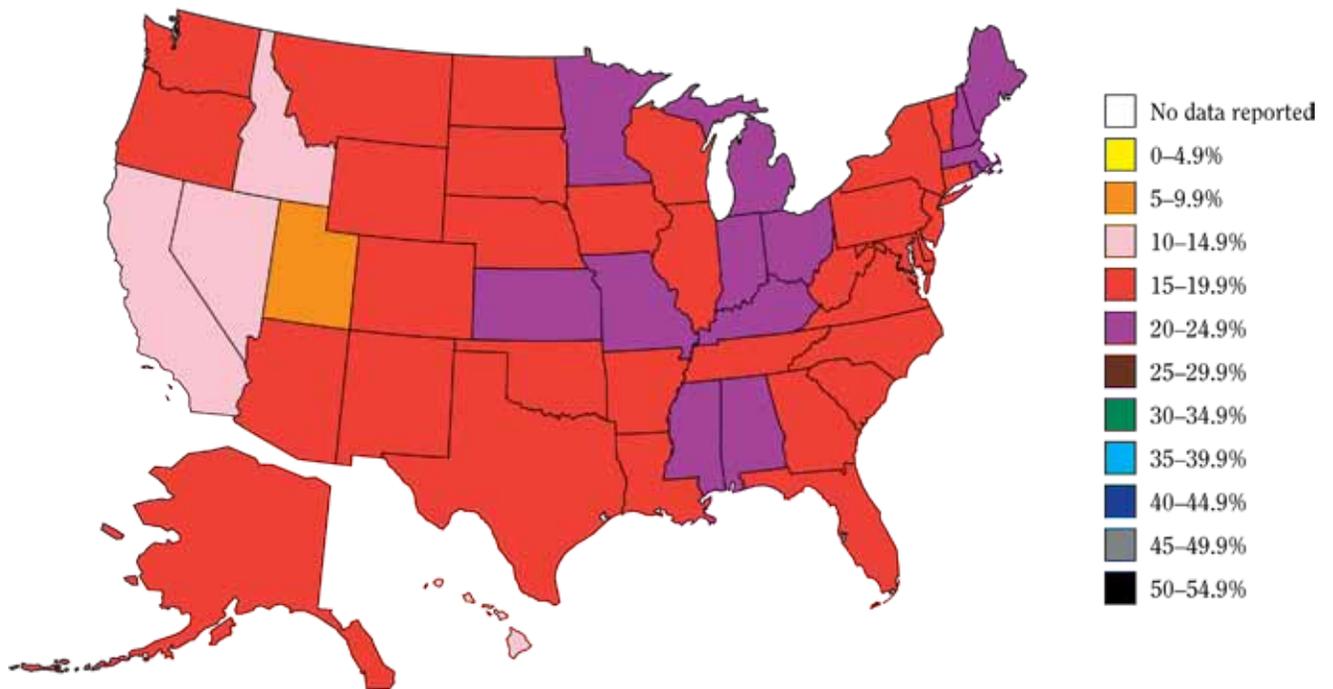
A. 12–17 years of age, males



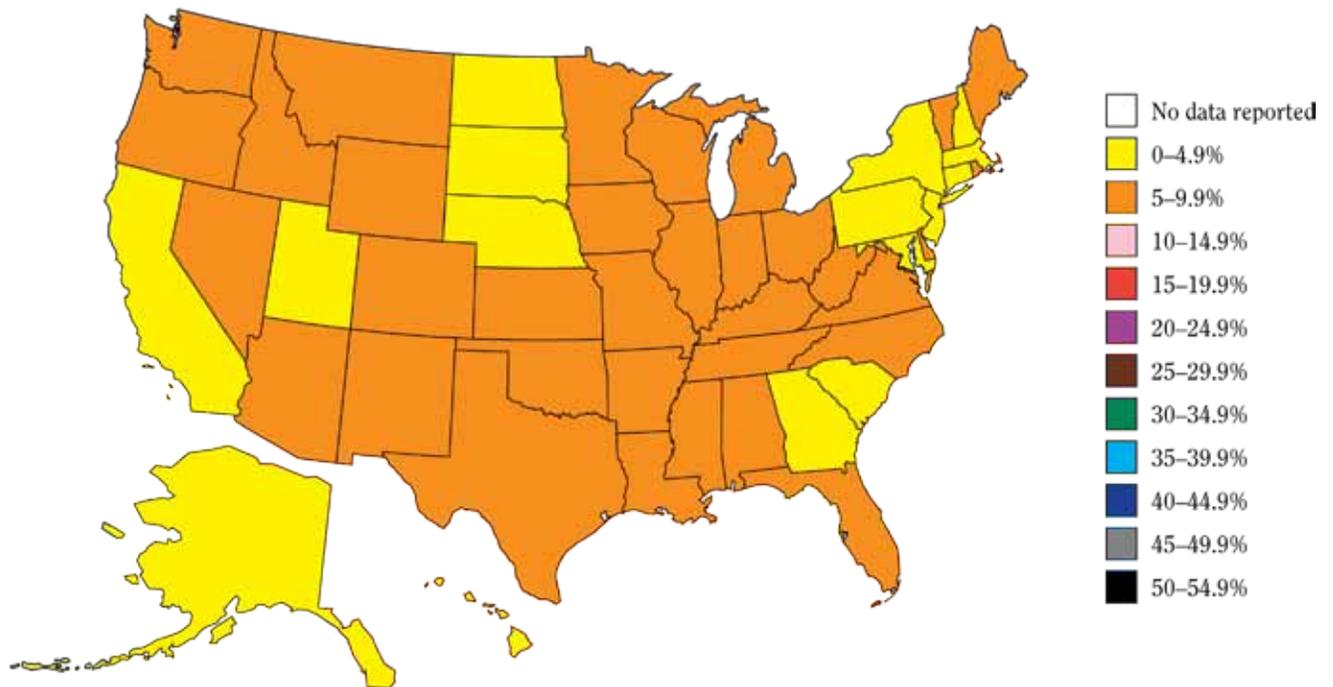
B. 12–17 years of age, females



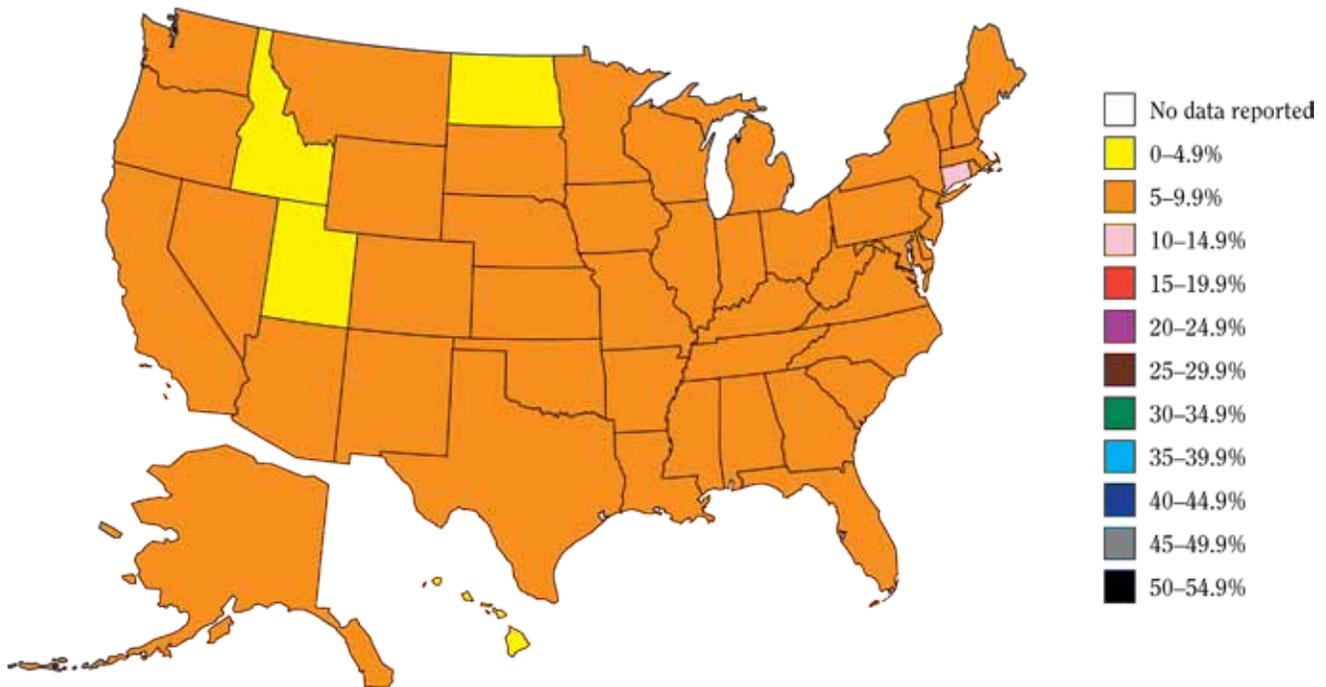
C. 18–25 years of age, males



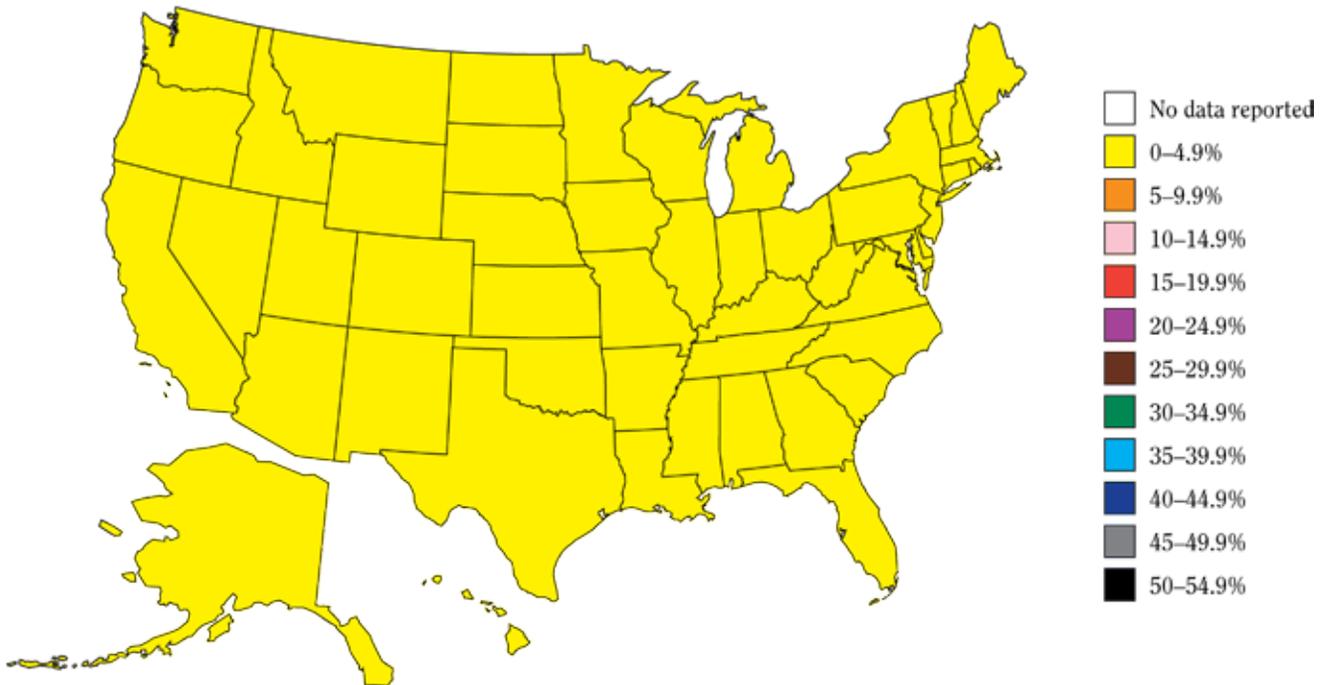
D. 18–25 years of age, females



E. 26 years of age or older, males



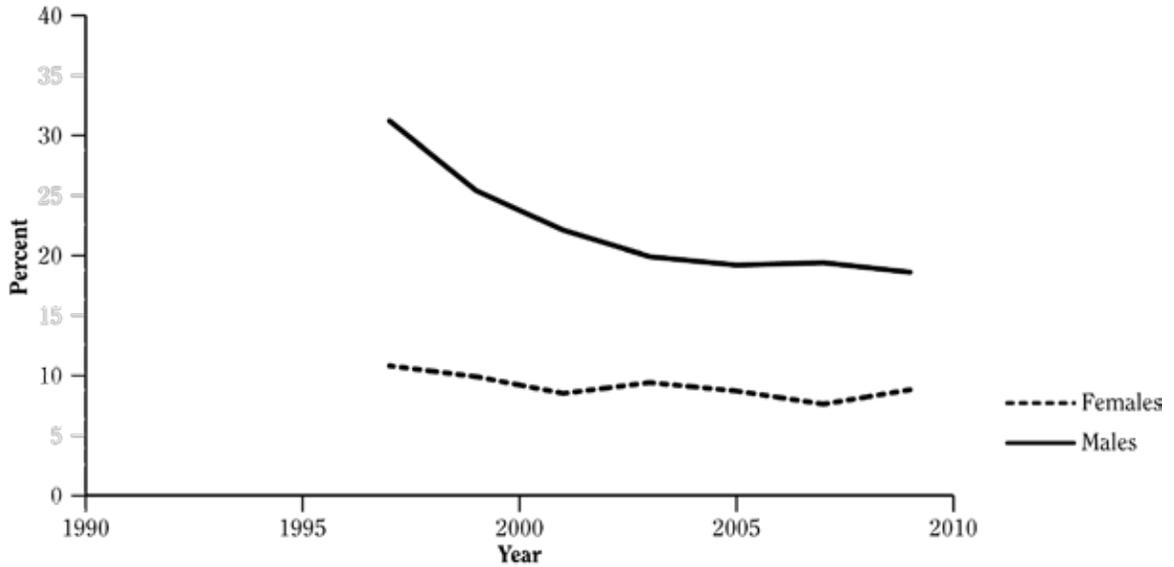
F. 26 years of age or older, females



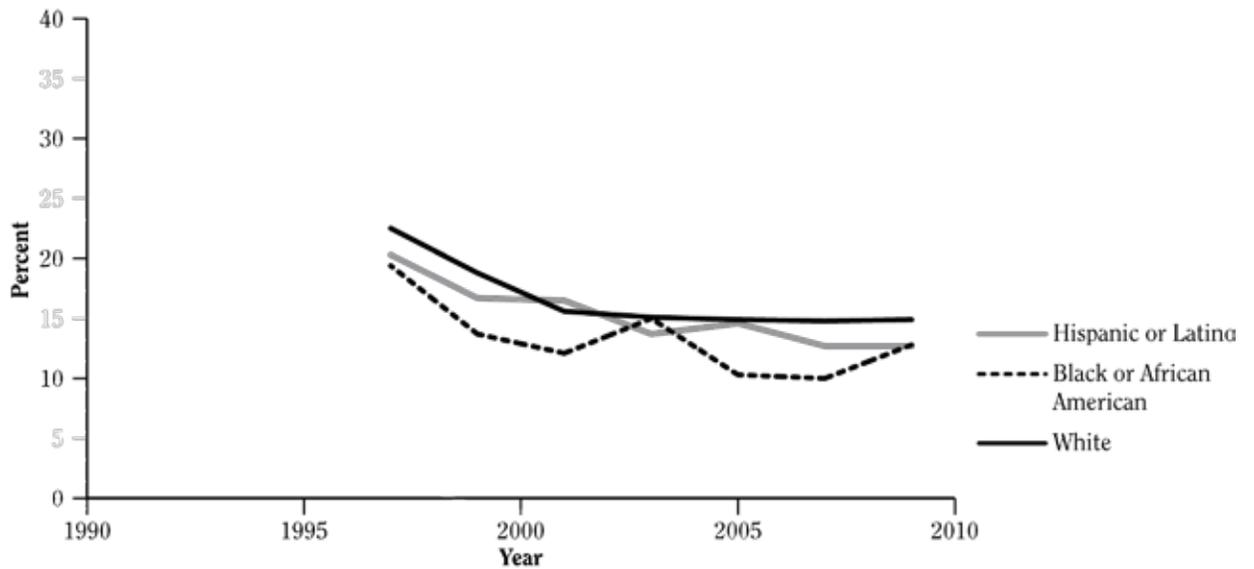
Source: 2005–2009 NSDUH; Substance Abuse and Mental Health Services Administration (unpublished data).

Figure 3.1.41 Trends in prevalence (%) of cigar use among young people, by gender and by race/ethnicity; National Youth Risk Behavior Survey (YRBS) 1997–2009; United States

A. Gender



B. Race/ethnicity

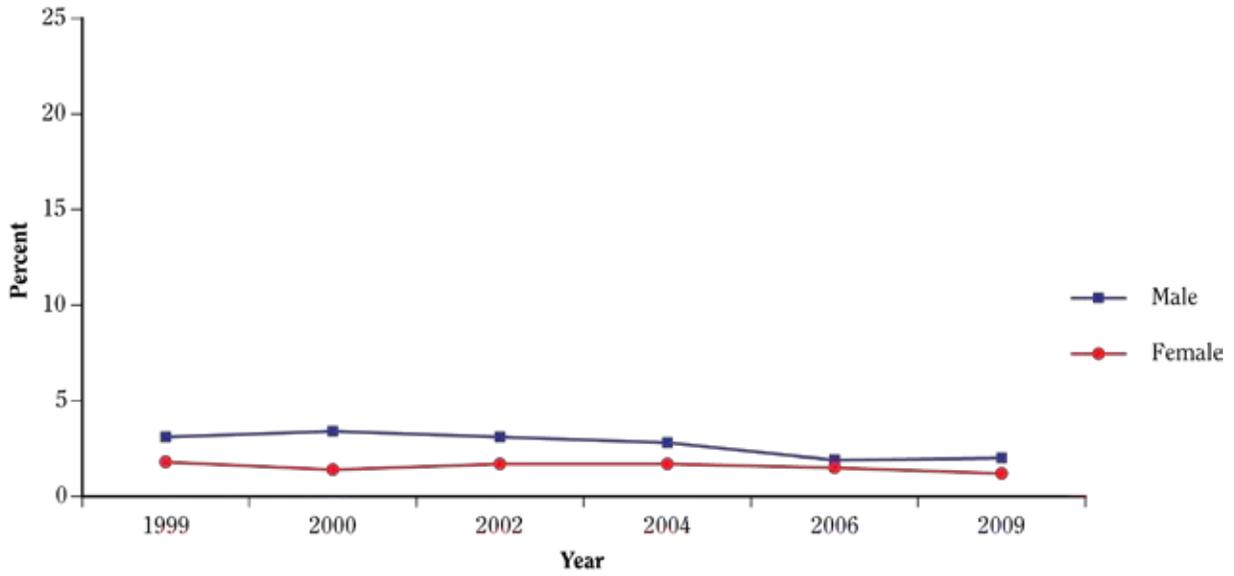


Source: 1997–2009 YRBS; Centers for Disease Control and Prevention, Division of Adolescent and School Health (unpublished data).

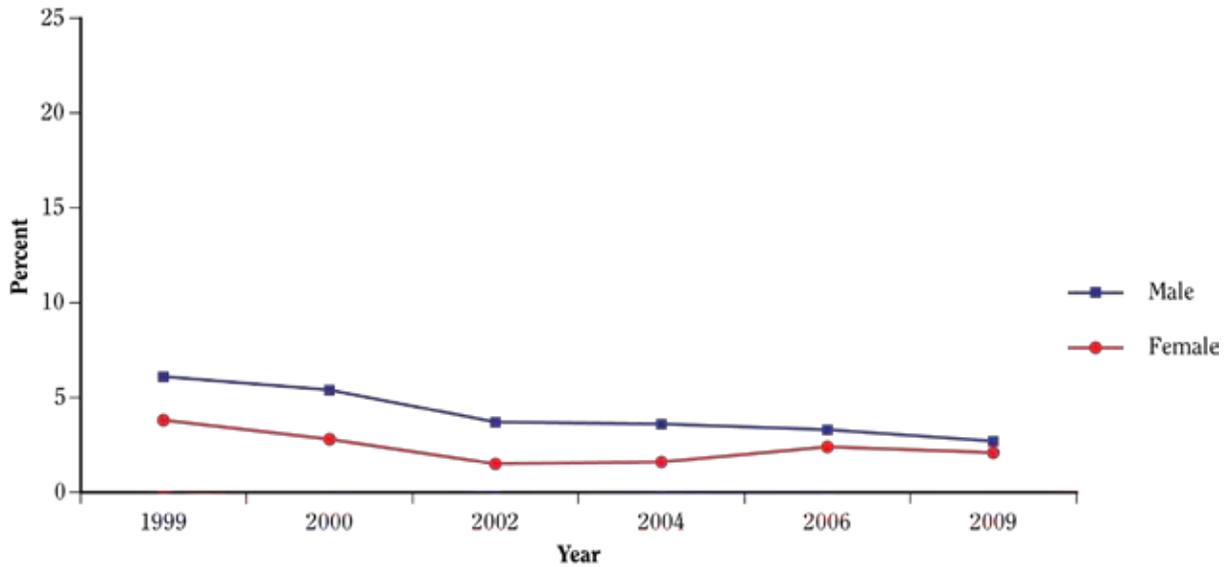
Figure 3.1.42 Trends in current use of bidis and kreteks among young people, by gender and by race/ethnicity; National Youth Tobacco Survey (NYTS) for 1999, 2000, 2002, 2004, 2006, and 2009; United States

Bidi use

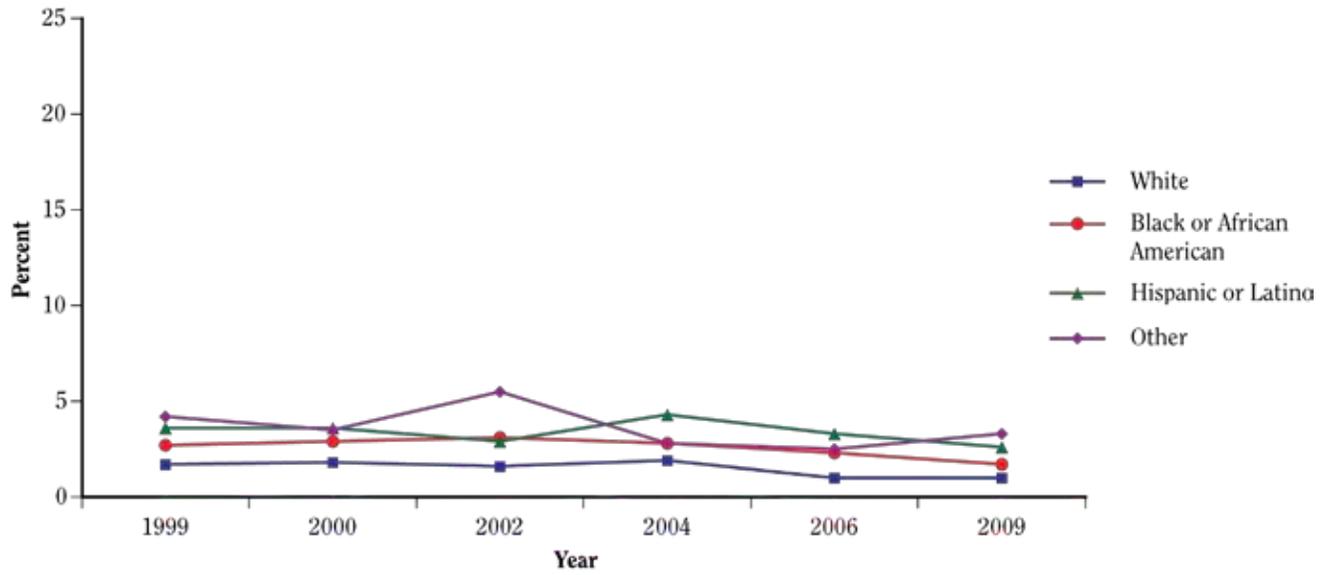
A. Gender, middle school



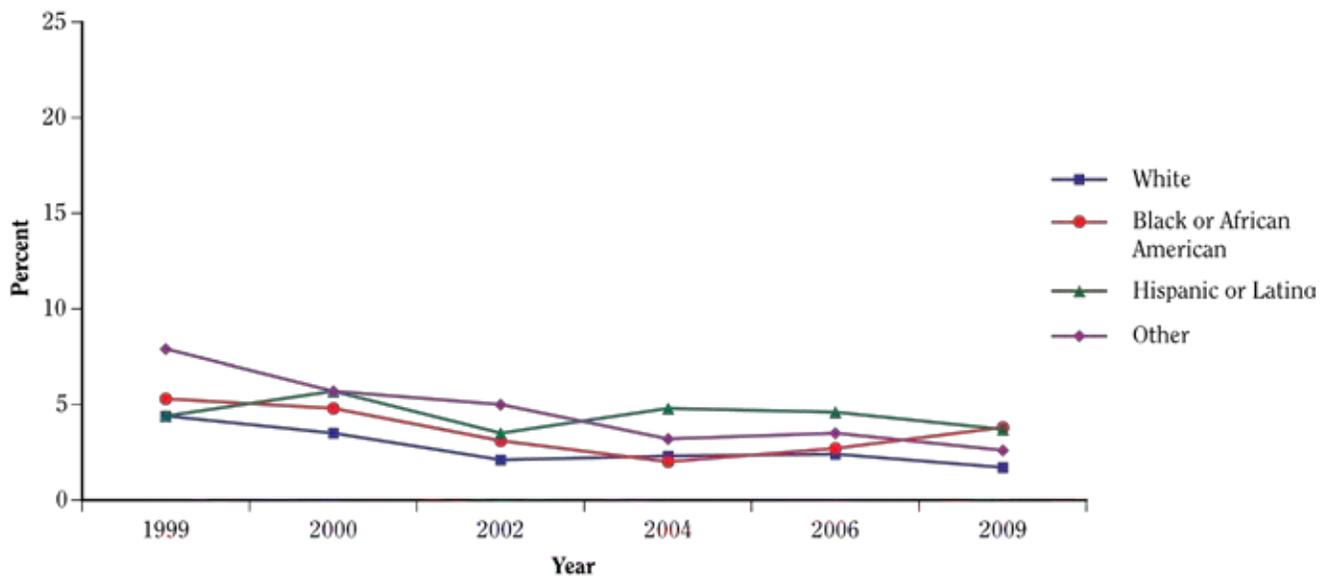
B. Gender, high school



C. Race/ethnicity, middle school

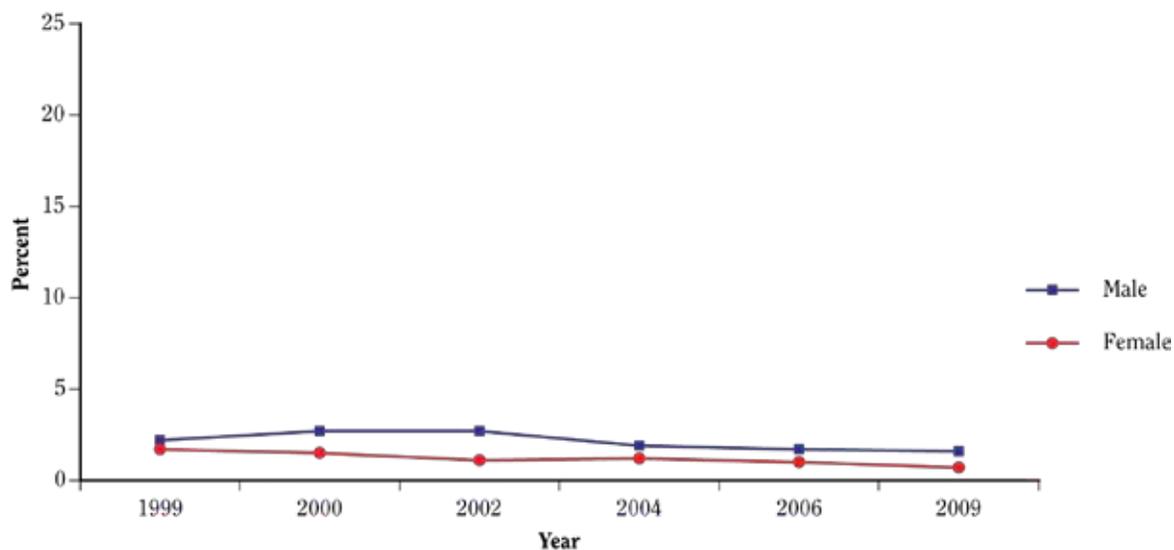


D. Race/ethnicity, high school

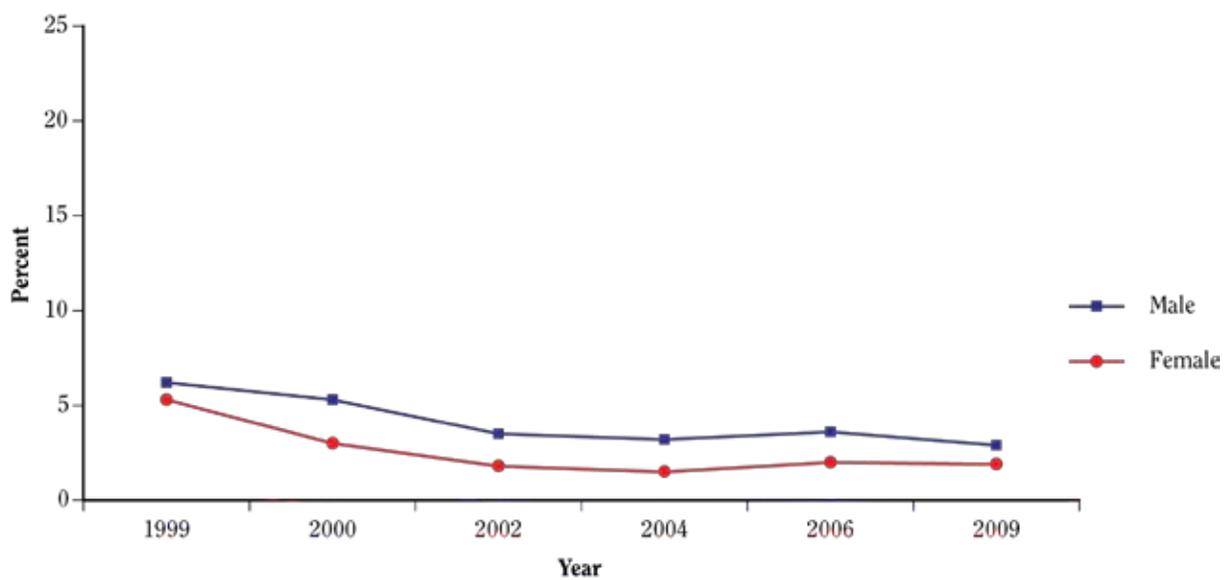


Kretek use

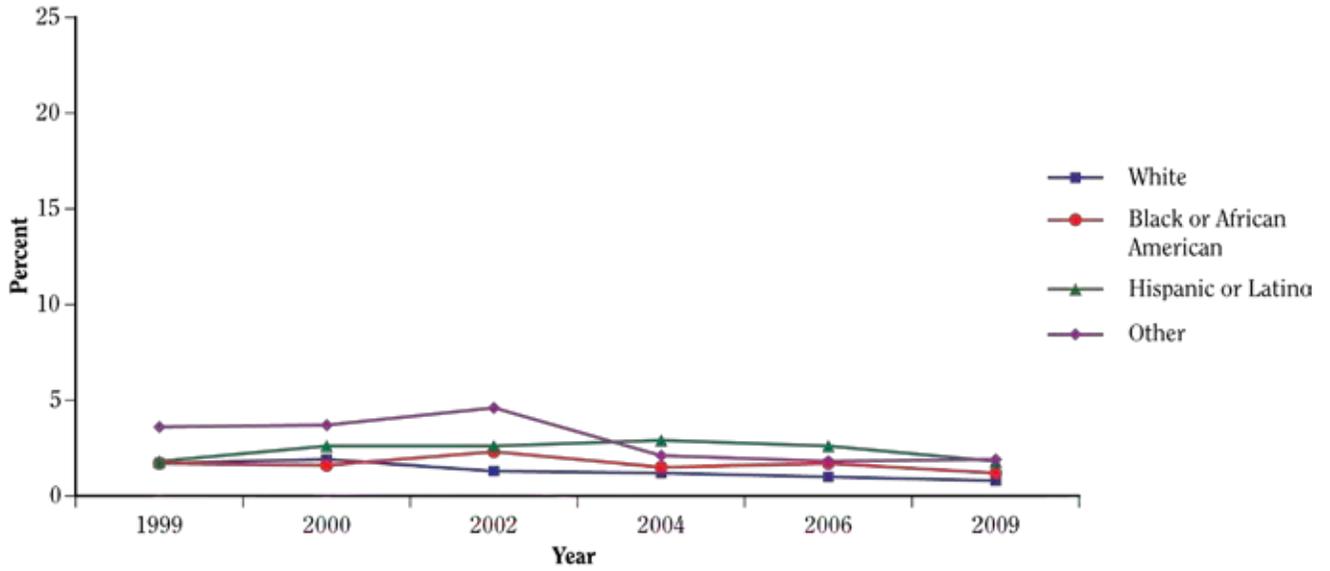
E. Gender, middle school



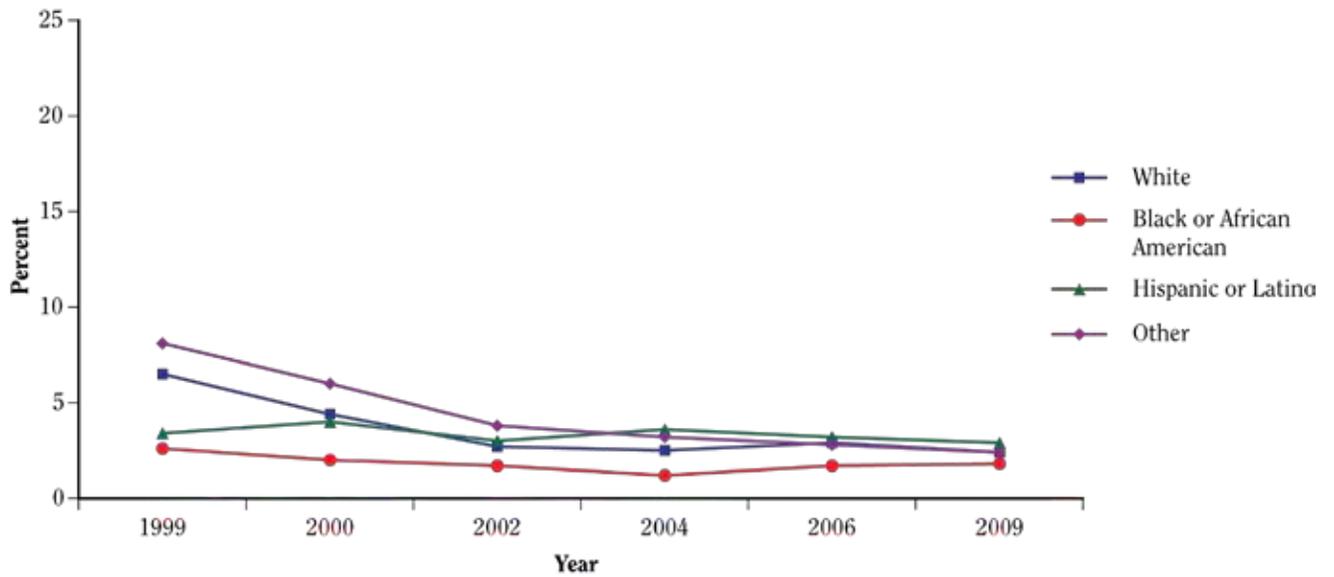
F. Gender, high school



G. Race/ethnicity, middle school



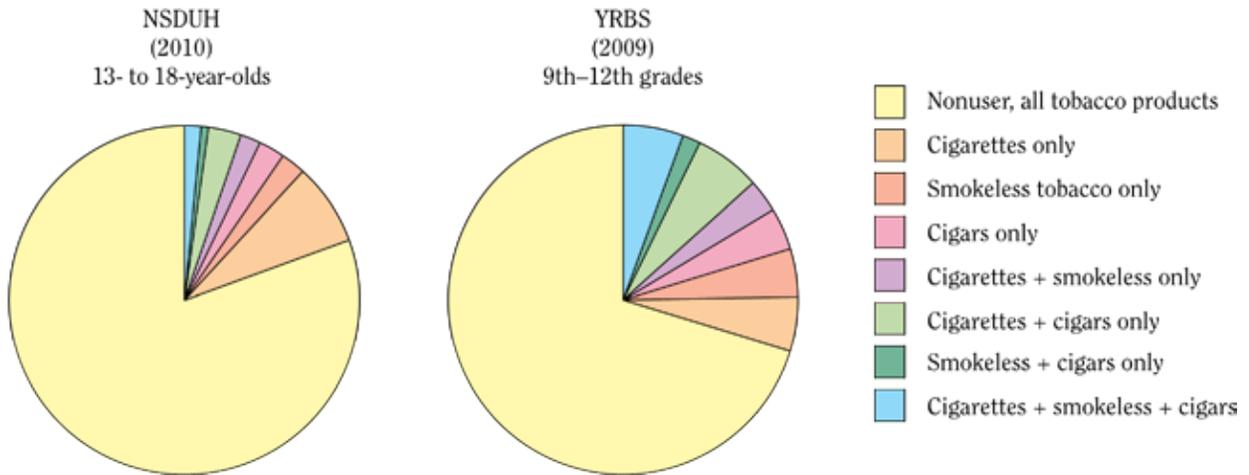
H. Race/ethnicity, high school



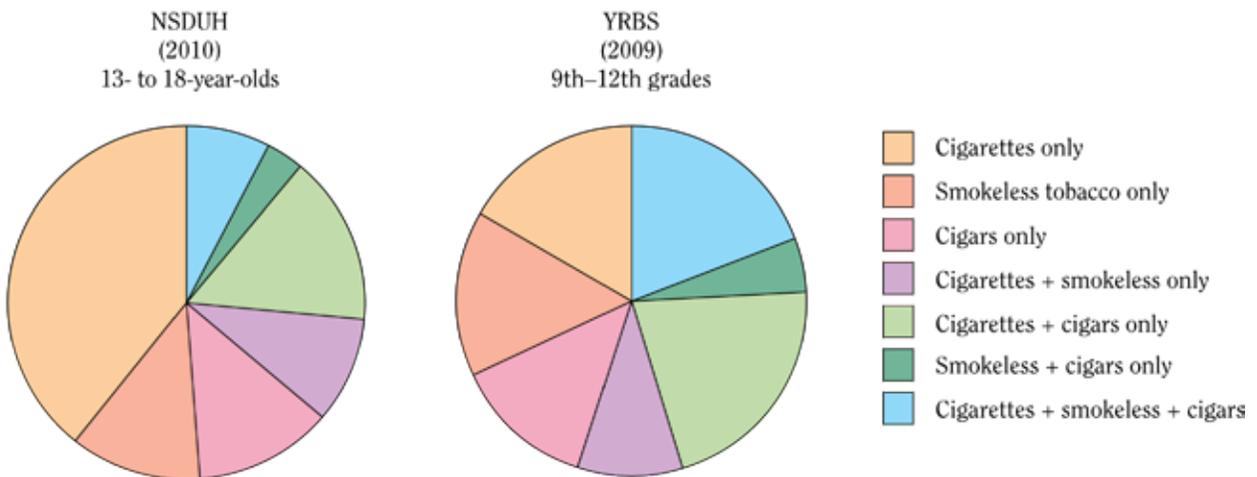
Source: 1999–2009 NYTS: Centers for Disease Control and Prevention, Division of Adolescent and School Health (unpublished data).

Figure 3.1.43 Prevalence of current use of multiple tobacco products among all males of high school age and only those males of high school age who report using tobacco; National Survey on Drug Use and Health (NSDUH) 2010 and National Youth Risk Behavior Survey (YRBS) 2009; United States

A. All males of high school age



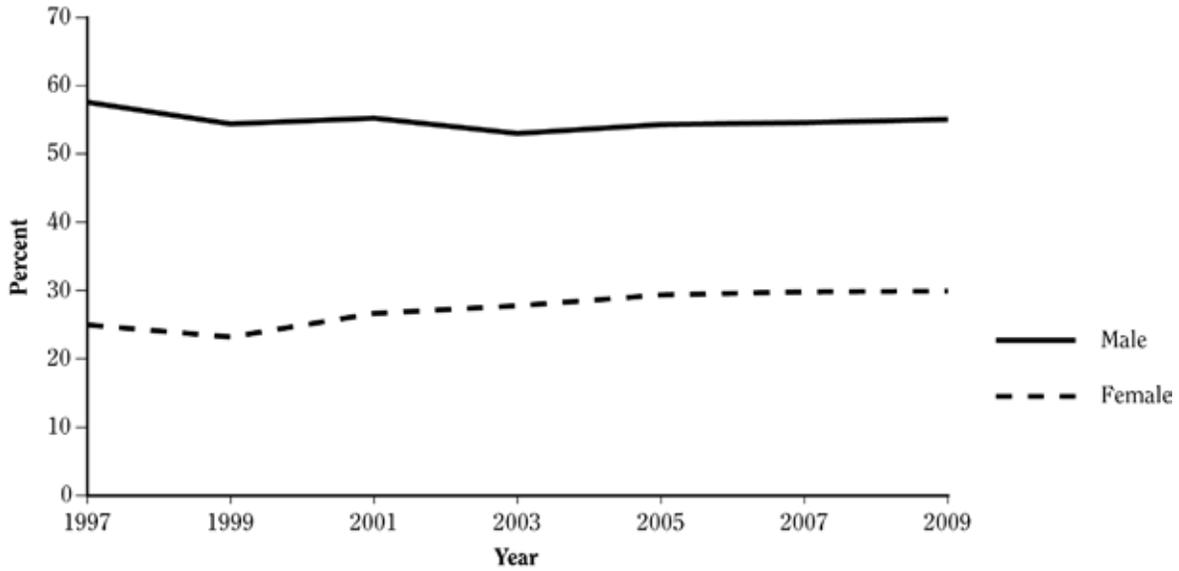
B. Males of high school age who report using tobacco



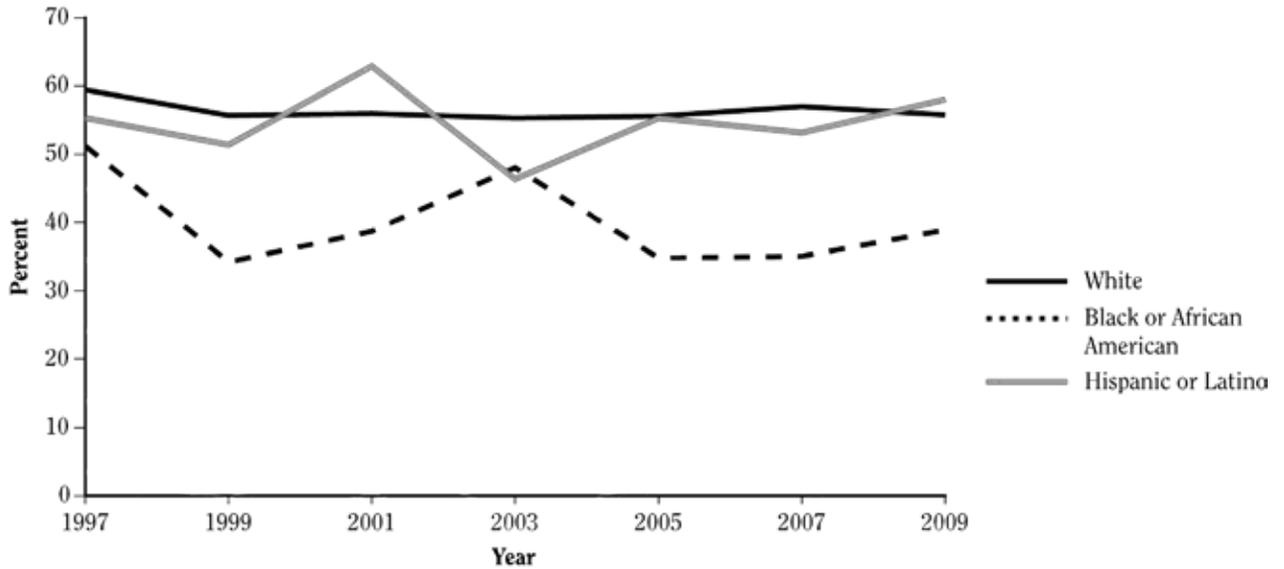
Source: 2010 NSDUH: Substance Abuse and Mental Health Services Administration (unpublished data); 2009 YRBS: Centers for Disease Control and Prevention, Division of Adolescent and School Health (unpublished data).

Figure 3.1.44 Trends in prevalence (%) of current use of two or more different tobacco products among students reporting any tobacco use, by gender and by race/ethnicity; National Youth Risk Behavior Survey (YRBS) 1997–2009; United States

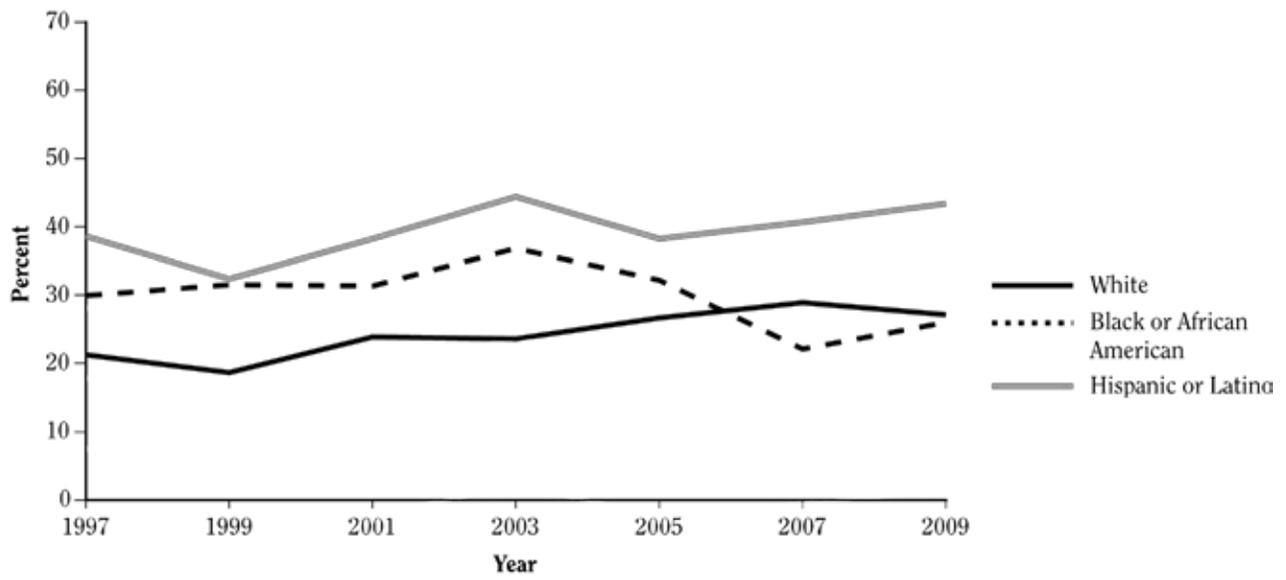
A. Gender



B. Males, by race/ethnicity



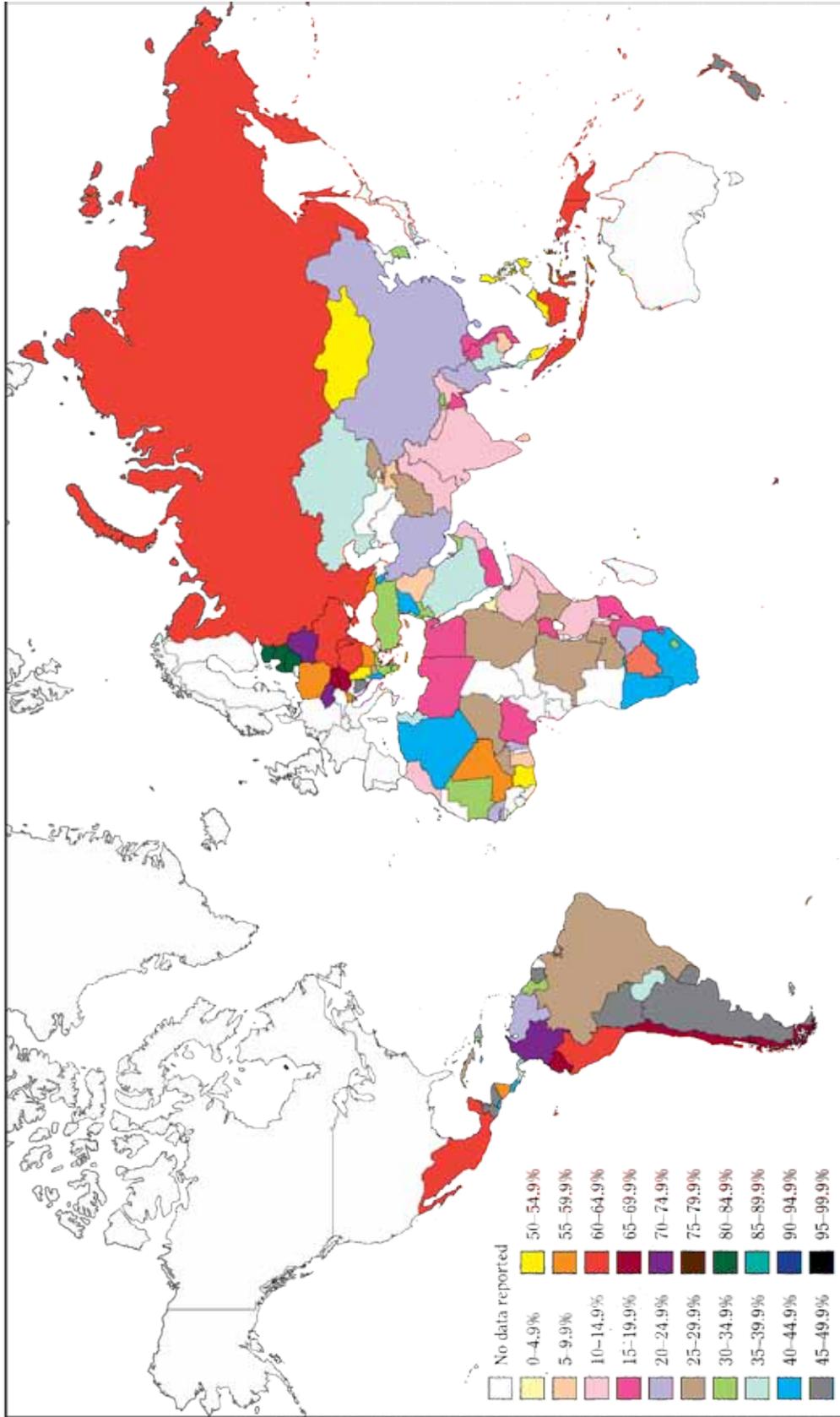
C. Females, by race/ethnicity



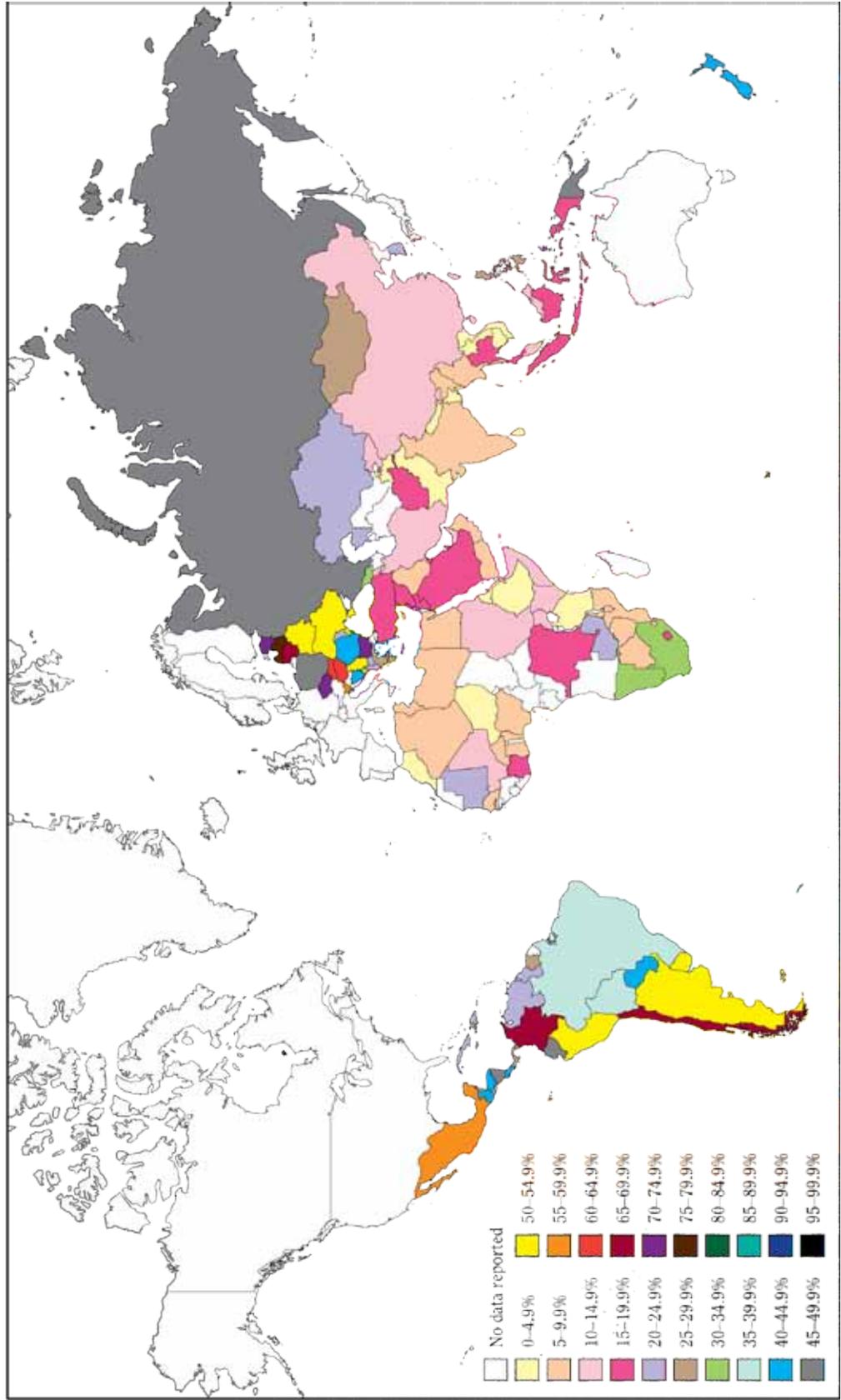
Source: 1997–2009 YRBS: Centers for Disease Control and Prevention, Division of Adolescent and School Health (unpublished data).

Figure 3.1.45 Percentage of 13- to 15-year-olds who have ever smoked cigarettes, by gender; Global Youth Tobacco Survey 1999–2007; worldwide

A. Boys



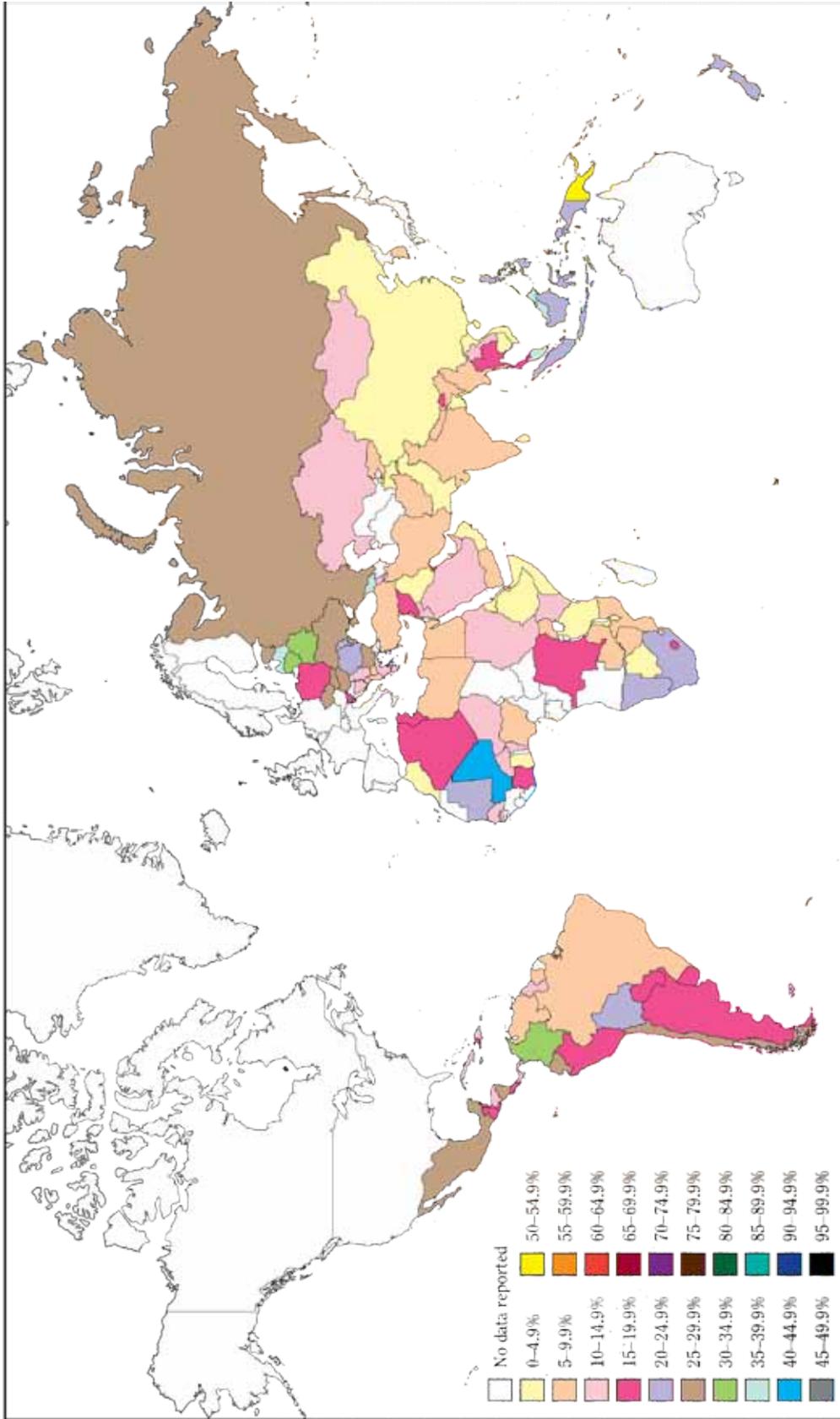
B. Girls



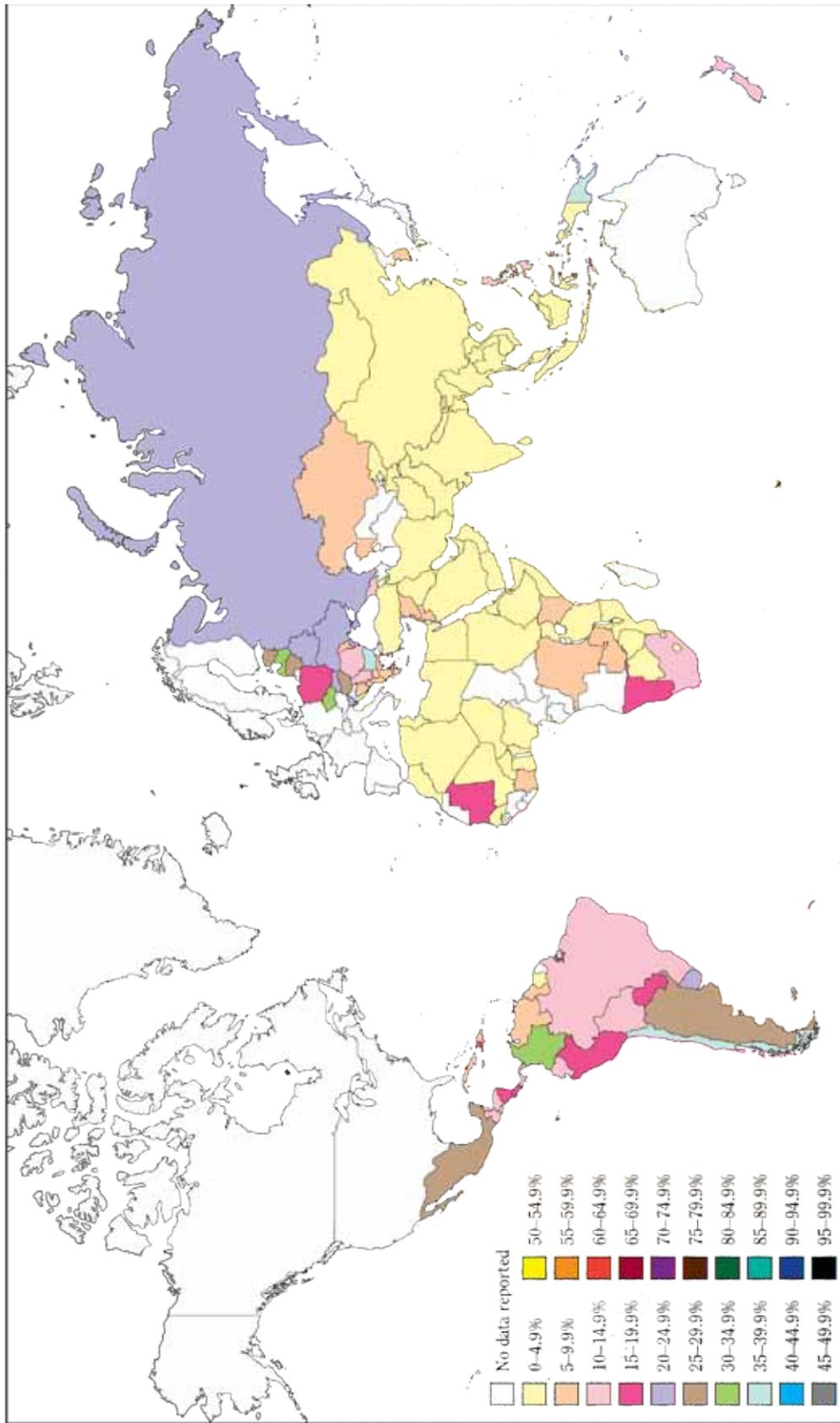
Source: Centers for Disease Control and Prevention 2010b.

Figure 3.1.46 Percentage of 13- to 15-year-olds who currently smoke cigarettes, by gender; Global Youth Tobacco Survey 1999–2007; worldwide

A. Boys



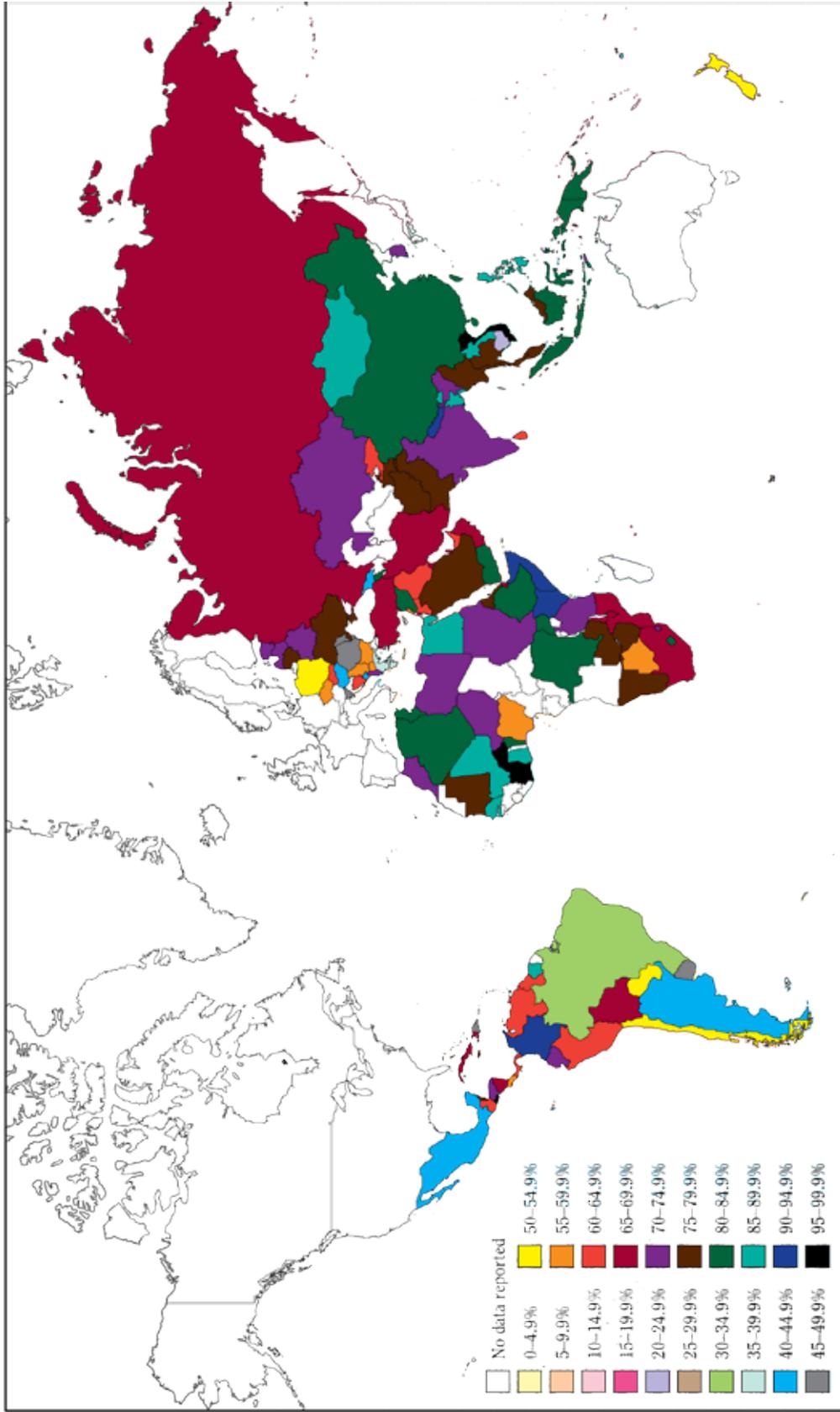
B. Girls



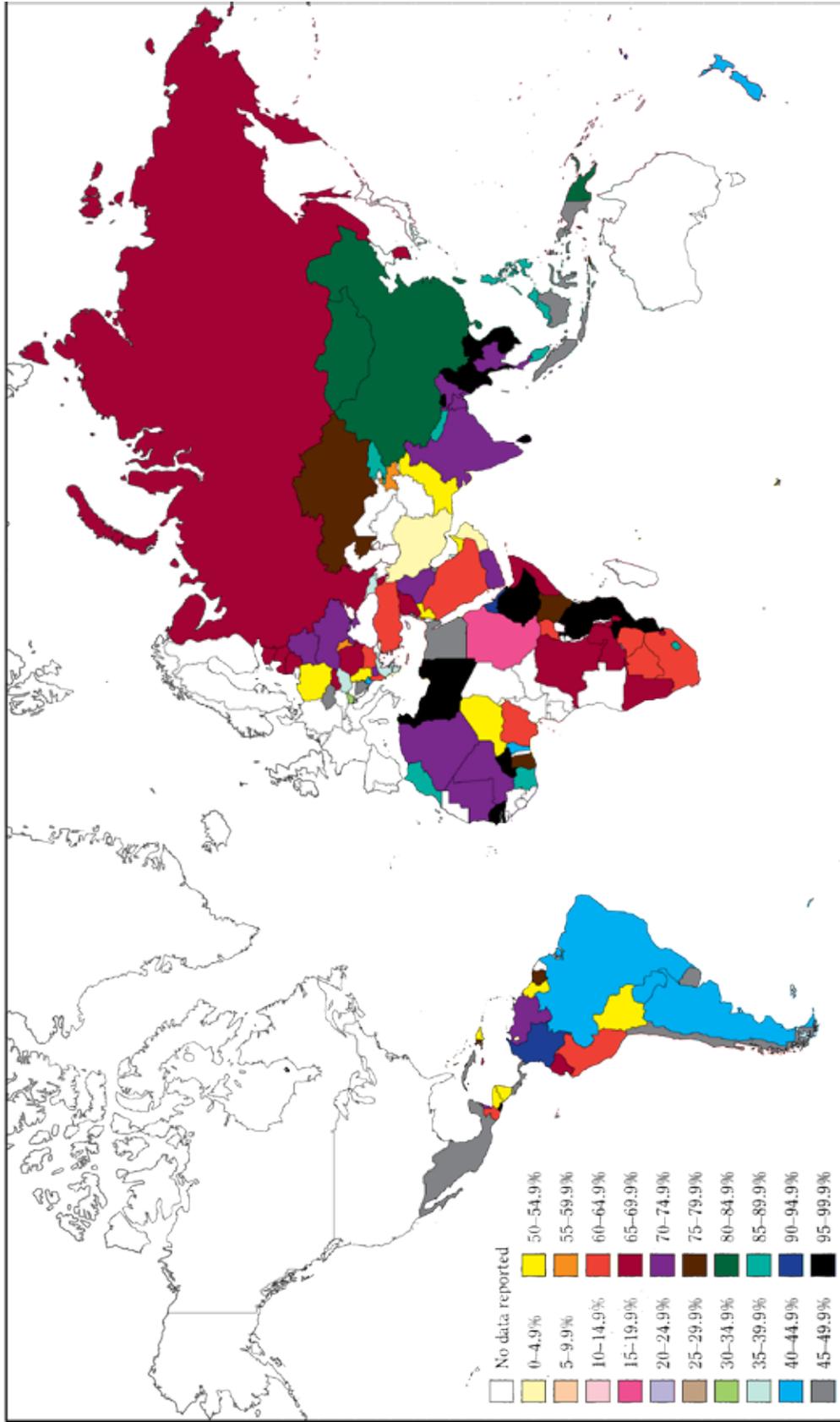
Source: Centers for Disease Control and Prevention 2010b.

Figure 3.1.47 Percentage of 13- to 15-year-olds who currently smoke and want to stop smoking, by gender; Global Youth Tobacco Survey 1999–2007, worldwide

A. Boys



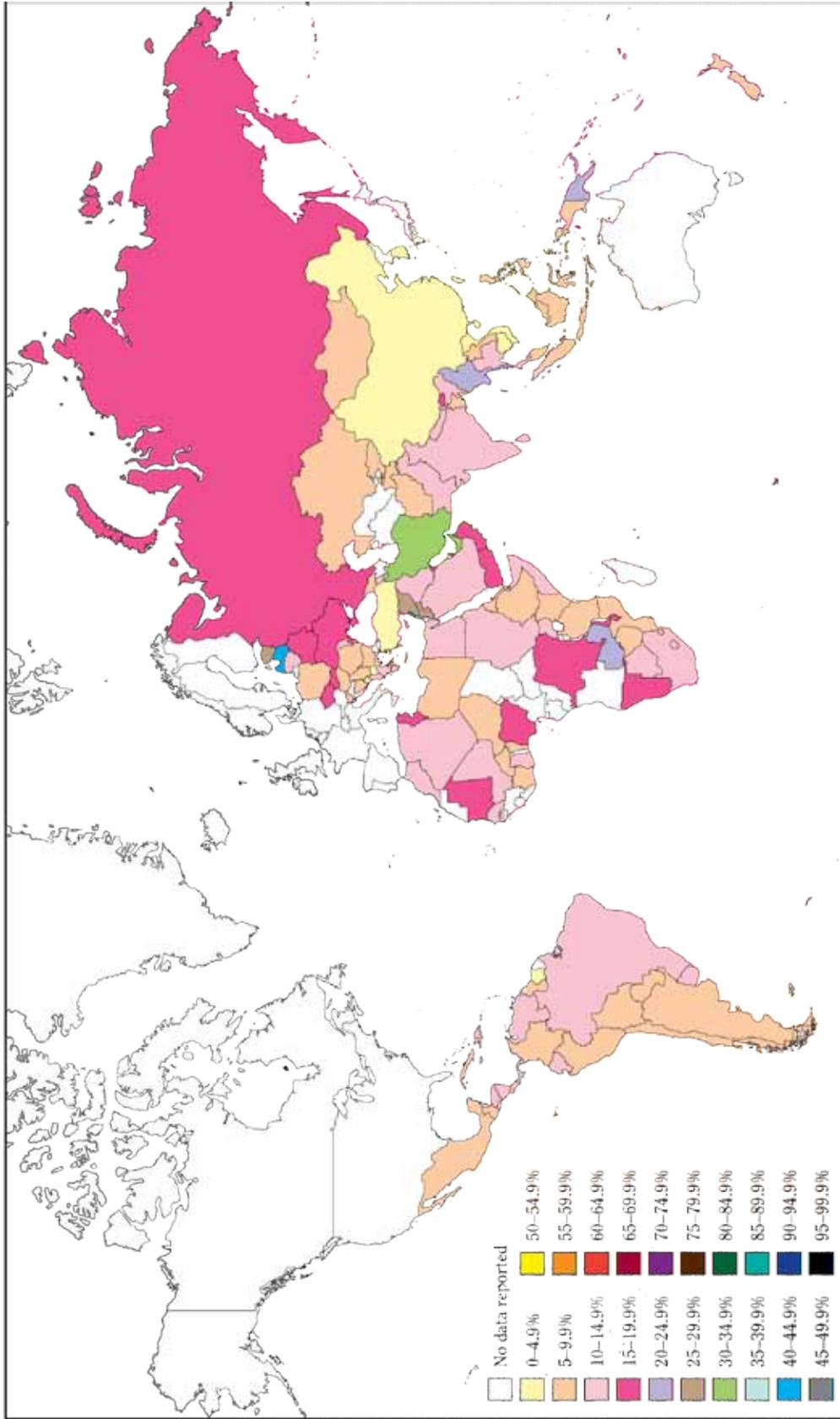
B. Girls



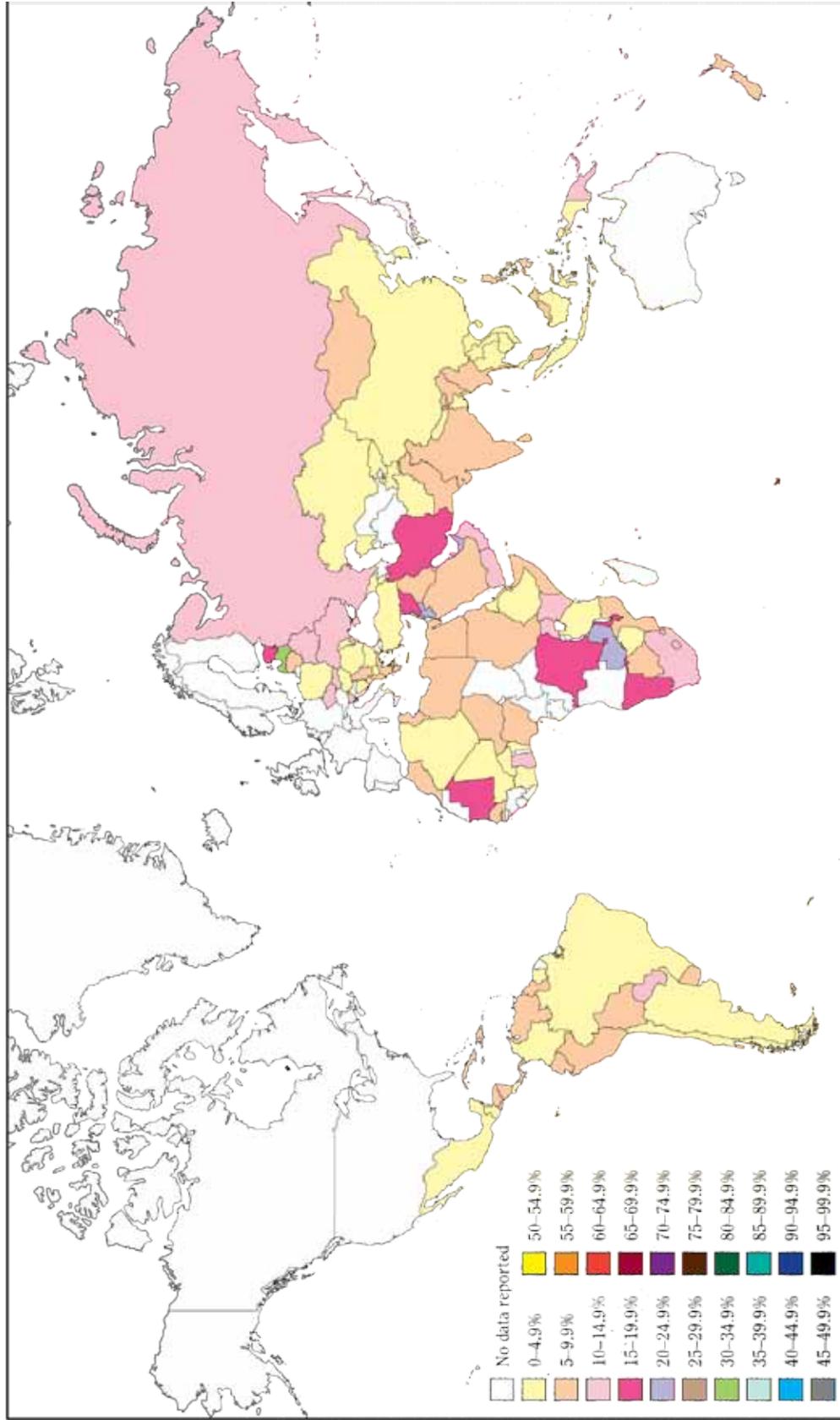
Source: Centers for Disease Control and Prevention 2010b.

Figure 3.1.48 Percentage of 13- to 15-year-olds who currently use other forms of tobacco than cigarettes, by gender; Global Youth Tobacco Survey 1999–2007; worldwide

A. Boys



B. Girls



Source: Centers for Disease Control and Prevention 2010b.

Table 3.2.1 Measures of tobacco use, by source, 2008 and 2009 questionnaires; United States and worldwide

Outcome measured and source	Question	Response options	Definition of outcome
Ever smoking			
NSDUH	Have you ever smoked part or all of a cigarette?	1. Yes 2. No	Ever smoker: chose Yes
MTF	Have you ever smoked cigarettes? (Forms 1–6)	1. Never 2. Once or twice 3. Occasionally but not regularly 4. Regularly in the past 5. Regularly now	Ever smoker: chose one of options 2–5
YRBS	Have you ever tried cigarette smoking, even one or two puffs?	A. Yes B. No	Ever smoker: chose Yes
NYTS	Have you ever tried cigarette smoking, even one or two puffs?	A. Yes B. No	Ever smoker: chose Yes
Current smoking			
NSDUH	During the past 30 days, have you smoked part or all of a cigarette?	1. Yes 2. No	Current smoker: chose Yes
GYTS	During the past 30 days (one month), on how many days did you smoke cigarettes?	A. 0 days B. 1 or 2 days C. 3–5 days D. 6–9 days E. 10–19 days F. 20–29 days G. All 30 days	Current smoker: smoked cigarettes on 1 or more of the past 30 days
MTF	How frequently have you smoked cigarettes during the past 30 days?	1. Not at all 2. Less than 1 cigarette per day 3. 1–5 cigarettes per day 4. About 1/2 pack per day 5. About 1 pack per day 6. About 1 1/2 packs per day 7. 2 packs or more per day	Current smoker: chose one of options 2–7
YRBS	During the past 30 days, on how many days did you smoke cigarettes?	A. 0 days B. 1 or 2 days C. 3–5 days D. 6–9 days E. 10–19 days F. 20–29 days G. All 30 days	Current smoker: chose one of options B–G
NYTS	During the past 30 days, on how many days did you smoke cigarettes?	A. 0 days B. 1 or 2 days C. 3 to 5 days D. 6 to 9 days E. 10 to 19 days F. 20 to 29 days G. All 30 days	Current smoker: chose one of options B–G

Table 3.2.1 Continued

Outcome measured and source	Question	Response options	Definition of outcome
Intensity of smoking			
NSDUH	During the past 30 days that is, since __, on how many days did you smoke part or all of a cigarette?	(Enter number of days.)	Frequent smoker: entered ≥ 20 days
NSDUH	On the days you smoked cigarettes during the past 30 days, how many cigarettes did you smoke per day, on average?	<ol style="list-style-type: none"> 1. Less than 1 cigarette per day 2. 1 cigarette per day 3. 2–5 cigarettes per day 4. 6–15 cigarettes per day (about 1/2 pack) 5. 16–25 cigarettes per day (about 1 pack) 6. 26–35 cigarettes per day (about 1 1/2 packs) 7. More than 35 cigarettes per day (about 2 packs or more) 	Heavy smoker: chose one of options 4–7
MTF	How frequently have you smoked cigarettes during the past 30 days?	<ol style="list-style-type: none"> 1. Not at all 2. Less than 1 cigarette per day 3. 1–5 cigarettes per day 4. About 1/2 pack per day 5. About 1 pack per day 6. About 1 1/2 packs per day 7. 2 packs or more per day 	Heavy smoker: chose one of options 4–7
YRBS	During the past 30 days, on how many days did you smoke cigarettes?	<ol style="list-style-type: none"> A. 0 days B. 1 or 2 days C. 3–5 days D. 6–9 days E. 10–19 days F. 20–29 days G. All 30 days 	Frequent smoker: chose option F or G
	During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?	<ol style="list-style-type: none"> A. I did not smoke cigarettes during the past 30 days B. Less than 1 cigarette per day C. 1 cigarette per day D. 2–5 cigarettes per day E. 6–10 cigarettes per day F. 11–20 cigarettes per day G. More than 20 cigarettes per day 	Frequent smoker: chose option F or G
NYTS	During the past 30 days, on how many days did you smoke cigarettes?	<ol style="list-style-type: none"> A. 0 days B. 1 or 2 days C. 3 to 5 days D. 6 to 9 days E. 10 to 19 days F. 20 to 29 days G. All 30 days 	Frequent smoker: chose option F or G

Table 3.2.1 Continued

Outcome measured and source	Question	Response options	Definition of outcome
	During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day	A. I did not smoke cigarettes during the past 30 days B. Less than 1 cigarette per day C. 1 cigarette per day D. 2 to 5 cigarettes per day E. 6 to 10 cigarettes per day F. 11 to 20 cigarettes per day G. More than 20 cigarettes per day	Heavy smoker: chose option F or G
Initiation of smoking			
NSDUH	How old were you the first time you smoked part or all of a cigarette?	(Enter age)	Age of initiation
	How old were you when you first started smoking cigarettes every day?	(Enter age)	Age of initiation
MTF	When (if ever) did you FIRST do each of the following things?		
	B101M: Smoke your first cigarette?	8. Never 1. Grade 6 or below 2. Grade 7 3. Grade 8 4. Grade 9 (Freshman) 5. Grade 10 (Sophomore) 6. Grade 11 (Junior) 7. Grade 12 (Senior)	Grade
	B101A: Smoke cigarettes on a daily basis?	8. Never 1. Grade 6 or below 2. Grade 7 3. Grade 8 4. Grade 9 (Freshman) 5. Grade 10 (Sophomore) 6. Grade 11 (Junior) 7. Grade 12 (Senior)	Grade
YRBS	How old were you when you smoked a whole cigarette for the first time?	A. I have never smoked a whole cigarette B. 8 years old or younger C. 9 or 10 years old D. 11 or 12 years old E. 13 or 14 years old F. 15 or 16 years old G. 17 years old or older	Age
NHIS	How old were you when you FIRST started to smoke fairly regularly?	1. Enter age if between 6 and 84 2. Enter 6 if less than 6 years old 3. Enter 85 if 85 years old or older 4. Enter 95 if 95 years old or older 5. Never smoked regularly 6. Refused 7. Don't know	Age

Table 3.2.1 Continued

Outcome measured and source	Question	Response options	Definition of outcome
NYTS	How old were you when you smoked a whole cigarette for the first time?	A. I have never smoked a whole cigarette B. 8 years old or younger C. 9 D. 10 E. 11 F. 12 G. 13 H. 14 I. 15 J. 16 K. 17 years old or older	Age
Brand preference: cigarettes			
NSDUH	During the past 30 days, what brand of cigarettes did you smoke most often?	1. American Spirit 2. Basic 3. Benson & Hedges 4. Camel 5. Capri 6. Carlton 7. Doral 8. GPC 9. Kent 10. Kool 11. Liggett Select 12. Marlboro 13. Merit 14. Misty 15. Monarch 16. More 17. Newport 18. Pall Mall 19. Parliament 20. Salem 21. USA Gold 22. Vantage 23. Viceroy 24. Virginia Slims 25. Winston 26. A brand not on this list	Brand
	During the past 30 days, what type of cigarettes did you smoke most often?	1. Lights 2. Ultra lights 3. Mediums 4. Full flavor	Type
	Were the cigarettes you smoked during the past 30 days menthol?	1. Yes 2. No	Type

Table 3.2.1 Continued

Outcome measured and source	Question	Response options	Definition of outcome
Attempts to quit smoking			
MTF	Have you ever tried to stop smoking and found you could not?	1. Yes 2. No	Yes
	How many times (if any) have you tried to stop smoking?	1. None 2. Once 3. Twice 4. 3 to 5 times 5. 6 to 9 times 6. 10 or more times	Once or more
YRBS	During the past 12 months, did you ever try to quit smoking cigarettes?	A. I did not smoke during the past 12 months B. Yes C. No	Yes
Ever use of smokeless tobacco			
NSDUH	Have you ever used snuff, even once?	1. Yes 2. No	Ever use of smokeless tobacco: chose Yes
	Have you ever used chewing tobacco, even once?	1. Yes 2. No	Ever use of smokeless tobacco: chose Yes
MTF	Have you ever taken or used smokeless tobacco (snuff, plug, dipping tobacco, chewing tobacco)?	1. Never 2. Once or twice 3. Occasionally but not regularly 4. Regularly in the past 5. Regularly now	Ever use of smokeless tobacco: chose one of options 2–5
NYTS	Have you ever used chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?	A. Yes B. No	Ever use of smokeless tobacco: chose Yes
Current use of smokeless tobacco			
NSDUH	During the past 30 days, have you used snuff, even once?	1. Yes 2. No	Current use of smokeless tobacco: chose Yes
MTF	How frequently have you taken smokeless tobacco during the past 30 days?	1. Not at all 2. Once or twice 3. Once or twice per week 4. Three to five times per week 5. About once a day 6. More than once a day	Current use of smokeless tobacco: use: chose one of options 2–6
YRBS	During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip...?	A. 0 days B. 1 or 2 days C. 3 to 5 days D. 6 to 9 days E. 10 to 19 days F. 20 to 29 days G. All 30 days	Current use of smokeless tobacco: chose one of options B–G

Table 3.2.1 Continued

Outcome measured and source	Question	Response options	Definition of outcome
NYTS	During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?	A. 0 days B. 1 or 2 days C. 3 to 5 days D. 6 to 9 days E. 10 to 19 days F. 20 to 29 days G. All 30 days	Current smokeless tobacco use: chose one of options B–G
Initiation of smokeless tobacco			
NSDUH	How old were you the first time you used snuff?	(Enter age)	Age
	How old were you the first time you used chewing tobacco?	(Enter age)	Age
MTF	When (if ever) did you FIRST do each of the following things: try smokeless tobacco (snuff, plug, or chewing tobacco)? Don't count anything you took because a doctor told you to.	8. Never 1. Grade 6 or below 2. Grade 7 3. Grade 8 4. Grade 9 (Freshman) 5. Grade 10 (Sophomore) 6. Grade 11 (Junior) 7. Grade 12 (Senior)	Grade
GYTS	How old were you when you used chewing tobacco, snuff, or dip for the first time?	a. I have never used chewing tobacco, snuff, or dip b. 7 years old or younger c. 8 or 9 years old d. 10 or 11 years old e. 12 or 13 years old f. 14 or 15 years old g. 16 years old or older	Age
NYTS	How old were you when you used chewing tobacco, snuff, or dip for the first time?	A. I have never used chewing tobacco, snuff, or dip B. 8 years old or younger C. 9 D. 10 E. 11 F. 12 G. 13 H. 14 I. 15 J. 16 K. 17 years old or older	Age

Table 3.2.1 Continued

Outcome measured and source	Question	Response options	Definition of outcome
Brand preference: smokeless tobacco			
NSDUH	During the past 30 days, what brand of snuff did you use most often?	<ol style="list-style-type: none"> 1. Copenhagen 2. Cougar 3. Gold River 4. Grizzly 5. Happy Days 6. Hawken 7. Kodiak 8. Red Seal 9. Redwood 10. Rooster 11. Silver Creek 12. Skoal 13. Timber Wolf 14. A brand not on this list 	Brand
	During the past 30 days, what brand of chewing tobacco did you use most often?	<ol style="list-style-type: none"> 1. Beech-Nut 2. Chattanooga Chew 3. Day's Work 4. Granger 5. H.B. Scott 6. Levi Garrett 7. Red Fox 8. Redman 9. Taylor's Pride 10. Totems 11. Work Horse 12. A brand not on this list 	Type
Ever use of a cigar			
NSDUH	Have you ever smoked part or all of a cigar? By cigars we mean any kind, including big cigars, cigarillos, and even little cigars that look like cigarettes	<ol style="list-style-type: none"> 1. Yes 2. No 	Ever use of a cigar: chose Yes
NYTS	Have you ever tried smoking cigars, cigarillos, or little cigars, even one or two puffs?	<ol style="list-style-type: none"> A. Yes B. No 	Ever cigar use: chose Yes
Current cigar use			
NSDUH	During the past 30 days, have you smoked part or all of any type of cigar?	<ol style="list-style-type: none"> 1. Yes 2. No 	Current cigar use: chose Yes
YRBS	During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?	<ol style="list-style-type: none"> A. 0 days B. 1 or 2 days C. 3 to 5 days D. 6 to 9 days E. 10 to 19 days F. 20 to 29 days G. All 30 days 	Current cigar use: chose one of options B–G

Table 3.2.1 Continued

Outcome measured and source	Question	Response options	Definition of outcome
NYTS	During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?	A. 0 days B. 1 or 2 days C. 3 to 5 days D. 6 to 9 days E. 10 to 19 days F. 20 to 29 days G. All 30 days	Current cigar use: chose one of options B–G
Initiation of cigar use			
GYTS	How old were you when you smoked a whole cigar, cigarillo, or little cigar for the first time?	a. I have never smoked a cigar, cigarillo, or little cigar b. 7 years old or younger c. 8 or 9 years old d. 10 or 11 years old e. 12 or 13 years old f. 14 or 15 years old g. 16 years old or older	Age
NSDUH	How old were you the first time you smoked part or all of any type of cigar?	(Enter age.)	Age
YRBS	During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?	A. 0 days B. 1 or 2 days C. 3 to 5 days D. 6 to 9 days E. 10 to 19 days F. 20 to 29 days G. All 30 days	Current cigar use: chose one of options B–G
NYTS	How old were you when you smoked a cigar, cigarillo, or little cigar for the first time?	A. I have never smoked a cigar, cigarillo, or little cigar B. 8 years old or younger C. 9 D. 10 E. 11 F. 12 G. 13 H. 14 I. 15 J. 16 K. 17 years old or older	Age

Table 3.2.1 Continued

Outcome measured and source	Question	Response options	Definition of outcome
Brand preference: cigars			
NSDUH	During the past 30 days, what brand of cigar did you smoke most often?	<ol style="list-style-type: none"> 1. Al Capone 2. Antonio y Cleopatra 3. Arturo Fuente 4. Backwoods 5. Black & Mild 6. Blackstone 7. Captain Black 8. Cohiba 9. Cuesta-Rey 10. Dutch Masters 11. El Producto 12. Garcia y Vega 13. Havatampa 14. King Edward 15. La Corona 16. Little Nippers 17. Macanudos 18. Montecristo 19. Muriel 20. Partagas 21. Phillies 22. Punch 23. Romeo y Julieta 24. Swisher Sweets 25. Thompson 26. Tijuana Smalls 27. White Owl 28. Winchester 29. A brand not on this list 	Brand
Ever bidi use			
NYTS	Have you ever tried smoking any of the following:	<ol style="list-style-type: none"> A. Bidis B. Kreteks C. I have tried both bidis and kreteks D. I have never smoked bidis or kreteks 	Ever bidi use: chose one of options A or C
Current bidi use			
NYTS	During the past 30 days, on how many days did you smoke bidis?	<ol style="list-style-type: none"> a. 0 days b. 1 or 2 days c. 3 to 5 days d. 6 to 9 days e. 10 to 19 days f. 20 to 29 days g. All 30 days 	Current bidi use: chose one of options b–g
Ever kretek use			
NYTS	Have you ever tried smoking any of the following:	<ol style="list-style-type: none"> A. Bidis B. Kreteks C. I have tried both bidis and kreteks D. I have never smoked bidis or kreteks 	Ever kretek use: chose one of options B or C

Table 3.2.1 Continued

Outcome measured and source	Question	Response options	Definition of outcome
Current kretek use NYTS	During the past 30 days, on how many days did you smoke kreteks?	a. 0 days b. 1 or 2 days c. 3 to 5 days d. 6 to 9 days e. 10 to 19 days f. 20 to 29 days g. All 30 days	Current kretek use: chose one of options b–g

Source: CDC 2008c, 2009c,d; Johnston et al. 2010; RTI International 2009.

Note: This table is compiled from the 2008 GYTS questionnaire and the 2009 questionnaires of the MTF, NHIS, NSDUH, NYTS, and YRBS. **GYTS** = Global Youth Tobacco Survey; **MTF** = Monitoring the Future; **NHIS** = National Health Interview Survey; **NSDUH** = National Survey on Drug Use & Health; **NYTS** = National Youth Tobacco Survey; **YRBS** = Youth Risk Behavior Survey.

Data Table for Figure 3.1.1—Percentage who currently smoke cigarettes, by age group and state; NSDUH, 2006–2010

State	A. 12-17 years of age (%)	B. 18-25 years of age (%)	C. 26 years of age and older (%)
Alabama	10.7	38.7	28.7
Alaska	9.5	38.8	27.4
Arizona	10.3	33.4	23.8
Arkansas	12.6	43.3	30.0
California	6.8	28.6	18.6
Colorado	10.3	38.9	22.6
Connecticut	9.1	37.5	19.6
Delaware	9.5	38.1	24.4
District of Columbia	8.6	31.7	24.7
Florida	8.2	33.2	23.4
Georgia	10.3	35.1	23.3
Hawaii	8.2	34.3	19.8
Idaho	8.7	33.2	22.0
Illinois	9.6	38.8	24.4
Indiana	10.6	42.5	26.3
Iowa	11.3	36.2	25.7
Kansas	11.0	39.4	24.0
Kentucky	14.1	46.7	30.6
Louisiana	10.0	37.6	27.7
Maine	8.7	41.8	25.4
Maryland	7.6	31.2	20.8
Massachusetts	8.8	35.3	18.0
Michigan	10.1	40.7	25.8
Minnesota	9.8	43.7	23.3
Mississippi	9.3	38.3	26.4
Missouri	11.8	40.6	28.5
Montana	12.7	38.3	23.4
Nebraska	9.3	38.2	24.7
Nevada	9.5	34.1	27.8
New Hampshire	10.2	40.6	22.7
New Jersey	7.8	36.0	21.1
New Mexico	11.9	39.1	20.8
New York	8.0	33.0	21.4
North Carolina	9.3	39.5	25.1
North Dakota	10.9	37.8	22.7
Ohio	12.0	42.5	26.9
Oklahoma	11.7	42.4	30.1
Oregon	10.4	34.6	23.1
Pennsylvania	10.2	37.5	24.6
Rhode Island	9.3	39.1	23.0

Data Table for Figure 3.1.1 Continued

State	A. 12-17 years of age (%)	B. 18-25 years of age (%)	C. 26 years of age and older (%)
South Carolina	10.7	41.1	28.9
South Dakota	11.7	39.2	24.4
Tennessee	10.8	41.6	30.4
Texas	8.1	33.7	24.1
Utah	5.4	20.6	14.4
Vermont	9.3	38.7	21.0
Virginia	10.4	36.4	23.2
Washington	9.9	35.3	21.9
West Virginia	11.5	46.7	31.3
Wisconsin	10.3	40.5	26.4
Wyoming	15.8	41.6	26.9

Data Table for Figure 3.1.2—Percentage who currently smoke cigarettes, by age group, state and gender; NSDUH, 2006–2010

State	12-17 years of age (%)		18-25 years of age (%)		26 years of age and older (%)	
	A. Males	B. Females	C. Males	D. Females	E. Males	F. Females
Alabama	11.2	10.3	43.4	34.2	32.3	25.5
Alaska	9.8	9.1	41.4	35.8	29.4	25.3
Arizona	9.4	11.3	36.1	30.5	29.0	18.9
Arkansas	12.7	12.5	48.5	38.1	33.8	26.6
California	7.1	6.5	34.6	22.4	21.8	15.5
Colorado	9.9	10.7	41.6	36.1	24.2	21.0
Connecticut	9.6	8.6	39.9	35.1	21.5	18.0
Delaware	10.0	8.9	40.5	35.8	27.6	21.5
District of Columbia	9.8	7.4	39.6	25.2	27.7	22.2
Florida	8.6	7.7	38.3	28.0	25.9	21.2
Georgia	10.6	10.0	39.3	30.9	26.6	20.2
Hawaii	7.1	9.5	38.6	29.7	24.1	15.9
Idaho	10.1	7.2	36.6	29.8	24.6	19.5
Illinois	10.6	8.7	44.1	33.4	26.7	22.3
Indiana	10.4	10.9	46.1	38.8	28.5	24.2
Iowa	11.0	11.7	37.6	34.8	28.3	23.4
Kansas	9.6	12.5	41.2	37.4	26.6	21.6
Kentucky	14.4	13.9	46.9	46.4	30.3	30.8
Louisiana	8.6	11.5	41.3	34.1	29.0	26.5
Maine	9.6	7.8	43.1	40.5	28.3	22.9
Maryland	7.5	7.7	33.3	29.1	22.1	19.6
Massachusetts	9.2	8.4	36.3	34.3	18.7	17.3
Michigan	10.1	10.0	43.8	37.5	28.2	23.6
Minnesota	9.0	10.6	47.4	40.0	25.0	21.7
Mississippi	9.4	9.2	45.3	31.4	30.5	22.9
Missouri	11.0	12.7	43.9	37.3	30.4	26.7
Montana	11.4	14.2	41.6	34.7	24.6	22.3
Nebraska	9.1	9.6	43.3	33.0	26.5	23.1
Nevada	10.7	8.2	36.8	31.2	30.5	25.2
New Hampshire	9.7	10.6	45.5	35.7	22.7	22.7
New Jersey	8.2	7.3	37.5	34.5	23.8	18.6
New Mexico	13.1	10.7	45.4	32.9	25.3	16.5
New York	7.4	8.6	35.9	30.0	24.2	18.8
North Carolina	9.6	9.0	44.6	34.5	28.7	22.0
North Dakota	9.9	12.0	41.0	34.3	25.6	19.9
Ohio	11.1	12.9	44.4	40.6	28.7	25.2
Oklahoma	11.8	11.5	47.0	37.7	34.2	26.4

Data Table for Figure 3.1.2 Continued

State	12-17 years of age (%)		18-25 years of age (%)		26 years of age and older (%)	
	A. Males	B. Females	C. Males	D. Females	E. Males	F. Females
Oregon	8.6	12.4	37.3	31.8	24.9	21.4
Pennsylvania	10.7	9.7	41.3	33.6	26.1	23.3
Rhode Island	8.0	10.7	41.2	37.1	24.7	21.4
South Carolina	11.2	10.1	45.9	36.4	32.9	25.3
South Dakota	10.9	12.4	39.3	39.1	24.9	24.0
Tennessee	10.6	10.9	46.1	37.2	34.6	26.5
Texas	8.9	7.2	39.5	27.8	27.5	20.8
Utah	4.7	6.0	23.7	17.4	16.8	12.1
Vermont	9.0	9.6	42.0	35.3	21.8	20.3
Virginia	9.9	10.8	41.2	31.7	26.4	20.4
Washington	9.9	9.9	39.3	31.1	23.7	20.1
West Virginia	10.1	13.0	48.1	45.2	31.9	30.6
Wisconsin	9.5	11.2	43.8	37.2	27.2	25.7
Wyoming	14.8	16.9	44.5	38.3	26.9	26.9

Data Table for Figure 3.1.3—Prevalence of current cigarette smoking among 12- to 17-year-olds and those 26 years of age or older, by state; National Survey on Drug Use and Health (NSDUH) 2008–2010; United States

State	12–17 years of age (%)	26 years of age and older (%)
Alabama	9.5	27.4
Alaska	8.9	28.1
Arizona	10.2	22.8
Arkansas	10.3	30.8
California	6.8	18.1
Colorado	10.4	21.5
Connecticut	8.6	21.0
Delaware	10.2	24.5
District of Columbia	9.2	24.5
Florida	7.7	22.7
Georgia	10.3	22.7
Hawaii	8.9	19.6
Idaho	9.1	23.3
Illinois	9.4	23.8
Indiana	10.1	25.3
Iowa	10.9	25.7
Kansas	10.9	23.4
Kentucky	12.1	33.9
Louisiana	8.7	27.8
Maine	7.6	24.4
Maryland	7.0	19.2
Massachusetts	7.3	17.6
Michigan	9.8	26.4
Minnesota	8.7	22.4
Mississippi	10.6	26.4
Missouri	12.3	26.4
Montana	12.3	24.8
Nebraska	8.9	24.3
Nevada	8.4	26.8
New Hampshire	11.2	23.5
New Jersey	6.9	21.5
New Mexico	10.7	21.4
New York	8.1	20.8
North Carolina	8.3	25.5
North Dakota	9.8	22.1
Ohio	11.2	25.9
Oklahoma	10.4	27.8
Oregon	10.4	23.5
Pennsylvania	8.9	24.6
Rhode Island	7.4	23.3

Data Table for Figure 3.1.3 **Continued**

State	12–17 years of age (%)	26 years of age and older (%)
South Carolina	9.3	27.4
South Dakota	10.7	24.9
Tennessee	8.8	28.9
Texas	7.4	22.9
Utah	5.2	13.7
Vermont	8.2	20.5
Virginia	9.4	23.5
Washington	9.2	22.8
West Virginia	12.3	31.4
Wisconsin	9.0	24.5
Wyoming	15.5	25.2

Data Table for Figure 3.1.10—Trends in the prevalence (%) of current smoking among 9th- to 12th-grade students, by state; Youth Risk Behavior Survey (YRBS) 1991–2009; United States; data for Maps A (1991)–E (1999)

State	A. 1991: Percent (95% CI)	B. 1993: Percent (95% CI)	C. 1995: Percent (95% CI)	D. 1997: Percent (95% CI)	E. 1999: Percent (95% CI)
Alabama	27.8	—	31.0	35.8	36.6
Alaska	—	—	36.5	—	—
Arizona	—	—	—	—	—
Arkansas	—	—	37.2	43.2	39.6
Colorado	—	—	—	—	—
Connecticut	—	—	—	35.2	—
Delaware	—	16.7	—	—	32.2
District of Columbia	—	—	—	22.7	19.9
Florida	—	—	—	—	—
Georgia	23.8	24.3	—	—	—
Hawaii	—	28.2	32.4	29.2	27.9
Idaho	23.3	27.3	—	—	—
Illinois	—	29.1	35.7	—	—
Indiana	—	—	—	—	—
Iowa	—	—	—	37.5	—
Kansas	—	—	—	—	—
Kentucky	—	—	—	47.0	—
Louisiana	—	—	—	36.4	—
Maine	—	—	37.8	39.2	—
Maryland	—	—	—	—	—
Massachusetts	—	30.2	35.7	34.4	30.3
Michigan	—	—	—	38.2	34.1
Mississippi	—	—	35.0	31.3	31.5
Missouri	—	27.6	39.8	40.3	32.8
Montana	—	30.7	34.8	38.1	35.0
Nebraska	29.2	33.7	—	—	—
Nevada	—	29.9	32.9	29.4	32.6
New Hampshire	—	35.6	36.0	—	—
New Jersey	—	—	—	—	—
New Mexico	30.1	—	—	—	—
New York	—	—	—	32.9	31.8
North Carolina	—	29.3	31.3	—	—
North Dakota	—	—	39.6	—	40.6
Ohio	—	29.7	—	34.5	40.3
Oklahoma	—	—	—	—	—
Pennsylvania	—	—	—	—	—
Rhode Island	—	—	—	35.4	—
South Carolina	25.6	26.7	32.6	38.6	36.0

Data Table for Figure 3.1.10 Maps A–E Continued

State	A. 1991: Percent (95% CI)	B. 1993: Percent (95% CI)	C. 1995: Percent (95% CI)	D. 1997: Percent (95% CI)	E. 1999: Percent (95% CI)
South Dakota	30.9	36.7	38.0	44.0	43.6
Tennessee	—	35.3	—	—	—
Texas	—	—	—	—	—
Utah	16.8	17.4	17.0	16.4	11.9
Vermont	—	33.5	40.0	38.3	33.4
West Virginia	—	38.9	43.0	41.9	42.2
Wisconsin	—	31.8	—	36.0	38.1
Wyoming	—	—	39.5	37.4	35.2

Data Table for Figure 3.1.10 (continued)—Trends in the prevalence (%) of current smoking among 9th- to 12th-grade students, by state; Youth Risk Behavior Survey (YRBS) 1991–2009; United States; data for maps F (2001)–J (2009)

State	F. 2001: Percent (95% CI)	G. 2003: Percent (95% CI)	H. 2005: Percent (95% CI)	I. 2007: Percent (95% CI)	J. 2009: Percent (95% CI)
Alabama	23.7	24.7	24.4	—	20.8
Alaska	—	19.2	—	17.8	15.7
Arizona	—	23.3	21.4	22.2	19.7
Arkansas	34.7	—	25.9	20.7	20.3
Colorado	—	—	18.7	—	17.7
Connecticut	—	—	18.1	21.1	17.8
Delaware	24.2	23.5	21.2	20.2	19.0
District of Columbia	—	13.2	9.2	10.6	—
Florida	21.5	18.1	17.2	15.9	16.1
Georgia	—	20.9	17.2	18.6	16.9
Hawaii	—	—	16.4	12.8	15.2
Idaho	19.1	14.0	15.8	20.0	14.5
Illinois	—	—	—	19.9	18.1
Indiana	—	25.6	21.9	22.5	23.5
Iowa	—	—	22.2	18.9	—
Kansas	—	—	21.0	20.6	16.9
Kentucky	—	32.7	26.2	26.0	26.1
Louisiana	—	—	—	—	17.6
Maine	24.8	20.5	16.2	14.0	18.1
Maryland	—	—	16.5	16.8	11.9
Massachusetts	26.0	20.9	20.5	17.7	16.0
Michigan	25.7	22.6	17.0	18.0	18.8
Mississippi	23.6	25.0	—	19.2	19.6
Missouri	30.3	24.8	21.3	23.8	18.9
Montana	28.5	22.9	20.1	20.0	18.7
Nebraska	—	24.1	21.8	—	—
Nevada	25.2	19.6	18.3	13.6	17.0
New Hampshire	—	19.1	20.5	19.0	20.8
New Jersey	29.4	—	19.8	—	17.0
New Mexico	—	—	25.7	24.2	24.0
New York	—	20.2	16.2	13.8	14.8
North Carolina	27.8	24.8	24.9	22.5	17.7
North Dakota	35.3	30.2	22.1	21.1	22.4
Ohio	—	22.2	24.4	21.6	—
Oklahoma	—	26.5	28.6	23.2	22.6
Pennsylvania	—	—	—	—	18.4
Rhode Island	24.8	19.3	15.9	15.1	13.3

Data Table for Figure 3.1.10 Maps F–J Continued

State	F. 2001: Percent (95% CI)	G. 2003: Percent (95% CI)	H. 2005: Percent (95% CI)	I. 2007: Percent (95% CI)	J. 2009: Percent (95% CI)
South Carolina	—	—	23.5	17.8	20.5
South Dakota	33.1	30.0	28.2	24.7	23.2
Tennessee	—	27.6	26.3	25.5	20.9
Texas	28.4	—	24.2	21.1	21.2
Utah	8.3	7.3	7.4	7.9	8.5
Vermont	23.7	22.1	17.9	18.2	17.6
West Virginia	—	28.5	25.3	27.6	21.8
Wisconsin	32.6	23.6	22.8	20.5	16.9
Wyoming	28.4	26.0	22.5	20.8	18.4

Data Table for Figure 3.1.16—Trends in the intensity of smoking among high school seniors; Monitoring the Future (MTF) 1976–2010; United States

Year	Never smoked	Have smoked, but not in past 30 days	<1 cigarette per day in past 30 days	1–5 cigarettes per day in past 30 days	Less than one half pack per day in past 30 days
1976	24.7	36.5	10.0	9.6	19.2
1977	24.4	37.2	9.6	9.4	19.4
1978	24.8	38.5	9.2	8.8	18.8
1979	26.1	39.5	9.1	8.9	16.5
1980	29.1	40.4	9.2	7.0	14.3
1981	29.1	41.4	9.1	6.8	13.6
1982	30.0	39.9	9.0	6.9	14.2
1983	29.4	40.3	9.2	7.4	13.8
1984	30.4	40.2	10.6	6.4	12.3
1985	31.3	38.6	10.6	7.0	12.5
1986	32.5	37.9	10.9	7.4	11.4
1987	32.8	37.7	10.7	7.3	11.4
1988	33.7	37.6	10.6	7.5	10.6
1989	34.4	37.0	9.7	7.7	11.2
1990	35.7	34.9	10.3	7.8	11.3
1991	36.9	34.7	9.9	7.8	10.7
1992	38.2	34.0	10.6	7.2	10.0
1993	38.2	31.9	10.9	8.2	10.9
1994	38.0	30.7	11.8	8.2	11.2
1995	35.9	30.5	12.0	9.2	12.4
1996	36.6	29.4	11.8	9.3	13.0
1997	34.6	28.8	12.0	10.3	14.3
1998	34.7	30.2	12.7	9.8	12.6
1999	35.5	29.9	11.5	10.0	13.2
2000	37.5	31.0	10.8	9.3	11.3
2001	39.1	31.5	10.4	8.7	10.3
2002	42.9	30.4	9.8	7.8	9.1
2003	46.3	29.2	8.6	7.5	8.4
2004	47.3	27.7	9.5	7.5	8.0
2005	50.1	26.7	9.6	6.7	6.9
2006	52.9	25.5	9.4	6.3	5.9
2007	53.9	24.5	9.3	6.6	5.7
2008	55.4	24.2	9.0	6.0	5.5
2009	56.5	23.4	8.9	6.2	5.0
2010	57.8	23.0	8.5	6.1	4.7

Data Table for Figure 3.1.28—Percentage who currently use smokeless tobacco, by age group and state; NSDUH, 2006–2010

State	A. 12-17 years of age (%)	B. 18-25 years of age (%)	C. 26 years of age and older (%)
Alabama	4.6	9.0	4.9
Alaska	4.7	10.5	5.8
Arizona	1.0	3.9	3.5
Arkansas	4.3	9.4	6.6
California	0.8	2.5	1.5
Colorado	3.1	7.8	4.3
Connecticut	1.8	4.9	1.3
Delaware	1.8	4.3	2.6
District of Columbia	0.4	2.0	0.7
Florida	2.0	4.4	1.9
Georgia	3.6	5.3	4.2
Hawaii	1.0	1.7	1.1
Idaho	3.1	9.5	5.1
Illinois	1.4	4.4	2.2
Indiana	2.2	6.7	4.3
Iowa	2.5	7.8	4.5
Kansas	2.9	10.5	5.0
Kentucky	6.4	9.8	5.4
Louisiana	2.7	5.7	4.6
Maine	2.1	6.3	2.0
Maryland	0.7	3.1	1.9
Massachusetts	1.5	4.2	0.9
Michigan	2.4	6.4	2.5
Minnesota	3.3	10.0	3.3
Mississippi	4.0	7.2	6.7
Missouri	3.5	7.3	4.0
Montana	5.4	16.1	7.6
Nebraska	3.2	8.6	3.8
Nevada	1.6	4.7	1.8
New Hampshire	2.1	6.3	1.4
New Jersey	1.3	2.9	1.4
New Mexico	3.0	6.8	4.0
New York	1.4	3.2	0.8
North Carolina	3.1	5.8	4.8
North Dakota	4.0	12.9	5.3
Ohio	3.4	8.3	4.3
Oklahoma	3.7	8.9	7.0
Oregon	2.8	7.8	4.3
Pennsylvania	2.9	7.2	3.4
Rhode Island	1.0	2.7	0.6

Data Table for Figure 3.1.28 **Continued**

State	A. 12-17 years of age (%)	B. 18-25 years of age (%)	C. 26 years of age and older (%)
South Carolina	3.0	6.0	3.1
South Dakota	3.9	13.3	5.3
Tennessee	5.0	9.3	5.8
Texas	2.1	5.0	4.2
Utah	1.1	4.3	2.9
Vermont	2.4	7.6	3.2
Virginia	2.7	6.6	2.2
Washington	2.8	9.1	4.2
West Virginia	6.0	10.8	9.5
Wisconsin	1.8	8.3	3.1
Wyoming	6.9	15.8	8.4

Data Table for Figure 3.1.29—Percentage who currently use smokeless tobacco, by age group, state, and gender; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

State	12-17 years of age (%)		18-25 years of age (%)		26 years of age and older (%)	
	A. Males	B. Females	C. Males	D. Females	E. Males	F. Females
Alabama	8.7	0.4	17.8	0.5	8.8	1.5
Alaska	6.3	3.1	17.5	2.7	10.8	0.7
Arizona	1.6	0.3	7.1	0.3	6.9	0.3
Arkansas	7.8	0.7	17.9	0.8	13.1	0.7
California	1.3	0.3	4.5	0.3	2.7	0.3
Colorado	5.0	1.0	14.2	0.9	8.5	0.3
Connecticut	3.4	0.3	9.7	—	2.6	0.1
Delaware	3.5	0.1	8.4	0.4	5.1	0.3
District of Columbia	0.7	0.2	4.2	0.2	1.2	0.3
Florida	3.4	0.5	8.4	0.3	3.9	0.1
Georgia	6.3	0.8	9.9	0.7	8.2	0.7
Hawaii	1.6	0.4	3.2	0.3	2.1	0.1
Idaho	5.2	0.8	16.8	1.8	9.9	0.5
Illinois	2.4	0.3	8.3	0.4	4.5	0.1
Indiana	3.8	0.7	12.2	1.1	8.9	—
Iowa	4.3	0.6	14.9	0.6	9.3	0.0
Kansas	5.3	0.4	19.2	1.5	10.3	0.1
Kentucky	11.9	0.6	18.2	1.3	11.2	0.2
Louisiana	4.3	1.0	11.8	—	8.5	1.2
Maine	3.8	0.4	11.6	1.0	4.2	—
Maryland	1.3	0.1	6.0	0.2	4.0	—
Massachusetts	3.0	—	8.5	—	2.0	—
Michigan	4.2	0.6	11.8	0.9	5.2	0.1
Minnesota	5.7	0.7	18.2	1.6	6.7	0.1
Mississippi	7.1	0.8	14.1	0.4	12.9	1.3
Missouri	6.0	1.0	14.1	0.6	8.3	0.2
Montana	8.1	2.5	27.9	3.4	14.7	0.7
Nebraska	5.8	0.5	16.4	0.6	7.6	0.2
Nevada	2.3	0.8	8.5	0.6	3.5	—
New Hampshire	3.8	0.4	11.5	1.0	2.9	—
New Jersey	2.5	—	5.8	—	2.9	—
New Mexico	4.4	1.5	12.7	1.1	7.8	0.5
New York	2.4	0.3	6.2	0.3	1.7	0.1
North Carolina	5.6	0.4	11.3	0.3	8.2	1.7
North Dakota	6.7	1.2	23.1	1.9	10.7	0.2
Ohio	5.9	0.7	15.7	0.9	8.7	0.3
Oklahoma	6.8	0.4	16.9	0.6	14.2	0.4
Oregon	4.8	0.6	13.6	2.0	8.8	0.1

Data Table for Figure 3.1.29 **Continued**

State	12-17 years of age (%)		18-25 years of age (%)		26 years of age and older (%)	
	A. Males	B. Females	C. Males	D. Females	E. Males	F. Females
Pennsylvania	5.3	0.4	13.8	0.4	7.0	0.1
Rhode Island	1.9	—	5.3	0.1	1.2	0.1
South Carolina	5.4	0.5	11.8	0.4	6.0	0.5
South Dakota	6.4	1.3	23.9	2.4	10.3	0.5
Tennessee	9.1	0.8	17.6	1.1	11.7	0.4
Texas	4.0	0.1	9.4	0.5	8.4	0.3
Utah	2.0	0.1	7.8	0.6	5.7	0.2
Vermont	4.6	0.1	13.6	1.3	6.4	0.2
Virginia	4.6	0.7	12.2	1.0	4.6	—
Washington	4.5	1.0	17.2	0.6	8.3	0.3
West Virginia	11.2	0.5	20.7	0.6	19.5	0.3
Wisconsin	3.0	0.5	15.5	1.1	6.3	0.1
Wyoming	11.6	2.0	27.8	2.7	16.3	0.6

Data Table for Figure 3.1.36—Percentage who currently smoke cigars, by age group and state; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

State	A. 12-17 years of age (%)	B. 18-25 years of age (%)	C. 26 years of age and older (%)
Alabama	4.0	13.9	5.3
Alaska	3.0	11.0	4.4
Arizona	3.6	12.6	4.8
Arkansas	5.2	10.8	4.4
California	2.7	9.2	3.9
Colorado	6.1	13.0	4.0
Connecticut	3.7	10.1	4.9
Delaware	3.2	11.5	4.2
District of Columbia	2.9	9.9	5.6
Florida	3.8	11.6	5.1
Georgia	4.2	11.4	4.1
Hawaii	2.5	7.7	2.1
Idaho	3.0	9.7	3.0
Illinois	4.1	12.8	5.1
Indiana	5.6	14.5	5.4
Iowa	5.2	12.0	3.5
Kansas	4.7	15.7	4.5
Kentucky	5.5	14.5	3.8
Louisiana	3.1	10.9	4.8
Maine	4.7	13.6	3.5
Maryland	2.9	10.0	3.6
Massachusetts	4.7	12.3	3.8
Michigan	4.2	13.9	5.1
Minnesota	4.7	13.3	3.6
Mississippi	3.9	13.8	4.7
Missouri	4.5	14.9	5.3
Montana	5.8	12.0	3.2
Nebraska	4.2	10.8	4.0
Nevada	3.2	10.7	5.0
New Hampshire	5.4	12.7	4.3
New Jersey	3.8	10.4	4.7
New Mexico	4.6	12.1	3.8
New York	3.3	9.4	3.9
North Carolina	4.3	11.1	4.4
North Dakota	4.0	11.6	2.8
Ohio	5.6	15.8	4.9
Oklahoma	4.1	13.9	6.1
Oregon	4.4	10.6	3.5
Pennsylvania	3.6	10.4	4.4
Rhode Island	4.1	13.1	5.1

Data Table for Figure 3.1.36 Continued

State	A. 12-17 years of age (%)	B. 18-25 years of age (%)	C. 26 years of age and older (%)
South Carolina	3.9	11.3	3.7
South Dakota	3.6	11.3	2.9
Tennessee	4.1	13.5	5.5
Texas	3.4	11.2	4.6
Utah	1.8	6.3	2.2
Vermont	4.8	11.2	3.7
Virginia	3.0	11.9	4.8
Washington	4.7	12.2	4.3
West Virginia	4.0	13.0	5.0
Wisconsin	3.7	11.6	4.3
Wyoming	6.7	12.7	5.5

Data Table for Figure 3.1.40—Percentage who currently smoke cigars, by age group, state, and gender; National Survey on Drug Use and Health (NSDUH) 2006–2010; United States

State	12-17 years of age (%)		18-25 years of age (%)		26 years of age and older (%)	
	A. Males	B. Females	C. Males	D. Females	E. Males	F. Females
Alabama	5.8	2.1	20.9	7.1	9.2	2.0
Alaska	5.0	0.9	16.9	4.5	8.0	0.8
Arizona	3.6	3.6	18.4	6.2	8.6	1.3
Arkansas	6.1	4.3	15.5	6.1	7.4	1.7
California	3.9	1.5	14.4	3.7	6.7	1.2
Colorado	8.1	4.1	19.0	6.6	6.3	1.7
Connecticut	5.5	1.9	17.3	2.9	10.0	0.3
Delaware	4.9	1.4	17.6	5.7	8.2	0.7
District of Columbia	3.4	2.3	15.9	5.1	9.3	2.4
Florida	5.4	2.2	17.5	5.5	8.7	1.8
Georgia	5.8	2.5	17.8	4.9	7.4	1.1
Hawaii	3.4	1.7	11.9	3.4	3.3	1.0
Idaho	4.7	1.1	13.7	5.6	4.6	1.4
Illinois	5.2	2.9	18.6	7.0	9.0	1.4
Indiana	6.7	4.5	22.3	6.6	9.8	1.3
Iowa	5.9	4.4	18.9	5.0	6.5	0.8
Kansas	4.6	4.8	23.0	8.1	7.7	1.6
Kentucky	8.6	2.3	20.5	8.5	7.1	0.9
Louisiana	4.3	1.9	16.2	5.8	7.3	2.7
Maine	7.2	2.1	20.7	6.4	6.0	1.1
Maryland	3.5	2.4	15.2	4.9	7.2	0.4
Massachusetts	6.3	3.1	20.0	4.9	6.7	1.1
Michigan	5.7	2.7	22.0	5.7	8.8	1.8
Minnesota	7.1	2.3	20.6	6.0	6.4	0.9
Mississippi	5.3	2.5	20.5	7.3	7.2	2.5
Missouri	6.4	2.5	24.0	5.8	9.9	1.1
Montana	8.3	3.1	17.6	5.8	5.4	1.1
Nebraska	5.0	3.4	17.4	4.1	7.3	0.8
Nevada	4.1	2.2	14.6	6.6	8.4	1.7
New Hampshire	7.3	3.5	20.8	4.6	7.5	1.3
New Jersey	5.5	2.0	17.0	3.5	8.9	0.9
New Mexico	6.4	2.9	18.1	6.2	6.2	1.7
New York	4.7	1.9	15.2	3.7	7.2	0.9
North Carolina	6.0	2.5	16.9	5.3	7.7	1.4
North Dakota	4.9	3.2	18.8	3.9	4.7	1.0
Ohio	7.6	3.5	22.9	8.6	8.9	1.3
Oklahoma	5.6	2.5	18.9	8.8	9.8	2.7
Oregon	6.1	2.6	15.9	5.1	6.2	1.0

Data Table for Figure 3.1.40 **Continued**

State	12-17 years of age (%)		18-25 years of age (%)		26 years of age and older (%)	
	A. Males	B. Females	C. Males	D. Females	E. Males	F. Females
Pennsylvania	5.6	1.5	16.1	4.6	8.5	0.7
Rhode Island	6.0	2.2	20.5	5.7	8.7	1.8
South Carolina	5.1	2.6	17.8	4.9	6.4	1.4
South Dakota	5.2	2.0	18.3	4.1	5.7	0.3
Tennessee	4.9	3.3	19.7	7.4	9.6	1.8
Texas	5.0	1.8	16.7	5.6	7.8	1.7
Utah	2.3	1.3	8.7	3.6	3.5	0.9
Vermont	6.5	3.0	16.8	5.4	7.0	0.5
Virginia	3.7	2.3	18.6	5.3	9.5	0.6
Washington	5.9	3.5	18.5	5.7	6.6	2.0
West Virginia	5.5	2.4	19.7	6.0	9.4	1.0
Wisconsin	5.2	2.1	18.0	5.1	7.9	0.9
Wyoming	9.7	3.5	18.8	6.0	9.5	1.5

Data Table for Figure 3.1.43—Prevalence of current use of multiple tobacco products among all males of high school age and only those males of high school age who report using tobacco; National Survey on Drug Use and Health (NSDUH) 2010 and National Youth Risk Behavior Survey (YRBS) 2009; United States

Type of tobacco product used	A. All males of high school age		B. Males of high school age who report using tobacco	
	13- to 18-year olds (NSDUH 2010)	9th–12th Grades (YRBS 2009)	13- to 18-year olds (NSDUH 2010)	9th–12th Grades (YRBS 2009)
Nonuser	79.5	70.14	—	—
Cigarettes only	7.7	4.90	37.6	16.40
Smokeless tobacco only	2.4	4.57	11.8	15.31
Cigars only	2.9	3.95	14.3	13.23
Cigarettes and smokeless only	1.8	2.86	8.9	9.58
Cigarettes and cigars only	3.8	6.34	18.6	21.24
Smokeless and cigars only	0.5	1.50	2.3	5.03
Cigarettes, smokeless, and cigars	1.3	5.73	6.5	19.20

Data Table for Figures 3.1.45—Percentage of 13- to 15-year-olds who have ever smoked cigarettes, by gender; Global Youth Tobacco Survey 1999–2007; worldwide

Year	Country	A. Boys	B. Girls
2004	Albania	40.6	23.9
2004	Armenia	41.0	10.4
2004	Belarus	70.2	54.8
2003	Bosnia and Herzegovina	46.7	42.2
2002	Bulgaria	59.5	71.3
2007	Czech Republic	72.2	70.0
2007	Estonia	83.0	73.0
2003	Georgia	58.5	34.2
2005	Greece	34.6	28.9
2003	Hungary	67.1	64.2
2004	Kazakhstan	36.6	21.8
2004	Kosovo	35.5	19.9
2004	Kyrgyzstan	28.8	13.3
2007	Latvia	82.8	78.8
2005	Lithuania	80.0	65.6
2003	Macedonia	26.3	21.0
2004	Montenegro	38.9	33.3
2003	Poland	58.6	49.6
2004	Republic of Moldova	64.4	22.7
2004	Romania	60.2	40.7
2004	Russian Federation	61.5	48.1
2003	Serbia	53.2	50.3
2007	Slovakia	68.7	60.2
2007	Slovenia	56.1	56.7
2004	Tajikistan	9.8	3.6
2003	Turkey	31.7	19.7
2005	Ukraine	64.5	50.6
2007	Algeria	40.2	6.2
2003	Benin	22.8	5.3
2001	Botswana	18.5	9.2
2006	Burkina Faso	29.5	8.1
2007	Comoros	39.3	17.2
2006	Congo	26.6	17.2
2003	Côte D'Ivoire (Ivory Coast)	50.0	18.5
2006	Eritrea	4.3	1.4
2003	Ethiopia	10.8	4.6
2006	Ghana	9.4	8.0
2007	Kenya	29.5	13.5
2002	Lesotho	34.0	15.3
2005	Malawi	10.2	5.6

Data Table for Figure 3.1.45 **Continued**

Year	Country	A. Boys	B. Girls
2001	Mali	56.4	11.0
2006	Mauritania	32.4	24.9
2003	Mauritius	38.9	22.2
2002	Mozambique	19.8	7.8
2004	Namibia	42.3	34.9
2006	Niger	26.2	4.0
2000	Nigeria	16.5	9.9
2007	Senegal	20.7	5.2
2007	Seychelles	54.1	42.4
2002	South Africa	43.8	30.9
2005	Swaziland	19.8	9.0
2007	Uganda	19.2	11.2
2003	United Republic of Tanzania	11.9	3.7
2007	Zambia	25.3	20.4
2003	Zimbabwe	21.5	9.8
2004	Afghanistan	27.4	15.5
2002	Bahrain	34.2	13.7
2003	Djibouti	16.7	6.8
2005	Egypt	19.0	5.6
2005	Gaza Strip	30.2	11.6
2007	Iran	23.7	11.0
2008	Iraq	7.4	6.8
2007	Jordan	33.2	19.8
2005	Kuwait	36.7	16.3
2005	Lebanon	35.8	19.1
2007	Libya	19.9	5.8
2006	Morocco	13.6	4.6
2007	Oman	14.5	5.7
2003	Pakistan	10.8	3.8
2007	Qatar	29.9	15.5
2007	Saudi Arabia	35.8	16.1
2007	Somalia	11.0	10.4
2005	Sudan	26.5	12.6
2007	Syria	40.0	15.0
2007	Tunisia	39.8	9.5
2005	United Arab Emirates	30.7	14.2
2005	West Bank	50.2	20.8
2003	Yemen	18.4	9.7
2003	Cambodia	5.8	0.4
2005	China	23.1	12.4
2005	China	33.8	28.3

Data Table for Figure 3.1.45 **Continued**

Year	Country	A. Boys	B. Girls
2003	Cook Islands	69.6	73.5
2005	Fiji	22.4	11.7
2005	Korea (South)	32.0	23.4
2003	Laos	19.0	2.4
2003	Malaysia	54.6	11.5
2007	Micronesia	56.2	34.7
2003	Mongolia	53.6	26.9
2007	New Zealand	49.5	42.1
2007	Papua New Guinea	64.4	47.0
2007	Philippines	51.2	29.9
2007	Samoa	25.9	17.0
2000	Singapore	23.9	18.8
2006	Tuvalu	45.1	30.4
2007	Vanuatu	39.3	18.6
2003	Viet Nam	16.0	4.9
2007	Bangladesh	15.8	4.8
2006	Bhutan	33.0	12.2
2006	East Timor	59.9	26.0
2006	India	14.4	8.7
2006	Indonesia	62.9	15.6
2007	Maldives	8.1	24.5
2007	Myanmar	23.4	6.3
2007	Nepal	11.4	3.8
2007	Sri Lanka	6.9	3.4
2005	Thailand	37.9	15.1
2004	Antigua & Barbuda	20.4	17.6
2003	Argentina	48.0	54.3
2004	Bahamas	27.7	23.0
2007	Barbados	40.2	25.3
2002	Belize	47.4	28.4
2003	Bolivia	46.5	35.8
2005	Brazil	29.5	36.5
2001	British Virgin Islands	26.2	18.2
2003	Chile	65.5	68.6
2001	Colombia	70.4	67.6
2002	Costa Rica	43.0	40.8
2004	Cuba	27.2	23.6
2004	Dominica	36.8	26.2
2004	Dominican Republic	22.3	20.4
2001	Ecuador	67.7	47.9
2003	El Salvador	44.4	27.5

Data Table for Figure 3.1.45 Continued

Year	Country	A. Boys	B. Girls
2004	Grenada	36.5	30.8
2002	Guatemala	48.8	43.6
2004	Guyana	34.7	20.4
2005	Haiti	34.2	27.9
2003	Honduras	47.3	44.8
2006	Jamaica	40.8	29.7
2006	Mexico	61.7	58.2
2000	Montserrat	20.7	18.5
2003	Nicaragua	55.9	47.4
2002	Panama	36.2	27.7
2003	Paraguay	38.3	40.7
2003	Peru	63.9	54.5
2007	Peru	44.6	46.1
2002	Saint Kitts & Nevis	24.7	11.5
2007	Saint Lucia	44.6	25.5
2007	Saint Vincent & The Grenadines	37.7	27.9
2004	Suriname	47.8	27.8
2007	Trinidad & Tobago	37.3	29.9
2007	Uruguay	45.0	51.9
1999	Venezuela	24.1	20.3

Data Table for Figures 3.1.46—Percentage of 13- to 15-year-olds who currently smoke cigarettes, by gender; Global Youth Tobacco Survey 1999–2007; worldwide

Year	Country	A. Boys	B. Girls
2004	Albania	11.9	5.8
2004	Armenia	10.3	0.9
2004	Belarus	31.2	21.7
2003	Bosnia and Herzegovina	13.6	8.9
2002	Bulgaria	26.0	39.4
2007	Czech Republic	29.8	32.7
2007	Estonia	28.2	26.2
2003	Georgia	35.5	12.9
2005	Greece	11.3	9.0
2003	Hungary	26.7	26.8
2004	Kazakhstan	12.7	6.6
2004	Kosovo	7.7	5.4
2004	Kyrgyzstan	7.6	4.2
2007	Latvia	36.3	30.2
2005	Lithuania	33.8	25.9
2003	Macedonia	8.5	6.8
2004	Montenegro	6.0	5.0
2003	Poland	19.6	17.1
2004	Republic of Moldova	23.0	6.0
2004	Romania	21.5	14.3
2004	Russian Federation	26.9	23.9
2003	Serbia	12.2	13.1
2007	Slovakia	26.5	23.4
2007	Slovenia	15.2	23.0
2004	Tajikistan	1.5	0.5
2003	Turkey	9.4	3.5
2005	Ukraine	27.6	20.6
2007	Algeria	18.3	1.5
2003	Benin	11.2	1.8
2001	Botswana	3.9	2.1
2006	Burkina Faso	14.1	2.4
2007	Comoros	13.5	6.9
2006	Congo	15.0	8.1
2003	Côte D'Ivoire (Ivory Coast)	19.3	7.1
2006	Eritrea	2.0	0.6
2003	Ethiopia	2.5	0.7
2006	Ghana	2.8	2.3
2007	Kenya	11.2	5.2
2002	Lesotho	16.6	4.8
2005	Malawi	3.8	2.2

Data Table for Figure 3.1.46 **Continued**

Year	Country	A. Boys	B. Girls
2001	Mali	41.8	4.6
2006	Mauritania	20.3	18.3
2003	Mauritius	19.8	7.7
2002	Mozambique	5.0	1.4
2004	Namibia	21.9	16.1
2006	Niger	11.7	1.1
2000	Nigeria	7.7	3.3
2007	Senegal	12.1	2.7
2007	Seychelles	23.2	20.0
2002	South Africa	21.0	10.6
2005	Swaziland	8.9	3.2
2007	Uganda	6.6	4.0
2003	United Republic of Tanzania	4.0	0.4
2007	Zambia	6.7	6.8
2003	Zimbabwe	6.1	3.2
2004	Afghanistan	7.6	0.0
2002	Bahrain	17.5	3.9
2003	Djibouti	8.6	2.6
2005	Egypt	5.9	1.4
2005	Gaza Strip	9.7	3.0
2007	Iran	5.1	0.9
2008	Iraq	3.3	2.7
2007	Jordan	13.2	7.1
2005	Kuwait	17.7	4.5
2005	Lebanon	11.8	5.6
2007	Libya	7.7	0.9
2006	Morocco	4.3	2.1
2007	Oman	3.5	1.2
2003	Pakistan	2.3	0.6
2007	Qatar	13.4	2.3
2007	Saudi Arabia	10.2	2.6
2007	Somalia	4.9	4.5
2005	Sudan	10.2	2.1
2007	Syria	19.1	5.9
2007	Tunisia	15.1	1.6
2005	United Arab Emirates	12.1	3.6
2005	West Bank	27.6	8.7
2003	Yemen	6.5	3.0
2003	Cambodia	4.6	0.2
2005	China	2.7	0.8
2005	China	11.0	9.8

Data Table for Figure 3.1.46 **Continued**

Year	Country	A. Boys	B. Girls
2003	Cook Islands	39.9	49.6
2005	Fiji	6.7	3.1
2005	Korea (South)	7.9	5.3
2003	Laos	10.2	0.7
2003	Malaysia	36.3	4.2
2007	Micronesia	36.9	19.8
2003	Mongolia	14.4	4.0
2007	New Zealand	23.9	13.0
2007	Papua New Guinea	52.1	35.8
2007	Philippines	23.4	12.0
2007	Samoa	16.0	12.7
2000	Singapore	10.5	7.5
2006	Tuvalu	33.2	22.1
2007	Vanuatu	28.2	11.4
2003	Viet Nam	1.5	0.8
2007	Bangladesh	2.9	1.1
2006	Bhutan	18.3	6.3
2006	East Timor	50.6	17.3
2006	India	5.4	1.6
2006	Indonesia	23.9	1.9
2007	Maldives	0.9	6.6
2007	Myanmar	8.5	1.3
2007	Nepal	5.7	1.9
2007	Sri Lanka	1.6	0.9
2005	Thailand	17.4	4.8
2004	Antigua & Barbuda	2.7	4.4
2003	Argentina	17.2	26.8
2004	Bahamas	6.2	3.7
2007	Barbados	14.3	9.3
2002	Belize	18.9	10.4
2003	Bolivia	20.3	12.0
2005	Brazil	9.1	12.9
2001	British Virgin Islands	4.1	2.8
2003	Chile	27.6	39.2
2001	Colombia	31.0	33.4
2002	Costa Rica	15.7	16.8
2004	Cuba	11.2	8.8
2004	Dominica	11.8	9.6
2004	Dominican Republic	7.3	5.8
2001	Ecuador	27.2	12.6
2003	El Salvador	18.4	10.9

Data Table for Figure 3.1.46 Continued

Year	Country	A. Boys	B. Girls
2004	Grenada	10.9	9.5
2002	Guatemala	17.3	11.2
2004	Guyana	11.0	5.4
2005	Haiti	17.2	17.7
2003	Honduras	14.4	14.1
2006	Jamaica	20.6	10.9
2006	Mexico	26.3	27.1
2000	Montserrat	3.5	6.3
2003	Nicaragua	25.6	17.4
2002	Panama	14.7	11.1
2003	Paraguay	19.2	18.5
2007	Peru	16.7	15.2
2002	Saint Kitts & Nevis	7.0	1.9
2007	Saint Lucia	17.0	9.6
2007	Saint Vincent & The Grenadines	14.8	9.5
2004	Suriname	9.3	4.7
2007	Trinidad & Tobago	14.7	10.3
2007	Uruguay	16.4	22.9
1999	Venezuela	6.0	8.4

Data Table for Figures 3.1.47—Percentage of 13- to 15-year-olds who currently smoke and want to stop smoking, by gender; Global Youth Tobacco Survey 1999–2007; worldwide

Year	Country	A. Boys	B. Girls
2004	Albania	71.9	60.9
2004	Armenia	81.4	68.9
2004	Belarus	72.8	71.2
2003	Bosnia and Herzegovina	62.9	47.9
2002	Bulgaria	59.6	61.5
2007	Czech Republic	57.3	48.4
2007	Estonia	70.4	69.6
2003	Georgia	44.1	39.7
2005	Greece	37.5	37.2
2003	Hungary	40.2	35.0
2004	Kazakhstan	74.0	79.1
2004	Kosovo	77.5	74.5
2004	Kyrgyzstan	60.3	87.9
2007	Latvia	72.7	69.7
2005	Lithuania	75.2	66.0
2003	Macedonia	58.6	71.1
2004	Montenegro	44.9	41.2
2003	Poland	50.3	52.7
2004	Republic of Moldova	45.2	57.2
2004	Romania	46.5	66.0
2004	Russian Federation	65.9	65.0
2003	Serbia	59.0	50.6
2007	Slovakia	63.3	67.3
2004	Tajikistan	76.2	55.1
2003	Turkey	68.9	60.2
2005	Ukraine	75.4	73.8
2007	Slovenia	49.5	34.2
2007	Algeria	81.6	71.7
2003	Benin	83.4	43.4
2001	Botswana	58.2	64.1
2006	Burkina Faso	97.0	100.0
2007	Comoros	73.3	100.0
2006	Congo	84.3	66.4
2003	Côte D'Ivoire (Ivory Coast)	96.2	85.3
2006	Eritrea	76.2	94.8
2003	Ethiopia	80.3	100.0
2006	Ghana	87.4	78.7
2007	Kenya	90.3	76.9
2002	Lesotho	83.8	85.1
2005	Malawi	68.3	67.5

Data Table for Figure 3.1.47 **Continued**

Year	Country	A. Boys	B. Girls
2001	Mali	86.6	74.8
2006	Mauritania	76.3	70.2
2003	Mauritius	64.7	47.5
2002	Mozambique	68.6	100.0
2004	Namibia	79.3	67.6
2006	Niger	74.8	51.5
2000	Nigeria	58.6	61.9
2007	Senegal	87.3	100.0
2007	Seychelles	74.4	74.0
2002	South Africa	69.2	63.1
2005	Swaziland	74.5	66.1
2007	Uganda	81.1	60.6
2003	United Republic of Tanzania	70.3	100.0
2007	Zambia	78.1	68.2
2003	Zimbabwe	78.2	64.5
2004	Afghanistan	76.5	—
2002	Bahrain	68.5	45.5
2003	Djibouti	66.8	100.0
2005	Egypt	86.7	46.7
2005	Gaza Strip	64.2	63.3
2007	Iran	67.8	0.0
2008	Iraq	62.2	70.2
2007	Jordan	60.4	50.0
2005	Kuwait	68.3	49.3
2005	Lebanon	56.3	49.7
2007	Libya	70.6	100.0
2006	Morocco	72.0	86.8
2007	Oman	66.1	0.0
2003	Pakistan	79.0	50.3
2007	Qatar	67.8	39.9
2007	Saudi Arabia	75.9	61.2
2007	Somalia	92.5	68.4
2005	Sudan	72.9	18.1
2007	Syria	83.0	66.5
2007	Tunisia	82.3	100.0
2005	United Arab Emirates	62.3	52.3
2005	West Bank	67.8	55.6
2003	Yemen	83.2	72.1
2003	Cambodia	22.3	100.0
2005	China	82.7	80.0
2005	China	38.4	46.7

Data Table for Figure 3.1.47 **Continued**

Year	Country	A. Boys	B. Girls
2003	Cook Islands	93.2	96.5
2005	Fiji	89.5	90.0
2005	Korea (South)	72.6	69.3
2003	Laos	89.5	100.0
2003	Malaysia	79.5	88.9
2007	Micronesia	86.4	91.7
2003	Mongolia	87.0	83.3
2007	New Zealand	53.4	40.6
2007	Papua New Guinea	82.6	81.4
2007	Philippines	88.0	89.3
2007	Samoa	69.2	63.6
2000	Singapore	—	—
2006	Tuvalu	100.0	97.7
2007	Vanuatu	83.8	85.4
2003	Viet Nam	100.0	100.0
2007	Bangladesh	89.5	71.4
2006	Bhutan	89.1	96.4
2006	East Timor	73.0	77.3
2006	India	70.0	72.2
2006	Indonesia	80.2	45.0
2007	Maldives	39.7	69.1
2007	Myanmar	78.7	100.0
2007	Nepal	93.5	85.7
2007	Sri Lanka	64.5	100.0
2005	Thailand	75.5	70.9
2004	Antigua & Barbuda	64.9	49.1
2003	Argentina	43.8	43.0
2004	Bahamas	57.6	58.7
2007	Barbados	52.7	61.1
2002	Belize	78.9	71.6
2003	Bolivia	65.5	50.9
2005	Brazil	30.2	40.4
2001	British Virgin Islands	100.0	0
2003	Chile	53.9	48.8
2001	Colombia	93.0	90.4
2002	Costa Rica	55.4	49.2
2004	Cuba	65.8	46.3
2004	Dominica	62.3	62.4
2004	Dominican Republic	49.9	54.0
2001	Ecuador	74.6	66.5
2003	El Salvador	96.2	100.0

Data Table for Figure 3.1.47 Continued

Year	Country	A. Boys	B. Girls
2004	Grenada	72.0	61.0
2002	Guatemala	62.6	61.2
2004	Guyana	61.9	53.4
2005	Haiti	65.8	77.0
2003	Honduras	70.2	50.2
2006	Jamaica	75.6	69.6
2006	Mexico	42.5	45.7
2000	Montserrat	82.6	92.5
2003	Nicaragua	65.0	53.0
2002	Panama	62.5	48.6
2003	Paraguay	53.8	40.0
2003	Peru	60.5	64.2
2007	Peru	67.3	69.2
2002	Saint Kitts & Nevis	48.1	71.2
2007	Saint Lucia	51.9	63.7
2007	Saint Vincent & The Grenadines	70.4	66.6
2004	Suriname	89.6	79.1
2007	Trinidad & Tobago	88.4	74.2
2007	Uruguay	45.8	46.7
1999	Venezuela	61.8	74.2

Figures 3.1.48—Percentage of 13- to 15-year-olds who currently use other forms of tobacco than cigarettes, by gender; Global Youth Tobacco Survey 1999–2007; worldwide

Year	Country	A. Boys	B. Girls
2004	Albania	11.5	6.7
2004	Armenia	10.0	1.9
2004	Belarus	15.2	10.4
2003	Bosnia and Herzegovina	7.6	4.3
2002	Bulgaria	5.3	3.3
2007	Czech Republic	17.2	11.2
2007	Estonia	25.4	16.7
2003	Georgia	9.6	3.7
2005	Greece	11.8	8.9
2003	Hungary	8.2	3.0
2004	Kazakhstan	9.3	4.2
2004	Kosovo	9.4	4.6
2004	Kyrgyzstan	7.6	2.9
2007	Latvia	42.0	33.6
2005	Lithuania	13.2	5.7
2003	Macedonia	4.3	3.0
2004	Montenegro	4.1	4.1
2003	Poland	9.0	4.8
2004	Republic of Moldova	12.8	4.2
2004	Romania	7.7	4.3
2004	Russian Federation	18.1	11.1
2003	Serbia	5.3	6.7
2007	Slovakia	15.1	10.6
2007	Slovenia	8.3	7.4
2004	Tajikistan	8.0	3.4
2003	Turkey	4.4	1.5
2005	Ukraine	15.2	10.5
2007	Algeria	12.7	4.8
2003	Benin	6.7	4.2
2001	Botswana	10.1	9.2
2006	Burkina Faso	9.3	4.8
2007	Comoros	12.5	9.9
2006	Congo	15.6	17.7
2003	Côte D'Ivoire (Ivory Coast)	5.6	4.4
2006	Eritrea	6.4	4.2
2003	Ethiopia	8.4	4.4
2006	Ghana	10.1	10.1
2007	Kenya	8.2	11.4
2002	Lesotho	12.3	14.8
2005	Malawi	17.1	17.1

Data Table for Figure 3.1.48 **Continued**

Year	Country	A. Boys	B. Girls
2001	Mali	13.1	4.8
2006	Mauritania	18.4	17.3
2003	Mauritius	—	—
2002	Mozambique	5.4	6.0
2004	Namibia	15.1	14.0
2006	Niger	6.1	7.0
2000	Nigeria	18.6	9.4
2007	Senegal	11.7	7.7
2007	Seychelles	10.6	9.2
2002	South Africa	14.8	11.9
2005	Swaziland	8.5	6.9
2007	Uganda	13.8	13.5
2003	United Republic of Tanzania	5.5	4.6
2007	Zambia	22.8	22.8
2003	Zimbabwe	8.4	4.8
2004	Afghanistan	7.0	3.2
2002	Bahrain	19.9	10.5
2003	Djibouti	12.3	9.6
2005	Egypt	12.3	6.7
2005	Gaza Strip	12.8	10.0
2007	Iran	31.9	19.5
2008	Iraq	11.7	9.9
2007	Jordan	28.2	23.5
2005	Kuwait	17.4	11.7
2005	Lebanon	44.7	35.7
2007	Libya	8.6	5.6
2006	Morocco	10.3	6.9
2007	Oman	16.9	10.6
2003	Pakistan	11.2	7.3
2007	Qatar	19.4	12.6
2007	Saudi Arabia	13.3	9.4
2007	Somalia	12.7	9.8
2005	Sudan	11.0	9.3
2007	Syria	29.7	15.3
2007	Tunisia	19.9	7.8
2005	United Arab Emirates	32.7	24.7
2005	West Bank	20.8	12.7
2003	Yemen	15.7	12.1
2003	Cambodia	3.3	3.0
2005	China	4.5	3.4
2005	China	2.4	1.7

Data Table for Figure 3.1.48 **Continued**

Year	Country	A. Boys	B. Girls
2003	Cook Islands	—	—
2005	Fiji	6.7	7.6
2005	Korea (South)	4.6	4.3
2003	Laos	6.3	2.2
2003	Malaysia	8.8	7.5
2007	Micronesia	41.8	32.1
2003	Mongolia	9.5	6.8
2007	New Zealand	6.8	5.6
2007	Papua New Guinea	21.1	11.1
2007	Philippines	8.2	7.2
2007	Samoa	19.5	13.5
2000	Singapore	—	—
2006	Tuvalu	33.3	22.4
2007	Vanuatu	17.5	11.3
2003	Viet Nam	1.9	0.5
2007	Bangladesh	8.0	4.2
2006	Bhutan	19.7	9.1
2006	East Timor	29.0	20.2
2006	India	14.3	8.5
2006	Indonesia	5.3	2.4
2007	Maldives	2.7	4.3
2007	Myanmar	20.3	7.9
2007	Nepal	11.1	4.4
2007	Sri Lanka	11.6	5.6
2005	Thailand	10.4	4.9
2004	Antigua & Barbuda	13.4	10.9
2003	Argentina	9.2	3.2
2004	Bahamas	9.4	7.4
2007	Barbados	30.2	18.7
2002	Belize	10.2	5.9
2003	Bolivia	9.5	6.9
2005	Brazil	10.0	3.3
2001	British Virgin Islands	8.3	8.4
2003	Chile	5.8	3.9
2001	Colombia	5.9	4.3
2002	Costa Rica	6.7	4.2
2004	Cuba	6.0	5.7
2004	Dominica	12.0	6.3
2004	Dominican Republic	12.9	7.4
2001	Ecuador	12.1	7.1

Data Table for Figure 3.1.48 Continued

Year	Country	A. Boys	B. Girls
2003	El Salvador	10.5	7.0
2004	Grenada	11.6	9.3
2002	Guatemala	6.6	3.3
2004	Guyana	9.1	7.7
2005	Haiti	9.0	11.1
2003	Honduras	12.1	8.0
2006	Jamaica	10.2	7.2
2006	Mexico	5.5	4.0
2000	Montserrat	10.2	7.7
2003	Nicaragua	12.8	6.7
2002	Panama	11.0	7.8
2003	Paraguay	9.9	10.1
2003	Peru	8.2	7.1
2007	Peru	3.8	3.1
2002	Saint Kitts & Nevis	14.6	12.1
2007	Saint Lucia	13.0	8.4
2007	Saint Vincent & The Grenadines	11.2	9.6
2004	Suriname	4.4	4.4
2007	Trinidad & Tobago	8.9	8.7
2007	Uruguay	10.3	6.1
1999	Venezuela	10.5	6.8