

Trends in Cigar Consumption and Smoking Prevalence

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INTRODUCTION The use of cigars appears to be on the increase in the United States based on reports in the popular press and the emergence of cigar bars and cigar events (Chapter 7). This chapter examines trends in cigar smoking prevalence and patterns of cigar use. Data on cigar sales are examined to assess overall trends in cigar use, while national and regional survey data on self-reported cigar use are used to evaluate changing patterns of cigar use among different age, gender, and racial groups.

Trends in Cigar Production, Sales, and Consumption Figure 1 depicts tobacco consumption in the United States by major product category for the period 1880 through 1997 (Milmore and Conover, 1956; U.S. Department of Agriculture, 1996, 1997). These data are expressed in pounds of tobacco consumed per adult rather than in individual units such as cigars or cigarettes, so that direct comparisons between product categories can be made. Cigars accounted for a larger percentage of overall tobacco consumption in the early decades of the twentieth century than they do currently. By the mid-1920's, cigar consumption began to decline as cigarettes became the predominant form of tobacco consumed. Cigar consumption increased slightly in the early 1950's and again in the mid-1960's, possibly as a result of male cigarette smokers switching to cigars in response to publicity about the health dangers of cigarettes.

From 1964 until 1993, cigar consumption declined by 66 percent in the United States (U.S. Department of Agriculture, December 1996), however between 1993 and 1997, overall cigar consumption increased nearly 50 percent. The recent upturn in cigar smoking since 1993 is due mainly to an increase in the sale of large cigars, which increased by 68 percent from 1993 to 1997 (Table 1). Despite the recent growth in cigar sales, cigars still constitute only a small fraction of the tobacco market in comparison with other tobacco products.

Figure 2 summarizes consumption data for United States of large cigars and cigarillos and small cigars between 1950 and 1997 (U.S. Department of Agriculture, September 1997). Before 1971, small cigars made up only a tiny fraction of cigar sales. However, the sale of small cigars increased by 254 percent between 1971 and 1972 (U.S. Department of Agriculture, December 1996) in conjunction with an increase in television advertising. The increased television advertising resulted from a loophole in the federal law (The Public Health

Figure 1
Per-capita consumption of different forms of tobacco in the US 1880-1997

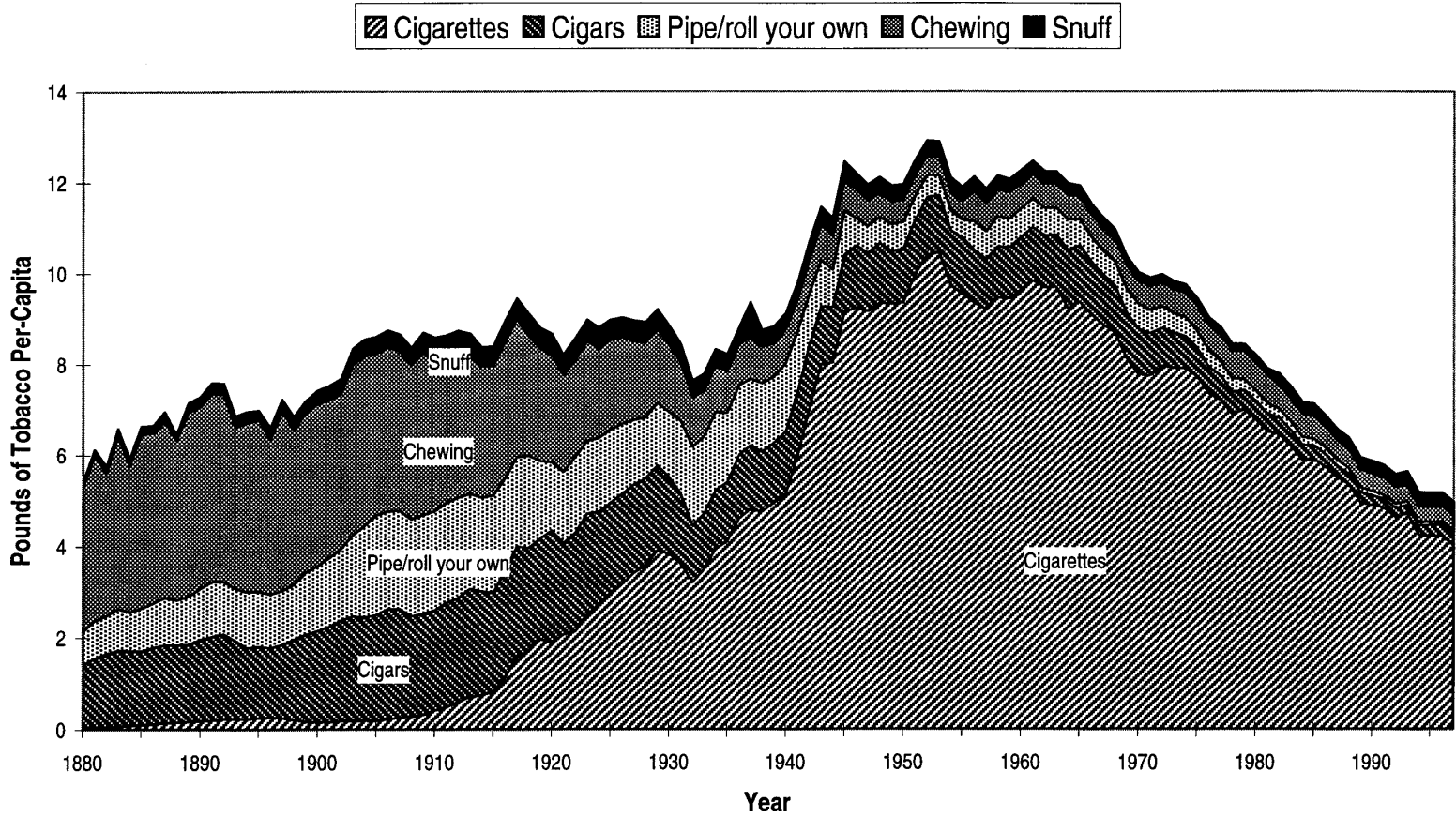
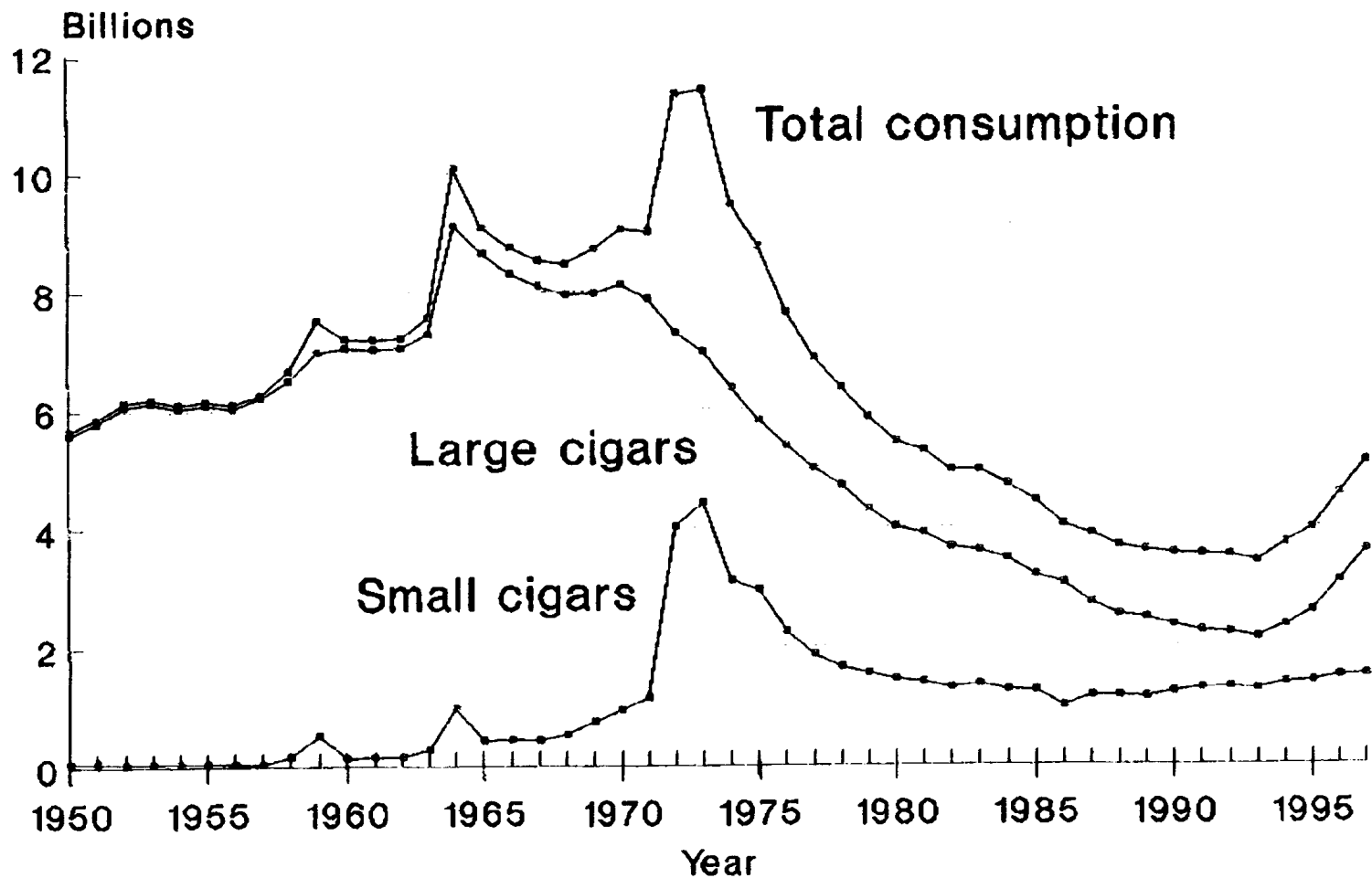


Figure 2
U.S. estimated consumption of cigars 1950 to 1997



1997 figure subject to revision

Cigarette Smoking Act of 1969) that prohibited cigarette advertising on radio and television, but which did not prohibit the advertising of cigars (U.S. Department of Health and Human Services, 1989). Television advertising by manufacturers of small cigars increased dramatically in 1972 and 1973 filling the void left by cigarette advertisers, and sales of small cigars soared. In September 1973, Congress passed a law banning the broadcast advertising of small cigars (The Little Cigar Act - PL93-109) (U.S. Department of Health and Human Services, 1989); and the consumption of small cigars dropped steadily until the early 1990's when it rebounded slightly.

As seen in Figure 2, the consumption of large cigars and cigarillos enjoyed a resurgence in 1964, possibly due to cigarette smokers switching from cigarettes to cigars following the first report to the U.S. Surgeon General on smoking and health (U.S. Public Health Service, 1964). After 1965, consumption of large cigars and cigarillos steadily declined until 1992. Since 1993, consumption of cigars of all types (i.e., small, large, and large premium cigars) has increased (Maxwell, 1997); but by far the largest percentage increase has been in the consumption of premium cigars. Between 1993 and 1996, sales of premium cigars increased by nearly 154 percent.

Recent Trends in Self-reported Use The recent upward trend in cigar sales in the United States may signal an increase in the prevalence of cigar smoking, an increase in the number of cigars smoked among current users, or some combination. This chapter examines national and regional survey data on self-reported cigar use in an attempt to evaluate trends in the patterns of cigar use among different age, gender, and racial groups.

Table 1.
Cigar consumption in the United States, 1993-1997

Cigar type	millions of cigars consumed	millions of cigars consumed	% change (1993-1997)
	(1993)	(1997)	
large	2,138	3,589	67.9
small	1,280	1,447	13.0
total	3,418	5,036	47.3

Source: U.S. Department of Agriculture *Tobacco Situation and Outlook Report*, December 1997, TSB-240.

Data Sources The principal sources of nationally representative survey data to estimate trends in cigar use by adults are the 1970, 1987, 1991, and 1992 National Health Interview Surveys (NHIS), the 1986 Adult Use of Tobacco Survey (AUTS), and the 1992/93 and 1995/96 Current Population Surveys (Table 2a). Additionally, some non-national surveys have included questions that can be used to estimate recent trends in cigar smoking prevalence among adults. These surveys include the

Table 2a
Data sources for adult cigar smoking prevalence

Survey	Type of Survey	Method of Administration	Sample Characteristics and Sample Size	Questions Asked
1970 National Health Interview Survey (NHIS)	cross-sectional nationally representative	in home; some telephone	18+ years old;	Has ___ smoked at least 50 cigars during his entire life? If yes, then: Does ___ smoke cigars now? If yes, then: About how many cigars a day does ___ usually smoke? ___ number per day (Follow-up question: What size cigars does ___ usually smoke: Full-sized cigars, the small cigars sometimes called cigarillos or the very small cigars about the size of a cigarette?) If less than 1 per day, then: 3-6 per week (Follow-up question: What size cigars does ___ usually smoke: Full-sized cigars, the small cigars sometimes called cigarillos or the very small cigars about the size of a cigarette?) Less than 3 per week (Follow-up question: How long has it been since ___ smoked 3 or more cigars a week)
1986 Adult Use of Tobacco Survey (AUTS)	cross-sectional nationally representative	telephone interviews	18+ years old; 12,479	Have you ever smoked cigars? If yes, then: Do you smoke cigars now? If yes, then: Do you smoke cigars: at least once a day at least once a week, or less than once a week?
1987 NHIS	cross-sectional nationally representative	in-person interviews	18+ years old; 43,526	Have you ever smoked cigars? If yes, then: Have you smoked at least 50 cigars in your lifetime? If no, skipped out. If yes, then: How old were you when you first smoked cigars? Do you smoke cigars now? Altogether, about how long [did you smoke/have you smoked] cigars? On the average, how many days per month [did/do] you smoke cigars? On the days you smoke(d) cigars, how many [did/do] you smoke?

Table 2a (Continued)
Data sources for adult cigar smoking prevalence

1991 NHIS	cross-sectional nationally representative	in-person interviews	18+ years old; 43,151	Have you ever smoked cigars? If yes, then: Have you smoked at least 50 cigars in your entire life? If yes, then: Do you smoke cigars now? Do you smoke cigars every day or some days? Do you smoke cigars "not at all" or "some days"?
1992 NHIS	cross-sectional nationally representative	in-person interviews	18+ years old; 11,827	Have you ever smoked cigars? If yes, then: Have you smoked at least 50 cigars in your entire life? If no, skipped out. If yes, then: Do you smoke cigars now? If yes, then: On the average, how many days per month do you smoke cigars?
1992-1993 Current Population Survey (CPS)	cross-sectional nationally representative	telephone and in-person interviews	18+ years old; 227,639	Have you ever used pipes, cigars, chewing tobacco or snuff on a regular basis? yes..... Which ones? pipes cigars chewing tobacco snuff If yes to any of the above then: Do you now use pipes, cigars, chewing tobacco or snuff? Yes Which ones? pipes cigars chewing tobacco snuff
1995-1996 CPS	cross-sectional nationally representative	telephone and in-person interviews	18+ years old; 186,476	Have you ever pipes, cigars, chewing tobacco or snuff on a regular basis? Yes..... Which ones? pipes cigars chewing tobacco snuff If yes to any of the above then: Do you now use pipes, cigars, chewing tobacco or snuff? yes..... Which ones? pipes cigars chewing tobacco snuff

Table 2a (Continued)

Data sources for adult cigar smoking prevalence

Community Intervention Trial for Smoking Cessation baseline survey, 1989 (COMMIT)	cohort and cross-sectional	telephone interviews	18+ years old; 8,417	Do you smoke cigars on a regular basis (regular 3-4 times per week)?
1993 COMMIT	cohort and cross-sectional	telephone interviews	18+ years old; 26,379	Do you smoke cigars on a regular basis (regular 3-4 times per week)? Have you smoked cigars in the past 6 months?
California Tobacco Use Survey, 1990	cross-sectional	telephone interviews	18+ years old; 24,296	Have you ever smoked cigars? Have you smoked at least 50 cigars in your entire life? Do you now smoke cigars every day, some days, or not all?
California Tobacco Use Survey, 1996	cross-sectional	telephone interviews	18+ years old; 18,616	Have you ever smoked cigars, cigarillos, or small cigars? Have you smoked at least 50 cigars in your entire life? Do you now smoke cigars every day, some days, or not all?

1990 and 1996 California Adult Tobacco Use survey, and the cross-sectional and cohort surveys conducted in 22 North American communities in 1989 and 1993 as part of the National Cancer Institute's Community Intervention Trial for Smoking Cessation (COMMIT) project (U.S. Public Health Service, 1995; Hyland et.al, 1997) (Table 2a). Surveys that examine cigar smoking among adolescents are included in Table 2b. It is important to note that differences in survey methodology and the measures used to define cigar use make it difficult to reliably compare trends in cigar use behavior between surveys. For example, some surveys have restricted their definition of current cigar use to individuals who report having smoked at least 50 cigars in their lifetime. Other surveys have asked about "regular" use of cigars without defining the frequency of cigar smoking. Few surveys have questioned cigar smokers about the quantity and type of cigars typically consumed.

Prevalence of Ever Smoking Cigars Among Adults

Prevalence of ever smoking cigars was assessed by each of the national adult surveys (Table 3). Cigar smoking is predominantly a male behavior. The overall male ever cigar smoking prevalence declined slightly from 1986 to 1991, and then increased slightly in 1992. This change in prevalence may also have occurred among females, but the prevalence among females is so low that it is difficult to define a change with confidence.

Table 2b
Data sources for adolescent cigar smoking prevalence

Survey	Type of Survey	Method of Administration	Sample Characteristics and Sample Size	Questions Asked
Robert Wood Johnson Foundation National Study of Tobacco Price Sensitivity, Behavior and Attitudes among Teenagers, 1996	cross-sectional nationally representative	self-administered questionnaire	14–19 years old; 16,417	How many cigars, if any, have you smoked in the past year?
Massachusetts Department of Public Health, 1996	cross-sectional	self-administered questionnaire	Grades 6–12; 6,844	How often have you smoked cigars in your lifetime? How often have you smoked cigars during the last 12 months? How often have you smoked cigars during the last 30 days?
Roswell Park Cancer Institute Survey of Alcohol, Tobacco and Drug Use (New York), 1996	census of students in two counties in New York state	self-administered questionnaire	Grade 9; 9,916 students in Erie County, 1,677 students in Chautauqua County	In the past 30 days, did you smoke a cigar?
California Tobacco Use Survey, 1996	cross-sectional	telephone interviews	12–17 years old; 6,252	Have you ever tried cigars, cigarillos, or little cigars? Do you think you will ever smoke a cigar, cigarillo, or little cigar? On how many of the past 30 days did you smoke cigars, cigarillos, or little cigars?

The prevalence estimates from the Current Population Surveys are significantly lower than those from the other national surveys, and this may be due to differences in wording of the questions on cigar smoking in these surveys. Respondents to the Current Population Survey were asked whether they had “ever regularly used” cigars, but respondents in the Adult Use of Tobacco Survey (AUTS) and in the NHIS were asked whether they had “ever smoked” cigars. Use of the words “regular use” on the Current Population Survey may have implied a more frequent use of cigars, and, therefore, those respondents who had smoked cigars infrequently may have been less likely to respond affirmatively to this question.

Table 3
Cigar ever smoking prevalence from national surveys

	1986 AUTS	1987 NHIS	1991 NHIS	1992 NHIS	1992-93 CPS	1995-96 CPS
Total Male	43.0±1.5	38.0±1.0	35.5±1.0	40.2±1.8	7.9±0.2	7.3±0.2
Age						
18–24	31.5±4.2	24.7±2.0	22.3±2.3	29.5±4.8	2.3±0.3	3.0±0.3
25–34	37.9±3.2	30.0±1.5	25.8±1.5	34.4±3.2	3.3±0.3	3.4±0.3
35–44	46.3±3.3	39.4±2.0	36.5±1.8	39.1±3.3	6.5±0.4	5.4±0.3
45–64	11.3±0.4	9.7±0.4				
45–54	52.8±4.1	44.5±2.3	45.3±2.3	45.8±4.2		
55–64	50.5±4.1	48.3±2.4	45.7±2.4	49.6±4.7		
65+	49.8±4.3	49.5±2.0	44.4±2.1	48.4±4.1	17.0±0.7	15.2±0.07
Hispanic Origin*						
Hispanic	34.7±6.5	22.5±2.6	21.3±3.0	25.5±4.7	3.5±0.4	3.0±0.4
Non-Hispanic White	43.6±1.6	39.2±1.1	36.8±1.0	41.5±1.8	9.0±0.2	8.4±0.2
Race						
White	45.3±1.6	39.9±2.4	37.5±1.1	42.2±1.9		
Black	29.7±5.1	26.6±3.3	25.2±2.5	32.0±4.7	5.6±0.5	4.8±0.5
Asian or PI	21.4±9.3	15.5±3.7	17.0±4.7	15.2±6.5	2.4±0.6	1.9±0.5
Other**	40.5±12.0	41.4±7.2	25.4±6.2	32.4±12.8	7.8±2.2	8.8±2.3
Educational Level						
<12	44.6±3.5	42.5±2.1	37.6±2.1	38.9±3.4	9.6±0.5	7.9±0.5
12	43.7±2.6	37.9±1.4	35.4±1.5	41.1±2.9	7.8±0.3	7.3±0.3
13–15	41.3±3.1	35.4±1.8	33.7±2.2	41.6±3.3	7.2±0.4	7.0±0.4
16+	41.6±3.1	36.2±1.7	35.3±1.7	38.6±3.2	7.7±0.4	7.1±0.4

	1986 AUTS	1987 NHIS	1991 NHIS	1992 NHIS	1992-93 CPS	1995-96 CPS
Total Female	3.5±0.6	3.8±0.3	3.1±0.2	3.7±0.5	0.29±0.04	0.28±0.04
Age						
18–24	2.2±1.3	4.5±0.9	2.7±0.7	5.0±1.7	0.16±0.07	0.16±0.08
25–34	4.2±1.2	4.7±0.6	3.0±0.6	4.7±1.2	0.23±0.07	0.26±0.08
35–44	5.1±1.4	4.2±0.6	4.3±0.6	3.2±0.9	0.36±0.09	0.35±0.09
45–64	0.42±0.09	0.35±0.08				
45–54	4.4±1.7	4.3±0.9	3.5±0.6	4.1±1.5		
55–64	2.9±1.4	3.0±0.6	3.3±0.7	3.2±1.3		
65+	2.0±1.1	1.7±0.4	1.6±0.5	2.2±0.9	0.21±0.07	0.21±0.07
Hispanic Origin*						
Hispanic	6.6±3.6	2.7±0.9	1.7±0.6	2.9±1.3	0.23±0.11	0.18±0.10
Non-Hispanic White	3.3±0.6	3.9±0.3	3.2±0.3	3.8±0.5	0.32±0.04	0.30±0.04
Race						
White	3.7±0.6	3.9±0.4	3.3±0.3	4.1±3.5		
Black	1.9±1.3	2.9±0.6	1.6±0.4	1.8±0.9	0.23±0.09	0.21±0.09
Asian or PI	7.2±7.3	2.0±1.8	1.6±1.4	1.1±1.6	0.05±0.09	0.19±0.16
Other**	6.5±6.3	5.5±4.3	7.3±5.8	7.1±6.2	0.78±0.67	1.40±0.85
Educational Level						
<12	3.4±1.3	3.6±0.5	2.7±0.5	3.2±1.0	0.38±0.10	0.32±0.09
12	3.3±0.9	3.6±0.4	3.1±0.4	3.2±0.8	0.25±0.05	0.24±0.05
13–15	3.9±1.1	4.7±0.6	3.2±0.5	4.7±1.4	0.30±0.07	0.28±0.07
16+	3.9±1.4	3.6±0.6	3.3±0.6	4.3±1.0	0.31±0.09	0.32±0.08

*The White and Black categories in NHIS included those of Hispanic origin whereas in the CPS, all Hispanics are included in the Hispanic category.

**The 1995/96 CPS category "Other" contains only American Indians. All other respondents were assigned to existing categories.

The prevalence of cigar smoking by age and gender shows that, in surveys conducted between 1986-1992, older males were more likely than younger males to have ever smoked cigars. Ever cigar smoking did not vary by age among females. The prevalence of ever smoking was lower in every age group in the Current Population Surveys, but the pattern of ever cigar smoking by age group among males in the Current Population Surveys was similar to that seen with the other national surveys. Older males showed a significant decline in ever smoking prevalence between 1992/93 and 1995/96 in the Current Population Surveys. However, this decline was not evident among younger males, and there was a small but statistically significant increase among males 18-24 years of age.

Non-Hispanic males were more likely than Hispanic males to have ever smoked cigars. This pattern was seen on all national surveys. There were no differences between Hispanic and non-Hispanic females. White males were more likely than black males to report ever having smoked cigars. Rates for white and black males decreased slightly from 1986 to 1991, but then rose again in 1992. White females were somewhat more likely than black females to have ever smoked cigars, but the rates for females did not vary by race from 1986 to 1992.

In 1987, males with fewer than 12 years of education were more likely than males with greater than 12 years of education to report ever smoking cigars. This difference by education is the opposite of that seen in more recent surveys. There were no differences in ever cigar smoking rates by education among women.

Data for the state of California can also be used to compare cigar smoking in 1990 with that in 1996. Table 4 presents the ever cigar smoking prevalence for the State of California in 1990 and 1996 and shows an overall decline in ever smoking prevalence among males, with no change among females. The prevalence of ever smoking among males in California increased substantially with age in the 1990 survey; but, between 1990 and 1996, the prevalence of ever smoking declined among older age groups and increased in the 18-24 year old group, resulting in a flattening in the gradient of ever smoking with age. Ever smoking prevalence among women showed little change with age in 1990; but in 1996, there was a decline in ever smoking prevalence among older age groups and an increase in the 18-24 year old group sufficient to produce an inverse gradient with age.

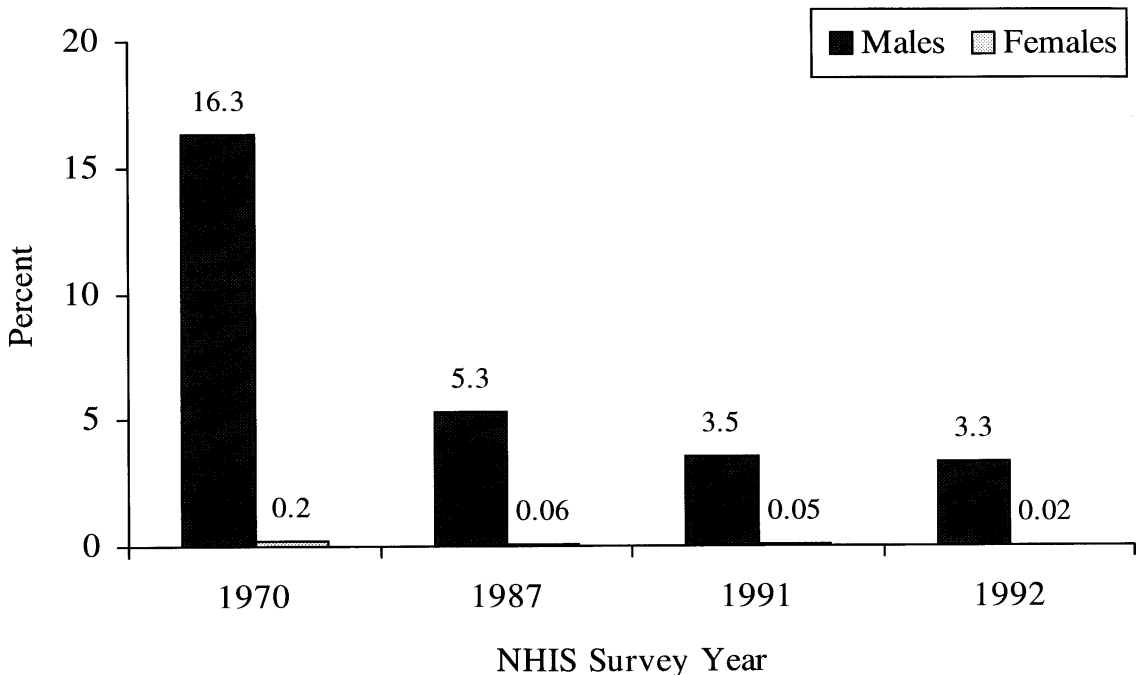
Prevalence of Current Cigar Smoking Figure 3 shows changes in the percentage of adult current cigar users among males and females in the United States between 1970 and 1992 using data collected from the NHIS. These data reveal that cigar use has always been predominantly a male behavior. Between 1970 and 1992, the prevalence of cigar use among adult males declined by 80 percent. The decline in cigar use by males was evident in all age and racial groups (data not shown). The highest prevalence of cigar use was among males between the ages of 35 and 64 years. Male and female prevalence of current cigar smoking among adults nationally also declined between 1986-1992 for all races (Table 5). Except for 1987, there were no significant differences among the races in current cigar smoking prevalence. By 1992, cigar use was a behavior rarely seen among

Table 4
 Current and ever cigar smoking prevalence among California adults, 1990 and 1996

	1990 Current Cigar (%)	1996 Current Cigar (%)	1990 Ever Smoked Cigars (%)	1996 Ever Smoked Cigars (%)
Male Total	4.8±0.6	8.8±0.8	42.7±1.6	35.2±1.1
Age				
18–24	4.2±1.8	12.4±2.7	29.4±3.8	32.5±3.8
25–44	5.3±0.7	10.9±1.3	39.4±1.8	32.8±2.2
45–64	4.7±1.0	6.2±1.3	52.5±2.2	38.1±2.8
65+	3.4±1.3	1.8±1.2	56.4±4.9	41.2±5.2
Race/Ethnicity				
Non-Hispanic White	5.7±0.6	11.5±1.2	52.5±1.9	47.5±1.7
African-American	2.5±1.4	6.3±2.2	27.9±6.1	28.7±4.2
Hispanic	3.3±1.2	5.6±1.8	25.0±2.6	17.9±2.6
Asian/PI	2.0±0.7	2.9±1.4	28.0±4.9	16.4±3.6
Other	14.6±7.7	8.1±4.0	58.0±12.1	26.2±9.1
Education				
<12	4.9±1.3	3.9±1.5	37.1±4.6	19.1±3.0
12	4.5±1.0	9.2±1.8	41.1±2.6	35.4±2.3
13–15	5.1±1.0	9.2±1.3	46.9±2.6	39.5±2.5
16+	4.6±0.8	11.4±1.6	46.0±2.2	42.5±2.0
Income				
≤10,000	4.0±1.4	4.7±2.0	36.4±5.0	20.8±4.7
10,001–20,000	4.1±1.1	6.3±1.7	34.4±4.6	27.7±4.7
20,001–30,000	4.9±1.7	6.6±1.9	40.9±3.8	30.9±4.3
30,001–50,000	5.6±1.3	8.4±2.2	48.2±3.7	37.5±3.3
50,001–75,000	4.7±1.0	10.8±2.1	47.0±3.8	39.4±3.9
75,000+	6.0±1.7	14.8±2.1	47.8±4.2	47.6±3.3
Unknown	3.5±1.1	5.1±2.2	38.0±4.0	28.1±4.7
Female Total	0.2±0.1	1.1±0.3	6.4±0.7	5.5±0.6
Age				
18–24	0.3±0.3	3.0±1.4	5.9±1.8	8.4±2.0
25–44	0.3±0.2	1.4±0.5	7.1±0.7	6.4±1.0
45–64	0.2±0.2	0.3±0.2	6.9±1.3	4.7±0.8
65+	0.1±0.1	0.1±0.1	3.9±1.0	1.9±0.9
Race/Ethnicity				
Non-Hispanic White	0.2±0.1	1.3±0.4	7.9±0.8	7.4±0.9
African-American	0.0±0.1	2.5±2.0	4.5±2.7	5.4±2.7
Hispanic	0.4±0.0	0.6±0.5	3.0±0.9	2.9±1.0
Asian/PI	0.2±0.4	0.5±0.5	4.7±2.4	2.1±1.0
Other	0.4±0.5	0.5±0.5	11.7±4.4	5.9±3.3
Education				
<12	0.4±0.4	0.7±0.7	5.9±1.7	2.7±1.2
12	0.2±0.1	0.9±0.4	5.4±1.0	4.1±0.8
13–15	0.2±0.1	1.3±0.6	6.8±0.9	6.6±1.0
16+	0.2±0.3	1.5±0.7	8.4±2.0	8.2±1.6
Income				
≤10,000	0.1±0.2	0.7±0.4	5.6±1.8	4.6±1.7
10,001–20,000	0.8±0.8	1.0±0.6	6.6±1.7	4.5±1.3
20,001–30,000	0.2±0.2	0.8±0.6	5.8±1.2	4.1±1.3
30,001–50,000	0.1±0.2	1.3±0.8	6.5±1.4	6.3±1.5
50,001–75,000	0.3±0.3	1.5±1.0	7.1±1.4	6.1±1.6
75,000+	0.1±0.1	1.6±1.0	8.4±1.9	8.6±2.2
Unknown	0.1±0.1	0.5±0.3	5.4±1.3	3.3±1.4

Figure 3

Percentage of adults (18+ years of age) who currently use cigars* by sex, National Health Interview Surveys, 1970, 1987, 1991, and 1992



* Current use identified those persons who had smoked 50+ cigars in their lifetime who currently smoke cigars

females of any age or among men under the age of 25 years. Data from the 1992/93 and 1995/96 Current Population Surveys confirm the overall low prevalence of cigar use among both men and women. In 1992/93, only 1.7 percent of males and 0.5 percent of females reported current regular use of cigars. However, the reported regular use of cigars increased slightly among males (i.e., to 2 percent) and females (i.e., to 0.6 percent) in 1995/96 suggesting a reversal in the 2-decade long decline in cigar use among adults in the United States.

Data from the longitudinal tracking survey of adults conducted between 1989 and 1993 in 22 North American communities as part of the NCI's COMMIT project also point to an increase in cigar use (Hyland et.al, in press). The 1989 and 1993 surveys asked whether the respondent regularly smoked cigars or cigarillos (regular was defined as 3-4 times/week). Averaged across the 22 communities, the prevalence rate of regular cigar use increased 133 percent from 0.9 percent in 1989 to 2.1 percent in 1993. The reported increase in regular cigar use was observed in all 22 communities and seen in every gender, age, race, income, and smoking status category. The 1993 data show that both regular and occasional cigar use were more frequently reported by younger respondents and current cigarette smokers. The higher prevalence of cigar use among younger adults represents a dramatic change from earlier surveys of cigar users.

Table 5
Cigar current smoking prevalence from national surveys

	1986 AUTS	1987 NHIS	1991 NHIS	1992NHIS	1992-93 CPS	1995-96 CPS
Total Male	5.9±0.7	5.3±0.4	3.5±0.3	3.3±0.5	1.6±0.1	1.9±0.1
Age						
18–24	2.8	1.6	0.8	1.0	0.6±0.1	1.2±0.2
25–34	5.6	4.9	2.3	2.3	1.1±0.2	1.6±0.2
35–44	7.4	7.1	4.6	3.9	1.7±0.2	2.1±0.2
45–64					2.2±0.2	2.3±0.2
45–54	8.8	7.6	5.7	4.7		
55–64	6.7	6.2	5.3	5.7		
65+	5.2	4.8	3.0	2.6	2.3±0.3	2.1±0.3
Hispanic Origin*						
Hispanic	7.5±3.6	3.7±1.1	1.8±1.0	2.1±2.0	0.9±0.2	1.2±0.2
Non-Hispanic White	5.8±0.7	8.3±0.8	5.5±0.5	5.5±0.9	1.8±0.1	2.1±0.1
Race						
White	6.0±0.8	8.5±0.9	5.4±0.5	5.6±0.9		
Black	5.8±2.6	5.2±0.2	4.5±1.1	4.5±2.3	1.6±0.3	1.9±0.3
Asian or PI	4.2±4.6	1.0±0.9	3.6±4.1	nr	0.5±0.3	0.5±0.3
Other**	5.7±5.7	8.9±6.3	3.2±2.4	3.8±7.2	1.7±1.1	2.9±1.4
Educational Level						
<12	6.6±1.8	8.3±1.5	7.1±1.2	4.9±1.7	1.9±0.2	1.8±0.2
12	5.2±1.2	8.2±1.0	4.8±0.7	5.3±1.4	1.6±0.2	1.9±0.2
13–15	5.9±1.5	6.6±1.2	4.9±1.1	4.7±1.9	1.4±0.2	2.0±0.2
16+	6.2±1.5	8.1±1.5	4.2±0.8	5.6±1.7	1.7±0.2	2.1±0.2
	1986 AUTS	1987 NHIS	1991 NHIS	1992 NHIS	1992-93 CPS	1995-96 CPS
Total Female	0.20±0.2	0.06±0.04	0.05±0.03	0.02±0.05	0.05±0.02	0.06±0.02
Age						
18–24	0.15	0.03	0.00	0.00	0.03±0.03	0.04±0.04
25–34	0.58	0.09	0.09	0.00	0.04±0.03	0.08±0.04
35–44	0.09	0.04	0.06	0.00	0.04±0.03	0.10±0.05
45–64					0.08±0.04	0.04±0.03
45–54	0.41	0.13	0.07	0.00		
55–64	0.13	0.06	0.06	0.22		
65+	0.00	0.00	0.02	0.00	0.03±0.03	0.04±0.03
Hispanic Origin*						
Hispanic	2.1±2.1	0.1±0.1	0.1±0.1	0.3±0.7	0.11±0.08	0.06±0.05
Non-Hispanic White	0.1±0.1	0.1±0.02	0.1±0.03	nr	0.04±0.02	0.06±0.02
Race						
White	0.3±0.2	0.1±0.03	0.1±0.03	0.03±0.06		
Black	0.1±0.3	0.1±0.1	0.1±0.1	nr	0.06±0.05	0.06±0.05
Asian or PI	nr	0.1±0.2	nr	nr	0.01±0.04	0.05±0.08
Other**	nr	0.3±0.6	nr	nr	.	0.50±0.51
Educational Level						
<12	0.2±0.3	0.1±0.1	0.05±0.09	0.1±0.2	0.08±0.04	0.07±0.04
12	0.4±0.3	0.02±0.02	0.02±0.03	nr	0.04±0.02	0.06±0.03
13–15	0.2±0.2	.05±0.06	0.1±0.1	nr	0.04±0.03	0.06±0.03
16+	nr	0.1±0.1	0.06±0.06	nr	0.04±0.03	0.06±0.04

*The White and Black categories in NHIS included those of Hispanic origin whereas in the CPS, all Hispanics are included in the Hispanic category.

**The 1995/96 CPS category "Other" contains only American Indians. All other respondents were assigned to existing categories.

The 1990 and 1996 California Adult Tobacco Use Surveys are perhaps the best source of data available to estimate recent trends in cigar use behavior. California adults were asked about their current cigar smoking habits in 1990 and 1996. Over this 6-year interval, cigar smoking increased among both males and females (Table 4). The rates of cigar smoking increased among males of each race, but the increase was greatest among white and black males. Current cigar smoking prevalence remained unchanged among males with less than a high school education. In contrast, males with higher educational attainment and income, and younger males, had increases in cigar smoking prevalence. Figure 4 compares current cigar smoking prevalence in 1990 and 1996 for different age groups of males and clearly demonstrates that the increase in current cigar smoking prevalence is predominantly occurring among younger age males (18-44). A similar shift in cigar smoking prevalence is also occurring among young women, but the prevalence of current cigar smoking remains low among women.

The increase in current cigar smoking prevalence with increasing educational attainment and income (Table 4) is in marked contrast to the pattern observed among cigarette smokers. Prevalence of cigarette smoking decreases with increasing educational attainment and income. Figure 5 contrasts the 1996 data for current cigarette and cigar smoking among California males by education and Figure 6 provides the same contrast for income level. Clearly the influence of these socioeconomic factors on these two tobacco-use behaviors is quite different.

Recent changes in use of cigars may be confined to current cigarette smokers, or it may also be occurring among those who are not current cigarette smokers. Table 6 presents data from the 1990 and 1996 California tobacco use surveys that classify cigar and cigarette smoking by whether only one tobacco product is currently being used or whether both products are currently being used. In 1996, 60 percent of males who reported currently smoking cigars did not smoke cigarettes at the time of the survey, and 40 percent had never smoked more than 100 cigarettes in their lifetime (the definition of a never smoker). There was an increase in male current cigar smoking prevalence between 1990 and 1996 for current and former cigarette smokers, as well as for never smokers, but the proportionate increase (278 percent) is greatest among never smokers. The increase in cigar only use between 1990 and 1996 is also greater for those groups with higher educational attainment and income.

Prevalence of Former Cigar Smoking There is little information available on the frequency with which cigar smokers quit smoking cigars. Data from the 1991 NHIS show that, among those males who had smoked 50 or more lifetime cigars, a larger percentage of older males were former cigar smokers as compared to younger males (Table 7). Former cigarette smokers were also more likely than current or never cigarette smokers to be a former cigar smoker.

The California survey has data on the frequency with which people who reported ever using cigars responded “not at all” when asked whether they smoked some days, every day, or not at all. This group can be considered former cigar smokers and can be further divided by whether the respondent reported

Figure 4
Prevalence of current cigar smoking among California males of different ages, 1990 and 1996

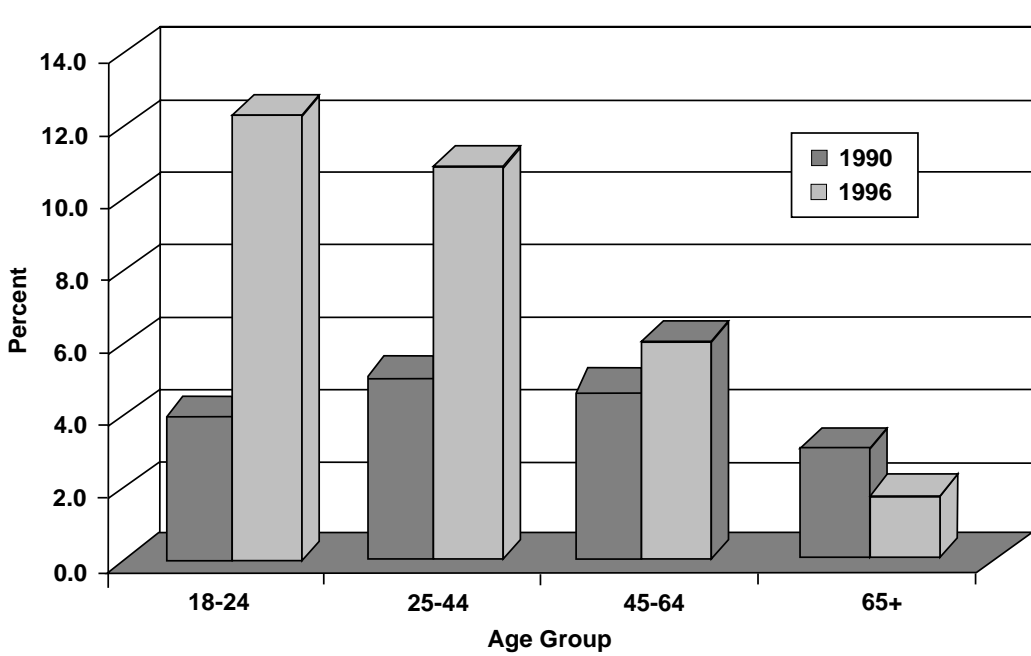


Figure 5
Prevalence of current cigarette and cigar smoking among California males of different levels of education, 1996

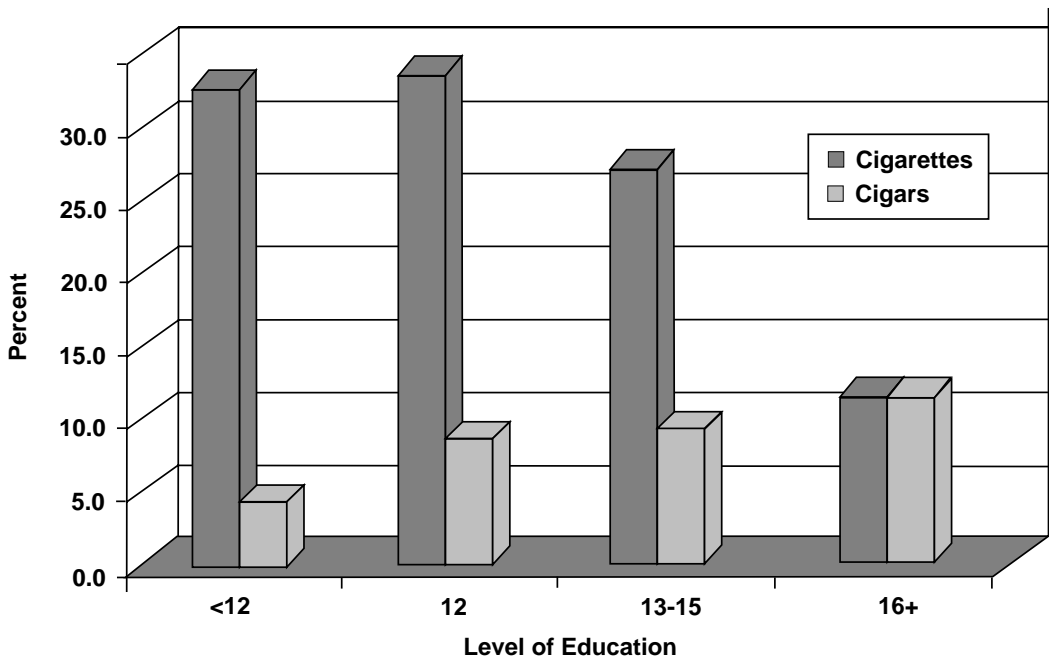


Figure 6
Prevalence of current cigarette and cigar smoking among California males of different incomes, 1996

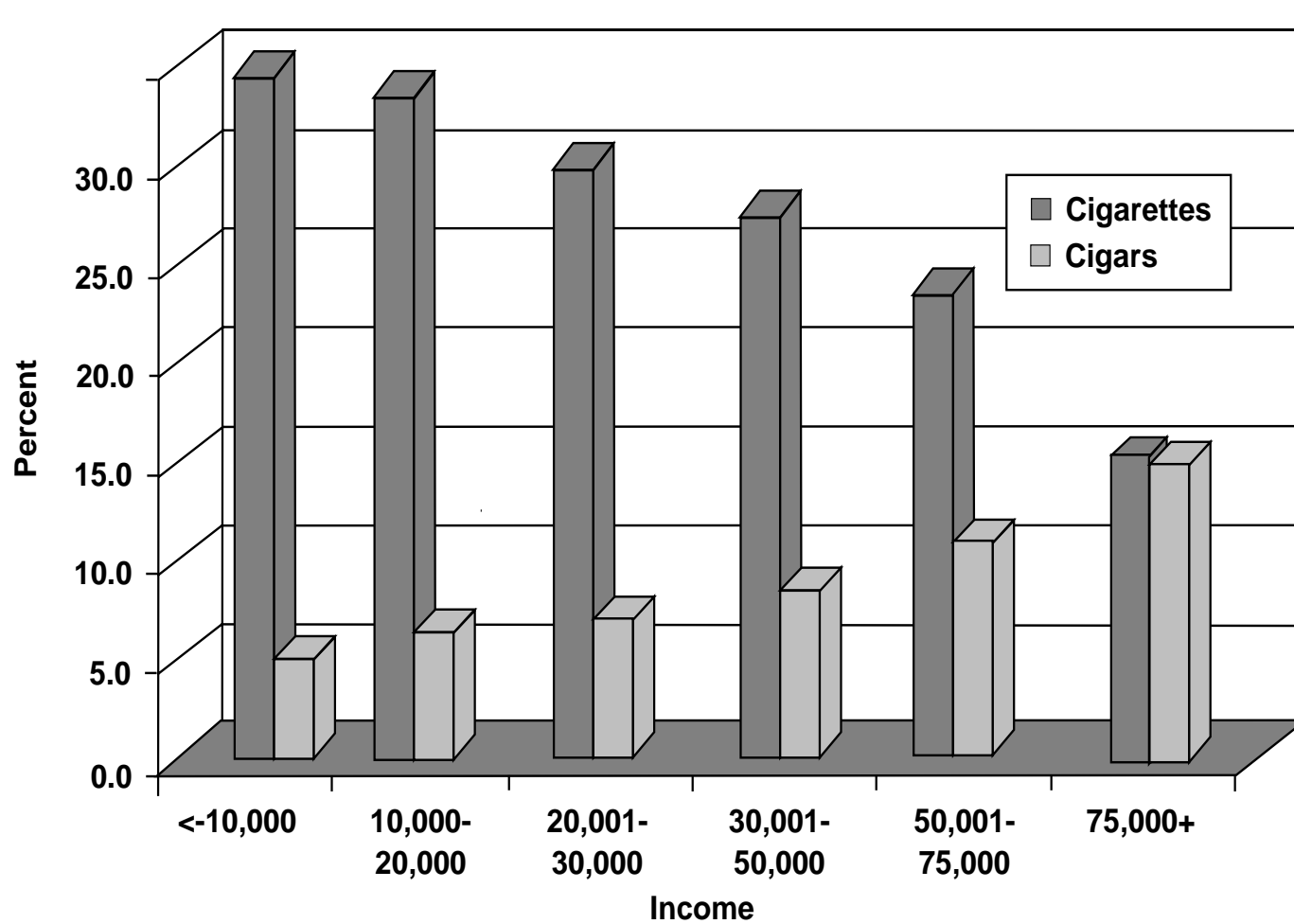


Table 6
Prevalence of cigar use in California, alone and in combination with cigarette use,
1990 and 1996

	1990					1996				
	Current Cigar Smokers					Current Cigar Smokers				
	Smoke Only Cigars					Smoke Only Cigars				
	Current Cigarettes Only (%)	Use Both Tobacco Products (%)	Never Smoked Cigarettes (%)	Former Cigarette Smoker (%)	Neither Product Used (%)	Current Cigarettes Only (%)	Use Both Tobacco Products (%)	Never Smoked Cigarettes (%)	Former Cigarette Smoker (%)	Neither Product Used (%)
Total Male	21.1±1.0	2.5±0.3	0.9±0.2	1.3±0.3	74.1±1.2	18.4±0.5	3.2±0.3	3.4±0.7	1.9±0.4	72.8±0.8
Age										
18-24	20.7±2.6	2.3±1.0	0.9±0.7	0.5±0.3	75.1±3.1	18.9±2.3	5.7±1.2	3.9±2.2	1.1±0.6	68.7±2.9
25-44	23.2±1.5	3.0±0.5	1.1±0.4	1.1±0.3	71.5±1.6	20.7±0.8	3.7±0.4	4.8±1.3	2.3±0.5	68.4±1.5
45-64	21.3±2.2	2.2±0.6	0.4±0.4	2.1±0.8	74.0±2.4	18.3±1.4	2.2±0.6	1.8±0.9	2.1±0.7	75.5±1.7
65+	12.6±2.5	1.2±0.6	0.5±0.6	1.6±0.8	84.0±3.0	9.4±1.4	0.3±0.2	0.8±0.9	0.8±0.7	88.8±1.7
Race/Ethnicity										
Non-Hispanic White	20.9±1.1	2.9±0.3	1.2±0.3	1.5±0.3	73.4±1.3	17.3±0.6	3.9±0.5	4.6±1.1	2.7±0.6	71.2±1.4
African-American	29.8±6.5	1.5±1.1	0.3±0.6	0.7±0.7	67.7±6.9	21.6±3.5	2.9±1.0	2.4±1.9	0.5±0.6	72.1±4.0
Hispanic	20.2±2.5	1.5±0.7	0.3±0.3	0.9±0.6	76.5±3.0	20.3±1.6	1.8±0.5	2.2±1.3	1.1±0.7	74.0±2.3
Asian/PI	17.5±2.4	0.9±0.5	0.2±0.2	0.8±0.6	80.5±2.4	16.2±2.0	2.1±1.1	0.6±0.9	0.3±0.2	80.9±2.3
Other	31.9±10.6	12.6±7.2	0.5±1.0	1.5±2.3	53.5±12.9	23.0±7.2	4.7±2.2	1.8±2.9	1.6±1.4	69.0±9.8
Education										
<12	26.8±2.8	3.6±1.1	0.1±0.1	1.1±0.7	68.3±3.6	25.3±2.4	2.5±0.6	1.1±1.2	0.4±0.4	70.7±2.2
12	24.2±1.6	2.5±0.5	0.7±0.5	1.0±0.3	71.3±1.9	23.8±1.2	4.4±0.7	2.6±1.4	1.7±0.7	67.0±2.1
13-15	21.0±2.0	2.5±0.4	1.0±0.4	1.5±0.6	73.9±2.1	18.1±1.4	3.8±0.6	3.1±1.2	1.9±0.7	72.7±1.9
16+	12.3±1.2	1.3±0.4	1.6±0.7	1.6±0.6	83.1±1.4	9.5±0.9	2.0±0.4	6.0±1.4	3.0±0.9	79.1±1.8
Income										
10,000	26.4±5.4	2.7±1.0	0.1±0.2	1.1±0.8	69.7±6.0	26.6±3.8	2.6±1.2	0.8±1.2	0.4±0.4	68.7±4.6
10,001-20,000	23.7±3.3	3.2±1.0	0.3±0.3	0.6±0.4	72.2±3.8	24.7±3.6	3.6±0.9	2.2±1.4	0.5±0.5	69.0±4.0
20,001-30,000	23.6±2.8	2.6±0.9	0.9±0.8	0.7±0.4	71.6±3.6	20.9±2.1	3.9±1.0	1.7±1.3	1.1±0.9	72.4±2.8
30,001-50,000	21.0±2.3	2.7±0.7	1.2±0.7	1.6±0.6	73.4±2.7	18.7±1.9	3.2±0.8	3.0±1.6	2.0±0.8	72.9±2.5
50,001-75,000	18.7±2.3	2.4±0.6	1.2±0.7	1.0±0.4	76.6±2.5	15.3±1.5	3.3±0.6	4.7±2.2	2.0±0.8	74.0±2.3
75,000+	15.1±2.0	1.7±0.6	1.4±0.7	2.7±1.3	78.9±2.6	12.1±1.4	3.1±0.7	7.1±2.1	4.2±1.1	73.1±2.4
Unknown	21.4±3.3	1.9±0.7	0.4±0.3	1.1±0.7	75.1±3.1	17.2±3.0	2.1±0.7	1.6±1.8	1.3±1.0	77.7±3.7

	1990					1996				
	Current Cigar Smokers					Current Cigar Smokers				
	Smoke Only Cigars					Smoke Only Cigars				
	Current Cigarettes Only (%)	Use Both Tobacco Products (%)	Never Smoked Cigarettes (%)	Former Cigarette Smoker (%)	Neither Product Used (%)	Current Cigarettes Only (%)	Use Both Tobacco Products (%)	Never Smoked Cigarettes (%)	Former Cigarette Smoker (%)	Neither Product Used (%)
Total Female	18.2±0.9	0.2±0.1	0.0±0.0	0.0±0.1	81.6±0.9	15.4±0.4	0.5±0.1	0.4±0.2	0.1±0.1	83.5±0.5
Age										
18-24	17.7±2.1	0.2±0.3	.	.	82.1±2.0	15.5±1.6	1.5±0.6	0.8±0.7	0.1±0.1	81.5±2.1
25-44	20.0±1.1	0.2±0.2	0.1±0.1	0.0±0.0	79.7±80.0	16.6±0.8	0.6±0.2	0.6±0.4	0.1±0.1	82.0±0.9
45-64	19.5±1.5	0.1±0.1	.	0.1±0.2	80.3±1.5	16.4±1.1	0.2±0.1	.	0.2±0.2	83.2±1.2
65+	10.9±1.07	0.1±0.1	.	.	89±1.7	9.6±1.3	.	.	.	90.4±1.3
Race/Ethnicity										
Non-Hispanic White	20.8±1.1	0.1±0.1	0.0±0.0	0.1±0.1	79.0±1.1	18.1±0.5	0.6±0.2	0.4±0.2	0.2±0.1	80.6±0.6
African-American	26.5±4.8	0.0±0.1	.	.	73.5±4.8	21.6±2.7	1.3±1.5	1.1±1.5	.	75.9±3.2
Hispanic	10.7±2.0	0.3±0.3	0.1±0.1	.	88.9±1.9	9.5±0.9	0.2±0.1	0.4±0.4	0.1±0.1	89.9±0.9
Asian/PI	8.5±2.0	0.0±0.1	0.1±0.2	0.0±0.1	91.3±2.0	8.4±2.2	0.3±0.3	0.2±0.4	.	91.1±2.2
Other	33.6±7.0	0.4±0.5	.	.	66.0±7.1	26.2±9.0	0.5±0.5	.	.	73.2±9.0
Education										
<12	18.8±2.3	0.4±0.4	.	.	80.8±2.4	15.0±1.4	0.4±0.3	.	.	84.2±1.4
12	21.7±1.3	0.1±0.1	0.0±0.1	0.0±0.0	78.1±1.3	20.1±1.3	0.5±0.2	0.3±0.3	0.1±0.1	79.0±1.4
13-15	17.7±1.5	0.1±0.1	0.1±0.8	0.0±0.0	82.1±1.5	16.7±1.2	0.6±0.3	0.5±0.5	0.1±0.1	82.0±1.3
16+	11.1±1.2	0.1±0.0	0.0±0.0	0.2±0.2	88.7±1.2	9.4±1.0	0.5±0.4	0.7±0.6	0.2±0.2	89.1±1.2
Income										
<=10,000	21.8±3.5	0.1±0.1	.	.	78.3±3.5	17.5±1.8	0.5±0.3	0.1±0.2	0.1±0.1	81.8±1.8
10,001-20,000	21.2±2.3	0.7±0.8	0.1±0.2	.	78.0±2.6	17.2±1.8	0.4±0.2	0.5±0.6	0.1±0.1	81.8±2.1
20,001-30,000	19.6±2.2	0.1±0.1	0.0±0.1	0.0±0.1	80.2±2.3	18.8±2.1	0.5±0.2	0.4±0.5	0.0±0.0	80.3±2.2
30,001-50,000	18.5±1.8	0.0±0.0	.	0.1±0.2	81.3±1.8	17.8±2.2	0.5±0.2	0.3±0.4	0.1±0.1	80.9±2.4
50,001-75,000	17.3±1.7	0.2±0.3	0.1±0.1	0.0±0.0	82.5±1.8	13.9±1.8	0.8±0.7	0.5±0.5	0.1±0.1	84.6±2.0
75,000+	14.4±2.0	0.1±0.1	.	0.0±0.0	85.5±2.0	10.0±1.3	0.4±0.2	0.8±0.9	0.3±0.4	88.3±1.5
Unknown	14.4±2.2	0.1±0.1	.	0.0±0.0	85.5±2.2	12.2±1.8	0.3±0.2	.	0.1±0.1	87.3±1.9

*Numbers may not sum to 100% because columns for missing or unknown data are omitted.

Table 7

Current occasional, current daily and former cigar smoking rates, 1991 NHIS

	Never Smoked Regularly	Former Smoker	Current Occasional Smoker	Current Daily Smoker
Gender				
Male	84.2±0.7	11.4±0.6	3.6±0.3	0.8±0.2
Female	99.7±0.1	0.2±0.1	0.07±0.04	0.005±0.007
Males Only				
Race				
White	83.1±0.7	12.5±0.6	3.7±0.3	0.7±0.1
Black	89.7±1.6	6.0±1.3	3.0±0.8	1.3±0.5
Asian/PI	94.4±3.9	2.5±2.1	1.5±2.2	1.7±2.9
Other	88.5±4.6	6.5±4.0	5.0±3.1	nr
Age				
18–24	97.2±0.8	1.3±0.6	1.4±0.6	0.07±0.1
25–34	93.6±0.8	3.0±0.5	3.3±0.6	0.06±0.06
35–44	84.7±1.4	9.5±1.1	5.1±0.9	0.7±0.3
45–54	75.3±2.0	18.4±1.8	4.6±0.9	1.7±0.8
55–64	72.7±2.2	21.1±2.0	4.5±1.1	1.7±0.5
65+	73.2±1.8	23.2±1.8	2.3±0.5	1.2±0.4
Cigarette Smoking Status				
Current	81.1±1.3	10.8±1.0	7.5±0.9	0.6±0.4
Former	72.5±1.4	23.3±1.3	2.8±0.5	1.4±0.4
Never	94.3±0.6	3.6±0.5	1.6±0.3	0.6±0.2

Current daily cigar smoker = smoked ≥50 cigars in life-time and smoking cigars daily at time of interview.

Current occasional = smoked ≥50 cigars in life-time but was not smoking cigars every day at time of interview.

Former cigar smoker = smoked ≥50 cigars in life-time but was not smoking at time of interview.

Never smoked regularly = never smoked ≥50 cigars in life-time.

smoking at least 50 lifetime cigars (Table 8). Among male Californians in 1996, 35.2 percent had ever smoked cigars, 8.8 percent currently smoked cigars and 26.4 percent were former cigar smokers. The prevalence of former cigar smoking increases with increasing age and level of education. The majority of former cigar smokers, using this definition of former smoker, had smoked fewer than 50 cigars in their lifetime.

Table 8

Detailed cigar smoking status among California adults, 1996

	Never Smoked Cigars (%)	Former Cigar Smoker		Current Cigar Smoker	
		< 50 Lifetime (%)	≥ 50 Lifetime (%)	Occasional (%)	Daily (%)
Total Male	64.8±1.1	17.7±1.1	8.6±0.7	8.4±0.8	0.4±0.2
Age					
18–24	67.5±3.8	18.0±2.8	2.0±1.0	12.2±2.7	0.2±0.3
25–44	67.2±2.2	18.1±1.9	3.7±0.6	10.6±1.3	0.3±0.2
45–64	61.9±2.8	17.8±2.2	13.9±1.5	5.7±1.2	0.5±0.4
65+	58.8±5.2	15.2±3.2	24.1±4.4	1.0±0.8	0.8±1.0
Race/Ethnicity					
Non-Hispanic White	52.5±1.7	22.7±1.8	13.1±1.2	10.9±1.2	0.6±0.4
African-American	71.2±4.2	15.4±4.1	6.9±3.2	6.2±2.2	0.2±0.2
Hispanic	82.1±2.6	9.8±2.0	2.4±0.8	5.6±1.8	0.1±0.1
Asian/PI	83.6±3.7	11.9±3.1	1.6±0.8	2.9±1.4	0.1±0.1
Other	73.8±9.1	14.3±6.7	3.6±2.0	7.6±3.9	0.4±0.7
Education					
<12	80.9±3.0	9.1±2.1	6.0±2.0	3.7±1.4	0.2±0.2
12	64.6±2.3	17.2±2.1	9.0±1.3	8.8±1.8	0.3±0.2
13–15	60.4±2.5	20.7±2.5	9.3±1.5	8.8±1.3	0.5±0.5
16+	57.5±2.0	21.4±2.3	9.6±1.3	10.9±1.5	0.5±0.4
Income					
≤10,000	79.2±4.7	10.5±3.3	5.5±1.8	4.6±1.9	0.1±0.2
10,001–20,000	72.3±4.7	13.6±3.8	7.8±2.5	6.1±1.7	0.2±0.2
20,001–30,000	69.0±4.3	16.4±2.8	7.8±2.1	6.2±1.8	0.4±0.7
30,001–50,000	62.4±3.3	19.2±2.9	9.7±1.8	7.7±2.2	0.6±0.5
50,001–75,000	60.6±3.9	20.1±3.0	8.4±1.9	10.5±2.2	0.3±0.2
75,000+	52.4±3.3	22.6±2.7	9.9±2.0	14.2±2.1	0.6±0.5
Unknown	71.9±4.7	14.1±3.4	8.9±2.7	4.9±2.2	0.1±0.1
	Never Smoked Cigars (%)	Former Cigar Smoker		Current Cigar Smoker	
		< 50 Lifetime (%)	≥ 50 Lifetime (%)	Occasional (%)	Daily (%)
Total Female	94.5±0.6	4.1±0.5	0.3±0.1	1.1±0.3	0.0±0.1
Age					
18–24	91.6±2.0	5.3±1.7	0.1±0.1	2.8±1.4	0.2±0.5
25–44	93.6±1.0	4.8±0.9	0.2±0.2	1.4±0.5	0.0±0.0
45–64	95.3±0.8	3.7±0.8	0.7±0.3	0.3±0.2	0.0±0.0
65+	98.1±0.9	1.5±0.8	0.3±0.4	.	.
Race/Ethnicity					
Non-Hispanic White	92.6±0.9	5.6±0.8	0.5±0.2	1.3±0.4	0.0±0.0
African-American	94.6±2.7	2.5±1.8	0.5±0.5	2.1±1.9	0.4±0.9
Hispanic	97.1±1.0	2.1±0.9	0.1±0.1	0.6±0.5	0.0±0.0
Asian/PI	97.9±1.0	1.5±0.9	0.0±0.1	0.5±0.5	.
Other	94.1±3.3	4.2±2.8	1.1±1.4	0.5±0.5	.
Education					
<12	97.3±1.2	1.7±1.0	0.2±0.2	0.7±0.7	0.0±0.1
12	95.8±0.8	3.0±0.6	0.3±0.2	0.8±0.4	0.1±0.2
13–15	93.4±1.0	5.0±1.0	0.3±0.2	1.3±0.6	0.0±0.0
16+	91.8±1.6	6.2±1.3	0.5±0.3	1.5±0.7	.
Income					
≤10,000	95.4±1.7	3.4±1.7	0.5±0.5	0.6±0.4	0.1±0.1
10,001–20,000	95.4±1.3	3.2±1.0	0.3±0.2	0.8±0.5	0.2±0.4
20,001–30,000	95.9±1.3	2.9±1.3	0.4±0.3	0.8±0.6	.
30,001–50,000	93.7±1.5	4.8±1.3	0.2±0.2	1.3±0.8	.
50,001–75,000	93.9±1.6	4.5±1.4	0.2±0.2	1.5±1.0	.
75,000+	91.4±2.2	6.6±1.8	0.4±0.4	1.6±1.0	.
Unknown	96.7±1.4	2.4±1.2	0.4±0.6	0.5±0.3	.

Smoking Patterns— In 1986, more than half the current cigar smokers smoked less than once per week, while 28.7 percent smoked at least once per day (Table 9). The younger the smoker, the less likely he was to report smoking cigars daily. Among those who reported that they currently smoke cigars, former and never cigarette smokers were more likely than current cigarette smokers to smoke cigars on a daily basis. The predominance of occasional use among cigar smokers is not a recent phenomenon. Only one quarter of current cigar smokers reported smoking daily in 1955 (Chaenszel, Shimkin and Miller, 1956).

Frequency

In the 1991 NHIS, those respondents who had smoked 50 or more lifetime cigars were asked whether they currently smoked cigars “some days,” “everyday,” or “not at all.” Less than one percent of males were current daily cigar smokers; females were even less likely than males to be smoking cigars daily (Table 7). Black males were somewhat more likely than white males to be daily cigar smokers. Males between the ages of 45-64 were more likely than younger males to be smoking cigars daily. Some day smoking also varied with age, with males aged 35-64 having the highest rates of some day cigar smoking.

Data from California (Table 10) show that between 1990 and 1996 there was little change in male prevalence of daily cigar smoking, and the increase in cigar

Table 9
Frequency of cigar smoking among current cigar smokers, 1986 AUTS

	At Least Once/Day	At Least Once/Week	Less than Once/Week
Total	29.7±5.5	17.9±4.6	52.4±6.0
Gender			
Male	28.0±5.5	18.5±4.8	53.4±6.1
Female	67.7±32.3	3.0±11.9	29.3±31.7
Race			
White	29.3±5.8	15.9±4.7	54.7±6.3
Black	25.0±19.7	40.1±22.3	35.0±21.7
Age			
18–24	1.8±6.4	32.6±22.6	65.6±22.9
25–34	20.6±10.0	16.9±9.3	62.5±11.9
35–44	16.0±8.5	16.9±8.7	67.1±10.8
45–54	41.9±13.5	15.6±9.5	42.5±13.5
55–64	53.5±16.6	14.3±11.7	32.3±15.6
65+	44.1±18.7	17.4±14.3	38.5±18.3
Cigarette Smoking Status			
Current	10.5±5.2	16.4±6.4	73.0±7.7
Former	46.0±10.4	17.3±7.8	36.7±10.0
Never	40.0±14.1	20.0±11.5	40.0±14.1

Table 10

Current cigar smoking prevalence among adult male Californians who have and have not smoked 50 or more cigars in their lifetime, 1990 and 1996

	1990					1996				
	Never/ Former Cigar Smokers (%)	Current Cigar Smokers				Never/ Former Cigar Smokers (%)	Current Cigar Smokers			
		Occasional		Daily			Occasional		Daily	
		< 50 Lifetime (%)	≥ 50 Lifetime (%)	< 50 Lifetime (%)	≥ 50 Lifetime (%)		< 50 Lifetime (%)	≥ 50 Lifetime (%)	< 50 Lifetime (%)	≥ 50 Lifetime (%)
Total Male	95.3±0.6	1.5±0.4	2.8±0.3	0.0±0.0	0.4±0.1	91.3±0.8	4.3±0.6	4.0±0.5	0.0±0.0	0.4±0.2
Age										
18-24	95.8±1.8	2.8±1.6	1.3±0.6	0.0±0.1	0.1±0.1	87.6±2.7	9.4±2.7	2.8±0.8	.	0.2±0.3
25-44	94.7±0.7	1.8±0.4	3.1±0.5	0.1±0.1	0.3±0.2	89.1±1.3	5.7±0.9	4.8±0.9	0.0±0.0	0.3±0.2
45-64	95.3±1.0	0.6±0.5	3.5±0.8	0.0±0.0	0.5±0.3	93.9±1.2	1.2±0.5	4.5±1.0	0.0±0.0	0.5±0.4
65+	96.6±1.3	0.1±0.1	2.3±0.9	.	1.0±0.7	98.2±1.2	0.1±0.2	0.9±0.8	.	0.8±1.0
Race/Ethnicity										
Non-Hispanic White	94.3±0.6	1.5±0.3	3.7±0.5	0.0±0.0	0.4±0.1	88.6±1.1	5.2±0.8	5.5±0.9	0.0±0.0	0.6±0.4
African-American	97.5±1.4	1.3±0.9	1.0±0.9	.	0.2±0.5	93.7±2.2	3.7±1.7	2.5±1.7	0.1±0.2	0.1±0.1
Hispanic	96.7±1.3	1.7±1.1	1.2±0.5	0.2±0.2	0.2±0.2	94.4±1.8	3.9±1.5	1.7±0.7	0.0±0.0	0.1±0.1
Asian/PI	98.0±0.7	0.6±0.4	1.2±0.7	.	0.2±0.3	97.1±1.4	1.2±0.8	1.6±1.2	.	0.1±0.1
Other	85.4±7.7	1.8±2.3	10.8±6.0	.	2.0±3.7	91.9±4.0	2.7±2.9	4.9±2.5	.	0.4±0.7
Education										
<12	95.1±1.3	1.6±0.9	2.6±0.7	0.1±0.1	0.6±0.4	96.1±1.5	2.6±1.3	1.2±0.4	0.0±0.1	0.2±0.2
12	95.4±1.0	1.7±0.8	2.4±0.5	0.1±0.1	0.3±0.2	90.9±1.8	4.2±1.1	4.6±1.3	0.1±0.1	0.3±0.2
13-15	94.9±1.0	1.5±0.5	3.1±0.6	.	0.4±0.3	90.9±1.3	4.7±1.1	3.9±0.8	0.0±0.0	0.5±0.5
16+	95.5±0.8	1.1±0.5	3.2±0.8	.	0.2±0.2	88.6±1.6	5.4±1.1	5.5±1.2	0.0±0.0	0.5±0.4
Income										
≤10,000	96.0±1.4	0.9±0.5	2.2±0.9	0.1±0.1	0.7±0.7	95.3±2.0	2.6±1.7	1.9±0.9	.	0.1±0.2
10,001-20,000	95.9±1.1	1.0±0.6	2.6±0.7	0.2±0.2	0.3±0.3	93.9±1.7	2.7±1.2	3.2±1.3	.	0.2±0.2
20,001-30,000	95.2±1.7	2.1±1.5	2.2±0.8	0.1±0.1	0.5±0.4	93.4±1.9	3.7±1.5	2.5±0.8	0.0±0.0	0.4±0.7
30,001-50,000	94.5±1.3	1.3±0.5	3.7±0.9	0.0±0.0	0.5±0.3	91.7±2.2	3.8±1.4	3.9±1.3	0.0±0.1	0.6±0.5
50,001-75,000	95.3±1.0	1.9±0.7	2.6±0.7	.	0.2±0.2	89.2±2.1	6.0±1.8	4.5±1.3	0.1±0.1	0.2±0.1
75,000+	94.±1.7	1.7±1.0	4.1±1.3	.	0.1±0.2	85.2±2.1	7.0±1.7	7.2±1.5	0.0±0.0	0.6±0.5
Unknown	96.6±1.2	1.4±0.7	1.6±0.7	.	0.4±0.4	95.1±2.1	2.5±2.0	2.2±1.0	.	0.1±0.1

smoking prevalence was confined largely to the occasional cigar smoking group (those who reported smoking cigars some days). The largest increase was in those some day cigar smokers who had not yet smoked 50 cigars in their lifetime, and the biggest increase among those who had not smoked 50 cigars in their lifetime was in the youngest age group. These California data suggest that there has been a dramatic increase in occasional cigar use recently, and that much of the change that has occurred would have been missed if the evaluation were confined only to those who had smoked more than 50 cigars in their lifetime.

Smoking Patterns— Quantity Among those cigar smokers who reported that they had smoked cigars regularly in 1987, 56.4 percent (95 percent CI, 54.3-58.6 percent) reported smoking 1-2 cigars per day; 26.4 percent (95 percent CI, 24.5-28.3 percent) reported smoking between 3 and 5 cigars per day, and 12.7 percent (95 percent CI, 11.3-14.0 percent) reported smoking 6 or more cigars per day. Unfortunately, most recent surveys have not collected information on quantity of cigars smoked making it impossible to assess trends on this important exposure variable.

Age of Initiation of Cigar Smoking Among the national surveys, only the 1987 NHIS asked adults about the age at which they first smoked cigars, and this question was only asked of those who had smoked more than 50 cigars in their lifetime. The age of initiation of cigar smoking was older than that for cigarette smoking. Among cigarette smokers, 60.2 percent had begun smoking regularly prior to age 18, whereas only 24.6 percent of those who had smoked more than 50 cigars in their lifetime had started prior to age 18 (Table 11). Recent data on adolescent use suggests that the age of initiation of cigar use currently may be much younger than in the past.

Adolescent Cigar Smoking During 1996, four surveys asked teenagers about their cigar smoking. Some surveys defined current smoking as having smoked cigars in the past 30 days; other surveys used a measure of use in the past year.

A national survey conducted by the Robert Wood Johnson Foundation (RWJF) found that 26.7 percent (95 percent CI, 25.0-28.4 percent) of 14-19 year olds had smoked at least one cigar in the past year (Centers for Disease Control and Prevention (CDC), 1997). Male adolescents (37 percent) were more than twice as likely as female adolescents (16 percent) to have smoked a cigar in the last year (Table 12). Those who smoked cigarettes or used smokeless tobacco in the previous month were more likely to have smoked cigars than those who had not used other tobacco products. There was a remarkably small difference in cigar smoking by age, with 14-16-year-old adolescents reporting smoking at a 24.4 percent rate as compared to 27.5 percent of 19-year-old teens.

The adolescent respondents were asked how many cigars they had smoked in the previous year. Nearly 3.0 percent had smoked more than 50 cigars in the previous year. Cigarette smokers and smokeless tobacco users were more likely than nonusers to have smoked 50 or more cigars in the previous year. The percentage of these teenagers who had consumed 50 or more cigars in one year was larger than the percentages of young adults who had smoked 50 or more cigars in their lifetime measured by the earlier NHIS (Figure 7).

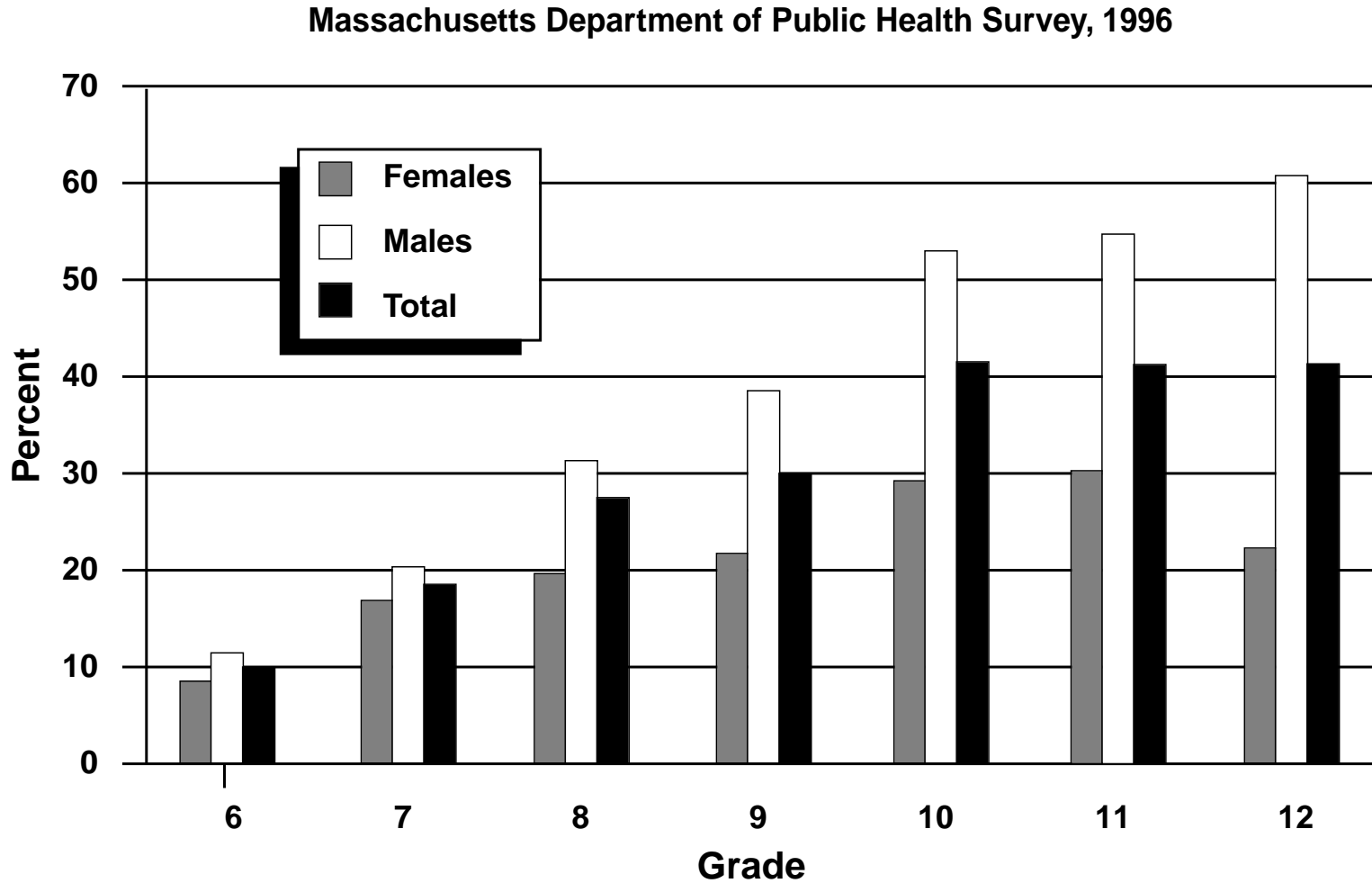
Table 11
Age of initiation of cigarette and cigar smoking for white and black males, 1987 NHIS

Age of Initiation	Cigar Smoking	Cigarette Smoking
White		
< 18	24.6±1.7	60.2±1.1
18–25	53.1±2.0	37.6±1.1
26–30	12.0±1.3	1.7±0.3
31–34	1.8±0.6	0.2±0.1
35–49	4.9±0.8	0.3±0.1
50+	3.6±0.7	0.0
Black		
< 18	19.8±6.4	52.8±3.5
18–25	52.6±7.8	43.3±3.4
26–30	14.9±5.0	3.0±1.3
31–34	2.4±2.2	0.4±0.3
35–49	5.9±2.9	0.6±0.7
50+	4.2±2.4	0.0

Table 12
Cigar use in the past year among adolescents, 1996 RWJF National Survey

	Prevalence
Gender	
Male	37.0±2.4
Female	16.0±1.3
Age	
14–16	24.4±1.7
17–18	29.8±1.7
19	27.5±5.3
Race/Ethnicity	
White, non-Hispanic	28.9±2.1
Black, non-Hispanic	19.3±2.9
Hispanic	26.2±2.1
Other	22.2±2.9
Past Month Cigarette Use	
Smoker	54.1±2.4
Nonsmoker	14.2±1.2
Past Month Smokeless Tobacco Use	
User	73.4±3.4
Nonuser	22.6±1.4

Figure 7
Lifetime use of cigars by grade and gender



The Massachusetts Department of Public Health assessed cigar use in grades 6 through 12 (CDC, 1997). The prevalence of ever having smoked a cigar increased with increasing grade and leveled off at over 40 percent for students in grades 10 through 12 (Figure 7, Table 13). Males in all grades were more likely than females to have ever smoked a cigar. Lifetime use of cigars by race (Figure 8) in Massachusetts showed that whites were more likely than other racial groups to have ever smoked a cigar.

The Massachusetts youth were also asked about past year and past month use of cigars. Past year use of cigars increased with increasing grade, with the largest increase between grades 7 and 8 (Table 13). The past year use for students in grades 9-12 (comparable in age to the students from the RWJF survey) showed that 28.1 percent had smoked a cigar in the past year, which was similar to the RWJF estimate of 26.7 percent. Past 30 day cigar use was highest in grade 11 for both male and female adolescents (Table 13). Cigar use was significantly higher

Table 13
Prevalence of cigar use in the last year, and all forms of tobacco use in the last 30 days, by school grade, Massachusetts, 1996

	Grade						
	6	7	8	9	10	11	12
Past Year Use Of Cigars	5.0 (4.2-5.8)	8.3 (6.6-10.0)	20.3 (17.7-22.9)	20.6 (18.1-23.1)	29.6 (26.9-32.3)	31.8 (28.7-34.8)	31.3 (28.2-34.4)
Past 30-Day Use							
Cigars	2.0 (1.1-2.9)	4.4 (1.3-7.5)	10.9 (8.9-12.9)	10.4 (8.5-12.3)	16.0 (13.8-18.2)	18.4 (15.9-20.9)	13.4 (11.0-15.8)
Males							
Cigarettes	10.7 (8.0-13.4)	13.7 (10.7-16.7)	24.6 (20.8-28.4)	27.2 (23.2-31.2)	32.2 (28.3-36.1)	35.5 (31.0-40.0)	45.1 (40.3-49.9)
Smokeless	2.6 (1.2-4.0)	2.5 (1.2-3.8)	5.7 (3.7-7.7)	4.4 (2.5-6.3)	10.9 (8.3-13.5)	14.3 (11.0-17.6)	13.6 (10.3-16.9)
Cigars	3.2 (1.6-4.8)	4.3 (2.6-6.0)	13.0 (10.0-16.0)	14.9 (11.7-18.1)	24.9 (21.3-28.5)	30.3 (25.9-34.7)	23.7 (19.6-27.8)
Females							
Cigarettes	5.7 (3.7-7.7)	19.0 (15.5-22.5)	27.5 (23.3-31.7)	33.0 (29.1-36.9)	35.3 (31.1-39.5)	42.0 (37.6-46.4)	36.6 (32.2-41.0)
Smokeless	0.1 (-0.8-1.0)	0.2 (-0.2-0.6)	0.8 (0.0-1.6)	1.3 (0.4-2.2)	1.2 (0.2-2.2)	0.5 (-0.1-1.1)	0.6 (-0.1-1.3)
Cigars	0.8 (-1.5-3.1)	4.6 (2.7-6.5)	8.4 (5.8-11.0)	6.6 (4.5-8.7)	6.1 (4.0-8.2)	7.7 (5.3-10.1)	4.1 (2.3-5.9)

* Numbers in the parentheses are the 95% confidence intervals of the estimates

than smokeless tobacco use for males in grades 8 through 12 and for females in grades 7 through 12. White students had the highest rate of past 30 day use, followed by blacks and Hispanics (Figure 9).

California also surveyed adolescents to estimate their rates of cigar smoking (Table 14). Males were more likely than females to have ever smoked a cigar. Older students were more likely than younger students to have ever smoked a cigar. White students were somewhat more likely than students of other races to have ever smoked a cigar. The California Tobacco Survey also asked youths between the ages of 12 and 17 about past 30-day cigar smoking. Males were more likely than females to be currently smoking cigars. The rates of current cigar smoking increased with age, and were somewhat higher among white and Hispanic adolescents.

Rates for ever smoking cigars and past 30-day cigar smoking were lower among the California teens than among the students in Massachusetts. This may be due to the different methodologies used in these surveys. The Massachusetts survey was anonymously conducted in schools; the California survey was a household survey conducted via the telephone. School based surveys of teens produce higher prevalence estimates for cigarette smoking than telephone surveys in the home (U.S. Department of Health and Human Services, 1994). It is possible that this is also true for cigar smoking behavior.

Figure 8
Ever cigar smoking by race among teenagers

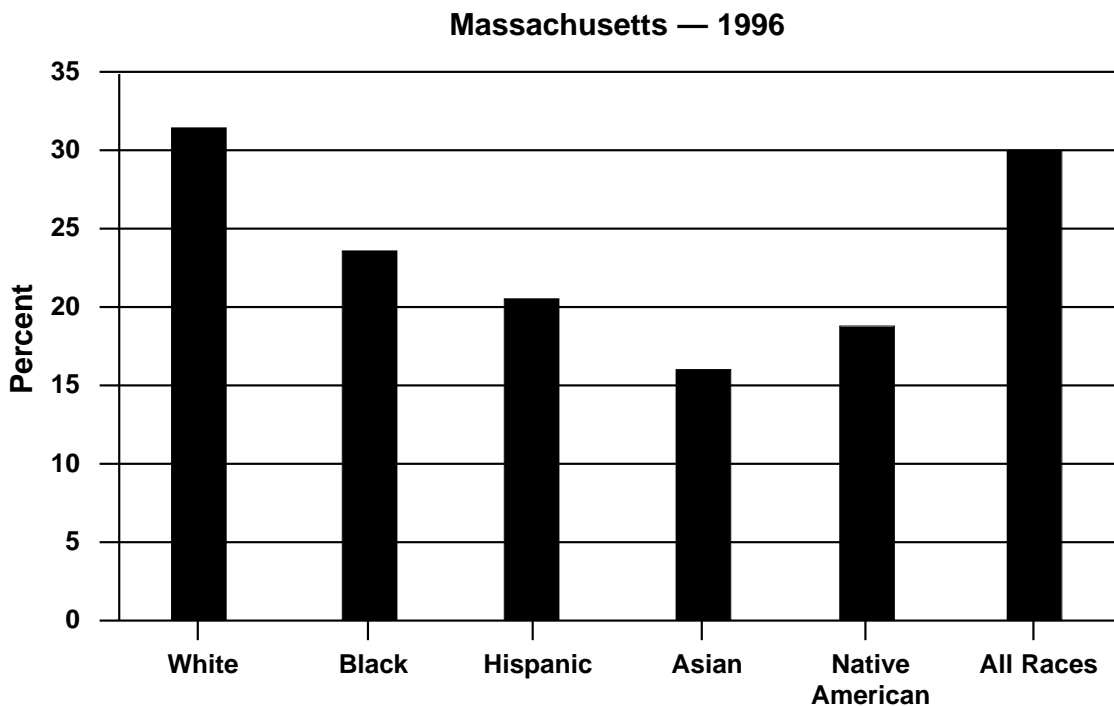


Figure 9
Past month use of cigars among teenagers by race

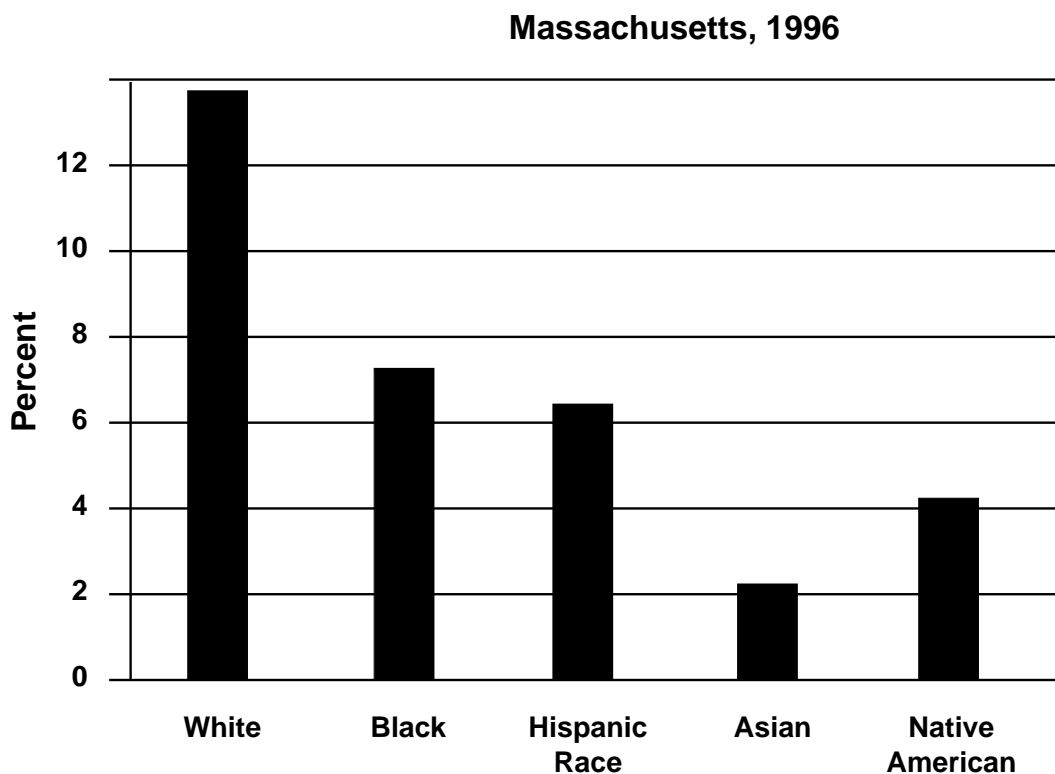


Table 14
Ever cigar smoking and current smoking in the last 30 days among California teenagers, 1996

	Ever Cigar Smoking Prevalence	Cigar Smoking in the Last 30 Days
Total:	15.0±1.2	4.0±0.6
Gender		
Male	19.7±1.9	5.7±1.1
Female	9.8±1.2	2.1±0.6
Age		
12-13	5.6±1.2	0.8±0.5
14-15	13.8±1.9	3.2±0.9
16-17	25.9±2.4	8.1±1.4
Race/Ethnicity		
Non-Hispanic White	18.1±1.4	4.9±0.9
African-American	13.2±3.7	3.2±1.6
Hispanic	13.0±2.3	3.7±0.9
Asian/PI	8.2±2.7	2.2±1.4
Other*	16.3±6.4	1.4±1.8

*Primarily Native Americans.

Table 15
Prevalence of adolescent cigar smoking in the past 30 days by various characteristics, New York, 1996

	Erie County	Chautauqua County
Gender		
Male	19.5	24.0
Female	6.1	5.3
Cigarette Smoking Status		
Never smoked	4.6	4.9
Smoked on 1–19 days in past 30	26.8	31.6
Smoked on 20–30 days in past 30	40.9	45.4
Smokeless Tobacco Use Status		
Not used in previous 30 days	10.9	11.1
Used in previous 30 days	62.4	63.0

Another school based teen survey was conducted in 1996 among ninth grade students in two New York counties (CDC, 1997). The median age of these students was 14. Males were more likely than females to have smoked a cigar in the previous 30 days (Table 15). As was seen on the RWJF national survey, cigarette smokers and smokeless tobacco users were substantially more likely than those who had not used other tobacco products to report having smoked a cigar in the previous month. As was seen in Massachusetts, smokeless tobacco use was lower than cigar use among these students (CDC, 1997).

DISCUSSION Data from the U.S. Department of Agriculture clearly demonstrate an increase in the number of cigars consumed per year since 1993. State and national surveys of smoking behavior suggest that competing trends in cigar usage are occurring. Among older males, cigar usage continues to decline. However, among young and middle-aged males, occasional use of cigars appears to be increasing dramatically. Adolescents of both genders are also using cigars, and some surveys show that their rates of use meet or exceed those of adults prior to 1993.

The only national adult data on cigar smoking collected after 1992 is from the Current Population Surveys, and these surveys show a low prevalence of cigar smoking and very little change between 1992-3 and 1995-6. Part of the explanation for the apparent difference between the consumption trends and the prevalence trends may lie in the wording of the questions used in the Current Population Surveys. The questions on this survey asked whether cigars were currently, or had ever been, “regularly used.” This is in contrast to the NHIS

which asked whether the respondent had ever smoked cigars or currently smoked cigars. The difference in questions probably leads to a different subset of cigar smokers who answer positively. Occasional cigar smokers and those who have smoked fewer than 50 cigars in their lifetime may be more likely to answer no to the Current Population Survey "use regularly" question, but respond yes to the NHIS "smoke" question. Support for this explanation of the differences between survey results is provided by survey data from California, where the prevalence of male daily cigar smoking did not change between 1990 and 1996, and where much of the change in cigar use was among those who have not yet smoked 50 cigars in their lifetime.

Changes in prevalence of occasional smoking in California between 1990 and 1996 are larger among well-educated and upper-income males and females. This pattern is markedly different from that seen with cigarette smoking. Cigar smoking increased among never smokers as well as among former cigarette smokers. Initiation of tobacco use with cigars after becoming an adult is markedly different from the predominantly adolescent initiation seen with cigarette smoking.

Among California males who were never cigarette smokers 2 years prior to the 1996 survey, by 1996 4.16 percent (+/- 2.08 percent) of those who smoked cigars were currently smoking cigarettes (new initiation) in contrast to 1.70 percent (+/- 0.45 percent) of those who did not smoke cigars. It is impossible to separate the likelihood of cigar smoking leading to initiation of cigarette smoking from the possibility that those who initiated cigarette smoking were also likely to smoke cigars; but the commonality in both of these behaviors is nicotine ingestion, and it would not be surprising if use of cigars predisposed an individual to the use of cigarettes. It remains to be seen whether those who have never used tobacco products prior to using cigars as adults will be able to remain occasional tobacco users or will shift either to regular cigar use or begin smoking cigarettes.

Another concern is former cigarette smokers who are currently smoking cigars occasionally. This group presumably includes a substantial number of individuals who were nicotine-addicted while they were smoking cigarettes, and who may be at increased risk of re-initiating their nicotine addiction due to their exposure to the nicotine in cigars. Among California males who were former cigarette smokers 1 year ago, cigar smokers reported a current cigarette smoking (relapse) rate of 16.35 percent (+/- 6.50 percent) in contrast to the 7.06 percent (+/- 1.83 percent) rate of current cigarette smoking among those who did not smoke cigars. This observation does not separate the likelihood that cigar smoking leads to relapse of cigarette smoking from the possibility that relapsing cigarette smokers take up smoking cigars as well, but it raises a concern that cigar use may place former cigarette smokers at increased risk of relapse.

Non daily smoking is also the predominant mode of cigar use among adolescents, but this pattern of use is of much greater concern for this group because the use of cigarettes and smokeless tobacco, two powerfully addictive forms of tobacco, are also largely used occasionally during adolescence (U.S. Department of Health and Human Services, 1994). Data from California (Table 16) show that a small number of male adolescents may have smoked cigars

Table 16
Use of cigars by adolescents in California, 1996

	Unknown (%)	Has Not Smoked Cigars (%)	Ever Smoked Cigars				
			Number of Days in the Last Month Cigars Were Smoked				
			Unknown (%)	0 (%)	1-9 (%)	10-29 (%)	30 (%)
Total Male	0.1±0.2	80.2±1.9	0.2±0.2	13.8±1.6	5.3±1.0	0.3±0.2	0.0±0.1
AGE							
12-13	0.4±0.5	92.0±2.2	.	6.5±1.8	1.1±0.9	.	.
14-15	.	82.6±3.1	0.2±0.4	12.7±2.6	4.4±1.4	0.1±0.1	0.1±0.1
16-17	.	65.6±3.8	0.3±0.5	22.5±3.4	10.6±2.2	0.9±0.7	0.1±0.1
Race/Ethnicity							
Non-Hispanic White	0.1±0.2	76.6±2.0	.	16.5±1.8	6.5±1.3	0.3±0.3	0.0±0.1
African-American	.	83.0±5.7	0.3±0.7	13.7±6.1	2.4±2.1	0.3±0.6	0.3±0.7
Hispanic	0.2±0.4	82.4±3.8	0.4±0.5	11.4±2.7	5.5±1.6	0.1±0.1	.
Asian/PI	.	88.4±4.6	0.3±0.7	7.7±3.6	2.3±1.8	1.2±1.7	.
Other	.	77.2±10.7	.	20.1±10.9	2.1±3.0	0.6±1.2	.
Family Income							
≤10,000	.	83.3±5.1	.	12.2±5.1	3.8±3.0	0.7±1.5	.
10,001-20,000	.	80.9±5.2	0.2±0.3	13.4±4.8	4.9±2.6	0.6±0.7	.
20,001-30,000	.	83.0±4.6	.	10.6±4.2	6.1±2.8	0.1±0.3	0.2±0.4
30,001-50,000	0.3±0.7	76.9±5.1	0.3±0.6	16.3±4.0	6.0±2.1	0.1±0.3	0.1±0.2
50,001-75,000	0.3±0.5	81.2±3.5	0.3±0.7	13.6±3.0	4.1±1.9	0.5±0.9	.
75,000+	.	77.2±3.2	0.2±0.4	15.6±2.5	6.7±2.0	0.2±0.5	.
Unknown	.	85.3±4.8	.	10.9±3.8	3.7±2.3	0.1±0.3	.
			Ever Smoked Cigars				
		Has Not Smoked Cigars (%)	Number of Days in the Last Month Cigars Were Smoked				
	Unknown (%)		Unknown (%)	0 (%)	1-9 (%)	10-29 (%)	30 (%)
Total Female	0.2±0.2	90.0±1.3	0.1±0.1	7.6±1.2	2.1±0.6	0.0±0.1	.
Age							
12-13	0.4±0.6	96.2±1.3	0.2±0.4	2.8±1.0	0.4±0.5	.	.
14-15	0.1±0.2	90.1±2.3	.	8.0±1.9	1.8±1.0	.	.
16-17	.	83.4±2.6	.	12.3±2.3	4.2±1.7	0.1±0.2	.
Race/Ethnicity							
Non-Hispanic White	.	87.8±1.8	.	9.5±1.7	2.6±1.1	0.1±0.1	.
African-American	.	90.5±4.3	.	6.1±3.1	3.4±2.3	.	.
Hispanic	0.5±0.6	91.0±2.9	0.2±0.4	6.5±2.3	1.7±0.9	.	.
Asian/PI	.	95.6±2.6	.	3.7±2.3	0.7±1.4	.	.
Other	.	91.4±8.0	.	8.6±8.0	.	.	.
Family Income							
≤10,000	0.9±1.8	92.5±3.7	.	5.4±3.2	1.2±1.5	.	.
10,001-20,000	0.5±1.1	91.9±3.2	0.5±1.0	5.2±2.5	1.9±1.4	.	.
20,001-30,000	0.3±0.5	89.9±3.9	.	6.8±3.4	3.0±1.9	.	.
30,001-50,000	.	90.4±3.0	.	7.5±2.8	2.1±1.4	.	.
50,001-75,000	.	90.4±2.9	.	7.4±2.8	2.3±1.3	.	.
75,000+	.	87.9±3.5	.	10.1±3.0	1.8±1.2	0.2±0.4	.
Unknown	.	87.3±4.5	.	10.8±4.0	1.9±1.9	.	.

on 10 or more of the last 30 days. This frequency of use suggests that cigar smoking among adolescent males is more than simple one-time experimentation. The major concern is that this frequent use of a product that can provide nicotine in substantial doses (Henningfield et. al, 1996) will lead to addiction among those adolescents currently using cigars with some regularity (Chapter 6).

A second concern is the use of cigars by adolescents who have never used other tobacco products. Table 17 shows an increased prevalence of cigar use among male adolescents who use cigarettes or smokeless tobacco, a finding present in most other recent surveys of adolescent use (CDC, 1997). Only 0.4 percent of those who have never used either cigarettes or smokeless tobacco are currently smoking cigars, and only 3.6 percent have ever smoked cigars.

MONITORING If the emerging public health problem of cigar smoking is to be tracked successfully, tools for monitoring it must be designed to measure the variable of interest in the most efficient manner possible. Questions on cigar use should be included in surveys designed to measure tobacco use, and the questions about cigar use should be standardized so that there is uniformity of data collection. This will require researchers in the field of tobacco control to establish standard definitions similar to those developed for cigarette smoking (CDC, 1994).

It is recommended that (1) no threshold level of cigar smoking be required before a respondent is asked about current cigar smoking status; (2) duration of cigar smoking be asked of all respondents who ever smoked cigars whether or not they are current cigar smokers; (3) age of initiation be asked of all respondents who have ever smoked a cigar; and (4) some measure of frequency and type of cigar smoked and of the quantity of cigars smoked be asked of all who have ever smoked cigars.

Table 17
Prevalence of cigar smoking among adolescent males in California by the status of their use of other tobacco products

	Cigar Smoking Status			
	Never Smoked Cigars (%)	Previously Smoked Cigars (%)	Current Cigar Smoker (%)	Unknown (%)
Total	80.2±1.9	13.9±1.6	5.7±1.1	0.3±0.3
Cigarette Smoking Status				
Never	95.3±1.0	3.9±0.9	0.6±0.3	0.2±0.2
Previous	53.7±6.7	36.2±6.1	9.8±3.6	0.3±0.6
Current	27.5±6.0	42.1±5.3	29.9±5.4	0.5±1.0
Chew or Snuff Use				
Never	85.6±1.9	10.9±1.5	3.2±0.9	0.3±0.3
Previous	30.9±5.8	41.4±7.2	27.2±6.2	0.5±1.0
Current	23.7±11.9	37.7±12.8	38.7±12.8	.
Never Used Either	95.8±0.9	3.6±0.8	0.4±0.3	0.2±0.3

CONCLUSIONS

1. U.S. consumption of cigars has increased dramatically since 1993, reversing a decline in cigar consumption that had persisted for most of this century.
2. In 1996, large inexpensive cigars (<\$1 retail) and cigarillos accounted for the greatest share of cigar sales (60.3 percent) followed by small cigars (33.2 percent), and large premium cigars (6.5 percent). In recent years, cigar sales have increased in all three categories, but the fastest growing segment of the cigar market has been the premium cigar category where sales have increased by 154 percent since 1993.
3. Limited national data and data from California suggest that the prevalence of cigar use among adults has increased since 1993. Much of that increase in California has been in occasional cigar smoking. There has been little change in the prevalence of daily cigar use among California adults between 1990 and 1996.
4. Among California adults in 1996, the prevalence of occasional cigar smoking increased with level of education and income, a pattern opposite that seen with cigarette smoking. This increase in prevalence with increasing level of education and income is not seen for daily cigar smoking.
5. Males are more likely to smoke cigars than females.
6. The prevalence of current cigar smoking among adults has increased between 1990 and 1996 for both current and former cigarette smokers in California, but the largest proportionate increase was among those who report never having smoked cigarettes. This suggests that many adults who have never smoked cigarettes are initiating tobacco use with cigars at ages when, prior to 1993, there had been little new initiation of tobacco use.
7. Multiple state and national surveys demonstrate a substantial rate of cigar smoking, both use in the last 30 days and ever use, among adolescents of both genders.

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