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American Legacy Foundation, Legacy First Look Report 7. Cigarettte Smoking AMong Youth: Results from the 2000 National Youth Tobacco Survey

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Legacy First Look Report 7

Cigarette Smoking Among Youth: Results from the 2000 National Youth Tobacco Survey

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AMERICAN LEGACY FOUNDATION

Preamble

In November 1998, Americans won an unprecedented victory in our nation's century long fight against tobacco use and abuse. A coalition of 46 state Attorneys General successfully settled their cases with the tobacco companies amounting to $206 billion over the first 25 years. As part of the Master Settlement Agreement (MSA), a 501(c)(3) organization was established to reduce tobacco usage in the United States. Now known as the American Legacy Foundation (Legacy), it adopted four goals:

- Reduce youth tobacco use.
- Reduce exposure to secondhand smoke among all ages and populations.
- Increase successful quit rate among all ages and populations.
- Reduce disparities in access to prevention and cessation services and in exposure to secondhand smoke.

Legacy's Board of Directors represents a diverse mix of state governors, legislators, Attorneys General, and experts in the medical, education, and public health fields:

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Purpose of the First Look Report Series

The purpose of the First Look Report Series is to provide brief research findings from the National Youth Tobacco Surveys and other tobacco use surveys. The series will cover a wide range of topics including tobacco use behaviors, attitudes and beliefs about tobacco, pro- and counter-tobacco marketing efforts, results of the American Legacy Foundation Initiatives, and other policies and programs related to tobacco use.

Dear Colleague:

In June 2000, Legacy released its first report based on data from the 1999 National Youth Tobacco Survey (NYTS). The report, *Legacy First Look Report 1, Cigarette Smoking Among Youth: Results from the 1999 National Youth Tobacco Survey*, presented an enormous amount of nationally representative information about youth smoking among middle and high school students. The report documented the state of youth smoking, from the proportion who reported having smoked "even one or two puffs" to the brand preferences of established smokers.

Now, one year later, we are able to update and refine that first report with data from the 2000 NYTS. The 2000 NYTS was completed by over 30,000 middle and high school students across the country. The data collected from these young people enable us to revise current estimates of youth smoking, use of menthol cigarettes, and brand preference. The data also provide entirely new information: in the 2000 survey, Asian-Americans were oversampled to provide the first nationally representative data about the tobacco use of this population. While the 1999 NYTS indicated that about one-third of the smokers in high school usually smoked menthol cigarettes, the 2000 NYTS reveals that use of menthol cigarettes among Asian-American youth far exceeds that number. More than 60 percent of Asian-American smokers choose menthol cigarettes during their high school years.

The 1999 NYTS indicated that, by the time they finished high school, racial/ethnic minorities (African-American and Hispanic youth) smoked at lower rates than White students. New data from the 2000 NYTS reveal that Asian-American youth do not fit this paradigm. Although Asian-American youth smoke at a much lower rate than those from other racial/ethnic groups in the middle school years (6 percent compared with about 11 percent of Hispanic, African-American, and White youth), by the time Asian-Americans finish high school one-third (33 percent) are smokers. Asian-American youth in 12th grade are almost as likely as White youth (38 percent), and more likely than Hispanic (27 percent) or African-American (21 percent) youth, to report having smoked a cigarette in the past month.

One of Legacy's primary goals is to reduce disparities in access to prevention and cessation services and in exposure to secondhand smoke. One of the first steps to achieving this goal is to understand how tobacco differentially affects minority populations. Legacy is committed to advancing research in priority populations so that this basic information can be made available to the public for the development of tobacco prevention and cessation programs and tobacco-related policy. I am very pleased to be able to offer this information to you.

Sincerely,

Cheryl Healton, DrPH
President/CEO
American Legacy Foundation

Innovative and Evidence-Based Programs

Marketing and Education

The most visible of Legacy's efforts to date is the **truth**[sm] campaign—a national youth movement against tobacco use. The **truth**[sm] campaign is aimed at reducing tobacco use among youth ages 12 to 17 who are most open to using tobacco. Modeled after successful teen brands, this multicultural countermarketing program incorporates advertising, Internet, grassroots, and public relations components and gives teens a voice in the effort.

Applied Research and Evaluation

The National Youth Tobacco Survey, a Legacy-sponsored research effort, provided the first national assessment of smoking rates for both high school and middle school students earlier this year. The survey is one part of an integrated research program that will commission studies, fund research, and publish reports (such as this one) on tobacco issues. In addition, a comprehensive evaluation effort will ensure the effectiveness of the programs Legacy supports.

Grants

Legacy's grants program is designed to build on existing tobacco control efforts, leverage resources, and spark new tobacco control initiatives. Awards totaling $35 million have been announced to states and organizations to develop grassroots youth empowerment programs to reduce tobacco use. Legacy is also supporting demonstration projects and encouraging model programs through competitive RFPs.

Priority Populations

Legacy is committed to addressing the needs of populations that have been disproportionately burdened by the epidemic of tobacco in America. In order to identify promising practices, culturally appropriate approaches, and resource gaps, Legacy convened six national Priority Population forums in 2000 among tobacco control experts who represented underserved populations. Their recommendations form the basis for the Priority Populations Initiative, which makes available up to $21 million over 3 years for capacity-building grants and innovative projects and applied research grants.

Training and Technical Assistance

Legacy is committed to providing high quality and best practices based training and technical assistance to its grantees, local and state entities, and others who are working in the tobacco control movement. In addition, Legacy's training and technical assistance team coordinates a range of Youth Activism Projects and is a major funder and collaborator for the National Tobacco Training and Assistance Consortium.

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Legacy First Look Report 7

Cigarette Smoking Among Youth: Results from the 2000 National Youth Tobacco Survey

This report was written by
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The authors are also grateful to
Andrew Jessup for graphic design, Susan Murchie for editorial review, and to all the schools in the survey for their cooperation.

The NYTS questionnaire was developed by the CDC Foundation and Macro International Inc. with technical support from the Office of Smoking and Health, CDC. Macro developed and implemented the NYTS sampling design, recruited schools, managed data collection and processing, and weighted the data with technical support from the Office of Smoking and Health.

*RTI †American Legacy Foundation

Contents

Introduction

In fall 1999, the American Legacy Foundation (Legacy) and the Centers for Disease Control and Prevention Foundation sponsored the first National Youth Tobacco Survey (NYTS). This survey was designed to provide nationally representative estimates of smoking behaviors, attitudes, and influences among African-American, Hispanic, and White middle and high school students. The prevalence of youth smoking from this survey was reported in *Legacy First Look Report 1*, *Cigarette Smoking Among Youth: Results from the 1999 National Youth Tobacco Survey*. In spring 2000, the NYTS was repeated to complement the National Youth Risk Behavior Surveys that are conducted in the spring of odd years (e.g., 1997, 1999, 2001, etc.). The sample size of the 2000 NYTS was increased to provide a nationally representative sample of Asian-Americans in middle and high school. The current report updates the findings from the 1999 NYTS focusing on the prevalence and intensity of youth smoking behavior and the characteristics of cigarettes smoked by middle and high school students.[1]

Data and Methods

2000 NYTS Design and Content

The 2000 NYTS was administered to 35,828 middle school and high school students in grades 6 through 12 in 324 schools across the United States. Participating students completed an anonymous, self-administered survey that included questions about tobacco use, exposure to environmental tobacco smoke, minors' ability to purchase tobacco products, the price paid for cigarettes, knowledge and attitudes about tobacco, and familiarity with pro- and countertobacco marketing.

The NYTS was designed to produce a nationally representative sample of students in grades 6 to 12. To ensure separate analysis of African-American, Hispanic, and for the first time, Asian-American students, schools with substantial proportions of these racial/ethnic groups were oversampled in the 2000 NYTS. A weighting factor was applied to each

[1]We selectively present results in graphical format. Additional information, upon which tables and figures are based, is presented in the Appendix.

student to adjust for nonresponse and for the probability of selection, including oversampling of African-American, Hispanic, and Asian-American students.

In addition to the aforementioned categories of questions, the survey also contained several questions regarding the respondents' age, gender, grade, and race/ethnicity. With respect to race/ethnicity, two questions were posed: "How do you describe yourself? (You can choose one answer, or more than one)," and "Which one of these groups best describes you? (Choose only one answer)." In both cases, the choices are as follows:

- American Indian or Alaska Native
- Asian-American
- Black or African-American
- Hispanic or Latino
- Native Hawaiian or Other Pacific Islander
- White

For the purposes of this report, we use the second question to characterize race/ethnicity.[2] Sample characteristics are summarized in Table 1.

Table 1: Unweighted Sample Characteristics of the 2000 NYTS (N = 35,828)

Demographic Characteristic	Mean
Age	14.6
Female	49.4
Male	50.6
African-American	16.8
Asian-American	4.9
Hispanic	18.6
Native Hawaiian or Other Pacific Islander	1.4
White	56.4

[2]Readers are asked to keep in mind that these racial and ethnic categories should not be interpreted as being primarily biological or genetic in reference. Race and ethnicity may be thought of in terms of social and cultural characteristics, as well as ancestry (OMB, 1997).

Methods

In this report, we provide estimates and 95 percent confidence intervals separately for African-American, Asian-American, Hispanic, and White middle and high school students. All estimates and 95 percent confidence intervals were calculated using sampling weights and controlling for the stratified survey design. Confidence intervals that do not overlap indicate statistical significance.

Main Findings

The NYTS contains several questions about current and lifetime smoking (Table 2). Our analysis of lifetime smoking focuses on the prevalence of students who have ever smoked at all or on a daily basis in their lifetime. Current smoking is based on tobacco use within the past 30 days. The current cigarette smoking behaviors that we summarize in this report include the prevalence of any current smoking and frequent smoking; cigarette consumption among current smokers; and brand, menthol, and cigarette strength preferences (e.g., regular, light, or ultra-light) among current smokers.

Table 2: Cigarette Smoking Behavior Questions from the 2000 NYTS

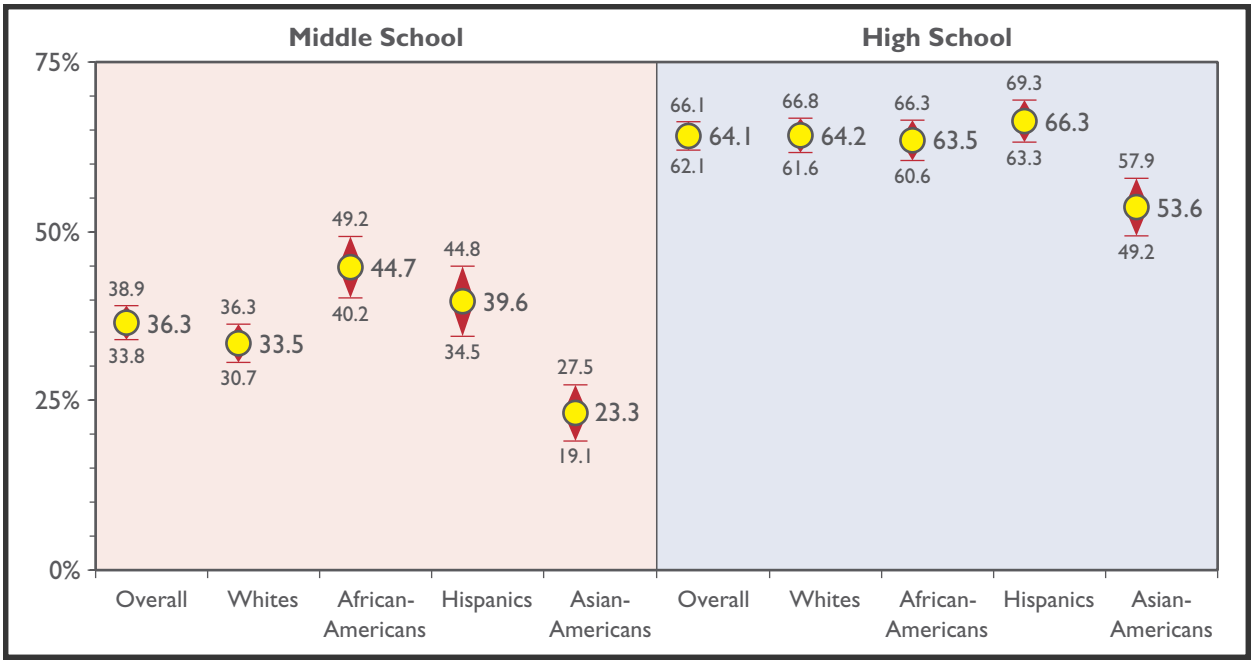
Question
Have you ever tried cigarette smoking, even one or two puffs?
When was the first time you smoked a whole cigarette?
How old were you when you smoked a whole cigarette for the first time?
About how many cigarettes have you smoked in your entire life?
Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?
During the past 30 days, on how many days did you smoke cigarettes?
During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?
During the past 30 days, what brand of cigarettes did you usually smoke?
Is the brand of cigarettes you usually smoked during the past 30 days mentholated?
What type of cigarette did you usually smoke in the past 30 days?

Lifetime Smoking

Respondents were asked if they had ever tried smoking a cigarette, even one or two puffs, and if they have ever smoked cigarettes on a daily basis, that is, at least one cigarette a day for 30 days. We examine the prevalence of these smoking behaviors among middle and high school students and for African-Americans, Asian-Americans, Hispanics, and Whites separately to highlight any differences by age and/or race/ethnicity.

Figure 1 illustrates that prevalence of lifetime smoking is similar across racial/ethnic groups. In middle school, 36 percent of students have tried smoking. At this age, any lifetime use is somewhat higher for African-Americans and Hispanics than Whites, and Asian-Americans lag behind the other three racial/ethnic groups. By high school, the difference between Whites, Hispanics, and African-Americans essentially disappears—approximately two-thirds of these groups report having tried at least a puff or two of a cigarette. Lifetime prevalence also increases for Asian-Americans, but the prevalence for this group still remains lower than for the other three racial/ethnic groups.

Figure 1: Prevalence of Ever Smoking for Middle and High School Students

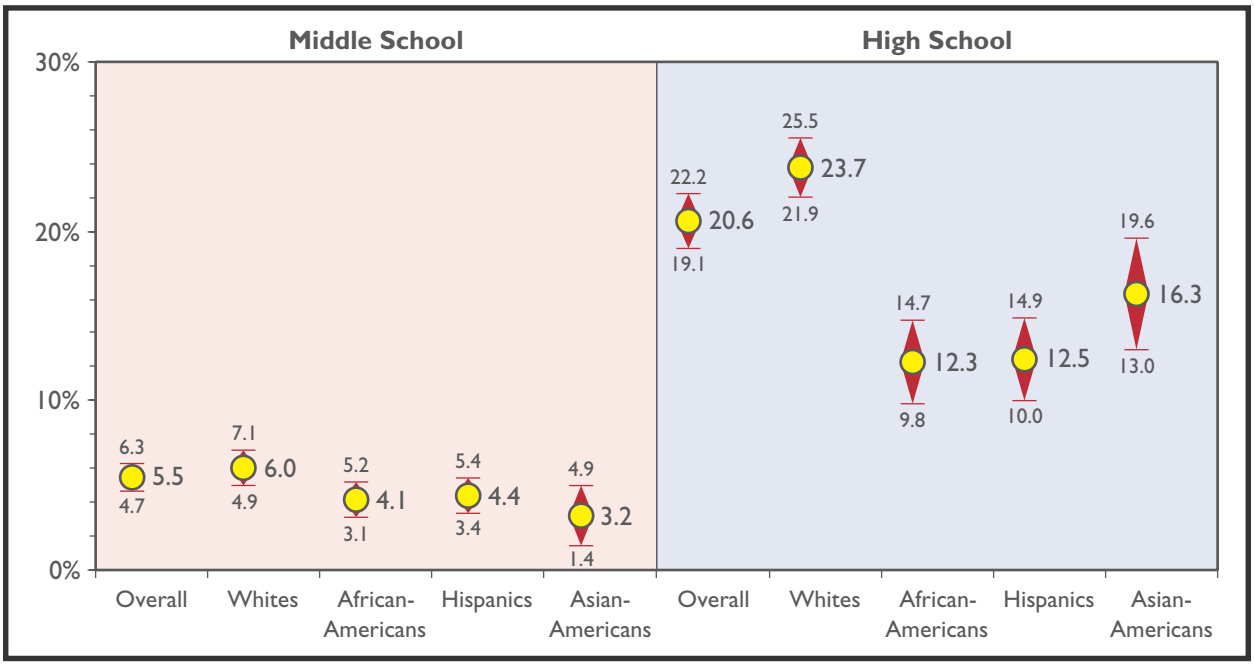


Note: Upper and lower ranges represent 95 percent confidence intervals that account for the survey design weighting.

Figure 2 illustrates lifetime prevalence toward more established smoking. Lifetime prevalence of daily smoking is measured by ever smoking at least one cigarette a day for 30 days. The prevalence of ever smoking more than triples from middle school (5.5 percent) to high school (20.6 percent). In contrast to Figure 1, statistically significant racial/ethnic differences in lifetime daily smoking do not emerge until high school. By high school, Whites are one and a half times more likely than Asian-Americans and almost twice as likely as Hispanics and African-Americans to have progressed to daily smoking at some time in their lives.

Taken together, these two measures indicate that experimentation with smoking cigarettes is a common occurrence at some point during the middle school and high school years across all major racial and ethnic groups. In contrast, a much smaller percentage of teenagers progress to established smoking, with Whites at much greater risk of progressing than other racial/ethnic groups.

Figure 2: Prevalence of Ever Smoking Daily for Middle and High School Students



Note: Upper and lower ranges represent 95 percent confidence intervals that account for the survey design weighting.

Current Smoking

The NYTS contains a wealth of information pertaining to the prevalence of current cigarette use; brand, type (e.g., regular versus light), and menthol preferences for current smokers; and the usual number of cigarettes smoked on the days smoked. For the purposes of our

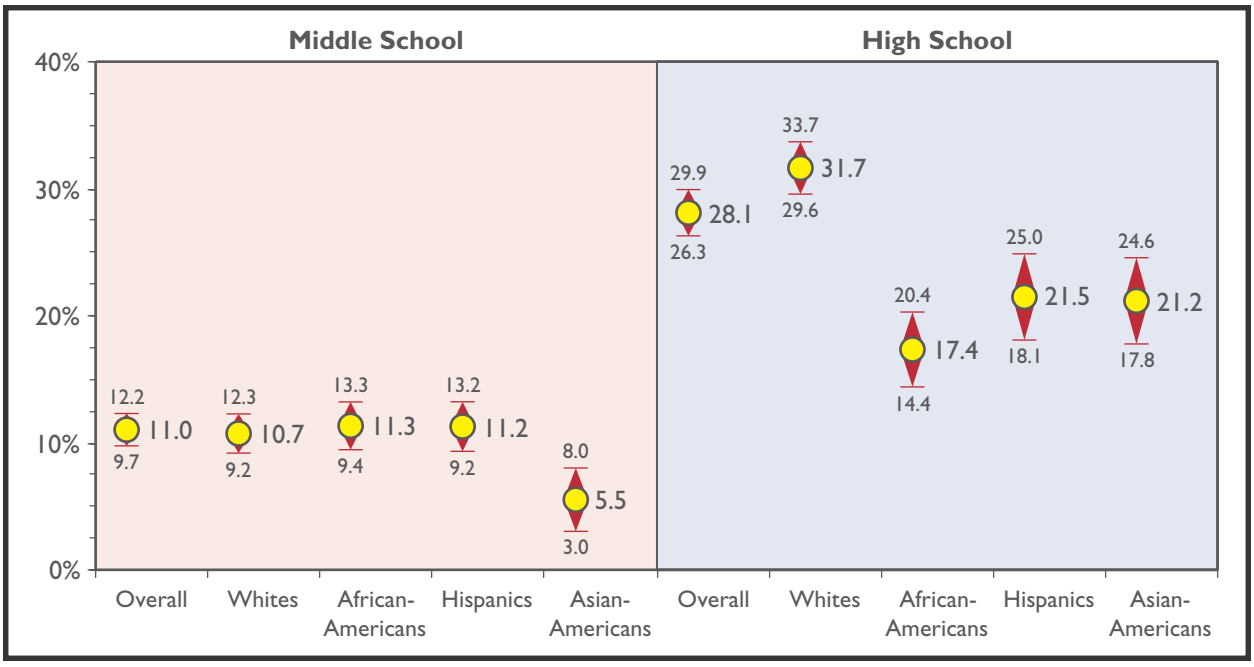
analysis, we employ two distinct measures of current smoking. The first and more common measure, "current smoking," is defined as smoking on one or more days in the past 30 days. The second measure, "frequent smoking," is defined as smoking on 20 or more days in the past 30 days.

Prevalence of Smoking

As illustrated in Figure 3, the overall prevalence of current smoking more than doubles from middle school (11 percent) to high school (28.1 percent). These results are not statistically different from those presented in *Legacy First Look Report 1* (Farrelly et al., 2000). Also consistent with this previous report, there is little difference among White, African-American, and Hispanic current smoking in middle school (roughly 11 percent for each). Current smoking prevalence among Asian-Americans (5.5 percent) is significantly lower than for the other racial/ethnic groups.

Significant racial/ethnic differences in current smoking emerge in high school. Whites (31.7 percent) are almost two times more likely than African-Americans (17.4 percent) and almost one and a half times more likely than Hispanics (21.5 percent) and Asian-Americans (21.2 percent) to engage in current smoking behavior.

Figure 3: Prevalence of Smoking on ≥1 Days in the Past 30 Days Among Middle and High School Students

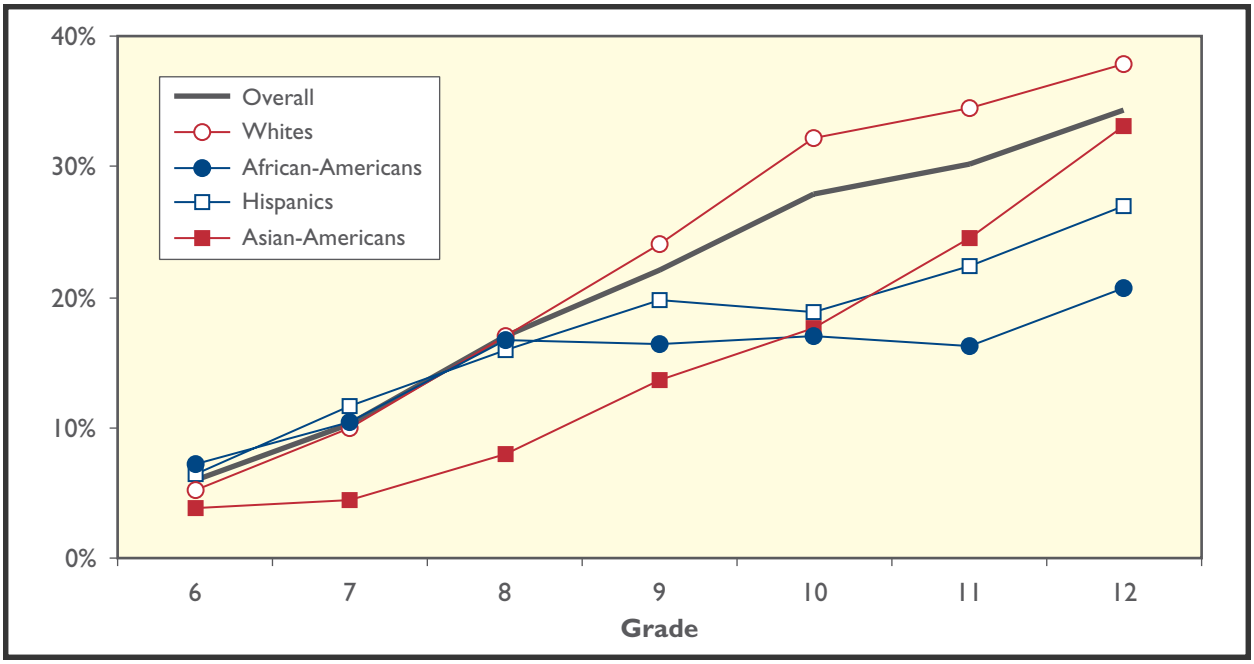


Note: Upper and lower ranges represent 95 percent confidence intervals that account for the survey design weighting.

To further illustrate the differential patterns in cigarette use by race/ethnicity, we graph the prevalence of current use by grade and race/ethnicity in Figure 4. This figure describes age-related changes in prevalence that differ by race/ethnicity. The prevalence of current smoking among Whites and Asian-Americans steadily rises across all grade levels. Asian-Americans delay the onset of current smoking by about two grades when compared to other racial/ethnic groups, but they catch up with and then exceed all groups except Whites during the high school years. Current smoking increases during the middle school years for African-Americans but then plateaus between 8th and 11th grades. For Hispanic students, the steady rise in current smoking extends through 9th grade and then levels off in 10th and 11th grades. Smoking prevalence increases for all racial and ethnic groups between 11th and 12th grade. Further research is necessary to gain a better understanding of how and why these differences emerge. Appendix Table A-1 presents the specific prevalence rates by grade, gender, and race/ethnicity.

Prevalence rates of current smoking do not differ significantly by gender in middle school and high school. In middle school, the prevalence of current smoking by males and females is 11.8 percent and 10.2 percent, respectively. Although the current smoking prevalence for both gender groups increases in high school, the pattern remains consistent, with 28.8 percent of males and 27.3 percent of females having reported smoking at least 1 cigarette in the past 30 days.

Figure 4: Prevalence of Smoking on ≥1 Days in the Past 30 Days by Grade and Race/Ethnicity



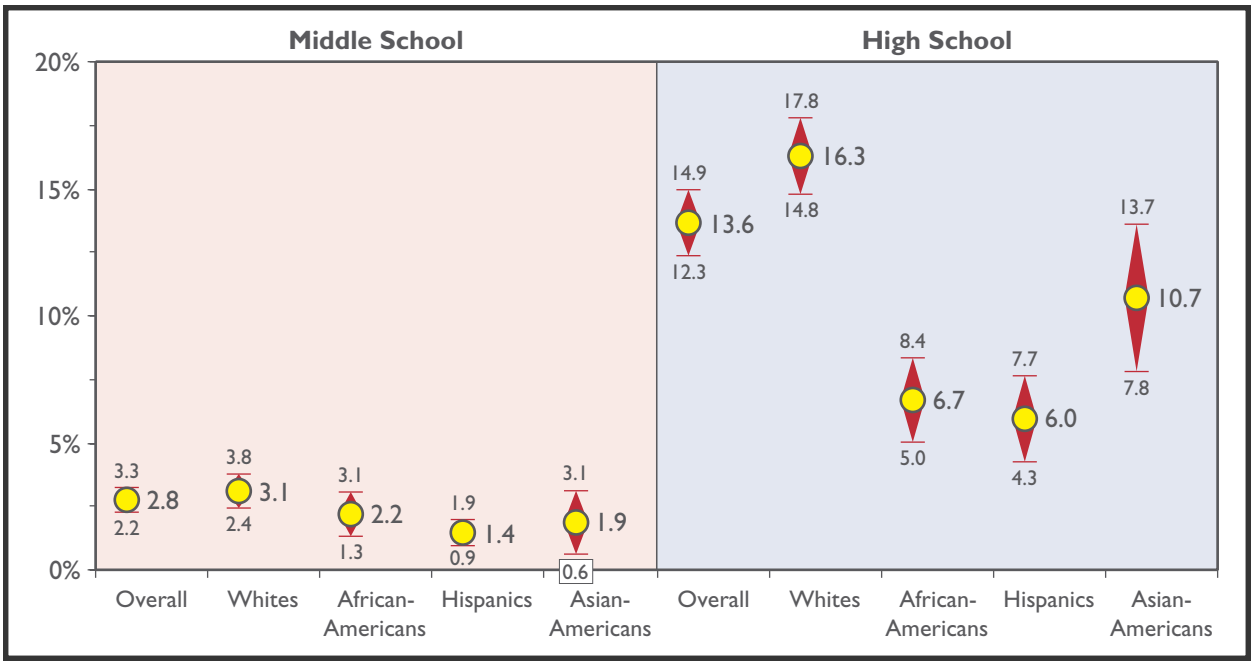
Prevalence of Frequent Smoking

Our definition of current smoking captures smokers of varying smoking frequency, from those who smoke for a few days each month to everyday smokers. In order to differentiate between these two groups, we employ a second definition of more habitual current smoking based on smoking at least 20 days during the past month.

As shown in Figure 5, the prevalence of frequent smoking demonstrates a similar trend to that of current smoking. Overall, the prevalence of frequent smoking increases significantly from middle school (2.8 percent) to high school (13.6 percent). Among the various races/ethnicities, we again see little variation in the prevalence of frequent smoking in middle school but pronounced differences in high school. In high school, frequent smoking is one and a half times more prevalent among Whites than Asian-Americans, and nearly two and a half times more prevalent among Whites than African-Americans and Hispanics. Hispanics and African-Americans have the lowest prevalence of frequent smoking, while Asian-Americans are second only to Whites.

As with the prevalence of "any day" smoking, there are no statistically significant differences by gender in the prevalence of frequent smoking.

Figure 5: Prevalence of Frequent Smoking (≥20 days) in the Past 30 Days Among Middle and High School Students



Note: Upper and lower ranges represent 95 percent confidence intervals that account for the survey design weighting.

Daily Cigarette Consumption

To measure the intensity of youth smoking, we summarize the average number of cigarettes smoked per day among current "any day" smokers and frequent smokers. The average number of cigarettes smoked per day was determined using the NYTS question, "During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?" Table 3 illustrates how this question was transformed into a more continuous measure.

Not surprisingly, frequent smokers smoke a significantly greater number of cigarettes per day than do current "any day" smokers. On average, frequent smokers (95 percent confidence interval) smoke 9.0 (8.2, 9.8) cigarettes per day in middle school and 8.9 (8.6, 9.3) cigarettes per day in high school. In contrast, current "any day" smokers smoke an average of 3.7 (3.3, 4.1) cigarettes per day in middle school and 5.6 (5.4, 5.9) cigarettes per day in high school. Appendix Table A-2 provides more detailed information on the patterns of current cigarette consumption.

Table 3: 2000 NYTS Question on Daily Cigarette Consumption

During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?	Continuous measure created: Average number of cigarettes smoked per day
a. I did not smoke cigarettes during the past 30 days	a. 0
b. Less than 1 cigarette per day	b. 0.5
c. 1 cigarette per day	c. 1
d. 2 to 5 cigarettes per day	d. 3.5
e. 6 to 10 cigarettes per day	e. 8
f. 11 to 20 cigarettes per day	f. 15.5
g. More than 20 cigarettes per day	g. 25

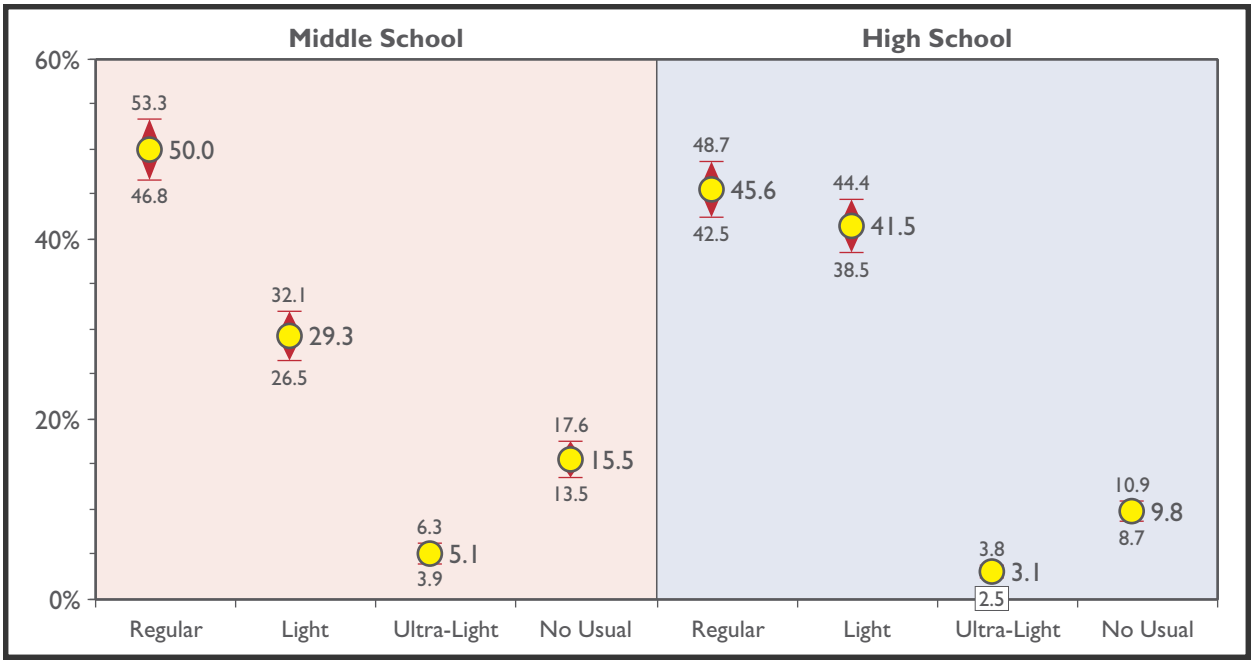
Cigarette Type Preferences

The spring 2000 NYTS includes a question on the types of cigarettes preferred by youth smokers that was not included in the fall 1999 NYTS. The question asks, "What type of cigarette did you smoke in the past 30 days?," with responses for regular, light, ultra-light, or no usual type. As shown in Figure 6, there is very little variation among middle and high school youth who prefer regular cigarettes. The prevalence of

regular cigarettes is roughly 50 percent for both groups. Light cigarettes, however, are decidedly more popular in high school than in middle school. The prevalence of light cigarettes among current smokers is 29.3 percent in middle school and over 40 percent in high school. A very small percentage of youth smoke ultra-light cigarettes in middle school (5.1 percent) and high school (3.1 percent), and another small fraction of youth smokers have no specific preference.

Appendix Table A-3 illustrates cigarette type preferences across gender and race/ethnicity. Males exhibit a clear preference for regular cigarettes in both middle school (56.7 percent) and high school (50.8 percent), while females prefer regular cigarettes in middle school (42.7 percent) but light cigarettes in high school (46.9 percent). With respect to race/ethnicity, all racial/ethnic groups overwhelmingly prefer regular cigarettes in middle school. In high school, however, while African-Americans demonstrate an even stronger preference for regular cigarettes (69.9 percent), Whites are the only group that prefers light cigarettes to all other types (46.0 percent), although the difference is not statistically significant.

Figure 6: Type Preference Among Current Middle and High School Smokers

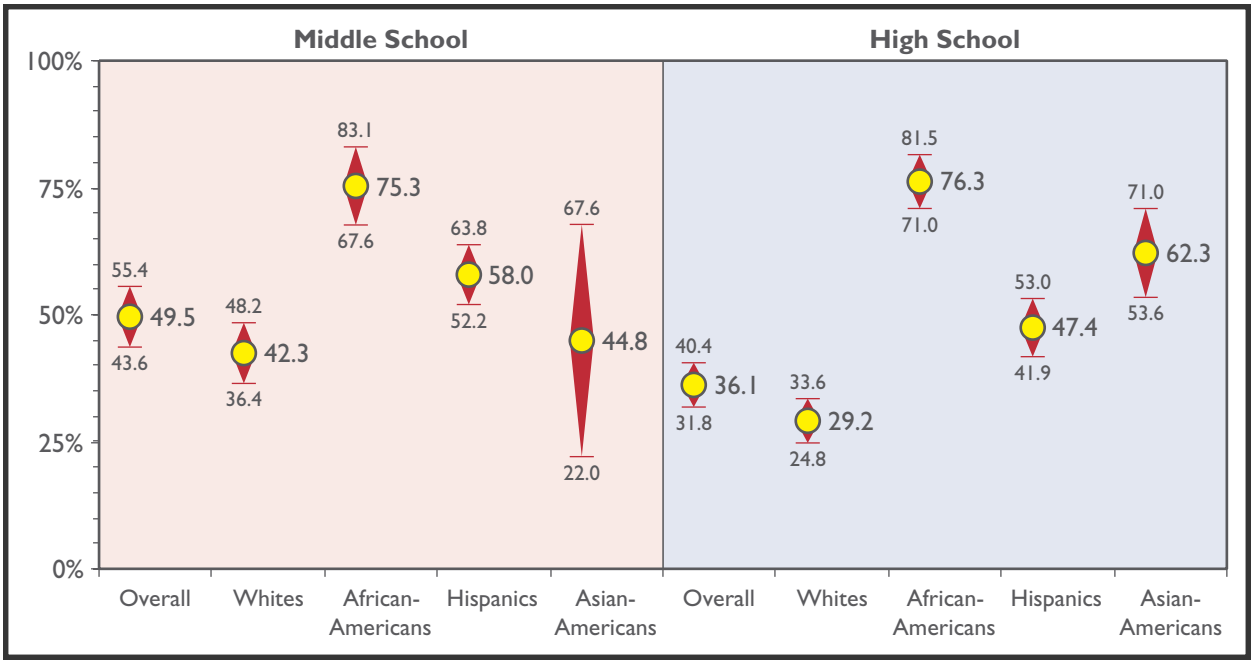


Note: Upper and lower ranges represent 95 percent confidence intervals that account for the survey design weighting.

Menthol Cigarettes

The NYTS asks, "Is the brand of cigarettes you usually smoked during the past 30 days mentholated?" As illustrated in Figure 7, there is an overall drop in the prevalence of smoking mentholated cigarettes from middle school (49.5 percent) to high school (36.1 percent). Consistent with previous literature, African-Americans smoke mentholated cigarettes at a higher rate than any other race/ethnicity throughout middle and high school. The 2000 NYTS shows little change in African-American use of mentholated cigarettes from middle school to high school. This is a significant departure from the 1999 NYTS, which showed an appreciable increase in the rate at which African-Americans smoked mentholated cigarettes from middle school (59.3 percent) to high school (81.9 percent) (Farrelly et al., 2000). With the inclusion of a nationally representative sample of Asian-Americans in the 2000 NYTS, we have uncovered a previously unknown fact—that the use of menthol cigarettes among Asian-Americans is second only to African-Americans in high school. Given the small sample of Asian Americans who smoke in middle school, it is difficult to determine the trend in menthol cigarette use from middle to high school. The prevalence of smoking mentholated cigarettes decreases among Whites and Hispanics as they reach high school.

Figure 7: Prevalence of Menthol Cigarettes Among Current Middle and High School Smokers

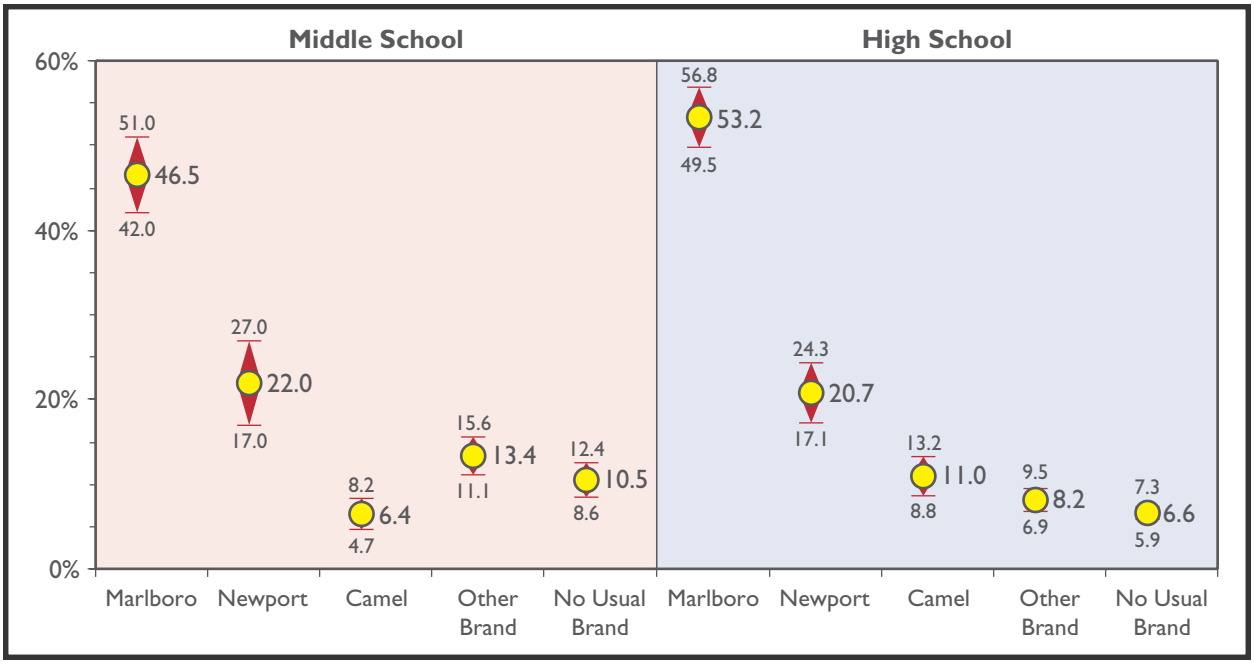


Note: Upper and lower ranges represent 95 percent confidence intervals that account for the survey design weighting.

Brand Preferences

We complete our analysis of youth smoking with a discussion of brand preferences. As depicted in Figure 8, Marlboro is the overall top-selling brand among youth in both middle school and high school, followed by Newport and Camel. There are, however, significant differences in the brands preferred by youth across races/ethnicities. Disparities by race/ethnicity and gender are highlighted in Appendix Table A-4 of the Appendix. Marlboro is the overwhelming choice among Whites, Hispanics, and Asian-Americans, while Newport is the preferred brand of African-Americans.

Figure 8: Brand Preference Among Current Middle and High School Smokers



Note: Upper and lower ranges represent 95 percent confidence intervals that account for the survey design weighting.

Summary

Although the spring 2000 NYTS was very similar to the fall 1999 NYTS, there are several notable differences in the survey content and sample of students. First, the 2000 NYTS provides an unprecedented nationally representative survey of smoking behavior among Asian-American middle and high school students. These data reveal that the prevalence of smoking among racial/ethnic groups is lowest for Asian-American middle school students, but by the 12th grade smoking in this group is second only to Whites. The sharpest rate of increase in the high school grades is among Asian-Americans. Further research is needed to determine whether this sharp increase continues beyond the high school grades and establishes Asian-Americans as the racial/ethnic group of young adults with the highest prevalence of smoking.

The prevalence of smoking in the fall 1999 NYTS was 9.4 percent among middle school students and 28.5 among high school students. Comparable statistics for the spring 2000 NYTS survey are 11.0 and 28.1 percent for middle and high school students, respectively. Although the prevalence of smoking appears to have increased among middle school students, this difference is not statistically significant. In addition, the comparison of smoking among middle school students in the spring and the fall is a comparison of apples and oranges because middle school students in the spring are 6 months older than those surveyed in the fall. Once we compare the prevalence of smoking for similar age groups in both surveys (e.g., youth ages 11 to 14), the rates are nearly identical—11.4 in the fall and 10.8 in the spring. In other words, there is no increase in the secular trend of smoking among middle school students.

The 2000 NYTS also highlights that the prevalence of menthol cigarette use among current high school smokers is highest among African-Americans followed by Asian-Americans, Hispanics, and Whites. Among high school students who smoke, 76 percent of African-Americans and 62 percent of Asian-Americans smoke menthol cigarettes—more than double the rate of menthol use among Whites at 29 percent.

Finally, the 2000 NYTS asks smokers to report whether or not they smoke regular, light, ultra-light, or no usual type of cigarette. Although some have suggested that menthol and mild cigarettes are a gateway to regular, non-mentholated cigarettes, the patterns of both menthol and light cigarette use among middle and high school students paint a

complicated picture. Among Whites, the use of menthol and regular strength cigarettes decreases and light cigarette use increases as the students get older. In contrast, for African-Americans, the prevalence of regular strength cigarette use increases with age, while menthol cigarette use remains the highest of all racial/ethnic groups in both middle and high school. No clear pattern emerges for other racial/ethnic groups.

As noted in a recent Institute of Medicine report (IOM, 2001), the health consequences of using light or "low-yield" cigarettes are unclear. As the science base of the health consequences of light cigarettes expands, it is also important to understand what factors influence the type of cigarettes smoked by youth of different races and ethnicities. The NYTS will be an important surveillance tool for monitoring and understanding these patterns.

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Appendix A:
Cigarette Smoking Statistics — Detailed Tables

Table A-1: Prevalence of Smoking By Grade — 2000 NYTS [95% Confidence Interval]

Grade	Overall	Males	Females	Whites	African-Americans	Hispanics	Asian-Americans
6	**6.0%** [4.7–7.2]	**6.8%** [4.9–8.7]	**5.2%** [4.0–6.4]	**5.2%** [3.7–6.6]	**7.2%** [5.0–9.5]	**6.4%** [4.6–8.2]	**3.8%** [0.5–7.2]
7	**10.3%** [8.8–11.8]	**11.1%** [8.9–13.4]	**9.5%** [7.8–11.1]	**10.0%** [8.2–11.8]	**10.5%** [7.6–13.3]	**11.7%** [8.2–15.1]	**4.4%** [0.6–8.3]
8	**17.0%** [15.1–18.9]	**17.7%** [15.3–20.0]	**16.4%** [14.1–18.6]	**17.1%** [14.6–19.6]	**16.7%** [13.4–19.9]	**16.0%** [13.1–18.9]	**8.0%** [4.0–12.0]
9	**22.1%** [19.8–24.4]	**21.2%** [18.6–23.8]	**23.0%** [20.3–25.7]	**24.1%** [21.3–26.9]	**16.4%** [12.3–20.5]	**19.8%** [15.0–24.6]	**13.7%** [9.6–17.8]
10	**27.9%** [25.2–30.6]	**29.6%** [27.0–32.3]	**26.0%** [22.4–29.6]	**32.1%** [28.9–35.3]	**16.9%** [12.2–21.7]	**18.9%** [15.5–22.3]	**17.7%** [12.2–23.1]
11	**30.2%** [27.9–32.5]	**32.2%** [29.2–35.2]	**28.2%** [25.4–31.0]	**34.4%** [31.7–37.1]	**16.2%** [12.4–20.0]	**22.4%** [17.6–27.1]	**24.5%** [18.1–31.0]
12	**34.3%** [31.2–37.5]	**34.9%** [31.5–38.3]	**33.7%** [30.0–37.5]	**37.9%** [34.0–41.8]	**20.7%** [15.3–26.2]	**27.0%** [21.9–32.2]	**33.1%** [25.5–40.7]

Table A-2: Cigarettes Smoked Per Day on the Days Smoked by Type of Smoker — 2000 NYTS [95% Confidence Interval]

	Middle School		High School	
	≥1 Day Smoker (N=1729)	≥20 Day Smoker (N=413)	≥1 Day Smoker (N=5074)	≥20 Day Smoker (N=2326)
Overall	**3.7** [3.3–4.1]	**9.0** [8.2–9.8]	**5.6** [5.4–5.9]	**8.9** [8.6–9.3]
Males	**4.2** [3.6–4.7]	**9.7** [8.4–10.9]	**6.1** [5.7–6.4]	**9.8** [9.3–10.3]
Females	**3.2** [2.7–3.6]	**8.0** [6.8–9.2]	**5.2** [4.8–5.5]	**8.0** [7.6–8.5]
Whites	**3.8** [3.4–4.3]	**8.3** [7.2–9.3]	**5.8** [5.5–6.1]	**8.9** [8.5–9.3]
African-Americans	**3.5** [2.5–4.6]	**11.8** [8.6–15.1]	**5.0** [4.1–5.9]	**9.0** [7.5–10.4]
Hispanics	**2.6** [2.2–3.1]	**8.4** [6.0–10.8]	**3.9** [3.4–4.4]	**8.3** [7.2–9.4]
Asian-Americans	**5.7** [2.1–9.4]	**13.4** [6.7–20.1]	**5.7** [4.6–6.8]	**8.6** [6.8–10.4]

Table A-3: Type Preference Among Smokers in Middle School and High School — 2000 NYTS [95% Confidence Interval]

	Middle School			
	Regular	**Light**	**Ultra-Light**	**No Usual**
Overall	**50.0%** [46.8–53.3]	**29.3%** [26.5–32.1]	**5.1%** [3.9–6.3]	**15.5%** [13.5–17.6]
Males	**56.7%** [52.6–60.8]	**24.7%** [21.2–28.2]	**4.9%** [3.4–6.5]	**13.6%** [10.8–16.5]
Females	**42.7%** [38.7–46.8]	**34.3%** [30.7–38.0]	**5.3%** [3.5–7.1]	**17.6%** [14.7–20.5]
Whites	**49.5%** [45.5–53.5]	**31.6%** [27.8–35.5]	**5.2%** [3.6–6.7]	**13.7%** [11.1–16.3]
African-Americans	**54.2%** [44.9–63.4]	**21.5%** [15.0–27.9]	**3.7%** [1.0–6.4]	**20.6%** [14.7–26.6]
Hispanics	**45.8%** [38.1–53.5]	**29.7%** [23.3–36.0]	**5.2%** [3.0–7.3]	**19.4%** [14.9–23.8]
Asian-Americans	**49.6%** [31.4–67.9]	**18.4%** [6.6–30.2]	**15.7%** [5.1–39.0]	**16.3%** [1.2–31.4]
	High School			
	Regular	**Light**	**Ultra-Light**	**No Usual**
Overall	**45.6%** [42.5–48.7]	**41.5%** [38.5–44.4]	**3.1%** [2.5–3.8]	**9.8%** [8.7–10.9]
Males	**50.8%** [47.4–54.2]	**36.3%** [32.8–39.8]	**2.5%** [1.9–3.2]	**10.4%** [9.1–11.7]
Females	**40.1%** [36.4–43.7]	**46.9%** [43.4–50.4]	**3.8%** [2.8–4.7]	**9.2%** [7.7–10.7]
Whites	**42.0%** [38.5–45.5]	**46.0%** [42.7–49.3]	**3.1%** [2.4–3.8]	**8.9%** [7.8–10.0]
African-Americans	**69.9%** [64.0–75.7]	**13.6%** [9.4–17.8]	**2.1%** [0.7–3.4]	**14.5%** [10.5–18.5]
Hispanics	**46.8%** [41.7–51.9]	**35.4%** [30.7–40.2]	**4.2%** [2.5–6.0]	**13.6%** [10.5–16.6]
Asian-Americans	**49.6%** [41.0–58.3]	**35.8%** [28.1–43.5]	**6.3%** [2.2–10.4]	**8.3%** [4.8–11.8]

Table A-4: Brand Preference Among Smokers in Middle and High School — 2000 NYTS [95% Confidence Interval]

	Middle School				
	Marlboro	**Newport**	**Camel**	**Other**	**No Usual**
Overall	**46.4%** [42.0–51.0]	**22.0%** [17.0–27.1]	**6.4%** [4.7–8.2]	**13.4%** [11.1–15.6]	**10.5%** [8.6–12.4]
Males	**45.0%** [40.1–49.9]	**21.5%** [16.4–26.7]	**8.1%** [5.9–10.4]	**14.1%** [11.4–16.7]	**9.9%** [7.6–12.1]
Females	**48.1%** [42.6–53.7]	**22.5%** [16.6–28.4]	**4.5%** [2.5–6.6]	**12.6%** [9.7–15.4]	**11.3%** [8.7–13.8]
Whites	**55.1%** [50.5–59.6]	**13.9%** [9.9–17.9]	**7.6%** [5.1–10.2]	**11.8%** [9.1–14.5]	**10.9%** [8.6–13.3]
African-Americans	**9.6%** [4.9–14.3]	**62.1%** [54.0–70.1]	**2.7%** [0.5–4.8]	**19.5%** [13.5–25.5]	**4.6%** [2.4–6.9]
Hispanics	**52.1%** [45.6–58.7]	**12.8%** [7.9–17.8]	**4.4%** [2.5–6.2]	**12.6%** [8.4–16.9]	**16.4%** [11.7–21.2]
Asian-Americans	**40.1%** [21.2–59.0]	**18.8%** [1.8–35.8]	**13.0%** [3.8–36.0]	**11.9%** [1.5–22.4]	**16.2%** [0.1–32.2]
	High School				
	Marlboro	**Newport**	**Camel**	**Other**	**No Usual**
Overall	**53.2%** [49.5–56.8]	**20.7%** [17.1–24.3]	**11.0%** [8.8–13.2]	**8.2%** [6.9–9.5]	**6.6%** [5.9–7.3]
Males	**52.0%** [47.7–56.2]	**19.7%** [15.6–23.8]	**12.7%** [10.2–15.2]	**8.9%** [7.1–10.6]	**6.5%** [5.6–7.4]
Females	**54.5%** [50.6–58.3]	**21.9%** [18.0–25.7]	**9.2%** [6.8–11.6]	**7.6%** [5.9–9.2]	**6.7%** [5.6–7.8]
Whites	**59.2%** [55.7–62.8]	**13.6%** [10.7–16.4]	**12.7%** [10.1–15.3]	**7.6%** [6.2–9.1]	**6.6%** [5.8–7.5]
African-Americans	**10.5%** [6.1–15.0]	**70.6%** [63.8–77.5]	**2.2%** [0.8–3.6]	**9.8%** [6.9–12.8]	**6.4%** [3.7–9.1]
Hispanics	**50.8%** [44.3–57.4]	**25.0%** [17.1–32.9]	**6.3%** [3.8–8.8]	**11.3%** [8.3–14.2]	**6.4%** [4.4–8.5]
Asian-Americans	**53.7%** [45.5–61.9]	**29.2%** [20.9–37.4]	**4.2%** [0.5–8.0]	**10.6%** [5.1–16.0]	**2.4%** [0.3–4.4]

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