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TOBACCO CONTROL IN CALIFORNIA: WHO'S WINNING THE WAR?

An Evaluation of the Tobacco Control Program, 1989-1996

FINAL REPORT

June 30, 1998

A Report to the
California Department of Health Services

Cancer Prevention and Control Program
University of California, San Diego

This report was prepared under contract #95-23211 between the University of California, San Diego and the California Department of Health Services, and the value of the contract was $1,800,000. The fieldwork for the 1996 California Tobacco Survey was subcontracted to Westat, Inc., and the value of the subcontract was $1,249,811.

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TABLE OF CONTENTS

PAGE

FIGURES AND TABLES

Chapter 11: School Smoking: Policies and Compliance

Chapter 12: Knowledge and Attitudes About Smoking

Chapter 13: Other Tobacco Use

Appendix A: Data Sources

PREFACE

The California Department of Health Services contracted with the University of California, San Diego, to conduct a series of California Tobacco Surveys and to provide an independent and scientific assessment of the progress of the California Tobacco Control Program. Any interpretations of data or conclusions expressed in this report are those of the authors and may not represent the views of the State of California.

A primary goal of the Tobacco Control Program is to reduce smoking among California adults and adolescents. Assessment of Program progress in meeting this goal involves an examination of trends in per capita cigarette consumption and smoking prevalence. Program effects must be distinguished from differences resulting from changes in the demographic profile of the California population. Standardized prevalence estimates were computed to adjust for demographic changes. An effective program would lead to a more rapid decline in smoking than existed previously or that occurred in the rest of the United States. Moreover, the effect should persist over time.

The analysis considered two periods in the Tobacco Control Program, suggested by changes in per capita cigarette consumption trends, standardized adult smoking prevalence estimates from the California Tobacco Surveys, and the relative level of funding for the Program and what the tobacco industry spends to promote smoking. Before fiscal year 1992-1993, the ratio of spending was 5:1 in favor of the tobacco industry and subsequently it was 10:1. The higher ratio resulted from reduced funding for the Tobacco Control Program and increased tobacco industry expenditures.

The first part of this executive summary presents a brief overview of the main evaluative outcomes relative to the California Tobacco Control Program: smoking behavior and exposure to secondhand tobacco smoke. Following this brief overview, trends in smoking behavior are discussed in more detail. Finally, other important findings, including those relating to secondhand smoke, are summarized under the five main tobacco control strategies identified by the Tobacco Education, Research, and Oversight Committee (TEROC).

OVERVIEW

The trends in per capita cigarette consumption and adult smoking prevalence indicate that the introduction of the California Tobacco Control Program led to an acceleration of the rate of decline in smoking, but that this effect was not maintained between 1993 and 1996.

Over the course of the Program, there has been a continued major decline in the level of exposure to secondhand tobacco smoke among Californians.

TRENDS IN SMOKING BEHAVIOR

In Period 1, from the start of the Program in January 1989 through June 1993, adult (18+ years) smoking prevalence and per capita cigarette consumption declined over 50% faster than previously, and over 40% faster than in the rest of the United States.

In Period 2, July 1993 through December 1996, the rate of decline in per capita cigarette consumption and adult prevalence slowed, consumption to only 34% of the rate of decline in Period 1, and prevalence to only 15% of the Period 1 rate. In Period 2, California no longer showed a greater rate of decline in prevalence than the rest of the United States. However, per capita cigarette consumption was constant in the rest of the United States. The 1996 California Tobacco Survey estimated that adult smoking prevalence was 18.1%.[1]

Adolescent (12-17 years) smoking prevalence in California remained stable in Period 1, but it increased 26.3% during Period 2 to 12.0% in 1996.[2] A detailed analysis of California data suggests that adolescent smoking prevalence will continue to increase through 1999.

Between 1993 and 1996, California smokers made considerable progress towards future successful cessation by decreasing consumption levels and increasing their quitting activity. A strong motivational tobacco control program may produce another major reduction in smoking prevalence.

[1] The adult prevalence estimates from the California Tobacco Surveys were: 22.2% in 1990, 20.2% in 1993, and 18.1% in 1996. The standardized estimates were: 20.9% in 1990, 18.9% in 1993, and 18.1% in 1996.

[2]The adolescent smoking prevalence estimates from the surveys were: 9.2% in 1990 and 1993, and 12.0% in 1996. The standardized estimates were: 9.4% in 1990, 9.5% in 1993, and 12.0% in 1996.

EFFECTIVENESS OF CALIFORNIA TOBACCO CONTROL STRATEGIES

STRATEGY 1: PROTECT CALIFORNIANS FROM SECONDHAND SMOKE

Source: CTS 1990, 1993, 1996

- From 1990 to 1996, the proportion of indoor workers exposed to secondhand tobacco smoke at work decreased from 29% to 11.7%, a reduction by a factor of nearly 60%. (KF* 4.3)

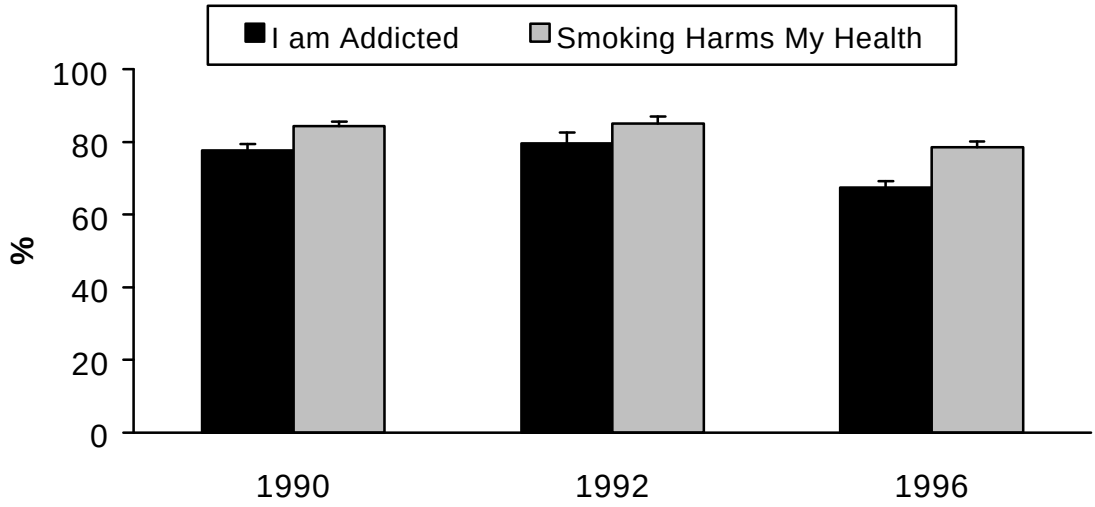
- By 1996, over 90% of indoor workers had a smokefree workplace, compared to 35% in 1990, an increase by a factor of nearly 160%. (KF* 4.2)

- Among California children and adolescents, exposure to secondhand tobacco smoke at home decreased from 29% in 1992 to 13% in 1996, a reduction by a factor of 55%. (KF* 2.11)

KF*= Key Findings, found on pages II-i to II-xvi.

EFFECTIVENESS OF CALIFORNIA TOBACCO CONTROL STRATEGIES

STRATEGY 2: TO EMPHASIZE THE ADDICTIVE NATURE OF TOBACCO, ITS HARMFUL HEALTH EFFECTS AND ITS UNATTRACTIVE FEATURES



Source: CTS 1990, 1992, 1996

- The percent of California smokers who believe they are addicted to smoking decreased significantly by a factor of 13% between 1990 and 1996, from 78% to 67%. The percent who agreed with the statement, "smoking is harming my own health," also decreased significantly, by a factor of 7%, from 84% in 1990 to 79% in 1996. (KF* 12.5a and 12.5b)

- However, the percent of California smokers who consume less than 15 cigarettes/day increased significantly by a factor of 26%, from 43.6% in 1990 to 55.1% in 1996. (KF* 6.5) Lighter smokers may be less likely to feel addicted or that they are harming their health.

- In 1996, 2.7% of California adults (>25 years) were "hard core" smokers; this represents less than 10% of all smokers. (KF* 6.1) This finding indicates that further significant decreases in smoking prevalence are possible.

KF*= Key Findings, found on pages II-i to II-xvi.

EFFECTIVENESS OF CALIFORNIA TOBACCO CONTROL STRATEGIES

STRATEGY 3: TO COUNTER EFFORTS OF THE TOBACCO INDUSTRY AND OTHERS TO PROMOTE TOBACCO USE

EFFECTIVENESS OF TOBACCO INDUSTRY ADVERTISING AND PROMOTION ACTIVITIES

- Between 1993 and 1996, receptivity to tobacco advertising and promotional activities increased among California teens. The percentage of teens owning a tobacco promotional item increased significantly, from 8.9% to 13.5%. (KF* 5.7)

- 34% of adolescent experimentation with cigarettes in California can be attributed to tobacco industry advertising and promotional activities. In 1996, over 200,000 California adolescents experimented with smoking; 68,000 did so because of tobacco industry advertising and promotions. (KF* 9.3)

- The marketing of cigars as symbols of sophistication and power is associated with significant increases in cigar use among California adults, from 2.5% in 1990 to 4.9% in 1996. Furthermore, in 1996, one in four teenage boys reported experimenting with cigars. (KF* 13.1 and 13.3)

EFFECTIVENESS OF THE TOBACCO CONTROL PROGRAM COUNTER-MARKETING

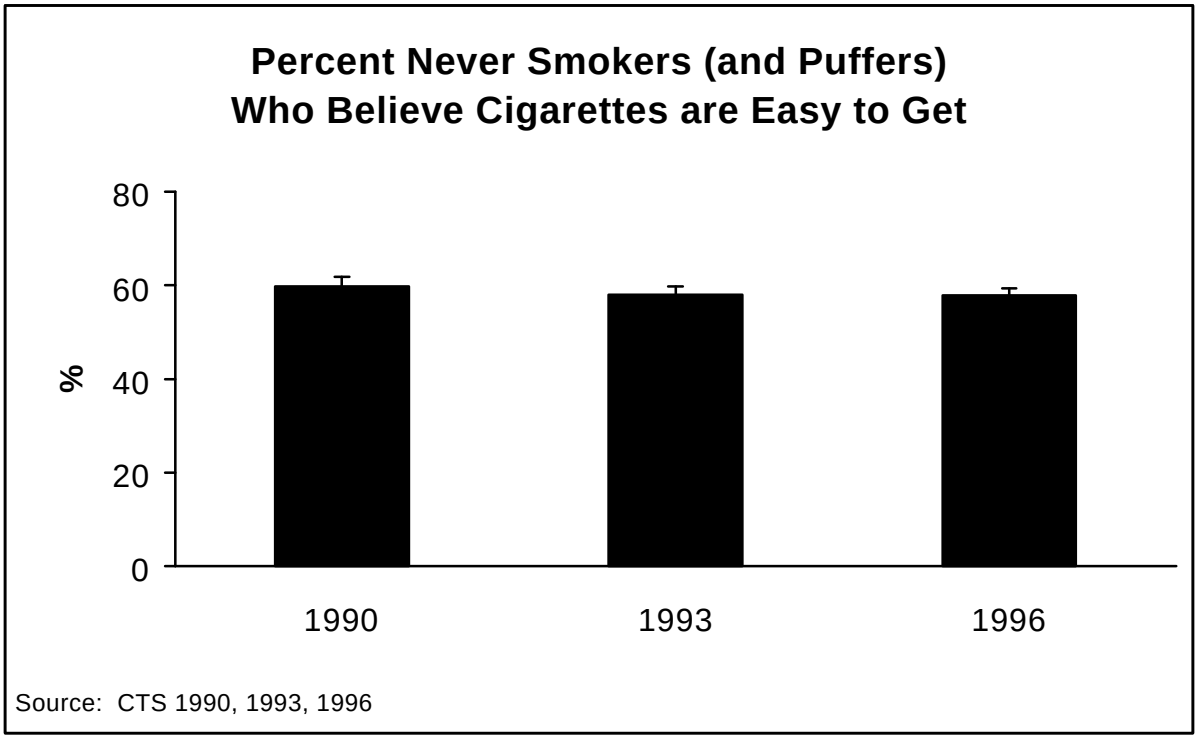
- In 1996, adults who recalled the media campaign were more likely to agree with messages used in the campaign. (KF* 9.9)

- Although inconsistently in the field, the mass media campaign was effective in getting smokers to seek help to quit. (KF* 9.6 and 9.7)

KF*= Key Findings, found on pages II-i to II-xvi.

EFFECTIVENESS OF CALIFORNIA TOBACCO CONTROL STRATEGIES

STRATEGY 4: WORK TO ELIMINATE THE AVAILABILITY OF TOBACCO PRODUCTS TO CHILDREN AND TEENS



Source: CTS 1990, 1993, 1996

- Between 1990 and 1996, the percent of California teens who had either never smoked or only puffed on a cigarette believed cigarettes were "easy to get" did not change. In 1996, 57.8% of these teens held this belief. (KF* 10.2)

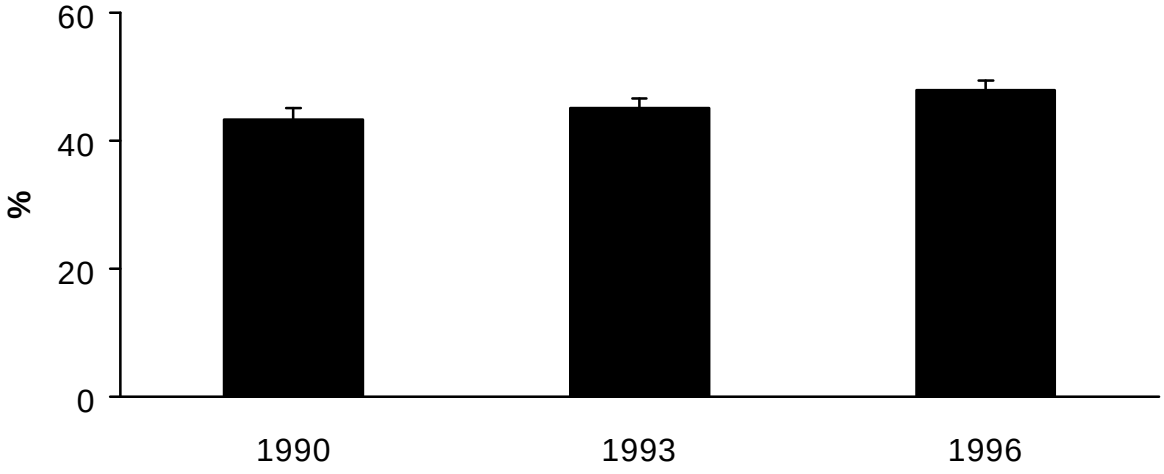
- In 1996,[1] 51.5% of teens believed it would be easy to buy a pack of cigarettes. (KF* 10.3)

- In 1996,[1] only 16% of teens who had ever smoked—or less than 5% of all teens—reported that they usually buy their own cigarettes. Another 20% reported that they usually ask someone else to buy cigarettes for them, and 58% reported that others usually give them the cigarettes they smoke. (KF* 10.1)

KF*= Key Findings, found on pages II-i to II-xvi.
[1] Data only available from the 1996 CTS.

EFFECTIVENESS OF CALIFORNIA TOBACCO CONTROL STRATEGIES

STRATEGY 5: TO PROVIDE YOUTH WITH TOBACCO-RELATED INFORMATION AND SKILLS



Source: CTS 1990, 1993, 1996

- In 1996, nearly half (48%) of teens (12-17 years old) believed it is safe to experiment with cigarettes, significantly more than the 43% who held this belief in 1990. (KF* 5.6)
- In 1996, fewer adolescents (41%) reported that teen smokers adhered to smokefree school policies than in 1990 (46%). (KF* 11.1)
- In 1996[1], the majority of students (57%) do not think that current health education classes are effective in dissuading adolescents from smoking. (KF* 11.6)
- Between 1993 and 1996, the percentage of 12-14 year old never smokers who were susceptible to smoking increased by a factor of 22%, from 34.5% to 42%. (KF*5.1)

KF*= Key Findings, found on pages II-i to II-xvi.
[1] Data only available from the 1996 CTS.

KEY FINDINGS BY CHAPTER

KEY FINDINGS BY CHAPTER

Chapter 1: EXPENDITURES TO INFLUENCE SMOKING BEHAVIOR IN CALIFORNIA

1. In November 1988, California voters passed Proposition 99, which mandated the establishment of the California Tobacco Control Program. Between 1989 and mid 1993, the California Tobacco Control Program spent an average of $85.5 million each year to promote a smokefree society. During this same time period, the tobacco industry spent an average of $437 million annually to promote cigarette use (Section 1.1 and Table 1.1).

2. Between 1993 and 1996, the California Tobacco Control Program only spent an average of $53 million annually to promote a smokefree society. The funding levels during these years reflected diversions of $62.2 million from the spending mandated by Proposition 99 for tobacco control. During this same period, the tobacco industry spent an average of $525 million annually to promote cigarette use. In addition to the industry's direct expenditures on advertising and promotions, in April 1993 the tobacco industry announced an approximately 10% decrease in the price of its premium brands of cigarettes to promote sales. (Section 1.1, pages 1-4 to 1-6 and Table 1.1)

3. Expenditures to influence tobacco usage can be split into two distinct periods. In the early period (Period 1), from January 1989 to mid 1993, the tobacco industry's advertising and promotional expenditures were 5 times higher than those of the Tobacco Control Program. In the later period (Period 2), from mid 1993 through 1996, the expenditures of the tobacco industry were 10 times higher than were those of the Tobacco Control Program. (Section 1.1, page 1-6)

4. Spending on advertising and promotions and manipulating the price of cigarettes are not the only strategies the tobacco industry has used to influence tobacco use. Campaign contributions to candidates for the legislature and state office represent important and direct means of influencing the conduct of the California Tobacco Control Program. In 1993-1994, the tobacco industry spent over $841,000 on campaign contributions; by 1995-1996 these expenditures had increased by a factor of 78%, to $1.5 million. Some anti-smoking advocates have suggested that the diversion of funds from the Tobacco Control Program were a result of these contributions and other political activities of the tobacco industry. (Section 1.1, page 1-7)

5. To level the playing field between the Tobacco Control Program and the tobacco industry would require restoring the funding levels of the Tobacco Control Program to 100% of the available budget and implementing an additional $0.25

per pack excise tax with all of the proceeds going to the Tobacco Control Program to promote a smokefree society. (Section 1.1, page 1-6)

Chapter 2: TOBACCO CONTROL IN CALIFORNIA: AN OVERVIEW

During Period 1 (January 1989 through June 1993) of the California Tobacco Control Program:

1. The proportion of nonsmoking California indoor workers who were exposed to secondhand tobacco smoke at work decreased by almost one-fourth, from 29% in 1990 to 22.3% in 1993. (Section 2.1, pages 2-3 to 2-4 and Figure 2.2)

2. The rate of decline in per capita cigarette consumption increased by a factor of over 60%; at the end of Period 1, Californians were consuming a monthly average of 6.7 packs/person. The factor decline in per capita consumption was 1.9 times higher than in the rest of the United States. (Section 2.2, Table 2.1 and Figure 2.4)

3. The rate of decline in adult smoking prevalence in California increased by a factor of 56%. During this period, the rate of decline in adult smoking prevalence in California was greater by a factor of 65% than the rate observed in the rest of the United States. (Section 2.2, pages 2-10 to 2-15, Table 2.2 and Figure 2.7)

4. If the rates of decline in adult smoking prevalence and per capita cigarette consumption observed in this period had continued to the year 2000, the Tobacco Control Program would have been associated with a decline by a factor of 68% in per capita cigarette consumption and by a factor of 52% in adult smoking prevalence. This is less than the 75% reduction goal set by the legislature when it established the Tobacco Control Program. (Section 2.2, page 2-13)

5. During this period, the percentage of California adolescents (12-17 years of age) who were smokers (smoked in the last 30 days) remained constant at approximately 9%. (Section 2.3, pages 2-18 and 2-19)

During Period 2 (July 1993 through December 1996) of the California Tobacco Control Program:

6. Among indoor workers in California, the rate of exposure to secondhand tobacco at work decreased by a factor of nearly 50%, to only 11.7%. (Section 2.1 and Figure 2.2)

7. The rate of decline in per capita cigarette consumption slowed to only about one-third of the rate of decline observed during the early period of the Tobacco Control Program. At the end of 1996, Californians were consuming a monthly average of 6.0 packs per person. However, this rate of decline was still substantially higher than the rate observed in the rest of the United States, which

had a per capita consumption of 10.3 packs/person in December 1996. (Section 2.2, pages 2-5 to 2-8, Figure 2.4 and Table 2.1)

8. During this period, adult smoking prevalence in California declined by only a small amount, at 15% of the rate observed during Period 1 of the Tobacco Control Program. Over the same period, the decline in adult smoking prevalence was no longer greater in California than in the rest of the United States. In 1996, adult smoking prevalence in California was 18.1%[1] (Section 2.2, pages 2-10 to 2-15, Table 2.6 and Figure 2.7)

9. If the rates of decline in adult smoking prevalence observed in Period 2 are maintained to the year 2000, then an estimated 17.5% of California adults will be smokers in that year. This estimate is only 27% lower than prevalence in 1988 and about 2.5 times higher than the prevalence rate set as a goal for the Tobacco Control Program in the enabling legislation. (Section 2.2, page 2-13)

10. After adjusting for demographic changes in the adolescent population, the percentage of California adolescents who were smokers (smoked in the last 30 days) increased by a factor of 26.3% so that in 1996, an estimated 12% of California adolescents were smokers.[2] (Section 2.3, pages 2-18 and 2-19)

Other Findings:

11. Between 1992 and 1996, exposure levels to secondhand tobacco smoke among California children and adolescents decreased from 29% to 13%, a reduction by a factor of 55%. (Section 2-1, and Figure 2.1)

12. Between 1989 and 1996, there were few identifiable differences in the extent of decline in smoking among adult (18 years of age and older) California subgroups defined by gender, race/ethnicity, education, or geographic region. (Section 2.2, pages 2-16 to 2-17)

13. Between 1990 and 1996, the percentage of California smokers who consumed less than 15 cigarettes/day increased by a factor of 26.4%, from 43.6% in 1990 to 55.1% in 1996. The percentage of smokers who quit smoking for at least 7 days in the last year increased by a factor of 20.1%, from 36.3% in 1990 to 43.6% in 1996. These changes in smoking behavior suggest that more smokers will successfully quit in the near future. (Section 2.4 and Table 2.9)

[1] The adult prevalence estimates from the California Tobacco Surveys were: 22.2% in 1990, 20.2% in 1993, and 18.1% in 1996. The standardized estimates were: 20.9% in 1990, 18.9% in 1993, and 18.1% in 1996.

[2] The adolescent smoking prevalence estimates from the surveys were: 9.2% in 1990 and 1993, and 12.0% in 1996. The standardized estimates were: 9.4% in 1990, 9.5% in 1993, and 12.0% in 1996.

Chapter 3: UNDERSTANDING SMOKING BEHAVIOR

1. Smoking prevalence is a relatively insensitive tool to evaluate a tobacco control program in the short-term. Since smoking prevalence is dependent upon rates of smoking uptake and smoking cessation, it is important to consider these processes separately and evaluate the impact of the Tobacco Control Program on each one. (Section 3.1)

2. The development of a nicotine *addiction* occurs among adolescents and young adults. The process of becoming a smoker has been described as the Smoking Uptake Continuum, and includes the following: a period of susceptibility prior to any experimentation, early and advanced periods of experimentation, the development of an *addiction* and the building up of tolerance until the cigarette consumption level is stabilized. This process occurs mainly between the ages of 12 and 24 years. (Sections 3.2 to 3.3, and Table 3.1)

3. Individuals who have smoked at least 100 cigarettes in their lifetime typically meet the criteria that define dependence on an addictive substance according to the Diagnostic and Statistical Manual (DSM), the official nomenclature of the American Psychiatric Association (APA). Therefore, individuals are considered *addicted* to cigarettes if they have smoked at least 100 cigarettes. (Section 3.1)

4. The process of quitting smoking can take as long as 10 years. Studies of smoking behavior show that smokers can be classified by levels on the Quitting Continuum, based on their level of *addiction*, quitting history and intentions to quit smoking. The overall amount that is smoked is a major predictor of who can maintain a quit attempt. Previous success in overcoming withdrawal symptoms is another important predictor of who can maintain an attempt. Finally, a smoker must be motivated to quit before any quit attempt will be made. (Section 3.5)

5. The distinctive levels on the Quitting Continuum include those who are *precontemplators*, *contemplators*, those in *early preparation*, *intermediate preparation*, or *advanced preparation* for quitting, those in *action* and those in *early maintenance* or *advanced maintenance*. Each more advanced level corresponds to an increased likelihood of successful smoking cessation over the next 2 years. (Section 3.5 and Table 3.2)

6. To increase the probability of future successful quitting, a tobacco control program needs to motivate smokers to reduce consumption to a moderate level (less than 15 cigarettes/day) and motivate and assist them to make quit attempts that last at least through the worst period of withdrawal symptoms (7 days). (Section 3.5)

7. To rapidly reduce the per capita consumption of cigarettes, a tobacco control program needs to focus on the smoking behavior of adults, particularly those over 25 years of age. (Section 3.4)

Chapter 4: PROTECTION OF NONSMOKERS

Involuntary Smoking in Workplaces

1. Approximately 80% of indoor workers are nonsmokers. (Table 4.1)

2. By 1996, over 90% of indoor workers had a smokefree workplace, compared to 35% in 1990, an increase by a factor of nearly 160%. (Section 4.1, page 4-4 and Figure 4.1)

3. Overall, exposure to secondhand smoke in the workplace decreased by a factor of 60%, from 29% of workers in 1990 to 11.7% in 1996. Exposure decreased greatly in all population subgroups. However, among Hispanics, young people, and workers with less than a high school education, exposure rates were higher by a factor of 50% than rates for other population subgroups. (Section 4.1 and Figure 4.2)

Involuntary Smoking at Home

4. In 1996, nearly 80% of all Californians reported having some type of smoking restrictions in their homes. (Section 4.2, page 4-7 and Figure 4.3)

5. Nearly 40% of smokers in California lived in homes with a complete ban on smoking. This represented an increase by a factor of 90% from 1993 levels. Another 25% of smokers lived with some smoking restrictions in their homes. Therefore, nearly two-thirds of all smokers in California lived with at least a partial restriction on smoking in their homes. (Section 4.2, page 4-8 and Figure 4.4)

6. In 1996, nearly 90% of all children and youth under 18 years of age were protected from secondhand smoke in the home. However, only three-fourths of African American children and adolescents were protected from involuntary smoking at home, compared to 90% of Hispanic and Asian children and adolescents and 82% of Non-Hispanic White children and adolescents. (Section 4.2, page 4-9 and Figure 4.6)

7. In 1996, nearly 30% of Californians reported no exposure to secondhand tobacco smoke in their routine day-to-day experience. (Section 4.3)

Chapter 5: TRENDS IN ADOLESCENT SMOKING

1. The proportion of 12-14 year olds categorized as *susceptible* to smoking increased significantly, from 34.5% in 1993 to 42.0% in 1996. (Section 5.2, Table 5.2)

2. The increases in *susceptibility* to smoking in 12-14 year olds were greatest among girls, African Americans, Hispanics and adolescents with higher self-reported school performance. These trends suggest that the number of *addicted* smokers in these groups will increase within the next 3 years. (Table 5.2)

3. Among 15-17 year olds, the percentage of *addicted* smokers remained stable from 1990 to 1993; however, by 1996 the percentage had increased by a factor of 22%, from 9.9% in 1993 to 12.1% in 1996. (Section 5.2, page 5-8 and Table 5.3)

4. Between 1993 and 1996, the trend for increasing numbers of 15-17 year old teens to become *addicted* to smoking was particularly marked for those with lower self-reported school performance. Among teens in this group, *addiction* increased by a factor of 41.8%, from 12.2% in 1993 to 17.3% in 1996. (Table 5.3)

5. Changes in family and personal influences on teens do not explain the increase in adolescent smoking in recent years. (Section 5.4, page 5-12 and Table 5.5)

6. In 1996, more teens (48%) believed that it is safe to experiment with cigarettes as held this belief in 1990 (43%). In addition, in 1996, tolerance for smoking was greater among teens than in earlier years: 56% of teens expressed strong attitudes against smoking in 1993, compared to only 49% in 1996. Across all ages of adolescents, significantly more teens in 1996 (19.0%) believed that most or all of their peers smoke than did in 1990 (9.4%) or 1993 (13.5%). These changing social norms about smoking reflect current increases in teen smoking prevalence and are early warning signs of increased smoking in the future. (Section 5.4, pages 5-13 to 5-14, Table 5.5 and Figure 5.5)

7. Owning a promotional item, such as a t-shirt or cap, with a cigarette company logo, is a predictor of future smoking. The percentage of teens who own a tobacco promotional item increased significantly, from 8.9% in 1993 to 13.6% in 1996. The increases in ownership of promotional items were greatest among *susceptible never smokers* and *early experimenters.* (Section 5.4, page 5-14 and Table 5.5)

8. The data suggest that the smoking uptake process may extend into the adult years for the Asian and Hispanic population subgroups. (Section 5.2 and Figure 5.2)

9. Most smokers do not reach a stable level of nicotine tolerance until they are well into adulthood. Among current *addicted* smokers, the percent of occasional smokers continues to decrease as age increases into the early thirties; one-half of

15-17 year old smokers are occasional smokers, while only one-third of smokers between the ages of 30 and 34 are occasional smokers. The mean daily consumption for daily smokers continues to increase into the early thirties; daily smokers in the 18-24 year old age group consume 13.5 cigarettes/day on average, while 30-34 year old smokers consume 15.5 cigarettes/day on average. (Section 5.3 and Table 5.4)

10. The vast majority of adolescents who smoke do not smoke daily. The prevalence of daily smoking among 15-17 year olds remained about 5% between 1990 and 1996. In California, changes in daily smoking rates among 15-17 year olds were not sufficiently sensitive to reflect the significant increases observed in current smoking behavior in this population. (Section 5.3 and Figure 5.4)

11. If the Legislature is interested in assessing punitive damages from the tobacco industry for promoting adolescents to smoke cigarettes, the smoking behavior measure of choice is the proportion of minors who are *addicted* to cigarettes (have smoked 100 cigarettes in their lifetime). Estimates predict that one in four teens who have reached the mark of 100 or more cigarettes will eventually die of a smoking-related disease. (Section 5.5)

12. It is projected that 14.2% of 15-17 year olds will be *addicted* to cigarettes in 1999, an increase by a factor of 17% from 1996. (Section 5.5 and Table 5.6)

Chapter 6: QUITTING AND PREDICTORS OF QUITTING

1. Hard core smokers were defined as those who had not tried to quit in the recent past and who stated that they have no intention of quitting at any time in the future. Overall, in 1996, 9.7% of California smokers (or 1.9% of the California population over 25 years of age) were classified as hard core smokers. This proportion varied significantly by age and by the smoking habit. (Figure 6.1 and Table 6.4)

2. Approximately 14% of smokers in California can be classified as *precontemplators*. These *precontemplaters* smoke at least 15 cigarettes/day, have no recent quit attempt, and no intention to quit in the near future (next 6 months). However, they do not necessarily expect to always remain a smoker. Approximately 3% of these smokers will successfully quit smoking within 2 years. The combination of *precontemplaters* with the hard core smokers represents those smokers who have so far been nonresponsive to the Tobacco Control Program. (Section 6.1, Table 6.1, Figure 6.1, and Table 6.4)

3. Smokers classified in *advanced preparation* for quitting are those who smoke less than 15 cigarettes/day and have made a quit attempt of at least 7 days in the 12 months prior to the California Tobacco Survey or have a life time quit of longer than 1 year. Approximately 20% of these smokers will successfully quit in the

next 2 years. Overall, approximately 27% of California smokers were classified in *advanced preparation* in 1996. (Section 6.1, pages 6-4 to 6-5 and Table 6.2)

4. Almost half of young adults (18-24 years old) who smoked were classified in *advanced preparation*. This proportion was markedly lower in older age groups. (Table 6.2)

5. Between 1990 and 1996, the proportion of California smokers who were light smokers (< 15 cigarettes/day) increased from 43.6% to 55.1%, a factor of over 26%. This increase was particularly noticed among Non-Hispanic Whites, and occurred about equally in all California smokers under 65 years of age. In other words, the increase in light smoking occurred primarily in the working population (Section 6.3 and Table 6.7).

6. Between 1990 and 1996, the proportion of California smokers who reported a quit attempt that lasted at least 7 days in the past year increased by a factor of 20.5%, from 41.4% to 49.9% of smokers. This increase was most marked in younger smokers, between the ages of 18 and 24 years old. This group showed an increase by a factor of 55.8%, from 43.4% who reported a 7+ day quit attempt in 1990 to 67.6% in 1996. African Americans were the only population subgroup that did not show a significant increase of greater than a factor of 20% in the percentage of smokers who reported a major quit attempt. In fact, the percent of African American smokers who reported a 7+ day quit attempt appeared to decrease between 1990 and 1996. (Table 6.8)

7. In 1996, over 60% of California smokers reported trying to quit smoking. About 80% of young adult smokers reported making a quit attempt that lasted at least 1 day during the last year. (Table 6.5)

8. A continuous quit attempt of at least 90 days is an early indication of successful quitting. In 1996, women smokers in California were significantly more likely than men to report that their most recent quit attempt lasted at least 90 days (21.9%, compared to 15.5% for men). Among men, the likelihood of success was strongly related to age: For men over 65 years of age, the rate of early success was 38%, whereas the rate of success for younger men ranged between 13% and 18%. There was no age effect among women. (Table 6.6)

9. Adolescent *addicted* smokers are also trying to quit smoking. In 1996, over three-fourths of these California teens reported that they had made a quit attempt in the past 12 months. (Section 6.4, pages 6-13 to 6-14)

10. Over 90% of adult smokers do not rule out quitting sometime in the future, and 77% of teen smokers have made a recent quit attempt. Therefore, there is no evidence that the smokers of California have "hit the wall," or reached their maximum potential for quitting. (Section 6.1, page 6-6 and Section 6.4)

Chapter 7: PROMOTING SMOKING CESSATION

1. Smokefree workplaces promote quitting by encouraging smokers to consume fewer cigarettes. Smokers who work in a smokefree environment are more likely to be light smokers (< 15 cigarettes/day), than are smokers without a smokefree workplace. (Section 7.1 and Figure 7.1)

2. Smokefree homes are associated with both higher rates of light smoking and more quit attempts. (Section 7.1 and Figure 7.2)

3. Among teens, strong parental norms against smoking were associated with behaviors that predict quitting. (Figure 7.5)

4. One-half of all smokers who visit a physician receive advice from the doctor to stop smoking. Often, however, this advice is limited to the suggestion without details about how to quit. (Section 7.2, page 7-7)

5. Although only 30% of smokers who receive advice from a physician to stop smoking actually attempt to quit, this advice may have helped motivate these smokers to make a quit attempt. (Section 7.2, page 7-7)

6. Approximately 20% of smokers who were trying to quit used some form of assistance. The majority reported using a combination of nicotine replacement therapy and counseling or self-help materials. (Section 7.3 and Figure 7.6)

7. Only 40% of recent quitters could name any program that helps smokers quit. Approximately one-half of those who identified a form of assistance named nicotine replacement treatment. (Table 7.1)

8. The California Smokers' Helpline has received calls from almost 60,000 smokers since its inception in 1992. (Section 7.4)

9. With the demonstrated clinical efficacy of the Smokers' Helpline, the number of referrals to the Helpline from insurance programs, such as MediCal, have increased. These programs often provide free nicotine replacement therapy on the condition that the smoker participates in a cessation program, such as the Smokers' Helpline. (Section 7.4, page 7-14)

Chapter 8: PRICES AND TAXES

1. The 1989 $0.25 tax increase produced a decline of about 12% in cigarette consumption. This decline in consumption was approximately equal to the decline that research on the price elasticity of demand predicts. (Section 8.1 and Figure 8.2)

2. In 1993, the tobacco industry acted in concert to reduce the price of cigarettes. In the absence of counterbalancing influences, this price reduction should have arrested the decline in cigarette consumption. The fact that consumption continued to decline between 1990 and 1994 and again in 1996, suggests that the California Tobacco Control Program counteracted the price effect. (Section 8.1, pages 8-4 to 8-5)

3. Price changes do not explain the only year (1995) in which there was no decline in per capita consumption. (Section 8.1)

4. Between 1993 and 1996, the price of cigarettes was not the major factor that determined the increase in teen smoking in California. (Section 8.1, pages 8-5 to 8-8)

5. Among all teens, the "image" of cigarette smoking was cited most as the determinant of brand choice among adolescents who smoked. (Section 8.2 and Figure 8.4)

6. Among teens experimenting with cigarettes, the brand choice of their friends was considered to be more important than the price of cigarettes, and was the second most important determinant of brand choice. (Section 8.2 and Figure 8.4)

7. In 1996, the majority (70%) of Californians favored an increase in the tobacco tax by at least $0.25. (Section 8.3 and Figure 8.5)

8. Support for a substantial increase in the cigarette excise tax was stronger among those who had recently quit smoking, suggesting that price is a significant motivator to maintain a successful quit attempt. (Section 8.3 and Figure 8.7)

9. Over one-third of current smokers supported at least a $0.50 increase in the cigarette excise tax, if the money was targeted to anti-smoking or other health programs. (Section 8.3 and Figure 8.6)

Chapter 9: ADVERTISING AND MEDIA

Relating to the Tobacco Industry

1. The tobacco industry continues to effectively target California adolescents with their advertising campaigns. Nearly 90% of 15-17 year olds could name a cigarette brand as most advertised, without prompting from the interviewer. Over 60% of 12-14 year olds, and nearly 70% of 15-17 year-old adolescents reported in 1996 that they had a favorite cigarette ad. (Section 9.1, pages 9-4 to 9-6)

2. The tobacco industry's effectiveness in penetrating the young adolescent market with their promotion items has increased rapidly. In 1996, 10.6% of 12-13 year olds possessed a tobacco industry item—over twice as many as possessed such an item in 1993. (Section 9.1, page 9-6)

3. There is strong evidence that the advertising and promotional activities of the tobacco industry are causally associated with the uptake of smoking in California adolescents. One-third of the 200,000 California adolescents who experimented with smoking between 1993 and 1996—approximately 68,000 per year—did so because of the influence of tobacco industry advertising and promotional practices. (Section 9.2, page 9-8)

Relating to the Tobacco Control Program

4. In 1996, 67% of adults and 82% of adolescents reported seeing an anti-smoking message on TV; 44% of adults and 50% of teens reported hearing an anti-smoking message on the radio; and 41% of adults and 58% of teens reported seeing an anti-smoking message on a billboard. (Section 9.3, page 9-9)

5. The Tobacco Control Program anti-smoking media messages were successful in catching the attention of adult smokers more than adult nonsmokers. These messages also achieved the goal of reaching all teens, regardless of smoking status. (Section 9.3, page 9-11 and Figures 9.1 and 9.2)

6. The Tobacco Control Program media campaign appears to be effective in promoting smokers to seek help to quit. However only 27% of smokers who had made a quit attempt in the last year had heard of the Smokers' Helpline telephone number, even with prompting. (Section 9.3, page 9-11)

7. It would appear that the Tobacco Control Program media campaign was not consistently in the field. During periods when the media campaign was broadcast and calling volume was high, proportionally more smokers noted that they had heard of the Helpline from a media message that included the 1-800 number. During other periods, calling volume was lower and proportionally fewer callers cited the mass media messages as a reason for their call. (Section 9.3 and Figure 9.3)

8. Detailed evaluation of the Tobacco Control Program's anti-smoking media campaign is hampered by lack of a tracking survey measuring Californians response to the media messages used. (Section 9.3, page 9-8)

9. Those who saw the Tobacco Control Program media campaign were more likely to take issue with the tobacco industry's claims about the harmful effects of secondhand tobacco smoke, the health risks of smoking and the addictiveness of cigarettes. (Section 9.3 and Table 9.2)

10. The Tobacco Control Program media campaign appeared ineffective in changing the beliefs or smoking behaviors of California adolescents. (Section 9.3 and Table 9.3)

Chapter 10: ACCESS TO AND EASE OF PURCHASE OF CIGARETTES

1. Overall, only 16% of teen ever smokers—or less than 5% of all teens in California— reported that they usually buy their own cigarettes. Another 20% reported that they usually ask someone else to buy cigarettes for them, and 58% reported that others usually give them the cigarettes they smoke. Among *addicted* smokers, 40% bought their own cigarettes and another 40% reported that they had someone else buy cigarettes for them. (Section 10.2 and Figure 10.4)

2. California's Legislature enacted the Stop Tobacco Access to Kids Enforcement (STAKE) Act in 1994. This legislation was intended to increase the enforcement of laws barring the sales of cigarettes to minors. However, the percent of teens who had never smoked or only puffed on a cigarette who believed cigarettes were easy to get did not change between 1990 and 1996. In 1996, 57.8% of such teens believed cigarettes were easy to get. (Section 10.1)

3. In 1996, over one-half (51.5%) of teens reported that they thought it would be easy to buy a pack of cigarettes. Furthermore, 70% of ever smokers held this view. (Section 10.1)

4. Small stores, particularly gas stations and liquor stores, appear to be favorite locations for minors to illegally purchase cigarettes. (Section 10.3)

5. Adolescents in the early stages of the Smoking Uptake Continuum appear to have little trouble in getting cigarettes from others without paying for the cigarettes. As more and more teens take up smoking, cigarettes are increasingly available from social sources. (Section 10.2 and Figures 10.4 and 10.5)

6. Although important to tobacco control, the data suggest that limiting the sales and purchase of cigarettes will not markedly reduce teen smoking. (Section 10.2)

Chapter 11: SCHOOL SMOKING: POLICIES AND COMPLIANCE

Smokefree Learning Environments at School

1. In 1996, only 41% of adolescents felt that peers who smoked complied with smokefree school policies. This represents an apparent worsening of compliance, compared to 1990 (46%). (Section 11.1 and Table 11.1)

2. Overall, more than one-third of adolescents reported seeing someone smoking at school in the past 2 weeks in 1996. Among students from private and religious schools, only 16% reported this level of noncompliance. (Section 11.1 and Table 11.2)

3. In 1996, 84% of adolescents supported a ban of all smoking on school grounds at all times. *Addicted* teen smokers had a much lower level of support (50%) for such a ban. (Section 11.1 and Figure 11.1)

4. In 1996, students were more likely to perceive that none of their teachers smoked than in earlier years; in 1996, 29% said none of their teachers smoked, compared to 18% in 1993. (Section 11.2 and Figure 11.2)

School Classes on Smoking

5. Between 1990 and 1996, the proportion of students who did not recall a class on the health risks of smoking remained constant, at about 25%. (Section 11.3 and Figure 11.4)

6. The majority (57%) of students who could recall such a class thought that it did not change any student attitudes toward smoking. Those who thought the class was effective were less likely to have experimented with smoking: 31% versus 43%. (Section 11.3, page 11-9)

7. New approaches are needed for these classes that will make them more relevant to a majority of students. (Section 11.3)

Chapter 12: KNOWLEDGE AND ATTITUDES ABOUT SMOKING

Relating to the Tobacco Industry

1. In 1996, the majority (55.8%) of California smokers perceived the labeling of cigarettes as "light" as a health claim that meant these cigarettes had lower levels of tar and/or nicotine or were less harmful. (Section 12.1 and Table 12.1)

2. Negative attitudes toward the industry increased slightly between 1992 and 1996, from 53% to 56%. (Section 12.2)

3. In 1996, 60% of Californians and 46% of current smokers indicated they would support the regulation of tobacco products by a government organization, such as the FDA. Approximately 55% of current smokers supported the licensing of merchants to sell tobacco products. (Section 12.3)

4. In 1996, about two-thirds (65%) of Californians supported banning the promotional activities of the tobacco industry. (Section 12.3 and Figure 12.3)

Relating to the Tobacco Control Program

5. The Tobacco Control Program **has not been able to maintain** either of the following:

   (a) **A high level of concern among smokers that smoking is harming their health:** Significantly fewer smokers expressed concern about the health risks of smoking in 1996 (79%), compared to 1990 (84%). This decreasing concern may be explained by increases in occasional smoking or smoking "light" cigarettes. However, this decline may lead to smokers making fewer attempts to quit in the next few years. (Section 12.4 and Figure 12.4)

   (b) **A high level of perception, especially among young adults, that smoking is addictive:** Significantly fewer smokers believed that they were *addicted* to smoking in 1996 (67%), compared to 1990 (78%). In 1996, only 48% of 18-24 year old smokers believed they were *addicted* to smoking. This decline in the perceived levels of *addiction* could lead to less success for future quit attempts. (Section 12.4, pages 12-9 to 12-10)

6. The Tobacco Control Program **has maintained** a high level of concern for the health effects of secondhand tobacco smoke on nonsmokers. Between 1992 and 1996, approximately 80% of Californians consistently believed that secondhand smoke causes cancer, and 93% believed that it is harmful to the health of children and babies. (Section 12.4, pages 12-10 and 12-11 and Figure 12.5)

7. In 1996, almost one-half (47%) of current smokers were asked not to smoke, and 44% of nonsmokers were activists and asked someone not to smoke. (Section 12.5 and Figures 12.6 to 12.10)

Chapter 13: OTHER TOBACCO USE

Cigar Use

1. Cigar use doubled from 2.5% of adults in 1990 to 4.9% in 1996. The increase was particularly high (over threefold) among adults 18-24 years of age. (Section 13.2 and Figure 13.2)

2. Cigar use has risen sharply in *never smokers*, as well as *former smokers* and *current smokers*. Research is needed to determine whether cigar use is associated with increased relapse to cigarette smoking among *former smokers* or increased uptake of cigarette smoking. (Figure 13.3)

3. One-fourth of adolescent boys and 12% of adolescent girls have smoked a cigar. Cigar use is particularly high among adolescents at high risk of becoming future *addicted* cigarette smokers. Research is needed to identify whether experimentation with cigars is associated with more rapid transition to *addicted* cigarette smoking. (Figure 13.4)

4. Although the rapid increase in cigar smoking is worth monitoring, it is likely that cigar smoking is a passing fad. (Section 13.4)

Smokeless Tobacco

5. Between 1990 and 1996, smokeless tobacco use among adult men remained low, and was approximately 2.5% in 1996. (Section 13.1 and Figure 13.1)

6. Although adolescent boys decreased their use of smokeless tobacco from 3.1% of boys in 1993 to 1.6% in 1996, they may be turning to cigars instead. (Section 13.3 and Figure 13.4)

Chapter 1

EXPENDITURES TO INFLUENCE SMOKING BEHAVIOR IN CALIFORNIA

Chapter 1: EXPENDITURES TO INFLUENCE SMOKING BEHAVIOR IN CALIFORNIA

Introduction

In November 1988, California voters passed Proposition 99, which established the Tobacco Tax and Health Protection Act and initiated the California Tobacco Control Program (TCP). Proposition 99 designated specifically how monies raised from the increased excise tax could be spent. These expenditure allocations can only be overruled by a four-fifths majority of legislators only if the changes fit within the general intent of Proposition 99. The resulting California Tobacco Control Program is widely perceived to be the largest and most comprehensive health promotion program ever undertaken to reduce the impact of tobacco on society.

Californians are not being influenced about the issue of smoking by the public health community alone. The tobacco industry has a very large marketing effort aimed at maintaining or increasing sales of tobacco products. Key elements of the marketing strategy used by the tobacco industry are the manipulation of product price to increase sales and promotional campaigns to encourage product use. The industry's marketing strategies in both of these areas conflict directly with the goals of the Tobacco Control Program. In addition, the tobacco industry lobbies elected officials to promote favorable legislation to the industry. These lobbying efforts have included substantial campaign contributions to candidates for the legislature and state office (Balbach et al., 1997). In addition, tobacco industry documents reveal that it pursued a well developed, multi-pronged strategy designed to "eliminate" the TCP anti-smoking media campaign. This strategy included encouraging legislative intervention, organizing business-community opposition, convincing the Director of Health Services to withdraw or modify the campaign, and seeking intercession against the campaign by the Governor of California (Chilcote, 1990).

Hence, in a very real way, the tobacco industry and the Tobacco Control Program are at war over the health of Californians. For the public health community, there is no acceptable or safe level of smoking, and for the tobacco industry, there is no apparent interest in getting out of the tobacco business.

The purpose of this report is to provide an unbiased assessment of the progress that has been made toward the public health goal of a smokefree California and the influences of both pro- and anti-tobacco forces on smoking behavior. As outlined in our previous report, the scientific evidence on the health hazards of active and passive smoking indicate clearly that a tobacco control program should have the following goals:

(1) To protect nonsmokers by reducing exposure to secondhand smoke
- (a) in children at home and at school
- (b) in adults, particularly at work and in public places

(2) To reduce smoking prevalence
- (a) by reducing smoking uptake in nonsmokers
- (b) by increasing quitting in smokers

A Tobacco Education and Research Oversight Committee (TEROC), whose members are appointed by the Governor, the Legislature and the Superintendent of Public Instruction, oversees the California Tobacco Control Program. In its recent report, this oversight committee noted that the Program's strategy has been to create a social milieu and legal climate in which tobacco use is regarded as unacceptable (TEROC, 1997). TEROC summarized Program activities and messages as the following:

1) To counter the tobacco industry and others who promote tobacco use
2) To emphasize the addictive nature of tobacco, its harmful health effects and its unattractive features
3) To protect Californians from secondhand smoke
4) To progressively eliminate the availability of tobacco products to children and teens
5) To provide youth with tobacco control-related information and skills.

The present report uses data from multiple sources (see Appendix A) to explore trends relevant to these Program activities and to assess the effectiveness of the California Tobacco Control Program's efforts compared to those of the tobacco industry. In this chapter, section 1 compares the budgets of the California Tobacco Control Program for discouraging smoking to the budget of the tobacco industry for advertising and promoting smoking. Section 2 outlines the material in the rest of the report, and section 3 discusses some statistical issues relevant to the presentation of the results throughout the report.

1. Comparison of Intervention Expenditures

The Tobacco Control Program

The Health Education Account, which funds the California Tobacco Control Program, was allocated a 20% share of the revenue raised from the $0.25 excise tax increase. The remaining 80% of the new revenue was used for indigent health care (45%), a legislative discretionary fund (25%), research (5%), and wildlife protection (5%). Details of the Health Education Account are presented for each fiscal year in Table 1.1. Not included are administrative and evaluative functions, which averaged about 5% of the total budget between 1989 and 1996.

Approximately one-third of the overall Health Education Account budget is allocated to the Department of Education, with the majority of these funds supporting smoking prevention programs in local schools. The remainder of the budget is administered by the Department of Health Services. Initially, the Local Lead Agency Program accounted for approximately 42% of the total budget, although in fiscal year 1995-1996, this percentage was reduced to approximately 25%. Local Lead Agency funds are distributed at the local level and through special interest networks. The policy allows for considerable local discretion in the use of the money. A yearly mass media campaign has received a relatively constant amount of money, with the exception of a very low actual expenditure in 1995-1996. Innovative intervention projects in communities are supported under a competitive grants program.

In the first 7 years since the passage of Proposition 99, a total of $517 million has been spent on tobacco control interventions, an average of $74 million each year. From 1989 to mid 1993, there was an average annual expenditure of $85.5 million with variation suggesting that funds from previous years are brought forward to the next, particularly in the category of competitive grants. California has a population of 25.5 million people 12 years of age and older. Thus, the average annual expenditure on the TCP during this period was $3.35 per capita/year. However, beginning in mid 1993, there was a marked reduction in TCP expenditures: funds were diverted from the Health Education and Research Accounts to indigent medical services. From mid 1993 to mid 1996, the average yearly expenditure was only $53 million, which translates to $2.08 per capita/year. Of particular note is the major decline in expenditures in 1995-1996 when the media budget was decreased by one-half, and the funding available at the local level was decreased by almost one-third from the previous fiscal year. Thus, between these two periods, there was a reduction in the annual funding for tobacco control in California by a factor of 40%.

Table 1.1 also shows the extent to which the Program was underfunded, which is shown as the percentage of the money actually spent to the funds mandated as available for the Health Education Account (20% of the increased excise tax revenue). From 1988 to 1993 the aggregate underfunding percentage was 27%, and from 1993 to 1996 the aggregate underfunding increased to 40%. Thus, in the later period, an average of $140.3 million annually was diverted from the amount mandated to be spent on the California TCP.

Table 1.1
Expenditures Targeted at Tobacco Use in California (millions of dollars)

Tobacco Control Program [1]	**Early Period**				**Later Period**			**TOTAL**
	1989-1990	**1990-1991**	**1991-1992**	**1992-1993**	**1993-1994**	**1994-1995**	**1995-1996**	**1989-1996**
Mass Media	$14.3	$ 14.3	$16.0	$15.4	$12.9	$12.2	$ 6.6	$ 91.7
Local Lead Agency	$35.6	$ 35.4	$14.5	$17.8	$13.5	$16.4	$10.2	$143.4
Competitive Grants	$ 3.3	$ 49.7	$ 1.1	$27.5	$15.1	$10.9	$ 9.7	$117.3
Local Schools	$32.6	$ 32.6	$24.3	$23.3	$19.6	$16.8	$15.3	$164.5
Yearly Totals	*$85.8*	*$132.1*	*$55.9*	*$84.0*	*$61.1*	*$56.3*	*$41.7*	***$516.9***
% under (-)/over(+) funding	*-51*[3]	*+28*	*-43*	*-14*	*-32*	*-38*	*-51*	***-32***
Tobacco Industry [2]								**TOTAL**
	1989	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1989-1995**
Advertising	$111	$114	$112	$ 99	$ 94	$ 89	$ 82	$ 795
Incentives to Merchants	$100	$102	$116	$151	$156	$168	$187	$ 980
Promotional Items	$122	$149	$207	$252	$332	$210	$201	$1473
Other	$ 28	$ 34	$ 31	$ 22	$ 22	$ 17	$ 19	$ 173
Yearly Totals	*$362*	*$399*	*$465*	*$523*	*$603*	*$483*	*$489*	***$3,324***

[1] Health Education budget reported in Balbach et al., 1997.
[2] 10% of National Expenditures reported by Federal Trade Commission, 1997.
[3] Figures reported for 1988-1990.

The Tobacco Industry

Table 1.1 also presents the estimated expenditures of the tobacco industry on advertising and promotion in California over the same time period for each calendar year. These estimates were based on data from the Federal Trade Commission (FTC) report (FTC, 1997). The estimates in Table 1.1 are based on the relative size of the California population and assume that California was not differentially targeted by the tobacco industry. These calculations predict that the tobacco industry would spend about 10% of its total advertising and promotions budget to directly influence Californians. The tobacco industry is required to supply the FTC with an accounting of the monies spent on advertising and promotion of manufactured cigarettes, but these figures do not include what it spends on promoting other tobacco products, such as cigars. Furthermore, these reports do not include industry expenditures for lobbying and political campaigns that may affect the conduct of the California TCP.

In 1989, traditional advertising approaches, such as print media and billboards, comprised approximately 30% of the total promotional expenditures of the industry; by 1995, this was reduced to 17%. Furthermore, by 1995, expenditures on traditional advertising amounted to only 41% of the amount the industry devoted to the category of promotional

items. Promotional items, which are a combination of the FTC categories for coupons, retail value added and specialty item distribution, comprised the largest proportion of the industry advertising and promotional expenditures in each year. The percentage for promotional items increased from a low of 34% of total expenditures in 1989 to a high of 55% in 1993.

The other major FTC category that the industry designates as promotional allowances covers expenditures to encourage wholesalers and retailers to stock and promote cigarettes. Table 1.1 labels this category "incentives to merchants" to better describe its purpose. Over a 7-year period, expenditures under this incentives-to-merchants category have risen steadily, from 27% to 38% of the total budget.

During the 1989 to 1992 period, the tobacco industry is estimated to have spent an average of $437 million/year or $17.14 per capita/year to persuade Californians to smoke. During the 1993 to 1995 period, the industry is estimated to have spent an average of $525 million/year or $20.59 per capita/year, for this purpose.

AVERAGE PROMOTIONAL EXPENDITURES PER PERSON PER YEAR

	1989 to 1992-1993	**1993 to 1995-1996**
Tobacco Industry	$17.14	$20.59
Tobacco Control	$ 3.35	$ 2.08
Ratio (Industry/Control)	**5.1**	**9.9**

Thus, from 1989 to 1993, the tobacco industry outspent the California TCP by 5 times. Subsequently, it increased its outlay; at the same time, funding from the TCP was diverted. Between 1993 and 1996 the tobacco industry spent 10 times more than the TCP.

Table 1.1 shows that in 1995 in California, the tobacco industry spent a total of approximately $489 million between its expenditures on advertising, incentives to merchants, promotional items, and other marketing activities, all designed to increase smoking. During fiscal year 1995-1996, the TCP was underfunded by 51%, and spent $41.7 million on its programs designed to reduce smoking. If the TCP had been fully funded that year, it would have spent approximately $81.8 million on anti-smoking activities, which leaves a differential of over $405 million between TCP and industry spending. Given that in 1996 California's per capita cigarette consumption was 6.0 packs/month or 72 packs/year, with a population of 25.5 million, approximately 1.84 billion packs of cigarettes were sold in California that year. An additional excise tax of $0.25/pack, with the revenues fully devoted to the TCP, would more than erase the differential between TCP and tobacco industry spending devoted to influencing smoking behavior.

In addition to the expenditures identified in Table 1.1, the tobacco industry also used another marketing strategy to promote smoking in the 1993 to 1996 period. In April 1993, tobacco companies acted in concert to reduce the real price of premium brands of cigarettes by an average of 11% nationally and 10% in California (Shapiro, 1993). Furthermore, the tobacco industry increased its campaign contributions to candidates for the legislature and other state offices and increased its contributions to political parties. In 1993 and 1994, the industry spent $841,342 for these activities to influence the conduct of the California TCP. In 1995 and 1996, this expenditure increased by a factor of nearly 80% to $1,456,031 (Balbach et al., 1997).

Summary

Documented evidence shows that as early as 1990, the tobacco industry outlined explicit strategies designed to defeat the tobacco control program and eliminate the monies legislatively dedicated to the anti-smoking media campaign (Chilcote, 1990). Therefore, it is reasonable to look for evidence of whether such strategies were successful in the years after 1990. The dramatic shift in the balance of funding by the California TCP and the tobacco industry represents one such form of evidence. Therefore, it is reasonable to examine the trends in smoking behavior (Chapter 2) for each of the two periods described above and to treat these as distinct intervals of the TCP. Furthermore, 1993 is both the midpoint of the TCP and the interim California Tobacco Survey (CTS) year; large CTS were conducted in 1990, 1993, and 1996.

2. Structure of This Report

The purpose of this report is to assess how Californians have reacted to these two competing influences and California's progress in achieving the goals set out for the Tobacco Control Program (TCP). As mentioned earlier, the main goals include reducing nonsmokers' exposure to secondhand tobacco smoke and reducing smoking prevalence. Smoking prevalence and cigarette consumption are the ultimate measures of the Program's impact for the second goal; however, neither of these measures provides a complete assessment of the relative impact of the California TCP and the tobacco industry on smoking behavior. Therefore, in addition to cigarette smoking prevalence, other measures are used that reflect the processes of smoking uptake and smoking cessation.

Chapter 2: Tobacco Control in California: An Overview provides the overview of trends in each of the major goals for the California TCP. The first goal relates to protecting nonsmokers and the second goal relates to reducing smoking prevalence. Trends in per capita consumption of cigarettes and adult and adolescent smoking prevalence in California are compared to trends in the rest of the United States.

Chapter 3: *Understanding Smoking Behavior* outlines what is known about the process by which a person becomes a smoker over time and the process by which a smoker becomes a successful quitter over time. These specific processes are referred to throughout this report.

Chapter 4: Protection of Nonsmokers presents data on how Californians have responded to concerns about the health consequences of secondhand tobacco smoke. These health effects have been comprehensively reviewed recently in the California Environmental Protection Agency report (CalEPA, 1997). The existence of workplace policies and their effect on exposure to secondhand tobacco smoke by nonsmokers is reported. Further, data are presented on the voluntary imposition of restrictions on smoking in the home.

Chapter 5: Trends in Adolescent Smoking examines the smoking uptake process in considerable detail, presenting trends in the indicators of future smoking for population subgroups. Changes in known predictors of smoking uptake are also discussed. Finally, the chapter assesses the probability of a major decline in teen smoking in the next 3 years.

Chapter 6: Quitting and Predictors of Quitting looks in detail at the Quitting Continuum and trends in the indicators of future successful cessation among current smokers.

Chapter 7: Promoting Smoking Cessation examines the role that smoking restrictions, doctors' advice, and assistance in quitting has played in the TCP.

Chapter 8: Prices and Taxes analyzes the changes in cigarette consumption that would be expected to occur because of changes in cigarette price. Also, population data are presented that address the willingness of Californians to accept an increase in the price of cigarettes from an additional excise tax, and on the concern of smokers about the amount of money they spend on cigarettes.

Chapter 9: Advertising and Media presents data on the effect of the promotional activities of both the tobacco industry and the TCP in trying to influence how Californians view cigarettes.

Chapter 10: Access to and Ease of Purchase of Cigarettes addresses the issue of the accessibility of cigarettes to adolescents in California. In order to focus this issue, data are presented concerning how teens get their cigarettes and the types of stores frequented by teens who buy cigarettes.

Chapter 11: *School Smoking: Policies and Compliance* examines the issue of cigarette smoking in schools. Included are trends in compliance with smoking bans, trends in teachers' smoking as perceived by students, and trends in exposure to anti-smoking curricula.

Chapter 12: Knowledge and Attitudes About Smoking reviews trends among Californians in a variety of other smoking-related issues, including beliefs about "light" cigarettes, opinions about the legitimacy of the tobacco industry and its regulation, knowledge about the health consequences of smoking, and the extent of nonsmoker activism.

Chapter 13: Other Tobacco Use presents data on the use of tobacco products other than cigarettes by both adults and adolescents. The recent increase in the popularity of cigars is addressed specifically.

Appendix A: Data Sources describes all of the data sources used for this report.

Appendix B: Sociodemographic Data contains data tables on the major topics described in this report.

3. Statistics

Throughout this report, data are summarized as percentages. Unless otherwise indicated, these percentages are population estimates compiled using survey weights. The weighting procedure is described separately in a technical report (Pierce et al., 1998). Many percentages are accompanied by 95% confidence intervals that indicate the margin of error for the estimates. Technically, these intervals indicate the expected range of the estimate if the survey were repeated many times.

Although the complete results of statistical testing are often not included in this report, the appropriate tests have been performed. When a result in reported as *significant*, it implies that the probability that this result would have occurred by chance alone is less than 5%.

When examining trends, percentage increases or decreases over time are reported. To point out that these are indeed percentage change (computed as 100*[level 1 – level 2)/level 1], the term increase or decrease *by a factor of* X% is used.

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Chapter 2

TOBACCO CONTROL IN CALIFORNIA: AN OVERVIEW

CHAPTER 2: TOBACCO CONTROL IN CALIFORNIA: AN OVERVIEW

Introduction

This chapter provides an overview of the status of tobacco control in California. As stated in Chapter 1, the two public health goals for tobacco control programs are:

(1) To protect nonsmokers by reducing exposure to secondhand smoke

(a) in children at home and at school
(b) in adults at work and in public places

(2) To reduce smoking prevalence

(a) by reducing smoking uptake in nonsmokers
(b) by increasing quitting in smokers

In this chapter, section 1 presents evidence of considerable progress toward achieving the first goal. Section 2 shows trends in per capita cigarette consumption and adult smoking prevalence and comments on these in light of the intensity of the California Tobacco Control Program over time. Section 3 presents data on smoking prevalence in teens and in older youth, and shows the trends for reaching a level of consumption that indicates completion of the smoking uptake process. Section 4 shows trends in smoking cessation and in factors that are predictive of future successful cessation. Finally, section 5 summarizes the findings of the chapter.

1. Evidence for Progress on Goal 1: Protect Nonsmokers by Reducing Exposure to Secondhand Smoke

Exposure of Children and Adolescents to Secondhand Tobacco Smoke

The recent report of the California Environmental Protection Agency (CalEPA, 1997) identified the following health effects for children exposed to environmental tobacco smoke (ETS): acute lower respiratory tract infections (e.g. bronchitis and pneumonia), asthma, chronic respiratory symptoms and middle ear infections. These health effects make protection of children and adolescents a major priority for any tobacco control program. Many public institutions frequented by children, such as schools and day care centers, are now mandated to be smokefree. Because protection in the home requires voluntary restrictions on smoking behavior, the home is likely to be the main site of secondhand tobacco smoke exposure in children.

In the following analysis, children and adolescents are considered to be protected against secondhand tobacco smoke exposure at home if (a) the household did not include any

smokers or (b) a household that did include smokers was explicitly reported to be smokefree. Figure 2.1 shows the proportion of children and adolescents exposed to secondhand tobacco smoke in California households. In 1992, 29% of California minors (younger than 18 years) were exposed to secondhand tobacco smoke. One year later, after the release of the Environmental Protection Agency's report on the health hazards of secondhand smoke, the proportion exposed decreased significantly to 23%. By 1996, the proportion exposed decreased to 13%, another significant decrease. Thus, over the 4-year period, the proportion of California children and adolescents exposed decreased by a factor of 55%. In 1996, less than one in every eight Californians under the age of 18 years was exposed to tobacco smoke at home.

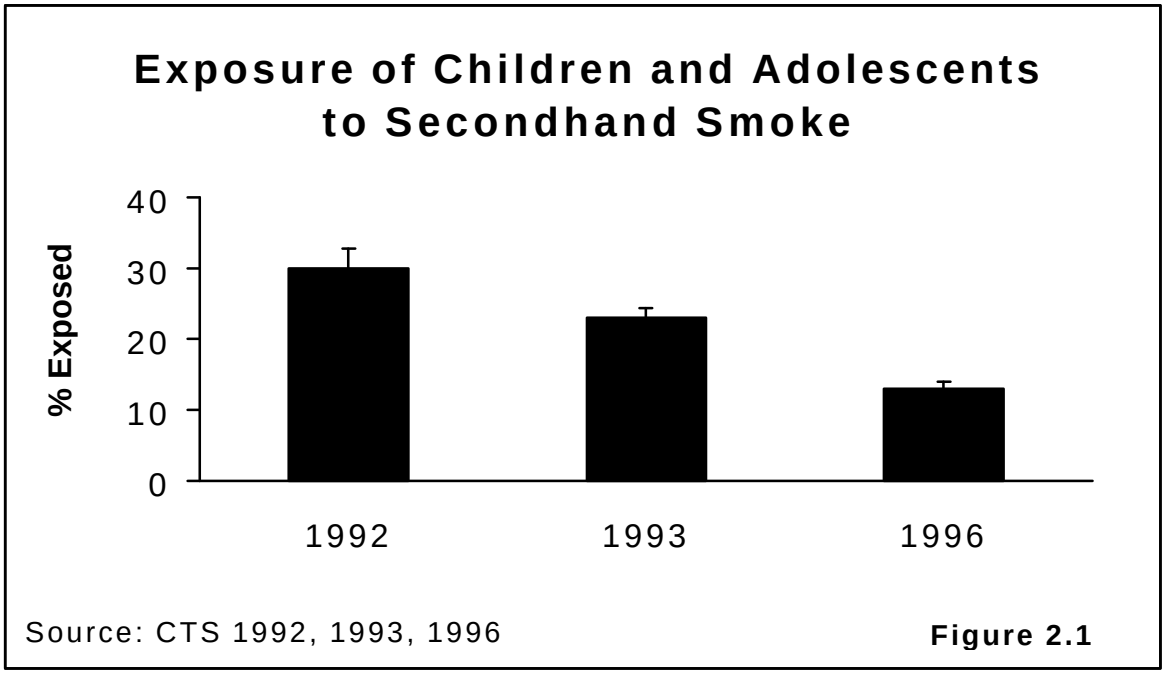
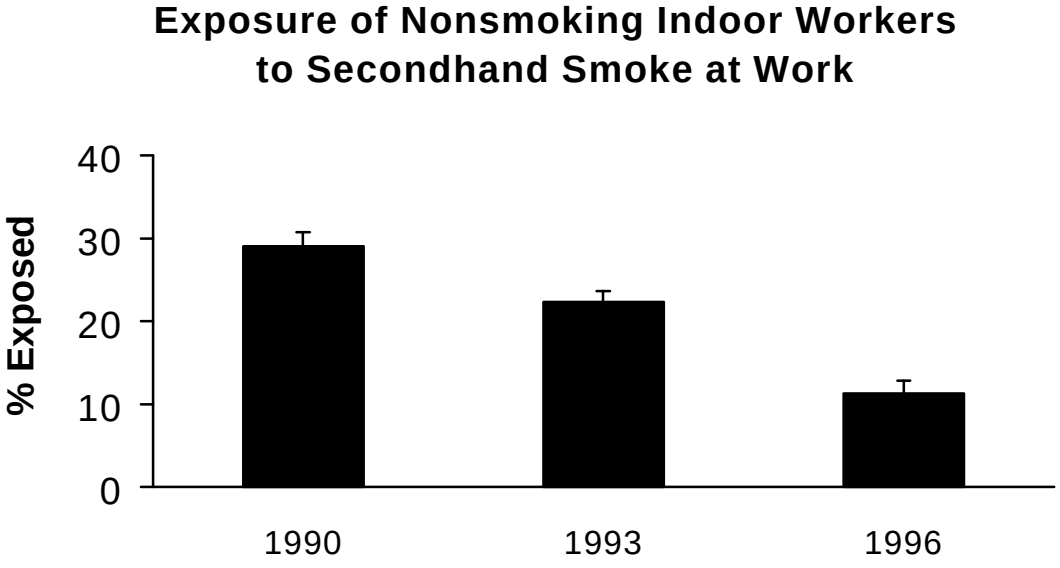


Figure 2.1

Protecting Nonsmoking Workers from Exposure to Secondhand Tobacco Smoke

Nonsmoking indoor workers are the second group at risk for health consequences from exposure to secondhand tobacco smoke. In 1990, 29% of nonsmoking indoor workers reported that someone had smoked in their work area within the previous 2 weeks. By 1993, the proportion of indoor workers who reported exposure to someone smoking by this measure had decreased by almost one-fourth to 22.3%. By 1996, this proportion had almost halved again, to only 12.4%. Thus, between 1990 and 1996, the proportion of nonsmoking workers who were exposed to secondhand tobacco smoke declined significantly. Figure 2.2 illustrates this decrease.



Source: CTS 1990, 1993, 1996

Figure 2.2

A more detailed presentation of progress in the protection of nonsmokers from secondhand tobacco smoke is presented in Chapter 4. Additionally, demographic breakdowns are presented in Appendix B, Tables 3 and 4.

PROGRESS ON GOAL 1:
Protecting Nonsmokers from Secondhand Tobacco Smoke

During the Tobacco Control Program

- **From 1992 to 1996, the proportion of children and adolescents exposed to secondhand tobacco smoke at home decreased by a factor of 55%.**
- **From 1990 to 1996, the proportion of nonsmoking indoor workers exposed to secondhand tobacco smoke decreased by a factor of 57%.**

2. Evidence for Progress on Goal 2: Reduce Smoking Prevalence

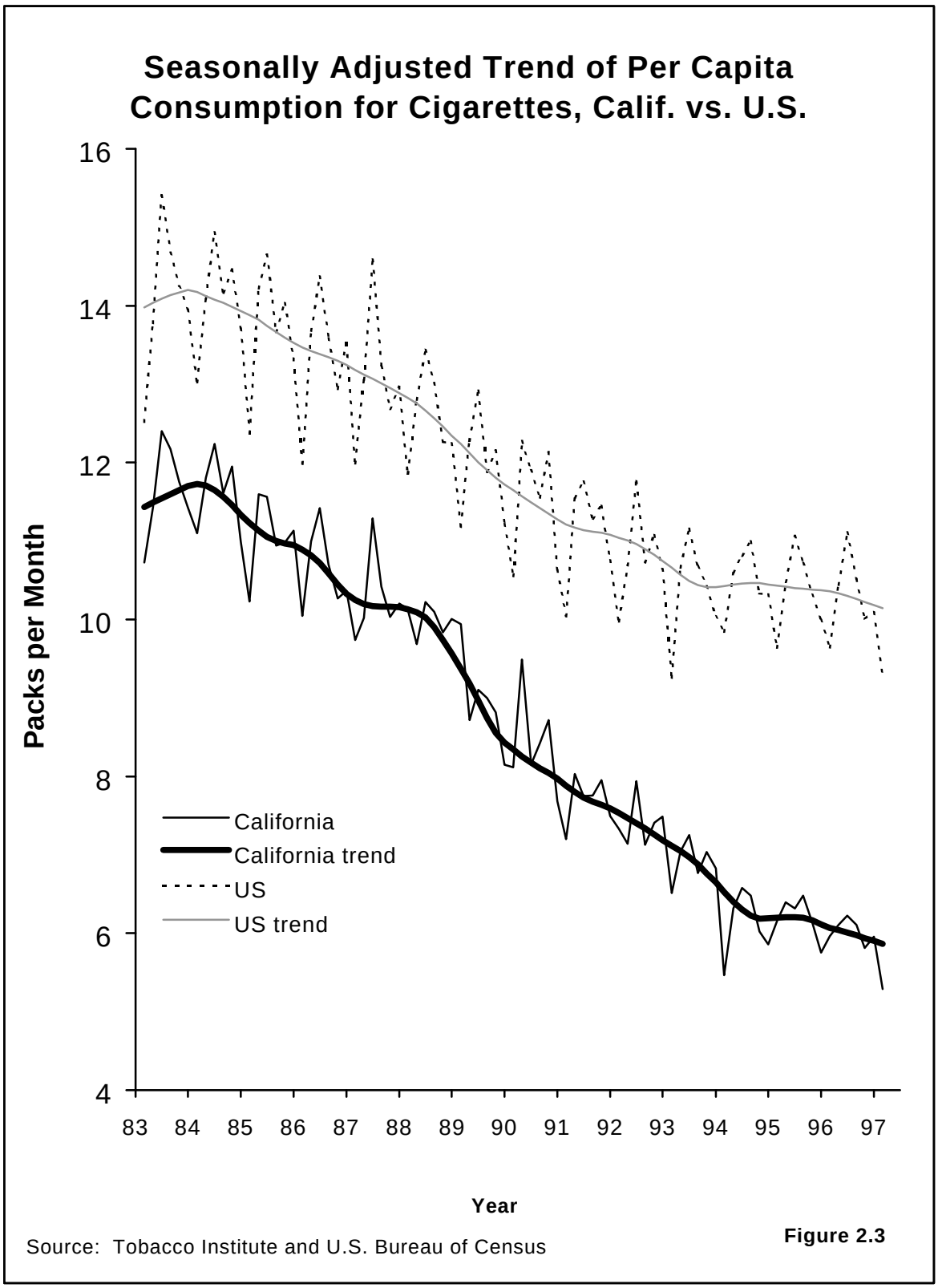
Two measures of population tobacco use are per capita cigarette consumption and adult smoking prevalence. Both prevalence and tobacco consumption have been declining in California and the rest of the United States over the last several decades, ever since the health consequences of smoking have become widely known. In order to evaluate whether any decline in tobacco use in California can be attributed to the California Tobacco Control Program, it is necessary to determine that the decline (1) represents an

acceleration of the pre-Program trend, and (2) is more substantial than any decline concurrently observed in the rest of the United States.

Smoking prevalence is generally measured by self-report from surveys and can be validated by comparison to total tobacco sales. Tobacco sales information is reported on a monthly basis at the state level by the Tobacco Institute and in California by the State Board of Equalization. For each pack of cigarettes sold in California, excise tax stamps are required. A careful comparison of these two sources of data shows that they are essentially equivalent. In order to compare California to the rest of the United States, Tobacco Institute data are used in this report. California cigarette consumption can also be estimated from the available survey data and compared to the reported sales data. In California, the self-reported consumption data consistently underestimates the sales data by about 30%, which is the same differential identified in the national data for the period 1974 through 1987 (USDHHS, 1989). Underestimation is thought to be caused by smokers consistently rounding the actual number of cigarettes that they smoke down to the nearest half-pack. Another possibility is that packs receiving an excise tax stamp at a wholesale warehouse are not always consumed by a smoker who lives in California.

Trends in Per Capita Consumption in California and the Rest of the United States, 1983-1997

Figure 2.3 presents the trends from February 1983 through March 1997 in the per capita cigarette consumption (packs/month) for persons aged 18 years and older for California and the remainder of the United States. As these data are from wholesale warehouse removals, there is considerable variation; the level of removals in the last month of any quarter is strongly correlated with the removals in the first month of the next quarter. This variation has little to do with actual consumption and likely reflects business practice. In order to remove this source of variability, data were combined into 2-month intervals with December/January, February/March, etc., treated as single intervals. A special smoothing procedure (SABL procedure from S-Plus statistical package; Becker et al., 1988) was used to separate real changes in consumption from changes due to seasonal variations. In Figure 2.3, the jagged lines show the actual bimonthly data and the smooth lines represent the deseasonalized trends.



Source: Tobacco Institute and U.S. Bureau of Census

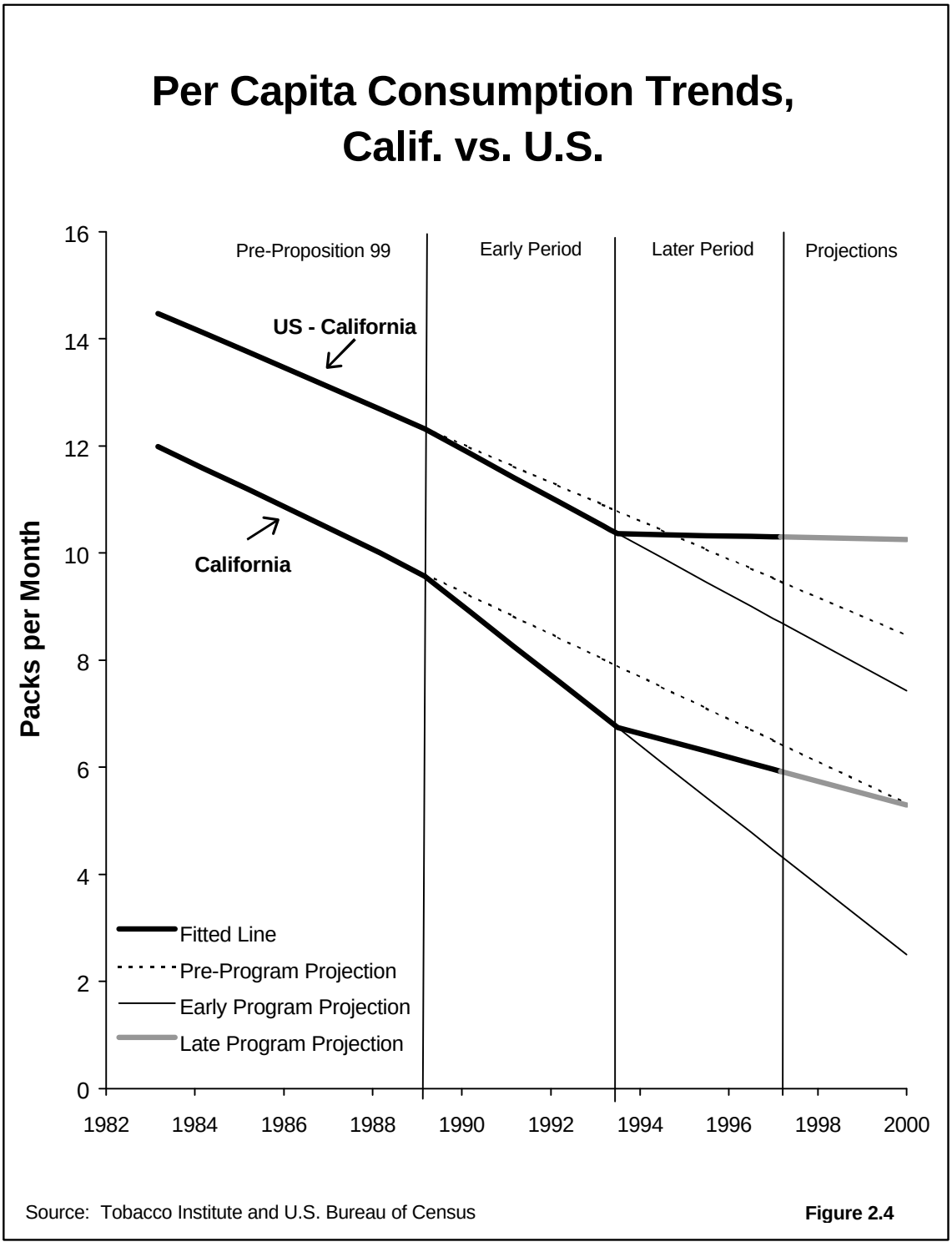
Figure 2.3

Over the entire period from 1983 to 1997, Californians consumed fewer cigarettes per capita than did people in the remainder of the United States. In California, around the time the Tobacco Control Program (TCP) began, the rate of decline in per capita cigarette consumption appeared to change. This increase in the rate of decline occurred several months before the passage of Proposition 99 and almost 18 months before to the start of the first TCP intervention. However, the faster rate of decline is coincident with the start of the $24 million media campaign mounted by the tobacco industry to convince voters to defeat Proposition 99. Beginning in 1994, the rate of decline in per capita consumption slowed in California, which may reflect the lower level of resources devoted to the TCP since 1993 (Chapter 1). In the rest of the United States, consumption no longer appeared to decline beginning around April 1993, when tobacco companies announced a drop in the price of premium brands of cigarettes (Shapiro, 1993).

These trends in per capita cigarette consumption for California indicate that there was a change in the rate of decline (slope) just prior to Proposition 99 and at least one change following the beginning of the TCP. Additionally, because of the changes in funding for the TCP outlined in Chapter 1, the time since the TCP began is divided into two intervals. The early period is from January 1989 through June 1993 (fiscal year 1992-1993), and the later period is from July 1993 through March 1997 (the most recent sales data available).

Figure 2.4 plots the regression fit to the seasonally adjusted consumption data in each of these intervals and the period before the TCP began. Also shown on the figure are the projected trend lines for each period extended to January 2000. The regression fit was from a spline piece-wise linear model (Neter et al., 1985). This model can evaluate whether a change in slope occurs in the periods before and after the boundaries indicated (December 1988 and June 1993).

As a guide to the material presented below, Table 2.1 summarizes the changes in per capita cigarette consumption in California and the rest of the United States. Before the excise tax increase in California in January 1989, monthly consumption had been declining at an annual rate of 0.40 packs/person so that in December 1988, Californians were consuming an average of 9.7 packs/person. After the start of the TCP, the annual rate of decline in monthly consumption increased from 0.40 to 0.65 packs/person, so that in June 1993, Californians were consuming an average of 6.7 packs/person. Thus, the early period in the TCP was associated with an increase by a factor of 63% in the annual rate of decline in per capita cigarette consumption in the state. In the later period of the TCP, the annual rate of decline in monthly consumption decreased to 0.22 packs/person, only one-third the rate of decline observed in the early period. Therefore, in December 1996, Californians were consuming 6.0 packs/person. If the annual rate of decline in monthly consumption from 1993 to 1996 continues, Californians will be consuming 5.2 packs/person in January 2000.



Source: Tobacco Institute and U.S. Bureau of Census

Figure 2.4

As can be seen in Figure 2.4, a consumption level of 5.2 packs/person is about the same as would be expected if the pre-Program trend had continued. If the trend observed during the early period of the TCP had continued, per capita consumption in January 2000 would have been 3.1 packs/person, which is less by a factor of 68% than it was before the TCP began in December 1988. The expected decline if the trend from the early period had continued would be close to the 75% goal set by the legislature for the year 2000.

Table 2.1
Summary of Decreases in Per Capita Cigarette Consumption

	California		Rest of U.S.	
Period	**Rate of Decline**	**Monthly Per Capita Consumption[1]**	**Rate of Decline**	**Monthly Per Capita Consumption[1]**
Pre-1989 (Pre-Program)	-0.40	9.7	-0.36	12.4
1989-1993 (Early Period)	-0.65	6.7	-0.45	10.4
1993-1996 (Later Period)	-0.22	6.0	-0.02	10.3
1996-2000 (Projected)	-0.22	5.2	-0.02	10.2

[1] Packs/person: December 1988, June 1993, December 1996, January 2000
Source: Tobacco Institute and U.S. Bureau of Census

Before the start of the TCP, monthly cigarette consumption had also been declining in the rest of the United States at an annual rate of 0.36 packs/person. By December 1988, residents in the rest of the United States were consuming an average of 12.4 packs/person. The level of consumption in the rest of the United States was higher by a factor of 28% than in California at the start of the TCP. During the early period of TCP (through fiscal year 1992-1993), the annual rate of decline in monthly consumption in the rest of the United States increased from 0.36 to 0.45 packs/person to a consumption level of 10.4 packs/person in June 1993. At this time point, the level of consumption in the rest of the United States was higher than in California by a factor of 55%. During the second period of the TCP, the annual rate of decline in monthly cigarette consumption in the rest of the United States was negligible (-0.02), but this trend estimated that in December 1996, consumption would be 10.3 packs/person. Thus, in December 1996, the level of per capita consumption in the rest of the United States was higher than it was in California by a factor of 72%.

During the early period of the TCP, per capita cigarette consumption decreased by a factor of 30.9% in California and by a factor of 16.1% in the rest of the United States. Therefore, during this period, per capita consumption declined 1.9 times more in California than in the rest of the United States. During the later period of the TCP, per capita consumption continued to decline in California, but only at one-third of the rate of decline observed in the early period. In the rest of the United States, there was no further decline after 1993. Over the entire period from December 1988 to December 1996, tobacco consumption decreased in California by a factor of 38% compared to a factor of only 17% in the rest of the United States.

Trends in Smoking Prevalence in Californians Aged 18 Years and Older

California Tobacco Surveys (CTS) were conducted in 1990, 1992, 1993 and 1996. Each survey provides a snapshot or point estimate of smoking prevalence for the California population in the year the survey was conducted. However, according to the Bureau of the Census estimates, California has experienced substantial changes in the demographic composition of its population over time. In particular, the adult population is more Hispanic in the mid 1990s than it was in the early 1990s, and more educated. Since smoking prevalence is lower among the well educated and among Hispanic women than in other demographic groups, any decrease in the overall smoking prevalence in 1996 compared to earlier years could be explained by the growth of these segments of the population. To adjust for these potential sources of bias in the point estimates of adult smoking prevalence, the estimates are standardized to a single population distribution. For this report, the standard population used is the 1994 U.S. Bureau of Census data for the state of California.

Figure 2.5 shows both the weighted and standardized adult smoking prevalence estimates from each of the four CTS. Since the 1996 CTS is both weighted and standardized to 1994 Census data, the two estimates are close. The standardized estimates, which are all computed relative to the same population distribution, indicate that adult smoking prevalence decreased considerably between 1990 and 1992, changed very little between 1992 and 1993, and decreased only slightly between 1993 and 1996.

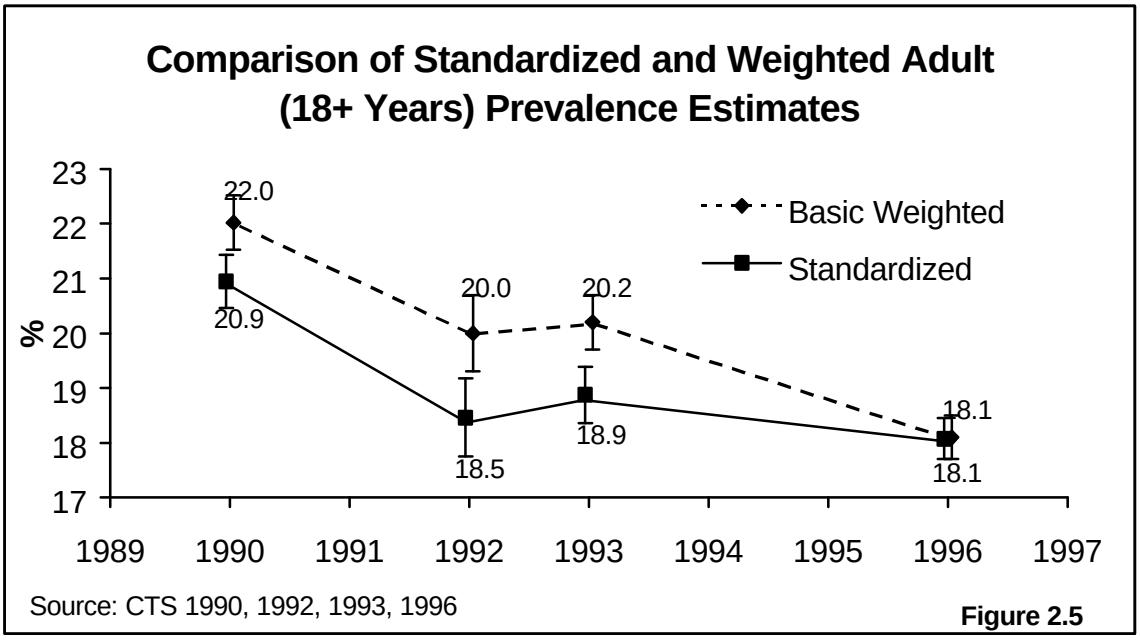


Figure 2.5

In order to draw conclusions about these changes, it is necessary to view these trends in context with trends in smoking prevalence before the program began, and relative to what has happened in the rest of the United States. To do this, data from all methodologically sound population surveys conducted since 1974 were considered. With the exception of the 1985 Current Population Survey (CPS), the only large-scale population surveys

conducted on a regular basis prior to 1988 in the United States were the National Health Interview Surveys (NHIS). Subsequently, in addition to the NHIS (1990, 1991, 1992, 1993, 1994), there have been multiple CPS (1989, 1992, 1993, 1995, 1996), and two new California population surveys: the California Tobacco Surveys (CTS) (1990, 1992, 1993, 1996) and the California Adult Tobacco Surveys (CATS) (1993, 1994, 1995, 1996). The CATS are supplements to the Behavioral Risk Factor Surveys (BRFS) conducted each year in California. Data from the BRFS (1991 and 1992) are considered as well. All of these surveys are described in detail in Appendix A. The differences in survey methodology (e.g., sample selection, survey mode, sample size, question format and how a current smoker is defined) will lead to differences in prevalence estimates between surveys in the same year.

Having considered all of these surveys, some were excluded from the analysis for several reasons. Two surveys, the 1976 and 1977 National Health Interview Surveys (NHIS), did not interview persons as young as 18 years of age. The 1974 NHIS and the Current Population Surveys (CPS) for 1985 and 1989 had unacceptably high rates (>2%) of missing data for smoking status. Finally, due to budget cuts, the 1992 NHIS was terminated prematurely, with consequences to the sample size, response rate, and representativeness.

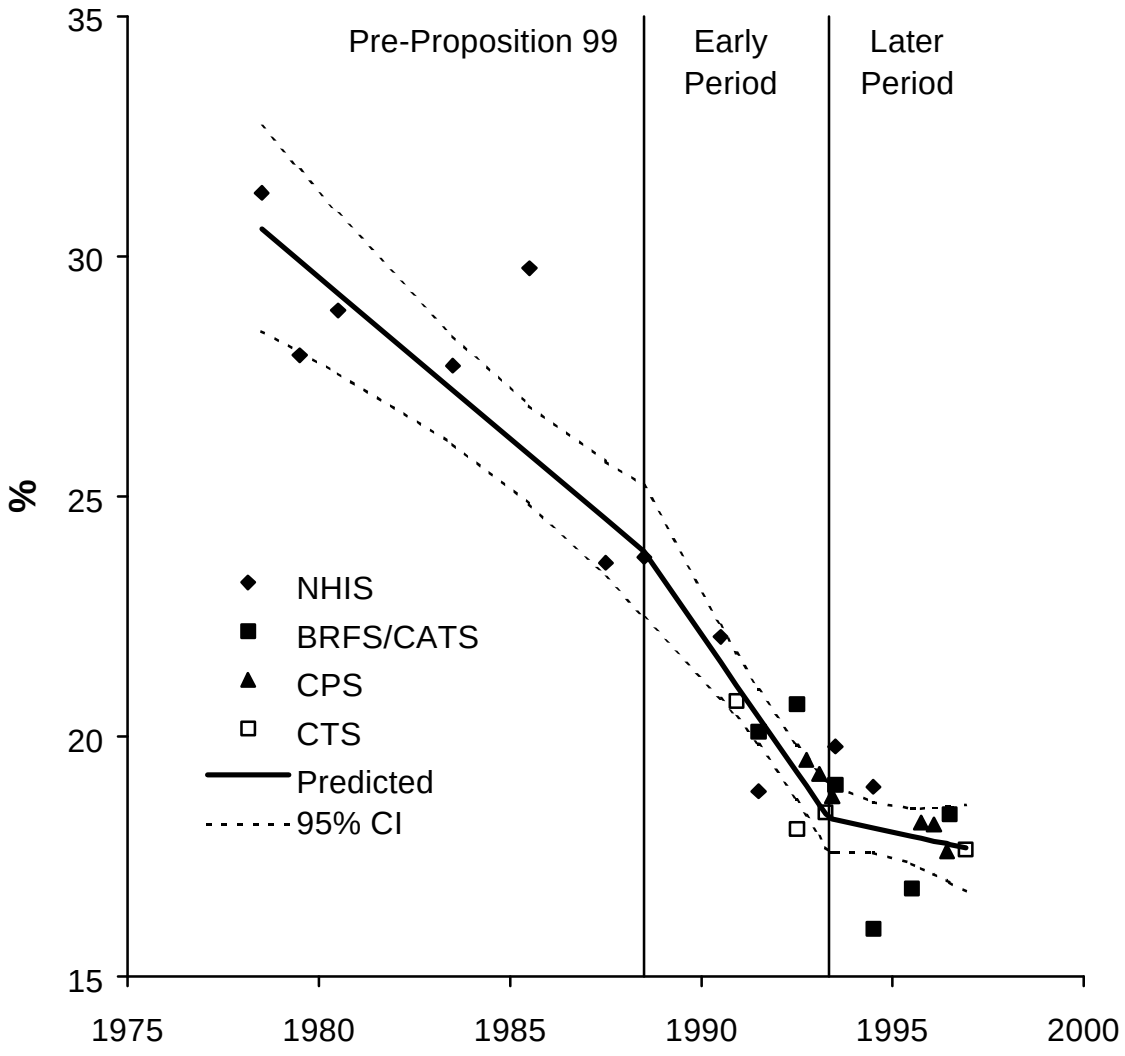
In comparing smoking prevalence rates over time, it is important to ensure that differences noted are not because of changes in the demographic profile of the population. To minimize this bias, all surveys were standardized to 1994 Census data. A recent census was chosen for the reference population so that the standardized estimate from the most recent survey will approximate the unstandardized estimate. The standardization variables were gender, age, race and educational level.[1] The standardized estimates were weighted in the regression analyses by the inverse of the sample size.

The analysis of prevalence data adopted the same basic model that was used to describe the consumption data. Thus, a regression model was used that allowed for a change in the rate of change in prevalence (i.e., change in slope) at the start of the TCP and for another change in the rate of change in prevalence at the end of fiscal year 1992-1993 (Figure 2.6).

The decrease in smoking prevalence for California and the rest of the United States is summarized in Table 2.2. The fitted regression model estimates that the prevalence of smoking in California in June 1978 was 30.9%. In the period from 1978 through 1988, the cigarette smoking prevalence declined at a rate of 0.70%/year, so that the model estimate of prevalence prior to the start of the TCP was 23.9%. In previous reports (Burns & Pierce, 1991; Pierce et al., 1993; Pierce et al., 1994), this figure was reported to be over 26%. The difference in the estimate given in Table 2.2 and the previous estimates is largely because of the different year selected for standardizing the estimates.

[1] The data from each survey were standardized to the 1994 California population distribution for gender, age (18-29,30-39,40-49,50-59,60+), race (White, Non-White) and educational level (college, no college).

Smoking Prevalence Among California Adults Aged 18 and Older



Source: NHIS 1978, 1979, 1980, 1983, 1985, 1987, 1988, 1990, 1991, 1993, 1994; CTS 1990, 1992, 1996; BRFS/CATS 1991-1995; CPS 1992-1993, 1995-1996

Figure 2.6

As explained in the beginning of this section and on page 2-11, the 1994 census data, which are the latest available, were used so that the CTS weighted estimate in 1996 would be close to the standardized estimate in 1996. If the estimates were instead standardized to the 1990 census data, the standardized estimate for 1996 would be more than two percentage points higher than the weighted estimate. Other reasons for the differences in the estimates are that the present analysis does not use all the NHIS data (for reasons explained earlier in this section), and the present analysis is of persons age 18 and older, rather than age 20 and older, as in previous reports.

Table 2.2
Summary of Decreases in Smoking Prevalence

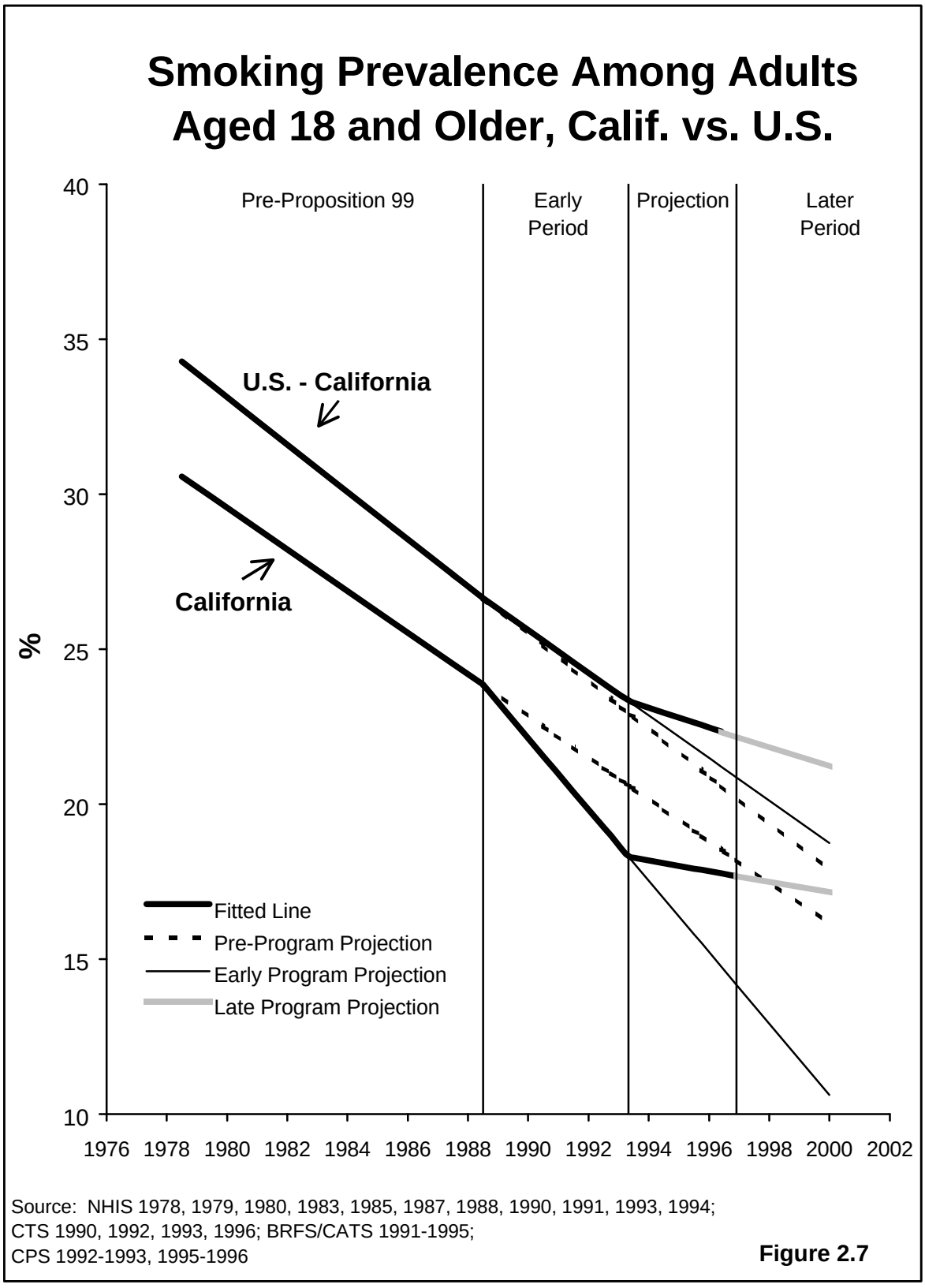
	California		Rest of U.S.	
Period	**Rate of Decline**	**Smoking Prevalence[1]**	**Rate of Decline**	**Smoking Prevalence[1]**
Pre-1989 (Pre-Program)	-0.70	23.9	-0.75	26.7
1989-1993 (Early Period)	-1.09	18.6	-0.66	23.5
1993-1996 (Later Period)	-0.16	18.1	-0.27	22.7
1996-2000 (Projected)	-0.16	17.5	-0.27	21.7

[1]Prevalence in December 1988, June 1993, December 1996, January 2000. Source: NHIS 1978, 1979, 1980, 1983, 1985, 1987, 1988, 1990, 1991, 1993, 1994; CTS 1990, 1992, 1993, 1996; BRFS/CATS 1991-1995; CPS 1992-1993, 1995-1996

The introduction of the TCP was associated with an increase by a factor of 56% in the rate of decline in smoking prevalence (to a rate of decline of 1.09%/year) so that estimated smoking prevalence was 18.6% in 1993. The early years of the TCP coincided with a reduction in smoking prevalence in California by a factor of 22%. During the later period of the TCP, prevalence only declined at a rate of 0.16%/year, which was only 15% of the rate of decline observed during the early period of the TCP. By December 1996, the model estimate of smoking prevalence in California was 18.1%. Thus, during the later period of the TCP, prevalence in California only declined by a factor of 2.7%. If the rate of decline observed since 1993 continues, the estimate from the model indicates prevalence will be 17.5% in January 2000. This will represent a reduction by a factor of 27% from California smoking prevalence before the passage of Proposition 99.

However, if the rate of decline experienced during the early period of the Program had continued until January 2000, prevalence would be 11.5%, a decline by a factor of 52% from the pre-Program level (see Figure 2.7). Even at that rate of decline, the projected smoking prevalence would not have reached the 75% reduction goal by the year 2000.

Figure 2.7 shows the prevalence data for California compared to that for the rest of the United States using the same form of regression model. Again, all trends for both California and the rest of the United States are projected to January 2000. Model- estimated smoking prevalence in the rest of the United States decreased from 34.2% in June 1978 to 26.7% in December 1988 at a rate of 0.75%/year. From 1989 to mid 1993, the rate of decline in prevalence was .66%/year so that in June 1993, the prevalence estimate for the rest of the United States was 23.5%. After the drop in cigarette prices in April 1993, the rate of decline in smoking prevalence was more than halved (to a decline of 0.27%/year), so that in December 1996, cigarette smoking prevalence in the rest of the United States was estimated by the model to be 22.7%. If the 1993-1996 rate of decline continues, smoking prevalence in the rest of the United States will be 21.7% in the year 2000.



Source: NHIS 1978, 1979, 1980, 1983, 1985, 1987, 1988, 1990, 1991, 1993, 1994; CTS 1990, 1992, 1993, 1996; BRFS/CATS 1991-1995; CPS 1992-1993, 1995-1996

Figure 2.7

PROGRESS ON GOAL 2:
Reducing Smoking Prevalence

During the early period of the Tobacco Control Program, cigarette smoking prevalence declined 1.9 times more in California than it did in the rest of the United States. In the later period, prevalence in California no longer declined at a faster rate.

	Percent Decrease	
	Early Period	Later Period
California	**22.2%**	**2.7%**
Rest of the United States	**12.0%**	**3.4%**

The difference between the amount of change observed in the per capita cigarette consumption data and the amount of change observed in prevalence can be explained by the reduction in the average daily consumption level of cigarette smokers. In Table 2.3, the daily rate of consumption for smokers (both daily and occasional smokers) is shown for respondents to the Current Population Surveys.

Table 2.3
Daily Cigarette Consumption (Cigarettes/day) for Current Smokers

	1989	1992-1993	1995-1996
California	17.3	15.3	13.7
Rest of United States	19.5	18.1	17.3

Source: Current Population Surveys 1989, 1992-1993, 1995-1996

Daily cigarette consumption for current smokers has declined in both California and the rest of the United States. From 1992-1993 to 1995-1996 in California (the later period of the TCP), daily cigarette consumption declined by a factor of 10.4%, whereas in the rest of the United States daily cigarette consumption only declined by a factor of 4.4%. Thus, while prevalence has leveled out in California, the number of cigarettes consumed by smokers has declined, which results in a continued decline in per capita consumption. In the rest of the United States, smoking prevalence has declined during the later period slightly more, and daily consumption has declined slightly less, so that the trend in overall per capita consumption is flat.

Smoking Prevalence Among Demographic Groups Unadjusted for Changes in Demographic Distribution

Tables 2.4a and 2.4b present the prevalence estimates from the California Surveys (1990, 1993, and 1996) for men and women by race/ethnicity and educational level attained. It appears from the weighted prevalence estimates in Tables 2.4a and b that some groups experienced substantial declines between 1993 and 1996. However, further breakdowns by age, race, and education than presented in Tables 2.4a and b revealed that the differences for more than half the subgroups were less than 1%. Although most differences were decreases, some were increases. Some of the biggest decreases were in

older, well-educated Non-Hispanic Whites, which are magnified with the regular weighted estimates because of the growth in this segment of the population since 1993. The standardized prevalence estimates prevalence estimates used in the overall assessment of smoking prevalence trends (Figures 2.5 and 2.6) adjust for these changes in the demographic profile of the population.

Table 2.4a
Smoking Prevalence in California
for Men 18 Years and Older

Demographics		**1990 %**	**1993 %**	**1996 %**
Overall		25.5	23.4	21.0
Race/Ethnicity	African American	29.3	26.1	25.0
	Asian	24.8	19.8	19.6
	Hispanic	25.9	23.3	20.9
	Non-Hispanic White	24.8	23.5	20.6
Education	No College	31.1	28.6	27.3
	Some College	23.2	21.7	20.8
	College Grad	14.4	13.5	11.4

Source: CTS 1990, 1993, 1996

Table 2.4b
Smoking Prevalence in California
for Women 18 Years and Older

Demographics		**1990** %	**1993** %	**1996** %
Overall		19.1	17.2	15.3
Race/Ethnicity	African American	26.3	20.0	21.4
	Asian	9.4	6.2	8.3
	Hispanic	12.8	10.0	10.0
	Non-Hispanic White	21.6	20.7	17.7
Education	No College	22.0	19.8	18.2
	Some College	18.3	17.0	15.4
	College Grad	11.1	9.5	9.5

Source: CTS 1990, 1993, 1996

Smoking Prevalence Across Regions Within California, Unadjusted for Demographic Changes

For the purposes of the CTS, California was divided into 18 regions based on the 58 California counties with the specification that any one region needed to have a minimum population size of approximately 500,000 people (Burns & Pierce, 1992). The CTS were

designed to provide estimates of smoking prevalence for each of these regions independently. Table 2.5 shows these data.

Table 2.5
Smoking Prevalence by Region Within California
(Adults Aged 18 Years and Older)

Region	1990 %	1993 %	1996 %
Los Angeles	21.8	19.7	18.0
San Diego	23.1	18.7	17.0
Orange	19.3	18.1	15.3
Santa Clara	19.7	19.5	13.9
San Bernardino	26.6	23.4	20.0
Alameda	22.8	19.9	18.9
Riverside	23.9	20.0	18.9
Sacramento	25.2	24.1	21.0
Contra Costa	21.9	21.3	18.1
San Francisco	21.9	20.7	20.8
San Mateo, Solana	20.8	19.6	17.1
Marin, Napa, Sonoma	21.7	18.5	17.0
Butte, Colusa, Del Norte, Glenn, Humbolt, Lake Lassen, Mendocino, Modoc, Plumas, Shasta, Siskiyou, Tehama, Trinity, Yolo.	23.7	22.3	21.1
San Luis Obispo, Santa Barbara, Ventura	18.8	19.8	17.1
Alpine, Amador, Calaveras, El Dorado, Mariposa, Nevada, Placer, San Joaquin, Sierra, Sutter, Tuolumne, Yuba	24.1	23.7	20.5
Monterey, San Benito, Santa Cruz	18.9	19.6	16.5
Fresno, Madera, Merced, Stanislaus	25.1	21.5	19.5
Imperial, Inyo, Kern, Kings, Mono, Tulare	23.9	22.1	21.5

Source: CTS 1996

In 1990, eight regions had a smoking prevalence over 23% (San Diego, San Bernardino, Riverside, Sacramento, the 15-county region including Butte, the 12-county region including Alpine, the 4-county region including Fresno and the 6-county region including Imperial). By 1996, only five regions had a smoking prevalence over 20%. These were Sacramento, San Francisco, the 15-county region including Butte, the 12-county region including Alpine, and the 6-county region including Imperial. Differences in smoking prevalence among the regions are expected because of different demographic distributions of the population.

The four regions with the lowest smoking prevalence in 1990 were Orange, Santa Clara, the 3-county region including San Luis Obispo, and the 3-county region including

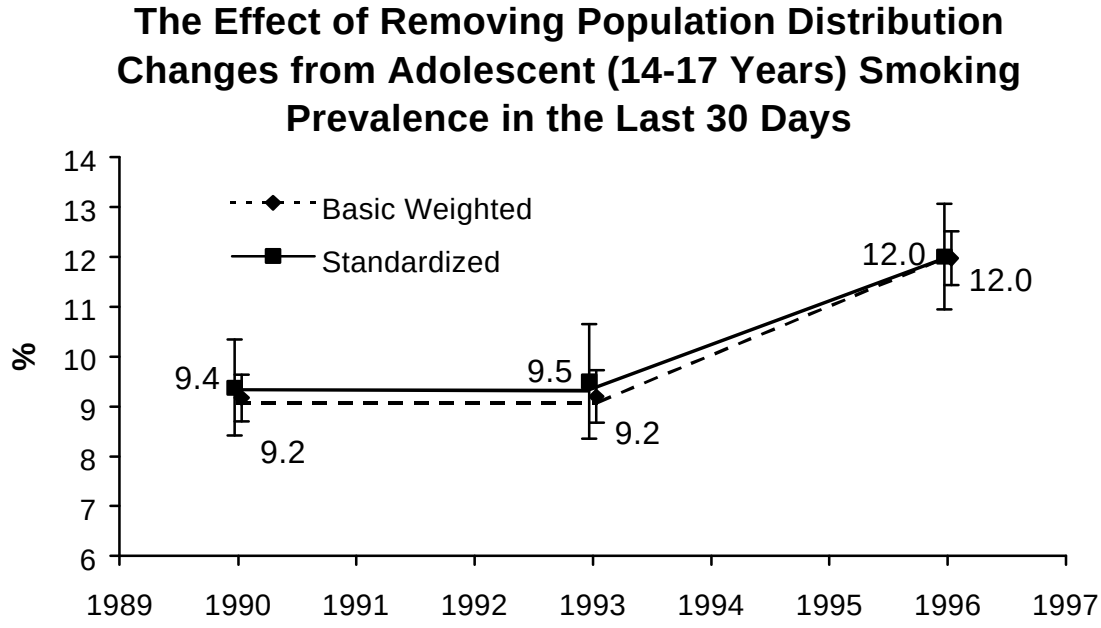
Monterey. In 1996, these same four regions also had the lowest prevalence (17.1% or below); however, they had been joined by San Diego and the 3-county region including Marin.

By 1996, only San Francisco failed to show a drop in smoking prevalence exceeding a factor of at least 5%, but surrounding regions with very similar prevalence in 1990, such as Contra Costa, the 2-county region including San Mateo and the 3-county region including Marin, exceeded this level of decrease.

3. Evidence for Progress on Goal 2a: Reducing Smoking Uptake

Trends in Smoking Uptake in California Adolescents, 1990-1996

The California Tobacco Surveys assessed smoking behavior in large samples of California adolescents in 1990, 1993 and 1996. The conventional measure of smoking prevalence in adolescents is the percentage who have smoked in the previous 30 days. Between 1990 and 1993, smoking prevalence in California adolescents did not change (9.2%). However, a considerable increase was observed between 1993 and 1996: 12% of adolescents reported smoking in the past 30 days in 1996 (Figure 2.8). Some of these



Source: CTS 1990, 1993, 1996

Figure 2.8

differences may be accounted for by changes in the demographics of the population of adolescents. The 1996 California population of 12-17 year old adolescents included a higher proportion of Hispanics, slightly fewer African Americans, and the average age was slightly older than in the 1990 population. In order to remove these potential demographic biases in the estimate of change in last 30-day smoking prevalence, the 1990 and 1993 data were standardized to the 1996 population. This analysis confirmed that smoking prevalence among 12-17 year old Californians did not change between 1990

and 1993, and that the smoking prevalence between 1993 and 1996 increased significantly, by a factor of 26.3%. The usual population estimates (dashed line) and the standardized data (solid line) are both shown in Figure 2.8.

More detailed information on trends in this and other measures of adolescent smoking uptake are presented in Chapter 5, and in Appendix B, Table 7.

Trends in the Percentage of the Population Reaching Addiction in California Compared to the Rest of the United States

Using 15-24 year old respondents to the Current Population Surveys (CPS) allows for a comparison of California with the rest of the United States with respect to the percentage of young people who reach a level of smoking that is a marker for addiction, a lifetime level of at least 100 cigarettes (Chapter 3). Table 2.6 shows these data for the 1985 survey, the 1992-1993 combined surveys, and the 1995-1996 combined surveys. The data are standardized for gender and race (White, Non-White) to 1994 national population totals.

In each survey year, both in California and the rest of the United States, the addiction rate increased with age. For instance, in the 1995-1996 survey, only 7.4% of adolescents 15-17 years of age reported smoking at least 100 cigarettes in their lifetime, whereas this percentage was 15.6% in young adults 18-20 years of age, and 22.9% in young adults 21-24 years of age. These data indicate that for some people, the smoking uptake process continues into early adulthood; however, fewer people, especially Californians, are reaching their mid twenties as addicted smokers (Table 2.6).

Table 2.6
Comparison of Prevalence of Addiction
in California and the Rest of the United States

Age (years)		1985 %	1992-1993 %	1995-1996 %	Factor Decrease 1985-1995
15-17	California	8.6	8.1	7.4	13.6
	Rest of U.S.	10.9	10.0	10.3	6.1
18-20	California	22.5	15.0	15.6	30.4
	Rest of U.S.	24.5	25.3	21.9	10.5
21-24	California	30.3	25.2	22.9	24.4
	Rest of U.S.	37.7	31.5	28.3	30.0

Source: Current Population Surveys 1985, 1992-1993, 1995-1996

In both California and the rest of the United States, all age groups showed slight declines in addiction rates between 1985 and 1992-1993, except for the 18-20 year olds in the rest of the United States. Considering the entire decade from the mid 1980s to the mid 1990s, Californians, especially those 18-20 years of age, appear to have reduced their rates of addiction more than youth in the rest of the United States.

Consistency between the CPS and CTS survey data was checked by computing standardized addiction percentages for the 1990, 1993 and 1996 CTS as well. These data are shown in Table 2.7.

Table 2.7
California Tobacco Survey Addiction Rates[1]

Age (years)	1990 %	1993 %	1996 %
15-17	9.9	9.4	12.0
18-20	28.3	20.1	21.8
21-24	34.8	31.1	27.1

[1]Weighted estimates were standardized to 1994 population totals.
Source: CTS 1990, 1993, 1996

The addiction rates from the CTS data are somewhat higher than the rates seen in the California data from the CPS. Although the addiction percentages are decreasing before 1993, as seen in the CPS data (Table 2.6), the CTS data indicate that addiction is increasing after 1993 in the two youngest groups. The response rate in the CPS for 15-17 year olds, in particular, and also for young adults, is much less than for older adults (personal communication, AH). However, in the CTS, the reverse is true for 15-17 year old adolescents. If adolescent smokers were differentially absent or unable to be reached by telephone, this would explain the lower estimates for addiction rates from the CPS and perhaps the failure to detect the increase in adolescent smoking between 1993 and 1996.

4. Evidence for Progress on Goal 2b: Increase Quitting in Smokers

The Quit Ratio for Adults 25 Years and Older

This subsection considers ever smokers (smoked at least 100 cigarettes in lifetime) aged 25 years and older. Younger smokers are not included in this analysis because for many, the uptake process may not be complete.

The quit ratio is a population-based measure of quitting, defined as the percentage of quitters among people who were ever addicted to smoking (smoked at least 100 cigarettes). However, the quit ratio is not a very sensitive indicator of successful quitting since some ex-smokers who were quit for a short time when surveyed will eventually relapse. An ongoing intervention, such as a tobacco control media campaign, might inflate the quit ratio temporarily. Table 2.8 presents the trends in this quit ratio in California and the rest of the United States from the Current Population Surveys (CPS) among smokers aged 25 and older. The quit ratio for Californians appears to be greater than that in the rest of the United States, but the trends over time for California and the rest of the United States are similar.

Table 2.8 Changes in the Quit Ratio in Adults Ages 25 Years and Older, California vs. Rest of U.S.				
	1985 %	**1992-1993 %**	**1995-1996 %**	**Factor Increase 1985-1996**
California	46.0	54.2	52.8	14.8
Rest of U.S.	43.1	44.3	49.0	13.7

Source: Current Population Surveys 1985, 1992-1993, 1995-1996.

Since smoking prevalence has declined considerably over the last decade in both California and the rest of the United States, the quit ratio would be expected to show a greater decline than Table 2.8 indicates. The most likely explanation for this inconsistency is that once smokers quit, they may deny ever having smoked, especially if they quit a long while ago. Another explanation for prevalence decreasing faster than the quit ratio increases would be more people entering adulthood as never smokers.

Predictors of Future Successful Quitting

As will be shown in Chapter 3, smokers can be categorized into groups with different probabilities of future successful smoking cessation. The primary factors that predict future successful cessation are a low level of cigarette consumption (<15 cigarettes/day) and a recent quit attempt lasting at least 7 days (Pierce et al., 1998). If the smoking population is increasingly comprised of light smokers and smokers who are trying to quit, the quit ratio is likely to increase in the future. As in the last subsection, only smokers who have reached a lifetime level of at least 100 cigarettes are considered.

Table 2.9 shows the percentage of California smokers who do not smoke every day, the percentage of daily smokers who report smoking less than 15 cigarettes/day, and the percentage of smokers who had a quit attempt in the last year that lasted at least 7 days.

Table 2.9 Predictors of Future Successful Cessation in Current Smokers			
	1990 %	**1996 %**	**Factor Increase 1990-1996**
Smoke <15 cigarettes/day	43.6	55.1	26.4
Recent quit lasting 7+ days	36.3	43.6	20.1

Source: CTS 1990, 1996

The percentage of current smokers consuming less than 15 cigarettes/day increased from 43.6% to 55.1%, an increase by a factor of 26.4%. The percentage of *current* smokers who had a quit attempt in the last year that lasted for at least 7 days also increased significantly, by a factor of 20.1% from 36.3% in 1990 to 43.6% in 1996. Data presented in Chapter 7 suggest that smokefree workplace ordinances and the willingness of smokers

to comply with or implement smoking bans at home have contributed to moving the population of current smokers in the direction of eventual successful quitting.

5. Summary

Continually more nonsmokers are being protected from secondhand tobacco smoke in California. The percentage of children and adolescents exposed to tobacco smoke at home decreased from 29% in 1992 to 13% in 1996, a decrease by a factor of 55%. In 1996, only 12.4% of nonsmoking indoor workers reported enduring tobacco smoke in their work area in the previous 2 weeks, compared to 29% in 1990, a decrease by a factor of 57%.

During the early period of the California Tobacco Control Program (TCP), both per capita cigarette consumption and smoking prevalence in California decreased faster than before the TCP began and faster than the decrease observed in the rest of the United States. However, beginning in 1993, when funding for the TCP was diverted, the rates of decline in per capita cigarette consumption and prevalence slowed. After 1993, the rate of decline in per capita cigarette consumption was only one-third what it had been previously, and the rate of decline in prevalence was only 15% of the earlier rate. The slowing of the rate of decline also occurred in the rest of the United States, suggesting that the rate of decline in California was influenced by events at the national level, such as the marketing practices of the tobacco industry, including the drop in the price of premium brands of cigarettes. During the second period of the TCP, the slowing of the rate of decline in prevalence was more pronounced in California than in the rest of the United States, suggesting that the decline in funding for the TCP exacerbated any influences at the national level.

Between 1990 and 1993, the level of adolescents reporting smoking in the last 30 days did not change; however, between 1993 and 1996, adolescent smoking prevalence increased from 9.2% to 12.0%. This amounted to an increase by a factor of 26.3% when these percentages were adjusted to account for changes in the demographic distribution of the population. The percentage of adolescents who have reached a lifetime cigarette consumption of at least 100 cigarettes also increased from 9.4% in 1993 to 12.0% in 1996. Chapter 5 explores these trends in more detail. These increases are likely a result of the imbalance in spending between the tobacco industry and the TCP. Adolescents appear particularly vulnerable to the tobacco industry's promotional items (Chapter 9), and the amount of money the industry has devoted to this part of their tobacco advertising and promotional budget has increased substantially in recent years (Chapter 1).

The quit ratio, the percentage of Californians who have ever smoked but who are no longer smokers, increased by a factor of 15%, from 46.0% in 1985 to 52.8% in 1995-1996. Although the quit ratio was higher in California than in the rest of the United States, the increase in California during the last decade was about the same as in the rest of the United States. The decline in consumption for all current smokers is encouraging. More smokers who are trying to quit are making it beyond 7 days, which is also an important indicator of future successful cessation.

CHAPTER 2: REFERENCES

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Chapter 3

UNDERSTANDING SMOKING BEHAVIOR

CHAPTER 3: UNDERSTANDING SMOKING BEHAVIOR

Introduction

A major goal of the California Tobacco Control Program is to reduce the prevalence of cigarette smoking. Estimates of cigarette smoking prevalence are generally used to evaluate the progress of tobacco control efforts. However, it is also widely recognized that cigarette smoking is a complex behavior that is not well captured by standard measures of smoking prevalence.

Two distinct processes are involved in cigarette smoking behavior: an uptake process and a quitting process (Pierce et al., 1987a; Pierce et al., 1989). Both of these processes are time dependent and have been described in some detail. A program aimed at reducing smoking prevalence may act effectively on the early phases of either of these processes, and consequently make an important contribution to reducing tobacco use. However, the impact of such a program may not be detected if the reduction in prevalence is the only measure that is evaluated.

Accordingly, a meaningful evaluation of the Tobacco Control Program must include indicators of where the population is with respect to the uptake and quitting processes. These indicators provide relevant information regarding the likely future impact of the program on the ultimate goal of reducing smoking prevalence. Furthermore, different program elements may exhibit varying time lags in their effects on smoking prevalence. For instance, assisting people to quit may have a relatively quick impact on smoking prevalence (Pierce, 1990). Preventing individuals from becoming addicted to tobacco in the first place may lead to a drop in prevalence in the longer term (Gilpin & Pierce, 1993).

The smoking uptake process is complete when an individual can be said to be addicted to cigarettes. Recent longitudinal studies of adolescents indicate that many of those in the early stages of the uptake process do not progress all the way to addiction in the space of 3 to 4 years, even though they are more advanced at follow-up than they were at baseline (Choi et al., submitted). Furthermore, once addicted, most smokers are unable to successfully quit overnight. Numerous studies of adults suggest that most smokers attempt quitting repeatedly over many years before they are able to quit for good. A previous study suggested that the quitting process can last as long as 10 years (Pierce, 1990).

In Section 1 of this chapter, the criterion used in this report to categorize an individual as addicted to smoking is presented and justified. Section 2 describes measures previously developed to characterize the smoking uptake process. Section 3 discusses the measure of smoking prevalence for the California Tobacco Surveys. Section 4 relates expected trends in smoking prevalence to expected trends in per capita cigarette consumption. Section 5 presents a measure previously developed to characterize the smoking cessation process.

Section 6 summarizes the chapter findings. Various categories from all the measures discussed in this chapter are used throughout this report to measure the changes in smoking behavior of the population and allow an evaluation of tobacco control efforts.

1. When Is A Smoker Addicted?

The California Tobacco Surveys (CTS) question smokers on whether or not they believe they are addicted, as this is the lay term that best describes the psychological concept of dependence. Dependence on a drug such as nicotine has an accepted working definition, which is described in the Diagnostic and Statistical Manual (DSM), the official nomenclature of the American Psychiatric Association. Recent publications (Am Psychiatr Assoc, 1994; Cottler et al., 1995) indicate that the diagnosis of dependence on a drug is warranted if at least three of five criteria are met. Below are the criteria, as they would apply to nicotine dependence:

Criterion 1. Physiological tolerance develops. Over time higher doses of nicotine are required to obtain the same physiological effect. Individuals gradually increase the number of cigarettes that they smoke until they reach their stable addicted level.

Criterion 2. There is a persistent desire to quit and continued unsuccessful efforts to quit smoking.

Criterion 3. If the individual stops smoking (with no nicotine substitute), withdrawal effects are experienced.

Criterion 4. The typical pattern of cigarette use is heavier and of a much more prolonged duration than the individual ever intended.

Criterion 5. Individuals continue smoking despite the knowledge that continued cigarette use is harmful to their health.

One author suggests that the first signs of addiction may occur in some people after as few as four cigarettes (one a week for four consecutive weeks) (Russell, 1990). Few would argue that most adult smokers would meet at least three of the five specified criteria of dependence. However, when a new smoker becomes dependent is not defined in the literature. In later chapters of this report, respondents are considered to be, or to have been, addicted to cigarettes if they answer "yes" to the following question:

Have you smoked at least 100 cigarettes in your lifetime?

If respondents answer "no" or that they don't know, they are not considered addicted. It is not the 100th cigarette that makes them addicted, it is their "yes" in response to the question. It is likely that they have smoked much more than 100 cigarettes.

The evidence to support using an affirmative answer to the above question as a marker of addiction is based on the prevalence of the DSM IV criteria among 15-17 year olds who reported smoking at least 100 cigarettes.

Criterion 1. In two longitudinal studies, 15-17 year old adolescents who reported that they had smoked at least 100 cigarettes at baseline increased their average consumption by **50%** from an average of 10 cigarettes per day to an average of 15 cigarettes per day over a period of 3 to 4 years.

Criterion 2. Approximately **80%** of 15-17 year old adolescents who reported that they had smoked at least 100 cigarettes reported trying to quit smoking in the past six months, and the vast majority was unsuccessful.

Criterion 3. Among 15-17 year olds who reported smoking at least 100 cigarettes and who reported trying to quit in the past 6 months, **80%** indicated that they suffered from standard smoking withdrawal symptoms.

Criterion 4. It has been demonstrated previously that half of those who report smoking at least 100 cigarettes in their lifetime will still be smoking 16-20 years later (Pierce & Gilpin, 1996). In two separate surveys, **80%** of adolescents who had smoked at least 100 cigarettes at baseline were still smoking 3 to 4 years later (Choi et al., submitted).

Criterion 5. Numerous surveys indicate that adolescent smokers are very knowledgeable about the health consequences of smoking. While this knowledge is associated with an intention to quit in the future, it does not predict who will quit in the short term. Indeed, **74%** of 15-17 year old adolescents who reported smoking at least 100 cigarettes and indicated that they would quit in the near future were still smoking 4 years later.

2. The Smoking Uptake Continuum

Table 3.1 shows the various levels on the Smoking Uptake Continuum. The probabilities reported in this table represent the percentage of the category who, at followup four years later in a longitudinal study, were current (reported smoking in the last 30 days) *addicted smokers* (see above) (Choi et al., submitted). Throughout this report, individuals who have never smoked (not even a puff) and who exhibit a firm determination not to smoke are labeled as *nonsusceptible never smokers*. Only 3% of individuals who were *nonsusceptible never smokers* at baseline were current *addicted smokers* 4 years later. Clearly, one major prevention goal of a tobacco control program is to help these individuals maintain their determination not to smoke. However, numerous social influences may weaken their resolve.

The first identifiable step toward smoking is when individuals become susceptible to smoking. *Susceptible nonsmokers* are those individuals who are no longer committed to never smoking a cigarette. It does not mean that they intend to smoke, but rather that they no longer absolutely rule out the possibility in the short term (next year) or do not rule out accepting a cigarette offered by a friend. Also included in this category are people who have puffed previously (but not smoked a whole cigarette) and who are confident that they will not smoke

in the near future. Ten percent of individuals in the *susceptible nonsmoker* category at baseline were current *addicted smokers* at follow-up.

Early experimentation is the next level on the Uptake Continuum. Individuals are characterized as *early experimenters* if they had puffed on a cigarette and do not rule out doing it again or have tried a few cigarettes but had not smoked in the past month and were strongly committed to not smoking again. Almost one-quarter of these *early experimenters* at baseline were *addicted smokers* 4 years later.

The standard measure for indicating smoking among adolescents is any reported smoking in the last 30 days. However, for some adolescents, the experimental period is not characterized by a gradual increase in the frequency of smoking. Rather, smoking is an irregular activity undertaken in social settings such as parties. Consequently, adolescents who report that they have not smoked in the last month but do not rule out smoking have the same probability of being current *addicted smokers* in the future as those who report smoking in the past month. Thus, *experimenters* who meet either of these criteria are labeled *advanced experimenters* in this report. Over 40% of *advanced experimenters* at baseline were current *addicted smokers* 4 years later. The final category on the Uptake Continuum is for those who have reached the lifetime level of at least 100 cigarettes. Four years later, 80% of these *addicted smokers* were still smoking.

Table 3.1
The Smoking Uptake Continuum

Category	Definition	Probability* of Future Smoking
Nonsusceptible Never Smoker	Never puffer with strong commitment not to smoke	3%
Susceptible Nonsmoker	Never smoker with weak commitment not to smoke **plus** former puffer with strong commitment	10%
Early Experimenter	Puffer with weak commitment **plus** former experimenter with strong commitment	23%
Advanced Experimenter	Former experimenter with weak commitment **plus** current experimenter (recent smoker, but fewer than 100 cigarettes in lifetime)	41%
Addicted Smoker	Smoked at least 100 cigarettes in lifetime	80%

*Probability that 12-17 year olds in this category will be a current addicted smoker at four-year follow-up.
Source: Choi et al., submitted

3. Smoking Prevalence

As in previous reports (Burns & Pierce, 1992; Pierce et al., 1993; Pierce et al., 1994), in 1996 smoking prevalence estimates from the CTS screener survey are considered the primary prevalence measure. The screener data include proxy reports of smoking status, where a respondent provided information regarding the smoking status of all persons in the household. A person is considered a smoker if the screener respondent reports that the person smokes now (at the time of the survey). This designation is irrespective of whether the screener respondent thinks the person has smoked at least 100 cigarettes in their lifetime or not. The large sample size from using the screener data allows for regional and demographic subgroup prevalence estimates with relatively smaller margins of error than would be obtained from the extended adult interviews.

Whether self-report of smoking status is more valid than proxy-report has been a subject of considerable debate. In some clinical studies of smoking cessation, a "significant other" is called upon to verify a subject's smoking status (Swartz, 1987). Other studies have relied on biochemical validation of self-report (Ohlin et al., 1976; Pierce et al., 1987b). Thus, proxy-report of current status may be at least as reliable as self-report in most instances. In 1990 and 1992, it was determined that there were two sources of discrepancy from using the screener measure of smoking prevalence: (1) recent quitters were sometimes categorized as current smokers by a proxy, and (2) occasional smokers were sometimes categorized as former smokers or, in some instances, as never smokers rather than current smokers by the proxy. These two sources of discrepancy tended to cancel each other out so that the screener prevalence estimate was only a fraction of a percentage point different from what would be obtained from using self-report only (Gilpin et al., 1994).

The 1996 CTS revealed another source of discrepancy in the estimate of smoking prevalence using the screener survey. Some occasional smokers denied that they were current smokers when, as a screener respondent, they answered *no* to the question:

> *Do you smoke cigarettes now?*

However, if selected for the extended interview and asked about their smoking status again, they admitted to smoking *some days* when asked:

> *Do you smoke cigarettes every day, some days or not at all?*

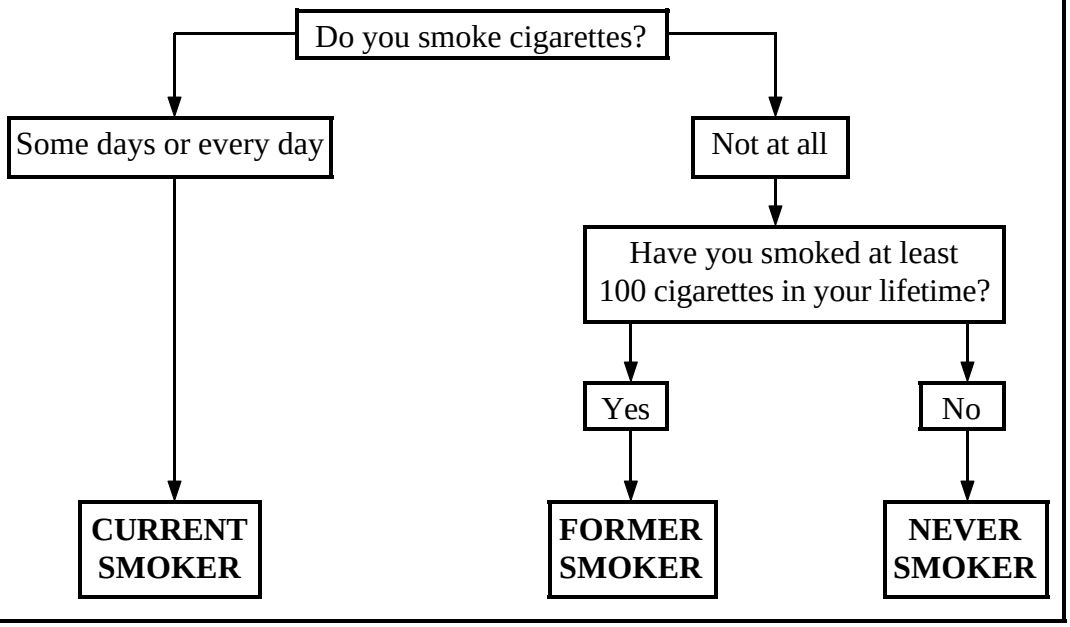
The 1996 CTS was the first year that smoking status was probed in more depth on the extended survey of self respondents to the screener survey. Thus, there is no measure of the magnitude of this discrepancy in past surveys. An analysis of the 1996 CTS data reveals that only a few respondents (62 of 12,193 of adults who were administered both the screener and extended interviews) contribute to this source of discrepancy. All but four stated that they smoked "some days" and would seem to be occasional smokers who are not yet *addicted*; furthermore, half were in the 18-24 year old age group. In addition, as in past CTS, there

were instances in which the proxy-derived smoking smoking status was a *never smoker* and the self-report smoking status from the extended interview was a current smoker. Many of these smokers may be occasional smokers, some of whom have not yet smoked at least 100 cigarettes in their lifetime. These occasional smokers who have not smoked at least 100 cigarettes in their lifetime were considered current smokers using the 1996 CTS definition (see Figure 3.1). The demographic subgroups for which the prevalence estimates from the adult extended interview were most affected were the 18-24 year old age group, Hispanics, and those without at least a high school education. For this reason, in Appendix B, Table 9, which presents the estimates of smoking prevalence from the extended interview, these individuals were labeled *current experimenters*. To obtain current smoking prevalence, the percentages for the columns headed "daily," "occasional" and "current experimenters" would need to be added together. Because of the change in the question and the additional probing in the 1996 CTS, the reader of this table should exercise some caution in comparing results with those from earlier CTS reports. As noted at the beginning of this section, the data from the screener, with identical questions for smoking status in each survey year, were used for examining trends in adult smoking prevalence over time (see Appendix B, Table 1).

The measure of current smoking used in this report conservatively includes occasional smokers who have not yet become addicted smokers.

In Chapters 4 through 13, smoking status taken from self-report on the extended CTS interview is used for analysis of smoking behavior, knowledge, and attitudes. Figure 3.1 illustrates the 1996 smoking status definition for the extended interview. As in all past CTS, a current smoker is someone who *smokes now* (screener survey) or *every day/some days* (adult extended survey) regardless of whether or not they have reached a lifetime level of at least 100 cigarettes. Other surveys (see Appendix A: Data Sources) use a different definition that places the *100 cigarette* question ahead of the *current smoking* question, so that a current smoker is someone who has smoked at least 100 cigarettes in their lifetime and who smokes now. In recent years, some national surveys also have changed the question about smoking status from the *smoke now* question to the *every day/some days/not at all* question. Any comparison of rates of knowledge, attitudes, etc., among smokers, former smokers and never smokers presented in Chapters 4 through 13 of this report would be only very minimally changed if the other definition were used. None of the conclusions of this report would be altered.

Figure 3.1
Smoking Status Determination Used in the 1996 California Tobacco Survey



4. Relationship of Smoking Prevalence to Per Capita Cigarette Consumption

This report compares trends in smoking prevalence with trends in the per capita consumption of cigarettes over time. The per capita consumption data are derived from tobacco industry sales, which are reported to the Federal Trade Commission for the purpose of payment of tobacco excise taxes. The taxes are levied at the warehouse level (see Appendix A: Data Sources, for details). Provided that the average daily cigarette consumption of smokers does not change, the trend in the per capita cigarette consumption should track the trend in smoking prevalence obtained from survey data. Thus, the per capita consumption trends offer an important validation of the smoking prevalence trends. However, it is important to note that a smoker's consumption level is much lower during the smoking uptake phase than it is once a smoking habit is fully established. Based on data from the 1996 CTS, smokers under the age of 25 years make up 17.4% of all current smokers but they account for only 9.6% of self-reported cigarette consumption. Thus, if the goal of a tobacco control program is to rapidly reduce per capita cigarette consumption, then the program needs to focus on promoting quitting among smokers 25 years and older. It should also be noted that as occasional smoking increases, per capita cigarette consumption may decrease while smoking prevalence remains constant or only decreases slightly.

5. The Quitting Continuum

As noted above, quitting behavior is prevalent among all smokers who report smoking at least 100 cigarettes in their lives, even adolescents. The majority of smokers are well past the

uptake process and can be categorized on a continuum based on their likelihood of successfully quitting in the next one to two years (Farkas et al., 1996a,b; Pierce et al., forthcoming).

Many researchers have observed that the problem for smokers is not quitting, but staying quit. Thus, how long an individual is able to maintain the quit attempt is important in assessing the probability that the person will stay quit. The pattern of relapse to smoking has been well described (Hunt et al., 1971; USDHHS, 1988, 1990). Data from previous California Tobacco Surveys indicate that the majority of smokers who quit for at least a day relapsed within the first week following their quit attempt. More than 50% of smokers who maintain their quit attempt for at least 3 months are successful in staying quit. More than 95% of smokers who remain abstinent for at least 12 months are successful in staying quit indefinitely (Gilpin et al., 1997). Accordingly, in this report, an early indication of successful quitting is defined as quit for at least 3 months, and quit for a year is used as a stronger definition of successful quitting. The California Tobacco Surveys have allowed a re-examination of the stages of change that a smoker goes through before becoming successfully quit.

In this report, the Quitting Continuum is used to categorize individual smokers on their progress toward successful quitting. Table 3.2 gives the definitions for the various levels of the Quitting Continuum. Becoming a successful quitter does not start with the actual quit attempt; instead, it starts when the smoker first contemplates quitting. Thus, the person who is at the lowest level of the Quitting Continuum is the *precontemplator*. The definition of smokers who are *precontemplators* has varied over the years (DiClemente et al., 1983; Prochaska & DiClemente, 1991; Farkas et al., 1996a). In this report, a new definition of *precontemplators* (Pierce et al., forthcoming) is used. *Precontemplators* are moderate to heavy smokers (more than 15 cigarettes/day) who have never made a long-term (over 1 year) quit attempt in the past and have not quit smoking for at least a day in the past year. Further, these smokers indicate that they have no intention of quitting smoking in the next 6 months. Two years later, only 3% of this group were quit for at least 3 months and 57% were still *precontemplators*. One of the aims of a tobacco control program is to motivate smokers to move out of this lowest level on the Quitting Continuum and begin the quitting process.

Table 3.2
The Quitting Continuum

Category	Definition	Probability* of Successful Cessation
Precontemplation	High addiction (> 15 cigarettes/day), no recent quit attempt, **and** no intent to change in 6 months	3%
Contemplation	High addiction **and either** recent quit attempt (< 1 week) **or** intent to change within 6 months	5%
Early Preparation	High addiction **and** limited quitting history **and** intent to change within 6 months	10%
Intermediate Preparation	Either low addiction (<15 cigarettes/day) **or** strong quitting history (recent > 1 week or lifetime > 1 year)	12%
Advanced Preparation	Both a low addiction **and** a strong quitting history	20%
Action	Quit for less than 3 months	44%
Early Maintenance	Quit 3 to 12 months	74%
Advanced Maintenance	Quit over 12 months	95%

*Probability of being quit at least 3 months at follow-up 2 years later.
Source: Pierce et al., forthcoming

As previously reported (Farkas et al., 1996a,b), the probability that a smoker will be successful on any given quit attempt is strongly related to their current level of addiction at the time of the quit attempt and to the strength of their quitting history. However, lower levels also involve intention to quit. Smokers with moderate to heavy cigarette consumption (≥15 cigarettes/day) with either a limited quitting history (quit attempt in the past year lasting 1-6 days) or an expressed intention to quit in the next 6 months are designated *contemplators*. If both these factors are reported, they are considered to be in *early preparation*. Smokers are classified as being in *intermediate preparation* if they had either a low addiction level (<15 cigarettes/day) or a strong quitting history (>7 days quit in the last year, or quit for a year before that). The probability that smokers in this group will be successfully quit in 2 years was 12%, or four times that of the *precontemplators*. Smokers with both a low addiction level and a strong quitting history are labeled as in *advanced preparation*, and 2 years later 20% of these were quit for at least 3 months.

To increase the probability of future successful quitting, a tobacco control program needs to motivate smokers to reduce consumption to a moderate level (less than 15 cigarettes/day)

and to motivate and assist them to make quit attempts that last at least through the worst period of withdrawal symptoms (7 days).

6. Summary

This chapter presented some of the key definitions that are used in the remainder of the report to analyze smoking behavior, knowledge, attitudes and other behavior according to smoking status.

The concept of addiction as it applies to nicotine was explored in detail. In this report, *addiction* was defined and justified as report of smoking at least 100 cigarettes in one's lifetime. Most adolescent smokers who report smoking at least 100 cigarettes also satisfy many of the criteria for addiction specified by the American Psychiatric Association.

The Uptake Continuum, which categorizes adolescents into groups that show different levels of risk for future smoking, was defined and explained. The groups in this continuum most frequently analyzed in later chapters are the *nonsusceptible never smokers*, *nonsmokers susceptible to smoking* and the *addicted* smokers. A number of figures in the report show the *early experimenters* and the *advanced experimenters* as well.

Considerable discussion was presented regarding the determination of current smoking status. For the 1996 CTS, a current smoker was defined as someone who *smokes now* (screener survey) or *every day/some days* (adult extended interview). The definition from the extended interview in 1996 is different than in past CTS extended interviews, which used the *smoke now* question. For this reason, some caution should be used in comparing 1996 estimates related directly to smoking status with those from past surveys. The conservative CTS definition of a current smoker includes a few occasional smokers who have not yet reached the lifetime 100-cigarette milestone. Other surveys only classify someone as a current smoker if they report smoking at least 100 cigarettes in their lifetime and smoke now (or every day/some days).

Finally, the Quitting Continuum was defined and discussed. For *addicted* smokers (at least 100 cigarettes in lifetime), it is helpful to determine the likelihood of future smoking cessation. The Quitting Continuum measure accomplishes this, and is based on the smoker's expressed intention to quit, quitting history and current level of cigarette consumption. Of particular relevance to the evaluation of the Tobacco Control Program (TCP) is the proportion of smokers in the *precontemplation* level of the Continuum. These smokers have moderate to heavy levels of cigarette consumption, have no recent quitting history and no intention to quit in the near future. Moving smokers out of this category would be an important goal of the TCP. Another category of interest, the *advanced preparation* category, includes smokers with low levels of cigarette consumption and a strong quitting history. Many such smokers are poised to quit in the near future.

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Chapter 4

PROTECTION OF NONSMOKERS

CHAPTER 4: PROTECTION OF NONSMOKERS

Introduction

Upwards of ten percent of smoking related deaths nationwide can be attributed to environmental tobacco smoke (ETS) or secondhand smoke (Chudy et al., 1992). The recent report from the California Environmental Protection Agency states that each year in California, ETS causes 1,200-2,200 cases of low birth weight, 120 sudden infant deaths, 960-3,120 new cases of asthma in children, 360 lung cancer deaths and 4,200-7,400 deaths dues to ischemic heart disease (CalEPA, 1997).

One of the major goals of the California Tobacco Control Program (TCP) is to protect nonsmokers from secondhand smoke. Reducing or eliminating exposure to secondhand tobacco smoke in the places where people spend most of their time, the workplace and at home, is central to this objective. Evidence presented in this chapter shows that a subsidiary benefit of home and workplace smoking bans is that they often provide incentive for individuals to quit smoking or limit their consumption of cigarettes, helping to achieve the other major objective of the TCP, a reduction in smoking.

This chapter analyzes progress toward the elimination of exposure to secondhand tobacco smoke. It explains that tremendous progress has occurred during the past 3 years. This progress, however, has not benefited all groups of individuals equally. Minorities and youth remain less protected from involuntary smoking than the rest of the population.

Section 1 of this chapter addresses workplace exposure to secondhand tobacco smoke, Section 2 examines home smoking policies—who is implementing them and who is benefiting, and Section 3 explores the extent of secondhand smoke exposure across the population in places other than home or work. Section 4 summarizes the chapter results, highlighting progress as well as areas where further policy initiatives are needed.

1. Workplace Smoking Policies

Workplace smoking policies have a wide reaching impact on Californians' exposure to secondhand tobacco smoke. About two-thirds of adult Californians work outside the home; nearly three-fourths of those employed outside the home work indoors. These indoor workers are most acutely affected by involuntary smoking and therefore stand to benefit the most from workplace smoking policies. Table 4.1 shows the proportion of Californians affected by workplace smoking policies since 1990.

Table 4.1 Californians Affected by Workplace Smoking Policies			
	1990 % (C.I.*)	**1992[1] % (C.I.*)**	**1996 % (C.I.*)**
Adults who work outside the home	64.1 (±1.0)	61.7 (± 1.9)	63.5 (±0.9)
Workers who work indoors	72.5 (±1.3)	73.2 (± 2.4)	79.3 (± 1.3)
Indoor workers who are nonsmokers	78.7 (±1.1)	80.6 (± 1.4)	79.8 (± 0.8)

*CI = 95% Confidence Interval
Source: CTS 1990, 1992, 1996

While workplace bans on smoking affect smokers and nonsmokers alike, they are particularly important for nonsmokers. In Table 4.1, the percentage of nonsmokers among indoor workers who would be affected by smoking policies may be increasing, although the trend is not statistically significant. This slight increase would mirror the gradual decrease in smoking prevalence across the population over these 6 years (see Chapter 2).

Trends in Workplace Smoking Policies

As part of the California Tobacco Control Program (TCP), local lead agencies provide technical assistance on the implementation of local ordinances restricting smoking behavior, as well as assistance to local businesses to introduce effective workplace bans on smoking. Early studies show an increase in the number smokefree workplaces in California subsequent to the introduction of the TCP (Patten et al., 1995). These local efforts were likely enhanced when the U.S. Environmental Protection Agency released its 1993 report declaring secondhand smoke a known human carcinogen (USEPA, 1992). The proliferation of these local ordinances throughout the early 1990s culminated in the passage of California Assembly Bill 13 (AB-13), which was enacted in January of 1994 and partially took effect in 1995.[2] AB-13 prohibits smoking in all enclosed places of employment, and supersedes many of the local ordinances enacted earlier. It does not preclude local jurisdictions from enacting stronger ordinances (MacDonald & Glantz, 1997).

It is interesting to examine changes in the percentage of indoor workers reporting smokefree workplaces since the beginning of the TCP and compare these trends to what has happened nationally. Important yet subtle differences between the California and national survey questions regarding workplace smoking policies complicate this comparison.

[1] The 1993 CTS did not include separate questions for working and working indoors, so 1992 data are presented instead.
[2] AB-13, as enacted, covers most workplaces except bars, taverns and gaming clubs (casinos), which became smokefree January 1, 1998.

The Current Population Surveys (CPS) of 1992-1993 and 1995-1996, the California Adult Tobacco Surveys (CATS) of 1993 through 1996, and the California Tobacco Surveys of 1990 and 1992 all asked the same set of questions to determine whether an indoor worker enjoyed a smokefree workplace. There were, however, some differences in how indoor workers were identified among these surveys. CPS respondents answered the workplace questions if they best described their work area as one of the following: private enclosed office with door, shared enclosed office with door, indoor open area with or without partitions, in one building but no regular work area, store or restaurant, warehouse or factory. CATS respondents answered the workplace questions if they were employed for wages (but not self-employed), worked outside the home and worked primarily indoors. CTS respondents answered the workplace questions if they were employed (including self-employed), worked outside the home and worked primarily indoors.

In each of the above surveys, indoor workers were asked:

Does your place of work have an official policy that restricts smoking in any way?

If there was a policy restricting smoking, respondents to all surveys were then asked:

- *Which of these best describes your place of work's smoking policy for indoor public or common areas, such as lobbies, rest rooms, and lunch rooms?*
- *Which of these best describes your place of work's smoking policy for work areas?*

The response choices for the latter two questions were: not allowed in any, allowed in some, or allowed in all. Workers who answered "not allowed in any" to both questions were considered to have smokefree workplaces.

The 1993 CTS may not have correctly identified whether an indoor worker had a smokefree workplace because of ambiguous response choices, so data from this survey are not included in the analysis for this report. Because nearly all workplaces were mandated to be smokefree in 1995, the questions asked in the 1996 CTS were different from prior years. The 1996 CTS established that a respondent was an indoor worker with one question, rather than a series of questions:

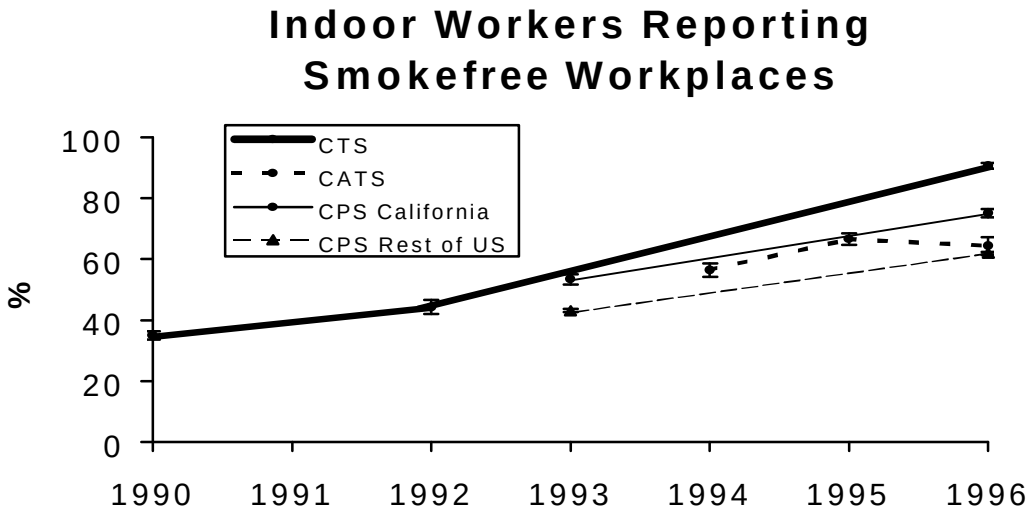
Do you currently work for money in an indoor setting, such as an office, plant, or store, outside of your home?

Respondents were no longer asked whether their workplace had a policy, rather whether it was smokefree:

Is your place of work completely smokefree indoors?

Figure 4.1 shows the percentage of indoor workers who reported that their workplace was smokefree. The results from the 1990, 1992 and 1996 CTS surveys suggest that the

percentage of workers who enjoy a smokefree workplace has increased considerably since 1990 and is now in the neighborhood of 90%. Data from the CATS also show an increase from 56.4% in 1994 to 66.6% in 1995. However, in 1996, 64.3% of indoor workers reported smokefree workplaces. The 1996 percentage is not statistically different from the 1995 percentage, and rather than a decline, this reflects a lack of further progress. Finally, the CPS data indicate that Californians were better protected



Source: CTS 1990, 1992, 1996; CATS 1994, 1995, 1996;
CPS-Calif. 1992-1993, 1995-1996; CPS-U.S. 1992-1993. 1995-1996

Figure 4.1

than the rest of the nation, and that there has been an increase in the percentage of workers protected, from 53.4% in 1992-1993 to 75.1% in 1995-1996, which is about the same degree of improvement as in the rest of the United States (from 43.1% in 1992-1993 to 61.9% in 1995-1996).

The differences in the findings from the surveys may be explained in part by their different approaches to identifying indoor workers. Also, the 1996 CTS (that did not ask if the respondent's workplace had a policy) might have produced an artificially high estimate, because there was an increased chance that the respondent would be asked the key question about their workplace being smokefree. Also, the CATS and CPS, by asking the policy question, may have been ambiguous to some respondents and have produced artificially low estimates. Since the passage of AB-13, some California respondents may have understood that it was the state, rather than the employer, who had a policy restricting smoking. They would have answered *no* to the workplace policy question and then not have been asked the follow-on questions about the nature of the workplace policy. Also, including self-employed workers in the CTS increased the number of persons answering the questions, and since AB-13 mandated smokefree workplaces regardless of company size, self-employed respondents were likely to state that their workplace was smokefree.

Despite these difficulties, it is reasonable to conclude that more indoor workers in California enjoy smokefree workplaces than in the rest of the United States, and that the

percentage of such workers in California has increased in recent years (see Appendix B, Table 2, for detailed demographic analysis of data).

Exposure of Nonsmokers to Secondhand Tobacco Smoke at Work

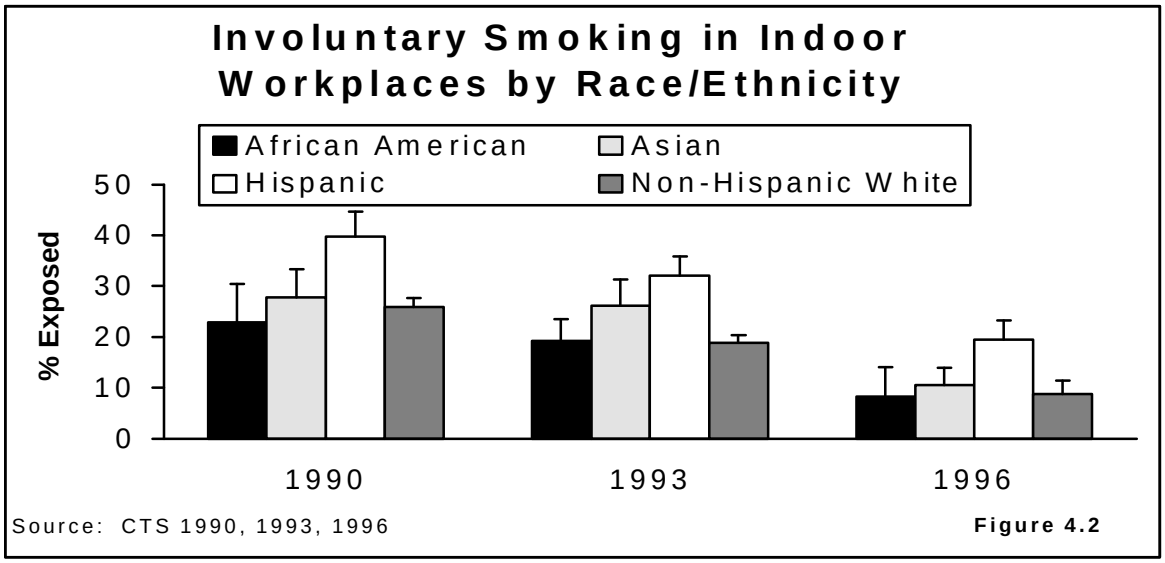
As explained above, in 1996 over 90% of nonsmoking indoor workers were employed in organizations with workplace smoking bans. However, if these bans are not enforced consistently, workplace exposure to secondhand tobacco smoke may not actually decline. In order to accurately assess workplace protection from secondhand tobacco smoke, the survey asked all nonsmokers who work indoors:

During the past two weeks, has anyone smoked in the area in which you work?

As reported in Chapter 2, the percentage of nonsmoking indoor workers reporting that they had not been exposed to secondhand smoke in the last 2 weeks has increased significantly. Nevertheless, even in 1996, when nearly all indoor workers (except bar and gaming club workers) should have been protected, 11.7% or 1.2 million Californians reported that someone had smoked recently in their work area. Although the exposure rate is still an imperfect indicator of the degree of noncompliance, it is worth examining further.

Minorities, particularly Hispanics, youth, and less educated workers, have the highest rates of workplace exposure to ETS, while more educated adult workers have the lowest rates of exposure.

It is encouraging to note that workplace exposure to secondhand smoke has diminished significantly across all categories of workers. Nonetheless, the same inequities in rates of exposure that existed in 1990 persisted in 1996. Among workers between the ages of 18 and 24, 17.4% were exposed to secondhand smoke at work; 19.6% of Hispanic workers, 28.7% of workers with less than a high school education, and 17.1% of workers with only a high school education were exposed to secondhand smoke. Figure 4.2 illustrates the disparity of protection from secondhand smoke in the workplace by race/ethnicity (see Appendix B, Table 3, for detailed demographic analysis).



Source: CTS 1990, 1993, 1996

Figure 4.2

2. Exposure to Involuntary Smoking at Home

The overall decrease in workplace exposure to secondhand smoke provides strong evidence that workplace smoking bans have contributed to the progress toward the California Tobacco Control Program (TCP) goal of protecting nonsmokers from secondhand tobacco smoke. Protection from passive smoking in the home, however, depends entirely on voluntary smoking bans. While the state's direct influence on such bans is inherently limited, this section presents evidence that the elements of the TCP designed to raise public awareness of the dangers of secondhand tobacco smoke, through media campaigns, school programs, and medical care programs may encourage smokers to adopt and enforce smokefree home policies.

As in the 1992 and 1993 CTS, all adults in the 1996 sample were asked to describe their home rules on smoking by choosing from the following options:

(1) Smokefree	*Smoking is completely banned in the home*
(2) Some Restrictions	*Smoking is permitted in certain rooms or at certain times*
(3) Unrestricted	*Smoking is allowed anywhere in the home*

The trend illustrated in Figure 4.3 clearly shows an overall increase in smokefree homes, a moderate change in the number of homes with some restrictions, and a corresponding drop in the number of homes with no restrictions. Altogether in 1996, 79.7% of Californians report some type of smoking restriction at home (see Appendix B, Table 4, for detailed demographic analysis).

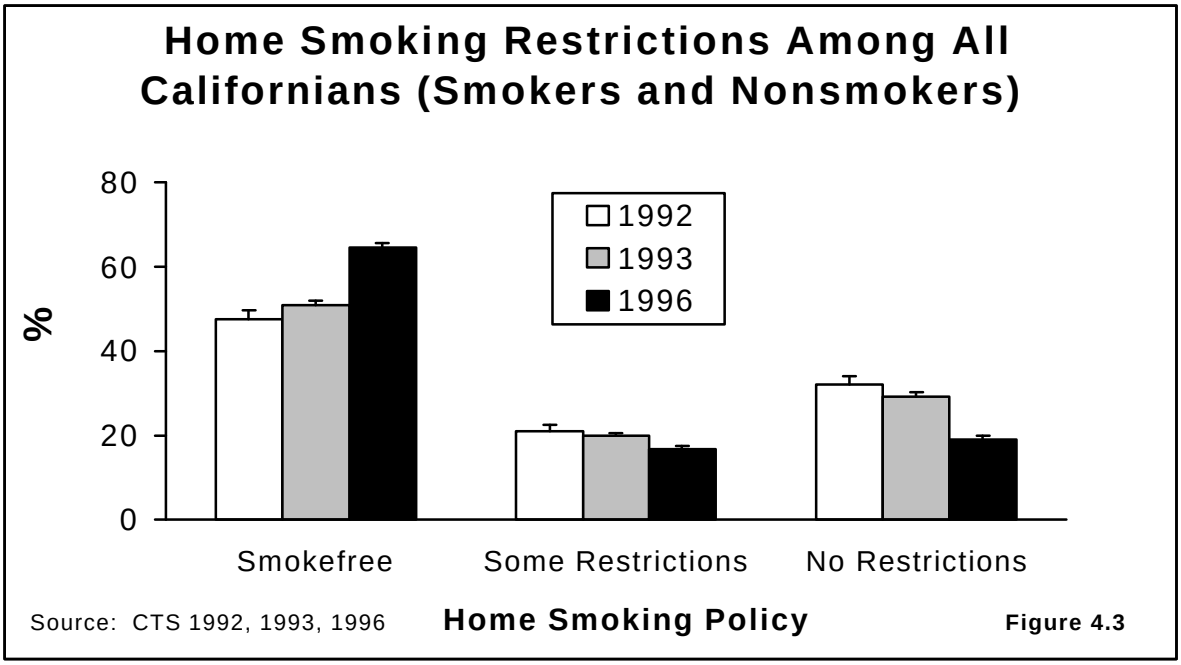


Figure 4.3

In 1996, nearly two-thirds of all smokers lived in homes with some level of smoking restrictions.

Since many homes do not have resident smokers, it is important to examine these trends as reported by smokers (see Figure 4.4). Between 1992 and 1993, the percentage of California smokers that reported smokefree homes was unchanged: 18.8% in 1992 and 20.1% in 1993. Between 1993 and 1996, the rate increased by a factor of over 90% so that 38.8% of smokers reported smokefree homes in 1996.

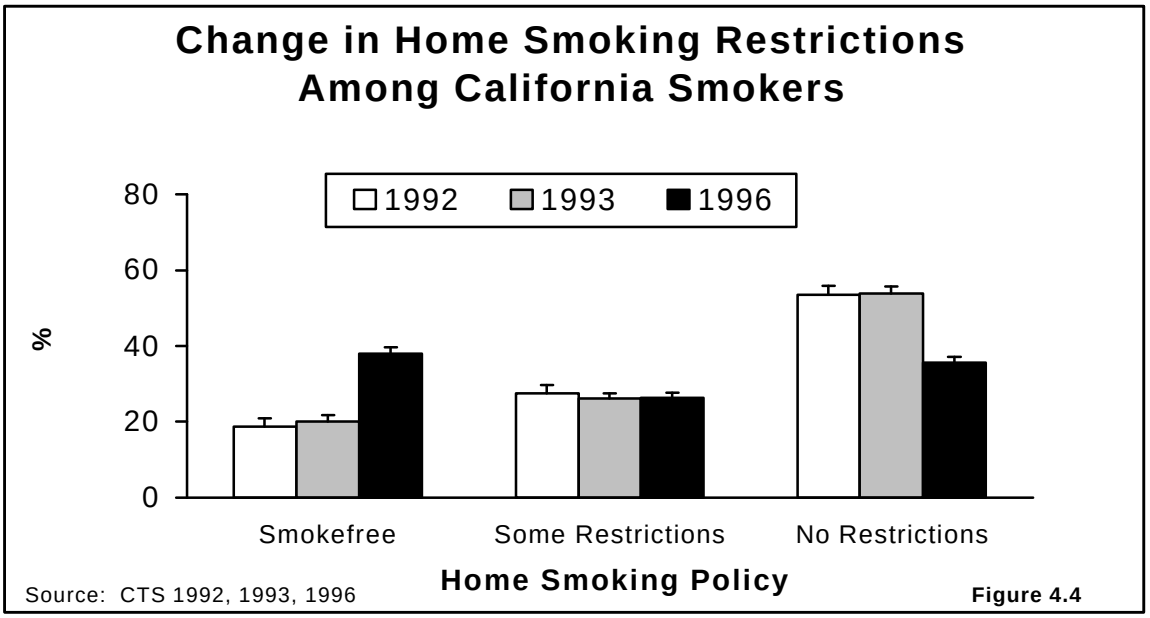


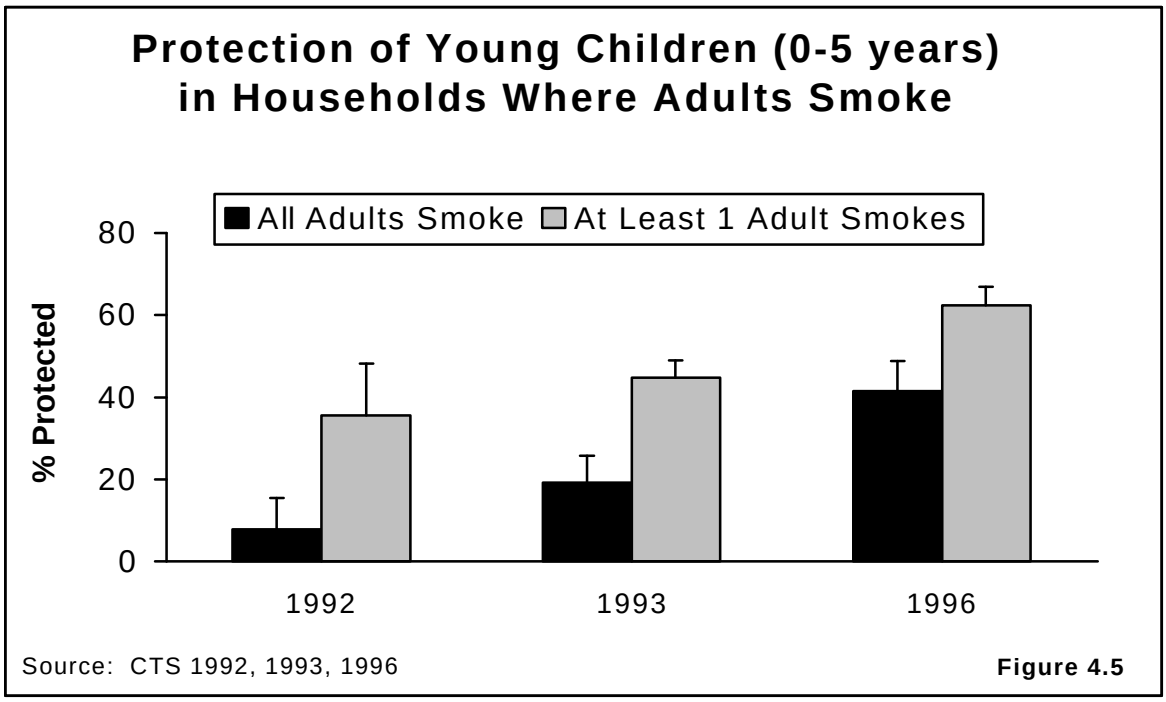
Figure 4.4

Corresponding to the rise in smokefree homes with adult smokers, there was a significant decrease in the percentage of homes with no restrictions between 1993 and 1996. These data represent an encouraging signal that the health norms promoted by the TCP have been incorporated into the social norms of a large segment of the population.

Protection of Children and Youth from Secondhand Tobacco Smoke in the Home

In Chapter 2, data were presented that showed children and adolescents are increasingly protected from secondhand tobacco smoke in the home either because they do not live with a smoker, *or* they live in a smokefree home.

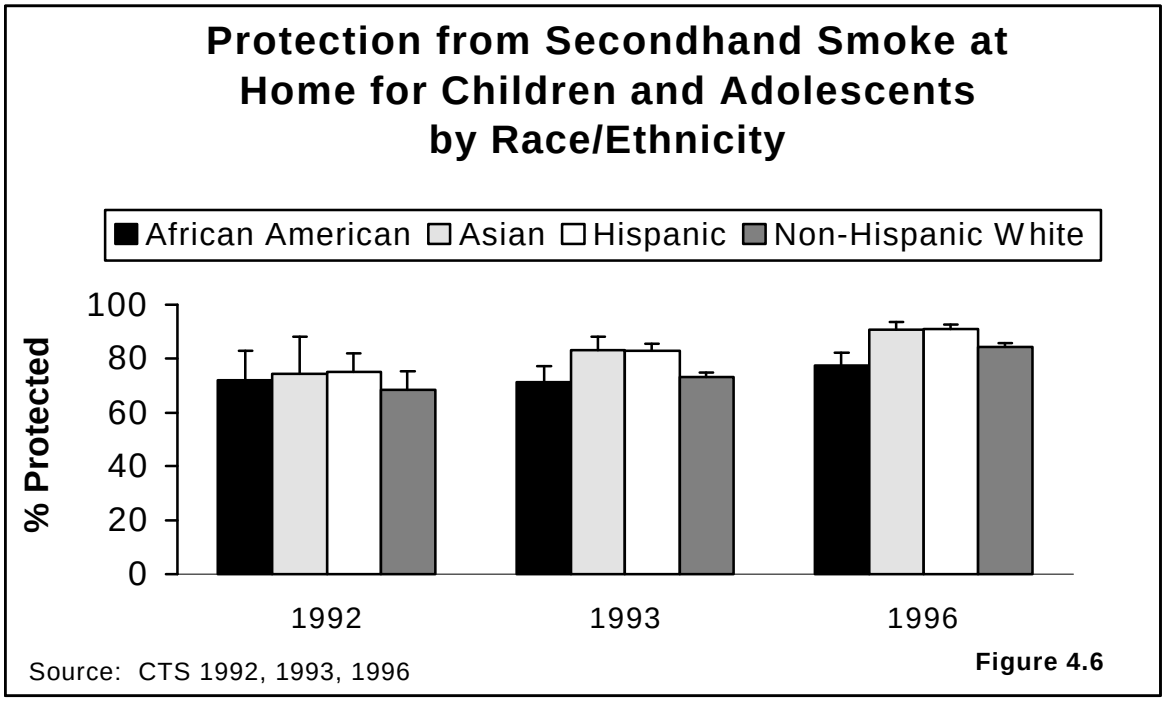
Looking more closely at the youth protection data reveals areas of success and those needing improvement. On the positive side, the youngest children enjoy the most protection. Approximately 89% of children under 6 years old were protected from ETS in the home in 1996. In homes with children under 6 years of age, where all adults smoke, Figure 4.5 shows that the percentage with complete bans on smoking rose from 19% in 1993 to over 40% in 1996. In homes with young children where only some adults smoke, 42% were smokefree in 1993, and this figure jumped to over 65% by 1996.



Source: CTS 1992, 1993, 1996

Figure 4.5

Overall, 87% of all children and adolescents were protected from secondhand smoke at home in 1996. Figure 4.6 shows that the protection of children and adolescents appears to have increased in all racial and ethnic groups, although in some groups not significantly. Some minority children and adolescents had particularly high rates of



Source: CTS 1992, 1993, 1996

Figure 4.6

protection from involuntary smoking in the home in 1996: Both Hispanic and Asian children and adolescents had a protection rate of over 90%. Less encouraging, however, is that African American children and adolescents were significantly less protected from secondhand tobacco smoke at home than were Non-Hispanic White, Hispanic or Asian children and adolescents. In 1996, only 77.3% of African American children and adolescents lived in smokefree homes.

The results presented in this section suggest that, although the TCP is limited to indirect interventions to reduce exposure to secondhand tobacco smoke in the home, its strategies appear to have been largely effective. A heightened general awareness of the dangers of passive smoking is manifested in the steadily increasing numbers of homes with complete bans on smoking. The fact that homes with smokers have been part of this increase suggests that even adults who smoke are not willing to endanger the health of others in their homes, particularly children, by exposing them to secondhand tobacco smoke. These results are an indicator of the reach of the anti-tobacco campaign, and its progress in educating Californians about the dangers of passive smoking.

In 1996, African American children and adolescents were significantly less protected from ETS in their homes than other racial/ethnic groups.

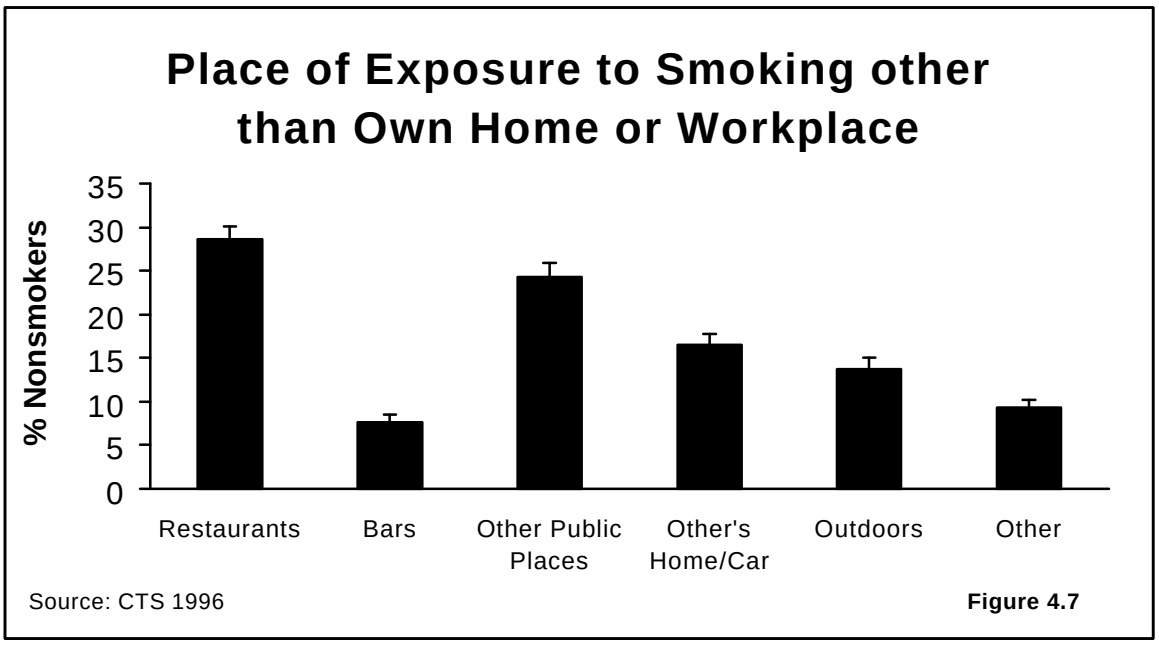
These data do not suggest, however, that it is time to focus state efforts elsewhere. Clearly there is still room for improvement across the population as a whole. Moreover, the lack of change in home smoking bans among African American families suggests that programs are not well designed to reach this population, and more attention must be directed toward this problem.

3. Exposure to Secondhand Tobacco Smoke in Places Other Than Work or Home

The reductions in home and workplace exposure to secondhand tobacco smoke correspond to reduced levels of secondhand tobacco smoke in other aspects of daily living. As people run errands or go out to eat, they are more likely to enter smokefree establishments than in earlier years. As a result, a new category of nonsmokers has emerged: those for whom smoking is not an issue in their lives. Nearly 30% of adults in 1996 reported that they experienced no exposure to secondhand tobacco smoke in their homes or workplaces, and did not encounter a situation in the past 12 months where they had to put up with smoking around them.

Figure 4.7 presents the percentage of nonsmokers who reported some exposure to secondhand tobacco smoke in places other than work or home during the past year. The most frequently identified location of these exposures to secondhand tobacco smoke was restaurants (28.6%). Other public places, which could include places such as shopping malls, office buildings, or community events, was the next most frequently identified place of secondhand tobacco smoke exposure (24.3%). This was followed by the home or car of other individuals (16.5%), outdoor public areas (13.7%), and bars[3] (7.6%). All the various other responses grouped together constituted 9.3% of the locations identified.

[3] Includes restaurant bars.



Source: CTS 1996

Figure 4.7

It would be extremely difficult to completely eliminate exposure to secondhand tobacco smoke as long as smoking prevalence rates remain above negligible rates. Nonetheless, it is useful to consider why exposures may be occurring in some of the most frequently cited locations, and what, if anything, can be done to reduce or eliminate such exposures.

Several of the locations listed above fall outside the purview of state or local regulation. At the time of the survey, for example, bars, taverns and gaming clubs (casinos) were exempt from the smokefree workplace regulations of AB-13. As of January 1, 1998, however, bars, taverns, and game rooms became smokefree as well. Additionally, beyond affecting social norms through media and other policy-driven campaigns, there is little that public policy can do about exposure to secondhand tobacco smoke in the cars or homes of acquaintances, at private parties or functions, or outdoors.

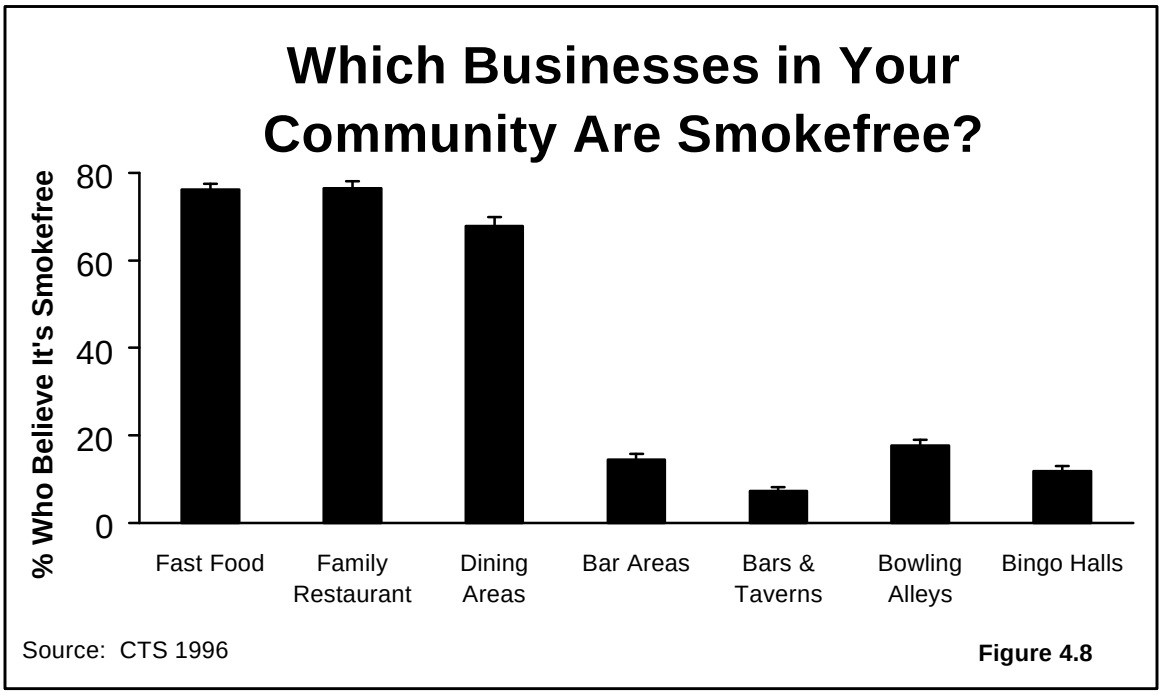
The relatively high incidence of exposures to secondhand tobacco smoke in restaurants is a complex issue. Under the terms of AB-13, restaurants are included among establishments designated as smokefree workplaces. However, many restaurants contain bar areas, which were exempt from the smokefree workplace regulations at the time of the survey. Therefore, it is possible that a large percentage of reported exposures to secondhand tobacco smoke in restaurants actually resulted from exposure to secondhand tobacco smoke that originated in a restaurant's bar area. Another explanation is that this exposure occurs during restaurant-sponsored cigar nights or other promotions. An alternative explanation for the fact that restaurants were the most frequently reported place of tobacco smoke exposure would be noncompliance to the terms of AB-13.

Similarly, commercial areas and other work areas are generally smokefree, according to the provisions of AB-13. Thus, exposure to tobacco smoke in these areas must be the result of either smoke traveling from some nearby area that does not fall under AB-13, such as outside areas, bars or hotel lobbies, or from noncompliance.

This analysis suggests that further reduction of exposure to secondhand tobacco smoke will depend on an expansion of AB-13 to include bars and taverns and an improvement in enforcement and compliance.

Awareness of Smokefree Laws

Another way to assess how well the population is protected from involuntary smoking outside the home or workplace is to ascertain individuals' perceptions of which establishments in their community are smokefree. Figure 4.8 shows that the vast majority of respondents believe that fast food restaurants and family restaurants in their community are smokefree.



Source: CTS 1996

Figure 4.8

However, it is noteworthy that the responses for fast food and family restaurants, in particular, were not universally 'smokefree.' Since the enactment of AB-13, fast food restaurants and family restaurants would be included among the smokefree indoor workplaces, and thus should not have tobacco smoke in their premises. Typically, neither fast food restaurants nor family restaurants would have bar areas or sponsor cigar nights, which might create tobacco smoke that would drift into these places, confusing people as to whether they are smokefree. The fact that not all respondents identified these locations as smokefree is evidence of incomplete knowledge of the scope of AB-13, or of non-compliance by the businesses in their community. It might be helpful for Tobacco Control Program media efforts to fully inform the public about the provisions of AB-13.

Conversely, it is interesting that any proportion of the population believed bar areas and bars and taverns to be smokefree in their community, since these businesses were still

exempt from AB-13 at the time of the survey. Any or a combination of the following reasons might explain these responses. One possibility is that the communities where these respondents lived had enacted smokefree bar ordinances, or that smokefree bar areas/bars and taverns exist in the community. Alternatively, irrespective of ordinances or legislation, the respondents infrequently visited such establishments and answered without complete knowledge, or if they did visit them, they did not notice or were not exposed to secondhand tobacco smoke in bars that were not smokefree.

The fact that the responses for dining areas, bowling alleys and bingo halls were mixed is less interesting than for the businesses that would theoretically be universally smokefree or universally not smokefree. Dining areas and bowling alleys are often attached to bar areas, and therefore may or may not expose patrons to secondhand tobacco smoke.

The mixed responses across the various types of businesses suggest that knowledge about the terms of AB-13 may not be universal, or that smokefree laws are not universally enforced. Either explanation suggests that AB-13 did not render obsolete the role of the local lead agencies in facilitating the implementation of smokefree policies.

4. Summary

This chapter showed that over 90% of indoor workers were protected by smokefree workplace policies by 1996, an increase of over 40% since 1993. This finding is strong evidence that California's Assembly Bill (AB-13), which took effect in 1995 and mandated that all indoor workplaces be smokefree, has been widely and effectively implemented. However, this chapter also explained that there remain inequities in the rates of exposure to secondhand smoke in the workplace, with minorities and youth experiencing significantly more exposure than Non-Hispanic White and older workers.

This chapter also showed that between 1993 and 1996 there were large and statistically significant increases in the percent of Californians who lived in homes with smoking restrictions. About 80% of all Californians—including smokers—reported having some type of smoking restriction in effect in their home, and nearly two-thirds lived in smokefree homes. Nearly two-thirds of smokers lived with some type of smoking restriction in their homes, and nearly 40% of smokers lived in smokefree homes. As a result of these significantly increased levels of protection from involuntary smoking at home, the percentage of children exposed decreased significantly between 1993 and 1996. However, African American children and adolescents remained significantly less protected than others from involuntary smoking at home.

Finally, this chapter showed that 30% of Californians experienced no exposure to secondhand tobacco smoke in their daily lives. For these people, smoking has become a nonissue. The other 70% of nonsmoking Californians were most likely to report exposure to secondhand tobacco smoke in restaurants and bars. As AB-13 expands to include bars, it would be expected that these exposures would decrease significantly.

CHAPTER 4: REFERENCES

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Chapter 5

TRENDS IN ADOLESCENT SMOKING

CHAPTER 5: TRENDS IN ADOLESCENT SMOKING

Introduction

It is well established that over 90% of adult smokers started smoking in their teens (USDHHS, 1989). In fact, the continued slow rate of decline in overall smoking prevalence can be attributed to the high rates of smoking uptake in each new generation. The reduction of adolescent smoking is a central component of the California Tobacco Control Program's goal to reduce overall smoking prevalence. This goal represents one of the most challenging and most important components of the Program's strategic plans.

Over the past 30 years, public health initiatives and information about the health dangers of smoking have proved quite effective in dissuading adults from taking up the smoking habit. For example, in the early 1950s approximately 10% of nonsmokers aged 20-24 years started to smoke each year. By the mid-1980s less than 1% of nonsmokers in this age group took up smoking (Gilpin et al., 1994). The tobacco control campaigns, however, have experienced much less success in keeping adolescents from becoming smokers. Over the past four decades, initiation rates increased significantly among 10-20 year old girls, and remained high in similar aged boys.

This chapter demonstrates that there is strong cause for concern about teen smoking prevalence in California. Between 1990 and 1993, teen smoking remained fairly constant, which was heralded as a success for the Tobacco Control Program, since teen smoking had increased in the country as a whole (Johnston et al., 1994). Since 1993, however, all measures of teen smoking behavior indicate that more adolescents are currently smoking and more will smoke in the future.

This chapter reports trends in adolescent smoking derived from the California Tobacco Survey, a cross-sectional survey of youth and adults that was administered in 1990, 1993, and 1996. Section 1 examines the prevalence of smoking within the past 30 days among demographic subgroups of California adolescents. The overall trends are presented in Chapter 2. Section 2 describes trends in the Uptake Continuum, the conceptual framework that establishes a link between levels on the Continuum and future smoking (see Chapter 3). It presents evidence of increases between 1993 and 1996 in adolescent susceptibility to smoking, as well as increases in early and advanced experimentation, which are precursors to future addicted smoking. Finally, it examines the attainment of the 100-cigarette lifetime consumption level, the marker of nicotine addiction, which defines the highest level in the Uptake Continuum. Section 3 examines the development of nicotine tolerance and the prevalence of daily smoking in young smokers. Section 4 presents some interesting trends in important predictors of adolescent smoking. Finally, section 5 gives projections for the percentage of 15-17 year olds who will be *addicted smokers* in 1999, and section 6 summarizes the results of the chapter.

1. Adolescent Smoking Prevalence in the Last 30 Days by Demographic Subgroups

The traditional measure of smoking behavior among adolescents is the prevalence of smoking in the past thirty days (USDHHS, 1994). The National Cancer Institute (NCI) recommends the use of this statistic to maximize comparability across studies. Although this measure suffers from difficulties, it remains the standard. Chapter 2 comments on the overall trend from 1990 to 1996.

Table 5.1 shows that overall, 30-day teen smoking prevalence increased by a factor of 30.4%[1] between 1993 and 1996. While 30-day smoking prevalence increased at approximately the same rate among males and females, in all years it was slightly lower among females, mirroring the situation in adults (see Appendix B, Table 7, for detailed demographic breakdown).

Table 5.1
Smoking in the Last 30 Days Among Demographic Subgroups of Adolescents 12-17 Years of Age

	% 1990	% 1993	% 1996	Factor Increase % 1993-1996	P-Value*
Overall	9.2	9.2	12.0	30.4[1]	<0.001
Gender					
Boys	9.7	10.1	12.6	24.8	0.008
Girls	8.7	8.3	11.3	36.1	0.001
Age					
12-13	3.6	3.1	3.3	6.4	0.180
14-15	8.0	9.6	10.9	13.5	0.067
16-17	16.6	15.9	22.1	39.0	<0.001
Race/Ethnicity					
African American	5.6	4.8	6.3	31.1	0.130
Asian	4.7	5.4	8.8	63.0	0.034
Hispanic	8.9	7.1	10.8	52.1	0.001
Non-Hispanic White	11.0	11.8	14.3	21.2	0.002
School Performance					
Much Better	4.5	3.9	5.8	48.7	0.018
Better	6.6	6.9	10.7	55.0	<0.001
Average or Below	13.4	13.2	16.6	25.8	0.002

*P-value of difference between 1993 and 1996.
Source: CTS 1990, 1993, 1996.

[1] This overall figure is unadjusted for changes in the demographics in the adolescent population. In Chapter 2, the factor increase is presented as 18.5%, reflecting the standardized data.

Among 16-17 year olds, 30-day smoking prevalence increased by a factor of 40% between 1993 and 1996.

The age of the adolescent is strongly related to 30-day smoking prevalence. Older teens, in the 16-17 year old group, have historically smoked more than younger teens. Between 1993 and 1996, 30-day smoking prevalence increased by a factor of 40% among the oldest teens, compared to smaller and statistically insignificant increases among 14-15 and 12-13 year olds.

Only African American teens did not experience a significant increase in 30-day smoking prevalence.

Between 1993 and 1996, 30-day smoking prevalence increased significantly in all racial/ethnic groups of teens except African Americans. Among Non-Hispanic White teens, 30-day smoking prevalence increased by a factor of 21%. It increased by a factor of 63% among Asian teens, and by a factor of over 50% among Hispanic teens.

Examining the teen smoking data by perceived school performance is similarly discouraging. Consistently across this observation period, teens who believed they performed "much better than average" smoked significantly less than those who felt they performed "better than average." In turn, the "better than average" students consistently smoked less than students whose perceived school performance was "average or below." Each of these groups maintained a fairly steady smoking prevalence rate between 1990 and 1993. However, between 1993 and 1996, the smoking prevalence in each group increased significantly. Students whose perceived school performance was the worst experienced the smallest relative increase in prevalence, although an increase by a factor of 26% in three years cannot be considered unimportant. Prevalence among "better than average" students increased by a factor of 55%, and among "much better than average" students, it increased by a factor of 49% between 1993 and 1996. These statistics suggest that any stigma the higher achievers had placed on smoking diminished in the years between 1993 and 1996.

Although, smoking in the last 30 days is the generally accepted smoking prevalence measure among adolescents, it is not a good predictor of who will enter adulthood as an addicted smoker (Pierce et al., 1995). About a third of older teens who have smoked in the past 30 days are already *addicted* daily smokers. However, many teens who experiment do not go on to become *addicted smokers*. Also, a teen who did not smoke recently may still continue to do so sporadically and eventually become *addicted*. To more fully capture the likelihood of future smoking, we examine trends in the Smoking Uptake Continuum (see Chapter 3)

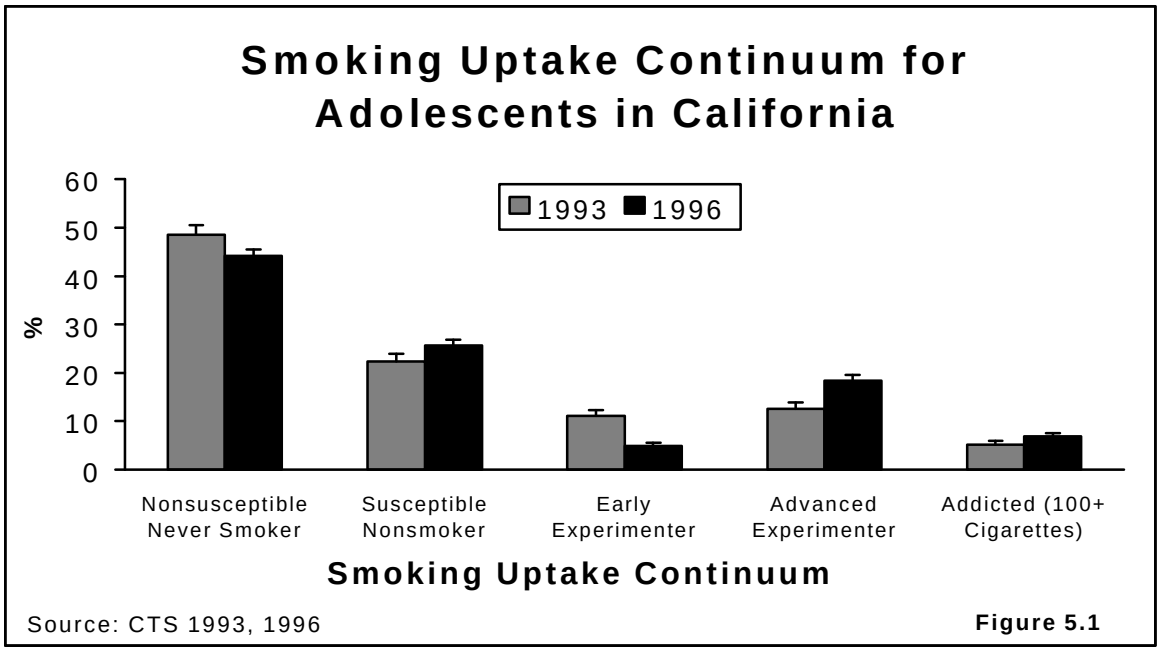
2. Trends in the Smoking Uptake Continuum

Research has shown that combining information about adolescents' future smoking plans with their smoking experience provides a framework for predicting future smoking behavior. Each of the five levels of the Smoking Uptake Continuum corresponds with different and increasing probabilities of future smoking.

Trends in the Distribution of Adolescents along the Smoking Uptake Continuum

The Smoking Uptake Continuum is described in detail in Chapter 3. This section examines changes in the percentage of adolescents at each level on the Continuum over time. (These data are also presented in Appendix B, Table 5). The California Tobacco Survey (CTS) questions defining susceptibility were improved between 1990 and 1992, and the changes in wording were sufficient to invalidate a comparative analysis that would include 1990. Because the 1992 CTS sample was small, changes from 1993 to 1996 will be the primary focus of this section.

An examination of the distribution of California teens along the Uptake Continuum over time shows that significantly fewer never-smoking teens could be classified as *nonsusceptible* in 1996 than in 1993. Correspondingly, more teens were *susceptible nonsmokers*, *advanced experimenters*, and *addicted smokers* in 1996 than in 1993. Figure 5.1 clearly illustrates this trend toward greater risk of future smoking among California's teens.



Source: CTS 1993, 1996

Figure 5.1

In 1993 and 1996, the distribution of boys and girls along the Uptake Continuum did not differ significantly. Nor were there significant differences in distribution across racial/ethnic groups. The distribution along the Uptake Continuum, however, was very different across different age groups. A higher percentage of older teens could be classified as *advanced experimenters* or *addicted* smokers than could younger teens. Less than 1% of 12-13 year olds were *addicted smokers* in either 1993 or 1996, while approximately 5% of 14-15 year olds and close to 15% of 16-17 year olds were *addicted* in 1996. Consistent with the overall trend, however, across all age groups there were significantly fewer *nonsusceptible never smokers* in 1996 than in 1993. Similarly, each

age group produced significantly more *advanced experimenters* and *addicted smokers* in 1996 than in 1993.

Susceptibility in Demographic Subgroups of 12-14 Year Olds

The transition to *susceptibility* often occurs during young adolescence or even during the pre-teen years. For this reason, changes in *susceptibility* to smoking are examined in 12-14 year olds who have never even puffed on a cigarette.[2] Overall, in 1993, 26.8% of this age group was susceptible to smoking. By 1996, 36.6% of 12-14 year olds were *susceptible*, an increase by a factor of 37%.

Between 1993 and 1996, both boys and girls showed increases in the percentages susceptible to smoking, but among girls *susceptibility* increased significantly more. Young teens who rated their own school performance "much better than average" showed particularly sharp and significant increases in the percentage *susceptible* to smoking, as did African American teens; *susceptibility* among Non-Hispanic White teens increased less. These results are presented in Table 5.2.

Table 5.2
Susceptibility to Smoking Among Demographic Subgroups of 12-14 Year Olds

	% 1993	% 1996	Factor Increase 1993-1996	P-Value*
Overall	26.8	36.6	36.7	<0.001
Gender				
Boys	29.7	36.6	23.1	0.0015
Girls	24.0	36.6	52.3	<0.001
Race/Ethnicity				
African American	19.6	38.0	93.7	<0.001
Asian	27.0	36.6	35.7	0.016
Hispanic	32.5	44.2	35.9	<0.001
Non-Hispanic White	24.0	30.1	25.3	<0.001
School Performance				
Much Better	15.9	29.3	83.8	<0.001
Better	25.0	35.6	42.0	<0.001
Average or Below	34.7	42.8	23.5	0.0016

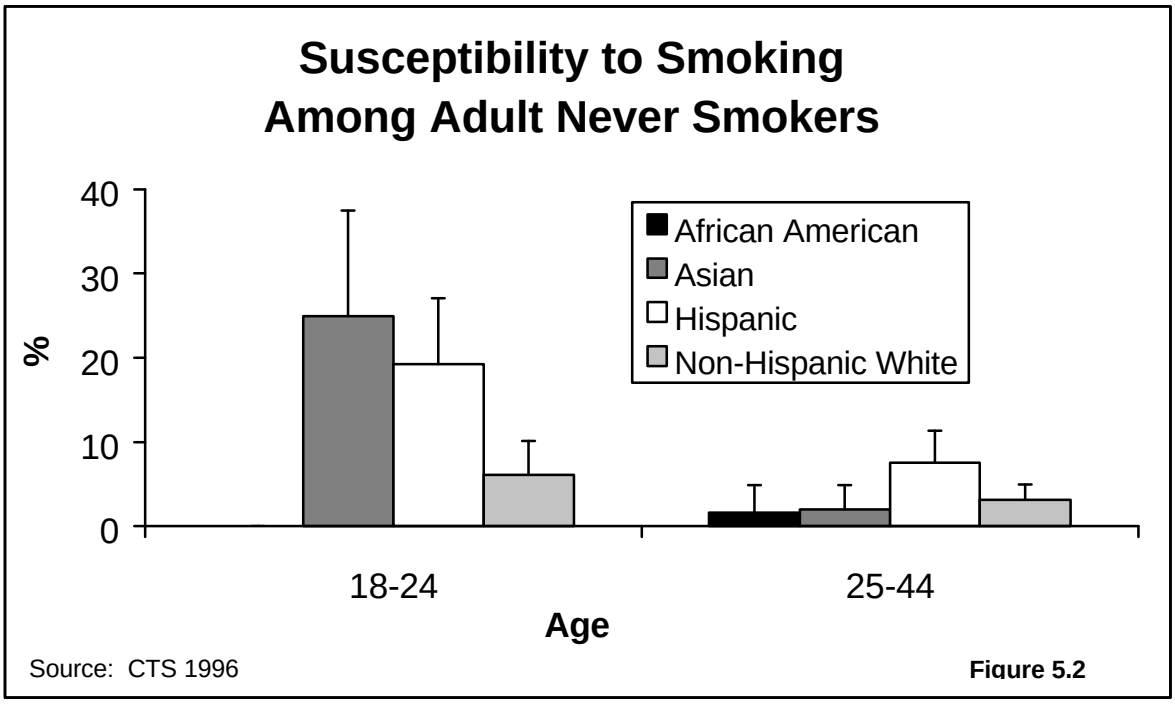
*P-value of difference between 1993 and 1996 data
Source: CTS 1992, 1993

Susceptibility Among Adults

Teens do not abruptly complete their transition to adulthood and to established behavior patterns that discourage smoking uptake when they reach 18 years old. Therefore it

[2] This definition of susceptibility differs slightly from that presented in Chapter 3.

makes sense that, although most new smokers are less than 18 years of age, some individuals take up smoking in their young adult years. Figure 5.2 shows that susceptibility to smoking remains elevated through early adulthood, although it is below the level observed in adolescents.



Hispanics and Asians appear to remain *susceptible* to smoking into adulthood the longest. Among 18-24 year olds, *susceptibility* is highest for Asians (24.9%), followed by Hispanics (19.2%). These rates were significantly higher than the rates for Non-Hispanic Whites (6.1%). No African Americans in this age group reported being *susceptible* to smoking. Interestingly, about 8% of Hispanics aged 25-44 years are still *susceptible* to smoking.

Experimentation

As shown in Figure 5.1, the overall percentage of *advanced experimenters* and *addicted* smokers increased significantly between 1993 and 1996. The decline *in early experimenters* may imply that more teens do not rule out smoking again after they smoke their first cigarette.

By their mid-teens, adolescents who are inclined to seriously experiment with cigarettes have taken this step. Figure 5.3 shows significantly higher rates of *advanced experimentation* and *addiction* in 15-17 year olds than in 12-14 year olds. Because of the very low rates of *addiction* in 12-14 year olds, the next section focuses on *addiction* only in the older teens.

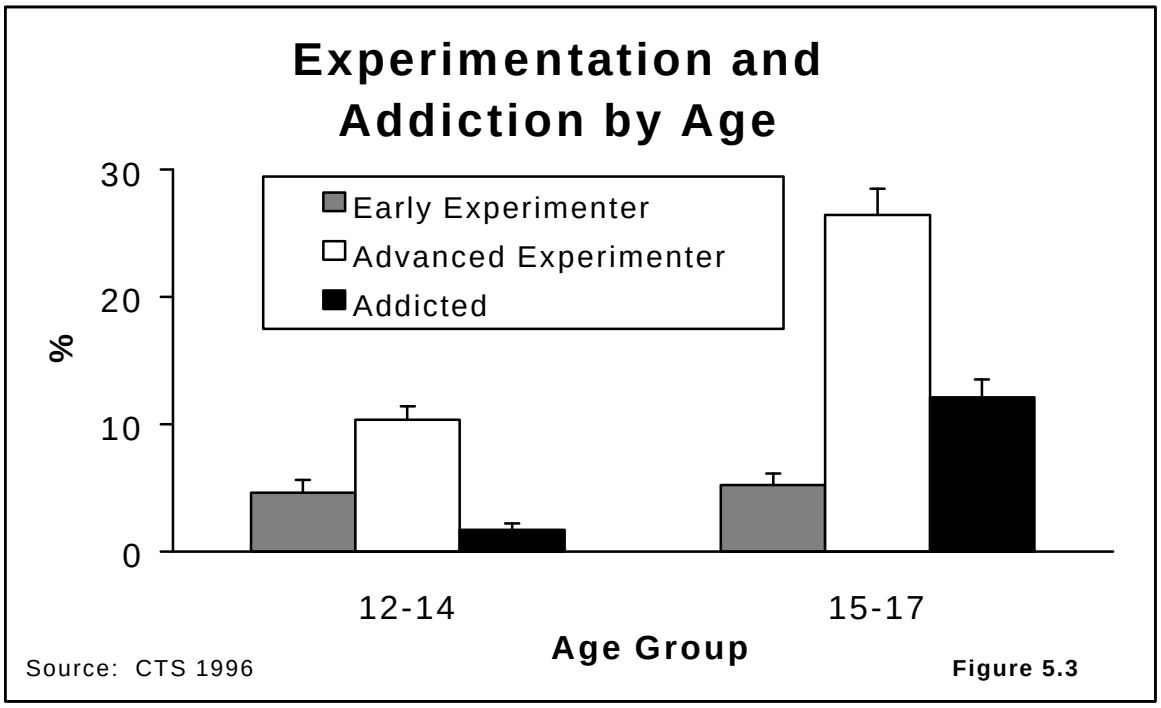


Figure 5.3

Addicted Smoking in Demographic Subgroups of 15-17 Year Olds

The Uptake Continuum considers those who report smoking at least 100 cigarettes in their lifetime as *addicted smokers*. After showing little change between 1990 and 1993, the percentage of 15-17 year old adolescents who reported smoking at least 100 cigarettes increased from 9.9% in 1993 to 12.1% in 1996, a factor of 22% (Table 5.3). These findings confirm the results found for other measures of adolescent smoking behavior, showing a sharp reversal in any progress achieved in slowing teen smoking prior to 1993.

Among these 15-17 year olds, boys and girls showed similar rates of increase. Approximately 14% of Non-Hispanic Whites reported smoking at least 100 cigarettes in 1990 and 1993; this percentage increased significantly to 16% in 1996. Hispanics also showed a significant increase in addicted smokers between 1993 to 1996.

The 15-17 year olds who rated their school performance as "much better than average" became *addicted smokers* at significantly lower rates than did lower achieving students. Among teens who rated their school performance "average or below," the percent who were *addicted smokers* increased from 12.2% in 1993 to 17.3% in 1996, an increase by a factor of 42.6%. In contrast, the increase in *addicted smokers* among "better than average" and "much better than average" teens was insignificant.

Table 5.3 Addicted Smoking Among Demographic Subgroups of 15-17 Year Olds					
	% 1990	**% 1993**	**% 1996**	**Factor Increase % 1993-1996**	**P-Value***
Overall	10.5	9.9	12.1	22.2	0.008
Gender					
Boys	11.5	10.5	12.5	19.0	0.008
Girls	9.5	9.2	11.7	27.2	0.018
Race/Ethnicity					
African American	4.6	2.5	5.7	128.0	0.395
Asian	7.6	6.9	8.3	20.2	0.187
Hispanic	7.0	6.1	8.1	32.8	0.037
Non-Hispanic White	14.3	13.7	16.2	18.2	0.021
School Performance					
Much Better	5.1	5.2	5.6	7.7	0.192
Better	8.3	9.0	10.3	14.4	0.208
Average or Below	14.4	12.2	17.3	41.8	<0.001

Source: CTS 1990, 1993, 1996.
*P-value of difference between 1993 and 1996 data.

3. The Development of Nicotine Tolerance

All teens who report smoking at least 100 cigarettes in their lifetime are categorized as *addicted smokers* in the Uptake Continuum framework. Most, but not all of these teens also report smoking in the past 30 days. For the sake of clarity, therefore, teens who report smoking at least 100 cigarettes in their lifetime and who report smoking in the past 30 days are considered *current addicted smokers*. Because the survey questions differed slightly between teens and adults, it is also important to be precise about the definition of *current addicted smokers* among young adults. Therefore, smokers age 18 and over are classified as *current addicted smokers* if they reported smoking at least 100 cigarettes in their lifetime and reported smoking every day or some days at the time of the survey.

Table 5.4 presents evidence that even teens who are *current addicted smokers* may still have a ways to go before their smoking habit reaches a stable nicotine tolerance level. For example, approximately half of teens and young adult (18-24 year olds) *current addicted smokers* are not yet daily smokers. Yet, by their early to mid 30s, less than one third of *current addicted smokers* are occasional smokers. Furthermore, daily smokers continue to increase their consumption as they get older. Mean daily consumption was 12.5 cigarettes/day for adolescent daily smokers, increasing to 15.5 cigarettes/day for daily smokers in their early thirties.

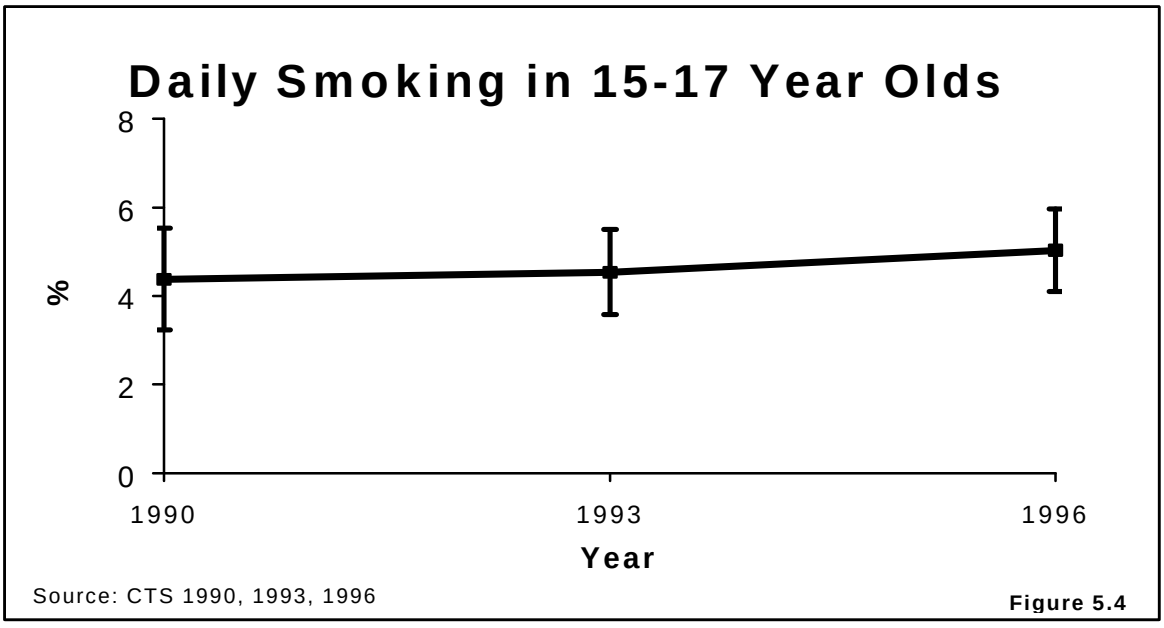
Table 5.4 Increased Nicotine Tolerance in Young Smokers		
Age Group	**% of Smokers that are Occasional Smokers**	**Mean Daily Consumption for Daily Smokers**
15-17	50.8	12.5
18-24	50.0	13.5
25-29	41.3	14.0
30-34	32.9	15.5

Source: CTS 1996

In Chapter 2, it was noted that current smoking prevalence may be increasing among young adults 18-24 years of age. Increases in the prevalence of occasional smoking among young adults likely accounts for this increase in overall smoking prevalence in this age group. In 1990, 4.7% of adults 18-24 years of age were occasional smokers and 16.0% were daily smokers. By 1996, occasional smoking prevalence in this group had increased to 7.7% and the prevalence of daily smoking was slightly lower, at 13.4% (see Appendix B, Table 9). Smoking restrictions at work or at college may explain this apparent delay in the development of nicotine tolerance (Pierce et al., 1991).

Daily Smoking

Daily smoking has been proposed by many as an indicator of teen smoking. However, considering how long it takes before a smoker reaches a stable level of nicotine tolerance, daily smoking rates are not very useful indicators of smoking prevalence in adolescents. Furthermore, daily smoking rates are very low in adolescents, especially young adolescents, compared to adults. Overall among California teens in the 15-17 year-old age group, daily smoking remained below 5% between 1990 and 1996. Figure 5.4 illustrates the daily smoking prevalence among 15-17 year olds in California:



Source: CTS 1990, 1993, 1996

Figure 5.4

Daily smoking prevalence did not differ significantly between boys and girls in any year, but was generally higher in Non-Hispanic Whites than minorities with significant differences in some years (Appendix B, Table 7). In 1990, there were significant differences in the daily smoking rate according to self-reported school performance, with less than 1% of "much better than average" students smoking daily compared to 6.8% in the "average or below" category. By 1996, however, the rates of daily smoking had more or less converged for the school performance groups.

4. Trends in Predictors of Smoking Uptake

The earlier sections of this chapter showed that various measures of smoking behavior remained relatively unchanged between 1990 and 1993 but then increased markedly from 1993 to 1996. In order to reverse these recent trends in adolescent smoking, it is important to understand what might be fueling them.

A number of studies have identified predictors of adolescent smoking uptake. Much of this work is summarized in a recent survey article (Conrad et al., 1992). To the extent possible, the results from the 27 longitudinal studies referenced in this article were validated for this report, using two longitudinal surveys: the national Teenage Attitude and Practices Surveys: 1989-1993 and the Robert Wood Johnson California Teenage Longitudinal Surveys: 1993-1996. These surveys are described in Appendix A, Data Sources. Two categories of predictors were identified: 1) personal or family influences and 2) environmental influences. The variables within each category were validated as significantly related to smoking uptake or progression on the Uptake Continuum. Although many additional factors were found to predict smoking uptake, Table 5.5 presents only the predictor variables for which there were significant changes between 1990 and 1996, which may, therefore, relate to the increases in teen smoking prevalence over this period.

Table 5.5 Trends in Predictors of Smoking Uptake				
	% 1990	**% 1993**	**% 1996**	**Predicted Direction of Change in Variable on Teen Smoking**
Personal/Family Influences	**% (±CI*)**			
Much better than average school performance	18.3 (±1.3)	18.4 (±1.5)	22.7 (±1.1)	Reduce
Sports participation	63.3 (±2.2)	64.4 (±1.9)	67.3 (±1.2)	Reduce
High degree of rebelliousness	N/A	12.5 (±1.3)	7.6 (±0.8)	Reduce
Strong personal attitudes against smokers	49.4 (±2.0)	55.9 (±1.9)	48.8 (±1.7)	Promote
Environmental Influences				
Perceives strong peer norms against smoking	79.4 (±1.7)	72.4 (±1.7)	64.3 (±1.3)	Reduce
Has best friends who smoke	37.1 (±1.5)	45.5 (±1.8)	59.3 (±1.4)	Promote
High perceived prevalence of peer smoking	9.4 (±1.2)	13.5 (±1.0)	19.0 (±1.2)	Promote
Perceives it's safe to experiment	43.3 (±1.8)	45.1 (±1.5)	47.9 (±1.5)	Promote
Perceives that no teachers smoke	17.3 (±1.6)	16.5 (±1.4)	25.4 (±1.4)	Reduce
High receptivity to tobacco industry promotions	N/A	8.9 (±0.9)	13.6 (±1.1)	Promote

*CI = 95% Confidence Interval
N/A = Not Available
Source: CTS 1990, 1993, 1996

Changes Expected to Reduce Smoking

Between 1990 and 1996 significantly more teens reported much better than average school performance (18.3% in 1990 vs. 22.7% in 1996) and sports participation (63.3% in 1990 vs. 67.3% in 1996). Furthermore, significantly fewer adolescents reported behaviors indicative of rebelliousness, such as arguing a lot with their families, getting into fights, or getting a kick out of doing dangerous things in 1996 (7.6%) compared to 1993 (12.5%). Also, in 1996, fewer teens (approximately 75%) perceived that teachers in their school smoked than did in 1990 or 1993 (about 83%). Based solely on the trends observed in these predictors, teen smoking prevalence would be expected to have declined by 1996. However, other important influences appear to be at work.

Changes Expected to Promote Smoking

Despite tobacco educational efforts, an increasing percentage of teens think it is safe to experiment with cigarettes (43.3% in 1990 vs. 47.9% in 1996). These teens either thought that it was safe to smoke for a year or two, that there was no harm in an occasional cigarette, or that if they smoked they could quit any time they wanted. This finding suggests that there must be other messages promoting the idea that tobacco use has no short- or long-term consequences.

Additionally, significantly fewer teens expressed strong attitudes against smokers in 1996 (48.8%), compared to 1993 (55.9%). And significantly fewer teens perceived that their peers are against smoking in 1996 (64.3%), compared to 1990 (79.4%). Correlated with the decreases in strong attitudes against smoking were increases in the percent of teens who reported that they have best friends who smoke, and in the percent who state that most or all of their peers smoke. Figure 5.5 shows the percentage of teens in each age group who think that most or all of their peers smoke.

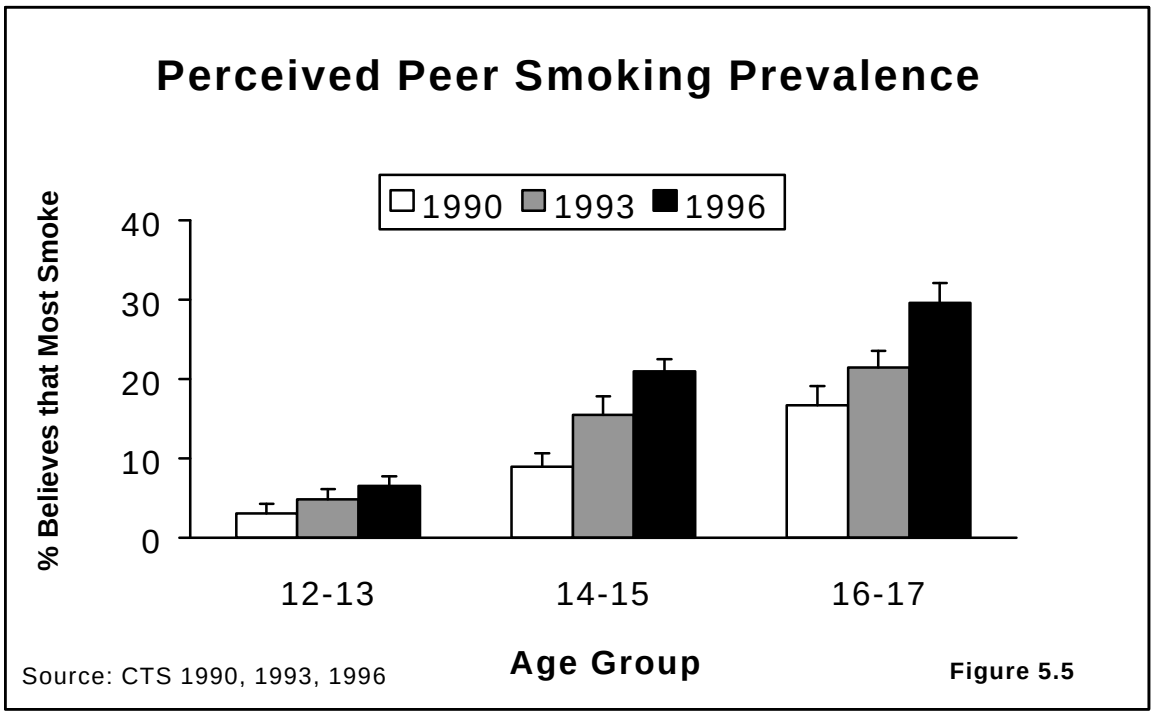


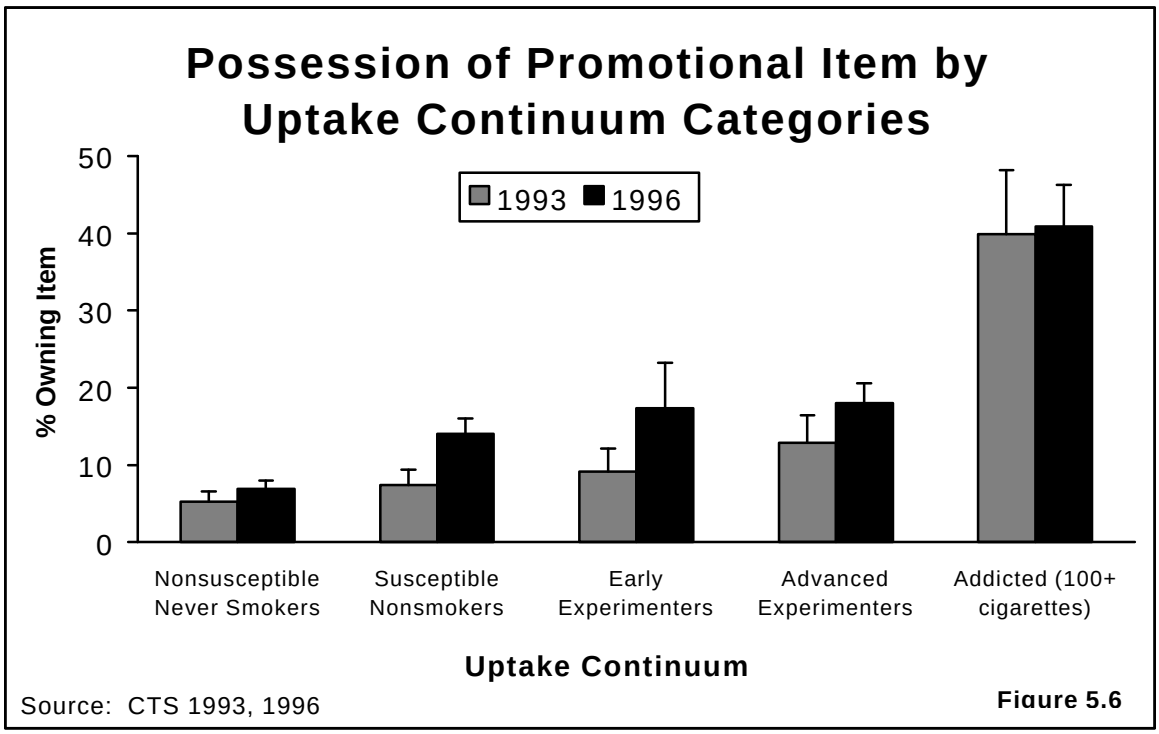
Figure 5.5

Older teens were significantly more likely than younger ones to perceive that most or all of their peers smoke, but in all age groups this perception increased nearly twofold between 1990 and 1996. This finding is important because it mirrors the increased social respectability of smoking. Together, these trends may create a snowball effect: as more teens smoke, the perceptions of respectability increase, and in turn more teens take up smoking. Also contributing to these perceptions of smoking as socially respectable is increased smoking by actors and actresses, important role models for teens, on television and in the movies in the 1990s (Snyder, 1992). Smoking by healthy, attractive, educated

young professionals, who should be positive role models for teens, is much more prevalent on the screen than it is in real life (Hazan & Glantz, 1995).

Chapter 9 describes in detail another important predictor of smoking uptake, receptiveness to tobacco advertising and promotions. In that chapter, moderate and high receptivity is measured by having a favorite cigarette ad or having or being willing to use a tobacco promotional item. Although the percentage of teens having a favorite cigarette advertisement has remained constant over time, the percentage who own a tobacco promotional item has increased considerably from 8.9% in 1993 to 13.6% in 1996.

Figure 5.6 presents ownership of promotional items by status on the Smoking Uptake Continuum in 1993 and 1996 (see Appendix B, Table 6 for demographic analysis).



Susceptible never smokers and *early experimenters* showed the greatest increases in ownership of promotional items between 1993 and 1996. The increases in ownership in these groups are particularly ominous since these adolescents are in the midst of a critical transitional process, deciding whether to continue to smoke and progress up the continuum or give up smoking and thereby lower their risk of becoming a future addicted smoker.

5. Projections for Teen Smoking in 1999

Chapter 3 described the Smoking Uptake Continuum and the results presented in Table 3.1 showed the probability of future smoking for teens in each Continuum level. These results were from a national longitudinal sample of teenagers. From the Robert Wood

Johnson California Teenage Longitudinal Survey of 1993 and 1996, the probability of transition from any level on the Smoking Uptake Continuum to the highest level (*addiction* – report of smoking at least 100 cigarettes) can be estimated for California teens. Using these transition probabilities applied to 12-14 year olds allows projections to be made about the percentage of 15-17 year olds who will become *addicted smokers* three years into the future. Table 5.6 shows the actual and projected percentages of smokers in 1993, 1996 and 1999. The actual data are from the youth portion of the California Tobacco Surveys for each year. Data from 1990 are not shown, because the questions defining the levels of the Uptake Continuum changed between 1990 and 1993.

Table 5.6
Actual and Projected Percentages of Teens (15-17 years)
Who Have Smoked at Least 100 Cigarettes

Year	Actual %	Projected %
1993	9.9	--
1996	12.1	12.8
1999	--	14.2

The actual and projected values for 1996 are close. In 1999, it is projected that 14.2% of teens will report having smoked at least 100 cigarettes, which is an increase by a factor of 17% from 1993. Of course, this projected level of smoking for 1999 may or may not actually occur. Vigorous interventions between now and then may hold teen smoking in check or even reduce it by making teens at lower levels of the Smoking Uptake Continuum less likely to make the transition to higher levels. Alternatively, other societal forces may act to increase the transition probabilities.

6. Summary

By the National Cancer Institute's measure of teen smoking prevalence (any smoking in the last 30 days), teen smoking has increased significantly between 1993 and 1996. This trend signals a reversal in previous progress in reducing or at least halting increases in teen smoking prevalence. Upon closer inspection, the data show that prevalence of smoking in the last 30 days has increased the fastest among some minority teens, one of the California Tobacco Control Program's target groups. Additionally, students with higher perceived school performance showed much higher rates of increase in last 30-day smoking prevalence than lower-achieving youth.

Because of the limitations of the 30-day prevalence measure, status on the Uptake Continuum was also examined. In 1996, teens of all ages were further along the Uptake Continuum than teens in 1993. Therefore, more teens in 1996 were at risk for becoming *addicted smokers*. This framework demonstrates that the recent increases in smoking among teens marks only the beginning of a trend toward even greater teen smoking in the future, which may become evident in the 1999 CTS.

The Uptake Continuum provides analysts and policymakers with an early warning signal. While it is likely that more teens will become *addicted smokers* in the future, based on the increases in higher risk categories in the Uptake Continuum, these teens are not yet addicted. Therefore, the opportunity to intervene and stop the progression toward addiction still exists.

To assess punitive damages of the tobacco industry, the percentage of adolescents becoming *addicted smokers* is a relevant measure. One in four of smokers who report smoking at least 100 cigarettes will die of a smoking-related disease (Pierce & Gilpin, 1996).

Finally, despite encouraging trends in some personal predictors of smoking that should lead to less adolescent smoking, such as better perceived school performance and decreased rebelliousness, changes in environmental predictors, particularly those that increase perceptions that smoking is socially acceptable or "cool," are winning out. These perceptions are being encouraged by the tobacco industry with its promotional items and the entertainment industry with its increased depiction of smoking on television and in the movies. The more that smoking is perceived as a socially acceptable activity, the more kids will take up smoking. By 1999, it is projected that the percentage of 15-17 year olds who will be *addicted smokers* will increase by a factor of 17% from 1996.

CHAPTER 5: REFERENCES

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Chapter 6

QUITTING AND PREDICTORS OF QUITTING

CHAPTER 6: QUITTING AND PREDICTORS OF QUITTING

Introduction

Measures of the Smoking Cessation Process

The 1990 Report of the Surgeon General of the United States noted that smoking cessation is a primary preventive intervention, equally as important as preventing smoking uptake in protecting the public health from the dangers of smoking-related disease (USDHHS, 1990). Not only does cessation directly benefit the health of the former smoker, parents who quit smoking reduce the exposure of their children to secondhand smoke and decrease the likelihood that these children will become smokers themselves (Chassin et al 1996; Jackson & Henriksen, 1997; Distefan et al., forthcoming). Accordingly, increasing the rates at which smokers attempt to quit smoking and ultimately successfully quit is a critical strategy for achieving the California Tobacco Control Program's (TCP) goal of reducing smoking prevalence.

Chapter 3 of this report identified two major predictors of future quitting: smokers' current addiction level and their quitting history. A smoker's expressed intention to quit is only important as an indicator that they have begun the quitting process. It has little relevance to one's ultimate success at quitting if the smoker has not taken some action to either reduce their level of addiction or to maintain a recent quit through the period when many suffer withdrawal symptoms. These three variables—addiction level, quitting history, and intention to quit—define the levels of the Quitting Continuum, the conceptual framework that categorizes smokers and recent former smokers according to the probability that they will be successfully quit in two years time. To be eligible for classification into the Quitting Continuum, smokers must report smoking at least 100 cigarettes in their lifetime (Chapter 3 describes the Quitting Continuum in detail).

It may take up to 10 years from the time that smokers begin the quitting process with an expressed intention to quit until they successfully quit smoking (Pierce, 1990). Therefore, in addition to measuring successful quitting, it is important to describe where smokers are in the process of quitting. By identifying trends in important indicators of cessation, it is possible to make inferences about future quitting behaviors.

The distribution of the population of smokers along this continuum provides an indication of areas of success for the TCP and points to populations that may require extra attention. Section 1 of this chapter describes the distribution of current adult smokers along the Quitting Continuum in 1996. In particular, this section focuses on three indicator categories chosen from this Quitting Continuum: *precontemplators*, current smokers in *advanced preparation* to quit, and recent quitters in *early maintenance*.

Section 2 of this chapter presents data from the 1996 CTS that describes who was trying to quit and how successful each of the population groups was in their quit attempts.

In order to evaluate progress in quitting over time, Section 3 of this chapter describes trends in two of the key variables that describe the Quitting Continuum: addiction level and quitting history.

Section 4 presents the quitting data for adolescent *addicted* smokers because they are also of particular interest to the TCP. While these adolescents report having smoked at least 100 cigarettes in their lifetime, many have not yet reached their stable level of cigarette consumption. That is, their tolerance level for nicotine is still increasing. Given the effect of addiction level on the probability of success, it is important to encourage these smokers to try to quit and to provide assistance to them.

Section 5 summarizes the results of this chapter.

1. Status on the Quitting Continuum

As with the uptake of smoking, quitting smoking is a process that occurs over time. It can take some smokers over 10 years to successfully complete the quitting process. Changes in behaviors that relate to the Quitting Continuum are important indications of smokers' progress toward ultimately successful cessation. The Quitting Continuum is described in detail in Chapter 3. This section examines the distribution among three of the indicator levels of the Quitting Continuum of those smokers who reported smoking any time in the 12 months prior to the 1996 CTS. Appendix B, Table 11 shows the demographic breakdown of the Quitting Continuum for all individuals who smoked in the last year. To be considered a smoker in the last year, someone is either a current smoker at the time of the survey, a current smoker one year before the survey, or former smokers who provided a quit date in the year before the survey.

Precontemplators

Smokers classified as *precontemplators* are moderate to heavy current smokers (they smoke 15 or more cigarettes/day), who have not made a quit attempt in the 12 months prior to the CTS and who stated they had no intention of making a quit attempt in the near future (next 6 months). Previous research indicates that the probability of this group achieving a successful quit within 2 years is approximately 3%. This group represents the proportion of smokers who are not responding to the persuasive messages of the Tobacco Control Program (TCP).

Table 6.1 presents the demographic distribution of *precontemplators*. In 1996, 13.8% of anyone smoking in the last year could be classified as *precontemplators*. This amounted to approximately 765,000 Californians.

Table 6.1 **Percent of Smokers in the Last Year Who Were Precontemplators (California 1996)**		
Demographic Group	**% Men (± CI*)**	**% Women (± CI*)**
Overall	13.8 (± 1.2)	13.8 (± 1.2)
Age		
18-24 year olds	6.3 (±1.8)	6.6 (± 2.2)
25-44 year olds	12.8 (±1.7)	10.6 (±1.5)
45-64 year olds	18.8 (±2.0)	21.5 (±2.8)
65+ year olds	18.5 (±4.6)	17.6 (±4.2)
Race/Ethnicity		
African American	8.2 (±3.8)	6.9 (±2.9)
Asian	12.7 (±4.4)	10.5 (±5.3)
Hispanic	5.5 (±1.7)	5.6 (± 2.0)
Non-Hispanic White	18.3 (±1.7)	17.0 (±1.6)

*CI = 95% Confidence Interval
Source: CTS 1996

Smokers 45 years and older were significantly more likely than those under age 45 to be *precontemplators*. This pattern was most evident among women: 21.5% of women 45-65 years old were *precontemplators*, compared with only about 6.6% of women between ages 18 and 24.

Among men, Hispanic smokers were significantly less likely than were smokers of the other racial/ethnic groups, with the exception of African American smokers, to be *precontemplators*. Among women, Hispanic and African American smokers were significantly less likely than were Non-Hispanic White smokers to be *precontemplators*. The sporadic smoking patterns of Hispanic smokers (Palinkas et al., 1993) could account for the differences between Hispanics and other demographic groups.

Advanced Preparation

Smokers in *advanced preparation* provide a useful indicator of the proportion of smokers who are nearing the final stages of the quitting process. They may have arrived in this category as a result of TCP efforts or on their own, having started the process several years earlier. Smokers in *advanced preparation* consume less than 15 cigarettes a day and have made a 7-day quit attempt in the past year, or have a lifetime quit of longer than one year. The probability that this group will be quit successfully in 2 years is 20% (Chapter 3).

Among those Californians who smoked in the last year, 26.9% or approximately 1,508,000 Californians, were in *advanced preparation* in 1996. Table 6.2 shows the demographic distribution of these smokers:

Table 6.2
Percent of Smokers in the Last Year
Who Were in Advanced Preparation, California 1996

Demographic Group	% Men (± CI*)	% Women (± CI*)
Overall	26.6 (± 1.6)	27.2 (±1.4)
Age		
18-24 year olds	45.6 (±4.7)	48.0 (±5.5)
25-44 year olds	27.8 (±2.3)	28.7 (±2.2)
45-64 year olds	18.8 (±2.7)	20.1 (±3.2)
65+ year olds	8.2 (±3.2)	14.2 (±4.5)
Race/Ethnicity		
African American	35.6 (±7.9)	30.6 (±5.7)
Asian	29.7 (±5.9)	44.1 (±11.7)
Hispanic	38.9 (±4.6)	39.5 (±6.6)
Non-Hispanic White	19.3 (±1.9)	22.1 (±1.5)

*CI = 95% Confidence Interval
Source: CTS 1996

As expected, there was a significant age trend among smokers in the *advanced preparation* stage of the Quitting Continuum. Table 6.2 demonstrates a significant decrease in the proportion of smokers in *advanced preparation* with each increasing age group. Nearly half of 18-24 year olds of each gender had achieved *advanced preparation* at the time of the 1996 CTS, compared to approximately 28% of 25-44 year olds, approximately 20% of 45-64 year olds, and 8 to 14% of current smokers over age 65.

Among smokers in *advanced preparation*, there were potentially important differences across racial/ethnic groups, as well. Minorities were significantly more likely than were Non-Hispanic Whites to be in *advanced preparation*, but there were insignificant differences among the minority racial/ethnic groups.

Early Maintenance

The proportion of smokers in the last year in *early maintenance* of successful quits is an additional indicator of TCP success. Like the others, these smokers were all smoking within 12 months of the survey, but during the 12 months prior to the survey they all quit smoking and had maintained that quit attempt for at least 3 months. Three-fourths of this group are expected to be still quit in 2 years. Table 6.3 provides the demographic profile of this group:

Table 6.3
Percent of Smokers in the Last Year
Who Were in Early Maintenance, California 1996

Demographic Group	% Men (±CI*)	% Women (± CI*)
Overall	8.9 (±1.3)	8.7 (±1.3)
Age		
18-24 year olds	8.4 (±2.3)	6.9 (±2.0)
25-44 year olds	8.5 (±1.9)	10.5 (±1.8)
45-64 year olds	10.4 (±3.0)	7.8 (±2.7)
65+ year olds	6.9 (±2.7)	5.1 (±2.2)
Race/Ethnicity		
African American	2.7 (±1.8)	4.6 (±2.8)
Asian	10.3 (±6.3)	7.5 (±4.7)
Hispanic	9.2 (±3.2)	11.5 (±4.2)
Non-Hispanic White	9.3 (±1.4)	9.0 (±1.4)

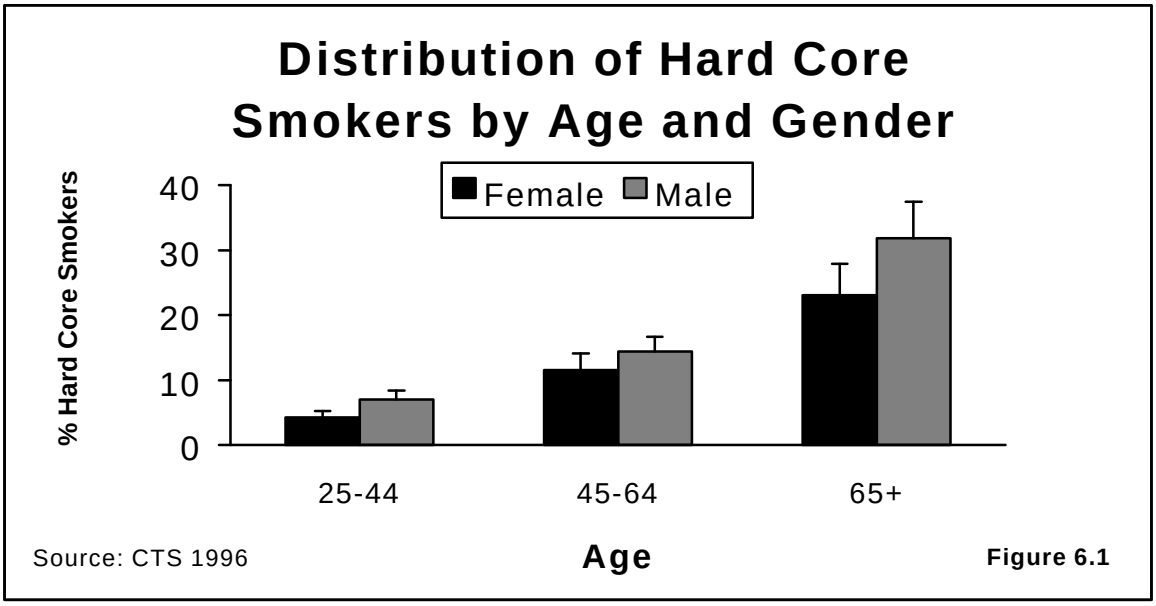
*CI = 95% Confidence Interval
Source: CTS 1996

Overall, 8.8% of adults who smoked in the last year prior to the CTS could be classified in the *early maintenance* category at the time of the survey. This accounted for approximately 493,000 Californians. Unlike the other indicator categories, there was not a significant age trend in this group. Nor was there a significant difference between any of the racial/ethnic groups.

Hard Core Smokers

There is small group of current smokers who can be considered *hard core* smokers. These individuals are not easily categorized by the levels of the Quitting Continuum. Many of these *hard core* smokers appear similar to those in the *precontemplator* group; in fact 64% of *hard core* smokers could also be categorized on the Quitting Continuum as *precontemplators*. They are differentiated from *precontemplators*, however, because they not only have no intention to quit in the near future and no recent quit attempt, but they also actively state that they will never attempt to quit smoking.

Overall, 1.9% of the California population over the age of 25 years, or 9.7% of smokers over age 25 (approximately 399,000 Californians) could be classified into this category in 1996. Smokers 25 years of age and younger were excluded from this category because many are still engaged in the process of smoking uptake and therefore may not have solidified their intentions regarding quitting smoking. Figure 6.1 illustrates the age and gender distribution of these *hard core* smokers.



Unlike *precontemplators*, there are some *light smokers* (either smoke <15 cigarettes/day and/or smoke occasionally) in the *hard core* group; 30.7% of *hard core* smokers were also *light smokers*. However, unlike other *light smokers*, these *hard core/light smokers* cannot be considered in *advanced preparation* to quit or in *early action* because of their lack of a strong quitting history.

Some *hard core* smokers may have made unsuccessful quit attempts in the more distant past and remain discouraged about the prospect of quitting. Others may simply enjoy smoking and be unwilling to eliminate this dangerous pleasure from their lives.

The above figure shows that across all age groups, men were more likely than were women to be *hard core* smokers. Also, with each increasing age group, the percentage of smokers who could be classified as *hard core* was significantly greater. Only 4% of women smokers and 7% of men smokers 25-44 years old were *hard core* smokers. In comparison, the *hard core* represented 12% of women and 14% of men who were current smokers between the ages of 45 and 64 years old, and 23% of women and nearly one-third of men who were current smokers over 65 years of age.

Table 6.4 gives the distribution of hard core smokers according to their smoking habit. Not surprisingly, hard core smokers are more represented among heavy smokers.

Table 6.4 Distribution of Hard Core Smokers According to Smoking Habit, California 1996		
Type of Smoker	**% Men (± CI*)**	**% Women (± CI*)**
Occasional	4.3 (±1.5)	2.5 (±1.1)
Daily		
< 15 cigarettes/day	7.8 (±2.7)	6.0 (±1.5)
15-24 cigarettes/day	11.2 (±2.0)	8.8 (±1.9)
25-34 cigarettes/day	19.1 (±5.0)	18.1 (±5.3)
35+ cigarettes/day	26.8 (±5.9)	30.6 (±9.8)

*CI = 95% Confidence Interval
Source: CTS 1996

Only 4.3% of men and 2.5% of women who were *occasional smokers* were also *hard core* smokers. As might be expected, a smaller percentage of current smokers who were occasional smokers or who smoked less than 15 cigarettes/day were also *hard core* smokers, compared to daily smokers who smoked 15 or more cigarettes/day. Among daily smokers who smoked fewer than 15 cigarettes/day 7.8% of men and 6.0% of women were also *hard core* smokers. There were significantly more daily smokers who smoked between 15 and 24 cigarettes/day and who were *hard core* smokers: 11.2% of men and 8.8% of women. Again, there were significantly more daily smokers who smoked 25+ cigarettes/day and who were also *hard core* smokers.

2. Profile of Who Attempted to Quit Smoking and Who Succeeded

In order to evaluate the reach and the impact of the California Tobacco Control Program (TCP) cessation promotion and support programs, it is critical to understand who has made quit attempts and who has been successful. Table 6.5 shows that overall, more than half of adults who reported smoking in the last year prior to the 1996 CTS had made a quit attempt lasting at least one day during that year (see Appendix B, Table 10 for a detailed description of demographic analysis).

Table 6.5
Percent of Smokers in the Last Year Who Made a Quit Attempt of One or More Days, California 1996

Demographic Group	% Men (± CI*)	% Women (± CI*)
Overall	**65.2** (±1.5)	**63.0** (±1.7)
Age		
18-24 year olds	81.5 (±3.3)	77.6 (±4.2)
25-44 year olds	65.0 (±2.3)	64.7 (±2.7)
45-64 year olds	57.6 (±2.6)	52.5 (±2.7)
65+ year olds	60.5 (±7.1)	64.4 (±6.1)
Race/Ethnicity		
African American	66.0 (±7.3)	68.8 (±7.1)
Asian	66.3 (±5.4)	62.0 (±10.7)
Hispanic	75.5 (±2.8)	76.2 (±3.7)
Non-Hispanic White	60.3 (±2.0)	58.9 (±1.9)

*CI = 95% Confidence Interval
Source: CTS 1996

The above table shows that while the differences between men and women were small, there were interesting age differences. Younger adult smokers were significantly more likely to make a quit attempt than were older adults. Men in the 18-24 year old age group were significantly more likely than were men 25 years of age and older to report a quit attempt in the past year. Similarly, women in the 18-24 year old age group were more likely than women 25 years of age and older to report a quit attempt. Women in the 45-64 year old age group were significantly less likely than were women in the other age groups to report a quit attempt in the past year.

Among women, Non-Hispanic White smokers were significantly less likely than were African American, Asian or Hispanic smokers to report any quit attempt.

Successful Quit Attempts

An early measure of successful quitting is the percentage of all quitters that are able to maintain a quit attempt for at least 90 days. This measure differs from the Quitting Continuum level *early maintenance* because it takes into account the proportion of smokers who achieved 90+ day abstinence from cigarettes, out of all who tried to quit smoking, rather than out of all smokers in the last year.

In order to accurately determine the percent of smokers who attempt a quit and go on to achieve early success (quits of over 90 days), a survival model was employed, using data from the 1996 CTS. The rates of successful quitting presented in Table 6.6 reflect respondents' most recent quit attempts, among those who also reported smoking in the last year. Overall in 1996, 18.2% of smokers who had made *any quit attempt* were still quit after 90 days.

Table 6.6
Percent of Most Recent Quit Attempts That Were Successful,* California 1996

Demographic Group	% Men (± CI**)	% Women (± CI**)
Overall	**15.5 (±1.8)**	**21.9 (±2.5)**
Age		
18-24 year olds	14.6 (±4.6)	23.5 (±8.0)
25-44 year olds	13.2 (±2.2)	21.3 (±3.0)
45-64 year olds	18.3 (±3.4)	22.0 (±4.8)
65+ year olds	37.8 (±12.6)	22.3 (±8.7)
Race/Ethnicity		
African American	10.3 (±6.0)	13.4 (±6.0)
Asian	10.2 (±5.9)	27.8 (±18.8)
Hispanic	15.3 (±4.0)	19.0 (±7.0)
Non-Hispanic White	17.0 (±2.0)	25.0 (±2.7)

*Success is defined as abstinence for at least 90 days. These figures are not adjusted for the smokers' level of addiction to cigarettes.
**CI = 95% Confidence Interval
Source: CTS 1996

As Table 6.6 shows, overall, women smokers were more likely than men smokers to successfully quit. This finding was somewhat surprising since other studies have previously shown the no difference in quitting success between men and women (Gilpin et al., 1997; Garvey et al., 1992).

When analyzed by age, this gender difference was significant among 25-44 year old recent quitters, but not across the other age groups. Across racial/ethnic groups, only the Non-Hispanic White recent quitters showed a statistically significant gender effect: 25% of women achieved early success in quitting, compared to 17% of men. Among women, Non-Hispanic White recent quitters were significantly more likely to achieve early success (25%), compared to African American women (13.4%), but other differences were not significant. Among men, there were no significant differences in quitting success by race/ethnicity.

3. Trends in Quitting Continuum Indicators

As explained above, the two most important variables that define the Quitting Continuum are addiction levels and quitting history. Intentions to quit make little difference without progress in these two variables. Therefore, this section reports changes in these variables between 1990 and 1996.

Trends in Addiction Level

Table 6.7 provides strong evidence of progress in reducing the addiction level of smokers. In 1990, 44% of all current smokers were *light smokers* (daily and occasional smokers who averaged less than 15 cigarettes/day). By 1996, this percentage had increased by a factor of 27%, to 55%. As was shown in Chapter 2, Table 2.9, the increase in the percent of *light smokers* is partly explained by the increase in *occasional smokers* (see Appendix B, Table 8 for detailed demographic analyses for all smokers, not just those who have reached a lifetime level of at least 100 cigarettes).

Table 6.7
Trends in Light Smoking (<15 cigarettes/day), California 1990-1996

Demographic Group	% Current Smokers, 1990 (±CI*)	% Current Smokers, 1996 (± CI*)	Factor Increase 1990-1996	p-value of Change
Overall	**43.6** (±1.7)	**55.1** (±1.4)	**26.4**	**<0.001**
Men	39.8 (±2.0)	53.1 (±1.9)	33.4	<0.001
Women	48.3 (±2.3)	57.8 (±1.8)	19.7	<0.001
Age				
18-24 year olds	59.6 (±4.3)	75.4 (±3.2)	26.5	<0.001
25-44 year olds	44.7 (±2.0)	58.2 (±1.8)	30.2	<0.001
45-64 year olds	33.8 (±3.2)	41.5 (±2.6)	22.8	<0.001
65+ year olds	36.6 (±4.1)	40.6 (±4.3)	10.9	0.052
Race/Ethnicity				
African American	64.7 (±6.3)	69.6 (±4.0)	7.6	0.060
Asian	59.9 (±10.3)	67.2 (±6.4)	12.2	0.059
Hispanic	72.9 (±10.3)	80.7 (±2.8)	10.7	<0.001
Non-Hispanic White	32.0 (±1.5)	42.7 (±1.8)	33.4	<0.001

*CI = 95% Confidence Interval
Source: CTS 1990, 1996

Overall, significantly more women were light smokers than men. But the relative increase in light smoking behavior was significantly greater among men than among women. In 1990, approximately 40% of male current smokers were light smokers, compared to 53% in 1996, an increase by a factor of 34%. In comparison, between 1990 and 1996, the percent of female current smokers who were light smokers increased by a factor of 20%, from 48% to 58%.

In each year, the majority of young adult smokers (18-24 year olds) were light smokers. Between 1990 and 1996, the percent of 18-24 year old light smokers increased significantly from 59.6% to 75.4%, an increase by a factor of 26.5%. Among 25-44 year olds, the percent of current smokers in this category increased significantly by a factor of 30.2%: from 44.7% in 1990 to 58.2% in 1996. Among 45-64 year old current smokers, the increase in light smoking was also significant: the percentage of light smokers increased from 33.8% in 1990 to 41.5% in 1996, a factor of 22.8%. Among the oldest

adult smokers (65+ years of age), the percentage of light smokers increased by only a factor of 10.9%, but the increase was still significant.

While minorities were significantly more likely than Non-Hispanic White smokers to be light smokers in both 1990 and 1996, it was the Non-Hispanic Whites who showed the most movement to light smoking between 1990 and 1996.

Trends in Quitting History: 7+ Day Quit Attempts

Table 6.8 shows significant increases between 1990 and 1996 in the percent of smokers who made quit attempts that lasted at least 7 days. Overall, 41.4% of smokers reported they made quit attempts of 7 or more days in 1990; by 1996, 49.9% reported such attempts. This represents a statistically significant increase by a factor of 20.5%.

Table 6.8
Percent of Smokers in the Last Year Who Made a Quit Attempt Lasting 7 or More Days, California 1990-1996

Demographic Group	% Who Made 7+ Day Quit Attempt 1990 (CI*)	% Who Made 7+ Day Quit Attempt 1996 (CI*)	Factor Increase 1990-1996	P-value of Change
Overall	**41.4** (±1.4)	**49.9** (±1.3)	**20.5**	**<0.001**
Men	42.1 (±1.6)	50.1 (±1.9)	19.0	<0.001
Women	40.5 (±1.8)	49.5 (±1.6)	22.2	<0.001
Age				
18-24 year olds	43.4 (±4.1)	67.6 (±3.3)	55.8	<0.001
25-44 year olds	42.2 (±2.5)	48.8 (±1.9)	15.6	<0.001
45-64 year olds	38.7 (±2.8)	42.0 (±2.5)	8.5	0.021
65+ year olds	41.7 (±5.7)	51.3 (±5.6)	23.0	0.005
Race/Ethnicity				
African American	47.7 (±5.0)	46.4 (±5.4)	-2.7	0.182
Asian	41.2 (±8.4)	52.9 (±5.0)	28.4	0.005
Hispanic	51.6 (±4.3)	62.8 (±3.0)	21.7	<0.001
Non-Hispanic White	37.5 (±1.3)	45.3 (±1.7)	20.8	<0.001

*CI = 95% Confidence Interval
Source: CTS 1990, 1996

In each survey, men and women were approximately equally likely to make a quit attempt of 7 or more days. In 1990, there were no significant differences between age groups, but in 1996 young adult smokers (18-24 year olds) were significantly more likely than older adults to make quit attempts of at least 7 days. These 18-24 year old smokers also showed the greatest factor increase (55.8%) in 7+ day quit attempts.

In each year, Hispanic smokers were the most likely to attempt to quit smoking for at least 7 days. Each racial/ethnic group, except African American smokers, showed

significant increases by over a factor of 20% in 7+ day quit attempts between 1990 and 1996.

4. Quitting Among Adolescents

This section discusses reported quitting behavior in California adolescents who were classified as addicted to smoking (smoked at least 100 cigarettes in their lifetime). The demographic data for adolescents who were classified as *addicted* is presented in Chapter 5. *Addiction* was more likely among 15-17 year olds than younger adolescents. Also, Non-Hispanic White 15-17 year olds were more likely than 15-17 year olds in other racial/ethnic groups to have reached an *addicted* level of smoking.

Over three-quarters of these *addicted* adolescents (77%) reported making a quit attempt of at least one day in the past year. The great majority of teens in each population sub-group reported trying to quit, with the lowest quitting rate observed among Hispanic adolescent smokers (65%) although this rate was not a significant different from the quit rate observed in other racial/ethnic groups. Of those adolescents who made a quit attempt, 44% had relapsed within the first week and a total of 80% had relapsed within the first month after the quit attempt.

In a separate analysis of the Teen Attitudes and Practices Survey (TAPS), a national longitudinal survey (Zhu et al., submitted) identified five important variables that are associated with increased quitting in adolescent smokers. As in the adults, the major predictors of quitting were measures of addiction level (daily vs. nondaily smoking) and recent quitting history. In addition, whether their mother smoked and whether they experienced depressive symptoms were risk factors for continued smoking. Data from the 1996 California Tobacco Survey (CTS) showed that many adolescent smokers have more favorable quitting profiles than do most adult smokers, based on their addiction levels and quitting history as indicators of readiness to quit.

The 1996 CTS showed that 54% of the addicted adolescent smokers were nondaily smokers, compared to 30.9% of adults. Thus, a significant portion of California's teen smokers has a low addiction level, which is a predictor of future quitting success.

Many adolescent *addicted* smokers in California also have a strong history of quit attempts. Over 40% reported being off cigarettes for more than 2 weeks in the past year, a significantly higher proportion than the 23% of adults with such quitting histories.

Parental smoking was another major predictor of successful quitting in the national TAPS data. In the 1996 CTS, over half of the adolescent *addicted* smokers had parents who were smokers. Thus, if the effect of parent behavior change can be confirmed, then these data would strongly suggest that one of the best ways to help adolescents to quit would be to encourage and assist their parents to quit successfully.

Finally, the TAPS longitudinal data showed that those adolescent smokers who reported depressive symptoms were much less likely to quit successfully. Previous research has

suggested that depressive symptoms may develop following addiction (Patten et al., 1997), although there is also research to suggest that adolescents who are more depressed are more likely to take up smoking. In the 1996 CTS, one-third of all adolescent smokers reported significant depressive symptoms, suggesting that it may be important to address adolescent depression in any program designed to encourage adolescent smoking cessation.

5. Summary

Status on the Quitting Continuum was used as a measure of the success of the California Tobacco Control Program (TCP) initiatives to support smoking cessation. In 1996, approximately 14% of smokers in the last year could be classified as *precontemplators*, the group least likely to successfully quit smoking in the next 2 years. Men and women were approximately equally likely to be in this group. Older smokers and Non-Hispanic Whites were most likely to be at this level of the Quitting Continuum. Approximately 10% of current smokers over the age of 25 years could be classified as *hard core* smokers, who actively stated that they would never attempt to quit smoking. Not surprisingly, older smokers and those who smoke 25 or more cigarettes/day were significantly more likely than younger smokers or those who smoke less to be classified as *hard core*.

In 1996, approximately 27% of smokers in the last year were in the stage of *advanced preparation* toward quitting. Previous research has shown that there is a 20% chance these individuals will be among successful quitters in 2 years. Young adults and minorities were most likely to be at this stage of the Quitting Continuum.

Only about 9% of smokers in the last year could be classified in *early maintenance* (quit for less than 3 months), where they would have a 75% chance of being successfully quit in 2 years. These recent-former smokers were more likely to be under 65 years of age and Asian, Hispanic, or Non-Hispanic White.

Looking at trends in key variables of the Quitting Continuum provided evidence of significant success of the TCP. Addiction levels fell between 1990 and 1996: in 1990, 44% of smokers smoked fewer than 15 cigarettes/day; by 1996 this proportion had increased by a factor of 26% to 55%. Quitting histories improved between 1990 and 1996, as well. The percent of smokers in the last year who made quit attempts lasting at least 7 days increased by approximately 20% overall. Smokers between the ages of 18 and 24 years old were most likely to make these attempts, but smokers 65 years of age and older experienced the greatest increase in the proportion who made 7+ day quit attempts. While every other demographic subgroup showed significant increases in quit attempts, African Americans did not.

In 1996, over 50% of smokers in the last year made <u>any</u> type of quit attempt. There were no significant differences between the percent of men and women who made any quit attempt, across each age or demographic group. As with other cessation indicators,

younger smokers were more likely than older smokers to report a quit attempt, and minorities were more likely than Non-Hispanic Whites to make any quit attempt.

The percent of most recent quit attempts that were successful ($\geq$ 90 days) was calculated using a survival model. This actuarial method showed that only 15-20% of most recent quit attempts could be classified as successful. Women were significantly more likely than were men to quit successfully.

Finally, this chapter discussed quitting among adolescents. It explained that over three-quarters of *addicted* teens ($\geq$100 cigarettes in their lifetime) attempted to quit in the year prior to the 1996 CTS. Over 40% of these teens who attempted to quit had relapsed within a week, and 80% relapsed within a month. However, a substantial proportion of California's adolescent smokers are nondaily smokers, were developing a history of quit attempts, and indicated intentions not to smoke in the future, suggesting a promising profile for future quitting success.

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Chapter 7

PROMOTING SMOKING CESSATION

CHAPTER 7: PROMOTING SMOKING CESSATION

Introduction

As Chapter 6 explained, smoking cessation is as important to the overall goal of eliminating tobacco-related disease as is the prevention of smoking uptake. Accordingly, it is a priority of the California Tobacco Control Program (TCP) to promote or encourage smokers to attempt to quit smoking, and to eventually achieve successful cessation.

Two strategies are central to this cessation promotion effort. The first strategy involves creating circumstances that increase smokers' motivation to quit. The second involves providing assistance to support those who try to quit. As for all analyses of quitting in this report, only smokers who have smoked at least 100 cigarettes are considered.

Section 1 of this chapter will discuss two of the primary motivators of quitting behavior among smokers: environmental restrictions on smoking among adults and parental norms among adolescent smokers. Section 2 of this chapter will examine a third motivator: physician's advice to quit smoking.

Section 3 of this chapter will describe and evaluate programs aimed at assisting smokers to successfully quit. It will examine the use of nicotine replacement treatment, as well as counseling and self-help programs.

Section 4 of this chapter will examine the California Smokers' Helpline, which is funded by the TCP, and designed to provide both motivation and assistance to smokers to quit smoking.

Section 5 summarizes the results presented in this chapter.

1. The Effect of Home and Work Smoking Bans on Quitting Behavior

By design, smoking restrictions in the home or workplace complicate the act of lighting up a cigarette, often requiring the smoker to defer their smoking urge or interrupt family or work activities to smoke. It therefore stands to reason that such bans not only protect nonsmokers from secondhand smoke, but also may create an environment conducive to quitting smoking simply by making smoking inconvenient for the smoker. This section explores the association between smoking restrictions and quitting behavior.

Workplace Smoking Restrictions and Quitting Behavior

As explained in Chapter 4 of this report, California Assembly Bill 13 (AB-13) took effect in 1995, making all indoor workplaces in the state smokefree.[1] Figure 7.1 presents the percent of current smokers with important quitting behavior indicators, comparing smokers who work in smokefree workplaces to those without workplace bans, many of whom do not work outside their home or work outdoors.

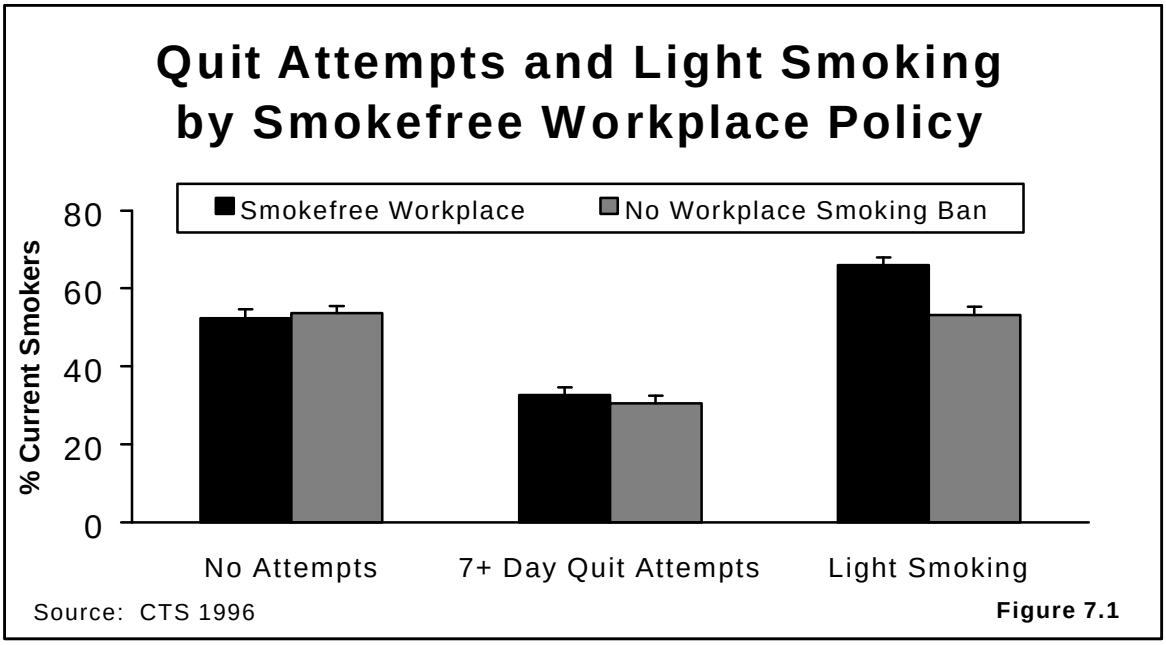


Figure 7.1

Figure 7.1 shows that despite the fact that workplace smoking bans make smoking during work hours much less convenient for smokers, working in a smokefree environment is not associated with greater rates of quitting behavior. Approximately 52% of smokers who worked in smokefree workplaces reported making no quit attempt in the year prior to the 1996 CTS. In comparison, 54% of Californians who reported that they were not subject to any workplace smoking restrictions reported making no quit attempts in the previous year. About one third of smokers in smokefree workplaces reported making quit attempts of 7 or more days. Only slightly fewer (31%) smokers without such restrictions made 7+ day quit attempts.

Smokers who work in a smokefree workplace are significantly more likely to be light smokers.

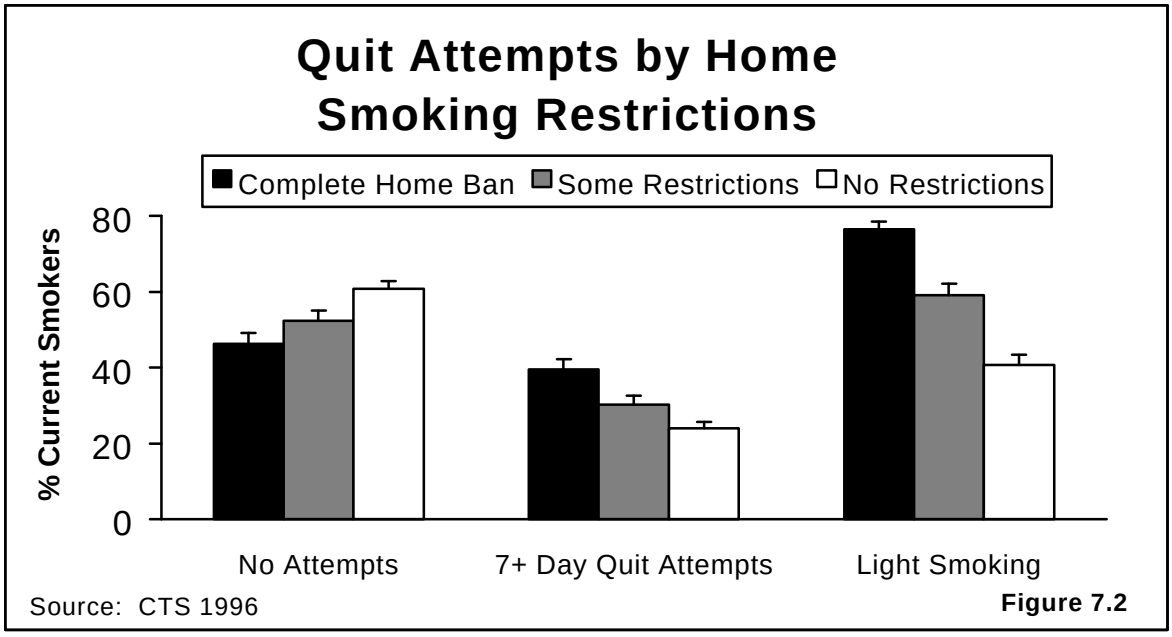
Although workplace smoking policies appear to have minimal impact on the percent of smokers who make quit attempts, complete smoking bans significantly increase the probability that a smoker will be a light smoker (<15 cigarettes per day) or occasional smoker. Figure 7.1 shows that two-thirds of smokers who work in a smokefree workplace are

[1] With the exception of bars, taverns, and game rooms (i.e., casinos), which became smokefree on January 1, 1998.

light or occasional smokers, compared to 53% of smokers who are not subject to workplace smoking bans.

Home Smoking Restrictions and Quitting Behavior

In addition to making smoking inconvenient for the smoker, home smoking restrictions may provide added impetus for smokers to engage in quitting behavior. Because they are voluntary, home smoking restrictions reflect self-imposed or family pressure to curtail or quit smoking, rather than simply compliance to state law. Figure 7.2 shows a significant dose effect for home bans; having no home smoking restrictions is associated with the least quitting activity among current smokers.



Source: CTS 1996

Figure 7.2

Among smokers with no home restrictions, 61% made no quit attempt in the 12 months prior to the California Tobacco Survey (CTS). In comparison, 52% of smokers with partial home ban made no quit attempts, and 46% of those with complete bans made no quit attempts; each of these differences was statistically significant.

Smokers with complete home bans on smoking are significantly more likely to attempt to quit smoking than those without home bans.

In addition, significantly more smokers with home restrictions made quit attempts of at least 7 days during the 12 months prior to the CTS. Among smokers with no home restrictions, only 24% reported making 7+ day quit attempts in the previous year. In comparison, 30% of those with partial home bans and 40% of those with smokefree homes made 7+ day quit attempts in the previous year. Again, each of these differences was statistically significant.

As with the work bans, the most obvious effect of a home ban on smoking was in the percent of smokers who could be classified as light or occasional smokers. Among smokers with no home smoking restrictions, 41% were light or occasional smokers.

Significantly more smokers (60%) with some smoking restrictions in the home were light or occasional smokers. And 77% of smokers with complete home bans were light or occasional smokers, a significantly greater percentage than those with partial restrictions.

Workplace and Home Smoking Restrictions and the Quitting Continuum

As might be expected from the associations with key indicators of quitting behavior described above, Figure 7.3 shows a modest relationship between having a smokefree workplace and position on the Quitting Continuum. Figure 7.4 shows that the stronger effect comes from having a smokefree home.

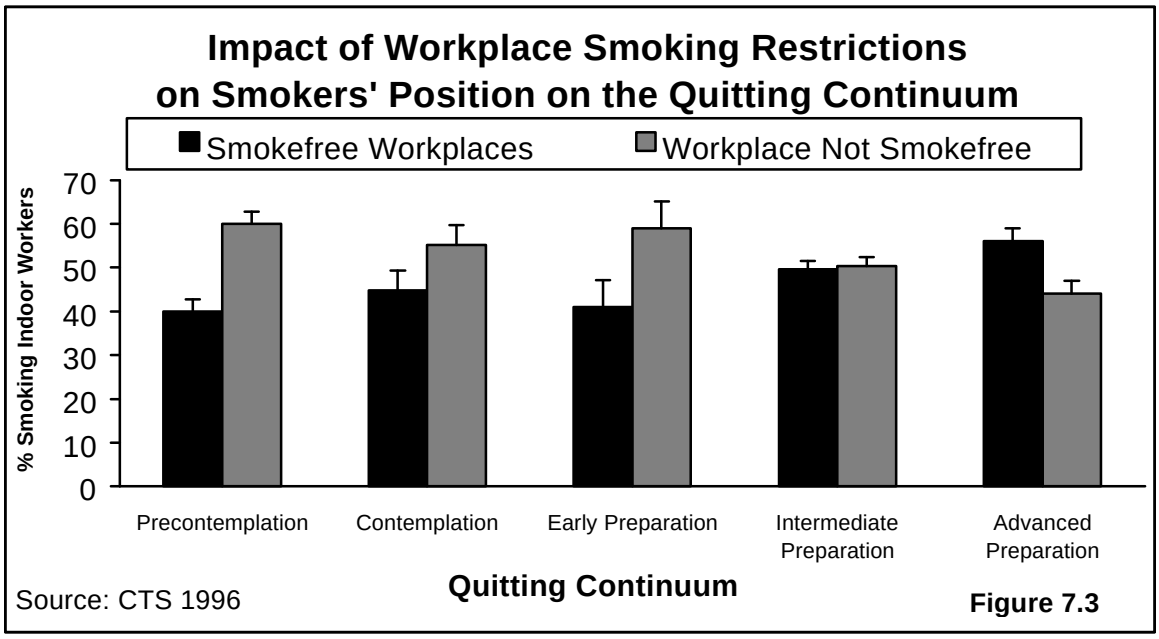


Figure 7.3

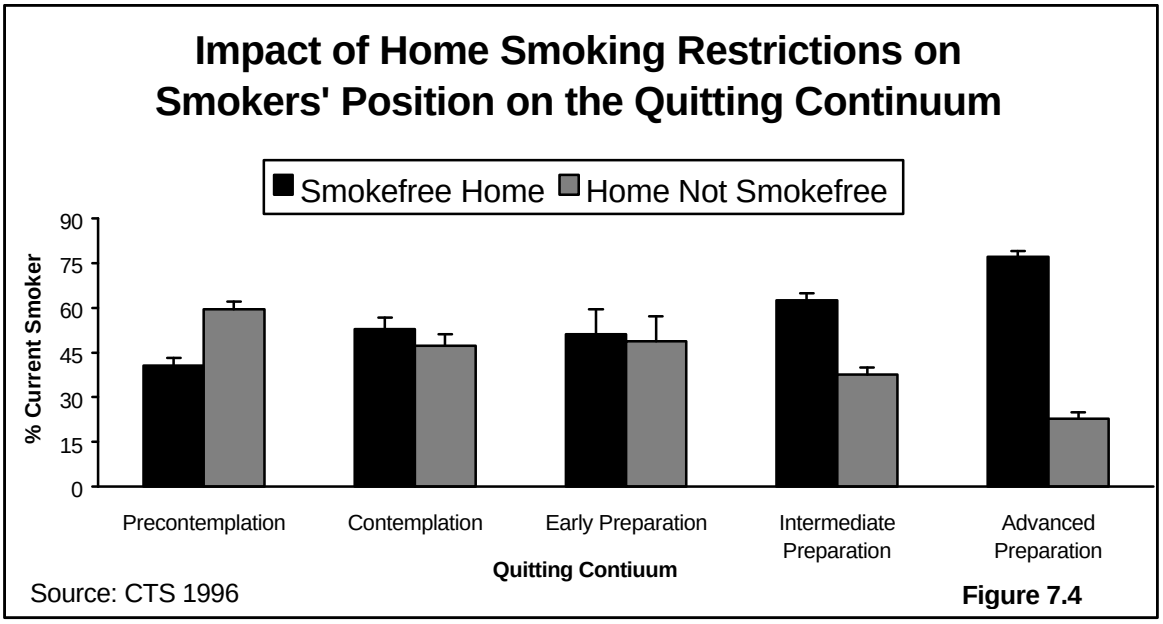


Figure 7.4

These findings suggest that home bans on smoking are associated with greater progress toward quitting smoking than are workplace bans. These findings, however, do not suggest that workplace bans are not effective in encouraging quitting behavior. In fact, earlier research showed that workplace smoking policies were significantly associated with lower smoking prevalence (Pierce et al., 1994). Rather, these results suggest that of the two environmental stimuli that encourage quitting behavior among adult current smokers, home bans are more powerful.

Environmental Influences on Adolescent Quitting Behavior

Because nearly all smoking uptake occurs among adolescents, most tobacco control efforts focus on preventing teens from starting to smoke. However, it is also critical not to write off teens who have already become smokers, but to promote quitting among these teens. One important reason to focus on motivating and assisting adolescents to successfully quit smoking is that typically teens' addiction levels are still relatively low; as a result, their habits and biological withdrawal symptoms may be less powerful barriers to success. Another reason to promote quitting among teen smokers is that, as described in Chapter 6, many already have strong quitting histories and a desire to quit. Therefore, promoting quitting could be particularly effective in this receptive population.

One of the most important environmental influences on teens is the values, or norms, about smoking that their parents express. Adolescents who are exposed to strong parental norms against smoking are significantly more likely to engage in quitting behavior than those who do not experience these norms. The 1996 Robert Wood Johnson (RWJ) Longitudinal Survey of Adolescents in California asked teens the following question to ascertain the extent of parental norms against smoking:

If you lit up a cigarette tomorrow in front of your parents, how do you think they would react?	• *Tell you to stop, and would be very upset.* • *Tell you to stop, but not be very upset.* • *Not tell you to stop, but would disapprove.* • *Have no reaction.*

Figure 7.5 shows that teens who say their parents would tell them to stop and be very upset were significantly more likely to be at advanced levels of the Quitting Continuum than teens whose parents would have more tempered reactions. Nineteen percent of teens whose parents would not be very upset were *precontemplators*, compared to 7% of teens who said their parents would be very upset if they lit up. Similarly, significantly more teens (34%) who said their parents would not be very upset were *contemplators*, compared to the 15% whose parents would be very upset who were *contemplators*. There was no significant difference between the percent of each group who were at the level of *early preparation*. Significantly more teens who reported that their parents would be very upset if they lit up could be classified at the levels of *intermediate* (32.5%)

and *advanced preparation* (21.2%), compared to those whose parents would not be very upset: 17.9% and 7.9%, respectively.

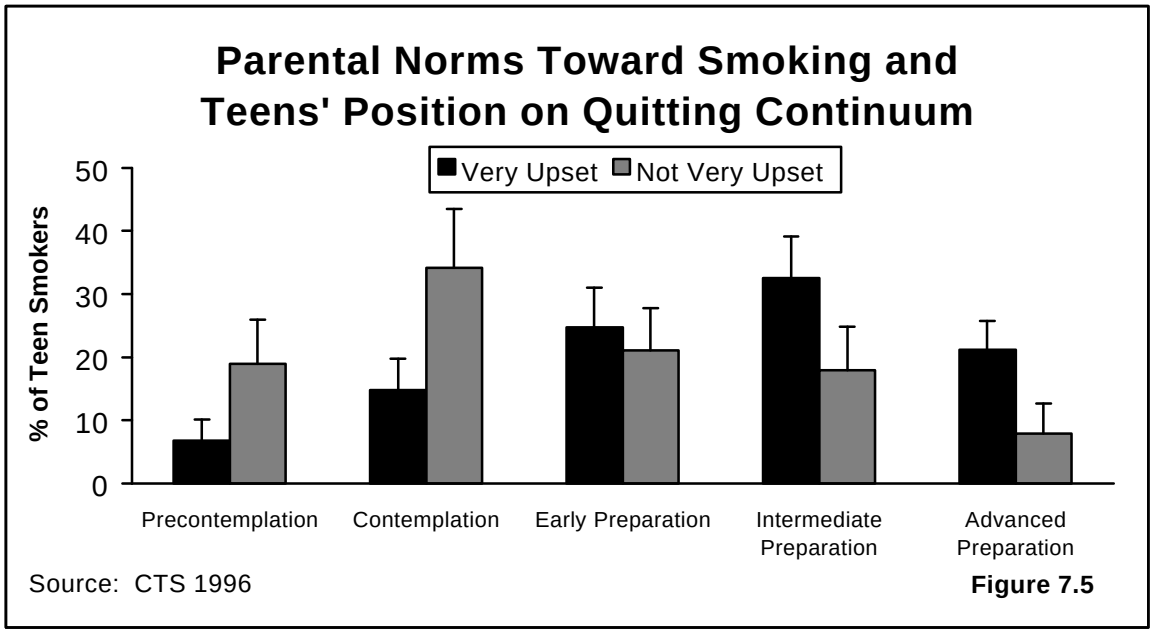


Figure 7.5

Unlike adult smokers, the imposition of a home ban on smoking does not significantly influence quitting behavior among teens. It is likely, however, that parental norms and home smoking bans are highly associated, so that the combination of these two factors is not much different than the strength of parental norms measured by itself.

2. Physician Advice and Referral

Physician advice has considerable potential both to encourage a quit attempt and to influence the use of assistance in that quit attempt (Fiori et al., 1996). Approximately 70% of smokers visit their physician in any given year (Gritz, 1988) and a survey of physicians suggests that they are interested in assisting patients to quit (Wechsler et al., 1983).

Advice to Quit Smoking

One-half of smokers who visited a physician in the past year reported doctor's advice to quit in 1996.

Among smokers in California, rates of visitation to a physician remained constant at approximately 70% between 1990 and 1996. In both 1992 and 1996, half of all smokers who reported visiting a doctor in the past year recalled receiving advice from their physician to quit smoking. This advice rate was significantly higher for smokers who rated their health as fair or poor (62%) compared to those who felt that they were in good or excellent health (48%).

Recall of advice to quit increased significantly with age. Less than 40% of smokers under the age of 25 years who visited a doctor in the past year recalled receiving such advice compared to approximately 60% of all smokers over the age of 45 years.

Less than one-third of those who were advised to quit smoking actually made a quit attempt.

Only 30% of smokers who were advised by their doctor to quit smoking said that they tried to quit as a result of their doctor's advice. This low percentage may be explained by the fact that, for the majority of smokers, their doctor's advice was limited to the suggestion that they quit smoking. In 1996, of the 50% who recalled receiving advice to quit, 30% reported that doctors gave them information on a smoking cessation program while only 18% reported that their doctor suggested that they set a specific quit date.

Information about Environmental Tobacco Smoke (ETS)

In the 1996 CTS, all smokers were asked whether their doctor had discussed with them the hazards of secondhand smoke to the nonsmoker. Under 30% of all smokers who visited a physician recalled having such a discussion. However, recall rates were considerably higher among minorities, smokers with less education, and women. Of those who discussed the health hazards of secondhand smoke with their doctor, 83% also reported receiving advice to quit.

3. The Use of Assistance to Quit Smoking in California

The small proportion of quit attempts that result in long-term cessation has prompted the development of a number of different treatment strategies to assist people to quit. These include a number of types of behavioral programs, many of which have been shown to significantly increase the cessation rate (Lichtenstein & Glasgow, 1992; Schwartz, 1987). In recent years, nicotine replacement treatment has become popular. This treatment, when used in conjunction with behavioral programs, can significantly increase the long-term success rate (Fiore et al., 1996).

Who Uses Assistance and What Type Do They Use?

In the 1992, 1993, and 1996 CTS, all smokers who had made a quit attempt in the past year were asked the following question concerning their most recent quit attempt:

- *Did you use counseling advice or self-help materials to adjust to life without cigarettes?*
- *For those indicating they had, further questions probed use of group counseling, one-on-one counseling, self-help materials, and use of the nicotine patch or nicotine gum.*

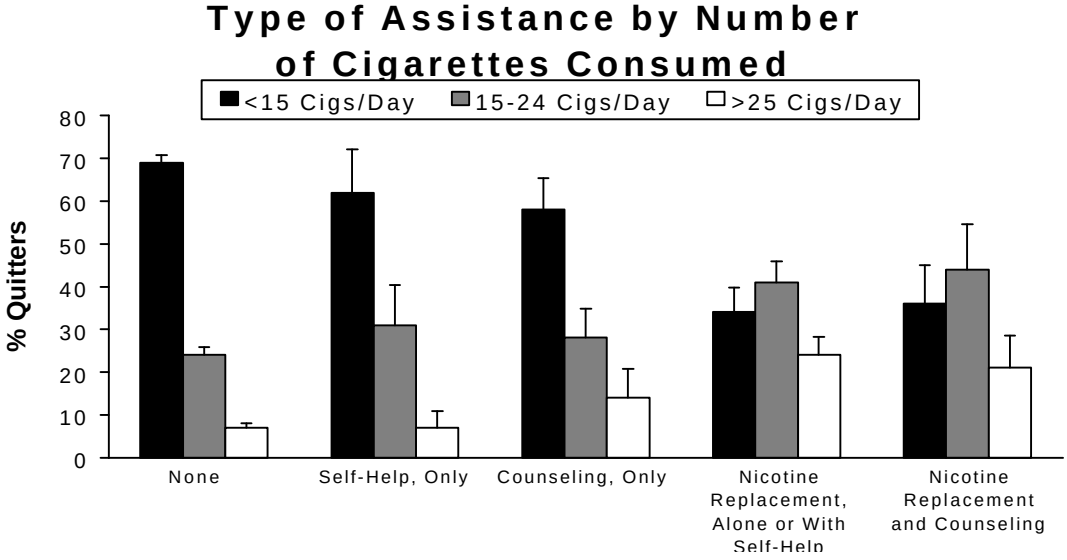
Approximately one in five Californians who tried to quit smoking in the last year use some type of assistance program.

In 1992, approximately 20% of Californians who tried to quit smoking in the last year reported using any form of assistance and this level was maintained through 1996. In each year, women were significantly more likely to use some form of assistance to quit than were

men; in 1996, 22.8% of women used assistance compared to 17.8% of men. Also, older smokers and Non-Hispanic White smokers were more likely to seek assistance in quitting. (See Appendix B, Table 12, for detailed demographic analyses).

Of those who reported using assistance in their last quit attempt in 1996, 14% reported using some form of counseling without nicotine replacement; 22% reported using a self-help program alone; 28% reported using nicotine replacement alone; and 36% reported using both nicotine replacement with a counseling or self-help program.

Use of assistance varied considerably by the level of reported cigarette consumption. Overall, heavy smokers were more likely to seek help than light smokers. Figure 7.6 shows the distribution of type of assistance in the most recent quit attempt, according to cigarette consumption level.



Source: CTS 1996

Figure 7.6

Figure 7.6 shows that the greater the consumption level of the smokers, the more likely they were to use nicotine replacement. The lighter smokers, on the other hand, were more likely to use counseling or self-help materials to quit smoking.

Nicotine Replacement Therapy

Nicotine polyacrilex gum became available for use by prescription in the mid 1980s and was made available without a physician's prescription beginning in 1996. The nicotine transdermal delivery system, the "nicotine patch," became available for use by prescription in January 1992 and "over-the counter" in July 1996. Recently, the Agency for Health Care Policy Research released guidelines for smoking cessation, recommending that cessation interventions include nicotine replacement therapies whenever appropriate (Fiori et al., 1996).

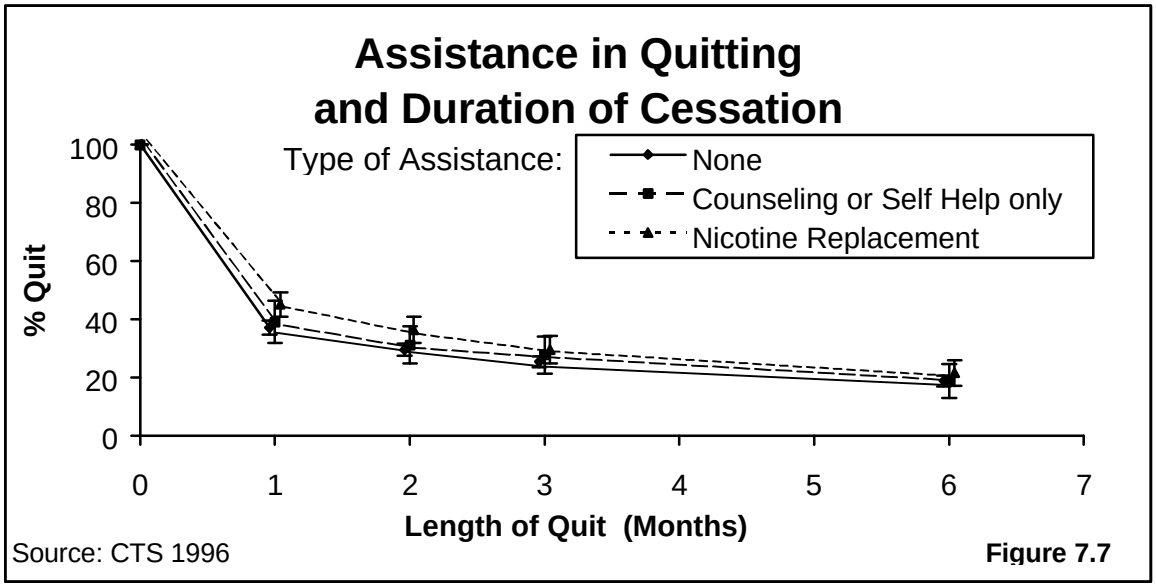
The 1996 survey shows that 13% of those who tried to quit smoking in the 12 months preceding the survey used some form of nicotine replacement. More used the nicotine patch (9%), than used nicotine gum (4%).

In 1996, there were minimal differences in the percentages of men (12%) and women (15%) who used nicotine replacement therapy. However, use of nicotine replacement therapy increased significantly with age, from 4% of quitters under the age of 25 years to 24% in those age 65 years and older. Non-Hispanic Whites (18%) were significantly more likely to use nicotine replacement than Hispanics (6%), African Americans (8%) or Asians (10%).

Consistent with earlier studies, the 1996 CTS showed that heavy smokers were significantly more likely than light smokers to use nicotine replacement to augment their quitting effort (Pierce et al., 1995). Only 7% of those who smoked fewer than 15 cigarettes used nicotine replacement, compared to 18% for those who smoked 15-24 cigarettes per day and 29% for those who smoked more than 25 cigarettes per day.

Success Rates of Those Who Seek Help and Those Who Do Not

A longitudinal study of California smokers identified the importance of using some assistance during a quit attempt (Pierce et al., 1994; Pierce et al., submitted). Figure 7.7 compares the time to relapse for those who reported that they sought help in quitting and those who did not on the 1996 CTS. Type of assistance was categorized as use of nicotine replacement, use of other assistance but not nicotine replacement and no use of assistance. The analysis considered only smokers and former smokers who reported that they were smoking one year before the interview and who had made a quit attempt lasting for at least one day in the past year. The percentages reaching each monthly quitting milestone were calculated using an actuarial analysis that adjusted for the fact that the final duration of the quit attempt was unknown for those who were still quit when surveyed.



Source: CTS 1996

Figure 7.7

Overall, Figure 7.7 shows no demonstrable differences between those who used nicotine replacement, other forms of assistance, or no assistance at all. The lack of difference, of course, should not be construed to mean that assistance with smoking is ineffective. Rather, this finding suggests that assistance levels the playing field for highly addicted smokers, since those who seek help are typically more addicted than those who do not seek help (see Figure 7.6). Because the smokers' level of addiction is one of the strongest predictors of relapse, it is expected that without some type of assistance these heavy smokers would relapse at much higher rates than would a light smoker who did not seek help (Farkas et al., 1996; Ockene et al., 1982; USDHHS, 1989; Westman et al., 1997). Therefore, since these heavy smokers with assistance did at least as well as the lighter smokers who did not seek help, having assistance appears to compensates for the higher probability of relapse that would otherwise occur in these heavy smokers.

Perceived Assistance Available

An earlier study showed that a majority of smokers do not know whether cessation assistance is readily available for those who need help to quit smoking (Zhu et al., 1995). The 1996 CTS asked all smokers who had made a quit attempt in the last year the following question:

> *Can you name up to 3 programs that are helpful to people who are trying to quit smoking?*

The majority of Californians trying to quit smoking is unaware of any assistance programs.

No prompts were given; the unaided responses are presented in Table 7.1. Over 60% of recent quitters were unable to name even one program for helping people to quit smoking. Strictly speaking, nicotine replacement treatment and hypnosis are not cessation programs, but types of treatment. Nicotine replacement therapy was mentioned most often (33.4%). Twelve percent of the smokers who had made quit attempts in the previous year identified specific programs such as Smokenders, Shick, and American Cancer Society programs, all of which are classified as behavioral treatment programs in Table 7.1. Approximately 9% named hypnosis. These results provide strong evidence that smokers who are trying to quit are not always aware of the programs that are available to help them with their effort.

Table 7.1
Programs that Smokers in California
Perceived as Helpful for Quitting* - 1996

Don't know of any	60.6%
Nicotine replacement therapy	33.4%
Behavioral treatment programs	12.0%
Hypnosis	9.1%
Support groups	2.6%
Others	4.5%

* Respondents could name more than one program so percentages do not total 100%.
Source: CTS 1996

4. The California Smokers' Helpline

The California Smokers' Helpline is a free, statewide telephone cessation service offered by the California Tobacco Control Program (TCP). It aims to provide convenient and accessible service for smokers across the state of California. It also serves as a supplemental source of service for other tobacco control efforts. For example, physicians can refer their patients who are smokers to the Helpline after advising them to quit smoking. The Helpline has also been used as an adjuvant behavioral program for many who are obtaining free nicotine patches covered by their insurance policies or MediCal. In addition, many local tobacco control programs refer smokers to the Helpline.

The Helpline service was first made available in 1992, following a large randomized controlled trial that demonstrated the efficacy of telephone counseling (Zhu et al., 1996). The Helpline provides service in English, Spanish, Cantonese/Mandarin, Vietnamese, and Korean, and also includes a TDD (Telecommunications Device for the Deaf) line for the hearing-impaired. It is available on a toll-free basis to all Californians.

Anti-smoking media spots on TV, radio and billboards are the primary means of promoting the Smokers' Helpline. As presented in Chapter 9 (Figure 9.3), calls to the Helpline are very responsive to mass media promotion, and increase markedly when media campaigns are being conducted.

Smokers who call the Helpline are first screened for their readiness to change. Those who are not ready to quit soon are sent motivational materials. Those who are ready to quit are asked to choose between a self-help program or telephone counseling. The advantage of this "stepped-care" approach is that it makes optimum use of available resources (Abrams, 1993).

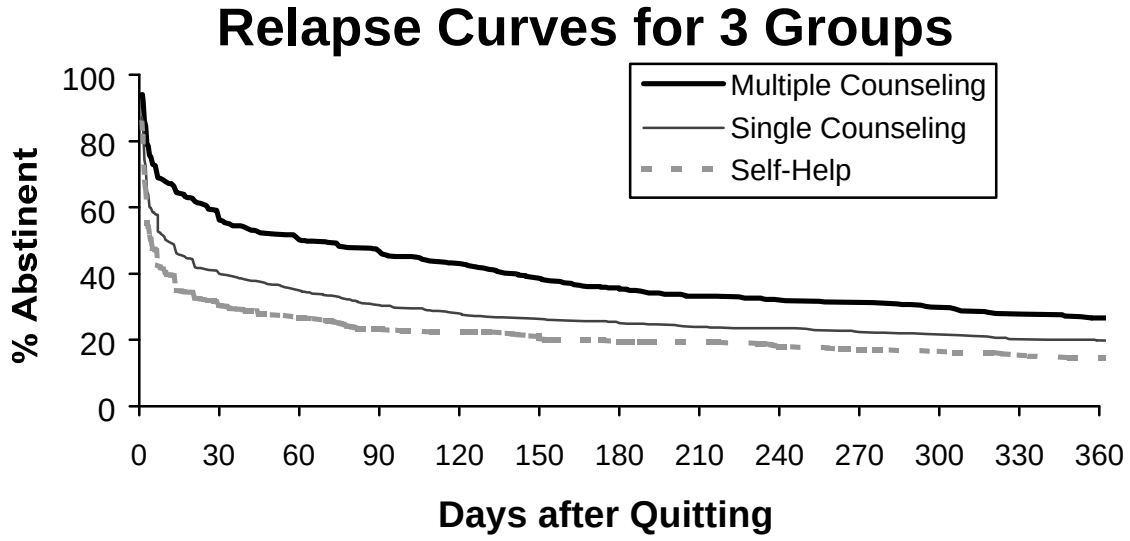
Who Calls the Helpline?

Since its inception in 1992, the Helpline has received calls from 58,000 smokers requesting assistance in quitting. Over half (52.8%) of the callers were female. The average age was approximately 37 years old. A total of 2,268 callers were under 18 years old. Overall, smokers of minority racial/ethnic background are well-represented among the callers. Thirty-seven percent of the callers were Hispanic, African American, Asian or Native American.

As with other forms of assistance, smokers who called the Helpline smoked more than the population average. The mean number of cigarettes smoked per day for those who called the Helpline is 20.6, while the mean number smoked daily among all smokers in the population is 13.5, and the mean number of cigarettes smoked per day among all daily smokers in the population is 17.4.

The Success Rate of Helpline Counseling

Figure 7.8 shows the results of a randomized controlled trial with over 3,000 subjects who called the Helpline, which showed that multi-session telephone counseling could nearly double the 12-month abstinence rate for those who received the counseling compared to a control group who quit with a self-help quit kit. Even a single counseling session significantly increased the success rate.



Source: Zhu SH et al., *J Consult Clin Psychol.* 1996;64, 202-211
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Figure 7.8

Helpline Counseling in Conjunction with Physician Advice and/or Nicotine Replacement Treatment

Over 7,000 smokers have been referred to the Helpline by their health-care providers. It is interesting to note that over 75% of those referred by health-care professionals identify themselves as having some health problems, compared to only 50% of those who heard of the program through the media. Callers referred by health-care providers were also more likely to choose counseling (or obtain counseling based on their medical condition) over self-help materials or information.

Recognizing the potential health-care cost savings to be realized from successful cessation, MediCal and some HMOs require that smokers participate in a behavioral treatment program, in order to obtain nicotine patches for free. Over the 3 years (1994 to 1997) that this information has been recorded, the percentage of callers who spontaneously reported that they planned to use the patch increased from 10% to over 26%. For those who received counseling from the Helpline, the percentage who used patches increased from 32% to 45%. The most significant increase in patch use was observed in those callers who were insured by MediCal. In this group, patch use

increased by a factor of 129%; 659 used the patch from August 1994 through July 1995, while 1,509 used it from August 1996 through July 1997.

5. Summary

Promoting smoking cessation is central to the California Tobacco Control Program's (TCP)'s overall strategy to reduce smoking prevalence. Promoting quitting consists of increasing the motivation to quit as well as providing assistance to successfully quit smoking.

Section 1 of this chapter explained that both smokefree homes and workplaces provide motivation to quit smoking by making the act of lighting up inconvenient. While smokefree workplaces do not significantly increase the rate of quit attempts among smokers, workplace policies are significantly associated with smoking fewer cigarettes, a predictor of successful quitting in the future. Smokefree homes were significantly associated both with making quit attempts and light smoking (<15 cigarettes/day). These results suggest that, because they are voluntary, home restrictions on smoking are more powerful motivators of quitting behavior than workplace restrictions, and perhaps reflect pre-existing motivation or family pressure to quit. This section also demonstrated that one of the most important environmental influences on teens is the values or norms toward smoking expressed by their parents. Teens who believed that their parents would be very upset to see them light up a cigarette were more likely to be at advanced levels of the Quitting Continuum than teens who believed their parents would not be very upset.

Section 2 of this chapter explained that approximately one-third of current smokers received advice from their physicians to quit smoking. Smokers who reported fair or poor health status and older patients were more likely than healthier and younger patients to receive this advice. Only about one-third of patients who received a physician's advice to quit smoking actually attempted to quit smoking. This small proportion may be explained by the fact that less than one-third of patients who received this advice were provided with any information on smoking cessation or a target date for quitting. Similarly, less than one-third of smokers received any information from their physician about the dangers to nonsmokers of passive smoking, or environmental tobacco smoke.

Section 3 showed that, consistently between 1992 and 1996, approximately one in five smokers who had tried to quit used some form of assistance, whether it was self-help materials, counseling, or nicotine replacement treatments. The majority of those who received assistance used a combination of nicotine replacement and self-help or counseling. Importantly, this section showed that smokers who consumed 15 or more cigarettes per day were significantly more likely than lighter smokers to seek assistance in quitting. The assistance appeared to level the playing field for these moderate to heavy smokers, bringing their success rates up to rates comparable with lighter smokers.

Section 4 described the California Smokers' Helpline. It showed that since 1992, when it was initiated, the Helpline has received calls from over 58,000 smokers. Mass media campaigns are the primary means of promoting the Helpline, and the volume of calls is

highly associated with the timing of these media campaigns. Callers who were randomized to receive the multiple counseling session treatment plan achieved significantly greater success rates than those who were randomized to the single counseling session or self-help materials. Insurance companies and MediCal sometimes provide free nicotine replacement therapy on the condition that the smoker participate in a cessation program, such as the California Smokers' Helpline.

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Chapter 8

PRICES AND TAXES

CHAPTER 8: PRICES AND TAXES

Introduction

With the passage of Proposition 99 in November of 1988, Californians voted to increase taxes on every pack of cigarettes sold in the state by $0.25. Twenty percent of the approximately $600 million dollars per year raised by this additional tax was designated to pay for the programs of the California Tobacco Control Program (TCP),[1] with the goal of reducing tobacco use in California by 75% by the year 2000. In addition to funding anti-smoking programs, however, the tax itself is expected to play an important role in reducing smoking by raising the price of cigarettes (USDHHS, 1989). A previous report estimated that the excise tax increase of 1989 produced a short-term impact that resulted in a 13% decline in cigarette consumption (Pierce et al., 1994).

This chapter examines the extent to which price has played a role in changes in cigarette consumption. It shows how the price of cigarettes has changed in California since the beginning of the TCP, how the tobacco industry has used reductions in cigarette prices in response to the state's cigarette tax policies, and whether and how these price effects have influenced the demand for cigarettes—i.e., consumption. Section 1 examines trends in cigarette prices in California since 1989, explains the theoretical relationship between price and demand for cigarettes, and presents and analyzes empirical estimates of the price elasticity of demand for cigarettes. Section 2 uses the California Tobacco Surveys (CTS) to analyze smokers' price sensitivity and trends in price sensitivity in California since the beginning of the TCP. Section 3 uses CTS data to examine support for excise taxes among smokers and nonsmokers in California. Section 4 summarizes the analyses presented in this chapter.

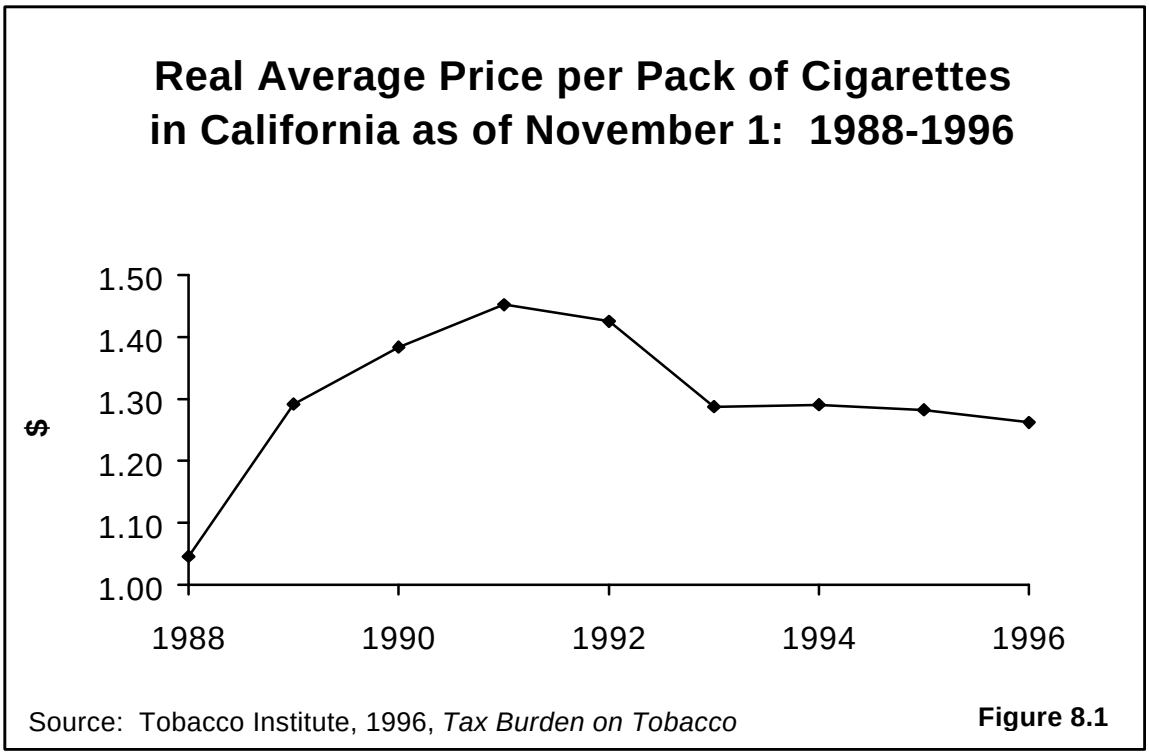
1. The Economics of Cigarette Prices

Economic theory holds that as the price of a product rises, the demand for that product will fall. The extent to which price affects demand for a product is called the *price elasticity* of demand. The *price elasticity* of demand is defined—and calculated—as the percent change in demand due to a percentage change in price (Silberberg, 1990).

Figure 8.1 illustrates the changes in the real price per pack of cigarettes between 1988 and 1996 in California. The data reflect average prices for sales of all brands on November 1 of each year as reported in the Tobacco Institute's *Tax Burden on Tobacco.*[2]

[1] For details of the budget for TCP and its allocation, refer to Chapter 1 of this report.

[2] The price per pack reported in the *Tax Burden on Tobacco* is the weighted average price, reported on November 1 of each year. The average is weighted to reflect the proportion of cigarettes bought in cartons and by the individual pack, as well as the percentage of generic and premium brand cigarettes purchased each year. These prices include state and federal excise taxes, but do not reflect excise taxes levied by municipal governments or sales tax. The real prices are calculated to account for inflation, by discounting by the Bureau of Labor Statistic's Consumer Price Index for Urban Consumers in the Western U.S. for each year.



Source: Tobacco Institute, 1996, *Tax Burden on Tobacco*

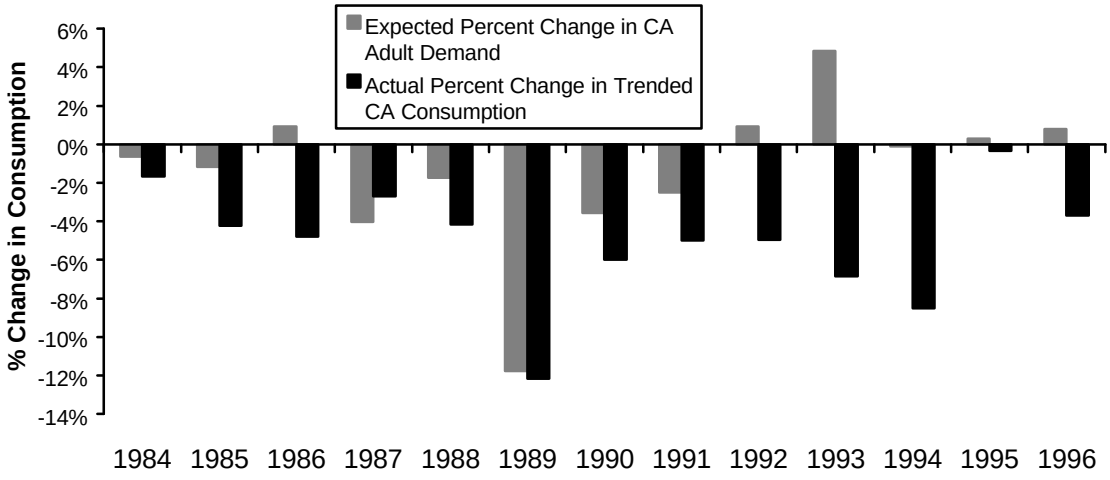
Figure 8.1

Figure 8.1 shows that the real average price of cigarettes rose by $0.25 in 1989. The real price of cigarettes continued to increase in 1990 and 1991, but then decreased in 1992. The average real price dropped again in 1993, following the tobacco industry's widely publicized announcement that it would reduce the prices for premium brands of cigarettes (Shapiro, 1993). After 1993, the real average price of cigarettes in California stabilized at levels that were equivalent to the 1989 real average price levels. In 1996, the real price of cigarettes dropped by another $0.02, to bring the real price per pack below 1989 levels. Given that the price of cigarettes plays a role in the demand for cigarettes, variations in cigarette consumption would be expected to correspond with these changes in the price of cigarettes.

Considerable debate persists about the extent to which changes in the price of cigarettes affect consumption. However, among economists the general consensus estimate of the overall price elasticity of demand for cigarettes falls in the range between –0.2 and –0.5 (USDHHS, 1989; USDHHS, 1994). Estimates of the price elasticity of demand for cigarettes in California lie between –0.45 and –0.6 (Hu, et al., 1995), at the high end of the consensus range. The negative sign on these estimates means that the price of cigarettes and demand are inversely related, as expected. The estimates are interpreted to mean that for every 10% increase in cigarette prices, demand decreases by 2-6% as a result of that price change.

Expected and Actual Changes in Cigarette Consumption

Because it describes the size and direction of the relationship between the price and demand for cigarettes, elasticity can be used to calculate the expected change in the consumption of cigarettes that would result from real changes in the price of cigarettes. This technique was used in the *Surgeon General's Report* to estimate the impact on the consumption of cigarettes and on smoking prevalence of a proposed federal excise tax on cigarettes (USDHHS, 1989). While this exercise is not an empirical test or calculation of the actual elasticity of demand for cigarettes, it is a useful and illustrative method of policy evaluation.



Source: Tobacco Institute, 1996, *Tax Burden on Tobacco* and *Monthly Sales Data* **Figure 8.2**

Figure 8.2 plots the expected annual percentage change in cigarette consumption for each year (November 1, 1984 – November 1, 1996) in California due to actual changes in the average real price per pack from year to year, assuming a constant price elasticity of demand of –0.5. This figure also plots the actual annual percentage changes in cigarette consumption in California.

Figure 8.2 shows that per capita consumption has decreased in each year since 1984. Prior to 1989, the actual percentage decreases in per capita consumption were 4% or less. The figure shows that in 4 of these 5 years before Proposition 99, the percentage change in the consumption of cigarettes decreased by more than would be expected, given the change in prices. In 1986, a slight reduction in the price of cigarettes predicted an increase in their consumption, which did not occur; consumption fell by approximately 5% from the previous year.

The excise tax increase of 1989 produced the expected 12% decrease in cigarette consumption.

The introduction of the $0.25 per pack excise tax increase in 1989 was the first tobacco control policy implemented due to Proposition 99. Figure 8.2 clearly shows that this significant price change resulted in a 12.2% decrease in consumption from 1988 levels, approximately equivalent to the projected decrease of 11.8%. After the initial shock of the 1989 excise tax, however, the actual and expected percentage changes in cigarette consumption in California began to diverge again.

Between 1990 and 1996, the California Tobacco Control Program appeared to produce a sustained decline in smoking despite a drop in cigarette prices that would have predicted increases in smoking among Californians.

In 1990 and 1991, the actual percentage decreases in consumption were larger than the expected percentage decreases. In 1992, a small decrease in the average real price per pack predicted a 1% increase in consumption, while a 5% decrease was observed. In 1993, corresponding to the tobacco industry's 9.7% price decrease, the elasticity calculations predicted an increase in consumption of 4.9%. However, actual consumption moved in the opposite direction: it decreased by nearly 7%. Per capita consumption in California decreased by 8.5% in 1994, despite the negligible rise in prices, which predicted a 0.1% decrease in consumption. Again in 1995, a negligible change in prices predicted no change in consumption. In this year, however, the observed change in consumption was also negligible. Finally, in 1996, a 1.6% decrease in the real price per pack of cigarettes predicted a 0.8% increase in consumption. Instead, actual consumption decreased by 3.7%.

In each year between 1989 and 1996, the elasticity calculations predicted higher levels of consumption than were observed. In other words, the actual demand for cigarettes during these years was less than price alone would have predicted. These discrepancies between actual and observed changes in consumption levels between 1989 and 1996 suggest that the California Tobacco Control Program (TCP) may have counterbalanced the influence of the tobacco industry's manipulations of price and advertising campaigns. In 1995, however, at the same time that the TCP's media budget was halved, the mediating influence on consumption disappeared. In fiscal year 1996-1997, funding for the TCP was restored to 94% of its original budget; in this year, the media campaign received four times the amount it was allocated in the previous year. In 1996, consumption once again decreased when increases were predicted.

Adolescent Smoking and the Price of Cigarettes

Several studies have found that the overall price elasticity of demand for cigarettes among adolescents is between two to three times higher than the price elasticity of demand for adults (e.g., Lewit & Coate, 1982; Chaloupka & Grossman, 1996). In other words, the research suggests that teens are more sensitive than adults to the price of cigarettes.

Data that specifically measure overall cigarette consumption by teens are unavailable. Therefore, the elasticity of adolescent smoking participation is used to calculate expected smoking prevalence among teens in California. Smoking participation elasticity refers to the extent to which cigarette prices influence individuals' decisions about whether to smoke. It is calculated as the percentage change in the number of teen smokers due to a percentage change in the price of cigarettes.

Studies have produced estimates of the elasticity of teen smoking participation ranging between –0.67 and –1.2 (Lewit, Coate, & Grossman, 1981; Chaloupka & Grossman, 1996). These participation elasticities, which constitute only part of the overall elasticity, are larger for teens than the overall elasticity estimates for adults. These studies suggest that the price of cigarettes plays an important role in teens' decisions about whether to become smokers. Based on these results, analysts have concluded that excise taxes "may be useful tools to prevent or delay the onset of smoking by adolescents" (USDHHS, 1989).

Despite the strong empirical evidence to suggest that teens are particularly sensitive to the price of cigarettes, there are several reasons to suggest that other factors may overwhelm the price effect. First, as explained in Chapter 10, only 16% of teens who smoke buy their own cigarettes, and another 20% have others buy their cigarettes for them; the rest get cigarettes from their friends or obtain them without permission from stores or family members. Moreover, less than 10% of teens who are not yet *addicted* smokers buy their own cigarettes. These teens are in the process of becoming smokers, but are not experiencing the price of cigarettes. For teens who do not pay for cigarettes, price could not play a large role in their decisions about whether or how much to smoke. Perhaps if cigarette prices were considerably higher, teens would be more reluctant to give even one or two to their friends.

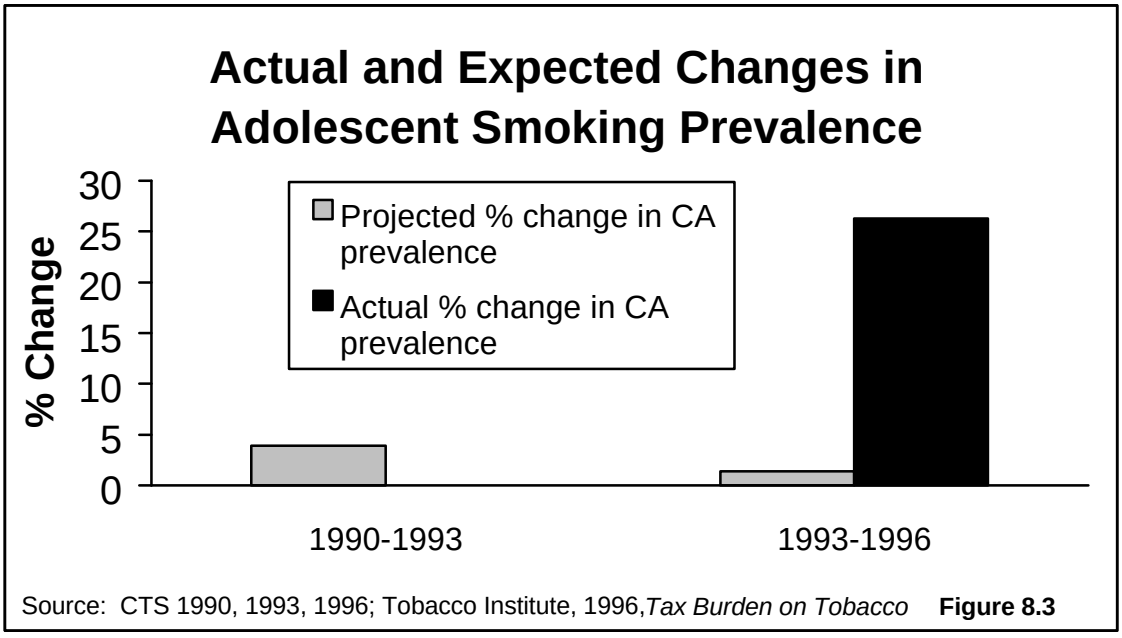
Second, nearly all teens who smoke (97%) smoke premium brand cigarettes, which are typically 30-60% more expensive than generics. Further, adolescent smokers consume five to six packs of cigarettes per month on average, compared to 26 packs per month for the average adult smoker. At approximately $2.50 per pack for premium brands, those teens who purchase cigarettes would spend about $15 per month on cigarettes on average. Thus, cigarettes likely represent a relatively small portion of the average teens' monthly disposable income, and therefore the price may not be as important to teens.[3]

Due to this uncertainty regarding the teens' price responsiveness, a range of estimates of the elasticity of smoking participation are used to calculate the expected changes in teen smoking due to changes in the price of cigarettes. For the comparison between expected and actual smoking, teen smoking participation is measured by a number greater than zero to the question:

[3]This question, however, depends in part on whether the amount teens spend on cigarettes constitutes a smaller or larger proportion of their disposable income, and on the direction and size of the income elasticity of demand for adults and teens. Potentially, the income effect could offset the price effect for teens. This issue, however, remains an empirical question that is outside the scope of this report.

On how many days in the last month did you smoke cigarettes? [4]

Figure 8.3 illustrates these results, using the most conservative teen smoking participation elasticity estimate, -0.60, to calculate the expected smoking prevalence:



Source: CTS 1990, 1993, 1996; Tobacco Institute, 1996,*Tax Burden on Tobacco* **Figure 8.3**

Between 1990 and 1993, the real price per pack of cigarettes decreased by $0.09, or 6.5%. Over this 3-year period, a smoking participation elasticity of –0.6 predicts a 3.9% increase in teen smoking; a participation elasticity of –0.8 predicts a 5.2% increase; using the highest participation elasticity cited in the literature, -1.2, predicts a 7.2% increase. The actual change in teen smoking prevalence between 1990 and 1993 was negligible.

Between 1993 and 1996, the real price per pack of cigarettes decreased by $0.03, or 2.3%. Using a participation elasticity of –0.6 predicts a 1.4% increase in teen smoking; a participation elasticity of –0.8 predicts a 1.9% increase; and the highest participation elasticity estimate, -1.2, predicts a 2.8% increase in teen smoking prevalence between 1993 and 1996. Over these 3 years, however, adolescent smoking prevalence increased by a factor of 26.3% in California.[5]

Price is not the most important determinant of teen smoking rates in California.

Clearly, in each period, the smoking participation elasticity estimates do not well describe teens' smoking behavior. Between 1990 and 1993, even the lowest estimate predicted higher increases than actually occurred. In contrast, between 1993 and 1996, the highest elasticity estimate predicted increases well below those that

[4] In order to be consistent with the research in the literature, 30-day prevalence is used to measure teen smoking participation in this analysis.

[5] 26.3% represents the observed factor increase of teen smoking prevalence based on standardized prevalence that accounts for demographic changes in the population.

were observed. It is reasonable to conclude, therefore, that factors other than price dominate teens' decisions about smoking.

Moreover, at the same time that adult consumption was decreasing faster than expected, teen smoking participation was increasing much faster than expected. Therefore, while the California Tobacco Control Program (TCP) may have offset the impact of price changes for overall consumption (which is dominated by adult smoking trends), these programs clearly did not have the same effect on adolescents. The sharp increases in teen smoking prevalence between 1993 and 1996 suggest that other factors—such as tobacco industry advertising and promotions—amplified the effect of decreasing cigarette prices. These influences overwhelmed the impact that the California Tobacco Control Program had made on adolescents in the earlier years.

2. Evidence of Price Sensitivity Among Californians

As further evidence of Californians' sensitivity to the price of cigarettes, this section examines two related issues. First, it describes the choices smokers make in purchasing cigarettes, whether they buy premium or less expensive generic brands, and whether they purchase cigarettes by the carton or by the pack. Second, this section addresses how adult smokers feel about the price of cigarettes.

Premium vs. Generic Cigarettes

The vast majority of smokers smoke premium brand cigarettes, such as Camels, Marlboros, Benson & Hedges, or Winstons, as opposed to generic cigarettes. Between 1992 and 1996, the percentage of adult smokers who smoked premium-brand cigarettes remained unchanged, at approximately 91%. At the same time, generic cigarettes became more widely available and advertised.

In 1996, there were significant differences in the demographic distribution of adult smokers who reported smoking premium brand cigarettes. Nearly all smokers under age 25 (98%) reported that they smoked premium cigarettes, while 92% of smokers age 25-44 smoked premiums, and less than 85% of smokers over age 45 reported they smoked premium brands.

Among adults, minorities were significantly more likely than Non-Hispanic Whites to smoke premium brand cigarettes, but those with higher educational attainment were also significantly more likely to smoke premium brands in 1996. Heavy smokers (>25 cigarettes per day) were significantly less likely to smoke premium brands than were lighter smokers in 1996. Approximately 82% of heavy smokers reported smoking premium cigarettes; 88% of those who smoked 15-24 cigarettes per day smoked premiums, and 93% of light smokers (<15 cigarettes per day) smoked premiums.

In 1996, the average daily adult smoker consumed 17 cigarettes per day, or 26 packs per month. This translated to an average expenditure of about $46 per month in 1996. On average, premium brand smokers smoked four fewer cigarettes per day than those who

smoked discount brands, but spent nearly $6 more per month on smoking; both these differences were statistically significant.

Adolescent Choices: Premium versus Generic Cigarettes

Teens smoke the more expensive premium brand cigarettes.

As explained in Section 1, nearly all teens smoke premium brand cigarettes. To better understand the reasons behind these choices, the 1996 Robert Wood Johnson (RWJ) survey asked teens whether they agreed or disagreed with each of the following four justifications that teens might use in making their choices to smoke premium cigarettes:

Why do you think kids smoke premium brands such as Marlboro or Camel much more than the cheaper brands like GPC or Basics? Is it because…	• *Premium brands taste better* • *Premium brands have a better image* • *Kids like promotional items with premium brands* • *Smoking the same brand as your friends is more important than price*

The "image" that teens associate with premium brand cigarettes is the most important determinant of brand choice.

For all teens "image" was most important, followed by promotional items. Whether they were more likely to cite "taste" or "smoking the same brand as friends" depended on their status on the Uptake Continuum. Figure 8.4 illustrates these results:

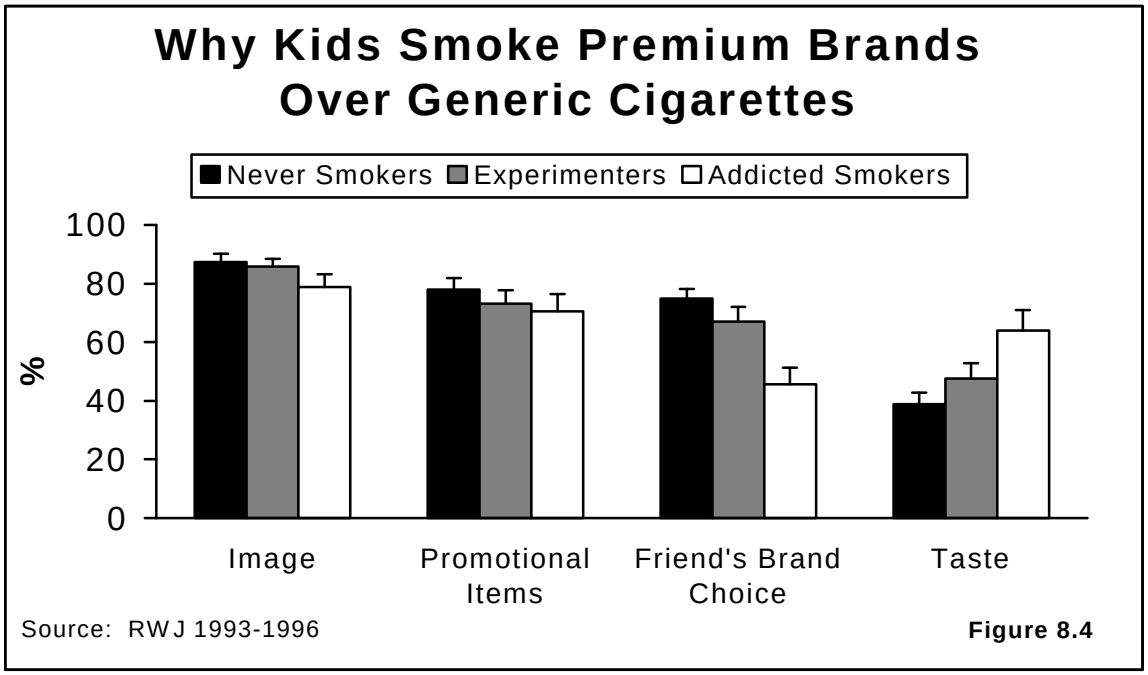


Figure 8.4

For teens in the early phases of smoking uptake, smoking the same brand as their friends is more important than taste in choice of brand.

Nonsmokers and *experimenters* were more likely to say that "smoking the same brand as friends" explained the choice to smoke premium cigarettes. For *addicted* teens, "friends" was the least frequently cited explanation and "taste" became more important. Therefore, as they gain more experience with smoking, conformity with their peers becomes less important than the taste of the cigarette for teens. These findings suggest that tobacco company marketing efforts that emphasize image, promotional items and peer approval are particularly powerful for teens in the early phases of smoking uptake.

Adults' Concerns About the Cost of Smoking

The 1996 California Tobacco Surveys (CTS) asked current adult smokers the following question to determine whether the price of cigarettes was a cause of concern:

Are you worried about how much money you spend on cigarettes?

Overall, about one third of current smokers (33% of men and 38% of women) reported that they were worried about the amount they spent on cigarettes. Women, middle-aged smokers, those without a high school education, and those smoking 15 or more cigarettes/day were most likely to worry about the expense of smoking. There were minimal but significant differences between racial/ethnic groups in the level of concern they expressed about the cost of smoking (see Appendix B, Table 13 for detailed demographic analyses). Those smokers who reported they smoked generic brand cigarettes were significantly more likely to report concern about how much they spent on cigarettes than were smokers who reported buying premium brands.

As cigarettes take up a larger share of a smoker's income, they report greater concern about the price of cigarettes.

The higher the price of cigarettes relative to the income of the smoker, the more likely were respondents to report concern; this effect was also statistically significant. In 1996, those smokers in the lowest income category, with a household income of less than $10,000 per year, were more than twice as likely as those with a household income of over $75,000 per year to worry about how much they spent on cigarettes (22% versus 46%). Smokers in 1992 were significantly more worried about the cost of cigarettes than were smokers in 1996 (44% vs. 35%); this finding makes sense, in light of the fact that the real price of cigarettes was higher by a factor of 10% in 1992.

Amount Spent on Smoking

Adult smokers who reported that they worried about how much they spent on cigarettes smoked more per day and spent significantly more each month on smoking. Among those who worried about the amount they spent on cigarettes, there was no difference in consumption levels between premium and generic brand smokers.

Most smokers (60%) bought their cigarettes by the pack in 1996. Those smokers who purchased their cigarettes by the carton smoked significantly more on average than those who bought by the pack, but both groups reported spending about $44 per month on smoking.

3. Support for a Cigarette Excise Tax and Public Funding of Tobacco-Related Health Care

In 1992, 1993, and 1996, the California Tobacco Survey asked adults the following question:

How much additional tax on a pack of cigarettes would you be willing to support if all the money raised was used to fund programs aimed at preventing smoking among children and other health care programs?

70% of Californians support a further increase in the cigarette excise tax.

Answers could range between *no increase* and an increase of *$3*. In 1996, approximately 70% of all respondents supported some additional tax on a pack of cigarettes. Overall, 50% of Californians favored an increase in the excise tax of at least $0.50. Figure 8.5 represents the level of overall support for additional excise taxes of increasing levels (see Appendix B, Table 14 for detailed demographic analyses).

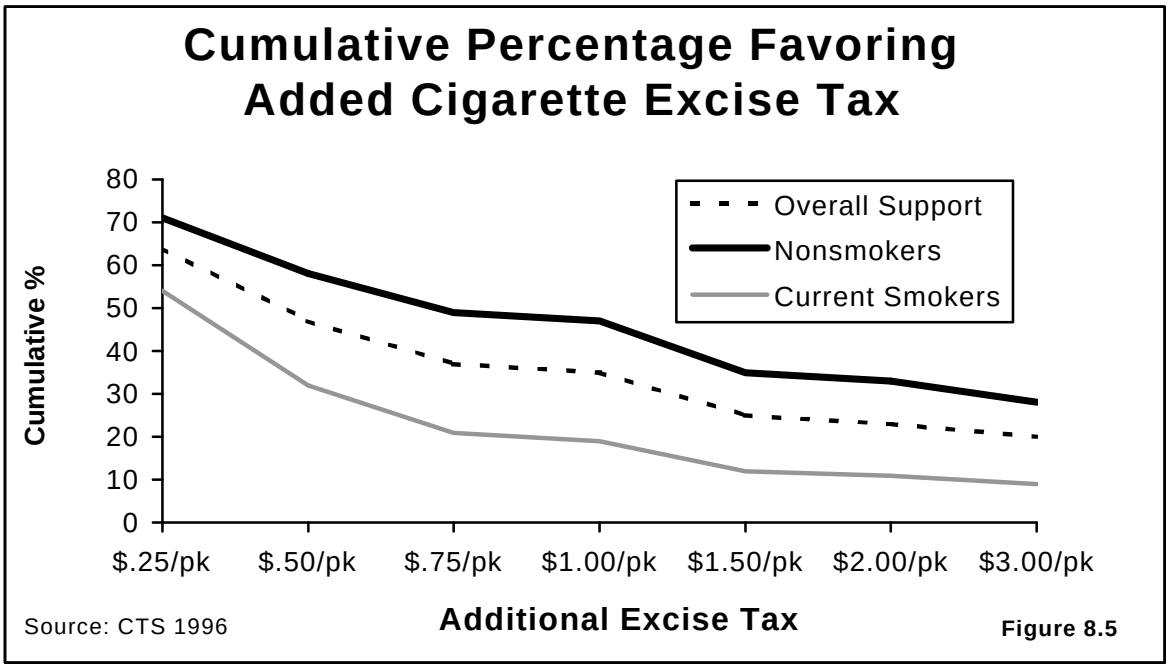


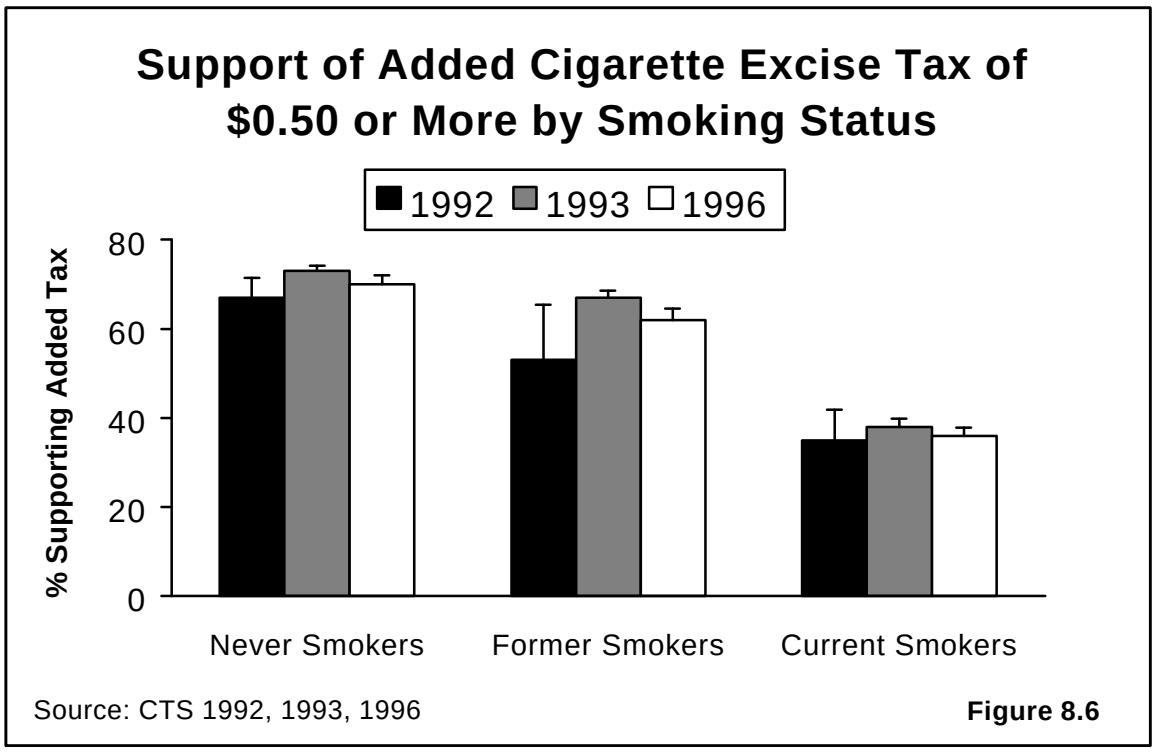
Figure 8.5

In 1996, support for an additional excise tax varied slightly across demographic groups. Women were significantly more supportive of an additional excise tax: 78% of women, compared to 72% of men, overall. Support did not vary significantly by race/ethnicity, but there were significant differences by educational level. College graduates were

significantly more likely than those with less than 16 years of education to support added excise taxes. Approximately one-third of college graduates supported a $3 tax, compared to 24% of all others.

Adults over age 65 expressed the least support for any tax. Young adults were significantly more likely than adults over age 45 to favor a moderate tax increase of $0.50-$1.00. Adults in the 45-64 year old group were least likely to support a $3.00 excise tax.

There was little change between 1992 and 1996 in the percentage of Californians who support an additional tax of at least $0.50. Figure 8.6 illustrates this steady support, across all categories of smoking status.



Source: CTS 1992, 1993, 1996

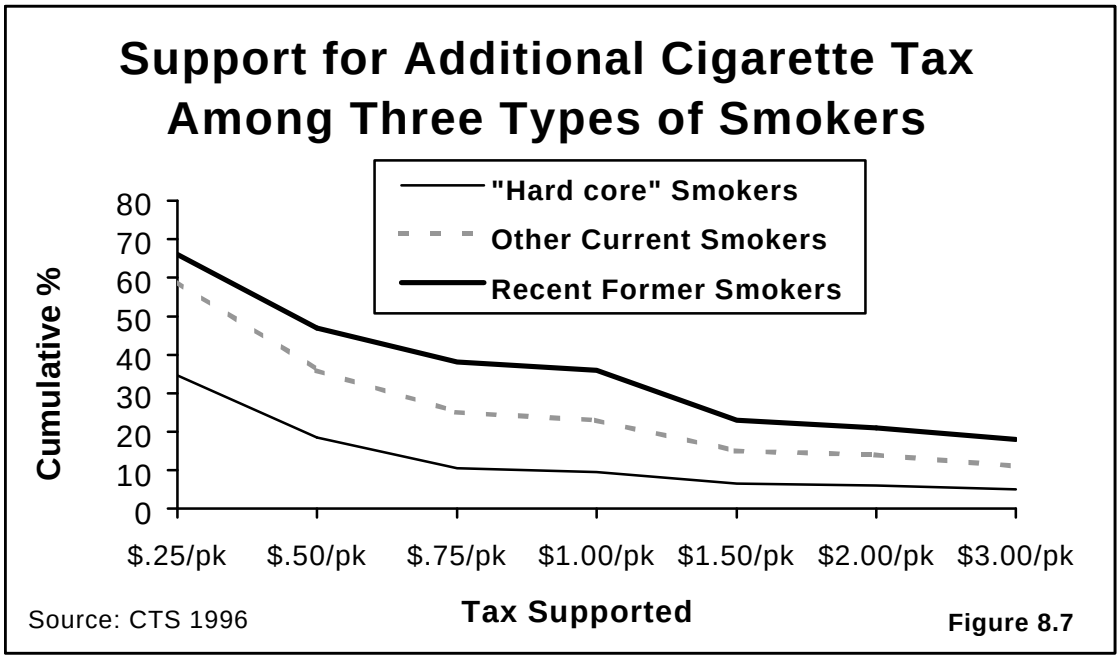
Figure 8.6

Support for Additional Cigarette Excise Tax Among Smokers

The majority of smokers favor an additional excise tax on cigarettes.

In each year of the survey, the majority of smokers continued to favor some additional excise tax. As expected, proportionately fewer current smokers were in favor of an additional tax than never smokers or former smokers: In 1996, **57% of current smokers supported an additional tax**, while 76% of former smokers and 82% of never smokers supported the tax. Similarly, among current smokers, those who could be classified as *hard core* (see Chapter 6) were least supportive of an additional tax, while *recent quitters* (those who were quit at the time of

the survey, but had smoked within the past 12 months) were the most supportive. Figure 8.7 illustrates these findings.



The fact that *hard core* smokers were the least willing to support an additional tax suggests that they are aware that such a tax would make their habit more expensive. At the same time, the fact that recent quitters were the most supportive of an additional tax suggests that they, too, are aware of the role of price: Either it no longer matters to them or they advocate higher taxes as an added incentive to remain quit.

4. Summary

The additional $0.25 excise tax that resulted from the passage of Proposition 99 increased the real price of cigarettes by a factor of 23% in 1989. Subsequent price hikes generated by the tobacco industry further increased the price of cigarettes each year through 1991. In 1993, the tobacco companies acted in concert to reduce the price of cigarettes nationally. These price decreases brought the real price of cigarettes back to 1989 levels, where they stayed into 1995. In 1996, the real price of cigarettes dropped again by 1.6%.

Using conservative estimates of the overall price elasticity of demand for cigarettes in California, it was shown that actual consumption levels decreased more than would have been predicted by price changes alone, and did not increase despite the tobacco industry's 1993 price drop. These findings suggest that factors other than price, likely the effects of the California Tobacco Control Program (TCP), overwhelmed the price effect during these years. The convergence of actual and expected changes in consumption levels in 1995 suggests that the counterbalancing factors disappeared in 1995. The reappearance of a decrease in 1996, when an increase in consumption was predicted by the change in

price, suggests that the re-instatement of the TCP monies may have offset the price effect once again.

Similar calculations, using conservative estimates of the elasticity of adolescent smoking participation, showed that between 1990 and 1993, teen smoking remained unchanged, when much larger increases were expected. In contrast, between 1993 and 1996, teen smoking increased significantly more than the price changes predicted. These findings suggest that factors other than price dominate teen smoking behavior. Moreover, the fact that adolescent smoking participation increased at faster rates than predicted at the same time that overall adult consumption decreased more than predicted suggests that whatever effect moderated overall smoking did not influence adolescent smoking.

The findings presented in section 2 suggested that the majority of smokers do not worry about the price of cigarettes, and their purchasing choices reflect this lack of concern. When asked directly about their level of concern about how much they spend on cigarettes, two-thirds of smokers reported minimal levels of concern. The overwhelming majority of smokers choose to smoke the more expensive premium-brand cigarettes, and most smokers buy their cigarettes by the pack, rather than the more economical way of buying by the carton.

Section 3 showed that the majority of smokers and nonsmokers alike said that they would support an additional tax on a pack of cigarettes of at least $0.50, if this money would support smoking prevention and other health care programs. Women, college graduates, younger adults (<45 years of age) and former and never smokers advocated even higher tax levels.

CHAPTER 8: REFERENCES

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Chapter 9

ADVERTISING AND MEDIA

CHAPTER 9: ADVERTISING AND MEDIA

Introduction

Tobacco industry advertising and promotions are major social and economic forces aimed at promoting tobacco use. In recent years, the tobacco industry has allocated approximately equal expenditures for advertising outdoors, in magazines, and at the point-of-sale within retail stores, but these activities represent a smaller portion of the total industry budget for advertising and promotions than in earlier years (see Chapter 1). The distribution of specialty items, such as T-shirts, caps, sunglasses, lighters and sporting goods imprinted with a brand's logo represents another and a growing category of promotional expenditures. These items are often obtained from catalogs with coupons from cigarette packs or given to potential consumers at sporting or cultural events. In addition, the industry uses retail value-added strategies, which include multi-pack offers such as "buy one, get one free" programs, cents-off coupons, and offers that include non-cigarette items (such as key chains, etc.) that are given away with the purchase of cigarettes. Industry expenditures for these activities are much higher in recent years than previously.

The primary purpose of any advertising or promotional activity is to increase product sales. A business can achieve this objective by either increasing the total number of customers (smokers), or by increasing its market share at the expense of the other companies' market shares. The tobacco industry argues that its advertising and promotional expenditures are aimed solely at the latter objective. However, recent data provide evidence that these advertising and promotional activities are effective in achieving the former objective: enlisting new smokers.

This chapter explores the influences of the tobacco industry's advertising and promotional activities, as well as the California Tobacco Control Program (TCP)'s anti-tobacco media messages. It describes trends in both, and suggests what these trends imply about future smoking among adults and teens in California. The data used in this chapter come from the 1990, 1992, 1993, and 1996 California Tobacco Surveys (CTS) and the 1993-1996 Robert Wood Johnson (RWJ) longitudinal survey of adolescents in California.

Section 1 defines the concept of *receptivity* to an advertising or promotional message, and presents evidence that the tobacco industry's advertising and promotional activities effectively target California adolescents. Section 2 presents data linking adolescents' *receptivity* to tobacco advertising and promotional activities with the progression of *nonsusceptible never smokers* to levels of greater smoking experience and higher risk for future smoking, represented on the Uptake Continuum. Section 3 analyzes adults' and adolescents' exposure and responses to the TCP's mass media campaign, and Section 4 provides a summary of the chapter.

1. Teen Receptivity to Tobacco Industry Advertising and Promotion Strategies

Chapters 3 and 5 of this report outlined the evidence that the process of becoming a smoker begins in the pre-adolescent and early adolescent years, and is generally well advanced by the age of 18 years. This section explores the extent to which teens are *receptive* to tobacco industry advertising and promotional activities, and the linkage between this *receptivity* and progression in the process of becoming a smoker, as measured by changes in status on the Uptake Continuum.

Understanding Receptivity to Advertising

The most generally accepted conceptual framework for organizing ideas about *receptivity* identifies three elements of *receptivity*: (1) exposure to the message, (2) paying attention to and understanding of the message, and (3) the development of a cognitive/affective response to the message (McGuire, 1985). Accordingly, the first goal of any persuasive communication or advertisement is to ensure that a prospective audience is targeted and exposed to the communication. It is important to note that the audience is rarely passive during the course of this process, and must pay attention to the message and understand it before the message can have any persuasive impact. Therefore, in order to characterize individuals as receptive to the communication or advertisement, it is necessary to demonstrate that they have internalized positive associations related to that communication. While these internalized messages may encourage the purchase of the advertised product, an additional incentive (such as a promotional item or free sample) is often needed to maximize the likelihood that the persuasive communication will lead to actual consumer behavior—a purchase of the advertised product (Ray, 1982).

(1) Are adolescents exposed to cigarette advertising and promotion?

In recent years, the tobacco industry has spent an estimated $100 million a year advertising their products, and they have maintained massive levels of advertising expenditures throughout most of the twentieth century (Tilley, 1948; Tennant, 1950; Robert, 1967; Wagner, 1971; Sobel, 1978; Whelan, 1984; Ernster, 1985; Pierce & Gilpin, 1995). Therefore, it is reasonable to argue that all Californians have been exposed to "saturation" level advertising for cigarettes.

(2) Do adolescents pay attention to cigarette advertising and promotion?

To measure attention to this advertising, the 1990, 1993 and 1996 CTS asked all respondents the following:

> *Think back to the cigarette advertisements you have recently seen on billboards or in magazines. What brand of cigarettes was advertised the most?*

By naming a cigarette brand in response to this question without any cues or hints from the survey interviewer, respondents provided evidence that they had been exposed to a cigarette advertisement and paid attention to it. Consistently, Californians of all ages demonstrate little trouble naming a cigarette brand. In each survey year, almost 90% of California adults under the age of 45 named a cigarette brand in an unaided response. In each year, approximately 85% of young teens (12-14 year olds) and nearly 90% of the older teens (15-17 year olds) could provide an unaided response. Teens overwhelmingly named Marlboro and Camel as the most advertised brands. Hence, there is little doubt that Californians of all ages, including adolescents, are exposed to and pay attention to cigarette advertising.

(3) Have adolescents responded cognitively or affectively to these advertising messages?

A positive cognitive response to an advertising or promotional message is manifest when the individual has (a) understood the message and (b) accepted the message. Acceptance is demonstrated when the message is consistent with the individual's set of beliefs relating to the product of the communication or advertisement. A positive affective response is demonstrated if (c) the individual develops a liking for the advertisement or (d) if they have a promotional item related to the product that is the subject of the advertisement.

(a) Do adolescents understand the message?

The first level of cognitive response is understanding the message of an advertisement. To measure the extent to which adolescents in California understand the messages in cigarette advertisements, each of the youth CTS asked all teens whether they thought that cigarette advertising promoted any of the following ideas:

- *Smoking as an enjoyable experience*
- *Smoking helps people relax*
- S*moking helps people to feel comfortable in social situations*
- *Smoking helps people to stay thin*
- *Smoking helps to reduce stress*
- *Smoking helps people when they are bored*
- *The idea that the "in" crowd are smokers*

Over 90% of 12-14 year old adolescents indicated that cigarette advertising promoted one of these messages. Over 75% indicated the message related to enjoyment, and over two thirds agreed that the messages were about relaxation and the advantage of smoking in social settings. Only for the boredom and weight control options did less than a majority agree that cigarette advertisements contained these messages. There was little difference in the perceptions of the cigarette advertising messages between adolescents in the 12-14 year old age group and those in the 15-17 year-old group.

(b) Do adolescents agree with, or internalize, the message?

In a separate section of the questionnaire from that exploring advertising, the youth CTS asked adolescents to agree or disagree with the following statements about smoking in 1990, 1993 and 1996:

- *Smoking helps people relax*
- *Smoking helps reduce stress*
- *Smoking helps people to feel comfortable at parties and in social situations*
- *Smoking can help people when they're bored*
- *Smoking helps people keep their weight down*

Responses to these questions indicate how well the teens' beliefs about the utility of cigarettes reflect what they think are the persuasive messages used by the tobacco industry.

Adolescents 12-14 years of age were much less likely to agree with the statements than were older teens in each survey. Additionally, agreement was significantly associated with the respondents' level on the Uptake Continuum (see Chapter 3).

Importantly, the pattern of responses for 12-14 year olds matched the pattern of responses to the questions about what they thought were the messages of the cigarette advertising. For example, in 1996, only 17% agreed with the idea that smoking helps keep weight down; as with the advertising question, this was the least supported statement. Similarly, the idea that smoking helps in social situations received the highest percent agreement for this question (38%), and the highest percent agreement for the advertising response.

Furthermore, this idea that smoking helps in social situations is associated with a decline in dislike for being around smokers. One outcome of many effective elementary school programs is that children internalize the idea that they strongly dislike being around smokers. The California surveys demonstrate that there is a marked decline with age in the adolescents who indicate this *strong dislike*, from a high of over 76% in 12-13 year olds to 58% in 16-17 year olds. This decline in *strong dislike for being around smokers* corresponds with the high level of agreement *that smoking helps people in social settings*.

(c) Are adolescents attracted to tobacco industry advertising?

A positive affective response to tobacco advertising occurs if adolescents indicate a liking for or an attraction to a cigarette advertisement. The 1992, 1993, and 1996 CTS asked the following question:

What is the name of the cigarette brand of your favorite advertisement?

Adolescents who hesitated on this question received the following verbal probe:

> *Of all the cigarette advertisements that you have seen, which do you think attracts your attention the most?*

The large majority of adolescents did not need this probe. Hence, the discussion herein refers to this variable as "favorite advertisement." Between 1993 and 1996, the proportion of individuals in each age group who could name a favorite advertisement remained relatively constant. Among adolescents, approximately 60% of 12-14 year olds named a favorite cigarette advertisement. Teens in the 15-17 year old age group were the most likely of all respondents to nominate a favorite ad; close to 70% of this age group provided an unaided response in 1996 (see Appendix B, Table 15, for detailed demographic analysis).

(d) Do adolescents have a tobacco industry promotional item?

As discussed above, the tobacco industry spends a substantial proportion of its advertising and promotional budget on promotional items. Consumer behavior theory indicates that these items are important incentives that help maximize the probability that a potential consumer will purchase a given brand (Ray, 1982). Thus, possession of such an item strongly indicates a positive affective response to the advertisement or promotion. Between 1993 and 1996, the percentage of teens who possessed a tobacco industry promotional item increased from 8.9% to 13.6% (a factor of 53%). Similar increases in possession were observed for both boys and girls. The greatest increase occurred among the youngest teens: 4.7% of 12-13 year olds possessed a promotional item in 1993, compared to 10.6% in 1996 (an increase by a factor of over 200%). (See Appendix B, Table 6, for a further demographic breakdown of adolescent possession of promotional items).

The material presented above demonstrates that some adolescents reveal *receptivity* to the tobacco industry's advertisements and promotions. They are exposed to these communications, they pay attention to them, they understand the messages and some develop a positive affective response to the messages. The next section explains the relationship between *receptivity* to tobacco industry advertising and promotions and smoking uptake.

2. Does Cigarette Advertising and Promotion Encourage Adolescents to Become Smokers?

A number of studies have linked the effectiveness of tobacco industry promotional activities over the past 10 years with the recent increases in adolescent smoking behavior (Pierce et al., 1991; Pollay & Lavack, 1993; Pierce et al., 1994; Pierce & Gilpin, 1995; Evans et al., 1995).

Using the Robert Wood Johnson longitudinal study of California adolescents, a logistic regression analysis of the likelihood of *nonsusceptible never smokers'* progression along the Uptake Continuum (described in detail in Chapter 3) between 1993 and 1996 was performed. This model included variables measuring the teens' *receptivity* to advertising

and promotional activities, as well as peer and parental smoking behaviors. The model also controlled for demographic variables and self-rated school performance.

In this model, *receptivity* was measured using a four-level scale. Teens were categorized as minimally receptive to tobacco industry advertising and promotions if they could not name a brand of cigarette advertising as being most advertised, had no favorite ad, and indicated they were unwilling to use or own a tobacco-related promotional item. A teen who could name a cigarette advertisement as being most advertised but who had no favorite and who was unwilling to use or possess a promotional item was classified as having a low level of *receptivity* to tobacco advertising and promotion. A moderate level of *receptivity* was defined as having a favorite cigarette advertisement, but not having and being unwilling to use a promotional item. Finally, high *receptivity* indicated that the teens owned or were willing to use a promotional item.

Table 9.1 presents the results of this analysis of predictors of which adolescents progressed toward smoking.

Table 9.1
Progression Along the Smoking Uptake Continuum From Nonsusceptible in 1993 to Susceptible or Experimenter in 1996*

Receptivity to Tobacco Promotions/Advertising	% Progressing on Uptake Continuum (±CI***)	Adjusted Odds Ratios** (±CI***)
Minimal (No Brand, Not Willing)	37.7 (±11.9)	1.00
Low (Brand, Not Willing)	43.9 (±6.7)	1.32 (0.73-2.41)
Moderate (Favorite Ad, Not Willing)	51.7 (±5.4)	1.82 (1.04-3.20)
High (Willing/Has Item)	62.1 (±9.5)	2.89 (1.47-5.68)

*N=1,752
**Adjusted for family smoking, peer smoking, age, gender, race/ethnicity, and school performance
***CI = 95% Confidence Interval
Source: Pierce JP et al., *JAMA* Feb. 18, 1998;279:511-515.
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Baseline *receptivity* to tobacco industry promotional activities was strongly related to which adolescents progressed toward smoking. Among those who were assessed as having a minimal level of receptivity, 37.7% progressed toward smoking. Compared to this group, those with moderate receptivity were 82% more likely to progress toward smoking after adjusting for the demographic variables and the influence of exposure to other smokers. This difference in likelihood of progression was statistically significant. Those with a high level of receptivity were almost three times more likely than teens with minimal receptivity to progress toward smoking, which was highly statistically significant.[1]

[1] Preliminary analysis showed no significant interactions between the receptivity index and the exposure to smoking variables and these were not retained in the final model.

Amount of Experimentation Attributable to Tobacco Promotional Activities

Data from the 1993 Robert Wood Johnson longitudinal representative sample indicate that in 1993, there were approximately 1.18 million *nonsusceptible never smokers* in the 12-14 year old age group in California. Furthermore, it was estimated that 1,078,812 (91%) of these *nonsusceptible never smokers* exhibited greater than minimal levels of *receptivity* at baseline. Of these youths who were *receptive nonsusceptible never smokers* in 1993, 367,907 (34%) became *experimenters* by 1996. Similarly, it was estimated that approximately 104,696 *nonsusceptible* teens in 1993 were also minimally *receptive* to cigarette advertising and promotions. Of these teens, 23,476 (22%) progressed to *experimentation* by 1996. Thus, the percentage of excess risk of experimentation with cigarettes that is influenced by tobacco promotional activities is 34.3%, using the standard attributable risk methodology. In other words, 34% of the progression from *nonsusceptible never smoker* status to *experimentation* between 1993 and 1996 among California teens is attributable to tobacco industry advertising and promotional activities. Therefore, among the approximately 200,000[2] teens who experiment with cigarettes each year, 34% (approximately 68,000) do so because of the influence of tobacco industry advertising and promotional activities.

3. 1996 Anti-Tobacco Media Exposure Among Adults and Youth

Since the beginning of the California Tobacco Control Program (TCP), the state's anti-smoking media campaigns have been a prominent component of the program's overall strategy. Over the past 6 years, Californians of all ages and sociodemographic groups have been exposed to these messages about the dangers of smoking on television, radio, and billboards. In a previous report, it was noted that the conduct of the early mass media campaigns was coincident with a decline in per capita cigarette consumption (Pierce et al., 1994). However, the evaluation of the media campaign component of the TCP does not include a tracking survey, which can assess public response to a media message or messages in an ongoing manner. Only a few, very general questions were included in the California Tobacco Surveys to assess response to the media campaign. Therefore, a detailed evaluation of the anti-smoking media campaign is hampered by the lack of appropriate data to measure Californians' responses to these media messages.

[2] From the 1993-96 Robert Wood Johnson California Teenage Longitudinal Survey, it was determined that over the course of the 3 years, there were 600,000 new experimenters or 200,000 new experimenters per year.

In 1996, all respondents were asked the following three questions:

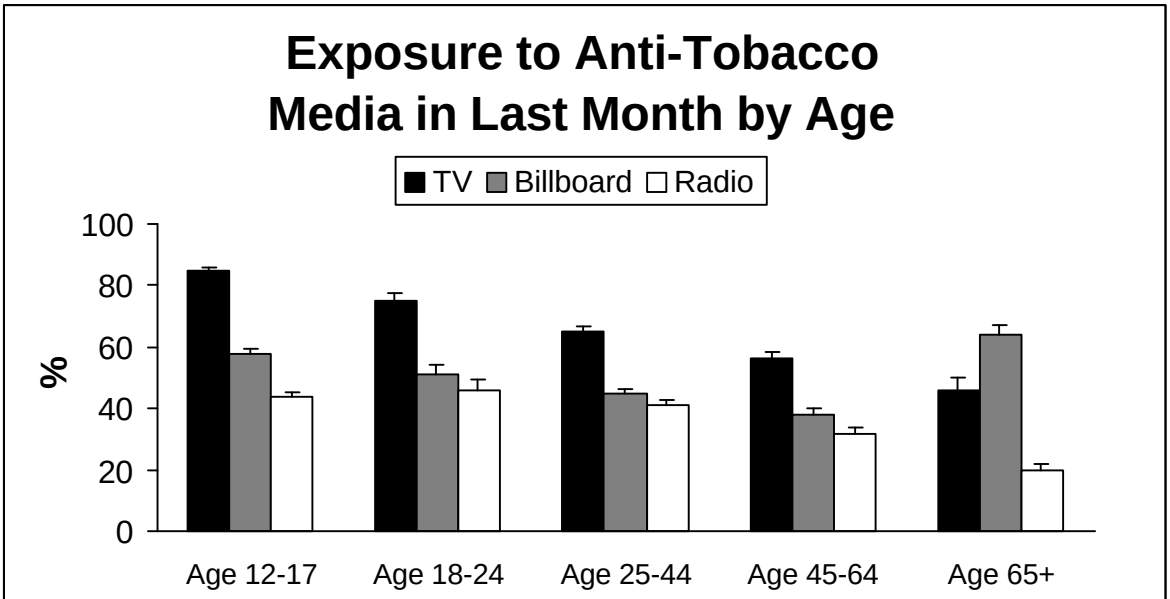
1. *In the last month, have you seen anything on TV against smoking?*	• *A lot of commercials* • *A few commercials* • *No commercials, but saw something in a program* • *Saw nothing against smoking, or* • *You rarely watch TV*
2. *In the last month, have you heard anything on the radio against smoking?*	• *A lot of commercials* • *A few commercials* • *No commercials, but heard something in a program* • *Heard nothing against smoking, or* • *You rarely listen to the radio*
3. *In the last month, have you seen a billboard with a message against smoking?*	• *A lot of billboards* • *A few billboards* • *No billboards against smoking*

Overall, 67% of adults and 82% of adolescents saw an antismoking message on TV, 44% of adults and 50% of adolescents heard such a message on radio, and 41% of adults and 58% of teens saw an anti-smoking billboard. It is important to note that in addition to capturing recall of the TCP media campaign, answers to the above questions may have also included respondents' recall of media messages against smoking other than the ones that were part of the TCP media campaign. For instance, advertisements on television for nicotine gum or the patch may have been what the respondent recalled. Also, there was some news coverage of the tobacco industry litigation during this period.

Demographics

The younger the respondent, the more likely they were to recall exposure to at least a few TV, radio, or billboard anti-tobacco messages. Similarly, the older the respondent, the more likely they were to recall *no* anti-tobacco messages on TV, radio, or billboards. The 1996 TCP media spots were placed on stations and/or programs that attract young adult viewers. Also, more young people watch TV and listen to the radio than older people. It is notable that these trends are similar to those representing *receptivity* to tobacco industry advertising and promotional activities.

Figure 9.1 illustrates the trends for recall of anti-tobacco messages on television, radio and billboards, by age group. The figure shows that, for all age groups except adults age 65 and older, recall is highest for television messages, followed by billboard and radio messages. Comprehensive demographic information on who saw anti-smoking media messages are presented in Appendix B, Table 16.



Source: CTS 1996

Figure 9.1

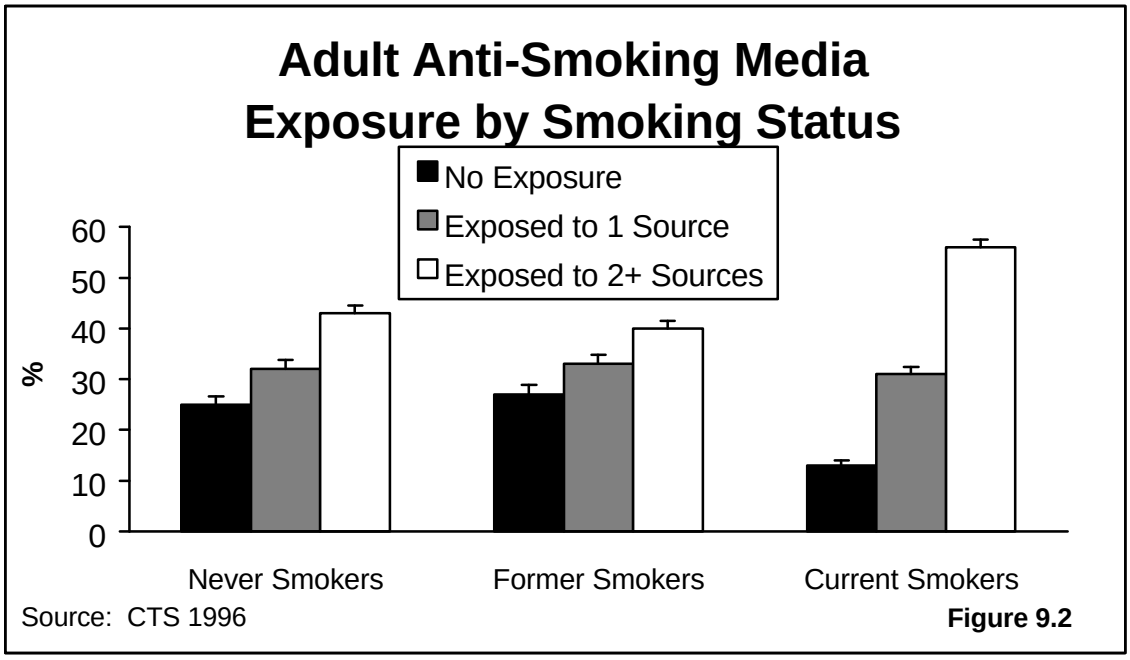
For analytical purposes, exposure to television, radio, and billboard messages were combined into a single binary variable indicating exposure. If respondents did not report seeing or hearing anti-tobacco messages on any of these three media, they were considered *not exposed*; otherwise, they were grouped into the *exposed* category.

Although there was no difference in the rates of recall between gender for adolescents (94% for boys and 93% for girls), adult men were significantly more likely (86%) to report seeing a message than adult women (79%). Also, among youth, there was little difference in rates of exposure across racial/ethnic groups. Among adults, however, exposure varied significantly; African-American (84%) and Hispanic adults (84%) reported higher rates of exposure than Asian (77%) or Non-Hispanic White adults (82%).

Education levels and exposure were also significantly related. Overall, 78% of adults with at least a high school education recalled at least one TV, radio, or billboard anti-tobacco message in the past month, compared to 74% of adults without a high school diploma, and the education gap widened with age. In fact, virtually no educational difference existed among 18-24 year olds, and the difference remained insignificant among 25-44 year olds. However, among adult 45-64 year olds, those with at least a high school education were significantly more likely (75%) to report some exposure than those without a high school diploma (69%). Approximately 64% of adults age 65 and older, who had at least a high school education recalled anti-tobacco media messages, while only 55% of older adults who had not completed high school reported any exposure, also a significant difference. Among youth, school performance was unrelated to exposure rates.

Anti-Tobacco Media Exposure and Smoking Status

Figure 9.2 shows that among adults, smoking status and exposure to anti-tobacco media were related.



Source: CTS 1996

Figure 9.2

The figure shows that adult current smokers recalled ads more often than nonsmokers or former smokers. This trend suggests that TCP media campaigns were successful in their strategy to target adult smokers.

Among teens, this relationship did not exist: addicted smokers recalled ads at about the same rate as never smokers and experimenters. However, for teens this result is desirable; it is important that all teens be exposed to anti-smoking media messages.

Anti-Tobacco Media Exposure and Quitting Behavior Among Adult Current Smokers

Many of the Tobacco Control Program's television, radio, and billboard ads display the toll-free telephone number for the state-funded California Smokers' Helpline. The 1996 CTS asked adult smokers who had a quit attempt in the last year if they had ever heard of the 1-800-7NOBUTTS telephone numbers for the Smokers' Helpline. Approximately 27% of smokers with a recent quit attempt had heard of the toll-free number (with aided recall).

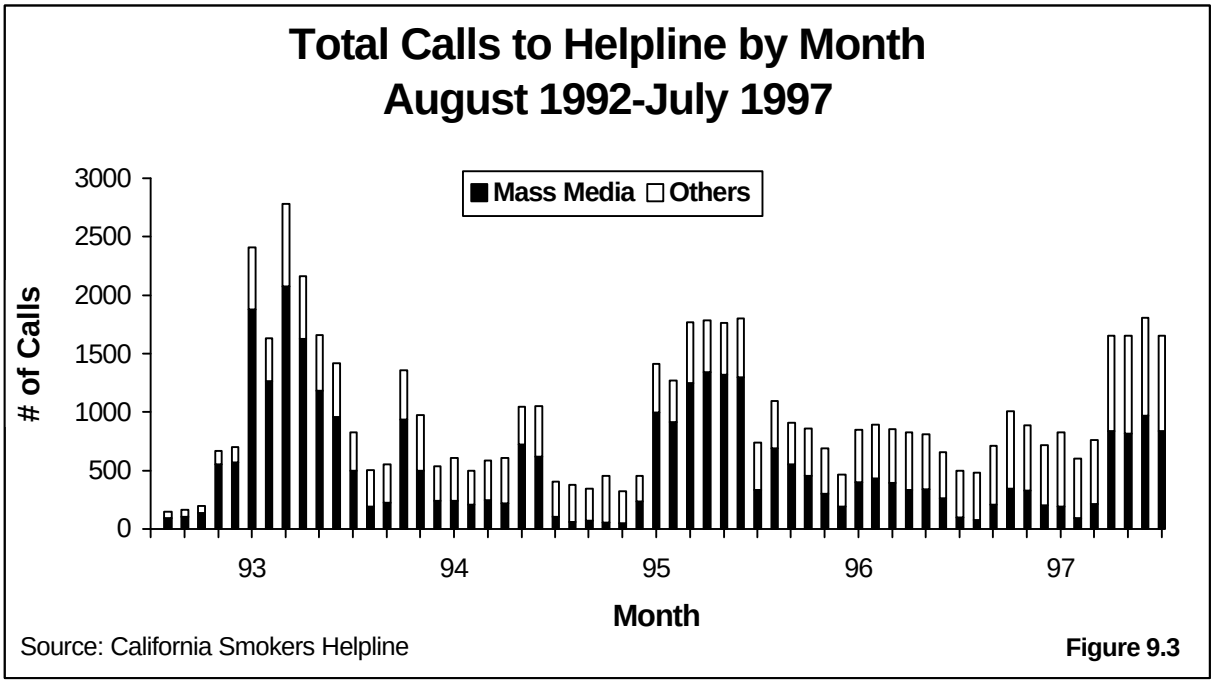
Current smokers who were exposed to anti-smoking media were more likely to attempt to quit smoking.

Current smokers who had made a quit attempt in the past year and were *exposed* in the last month to anti-tobacco media messages were significantly more likely to have heard of the Smokers' Helpline telephone numbers than were those who were *not exposed* (28.2% vs. 16.4%). Current smokers who were *exposed* to anti-tobacco media were also significantly more likely to have attempted to quit smoking within the last 12 months than were current smokers who were *not exposed* (48.2% vs. 39.1%).

To sort out which factors were related to the probability that a current smoker attempted to quit smoking, a logistic regression analysis—which simultaneously controlled for previous quitting history, cigarette consumption level, intention to quit, age, gender, race/ethnicity and educational level—was conducted. After adjusting for other factors known to be related to quitting, the analysis showed that smokers who were *exposed* to all three types of anti-tobacco media were significantly more likely (60.1%) to attempt to quit smoking than were smokers who said they had not seen or heard any of the three types of media messages (43.2%). This result implies that either the TCP media program has been effective in encouraging smokers to quit, or that those smokers who are in the midst of the quitting process are more likely to notice the anti-tobacco media.

Calls to the Helpline for Assistance to Quit

One of the goals of the California Tobacco Control Program (TCP) is to encourage smokers to seek help to quit. As mentioned above, many of the TCP anti-smoking media messages display the telephone number for the California Smokers' Helpline. Figure 9.3 presents the monthly calls to the Helpline from August 1992 through July 1997, and it demonstrates that the media campaign plays a crucial role in getting smokers to call the Helpline for assistance to quit.



Source: California Smokers Helpline

Figure 9.3

In Figure 9.3, the dark portion of the bar represents the number of calls in each month from callers who cited the TCP mass media campaign as one of their motivations to call the Smokers' Helpline. The unshaded portion of each bar represents those smokers who did not directly attribute their awareness of the Helpline to the mass media campaign. The figure shows that the periods during which there were increased calls to the Helpline correspond to times when there was an intensive media campaign in the field. In the first half of 1993, a period of intensive media activity, the monthly average for the number of Helpline calls was over three times that observed from the second half of that year through 1995. Again in the early half of 1995, monthly calls averaged about 3 times the level for the second half of that year through 1996. These data confirm previous reports (Pierce et al., 1986; Pierce et al., 1992) indicating that calls to the Helpline may be a reasonable measure of the effectiveness of the Mass Media Campaign.

Anti-Tobacco Media Exposure and Perceptions of the Tobacco Industry Among Adults

One media strategy outlined in an early report of the Tobacco Education and Research Oversight Committee (TEROC) was to educate Californians about the motives behind the tobacco industry's marketing. Specifically, the mass media program contested the tobacco industry's claims that it does not encourage young people to smoke, its products are not addictive, and that tobacco does not kill people (TEROC, 1997). To assess the effectiveness of the anti-tobacco media messages in this educational process, the 1996 CTS asked respondents whether they believed a series of statements about smoking, which reflected the tobacco industry's positions.

Anti-tobacco media exposure appears to have significantly increased the percentage of smokers who *did not* believe the tobacco industry messages.

Adult current smokers who were exposed to anti-tobacco media were slightly, but significantly, more likely to report that they *did not* believe tobacco company messages about industry advertising practices or the health consequences of smoking and secondhand smoke. Table 9.2 presents the percentages of adult current smokers exposed and not exposed to anti-tobacco messages who responded that they *did not* believe six specific tobacco industry messages.

Table 9.2
Percent of Current Smokers
Who Did Not Believe the Tobacco Industry Claims

Tobacco Industry Claim	Exposed to Anti-Tobacco Messages (%)	Not Exposed to Anti-Tobacco Messages (%)	P-value
They do not manipulate the level of nicotine in cigarettes	79.7	74.5	0.002*
They do not target advertising to encourage kids to smoke	71.7	67.5	0.047*
Advertising is only aimed at getting adult smokers to change brands	70.9	66.6	0.051
Nicotine is not addictive	93.1	89.9	0.007*
Secondhand smoke is not harmful to health	82.7	78.4	0.001*
Tobacco is not harmful to health	92.0	88.6	0.005*

*Indicates a statistically significant difference between the percentage of exposed and not-exposed smokers who do not believe the statements.
Source: CTS 1996

Impact of Anti-Tobacco Media Exposure on Adolescents

The 1996 media campaign was not explicitly aimed at adolescents but rather at young adults. Since adolescents often emulate young adults and are interested in the same things, such a focus for the campaign should reach adolescents as well. Indeed, adolescent respondents were more likely than adult respondents to see or hear anti-tobacco messages, but there was no difference in their beliefs about tobacco industry claims depending on whether they were exposed to anti-tobacco media messages. Because there was no difference, the data are not presented here.

One of the most powerful television spots of the 1996 media campaign showed a woman smoking through a hole in her throat. Such an emotional appeal would be expected to influence teens' views on the health consequences of smoking and possibly discourage *never smokers* from thinking about smoking or encourage smokers to quit. However, the data collected cannot isolate this media message from the others aired during this time.

Table 9.3 shows that, overall, the media campaign had no association with teens' beliefs about the health consequences of smoking or *susceptibility* to smoking (see Chapter 3). The table shows a trend for teen smokers exposed to anti-smoking media to be more likely to seriously have thought about quitting, but the sample of smokers is too small for the difference to be statistically significant.

Table 9.3
Association Between Media Exposure Among California Teens and Beliefs About the Health Consequences of Smoking, Susceptibility to Smoking, and Quitting Behavior

	Exposed (%)	Not Exposed (%)	P-value
Health Consequences (n=6,252)			
Believe it's safe to smoke for a year or two	9.2	10.3	0.452
Believe there is not any harm to having an occasional cigarette	67.4	66.9	0.823
Susceptible to Smoking (n=4,339)	31.1	29.3	0.467
Seriously Thought of Quitting			
All smokers (n=2,174)	40.2	34.4	0.155
Addicted smokers (n=446)	85.1	76.2	0.291

Source: CTS 1996

4. Summary

The tobacco industry and the state of California each use the media extensively to convey their respective messages. This chapter explained that receptivity to advertising and promotions consists of three components: (1) exposure to the message, (2) paying attention to or recognizing the message, and (3) developing a cognitive or positive affective response to the message as demonstrated by understanding of, interest in, and agreement with the message.

Section 1 presented strong evidence that California teens are highly exposed to tobacco industry advertising and promotional activities. Approximately 90% of teens reported exposure to these pro-smoking messages in each CTS, based on their answers to a question about whether they could name a brand of cigarettes they saw advertised most on billboards and in magazines. The analyses presented in this section also showed that teens understand and agree with the messages in cigarette advertisements. Finally, this section demonstrated that the percent of teens who are willing to use or own a cigarette promotional item, another important indicator of receptivity, increased significantly between 1993 and 1996.

Section 2 of this chapter presented evidence that cigarette advertisements and promotional activities independently contribute to the likelihood that a teen will progress from a *nonsusceptible never smoker* to riskier levels of the Uptake Continuum. Using the Robert Wood Johnson longitudinal data, it was shown that approximately 34% of the risk of future experimentation among *nonsusceptible never smokers* could be attributed to these activities. Thus, at least 68,000 new experimenters are recruited from the ranks of never smokers each year by tobacco industry advertising and promotions.

Section 3 suggests that the California Tobacco Control Program (TCP)'s media campaign has produced mixed results. Just as with the tobacco industry messages, younger respondents, women, African Americans and Hispanics were more likely to report recall of anti-tobacco media messages. The media campaign appears to have had some impact with adults. Adults exposed to the anti-tobacco messages were less likely to believe the messages of the tobacco industry; smokers who recalled radio, television and billboard messages were more likely to have made a recent quit attempt. Although more adolescents reported exposure to media antismoking messages than did adults, the messages had little impact on the teens' beliefs or behavior.

The evidence presented in this chapter suggests that the tobacco companies have been quite effective in their strategies to influence and attract new smokers. The TCP Mass Media Campaign showed some effect with adults but had little impact on youth. A fully funded and intensive media campaign that reaches a large proportion of California smokers should stimulate quitting and calls to the California Smokers' Helpline for assistance.

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Chapter 10

ACCESS TO AND EASE OF PURCHASE OF CIGARETTES

CHAPTER 10: ACCESS TO AND EASE OF PURCHASE OF CIGARETTES

Introduction

Banning or limiting the ability of minors to purchase cigarettes is a seemingly simple and politically popular measure aimed at curbing teen smoking. By California law, the minimum age for the purchase of cigarettes and smokeless tobacco is 18 years old. Any person—other than a parent or guardian—who gives, barters, or sells tobacco products to a minor is subject to fines. In 1990, the majority of Californians felt that the enforcement of laws prohibiting the sale of cigarettes was inadequate, and three quarters of smokers felt that vending machine sales to minors should be banned (Burns & Pierce, 1992).

In 1994, California's Legislature enacted the Stop Tobacco Access to Kids Enforcement (STAKE) Act. This legislation was designed to strengthen the ban on the sales of tobacco products to minors. The Department of Health Services was designated to enforce the Act. As part of its enforcement duties, the Department of Health Services began to conduct random "sting" inspections, beginning in December of 1995 (TEROC, 1997). Subsequent to the passage of the STAKE Act, the fines and terms of permit revocation were increased in 1996 (ALA, AHA, and ACS, 1996). Compliance checks were carried out through 1997, and the identification of illegal sales dropped from 37% in 1995 to 29% in early 1997.

The STAKE Act and the increased fines are two tangible measures the state has taken to implement its commitment to more effectively control the sale of tobacco to minors. Despite these activities, however, evidence presented in this chapter suggests that enforcement of bans on the sale of tobacco products to teens may not effectively limit their access to cigarettes. A recent study showed that in communities with improved enforcement of access laws, illegal sales of cigarettes decreased to only 18% in test buys. In control communities, without increased enforcement, illegal cigarette sales occurred in 55% of test buys. However, the decrease in illegal purchases that resulted from the increased enforcement did not significantly reduce teens' ability to obtain cigarettes or reduce their smoking behavior (Rigotti et al., 1997).

This chapter discusses the efficacy of laws restricting teens' ability to purchase cigarettes, and the impact of such laws on teens' access to cigarettes. Section 1 explores teens' perceptions of the ease of obtaining cigarettes. Section 2 analyzes the ways in which teens obtain the cigarettes they smoke. Section 3 examines where teens buy cigarettes. Section 4 presents conclusions from this chapter.

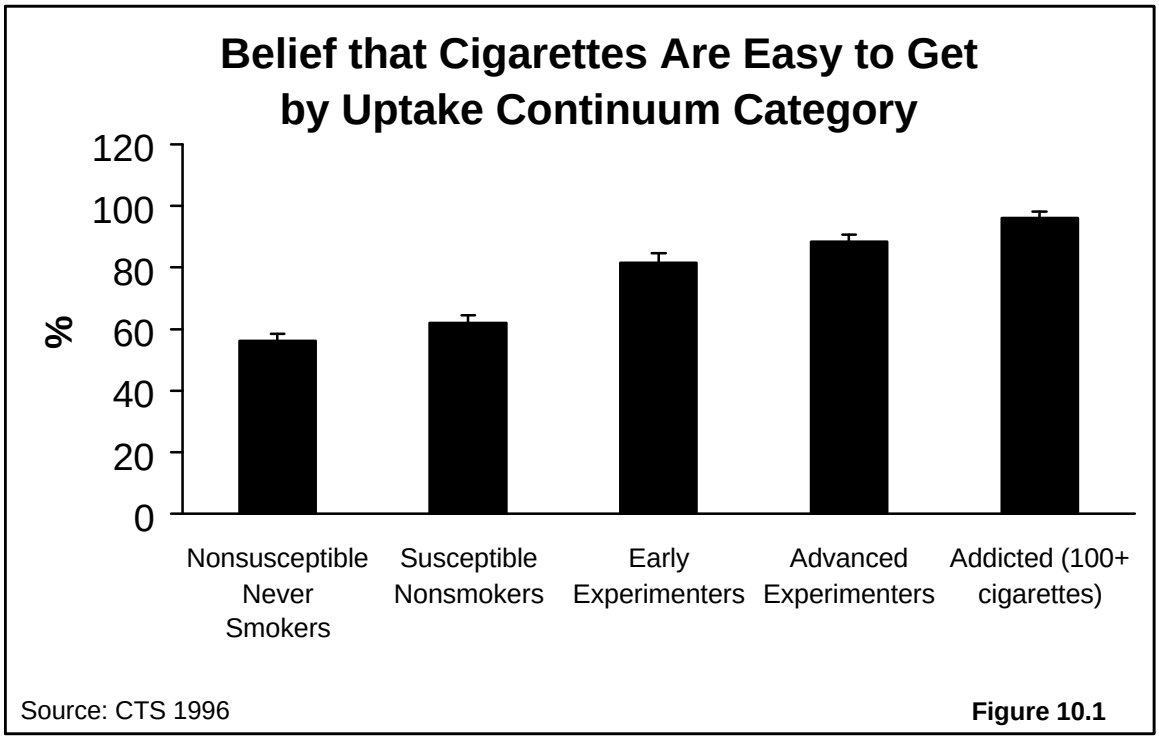
1. Teens' Perceptions of the Ease of Obtaining Cigarettes

To assess teens' perceptions about how easy it is to obtain cigarettes, the 1990, 1993 and 1996 CTS asked:

> *Do you think it would be easy or hard for you to get cigarettes if you wanted some?*

Only teens who had never smoked or only had puffed on a cigarette were consistently asked the above question in each survey. The percentage of this group who thought cigarettes were easy to get did not change significantly between 1990 and 1996. In 1990, 59.7% believed cigarettes were easy to get, in 1993 57.9% held this belief, and in 1996 57.8% did.

The 1996 CTS asked the question of all respondents, and Figure 10.1 shows the percentage of teens who think cigarettes are easy to get for each category of the Uptake Continuum (Chapter 3).



Source: CTS 1996 **Figure 10.1**

Clearly teens who had smoked a cigarette were more likely, no doubt because of their own experience, to think cigarettes were easy to get. Over 80% of *early experimenters* and 88% of *advanced experimenters* thought cigarettes were easy to get. Finally, 96% of *addicted smokers*, who are the most likely to face the problem of having to get cigarettes, held this view.

The 1996 CTS included an additional question that asked teens:

Would you say it would be easy, somewhat difficult or hard for you to **buy** *a pack of cigarettes?*

In 1996, the majority (51.5%) of teens, regardless of smoking experience, believed it would be easy to buy a pack of cigarettes, and 70% of ever smokers held this view.

Overall in 1996, 51.5% of adolescents thought it would be easy to buy a pack of cigarettes. The percentage of never smokers thinking it would be easy to **buy** a pack of cigarettes was significantly lower for *nonsusceptible* (42%) and *susceptible* never smokers (45%) than for those in *early experimentation* (57%), *advanced experimentation* (68%), or for *addicted smokers* (88%). Considering all teens who had ever smoked, 70% thought it would be easy to buy a pack of cigarettes.

Among *never smokers*, there was no gender difference in perceived ease of buying a pack of cigarettes. However, Non-Hispanic White and African American teens were significantly more likely than Hispanic or Asian teens to think it is easy to buy a pack. There was a significant increase with age as well: Only 22% of never smokers aged 12-13 years old thought it would be easy to buy a pack of cigarettes, compared to 48% of 14-15 year olds and 69% of 16-17 year old never smokers. Perhaps as never smoking teens get older they know more peers who smoke and who apparently have little difficulty buying cigarettes. Also, as they get older, they may assume that they are less likely to be asked for identification.

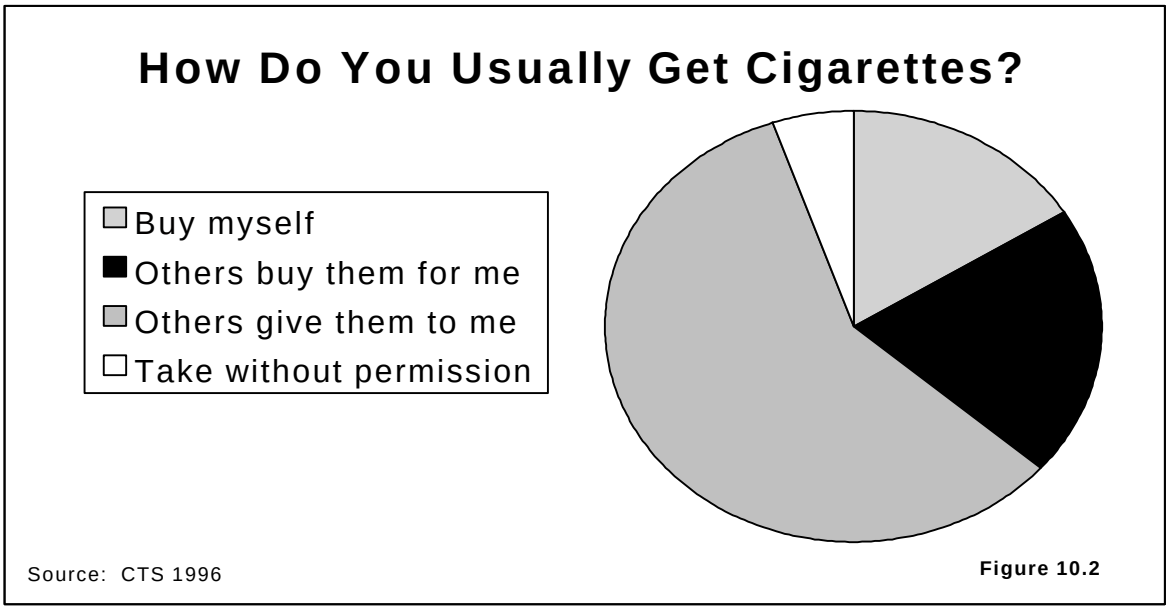
2. How Do Teens Usually Get Cigarettes?

By making it more difficult for young people to purchase cigarettes, it was expected that teens would have less access to cigarettes and therefore smoke less. Research found, however, that laws limiting the sale and purchase of cigarettes have little impact on teens' access to cigarettes (Chaloupka & Grossman, 1996; Rigotti et al., 1997). The primary reason these laws did not produce the desired effects appears to be that **relatively few teens actually purchase cigarettes**.

The 1996 CTS asked teens who had ever smoked a cigarette:

How do you usually get cigarettes?

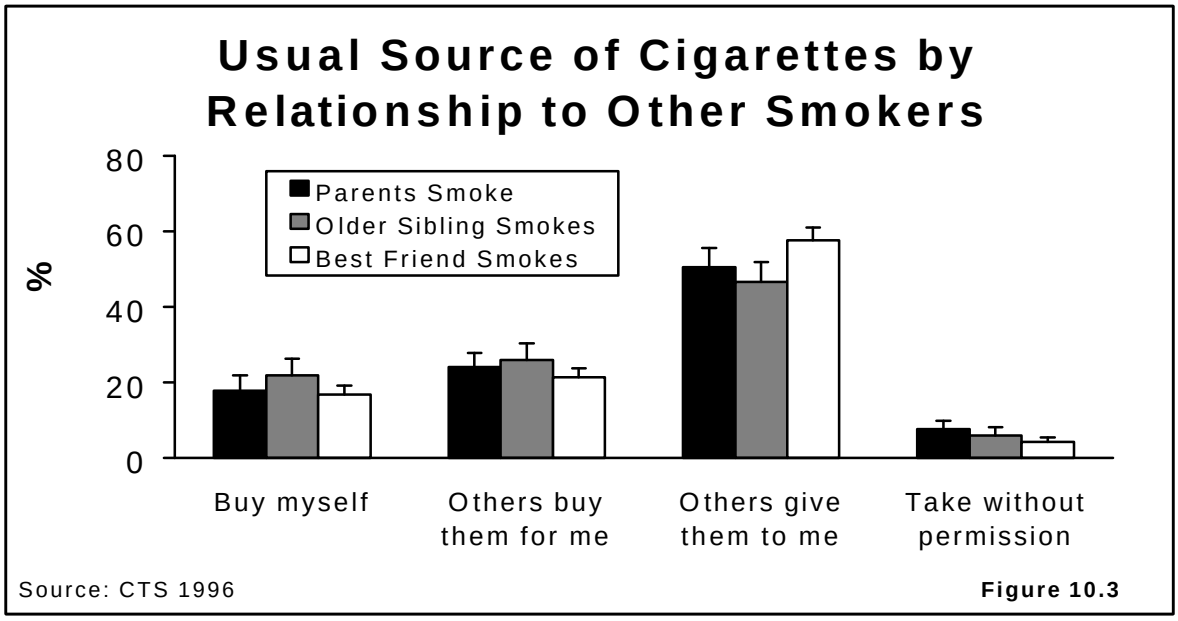
Figure 10.2 shows that, for the most part, teens who had ever smoked obtain cigarettes in one of three ways: others give them cigarettes, others buy cigarettes for them, or teens buy their own cigarettes (see Appendix B, Table 17 for detailed demographic analysis).



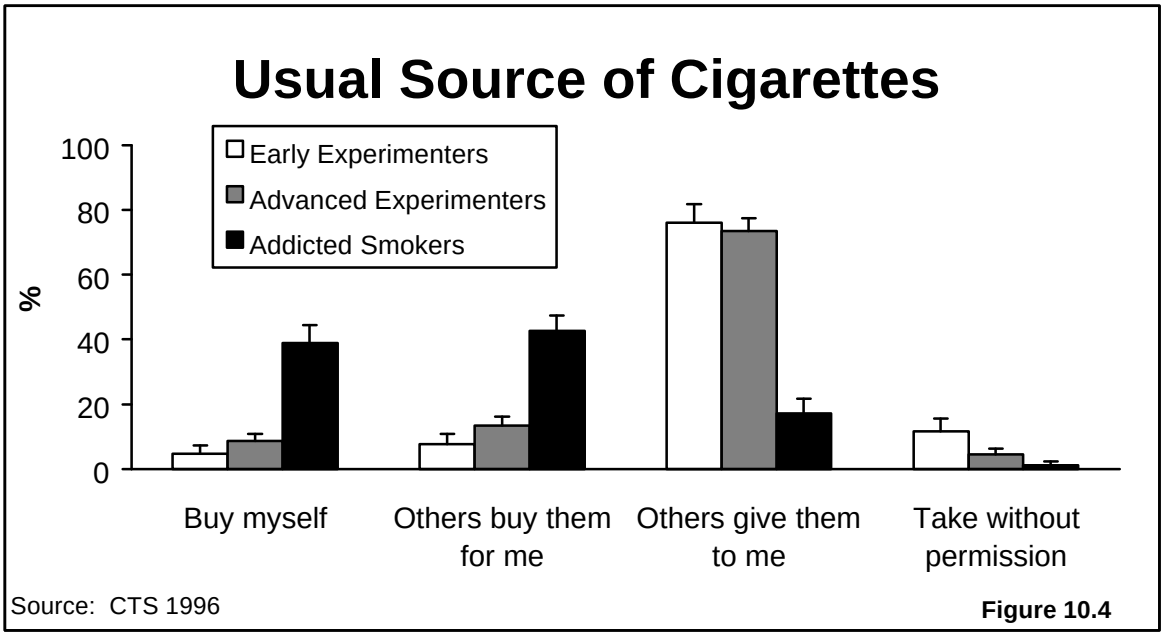
83% of teens who had ever smoked did not usually buy their own cigarettes.

Overall, 58% of teens who had ever smoked say that others give them their cigarettes, 20% say that others buy cigarettes for them, 16% buy their own cigarettes, and 5% of teens admit to taking cigarettes from friends, family, or stores without permission.

Among teens whose parents or older siblings smoke, approximately 9% obtain cigarettes from home. Figure 10.3 shows that, compared to teens whose parents smoke or who have an older sibling who smokes, those teens who have a best friend who smokes are significantly more likely to get their cigarettes from someone who gives them the cigarettes, likely the best friend.



How much an adolescent smokes is strongly associated with the ways in which they obtain cigarettes. As might be expected, those teens who smoke regularly are significantly more likely to purchase cigarettes than teens who are in experimental phases. Conversely, teens who are still experimenting are significantly more likely to get their cigarettes from others than are *addicted smokers*. Figure 10.4 illustrates these results. In this figure (as explained in Chapter 3), *early experimenters* have not smoked 100 cigarettes in their lifetime and have not smoked in the past 30 days; *advanced experimenters* have not yet smoked 100 cigarettes, but have smoked within the past 30 days; and *addicted smokers* have smoked 100 cigarettes in their lifetime.



Source: CTS 1996

Figure 10.4

Over 80% of *addicted* teens usually purchase the cigarettes they smoke. In contrast, 75% of teens in the *experimentation* phases of smoking uptake usually get their cigarettes from others.

Figure 10.4 shows that only 4.7% of *early experimenters* and 8.6% of *advanced experimenters* usually buy their own cigarettes, while 39% of *addicted smokers* usually buy their own. A similar pattern is evident for those who have others buy them cigarettes. Approximately 8% of *early experimenters* and 14% of *advanced experimenters* usually have others buy cigarettes for them, but 43% of *addicted smokers* usually have others buy their cigarettes. Considering those *addicted smokers* who buy their own and those who have others buy cigarettes for them, approximately 82% of *addicted smokers* usually purchase cigarettes one way or another. These teens are smoking at rates that would probably exceed the generosity of their friends. In contrast, the vast majority of experimenters are given the few cigarettes that they smoke from others: 76% of *early experimenters* and 74% of *advanced experimenters* usually get their cigarettes this way, while only about 17% of *addicted* usually smokers get their cigarettes from others.

Figure 10.5 shows how teen ever smokers usually get their cigarettes, analyzed by age. The 1996 California Tobacco Survey found that only 3% of ever smokers in the 12-13 year old age group, 10% of 14-15 year old ever smokers and 23% of 16-17 year old ever smokers usually purchase their own cigarettes. Eighteen percent (18%) of boys who ever smoked said they usually bought their own cigarettes, compared to 14% of girls. Because more teens in the *addicted smoker* category are also older teens, the patterns in Figures 10.4 and 10.5 are very similar. It is nonetheless useful to see that significantly more ever smokers aged 16-17 usually buy their own cigarettes, compared to 12-13 year olds or 14-15 year olds. In contrast, significantly more 12-13 year olds and 14-15 year olds usually have others give them cigarettes, compared to the 16-17 year olds. Interestingly, significantly more 12-13 year olds take cigarettes without permission, compared to the older teens.

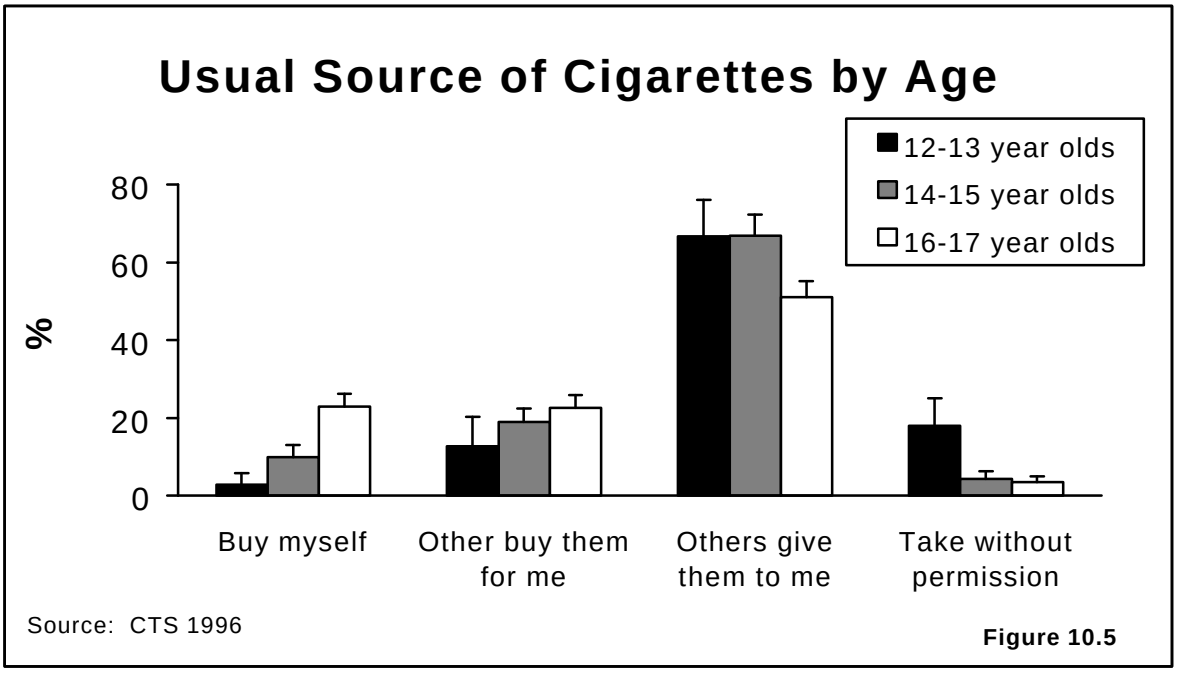
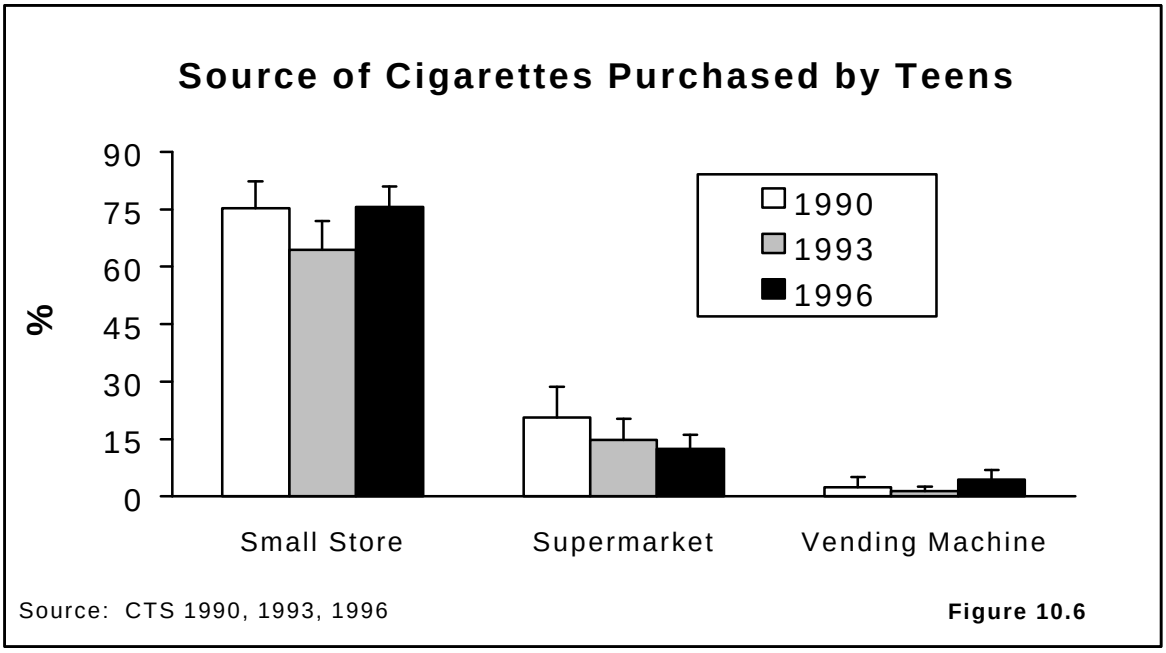


Figure 10.5

3. Where Teens Usually Buy Cigarettes

In each year of the CTS, among teens who purchase their own cigarettes, small stores, followed by supermarkets and vending machines were the favored sources of cigarettes. Gas stations and liquor stores were the most common small stores cited as the purchasing source. Figure 10.6 shows that the type of establishment where teens said they "often" bought their cigarettes remained relatively constant between 1990 and 1996.



Source: CTS 1990, 1993, 1996

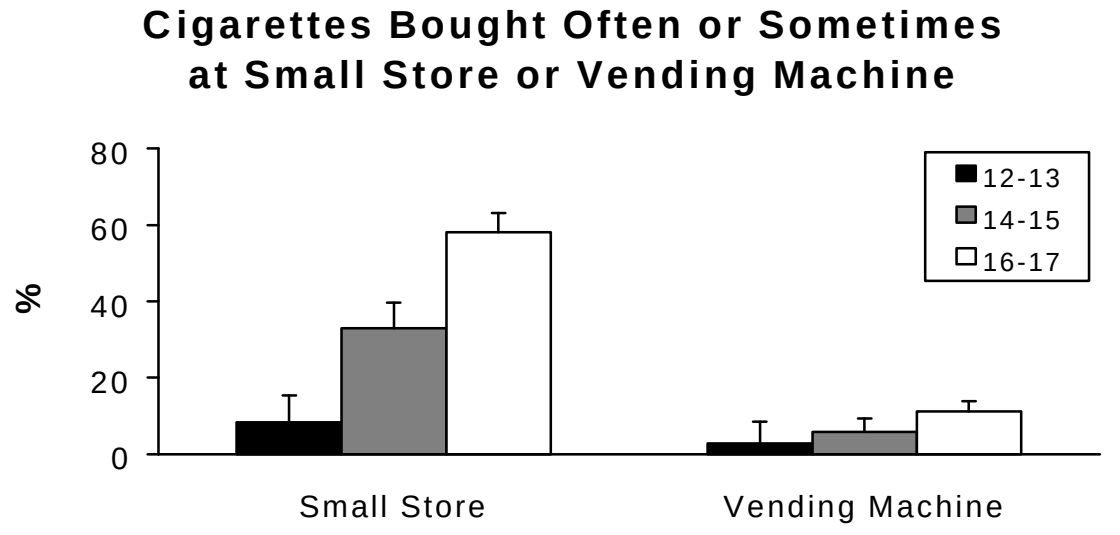
Figure 10.6

Over two-thirds of teens who buy cigarettes make their purchases in small stores, such as gas stations or liquor stores.

The figure shows no difference in the percent of teens who often purchased their cigarettes from small stores (70%) between 1990 and 1996. However, there was a small but statistically significant decline in the percent of teens who often purchased their cigarettes from supermarkets between 1990 and 1996. The patterns observed in Figure 10.6 held among establishments where teens "sometimes" buy cigarettes, as well.

These findings suggest that the larger supermarket chains may have adopted stricter corporate policies about selling cigarettes to minors, while small stores may not as consistently enforce the law. Research suggests that there would be no noticeable effect on teen cigarette purchases until store compliance was high enough that illegal sales of cigarettes to minors occurs in only about 10% of random checks. (Jason et al., 1991; DiFranza et al., 1992). Increased enforcement of laws banning the sale of cigarettes to minors and stepped-up compliance checks may never reach a level of stringency sufficient to deter minors from purchasing cigarettes (Rigotti et al., 1997).

Figure 10.7 shows insignificant differences between the percentage of 12-13 year olds who bought cigarettes in small stores versus those who bought them from vending machines in 1996. Among 14-15 year olds and 16-17 year olds, however, significantly more teens bought their cigarettes from small stores than from vending machines.



Source: CTS 1996

Figure 10.7

4. Summary

This chapter showed that despite the passage of the STAKE Act in 1994, minimal changes occurred between 1990 and 1996 in nonsmoking teens' perceptions of how easy it is to get cigarettes. In 1996, 51.5% of all teens thought it would be easy to buy a pack of cigarettes, and 70% of ever smokers held this view.

In 1996, only 16% of teens who ever smoked usually buy their own cigarettes. Nearly 80% of teens who smoke usually get their cigarettes from others. Most (55%) say others give them the cigarettes, but many (20%) have others buy the cigarettes for them. As might be expected, the teens who smoke the most were the most likely to buy their own cigarettes. Similarly, younger teens (12-15 years old)—who typically have less experience with smoking—were more likely to get their cigarettes from others, while older teens (16-17 years old) were more likely to report that they usually bought their own cigarettes.

The data presented in this chapter show that teen access to cigarettes is made easier by increasing rates of adolescent smoking prevalence: with more teens smoking, more teens are able to get cigarettes from their friends or acquaintances. These results suggest that public policy efforts attempting to limit access to cigarettes through limiting the ability to purchase them may produce less success than other tobacco control policies in reducing teen smoking. For instance, a major increase in the price of cigarettes from a new tax might make teens less likely to give them away.

The focus of tobacco control efforts on limiting teen access has been questioned previously (Glantz, 1996). Indeed, the tobacco industry expresses support for the goal of

limiting teen access, even though their advertising and promotional activities clearly promote smoking in this population (see Chapter 9). This tobacco industry endorsement suggests that it believes that this strategy may result in minimal changes in behavior, and produce a more respectable public perception of the industry. By making cigarettes even more "off-limits," this strategy may actually lead to an increased interest in cigarettes among teens. Furthermore, as the war on drugs has demonstrated, major funding to restrict supply in the face of increasing demand is rarely successful. Adolescent demand is fueled by tobacco industry advertising and promotions. A message that "only adults can buy cigarettes" sets up the purchase and smoking of cigarettes as a symbol of entry into the adult world.

CHAPTER 10: REFERENCES

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Chapter 11

SCHOOL SMOKING: POLICIES AND COMPLIANCE

CHAPTER 11: SCHOOL SMOKING: POLICIES AND COMPLIANCE

Introduction

School smoking prevention efforts focus on three objectives: the implementation of smokefree policies on school property, strict enforcement of such policies, and the incorporation of anti-tobacco education into the school curriculum. Since 1952, the California State Education Code has banned all student smoking on the grounds of junior high and middle schools (Pentz, 1989). In 1991, AB-99 required that all schools become tobacco-free by July 1, 1996 in order to qualify for anti-tobacco program funding. Legislation passed in 1994 moved the implementation date of the AB-99 school policies ahead by a year, to July 1, 1995.

School smoking regulations may also achieve two additional goals that are consistent with the California Tobacco Control Program (TCP) objectives. First, they protect students from environmental tobacco smoke (ETS). Second, they may discourage smoking by making it inconvenient and officially recognized as an undesirable activity.[1] This chapter examines the extent to which students believe that their peers and teachers comply with the school smoking ban and the degree of enforcement students themselves advocate.

Section 1 analyzes trends in student compliance with school smoking regulations. Section 2 examines trends in perception of teachers' smoking. Section 3 explores students' exposure to anti-smoking curricula. Section 4 summarizes the chapter.

1. Smokefree School Policies

To assess compliance with smokefree policies at schools, the 1990, 1993 and 1996 California Tobacco Surveys (CTS) asked adolescents the following question:

How many students who smoke obey the rule not to smoke on school property?

In 1990 and 1993, approximately 45% of adolescents responded that *most* or *all* of the student smokers obeyed the school smoking restriction. In 1996, only 41% gave this answer, representing a decrease by a factor of 10% in perceived compliance. Table 11.1 provides a summary of the percent of students in 1996 who responded that *most* or *all* students who smoke obeyed the smoking ban on school property (see Appendix B, Table 18 for detailed demographic results).

[1] For the rebellious student, the official disapproval of smoking may, however, present a stimulus to smoke.

Table 11.1
How Many Students Who Smoke
Obey the Rule Not to Smoke on School Property?

Demographics	Responding "Most" or "All"			Factor Decrease 1990-1996
	1990 % (±C.I.*)	1993 % (±C.I.*)	1996 % (±C.I.*)	%
All Students	46.3 (±2.0)	43.7 (±1.6)	40.7 (±1.4)	-12.1
Gender				
Boys	48.6 (±2.9)	46.0 (±2.2)	40.5 (±1.8)	-16.7
Girls	44.2 (±2.7)	41.4 (±2.9)	40.9 (±1.4)	-7.5
Age				
12-13	56.9 (±3.9)	53.8 (±2.3)	46.1 (±2.4)	-19.0
14-15	41.9 (±3.5)	38.9 (±2.8)	37.7 (±2.6)	-10.0
16-17	39.3 (±3.6)	36.8 (±3.4)	38.3 (±2.5)	-2.5
Race/Ethnicity				
African American	49.2 (±8.8)	42.5 (±7.7)	38.3 (±4.9)	-22.1
Asian	42.1 (±6.6)	38.0 (±5.9)	34.5 (±4.3)	-18.1
Hispanic	42.8 (±3.5)	38.5 (±3.8)	39.5 (±2.9)	-7.7
Non-Hispanic White	48.9 (±2.6)	47.9 (±2.3)	43.3 (±2.0)	-11.5

*CI = 95% Confidence Interval
Source: CTS 1990, 1993, 1996

Table 11.1 shows that there were no differences between boys' and girls' perceptions of compliance and differences between minority groups' perceptions were minimal in each year of the CTS. A significantly higher percentage of Non-Hispanic White students reported that *most* or *all* student smokers obeyed the school smoking ban than Hispanic students in 1993, but this difference disappeared by 1996. Perceived compliance was significantly higher among students age 12-13 than in older students. This makes sense for two reasons: fewer 12-13 year olds smoke, and a smoking ban in junior high and middle schools has been in place for over 40 years (Pentz et al., 1989).

60% of students believe that school smoking bans are not obeyed.

These statistics indicate that despite a long-standing ban on smoking in junior high and middle schools and a more recent total ban on all smoking in all schools, compliance remains poor; 60% of adolescents believe that smoking bans are not obeyed. Table 11.1 shows that perceptions of compliance decreased between 1990 and 1996 across all groups of students.

While decreased perceptions of compliance were observed in all students, the decline in perceived compliance was greater in boys than girls (by a factor of 16.7% for boys vs. 7.5% for girls) and in 12-13 year olds and 14-15 year olds compared to 16-17 year olds. Hispanic students showed significantly less change in perceptions of compliance than other racial/ethnic groups (decreased by a factor of 7.7%). The fact that compliance appears to

have gotten worse since the AB-99 school policy was implemented may, in fact, represent declining compliance. On the other hand, it may represent increased recognition of noncompliance resulting from greater awareness of school policies. Thus, students may have become sensitized to school smoking by the new policies, rather than less compliant.

How Many Students Witnessed Smoking in School?

In earlier years of the California Tobacco Survey, students were asked separate questions about whether they had seen students or teachers smoking at school. The 1996 CTS was slightly modified to ask students the following single question to ascertain the level of compliance to the new law:

Have you seen anyone smoke in school in the last two weeks?

In 1996, over one-third (36%) of students had seen anyone smoking at school. Answers to this question varied widely, depending on the student's age, and whether they attended private or public school. Significantly more of the oldest teens observed smoking at school. Only 16% of private and religious school students reported they had seen smoking at school, while 39% of public school students answered "yes" to this question, which is a significant difference. Further research may determine whether, and what type of, differences in the enforcement of school smoking policies result in the differential exposures to smoking at school among private and public school students. Results for this question are presented in Table 11.2.

Table 11.2
Students Who Have Seen Anyone Smoking at School

Demographic Groups	% Who Saw Smoking 1996 (±C.I.*)
All Students	36.0 (±1.5)
Gender	
Boys	37.0 (±2.1)
Girls	34.9 (±2.0)
Age	
12-13 year olds	12.3 (±1.9)
14-15 year olds	44.2 (±2.5)
16-17 year olds	51.0 (±2.3)
Race/Ethnicity	
African American	35.1 (±5.2)
Asian	41.6 (±4.1)
Hispanic	32.3 (±2.9)
Non-Hispanic White	36.9 (±1.8)
School	
Private/Religious School	16.0 (±3.3)
Public School	39.0 (±1.6)

*CI = 95% Confidence Interval
Source: CTS 1996

Trends in Student Preferences for Smokefree School Grounds 1993-1996

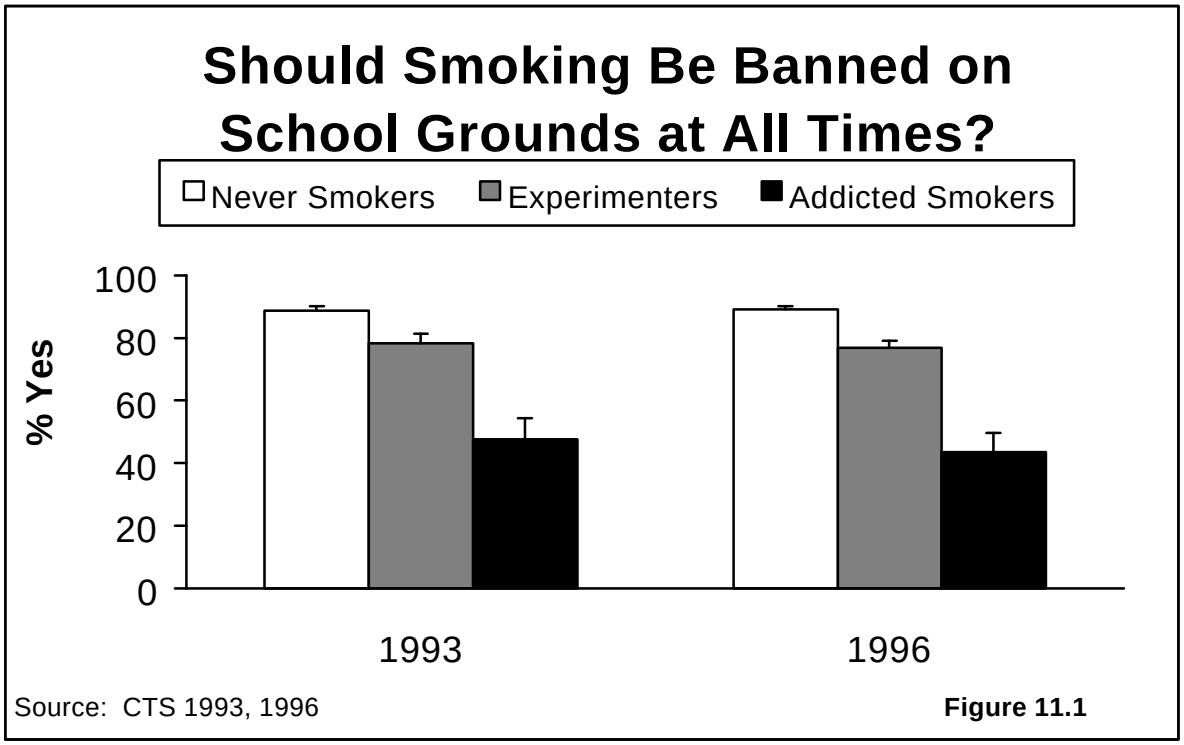
Adolescents often confront the strict enforcement of any type of restriction with resistance and noncompliance. To test students' reactions to smokefree policies, the 1993 and 1996 CTS asked adolescents the following question:

> *Do you think that all smoking by anyone should be banned on school grounds at all times, including meetings and sporting events?*

The vast majority of students (84%) support a complete ban on smoking on school grounds.

The word "ban" was deliberately used in this question to maximize the number of adolescents who would disagree and thereby provide a conservative estimate of student support for school smoking policies. Despite the wording, in both 1993 and 1996 approximately 84% of the students surveyed supported the imposition of a policy prohibiting smoking at any time on school grounds.

There were significant differences in responses of students, depending on their experience with smoking. Figure 11.1 shows that in both 1993 and 1996, nearly 90% of *never smokers* favored such a smoking ban. Approximately 80% of students who had *experimented* with cigarettes supported this type of ban in each year, but less than 50% of students who were *addicted smokers* (had smoked over 100 cigarettes) supported this ban in each year. For detailed descriptions of these smoking categories of adolescents, see Chapter 3.



Source: CTS 1993, 1996

Figure 11.1

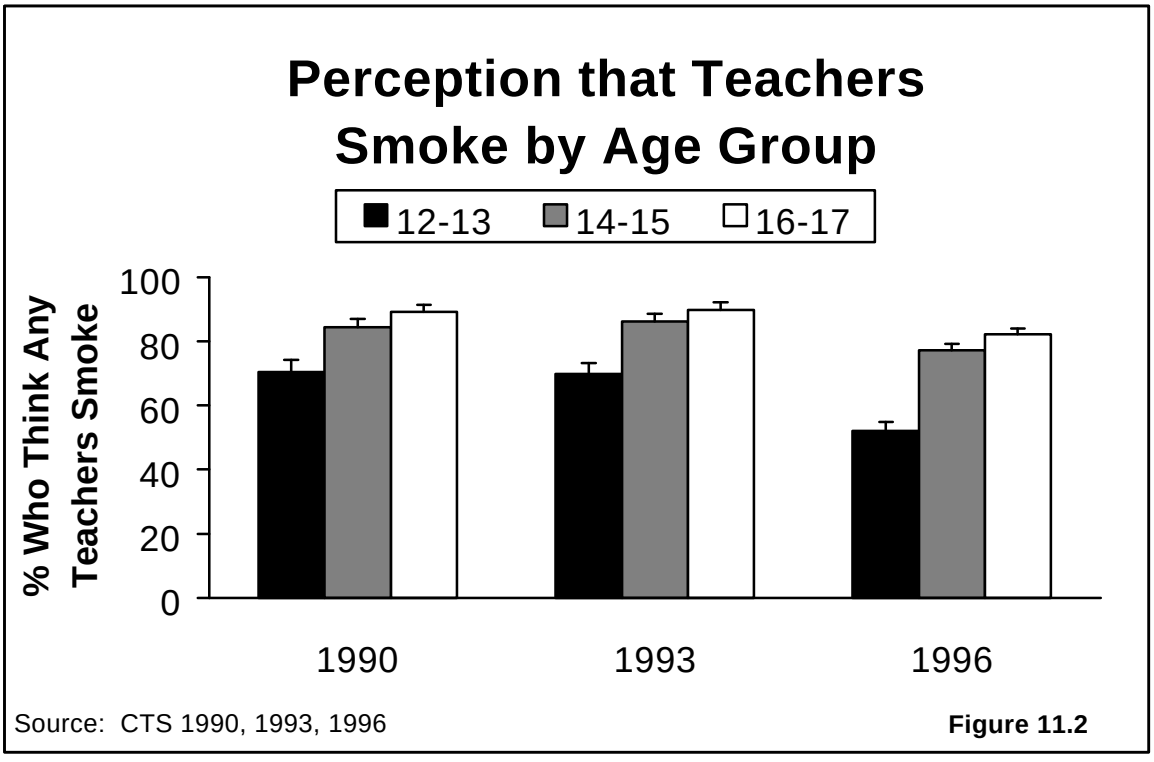
2. Trends in Perceptions of Teachers' Smoking

A teacher's influence on students extends far beyond the classroom knowledge they convey. Earlier research has established a link between teachers' smoking at school and adolescent smoking uptake (Allen et al., 1991, 1992). In the 1990, 1993 and 1996 California Tobacco Survey, all students were asked:

How many of the teachers in your school smoke cigarettes?

This question cannot accurately assess the prevalence of smoking among teachers. Adolescents typically overestimate both peer and adult smoking. Nevertheless, adolescents' perceptions and trends in these perceptions are important. In general, adolescents do not think that the majority of teachers smoke. From 1990 to 1993, approximately 17-18% responded that *none* of their teachers smoked. In 1996, 29% responded that *none* of their teachers smoked. This change represents an increase by a factor of 61%.

Figure 11.2 shows that younger students were least likely in each year to perceive that any teachers smoke (i.e., they answered either *a few*, *some*, *most*, or *all*). In 1990 and 1993, 70% of 12-13 year olds perceived that *any* of their teachers smoke, and by 1996, only 52% of students in this age group perceived that *any* teachers smoke. This change represents a decrease by a factor of 26%. Although the percentage of 16-17 year olds who perceived that *any* teachers smoke was higher in each year than the percentage of 14-15 year olds providing this answer, the difference between these two age groups was significant only in 1996.

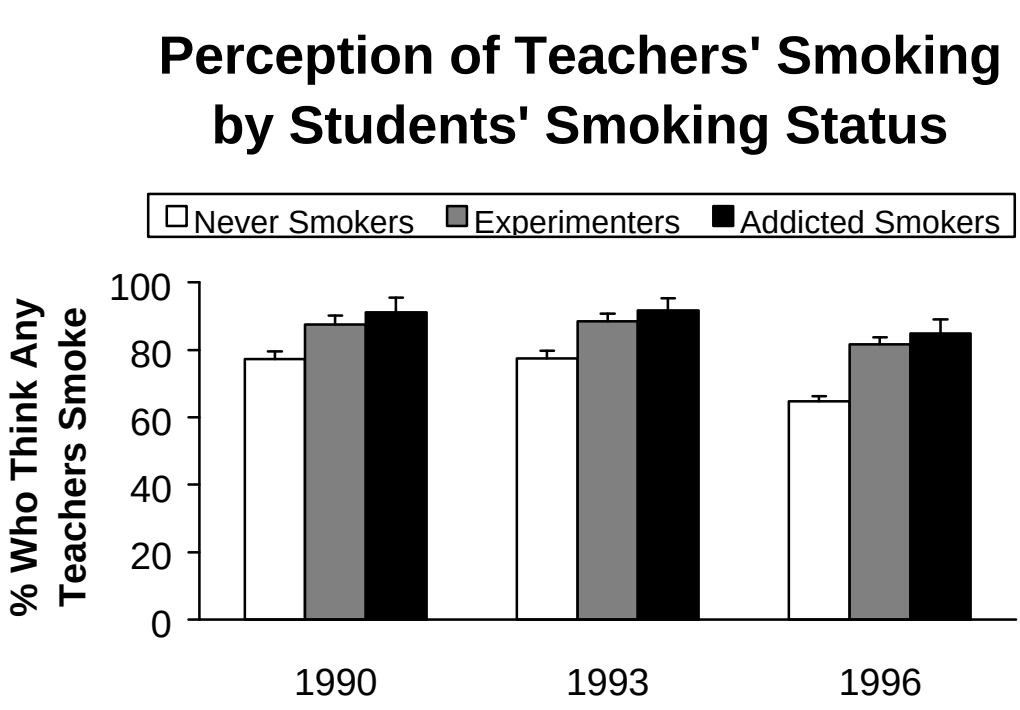


Source: CTS 1990, 1993, 1996

Figure 11.2

Although students may see teachers smoking outside of school or smell smoke on their breath or clothes, it is likely that teacher compliance to smokefree school policies has increased since AB-99 was implemented in 1995, so that fewer students are aware of their smoking. Compliance may be higher in junior high and middle schools, but older students may simply be more aware of teachers' behavior.

Students' smoking status was also associated with their perceptions of teachers' smoking. Figure 11.3 shows that in each year, *experimenters* and *addicted smokers* were significantly more likely than *never smokers* to perceive that *any* teachers smoked. In 1996, 65% of *never smokers* reported *any* teacher smoking, compared to 82% of *experimenters* and 85% of *addicted smokers* (for a detailed discussion of the Uptake Continuum levels, see Chapter 3). One explanation for this trend is that students who have at least experimented with smoking may actively search for smoking behavior in their role models, such as teachers.



Source: CTS 1990, 1993, 1996

Figure 11.3

This section suggests that either fewer teachers smoke in 1996 than in earlier years, or that more teachers are respecting the smokefree policies in California schools so that students are less aware of their smoking. Either way, these results indicate that fewer students think these important role models are smokers.

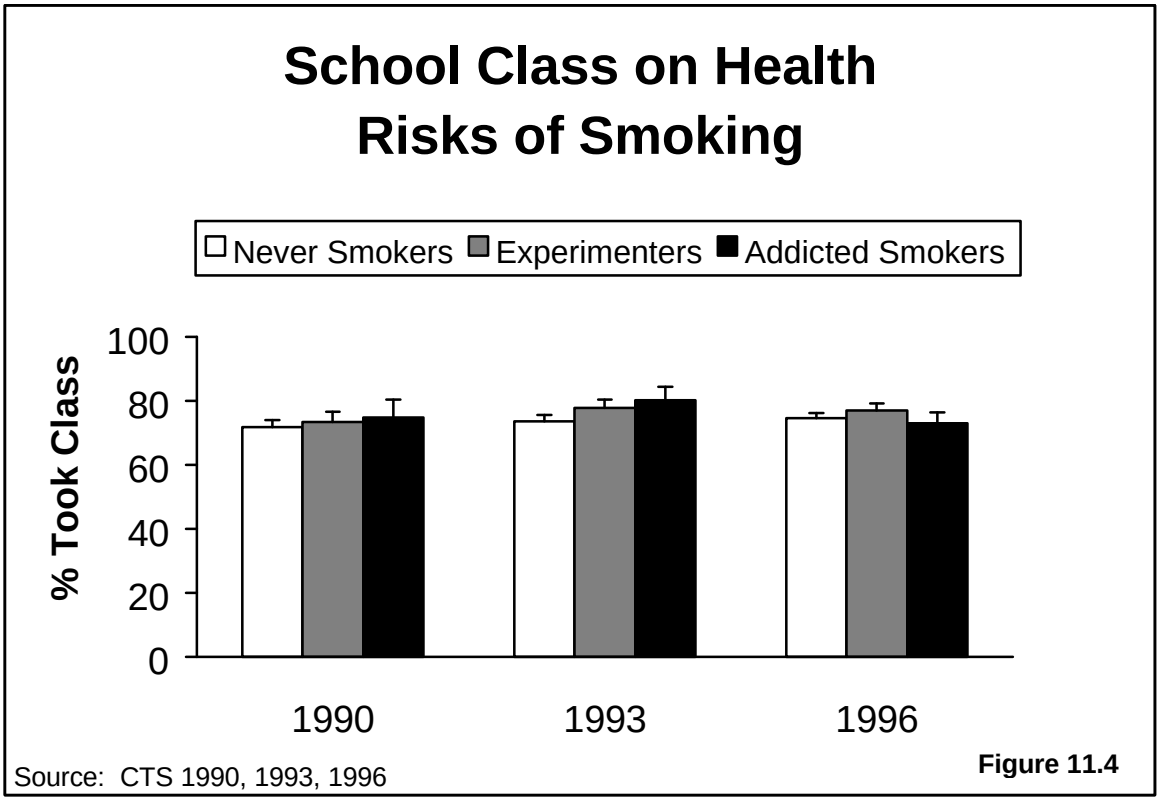
3. Trends in Health Education Classes at Schools 1990-1996

To assess the extent to which schools in California have incorporated education on the health risks of smoking into their curricula, all adolescents were asked the following question in the 1990, 1993 and 1996 CTS:

> *Have you ever taken a class or course at school in which the health risks of smoking were discussed?*

Three out of four students in California said that they took some type of class in school where the health risks of smoking were discussed.

The question was intentionally broad because it was judged unlikely that students receive information on smoking at every grade level (Hansen, 1992; Connell et al., 1985). The proportion of adolescents who could not recall ever having such a class remained essentially unchanged between 1990 and 1996, at approximately 25%. Figure 11.4 shows that there are no significant differences in response to this question between students who were *never smokers*, those who had *experimented*, and those who were *addicted smokers*.



Source: CTS 1990, 1993, 1996

Figure 11.4

In 1996, students were also asked:

> *Do you think that kids who took the health class on the effects of smoking are more against smoking, less against smoking, or had no change in attitude toward smoking as a result of taking this class?*

The majority of students believed that these classes did not affect attitudes toward smoking or smoking behavior.

Answers to this question indicate that health classes did not impress the majority of teens as being effective in dissuading students from smoking. Of those teens who recalled taking the health class, 56.8% responded that they thought kids who took the health class had *no change* in attitudes toward smoking, or that they were *less against* smoking than kids who did not take the class; 69% of these students reported that they had at least puffed on a cigarette. Of the approximately 43% of students who reported that kids who took the health class were *more against* smoking, only 31% had at least puffed on a cigarette.

This association may reflect the fact that health classes reinforce the determination of never smokers. However, it is unclear whether experimenters tried cigarettes before or after they attended the health class. If experimentation preceded the health class, it may or may not have discouraged further experimentation or smoking uptake. Since most of the experimenters did not credit the class with influencing their peers against smoking, such classes likely had minimal impact on these experimenters as well.

4. Summary

The results presented in this section suggest that smokefree school policies have produced mixed results. It would appear that compliance with smokefree school policies is worse in 1996 than in earlier years. However, it is possible (although unlikely) that this result is an artifact of students becoming more highly sensitized to smoking as a result of the implementation of smokefree school policies in 1995. The data also suggest that fewer teens perceived that their teachers were smoking in 1996 than in earlier years. This change in perception represents important progress, as teachers are important role models for students.

Exposure to any smoking at school has declined in recent years, but not all students experienced this decline. In addition, the research presented above showed that health classes on the effects of smoking produced equivocal results. Students who believed these classes to be effective were much less likely to have experimented with cigarettes. The majority of students, however, reported that they did not think these classes were effective in changing attitudes toward smoking, and many had experimented with cigarettes. Despite these mixed results, the overwhelming majority of students continued to support a complete ban on smoking on school premises.

CHAPTER 11: REFERENCES

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Chapter 12

KNOWLEDGE AND ATTITUDES ABOUT SMOKING

CHAPTER 12: KNOWLEDGE AND ATTITUDES ABOUT SMOKING

Introduction

A crucial intermediate objective of the California Tobacco Control Program (TCP) is to influence public knowledge and attitudes toward smoking, in order to ultimately reduce smoking prevalence and exposure to environmental tobacco smoke (ETS), or secondhand smoke. Therefore, this chapter analyzes Californians' current opinions about smoking, secondhand tobacco smoke and the tobacco industry, and compares these to earlier levels of public knowledge and attitudes. Section 1 reports on beliefs about "light" cigarettes. Section 2 examines public opinions about the legitimacy of the tobacco industry. Section 3 describes support for public policies that would regulate the tobacco industry. Section 4 analyzes smokers' beliefs about the health effects of smoking and all Californians' beliefs about the health effects of secondhand smoke. Section 5 discusses trends in nonsmoker activism, and Section 6 summarizes the findings of this chapter.

1. Beliefs about "Light" Cigarettes

The tobacco industry has argued that their labeling of cigarettes as "light" and "ultra-light" does not represent a health claim but indicates a difference in flavor, a "milder taste." Many other consumer products are labeled as "light," ranging from food to beer. Sometimes this represents a health claim, although this is not necessarily the case. If the public perceives the usage of this terminology to be a health claim, then the Federal Trade Commission can require the tobacco industry to either prove their claim or desist from this form of promotion of their products.

While the tobacco industry asserts that the "light" label describes a milder taste, reported tar and nicotine levels for these brands are generally lower than those reported for regular brands. It is important to note that these reported levels of tar and nicotine do not represent what a smoker might actually inhale from such a cigarette, but rather what a machine will extract from the cigarette in a laboratory setting. Substantial scientific evidence suggests that "light" cigarette smokers actually receive about the same amount of tar and nicotine as smokers of regular cigarettes (Benowitz et al., 1983; New York Times News Service, 1994). Studies have shown that "light" cigarette smokers inhale more deeply, and often block the filtration holes with their lips or fingers, negating the effects of the filters. These findings contradict any suggestion about the relative health impacts of "light" cigarettes.

The 1996 California Tobacco Survey (CTS) asked smokers the following question in order to explore their perceptions of what it means for a cigarette to be marketed as "light:"

What do you think is meant by the words "light" or "ultra light" on cigarette packages?

Answers to this question are presented in Table 12.1.

Table 12.1
Smokers' Perceptions of What "Light" or "Ultra Light" Means

Response	% of All Smokers (± CI*)	% Regular Cigarette Smokers (±CI*)	% "Light" Cigarette Smokers (±CI*)
Low tar and low nicotine	24.9 (±1.1)	18.0 (±1.4)	32.3 (±1.8)
Low tar or low nicotine	27.9 (±1.2)	27.4 (±1.9)	28.5 (±1.3)
Less harmful	3.0 (±0.5)	3.2 (±0.7)	2.8 (±0.6)
Subtotal	**55.8**	**48.5**	**63.6**
Filtered	4.4 (±0.5)	4.5 (±0.7)	4.3 (±0.8)
More air	2.1 (±0.4)	2.6 (±0.7)	1.5 (±0.4)
Milder taste	10.4 (±0.9)	10.0 (±1.1)	10.8 (±1.4)
Advertising gimmick	5.6 (±0.6)	6.8 (±1.0)	4.3 (±0.6)
Don't know	16.2 (±1.2)	19.6 (±1.5)	12.5 (±1.4)
Other	5.5 (±0.7)	7.9 (±1.0)	3.0 (±0.6)
Total	100.0	100.0	100.0

*CI = 95% Confidence Interval
Source: CTS 1996

Overall, only 10.4% of smokers thought "light" or "ultra light" meant milder taste. This percentage was about the same for smokers of regular and "light" cigarettes. Smokers who were smoking "light" cigarettes at the time of the survey were significantly more likely to respond that "light" meant low tar and low nicotine than other smokers. One in six of all smokers did not know what "light" or "ultra light" meant, and smokers of regular cigarettes were significantly more likely to indicate they didn't know. These answers suggest that smokers who smoke "light" cigarettes think they are exposing themselves to less harm. Thus, the public perception is that this labeling reflects a health claim and not a taste claim as suggested by the tobacco industry.

Who Smokes Light Cigarettes?

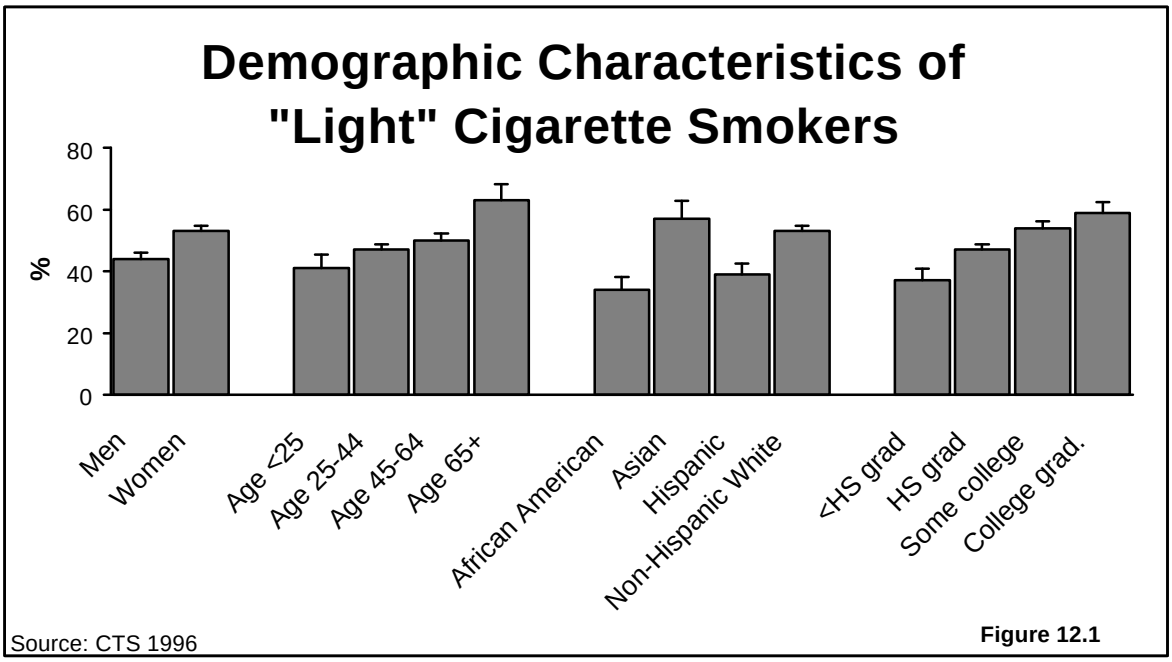
In 1996, current smokers were asked:

Are you currently smoking a cigarette with low levels of nicotine and tar?

About half of all smokers smoke "light" or "ultra light" cigarettes.

About half of all current smokers (48%) reported smoking low nicotine/low tar, or "light," cigarettes. Another 33% of all smokers indicated that they had considered switching to "light" cigarettes. Women were significantly more likely than men to smoke "lights" (53% versus 44% for men). Non-Hispanic White and Asian smokers, older smokers, and more educated smokers were

also significantly more likely to smoke "light" cigarettes. Figure 12.1 illustrates these results (See also Appendix B, Table 19).



Source: CTS 1996

Figure 12.1

Among smokers who rated their overall health as excellent, significantly more smoked "light" cigarettes than regular-style cigarettes (50% versus 41% for regular cigarette smokers). Smokers who received advice from a physician to quit smoking were significantly more likely to have considered switching to "light" cigarettes than those who had not received that advice (40% versus 32%). Given the general perception that "light" cigarettes are in some way less harmful than regular cigarettes, it was expected that heavier smokers would also be more likely to smoke "light" cigarettes. However, the CTS data showed that smoking "light" cigarettes was not significantly associated with the number of cigarettes smoked per day.

Half of those who had attempted to quit smoking had also considered switching to "light" cigarettes. These findings further suggest that the tobacco industry may be using the "light" label to ameliorate the smokers' health concerns.

2. Opinions About the Legitimacy of the Tobacco Industry

One of the expressed goals of the mass media advertising campaign of the California Tobacco Control Program was to deglamorize the tobacco industry. The first recommendation of the Tobacco Education and Research Oversight Committee (TEROC) is that the California Tobacco Control Program will continue to "vigorously expose tobacco industry tactics" (TEROC, 1997). This exposure of tobacco industry tactics was advocated as a strategy to create a public dialogue about whether the tobacco industry should be a legitimate business in the United States in the future.

To assess progress toward this goal, the 1992 and 1996 California Tobacco Surveys (CTS) asked adults whether they agreed or disagreed with the following statement:

> *By the next century, the production and sale of cigarettes should not be a legitimate business in the U.S.*

In 1992, 53% of adults agreed with this statement; by 1996, 56% agreed. Although this increase is statistically significant, it is small. This minimal change in attitudes about the legitimacy of the tobacco industry occurred over the same time period when several highly publicized events revealed very negative information about the tobacco industry. For example, during 1996 several states initiated legal cases against the tobacco industry to recover Medicare costs related to smoking (although none were settled at the time of the survey). Prior to 1992, the TCP mass media campaign focussed specifically on the issue of tobacco industry legitimacy. The lack of change in attitudes regarding legitimacy of the industry, therefore, likely reflects the absence of a sustained focus on the campaign to de-legitimize the tobacco industry (TEROC, 1997). If this goal remains a high priority, as stated, consideration should be given to reinstating such campaigns. Figure 12.2 presents answers to this question, analyzed by the smoking status of the respondent:

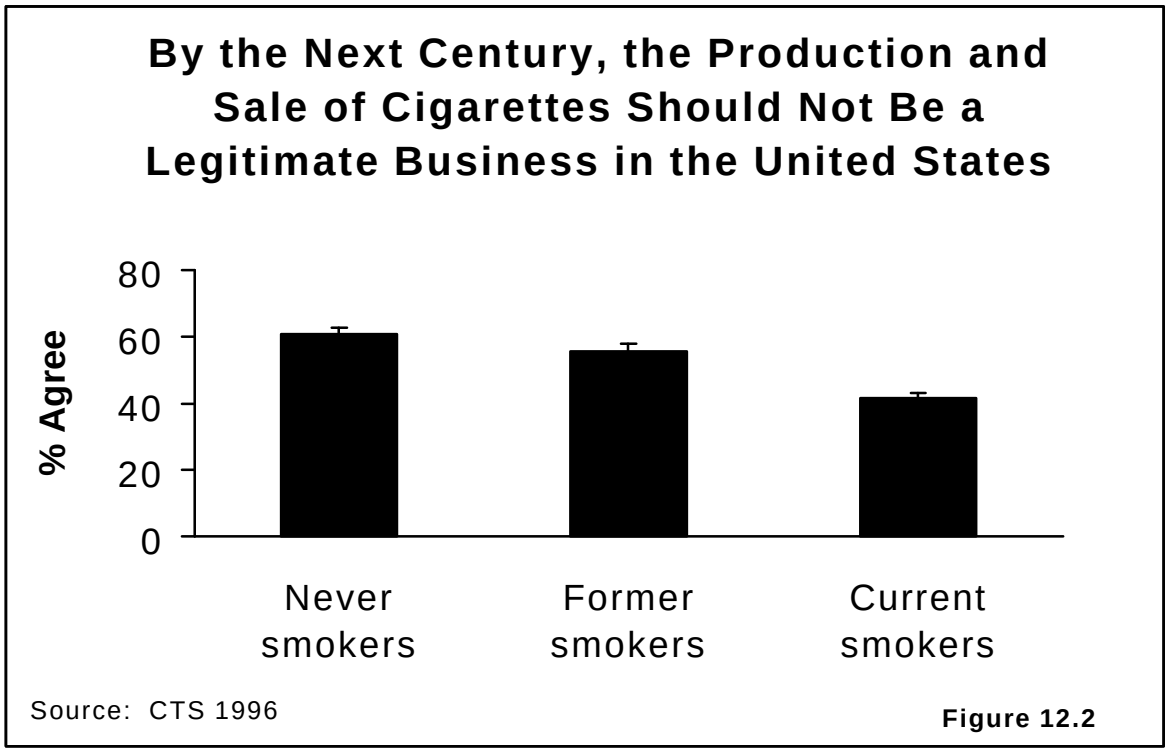


Figure 12.2

Not surprisingly, smoking status was strongly related to adults' beliefs about the legitimacy of the tobacco industry. Those who had never smoked were much more likely than former or current smokers to agree that the production and sale of cigarettes should

not be a legitimate business in the next century. Figure 12.2 shows that in 1996, approximately 61% of never smokers agreed with the statement, almost 56% of former smokers agreed, and only 42% of current smokers agreed. These differences were statistically significant.

3. Support for Anti-Smoking Policies and Regulation of the Tobacco Industry

The 1996 California Tobacco Survey included several questions specifically exploring respondents' opinions regarding various ways of regulating the sales of cigarettes and regulating the advertising of cigarettes.

Support for the Regulation of Cigarette Sales

All respondents in 1996 were asked the following three questions about the regulation of cigarette sales:

- *Do you agree or disagree that store owners should need a license to sell tobacco?*
- *If agree, should licensing fees pay for the enforcement of laws prohibiting tobacco sales to minors?*
- *Do you agree or disagree that tobacco products should be regulated as a drug by a government agency such as the Food and Drug Administration?*

Nearly half of all smokers believe that the government should regulate tobacco products.

Overall, 60% of Californians agreed that tobacco products should be regulated by a government agency, such as the FDA. Almost half (46%) of current smokers in 1996 agreed that tobacco products should be regulated, and 55% of current smokers agreed that stores should be required to hold a license to sell cigarettes. The vast majority (93%) of those who supported store licensing agreed that licensing fees should pay for the enforcement of laws prohibiting tobacco sales to minors.

Support for licenses to sell tobacco and the regulation of the tobacco industry was significantly more prevalent among African Americans, Asians, and Hispanics, compared to Non-Hispanic Whites. Also, individuals with less than 12 years of formal education were significantly more likely than more educated respondents to favor licenses and regulations. Current smokers, especially those who have never attempted and have no intention to quit smoking, were significantly less likely to support licenses and regulation.

Regulation of Tobacco Company Advertising and Other Promotions

In 1990, 1993, and 1996, the CTS asked all respondents the following question:

Do you think that advertising of tobacco products should be allowed or banned?

The 1990, 1992, and 1996 CTS asked all respondents the following questions about the distribution of free cigarettes:

- *Do you think that distribution of free cigarette and tobacco samples on public property should be allowed or banned?*
- *Do you think that distribution of free tobacco samples, or coupons to obtain free samples by mail, should be allowed or banned?*

The 1990, 1992, and 1996 surveys also asked the following question about banning other means of cigarette promotion:

Do you think that sponsorship of sporting or cultural events by tobacco companies should be allowed or banned?

Support for the bans suggested by all these questions increased significantly between 1990 and 1996. In 1996, 65% of the population thought that advertisement of tobacco products should be banned, 85% thought that distribution of free tobacco products on public property should be banned, 80% thought that distribution in the mail should be banned, and 66% would support a ban on tobacco industry sponsorship of sporting or cultural events. These data are presented in Figure 12.3.

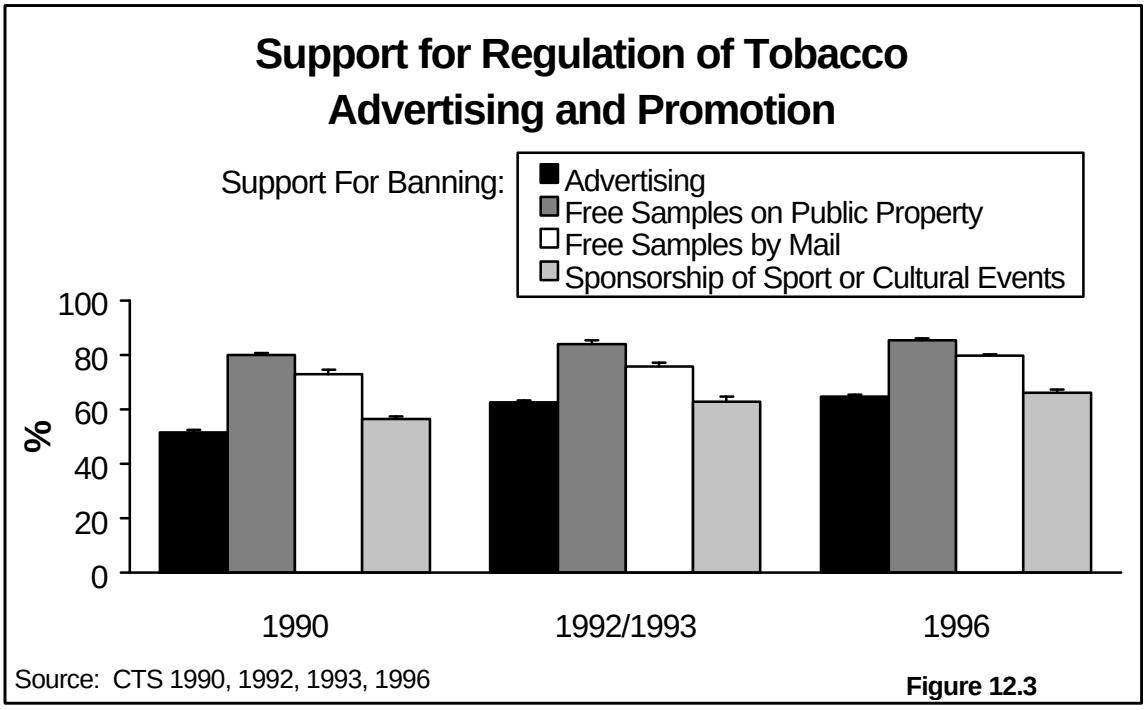


Figure 12.3

Not surprisingly, nonsmokers show significantly higher levels of support than smokers do. The demographic patterns of support for these questions in 1996 follow the same pattern outlined above for support for regulations on tobacco sales and are presented in Appendix

B, Table 20. A higher level of support is generally observed in women, minorities, and the lower educated.

4. Health Consequences of Smoking and Secondhand Tobacco Smoke

Since the release of the 1964 Surgeon General's Report on Smoking and Health, information about the harmful health effects of smoking has been widely disseminated. With each year, the evidence of smoking's harmful effects accumulates and is publicized.

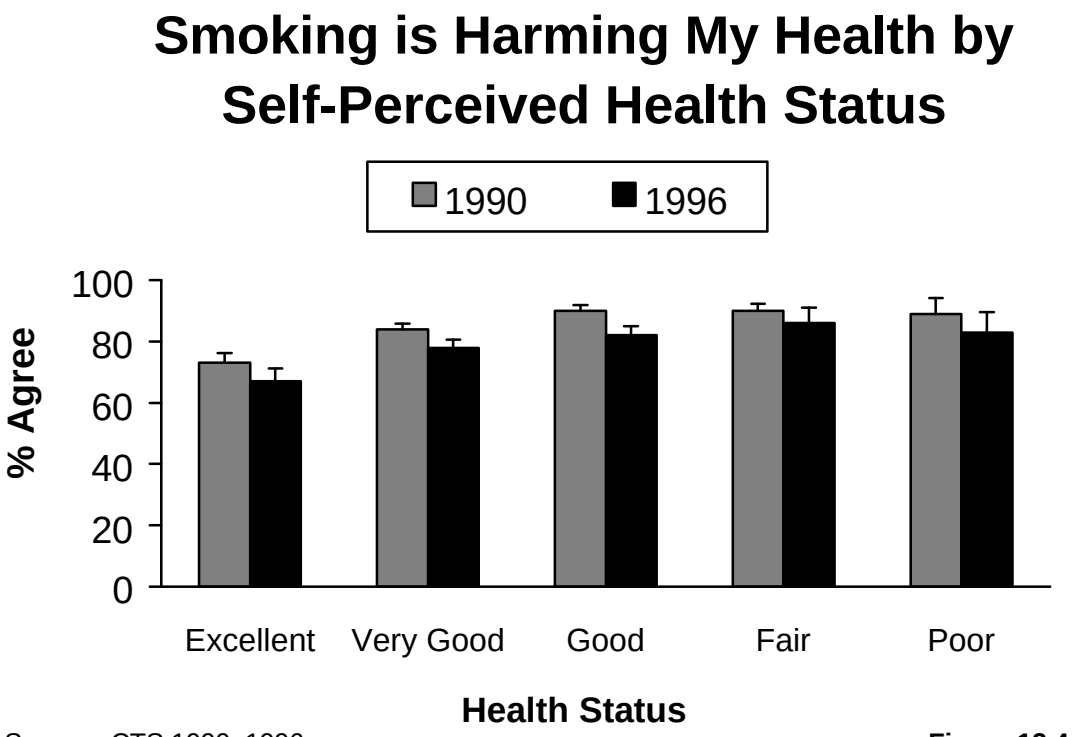
Health Effects of Smoking

Despite the growing body of information about the health effects of smoking, the results of the 1990, 1992, and 1996 California Tobacco Surveys (CTS) indicate that smokers were less inclined to believe that smoking is harming their health. The CTS asked current smokers the following question in 1990, 1992, and 1996:

> *Do you agree or disagree with the statement, smoking is harming my own health?*

In 1990, 84% of smokers agreed with this statement and in 1992, 86% agreed. However, in 1996 only 79% agreed, which was significantly lower than in 1990 or 1992. Interestingly, in all 3 years smokers aged 65 and older showed particularly low rates of agreement, only 59% in 1996. This might be explained by the fact that individuals who perceive that their health is deteriorating quit smoking before they reached the age of 65 years. Another explanation might be a more defensive posture of older smokers. The overall decline in agreement with this statement may also have some connection with the fact that increasing numbers of smokers are occasional, rather than daily smokers (see Chapter 2). Occasional smokers often feel that they are not harming their own health to the same extent as they would be if they smoked daily (Gilpin et al., 1997).

Smokers were significantly more likely to agree that smoking was harming their own health if they perceived that their health was poor to good rather than very good or excellent. However, Figure 12.4 shows that the reduction in agreement from 1990 to 1996 is present to about the same degree regardless of self-perceived health status.



Source: CTS 1990, 1996

Figure 12.4

Smoking and Addiction

A decline is also noticed when examining the extent to which smokers believed they were addicted to cigarettes in each year. In 1990, 1992, and 1996, the CTS asked the following question:

- *Do you agree or disagree with the statement, I am addicted to cigarettes?*
- *Do you agree or disagree with the statement, tobacco is not as addictive as other drugs such as heroin or cocaine?*

Overall, significantly fewer smokers believed they were addicted to cigarettes in 1996 (67%) than in 1990 (78%) and in 1992 (80%). However, the percentage of all respondents who agreed that tobacco is not as addictive as other drugs remained essentially the same over all three surveys, 21% in 1990, and 24% in 1992 and 1996.

Young adult smokers, aged 18-24, showed a particularly sharp and significant decline between 1990 and 1996 in the percentage who believed they were addicted to cigarettes (68% in 1990; 48% in 1996). The percentage of Hispanics who believed they were addicted also decreased significantly between 1990 and 1996 (64% in 1990; 50% in 1996). This decline can probably be explained by the fact that these groups are more likely to be relatively lighter, or even occasional, smokers (see Chapter 6).

Consistent with the definition of the Quitting Continuum (see Chapter 3), a relatively low percentage of agreement was found among smokers in *advanced preparation* (i.e., those who are light smokers (<15 cigarettes/day) and have a history of quit attempts (59% in 1990; 55% in 1996). Failure to acknowledge the addictive power of smoking may affect the willingness of smokers to seek help to quit and may result in poorer success rates from quit attempts.

Health Effects of Secondhand Smoke

In 1986, the Surgeon General's Report focused exclusively on the dangers of environmental tobacco smoke (ETS) or secondhand tobacco smoking (USDHHS, 1986). This was among the first widely published public health documents that clearly identified the health threats attributable to secondhand smoke. A major focus of the California Tobacco Program's initiatives has been to further disseminate knowledge about the dangers of secondhand smoke. The 1992, 1993, and 1996 California Tobacco Surveys (CTS) included questions directly related to knowledge of the health risks of ETS to nonsmokers. In 1992 and 1996, smokers and nonsmokers were asked to agree or disagree with the following two statements about secondhand smoke:

- *Inhaling smoke from someone else's cigarette causes lung cancer in a nonsmoker.*
- *Inhaling smoke from someone else's cigarette harms the health of babies and children.*

The 1993 CTS included only the question regarding lung cancer. The results indicate that knowledge about the risks of breathing secondhand tobacco smoke is relatively high and has remained constant since 1992. About 80% agreed with the first assertion in all 3 years. Also, 93% of respondents in 1992 and 1996 agreed that inhaling secondhand smoke harms the health of babies and children (See Appendix B, Table 21 for detailed demographic analyses).

In each survey year, *never smokers*, Hispanics and young adults (age 18-24) were significantly more likely to believe that secondhand smoke causes lung cancer. Prior to 1996, men and women were equally likely to agree with this statement. In 1996, significantly more women than men (83% versus 77%) believed the link between secondhand smoke and lung cancer.

The patterns of agreement regarding the harmfulness of secondhand smoke to the health of babies and children were similar to those just described for secondhand smoke causing cancer. Again, nonsmokers showed higher rates of agreement than current smokers did and a gender gap emerged in 1996.

There was a significant relationship between beliefs about the harmfulness of involuntary smoking and living in homes where smoking is restricted. This relationship is illustrated in Figure 12.5 using 1996 CTS data. People who live in smokefree homes were significantly more likely than were those who live where there are no restrictions to think

secondhand smoke is harmful (by a factor of 37% for causing cancer and by a factor of 12% for harming babies and children). This association is due in part to the presence of smokers in the home (see Chapter 4), but it is likely that belief that secondhand smoke is harmful may drive the imposition of smoking restrictions even in homes with smokers.

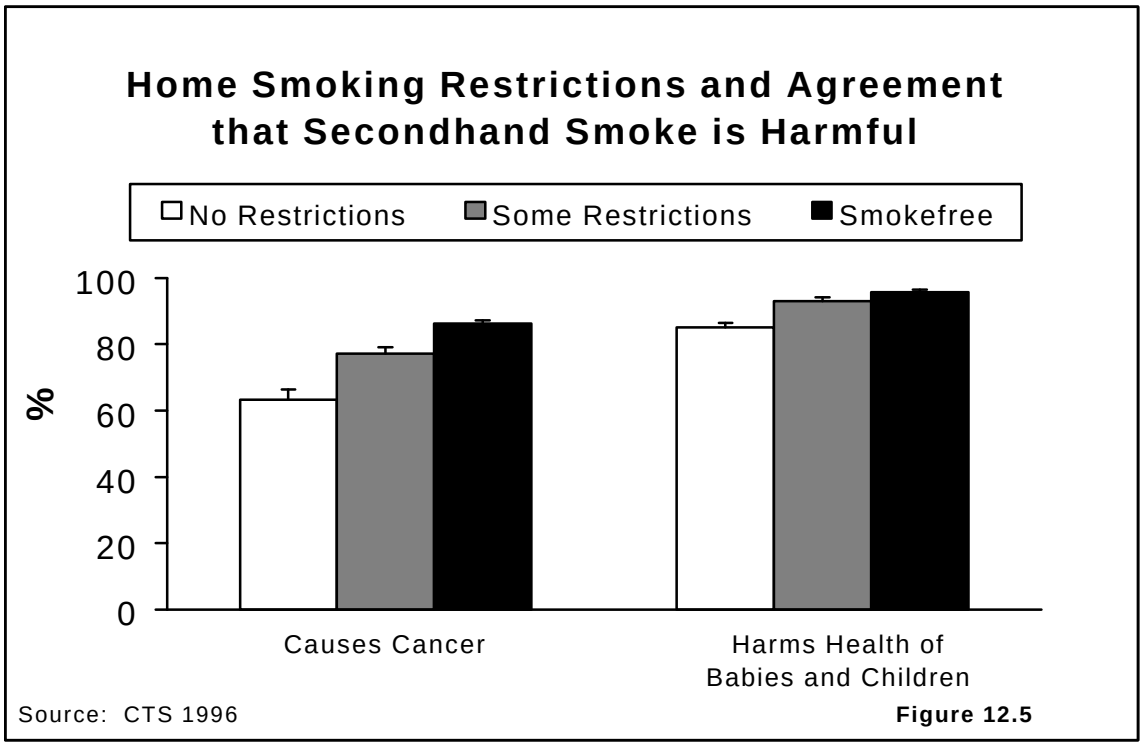


Figure 12.5

5. Trends in Nonsmoker Activism

Nonsmokers become activists when they ask someone not to smoke. This may be an interaction between family members, friends, coworkers, or complete strangers. It may be motivated by concern for one's own health, the health of the smoker, or simply annoyance. It may be a polite request, a plea, or a hard-and-fast rule. Regardless of the manifestation of nonsmoker activism, this behavior is evidence of nonsmokers' exposure to and disapproval of smoking. As such, it measures two variables that are central to the California Tobacco Control Program: exposure to secondhand smoke, and social norms and attitudes about smoking.

Trends in the Characteristics of Activists

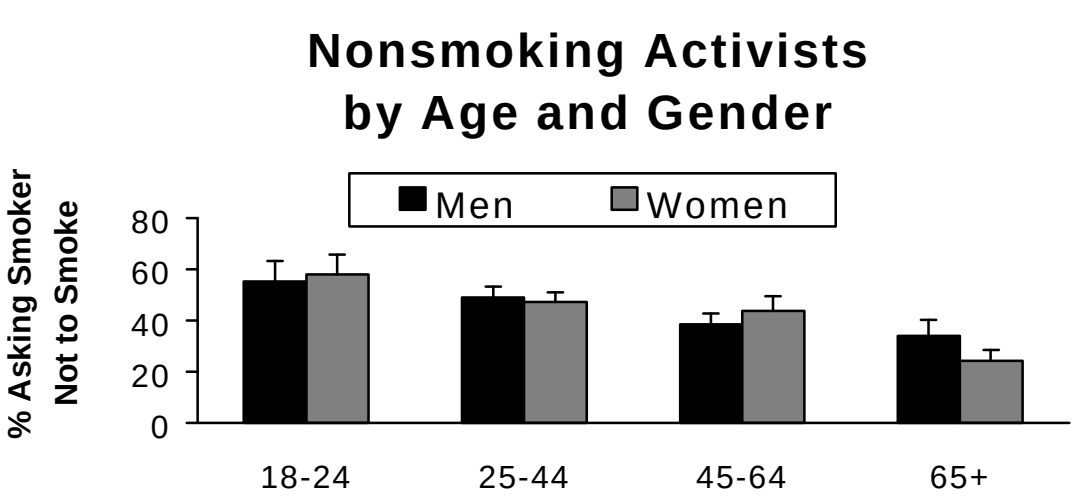
The 1990 and 1996 California Tobacco Surveys (CTS) asked the following question[1]:

[1] In 1990, this question was asked of all respondents. In 1996, an error in the skip-pattern instructions disqualified nearly half of nonsmokers from answering this question. The skip pattern instructed interviewers to only ask the question of all "former" or "zero" smokers. This pattern eliminated all nonsmokers who had ever smoked between 1 and 99 cigarettes, but did not go on to become smokers. In order to make accurate comparisons, these individuals were removed from the 1990 data set for these calculations.

In the past 12 months have you asked someone not to smoke?

Overall, 44% of nonsmokers in the 1996 CTS reported that they had asked a smoker not to smoke in the last 12 months. This represents a significant decrease from the 57% in 1990 who reported that they had asked a smoker not to smoke. The decrease in activism may be related to less exposure to smokers in the act of smoking either at work or in the home because of increased restrictions in recent years (see Chapter 4). Alternatively, this finding may reflect less emphasis by the TCP in recent years on the dangers of secondhand smoke.

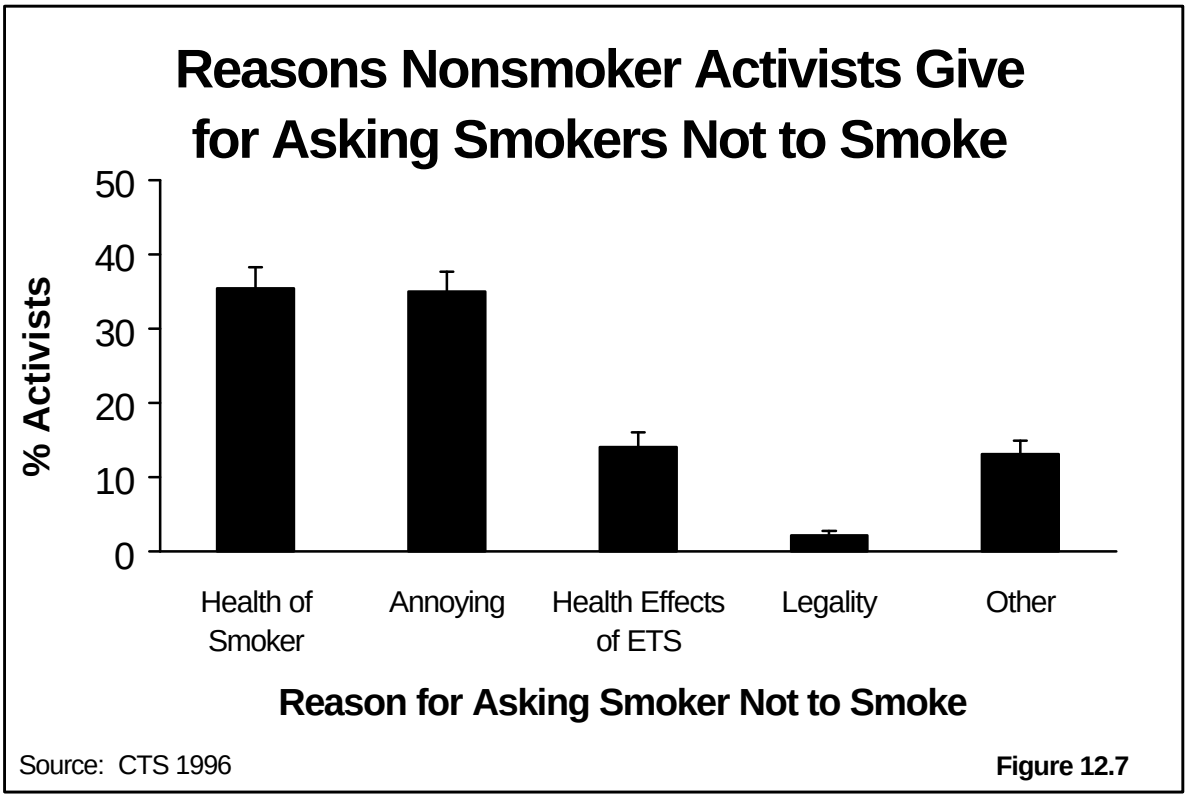
In 1996, younger people were significantly more likely than were older people to ask someone not to smoke. Overall, women and men were equally likely to ask a smoker not to smoke. Figure 12.6 illustrates the distribution of activists by age and gender.



Source: CTS 1996

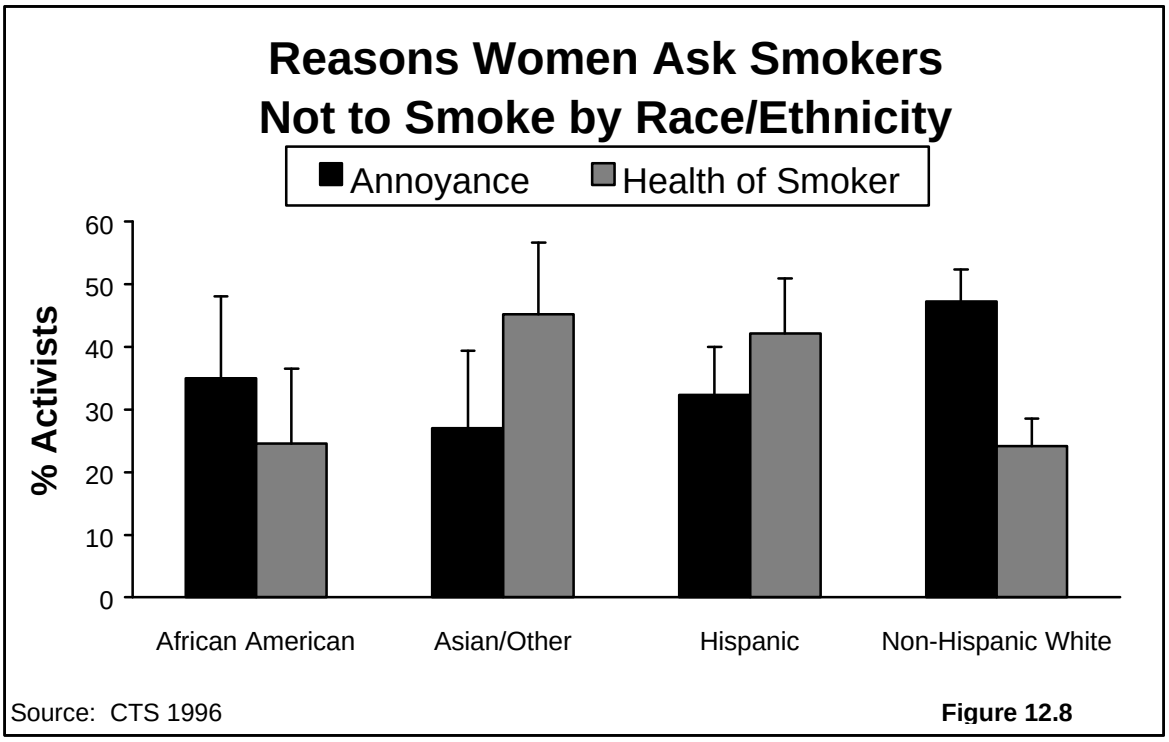
Figure 12.6

The majority of nonsmoker activists asked a smoker not to smoke for one of two reasons: concern about the smoker's health or annoyance. Each of these reasons was cited by about 35% of activists. After health concerns and annoyance, concern about the long-term health effects of secondhand tobacco smoke or environmental tobacco smoke (ETS) was the third most frequently listed reason behind nonsmokers' activism, with approximately 15% of activists listing this motive. Figure 12.7 illustrates the distribution of reasons behind nonsmoker activism.



Source: CTS 1996 **Figure 12.7**

Among men, there were few differences between racial/ethnic groups' rationales for their activism. Among women, however, racial/ethnic differences were more pronounced and significant. Non-Hispanic White women asked a smoker not to smoke more often because they found the smoking annoying, while Hispanic and Asian women were more likely to attribute their activism to concern about the health of the smoker. Among African American women, the difference in the percentage asking because of annoyance and the percentage asking because of concern about the smoker's health was not statistically significant. Figure 12.8 illustrates these trends.

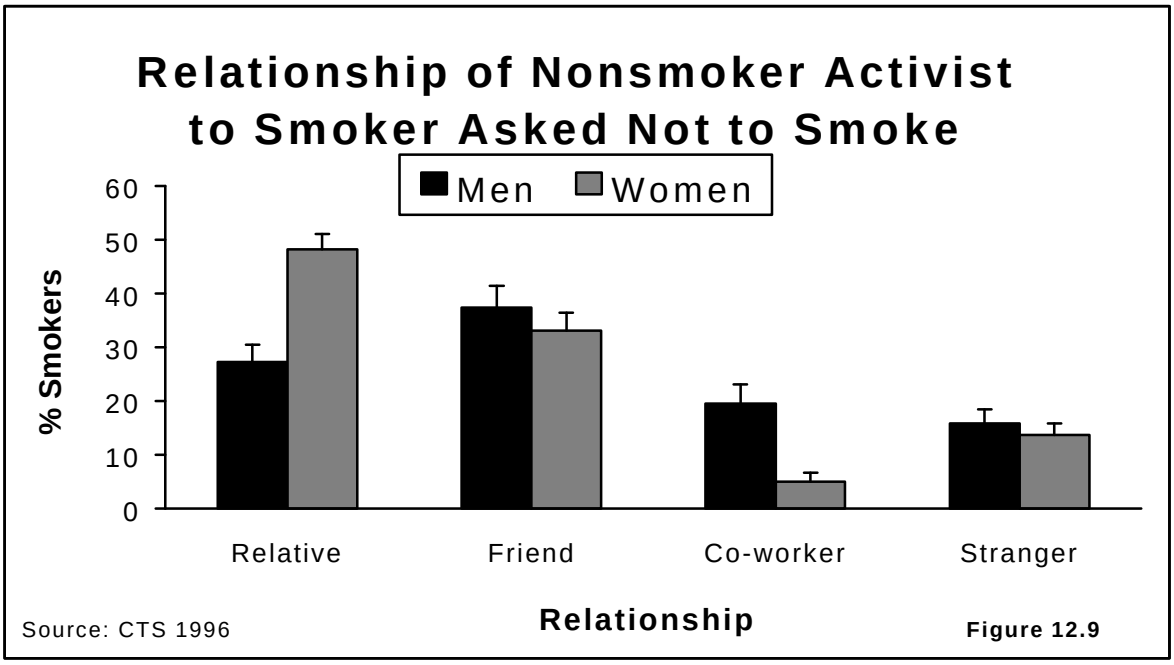


Source: CTS 1996

Figure 12.8

These differences likely reflect different cultural norms and are evidence of the necessity to appropriately target media messages about smoking.

The relationship of the nonsmoker activist to the smoker differed significantly by gender. Figure 12.9 shows that in 1996, women were significantly more likely than men to ask a relative not to smoke. In contrast, men were significantly more likely than were women to ask a coworker not to smoke.



Source: CTS 1996

Figure 12.9

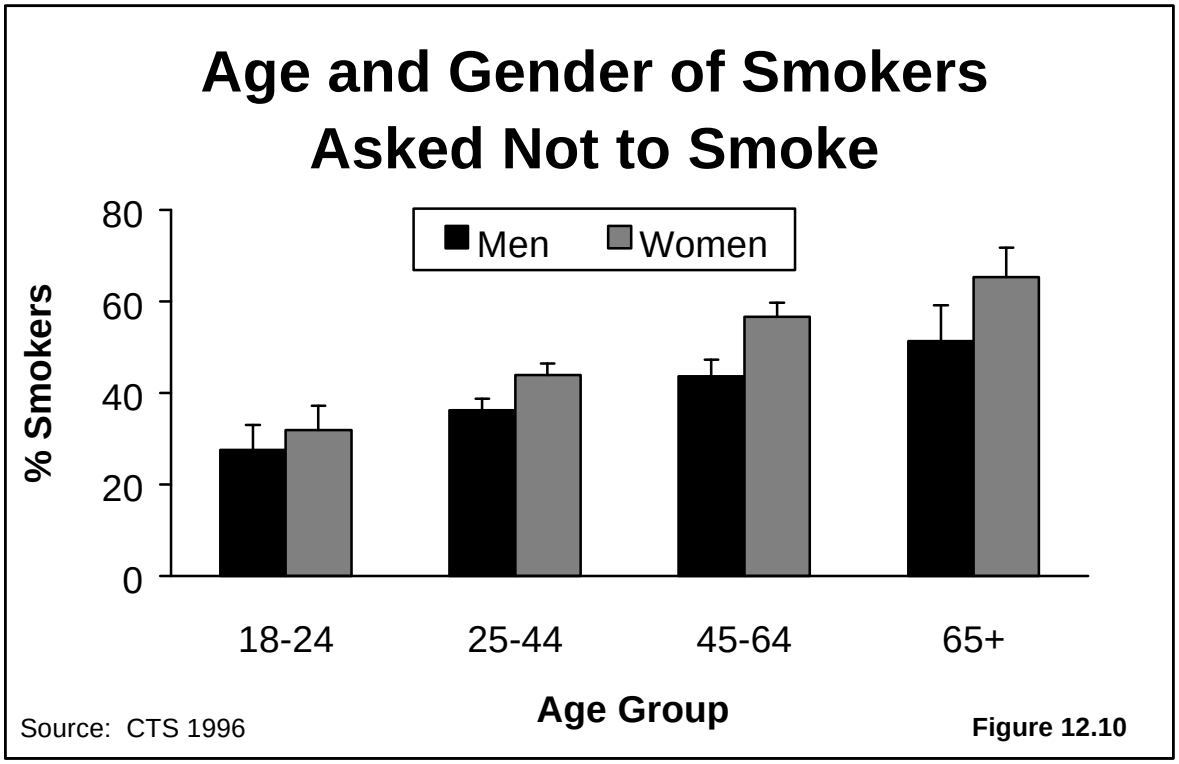
These results could be due to more men being exposed to involuntary smoking on the job because more men work outside the home. Men, therefore, may have greater opportunity and motivation to ask coworkers not to smoke. However, it is more likely that these findings reflect real differences in the ways that men and women behave.

Who Gets Asked Not to Smoke

The 1996 CTS also asked smokers the following question:

> *About how many times in the past 12 months has anyone asked you not to smoke when you were smoking or were about to smoke?*

Overall, 47% of smokers in 1996 reported being asked not to smoke. Older smokers were significantly more likely than younger smokers to be asked not to smoke. For the majority of adult smokers, those between 25 and 64 years old and women were significantly more likely than were men to be the target of nonsmoker activism. Figure 12.10 presents these results.



Source: CTS 1996

Figure 12.10

The lower proportion of young smokers being asked not to smoke may reflect the changing norms that were identified in Chapter 5, which showed that the number of young people who care about smoking is declining. However, an alternative possibility is that younger people are not putting themselves in a position where they might be asked not to

smoke. The data are insufficient to allow the determination of which of these two alternatives occurs. Should it be the former, it would be a major warning for the Tobacco Control Program to take action. If were the latter, then it would be an indication of a success of the Tobacco Control Program. It should be noted, however, that it has been several years since the TCP media campaign has focused on the dangers of secondhand smoke.

Non-Hispanic White smokers were significantly more likely to report being asked not to smoke than were smokers of any other racial/ethnic group. Nearly half of all Non-Hispanic White smokers interviewed reported being asked not to smoke in the past year, while only 35% of African Americans, 29% of Hispanics, and 27% of Asians said they had been asked not to smoke. Again, these results point to different cultural norms among different racial/ethnic groups, which need to be understood and taken into account in anti-smoking educational and media programs.

6. Summary

The analyses presented in this chapter showed that a great deal of confusion persisted into 1996 about the health effects of smoking. In 1996, smokers of "light" cigarettes believed that they were making a healthier choice, and all smokers were less likely to believe that smoking was harming their health or was addictive, than in earlier years.

On a more encouraging note, knowledge about the health effects of secondhand smoke was high in 1990 and remained high in 1996. Knowledge about the dangers of secondhand smoke was highest among individuals who lived in a home where some restrictions on smoking were in place, indicating that the high levels of knowledge had been translated into meaningful actions.

In 1990, the majority of all respondents expressed support for regulations on cigarette sales and advertising. Between 1990 and 1996, this support increased only slightly. Women, minorities, less educated individuals, and nonsmokers were consistently more likely to support such regulations in each year. One explanation of the consistently higher support of strict regulation of tobacco sales and promotional activities among women, minorities and less educated individuals may be that such support is a signal that these groups perceive themselves as targets of the tobacco industry strategies, and thus in greater need of protection. Another explanation is that these groups may be more likely to give the answer they think the interviewer wants to hear.

When a nonsmoker asks a smoker not to smoke, they become an activist. Nonsmoker activism is evidence of exposure to secondhand smoke and social norms and attitudes about smoking. Between 1990 and 1996, the percent of nonsmokers who reported asking a smoker not to smoke decreased from 57% to 44%. This change may reflect less activism or less *cause* for activism—i.e., less exposure to secondhand smoke. Young people and women were more likely to report being activists, and the primary motivations

for this behavior were concern about the health of the smoker and annoyance. The nonsmoker activist was most often a relative or friend of the smoker. Older smokers and women were most likely to report being asked not to smoke.

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Chapter 13

OTHER TOBACCO USE

CHAPTER 13: OTHER TOBACCO USE

Introduction

Aside from programs designed to deter adolescent use of smokeless tobacco (chewing tobacco and snuff), the California Tobacco Control Program (TCP) has mainly focused on discouraging cigarette smoking. Nevertheless, it is important to monitor the use of other tobacco products in the population, in order to determine whether such use approaches levels that signal the potential for increased adverse health consequences in the future. If such trends are discovered, the California Tobacco Control Program should be expanded to target these products as well.

Recently, cigar smoking has become a trendy symbol of sophistication. Movie stars flash stogies both on and off screen, and at least two new magazines, *Smoke* and *Cigar Afficionado*, promote this image. Popular hotels and lounges have dedicated areas for cigar smoking, complete with elaborate humidors and cigar paraphenalia. Sales of premium cigars have increased from 78,000 in 1977 to 275,000 in 1996.

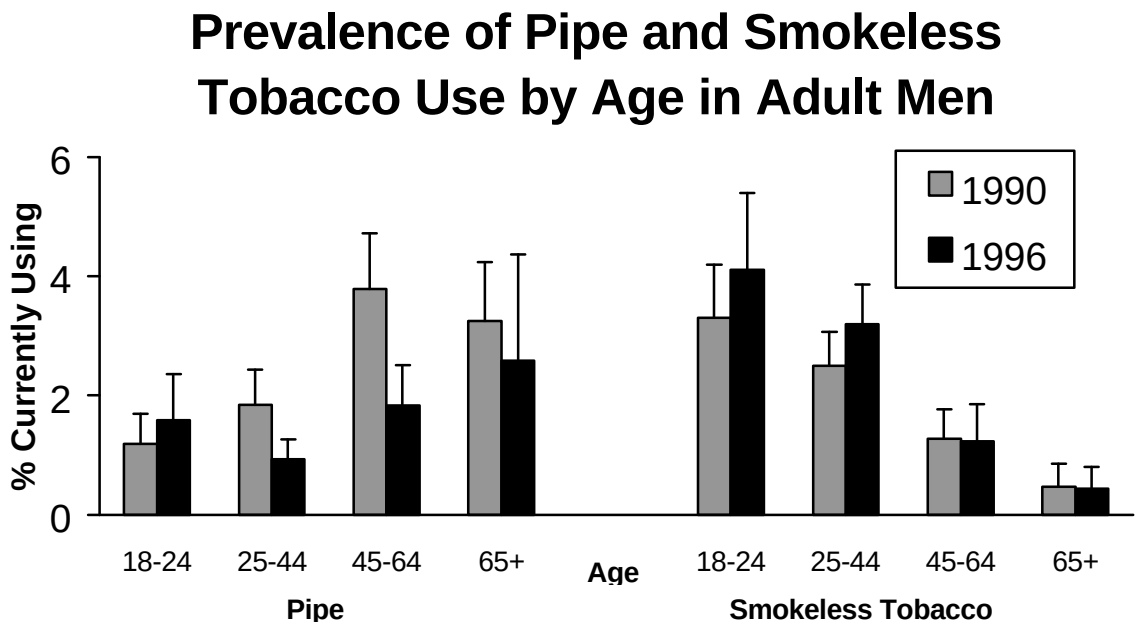
Although many cigar smokers believe this behavior is less harmful than cigarette smoking, one typical large cigar may be equivalent to smoking 10 cigarettes in terms of nicotine, tar and carbon monoxide (Rickert et al., 1985; Henningfield et al., 1996). If people are using cigars to support a nicotine habit, they could be exposing themselves to very high levels of dangerous substances, and subjecting others to particularly noxious secondhand smoke. If the current fad does not pass soon, it has the potential to interest youth in tobacco, including cigarettes, and perhaps contribute to the relapse of former cigarette smokers.

This chapter examines changes in the use of other tobacco products using data from the 1990, 1993, and 1996 California Tobacco Surveys (CTS). Since questions on cigar use among adolescents were not included in the 1990 or 1993 CTS, only 1996 data on cigar use are presented. Section 1 presents data on changes in the use of pipes and smokeless tobacco in adults. Section 2 deals with adult cigar use, including a discussion of both trends and patterns of use in 1996. Section 3 looks at changes in smokeless tobacco use between 1993 and 1996 in adolescents and cigar use in adolescents in 1996. Section 4 summarizes this chapter.

1. Adult Use of Pipes and Smokeless Tobacco

The 1990 and 1996 California Tobacco Surveys (CTS) asked adult respondents who admitted to ever using other forms of tobacco than cigarettes, whether they now use the particular product every day, some days or not at all. For purposes of analysis, use *every day* and *some days* are combined into the category of *current use*. Because very few women use pipes or smokeless tobacco, only trends for men are presented. It is

important to note that even among men, use of pipes and smokeless tobacco is uncommon. Overall in 1990, 2.4% of adult men smoked pipes and 2.1% used smokeless tobacco products; in 1996 these percentages were 1.5% and 2.5%, respectively. (Further demographic breakdowns are presented in Appendix B, Table 22). Figure 13.1 shows the prevalence of current use of pipes and smokeless tobacco in 1990 and 1996 for men by age.



Source: CTS 1990, 1996

Figure 13.1

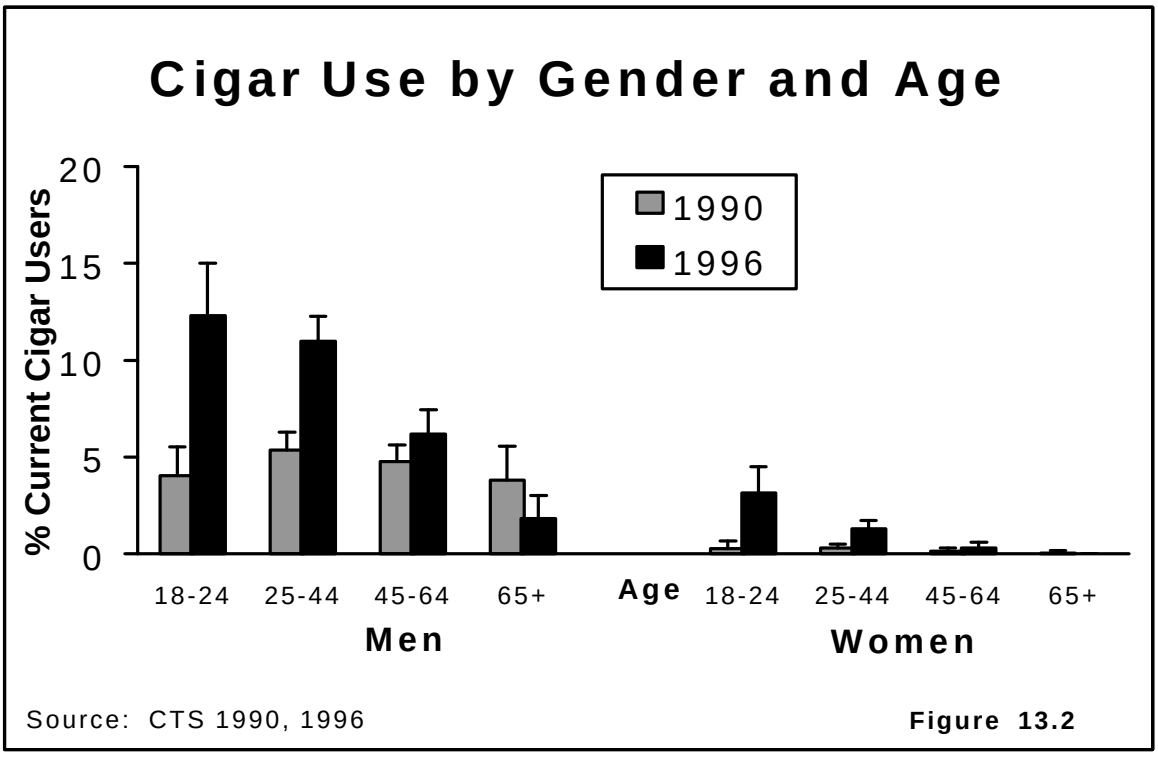
Among older men, pipe use appears to have declined from 1990 to 1996; the decline for those aged 45-64 years was significant. Smokeless tobacco use by adult men did not change significantly between 1990 and 1996.

2. Adult Cigar Use

Cigar use doubled between 1990 and 1996 in California.

As with the questions on pipe smoking and smokeless tobacco use, the 1990 and 1996 California Tobacco Surveys (CTS) asked respondents who had ever used cigars whether they smoke cigars every day, some days, or not at all. Again, *current use* was defined as use *every day* or *some days*. In the entire population, *current use* increased significantly, from 2.5% in 1990 to 4.9% in 1996. However, the population prevalence of every day use was only 0.2 % in both years. It is of interest to note that among current users, the percentage of those smoking daily was 9.0% in 1990 and 4.5% in 1996.

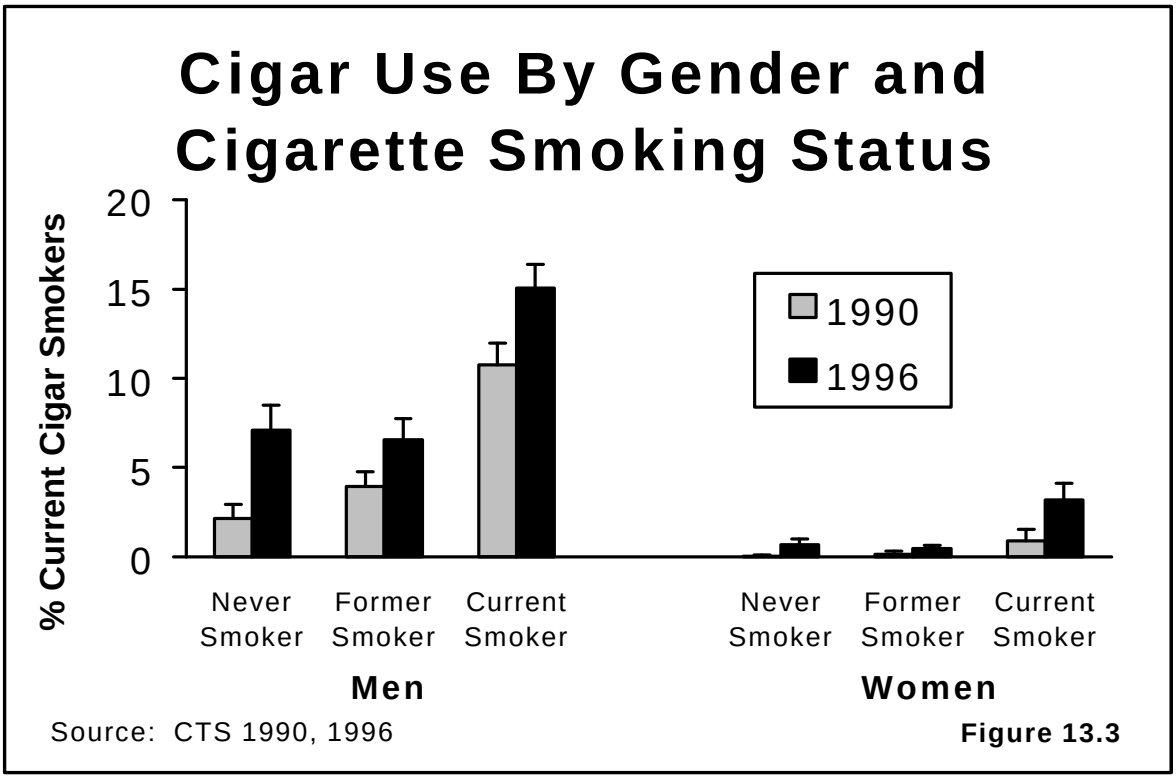
Figure 13.2 presents the prevalence of current cigar use by gender and age in 1990 and 1996. Although use of cigars is much more prevalent among men than among women, in the youngest two age groups both genders showed significant increases in cigar use from 1990 to 1996. In men 18-24 years of age, cigar use tripled, from 4.0% in 1990 to 12.3% in 1996; in the group aged 25-44 years, cigar use nearly doubled, an increase from 5.4% in 1990 to 11% in 1996. The increase was even greater for the corresponding age groups of women, but use in 1990 was very low. Current cigar use among men age 65 years and older showed a slight decrease between 1990 and 1996.



Cigarette Smoking Status and Cigar Smoking

Never smokers are less likely to use cigars than current cigarette smokers.

Cigar smoking is related to cigarette smoking status. In 1990, cigar use was significantly lower among men who never smoked cigarettes than among former cigarette smokers. Former cigarette smokers, in turn, showed lower rates of cigar use than current cigarette smokers did. In 1996, however, the difference in current cigar use between never and former cigarette smokers disappeared; 7% of both groups stated that they currently used cigars. Moreover, current cigar smoking has significantly increased across all cigarette smoking status groups of men between 1990 and 1996. These trends are illustrated in Figure 13.3. While the same general pattern exists among women, not all of the differences are statistically significant, because of the generally low rates of cigar use among women.



Source: CTS 1990, 1996

Figure 13.3

As expected from the above findings, young men (either current or former cigarette smokers) had particularly high rates of current cigar use in 1996: 23.4% of current cigarette smokers and 16.4% for former smokers in the 18-24 year old age group currently smoked cigars. Regardless of the smoking status of this younger group of men, however, the increase in current cigar use from 1990 to 1996 was significant.

Demographic Patterns of Cigar Use

Among men, there were significant increases—roughly a doubling in current cigar use between 1990 and 1996—across all race/ethnic groups, except for Asians. In both 1990 and 1996, Non-Hispanic Whites had significantly higher rates of cigar use than other racial/ethnic groups. Furthermore, the rates of current cigar use among men increased significantly for all educational levels, except for those who never finished high school. In 1996, therefore, the typical adult cigar smokers were disproportionately better-educated, Non-Hispanic White men under the age of 45 years who also smoke cigarettes. Details on the demographic distribution of cigar use are available in Appendix B, Table 22.

Vulnerability to Relapse Among Former Smokers

Former cigarette smokers who currently use cigars may be more vulnerable to relapse to cigarette smoking than those who abstain from tobacco altogether. The 1996 CTS asked

all former cigarette smokers the following three questions to assess their vulnerability to relapse:

- *Do you ever think about smoking and whether you might go back?*
- *Do you think that it is likely or unlikely that you will return to smoking in the next 12 months?*
- *Do you think that there is any possible situation in which you might start smoking again?*

Former smokers who reported that they think about smoking, those who state that it is likely that they might return, or those who could name a situation in which they might smoke again were considered vulnerable to relapse. Among former smokers in 1996, 40.5% of current cigar users were vulnerable to relapse, compared to only 29.3% of former smokers who were not current cigar smokers. This difference was statistically significant.

3. Adolescent Use of Smokeless Tobacco and Cigars

Significantly fewer adolescents used smokeless tobacco in 1996 than in 1993; however, there is reason to believe that this progress was more than defeated by an increase in the percentage of teens who smoked cigars. Overall, the percentage of teens who have ever used smokeless tobacco decreased from 1.7% to 1.0% between 1993 and 1996. For boys, the percentages in 1993 and 1996 were 3.1% and 1.6%, respectively. For the most part, smokeless tobacco use appeared to decline across all categories of boys, except for African Americans, among whom it may have increased. Although not statistically significant, this apparent increase is cause for concern because it is consistent with trends suggesting that all forms of tobacco use have increased among African Americans, a group that in the past showed relatively lower tobacco use than other racial/ethnic groups.

<u>Adolescent Use of Cigars</u>

One quarter of adolescent boys have smoked at least one cigar.

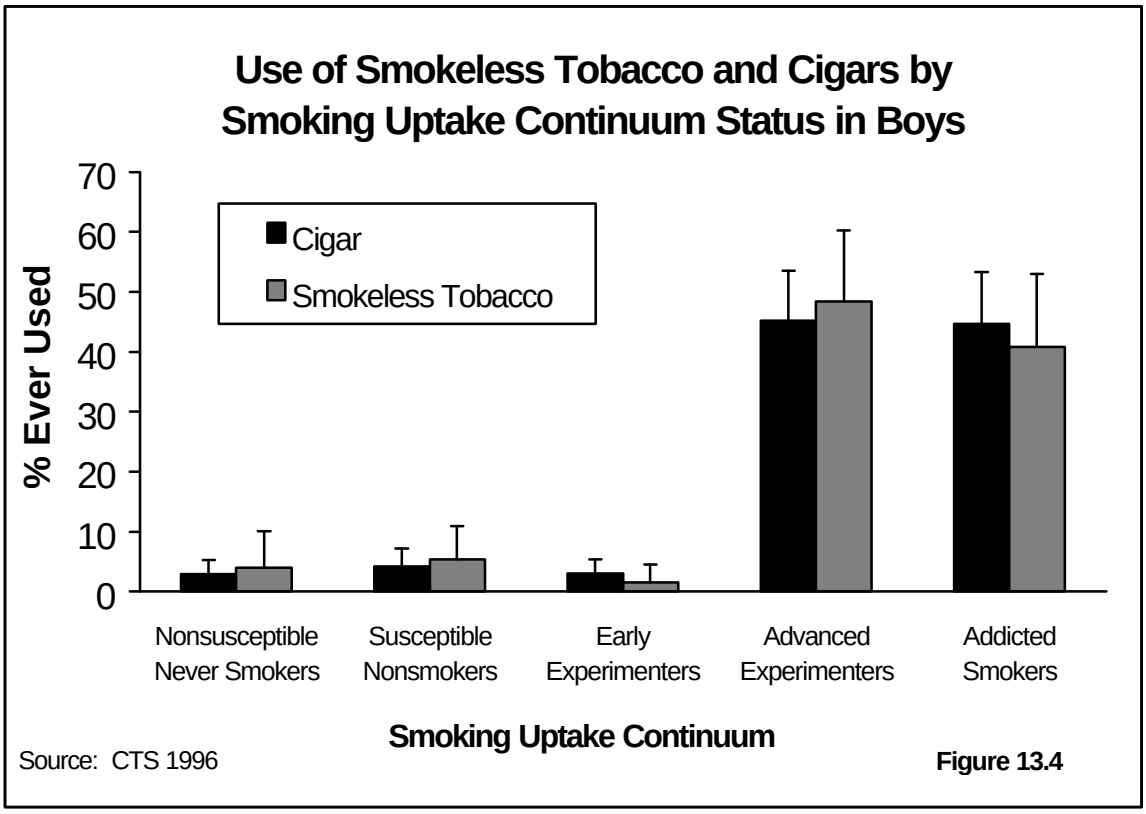
Overall in 1996, 15% of teens 12-17 years of age reported they had ever tried a cigar. Boys were significantly more likely to have experimented with cigars; 24% reported they had ever smoked a cigar, compared to 12% of girls. As with other smoking trends, older teens were significantly more likely to have tried cigars than younger teens. Among 16-17 year olds, 25.8% reported experimenting with cigars, compared to 14.0% of 14-15 year olds and 8% of 12-15 year olds. These figures are consistent with the findings from a national survey indicating 26.7% of high school students had tried cigars (MMWR, 1997). Non-Hispanic White teens experimented with cigars at a significantly higher rate than minorities. In 1996, approximately 18% of Non-Hispanic White teens reported they had ever smoked a cigar, while only 12-13% of minority teens made this claim.

Although it is not known for sure that rates of cigar use among teens were lower than rates of smokeless tobacco use in 1990 or 1993, this was the common belief, and it was

the reason that data on cigar use were not gathered in earlier California Tobacco Surveys. Because the data do not exist, it is impossible to analyze trends in adolescent cigar smoking. However, since cigar use has increased dramatically among adults, there is reason to believe that more teens have smoked cigars in 1996 than in earlier years. Furthermore, since cigars have become increasingly glamorized in the media by sports and entertainment stars, it is likely that more teens would have experimented with them in recent years. In any case, the current statistics about youth cigar smoking suggest that teens experiment with and smoke cigars at rates that cannot be dismissed as inconsequential.

Alternative Tobacco Use by the Smoking Uptake Continuum

Status along the Smoking Uptake Continuum (see Chapter 3) correlates well with use of alternative tobacco products. Among boys who are *advanced experimenters* or *addicted* smokers, rates of experimentation with smokeless tobacco or cigars are particularly high: between 40-50%. It seems that among these teens, fewer barriers to trying other tobacco products exist, and use of these products is more likely. Figure 13.4 illustrates this phenomenon.



Source: CTS 1996

Figure 13.4

4. Summary

The data presented in this chapter indicate that the use of pipes and smokeless tobacco by adults remains low, and pipe use may have actually decreased between 1990 and 1996. However, cigar use has increased dramatically over this period among people under the age of 45 years. The recent increases in cigar use may reflect a passing fad, but these changes should be monitored to determine if they will become an ongoing public health concern. In 1996, the current cigar smoker is likely to be a Non-Hispanic White, better educated man who also currently smokes or formerly smoked cigarettes. Very few cigar smokers smoke cigars every day, which suggests that cigar smoking may be largely an activity confined to social settings. There is some evidence that former cigarette smokers who currently smoke cigars may be more vulnerable to relapse. More information on the frequency and patterns of cigar use is needed to understand the extent of exposure and whether exposure is associated with increased relapse to smoking among former smokers or increased smoking uptake among youth.

While efforts to reduce adolescent use of smokeless tobacco products appear to have been successful, teens—like younger adults—have also begun to experiment with cigars. Their rates of experimentation more than compensate for the reductions in smokeless tobacco use. In fact, by conservative estimates, 6-10 times more teens had ever used cigars in 1996 as compared to those who ever tried smokeless tobacco in 1993. The correlation of alternative tobacco product use with the stages of the Smoking Uptake Continuum suggests that cigar use may play a significant part in pushing experimenters along through to become addicted smokers. If this is the case, then the current infatuation with cigars in advertising and the mass media is a problem for tobacco control programs.

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Appendix A

DATA SOURCES

APPENDIX A: DATA SOURCES

Introduction

Several data sources are available for studying changes in the smoking-related behavior, beliefs, and attitudes of the California population before and after the passage of Proposition 99. Prior to the passage of Proposition 99, the National Health Interview Surveys and Current Population Survey were used to make state-level estimates[1] of smoking prevalence among adolescents and adults. Since the passage of Proposition 99, many other surveys have asked questions on smoking related behavior. The most detailed of these surveys are the California Tobacco Surveys (CTS), which are funded by the Tobacco Control Section of California's Department of Health Services (DHS). The specific purpose of these surveys is to assess changes in smoking behavior and attitudes and opinions about smoking in the California population.

This report relied on a number of available data sources to evaluate the impact of the Tobacco Control Program on the California population. This appendix reviews the methods and procedures of each of the data sources, and explains how they were used in this report. The following data sources are included in this review:

1) California Tobacco Surveys: 1990, 1992, 1993, 1996 Cross-Sectional

2) Robert Wood Johnson California Teenage Longitudinal Survey: 1993 and 1996

3) Teenage Attitudes and Practices Surveys: 1989 and 1993

4) Behavioral Risk Factor Surveys: 1991-1993; California Adult Tobacco Surveys: 1994-1996

5) National Health Interview Surveys: 1974, 1978-80, 1983, 1985, 1987, 1988, 1990-1994

6) Tobacco Supplements of the Current Population Surveys: 1985, 1989, 1992-1993, 1995-1996

7) Sales data reported to the Federal Trade Commission: 1988-1996

8) Price data provided by the Tobacco Institute: 1989-1995

[1] The National Health Interview Surveys were designed to yield regional rather than state-specific estimates.

1. California Tobacco Surveys: 1990, 1992, 1993, 1996 Cross-Sectional

The California Tobacco Surveys (CTS) were the principal data sources used in this report. These surveys were undertaken and funded as part of the Tobacco Tax and Health Protection Act, *Proposition 99*, which was passed in 1988. Data were collected via random-digit dialed telephone interviews. Previous experience with telephone surveys at the national level (used as a backup mode to household interviewing when a respondent was unavailable in the National Health Interview Surveys) has demonstrated that this survey mode does not introduce any major bias into the estimates of trends in smoking behavior (USDHHS, 1989). Each CTS undertaken draws a new sample from the population. To make estimates of smoking behaviors in the population, these samples are then weighted to the population for the year that the survey was in the field. To remove any effects of changes in the demographic distribution of the population over time, the data are standardized to 1990 population totals for sex, age, race and education for examination of prevalence trends. Otherwise, estimates are weighted estimates.

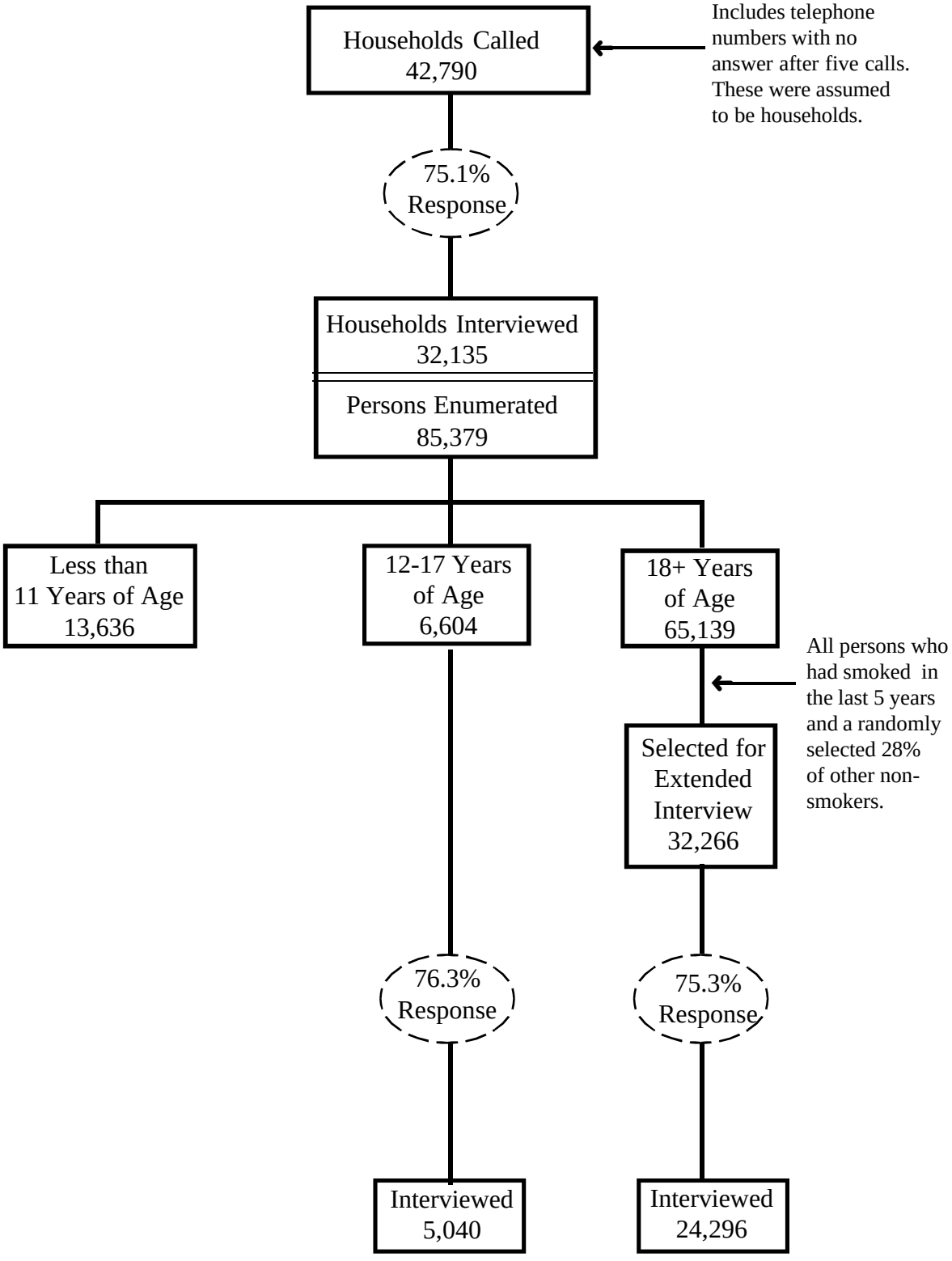
1990 Cross-Sectional CTS

The 1990 CTS consisted of three separate surveys: a five-minute "screener" survey, an extended 25-minute adult survey, and an extended 25-minute adolescent survey. Interviews were conducted from June 1990 through February 1991. Between February 1991 and July 1991, additional interviews were conducted in Los Angeles to increase representation of minorities in the sample. Details of the methodology of this survey have been described elsewhere (Burns & Pierce, 1992; Pierce et al., 1992). Figure A.1 presents a flowchart of the sample sizes and the response rates for the 1990 CTS. In the present report, only data collected as part of the CTS were utilized (additional Los Angeles sample excluded).

The survey was designed to be representative of the California population at the regional/county level, providing estimates of population behaviors, beliefs, and attitudes relating to tobacco use. Interviewers attempted to contact 42,790 households using a modified Waksberg-Mitofsky random-digit dialed methodology (Waksberg, 1978). The short screener survey included questions on household composition and the sociodemographic and smoking status of each household member, and was completed in 75.1% of the households contacted. Of the 85,379 people enumerated in these households, 6,604 were between 12 and 17 years of age. All 12-17 year olds were scheduled for an extended interview, and 76.3% of these were completed. Almost half of the enumerated adults were selected for an extended interview; a specific selection criteria reduced the probability that someone who had not smoked in the last 5 years would be interviewed. An extended interview was completed for 75.3% of enumerated adults.

Figure A.1

1990 California Tobacco Survey Flowchart



From both the screener questionnaire and the adult extended questionnaire, smoking status was determined as illustrated in Figure A.2. Respondents who answered "yes" to the question below were considered current smokers:

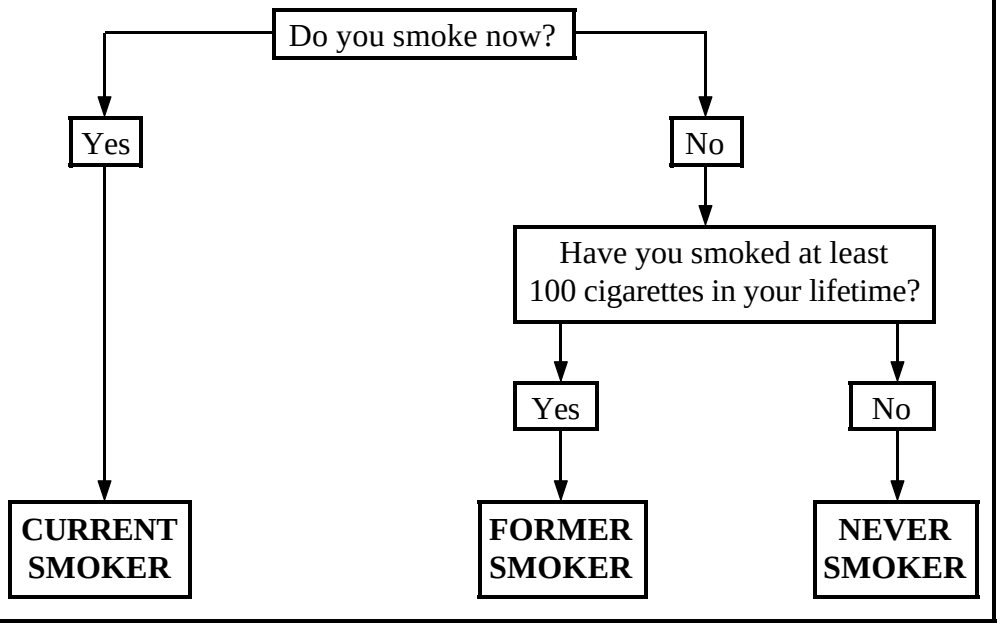
Does this person (do you) smoke now?

Respondents who answered "no" were classified as former smokers if they answered "yes" to the following question:

Have you smoked at least 100 cigarettes in your lifetime?

Smokers who answered "no" to the above question were considered never smokers.

Figure A.2
1990 California Tobacco Survey Smoking Status Determination



1992 Cross-Sectional CTS

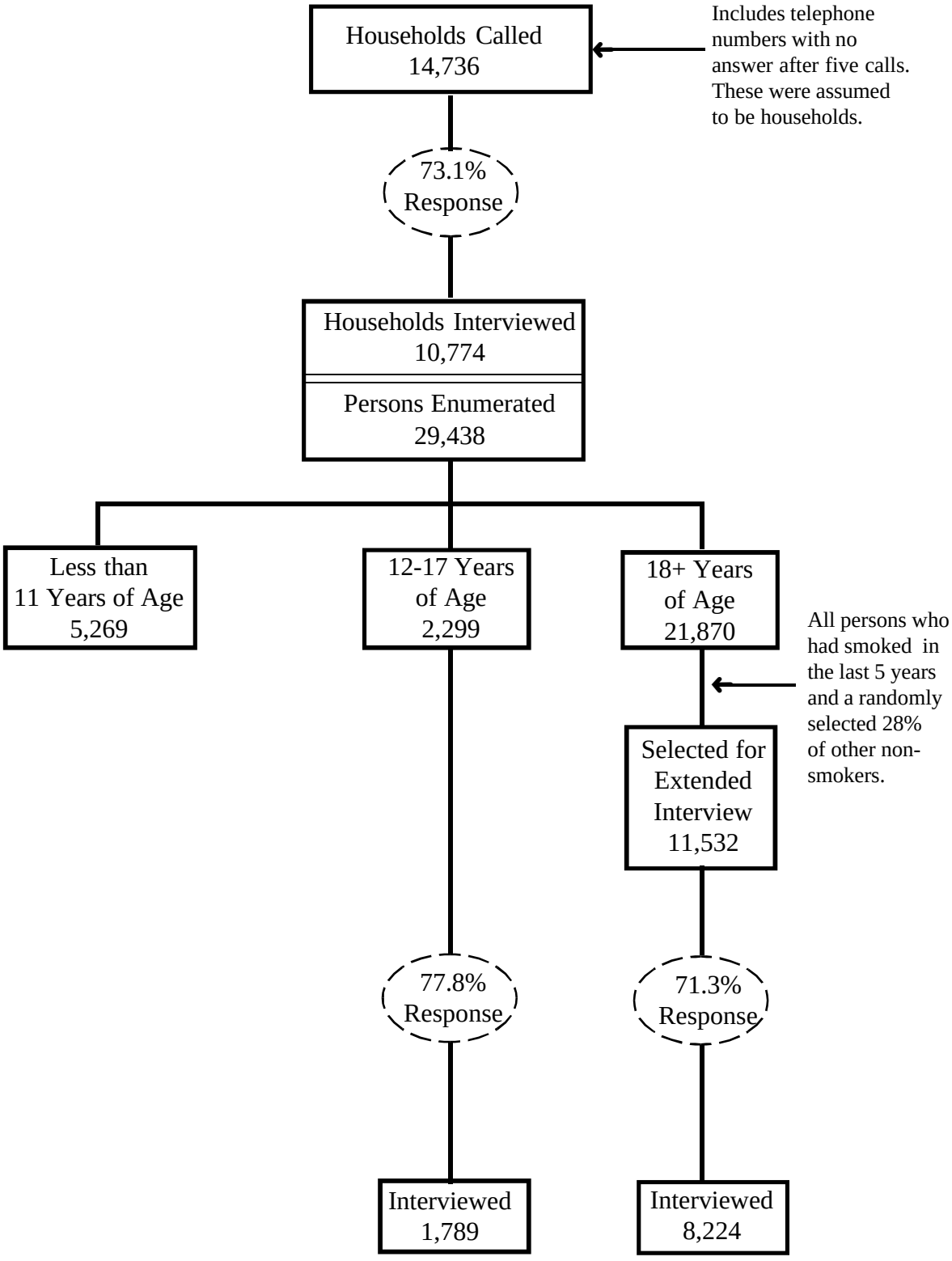
The 1992 survey methodology was very similar to that used in the 1990 survey, with the exception that it was designed to be representative at the state level only and not at the county/regional level. The state-approved plan for evaluation of the Tobacco Control Program called for regional estimates of smoking behavior at 3-year intervals supplemented by statewide estimates in other years. Interviews for the 1992 CTS were conducted from March 1992 through July 1992. The flowchart for this survey is presented in Figure A.3. Because estimates at the county/regional level were not needed, a smaller sample size could be used. Screener interviews were completed for 73.1% of the 14,736 households included in the screener sample. This survey identified 29,438 people, of whom 2,299 were between the ages of 12 and

17 years. An in-depth interview was completed for 77.8% of these adolescents. As in the 1990 survey, a separate sample was drawn from the enumerated adults to reduce the probability that a long-term nonsmoker would be interviewed (thus increasing the efficiency of the survey). An in-depth interview was completed for 71.3% of the enumerated adults.

The 1992 analysis used the same determination of smoking status as the 1990 analysis (see Figure A.2).

Figure A.3

1992 California Tobacco Survey Flowchart



1993 Cross-Sectional CTS

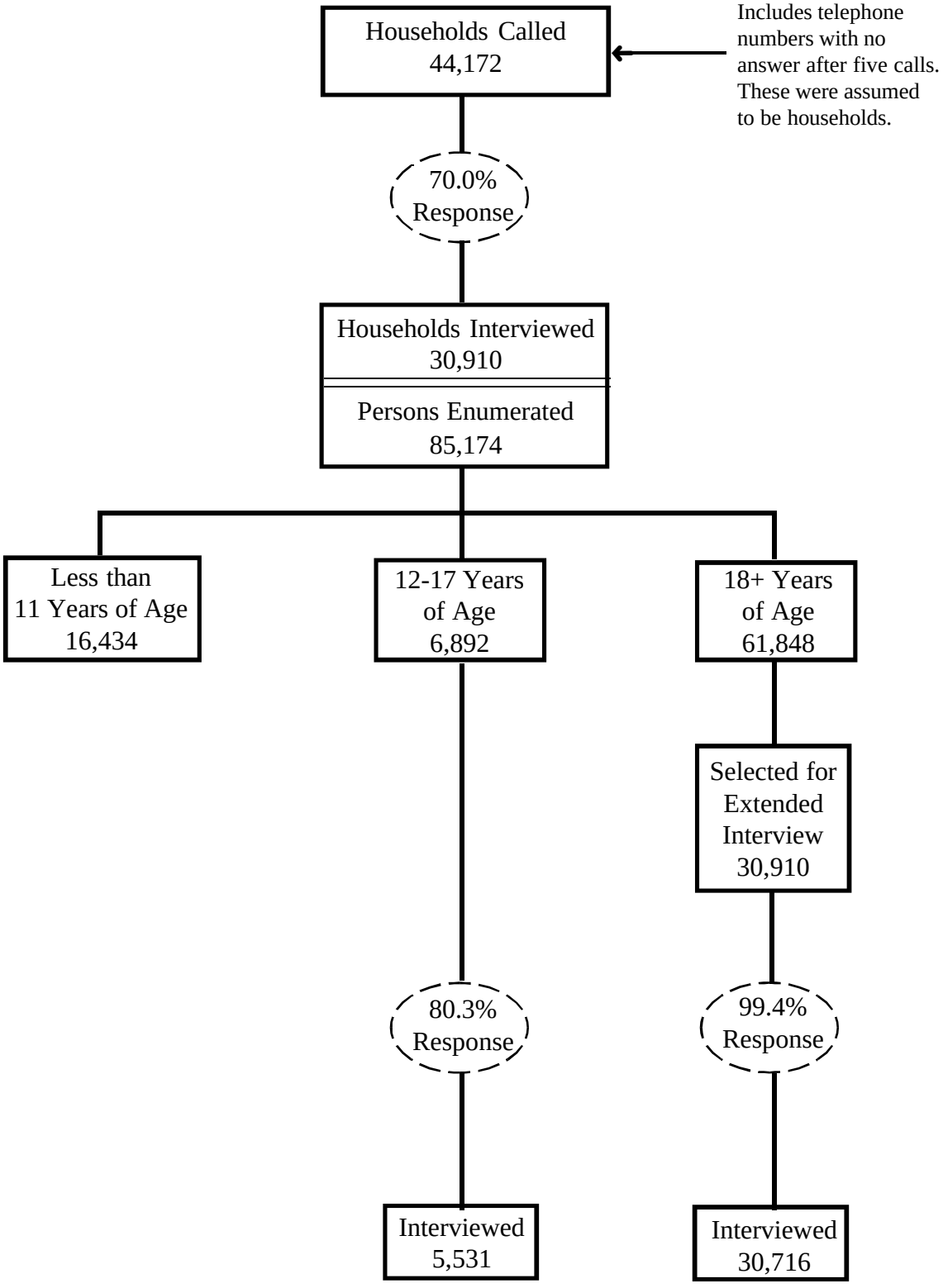
The 1993 CTS, like the 1990 CTS, was intended to provide estimates for the population at the county/regional level, so the initial sampling procedures were similar to those used in the 1990 CTS. However, it differed from the previous two surveys in that a separate sample was not drawn from the enumerated adults and the 25-minute in-depth survey was not undertaken for adults (these changes were dictated by cost constraints). Instead, the individual who responded to the screener survey was asked an average of 20 additional questions about attitudes and behaviors related to tobacco use from previous surveys. Interviews were conducted from January 1993 through May 1993. A screener survey was completed in 70.0% of the households called (see Figure A.4). Responses to the additional questions were obtained from 99.4% of the adults who completed the initial screener survey.

Among the 85,174 people enumerated in these California households, 6,892 were adolescents between the ages of 12 and 17 years. The 1993 in-depth adolescent CTS (with only minor changes from the 1992 adolescent CTS) was completed for 5,531 (80.3%) of these adolescents.

The 1993 CTS analysis used the same determination of smoking status as the 1990 analysis (see Figure A.2).

Figure A.4

1993 California Tobacco Survey Flowchart



1996 Cross-Sectional CTS

The 1996 CTS consisted of four separate surveys. First, a five-minute "screener" survey was conducted as in previous years. Based on the screener information, adults were sampled for the 25-minute extended interview based on their smoking status in the last 5 years. These respondents to the extended interview provided a sample very comparable to the 1990 CTS. If the screener respondent was not selected for the long extended interview, they were asked to answer a five-minute short interview. The short interview contained a subset of the questions from the long interview, so that screener respondents provided a sample very comparable to the 1993 CTS. As in previous years, all adolescents in the household were targeted for a 25-minute extended interview. Interviews were conducted from September 1996 through January 1997. Figure A.5 presents a flowchart of the sample sizes and the response rates for the 1996 CTS.

Interviewers attempted to contact 71,989 households. The screener survey was completed for 39,674 (55.3%) of the households contacted. Of the 104,680 people enumerated in these households, 8,778 were between 12 and 17 years of age, and extended interviews were completed for 6,252 (71.2%) of these adolescents. From the 78,337 adults who were enumerated, 25,546 were selected for the long extended interview, and 18,616 (72.9%) of these were completed. Furthermore, 25,812 additional short interviews were obtained for screener respondents, which accounted for 97.9% of those targeted.

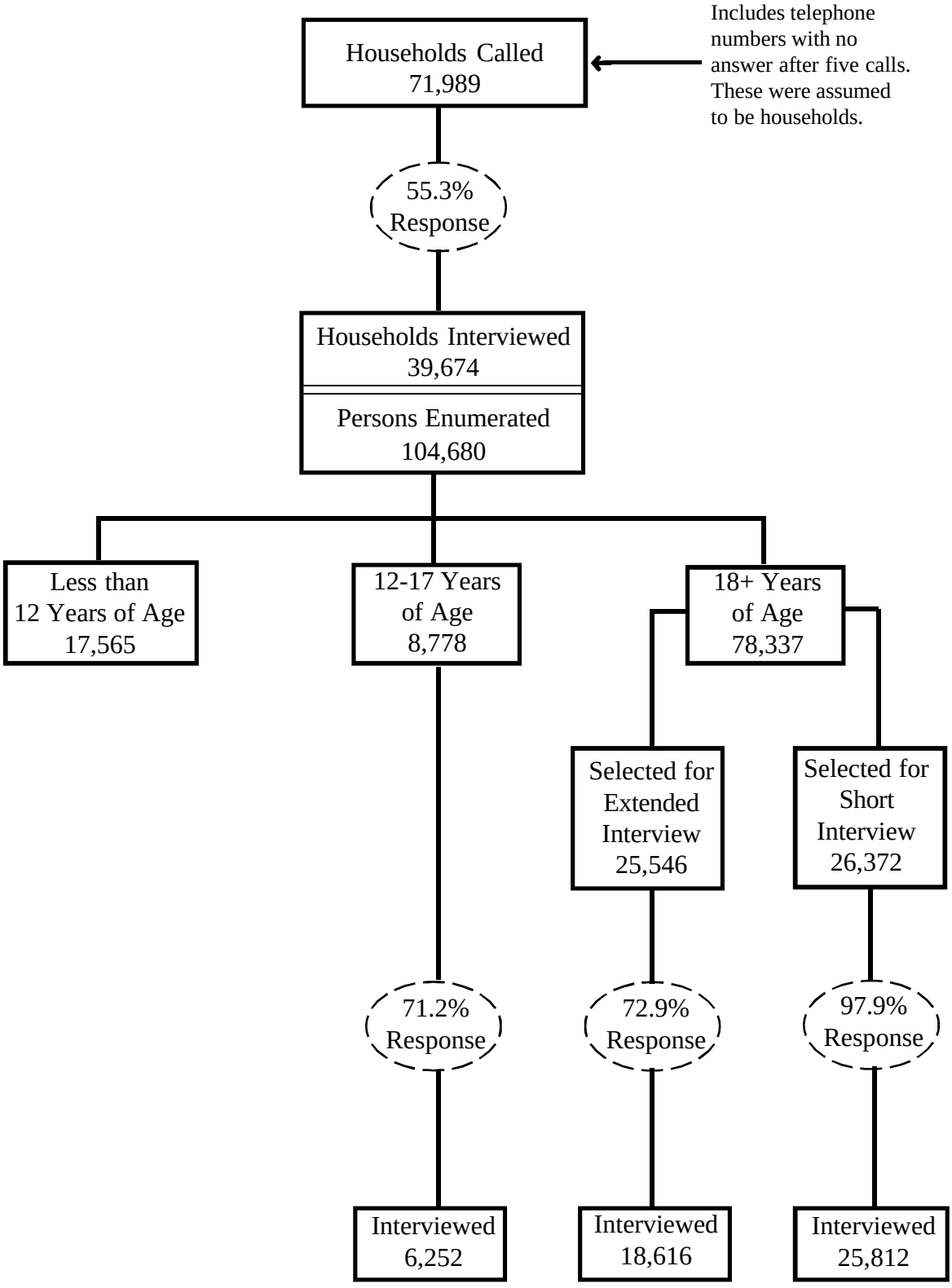
The 1996 screener smoking status was determined in the same manner as the 1990 screener smoking status (see Figure A.2). The question for the adult extended interview changed from the *smoke now* question to:

Do you smoke cigarettes every day, some days or not at all?

A detailed description of how cigarette smoking status was established, including a chart (Figure 3.1), is presented in Chapter 3, Section 3. As stated in Chapter 3, the trends in smoking prevalence were analyzed using screener data, so the change in question format had no impact on these results.

Figure A.5

1996 California Tobacco Survey Flowchart



2. Robert Wood Johnson California Teenage Longitudinal Survey: 1993 and 1996

In 1993, the University of California, San Diego and Westat, Inc. conducted a survey of attitudes, behaviors, and media exposure regarding smoking and tobacco use in California. The initial 1993 survey was conducted through a contract with the California Department of Health Services, as part of the 1993 California Tobacco Survey. During this 1993 survey, screener interviews were conducted with 30,910 households. As part of the screener interview, all household members were enumerated. In total, there were 6,892 adolescents ages 12 to 17 years old in these households, and all were selected for the youth extended interview. Interviews were completed for 5,531 adolescents, representing a response rate of 80.6%. All interviews were conducted using computer-assisted telephone interviewing (CATI) and were administered in English or Spanish, according to the respondent's preference.

In 1993, it was unknown whether follow-up interviews would be conducted for a longitudinal survey 3 years later. Thus, participants were informed that they might be contacted again in the future for this survey. When separate funding was obtained through the Robert Wood Johnson (RWJ) Foundation, attempts were made to contact all adolescents who were interviewed in 1993. Even after using tracing services, 26.5% of the 1993 youth sample was not located. Of those who were located, follow-up interviews were completed on 85.0% (n=3,376). There was a total refusal rate of 7.0%, consisting of 1.2% parents who refused and 5.8% teens who refused.

The longitudinal survey is a powerful instrument for identifying factors associated with individual change in behavior or other variables of interest. However, longitudinal studies must address the issue of whether nonrespondents to the second interview were different with respect to important variables from those who did provide a second interview. A statistical difference might indicate a bias in the results of the second survey. Because the follow-up interviews for the Robert Wood Johnson survey could not be completed on all teens in the 1993 sample, it was necessary to carefully examine the data for such biases.

Table A.1 presents information on smoking behavior and sociodemographics for those who completed the 1996 follow-up and those who did not. Where the differences in respondents and nonrespondents were statistically significant, the category is designated with an asterisk (*):

Table A.1
Comparison of Characteristics of Respondents and Nonrespondents to the 1996 RWJ Follow-Up Survey

Demographic Group	Respondents (N=3,376)	Nonrespondents (N=2,155)
Male	49.6%	51.3%
Female	50.4	48.7
12-13 year olds	35.3	35.5
14-15 year olds	35.3	31.1
16-17 year olds	29.4	33.4
African American*	8.7	12.1
Asian/Other	10.3	9.5
Hispanic*	32.8	40.4
Non-Hispanic White*	48.3	38.0
Much better than average school performance*	19.2	15.3
Better than average school performance	38.5	32.2
Average/below average school performance*	42.3	52.5
Never Smokers	66.4	62.5
Experimenters	29.6	31.1
Addicted*	4.1	6.5

As Table A.1 shows, fewer teens in the older age groups and fewer minorities were re-contacted in 1996. Sociodemographic differences in response of this kind are expected with population surveying. These differences were adjusted for by using standard methods of weighting (Pierce et al., 1994). Each respondent is assigned a weight so that the demographic distribution of the panel sample is representative of the demographic characteristics of the state of California. Any bias due to failure to contact older teens who might be more likely to be smokers should diminish the power of analyses to detect significant predictors of uptake. Therefore, the figures derived from these data that are provided in this report represent conservative estimates.

3. Teenage Attitudes and Practices Surveys: 1989 and 1993

The Teenage Attitudes and Practices Survey (TAPS) is a national longitudinal study that interviewed adolescents whose parents or guardians had responded to the 1989 National Health Interview Survey (NHIS, described below). TAPS I was conducted in 1989 and the

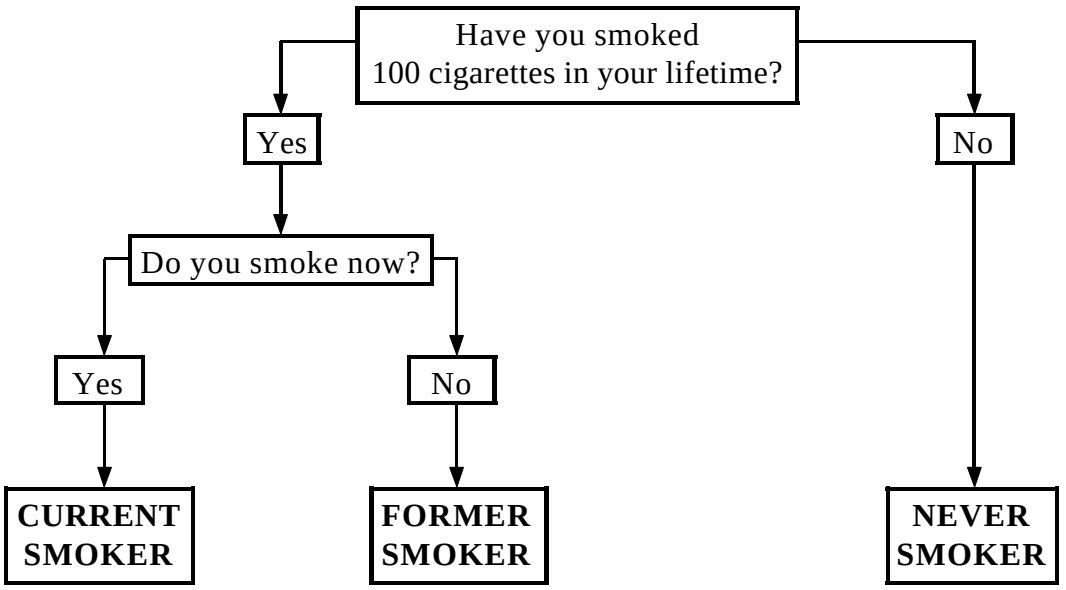
follow-up, TAPS II, was conducted in 1993. The 1993 TAPS included 7,960 adolescents who were interviewed in both 1989 and 1993, and an additional sample of 4,992 adolescents between 10 and 15 years of age who were interviewed in 1993. The new respondents in 1993 were identified from the 1991 and 1992 NHIS sampling frame. The 1993 response rates for the longitudinal and new samples were 87% and 89%, respectively. The multistage design of the NHIS requires weighting to produce valid population estimates. These weights reflect the probability of household selection and post-stratification by race, sex, and age.

4. Behavioral Risk Factor Surveys: 1991-1993; California Adult Tobacco Surveys: 1994-1996

Since 1991, Tobacco Control Program funds have been used to increase the sample size, improve quality control procedures, and collect additional information on tobacco use obtained in conjunction with the Behavioral Risk Factor Survey (BRFS) for California. The BRFS has been undertaken in California every year since 1984. However, before the addition of Tobacco Control funds, this survey had small sample sizes and there is no documentation on the application of rigorous quality control procedures. Since 1994, the BRFS have included a special supplement on smoking, the California Adult Tobacco Survey (CATS), a random-digit dialed telephone survey that is conducted by the State Department of Health. The core BRFS questionnaire was designed by the Centers for Disease Control. Data collection was supported in part by funds from Cooperative Agreement No. U58/CCU900590-07 between the Centers for Disease Control and Prevention, U.S. Public Health Service, and the Cancer Surveillance Section, California Department of Health Services. A detailed technical report on survey methodology is available for the CATS (CDHS, 1995). For examination of smoking prevalence trends, each survey was standardized to 1994 population totals for sex, age, race and education.

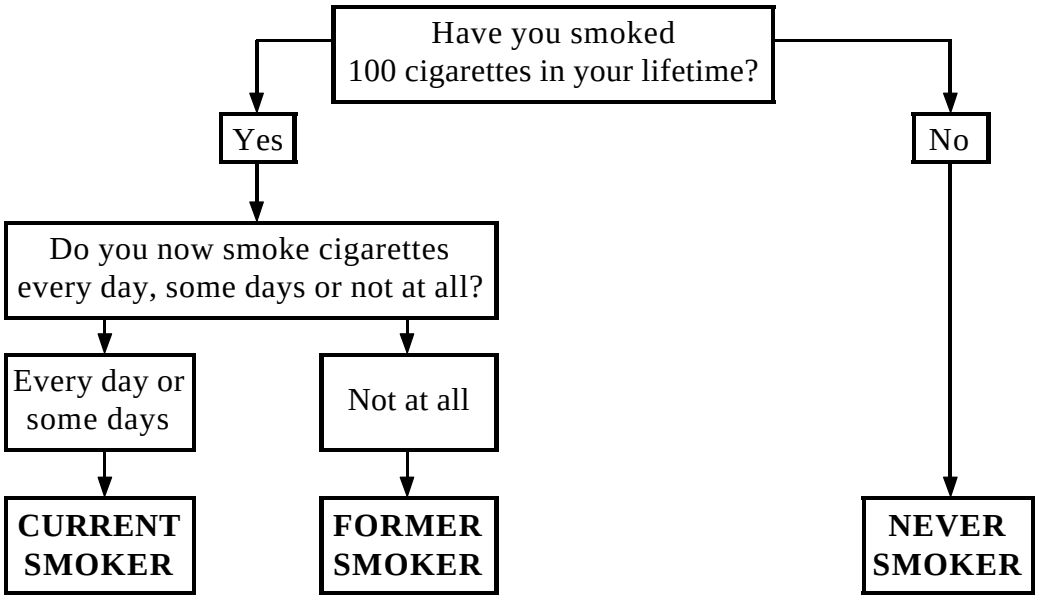
The BRFS/CATS included the same questions on smoking status as the CTS. The method for determining smoking status for the surveys through 1994 followed the logic displayed in Figure A.6.

Figure A.6
BRFS/CATS Smoking Status Determination Through 1994



In 1995 and 1996, the "Do you smoke now?" question was replaced by the "every day/some days/not at all" question, so that the determination of smoking status was as indicated in Figure A.7.

Figure A.7
BRFS/CATS Smoking Status Determination After 1994



5. National Health Interview Surveys: 1974, 1978-1980, 1983, 1985, 1987, 1988, 1990-1994

The National Health Interview Surveys (NHIS) are household surveys of the adult non-institutionalized population of the United States. Since 1974, these surveys have only accepted self-reported information on smoking status; if the randomly selected household member was unavailable at the time of the scheduled household interview, the interview was conducted by telephone. The NHIS are designed and supervised by the National Center for Health Statistics, with interviews conducted by the Bureau of the Census. The NHIS are widely recognized as the definitive data source for trends in smoking behavior nationwide. These surveys are not intended to provide estimates of behavior at the state level but rather at the regional level (with the United States divided into four regions). Because California has such a large population, on any particular survey, the proportion of participants from the western region who come from California can be as high as 75%; further, Californians comprise approximately 10% of the total national sample. Data from the NHIS were used to establish the trend in smoking behavior prior to Proposition 99, which was passed in 1988. All surveys with supplements on smoking from 1978 through 1994 were considered for inclusion in the analysis. The 1974 survey was excluded because more than 2% of respondents did not have complete smoking status information. The 1976 and 1977 surveys were excluded because they did not interview people as young as 18 years. The 1992 survey was excluded because it was terminated prematurely due to budget cuts with adverse consequences for representativeness and response rate. The data for California and the rest of the United States was standardized to 1994 population totals for sex, age, race and education for prevalence trend analysis.

The NHIS included the same smoking status questions as the CTS. Up through the 1992 NHIS, the determination of smoking status followed the logic presented in Figure A.6. From 1993 onwards, the new question was used and the determination of smoking status was as indicated in Figure A.7.

6. Tobacco Supplements of the Current Population Surveys: 1985, 1989, 1992-1993, 1995-1996

The Current Population Surveys (CPS) conduct household interviews with a random sample of nonmilitary and noninstitutionalized households in the United States. Questions are addressed to an adult respondent in the household who provides information on other members of the household. The CPS are designed to provide state-specific estimates and are undertaken by the Bureau of the Census for the Bureau of Labor Statistics. The main purpose of these surveys is to obtain unemployment estimates. In any given month, the Census Bureau allows other federal agencies to design supplemental questions to be asked of the approximately 45,000 households that are scheduled for interview. Supplements on smoking were included in 1985, 1989, 1992-1993 and 1995-1996.

The methodology of the 1992 smoking supplement was changed significantly to improve the accuracy of estimates of smoking behavior obtainable from this type of survey. The 1992-1993

survey is part of the baseline data for assessing the impact of state-level tobacco control initiatives funded by the National Cancer Institute and the American Cancer Society. The CPS provide estimates including smoking prevalence in California and the rest of the United States. Response rates for the 1992-1993 and 1995-1996 smoking supplements range from 86% to 89%. For analysis of trends in smoking prevalence for this report, the data were standardized to 1994 population totals for sex, age, race and education.
Again, the CPS included the same smoking status questions as the CTS. The 1985 and 1989 CPS determination of smoking status was according to the method illustrated in Figure A.6, and the 1992-1993 and 1995-1996 CPS used the new question to determine smoking status as illustrated in Figure A.7. However, since the 1985 and 1989 surveys had unknown or missing smoking status information on well over 2% of adult respondents, these surveys were omitted from the analysis.

7. Sales Data Reported to the Federal Trade Commission: 1984-1996

Population surveys, no matter how carefully designed and executed, are subject to a number of errors, including errors associated with sampling. Some research has suggested that decreases in self-reported smoking behavior may result from survey respondents who underreport their smoking behavior because of the increasing social stigma associated with tobacco use (Warner, 1978), although these findings have been challenged (Hatziandreu et al., 1989; Pierce et al., 1987).

Tobacco consumption estimates obtained from data on cigarette sales are not subject to these errors and represent the most objective data available on population consumption patterns. Data on cigarette sales are available from the Federal Trade Commission based on the excise taxes that are levied on tobacco products (FTC, 1997). The government collects excise taxes at the warehouse level and this information is reported on a monthly basis. These data are subject to seasonal variations that are unrelated to actual retail sales or to consumer behavior. Seasonal variations typically follow a quarterly pattern associated with the fiscal year. They also vary considerably from month to month in a somewhat random pattern, probably reflecting patterns of inventory stocking at the retail level. However, with the systematic seasonal variations removed, collective sales data provide the best available estimate of total tobacco use by Californians and people in the rest of the United States.

The main limitation of these data is that they do not provide information on the cigarette consumers. Thus, while trends in per capita consumption of cigarettes can be estimated, it is not possible to use these data to assess whether changes in consumption result from either uptake or quitting behavior, or to identify whether some groups changed behavior more than others. For example, a drop in cigarette sales may be the result of fewer people smoking or of the same people smoking a smaller amount. In this report, these data are used as the main source for detecting changes in tobacco consumption and the timing of these changes.

The per capita cigarette consumption in California and the rest of the United States is derived by dividing the monthly sales figure by the number of people aged 18 and older in the

population as of that month. The population size data are derived from United States Census Bureau estimates (Bureau of Census, 1990, 1994, 1996).

8. Price Data Provided by the Tobacco Institute: 1989-1995

The Tobacco Institute publishes an annual historical compilation of tax policies and prices of cigarettes in each state of the United States for each year since 1921. This document, *The Tax Burden on Tobacco*, reports the weighted average nominal price per pack of cigarettes on November 1 of each year. The weights reflect the proportion of packs sold, which are premium and generic brands of cigarettes, as well as the proportion sold in cartons and individually. In order to account for the role of general inflation on the price of cigarettes, these nominal prices are discounted by the Consumer Price Index for each year.

9. Summary

Multiple sources of data are used to assess whether smoking-related behavior changed in California as a result of the California Tobacco Control Program and what particular factors were associated with that change. In this report, the Robert Wood Johnson and Teen Attitudes and Practices longitudinal data are used to validate predictors of smoking behavior. The California Tobacco Surveys, California Adult Tobacco Surveys, the National Health Interview Surveys, and the Current Population Surveys are used to identify and confirm prevalence trends. The CTS were the primary sources of information about trends in attitudes and smoking-related behaviors.

APPENDIX A: REFERENCES

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Appendix B

SOCIODEMOGRAPHIC DATA

TABLE LIST

Table	Survey Title	Comments
B.1	Smoking Prevalence (Screen)	
B.2	Workplace Smoking Policy (Adult)	No 1993 data
B.3	Exposure of Indoor Workers to ETS (Adult)	No 1993 data
B.4	Home Smoking Restrictions (Adult)	No 1990 data
B.5	Uptake Continuum Among Adolescents (Teen)	
B.6	Promotional Items Status (Teen)	
B.7	Smoking Status Among Adolescents (Teen)	No 1990,1992 data
B.8	Average Daily Consumption for All Smokers (Adult)	
B.9	Detailed Current Smoking Status (Adult)	No 1993 data
B.10	Quitting Status Among People Who Smoked in the Last Year	No 1993 data
B.11	The Quitting Continuum for People Who Smoked (Adult)	No 1992,1993 data
B.12	Assistance in Quitting Smoking (Adult)	
B.13	Price Sensitivity (Adult)	No 1990,1993 data
B.14	Support for Cigarette Tax Increase (Adult)	No 1990 data
B.15	Favorite Ads of Adults and Adolescents (Adult, Teen)	No 1990 adult or adolescent data; no 1993 adult data
B.16	Exposure to Anti-Smoking Media (Adult, Teen)	1996 data only
B.17	How Do You Usually Get Cigarettes? (Teen)	1996 data only
B.18	Compliance with School Nonsmoking Rules (Teen)	
B.19	What is the Meaning of 'Light' Cigarette (Adult)	1996 data only
B.20	Support for Regulation of Tobacco Advertising and Promotion (Adult)	No 1993 data
B.21	Health Beliefs on ETS (Adult)	No 1990 data; only 1 question for 1993
B.22	Current Tobacco Use Status (Adult)	No 1993 data; different format for 1992

Notes:

- PI=Pacific Islander
- No regional data available for 1992

TABLE B.1: SMOKING PREVALENCE (1990 SCREENER CTS)

OVERALL	Current Smoker (%) +/- 95% CI	Former Smoker in Last 5 years (%) +/- 95% CI	Quit Ratio in Last 5 Years (%) +/- 95% CI	Population Size (n)	Sample Size (n)
TOTAL	22.2 +/- 0.5	9.8 +/- 0.4	30.6 +/- 1.1	21,567,804	65,139
SEX					
Male	25.5 +/- 0.5	10.7 +/- 0.4	29.5 +/- 1.1	10,484,060	31,613
Female	19.1 +/- 0.7	8.9 +/- 0.4	31.9 +/- 1.4	11,083,744	33,526
AGE					
18-24	21.4 +/- 1.4	7.3 +/- 0.9	25.4 +/- 2.8	3,273,514	10,384
25-44	24.6 +/- 0.8	9.9 +/- 0.5	28.7 +/- 1.4	10,169,829	30,118
45-64	23.8 +/- 1.0	11.1 +/- 0.7	31.8 +/- 1.9	5,114,166	16,012
65+	12.2 +/- 0.8	9.8 +/- 1.1	44.5 +/- 3.0	3,010,295	8,625
RACE/ETHNICITY					
Hispanic	19.4 +/- 1.1	8.6 +/- 0.9	30.8 +/- 2.6	4,842,274	10,551
Non-Hispanic White	23.1 +/- 0.5	10.6 +/- 0.4	31.5 +/- 1.0	13,320,636	45,696
African-American	27.7 +/- 2.7	9.4 +/- 1.6	25.4 +/- 4.1	1,357,116	3,317
Asian/PI	16.8 +/- 1.6	6.9 +/- 1.0	29.2 +/- 3.9	1,747,605	4,637
Other	33.5 +/- 4.5	8.2 +/- 2.3	19.7 +/- 5.1	300,173	938
EDUCATION					
<12	26.0 +/- 1.3	9.5 +/- 1.0	26.7 +/- 2.4	5,086,564	7,603
12	26.5 +/- 0.8	10.3 +/- 0.5	28.1 +/- 1.3	6,940,221	21,528
13-15	20.7 +/- 0.7	10.1 +/- 0.7	32.7 +/- 2.0	5,035,099	19,602
16+	12.9 +/- 0.7	9.0 +/- 0.6	41.0 +/- 2.5	4,505,920	16,406
SEX Male					
AGE					
18-24	24.6 +/- 1.9	7.0 +/- 1.1	22.2 +/- 3.5	1,660,038	5,169
25-44	28.4 +/- 1.1	10.6 +/- 0.6	27.1 +/- 1.5	5,049,577	14,870
45-64	26.3 +/- 1.3	12.3 +/- 1.0	31.9 +/- 2.0	2,488,961	7,853
65+	13.4 +/- 1.2	12.6 +/- 1.9	48.6 +/- 4.9	1,285,484	3,721
RACE/ETHNICITY					
Hispanic	25.9 +/- 2.8	10.3 +/- 1.1	28.4 +/- 1.6	2,440,118	5,302
Non-Hispanic White	24.8 +/- 1.3	11.1 +/- 0.6	30.9 +/- 0.6	6,445,925	22,062
African-American	29.3 +/- 5.7	10.2 +/- 2.6	25.8 +/- 3.1	611,527	1,539
Asian/PI	24.8 +/- 4.1	9.2 +/- 1.6	26.9 +/- 2.2	834,738	2,236
Other	36.3 +/- 7.9	9.8 +/- 3.7	21.3 +/- 7.0	151,752	474
EDUCATION					
<12	33.0 +/- 1.6	11.2 +/- 1.4	25.4 +/- 2.6	2,427,870	3,678
12	30.1 +/- 1.1	11.1 +/- 0.7	27.0 +/- 1.5	3,144,689	9,695
13-15	23.2 +/- 1.0	10.7 +/- 1.1	31.5 +/- 2.6	2,460,443	9,364
16+	14.4 +/- 1.0	9.5 +/- 0.9	39.7 +/- 3.2	2,451,058	8,876
SEX Female					
AGE					
18-24	18.1 +/- 1.6	7.6 +/- 1.3	29.5 +/- 4.3	1,613,476	5,215
25-44	20.9 +/- 0.9	9.3 +/- 0.7	30.8 +/- 2.1	5,120,252	15,248
45-64	21.5 +/- 1.2	10.0 +/- 0.9	31.8 +/- 2.6	2,625,205	8,159
65+	11.3 +/- 1.2	7.7 +/- 1.0	40.4 +/- 3.8	1,724,811	4,904
RACE/ETHNICITY					
Hispanic	12.8 +/- 4.2	7.0 +/- 1.1	35.2 +/- 1.3	2,402,156	5,249
Non-Hispanic White	21.6 +/- 1.3	10.2 +/- 0.4	32.2 +/- 0.7	6,874,711	23,634
African-American	26.3 +/- 4.5	8.8 +/- 1.7	25.0 +/- 3.3	745,589	1,778
Asian/PI	9.4 +/- 7.1	4.9 +/- 1.2	34.2 +/- 1.5	912,867	2,401
Other	30.7 +/- 8.2	6.6 +/- 3.2	17.6 +/- 6.0	148,421	464
EDUCATION					
<12	19.7 +/- 1.4	7.8 +/- 0.9	28.5 +/- 3.0	2,658,694	3,925
12	23.6 +/- 1.0	9.7 +/- 0.7	29.1 +/- 1.7	3,795,532	11,833
13-15	18.3 +/- 1.1	9.5 +/- 0.9	34.1 +/- 2.7	2,574,656	10,238
16+	11.1 +/- 1.0	8.3 +/- 0.8	42.9 +/- 3.3	2,054,862	7,530

TABLE B.1: SMOKING PREVALENCE (1990 SCREENER CTS)

REGION	Current Smoker (%) +/- 95% CI	Former Smoker in Last 5 years (%) +/- 95% CI	Quit Ratio in Last 5 Years (%) +/- 95% CI	Population Size (n)	Sample Size (n)
OVERALL	22.2 +/- 0.5	9.8 +/- 0.4	30.6 +/- 1.1	21,567,804	65,139
Los Angeles	21.8 +/- 1.5	9.2 +/- 1.0	29.7 +/- 3.0	6,463,377	7,252
San Diego	23.1 +/- 2.2	9.8 +/- 0.9	29.8 +/- 2.8	1,833,748	3,885
Orange	19.3 +/- 2.1	9.1 +/- 1.1	32.1 +/- 3.8	1,793,000	3,654
Santa Clara	19.7 +/- 2.3	9.4 +/- 1.1	32.3 +/- 3.3	1,094,406	3,422
San Bernadino	26.6 +/- 1.7	9.6 +/- 1.3	26.4 +/- 3.0	970,659	4,082
Alameda	22.8 +/- 2.3	9.8 +/- 1.5	30.1 +/- 4.3	934,417	3,326
Riverside	23.9 +/- 1.8	10.0 +/- 1.3	29.5 +/- 2.8	834,904	3,715
Sacramento	25.2 +/- 2.0	11.1 +/- 1.6	30.6 +/- 3.9	745,396	3,190
Contra Costa	21.9 +/- 1.6	10.6 +/- 1.4	32.6 +/- 3.7	570,574	3,554
San Francisco	21.9 +/- 2.4	10.1 +/- 1.2	31.6 +/- 3.5	580,123	2,890
San Mateo, Solano	20.8 +/- 1.4	10.8 +/- 1.2	34.2 +/- 2.9	713,607	3,136
Marin, Napa, Sonoma	21.7 +/- 2.0	12.3 +/- 1.8	36.2 +/- 3.4	548,633	2,807
Butte, Colusa, Del Norte, Glenn, etc.	23.7 +/- 1.6	10.5 +/- 1.1	30.8 +/- 2.6	689,787	3,431
San Luis Obisbo, Santa Barbara, Ventura	18.9 +/- 1.7	10.1 +/- 1.0	34.8 +/- 3.4	916,807	3,541
Amador, Alpine, Calaveras, El Dorado, etc.	24.1 +/- 2.4	10.0 +/- 1.3	29.3 +/- 3.6	809,668	3,240
Monterey, San Benito, Santa Cruz	19.0 +/- 1.9	11.1 +/- 1.7	37.0 +/- 4.7	439,173	3,249
Fresno, Madera, Merced, Stanislaus	25.1 +/- 2.4	9.8 +/- 1.3	28.1 +/- 3.5	885,840	3,381
Imperial, Inyo, Kern, Kings, Mono,Tulare	23.9 +/- 2.0	9.6 +/- 1.3	28.8 +/- 3.7	743,685	3,384

TABLE B.1: SMOKING PREVALENCE (1992 SCREENER CTS)

OVERALL	Current Smoker (%) +/- 95% CI	Former Smoker in Last 5 years (%) +/- 95% CI	Quit Ratio in Last 5 Years (%) +/- 95% CI	Population Size (n)	Sample Size (n)
TOTAL	20.0 +/- 0.7	9.5 +/- 0.4	32.1 +/- 1.5	21,587,607	21,872
SEX					
Male	22.8 +/- 1.0	10.8 +/- 0.6	32.1 +/- 1.5	10,515,890	10,586
Female	17.4 +/- 0.9	8.2 +/- 0.7	32.1 +/- 2.4	11,071,717	11,286
AGE					
18-24	18.9 +/- 1.7	5.6 +/- 0.8	23.0 +/- 3.3	3,258,230	3,412
25-44	22.8 +/- 1.0	9.7 +/- 0.8	29.9 +/- 2.4	10,111,306	10,014
45-64	20.9 +/- 1.4	11.2 +/- 1.0	35.0 +/- 2.9	5,015,768	5,470
65+	11.0 +/- 1.4	9.7 +/- 1.5	47.0 +/- 5.3	3,202,303	2,976
RACE/ETHNICITY					
Hispanic	17.0 +/- 1.4	8.1 +/- 1.0	32.3 +/- 3.3	4,817,815	4,404
Non-Hispanic White	21.7 +/- 0.8	10.2 +/- 0.7	31.9 +/- 1.9	13,339,026	14,306
African-American	21.3 +/- 3.0	9.3 +/- 2.0	30.5 +/- 5.6	1,359,140	1,297
Asian/PI	13.9 +/- 2.0	6.8 +/- 1.3	32.7 +/- 4.8	1,763,859	1,591
Other	23.1 +/- 7.4	15.8 +/- 7.8	40.6 +/-16.6	307,767	274
EDUCATION					
<12	22.4 +/- 1.6	9.3 +/- 1.3	29.5 +/- 3.6	5,021,719	2,756
12	25.7 +/- 1.2	10.3 +/- 0.9	28.6 +/- 2.2	7,015,324	7,118
13-15	18.2 +/- 1.1	9.6 +/- 0.9	34.5 +/- 2.9	4,877,230	6,377
16+	10.8 +/- 0.8	8.1 +/- 0.6	42.8 +/- 2.5	4,673,334	5,621
SEX Male					
AGE					
18-24	21.9 +/- 2.6	5.6 +/- 1.4	20.5 +/- 4.3	1,683,207	1,696
25-44	26.4 +/- 1.5	10.7 +/- 1.0	28.8 +/- 2.6	5,023,599	4,937
45-64	22.5 +/- 2.1	13.9 +/- 1.7	38.2 +/- 3.9	2,416,190	2,649
65+	11.5 +/- 2.5	11.8 +/- 2.2	50.6 +/- 7.8	1,392,894	1,304
RACE/ETHNICITY					
Hispanic	22.4 +/- 2.1	10.6 +/- 1.7	32.2 +/- 4.1	2,351,850	2,145
Non-Hispanic White	23.0 +/- 1.0	10.8 +/- 0.8	31.9 +/- 1.8	6,535,288	6,974
African-American	24.2 +/- 4.8	10.7 +/- 3.1	30.6 +/- 8.0	629,431	572
Asian/PI	21.3 +/- 3.3	10.2 +/- 2.2	32.2 +/- 5.1	864,385	781
Other	25.4 +/-11.7	16.8 +/- 9.7	39.8 +/-21.8	134,936	114
EDUCATION					
<12	27.3 +/- 1.1	12.2 +/- 2.2	31.0 +/- 4.5	2,407,919	1,331
12	29.3 +/- 0.9	11.2 +/- 1.1	27.6 +/- 2.5	3,180,336	3,181
13-15	21.3 +/- 1.8	10.4 +/- 1.2	32.8 +/- 3.4	2,356,243	3,043
16+	12.1 +/- 1.6	9.2 +/- 1.0	43.3 +/- 3.3	2,571,392	3,031
SEX Female					
AGE					
18-24	15.6 +/- 2.3	5.6 +/- 1.0	26.5 +/- 4.9	1,575,023	1,716
25-44	19.3 +/- 1.3	8.8 +/- 1.2	31.2 +/- 3.8	5,087,707	5,077
45-64	19.4 +/- 1.7	8.7 +/- 1.1	31.0 +/- 3.8	2,599,578	2,821
65+	10.6 +/- 1.9	8.1 +/- 1.9	43.5 +/- 7.0	1,809,409	1,672
RACE/ETHNICITY					
Hispanic	11.8 +/- 1.5	5.7 +/- 1.2	32.4 +/- 5.5	2,465,965	2,259
Non-Hispanic White	20.6 +/- 1.4	9.6 +/- 1.0	31.8 +/- 3.2	6,803,738	7,332
African-American	18.7 +/- 3.8	8.1 +/- 2.7	30.3 +/- 8.9	729,709	725
Asian/PI	6.8 +/- 1.9	3.5 +/- 1.1	34.2 +/- 9.2	899,474	810
Other	21.3 +/- 8.1	15.0 +/- 9.1	41.4 +/-19.3	172,831	160
EDUCATION					
<12	17.9 +/- 1.7	6.7 +/- 1.5	27.2 +/- 5.0	2,613,800	1,425
12	22.8 +/- 1.4	9.6 +/- 1.3	29.6 +/- 3.4	3,834,988	3,937
13-15	15.3 +/- 1.6	8.9 +/- 1.0	36.6 +/- 3.8	2,520,987	3,334
16+	9.3 +/- 1.2	6.8 +/- 0.9	42.2 +/- 5.1	2,101,942	2,590

Regional data not available for 1992

TABLE B.1: SMOKING PREVALENCE (1993 SCREENER CTS)

OVERALL	Current Smoker (%) +/- 95% CI	Former Smoker in Last 5 years (%) +/- 95% CI	Quit Ratio in Last 5 Years (%) +/- 95% CI	Population Size (n)	Sample Size (n)
TOTAL	20.2 +/- 0.5	11.1 +/- 0.4	35.4 +/- 1.0	21,573,095	63,269
SEX					
Male	23.4 +/- 0.7	12.1 +/- 0.5	34.0 +/- 1.1	10,519,506	30,874
Female	17.2 +/- 0.5	10.2 +/- 0.6	37.1 +/- 1.6	11,053,589	32,395
AGE					
18-24	18.9 +/- 1.2	9.1 +/- 0.8	32.6 +/- 2.8	3,260,988	9,423
25-44	22.3 +/- 0.8	11.4 +/- 0.6	33.8 +/- 1.4	10,190,923	28,635
45-64	22.1 +/- 0.8	12.2 +/- 0.8	35.5 +/- 2.1	5,037,754	16,574
65+	11.8 +/- 1.0	10.6 +/- 1.1	47.4 +/- 3.6	3,083,430	8,637
RACE/ETHNICITY					
Hispanic	16.7 +/- 1.2	12.2 +/- 0.9	42.3 +/- 2.6	4,849,214	11,633
Non-Hispanic White	22.1 +/- 0.7	11.2 +/- 0.4	33.6 +/- 1.1	13,334,711	42,463
African-American	22.7 +/- 2.3	10.6 +/- 1.8	31.8 +/- 4.9	1,355,281	3,285
Asian/PI	12.7 +/- 1.3	7.8 +/- 1.0	38.1 +/- 3.8	1,732,707	4,965
Other	29.1 +/- 4.2	11.2 +/- 2.5	27.9 +/- 5.9	301,182	923
EDUCATION					
<12	22.2 +/- 1.0	12.0 +/- 1.0	35.0 +/- 2.3	5,074,759	7,696
12	25.2 +/- 0.8	11.6 +/- 0.6	31.5 +/- 1.4	6,947,049	19,615
13-15	19.3 +/- 1.0	11.4 +/- 0.7	37.2 +/- 2.2	4,951,855	19,207
16+	11.6 +/- 0.7	9.1 +/- 0.7	43.9 +/- 2.5	4,599,432	16,751
SEX Male					
AGE					
18-24	21.1 +/- 1.7	9.8 +/- 1.1	31.6 +/- 3.3	1,706,926	4,840
25-44	26.4 +/- 1.3	11.5 +/- 0.6	30.4 +/- 1.6	5,070,308	14,157
45-64	24.6 +/- 1.3	14.6 +/- 1.2	37.2 +/- 2.8	2,402,854	8,041
65+	13.0 +/- 1.4	12.7 +/- 1.5	49.4 +/- 4.4	1,339,418	3,836
RACE/ETHNICITY					
Hispanic	23.3 +/- 2.0	15.1 +/- 1.4	39.4 +/- 3.1	2,442,787	5,880
Non-Hispanic White	23.5 +/- 0.9	11.1 +/- 0.5	32.1 +/- 1.4	6,492,599	20,669
African-American	26.1 +/- 3.1	10.6 +/- 2.6	28.9 +/- 6.1	611,928	1,516
Asian/PI	19.8 +/- 2.0	11.5 +/- 2.0	36.7 +/- 4.6	828,534	2,361
Other	31.8 +/- 6.6	14.1 +/- 3.9	30.8 +/- 9.0	143,658	448
EDUCATION					
<12	28.0 +/- 2.7	14.7 +/- 1.3	34.5 +/- 1.8	2,433,328	3,742
12	29.0 +/- 1.7	11.8 +/- 0.8	29.0 +/- 1.2	3,196,489	8,926
13-15	21.7 +/- 2.6	11.7 +/- 0.8	35.1 +/- 1.3	2,393,926	9,225
16+	13.4 +/- 3.3	10.2 +/- 0.9	43.1 +/- 1.2	2,495,763	8,981
SEX Female					
AGE					
18-24	16.5 +/- 1.6	8.4 +/- 1.3	33.9 +/- 4.3	1,554,062	4,583
25-44	18.2 +/- 0.7	11.2 +/- 0.9	38.1 +/- 2.3	5,120,615	14,478
45-64	19.9 +/- 1.0	10.0 +/- 0.9	33.4 +/- 2.4	2,634,900	8,533
65+	10.8 +/- 1.3	9.0 +/- 1.3	45.3 +/- 4.9	1,744,012	4,801
RACE/ETHNICITY					
Hispanic	10.0 +/- 1.2	9.2 +/- 1.0	48.1 +/- 4.1	2,406,427	5,753
Non-Hispanic White	20.7 +/- 0.7	11.2 +/- 0.5	35.2 +/- 1.5	6,842,112	21,794
African-American	20.0 +/- 3.0	10.5 +/- 2.1	34.5 +/- 6.4	743,353	1,769
Asian/PI	6.2 +/- 1.3	4.5 +/- 1.1	42.1 +/- 9.0	904,173	2,604
Other	26.6 +/- 5.9	8.6 +/- 3.3	24.4 +/- 8.7	157,524	475
EDUCATION					
<12	16.8 +/- 3.7	9.4 +/- 1.4	35.9 +/- 1.3	2,641,431	3,954
12	22.0 +/- 2.1	11.4 +/- 0.9	34.1 +/- 1.0	3,750,560	10,689
13-15	17.0 +/- 2.9	11.1 +/- 0.9	39.5 +/- 1.1	2,557,929	9,982
16+	9.5 +/- 3.9	7.8 +/- 0.7	45.1 +/- 0.9	2,103,669	7,770

TABLE B.1: SMOKING PREVALENCE (1993 SCREENER CTS)

REGION	Current Smoker (%) +/- 95% CI	Former Smoker in Last 5 years (%) +/- 95% CI	Quit Ratio in Last 5 Years (%) +/- 95% CI	Population Size (n)	Sample Size (n)
OVERALL	20.2 +/- 0.5	11.1 +/- 0.4	35.4 +/- 1.0	21,573,095	63,269
Los Angeles	19.7 +/- 1.3	11.4 +/- 1.0	36.6 +/- 3.0	6,441,949	6,861
San Diego	18.7 +/- 1.7	10.5 +/- 1.4	36.0 +/- 3.8	1,842,990	3,681
Orange	18.1 +/- 1.8	11.0 +/- 1.5	37.8 +/- 3.8	1,776,415	3,224
Santa Clara	19.5 +/- 2.0	10.2 +/- 1.2	34.4 +/- 3.9	1,100,066	3,467
San Bernadino	23.4 +/- 2.0	11.1 +/- 1.1	32.1 +/- 3.2	945,585	3,741
Alameda	19.9 +/- 1.8	10.7 +/- 1.2	35.0 +/- 3.2	938,607	3,068
Riverside	20.0 +/- 1.9	12.2 +/- 1.4	38.0 +/- 3.8	820,577	3,837
Sacramento	24.1 +/- 2.1	10.1 +/- 1.3	29.5 +/- 3.6	742,678	3,340
Contra Costa	21.3 +/- 2.0	11.9 +/- 1.4	35.8 +/- 3.8	587,305	3,577
San Francisco	20.7 +/- 1.8	11.6 +/- 1.6	35.9 +/- 3.9	616,791	2,871
San Mateo, Solano	19.6 +/- 2.0	11.6 +/- 1.2	37.3 +/- 3.9	715,058	3,147
Marin, Napa, Sonoma	18.5 +/- 1.9	11.8 +/- 1.2	39.1 +/- 3.6	538,315	2,920
Butte, Colusa, Del Norte, Glenn, etc.	22.3 +/- 1.9	11.9 +/- 1.5	34.7 +/- 3.7	704,082	3,327
San Luis Obisbo, Santa Barbara, Ventura	19.8 +/- 1.8	10.5 +/- 1.6	34.7 +/- 4.1	904,406	3,342
Amador, Alpine, Calaveras, El Dorado, etc.	23.7 +/- 2.1	10.1 +/- 1.1	29.9 +/- 3.3	790,702	2,953
Monterey, San Benito, Santa Cruz	19.6 +/- 2.0	11.7 +/- 1.4	37.4 +/- 4.2	438,913	3,268
Fresno, Madera, Merced, Stanislaus	21.5 +/- 1.9	10.4 +/- 1.2	32.7 +/- 3.3	919,860	3,329
Imperial, Inyo, Kern, Kings, Mono, Tulare	22.0 +/- 1.8	11.4 +/- 1.4	34.2 +/- 3.7	748,796	3,316

TABLE B.1: SMOKING PREVALENCE (1996 SCREENER CTS)

OVERALL	Current Smoker (%) +/- 95% CI	Former Smoker in Last 5 years (%) +/- 95% CI	Quit Ratio in Last 5 Years (%) +/- 95% CI	Population Size (n)	Sample Size (n)
TOTAL	18.1 +/- 0.4	10.3 +/- 0.2	36.4 +/- 0.6	22,864,250	78,337
SEX					
Male	21.0 +/- 0.5	11.7 +/- 0.4	35.7 +/- 0.9	11,219,486	37,616
Female	15.3 +/- 0.5	9.0 +/- 0.2	37.2 +/- 0.9	11,644,764	40,721
AGE					
18-24	19.2 +/- 1.1	8.2 +/- 0.7	29.9 +/- 2.1	3,013,308	10,976
25-44	20.0 +/- 0.6	10.3 +/- 0.4	34.0 +/- 1.0	10,723,813	34,821
45-64	18.3 +/- 0.6	11.2 +/- 0.5	38.0 +/- 1.6	5,909,957	21,923
65+	10.3 +/- 0.8	10.8 +/- 0.6	51.3 +/- 2.7	3,217,172	10,617
RACE/ETHNICITY					
Hispanic	15.4 +/- 0.9	11.2 +/- 0.7	42.0 +/- 1.5	5,878,993	14,831
Non-Hispanic White	19.1 +/- 0.3	10.4 +/- 0.3	35.2 +/- 1.0	12,603,957	49,297
African-American	23.1 +/- 1.7	9.5 +/- 0.9	29.2 +/- 2.9	1,488,076	4,507
Asian/PI	13.7 +/- 1.0	8.6 +/- 0.8	38.4 +/- 2.8	2,231,515	7,515
Other	25.2 +/- 2.2	9.7 +/- 1.2	27.9 +/- 3.1	661,709	2,187
EDUCATION					
<12	22.1 +/- 1.1	11.8 +/- 0.7	34.9 +/- 1.9	4,868,721	7,952
12	22.8 +/- 0.6	12.0 +/- 0.5	34.4 +/- 1.1	5,706,895	23,034
13-15	18.0 +/- 0.5	10.2 +/- 0.4	36.2 +/- 1.2	6,155,466	23,606
16+	10.5 +/- 0.4	7.7 +/- 0.5	42.3 +/- 1.9	6,133,168	23,745
SEX Male					
AGE					
18-24	22.6 +/- 1.4	8.4 +/- 0.9	27.1 +/- 2.5	1,535,205	5,384
25-44	23.1 +/- 0.7	11.5 +/- 0.5	33.3 +/- 1.3	5,373,429	17,056
45-64	20.7 +/- 0.7	12.9 +/- 0.8	38.4 +/- 1.9	2,908,010	10,613
65+	11.6 +/- 1.2	13.1 +/- 1.1	53.1 +/- 3.5	1,402,842	4,563
RACE/ETHNICITY					
Hispanic	20.9 +/- 1.2	13.7 +/- 0.8	39.7 +/- 2.0	2,902,445	7,136
Non-Hispanic White	20.6 +/- 0.4	10.9 +/- 0.5	34.5 +/- 1.1	6,214,861	23,748
African-American	25.0 +/- 2.2	10.4 +/- 1.5	29.4 +/- 3.9	690,108	2,041
Asian/PI	19.6 +/- 1.5	12.3 +/- 1.2	38.6 +/- 2.8	1,073,373	3,590
Other	25.5 +/- 2.9	8.9 +/- 2.0	25.8 +/- 5.0	338,699	1,101
EDUCATION					
<12	27.8 +/- 1.6	15.1 +/- 1.2	35.1 +/- 2.1	2,376,403	3,816
12	26.8 +/- 1.0	13.2 +/- 0.7	32.9 +/- 1.6	2,661,814	10,545
13-15	20.8 +/- 0.8	11.0 +/- 0.7	34.5 +/- 1.7	2,927,977	10,933
16+	11.4 +/- 0.6	8.6 +/- 0.6	42.9 +/- 2.6	3,253,292	12,322
SEX Female					
AGE					
18-24	15.6 +/- 1.5	7.9 +/- 0.8	33.8 +/- 3.2	1,478,103	5,592
25-44	16.8 +/- 0.7	9.0 +/- 0.5	34.9 +/- 1.4	5,350,384	17,765
45-64	16.0 +/- 0.8	9.6 +/- 0.7	37.6 +/- 2.2	3,001,947	11,310
65+	9.3 +/- 0.8	9.1 +/- 0.7	49.4 +/- 3.0	1,814,330	6,054
RACE/ETHNICITY					
Hispanic	10.0 +/- 0.9	8.6 +/- 0.8	46.3 +/- 2.8	2,976,548	7,695
Non-Hispanic White	17.7 +/- 0.5	9.9 +/- 0.4	35.9 +/- 1.2	6,389,096	25,549
African-American	21.4 +/- 2.1	8.8 +/- 1.2	29.1 +/- 4.1	797,968	2,466
Asian/PI	8.3 +/- 1.3	5.1 +/- 0.7	37.9 +/- 5.5	1,158,142	3,925
Other	24.8 +/- 3.5	10.6 +/- 1.8	30.0 +/- 5.2	323,010	1,086
EDUCATION					
<12	16.7 +/- 1.4	8.8 +/- 1.0	34.4 +/- 3.1	2,492,318	4,136
12	19.4 +/- 0.9	10.9 +/- 0.4	36.1 +/- 1.4	3,045,081	12,489
13-15	15.4 +/- 0.7	9.6 +/- 0.5	38.3 +/- 1.6	3,227,489	12,673
16+	9.5 +/- 0.7	6.7 +/- 0.6	41.5 +/- 2.8	2,879,876	11,423

TABLE B.1: SMOKING PREVALENCE (1996 SCREENER CTS)

REGION	Current Smoker (%) +/- 95% CI	Former Smoker in Last 5 years (%) +/- 95% CI	Quit Ratio in Last 5 Years (%) +/- 95% CI	Population Size (n)	Sample Size (n)
OVERALL	18.1 +/- 0.4	10.3 +/- 0.2	36.4 +/- 0.6	22,864,250	78,337
Los Angeles	17.9 +/- 0.8	10.1 +/- 0.6	35.9 +/- 1.6	6,729,470	15,793
San Diego	17.0 +/- 1.4	10.0 +/- 0.9	37.1 +/- 3.1	1,900,179	4,923
Orange	15.3 +/- 1.2	10.4 +/- 1.0	40.3 +/- 2.9	1,901,281	4,788
Santa Clara	13.9 +/- 1.3	10.2 +/- 1.3	42.3 +/- 4.1	1,159,354	3,817
San Bernadino	20.0 +/- 2.1	10.7 +/- 1.2	34.9 +/- 3.6	1,037,555	3,200
Alameda	18.9 +/- 1.6	9.4 +/- 1.2	33.2 +/- 3.6	972,810	3,616
Riverside	18.9 +/- 1.9	12.0 +/- 1.3	38.8 +/- 3.4	947,889	3,275
Sacramento	20.9 +/- 1.6	9.7 +/- 0.9	31.7 +/- 3.0	795,986	3,557
Contra Costa	18.1 +/- 1.8	9.8 +/- 1.1	35.1 +/- 3.5	634,910	3,389
San Francisco	20.8 +/- 1.8	10.6 +/- 1.1	33.8 +/- 3.0	636,150	3,362
San Mateo, Solano	17.1 +/- 1.7	10.6 +/- 1.5	38.1 +/- 4.2	759,453	3,636
Marin, Napa, Sonoma	17.0 +/- 1.3	11.0 +/- 1.2	39.2 +/- 3.2	575,273	3,724
Butte, Colusa, Del Norte, Glenn, etc.	21.1 +/- 1.7	10.2 +/- 1.0	32.7 +/- 2.8	740,568	3,674
San Luis Obisbo, Santa Barbara, Ventura	17.0 +/- 1.5	10.2 +/- 1.2	37.5 +/- 3.4	957,318	3,712
Amador, Alpine, Calaveras, El Dorado, etc.	20.5 +/- 1.6	11.3 +/- 1.0	35.6 +/- 2.7	858,175	3,461
Monterey, San Benito, Santa Cruz	16.5 +/- 1.8	11.6 +/- 1.2	41.1 +/- 3.8	458,145	3,645
Fresno, Madera, Merced, Stanislaus	19.4 +/- 1.8	10.3 +/- 1.5	34.7 +/- 3.8	972,455	3,253
Imperial, Inyo, Kern, Kings, Mono, Tulare	21.5 +/- 1.7	10.8 +/- 1.3	33.5 +/- 3.4	827,279	3,512

TABLE B.2: WORKPLACE SMOKING POLICY (1990 ADULT CTS)

OVERALL	Size of Workplace									
	<50					50+				
	Extent of Ban					Extent of Ban				
	Total Ban (%)	Work Area Ban (%)	Less/No Restrictions (%)	Population Size (n)	Sample Size (n)	Total Ban (%)	Work Area Ban (%)	Less/No Restrictions (%)	Population Size (n)	Sample Size (n)
TOTAL	31.7	13.3	55.0	4,891,945	5,804	38.1	24.5	37.4	5,076,574	5,847
SEX										
Male	28.5	11.8	59.7	2,339,674	2,442	36.6	22.1	41.3	2,562,698	2,688
Female	34.7	14.6	50.7	2,552,271	3,362	39.6	26.9	33.5	2,513,876	3,159
AGE										
18-24	24.6	14.9	60.5	943,000	1,049	29.8	26.7	43.5	777,571	805
25-44	33.5	13.0	53.5	2,659,836	3,166	40.4	23.2	36.4	2,925,099	3,496
45-64	33.1	13.2	53.7	1,157,460	1,478	38.8	26.1	35.1	1,293,833	1,494
65+	34.2	7.3	58.5	131,649	111	23.5	22.1	54.4	80,071	52
RACE/ETHNICITY										
Hispanic	25.6	14.4	60.1	1,050,129	776	26.1	26.7	47.2	1,066,764	829
Non-Hispanic White	33.7	12.3	53.9	3,038,477	4,398	42.0	23.6	34.4	3,054,488	4,120
African-American	34.1	15.6	50.3	235,071	206	46.8	19.4	33.8	419,484	408
Asian/PI	33.1	17.5	49.4	446,450	327	32.9	29.7	37.4	493,557	423
Other	25.1	7.3	67.6	121,818	97	32.5	18.8	48.7	42,281	67
EDUCATION										
<12	22.3	9.3	68.4	822,489	453	22.4	29.8	47.9	655,509	341
12	26.1	15.6	58.4	1,545,763	1,805	34.6	24.7	40.7	1,488,144	1,593
13-15	32.7	13.8	53.5	1,302,477	2,020	40.1	24.6	35.3	1,304,243	1,966
16+	44.2	12.4	43.3	1,221,216	1,526	46.1	22.0	31.9	1,628,678	1,947
SEX Male										
AGE										
18-24	21.2	15.6	63.2	476,086	464	29.7	24.1	46.2	409,510	367
25-44	29.5	11.3	59.2	1,301,290	1,317	39.0	21.0	40.1	1,443,483	1,601
45-64	32.6	9.9	57.4	490,177	605	37.3	23.8	38.9	665,336	698
65+	32.0	7.8	60.2	72,121	56	13.6	14.8	71.6	44,369	22
RACE/ETHNICITY										
Hispanic	22.9	14.0	63.2	524,853	367	24.4	22.5	53.1	541,615	401
Non-Hispanic White	29.7	10.6	59.7	1,439,986	1,807	40.2	22.2	37.6	1,555,298	1,874
African-American	38.3	16.5	45.2	104,636	73	48.8	19.4	31.9	191,294	164
Asian/PI	27.8	13.7	58.5	220,191	153	31.4	23.9	44.7	259,591	226
Other	36.1	4.3	59.5	50,008	42	41.7	6.2	52.2	14,900	23
EDUCATION										
<12	24.2	7.9	67.9	442,768	215	25.8	20.7	53.5	325,251	162
12	20.1	14.3	65.5	653,378	658	32.3	20.2	47.5	653,227	608
13-15	26.6	13.3	60.1	583,711	771	34.7	25.4	39.9	629,865	841
16+	41.4	10.6	48.0	659,817	798	44.5	21.7	33.7	954,355	1,077
SEX Female										
AGE										
18-24	28.1	14.1	57.8	466,914	585	30.0	29.6	40.5	368,061	438
25-44	37.5	14.6	47.9	1,358,546	1,849	41.8	25.4	32.8	1,481,616	1,895
45-64	33.4	15.7	50.9	667,283	873	40.4	28.5	31.1	628,497	796
65+	36.9	6.7	56.4	59,528	55	35.7	31.2	33.1	35,702	30
RACE/ETHNICITY										
Hispanic	28.2	14.7	57.0	525,276	409	27.8	31.1	41.1	525,149	428
Non-Hispanic White	37.4	13.8	48.8	1,598,491	2,591	43.9	25.1	31.0	1,499,190	2,246
African-American	30.7	14.9	54.3	130,435	133	45.2	19.5	35.3	228,190	244
Asian/PI	38.3	21.2	40.5	226,259	174	34.7	36.0	29.3	233,966	197
Other	17.5	9.3	73.2	71,810	55	27.5	25.7	46.8	27,381	44
EDUCATION										
<12	20.0	10.9	69.1	379,721	238	19.0	38.7	42.3	330,258	179
12	30.4	16.4	53.1	892,385	1,147	36.5	28.2	35.4	834,917	985
13-15	37.7	14.2	48.1	718,766	1,249	45.1	24.0	31.0	674,378	1,125
16+	47.6	14.7	37.8	561,399	728	48.3	22.3	29.4	674,323	870

TABLE B.2: WORKPLACE SMOKING POLICY (1990 ADULT CTS)

REGIONAL	Size of Workplace									
	<50					50+				
	Extent of Ban					Extent of Ban				
	Total Ban (%)	Work Area Ban (%)	Less/No Restrictions (%)	Population Size (n)	Sample Size (n)	Total Ban (%)	Work Area Ban (%)	Less/No Restrictions (%)	Population Size (n)	Sample Size (n)
OVERALL	31.7	13.3	55.0	4,891,945	5,804	38.1	24.5	37.4	5,076,574	5,847
Los Angeles	26.5	13.9	59.6	1,509,665	581	30.2	23.0	46.8	1,505,422	651
San Diego	36.3	13.6	50.1	387,090	361	47.5	21.9	30.7	440,606	362
Orange	34.3	14.7	50.9	425,858	300	41.0	20.7	38.3	458,100	324
Santa Clara	32.9	14.4	52.8	265,194	266	40.5	29.2	30.3	364,318	423
San Bernadino	34.1	10.0	55.9	199,487	325	37.6	27.3	35.0	218,808	343
Alameda	28.4	17.7	53.9	217,604	315	40.5	23.6	36.0	283,128	373
Riverside	25.1	12.0	62.9	170,964	313	31.9	27.5	40.6	146,639	286
Sacramento	40.6	14.6	44.8	144,010	272	53.6	26.1	20.3	209,464	378
Contra Costa	36.6	11.9	51.5	152,412	354	37.9	32.1	30.0	148,863	342
San Francisco	31.7	12.6	55.7	138,739	302	37.6	31.2	31.2	172,900	311
San Mateo, Solano	37.3	16.6	46.2	153,925	266	34.7	21.9	43.4	199,123	364
Marin, Napa, Sonoma	36.8	11.5	51.6	129,340	299	37.4	26.1	36.5	106,055	235
Butte, Colusa, Del Norte, Glenn, etc.	33.9	11.2	54.9	150,813	328	42.2	22.2	35.6	91,215	187
San Luis Obisbo, Santa Barbara, Ventura	40.3	9.8	49.9	217,297	309	50.0	21.1	28.9	200,372	292
Amador, Alpine, Calaveras El Dorado, etc.	30.2	13.0	56.8	186,548	319	43.6	30.8	25.6	130,016	228
Monterey, San Benito, Santa Cruz	37.9	12.4	49.8	107,425	324	45.6	20.2	34.2	83,849	229
Fresno, Madera, Merced, Stanislaus	37.3	7.1	55.6	173,281	277	40.0	26.3	33.7	192,196	286
Imperial, Inyo, Kern, Kings, Mono, Tulare	25.6	13.3	61.2	162,293	293	31.3	27.1	41.6	125,500	233

TABLE B.2: WORKPLACE SMOKING POLICY (1992 ADULT CTS)

	Size of Workplace									
	<50					50+				
	Extent of Ban					Extent of Ban				
	Total Ban (%)	Work Area Ban (%)	Less/No Restrictions (%)	Population Size (n)	Sample Size (n)	Total Ban (%)	Work Area Ban (%)	Less/No Restrictions (%)	Population Size (n)	Sample Size (n)
TOTAL	39.5	11.6	49.0	4,932,791	2,692	52.5	19.4	28.1	4,879,001	2,947
SEX										
Male	33.9	12.2	53.9	2,253,087	1,138	49.0	18.8	32.1	2,506,134	1,425
Female	44.1	11.1	44.8	2,679,704	1,554	56.2	20.0	23.9	2,372,867	1,522
AGE										
18-24	32.8	11.2	56.1	982,194	457	31.8	20.4	47.8	672,430	354
25-44	41.0	12.1	46.9	2,696,513	1,448	53.1	19.7	27.2	2,936,731	1,714
45-64	42.8	11.6	45.5	1,100,810	725	61.9	18.3	19.8	1,211,780	847
65+	31.2	4.7	64.1	153,274	62	64.3	16.3	19.3	58,060	32
RACE/ETHNICITY										
Hispanic	22.2	15.2	62.6	1,015,706	375	38.6	17.9	43.5	1,064,636	467
Non-Hispanic White	46.2	9.3	44.5	3,125,510	2,010	58.0	18.7	23.2	2,926,505	2,034
African-American	30.1	15.2	54.6	214,791	112	54.1	21.9	24.0	371,112	233
Asian/PI	38.2	16.4	45.4	516,162	157	50.9	24.3	24.8	416,777	172
Other	26.8	12.6	60.6	60,622	38	38.6	24.9	36.5	99,971	41
EDUCATION										
<12	21.2	14.7	64.1	951,185	220	33.6	20.3	46.1	588,338	169
12	38.7	12.0	49.3	1,520,627	804	45.9	22.0	32.1	1,430,139	777
13-15	43.4	10.5	46.1	1,202,022	950	53.9	20.5	25.5	1,243,739	1,000
16+	50.4	9.7	39.9	1,258,957	718	64.1	15.9	20.0	1,616,785	1,001
SEX Male										
AGE										
18-24	28.6	13.3	58.1	468,407	192	26.8	17.6	55.7	348,505	173
25-44	34.7	12.8	52.5	1,284,766	628	50.0	19.8	30.2	1,532,424	816
45-64	39.6	10.7	49.7	434,966	295	58.2	17.3	24.5	586,665	417
65+	19.2	2.8	78.0	64,948	23	72.4	15.9	11.8	38,540	19
RACE/ETHNICITY										
Hispanic	22.8	20.2	57.0	518,395	183	34.4	18.5	47.1	533,109	224
Non-Hispanic White	36.6	8.6	54.8	1,385,153	815	53.8	18.9	27.3	1,508,676	971
African-American	25.8	29.2	44.9	92,438	51	48.7	26.3	25.1	187,415	109
Asian/PI	47.7	9.5	42.8	236,916	76	53.4	15.3	31.3	214,744	100
Other	8.7	9.1	82.2	20,185	13	43.3	11.4	45.3	62,190	21
EDUCATION										
<12	20.6	14.4	65.0	455,229	101	33.2	24.0	42.8	365,259	92
12	29.0	15.6	55.4	604,874	286	34.6	20.8	44.6	573,973	295
13-15	33.6	13.5	52.9	482,584	387	46.7	19.3	34.0	569,802	454
16+	46.9	7.1	46.1	710,400	364	64.4	15.6	20.0	997,100	584
SEX Female										
AGE										
18-24	36.6	9.3	54.2	513,787	265	37.1	23.5	39.4	323,925	181
25-44	46.7	11.5	41.8	1,411,747	820	56.5	19.5	24.0	1,404,307	898
45-64	45.0	12.3	42.8	665,844	430	65.4	19.3	15.3	625,115	430
65+	40.1	6.1	53.9	88,326	39	48.4	17.3	34.3	19,520	13
RACE/ETHNICITY										
Hispanic	21.6	9.9	68.5	497,311	192	42.8	17.4	39.8	531,527	243
Non-Hispanic White	53.7	10.0	36.3	1,740,357	1,195	62.5	18.6	18.9	1,417,829	1,063
African-American	33.4	4.7	61.9	122,353	61	59.6	17.4	23.0	183,697	124
Asian/PI	30.2	22.2	47.6	279,246	81	48.2	33.9	17.9	202,033	72
Other	35.8	14.4	49.8	40,437	25	30.9	47.1	22.0	37,781	20
EDUCATION										
<12	21.7	15.0	63.2	495,956	119	34.2	14.1	51.7	223,079	77
12	45.2	9.7	45.2	915,753	518	53.4	22.8	23.7	856,166	482
13-15	49.9	8.5	41.6	719,438	563	60.0	21.6	18.4	673,937	546
16+	55.0	13.1	31.9	548,557	354	63.6	16.4	20.0	619,685	417

Regional data not available for 1992

TABLE B.2: WORKPLACE SMOKING POLICY (1996 ADULT CTS)

OVERALL	Size of Workplace									
	<50					50+				
	Extent of Ban					Extent of Ban				
	Total Ban (%)	Work Area Ban (%)	Less/No Restrictions (%)	Population Size (n)	Sample Size (n)	Total Ban (%)	Work Area Ban (%)	Less/No Restrictions (%)	Population Size (n)	Sample Size (n)
TOTAL	86.3	6.0	7.7	5,172,416	4,537	93.5	4.0	2.5	7,378,200	5,739
SEX										
Male	82.2	7.7	10.1	2,726,170	2,180	92.0	4.4	3.5	3,790,307	2,872
Female	90.8	4.2	4.9	2,446,246	2,357	95.0	3.6	1.4	3,587,893	2,867
AGE										
18-24	88.0	5.3	6.7	818,161	745	91.7	6.0	2.3	880,958	685
25-44	84.3	7.5	8.2	2,743,247	2,397	93.5	3.6	2.9	4,167,639	3,213
45-64	89.4	4.1	6.6	1,425,694	1,284	94.1	4.2	1.7	2,215,171	1,757
65+	85.6	2.4	12.0	185,314	111	94.8	.	5.2	114,432	84
RACE/ETHNICITY										
Hispanic	81.6	8.7	9.7	1,268,993	742	92.0	4.0	4.0	1,815,447	984
Non-Hispanic White	87.6	4.6	7.8	3,061,600	3,165	94.3	3.5	2.2	3,782,809	3,611
African-American	91.2	4.2	4.6	223,438	175	92.0	5.9	2.1	675,847	454
Asian/PI	88.9	8.6	2.6	506,548	324	93.5	5.5	1.0	858,350	512
Other	83.9	7.7	8.4	111,837	131	95.2	2.0	2.7	245,747	178
EDUCATION										
<12	79.1	6.7	14.2	823,048	362	88.8	4.3	6.9	871,329	340
12	84.9	6.6	8.6	1,364,915	1,480	91.2	5.6	3.2	1,561,635	1,554
13-15	86.2	6.9	7.0	1,402,605	1,468	92.8	4.9	2.3	2,190,191	1,935
16+	91.4	4.5	4.1	1,581,848	1,227	96.7	2.4	0.9	2,755,045	1,910
SEX Male										
AGE										
18-24	85.7	6.4	7.8	441,066	347	92.8	4.0	3.2	465,994	355
25-44	80.6	9.5	9.8	1,508,574	1,180	91.3	4.2	4.4	2,077,122	1,600
45-64	84.1	4.7	11.2	692,520	602	92.6	5.2	2.2	1,178,764	877
65+	77.2	5.4	17.5	84,010	51	97.7	.	2.3	68,427	40
RACE/ETHNICITY										
Hispanic	77.4	9.1	13.4	730,726	429	88.9	4.0	7.2	931,941	522
Non-Hispanic White	83.7	6.1	10.2	1,560,119	1,420	93.4	4.1	2.5	1,976,306	1,734
African-American	86.9	8.2	4.9	103,777	77	90.8	5.1	4.1	321,776	209
Asian/PI	85.6	11.1	3.3	280,632	196	92.6	6.9	0.5	447,948	317
Other	77.6	14.5	7.9	50,916	58	95.6	2.9	1.6	112,336	90
EDUCATION										
<12	76.4	6.6	17.0	488,153	224	82.8	5.0	12.2	491,478	198
12	79.0	9.7	11.3	644,384	648	88.6	8.0	3.4	748,654	715
13-15	81.9	8.4	9.7	686,497	637	91.5	4.9	3.6	1,050,003	914
16+	87.9	6.2	5.9	907,136	671	97.1	2.2	0.7	1,500,172	1,045
SEX Female										
AGE										
18-24	90.7	4.0	5.3	377,095	398	90.6	8.1	1.3	414,964	330
25-44	88.7	5.1	6.2	1,234,673	1,217	95.6	3.1	1.4	2,090,517	1,613
45-64	94.3	3.5	2.1	733,174	682	95.8	3.0	1.2	1,036,407	880
65+	92.6	.	7.4	101,304	60	90.6	.	9.4	46,005	44
RACE/ETHNICITY										
Hispanic	87.3	8.1	4.7	538,267	313	95.3	4.1	0.6	883,506	462
Non-Hispanic White	91.6	3.0	5.4	1,501,481	1,745	95.3	2.9	1.8	1,806,503	1,877
African-American	94.9	0.8	4.3	119,661	98	93.1	6.6	0.3	354,071	245
Asian/PI	92.9	5.5	1.6	225,916	128	94.5	4.0	1.5	410,402	195
Other	89.2	1.9	8.9	60,921	73	94.9	1.3	3.7	133,411	88
EDUCATION										
<12	83.2	6.8	10.0	334,895	138	96.5	3.3	0.2	379,851	142
12	90.1	3.7	6.2	720,531	832	93.6	3.4	3.0	812,981	839
13-15	90.3	5.4	4.4	716,108	831	94.0	4.9	1.1	1,140,188	1,021
16+	96.1	2.3	1.6	674,712	556	96.3	2.7	1.0	1,254,873	865

TABLE B.2: WORKPLACE SMOKING POLICY (1996 ADULT CTS)

REGIONAL	Size of Workplace									
	<50					50+				
	Extent of Ban					Extent of Ban				
	Total Ban (%)	Work Area Ban (%)	Less/No Restrictions (%)	Population Size (n)	Sample Size (n)	Total Ban (%)	Work Area Ban (%)	Less/No Restrictions (%)	Popu-lation Size (n)	Sample Size (n)
OVERALL	86.3	6.0	7.7	5,172,416	4,537	93.5	4.0	2.5	7,378,200	5,739
Los Angeles	86.2	6.1	7.7	1,474,525	845	92.7	4.2	3.1	2,267,534	1,197
San Diego	86.5	7.7	5.7	430,254	285	96.9	1.7	1.4	640,559	398
Orange	85.5	4.1	10.4	401,454	257	93.1	2.6	4.3	655,037	359
Santa Clara	89.9	2.6	7.5	273,426	175	98.2	1.5	0.3	516,466	330
San Bernadino	88.0	5.1	6.9	223,465	168	91.6	5.8	2.6	338,927	237
Alameda	85.2	9.9	4.8	205,823	181	85.3	13.8	0.9	396,228	313
Riverside	77.7	3.3	19.0	202,576	184	93.8	3.2	3.0	234,712	206
Sacramento	89.8	3.8	6.4	168,938	209	94.1	4.1	1.8	306,325	329
Contra Costa	87.9	6.1	6.0	159,831	195	98.0	1.6	0.4	217,261	249
San Francisco	89.7	8.5	1.9	169,840	229	95.5	3.9	0.6	204,939	296
San Mateo, Solano	85.7	7.2	7.1	192,558	197	93.6	5.2	1.2	269,932	291
Marin, Napa, Sonoma	89.0	3.8	7.2	145,246	253	98.1	1.5	0.5	170,876	251
Butte, Colusa, Del Norte, Glenn, etc.	86.6	10.0	3.4	185,644	257	90.2	5.3	4.6	142,323	184
San Luis Obisbo, Santa Barbara, Ventura	86.7	4.4	8.9	239,648	249	96.0	2.7	1.4	263,618	243
Amador, Alpine, Calaveras, El Dorado, etc	81.0	13.6	5.3	181,998	214	85.4	6.5	8.1	204,411	231
Monterey, San Benito, Santa Cruz	84.9	5.7	9.5	123,835	244	96.2	3.8	.	113,962	218
Fresno, Madera, Merced, Stanislaus	91.4	3.3	5.3	218,949	194	92.9	0.8	6.2	257,847	213
Imperial, Inyo, Kern, Kings, Mono, Tulare	81.7	4.9	13.4	174,406	201	92.8	5.7	1.5	177,243	194

TABLE B.3: EXPOSURE OF INDOOR WORKERS TO ETS (1990 ADULT CTS)

OVERALL		Smoking Policy				
	Overall (%) +/- 95% CI	Total Ban (%) +/- 95% CI	Work Area Ban (%) +/- 95% CI	Less/No Restrictions (%) +/- 95% CI	Population Size (n)	Sample Size (n)
TOTAL	29.0 +/- 1.8	9.1 +/- 2.2	22.9 +/- 3.8	47.9 +/- 3.3	7,863,841	7,263
SEX						
Male	35.6 +/- 2.9	11.7 +/- 3.7	29.0 +/- 5.1	55.1 +/- 4.5	3,819,971	3,206
Female	22.8 +/- 2.0	7.0 +/- 2.4	18.2 +/- 4.7	39.8 +/- 3.8	4,043,870	4,057
AGE						
18-24	41.7 +/- 4.7	11.5 +/- 5.3	41.2 +/- 9.9	58.0 +/- 7.1	1,394,358	1,199
25-44	27.9 +/- 2.4	9.8 +/- 2.6	20.8 +/- 5.9	47.6 +/- 4.6	4,380,617	4,118
45-64	23.3 +/- 2.7	7.0 +/- 3.4	15.7 +/- 6.5	41.7 +/- 4.1	1,906,619	1,828
65+	16.7 +/- 9.4	2.4 +/- 3.2	1.2 +/- 2.5	27.9 +/-19.1	182,247	118
RACE/ETHNICITY						
Hispanic	39.8 +/- 4.9	14.5 +/- 6.7	32.9 +/-11.5	55.0 +/- 8.9	1,715,778	1,101
Non-Hispanic White	25.9 +/- 1.8	7.3 +/- 1.7	19.0 +/- 3.3	46.5 +/- 2.5	4,770,374	5,197
African-American	22.9 +/- 7.5	9.9 +/- 9.6	15.5 +/-11.2	43.0 +/-14.6	480,839	360
Asian/PI	27.8 +/- 5.6	11.7 +/- 6.9	25.0 +/-12.8	42.4 +/-11.0	790,792	530
Other	29.9 +/-22.5	23.9 +/-41.0	24.7 +/-31.1	32.6 +/-38.3	106,058	75
EDUCATION						
<12	42.1 +/- 8.7	15.2 +/-10.0	42.6 +/-17.4	52.4 +/-12.1	1,046,368	416
12	33.7 +/- 3.5	10.5 +/- 4.4	22.5 +/- 7.1	53.4 +/- 5.5	2,259,587	1,823
13-15	30.0 +/- 3.2	8.8 +/- 3.3	25.4 +/- 6.5	50.3 +/- 5.3	2,056,201	2,447
16+	18.5 +/- 1.8	7.3 +/- 2.0	12.7 +/- 4.7	35.7 +/- 4.1	2,501,685	2,577
SEX Male						
AGE						
18-24	47.1 +/- 6.6	11.5 +/- 8.1	51.8 +/-13.8	63.0 +/- 9.7	697,266	511
25-44	35.4 +/- 4.1	12.7 +/- 4.1	28.1 +/- 6.9	55.3 +/- 6.9	2,128,971	1,806
45-64	28.0 +/- 4.1	9.7 +/- 6.5	13.7 +/- 7.8	50.2 +/- 6.0	898,226	837
65+	26.7 +/-19.9	5.4 +/- 9.6	3.2 +/- 7.8	36.7 +/-35.9	95,508	52
RACE/ETHNICITY						
Hispanic	46.5 +/- 8.6	20.8 +/-14.3	35.9 +/-14.3	60.6 +/-12.6	812,284	492
Non-Hispanic White	32.5 +/- 3.1	9.6 +/- 2.8	27.1 +/- 7.2	53.3 +/- 3.7	2,363,813	2,302
African-American	32.3 +/-15.2	15.3 +/-17.9	22.9 +/-22.5	61.7 +/-28.5	215,928	133
Asian/PI	32.1 +/- 8.1	6.2 +/- 7.5	27.8 +/-16.0	49.4 +/-15.5	389,458	249
Other	48.5 +/-23.5	36.0 +/-78.2	49.7 +/- 120	54.6 +/-36.7	38,488	30
EDUCATION						
<12	49.4 +/-11.9	15.0 +/-16.2	50.8 +/-29.9	63.4 +/-16.4	510,522	192
12	46.3 +/- 7.2	16.1 +/- 9.8	34.7 +/-12.9	64.8 +/- 8.1	979,362	683
13-15	38.7 +/- 4.6	14.6 +/- 6.7	34.7 +/-11.0	56.4 +/- 7.2	928,800	954
16+	20.9 +/- 2.3	7.6 +/- 2.9	14.1 +/- 5.4	39.4 +/- 5.3	1,401,287	1,377
SEX Female						
AGE						
18-24	36.2 +/- 5.3	11.5 +/- 4.7	31.2 +/-10.6	52.7 +/- 9.0	697,092	688
25-44	20.9 +/- 2.2	7.3 +/- 3.1	15.3 +/- 7.8	38.7 +/- 4.6	2,251,646	2,312
45-64	19.1 +/- 4.0	4.5 +/- 2.8	17.2 +/- 9.9	33.7 +/- 6.8	1,008,393	991
65+	5.8 +/- 4.4	0.5 +/- 1.0	. +/- 0.0	12.8 +/-12.5	86,739	66
RACE/ETHNICITY						
Hispanic	33.7 +/- 6.2	9.7 +/- 5.3	30.8 +/-15.2	49.0 +/-10.7	903,494	609
Non-Hispanic White	19.5 +/- 1.6	5.2 +/- 1.9	12.0 +/- 2.9	38.7 +/- 2.7	2,406,561	2,895
African-American	15.2 +/- 6.4	4.8 +/- 3.8	10.1 +/-10.0	29.4 +/-16.3	264,911	227
Asian/PI	23.5 +/- 7.7	15.9 +/-11.1	23.1 +/-21.1	32.3 +/-11.9	401,334	281
Other	19.3 +/-27.0	8.7 +/-16.6	18.9 +/-34.5	21.5 +/-52.4	67,570	45
EDUCATION						
<12	35.1 +/-10.6	15.3 +/- 9.4	38.1 +/-23.6	41.0 +/-15.1	535,846	224
12	24.0 +/- 3.6	6.9 +/- 3.6	15.8 +/- 6.9	42.0 +/- 6.6	1,280,225	1,140
13-15	22.7 +/- 3.0	5.2 +/- 3.0	16.9 +/- 6.9	44.1 +/- 5.6	1,127,401	1,493
16+	15.3 +/- 2.9	7.0 +/- 3.6	11.0 +/- 6.9	30.1 +/- 6.6	1,100,398	1,200

TABLE B.3: EXPOSURE OF INDOOR WORKERS TO ETS (1990 ADULT CTS)

REGION	Overall (%) +/- 95% CI	Smoking Policy			Population Size (n)	Sample Size (n)
		Total Ban (%) +/- 95% CI	Work Area Ban (%) +/- 95% CI	Less/No Restrictions (%) +/- 95% CI		
OVERALL	29.0 +/- 1.8	9.1 +/- 2.2	22.9 +/- 3.8	47.9 +/- 3.3	7,863,841	7,263
Los Angeles	35.0 +/- 5.2	10.8 +/- 6.1	29.6 +/-11.4	50.6 +/- 7.9	2,317,682	728
San Diego	24.4 +/- 4.9	6.2 +/- 3.8	32.9 +/-14.2	43.1 +/- 8.8	661,442	468
Orange	27.9 +/- 5.6	12.8 +/- 6.6	24.6 +/-16.2	42.1 +/-10.3	715,976	404
Santa Clara	24.4 +/- 6.2	5.0 +/- 4.3	13.3 +/- 9.6	49.2 +/-11.1	523,229	445
San Bernadino	31.2 +/- 5.2	4.7 +/- 4.2	15.3 +/- 9.1	62.6 +/- 8.6	321,559	392
Alameda	21.1 +/- 4.7	10.5 +/- 7.0	11.4 +/- 5.2	34.7 +/- 8.6	392,893	423
Riverside	38.0 +/- 5.0	9.3 +/- 7.6	20.8 +/-11.0	60.4 +/- 7.5	233,666	328
Sacramento	16.1 +/- 4.1	6.6 +/- 3.2	8.0 +/- 6.3	38.5 +/-10.2	279,454	410
Contra Costa	25.0 +/- 4.0	10.5 +/- 6.4	16.5 +/- 7.8	44.1 +/- 8.3	247,637	464
San Francisco	24.9 +/- 4.5	10.3 +/- 6.3	18.6 +/- 9.6	42.1 +/- 8.7	251,282	393
San Mateo, Solano	30.4 +/- 6.0	10.2 +/- 6.1	11.7 +/- 7.5	56.4 +/- 9.9	275,300	384
Marin, Napa, Sonoma	24.7 +/- 6.0	7.5 +/- 5.8	29.4 +/-14.7	37.1 +/-10.1	187,017	344
Butte, Colusa, Del Norte, Glenn, etc.	32.6 +/- 7.7	12.2 +/- 6.5	24.6 +/-11.8	53.7 +/- 9.8	194,688	331
San Luis Obisbo, Santa Barbara, Ventura	22.3 +/- 3.9	3.6 +/- 3.2	23.3 +/-13.7	44.3 +/-10.2	345,382	398
Amador, Alpine, Calaveras, El Dorado,etc.	29.8 +/- 5.4	5.7 +/- 4.9	34.0 +/-13.2	49.0 +/-12.5	246,257	339
Monterey, San Benito, Santa Cruz	23.8 +/- 6.3	11.9 +/- 6.4	18.7 +/-14.1	38.3 +/-12.1	158,274	362
Fresno, Madera, Merced, Stanislaus	28.0 +/- 6.9	12.0 +/- 7.4	15.7 +/- 8.5	48.1 +/-11.4	294,530	356
Imperial, Inyo, Kern, Kings, Mono, Tulare	34.1 +/- 8.2	17.1 +/-10.4	26.1 +/-20.3	48.2 +/-13.4	217,573	294

TABLE B.3: EXPOSURE OF INDOOR WORKERS TO ETS (1992 ADULT CTS)

OVERALL		Smoking Policy				
	Overall (%) +/- 95% CI	Total Ban (%) +/- 95% CI	Work Area Ban (%) +/- 95% CI	Less/No Restrictions (%) +/- 95% CI	Population Size (n)	Sample Size (n)
TOTAL	11.5 +/- 1.8	4.2 +/- 2.2	15.2 +/- 3.8	39.1 +/- 3.3	5,829,991	2,696
SEX						
Male	15.0 +/- 2.9	5.3 +/- 3.7	19.4 +/- 5.1	42.7 +/- 4.5	2,733,308	1,182
Female	8.5 +/- 2.0	3.3 +/- 2.4	11.3 +/- 4.7	34.3 +/- 3.8	3,096,683	1,514
AGE						
18-24	23.2 +/- 4.7	10.1 +/- 5.3	29.1 +/- 9.9	45.7 +/- 7.1	829,813	352
25-44	11.0 +/- 2.4	3.5 +/- 2.6	15.1 +/- 5.9	40.1 +/- 4.6	3,415,192	1,565
45-64	6.6 +/- 2.7	3.5 +/- 3.4	4.5 +/- 6.5	30.0 +/- 4.1	1,487,200	747
65+	5.6 +/- 9.4	.	52.1 +/- 2.5	.	97,786	32
RACE/ETHNICITY						
Hispanic	18.7 +/- 4.9	7.1 +/- 6.7	21.0 +/-11.5	39.1 +/- 8.9	1,111,573	404
Non-Hispanic White	9.7 +/- 1.8	3.9 +/- 1.7	12.8 +/- 3.3	39.1 +/- 2.5	3,716,827	1,912
African-American	11.3 +/- 7.5	3.1 +/- 9.6	15.3 +/-11.2	39.2 +/-14.6	337,573	169
Asian/PI	11.0 +/- 5.6	2.4 +/- 6.9	16.9 +/-12.8	52.4 +/-11.0	576,169	180
Other	4.2 +/-22.5	3.5 +/-41.0	.	9.7 +/-38.3	87,849	31
EDUCATION						
<12	26.2 +/- 8.7	15.6 +/-10.0	28.1 +/-17.4	46.5 +/-12.1	663,177	126
12	12.5 +/- 3.5	4.7 +/- 4.4	14.2 +/- 7.1	39.2 +/- 5.5	1,580,845	624
13-15	12.3 +/- 3.2	4.2 +/- 3.3	15.3 +/- 6.5	44.2 +/- 5.3	1,493,686	922
16+	5.7 +/- 1.8	1.4 +/- 2.0	8.9 +/- 4.7	29.2 +/- 4.1	2,092,283	1,024
SEX Male						
AGE						
18-24	28.1 +/- 6.6	14.3 +/- 8.1	23.5 +/-13.8	53.7 +/- 9.7	372,893	140
25-44	14.7 +/- 4.1	4.6 +/- 4.1	21.6 +/- 6.9	42.5 +/- 6.9	1,649,263	683
45-64	9.3 +/- 4.1	3.8 +/- 6.5	8.3 +/- 7.8	33.0 +/- 6.0	664,577	344
65+	3.5 +/-19.9	.	27.3 +/- 7.8	.	46,575	15
RACE/ETHNICITY						
Hispanic	26.8 +/- 8.6	11.8 +/-14.3	31.8 +/-14.3	47.6 +/-12.6	565,520	179
Non-Hispanic White	12.2 +/- 3.1	4.2 +/- 2.8	15.0 +/- 7.2	40.9 +/- 3.7	1,679,069	820
African-American	18.3 +/-15.2	4.3 +/-17.9	22.6 +/-22.5	50.1 +/-28.5	176,801	82
Asian/PI	7.5 +/- 8.1	4.1 +/- 7.5	2.4 +/-16.0	53.0 +/-15.5	258,165	85
Other	4.2 +/-23.5	.	.	10.8 +/-36.7	53,753	16
EDUCATION						
<12	32.2 +/-11.9	21.4 +/-16.2	34.0 +/-29.9	53.2 +/-16.4	372,089	62
12	18.6 +/- 7.2	6.5 +/- 9.8	18.9 +/-12.9	44.8 +/- 8.1	552,884	198
13-15	21.5 +/- 4.6	7.1 +/- 6.7	21.6 +/-11.0	52.0 +/- 7.2	613,544	375
16+	4.7 +/- 2.3	1.1 +/- 2.9	8.5 +/- 5.4	23.5 +/- 5.3	1,194,791	547
SEX Female						
AGE						
18-24	19.2 +/- 5.3	7.4 +/- 4.7	34.3 +/-10.6	36.4 +/- 9.0	456,920	212
25-44	7.6 +/- 2.2	2.6 +/- 3.1	8.1 +/- 7.8	37.0 +/- 4.6	1,765,929	882
45-64	4.5 +/- 4.0	3.2 +/- 2.8	1.8 +/- 9.9	24.5 +/- 6.8	822,623	403
65+	7.5 +/- 4.4	.	84.9 +/- 0.0	.	51,211	17
RACE/ETHNICITY						
Hispanic	10.4 +/- 6.2	3.0 +/- 5.3	5.6 +/-15.2	30.1 +/-10.7	546,053	225
Non-Hispanic White	7.6 +/- 1.6	3.7 +/- 1.9	10.7 +/- 2.9	36.2 +/- 2.7	2,037,758	1,092
African-American	3.5 +/- 6.4	2.2 +/- 3.8	.	19.2 +/-16.3	160,772	87
Asian/PI	13.8 +/- 7.7	0.5 +/-11.1	22.4 +/-21.1	52.1 +/-11.9	318,004	95
Other	4.3 +/-27.0	9.1 +/-16.6	.	.	34,096	15
EDUCATION						
<12	18.6 +/-10.6	8.5 +/- 9.4	19.1 +/-23.6	38.9 +/-15.1	291,088	64
12	9.2 +/- 3.6	4.0 +/- 3.6	10.7 +/- 6.9	33.8 +/- 6.6	1,027,961	426
13-15	5.9 +/- 3.0	2.7 +/- 3.0	10.3 +/- 6.9	26.0 +/- 5.6	880,142	547
16+	7.0 +/- 2.9	1.9 +/- 3.6	9.4 +/- 6.9	37.1 +/- 6.6	897,492	477

Regional data not available for 1992

TABLE B.3: EXPOSURE OF INDOOR WORKERS TO ETS (1996 ADULT CTS)

OVERALL		Smoking Policy				
	Overall (%) +/- 95% CI	Total Ban (%) +/- 95% CI	Work Area Ban (%) +/- 95% CI	Less/No Restrictions (%) +/- 95% CI	Population Size (n)	Sample Size (n)
TOTAL	11.7 +/- 1.8	7.1 +/- 2.2	48.6 +/- 3.8	75.6 +/- 3.3	10,025,257	5,381
SEX						
Male	16.3 +/- 2.9	10.3 +/- 3.7	52.4 +/- 5.1	76.7 +/- 4.5	5,095,233	2,631
Female	7.0 +/- 2.0	3.9 +/- 2.4	43.1 +/- 4.7	72.8 +/- 3.8	4,930,024	2,750
AGE						
18-24	17.4 +/- 4.7	13.8 +/- 5.3	44.5 +/- 9.9	83.8 +/- 7.1	1,222,534	636
25-44	12.3 +/- 2.4	7.1 +/- 2.6	44.3 +/- 5.9	81.1 +/- 4.6	5,489,889	2,870
45-64	8.6 +/- 2.7	4.6 +/- 3.4	58.7 +/- 6.5	66.3 +/- 4.1	3,043,580	1,747
65+	9.8 +/- 9.4	5.1 +/- 3.2	100.0 +/- 2.5	41.4 +/-19.1	269,254	128
RACE/ETHNICITY						
Hispanic	19.6 +/- 4.9	14.6 +/- 6.7	39.8 +/-11.5	75.8 +/- 8.9	2,468,259	985
Non-Hispanic White	9.0 +/- 1.8	4.2 +/- 1.7	48.8 +/- 3.3	76.7 +/- 2.5	5,430,064	3,481
African-American	7.9 +/- 7.5	4.2 +/- 9.6	49.9 +/-11.2	47.2 +/-14.6	705,409	300
Asian/PI	11.6 +/- 5.6	7.7 +/- 6.9	60.9 +/-12.8	81.6 +/-11.0	1,161,051	482
Other	6.3 +/-22.5	2.9 +/-41.0	75.4 +/-31.1	100.0 +/-38.3	260,474	133
EDUCATION						
<12	28.7 +/- 8.7	20.7 +/-10.0	75.8 +/-17.4	75.2 +/-12.1	1,228,517	310
12	17.1 +/- 3.5	11.3 +/- 4.4	58.3 +/- 7.1	70.6 +/- 5.5	2,160,350	1,317
13-15	9.3 +/- 3.2	4.7 +/- 3.3	38.3 +/- 6.5	79.1 +/- 5.3	2,835,020	1,733
16+	5.0 +/- 1.8	2.6 +/- 2.0	38.6 +/- 4.7	78.7 +/- 4.1	3,801,370	2,021
SEX Male						
AGE						
18-24	22.0 +/- 6.6	19.8 +/- 8.1	31.7 +/-13.8	72.4 +/- 9.7	625,026	292
25-44	17.6 +/- 4.1	10.7 +/- 4.1	47.6 +/- 6.9	82.9 +/- 6.9	2,782,154	1,407
45-64	12.1 +/- 4.1	6.3 +/- 6.5	68.5 +/- 7.8	62.8 +/- 6.0	1,545,149	861
65+	13.7 +/-19.9	4.3 +/- 9.6	100.0 +/- 7.8	78.2 +/-35.9	142,904	71
RACE/ETHNICITY						
Hispanic	28.6 +/- 8.6	21.9 +/-14.3	44.1 +/-14.3	77.5 +/-12.6	1,261,786	508
Non-Hispanic White	12.2 +/- 3.1	6.3 +/- 2.8	50.7 +/- 7.2	79.2 +/- 3.7	2,803,704	1,659
African-American	9.6 +/-15.2	7.0 +/-17.9	25.0 +/-22.5	43.5 +/-28.5	325,085	134
Asian/PI	15.3 +/- 8.1	9.7 +/- 7.5	78.3 +/-16.0	63.4 +/-15.5	591,552	270
Other	7.0 +/-23.5	1.4 +/-78.2	81.6 +/- 120	100.0 +/-36.7	113,106	60
EDUCATION						
<12	40.7 +/-11.9	32.4 +/-16.2	58.8 +/-29.9	77.6 +/-16.4	682,012	188
12	24.7 +/- 7.2	17.1 +/- 9.8	63.3 +/-12.9	72.0 +/- 8.1	984,691	565
13-15	12.6 +/- 4.6	6.5 +/- 6.7	42.8 +/-11.0	78.1 +/- 7.2	1,337,976	777
16+	6.9 +/- 2.3	3.6 +/- 2.9	46.1 +/- 5.4	78.1 +/- 5.3	2,090,554	1,101
SEX Female						
AGE						
18-24	12.7 +/- 5.3	7.3 +/- 4.7	54.3 +/-10.6	99.0 +/- 9.0	597,508	344
25-44	7.0 +/- 2.2	3.7 +/- 3.1	39.1 +/- 7.8	76.3 +/- 4.6	2,707,735	1,463
45-64	4.9 +/- 4.0	2.9 +/- 2.8	42.8 +/- 9.9	84.0 +/- 6.8	1,498,431	886
65+	5.4 +/- 4.4	5.9 +/- 1.0	.	.	126,350	57
RACE/ETHNICITY						
Hispanic	10.2 +/- 6.2	7.6 +/- 5.3	35.2 +/-15.2	66.7 +/-10.7	1,206,473	477
Non-Hispanic White	5.5 +/- 1.6	2.2 +/- 1.9	45.4 +/- 2.9	71.8 +/- 2.7	2,626,360	1,822
African-American	6.5 +/- 6.4	1.8 +/- 3.8	71.6 +/-10.0	68.1 +/-16.3	380,324	166
Asian/PI	7.8 +/- 7.7	5.7 +/-11.1	32.2 +/-21.1	100.0 +/-11.9	569,499	212
Other	5.8 +/-27.0	3.9 +/-16.6	.	100.0 +/-52.4	147,368	73
EDUCATION						
<12	13.8 +/-10.6	8.0 +/- 9.4	95.2 +/-23.6	60.8 +/-15.1	546,505	122
12	10.7 +/- 3.6	6.9 +/- 3.6	46.9 +/- 6.9	68.8 +/- 6.6	1,175,659	752
13-15	6.4 +/- 3.0	3.1 +/- 3.0	33.8 +/- 6.9	81.8 +/- 5.6	1,497,044	956
16+	2.8 +/- 2.9	1.4 +/- 3.6	26.7 +/- 6.9	80.8 +/- 6.6	1,710,816	920

TABLE B.3: EXPOSURE OF INDOOR WORKERS TO ETS (1996 ADULT CTS)

REGION	Overall (%) +/- 95% CI	Smoking Policy			Population Size (n)	Sample Size (n)
		Total Ban (%) +/- 95% CI	Work Area Ban (%) +/- 95% CI	Less/No Restrictions (%) +/- 95% CI		
OVERALL	11.7 +/- 1.8	7.1 +/- 2.2	48.6 +/- 3.8	75.6 +/- 3.3	10,025,257	5,381
Los Angeles	12.9 +/- 5.2	8.5 +/- 6.1	48.0 +/-11.4	66.5 +/- 7.9	2,949,696	1,060
San Diego	8.4 +/- 4.9	5.6 +/- 3.8	33.6 +/-14.2	88.8 +/- 8.8	853,312	356
Orange	13.0 +/- 5.6	6.8 +/- 6.6	50.2 +/-16.2	82.7 +/-10.3	856,558	341
Santa Clara	7.8 +/- 6.2	5.5 +/- 4.3	44.3 +/- 9.6	72.3 +/-11.1	688,442	314
San Bernadino	12.6 +/- 5.2	8.5 +/- 4.2	68.6 +/- 9.1	50.1 +/- 8.6	456,639	213
Alameda	13.8 +/- 4.7	4.9 +/- 7.0	55.9 +/- 5.2	100.0 +/- 8.6	484,701	248
Riverside	16.6 +/- 5.0	10.2 +/- 7.6	27.7 +/-11.0	72.1 +/- 7.5	324,101	196
Sacramento	7.7 +/- 4.1	3.7 +/- 3.2	54.8 +/- 6.3	77.3 +/-10.2	390,053	283
Contra Costa	10.1 +/- 4.0	6.5 +/- 6.4	48.8 +/- 7.8	98.0 +/- 8.3	313,131	233
San Francisco	9.3 +/- 4.5	6.9 +/- 6.3	36.9 +/- 9.6	100.0 +/- 8.7	282,327	243
San Mateo, Solano	9.0 +/- 6.0	3.9 +/- 6.1	57.3 +/- 7.5	87.9 +/- 9.9	364,340	256
Marin, Napa, Sonoma	7.6 +/- 6.0	2.8 +/- 5.8	83.0 +/-14.7	94.9 +/-10.1	249,850	279
Butte, Colusa, Del Norte, Glenn, etc.	9.1 +/- 7.7	4.8 +/- 6.5	30.3 +/-11.8	76.5 +/- 9.8	259,407	221
San Luis Obisbo, Santa Barbara, Ventura	12.9 +/- 3.9	7.7 +/- 3.2	26.3 +/-13.7	100.0 +/-10.2	401,816	255
Amador,Alpine,Calaveras El Dorado,etc.	20.3 +/- 5.4	8.7 +/- 4.9	62.6 +/-13.2	92.1 +/-12.5	296,858	227
Monterey, San Benito, Santa Cruz	8.6 +/- 6.3	4.6 +/- 6.4	48.5 +/-14.1	61.7 +/-12.1	193,078	247
Fresno, Madera, Merced, Stanislaus	17.1 +/- 6.9	12.9 +/- 7.4	47.4 +/- 8.5	86.1 +/-11.4	384,899	212
Imperial, Inyo, Kern, Kings, Mono, Tulare	8.8 +/- 8.2	5.6 +/-10.4	33.2 +/-20.3	38.5 +/-13.4	276,049	197

TABLE B.4: HOME SMOKING RESTRICTIONS (1992 ADULT CTS)

OVERALL	Total Household Ban (%) +/- 95% CI	Partial Ban (%) +/- 95% CI	No Restrictions (%) +/- 95% CI	Population Size (n)	Sample Size (n)
TOTAL	48.1 +/- 1.9	20.3 +/- 1.3	31.6 +/- 1.7	21,588,796	11,905
SEX					
Male	49.4 +/- 2.7	18.1 +/- 1.7	32.6 +/- 2.4	10,673,057	5,684
Female	46.9 +/- 2.6	22.5 +/- 1.8	30.6 +/- 2.1	10,915,739	6,221
AGE					
18-24	45.0 +/- 5.5	20.4 +/- 3.0	34.6 +/- 5.7	3,277,155	1,514
25-44	49.6 +/- 2.9	22.6 +/- 2.0	27.8 +/- 2.3	10,187,108	5,689
45-64	48.9 +/- 3.7	19.4 +/- 2.3	31.8 +/- 3.2	5,032,967	3,282
65+	45.2 +/- 4.0	14.3 +/- 2.8	40.5 +/- 3.9	3,091,566	1,420
RACE/ETHNICITY					
Hispanic	53.1 +/- 4.0	17.9 +/- 3.3	29.0 +/- 4.4	4,872,984	1,817
Non-Hispanic White	46.3 +/- 2.0	21.4 +/- 1.3	32.3 +/- 1.8	13,312,956	8,662
African-American	46.4 +/- 7.2	23.3 +/- 6.8	30.4 +/- 5.9	1,357,672	680
Asian/PI	49.2 +/- 6.1	18.3 +/- 5.0	32.5 +/- 6.6	1,540,666	556
Other	49.6 +/-13.7	12.2 +/- 6.1	38.3 +/-14.3	504,518	190
EDUCATION					
<12	47.0 +/- 4.3	15.9 +/- 3.3	37.1 +/- 4.2	5,091,113	1,384
12	43.7 +/- 3.0	21.5 +/- 1.8	34.8 +/- 2.5	6,947,028	3,825
13-15	50.7 +/- 2.6	22.2 +/- 1.9	27.1 +/- 2.1	5,063,990	3,949
16+	53.3 +/- 3.3	21.3 +/- 2.4	25.4 +/- 2.5	4,486,665	2,747
SEX Male					
AGE					
18-24	47.0 +/-10.3	18.5 +/- 4.2	34.5 +/- 9.6	1,758,732	761
25-44	50.2 +/- 3.5	20.2 +/- 2.6	29.6 +/- 2.8	5,435,923	2,823
45-64	49.0 +/- 4.9	16.1 +/- 2.5	34.9 +/- 4.6	2,268,835	1,520
65+	49.6 +/- 6.7	11.8 +/- 4.1	38.6 +/- 6.8	1,209,567	580
RACE/ETHNICITY					
Hispanic	54.7 +/- 5.0	15.8 +/- 3.8	29.4 +/- 6.0	2,398,107	900
Non-Hispanic White	47.5 +/- 3.0	19.2 +/- 2.0	33.3 +/- 2.3	6,531,614	4,065
African-American	53.2 +/- 9.2	20.4 +/- 8.0	26.4 +/- 6.7	715,323	321
Asian/PI	45.0 +/- 7.7	15.2 +/- 5.3	39.8 +/- 8.9	756,678	304
Other	48.4 +/-20.4	12.6 +/- 9.5	39.1 +/-21.8	271,335	94
EDUCATION					
<12	50.9 +/- 5.7	12.5 +/- 3.6	36.6 +/- 6.2	2,454,405	642
12	44.9 +/- 5.4	18.7 +/- 2.9	36.3 +/- 4.7	3,191,429	1,648
13-15	49.8 +/- 3.9	21.1 +/- 3.1	29.1 +/- 2.8	2,478,330	1,902
16+	53.0 +/- 4.6	19.7 +/- 3.4	27.3 +/- 3.5	2,548,893	1,492
SEX Female					
AGE					
18-24	42.8 +/- 6.7	22.5 +/- 4.1	34.8 +/- 6.3	1,518,423	753
25-44	49.0 +/- 3.6	25.3 +/- 2.6	25.7 +/- 2.9	4,751,185	2,866
45-64	48.7 +/- 4.5	22.1 +/- 3.8	29.2 +/- 3.8	2,764,132	1,762
65+	42.4 +/- 5.5	15.9 +/- 3.5	41.7 +/- 5.0	1,881,999	840
RACE/ETHNICITY					
Hispanic	51.6 +/- 5.4	19.9 +/- 4.4	28.5 +/- 5.5	2,474,877	917
Non-Hispanic White	45.1 +/- 2.9	23.5 +/- 1.9	31.4 +/- 2.6	6,781,342	4,597
African-American	38.8 +/- 8.2	26.4 +/- 8.6	34.8 +/- 7.5	642,349	359
Asian/PI	53.3 +/- 8.3	21.3 +/- 7.8	25.4 +/- 7.6	783,988	252
Other	51.0 +/-18.4	11.7 +/- 6.9	37.4 +/-17.4	233,183	96
EDUCATION					
<12	43.3 +/- 6.3	19.1 +/- 4.9	37.5 +/- 5.3	2,636,708	742
12	42.7 +/- 3.5	23.8 +/- 2.2	33.5 +/- 3.2	3,755,599	2,177
13-15	51.5 +/- 3.4	23.2 +/- 2.2	25.3 +/- 2.8	2,585,660	2,047
16+	53.8 +/- 4.2	23.4 +/- 3.7	22.8 +/- 3.1	1,937,772	1,255

Regional data not available for 1992

TABLE B.4: HOME SMOKING RESTRICTIONS (1993 ADULT CTS)

OVERALL	Total Household Ban (%) +/- 95% CI	Partial Ban (%) +/- 95% CI	No Restrictions (%) +/- 95% CI	Population Size (n)	Sample Size (n)
TOTAL	50.9 +/- 0.9	19.9 +/- 0.5	29.1 +/- 0.9	21,587,775	30,715
SEX					
Male	49.8 +/- 1.2	19.0 +/- 1.0	31.2 +/- 1.2	10,671,517	12,477
Female	52.0 +/- 1.2	20.9 +/- 0.9	27.1 +/- 1.2	10,916,258	18,238
AGE					
18-24	52.6 +/- 2.1	20.7 +/- 1.8	26.7 +/- 2.1	3,275,848	3,702
25-44	52.4 +/- 1.2	22.2 +/- 1.2	25.4 +/- 1.2	10,191,131	14,189
45-64	48.7 +/- 1.9	18.2 +/- 1.4	33.2 +/- 1.7	5,120,292	7,898
65+	48.0 +/- 2.4	14.4 +/- 1.5	37.6 +/- 2.6	3,000,504	4,926
RACE/ETHNICITY					
Hispanic	57.1 +/- 2.1	17.0 +/- 1.6	25.8 +/- 2.1	4,859,668	4,875
Non-Hispanic White	48.2 +/- 1.1	21.1 +/- 0.8	30.8 +/- 1.0	13,336,484	21,648
African-American	47.1 +/- 3.1	21.4 +/- 3.1	31.4 +/- 3.5	1,358,411	1,686
Asian/PI	60.1 +/- 3.2	18.4 +/- 3.0	21.5 +/- 3.2	1,622,912	2,011
Other	43.4 +/- 6.4	18.6 +/- 6.6	38.1 +/- 7.8	410,300	495
EDUCATION					
<12	51.2 +/- 2.4	17.1 +/- 1.8	31.8 +/- 2.7	5,090,098	3,359
12	46.1 +/- 1.5	20.7 +/- 1.2	33.2 +/- 1.5	6,947,051	8,857
13-15	50.5 +/- 1.5	22.3 +/- 1.3	27.3 +/- 1.3	4,999,968	9,802
16+	58.5 +/- 1.7	19.5 +/- 1.2	22.0 +/- 1.3	4,550,658	8,697
SEX Male					
AGE					
18-24	50.1 +/- 3.1	20.3 +/- 3.0	29.6 +/- 3.4	1,828,101	1,693
25-44	50.4 +/- 1.9	21.1 +/- 1.7	28.5 +/- 1.6	5,124,982	6,014
45-64	49.0 +/- 3.1	16.7 +/- 2.2	34.3 +/- 2.8	2,395,854	3,088
65+	48.7 +/- 4.0	13.1 +/- 2.5	38.2 +/- 3.8	1,322,580	1,682
RACE/ETHNICITY					
Hispanic	54.9 +/- 3.4	17.1 +/- 2.5	28.0 +/- 2.8	2,457,143	2,032
Non-Hispanic White	47.8 +/- 1.6	19.4 +/- 1.2	32.8 +/- 1.4	6,456,417	8,624
African-American	47.4 +/- 4.9	22.4 +/- 4.6	30.2 +/- 5.8	644,756	666
Asian/PI	56.6 +/- 5.0	18.6 +/- 4.2	24.8 +/- 4.8	921,836	952
Other	29.3 +/- 7.7	19.3 +/-13.0	51.4 +/-12.6	191,365	203
EDUCATION					
<12	49.8 +/- 3.6	18.2 +/- 2.9	32.0 +/- 3.7	2,433,065	1,222
12	45.8 +/- 2.5	18.6 +/- 1.9	35.6 +/- 2.3	3,196,795	3,189
13-15	47.8 +/- 1.7	21.2 +/- 1.7	31.0 +/- 1.9	2,465,579	3,888
16+	56.7 +/- 2.4	18.1 +/- 1.7	25.2 +/- 1.9	2,576,078	4,178
SEX Female					
AGE					
18-24	55.8 +/- 3.4	21.2 +/- 2.8	23.0 +/- 3.0	1,447,747	2,009
25-44	54.4 +/- 1.8	23.4 +/- 1.7	22.2 +/- 1.7	5,066,149	8,175
45-64	48.4 +/- 2.2	19.4 +/- 1.6	32.2 +/- 2.3	2,724,438	4,810
65+	47.4 +/- 3.0	15.5 +/- 1.7	37.2 +/- 3.3	1,677,924	3,244
RACE/ETHNICITY					
Hispanic	59.4 +/- 2.5	17.0 +/- 2.3	23.6 +/- 2.4	2,402,525	2,843
Non-Hispanic White	48.5 +/- 1.3	22.7 +/- 1.1	28.8 +/- 1.3	6,880,067	13,024
African-American	46.9 +/- 4.6	20.6 +/- 4.3	32.6 +/- 4.6	713,655	1,020
Asian/PI	64.6 +/- 5.0	18.2 +/- 4.0	17.1 +/- 3.6	701,076	1,059
Other	55.7 +/- 8.7	17.9 +/- 5.1	26.4 +/- 7.8	218,935	292
EDUCATION					
<12	52.4 +/- 3.0	16.0 +/- 2.4	31.6 +/- 2.9	2,657,033	2,137
12	46.4 +/- 2.0	22.5 +/- 1.6	31.2 +/- 1.9	3,750,256	5,668
13-15	53.1 +/- 2.3	23.3 +/- 1.7	23.7 +/- 1.7	2,534,389	5,914
16+	60.8 +/- 2.3	21.4 +/- 1.8	17.8 +/- 2.1	1,974,580	4,519

TABLE B.4: HOME SMOKING RESTRICTIONS (1993 ADULT CTS)

REGIONAL	Total Household Ban (%) +/- 95% CI	Partial Ban (%) +/- 95% CI	No Restrictions (%) +/- 95% CI	Population Size (n)	Sample Size (n)
OVERALL	50.9 +/- 0.9	19.9 +/- 0.5	29.1 +/- 0.9	21,587,775	30,715
Los Angeles	50.1 +/- 2.1	19.4 +/- 1.5	30.5 +/- 2.3	6,429,627	3,219
San Diego	52.9 +/- 3.1	20.3 +/- 2.4	26.8 +/- 2.7	1,812,081	1,785
Orange	57.2 +/- 3.3	17.4 +/- 2.3	25.4 +/- 3.0	1,748,693	1,519
Santa Clara	53.5 +/- 2.9	21.1 +/- 2.4	25.4 +/- 3.1	1,086,331	1,589
San Bernadino	49.1 +/- 3.7	19.8 +/- 2.6	31.1 +/- 3.7	1,028,911	1,784
Alameda	48.4 +/- 3.1	22.9 +/- 2.3	28.7 +/- 3.3	927,988	1,516
Riverside	51.8 +/- 3.5	18.9 +/- 2.7	29.3 +/- 2.9	849,040	1,853
Sacramento	48.4 +/- 2.7	22.4 +/- 2.5	29.2 +/- 3.1	755,336	1,692
Contra Costa	49.0 +/- 4.1	23.4 +/- 3.7	27.6 +/- 2.3	583,028	1,739
San Francisco	45.1 +/- 3.8	21.5 +/- 3.0	33.4 +/- 2.8	525,170	1,442
San Mateo, Solano	51.2 +/- 3.2	21.5 +/- 2.3	27.3 +/- 2.5	718,240	1,516
Marin, Napa, Sonoma	46.3 +/- 2.7	24.3 +/- 2.6	29.4 +/- 3.1	528,885	1,494
Butte, Colusa, Del Norte, Glenn, etc.	46.4 +/- 2.6	19.3 +/- 2.6	34.3 +/- 2.7	686,773	1,688
San Luis Obisbo, Santa Barbara, Ventura	56.3 +/- 3.2	17.5 +/- 2.4	26.1 +/- 3.1	910,992	1,587
Amador, Alpine, Calaveras, El Dorado, etc.	49.9 +/- 2.9	18.4 +/- 2.3	31.7 +/- 3.3	805,079	1,469
Monterey, San Benito, Santa Cruz	51.8 +/- 3.3	22.4 +/- 2.8	25.8 +/- 3.5	451,319	1,595
Fresno, Madera, Merced, Stanislaus	50.6 +/- 3.4	20.0 +/- 2.5	29.4 +/- 3.0	946,316	1,613
Imperial, Inyo, Kern, Kings, Mono, Tulare	49.4 +/- 3.0	18.8 +/- 2.0	31.9 +/- 2.8	793,966	1,615

TABLE B.4: HOME SMOKING RESTRICTIONS (1996 ADULT CTS)

OVERALL	Total Household Ban (%) +/- 95% CI	Partial Ban (%) +/- 95% CI	No Restrictions (%) +/- 95% CI	Population Size (n)	Sample Size (n)
TOTAL	63.7 +/- 0.4	16.0 +/- 0.4	20.2 +/- 0.5	22,879,429	38,009
SEX					
Male	61.6 +/- 0.8	15.4 +/- 0.6	23.0 +/- 0.8	11,230,397	15,363
Female	65.8 +/- 0.6	16.6 +/- 0.6	17.5 +/- 0.6	11,649,032	22,646
AGE					
18-24	63.8 +/- 1.8	18.5 +/- 1.4	17.7 +/- 1.3	3,030,166	4,320
25-44	67.0 +/- 0.8	16.5 +/- 0.6	16.5 +/- 0.7	10,722,144	17,357
45-64	60.9 +/- 1.2	15.1 +/- 1.0	24.0 +/- 1.2	5,891,072	10,642
65+	58.1 +/- 1.5	13.8 +/- 1.2	28.1 +/- 1.4	3,236,047	5,690
RACE/ETHNICITY					
Hispanic	72.7 +/- 1.2	10.7 +/- 0.8	16.6 +/- 1.2	5,892,946	6,299
Non-Hispanic White	60.3 +/- 0.8	17.9 +/- 0.6	21.9 +/- 0.7	12,623,439	25,270
African-American	56.6 +/- 2.3	21.5 +/- 1.9	21.9 +/- 1.7	1,488,906	2,366
Asian/PI	68.2 +/- 2.1	15.3 +/- 1.5	16.6 +/- 2.2	2,050,567	2,961
Other	54.7 +/- 3.9	18.6 +/- 2.9	26.7 +/- 3.7	823,571	1,113
EDUCATION					
<12	66.1 +/- 1.5	11.5 +/- 1.0	22.4 +/- 1.5	4,886,727	3,283
12	59.6 +/- 1.1	17.2 +/- 1.0	23.2 +/- 1.1	5,708,702	10,006
13-15	61.9 +/- 1.1	18.5 +/- 0.9	19.6 +/- 0.8	6,141,517	12,102
16+	67.5 +/- 0.8	16.2 +/- 0.7	16.4 +/- 0.9	6,142,483	12,618
SEX Male					
AGE					
18-24	61.1 +/- 2.5	18.2 +/- 1.8	20.7 +/- 1.9	1,626,269	1,903
25-44	64.4 +/- 1.2	16.3 +/- 0.8	19.3 +/- 1.0	5,497,319	7,316
45-64	60.0 +/- 2.0	13.3 +/- 1.4	26.7 +/- 2.1	2,844,583	4,228
65+	53.5 +/- 3.0	12.7 +/- 2.1	33.9 +/- 3.3	1,262,226	1,916
RACE/ETHNICITY					
Hispanic	69.4 +/- 2.0	11.3 +/- 1.3	19.3 +/- 2.1	2,882,958	2,571
Non-Hispanic White	58.6 +/- 1.2	16.7 +/- 0.8	24.6 +/- 1.1	6,149,253	10,029
African-American	56.8 +/- 3.7	18.9 +/- 2.5	24.3 +/- 3.3	674,051	868
Asian/PI	64.3 +/- 3.0	16.0 +/- 2.4	19.7 +/- 2.7	1,086,046	1,374
Other	52.0 +/- 5.7	16.8 +/- 3.3	31.1 +/- 6.1	438,089	521
EDUCATION					
<12	62.5 +/- 2.7	11.0 +/- 1.4	26.6 +/- 2.7	2,263,327	1,252
12	58.4 +/- 2.0	16.1 +/- 1.3	25.5 +/- 1.8	2,647,193	3,623
13-15	59.7 +/- 2.0	17.8 +/- 1.3	22.5 +/- 1.5	2,942,130	4,627
16+	65.1 +/- 1.1	15.7 +/- 0.9	19.1 +/- 1.1	3,377,747	5,861
SEX Female					
AGE					
18-24	66.9 +/- 2.0	18.9 +/- 2.2	14.2 +/- 1.6	1,403,897	2,417
25-44	69.7 +/- 1.0	16.8 +/- 0.9	13.5 +/- 1.0	5,224,825	10,041
45-64	61.8 +/- 1.6	16.7 +/- 1.2	21.5 +/- 1.3	3,046,489	6,414
65+	61.1 +/- 1.8	14.5 +/- 1.7	24.5 +/- 1.8	1,973,821	3,774
RACE/ETHNICITY					
Hispanic	75.9 +/- 1.5	10.1 +/- 1.3	14.1 +/- 1.4	3,009,988	3,728
Non-Hispanic White	61.8 +/- 0.9	18.9 +/- 0.7	19.3 +/- 0.8	6,474,186	15,241
African-American	56.4 +/- 3.0	23.6 +/- 2.7	20.0 +/- 2.4	814,855	1,498
Asian/PI	72.6 +/- 2.2	14.4 +/- 2.0	13.0 +/- 2.4	964,521	1,587
Other	57.7 +/- 4.9	20.6 +/- 4.7	21.7 +/- 4.3	385,482	592
EDUCATION					
<12	69.3 +/- 2.1	11.9 +/- 1.6	18.8 +/- 1.9	2,623,400	2,031
12	60.7 +/- 1.3	18.1 +/- 1.3	21.2 +/- 1.3	3,061,509	6,383
13-15	63.9 +/- 1.1	19.1 +/- 1.2	16.9 +/- 0.9	3,199,387	7,475
16+	70.3 +/- 1.1	16.7 +/- 1.1	13.0 +/- 1.0	2,764,736	6,757

TABLE B.4: HOME SMOKING RESTRICTIONS (1996 ADULT CTS)

REGIONAL	Total Household Ban (%) +/- 95% CI	Partial Ban (%) +/- 95% CI	No Restrictions (%) +/- 95% CI	Population Size (n)	Sample Size (n)
OVERALL	63.7 +/- 0.4	16.0 +/- 0.4	20.2 +/- 0.5	22,879,429	38,009
Los Angeles	63.4 +/- 1.2	15.7 +/- 0.8	20.9 +/- 1.0	6,608,881	7,521
San Diego	63.7 +/- 1.7	17.1 +/- 1.7	19.2 +/- 2.0	1,946,717	2,444
Orange	68.9 +/- 2.5	13.2 +/- 1.8	17.9 +/- 2.2	1,886,383	2,231
Santa Clara	68.0 +/- 2.7	14.1 +/- 1.8	17.9 +/- 2.4	1,161,945	1,770
San Bernadino	62.2 +/- 3.9	15.5 +/- 2.1	22.4 +/- 3.4	1,050,365	1,524
Alameda	61.7 +/- 3.2	18.2 +/- 1.8	20.1 +/- 2.8	995,402	1,784
Riverside	67.2 +/- 2.4	13.8 +/- 2.1	19.0 +/- 2.3	953,886	1,570
Sacramento	63.6 +/- 3.0	16.3 +/- 2.1	20.1 +/- 2.5	798,175	1,810
Contra Costa	64.6 +/- 2.8	17.6 +/- 2.5	17.8 +/- 2.3	650,708	1,645
San Francisco	53.4 +/- 3.3	21.0 +/- 2.4	25.6 +/- 2.4	612,688	1,694
San Mateo, Solano	61.9 +/- 3.0	16.6 +/- 2.1	21.5 +/- 2.6	795,973	1,695
Marin, Napa, Sonoma	65.7 +/- 2.7	15.9 +/- 2.2	18.3 +/- 2.4	591,642	1,906
Butte, Colusa, Del Norte, Glenn, etc.	56.4 +/- 2.7	18.5 +/- 1.8	25.1 +/- 2.1	748,830	1,883
San Luis Obisbo, Santa Barbara, Ventura	65.0 +/- 3.4	18.4 +/- 2.3	16.5 +/- 2.2	959,202	1,788
Amador, Alpine, Calaveras, El Dorado,etc.	60.1 +/- 3.0	17.8 +/- 2.1	22.1 +/- 2.8	885,018	1,728
Monterey, San Benito, Santa Cruz	67.9 +/- 2.5	15.3 +/- 1.7	16.8 +/- 2.3	452,619	1,786
Fresno, Madera, Merced, Stanislaus	67.1 +/- 2.8	14.2 +/- 2.1	18.7 +/- 2.8	962,552	1,558
Imperial, Inyo, Kern, Kings, Mono, Tulare	60.0 +/- 3.0	16.0 +/- 2.5	24.0 +/- 2.2	818,443	1,672

TABLE B.5: UPTAKE CONTINUUM AMONG ADOLESCENTS (1990 TEEN CTS)

OVERALL	Uptake Continuum						
	Not Susceptible/ Never Smoker (%)	Susceptible (%)	Early Experimentation (%)	Advanced Experimentation (%)	Addicted Smoker (%)	Population Size (n)	Sample Size (n)
TOTAL	50.7	20.0	14.8	8.8	5.8	2,342,099	5,040
SEX							
Male	47.8	20.2	16.4	9.3	6.3	1,157,850	2,549
Female	53.4	19.8	13.2	8.4	5.3	1,184,249	2,491
AGE							
12-13	62.9	22.5	8.3	5.7	0.6	801,622	1,706
14-15	49.7	20.3	16.1	10.0	3.8	798,891	1,697
16-17	38.5	16.9	20.3	10.9	13.4	741,586	1,637
RACE/ETHNICITY							
Hispanic	47.0	22.5	15.6	10.6	4.2	799,493	1,314
Non-Hispanic White	50.6	16.8	16.1	8.6	7.9	1,094,472	2,912
African-American	58.8	21.8	10.3	6.4	2.7	208,324	297
Asian/PI	57.0	24.8	8.9	5.8	3.6	199,489	404
Other	49.5	24.0	12.7	8.1	5.7	40,321	113
SCHOOL PERFORMANCE							
Much bet than ave	61.3	19.4	11.5	4.9	2.9	427,963	934
Better than ave	55.4	19.8	14.4	6.2	4.2	876,246	1,891
Average and below	42.3	20.4	16.4	12.6	8.3	1,037,890	2,215
SEX Male							
AGE							
12-13	60.7	22.9	9.7	6.5	0.3	392,667	836
14-15	45.5	22.6	18.0	9.8	4.1	400,303	866
16-17	36.6	14.9	21.8	11.6	15.2	364,880	847
RACE/ETHNICITY							
Hispanic	42.0	21.8	17.9	13.6	4.8	396,336	664
Non-Hispanic White	48.7	18.2	17.6	7.3	8.2	548,096	1,473
African-American	63.8	16.8	9.4	6.3	3.7	93,671	149
Asian/PI	52.5	26.4	10.4	6.8	4.0	102,757	212
Other	39.1	33.1	13.8	5.4	8.6	16,990	51
SCHOOL PERFORMANCE							
Much bet than ave	58.9	19.8	12.5	5.2	3.6	200,092	449
Better than ave	53.4	19.8	17.1	6.7	3.0	425,972	928
Average and below	39.2	20.8	17.2	12.9	9.9	531,786	1,172
SEX Female							
AGE							
12-13	65.0	22.1	7.1	4.9	0.9	408,955	870
14-15	53.9	18.1	14.2	10.2	3.6	398,588	831
16-17	40.3	18.9	18.8	10.3	11.7	376,706	790
RACE/ETHNICITY							
Hispanic	52.0	23.2	13.4	7.8	3.6	403,157	650
Non-Hispanic White	52.6	15.4	14.6	9.8	7.6	546,376	1,439
African-American	54.7	26.0	11.1	6.4	1.9	114,653	148
Asian/PI	61.8	23.2	7.3	4.7	3.1	96,732	192
Other	57.1	17.3	12.0	10.1	3.6	23,331	62
SCHOOL PERFORMANCE							
Much bet than average	63.4	19.1	10.6	4.7	2.3	227,871	485
Better than average	57.2	19.8	11.9	5.8	5.3	450,274	963
Average and below	45.6	20.1	15.5	12.3	6.6	506,104	1,043

TABLE B.5: UPTAKE CONTINUUM AMONG ADOLESCENTS (1990 TEEN CTS)

REGIONAL	Uptake Continuum					Population Size	Sample Size
	Not susceptible / Never smoker (%)	Susceptible (%)	Early Experi-mentation (%)	Advanced Experi-mentation (%)	Addicted Smoker (%)	(n)	(n)
OVERALL	50.7	20.0	14.8	8.8	5.8	2,342,099	5,040
Los Angeles	50.5	20.8	15.8	9.0	3.9	697,508	486
San Diego	48.5	20.5	16.2	8.6	6.3	196,601	257
Orange	50.9	18.8	11.5	10.9	7.9	189,724	266
Santa Clara	54.7	21.3	11.8	5.6	6.6	117,856	239
San Bernadino	48.8	19.2	15.6	8.0	8.4	111,624	390
Alameda	51.3	19.1	12.3	7.5	9.7	100,649	230
Riverside	52.5	18.3	14.1	9.2	5.8	92,098	305
Sacramento	61.6	15.7	12.2	6.7	3.8	81,959	247
Contra Costa	50.1	23.4	13.4	7.0	6.1	63,253	290
San Francisco	53.1	18.5	13.6	9.1	5.7	56,984	138
San Mateo, Solano	51.9	20.7	13.9	6.3	7.2	77,927	241
Marin, Napa, Sonoma	56.2	16.3	11.9	10.2	5.4	57,383	193
Butte, Colusa, Del Norte, Glenn, etc.	49.7	19.2	13.4	9.3	8.4	74,624	279
San Luis Obisbo, Santa Barbara, Ventura	49.1	15.1	17.3	12.6	5.8	98,831	263
Amador,Alpine, Calaveras, El Dorado,etc.	46.1	19.7	16.3	10.9	7.1	87,344	259
Monterey, San Benito, Santa Cruz	44.2	24.9	14.4	10.9	5.6	48,944	253
Fresno, Madera, Merced, Stanislaus	45.6	25.0	16.8	7.9	4.7	102,660	328
Imperial, Inyo, Kern, Kings, Mono, Tulare	51.0	19.3	17.4	8.0	4.3	86,130	376

TABLE B.5: UPTAKE CONTINUUM AMONG ADOLESCENTS (1992 TEEN CTS)

OVERALL	Uptake Continuum						
	Not Susceptible/ Never smoker (%)	Susceptible (%)	Early Experimentation (%)	Advanced Experimentation (%)	Addicted Smoker (%)	Population Size (n)	Sample Size (n)
TOTAL	48.1	23.5	12.3	11.6	4.5	2,344,490	1,789
SEX							
Male	46.7	24.0	13.7	11.8	3.9	1,158,999	882
Female	49.5	23.0	11.0	11.5	5.0	1,185,491	907
AGE							
12-13	62.3	25.5	7.9	4.3	0.1	807,464	625
14-15	44.6	24.5	12.2	14.4	4.4	797,854	611
16-17	36.4	20.2	17.4	16.7	9.3	739,172	553
RACE/ETHNICITY							
Hispanic	39.8	32.1	14.8	10.5	2.9	792,627	550
Non-Hispanic White	49.8	19.1	11.0	13.4	6.7	1,095,598	932
African-American	57.6	19.1	11.2	11.1	1.0	208,540	117
Asian/PI	59.8	22.4	10.5	5.6	1.7	199,094	147
Other	57.2	5.4	14.6	17.4	5.4	48,631	43
SCHOOL PERFORMANCE							
Much bet than ave	59.6	21.4	9.7	8.6	0.7	425,204	332
Better than ave	53.8	21.2	12.4	8.9	3.8	838,664	638
Average and below	39.2	26.1	13.3	15.0	6.4	1,080,622	819
SEX Male							
AGE							
12-13	59.7	27.4	8.6	4.3	.	399,645	313
14-15	42.3	25.1	14.3	13.9	4.3	400,744	298
16-17	37.1	18.9	18.7	17.6	7.6	358,610	271
RACE/ETHNICITY							
Hispanic	36.1	31.2	18.1	11.8	2.9	408,568	285
Non-Hispanic White	49.7	19.6	10.3	14.1	6.2	523,964	442
African-American	59.5	20.7	10.1	9.7	.	105,390	60
Asian/PI	57.2	24.8	15.5	2.5	.	94,212	73
Other	62.2	8.1	22.1	6.5	1.0	26,865	22
SCHOOL PERFORMANCE							
Much bet than ave	56.9	24.6	8.6	8.8	1.1	194,492	151
Better than ave	53.3	19.5	13.6	10.5	3.0	405,972	302
Average and below	38.3	27.0	15.5	13.7	5.5	558,535	429
SEX Female							
AGE							
12-13	64.8	23.6	7.1	4.2	0.2	407,819	312
14-15	46.9	23.8	10.1	14.8	4.4	397,110	313
16-17	35.8	21.5	16.1	15.8	10.8	380,562	282
RACE/ETHNICITY							
Hispanic	43.9	32.9	11.3	9.1	2.8	384,059	265
Non-Hispanic White	49.8	18.6	11.7	12.7	7.2	571,634	490
African-American	55.6	17.6	12.4	12.4	2.0	103,150	57
Asian/PI	62.0	20.2	6.0	8.5	3.2	104,882	74
Other	51.1	2.0	5.3	30.8	10.8	21,766	21
SCHOOL PERFORMANCE							
Much bet than average	61.8	18.7	10.7	8.4	0.4	230,712	181
Better than average	54.3	22.7	11.2	7.3	4.5	432,692	336
Average and below	40.1	25.1	11.0	16.3	7.5	522,087	390

Regional data not available for 1992

TABLE B.5: UPTAKE CONTINUUM AMONG ADOLESCENTS (1993 TEEN CTS)

OVERALL	Uptake Continuum						
	Not susceptible / Never smoker (%)	Susceptible (%)	Early Experimentation (%)	Advanced Experimentation (%)	Addicted Smoker (%)	Population Size (n)	Sample Size (n)
TOTAL	48.6	22.4	11.2	12.6	5.2	2,344,485	5,531
SEX							
Male	45.1	23.8	11.7	13.8	5.6	1,161,032	2,818
Female	52.0	21.0	10.7	11.4	4.8	1,183,453	2,713
AGE							
12-13	62.2	25.2	6.4	6.0	0.2	838,103	1,921
14-15	43.9	23.8	14.1	14.0	4.3	779,043	1,873
16-17	38.0	17.7	13.6	18.7	12.0	727,339	1,737
RACE/ETHNICITY							
Hispanic	44.4	27.9	12.8	11.7	3.2	772,956	1,431
Non-Hispanic White	48.1	18.3	11.2	14.8	7.6	1,135,006	3,234
African-American	59.4	23.2	9.2	7.2	1.1	208,932	323
Asian/PI	60.0	21.6	8.2	7.1	3.1	188,805	443
Other	34.7	31.1	6.2	20.8	7.2	38,786	100
SCHOOL PERFORMANCE							
Much bet than ave	63.7	19.4	7.7	7.1	2.2	430,306	1,065
Better than ave	52.4	21.5	9.9	11.7	4.5	861,056	2,068
Average and below	39.4	24.3	13.7	15.6	7.0	1,053,123	2,398
SEX Male							
AGE							
12-13	56.9	28.5	7.8	6.6	0.3	408,933	961
14-15	43.7	25.0	13.3	13.7	4.3	389,936	971
16-17	33.3	17.4	14.4	21.9	13.0	362,163	886
RACE/ETHNICITY							
Hispanic	39.2	29.5	13.0	14.6	3.7	382,130	714
Non-Hispanic White	47.1	18.9	10.7	14.8	8.4	561,905	1,662
African-American	56.9	22.5	11.4	8.3	0.7	103,704	166
Asian/PI	49.6	27.2	13.2	8.0	2.0	94,217	226
Other	18.7	45.7	7.2	23.0	5.5	19,076	50
SCHOOL PERFORMANCE							
Much bet than ave	58.9	24.0	7.8	7.3	2.0	197,636	499
Better than ave	49.7	20.5	11.6	13.5	4.7	408,023	1,016
Average and below	36.8	26.2	13.2	16.3	7.5	555,373	1,303
SEX Female							
AGE							
12-13	67.2	22.0	5.1	5.5	0.2	429,170	960
14-15	44.1	22.5	15.0	14.2	4.2	389,107	902
16-17	42.7	18.1	12.8	15.4	11.0	365,176	851
RACE/ETHNICITY							
Hispanic	49.5	26.4	12.6	8.8	2.8	390,826	717
Non-Hispanic White	49.0	17.7	11.6	14.8	6.8	573,101	1,572
African-American	61.8	23.9	6.9	6.0	1.4	105,228	157
Asian/PI	70.4	15.9	3.1	6.3	4.2	94,588	217
Other	50.2	17.0	5.3	18.7	8.8	19,710	50
SCHOOL PERFORMANCE							
Much bet than average	67.7	15.5	7.7	6.8	2.3	232,670	566
Better than average	54.7	22.4	8.4	10.1	4.4	453,033	1,052
Average and below	42.3	22.2	14.2	14.8	6.5	497,750	1,095

TABLE B.5: UPTAKE CONTINUUM AMONG ADOLESCENTS (1993 TEEN CTS)

REGIONAL	Uptake Continuum						
	Not susceptible/ Never Smoker (%)	Susceptible (%)	Early Experimentation (%)	Advanced Experimentation (%)	Addicted Smoker (%)	Population Size (n)	Sample Size (n)
OVERALL	48.6	22.4	11.2	12.6	5.2	2,344,485	5,531
Los Angeles	51.1	24.9	8.9	11.5	3.6	698,249	546
San Diego	46.5	21.7	10.9	15.9	5.0	196,801	290
Orange	44.7	21.9	13.4	15.8	4.2	189,903	242
Santa Clara	45.7	24.7	10.7	11.7	7.3	117,969	280
San Bernadino	46.9	18.1	13.7	13.9	7.4	111,744	399
Alameda	55.6	18.0	8.3	12.0	6.1	100,775	247
Riverside	49.8	23.6	13.4	8.8	4.4	92,197	359
Sacramento	51.0	20.1	12.2	11.8	4.9	82,017	306
Contra Costa	50.1	25.0	10.2	8.9	5.8	63,325	279
San Francisco	42.0	29.1	12.5	11.4	5.0	57,034	101
San Mateo, Solano	46.4	23.8	10.6	12.3	6.9	77,992	236
Marin, Napa, Sonoma	34.0	24.9	12.9	20.2	8.0	57,432	239
Butte, Colusa, Del Norte, Glenn, etc.	49.8	17.4	13.4	13.2	6.1	74,695	321
San Luis Obisbo, Santa Barbara, Ventura	45.3	20.9	12.8	13.8	7.2	98,929	315
Amador, Alpine, Calaveras, El Dorado, etc.	51.4	18.2	13.1	11.4	5.8	87,431	337
Monterey, San Benito, Santa Cruz	44.2	17.5	15.1	16.2	7.1	49,013	304
Fresno, Madera, Merced, Stanislaus	50.8	19.3	12.3	11.4	6.3	102,768	334
Imperial, Inyo, Kern, Kings, Mono, Tulare	51.2	20.4	13.2	9.6	5.7	86,211	396

TABLE B.5: UPTAKE CONTINUUM AMONG ADOLESCENTS (1996 TEEN CTS)

OVERALL	Uptake Continuum						
	Not susceptible /Never smoker (%)	Susceptible (%)	Early Experimentation (%)	Advanced Experimentation (%)	Addicted Smoker (%)	Population Size (n)	Sample Size (n)
TOTAL	44.0	25.8	10.9	12.4	6.9	2,692,861	6,252
SEX							
Male	42.5	25.5	11.7	13.3	6.9	1,408,066	3,199
Female	45.7	26.1	9.9	11.4	6.9	1,284,795	3,053
AGE							
12-13	55.7	32.5	6.2	5.0	0.6	883,489	2,086
14-15	40.9	27.1	12.4	14.2	5.4	945,535	2,200
16-17	35.5	17.6	14.0	17.9	15.0	863,837	1,966
RACE/ETHNICITY							
Hispanic	39.5	31.2	11.8	12.8	4.7	865,713	1,585
Non-Hispanic White	45.5	20.9	10.8	13.4	9.4	1,264,844	3,426
African-American	50.3	29.0	8.6	9.2	2.9	173,295	442
Asian/PI	48.2	28.3	10.6	8.0	4.9	293,830	585
Other	42.0	27.9	9.1	13.7	7.4	95,179	214
SCHOOL PERFORMANCE							
Much bet than ave	58.5	24.5	7.1	7.0	2.9	610,321	1,453
Better than ave	45.6	24.7	11.2	12.5	5.9	1,008,739	2,396
Average and below	34.4	27.6	12.6	15.3	10.1	1,073,801	2,403
SEX Male							
AGE							
12-13	54.5	31.7	6.9	6.3	0.6	460,008	1,051
14-15	39.2	29.0	14.1	12.9	4.8	492,765	1,132
16-17	34.0	15.6	14.1	20.8	15.6	455,293	1,016
RACE/ETHNICITY							
Hispanic	36.8	29.7	12.8	15.3	5.3	442,110	788
Non-Hispanic White	45.1	21.8	11.3	13.1	8.6	674,265	1,782
African-American	49.0	28.1	11.3	10.5	1.1	85,535	212
Asian/PI	46.5	26.5	11.5	8.9	6.6	155,509	305
Other	33.7	31.1	9.6	15.6	9.9	50,647	112
SCHOOL PERFORMANCE							
Much bet than ave	56.5	27.3	7.7	5.8	2.7	298,194	698
Better than ave	44.4	24.2	12.3	13.2	5.8	512,834	1,214
Average and below	33.8	25.7	13.3	17.1	10.1	597,038	1,287
SEX Female							
AGE							
12-13	57.1	33.3	5.4	3.6	0.6	423,481	1,035
14-15	42.7	25.1	10.5	15.6	6.1	452,770	1,068
16-17	37.3	19.8	13.9	14.7	14.2	408,544	950
RACE/ETHNICITY							
Hispanic	42.3	32.9	10.6	10.3	4.0	423,603	797
Non-Hispanic White	45.9	19.9	10.2	13.7	10.4	590,579	1,644
African-American	51.6	29.8	6.0	7.9	4.6	87,760	230
Asian/PI	50.1	30.4	9.4	7.0	3.0	138,321	280
Other	51.4	24.2	8.5	11.4	4.4	44,532	102
SCHOOL PERFORMANCE							
Much bet than ave	60.3	21.8	6.6	8.2	3.0	312,127	755
Better than ave	46.9	25.2	10.1	11.8	6.1	495,905	1,182
Average and below	35.0	29.9	11.9	13.0	10.2	476,763	1,116

TABLE B.5: UPTAKE CONTINUUM AMONG ADOLESCENTS (1996 TEEN CTS)

REGIONAL	Uptake Continuum					Population Size	Sample size
	Not susceptible / Never smoker (%)	Susceptible (%)	Early experi-mentation (%)	Advanced experi-mentation (%)	Addicted smoker (%)	(n)	(n)
OVERALL	44.0	25.8	10.9	12.4	6.9	2,692,861	6,252
Los Angeles	42.7	28.5	11.5	12.5	4.8	785,872	1,078
San Diego	46.5	30.4	8.0	9.4	5.7	219,994	353
Orange	50.0	19.5	11.2	11.4	8.0	214,733	326
Santa Clara	47.6	24.9	8.7	12.7	6.1	125,169	263
San Bernadino	43.0	24.0	11.8	11.4	9.8	148,339	331
Alameda	42.4	31.5	9.1	11.7	5.3	102,089	234
Riverside	41.9	26.1	9.6	14.6	7.8	118,581	313
Sacramento	48.9	20.0	7.2	12.2	11.8	92,391	303
Contra Costa	44.4	23.6	11.9	11.9	8.3	71,455	285
San Francisco	46.5	27.1	8.4	14.4	3.6	41,434	99
San Mateo, Solano	43.1	23.6	13.6	9.9	9.8	83,660	301
Marin, Napa, Sonoma	36.1	20.3	10.1	24.2	9.3	56,412	306
Butte, Colusa, Del Norte, Glenn, etc.	41.2	23.2	12.9	11.6	11.1	90,675	343
San Luis Obisbo, Santa Barbara, Ventura	41.8	24.8	12.9	14.3	6.2	115,322	308
Amador, Alpine, Calaveras, El Dorado, etc.	43.6	21.3	15.1	10.3	9.7	107,558	361
Monterey, San Benito, Santa Cruz	41.0	26.0	12.6	13.4	7.0	55,454	301
Fresno, Madera, Merced, Stanislaus	42.2	23.1	11.5	13.7	9.5	141,549	344
Imperial, Inyo, Kern, Kings, Mono, Tulare	46.3	28.8	8.2	12.0	4.6	122,174	403

TABLE B.6: PROMOTIONAL ITEM STATUS (1993 TEEN CTS)

OVERALL	Not Willing to Use (%)	Willing to Use (%)	Has Item (%)	Population Size (%)	Sample Size (%)
TOTAL	72.6	18.4	8.9	2,344,485	5,531
SEX					
Male	65.4	23.3	11.3	1,161,032	2,818
Female	79.7	13.7	6.6	1,183,453	2,713
AGE					
12-13	80.9	14.4	4.7	838,103	1,921
14-15	70.4	20.3	9.3	779,043	1,873
16-17	65.5	21.1	13.4	727,339	1,737
RACE/ETHNICITY					
Hispanic	73.1	19.4	7.5	772,956	1,431
Non-Hispanic White	70.7	18.1	11.2	1,135,006	3,234
African-American	74.0	19.6	6.5	208,932	323
Asian/PI	82.7	13.4	3.9	188,805	443
Other	63.5	27.1	9.3	38,786	100
SCHOOL PERFORMANCE					
Much better than average	78.4	14.0	7.6	430,306	1,065
Better than average	73.7	16.7	9.6	861,056	2,068
Average and below	69.4	21.7	8.9	1,053,123	2,398
SEX Male					
AGE					
12-13	77.8	17.3	4.9	408,933	961
14-15	62.2	26.0	11.7	389,936	971
16-17	54.9	27.1	17.9	362,163	886
RACE/ETHNICITY					
Hispanic	64.5	25.8	9.8	382,130	714
Non-Hispanic White	64.2	22.2	13.6	561,905	1,662
African-American	66.6	23.8	9.6	103,704	166
Asian/PI	79.4	16.3	4.3	94,217	226
Other	46.0	39.1	14.9	19,076	50
SCHOOL PERFORMANCE					
Much better than average	70.7	18.5	10.8	197,636	499
Better than average	67.8	20.1	12.1	408,023	1,016
Average and below	61.8	27.4	10.8	555,373	1,303
SEX Female					
AGE					
12-13	83.9	11.7	4.5	429,170	960
14-15	78.6	14.5	6.8	389,107	902
16-17	75.9	15.1	9.0	365,176	851
RACE/ETHNICITY					
Hispanic	81.5	13.2	5.3	390,826	717
Non-Hispanic White	77.1	14.1	8.8	573,101	1,572
African-American	81.2	15.4	3.4	105,228	157
Asian/PI	85.9	10.6	3.4	94,588	217
Other	80.5	15.5	4.0	19,710	50
SCHOOL PERFORMANCE					
Much better than average	85.0	10.1	4.9	232,670	566
Better than average	79.0	13.7	7.3	453,033	1,052
Average and below	77.8	15.3	6.9	497,750	1,095

TABLE B.6: PROMOTIONAL ITEM STATUS (1993 TEEN CTS)

REGIONAL	Not Willing to Use (%)	Willing to Use (%)	Has Item (%)	Population Size (n)	Sample Size (n)
OVERALL	72.6	18.4	8.9	2,344,485	5,531
Los Angeles	75.8	17.0	7.2	698,249	546
San Diego	68.3	21.3	10.4	196,801	290
Orange	73.3	20.6	6.1	189,903	242
Santa Clara	70.9	17.4	11.7	117,969	280
San Bernadino	71.0	17.5	11.5	111,744	399
Alameda	70.4	15.9	13.8	100,775	247
Riverside	76.3	18.1	5.6	92,197	359
Sacramento	70.7	21.1	8.3	82,017	306
Contra Costa	68.4	19.4	12.2	63,325	279
San Francisco	71.1	19.7	9.2	57,034	101
San Mateo, Solano	68.9	19.4	11.6	77,992	236
Marin, Napa, Sonoma	68.8	23.7	7.5	57,432	239
Butte, Colusa, Del Norte, Glenn, etc.	71.5	20.5	8.0	74,695	321
San Luis Obisbo, Santa Barbara, Ventura	70.4	20.7	8.9	98,929	315
Amador, Alpine, Calaveras, El Dorado, etc.	74.6	17.3	8.1	87,431	337
Monterey, San Benito, Santa Cruz	67.3	18.0	14.6	49,013	304
Fresno, Madera, Merced, Stanislaus	73.4	16.5	10.1	102,768	334
Imperial, Inyo, Kern, Kings, Mono, Tulare	73.9	16.0	10.0	86,211	396

TABLE B.6: PROMOTIONAL ITEM STATUS (1996 TEEN CTS)

OVERALL	Not Willing to Use (%)	Willing to Use (%)	Has Item (%)	Population Size (n)	Sample Size (n)
TOTAL	70.0	16.4	13.6	2,692,861	6,252
SEX					
Male	64.2	19.6	16.1	1,408,066	3,199
Female	76.2	12.8	10.9	1,284,795	3,053
AGE					
12-13	75.6	13.7	10.6	883,489	2,086
14-15	69.2	16.1	14.7	945,535	2,200
16-17	65.0	19.4	15.6	863,837	1,966
RACE/ETHNICITY					
Hispanic	68.1	19.4	12.5	865,713	1,585
Non-Hispanic White	70.5	15.5	14.0	1,264,844	3,426
African-American	74.3	13.8	11.9	173,295	442
Asian/PI	71.4	14.5	14.1	293,830	585
Other	67.9	11.6	20.5	95,179	214
SCHOOL PERFORMANCE					
Much better than average	77.8	11.8	10.3	610,321	1,453
Better than average	70.5	16.2	13.3	1,008,739	2,396
Average and below	65.0	19.2	15.8	1,073,801	2,403
SEX Male					
AGE					
12-13	70.8	16.7	12.5	460,008	1,051
14-15	63.1	19.7	17.2	492,765	1,132
16-17	58.9	22.5	18.6	455,293	1,016
RACE/ETHNICITY					
Hispanic	58.8	25.4	15.9	442,110	788
Non-Hispanic White	66.1	18.0	15.9	674,265	1,782
African-American	72.2	15.2	12.7	85,535	212
Asian/PI	67.8	16.0	16.2	155,509	305
Other	63.1	10.9	25.9	50,647	112
SCHOOL PERFORMANCE					
Much better than average	72.9	14.4	12.7	298,194	698
Better than average	64.1	20.0	15.9	512,834	1,214
Average and below	60.0	22.0	18.0	597,038	1,287
SEX Female					
AGE					
12-13	80.9	10.5	8.6	423,481	1,035
14-15	75.9	12.2	11.9	452,770	1,068
16-17	71.8	15.9	12.3	408,544	950
RACE/ETHNICITY					
Hispanic	77.8	13.2	9.0	423,603	797
Non-Hispanic White	75.6	12.6	11.8	590,579	1,644
African-American	76.3	12.5	11.1	87,760	230
Asian/PI	75.5	12.8	11.7	138,321	280
Other	73.3	12.3	14.4	44,532	102
SCHOOL PERFORMANCE					
Much better than average	82.5	9.4	8.0	312,127	755
Better than average	77.1	12.2	10.6	495,905	1,182
Average and below	71.2	15.6	13.2	476,763	1,116

TABLE B.6: PROMOTIONAL ITEM STATUS (1996 TEEN CTS)

REGIONAL	Not Willing to Use (%)	Willing to Use (%)	Has Item (%)	Population Size (n)	Sample Size (n)
OVERALL	70.0	16.4	13.6	2,692,861	6,252
Los Angeles	68.1	17.3	14.5	785,872	1,078
San Diego	74.6	13.8	11.6	219,994	353
Orange	68.6	16.7	14.8	214,733	326
Santa Clara	75.3	15.6	9.1	125,169	263
San Bernadino	68.8	16.5	14.7	148,339	331
Alameda	73.6	13.3	13.0	102,089	234
Riverside	65.9	18.4	15.7	118,581	313
Sacramento	74.3	12.5	13.2	92,391	303
Contra Costa	72.7	16.0	11.3	71,455	285
San Francisco	74.9	14.0	11.0	41,434	99
San Mateo, Solano	71.0	15.8	13.2	83,660	301
Marin, Napa, Sonoma	74.8	12.0	13.1	56,412	306
Butte, Colusa, Del Norte, Glenn, etc.	70.1	16.4	13.5	90,675	343
San Luis Obisbo, Santa Barbara, Ventura	71.9	15.2	12.8	115,322	308
Amador,Alpine,Calaveras, El Dorado, etc	65.7	17.1	17.2	107,558	361
Monterey, San Benito, Santa Cruz	66.6	18.1	15.3	55,454	301
Fresno, Madera, Merced, Stanislaus	68.0	18.6	13.5	141,549	344
Imperial, Inyo, Kern, Kings, Mono, Tulare	69.1	19.1	11.8	122,174	403

TABLE B.7: SMOKING STATUS AMONG ADOLESCENTS (1990 TEEN CTS)

OVERALL	Daily	Smoked in Last 30 Days	Experimenter (not in last 30 days)	Susceptible Never Smoker	Nonsusceptible Never Smoker	Population Size	Sample Size
	(%) +/- 95% CI	(%) +/- 95% CI	(%) +/- 95% CI	(%) +/- 95% CI	(%) +/- 95% CI	(n)	(n)
TOTAL	2.3 +/- 0.6	6.9 +/- 0.8	27.1 +/- 2.1	13.1 +/- 1.5	50.7 +/- 1.9	2,342,099	5,040
SEX							
Male	2.4 +/- 0.9	7.4 +/- 1.4	29.5 +/- 2.6	12.9 +/- 1.8	47.8 +/- 2.7	1,157,850	2,549
Female	2.2 +/- 0.8	6.5 +/- 1.3	24.7 +/- 2.3	13.2 +/- 2.2	53.4 +/- 2.4	1,184,249	2,491
AGE							
12-13	0.2 +/- 0.2	3.5 +/- 1.6	15.3 +/- 2.5	18.2 +/- 2.7	62.9 +/- 3.1	801,622	1,706
14-15	1.6 +/- 0.7	6.3 +/- 1.4	28.0 +/- 3.7	14.3 +/- 2.6	49.7 +/- 2.8	798,891	1,697
16-17	5.3 +/- 1.5	11.3 +/- 2.0	38.8 +/- 3.3	6.1 +/- 1.9	38.5 +/- 2.9	741,586	1,637
RACE/ETHNICITY							
Hispanic	1.0 +/- 0.6	7.9 +/- 1.9	28.8 +/- 4.4	15.3 +/- 3.4	47.0 +/- 4.1	799,493	1,314
Non-Hispanic White	3.8 +/- 1.2	7.2 +/- 1.2	27.7 +/- 2.2	10.7 +/- 1.8	50.6 +/- 2.4	1,094,472	2,912
African-American		5.6 +/- 3.2	24.1 +/- 5.4	11.6 +/- 5.2	58.8 +/- 6.8	208,324	297
Asian/PI	1.5 +/- 1.7	3.3 +/- 2.1	20.2 +/- 5.2	18.0 +/- 4.6	57.0 +/- 5.7	199,489	404
Other	2.9 +/- 2.8	5.8 +/- 3.4	24.9 +/- 8.7	16.9 +/-11.9	49.5 +/-10.6	40,321	113
SCHOOL PERFORMANCE							
Much better than average	0.6 +/- 0.4	3.8 +/- 1.7	21.7 +/- 3.5	12.6 +/- 3.2	61.3 +/- 3.8	427,963	934
Better than average	1.6 +/- 0.8	5.0 +/- 1.2	26.1 +/- 3.4	12.0 +/- 2.3	55.4 +/- 3.3	876,246	1,891
Average and below	3.6 +/- 1.0	9.8 +/- 1.7	30.1 +/- 3.0	14.2 +/- 2.6	42.3 +/- 2.9	1,037,890	2,215
SEX Male							
AGE							
12-13	0.1 +/- 0.2	4.2 +/- 2.9	17.1 +/- 4.3	18.0 +/- 3.2	60.7 +/- 4.8	392,667	836
14-15	1.2 +/- 0.8	5.8 +/- 1.6	32.5 +/- 4.6	14.9 +/- 3.4	45.5 +/- 4.8	400,303	866
16-17	6.2 +/- 2.5	12.4 +/- 2.6	39.5 +/- 3.9	5.3 +/- 2.1	36.6 +/- 3.8	364,880	847
RACE/ETHNICITY							
Hispanic	1.2 +/- 0.8	9.7 +/- 3.0	32.9 +/- 6.1	14.2 +/- 4.8	42.0 +/- 5.5	396,336	664
Non-Hispanic White	3.8 +/- 1.6	6.6 +/- 1.6	29.6 +/- 3.2	11.3 +/- 2.3	48.7 +/- 3.9	548,096	1,473
African-American		6.5 +/- 5.9	21.7 +/- 8.1	8.0 +/- 5.7	63.8 +/- 10.4	93,671	149
Asian/PI	1.8 +/- 2.6	3.4 +/- 3.5	23.3 +/- 7.9	19.0 +/- 6.8	52.5 +/- 9.5	102,757	212
Other	3.1 +/- 5.0	7.0 +/- 6.7	25.4 +/-17.5	25.5 +/-22.1	39.1 +/-17.4	16,990	51
SCHOOL PERFORMANCE							
Much better than average	0.8 +/- 0.8	4.6 +/- 3.1	22.2 +/- 5.1	13.5 +/- 5.8	58.9 +/- 5.9	200,092	449
Better than average	0.9 +/- 0.6	4.4 +/- 1.5	29.6 +/- 5.1	11.7 +/- 3.1	53.4 +/- 5.1	425,972	928
Average and below	4.2 +/- 1.6	10.8 +/- 2.8	32.1 +/- 4.3	13.7 +/- 3.0	39.2 +/- 3.6	531,786	1,172
SEX Female							
AGE							
12-13	0.2 +/- 0.3	2.8 +/- 1.7	13.6 +/- 2.5	18.4 +/- 3.8	65.0 +/- 4.7	408,955	870
14-15	2.1 +/- 1.2	6.8 +/- 2.5	23.4 +/- 4.9	13.8 +/- 4.4	53.9 +/- 4.4	398,588	831
16-17	4.4 +/- 2.0	10.2 +/- 2.8	38.2 +/- 5.2	6.9 +/- 3.0	40.3 +/- 4.9	376,706	790
RACE/ETHNICITY							
Hispanic	0.8 +/- 0.8	6.1 +/- 2.3	24.8 +/- 5.5	16.3 +/- 4.4	52.0 +/- 5.4	403,157	650
Non-Hispanic White	3.8 +/- 1.5	7.8 +/- 2.0	25.8 +/- 3.1	10.1 +/- 2.3	52.6 +/- 4.3	546,376	1,439
African-American		4.8 +/- 4.4	26.1 +/- 9.9	14.4 +/- 7.5	54.7 +/- 12.2	114,653	148
Asian/PI	1.3 +/- 2.4	3.1 +/- 2.4	17.0 +/- 6.9	16.8 +/- 7.5	61.8 +/- 8.2	96,732	192
Other	2.7 +/- 3.9	5.0 +/- 4.9	24.7 +/-12.6	10.6 +/-11.1	57.1 +/-14.0	23,331	62
SCHOOL PERFORMANCE							
Much better than average	0.5 +/- 0.5	3.1 +/- 1.4	21.3 +/- 4.7	11.7 +/- 3.4	63.4 +/- 5.2	227,871	485
Better than average	2.2 +/- 1.6	5.6 +/- 1.9	22.8 +/- 3.2	12.3 +/- 3.5	57.2 +/- 3.7	450,274	963
Average and below	3.0 +/- 1.3	8.8 +/- 2.4	28.0 +/- 3.9	14.7 +/- 3.6	45.6 +/- 3.9	506,104	1,043

TABLE 7: SMOKING STATUS AMONG ADOLESCENTS (1990 TEEN CTS)

REGIONAL	Daily (%) +/- 95% CI	Smoked in Last 30 Days (%) +/- 95% CI	Experimenter (not in last 30 days) (%) +/- 95% CI	Susceptible Never Smoker (%) +/- 95% CI	Nonsusceptible Never Smoker (%) +/- 95% CI	Population Size (n)	Sample Size (n)
OVERALL	2.3 +/- 0.6	6.9 +/- 0.8	27.1 +/- 2.1	13.1 +/- 1.5	50.7 +/- 1.9	2,342,099	5,040
Los Angeles	1.2 +/- 0.9	6.1 +/- 2.3	28.0 +/- 5.0	14.2 +/- 3.9	50.5 +/- 5.1	697,508	486
San Diego	1.7 +/- 2.1	6.0 +/- 2.7	33.6 +/- 7.3	10.3 +/- 5.0	48.5 +/- 7.8	196,601	257
Orange	1.0 +/- 1.5	9.8 +/- 4.2	24.7 +/- 5.7	13.6 +/- 6.0	50.9 +/- 6.5	189,724	266
Santa Clara	2.0 +/- 1.6	6.7 +/- 2.6	21.9 +/- 6.9	14.7 +/- 6.1	54.7 +/- 6.7	117,856	239
San Bernadino	5.0 +/- 3.1	7.7 +/- 3.2	25.6 +/- 5.3	12.9 +/- 4.5	48.8 +/- 4.9	111,624	390
Alameda	5.6 +/- 4.1	6.4 +/- 3.6	25.7 +/- 6.9	10.9 +/- 3.9	51.3 +/- 8.3	100,649	230
Riverside	2.3 +/- 1.8	8.1 +/- 2.9	26.3 +/- 6.1	10.8 +/- 3.9	52.5 +/- 6.7	92,098	305
Sacramento	1.2 +/- 1.6	6.1 +/- 4.0	21.9 +/- 7.0	9.2 +/- 3.7	61.6 +/- 7.6	81,959	247
Contra Costa	3.2 +/- 2.4	5.0 +/- 2.8	24.6 +/- 6.2	17.0 +/- 5.6	50.1 +/- 5.7	63,253	290
San Francisco	0.8 +/- 1.6	4.7 +/- 3.5	28.4 +/- 7.5	12.9 +/- 6.3	53.1 +/- 8.6	56,984	138
San Mateo, Solano	4.6 +/- 4.1	4.8 +/- 2.6	25.0 +/- 5.7	13.6 +/- 4.9	51.9 +/- 5.8	77,927	241
Marin, Napa, Sonoma	2.2 +/- 2.1	8.7 +/- 4.5	19.0 +/- 7.0	14.0 +/- 6.2	56.2 +/- 9.3	57,383	193
Butte, Colusa, Del Norte, Glenn, etc.	3.9 +/- 2.7	10.7 +/- 4.1	22.4 +/- 5.3	13.2 +/- 3.7	49.7 +/- 6.3	74,624	279
San Luis Obisbo, Santa Barbara, Ventura	3.4 +/- 2.3	8.7 +/- 3.5	27.5 +/- 6.7	11.4 +/- 4.7	49.1 +/- 9.0	98,831	263
Amador, Alpine, Calaveras, El Dorado,etc.	4.1 +/- 3.0	8.9 +/- 4.4	28.4 +/- 6.2	12.5 +/- 4.9	46.1 +/- 7.1	87,344	259
Monterey, San Benito, Santa Cruz	1.8 +/- 1.6	10.7 +/- 5.3	29.7 +/- 6.7	13.6 +/- 4.2	44.2 +/- 8.0	48,944	253
Fresno, Madera, Merced, Stanislaus	3.0 +/- 2.0	5.0 +/- 3.2	31.0 +/- 5.8	15.4 +/- 3.8	45.6 +/- 6.4	102,660	328
Imperial, Inyo, Kern, Kings, Mono, Tulare	2.5 +/- 1.9	5.3 +/- 2.9	30.1 +/- 4.6	11.1 +/- 3.4	51.0 +/- 4.7	86,130	376

TABLE B.7: SMOKING STATUS AMONG ADOLESCENTS (1992 TEEN CTS)

OVERALL	Daily	Smoked in Last 30 Days	Experimenter (not in last 30 days)	Susceptible Never Smoker	Nonsusceptible Never Smoker	Population Size	Sample Size
	(%) +/- 95% CI	(%) +/- 95% CI	(%) +/- 95% CI	(%) +/- 95% CI	(%) +/- 95% CI	(n)	(n)
TOTAL	1.9 +/- 0.9	6.8 +/- 1.6	26.3 +/- 2.1	16.8 +/- 1.7	48.1 +/- 2.4	2,344,490	1,789
SEX							
Male	1.2 +/- 0.7	6.8 +/- 2.1	27.2 +/- 3.5	18.1 +/- 3.1	46.7 +/- 3.8	1,158,999	882
Female	2.6 +/- 1.6	6.8 +/- 1.9	25.4 +/- 3.4	15.6 +/- 2.5	49.5 +/- 3.9	1,185,491	907
AGE							
12-13		1.5 +/- 1.0	13.6 +/- 3.2	22.6 +/- 4.1	62.3 +/- 4.8	807,464	625
14-15	0.7 +/- 0.7	9.1 +/- 3.3	27.5 +/- 4.2	18.1 +/- 3.4	44.6 +/- 5.6	797,854	611
16-17	5.4 +/- 2.7	10.2 +/- 3.5	38.9 +/- 4.1	9.1 +/- 2.9	36.4 +/- 5.0	739,172	553
RACE/ETHNICITY							
Hispanic	1.0 +/- 0.7	6.9 +/- 2.8	29.2 +/- 4.5	23.0 +/- 4.3	39.8 +/- 4.7	792,627	550
Non-Hispanic White	3.1 +/- 1.9	7.1 +/- 2.1	26.1 +/- 3.8	13.9 +/- 2.8	49.8 +/- 4.3	1,095,598	932
African-American	1.0 +/- 1.4	5.0 +/- 7.8	24.6 +/- 7.7	11.8 +/- 7.5	57.6 +/- 9.1	208,540	117
Asian/PI		5.1 +/- 5.1	19.0 +/- 5.9	16.1 +/- 6.0	59.8 +/- 8.2	199,094	147
Other	0.6 +/- 1.2	13.7 +/-11.9	23.1 +/-13.7	5.4 +/- 6.7	57.2 +/-15.0	48,631	43
SCHOOL PERFORMANCE							
Much better than average	0.5 +/- 0.7	2.3 +/- 1.5	22.5 +/- 7.1	15.1 +/- 4.2	59.6 +/- 7.4	425,204	332
Better than average	1.5 +/- 1.5	4.7 +/- 2.6	24.2 +/- 3.4	15.7 +/- 3.2	53.8 +/- 4.5	838,664	638
Average and below	2.8 +/- 1.6	10.3 +/- 2.8	29.4 +/- 3.1	18.4 +/- 3.1	39.2 +/- 3.7	1,080,622	819
SEX Male							
AGE							
12-13		1.4 +/- 1.5	14.7 +/- 5.0	24.2 +/- 5.4	59.7 +/- 6.4	399,645	313
14-15	0.5 +/- 0.7	9.0 +/- 5.3	29.6 +/- 5.6	18.6 +/- 5.4	42.3 +/- 7.6	400,744	298
16-17	3.3 +/- 2.0	10.4 +/- 3.9	38.5 +/- 7.7	10.7 +/- 4.2	37.1 +/- 8.2	358,610	271
RACE/ETHNICITY							
Hispanic	0.9 +/- 1.0	7.4 +/- 3.5	31.9 +/- 6.4	23.8 +/- 6.0	36.1 +/- 6.2	408,568	285
Non-Hispanic White	1.9 +/- 1.4	7.8 +/- 2.9	25.6 +/- 5.7	14.9 +/- 4.6	49.7 +/- 6.7	523,964	442
African-American		6.8 +/- 14.7	22.6 +/- 11.5	11.1 +/- 10.1	59.5 +/- 14.4	105,390	60
Asian/PI			21.4 +/1 9	21.3 +/- 10.2	57.2 +/- 10.7	94,212	73
Other	1.0 +/- 2.1	2.8 +/- 5.7	25.8 +/-22.1	8.1 +/-11.7	62.2 +/-22.2	26,865	22
SCHOOL PERFORMANCE							
Much better than average	0.6 +/- 1.3	2.5 +/- 2.4	20.2 +/- 9.8	19.8 +/- 8.0	56.9 +/-11.2	194,492	151
Better than average	0.9 +/- 1.1	6.5 +/- 4.3	24.8 +/- 4.9	14.5 +/- 4.7	53.3 +/- 6.2	405,972	302
Average and below	1.6 +/- 1.3	8.6 +/- 2.8	31.4 +/- 5.1	20.1 +/- 4.5	38.3 +/- 5.4	558,535	429
SEX Female							
AGE							
12-13		1.6 +/- 1.4	12.6 +/- 3.7	21.1 +/- 5.9	64.8 +/- 6.6	407,819	312
14-15	0.8 +/- 1.1	9.3 +/- 3.5	25.4 +/- 7.3	17.6 +/- 5.2	46.9 +/- 7.3	397,110	313
16-17	7.3 +/- 4.6	10.0 +/- 5.1	39.2 +/- 6.2	7.7 +/- 3.5	35.8 +/- 7.5	380,562	282
RACE/ETHNICITY							
Hispanic	1.2 +/- 1.2	6.5 +/- 3.9	26.2 +/- 6.5	22.2 +/- 5.1	43.9 +/- 7.0	384,059	265
Non-Hispanic White	4.3 +/- 3.2	6.5 +/- 2.4	26.5 +/- 5.9	13.0 +/- 3.3	49.8 +/- 5.7	571,634	490
African-American	2.0 +/- 2.9	3.2 +/- 4.0	26.6 +/-12.5	12.5 +/-11.7	55.6 +/-13.4	103,150	57
Asian/PI		9.7 +/- 9.4	16.8 +/- 9.2	11.5 +/- 7.3	62.0 +/- 12.8	104,882	74
Other		27.2 +/- 23.0	19.7 +/- 17.5	2.0 +/- 4.2	51.1 +/- 21.9	21,766	21
SCHOOL PERFORMANCE							
Much better than average	0.4 +/- 0.9	2.2 +/- 1.9	24.4 +/-10.1	11.1 +/- 4.3	61.8 +/-10.1	230,712	181
Better than average	2.1 +/- 2.9	3.0 +/- 1.9	23.7 +/- 5.3	16.9 +/- 4.2	54.3 +/- 6.7	432,692	336
Average and below	4.0 +/- 2.6	12.1 +/- 4.3	27.3 +/- 5.4	16.5 +/- 4.5	40.1 +/- 5.8	522,087	390

Regional data not available for 1992

TABLE B.7: SMOKING STATUS AMONG ADOLESCENTS (1993 TEEN CTS)

OVERALL	Daily	Smoked in Last 30 Days	Experimenter (not in last 30 days)	Susceptible Never Smoker	Nonsusceptible Never Smoker	Population Size	Sample Size
	(%) +/- 95% CI	(%) +/- 95% CI	(%) +/- 95% CI	(%) +/- 95% CI	(%) +/- 95% CI	(n)	(n)
TOTAL	2.3 +/- 0.4	6.9 +/- 1.0	25.7 +/- 1.9	16.5 +/- 1.3	48.6 +/- 1.9	2,344,485	5,531
SEX							
Male	2.6 +/- 0.6	7.5 +/- 1.6	27.5 +/- 2.9	17.3 +/- 2.0	45.1 +/- 2.8	1,161,032	2,818
Female	2.1 +/- 0.7	6.2 +/- 1.2	23.9 +/- 2.0	15.8 +/- 1.9	52.0 +/- 2.5	1,183,453	2,713
AGE							
12-13	0.1 +/- 0.1	3.0 +/- 1.0	13.0 +/- 1.9	21.7 +/- 2.7	62.2 +/- 3.1	838,103	1,921
14-15	1.6 +/- 0.6	7.9 +/- 1.9	29.7 +/- 2.9	16.8 +/- 2.3	43.9 +/- 3.0	779,043	1,873
16-17	5.7 +/- 1.4	10.2 +/- 2.1	35.9 +/- 3.8	10.2 +/- 2.4	38.0 +/- 3.3	727,339	1,737
RACE/ETHNICITY							
Hispanic	1.1 +/- 0.5	6.0 +/- 1.8	27.8 +/- 4.0	20.8 +/- 3.3	44.4 +/- 4.3	772,956	1,431
Non-Hispanic White	3.3 +/- 0.7	8.4 +/- 1.1	26.6 +/- 2.0	13.6 +/- 1.4	48.1 +/- 2.2	1,135,006	3,234
African-American	0.7 +/- 1.1	4.1 +/- 3.1	22.1 +/- 5.9	13.8 +/- 5.1	59.4 +/- 6.2	208,932	323
Asian/PI	2.6 +/- 3.3	2.8 +/- 2.2	16.7 +/- 4.4	17.9 +/- 4.6	60.0 +/- 6.6	188,805	443
Other	5.0 +/- 4.5	14.1 +/-11.4	21.6 +/-10.4	24.7 +/-11.7	34.7 +/-15.4	38,786	100
SCHOOL PERFORMANCE							
Much better than average	0.9 +/- 0.8	3.0 +/- 1.3	18.0 +/- 2.7	14.5 +/- 3.4	63.7 +/- 4.7	430,306	1,065
Better than average	1.7 +/- 0.9	5.2 +/- 1.2	25.4 +/- 3.3	15.3 +/- 1.8	52.4 +/- 3.8	861,056	2,068
Average and below	3.4 +/- 0.7	9.8 +/- 1.8	29.1 +/- 2.7	18.3 +/- 2.2	39.4 +/- 2.8	1,053,123	2,398
SEX Male							
AGE							
12-13	0.1 +/- 0.2	3.4 +/- 1.4	15.2 +/- 3.1	24.4 +/- 4.2	56.9 +/- 4.4	408,933	961
14-15	1.6 +/- 1.0	8.2 +/- 3.1	29.5 +/- 4.2	17.1 +/- 3.3	43.7 +/- 4.7	389,936	971
16-17	6.4 +/- 1.8	11.6 +/- 3.6	39.5 +/- 5.2	9.3 +/- 2.5	33.3 +/- 5.1	362,163	886
RACE/ETHNICITY							
Hispanic	1.8 +/- 1.1	6.3 +/- 2.2	30.0 +/- 5.7	22.7 +/- 4.6	39.2 +/- 5.4	382,130	714
Non-Hispanic White	3.5 +/- 1.1	9.0 +/- 2.0	27.1 +/- 3.0	13.3 +/- 2.1	47.1 +/- 3.5	561,905	1,662
African-American	0.4 +/- 0.8	5.6 +/- 4.7	26.6 +/- 9.4	10.5 +/- 6.0	56.9 +/- 9.5	103,704	166
Asian/PI	2.1 +/- 1.7	3.1 +/- 3.5	22.9 +/- 6.9	22.3 +/- 7.3	49.6 +/- 7.9	94,217	226
Other	5.5 +/- 7.8	20.0 +/-16.1	18.3 +/-11.4	37.4 +/-16.9	18.7 +/-14.4	19,076	50
SCHOOL PERFORMANCE							
Much better than average	1.2 +/- 1.4	3.6 +/- 2.3	18.6 +/- 4.4	17.7 +/- 5.2	58.9 +/- 6.1	197,636	499
Better than average	1.7 +/- 0.9	6.0 +/- 2.2	29.2 +/- 5.4	13.3 +/- 2.5	49.7 +/- 5.2	408,023	1,016
Average and below	3.7 +/- 1.0	10.0 +/- 2.5	29.5 +/- 3.6	20.0 +/- 3.3	36.8 +/- 3.9	555,373	1,303
SEX Female							
AGE							
12-13		2.7 +/- 1.4	11.0 +/- 2.3	19.1 +/- 3.0	67.2 +/- 4.3	429,170	960
14-15	1.6 +/- 0.9	7.7 +/- 2.5	30.0 +/- 3.6	16.5 +/- 3.5	44.1 +/- 4.7	389,107	902
16-17	5.0 +/- 2.0	8.8 +/- 2.5	32.4 +/- 4.4	11.0 +/- 3.5	42.7 +/- 4.1	365,176	851
RACE/ETHNICITY							
Hispanic	0.5 +/- 0.4	5.6 +/- 2.3	25.6 +/- 4.6	18.9 +/- 4.2	49.5 +/- 5.9	390,826	717
Non-Hispanic White	3.1 +/- 0.9	7.9 +/- 1.7	26.0 +/- 2.5	13.9 +/- 2.1	49.0 +/- 3.0	573,101	1,572
African-American	1.0 +/- 2.0	2.6 +/- 3.6	17.7 +/- 6.6	17.0 +/- 8.9	61.8 +/- 8.8	105,228	157
Asian/PI	3.2 +/- 6.0	2.4 +/- 2.8	10.4 +/- 4.4	13.6 +/- 6.2	70.4 +/- 9.2	94,588	217
Other	4.4 +/- 5.1	8.3 +/-10.0	24.7 +/-18.2	12.4 +/-10.1	50.2 +/-22.6	19,710	50
SCHOOL PERFORMANCE							
Much better than average	0.7 +/- 0.6	2.4 +/- 1.6	17.4 +/- 3.9	11.8 +/- 4.1	67.7 +/- 6.4	232,670	566
Better than average	1.7 +/- 1.4	4.5 +/- 1.4	22.0 +/- 3.2	17.1 +/- 2.7	54.7 +/- 4.1	453,033	1,052
Average and below	3.1 +/- 1.1	9.6 +/- 2.4	28.6 +/- 3.6	16.4 +/- 3.1	42.3 +/- 4.3	497,750	1,095

TABLE B.7: SMOKING STATUS AMONG ADOLESCENTS (1993 TEEN CTS)

REGIONAL	Daily (%) +/- 95% CI	Smoked in Last 30 Days (%) +/- 95% CI	Experi-menter (not in last 30 days) (%) +/- 95% CI	Suscep-tible Never Smoker (%) +/- 95% CI	Nonsusceptible Never Smoker (%) +/- 95% CI	Population Size (n)	Sample Size (n)
OVERALL	2.3 +/- 0.4	6.9 +/- 1.0	25.7 +/- 1.9	16.5 +/- 1.3	48.6 +/- 1.9	2,344,485	5,531
Los Angeles	1.4 +/- 1.1	5.9 +/- 2.1	22.4 +/- 4.4	19.2 +/- 3.3	51.1 +/- 4.4	698,249	546
San Diego	2.5 +/- 2.3	7.3 +/- 3.7	30.3 +/- 6.9	13.5 +/- 4.1	46.5 +/- 8.5	196,801	290
Orange	1.0 +/- 1.2	7.9 +/- 3.6	28.7 +/- 7.5	17.7 +/- 4.9	44.7 +/- 7.8	189,903	242
Santa Clara	2.8 +/- 1.8	6.9 +/- 3.9	26.2 +/- 5.7	18.5 +/- 5.3	45.7 +/- 6.6	117,969	280
San Bernadino	3.8 +/- 2.5	6.5 +/- 3.2	29.9 +/- 6.4	12.8 +/- 3.7	46.9 +/- 6.7	111,744	399
Alameda	2.7 +/- 2.2	5.4 +/- 3.7	22.6 +/- 5.8	13.7 +/- 5.1	55.6 +/- 8.4	100,775	247
Riverside	2.9 +/- 2.2	4.7 +/- 2.2	24.8 +/- 4.8	17.9 +/- 5.4	49.8 +/- 7.1	92,197	359
Sacramento	1.9 +/- 2.1	6.4 +/- 3.3	26.5 +/- 7.4	14.1 +/- 4.2	51.0 +/- 8.1	82,017	306
Contra Costa	2.5 +/- 1.7	6.2 +/- 3.5	22.6 +/- 5.5	18.6 +/- 6.9	50.1 +/- 6.9	63,325	279
San Francisco	1.8 +/- 2.7	5.5 +/- 4.6	29.3 +/-11.6	21.4 +/- 6.2	42.0 +/-12.9	57,034	101
San Mateo, Solano	3.9 +/- 3.5	8.0 +/- 3.8	26.2 +/- 7.4	15.6 +/- 6.9	46.4 +/- 7.5	77,992	236
Marin, Napa, Sonoma	2.3 +/- 1.9	15.2 +/- 5.1	29.1 +/- 6.4	19.4 +/- 5.1	34.0 +/- 5.7	57,432	239
Butte, Colusa, Del Norte, Glenn, etc.	3.9 +/- 3.1	7.7 +/- 3.0	26.2 +/- 5.8	12.4 +/- 4.4	49.8 +/- 6.5	74,695	321
San Luis Obisbo,	3.9 +/- 2.3	9.6 +/- 4.3	26.2 +/- 4.2	15.1 +/- 4.2	45.3 +/- 6.7	98,929	315
Santa Barbara, Ventura Amador,Alpine, Calaveras El Dorado, etc.	3.2 +/- 1.9	5.0 +/- 2.3	26.9 +/- 5.1	13.4 +/- 4.1	51.4 +/- 5.2	87,431	337
Monterey, San Benito, Santa Cruz,	3.6 +/- 2.2	9.3 +/- 4.5	29.2 +/- 5.9	13.8 +/- 3.3	44.2 +/- 7.1	49,013	304
Fresno, Madera, Merced, Stanislaus	3.2 +/- 2.3	7.9 +/- 2.8	25.3 +/- 5.3	12.9 +/- 3.6	50.8 +/- 5.1	102,768	334
Imperial, Inyo, Kern, Kings, Mono, Tulare	1.8 +/- 1.5	7.1 +/- 3.6	26.1 +/- 5.6	13.8 +/- 2.8	51.2 +/- 6.2	86,211	396

TABLE B.7: SMOKING STATUS AMONG ADOLESCENTS (1996 TEEN CTS)

OVERALL	Daily (%) +/- 95% CI	Smoked in Last 30 Days (%) +/- 95% CI	Experimenter (not in last 30 days) (%) +/- 95% CI	Susceptible Never Smoker (%) +/- 95% CI	Nonsusceptible Never Smoker (%) +/- 95% CI	Population Size (n)	Sample Size (n)
TOTAL	2.7 +/- 0.5	9.3 +/- 0.9	22.2 +/- 1.3	21.7 +/- 1.0	44.0 +/- 1.3	2,692,861	6,252
SEX							
Male	2.7 +/- 0.7	10.0 +/- 1.2	23.4 +/- 2.0	21.4 +/- 1.6	42.5 +/- 2.1	1,408,066	3,199
Female	2.7 +/- 0.6	8.6 +/- 1.2	20.9 +/- 1.4	22.1 +/- 1.4	45.7 +/- 1.9	1,284,795	3,053
AGE							
12-13	0.1 +/- 0.1	3.2 +/- 0.9	11.3 +/- 1.7	29.7 +/- 2.3	55.7 +/- 2.1	883,489	2,086
14-15	1.8 +/- 0.7	9.0 +/- 1.2	24.6 +/- 1.9	23.7 +/- 2.2	40.9 +/- 2.3	945,535	2,200
16-17	6.3 +/- 1.2	15.9 +/- 2.0	30.8 +/- 2.5	11.5 +/- 1.6	35.5 +/- 2.4	863,837	1,966
RACE/ETHNICITY							
Hispanic	1.7 +/- 0.8	9.1 +/- 1.6	21.9 +/- 2.1	27.8 +/- 2.0	39.5 +/- 2.7	865,713	1,585
Non-Hispanic White	3.8 +/- 0.7	10.6 +/- 1.2	23.2 +/- 1.8	17.0 +/- 1.2	45.5 +/- 1.9	1,264,844	3,426
African-American	0.8 +/- 0.8	5.4 +/- 2.5	23.4 +/- 4.3	20.0 +/- 3.6	50.3 +/- 4.7	173,295	442
Asian/PI	1.7 +/- 1.1	7.1 +/- 2.2	17.4 +/- 3.7	25.6 +/- 4.1	48.2 +/- 4.7	293,830	585
Other	4.6 +/- 3.4	8.1 +/- 4.7	24.1 +/- 7.2	21.3 +/- 6.3	42.0 +/- 8.7	95,179	214
SCHOOL PERFORMANCE							
Much better than average	1.4 +/- 0.7	4.5 +/- 1.3	14.9 +/- 2.1	20.8 +/- 2.6	58.5 +/- 3.2	610,321	1,453
Better than average	2.3 +/- 0.7	8.5 +/- 1.3	22.5 +/- 2.0	21.2 +/- 1.4	45.6 +/- 2.1	1,008,739	2,396
Average and below	3.9 +/- 0.8	12.8 +/- 1.5	26.1 +/- 2.2	22.9 +/- 1.8	34.4 +/- 1.9	1,073,801	2,403
SEX Male							
AGE							
12-13	0.1 +/- 0.2	4.1 +/- 1.3	12.8 +/- 2.8	28.5 +/- 3.1	54.5 +/- 3.4	460,008	1,051
14-15	1.8 +/- 0.8	7.4 +/- 2.0	26.5 +/- 2.7	25.1 +/- 3.4	39.2 +/- 3.6	492,765	1,132
16-17	6.2 +/- 1.8	18.7 +/- 2.9	30.9 +/- 3.8	10.3 +/- 2.1	34.0 +/- 3.6	455,293	1,016
RACE/ETHNICITY							
Hispanic	2.1 +/- 1.2	10.9 +/- 2.4	23.8 +/- 3.3	26.4 +/- 3.5	36.8 +/- 3.9	442,110	788
Non-Hispanic White	3.1 +/- 0.8	10.4 +/- 1.7	23.5 +/- 2.4	17.9 +/- 1.9	45.1 +/- 2.7	674,265	1,782
African-American	0.3 +/- 0.6	4.9 +/- 2.9	24.6 +/- 6.2	21.2 +/- 5.6	49.0 +/- 6.4	85,535	212
Asian/PI	2.6 +/- 2.0	7.8 +/- 3.4	19.8 +/- 6.1	23.4 +/- 5.7	46.5 +/- 6.3	155,509	305
Other	5.8 +/- 5.0	11.8 +/- 7.7	29.1 +/-10.4	19.6 +/- 7.0	33.7 +/-11.1	50,647	112
SCHOOL PERFORMANCE							
Much better than average	1.3 +/- 1.1	4.1 +/- 1.5	14.5 +/- 3.2	23.5 +/- 3.7	56.5 +/- 4.4	298,194	698
Better than average	2.3 +/- 0.9	8.7 +/- 1.7	23.9 +/- 3.2	20.7 +/- 2.5	44.4 +/- 3.0	512,834	1,214
Average and below	3.7 +/- 1.1	13.9 +/- 1.9	27.5 +/- 3.1	21.1 +/- 2.7	33.8 +/- 2.9	597,038	1,287
SEX Female							
AGE							
12-13	0.2 +/- 0.3	2.2 +/- 1.1	9.6 +/- 1.8	30.9 +/- 3.2	57.1 +/- 3.3	423,481	1,035
14-15	1.8 +/- 0.8	10.8 +/- 2.1	22.5 +/- 2.4	22.1 +/- 3.0	42.7 +/- 3.6	452,770	1,068
16-17	6.4 +/- 1.6	12.7 +/- 2.3	30.6 +/- 2.9	12.9 +/- 2.4	37.3 +/- 3.0	408,544	950
RACE/ETHNICITY							
Hispanic	1.2 +/- 0.8	7.3 +/- 1.9	19.9 +/- 3.0	29.2 +/- 2.8	42.3 +/- 4.1	423,603	797
Non-Hispanic White	4.5 +/- 1.1	10.8 +/- 1.7	22.9 +/- 2.3	16.0 +/- 1.7	45.9 +/- 3.1	590,579	1,644
African-American	1.4 +/- 1.7	5.9 +/- 4.1	22.3 +/- 4.9	18.8 +/- 5.1	51.6 +/- 6.8	87,760	230
Asian/PI	0.8 +/- 1.0	6.4 +/- 3.5	14.7 +/- 3.7	28.1 +/- 5.8	50.1 +/- 7.3	138,321	280
Other	3.1 +/- 3.4	3.8 +/- 4.2	18.4 +/- 8.8	23.3 +/-11.1	51.4 +/-12.4	44,532	102
SCHOOL PERFORMANCE							
Much better than average	1.4 +/- 0.9	4.8 +/- 1.8	15.3 +/- 2.9	18.2 +/- 3.2	60.3 +/- 4.9	312,127	755
Better than average	2.3 +/- 1.0	8.2 +/- 1.8	21.0 +/- 2.5	21.6 +/- 2.2	46.9 +/- 2.7	495,905	1,182
Average and below	4.1 +/- 1.1	11.5 +/- 2.1	24.3 +/- 2.8	25.1 +/- 2.5	35.0 +/- 2.8	476,763	1,116

TABLE B.7: SMOKING STATUS AMONG ADOLESCENTS (1996 TEEN CTS)

REGIONAL	Daily (%) +/- 95% CI	Smoked in Last 30 Days (%) +/- 95% CI	Experimenter (not in last 30 days) (%) +/- 95% CI	Susceptible Never Smoker (%) +/- 95% CI	Nonsusceptible Never Smoker (%) +/- 95% CI	Population Size (n)	Sample Size (n)
OVERALL	2.7 +/- 0.5	9.3 +/- 0.9	22.2 +/- 1.3	21.7 +/- 1.0	44.0 +/- 1.3	2,692,861	6,252
Los Angeles	1.6 +/- 0.7	8.7 +/- 1.8	22.4 +/- 2.7	24.5 +/- 2.6	42.7 +/- 3.2	785,872	1,078
San Diego	1.4 +/- 1.3	7.1 +/- 3.2	20.5 +/- 4.9	24.5 +/- 4.5	46.5 +/- 5.5	219,994	353
Orange	3.6 +/- 2.5	12.6 +/- 4.1	16.5 +/- 5.2	17.3 +/- 4.5	50.0 +/- 6.0	214,733	326
Santa Clara	2.4 +/- 1.8	9.0 +/- 4.2	18.8 +/- 5.2	22.2 +/- 6.0	47.6 +/- 6.7	125,169	263
San Bernadino	4.5 +/- 2.2	8.3 +/- 3.6	24.1 +/- 4.8	20.2 +/- 4.6	43.0 +/- 5.6	148,339	331
Alameda	2.2 +/- 2.2	9.5 +/- 3.8	19.4 +/- 6.6	26.4 +/- 6.2	42.4 +/- 7.5	102,089	234
Riverside	4.5 +/- 2.8	8.8 +/- 2.9	23.3 +/- 5.7	21.5 +/- 5.1	41.9 +/- 6.8	118,581	313
Sacramento	4.4 +/- 3.0	10.7 +/- 3.9	20.4 +/- 4.4	15.7 +/- 4.8	48.9 +/- 6.4	92,391	303
Contra Costa	2.8 +/- 2.0	9.2 +/- 4.0	25.3 +/- 6.5	18.4 +/- 5.3	44.4 +/- 7.4	71,455	285
San Francisco	2.2 +/- 3.1	7.1 +/- 5.6	19.0 +/- 8.9	25.3 +/- 8.3	46.5 +/-11.9	41,434	99
San Mateo, Solano	3.6 +/- 2.2	8.1 +/- 3.7	27.2 +/- 6.0	18.0 +/- 4.7	43.1 +/- 6.6	83,660	301
Marin, Napa, Sonoma	3.2 +/- 1.9	14.4 +/- 4.4	29.1 +/- 5.4	17.2 +/- 3.9	36.1 +/- 6.0	56,412	306
Butte, Colusa, Del Norte, Glenn, etc.	4.2 +/- 2.1	12.2 +/- 4.2	22.3 +/- 4.7	20.0 +/- 4.5	41.2 +/- 6.9	90,675	343
San Luis Obisbo, Santa Barbara, Ventura	2.9 +/- 2.0	8.0 +/- 3.1	26.9 +/- 5.6	20.4 +/- 5.6	41.8 +/- 5.6	115,322	308
Amador,Alpine, Calaveras, El Dorado, etc.	2.9 +/- 2.1	11.8 +/- 4.0	25.3 +/- 4.2	16.5 +/- 3.9	43.6 +/- 4.6	107,558	361
Monterey, San Benito, Santa Cruz	2.0 +/- 1.6	6.9 +/- 3.3	27.8 +/- 4.9	22.3 +/- 3.7	41.0 +/- 6.5	55,454	301
Fresno, Madera, Merced, Stanislaus	4.8 +/- 2.7	11.4 +/- 3.1	22.0 +/- 4.6	19.6 +/- 4.3	42.2 +/- 5.5	141,549	344
Imperial, Inyo, Kern, Kings, Mono, Tulare	2.0 +/- 1.4	6.7 +/- 3.2	20.9 +/- 3.7	24.1 +/- 4.6	46.3 +/- 5.1	122,174	403

TABLE B.8: AVERAGE DAILY CONSUMPTION FOR ALL SMOKERS[1] (1990 ADULT CTS)

OVERALL	Cigarettes Per Day					
	0-4 (%)	5-14 (%)	15-24 (%)	25+ (%)	Population Size (n)	Sample Size (n)
TOTAL	16.4	27.1	37.4	19.1	4,499,152	9,263
SEX						
Male	15.7	24.0	37.8	22.5	2,507,356	4,584
Female	17.3	30.9	36.9	14.8	1,991,796	4,679
AGE						
18-24	25.4	35.9	32.3	6.3	691,574	1,346
25-44	17.4	26.9	37.7	18.0	2,353,247	4,766
45-64	10.7	22.3	39.0	28.0	1,120,367	2,432
65+	10.5	26.0	40.5	22.9	333,964	719
RACE/ETHNICITY						
Hispanic	36.6	37.1	20.8	5.6	799,156	1,027
Non-Hispanic White	10.1	21.3	43.9	24.7	2,931,483	7,120
African-American	21.4	43.6	26.5	8.4	369,997	533
Asian/PI	21.1	39.1	32.5	7.4	260,584	369
Other	12.8	23.8	35.1	28.3	137,932	214
EDUCATION						
<12	17.0	30.0	34.4	18.6	1,231,903	1,303
12	14.9	26.6	40.0	18.5	1,675,043	3,499
13-15	15.9	26.2	38.8	19.2	1,032,141	3,000
16+	20.9	23.6	33.8	21.7	560,065	1,461
SEX Male						
AGE						
18-24	24.9	33.3	33.8	8.0	417,010	733
25-44	16.3	23.3	39.3	21.1	1,338,757	2,431
45-64	9.3	18.9	37.4	34.4	588,912	1,137
65+	10.9	24.9	37.2	27.1	162,677	283
RACE/ETHNICITY						
Hispanic	32.2	35.8	24.7	7.4	518,399	603
Non-Hispanic White	9.0	16.8	44.2	29.9	1,542,104	3,376
African-American	21.7	38.7	27.7	11.8	189,587	260
Asian/PI	21.2	40.2	30.6	8.0	181,286	242
Other	11.7	15.0	39.1	34.3	75,980	103
EDUCATION						
<12	16.7	26.8	34.8	21.7	722,595	684
12	12.9	23.7	42.0	21.4	844,008	1,589
13-15	15.9	23.5	37.4	23.2	588,349	1,477
16+	20.3	19.9	34.4	25.4	352,404	834
SEX Female						
AGE						
18-24	24.9	33.3	33.8	8.0	417,010	733
25-44	16.3	23.3	39.3	21.1	1,338,757	2,431
45-64	9.3	18.9	37.4	34.4	588,912	1,137
65+	10.9	24.9	37.2	27.1	162,677	283
RACE/ETHNICITY						
Hispanic	32.2	35.8	24.7	7.4	518,399	603
Non-Hispanic White	9.0	16.8	44.2	29.9	1,542,104	3,376
African-American	21.7	38.7	27.7	11.8	189,587	260
Asian/PI	21.2	40.2	30.6	8.0	181,286	242
Other	11.7	15.0	39.1	34.3	75,980	103
EDUCATION						
<12	16.7	26.8	34.8	21.7	722,595	684
12	12.9	23.7	42.0	21.4	844,008	1,589
13-15	15.9	23.5	37.4	23.2	588,349	1,477
16+	20.3	19.9	34.4	25.4	352,404	834

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

TABLE B.8: AVERAGE DAILY CONSUMPTION FOR ALL SMOKERS[1] (1990 ADULT CTS)

REGIONAL	Cigarettes Per Day				Population Size	Sample Size
	0-4 (%)	5-14 (%)	15-24 (%)	25+ (%)	(n)	(n)
OVERALL	16.4	27.1	37.4	19.1	4,499,152	9,263
Los Angeles	23.1	31.6	31.1	14.2	1,303,802	930
San Diego	13.8	27.9	37.1	21.2	370,919	530
Orange	21.9	24.1	34.7	19.2	315,640	412
Santa Clara	14.2	27.2	38.8	19.9	194,240	412
San Bernadino	10.6	24.5	42.8	22	269,574	674
Alameda	15.7	28.3	37.9	18.1	202,800	472
Riverside	9.3	25.4	43.1	22.1	201,558	605
Sacramento	11.9	19.7	42.1	26.3	169,271	500
Contra Costa	17.1	24.6	38.8	19.5	116,951	480
San Francisco	16.6	33.9	37.9	11.6	105,990	378
San Mateo, Solano	15.5	22.1	46.2	16.3	152,271	467
Marin, Napa, Sonoma	12.9	23	46.6	17.5	107,251	391
Butte, Colusa, Del Norte, Glenn, etc.	7.5	22.7	41.9	27.9	157,155	554
San Luis Obisbo, Santa Barbara, Ventura	14.6	26.7	39.7	18.9	159,345	449
Amador, Alpine, Calaveras, El Dorado, etc.	9.9	23.4	43.8	22.8	188,133	519
Monterey, San Benito, Santa Cruz	13	29.7	38.3	19	85,500	428
Fresno, Madera, Merced, Stanislaus	12.6	25.8	37.5	24.2	223,357	531
Imperial, Inyo, Kern, Kings, Mono, Tulare	13.9	21.6	39.8	24.8	175,395	531

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

TABLE B.8: AVERAGE DAILY CONSUMPTION FOR ALL SMOKERS [1](1992 ADULT CTS)

OVERALL	Cigarettes Per Day				Population Size	Sample Size
	0-4 (%)	5-14 (%)	15-24 (%)	25+ (%)	(n)	(n)
TOTAL	16.5	26.5	39.3	17.7	4,210,739	4,558
SEX						
Male	17.5	24.1	37.9	20.5	2,396,650	2,269
Female	15.2	29.7	41.1	14.0	1,814,089	2,289
AGE						
18-24	25.9	34.0	32.3	7.8	688,905	533
25-44	17.9	25.7	38.5	17.9	2,243,809	2,272
45-64	8.2	21.8	46.1	23.8	960,483	1,346
65+	11.3	30.2	39.5	19.0	317,542	407
RACE/ETHNICITY						
Hispanic	36.1	33.4	23.1	7.5	718,454	528
Non-Hispanic White	11.4	21.7	45.3	21.6	2,859,252	3,523
African-American	14.1	51.7	24.1	10.2	290,880	267
Asian/PI	22.8	37.0	34.4	5.9	191,882	143
Other	17.9	21.9	38.4	21.8	150,271	97
EDUCATION						
<12	17.7	26.0	37.7	18.7	1,131,045	589
12	13.5	28.0	41.1	17.3	1,641,650	1,715
13-15	16.5	25.8	39.8	17.8	936,242	1,490
16+	23.6	23.9	36.0	16.5	501,802	764
SEX Male						
AGE						
18-24	28.3	31.5	30.6	9.6	440,607	306
25-44	18.0	23.3	38.0	20.8	1,322,054	1,203
45-64	8.8	17.9	42.9	30.3	481,771	600
65+	9.8	29.0	42.5	18.6	152,218	160
RACE/ETHNICITY						
Hispanic	36.7	31.6	23.6	8.2	462,350	310
Non-Hispanic White	12.5	18.3	43.8	25.3	1,567,768	1,689
African-American	12.1	46.9	26.9	14.1	157,313	126
Asian/PI	22.0	40.1	29.6	8.4	134,202	96
Other	7.1	21.0	41.1	30.7	75,017	48
EDUCATION						
<12	22.0	24.8	33.9	19.4	658,026	287
12	13.2	24.9	40.7	21.2	873,380	777
13-15	15.9	23.9	39.0	21.1	546,512	773
16+	22.8	20.5	36.8	19.8	318,732	432
SEX Female						
AGE						
18-24	21.8	38.2	35.2	4.8	248,298	227
25-44	17.8	29.1	39.2	13.9	921,755	1,069
45-64	7.7	25.7	49.3	17.3	478,712	746
65+	12.7	31.2	36.7	19.4	165,324	247
RACE/ETHNICITY						
Hispanic	34.9	36.6	22.2	6.3	256,104	218
Non-Hispanic White	10.0	25.8	47.0	17.2	1,291,484	1,834
African-American	16.4	57.3	20.7	5.5	133,567	141
Asian/PI	24.6	29.7	45.7	.	57,680	47
Other	28.6	22.8	35.7	12.9	75,254	49
EDUCATION						
<12	11.7	27.6	43.0	17.8	473,019	302
12	13.9	31.5	41.6	13.0	768,270	938
13-15	17.4	28.5	40.9	13.2	389,730	717
16+	25.1	29.7	34.6	10.7	183,070	332

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

Regional data not available for 1992

TABLE B.8: AVERAGE DAILY CONSUMPTION FOR ALL SMOKERS[1] (1993 ADULT CTS)

OVERALL	Cigarettes Per Day				Population Size	Sample Size
	0-4 (%)	5-14 (%)	15-24 (%)	25+ (%)	(n)	(n)
TOTAL	10.9	32.3	37.7	19.1	4,077,267	5,471
SEX						
Male	10.8	29.7	37.6	21.9	2,302,927	2,490
Female	11.0	35.7	37.9	15.4	1,774,340	2,981
AGE						
18-24	19.1	45.7	28.8	6.4	587,906	641
25-44	11.5	32.1	38.6	17.8	2,132,818	2,708
45-64	5.4	24.4	41.2	29.0	1,013,164	1,575
65+	9.1	34.5	36.7	19.7	343,379	547
RACE/ETHNICITY						
Hispanic	27.2	43.4	23.7	5.6	648,226	639
Non-Hispanic White	6.8	27.5	41.3	24.4	2,819,586	4,173
African-American	11.7	48.6	34.2	5.5	280,579	293
Asian/PI	16.2	47.2	31.6	4.9	199,164	225
Other	9.1	24.2	44.8	21.8	129,712	141
EDUCATION						
<12	12.9	32.3	35.7	19.2	994,609	681
12	8.6	32.1	39.5	19.9	1,607,641	2,002
13-15	11.4	32.2	37.1	19.2	982,308	1,879
16+	13.4	33.5	37.0	16.1	492,709	909
SEX Male						
AGE						
18-24	18.8	43.5	29.4	8.3	367,156	324
25-44	10.8	29.3	39.0	20.9	1,269,131	1,323
45-64	5.3	20.1	40.1	34.4	513,085	661
65+	10.7	32.4	36.4	20.4	153,555	182
RACE/ETHNICITY						
Hispanic	22.2	42.9	28.4	6.5	446,873	365
Non-Hispanic White	6.9	22.4	40.1	30.5	1,446,920	1,764
African-American	8.5	47.9	38.2	5.4	160,455	136
Asian/PI	16.8	46.0	32.9	4.3	165,150	155
Other	10.4	18.4	50.3	20.9	83,529	70
EDUCATION						
<12	12.5	29.4	36.4	21.8	599,297	315
12	7.4	31.6	38.3	22.7	818,134	819
13-15	12.1	28.3	37.0	22.6	555,006	839
16+	14.1	28.1	38.9	18.8	330,490	517
SEX Female						
AGE						
18-24	19.7	49.3	27.7	3.3	220,750	317
25-44	12.7	36.1	38.1	13.1	863,687	1,385
45-64	5.6	28.7	42.3	23.4	500,079	914
65+	7.7	36.2	36.9	19.1	189,824	365
RACE/ETHNICITY						
Hispanic	38.4	44.6	13.3	3.8	201,353	274
Non-Hispanic White	6.6	32.8	42.6	17.9	1,372,666	2,409
African-American	16.0	49.5	29.0	5.5	120,124	157
Asian/PI	13.7	53.3	25.1	8.0	34,014	70
Other	6.8	34.7	35.0	23.4	46,183	71
EDUCATION						
<12	13.5	36.6	34.6	15.3	395,312	366
12	9.9	32.5	40.7	16.9	789,507	1,183
13-15	10.5	37.4	37.3	14.8	427,302	1,040
16+	12.0	44.4	33.2	10.4	162,219	392

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

TABLE 8: AVERAGE DAILY CONSUMPTION FOR ALL SMOKERS[1] (1993 ADULT CTS)

REGIONAL	Cigarettes Per Day				Population Size	Sample Size
	0-4 (%)	5-14 (%)	15-24 (%)	25+ (%)	(n)	(n)
OVERALL	10.9	32.3	37.7	19.1	4,077,267	5,471
Los Angeles	15.5	33.2	32.9	18.4	1,161,354	563
San Diego	9.5	29.9	42.3	18.3	306,925	285
Orange	9.7	34.8	38.6	16.9	281,948	242
Santa Clara	12.7	33.7	36.6	17.0	183,040	244
San Bernadino	7.4	27.5	41.4	23.7	214,493	353
Alameda	14.2	42.4	31.6	11.8	178,280	267
Riverside	8.1	30.6	38.3	23.0	148,208	324
Sacramento	6.3	29.7	39.9	24.2	172,805	344
Contra Costa	8.9	34.8	38.1	18.1	121,979	314
San Francisco	14.0	36.0	38.1	11.8	99,544	254
San Mateo, Solano	15.7	27.6	36.8	20.0	140,833	251
Marin, Napa, Sonoma	11.7	27.1	45.8	15.4	88,713	225
Butte, Colusa, Del Norte, Glenn, etc.	4.4	26.4	48.4	20.8	156,498	346
San Luis Obisbo, Santa Barbara, Ventura	8.9	32.4	43.3	15.5	175,125	283
Amador, Alpine, Calaveras El Dorado, etc.	4.3	35.6	37.0	23.1	198,280	298
Monterey, San Benito, Santa Cruz	12.3	29.2	44.4	14.1	82,988	274
Fresno, Madera, Merced, Stanislaus	5.8	32.3	34.2	27.7	195,965	292
Imperial, Inyo, Kern, Kings, Mono, Tulare	6.3	30.6	42.7	20.4	170,289	312

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

TABLE B.8: AVERAGE DAILY CONSUMPTION FOR ALL SMOKERS[1] (1996 ADULT CTS)

OVERALL	Cigarettes Per Day				Population Size	Sample Size
	0-4 (%)	5-14 (%)	15-24 (%)	25+ (%)	(n)	(n)
TOTAL	26.0	29.4	31.1	13.5	4,324,512	8,581
SEX						
Male	25.6	27.4	31.0	16.0	2,440,996	4,361
Female	26.5	32.1	31.2	10.2	1,883,516	4,220
AGE						
18-24	48.2	30.6	17.5	3.8	737,474	1,302
25-44	26.6	31.0	31.6	10.8	2,207,560	4,305
45-64	12.9	26.5	36.8	23.9	1,084,139	2,389
65+	14.6	25.1	40.4	19.9	295,339	585
RACE/ETHNICITY						
Hispanic	49.5	32.1	15.1	3.2	971,728	1,200
Non-Hispanic White	16.9	25.5	38.9	18.8	2,513,050	5,927
African-American	26.9	43.0	23.8	6.3	361,669	578
Asian/PI	31.5	35.9	26.7	6.0	288,327	530
Other	16.5	32.2	30.8	20.5	189,738	346
EDUCATION						
<12	29.6	30.8	27.3	12.2	1,072,850	1,018
12	21.5	28.6	34.2	15.7	1,384,793	3,227
13-15	24.1	30.9	31.9	13.1	1,187,616	2,772
16+	32.7	26.2	29.4	11.7	679,253	1,564
SEX Male						
AGE						
18-24	47.9	29.1	18.1	4.8	449,848	716
25-44	25.0	29.3	32.7	13.0	1,264,732	2,246
45-64	13.0	23.7	34.9	28.4	599,128	1,170
65+	11.1	19.4	41.9	27.6	127,288	229
RACE/ETHNICITY						
Hispanic	46.8	33.7	15.7	3.8	646,021	749
Non-Hispanic White	16.1	21.4	39.1	23.4	1,336,377	2,825
African-American	23.0	42.3	27.2	7.6	174,490	264
Asian/PI	28.2	33.2	31.1	7.5	192,144	352
Other	13.1	29.8	29.0	28.0	91,964	171
EDUCATION						
<12	30.6	31.3	25.3	12.7	640,001	565
12	21.4	25.3	34.3	19.1	753,289	1,587
13-15	24.3	26.6	32.1	17.1	651,128	1,369
16+	27.6	26.2	32.4	13.8	396,578	840
SEX Female						
AGE						
18-24	48.5	32.9	16.4	2.2	287,626	586
25-44	28.6	33.4	30.2	7.8	942,828	2,059
45-64	12.8	29.9	39.0	18.4	485,011	1,219
65+	17.3	29.5	39.2	14.0	168,051	356
RACE/ETHNICITY						
Hispanic	54.9	28.9	14.0	2.1	325,707	451
Non-Hispanic White	17.7	30.1	38.6	13.6	1,176,673	3,102
African-American	30.5	43.7	20.6	5.2	187,179	314
Asian/PI	38.0	41.2	17.8	3.0	96,183	178
Other	19.7	34.4	32.5	13.4	97,774	175
EDUCATION						
<12	28.2	30.1	30.2	11.5	432,849	453
12	21.7	32.6	34.1	11.6	631,504	1,640
13-15	23.9	36.1	31.7	8.3	536,488	1,403
16+	39.7	26.3	25.2	8.8	282,675	724

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

TABLE B.8: AVERAGE DAILY CONSUMPTION FOR ALL SMOKERS[1] (1996 ADULT CTS)

REGIONAL	Cigarettes Per Day					
	0-4 (%)	5-14 (%)	15-24 (%)	25+ (%)	Population Size (n)	Sample Size (n)
OVERALL	26.0	29.4	31.1	13.5	4,324,512	8,581
Los Angeles	34.1	30.1	25.9	9.9	1,273,574	1,632
San Diego	25.8	32.4	29.1	12.7	347,024	530
Orange	24.9	27.9	33.8	13.3	321,428	441
Santa Clara	32.1	31.3	24.2	12.5	146,393	280
San Bernadino	16.1	33.3	32.9	17.6	214,554	380
Alameda	22.6	34.8	29.9	12.8	182,690	383
Riverside	28.1	23.4	32.9	15.6	198,505	379
Sacramento	19.5	28.1	37.4	15.0	158,569	444
Contra Costa	19.6	31.2	35.1	14.1	114,607	367
San Francisco	29.7	27.4	32.5	10.4	141,043	422
San Mateo, Solano	21.4	33.3	31.4	13.9	171,082	386
Marin, Napa, Sonoma	22.0	25.9	37.9	14.3	94,263	364
Butte, Colusa, Del Norte, Glenn, etc.	16.2	22.3	41.8	19.7	159,070	507
San Luis Obisbo, Santa Barbara, Ventura	22.0	29.7	28.7	19.7	178,751	410
Amador, Alpine, Calaveras, El Dorado,etc.	16.2	30.2	36.8	16.8	179,220	445
Monterey, San Benito, Santa Cruz	33.4	21.9	32.7	12.0	82,228	374
Fresno, Madera, Merced, Stanislaus	19.6	26.2	39.1	15.1	186,737	392
Imperial, Inyo, Kern, Kings, Mono, Tulare	17.8	28.0	35.4	18.9	174,774	445

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

TABLE B.9: DETAILED CURRENT SMOKING STATUS[1] (1990 ADULT CTS)

OVERALL	Current Smokers			Former Smokers						
	Daily (%)	Occasional (%)	Current Experimenters (< 100) (%)	Quit <1 year (%)	Quit 1-4 Years (%)	Quit 5+ Years (%)	Former Experimenters (1-99) (%)	Never Smokers (0 cigs.) (%)	Population Size (n)	Sample Size (n)
TOTAL	17.7	3.5	0.5	3.1	5.5	18.8	23.1	27.8	21,567,108	24,296
SEX										
Male	19.8	4.2	0.7	3.5	6.1	22.3	24.2	19.3	10,661,782	11,480
Female	15.7	2.9	0.3	2.8	4.8	15.3	22.0	36.1	10,905,326	12,816
AGE										
18-24	16.0	4.7	1.7	4.4	5.7	2.4	29.9	35.2	3,273,611	3,532
25-44	19.4	4.2	0.3	3.3	5.2	14.0	25.9	27.7	10,172,724	11,814
45-64	19.0	2.8	0.3	2.9	5.9	29.1	17.2	22.7	5,286,164	6,229
65+	11.1	1.3	.	1.4	5.5	35.5	16.2	29.0	2,834,609	2,721
RACE/ETHNICITY										
Hispanic	11.6	5.1	1.3	4.5	4.6	12.1	24.2	36.7	4,845,718	3,462
Non-Hispanic White	19.8	2.6	0.1	2.8	5.8	22.2	23.6	23.0	13,320,587	17,988
African-American	21.5	7.4	0.3	3.0	5.4	16.8	19.5	26.1	1,357,052	1,223
Asian/PI	12.9	2.6	0.6	2.3	5.0	14.1	20.3	42.2	1,674,503	1,240
Other	32.7	4.9	0.7	1.5	6.9	10.6	17.3	25.4	369,248	383
EDUCATION										
<12	21.0	3.8	1.1	4.5	5.3	17.4	16.7	30.1	5,083,262	2,975
12	20.7	3.7	0.4	2.9	5.9	18.0	21.4	27.1	6,942,656	7,999
13-15	17.3	3.6	0.3	3.0	5.7	17.9	26.6	25.6	5,033,696	7,762
16+	9.9	2.8	0.1	2.1	4.8	22.5	29.0	28.8	4,507,494	5,560
SEX Male										
AGE										
18-24	17.8	5.2	2.4	4.6	5.8	2.1	31.9	30.2	1,754,864	1,775
25-44	21.7	4.9	0.3	3.7	5.7	16.0	27.7	19.9	5,150,166	5,701
45-64	20.3	3.4	0.5	3.1	6.7	35.5	16.9	13.5	2,551,450	2,906
65+	12.9	1.2	.	1.6	7.4	50.6	13.4	12.9	1,205,302	1,098
RACE/ETHNICITY										
Hispanic	15.3	6.9	2.2	5.6	6.3	15.6	27.5	20.6	2,342,974	1,771
Non-Hispanic White	21.0	2.9	0.2	2.8	6.2	25.0	24.0	17.9	6,601,854	8,320
African-American	22.9	8.2	0.1	3.0	4.4	20.0	19.3	22.1	650,809	547
Asian/PI	16.9	3.4	0.8	3.4	6.4	22.0	22.1	25.1	885,499	664
Other	37.4	5.3	.	1.4	8.5	18.0	15.0	14.3	180,646	178
EDUCATION										
<12	25.9	5.3	1.9	5.9	6.9	22.6	16.6	14.8	2,361,078	1,439
12	22.9	3.9	0.5	3.1	6.3	20.4	22.8	20.1	3,183,957	3,431
13-15	19.4	4.5	0.3	2.9	6.2	21.0	27.5	18.2	2,526,431	3,585
16+	10.8	3.1	0.2	2.3	5.2	25.5	29.6	23.3	2,590,316	3,025
SEX Female										
AGE										
18-24	14.0	4.2	0.8	4.3	5.6	2.7	27.5	41.0	1,518,747	1,757
25-44	17.0	3.5	0.3	2.9	4.7	11.9	24.0	35.7	5,022,558	6,113
45-64	17.8	2.2	0.2	2.7	5.1	23.2	17.6	31.3	2,734,714	3,323
65+	9.7	1.3	.	1.3	4.1	24.3	18.3	40.9	1,629,307	1,623
RACE/ETHNICITY										
Hispanic	8.1	3.4	0.5	3.4	3.1	8.7	21.1	51.7	2,502,744	1,691
Non-Hispanic White	18.6	2.4	0.1	2.8	5.5	19.4	23.2	28.0	6,718,733	9,668
African-American	20.2	6.6	0.6	3.0	6.3	13.8	19.7	29.9	706,243	676
Asian/PI	8.4	1.7	0.3	1.0	3.5	5.4	18.3	61.4	789,004	576
Other	28.2	4.5	1.3	1.6	5.4	3.6	19.4	36.0	188,602	205
EDUCATION										
<12	16.8	2.5	0.4	3.4	4.0	12.8	16.8	43.3	2,722,184	1,536
12	18.8	3.6	0.3	2.7	5.5	16.0	20.2	33.0	3,758,699	4,568
13-15	15.2	2.8	0.4	3.0	5.2	14.7	25.8	33.0	2,507,265	4,177
16+	8.8	2.5	0.0	1.9	4.1	18.4	28.2	36.1	1,917,178	2,535

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

TABLE B.9: DETAILED CURRENT SMOKING STATUS[1] (1990 ADULT CTS)

REGIONAL	Current Smokers			Former Smokers						
	Daily (%)	Occasional (%)	Current Experi-menters (< 100) (%)	Quit <1 year (%)	Quit 1-4 Years (%)	Quit 5+ Years (%)	Former Experi-menters (1-99) (%)	Never Smokers (0 cigs.) (%)	Population Size (n)	Sample Size (n)
OVERALL	17.7	3.5	0.5	3.1	5.5	18.8	23.1	27.8	21,567,108	24,296
Los Angeles	16.2	4.5	0.8	3.4	5.5	16.2	22.6	30.8	6,423,142	2,474
San Diego	17.7	2.7	0.4	2.5	5.8	18.1	26.6	26.2	1,810,285	1,450
Orange	14.2	4.2	0.9	3.6	5.1	18.3	25.6	28.1	1,746,931	1,185
Santa Clara	15.7	2.7	0.2	3.0	4.6	19.1	27.7	27.0	1,085,293	1,174
San Bernadino	23.3	3.2	0.2	2.8	5.3	18.5	18.6	28.2	1,027,826	1,578
Alameda	19.0	3.5	0.1	2.4	4.4	18.5	24.7	27.2	927,041	1,216
Riverside	21.5	3.0	0.3	3.6	5.9	22.7	19.1	23.8	848,226	1,432
Sacramento	19.9	3.0	0.1	3.7	5.2	20.8	20.2	27.1	754,545	1,283
Contra Costa	17.1	3.3	0.3	3.7	5.9	21.5	24.7	23.5	582,471	1,347
San Francisco	17.1	3.8	0.2	2.4	6.3	21.2	23.8	25.1	524,671	1,039
San Mateo, Solano	18.1	3.1	0.1	3.0	6.1	18.7	24.6	26.2	717,511	1,190
Marin, Napa, Sonoma	18.0	2.5	0.1	3.2	6.5	24.7	21.8	23.2	528,390	1,119
Butte, Colusa, Del Norte, Glenn, etc.	20.9	2.7	0.1	3.2	6.1	19.3	23.9	23.7	687,089	1,397
San Luis Obisbo, Santa Barbara, Ventura	15.5	2.3	0.2	3.4	6.2	19.4	25.8	27.2	910,059	1,287
Amador, Alpine, Calaveras El Dorado, etc.	20.8	3.3	0.1	2.1	5.3	25.1	20.2	23.1	804,275	1,290
Monterey, San Benito, Santa Cruz	16.4	2.7	0.2	3.0	5.2	21.4	23.7	27.3	450,862	1,221
Fresno, Madera, Merced, Stanislaus	21.3	2.7	0.3	2.3	5.1	19.6	19.4	29.2	945,344	1,309
Imperial, Inyo, Kern, Kings, Mono, Tulare	19.1	3.5	0.7	3.0	5.9	18.2	19.9	29.7	793,147	1,305

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

TABLE B.9: DETAILED CURRENT SMOKING STATUS[1] (1992 ADULT CTS)

OVERALL	Current Smokers			Former Smokers						
	Daily (%)	Occasional (%)	Current Experimenters (< 100) (%)	Quit <1 year (%)	Quit 1-4 Years (%)	Quit 5+ Years (%)	Former Experimenters (1-99) (%)	Never Smokers (0 cigs.) (%)	Population Size (n)	Sample Size (n)
TOTAL	16.4	3.5	0.2	3.0	5.4	19.5	24.1	28.0	21,588,796	11,905
SEX										
Male	18.6	4.1	0.3	3.5	6.5	22.7	26.0	18.3	10,673,057	5,684
Female	14.3	2.9	0.1	2.4	4.4	16.3	22.2	37.4	10,915,739	6,221
AGE										
18-24	15.8	5.2	0.7	4.5	3.5	2.7	31.3	36.4	3,277,155	1,514
25-44	18.1	4.3	0.2	3.1	6.3	13.6	26.5	28.0	10,187,108	5,689
45-64	17.6	2.1	.	2.5	6.1	28.9	19.4	23.4	5,032,967	3,282
65+	9.4	1.6	.	1.7	3.6	41.0	16.3	26.5	3,091,566	1,420
RACE/ETHNICITY										
Hispanic	10.3	5.0	0.4	3.5	5.7	12.1	25.7	37.3	4,872,984	1,817
Non-Hispanic White	18.9	2.9	0.1	2.8	5.2	23.6	24.5	22.1	13,312,956	8,662
African-American	18.7	3.6	0.2	2.3	5.9	15.8	18.2	35.2	1,357,672	680
Asian/PI	10.1	2.7	0.5	3.4	4.6	12.2	21.4	45.2	1,540,666	556
Other	23.7	6.6	.	3.7	10.2	14.2	21.9	19.6	504,518	190
EDUCATION										
<12	19.0	4.0	0.4	3.5	6.6	17.2	17.7	31.6	5,091,113	1,384
12	20.3	3.8	0.2	3.2	5.5	18.6	22.6	25.9	6,947,028	3,825
13-15	15.4	3.2	0.2	3.0	5.2	19.9	26.6	26.6	5,063,990	3,949
16+	8.6	2.9	0.0	2.1	4.3	22.8	30.8	28.5	4,486,665	2,747
SEX Male										
AGE										
18-24	17.8	6.7	1.0	5.7	3.3	3.8	34.6	27.1	1,758,732	761
25-44	20.2	4.5	0.2	3.3	6.9	15.6	28.1	21.2	5,435,923	2,823
45-64	19.1	2.7	.	3.3	8.7	35.8	19.6	10.7	2,268,835	1,520
65+	11.6	1.1	.	1.7	5.2	57.6	15.8	7.0	1,209,567	580
RACE/ETHNICITY										
Hispanic	13.1	6.8	0.5	4.9	6.6	16.2	30.3	21.5	2,398,107	900
Non-Hispanic White	20.7	3.4	0.1	2.9	6.1	26.3	25.3	15.2	6,531,614	4,065
African-American	19.7	2.0	0.4	2.6	5.9	21.2	18.4	29.6	715,323	321
Asian/PI	15.0	3.3	0.8	5.1	5.9	17.6	26.6	25.8	756,678	304
Other	22.6	5.5	.	3.2	17.8	13.0	24.1	13.9	271,335	94
EDUCATION										
<12	22.1	5.3	0.7	4.7	8.8	22.9	20.1	15.5	2,454,405	642
12	23.1	4.6	0.2	3.7	6.2	21.0	25.2	16.2	3,191,429	1,648
13-15	18.5	3.4	0.3	3.2	6.6	22.6	26.5	19.0	2,478,330	1,902
16+	9.7	3.1	0.1	2.5	4.4	24.9	32.3	23.0	2,548,893	1,492
SEX Female										
AGE										
18-24	13.4	3.5	0.3	3.1	3.6	1.4	27.5	47.1	1,518,423	753
25-44	15.8	4.0	0.0	2.9	5.7	11.4	24.5	35.7	4,751,185	2,866
45-64	16.4	1.5	.	1.9	4.0	23.3	19.2	33.8	2,764,132	1,762
65+	8.0	1.9	.	1.6	2.5	30.3	16.5	39.0	1,881,999	840
RACE/ETHNICITY										
Hispanic	7.6	3.2	0.2	2.1	4.9	8.1	21.3	52.7	2,474,877	917
Non-Hispanic White	17.1	2.5	0.0	2.6	4.3	20.9	23.7	28.8	6,781,342	4,597
African-American	17.6	5.4	.	2.0	6.0	9.8	17.8	41.4	642,349	359
Asian/PI	5.4	2.1	0.1	1.7	3.4	7.0	16.4	63.8	783,988	252
Other	24.9	7.9	.	4.4	1.4	15.7	19.5	26.3	233,183	96
EDUCATION										
<12	16.2	2.7	0.1	2.4	4.6	11.9	15.6	46.6	2,636,708	742
12	17.9	3.2	0.1	2.8	4.9	16.6	20.4	34.1	3,755,599	2,177
13-15	12.4	3.0	0.0	2.8	3.9	17.3	26.6	33.9	2,585,660	2,047
16+	7.1	2.6	.	1.5	4.1	20.1	28.8	35.8	1,937,772	1,255

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

Regional data not available for 1992

TABLE B.9: DETAILED CURRENT SMOKING STATUS[1] (1996 ADULT CTS)

OVERALL	Current Smokers			Former Smokers						
	Daily	Occasional	Current Experimenters (< 100)	Quit <1 year	Quit 1-4 Years	Quit 5+ Years	Former Experimenters (1-99)	Never Smokers (0 cigs.)	Population Size	Sample Size
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(n)	(n)
TOTAL	14.1	4.6	1.7	2.0	3.5	19.1	22.7	32.3	22,878,901	18,616
SEX										
Male	16.1	5.6	1.8	2.3	3.7	23.1	23.8	23.7	11,229,770	9,065
Female	12.2	3.7	1.6	1.7	3.3	15.2	21.6	40.6	11,649,131	9,551
AGE										
18-24	13.4	7.7	5.8	2.3	2.4	1.6	25.3	41.4	3,029,936	2,473
25-44	15.2	5.6	1.5	2.2	4.0	11.9	25.9	33.6	10,688,511	8,778
45-64	15.6	3.0	0.4	1.7	3.8	29.6	18.9	27.0	6,039,397	5,394
65+	8.2	1.5	0.7	1.3	2.3	40.3	16.7	29.0	3,121,057	1,971
RACE/ETHNICITY										
Hispanic	9.0	6.7	3.6	2.1	2.9	12.7	20.1	42.7	5,869,477	3,050
Non-Hispanic White	16.3	3.6	0.9	2.1	3.8	24.0	24.7	24.5	12,610,345	12,564
African-American	18.0	5.9	1.5	1.3	3.1	14.0	22.8	33.4	1,492,445	1,117
Asian/PI	9.9	3.6	1.1	1.3	3.5	10.5	20.9	49.2	2,144,990	1,284
Other	20.5	5.0	1.3	1.8	4.5	21.7	14.7	30.4	761,644	601
EDUCATION										
<12	15.8	5.5	2.7	2.5	2.9	16.8	14.5	39.3	4,876,751	2,052
12	19.2	5.1	1.4	2.1	4.3	19.0	19.9	28.9	5,717,864	6,040
13-15	14.8	4.8	1.7	2.0	4.1	19.0	23.5	30.1	6,042,162	5,894
16+	7.4	3.3	1.1	1.4	2.6	21.1	30.9	32.0	6,242,124	4,630
SEX Male										
AGE										
18-24	15.7	9.1	7.1	2.6	2.3	1.7	27.6	34.0	1,569,047	1,272
25-44	17.5	6.8	1.5	2.4	4.2	14.0	28.7	24.9	5,328,315	4,368
45-64	17.2	3.4	0.3	2.0	4.3	36.4	17.6	18.7	2,974,175	2,592
65+	8.3	1.4	.	1.9	2.1	54.7	13.9	17.7	1,358,233	833
RACE/ETHNICITY										
Hispanic	12.5	9.7	3.9	2.8	3.3	18.2	22.8	26.7	2,831,017	1,641
Non-Hispanic White	17.5	3.8	1.1	2.2	3.6	27.3	24.9	19.7	6,259,222	5,858
African-American	18.4	6.7	0.6	1.1	3.7	14.6	26.2	28.9	707,773	512
Asian/PI	13.9	4.5	1.0	2.0	5.4	16.1	23.0	34.1	1,057,917	763
Other	20.8	5.3	2.2	2.3	3.1	26.2	12.8	27.2	373,841	291
EDUCATION										
<12	19.0	8.7	2.1	3.6	3.4	23.5	15.2	24.5	2,320,055	1,094
12	22.1	6.4	1.5	2.1	4.7	21.8	21.5	19.9	2,665,524	2,782
13-15	16.6	5.2	2.4	2.2	4.0	21.2	23.7	24.7	2,930,166	2,768
16+	8.6	3.0	1.3	1.5	2.8	25.6	31.9	25.2	3,314,025	2,421
SEX Female										
AGE										
18-24	11.0	6.2	4.4	2.0	2.5	1.6	22.9	49.4	1,460,889	1,201
25-44	12.9	4.3	1.6	2.1	3.8	9.9	23.1	42.3	5,360,196	4,410
45-64	14.0	2.6	0.5	1.4	3.3	23.1	20.0	35.0	3,065,222	2,802
65+	8.1	1.5	1.2	0.9	2.5	29.2	18.9	37.7	1,762,824	1,138
RACE/ETHNICITY										
Hispanic	5.8	3.9	3.4	1.4	2.5	7.6	17.7	57.7	3,038,460	1,409
Non-Hispanic White	15.2	3.4	0.8	2.1	4.0	20.7	24.5	29.2	6,351,123	6,706
African-American	17.7	5.2	2.3	1.5	2.6	13.4	19.7	37.5	784,672	605
Asian/PI	6.0	2.7	1.2	0.6	1.6	5.1	19.0	63.9	1,087,073	521
Other	20.2	4.8	0.5	1.3	5.8	17.3	16.6	33.5	387,803	310
EDUCATION										
<12	13.0	2.6	3.2	1.4	2.5	10.8	13.8	52.8	2,556,696	958
12	16.6	4.0	1.4	2.2	4.0	16.5	18.6	36.8	3,052,340	3,258
13-15	13.1	4.3	1.0	1.9	4.2	16.9	23.4	35.2	3,111,996	3,126
16+	6.1	3.6	0.9	1.3	2.4	16.1	29.9	39.7	2,928,099	2,209

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

TABLE B.9: DETAILED CURRENT SMOKING STATUS[1] (1996 ADULT CTS)

REGIONAL	Current Smokers			Former Smokers						
	Daily (%)	Occasional (%)	Current Experi-menters (< 100) (%)	Quit <1 year (%)	Quit 1-4 Years (%)	Quit 5+ Years (%)	Former Experi-menters (1-99) (%)	Never Smokers (0 cigs.) (%)	Population Size (n)	Sample Size (n)
OVERALL	14.1	4.6	1.7	2.0	3.5	19.1	22.7	32.3	22,878,901	18,616
Los Angeles	13.1	5.1	3.1	1.7	3.0	15.6	22.5	36.0	6,617,607	3,565
San Diego	13.2	4.2	1.4	2.1	4.3	21.6	25.2	28.1	1,950,958	1,193
Orange	12.5	3.9	1.3	2.2	4.5	17.9	24.0	33.6	1,885,635	1,063
Santa Clara	8.5	3.9	1.0	2.0	3.6	18.3	28.4	34.3	1,165,855	752
San Bernadino	16.9	4.0	0.8	2.0	3.7	20.0	18.6	34.0	1,048,807	778
Alameda	14.6	4.6	0.4	2.2	2.7	17.5	22.4	35.5	990,883	797
Riverside	15.1	6.0	2.0	2.7	3.6	20.9	21.0	28.6	958,334	819
Sacramento	16.3	3.3	0.6	1.7	3.3	19.7	25.8	29.4	804,664	921
Contra Costa	14.5	3.3	1.0	1.5	2.7	27.0	22.9	27.1	654,220	781
San Francisco	16.2	7.1	1.6	2.1	3.9	21.4	23.3	24.5	611,685	817
San Mateo, Solano	16.0	5.5	0.3	1.8	3.4	24.4	19.9	28.6	797,587	819
Marin, Napa, Sonoma	12.0	4.8	0.8	2.1	3.6	29.9	23.6	23.1	590,502	899
Butte, Colusa, Del Norte, Glenn, etc.	19.0	3.2	1.5	2.2	3.9	23.5	16.9	29.9	733,408	1,016
San Luis Obisbo, Santa Barbara, Ventura	15.1	4.1	0.8	2.6	3.4	22.4	21.7	30.0	956,940	908
Amador, Alpine Calaveras El Dorado, etc.	16.5	3.8	2.2	2.5	3.6	22.7	20.2	28.4	882,608	932
Monterey, San Benito, Santa Cruz	12.5	5.9	0.5	2.0	4.5	17.7	24.5	32.3	451,276	852
Fresno, Madera, Merced, Stanislaus	15.2	4.6	1.4	1.9	2.8	15.3	24.2	34.6	963,994	820
Imperial, Inyo, Kern, Kings, Mono, Tulare	18.0	4.8	0.4	1.7	4.6	16.3	20.2	34.2	813,938	884

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

TABLE B.10: QUITTING STATUS AMONG PEOPLE WHO SMOKED IN THE LAST YEAR (1990 ADULT CTS)

OVERALL	Length of Quit						
	Former Smokers		Current Smokers				
	3+ Months (%)	0-3 Months (%)	7+ Days Off (%)	1-6 Days Off (%)	No Attempts (%)	Population Size (n)	Sample Size (n)
TOTAL	7.3	16.2	23.3	15.3	37.9	5,927,996	11,499
SEX							
Male	6.4	17.5	24.1	15.2	36.7	3,317,064	5,681
Female	8.5	14.4	22.4	15.3	39.4	2,610,932	5,818
AGE							
18-24	8.6	17.6	32.6	17.0	24.1	913,211	1,710
25-44	6.9	15.1	24.6	16.5	36.9	3,045,273	5,841
45-64	7.8	15.1	17.4	13.5	46.3	1,483,020	2,995
65+	6.0	23.1	16.6	9.7	44.6	486,492	953
RACE/ETHNICITY							
Hispanic	9.6	25.7	26.2	12.9	25.6	1,213,134	1,440
Non-Hispanic White	6.5	14.4	21.0	15.0	43.2	3,760,191	8,721
African-American	7.8	9.7	33.2	19.8	29.5	472,575	637
Asian/PI	9.2	15.3	22.4	19.3	33.8	328,230	460
Other	5.5	5.0	30.0	18.2	41.2	153,866	241
EDUCATION							
<12	6.9	18.1	22.8	14.6	37.6	1,662,452	1,609
12	7.3	13.2	23.7	15.9	39.9	2,106,907	4,238
13-15	7.5	14.8	25.0	16.4	36.3	1,347,152	3,715
16+	8.0	21.8	20.8	13.2	36.2	811,485	1,937
SEX Male							
AGE							
18-24	6.3	19.1	33.1	19.5	21.9	534,444	907
25-44	6.1	16.4	24.8	16.2	36.4	1,750,447	2,964
45-64	7.5	16.0	18.0	12.4	46.1	787,479	1,419
65+	4.8	26.4	19.4	7.7	41.7	244,694	391
RACE/ETHNICITY							
Hispanic	7.5	27.8	26.0	14.0	24.7	786,495	856
Non-Hispanic White	5.9	14.7	21.7	14.6	43.1	1,970,657	4,111
African-American	5.4	11.1	34.3	22.2	26.9	240,975	302
Asian/PI	8.3	17.9	23.8	18.1	32.0	233,992	296
Other	5.7	4.4	34.1	14.6	41.3	84,945	116
EDUCATION							
<12	6.0	20.6	24.1	14.5	34.8	997,501	871
12	6.2	13.8	25.6	16.0	38.3	1,049,831	1,908
13-15	6.1	14.8	25.2	16.8	37.2	754,593	1,790
16+	8.0	23.0	19.7	12.7	36.6	515,139	1,112
SEX Female							
AGE							
18-24	12.0	15.6	31.9	13.4	27.1	378,767	803
25-44	8.0	13.3	24.2	16.8	37.7	1,294,826	2,877
45-64	8.1	14.1	16.7	14.6	46.5	695,541	1,576
65+	7.1	19.8	13.7	11.8	47.6	241,798	562
RACE/ETHNICITY							
Hispanic	13.4	21.9	26.6	10.8	27.3	426,639	584
Non-Hispanic White	7.1	14.1	20.2	15.4	43.2	1,789,534	4,610
African-American	10.2	8.2	32.1	17.3	32.2	231,600	335
Asian/PI	11.5	9.1	18.8	22.4	38.2	94,238	164
Other	5.4	5.7	25.0	22.8	41.1	68,921	125
EDUCATION							
<12	8.3	14.5	20.8	14.6	41.8	664,951	738
12	8.3	12.7	21.9	15.7	41.4	1,057,076	2,330
13-15	9.4	14.9	24.7	15.9	35.1	592,559	1,925
16+	7.9	19.8	22.8	14.2	35.3	296,346	825

TABLE B.10: QUITTING STATUS AMONG PEOPLE WHO SMOKED IN THE LAST YEAR (1990 ADULT CTS)

REGIONAL	Length of Quit						
	Former Smokers		Current Smokers				
	3+ Months (%)	0-3 Months (%)	7+ Days Off (%)	1-6 Days Off (%)	No Attempts (%)	Population Size (n)	Sample Size (n)
OVERALL	7.3	16.2	23.3	15.3	37.9	5,927,996	11,499
Los Angeles	8.2	17.4	24.5	15.4	34.5	1,755,797	1,169
San Diego	6.6	15.5	24.6	17.1	36.2	468,877	638
Orange	5.8	23.2	21.6	11.2	38.2	447,833	534
Santa Clara	8.4	15.7	21.9	15.9	38.2	258,960	519
San Bernadino	4.1	14.3	23.4	15.5	42.7	331,982	806
Alameda	5.9	13.5	21.0	17.6	41.9	259,088	567
Riverside	8.2	15.7	20.9	15.0	40.2	271,715	747
Sacramento	9.7	13.6	18.9	14.4	43.4	222,532	608
Contra Costa	7.4	18.1	26.9	14.8	32.8	158,769	625
San Francisco	4.9	15.4	24.5	12.5	42.7	136,346	480
San Mateo, Solano	6.6	12.7	25.2	18.0	37.5	188,548	571
Marin, Napa, Sonoma	8.2	17.8	22.0	16.6	35.4	146,125	509
Butte, Colusa, Del Norte, Glenn, etc.	6.4	13.2	22.7	15.0	42.7	200,507	691
San Luis Obisbo, Santa Barbara, Ventura	11.6	18.1	19.3	12.2	38.7	229,140	587
Amador, Alpine, Calaveras El Dorado,etc.	4.1	15.0	22.9	17.9	40.1	238,397	631
Monterey, San Benito, Santa Cruz	9.5	18.7	23.4	14.0	34.4	120,048	550
Fresno, Madera, Merced, Stanislaus	7.3	8.8	25.4	15.9	42.5	269,012	637
Imperial, Inyo, Kern, Kings, Mono, Tulare	7.4	13.1	25.7	15.0	38.7	224,320	630

TABLE B.10: QUITTING STATUS AMONG PEOPLE WHO SMOKED IN THE LAST YEAR (1992 ADULT CTS)

OVERALL	Length of Quit						
	Former Smokers		Current Smokers				
	3+ Months (%)	0-3 Months (%)	7+ Days Off (%)	1-6 Days Off (%)	No Attempts (%)	Population Size (n)	Sample Size (n)
TOTAL	8.3	17.1	18.1	9.9	46.6	5,754,800	5,854
SEX							
Male	8.6	17.7	17.6	10.1	46.1	3,274,310	2,919
Female	8.0	16.3	18.9	9.6	47.2	2,480,490	2,935
AGE							
18-24	11.1	15.5	26.7	9.5	37.1	935,258	709
25-44	8.9	15.1	18.7	10.0	47.4	3,003,700	2,906
45-64	5.7	17.6	14.2	11.4	51.1	1,284,191	1,685
65+	6.7	29.4	9.7	6.3	47.8	531,651	554
RACE/ETHNICITY							
Hispanic	12.2	21.2	23.5	6.3	36.8	1,110,203	747
Non-Hispanic White	7.3	16.3	16.0	10.3	50.0	3,802,922	4,445
African-American	7.3	10.5	22.9	15.6	43.6	368,507	336
Asian/PI	10.9	20.5	14.7	11.0	42.8	285,530	211
Other	3.3	15.3	25.1	10.2	46.0	187,638	115
EDUCATION							
<12	8.0	14.0	18.6	10.6	48.8	1,495,865	745
12	7.4	15.3	17.6	9.7	50.1	2,161,547	2,143
13-15	9.0	17.9	18.7	11.3	43.1	1,287,795	1,908
16+	10.4	26.3	17.7	7.0	38.5	809,593	1,058
SEX Male							
AGE							
18-24	10.8	16.7	25.8	9.1	37.5	594,500	392
25-44	9.2	15.7	16.9	10.3	47.9	1,785,847	1,538
45-64	6.0	18.3	14.8	12.3	48.6	649,053	769
65+	4.9	32.6	9.7	5.0	47.8	244,910	220
RACE/ETHNICITY							
Hispanic	13.2	20.5	22.2	5.1	39.0	715,916	432
Non-Hispanic White	7.2	16.9	15.7	10.6	49.5	2,072,873	2,135
African-American	8.3	12.3	19.6	18.7	41.1	196,402	157
Asian/PI	9.5	22.4	15.7	13.9	38.5	200,671	139
Other	1.2	12.8	24.2	9.2	52.7	88,448	56
EDUCATION							
<12	9.0	15.5	18.3	9.9	47.3	886,535	366
12	7.6	15.3	17.1	10.4	49.6	1,142,280	965
13-15	7.5	18.2	18.1	11.7	44.5	729,221	972
16+	11.5	25.9	16.7	7.4	38.6	516,274	616
SEX Female							
AGE							
18-24	11.7	13.4	28.2	10.1	36.6	340,758	317
25-44	8.3	14.3	21.3	9.5	46.5	1,217,853	1,368
45-64	5.3	16.9	13.6	10.5	53.7	635,138	916
65+	8.3	26.6	9.7	7.5	47.8	286,741	334
RACE/ETHNICITY							
Hispanic	10.5	22.3	25.9	8.5	32.8	394,287	315
Non-Hispanic White	7.5	15.6	16.4	9.8	50.6	1,730,049	2,310
African-American	6.1	8.5	26.8	12.1	46.5	172,105	179
Asian/PI	14.2	16.2	12.4	4.4	52.9	84,859	72
Other	5.3	17.6	26.0	11.1	40.1	99,190	59
EDUCATION							
<12	6.5	11.9	19.1	11.5	51.0	609,330	379
12	7.2	15.2	18.3	8.9	50.5	1,019,267	1,178
13-15	10.9	17.4	19.5	10.8	41.4	558,574	936
16+	8.6	27.0	19.6	6.4	38.5	293,319	442

Regional data not available for 1992

TABLE B.10: QUITTING STATUS AMONG PEOPLE WHO SMOKED IN THE LAST YEAR (1996 ADULT CTS)

OVERALL	Length of Most Quit						
	Former Smokers		Current Smokers				
	3+ Months (%)	0-3 Months (%)	7+ Days Off (%)	1-6 Days Off (%)	No Attempts (%)	Population Size (n)	Sample Size (n)
TOTAL	7.6	15.4	29.4	12.0	35.7	5,543,155	10,552
SEX							
Male	7.6	15.3	30.1	12.2	34.8	3,146,344	5,369
Female	7.6	15.4	28.3	11.7	37.0	2,396,811	5,183
AGE							
18-24	6.8	10.6	52.6	10.0	20.0	768,386	1,540
25-44	7.9	13.3	30.2	13.5	35.1	2,817,447	5,311
45-64	8.1	15.2	20.3	11.7	44.7	1,459,998	2,907
65+	5.0	34.5	15.2	7.9	37.4	497,324	794
RACE/ETHNICITY							
Hispanic	8.0	20.2	38.2	9.4	24.3	1,286,423	1,552
Non-Hispanic White	8.2	14.4	24.8	12.2	40.4	3,249,540	7,305
African-American	3.0	12.6	33.9	17.9	32.6	418,389	666
Asian/PI	6.9	13.0	34.9	10.1	35.1	358,851	630
Other	5.9	9.5	28.1	16.1	40.3	229,952	399
EDUCATION							
<12	5.0	17.6	31.4	13.0	33.0	1,344,512	1,243
12	6.6	12.7	28.7	11.3	40.6	1,712,112	3,832
13-15	8.5	14.1	29.5	12.5	35.5	1,524,222	3,407
16+	11.4	18.9	27.4	11.1	31.2	962,309	2,070
SEX Male							
AGE							
18-24	7.0	10.1	53.6	10.7	18.5	468,607	848
25-44	7.2	13.2	31.0	13.7	35.0	1,626,747	2,764
45-64	9.1	16.7	19.8	11.9	42.4	823,089	1,435
65+	5.8	36.1	12.9	5.7	39.5	227,901	322
RACE/ETHNICITY							
Hispanic	7.1	19.6	38.7	10.1	24.5	856,620	960
Non-Hispanic White	8.4	13.8	25.2	12.9	39.8	1,708,712	3,474
African-American	2.4	12.3	35.1	16.2	34.0	208,164	305
Asian/PI	7.6	14.4	32.1	12.1	33.7	247,958	424
Other	8.3	13.6	26.6	10.7	40.9	124,890	206
EDUCATION							
<12	6.1	17.8	32.8	11.5	31.7	846,060	719
12	5.9	12.4	30.7	11.1	39.8	927,386	1,865
13-15	8.4	13.2	30.5	14.2	33.7	816,708	1,674
16+	11.2	19.6	24.4	12.1	32.8	556,190	1,111
SEX Female							
AGE							
18-24	6.4	11.4	51.0	8.8	22.4	299,779	692
25-44	8.9	13.5	29.1	13.2	35.3	1,190,700	2,547
45-64	6.9	13.2	21.0	11.3	47.5	636,909	1,472
65+	4.4	33.2	17.1	9.7	35.6	269,423	472
RACE/ETHNICITY							
Hispanic	9.8	21.6	37.0	7.8	23.8	429,803	592
Non-Hispanic White	8.0	15.1	24.3	11.5	41.2	1,540,828	3,831
African-American	3.6	12.9	32.7	19.6	31.2	210,225	361
Asian/PI	5.3	9.9	41.1	5.7	38.0	110,893	206
Other	3.1	4.7	30.0	22.6	39.7	105,062	193
EDUCATION							
<12	3.0	17.3	29.0	15.6	35.1	498,452	524
12	7.5	13.0	26.3	11.6	41.6	784,726	1,967
13-15	8.5	15.1	28.3	10.4	37.6	707,514	1,733
16+	11.7	18.0	31.5	9.7	29.1	406,119	959

TABLE B.10: QUITTING STATUS AMONG PEOPLE WHO SMOKED IN THE LAST YEAR (1996 ADULT CTS)

REGIONAL	Length of Quit					Population Size	Sample Size
	Former Smokers		Current Smokers				
	3+ Months	0-3 Months	7+ Days Off	1-6 Days Off	No Attempts		
	(%)	(%)	(%)	(%)	(%)	(n)	(n)
OVERALL	7.6	15.4	29.4	12.0	35.7	5,543,155	10,552
Los Angeles	5.7	16.3	31.8	11.4	34.8	1,532,413	1,958
San Diego	8.0	18.7	27.7	12.4	33.2	462,931	671
Orange	9.1	12.3	27.1	15.9	35.6	395,471	564
Santa Clara	16.1	16.5	25.7	8.9	32.8	214,759	366
San Bernadino	6.6	13.6	27.3	15.3	37.2	274,617	452
Alameda	5.1	13.0	31.6	12.1	38.1	232,153	471
Riverside	9.2	14.9	35.0	9.9	31.0	266,821	478
Sacramento	6.1	16.2	27.1	11.7	38.9	203,162	529
Contra Costa	7.6	22.1	22.0	9.5	38.8	165,475	447
San Francisco	8.0	13.5	33.7	12.2	32.5	181,687	527
San Mateo, Solano	8.7	16.8	30.3	9.6	34.5	230,229	479
Marin, Napa, Sonoma	12.2	19.6	27.0	11.4	29.8	145,063	475
Butte, Colusa, Del Norte, Glenn, etc.	8.9	13.2	23.7	13.0	41.2	208,950	618
San Luis Obisbo, Santa Barbara, Ventura	9.3	15.0	29.6	12.4	33.5	241,875	517
Amador,Alpine,Calavera-s,El Dorado,etc.	9.6	11.0	23.8	11.1	44.6	225,759	536
Monterey, San Benito, Santa Cruz	9.3	12.0	35.4	13.9	29.4	105,241	471
Fresno, Madera, Merced, Stanislaus	4.1	16.2	29.2	12.2	38.3	239,289	471
Imperial, Inyo, Kern, Kings, Mono, Tulare	4.4	10.3	29.7	12.7	43.0	217,260	522

TABLE B.11: THE QUITTING CONTINUUM FOR PEOPLE WHO SMOKED IN THE LAST YEAR (1990 ADULT CTS)

OVERALL	Stage of Quitting							Population Size	Sample Size
	Precon-templation (%)	Contem-plation (%)	Early Preparation (%)	Intermediate Preparation (%)	Advanced Preparation (%)	Action (%)	Early Maintenance (%)	(n)	(n)
TOTAL	11.7	10.7	5.1	28.8	20.2	15.8	7.7	5,927,996	11,499
SEX									
Male	12.1	11.1	5.1	28.8	19.1	17.2	6.7	3,317,064	5,681
Female	11.2	10.1	5.2	28.9	21.6	14.0	8.9	2,610,932	5,818
AGE									
18-24	5.5	8.1	5.3	28.7	26.2	17.1	9.2	913,211	1,710
25-44	10.5	11.2	5.6	28.6	22.1	14.8	7.3	3,045,273	5,841
45-64	15.4	11.7	4.9	30.3	14.8	14.7	8.2	1,483,020	2,995
65+	19.5	9.2	2.6	26.0	13.7	22.8	6.2	486,492	953
RACE/ETHNICITY									
Hispanic	3.5	4.8	2.0	26.3	28.2	24.7	10.6	1,213,134	1,440
Non-Hispanic White	14.9	13.3	6.0	29.6	15.4	14.2	6.7	3,760,191	8,721
African-American	6.2	8.2	5.9	29.6	32.7	9.2	8.2	472,575	637
Asian/PI	9.6	8.1	3.9	26.7	27.1	15.3	9.2	328,230	460
Other	19.5	6.8	10.1	32.8	20.3	4.8	5.7	153,866	241
EDUCATION									
<12	13.4	9.3	4.0	29.5	18.7	17.5	7.5	1,662,452	1,609
12	12.5	11.9	6.1	29.0	20.0	12.9	7.6	2,106,907	4,238
13-15	10.0	11.3	5.8	28.9	21.7	14.5	7.9	1,347,152	3,715
16+	8.9	9.3	3.8	26.9	21.3	21.7	8.1	811,485	1,937
SEX Male									
AGE									
18-24	5.0	9.9	6.0	29.7	24.0	18.8	6.7	534,444	907
25-44	11.1	11.7	5.7	29.2	19.8	16.2	6.4	1,750,447	2,964
45-64	16.5	11.9	4.1	28.5	15.4	15.5	8.0	787,479	1,419
65+	20.1	6.9	2.2	24.8	14.8	26.0	5.2	244,694	391
RACE/ETHNICITY									
Hispanic	4.1	5.9	2.4	26.1	26.1	26.8	8.5	786,495	856
Non-Hispanic White	15.2	13.7	6.0	31.0	13.5	14.5	6.1	1,970,657	4,111
African-American	8.7	9.3	7.4	24.0	34.1	11.1	5.4	240,975	302
Asian/PI	11.0	9.9	2.8	22.8	27.3	17.9	8.3	233,992	296
Other	24.9	7.0	9.0	31.9	17.1	4.4	5.7	84,945	116
EDUCATION									
<12	13.7	9.3	4.2	28.6	17.7	20.0	6.6	997,501	871
12	13.0	12.9	6.4	29.1	18.6	13.6	6.4	1,049,831	1,908
13-15	10.2	12.2	5.6	29.8	21.2	14.5	6.4	754,593	1,790
16+	9.7	9.1	3.6	27.0	19.6	22.9	8.1	515,139	1,112
SEX Female									
AGE									
18-24	6.1	5.5	4.2	27.3	29.4	14.7	12.8	378,767	803
25-44	9.7	10.5	5.6	27.9	25.1	12.9	8.4	1,294,826	2,877
45-64	14.1	11.4	5.7	32.3	14.2	13.8	8.4	695,541	1,576
65+	18.8	11.6	3.1	27.2	12.5	19.6	7.2	241,798	562
RACE/ETHNICITY									
Hispanic	2.3	2.7	1.1	26.6	32.0	20.8	14.5	426,639	584
Non-Hispanic White	14.5	12.8	6.0	28.0	17.6	13.9	7.3	1,789,534	4,610
African-American	3.6	7.0	4.4	35.4	31.2	7.3	11.1	231,600	335
Asian/PI	6.1	3.6	6.7	36.4	26.5	9.1	11.5	94,238	164
Other	12.7	6.5	11.3	33.9	24.4	5.4	5.8	68,921	125
EDUCATION									
<12	13.0	9.3	3.8	30.9	20.2	13.9	8.9	664,951	738
12	11.9	10.8	5.8	28.9	21.5	12.3	8.7	1,057,076	2,330
13-15	9.6	10.0	6.1	27.7	22.3	14.5	9.8	592,559	1,925
16+	7.5	9.7	4.1	26.7	24.3	19.7	8.1	296,346	825

TABLE B.11: THE QUITTING CONTINUUM FOR PEOPLE WHO SMOKED IN THE LAST YEAR (1990 ADULT CTS)

REGIONAL	Stage of Quitting							Population Size	Sample Size
	Precon-templation (%)	Contem-plation (%)	Early Preparation (%)	Intermediate Preparation (%)	Advanced Preparation (%)	Action (%)	Early Maintenance (%)	(n)	(n)
OVERALL	11.7	10.7	5.1	28.8	20.2	15.8	7.7	5,927,996	11,499
Los Angeles	9.0	8.3	4.8	27.8	24.5	16.9	8.7	1,755,797	1,169
San Diego	10.3	10.3	6.9	31.2	19.1	15.1	7.0	468,877	638
Orange	10.2	9.6	3.4	28.2	19.6	23.2	5.8	447,833	534
Santa Clara	11.9	11.6	4.9	28.3	19.2	14.8	9.3	258,960	519
San Bernadino	18.3	12.2	5.2	28.6	17.4	14.0	4.3	331,982	806
Alameda	12.8	13.1	5.7	27.7	21.3	13.2	6.2	259,088	567
Riverside	13.8	12.7	5.2	28.6	15.9	15.5	8.3	271,715	747
Sacramento	15.5	12.7	6.1	29.0	13.4	13.6	9.7	222,532	608
Contra Costa	11.1	8.8	6.5	27.0	21.1	17.8	7.8	158,769	625
San Francisco	12.5	9.8	3.0	30.7	23.7	15.4	4.9	136,346	480
San Mateo, Solano	13.3	11.5	5.9	29.7	20.3	12.3	7.0	188,548	571
Marin, Napa, Sonoma	11.9	10.3	6.1	28.7	17.0	17.7	8.4	146,125	509
Butte, Colusa, Del Norte, Glenn, etc.	15.6	11.6	6.5	31.4	15.3	12.4	7.1	200,507	691
San Luis Obisbo, Santa Barbara, Ventura	10.1	12.8	3.2	27.9	16.3	17.5	12.2	229,140	587
Amador,Alpine, Calaveras El Dorado,etc.	15.4	12.9	5.6	30.8	16.2	14.8	4.3	238,397	631
Monterey, San Benito, Santa Cruz	10.5	10.4	4.3	26.1	20.6	18.2	10.0	120,048	550
Fresno, Madera, Merced, Stanislaus	13.4	15.5	5.0	29.9	20.1	8.5	7.6	269,012	637
Imperial, Inyo, Kern, Kings, Mono, Tulare	12.1	11.5	6.1	32.1	17.6	12.7	7.8	224,320	630

TABLE B.11: THE QUITTING CONTINUUM FOR PEOPLE WHO SMOKED IN THE LAST YEAR (1996 ADULT CTS)

OVERALL	Stage of Quitting								
	Precon-templation (%)	Contem-plation (%)	Early Preparation (%)	Intermediate Preparation (%)	Advanced Preparation (%)	Action (%)	Early Maintenance (%)	Population Size (n)	Sample Size (n)
TOTAL	13.8	7.2	2.1	27.1	26.9	14.1	8.8	5,543,155	10,552
SEX									
Male	13.8	7.5	2.4	26.7	26.7	14.0	8.9	3,146,344	5,369
Female	13.8	6.9	1.7	27.5	27.2	14.2	8.7	2,396,811	5,183
AGE									
18-24	6.4	4.1	2.0	23.5	46.5	9.6	7.8	768,386	1,540
25-44	11.9	7.7	2.4	28.6	28.2	11.9	9.4	2,817,447	5,311
45-64	20.0	8.5	1.9	26.9	19.3	14.1	9.3	1,459,998	2,907
65+	18.0	5.4	1.4	24.1	11.5	33.6	5.9	497,324	794
RACE/ETHNICITY									
Hispanic	5.6	2.7	1.2	23.0	39.3	18.3	9.9	1,286,423	1,552
Non-Hispanic White	17.7	9.3	2.4	27.4	20.6	13.5	9.2	3,249,540	7,305
African-American	7.6	8.1	2.3	33.3	33.1	12.0	3.6	418,389	666
Asian/PI	12.0	4.3	1.7	27.9	34.1	10.5	9.4	358,851	630
Other	19.2	6.6	3.3	32.4	23.2	9.4	6.1	229,952	399
EDUCATION									
<12	13.2	7.3	2.4	25.4	29.1	16.2	6.4	1,344,512	1,243
12	16.8	8.1	2.2	28.7	24.8	11.4	7.9	1,712,112	3,832
13-15	12.5	7.6	2.2	27.5	27.6	13.2	9.3	1,524,222	3,407
16+	11.3	4.9	1.4	25.7	26.4	17.3	13.0	962,309	2,070
SEX Male									
AGE									
18-24	6.3	4.5	2.1	24.4	45.6	8.8	8.4	468,607	848
25-44	12.8	7.9	2.8	28.3	27.8	11.9	8.5	1,626,747	2,764
45-64	18.8	9.1	2.1	25.4	18.8	15.4	10.4	823,089	1,435
65+	18.5	4.9	1.7	24.8	8.2	35.0	6.9	227,901	322
RACE/ETHNICITY									
Hispanic	5.5	2.7	1.4	24.5	39.2	17.5	9.2	856,620	960
Non-Hispanic White	18.3	10.1	3.1	27.0	19.3	12.9	9.3	1,708,712	3,474
African-American	8.2	9.5	2.5	29.5	35.6	12.0	2.7	208,164	305
Asian/PI	12.7	5.5	1.6	28.5	29.7	11.7	10.3	247,958	424
Other	20.8	4.3	2.4	29.3	21.2	13.6	8.3	124,890	206
EDUCATION									
<12	11.5	7.0	2.2	23.9	31.4	15.7	8.3	846,060	719
12	17.1	8.1	2.7	28.4	25.3	11.5	6.9	927,386	1,865
13-15	13.2	8.9	2.7	27.2	26.4	12.4	9.2	816,708	1,674
16+	12.7	5.2	2.0	27.3	22.1	18.1	12.6	556,190	1,111
SEX Female									
AGE									
18-24	6.6	3.4	2.0	22.2	48.0	10.9	6.9	299,779	692
25-44	10.6	7.5	1.7	29.1	28.7	11.9	10.5	1,190,700	2,547
45-64	21.5	7.8	1.8	28.7	20.1	12.3	7.8	636,909	1,472
65+	17.6	5.9	1.3	23.5	14.2	32.5	5.1	269,423	472
RACE/ETHNICITY									
Hispanic	5.6	2.5	0.9	20.0	39.6	19.9	11.5	429,803	592
Non-Hispanic White	17.0	8.3	1.7	27.8	22.1	14.1	9.0	1,540,828	3,831
African-American	6.9	6.8	2.0	37.1	30.6	11.9	4.6	210,225	361
Asian/PI	10.5	1.8	2.0	26.5	44.1	7.7	7.4	110,893	206
Other	17.2	9.3	4.3	35.9	25.6	4.3	3.4	105,062	193
EDUCATION									
<12	15.9	8.0	2.6	28.0	25.2	17.1	3.2	498,452	524
12	16.6	8.1	1.6	29.0	24.2	11.3	9.2	784,726	1,967
13-15	11.7	6.1	1.8	27.9	28.9	14.2	9.4	707,514	1,733
16+	9.4	4.4	0.7	23.4	32.4	16.3	13.5	406,119	959

TABLE B.11: THE QUITTING CONTINUUM FOR PEOPLE WHO SMOKED IN THE LAST YEAR (1996 ADULT CTS)

REGIONAL	Stage of Quitting							Population Size	Sample Size
	Precon-templation (%)	Contem-plation (%)	Early Preparation (%)	Intermediate Preparation (%)	Advanced Preparation (%)	Action (%)	Early Maintenance (%)	(n)	(n)
OVERALL	13.8	7.2	2.1	27.1	26.9	14.1	8.8	5,543,155	10,552
Los Angeles	12.0	6.4	1.8	27.6	30.1	14.9	7.1	1,532,413	1,958
San Diego	11.6	7.0	2.2	25.5	27.0	18.3	8.4	462,931	671
Orange	16.1	5.9	2.9	29.0	24.5	11.8	9.7	395,471	564
Santa Clara	8.5	6.6	1.4	23.8	27.0	13.9	18.8	214,759	366
San Bernadino	15.3	8.0	2.3	31.4	22.9	12.3	7.8	274,617	452
Alameda	13.7	6.0	2.0	31.4	28.7	10.0	8.2	232,153	471
Riverside	13.6	7.2	1.5	24.4	29.1	14.6	9.6	266,821	478
Sacramento	14.7	8.5	3.2	27.9	23.5	14.2	8.1	203,162	529
Contra Costa	15.5	6.9	2.3	24.3	21.3	20.3	9.5	165,475	447
San Francisco	13.2	6.5	2.2	22.8	33.6	13.0	8.6	181,687	527
San Mateo, Solano	14.6	5.9	1.8	25.9	26.3	15.7	9.8	230,229	479
Marin, Napa, Sonoma	11.8	6.7	4.1	19.4	26.2	18.8	13.0	145,063	475
Butte, Colusa, Del Norte, Glenn, etc.	20.3	9.5	2.4	26.4	19.3	12.5	9.5	208,950	618
San Luis Obisbo, Santa Barbara, Ventura	14.1	7.8	1.4	26.1	26.1	14.4	10.0	241,875	517
Amador,Alpine,Calaveras El Dorado,etc.	17.7	8.8	3.1	27.4	22.5	9.6	10.9	225,759	536
Monterey, San Benito, Santa Cruz	10.0	7.6	1.0	30.4	29.7	11.2	10.1	105,241	471
Fresno, Madera, Merced, Stanislaus	16.0	10.7	1.4	26.9	24.7	13.8	6.4	239,289	471
Imperial, Inyo, Kern, Kings, Mono, Tulare	18.2	9.0	2.3	30.1	25.6	9.0	5.8	217,260	522

TABLE B.12: ASSISTANCE IN QUITTING SMOKING (1990 ADULT CTS)

OVERALL	Assistance				Population Size	Sample Size
	None (%)	Gum or Patch (%)	Counseling (%)	Both (%)	(n)	(n)
TOTAL	94.9	3.3	1.7	0.2	2,348,081	4,777
SEX						
Male	95.4	2.9	1.6	0.1	1,314,604	2,398
Female	94.3	3.8	1.7	0.2	1,033,477	2,379
AGE						
18-24	98.1	1.4	0.5	0.1	475,541	933
25-44	95.0	3.2	1.6	0.2	1,232,857	2,518
45-64	91.8	5.2	2.8	0.2	497,597	1,018
65+	94.2	3.9	1.7	0.1	142,086	308
RACE/ETHNICITY						
Hispanic	97.5	1.6	0.7	0.2	499,600	642
Non-Hispanic White	93.3	4.3	2.3	0.1	1,412,840	3,481
African-American	97.8	1.9	0.1	0.2	239,455	337
Asian/PI	98.3	1.2	0.5	.	136,723	213
Other	92.3	4.3	3.4	.	59,463	104
EDUCATION						
<12	97.4	2.5	0.1	.	632,684	667
12	95.2	2.9	1.7	0.2	839,609	1,748
13-15	93.7	3.5	2.5	0.3	581,847	1,593
16+	91.2	5.7	3.1	.	293,941	769
SEX Male						
AGE						
18-24	97.7	1.3	0.8	0.1	291,222	528
25-44	95.2	3.2	1.5	0.1	699,832	1,277
45-64	92.5	4.1	3.3	0.1	253,617	460
65+	98.2	1.1	0.8	.	69,933	133
RACE/ETHNICITY						
Hispanic	98.1	1.2	0.8	.	320,536	390
Non-Hispanic White	93.5	4.1	2.2	0.2	737,623	1,649
African-American	98.2	1.8	.	.	128,247	168
Asian/PI	97.9	1.5	0.6	.	97,270	139
Other	93.5	.	6.5	.	30,928	52
EDUCATION						
<12	98.0	2.0	.	.	380,550	380
12	95.7	2.2	1.9	0.2	443,088	829
13-15	94.0	3.1	2.8	0.1	317,858	764
16+	91.6	5.9	2.5	.	173,108	425
SEX Female						
AGE						
18-24	98.5	1.5	.	.	184,319	405
25-44	94.8	3.1	1.8	0.3	533,025	1,241
45-64	91.0	6.4	2.3	0.3	243,980	558
65+	90.3	6.7	2.7	0.3	72,153	175
RACE/ETHNICITY						
Hispanic	96.4	2.2	0.7	0.6	179,064	252
Non-Hispanic White	93.0	4.5	2.3	0.1	675,217	1,832
African-American	97.4	1.9	0.3	0.4	111,208	169
Asian/PI	99.5	0.5	.	.	39,453	74
Other	91.0	9.0	.	.	28,535	52
EDUCATION						
<12	96.5	3.3	0.3	.	252,134	287
12	94.7	3.7	1.5	0.2	396,521	919
13-15	93.2	3.9	2.2	0.7	263,989	829
16+	90.7	5.3	3.9	.	120,833	344

TABLE B.12: ASSISTANCE IN QUITTING SMOKING (1990 ADULT CTS)

REGIONAL	Assistance				Population Size	Sample Size
	None (%)	Gum or Patch (%)	Counseling (%)	Both (%)	(n)	(n)
OVERALL	94.9	3.3	1.7	0.2	2,348,081	4,777
Los Angeles	96.3	2.3	1.3	0.2	712,520	515
San Diego	95.6	2.6	1.6	0.2	185,508	276
Orange	95.1	3.1	1.8	.	160,930	202
Santa Clara	93.7	4.5	1.8	.	109,203	226
San Bernadino	96.0	2.2	1.8	.	132,728	329
Alameda	96.5	2.8	0.7	.	94,691	230
Riverside	94.0	3.9	1.9	0.2	101,540	291
Sacramento	93.0	4.3	2.2	0.5	80,963	233
Contra Costa	94.6	2.8	2.6	.	69,495	263
San Francisco	93.4	5.4	0.3	0.9	54,068	206
San Mateo, Solano	94.6	3.1	1.6	0.7	84,440	260
Marin, Napa, Sonoma	94.4	3.6	2.0	.	64,468	229
Butte, Colusa, Del Norte, Glenn, etc.	92.9	6.2	0.8		79,863	287
San Luis Obisbo, Santa Barbara, Ventura	93.7	4.3	1.8	0.2	81,709	227
Amador, Alpine, Calaveras ,El Dorado, etc	93.0	4.6	2.4		92,339	258
Monterey, San Benito, Santa Cruz	96.6	1.2	2.1		47,217	223
Fresno, Madera, Merced, Stanislaus	93.0	6.2	0.8		109,766	267
Imperial, Inyo, Kern, Kings, Mono, Tulare	91.3	3.9	4.3	0.5	86,633	255

TABLE B.12: ASSISTANCE IN QUITTING SMOKING (1992 ADULT CTS)

OVERALL	Assistance				Population Size	Sample Size
	None (%)	Gum or Patch (%)	Counseling (%)	Both (%)	(n)	(n)
TOTAL	81.0	7.8	8.8	2.5	1,753,362	1,890
SEX						
Male	83.5	6.7	7.5	2.3	1,008,434	948
Female	77.5	9.2	10.5	2.8	744,928	942
AGE						
18-24	93.5	0.7	5.6	0.2	363,670	279
25-44	79.8	7.7	9.8	2.7	901,917	948
45-64	74.0	11.6	10.0	4.4	372,842	517
65+	73.1	18.2	6.8	2.0	114,933	146
RACE/ETHNICITY						
Hispanic	88.3	1.9	8.5	1.3	320,494	240
Non-Hispanic White	78.3	9.9	8.5	3.3	1,112,972	1,388
African-American	87.2	5.4	6.4	1.0	149,772	146
Asian/PI	90.9	2.7	5.3	1.2	106,333	73
Other	59.3	13.6	27.0	.	63,791	43
EDUCATION						
<12	89.1	6.1	3.7	1.1	439,507	233
12	80.3	8.1	9.1	2.5	649,450	675
13-15	78.9	7.0	10.9	3.2	431,534	660
16+	71.2	11.4	13.5	3.9	232,871	322
SEX Male						
AGE						
18-24	93.8	0.9	4.9	0.4	234,671	151
25-44	80.6	7.5	9.5	2.5	524,091	499
45-64	79.9	9.9	6.1	4.0	201,625	237
65+	80.0	13.4	3.8	2.9	48,047	61
RACE/ETHNICITY						
Hispanic	85.9	2.7	10.3	1.1	196,308	135
Non-Hispanic White	81.5	8.6	6.6	3.3	612,805	671
African-American	86.9	5.3	6.8	1.1	86,801	70
Asian/PI	90.9	2.6	6.5	.	86,318	51
Other	75.4	12.0	12.6	.	26,202	21
EDUCATION						
<12	93.4	2.3	4.0	0.3	250,385	108
12	82.5	8.3	7.1	2.0	363,907	321
13-15	79.5	7.3	9.6	3.6	241,341	331
16+	75.9	9.3	10.8	4.1	152,801	188
SEX Female						
AGE						
18-24	93.1	0.2	6.7	.	128,999	128
25-44	78.7	8.1	10.2	3.0	377,826	449
45-64	66.9	13.5	14.6	5.0	171,217	280
65+	68.1	21.6	9.0	1.3	66,886	85
RACE/ETHNICITY						
Hispanic	92.1	0.7	5.5	1.7	124,186	105
Non-Hispanic White	74.3	11.5	10.8	3.4	500,167	717
African-American	87.6	5.6	5.8	0.9	62,971	76
Asian/PI	91.0	2.8	.	6.2	20,015	22
Other	48.1	14.8	37.1	.	37,589	22
EDUCATION						
<12	83.5	11.1	3.3	2.1	189,122	125
12	77.5	7.8	11.6	3.1	285,543	354
13-15	78.1	6.7	12.6	2.6	190,193	329
16+	62.3	15.3	18.8	3.7	80,070	134

Regional data not available for 1992

TABLE B.12: ASSISTANCE IN QUITTING SMOKING (1993 ADULT CTS)

OVERALL	Assistance				Population Size	Sample Size
	None (%)	Gum or Patch (%)	Counseling (%)	Both (%)	(n)	(n)
TOTAL	80.8	8.8	6.5	3.8	1,818,252	2,359
SEX						
Male	85.2	7.0	4.9	2.9	1,060,297	1,090
Female	74.7	11.3	8.8	5.1	757,955	1,269
AGE						
18-24	93.2	1.5	3.7	1.6	343,962	360
25-44	81.1	8.4	6.8	3.7	988,130	1,224
45-64	69.9	15.0	9.2	6.0	374,306	595
65+	77.4	14.0	3.7	4.8	111,854	180
RACE/ETHNICITY						
Hispanic	91.7	3.3	4.1	0.9	373,072	345
Non-Hispanic White	76.1	11.3	7.7	4.9	1,130,913	1,669
African-American	90.0	0.7	4.9	4.3	170,087	168
Asian/PI	90.0	5.7	2.7	1.7	93,157	111
Other	59.6	26.1	11.2	3.2	51,023	66
EDUCATION						
<12	85.8	6.3	6.6	1.4	460,864	313
12	80.3	10.0	5.3	4.4	703,657	830
13-15	78.4	8.4	8.5	4.6	426,433	813
16+	77.0	10.9	6.3	5.7	227,298	403
SEX Male						
AGE						
18-24	93.1	1.4	3.2	2.3	226,458	191
25-44	84.2	7.5	6.0	2.3	581,163	583
45-64	79.6	11.1	4.5	4.8	199,861	255
65+	84.2	9.7	1.3	4.8	52,815	61
RACE/ETHNICITY						
Hispanic	93.6	1.5	4.5	0.4	255,331	189
Non-Hispanic White	81.4	9.0	5.3	4.4	598,975	721
African-American	94.4	.	4.3	1.3	97,205	73
Asian/PI	88.2	7.0	2.9	1.9	75,611	76
Other	57.0	33.9	6.8	2.3	33,175	31
EDUCATION						
<12	89.9	5.4	4.7	.	294,699	156
12	84.1	6.9	4.4	4.7	358,991	335
13-15	84.3	6.9	5.3	3.5	249,204	363
16+	80.8	10.2	5.7	3.3	157,403	236
SEX Female						
AGE						
18-24	93.3	1.7	4.6	0.4	117,504	169
25-44	76.6	9.7	8.0	5.7	406,967	641
45-64	58.8	19.4	14.6	7.3	174,445	340
65+	71.3	17.9	5.9	4.9	59,039	119
RACE/ETHNICITY						
Hispanic	87.5	7.3	3.3	1.9	117,741	156
Non-Hispanic White	70.2	13.9	10.4	5.6	531,938	948
African-American	84.1	1.7	5.8	8.4	72,882	95
Asian/PI	97.5	.	1.7	0.8	17,546	35
Other	64.3	11.6	19.3	4.8	17,848	35
EDUCATION						
<12	78.4	7.9	9.9	3.8	166,165	157
12	76.4	13.3	6.3	4.0	344,666	495
13-15	70.2	10.4	13.1	6.2	177,229	450
16+	68.6	12.5	7.8	11.2	69,895	167

TABLE B.12: ASSISTANCE IN QUITTING SMOKING (1993 ADULT CTS)

REGIONAL	Assistance				Population Size	Sample Size
	None (%)	Gum or Patch (%)	Counseling (%)	Both (%)	(n)	(n)
OVERALL	80.8	8.8	6.5	3.8	1,818,252	2,359
Los Angeles	82.9	7.6	5.0	4.5	550,347	253
San Diego	84.4	4.8	5.8	5.0	127,942	117
Orange	83.4	8.8	5.7	2.0	142,265	117
Santa Clara	89.1	4.6	2.0	4.3	91,638	107
San Bernadino	77.6	10.1	10.5	1.8	83,357	135
Alameda	83.0	10.7	5.0	1.3	80,809	118
Riverside	81.8	9.5	3.8	4.9	56,820	135
Sacramento	77.5	8.7	8.2	5.6	74,752	151
Contra Costa	76.7	6.4	11.0	5.8	57,425	138
San Francisco	87.8	4.7	4.5	3.1	45,436	109
San Mateo, Solano	69.8	13.4	10.5	6.4	54,227	103
Marin, Napa, Sonoma	72.6	6.1	15.5	5.9	43,304	106
Butte, Colusa, Del Norte, Glenn, etc.	70.8	12.8	10.8	5.6	64,031	155
San Luis Obisbo, Santa Barbara, Ventura	70.7	18.4	8.5	2.4	78,486	131
Amador,Alpine,Calavera-s,El Dorado,etc.	78.9	6.3	11.3	3.5	81,526	117
Monterey, San Benito, Santa Cruz	79.2	6.5	12.6	1.8	30,631	111
Fresno, Madera, Merced, Stanislaus	81.5	12.7	3.9	1.9	74,597	117
Imperial, Inyo, Kern, Kings, Mono, Tulare	81.7	13.5	3.1	1.7	80,659	139

TABLE B.12: ASSISTANCE IN QUITTING SMOKING (1996 ADULT CTS)

OVERALL	Assistance				Population Size	Sample Size
	None (%)	Gum or Patch (%)	Counseling (%)	Both (%)	(n)	(n)
TOTAL	80.1	5.7	6.8	7.4	2,557,763	5,055
SEX						
Male	82.2	5.0	6.1	6.7	1,466,304	2,616
Female	77.2	6.6	7.8	8.4	1,091,459	2,439
AGE						
18-24	88.5	1.9	8.5	1.1	517,383	1,014
25-44	80.1	5.3	6.5	8.0	1,357,127	2,622
45-64	74.5	8.4	6.2	10.9	539,010	1,135
65+	70.0	13.1	5.1	11.8	144,243	284
RACE/ETHNICITY						
Hispanic	88.1	2.3	5.9	3.7	652,126	851
Non-Hispanic White	76.4	7.5	6.0	10.1	1,379,365	3,299
African-American	79.5	3.2	13.0	4.2	230,886	377
Asian/PI	80.3	7.9	8.4	3.3	182,709	324
Other	79.1	5.0	5.4	10.5	112,677	204
EDUCATION						
<12	82.3	3.9	8.1	5.7	650,560	649
12	80.9	5.5	6.0	7.7	761,505	1,762
13-15	80.2	5.8	6.6	7.5	716,002	1,658
16+	75.1	8.7	6.6	9.6	429,696	986
SEX Male						
AGE						
18-24	87.6	2.3	9.4	0.6	323,518	564
25-44	83.1	4.6	5.2	7.1	781,283	1,351
45-64	75.9	8.5	5.4	10.2	300,402	581
65+	73.8	6.6	3.1	16.5	61,101	120
RACE/ETHNICITY						
Hispanic	88.4	2.1	5.4	4.0	439,356	531
Non-Hispanic White	78.8	6.8	5.0	9.4	738,849	1,607
African-American	82.7	2.3	12.4	2.6	110,850	163
Asian/PI	81.5	7.6	8.6	2.3	124,981	219
Other	78.8	3.5	7.4	10.2	52,268	96
EDUCATION						
<12	84.5	2.6	7.3	5.7	409,330	380
12	83.8	5.2	4.5	6.5	417,267	874
13-15	81.8	5.5	6.6	6.2	403,986	848
16+	76.3	8.0	5.8	9.9	235,721	514
SEX Female						
AGE						
18-24	90.0	1.1	7.1	1.8	193,865	450
25-44	76.1	6.3	8.3	9.3	575,844	1,271
45-64	72.8	8.2	7.3	11.7	238,608	554
65+	67.2	17.9	6.6	8.4	83,142	164
RACE/ETHNICITY						
Hispanic	87.4	2.8	7.0	2.9	212,770	320
Non-Hispanic White	73.6	8.3	7.2	10.8	640,516	1,692
African-American	76.5	4.1	13.7	5.7	120,036	214
Asian/PI	77.9	8.6	8.0	5.6	57,728	105
Other	79.4	6.3	3.6	10.7	60,409	108
EDUCATION						
<12	78.6	6.2	9.4	5.8	241,230	269
12	77.3	5.8	7.8	9.2	344,238	888
13-15	78.1	6.2	6.5	9.2	312,016	810
16+	73.7	9.5	7.7	9.1	193,975	472

TABLE B.12: ASSISTANCE IN QUITTING SMOKING (1996 ADULT CTS)

REGIONAL	Assistance				Population Size	Sample Size
	None (%)	Gum or Patch (%)	Counseling (%)	Both (%)	(n)	(n)
OVERALL	80.1	5.7	6.8	7.4	2,557,763	5,055
Los Angeles	82.0	4.7	6.7	6.7	711,269	959
San Diego	81.5	5.4	4.7	8.3	212,806	328
Orange	83.8	6.0	4.3	5.8	197,775	273
Santa Clara	72.4	11.3	4.1	12.2	92,063	181
San Bernadino	77.6	4.5	11.2	6.7	129,199	234
Alameda	76.6	6.0	10.1	7.3	112,993	225
Riverside	81.2	4.7	5.9	8.2	135,772	225
Sacramento	81.4	5.1	4.8	8.7	86,634	243
Contra Costa	78.0	6.7	6.3	9.0	59,022	199
San Francisco	74.9	5.0	12.4	7.7	90,283	278
San Mateo, Solano	85.0	6.1	5.8	3.2	93,491	221
Marin, Napa, Sonoma	71.1	4.6	8.0	16.3	65,204	210
Butte, Colusa, Del Norte, Glenn, etc.	78.9	7.1	4.9	9.2	88,441	276
San Luis Obisbo, Santa Barbara, Ventura	78.6	8.5	6.0	6.9	122,581	268
Amador, Alpine, Calaveras El Dorado,etc	79.8	6.5	7.8	5.9	88,417	224
Monterey, San Benito, Santa Cruz	78.5	5.3	11.0	5.2	56,911	241
Fresno, Madera, Merced, Stanislaus	79.6	8.0	5.1	7.3	113,053	225
Imperial, Inyo, Kern, Kings, Mono, Tulare	79.3	3.4	9.1	8.2	101,849	245

TABLE B.13: PRICE SENSITIVITY (1992 ADULT CTS)

OVERALL	Worried about money spent on cigarettes (%)	Smoke generic cigarettes (%)	Population Size (n)	Sample Size (n)
TOTAL	43.2	9.1	4,340,288	4,657
SEX				
Male	41.0	7.9	2,451,936	2,304
Female	46.0	10.7	1,888,352	2,353
AGE				
18-24	38.6	6.2	709,878	545
25-44	45.6	8.9	2,299,433	2,307
45-64	42.7	11.3	989,933	1,380
65+	38.2	10.7	341,044	425
RACE/ETHNICITY				
Hispanic	38.1	3.8	761,315	551
Non-Hispanic White	44.8	11.3	2,914,846	3,575
African-American	43.4	5.6	306,849	281
Asian/PI	32.1	0.6	204,615	150
Other	52.1	12.2	152,663	100
EDUCATION				
<12	47.2	10.2	1,187,561	616
12	43.5	9.3	1,686,240	1,751
13-15	42.2	8.4	950,014	1,508
16+	34.9	7.5	516,473	782
SEX Male				
AGE				
18-24	36.2	5.8	448,254	310
25-44	43.5	7.7	1,354,441	1,218
45-64	39.6	10.4	494,985	614
65+	38.1	8.4	154,256	162
RACE/ETHNICITY				
Hispanic	35.9	2.7	490,429	323
Non-Hispanic White	42.7	10.2	1,581,985	1,702
African-American	44.1	5.4	158,639	128
Asian/PI	28.8	0.8	144,775	102
Other	56.8	12.1	76,108	49
EDUCATION				
<12	44.2	7.7	687,744	297
12	41.6	8.7	888,145	787
13-15	40.9	7.3	548,526	777
16+	33.1	7.4	327,521	443
SEX Female				
AGE				
18-24	42.5	6.9	261,624	235
25-44	48.6	10.6	944,992	1,089
45-64	45.8	12.1	494,948	766
65+	38.3	12.5	186,788	263
RACE/ETHNICITY				
Hispanic	42.0	5.9	270,886	228
Non-Hispanic White	47.3	12.6	1,332,861	1,873
African-American	42.6	5.8	148,210	153
Asian/PI	39.9	.	59,840	48
Other	47.4	12.2	76,555	51
EDUCATION				
<12	51.2	13.6	499,817	319
12	45.6	10.0	798,095	964
13-15	43.9	9.9	401,488	731
16+	38.1	7.6	188,952	339

Regional data not available for 1992

TABLE B.13: PRICE SENSITIVITY (1996 ADULT CTS)

OVERALL	Worried about money spent on cigarettes (%)	Smoke generic cigarettes (%)	Population Size (n)	Sample Size (n)
TOTAL	32.2	8.3	4,668,308	8,904
SEX				
Male	30.3	7.6	2,632,073	4,539
Female	34.6	9.1	2,036,235	4,365
AGE				
18-24	25.2	1.5	815,343	1,359
25-44	34.8	6.8	2,385,055	4,478
45-64	33.4	14.0	1,144,985	2,456
65+	25.9	15.5	322,925	611
RACE/ETHNICITY				
Hispanic	29.9	3.1	1,137,646	1,316
Non-Hispanic White	32.3	10.9	2,633,396	6,076
African-American	32.2	8.0	379,486	601
Asian/PI	35.5	1.9	312,542	552
Other	38.1	13.0	205,238	359
EDUCATION				
<12	36.8	8.8	1,171,516	1,075
12	34.0	9.5	1,470,554	3,331
13-15	30.8	8.4	1,284,863	2,868
16+	23.4	4.6	741,375	1,630
SEX Male				
AGE				
18-24	24.1	1.5	499,661	756
25-44	32.6	6.1	1,377,266	2,354
45-64	31.4	13.6	622,700	1,194
65+	24.0	18.7	132,446	235
RACE/ETHNICITY				
Hispanic	31.5	2.8	739,847	816
Non-Hispanic White	28.7	10.5	1,399,076	2,899
African-American	30.0	8.9	181,479	274
Asian/PI	36.6	2.2	205,874	368
Other	31.4	11.9	105,797	182
EDUCATION				
<12	36.6	7.1	691,727	601
12	31.7	9.0	799,704	1,643
13-15	26.8	8.3	711,749	1,421
16+	23.0	4.6	428,893	874
SEX Female				
AGE				
18-24	26.9	1.5	315,682	603
25-44	37.9	7.9	1,007,789	2,124
45-64	35.7	14.5	522,285	1,262
65+	27.3	13.3	190,479	376
RACE/ETHNICITY				
Hispanic	27.1	3.7	397,799	500
Non-Hispanic White	36.4	11.4	1,234,320	3,177
African-American	34.2	7.1	198,007	327
Asian/PI	33.3	1.3	106,668	184
Other	45.3	14.2	99,441	177
EDUCATION				
<12	37.1	11.4	479,789	474
12	36.8	10.1	670,850	1,688
13-15	35.8	8.6	573,114	1,447
16+	24.0	4.5	312,482	756

TABLE B.13: PRICE SENSITIVITY (1996 ADULT CTS)

REGIONAL	Worried about money spent on cigarettes (%)	Smoke generic cigarettes (%)	Population Size (n)	Sample Size (n)
OVERALL	32.2	8.3	4,668,308	8,904
Los Angeles	29.5	4.1	1,408,146	1,710
San Diego	30.6	11.0	365,951	552
Orange	32.6	7.0	335,890	452
Santa Clara	33.1	5.8	155,840	294
San Bernadino	38.3	11.6	227,913	391
Alameda	33.9	5.9	194,264	398
Riverside	31.0	6.7	222,245	398
Sacramento	39.5	11.9	162,915	452
Contra Costa	24.0	11.0	123,414	378
San Francisco	24.1	2.0	152,269	443
San Mateo, Solano	32.3	6.8	174,170	394
Marin, Napa, Sonoma	37.8	8.2	104,310	371
Butte, Colusa, Del Norte, Glenn, etc.	36.5	18.7	173,608	528
San Luis Obisbo, Santa Barbara, Ventura	32.3	6.0	190,614	425
Amador,Alpine,Calaveras, El Dorado,etc.	34.0	17.3	198,846	460
Monterey, San Benito, Santa Cruz	32.3	8.9	85,633	388
Fresno, Madera, Merced, Stanislaus	36.9	14.6	203,803	407
Imperial, Inyo, Kern, Kings, Mono, Tulare	37.4	15.9	188,477	463

TABLE B.14: SUPPORT FOR CIGARETTE TAX INCREASE (1992 ADULT CTS)

OVERALL	Tax Increase Willing to Support										
	Don't know	$0.25	$0.50	$0.75	$1.00	$1.50	$2.00	$3.00	No Tax Increase	Population Size	Sample Size
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(n)	(n)
TOTAL	9.8	19.8	12.5	2.9	10.3	2.7	3.5	22.3	16.3	5,784,442	2,855
SEX											
Male	7.8	22.0	12.8	2.2	9.2	3.3	3.8	21.2	17.8	2,942,446	1,403
Female	11.9	17.5	12.2	3.6	11.5	2.1	3.2	23.5	14.6	2,841,996	1,452
AGE											
18-24	4.4	18.2	16.3	6.0	13.5	2.5	4.8	21.9	12.4	910,469	407
25-44	6.8	21.9	12.9	2.9	10.6	3.2	3.4	24.6	13.9	2,911,768	1,407
45-64	12.5	17.2	11.7	0.7	9.6	2.8	3.7	21.5	20.3	1,206,975	703
65+	23.5	18.1	7.5	2.4	6.6	1.0	2.0	15.1	23.8	755,230	338
RACE/ETHNICITY											
Hispanic	10.5	17.1	11.9	3.3	11.0	3.0	3.9	27.8	11.5	2,754,032	819
Non-Hispanic White	9.3	23.4	13.3	2.9	10.0	1.4	2.9	16.4	20.4	2,430,906	1,759
African-American	11.0	19.8	12.2	0.6	4.7	.	2.7	20.3	28.7	200,334	117
Asian/PI	8.5	16.2	9.3	1.0	9.9	11.7	5.3	21.9	16.2	332,980	119
Other	0.7	20.2	19.7	.	11.7	.	.	21.0	26.8	66,190	41
EDUCATION											
<12	11.6	17.4	10.0	2.6	8.7	4.2	3.2	25.3	17.1	2,390,565	567
12	7.9	24.9	13.7	3.2	9.9	0.9	3.9	18.9	16.8	1,547,111	849
13-15	9.3	21.6	16.1	2.3	11.8	2.0	3.5	16.1	17.3	916,448	852
16+	8.9	15.9	13.3	3.6	13.7	2.7	3.4	26.3	12.3	930,318	587
SEX Male											
AGE											
18-24	5.5	19.9	13.6	3.5	10.5	2.9	1.8	27.0	15.2	522,956	201
25-44	6.1	24.5	13.7	2.1	9.6	3.5	5.0	20.7	14.9	1,570,798	720
45-64	5.4	20.0	12.2	.	8.4	5.4	2.7	22.9	23.1	505,743	325
65+	22.6	17.2	8.1	3.7	6.5	.	2.6	11.8	27.4	342,949	157
RACE/ETHNICITY											
Hispanic	7.1	21.3	13.1	2.8	8.9	4.6	4.3	25.9	12.1	1,402,626	417
Non-Hispanic White	8.1	23.3	12.2	1.7	10.6	1.8	4.0	16.0	22.3	1,255,829	839
African-American	15.6	22.9	11.3	1.3	3.6	.	0.9	13.8	30.5	100,130	54
Asian/PI	8.7	19.4	13.5	1.7	0.5	5.8	0.7	28.3	21.3	144,072	68
Other	0.4	14.2	20.5	.	19.4	.	.	12.1	33.4	39,789	25
EDUCATION											
<12	8.6	22.7	11.1	2.2	6.4	5.3	3.6	23.0	17.2	1,195,148	278
12	8.5	26.5	13.8	1.7	8.8	1.1	3.7	16.1	19.7	722,284	390
13-15	5.9	20.6	13.0	2.3	13.6	2.3	3.5	17.9	20.9	463,052	410
16+	6.7	16.1	14.9	2.6	11.8	2.6	4.5	26.6	14.2	561,962	325
SEX Female											
AGE											
18-24	2.8	15.9	19.9	9.3	17.6	2.0	8.8	15.0	8.6	387,513	206
25-44	7.7	18.8	12.0	3.8	11.7	2.9	1.4	29.2	12.6	1,340,970	687
45-64	17.7	15.1	11.4	1.3	10.4	0.9	4.4	20.5	18.3	701,232	378
65+	24.3	19.0	7.0	1.3	6.6	1.9	1.4	17.8	20.7	412,281	181
RACE/ETHNICITY											
Hispanic	14.0	12.7	10.8	3.8	13.1	1.3	3.6	29.8	10.9	1,351,406	402
Non-Hispanic White	10.6	23.6	14.5	4.2	9.4	1.0	1.7	16.8	18.3	1,175,077	920
African-American	6.4	16.6	13.2	.	5.7	.	4.5	26.7	26.9	100,204	63
Asian/PI	8.3	13.7	6.2	0.5	17.0	16.2	8.9	16.9	12.3	188,908	51
Other	1.1	29.2	18.4	.	.	.	.	34.6	16.8	26,401	16
EDUCATION											
<12	14.6	12.2	8.9	2.9	10.9	3.1	2.9	27.7	16.9	1,195,417	289
12	7.3	23.4	13.7	4.5	10.8	0.7	4.1	21.4	14.2	824,827	459
13-15	12.8	22.5	19.2	2.4	10.0	1.7	3.4	14.4	13.7	453,396	442
16+	12.3	15.6	11.0	5.0	16.6	2.8	1.6	25.8	9.4	368,356	262

Regional data not available for 1992

TABLE B.14: SUPPORT FOR CIGARETTE TAX INCREASE (1993 ADULT CTS)

OVERALL	Tax Increase Willing to Support										
	Don't know	$0.25	$0.50	$0.75	$1.00	$1.50	$2.00	$3.00	No Tax Increase	Population Size	Sample Size
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(n)	(n)
TOTAL	7.3	18.4	12.1	3.1	12.0	1.9	3.5	27.0	14.7	21,587,775	30,715
SEX											
Male	6.4	17.6	12.0	2.9	12.1	1.9	3.6	27.5	15.9	10,671,517	12,477
Female	8.2	19.2	12.2	3.3	11.8	1.9	3.5	26.4	13.5	10,916,258	18,238
AGE											
18-24	3.5	20.3	15.7	5.3	12.1	2.9	4.2	27.6	8.3	3,275,848	3,702
25-44	5.3	19.1	12.5	3.0	12.3	2.0	3.5	29.5	12.8	10,191,131	14,189
45-64	8.5	17.4	10.3	2.5	11.9	1.3	3.1	26.5	18.6	5,120,292	7,898
65+	16.4	15.9	9.8	2.3	10.7	1.7	3.3	18.3	21.5	3,000,504	4,926
RACE/ETHNICITY											
Hispanic	7.5	19.6	12.0	3.8	12.1	2.5	4.0	28.1	10.5	4,859,668	4,875
Non-Hispanic White	6.9	17.6	12.1	2.6	11.9	1.6	3.3	27.6	16.4	13,336,484	21,648
African-American	5.7	22.6	10.1	5.6	8.8	3.2	4.2	22.7	17.1	1,358,411	1,686
Asian/PI	11.4	18.5	13.2	3.6	15.1	2.2	4.1	22.9	9.0	1,622,912	2,011
Other	9.2	16.9	13.3	1.0	9.0	1.8	1.5	22.6	24.7	410,300	495
EDUCATION											
<12	10.1	20.1	10.2	2.9	10.7	2.1	3.6	23.6	16.7	5,090,098	3,359
12	7.2	20.8	13.0	3.3	10.6	1.9	2.9	24.7	15.6	6,947,051	8,857
13-15	5.5	19.0	12.9	3.0	12.6	1.6	3.4	27.6	14.5	4,999,968	9,802
16+	6.4	12.3	12.0	3.2	14.8	2.1	4.4	33.6	11.3	4,550,658	8,697
SEX Male											
AGE											
18-24	3.1	21.6	15.9	5.0	11.7	2.5	4.9	26.4	9.0	1,828,101	1,693
25-44	5.0	18.2	12.1	2.6	11.9	2.0	3.4	29.9	14.9	5,124,982	6,014
45-64	8.2	14.3	10.4	2.8	12.7	1.4	2.9	27.5	19.8	2,395,854	3,088
65+	13.5	15.6	9.5	1.5	12.3	2.0	3.7	19.8	22.2	1,322,580	1,682
RACE/ETHNICITY											
Hispanic	7.6	18.8	13.4	3.7	11.3	2.1	3.5	28.6	10.9	2,457,143	2,032
Non-Hispanic White	5.7	16.6	11.3	2.1	12.2	1.8	3.5	28.2	18.4	6,456,417	8,624
African-American	4.1	21.6	9.8	6.7	10.6	2.0	4.2	25.2	15.7	644,756	666
Asian/PI	9.1	19.0	14.7	4.2	14.4	2.6	4.0	22.8	9.1	921,836	952
Other	9.6	15.8	11.8	1.7	11.1	0.6	1.4	20.8	27.3	191,365	203
EDUCATION											
<12	8.8	18.7	11.7	3.1	11.3	2.0	3.1	24.2	16.9	2,433,065	1,222
12	5.8	20.4	12.1	2.8	10.7	2.0	3.0	26.4	16.9	3,196,795	3,189
13-15	5.3	19.2	12.7	3.0	11.5	1.4	3.6	26.6	16.5	2,465,579	3,888
16+	6.0	11.6	11.5	2.8	15.1	2.3	4.7	33.0	13.1	2,576,078	4,178
SEX Female											
AGE											
18-24	4.1	18.8	15.5	5.6	12.6	3.4	3.4	29.2	7.5	1,447,747	2,009
25-44	5.5	19.9	12.9	3.4	12.8	2.1	3.7	29.1	10.5	5,066,149	8,175
45-64	8.8	20.0	10.2	2.1	11.1	1.3	3.3	25.6	17.6	2,724,438	4,810
65+	18.6	16.2	10.1	3.0	9.4	1.5	3.1	17.1	21.0	1,677,924	3,244
RACE/ETHNICITY											
Hispanic	7.3	20.3	10.7	3.8	12.9	2.9	4.4	27.6	10.1	2,402,525	2,843
Non-Hispanic White	7.9	18.6	12.9	3.1	11.6	1.4	3.0	27.1	14.4	6,880,067	13,024
African-American	7.0	23.6	10.4	4.6	7.2	4.2	4.1	20.4	18.4	713,655	1,020
Asian/PI	14.5	17.8	11.3	2.7	16.1	1.6	4.3	22.9	8.8	701,076	1,059
Other	8.7	17.9	14.6	0.3	7.2	2.7	1.7	24.3	22.5	218,935	292
EDUCATION											
<12	11.2	21.4	8.8	2.8	10.1	2.2	4.1	23.1	16.4	2,657,033	2,137
12	8.4	21.2	13.8	3.7	10.5	1.9	2.9	23.2	14.5	3,750,256	5,668
13-15	5.6	18.7	13.0	3.0	13.6	1.9	3.3	28.5	12.5	2,534,389	5,914
16+	6.9	13.1	12.6	3.7	14.4	1.9	4.0	34.3	9.0	1,974,580	4,519

TABLE B.14: SUPPORT FOR CIGARETTE TAX INCREASE (1993 ADULT CTS)

REGIONAL	Tax Increase Willing to Support									Population Size	Sample Size
	Don't know (%)	$0.25 (%)	$0.50 (%)	$0.75 (%)	$1.00 (%)	$1.50 (%)	$2.00 (%)	$3.00 (%)	No Tax Increase (%)	(n)	(n)
OVERALL	7.3	18.4	12.1	3.1	12.0	1.9	3.5	27.0	14.7	21,587,775	30,715
Los Angeles	7.0	19.8	12.3	3.2	12.1	1.8	3.9	27.2	12.7	6,429,627	3,219
San Diego	6.8	17.8	13.2	2.9	11.7	1.5	4.0	25.9	16.3	1,812,081	1,785
Orange	6.7	15.0	11.9	3.6	12.2	2.6	2.9	30.3	14.8	1,748,693	1,519
Santa Clara	7.8	17.2	12.0	2.6	14.0	1.9	3.5	25.9	15.1	1,086,331	1,589
San Bernadino	6.0	18.6	12.6	3.1	10.0	1.6	2.9	27.3	17.8	1,028,911	1,784
Alameda	6.7	17.9	12.4	4.8	14.4	1.7	3.6	25.1	13.4	927,988	1,516
Riverside	8.0	18.5	12.0	2.9	11.1	1.5	2.6	26.9	16.5	849,040	1,853
Sacramento	5.4	18.8	10.8	3.0	13.1	2.9	2.9	25.5	17.5	755,336	1,692
Contra Costa	8.0	17.8	11.2	3.6	12.1	1.8	3.9	30.1	11.4	583,028	1,739
San Francisco	10.5	15.2	10.1	4.0	13.0	2.3	4.9	27.5	12.4	525,170	1,442
San Mateo, Solano	7.6	17.2	12.6	2.5	13.0	2.2	3.7	28.4	12.7	718,240	1,516
Marin, Napa, Sonoma	8.4	16.4	12.5	2.4	13.0	2.0	3.2	29.8	12.3	528,885	1,494
Butte, Colusa, Del Norte, Glenn, etc.	7.9	19.1	11.9	3.8	10.3	1.6	3.1	23.2	19.0	686,773	1,688
San Luis Obisbo, Santa Barbara, Ventura	8.5	18.0	10.9	3.1	11.6	2.8	3.7	28.2	13.4	910,992	1,587
Amador,Alpine, Calavera s,El Dorado,etc.	7.2	17.6	11.5	2.1	11.6	2.3	4.0	26.0	17.6	805,079	1,469
Monterey, San Benito, Santa Cruz	7.1	16.2	11.7	2.5	13.0	1.8	4.2	28.9	14.7	451,319	1,595
Fresno, Madera, Merced, Stanislaus	8.2	20.9	12.2	2.8	10.2	2.0	2.4	24.3	16.9	946,316	1,613
Imperial, Inyo, Kern, Kings, Mono, Tulare	9.2	21.7	11.8	2.5	9.1	1.5	2.5	23.5	18.2	793,966	1,615

TABLE B.14: SUPPORT FOR CIGARETTE TAX INCREASE (1996 ADULT CTS)

OVERALL	Tax Increase Willing to Support										
	Don't know	$0.25	$0.50	$0.75	$1.00	$1.50	$2.00	$3.00	No Tax Increase	Population Size	Sample Size
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(n)	(n)
TOTAL	6.0	13.4	10.4	2.5	12.4	2.0	3.7	26.1	23.5	22,878,901	18,616
SEX											
Male	4.9	12.2	9.9	2.2	11.9	2.0	4.0	26.1	26.8	11,229,770	9,065
Female	7.2	14.5	10.9	2.8	12.9	2.0	3.4	26.0	20.3	11,649,131	9,551
AGE											
18-24	2.2	13.6	14.3	4.5	14.3	2.8	4.8	22.5	20.9	3,029,936	2,473
25-44	4.8	13.2	11.1	2.5	12.7	2.0	3.8	27.4	22.4	10,688,511	8,778
45-64	5.7	13.5	8.8	1.7	10.8	1.7	3.4	27.7	26.8	6,039,397	5,394
65+	14.5	13.4	7.6	2.1	12.6	1.6	2.9	21.7	23.4	3,121,057	1,971
RACE/ETHNICITY											
Hispanic	6.1	13.9	9.8	2.7	13.5	2.6	4.2	25.7	21.5	5,861,511	3,045
Non-Hispanic White	5.7	13.0	10.4	2.2	12.6	1.8	3.5	26.7	24.0	12,610,345	12,564
African-American	3.9	15.3	10.3	4.3	7.9	1.8	3.3	23.6	29.6	1,492,445	1,117
Asian/PI	10.1	12.9	11.9	2.6	13.3	1.7	4.3	25.6	17.7	2,144,990	1,284
Other	4.1	13.2	11.1	2.8	7.1	1.0	3.0	23.1	34.5	769,610	606
EDUCATION											
<12	8.8	13.2	8.3	1.7	11.0	2.1	3.5	24.8	26.5	4,876,751	2,052
12	6.5	15.6	10.9	3.1	12.2	1.7	2.9	21.1	26.1	5,717,864	6,040
13-15	4.2	14.5	12.0	2.7	11.5	1.9	3.8	24.6	24.8	6,042,162	5,894
16+	5.2	10.4	10.1	2.5	14.5	2.3	4.5	32.9	17.6	6,242,124	4,630
SEX Male											
AGE											
18-24	1.7	14.4	13.3	4.3	11.5	2.7	3.9	24.0	24.2	1,569,047	1,272
25-44	4.3	13.2	10.4	1.8	12.1	2.1	4.2	25.8	26.1	5,328,315	4,368
45-64	5.3	10.3	8.7	2.0	11.1	1.5	4.0	28.3	28.8	2,974,175	2,592
65+	9.7	10.1	7.1	2.3	12.9	1.7	3.6	24.7	28.0	1,358,233	833
RACE/ETHNICITY											
Hispanic	4.6	13.9	11.1	2.4	12.1	3.1	5.0	23.3	24.5	2,828,290	1,639
Non-Hispanic White	4.7	11.0	9.2	1.9	12.3	1.7	3.7	27.2	28.3	6,259,222	5,858
African-American	3.2	14.1	8.5	2.8	8.0	2.5	4.2	26.6	30.1	707,773	512
Asian/PI	7.8	13.0	12.2	3.8	13.1	0.7	3.2	27.7	18.4	1,057,917	763
Other	4.8	13.9	10.4	1.4	5.4	0.8	4.1	22.6	36.6	376,568	293
EDUCATION											
<12	6.0	12.4	8.2	1.3	11.6	2.1	3.8	24.6	30.1	2,320,055	1,094
12	4.9	13.4	10.2	2.8	12.2	1.5	3.6	21.8	29.6	2,665,524	2,782
13-15	3.7	14.4	10.9	2.1	10.6	2.1	4.0	23.8	28.3	2,930,166	2,768
16+	5.0	9.3	10.2	2.5	12.9	2.1	4.5	32.6	20.8	3,314,025	2,421
SEX Female											
AGE											
18-24	2.8	12.8	15.4	4.7	17.3	3.0	5.7	21.0	17.4	1,460,889	1,201
25-44	5.4	13.3	11.8	3.3	13.3	2.0	3.4	29.0	18.7	5,360,196	4,410
45-64	6.0	16.6	8.9	1.5	10.4	1.9	2.8	27.1	24.8	3,065,222	2,802
65+	18.3	16.0	8.0	2.0	12.4	1.6	2.4	19.4	20.0	1,762,824	1,138
RACE/ETHNICITY											
Hispanic	7.4	13.9	8.6	2.9	14.8	2.1	3.4	28.0	18.7	3,033,221	1,406
Non-Hispanic White	6.7	14.9	11.7	2.5	12.8	2.0	3.3	26.3	19.9	6,351,123	6,706
African-American	4.5	16.3	12.0	5.6	7.8	1.3	2.4	20.9	29.1	784,672	605
Asian	12.3	12.7	11.5	1.5	13.5	2.7	5.2	23.6	16.9	1,087,073	521
Other	3.5	12.5	11.7	4.2	8.7	1.2	2.0	23.6	32.5	393,042	313
EDUCATION											
<12	11.4	14.0	8.4	2.1	10.4	2.1	3.3	25.1	23.2	2,556,696	958
12	7.9	17.4	11.5	3.3	12.2	1.9	2.2	20.5	23.0	3,052,340	3,258
13-15	4.7	14.6	13.2	3.2	12.4	1.6	3.5	25.4	21.4	3,111,996	3,126
16+	5.3	11.7	10.0	2.5	16.3	2.5	4.6	33.3	13.9	2,928,099	2,209

TABLE B.14: SUPPORT FOR CIGARETTE TAX INCREASE (1996 ADULT CTS)

REGIONAL	Tax Increase Willing to Support									Population Size	Sample Size
	Don't know (%)	$0.25 (%)	$0.50 (%)	$0.75 (%)	$1.00 (%)	$1.50 (%)	$2.00 (%)	$3.00 (%)	No Tax Increase (%)	(n)	(n)
OVERALL	6.0	13.4	10.4	2.5	12.4	2.0	3.7	26.1	23.5	22,878,901	18,616
Los Angeles	6.7	12.9	9.2	2.2	12.2	2.6	3.8	27.8	22.6	6,617,607	3,565
San Diego	6.0	15.3	12.9	2.8	10.0	1.7	3.3	23.4	24.7	1,950,958	1,193
Orange	4.6	12.7	15.0	2.0	13.2	2.0	4.8	24.4	21.4	1,885,635	1,063
Santa Clara	8.3	13.0	8.4	2.8	13.1	2.1	4.2	31.3	16.8	1,165,855	752
San Bernadino	5.2	15.2	8.0	3.9	13.6	1.1	4.6	21.4	26.9	1,048,807	778
Alameda	5.1	12.3	11.6	5.3	16.2	2.4	3.6	23.1	20.5	990,883	797
Riverside	8.0	12.8	12.3	1.5	12.0	1.0	4.0	22.9	25.5	958,334	819
Sacramento	7.6	11.5	7.3	3.3	12.1	1.5	3.9	27.7	25.1	804,664	921
Contra Costa	4.7	15.0	10.8	1.9	11.4	2.7	4.2	27.5	21.8	654,220	781
San Francisco	6.8	12.2	12.6	2.7	16.4	1.9	1.7	26.4	19.2	611,685	817
San Mateo, Solano	5.0	9.5	8.3	3.2	14.7	0.7	4.6	28.5	25.6	797,587	819
Marin, Napa, Sonoma	4.5	11.0	10.1	1.5	13.2	2.6	4.1	33.5	19.5	590,502	899
Butte, Colusa, Del Norte, Glenn, etc.	5.3	13.3	12.3	1.2	9.3	0.9	4.2	25.1	28.4	733,408	1,016
San Luis Obisbo, Santa Barbara, Ventura	5.8	13.7	11.0	2.4	12.6	1.9	3.3	23.9	25.4	956,940	908
Amador,Alpine, Calaveras El Dorado,etc.	5.3	15.6	9.4	2.7	10.2	2.7	2.3	25.0	26.8	882,608	932
Monterey, San Benito, Santa Cruz	6.2	13.2	9.9	2.3	16.7	1.7	2.4	26.7	21.0	451,276	852
Fresno, Madera, Merced, Stanislaus	6.6	11.9	10.2	2.3	10.2	2.3	2.1	27.5	27.0	963,994	820
Imperial, Inyo, Kern, Kings, Mono, Tulare	3.3	20.7	9.2	2.7	11.4	0.5	2.7	19.5	29.9	813,938	884

TABLE B.15: FAVORITE ADS OF ADULTS (1992 ADULT CTS)

OVERALL	Favorite Ad				Population Size	Sample Size
	Camel (%)	Marlboro (%)	Other (%)	No Favorite (%)	(n)	(n)
TOTAL	16.4	21.2	9.4	53.1	21,588,796	11,905
SEX						
Male	21.5	23.1	6.6	48.8	10,673,057	5,684
Female	11.3	19.3	12.2	57.2	10,915,739	6,221
AGE						
18-24	26.4	28.6	8.0	37.1	3,277,155	1,514
25-44	20.3	21.6	10.1	47.9	10,187,108	5,689
45-64	9.0	17.9	10.0	63.0	5,032,967	3,282
65+	4.7	17.0	7.6	70.7	3,091,566	1,420
RACE/ETHNICITY						
Hispanic	15.0	28.6	7.6	48.8	4,872,984	1,817
Non-Hispanic White	18.1	19.0	8.9	54.1	13,312,956	8,662
African-American	11.8	11.1	20.9	56.1	1,357,672	680
Asian/PI	11.0	26.7	9.5	52.9	1,540,666	556
Other	12.7	17.5	10.3	59.4	504,518	190
EDUCATION						
<12	14.1	27.6	7.5	50.8	5,091,113	1,384
12	17.0	19.5	10.1	53.4	6,947,028	3,825
13-15	18.6	19.6	10.3	51.5	5,063,990	3,949
16+	15.5	18.2	9.4	56.9	4,486,665	2,747
SEX Male						
AGE						
18-24	34.8	31.1	4.2	29.9	1,758,732	761
25-44	25.2	23.9	7.0	43.9	5,435,923	2,823
45-64	10.1	18.4	6.9	64.6	2,268,835	1,520
65+	7.2	16.5	7.6	68.7	1,209,567	580
RACE/ETHNICITY						
Hispanic	19.5	34.8	4.7	41.0	2,398,107	900
Non-Hispanic White	23.8	19.6	6.4	50.2	6,531,614	4,065
African-American	16.0	16.7	14.7	52.6	715,323	321
Asian/PI	16.2	27.0	6.4	50.5	756,678	304
Other	13.6	10.3	7.2	69.0	271,335	94
EDUCATION						
<12	19.5	31.2	5.7	43.6	2,454,405	642
12	22.9	21.0	7.4	48.7	3,191,429	1,648
13-15	24.1	20.9	6.6	48.4	2,478,330	1,902
16+	19.2	19.9	6.5	54.3	2,548,893	1,492
SEX Female						
AGE						
18-24	16.7	25.7	12.3	45.4	1,518,423	753
25-44	14.7	19.0	13.7	52.6	4,751,185	2,866
45-64	8.0	17.6	12.6	61.7	2,764,132	1,762
65+	3.1	17.3	7.6	71.9	1,881,999	840
RACE/ETHNICITY						
Hispanic	10.6	22.6	10.5	56.3	2,474,877	917
Non-Hispanic White	12.6	18.4	11.2	57.9	6,781,342	4,597
African-American	7.1	4.9	27.9	60.1	642,349	359
Asian/PI	6.0	26.4	12.5	55.2	783,988	252
Other	11.8	26.0	13.9	48.3	233,183	96
EDUCATION						
<12	9.1	24.2	9.3	57.4	2,636,708	742
12	11.9	18.1	12.4	57.5	3,755,599	2,177
13-15	13.2	18.4	14.0	54.4	2,585,660	2,047
16+	10.6	15.9	13.2	60.3	1,937,772	1,255

Regional data not available for 1992

TABLE B.15: FAVORITE ADS OF ADOLESCENTS (1992 TEEN CTS)

OVERALL	Favorite Ad				Population Size	Sample Size
	Camel (%)	Marlboro (%)	Other (%)	No Favorite (%)	(n)	(n)
TOTAL	35.9	20.0	8.1	36.0	2,344,490	1,789
SEX						
Male	42.7	22.4	3.7	31.2	1,158,999	882
Female	29.2	17.6	12.4	40.8	1,185,491	907
AGE						
12-13	36.9	14.3	5.7	43.1	807,464	625
14-15	35.9	21.4	7.4	35.2	797,854	611
16-17	34.7	24.6	11.5	29.2	739,172	553
RACE/ETHNICITY						
Hispanic	35.8	23.7	4.5	36.0	792,627	550
Non-Hispanic White	36.8	20.0	9.0	34.2	1,095,598	932
African-American	41.2	8.7	15.3	34.8	208,540	117
Asian/PI	23.7	15.9	10.3	50.1	199,094	147
Other	44.2	22.9	7.3	25.6	48,631	43
SCHOOL PERFORMANCE						
Much better than average	38.9	17.5	8.9	34.7	425,204	332
Better than average	34.7	16.0	8.9	40.4	838,664	638
Average and below	35.6	24.1	7.2	33.1	1,080,622	819
SEX Male						
AGE						
12-13	40.7	17.2	3.8	38.4	399,645	313
14-15	43.7	22.9	2.9	30.5	400,744	298
16-17	43.8	27.7	4.6	23.9	358,610	271
RACE/ETHNICITY						
Hispanic	39.7	27.2	1.7	31.3	408,568	285
Non-Hispanic White	44.6	21.7	5.3	28.4	523,964	442
African-American	44.4	11.8	6.6	37.2	105,390	60
Asian/PI	39.2	18.3	1.2	41.3	94,212	73
Other	56.8	18.8	.	24.5	26,865	22
SCHOOL PERFORMANCE						
Much better than average	49.7	22.7	2.8	24.9	194,492	151
Better than average	42.1	16.7	3.6	37.6	405,972	302
Average and below	40.7	26.5	4.1	28.7	558,535	429
SEX Female						
AGE						
12-13	33.2	11.6	7.6	47.7	407,819	312
14-15	28.1	20.0	12.0	40.0	397,110	313
16-17	26.1	21.7	18.1	34.1	380,562	282
RACE/ETHNICITY						
Hispanic	31.6	20.0	7.5	40.9	384,059	265
Non-Hispanic White	29.6	18.5	12.4	39.5	571,634	490
African-American	38.0	5.5	24.1	32.3	103,150	57
Asian/PI	9.8	13.8	18.4	57.9	104,882	74
Other	28.6	28.0	16.4	27.0	21,766	21
SCHOOL PERFORMANCE						
Much better than average	29.7	13.2	14.0	43.1	230,712	181
Better than average	27.8	15.3	13.8	43.1	432,692	336
Average and below	30.1	21.5	10.5	37.8	522,087	390

Regional data not available for 1992

TABLE B.15: FAVORITE ADS OF ADOLESCENTS (1993 TEEN CTS)

OVERALL	Favorite Ad				Population Size	Sample Size
	Camel (%)	Marlboro (%)	Other (%)	No Favorite (%)	(n)	(n)
TOTAL	36.4	26.9	10.1	26.7	2,344,485	5,531
SEX						
Male	43.4	27.3	6.0	23.2	1,161,032	2,818
Female	29.4	26.5	14.0	30.0	1,183,453	2,713
AGE						
12-13	36.3	24.8	8.8	30.1	838,103	1,921
14-15	38.6	27.0	10.6	23.8	779,043	1,873
16-17	34.0	29.3	10.9	25.8	727,339	1,737
RACE/ETHNICITY						
Hispanic	34.4	29.8	7.9	27.9	772,956	1,431
Non-Hispanic White	39.5	26.5	9.7	24.3	1,135,006	3,234
African-American	32.9	14.4	21.3	31.3	208,932	323
Asian/PI	29.1	31.3	9.8	29.8	188,805	443
Other	34.7	27.9	5.4	32.0	38,786	100
SCHOOL PERFORMANCE						
Much better than average	35.4	24.1	9.6	30.8	430,306	1,065
Better than average	36.9	24.8	10.8	27.5	861,056	2,068
Average and below	36.3	29.8	9.7	24.3	1,053,123	2,398
SEX Male						
AGE						
12-13	42.3	26.3	5.1	26.3	408,933	961
14-15	45.1	26.9	6.4	21.7	389,936	971
16-17	42.9	28.9	6.7	21.4	362,163	886
RACE/ETHNICITY						
Hispanic	41.8	31.3	4.5	22.3	382,130	714
Non-Hispanic White	47.3	25.9	5.6	21.2	561,905	1,662
African-American	38.9	13.2	15.4	32.4	103,704	166
Asian/PI	31.7	34.3	4.6	29.4	94,217	226
Other	45.4	28.9	5.1	20.7	19,076	50
SCHOOL PERFORMANCE						
Much better than average	44.0	25.9	2.6	27.5	197,636	499
Better than average	44.0	25.2	6.0	24.7	408,023	1,016
Average and below	42.8	29.3	7.2	20.6	555,373	1,303
SEX Female						
AGE						
12-13	30.6	23.4	12.3	33.7	429,170	960
14-15	32.1	27.1	14.9	25.9	389,107	902
16-17	25.1	29.7	15.1	30.0	365,176	851
RACE/ETHNICITY						
Hispanic	27.2	28.4	11.1	33.3	390,826	717
Non-Hispanic White	32.0	27.0	13.7	27.3	573,101	1,572
African-American	27.0	15.6	27.2	30.2	105,228	157
Asian/PI	26.5	28.4	14.9	30.1	94,588	217
Other	24.4	27.0	5.7	42.9	19,710	50
SCHOOL PERFORMANCE						
Much better than average	28.1	22.6	15.6	33.7	232,670	566
Better than average	30.5	24.5	15.0	30.0	453,033	1,052
Average and below	29.0	30.3	12.4	28.3	497,750	1,095

TABLE B.15: FAVORITE ADS OF ADOLESCENTS (1993 TEEN CTS)

REGIONAL	Favorite Ad				Population Size	Sample Size
	Camel (%)	Marlboro (%)	Other (%)	No Favorite (%)	(n)	(n)
OVERALL	36.4	26.9	10.1	26.7	2,344,485	5,531
Los Angeles	35.5	25.2	11.3	28.0	698,249	546
San Diego	35.7	29.1	6.8	28.3	196,801	290
Orange	35.1	30.4	9.5	25.1	189,903	242
Santa Clara	38.9	27.0	8.7	25.4	117,969	280
San Bernadino	36.1	26.3	12.3	25.4	111,744	399
Alameda	30.3	26.3	14.1	29.3	100,775	247
Riverside	35.0	32.2	8.5	24.3	92,197	359
Sacramento	39.6	21.1	13.8	25.5	82,017	306
Contra Costa	35.2	22.1	12.1	30.6	63,325	279
San Francisco	27.4	30.2	16.2	26.3	57,034	101
San Mateo, Solano	35.3	31.0	9.0	24.8	77,992	236
Marin, Napa, Sonoma	42.7	26.1	12.5	18.6	57,432	239
Butte, Colusa, Del Norte, Glenn, etc.	43.5	23.8	7.4	25.3	74,695	321
San Luis Obisbo, Santa Barbara, Ventura	41.0	24.4	6.7	27.9	98,929	315
Amador, Alpine, Calaveras El Dorado,etc.	39.7	27.3	4.4	28.5	87,431	337
Monterey, San Benito, Santa Cruz	39.7	28.3	8.1	23.9	49,013	304
Fresno, Madera, Merced, Stanislaus	37.4	32.1	8.4	22.1	102,768	334
Imperial, Inyo, Kern, Kings, Mono, Tulare	35.6	25.9	9.4	29.2	86,211	396

TABLE B.15: FAVORITE ADS OF ADULTS (1996 ADULT CTS)

OVERALL	Favorite Ad				Population Size	Sample Size
	Camel (%)	Marlboro (%)	Other (%)	No Favorite (%)	(n)	(n)
TOTAL	17.0	27.0	7.4	48.6	22,878,901	18,616
SEX						
Male	20.4	29.9	5.6	44.1	11,229,770	9,065
Female	13.8	24.3	9.0	52.9	11,649,131	9,551
AGE						
18-24	26.7	28.7	7.4	37.3	3,029,936	2,473
25-44	19.0	28.0	7.7	45.4	10,688,511	8,778
45-64	13.6	26.3	7.3	52.8	6,039,397	5,394
65+	7.6	23.4	6.4	62.5	3,121,057	1,971
RACE/ETHNICITY						
Hispanic	14.4	28.3	5.2	52.1	5,861,511	3,045
Non-Hispanic White	18.9	26.6	7.1	47.4	12,610,345	12,564
African-American	16.5	16.7	16.0	50.8	1,492,445	1,117
Asian/PI	12.8	35.2	8.1	43.9	2,144,990	1,284
Other	19.4	21.5	9.2	50.0	769,610	606
EDUCATION						
<12	11.7	27.9	5.9	54.5	4,876,751	2,052
12	16.5	27.8	8.5	47.2	5,717,864	6,040
13-15	20.6	26.6	8.4	44.4	6,042,162	5,894
16+	18.2	26.0	6.5	49.3	6,242,124	4,630
SEX Male						
AGE						
18-24	30.8	30.7	4.5	34.0	1,569,047	1,272
25-44	22.4	31.9	5.6	40.2	5,328,315	4,368
45-64	15.1	28.3	6.7	50.0	2,974,175	2,592
65+	12.4	24.6	4.9	58.1	1,358,233	833
RACE/ETHNICITY						
Hispanic	18.3	33.9	3.3	44.6	2,828,290	1,639
Non-Hispanic White	21.9	28.3	5.2	44.5	6,259,222	5,858
African-American	20.2	19.2	12.6	48.0	707,773	512
Asian/PI	14.5	39.1	8.0	38.5	1,057,917	763
Other	27.7	20.0	10.6	41.7	376,568	293
EDUCATION						
<12	15.8	31.3	5.3	47.6	2,320,055	1,094
12	20.8	31.8	7.6	39.8	2,665,524	2,782
13-15	24.2	28.8	5.2	41.8	2,930,166	2,768
16+	20.0	28.3	4.7	47.1	3,314,025	2,421
SEX Female						
AGE						
18-24	22.3	26.5	10.4	40.8	1,460,889	1,201
25-44	15.6	24.2	9.8	50.5	5,360,196	4,410
45-64	12.1	24.4	8.0	55.5	3,065,222	2,802
65+	3.9	22.5	7.6	66.0	1,762,824	1,138
RACE/ETHNICITY						
Hispanic	10.8	23.1	7.1	59.1	3,033,221	1,406
Non-Hispanic White	15.9	24.9	9.0	50.3	6,351,123	6,706
African-American	13.1	14.6	19.1	53.3	784,672	605
Asian/PI	11.1	31.4	8.2	49.3	1,087,073	521
Other	11.5	22.8	7.9	57.8	393,042	313
EDUCATION						
<12	8.1	24.8	6.5	60.7	2,556,696	958
12	12.7	24.3	9.3	53.7	3,052,340	3,258
13-15	17.2	24.5	11.4	46.9	3,111,996	3,126
16+	16.2	23.5	8.5	51.7	2,928,099	2,209

TABLE B.15: FAVORITE ADS OF ADULTS (1996 ADULT CTS)

REGIONAL	Favorite Ad				Population Size	Sample Size
	Camel (%)	Marlboro (%)	Other (%)	No Favorite (%)	(n)	(n)
OVERALL	17.0	27.0	7.4	48.6	22,878,901	18,616
Los Angeles	16.4	26.9	8.6	48.2	6,617,607	3,565
San Diego	18.2	28.9	6.3	46.6	1,950,958	1,193
Orange	14.7	27.6	6.3	51.4	1,885,635	1,063
Santa Clara	15.7	25.8	7.3	51.2	1,165,855	752
San Bernadino	20.1	24.5	7.2	48.3	1,048,807	778
Alameda	15.8	26.5	9.9	47.8	990,883	797
Riverside	17.3	25.8	9.0	48.0	958,334	819
Sacramento	22.5	23.8	7.8	45.9	804,664	921
Contra Costa	17.6	27.1	7.0	48.3	654,220	781
San Francisco	14.8	33.0	7.6	44.6	611,685	817
San Mateo, Solano	14.8	29.3	8.2	47.6	797,587	819
Marin, Napa, Sonoma	16.7	27.5	4.5	51.3	590,502	899
Butte, Colusa, Del Norte, Glenn, etc.	18.0	27.7	7.8	46.5	733,408	1,016
San Luis Obisbo, Santa Barbara, Ventura	17.5	27.6	6.1	48.8	956,940	908
Amador, Alpine, Calaveras, El Dorado,etc.	19.8	23.7	6.5	49.9	882,608	932
Monterey, San Benito, Santa Cruz	12.7	29.8	5.2	52.3	451,276	852
Fresno, Madera, Merced, Stanislaus	16.8	23.7	5.0	54.5	963,994	820
Imperial, Inyo, Kern, Kings, Mono, Tulare	20.1	30.1	4.8	44.9	813,938	884

TABLE B.15: FAVORITE ADS OF ADOLESCENTS (1996 TEEN CTS)

OVERALL	Favorite Ad				Population Size	Sample Size
	Camel (%)	Marlboro (%)	Other (%)	No Favorite (%)	(n)	(n)
TOTAL	36.0	27.3	7.8	28.8	2,692,861	6,252
SEX						
Male	38.6	29.3	5.5	26.5	1,408,066	3,199
Female	33.2	25.2	10.3	31.3	1,284,795	3,053
AGE						
12-13	34.7	24.0	7.4	33.9	883,489	2,086
14-15	37.3	28.1	8.0	26.6	945,535	2,200
16-17	36.0	30.0	8.0	26.0	863,837	1,966
RACE/ETHNICITY						
Hispanic	32.2	31.9	5.5	30.4	865,713	1,585
Non-Hispanic White	40.4	25.5	7.2	26.9	1,264,844	3,426
African-American	30.8	13.2	22.8	33.2	173,295	442
Asian/PI	29.7	32.2	8.2	29.9	293,830	585
Other	41.8	20.5	8.9	28.9	95,179	214
SCHOOL PERFORMANCE						
Much better than average	35.5	24.7	9.7	30.1	610,321	1,453
Better than average	39.6	24.4	7.3	28.7	1,008,739	2,396
Average and below	33.0	31.6	7.2	28.2	1,073,801	2,403
SEX Male						
AGE						
12-13	37.1	24.4	5.7	32.8	460,008	1,051
14-15	41.5	28.5	6.4	23.5	492,765	1,132
16-17	37.1	35.0	4.4	23.5	455,293	1,016
RACE/ETHNICITY						
Hispanic	34.0	34.3	4.5	27.1	442,110	788
Non-Hispanic White	43.5	27.5	4.9	24.1	674,265	1,782
African-American	36.5	13.1	18.2	32.2	85,535	212
Asian/PI	30.1	33.5	5.5	30.9	155,509	305
Other	43.6	24.1	1.5	30.8	50,647	112
SCHOOL PERFORMANCE						
Much better than average	40.3	26.7	5.8	27.2	298,194	698
Better than average	41.9	25.8	5.2	27.1	512,834	1,214
Average and below	35.0	33.5	5.7	25.8	597,038	1,287
SEX Female						
AGE						
12-13	32.1	23.6	9.2	35.1	423,481	1,035
14-15	32.7	27.6	9.7	30.0	452,770	1,068
16-17	34.7	24.4	12.0	28.9	408,544	950
RACE/ETHNICITY						
Hispanic	30.2	29.5	6.5	33.7	423,603	797
Non-Hispanic White	36.8	23.3	9.7	30.1	590,579	1,644
African-American	25.3	13.2	27.2	34.3	87,760	230
Asian/PI	29.3	30.7	11.3	28.8	138,321	280
Other	39.7	16.3	17.2	26.7	44,532	102
SCHOOL PERFORMANCE						
Much better than average	31.0	22.9	13.4	32.8	312,127	755
Better than average	37.2	23.0	9.5	30.4	495,905	1,182
Average and below	30.4	29.1	9.2	31.3	476,763	1,116

TABLE B.15: FAVORITE ADS OF ADOLESCENTS (1996 TEEN CTS)

REGIONAL	Favorite Ad				Population Size	Sample Size
	Camel (%)	Marlboro (%)	Other (%)	No Favorite (%)	(n)	(n)
OVERALL	36.0	27.3	7.8	28.8	2,692,861	6,252
Los Angeles	32.2	29.0	8.7	30.1	785,872	1,078
San Diego	38.0	26.0	7.5	28.6	219,994	353
Orange	34.2	31.8	5.4	28.6	214,733	326
Santa Clara	34.1	32.6	4.0	29.3	125,169	263
San Bernadino	41.0	26.1	5.1	27.8	148,339	331
Alameda	34.9	21.3	10.3	33.5	102,089	234
Riverside	36.5	31.2	7.1	25.2	118,581	313
Sacramento	43.3	18.8	10.7	27.2	92,391	303
Contra Costa	32.2	22.7	12.4	32.7	71,455	285
San Francisco	32.2	23.6	10.4	33.9	41,434	99
San Mateo, Solano	36.0	23.8	13.9	26.3	83,660	301
Marin, Napa, Sonoma	44.3	23.1	8.2	24.4	56,412	306
Butte, Colusa, Del Norte, Glenn, etc.	39.8	27.5	4.9	27.8	90,675	343
San Luis Obisbo, Santa Barbara, Ventura	39.6	24.8	8.1	27.6	115,322	308
Amador, Alpine, Calaveras El Dorado, etc.	36.0	28.2	8.8	26.9	107,558	361
Monterey, San Benito, Santa Cruz	35.8	23.9	8.8	31.5	55,454	301
Fresno, Madera, Merced, Stanislaus	42.7	26.6	5.8	24.8	141,549	344
Imperial, Inyo, Kern, Kings, Mono, Tulare	36.8	27.5	5.7	30.0	122,174	403

TABLE B.16: EXPOSURE TO ANTI-SMOKING MEDIA (1996 ADULT CTS)

OVERALL	Number of Media Types with Message Seen				Anti-Smoking Message Seen on...*			Population Size	Sample Size
	0	1	2	3	TV	Radio	Billboard		
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(n)	(n)
TOTAL	17.6	31.4	31.7	19.3	67.6	44.0	41.2	22,878,901	18,616
SEX									
Male	14.4	27.1	33.9	24.5	70.7	50.4	47.5	11,229,770	9,065
Female	20.6	35.6	29.5	14.3	64.6	37.8	35.1	11,649,131	9,551
AGE									
18-24	9.5	27.5	35.6	27.4	79.2	50.9	50.8	3,029,936	2,473
25-44	14.5	29.7	33.5	22.3	70.2	48.7	44.7	10,688,511	8,778
45-64	19.1	34.4	30.2	16.3	63.9	41.4	38.3	6,039,397	5,394
65+	32.7	35.4	24.4	7.4	54.9	26.0	25.5	3,121,057	1,971
RACE/ETHNICITY									
Hispanic	16.1	31.0	31.6	21.3	68.2	48.1	41.8	5,861,511	3,045
Non-Hispanic White	17.8	32.2	32.0	18.0	68.6	42.2	39.5	12,610,345	12,564
African-American	16.0	27.0	34.2	22.8	70.1	48.4	45.2	1,492,445	1,117
Asian/PI	23.4	28.0	28.7	20.0	59.5	40.8	45.0	2,144,990	1,284
Other	12.1	39.5	31.2	17.2	64.2	42.2	47.1	769,610	606
EDUCATION									
<12	24.3	30.7	28.6	16.3	59.7	40.7	36.6	4,876,751	2,052
12	17.5	32.0	31.8	18.7	68.9	43.0	39.7	5,717,864	6,040
13-15	15.0	32.3	31.8	20.9	72.0	44.9	41.7	6,042,162	5,894
16+	14.8	30.5	33.9	20.8	68.4	46.6	45.7	6,242,124	4,630
SEX Male									
AGE									
18-24	9.1	25.1	36.1	29.6	80.4	51.4	54.5	1,569,047	1,272
25-44	12.0	24.6	35.1	28.2	73.3	55.6	50.6	5,328,315	4,368
45-64	16.5	29.6	32.9	21.1	65.9	48.9	43.8	2,974,175	2,592
65+	25.1	34.0	29.2	11.7	59.9	32.2	35.2	1,358,233	833
RACE/ETHNICITY									
Hispanic	13.5	25.7	33.9	27.0	70.2	56.5	47.6	2,828,290	1,639
Non-Hispanic White	13.6	28.7	33.8	23.9	72.6	48.1	47.3	6,259,222	5,858
African-American	14.7	21.0	41.1	23.1	71.9	54.9	46.0	707,773	512
Asian/PI	21.6	25.1	30.4	22.8	61.2	45.4	47.9	1,057,917	763
Other	12.8	29.6	33.5	24.1	66.9	49.4	52.8	376,568	293
EDUCATION									
<12	20.0	25.6	33.3	21.0	63.1	50.2	42.1	2,320,055	1,094
12	13.4	26.9	35.4	24.3	73.0	50.3	47.4	2,665,524	2,782
13-15	12.6	29.2	31.5	26.8	74.2	49.6	48.6	2,930,166	2,768
16+	12.9	26.6	35.4	25.2	71.1	51.3	50.4	3,314,025	2,421
SEX Female									
AGE									
18-24	9.9	30.1	35.0	25.0	77.8	50.4	46.8	1,460,889	1,201
25-44	17.0	34.7	32.0	16.3	67.0	41.8	38.9	5,360,196	4,410
45-64	21.7	39.1	27.6	11.6	61.9	34.2	33.0	3,065,222	2,802
65+	38.6	36.6	20.8	4.1	51.1	21.3	17.9	1,762,824	1,138
RACE/ETHNICITY									
Hispanic	18.6	35.9	29.4	16.1	66.4	40.2	36.3	3,033,221	1,406
Non-Hispanic White	21.8	35.8	30.2	12.2	64.7	36.4	31.8	6,351,123	6,706
African-American	17.2	32.4	28.0	22.4	68.5	42.7	44.5	784,672	605
Asian/PI	25.0	30.7	27.0	17.2	57.9	36.3	42.1	1,087,073	521
Other	11.5	49.0	28.9	10.5	61.6	35.3	41.5	393,042	313
EDUCATION									
<12	28.2	35.4	24.4	12.0	56.6	32.1	31.6	2,556,696	958
12	21.1	36.5	28.6	13.8	65.4	36.6	33.0	3,052,340	3,258
13-15	17.3	35.3	32.1	15.3	69.9	40.4	35.3	3,111,996	3,126
16+	17.0	35.0	32.1	15.8	65.3	41.2	40.3	2,928,099	2,209

*Percentages add up to more than 100%

TABLE B.16: EXPOSURE TO ANTI-SMOKING MEDIA (1996 ADULT CTS)

REGIONAL	Number of Media Types with Message Seen				Anti-Smoking Message Seen on...*			Population Size	Sample Size
	0 (%)	1 (%)	2 (%)	3 (%)	TV (%)	Radio (%)	Bilboard (%)	(n)	(n)
OVERALL	17.6	31.4	31.7	19.3	67.6	44.0	41.2	22,878,901	18,616
Los Angeles	16.6	30.8	31.7	21.0	66.9	44.2	46.0	6,617,607	3,565
San Diego	21.8	34.0	28.2	16.0	63.0	40.5	34.9	1,950,958	1,193
Orange	16.0	31.9	32.2	19.9	69.4	47.3	39.1	1,885,635	1,063
Santa Clara	18.6	25.6	36.9	18.9	65.1	47.2	43.9	1,165,855	752
San Bernadino	15.2	33.9	31.6	19.3	71.7	42.7	40.7	1,048,807	778
Alameda	15.2	30.9	35.6	18.3	68.8	42.2	45.9	990,883	797
Riverside	16.6	30.0	31.9	21.5	72.5	45.5	40.3	958,334	819
Sacramento	16.1	26.7	33.8	23.4	71.7	43.2	49.7	804,664	921
Contra Costa	17.0	32.8	33.8	16.4	72.3	46.6	30.7	654,220	781
San Francisco	16.1	28.9	31.6	23.4	67.6	43.4	51.2	611,685	817
San Mateo, Solano	18.2	32.7	30.7	18.5	65.5	45.8	38.2	797,587	819
Marin, Napa, Sonoma	21.7	37.1	27.7	13.4	62.4	41.6	28.8	590,502	899
Butte, Colusa, Del Norte, Glenn, etc.	17.1	31.1	35.5	16.2	68.1	43.0	39.5	733,408	1,016
San Luis Obisbo, Santa Barbara, Ventura	17.6	36.4	28.3	17.7	72.8	43.5	29.7	956,940	908
Amador,Alpine,Calavera-s,El Dorado,etc.	17.2	33.2	31.7	17.8	68.9	39.6	41.6	882,608	932
Monterey, San Benito, Santa Cruz	21.0	28.9	31.6	18.5	66.2	51.5	29.8	451,276	852
Fresno, Madera, Merced, Stanislaus	20.4	31.3	29.2	19.1	64.6	42.2	40.1	963,994	820
Imperial, Inyo, Kern, Kings, Mono, Tulare	19.4	30.8	29.9	19.8	66.1	43.1	41.0	813,938	884

*Percentages add up to more than 100%

TABLE B.16: EXPOSURE TO ANTI-SMOKING MEDIA (1996 TEEN CTS)

OVERALL	Number of Media Types with Message Seen				Anti-Smoking Message Seen on...*			Population Size	Sample Size
	0 (%)	1 (%)	2 (%)	3 (%)	TV (%)	Radio (%)	Bilboard (%)	(n)	(n)
TOTAL	6.5	24.6	40.8	28.1	82.2	50.3	58.0	2,692,861	6,252
SEX									
Male	6.2	25.7	41.0	27.1	82.8	46.5	59.7	1,408,066	3,199
Female	6.8	23.4	40.6	29.2	81.5	54.5	56.1	1,284,795	3,053
AGE									
12-13	7.3	25.5	40.8	26.4	81.1	46.2	59.1	883,489	2,086
14-15	6.5	24.3	40.7	28.4	82.7	51.6	56.7	945,535	2,200
16-17	5.6	24.0	40.9	29.4	82.7	53.2	58.3	863,837	1,966
RACE/ETHNICITY									
Hispanic	6.5	23.7	39.4	30.4	81.3	51.1	61.2	865,713	1,585
Non-Hispanic White	7.0	25.9	40.7	26.5	82.5	48.5	55.7	1,264,844	3,426
African-American	5.3	22.1	43.9	28.7	79.2	56.4	60.4	173,295	442
Asian/PI	5.5	22.7	43.5	28.2	85.0	52.0	57.5	293,830	585
Other	5.6	25.7	41.3	27.4	83.1	51.2	56.2	95,179	214
SCHOOL PERFORMANCE									
Much better than average	5.8	24.7	40.2	29.3	83.6	50.3	59.2	610,321	1,453
Better than average	5.2	24.0	41.5	29.3	84.2	52.4	58.3	1,008,739	2,396
Average and below	8.2	25.1	40.4	26.3	79.5	48.3	57.0	1,073,801	2,403
SEX Male									
AGE									
12-13	7.1	25.9	42.0	25.1	82.3	41.3	61.5	460,008	1,051
14-15	6.0	25.4	39.9	28.7	83.1	48.9	59.2	492,765	1,132
16-17	5.5	25.9	41.2	27.4	82.8	49.2	58.4	455,293	1,016
RACE/ETHNICITY									
Hispanic	6.0	26.0	39.7	28.3	80.5	47.3	62.6	442,110	788
Non-Hispanic White	6.6	25.9	41.5	26.0	84.2	44.5	58.1	674,265	1,782
African-American	9.1	25.3	40.3	25.3	72.9	48.8	60.2	85,535	212
Asian/PI	3.1	23.1	43.3	30.4	89.0	52.6	59.4	155,509	305
Other	6.9	28.8	40.0	24.3	81.8	44.1	55.9	50,647	112
SCHOOL PERFORMANCE									
Much better than average	5.5	24.6	40.8	29.1	83.7	47.1	62.6	298,194	698
Better than average	5.3	24.6	43.0	27.2	85.0	48.1	58.9	512,834	1,214
Average and below	7.3	27.3	39.4	26.1	80.4	44.8	59.0	597,038	1,287
SEX Female									
AGE									
12-13	7.5	25.0	39.5	27.9	79.8	51.5	56.5	423,481	1,035
14-15	7.1	23.2	41.7	28.1	82.3	54.5	54.0	452,770	1,068
16-17	5.8	21.9	40.6	31.7	82.5	57.6	58.1	408,544	950
RACE/ETHNICITY									
Hispanic	7.0	21.4	39.1	32.5	82.2	55.2	59.8	423,603	797
Non-Hispanic White	7.4	25.8	39.7	27.1	80.5	53.0	53.0	590,579	1,644
African-American	1.7	19.0	47.3	32.0	85.4	63.8	60.5	87,760	230
Asian/PI	8.2	22.3	43.8	25.8	80.4	51.3	55.4	138,321	280
Other	4.1	22.3	42.7	30.9	84.6	59.2	56.5	44,532	102
SCHOOL PERFORMANCE									
Much better than average	6.0	24.7	39.7	29.6	83.5	53.4	55.9	312,127	755
Better than average	5.0	23.5	40.1	31.5	83.4	56.9	57.7	495,905	1,182
Average and below	9.3	22.4	41.8	26.6	78.3	52.7	54.6	476,763	1,116

*Percentages add up to more than 100%

TABLE B.16: EXPOSURE TO ANTI-SMOKING MEDIA (1996 TEEN CTS)

REGIONAL	Number of Media Types with Message Seen				Anti-Smoking Message Seen on...*			Population Size	Sample Size
	0 (%)	1 (%)	2 (%)	3 (%)	TV (%)	Radio (%)	Bilboard (%)	(n)	(n)
OVERALL	6.5	24.6	40.8	28.1	82.2	50.3	58.0	2,692,861	6,252
Los Angeles	5.1	23.4	41.4	30.2	82.8	49.4	64.5	785,872	1,078
San Diego	5.5	26.9	48.2	19.4	84.1	51.3	46.1	219,994	353
Orange	8.7	24.4	38.4	28.5	83.5	48.2	55.0	214,733	326
Santa Clara	7.8	23.6	40.1	28.4	84.0	48.5	56.6	125,169	263
San Bernadino	4.9	31.3	41.1	22.7	81.9	45.9	54.0	148,339	331
Alameda	4.8	22.3	42.7	30.2	82.7	54.1	61.4	102,089	234
Riverside	10.2	26.0	35.3	28.5	78.0	51.0	53.1	118,581	313
Sacramento	2.3	19.4	41.2	37.1	83.9	66.4	62.8	92,391	303
Contra Costa	8.9	29.1	35.8	26.3	82.0	48.1	49.4	71,455	285
San Francisco	7.3	22.4	40.4	30.0	81.2	45.0	66.9	41,434	99
San Mateo, Solano	6.9	24.4	38.0	30.7	82.3	58.1	52.0	83,660	301
Marin, Napa, Sonoma	7.8	26.2	43.9	22.0	78.4	46.6	55.1	56,412	306
Butte, Colusa, Del Norte, Glenn, etc.	10.9	24.7	37.5	26.9	76.0	48.3	56.1	90,675	343
San Luis Obisbo, Santa Barbara, Ventura	6.5	30.3	42.6	20.5	82.2	43.4	51.5	115,322	308
Amador, Alpine, Calaveras El Dorado, etc.	9.9	27.8	37.0	25.2	81.6	44.3	51.7	107,558	361
Monterey, San Benito, Santa Cruz	8.8	19.6	42.9	28.7	80.8	56.2	54.4	55,454	301
Fresno, Madera, Merced, Stanislaus	6.2	20.0	41.9	32.0	83.9	53.2	62.6	141,549	344
Imperial, Inyo, Kern, Kings, Mono, Tulare	5.9	22.8	37.1	34.2	79.1	55.9	64.5	122,174	403

TABLE B.17: HOW DO YOU USUALLY GET THE CIGARETTES YOU SMOKE (1996 TEEN CTS)

OVERALL	Buy them myself (%)	Someone in my home buys them for me (%)	Someone in my home gives them to me (%)	I take them from someone in my home without permission (%)	Other people buy them for me (%)	Other people give them to me (%)	I take them from other people without permission (%)	I take them from a store without permission (%)	Population Size (n)	Sample Size (n)
TOTAL	16.1	1.8	2.1	3.3	18.5	56.3	1.6	0.4	671,188	1,603
SEX										
Male	18.1	1.1	1.8	3.1	16.5	56.9	2.1	0.5	362,130	833
Female	13.7	2.6	2.4	3.5	20.7	55.7	1.0	0.3	309,058	770
AGE										
12-13	2.7	0.9	8.4	9.3	11.8	58.2	7.5	1.1	67,169	179
14-15	9.9	1.4	1.3	3.2	17.5	65.6	0.5	0.6	245,541	588
16-17	22.8	2.2	1.4	2.2	20.3	49.6	1.2	0.1	358,478	836
RACE/ETHNICITY										
Hispanic	14.1	0.5	2.0	2.4	16.2	62.9	1.4	0.6	198,649	376
Non-Hispanic White	16.5	2.7	1.6	3.2	20.3	54.3	1.1	0.2	368,784	995
African-American	20.7	.	1.7	8.3	12.9	52.4	2.8	1.2	26,851	71
Asian/PI	16.0	1.8	6.8	4.1	17.2	50.0	4.1	.	51,794	108
Other	20.8	.	0.4	4.8	18.2	51.0	3.6	1.3	25,110	53
SCHOOL PERFORMANCE										
Much better than average	13.0	0.9	1.4	3.3	11.4	69.5	.	0.5	82,717	212
Better than average	15.1	1.9	2.0	2.6	17.6	59.7	0.6	0.5	246,380	593
Average and below	17.5	1.9	2.3	3.8	20.8	50.7	2.7	0.3	342,091	798
SEX Male										
AGE										
12-13	4.6	.	7.5	9.5	11.6	55.8	9.0	1.9	39,620	100
14-15	11.1	1.1	0.4	2.7	18.7	64.4	0.6	1.0	119,869	284
16-17	24.8	1.3	1.5	2.0	16.2	52.6	1.6	.	202,641	449
RACE/ETHNICITY										
Hispanic	15.8	0.4	1.8	2.9	14.1	62.3	2.0	0.7	112,772	207
Non-Hispanic White	18.6	1.8	1.6	2.9	17.7	55.9	1.1	0.4	189,636	494
African-American	7.5	.	.	11.6	10.5	63.6	5.8	1.1	13,163	36
Asian/PI	23.0	.	4.4	1.9	23.3	42.8	4.5	.	31,074	64
Other	27.2	.	.	1.8	11.5	51.5	5.9	2.1	15,485	32
SCHOOL PERFORMANCE										
Much better than average	14.6	.	1.3	0.9	13.0	69.1	.	1.1	35,421	92
Better than average	17.9	1.3	1.1	1.1	13.9	63.9	0.2	0.6	127,537	298
Average and below	18.8	1.1	2.3	4.7	18.9	50.2	3.6	0.4	199,172	443
SEX Female										
AGE										
12-13	.	2.1	9.6	9.0	12.0	61.8	5.4	.	27,549	79
14-15	8.7	1.6	2.2	3.7	16.4	66.7	0.4	0.3	125,672	304
16-17	20.2	3.4	1.4	2.4	25.7	45.8	0.7	0.3	155,837	387
RACE/ETHNICITY										
Hispanic	11.8	0.6	2.3	1.7	18.8	63.7	0.6	0.6	85,877	169
Non-Hispanic White	14.3	3.7	1.6	3.5	23.1	52.7	1.0	0.1	179,148	501
African-American	33.4	.	3.4	5.1	15.3	41.6	.	1.2	13,688	35
Asian/PI	5.4	4.5	10.4	7.4	8.0	60.8	3.5	.	20,720	44
Other	10.6	.	0.9	9.6	28.8	50.1	.	.	9,625	21
SCHOOL PERFORMANCE										
Much better than average	11.8	1.6	1.5	5.0	10.3	69.8	.	.	47,296	120
Better than average	12.2	2.5	2.9	4.3	21.6	55.2	0.9	0.4	118,843	295
Average and below	15.6	3.0	2.4	2.4	23.4	51.5	1.4	0.3	142,919	355

TABLE B.17: HOW DO YOU USUALLY GET THE CIGARETTES YOU SMOKE (1996 TEEN CTS)

REGIONAL	Buy them myself (%)	Some-one in my home buys them for me (%)	Someone in my home gives them to me (%)	I take them from someone in my home without permission (%)	Other people buy them for me (%)	Other people give them to me (%)	I take them from other people without permission (%)	I take them from a store without permission (%)	Popula-tion Size (n)	Sample Size (n)
OVERALL	16.1	1.8	2.1	3.3	18.5	56.3	1.6	0.4	671,188	1,603
Los Angeles	20.6	1.2	1.8	3.3	9.7	61.1	2.3	.	180,258	247
San Diego	2.5	1.0	.	.	33.0	60.8	2.7	.	40,967	67
Orange	20.8	2.6	4.8	1.3	24.0	44.8	1.6	.	52,729	77
Santa Clara	9.5	1.9	.	5.0	17.3	66.3	.	.	29,352	60
San Bernadino	18.2	1.6	5.0	3.0	18.3	51.3	2.7	.	41,669	91
Alameda	15.7	3.9	2.0	2.0	28.9	45.3	2.2	.	21,173	49
Riverside	18.1	1.3	.	1.1	18.3	61.2	.	.	33,444	85
Sacramento	15.9	2.1	.	6.9	34.1	39.1	1.9	.	25,325	73
Contra Costa	24.9	2.3	0.4	6.4	17.8	48.2	.	.	19,943	79
San Francisco	17.5	.	.	6.3	10.7	65.6	.	.	8,681	19
San Mateo, Solano	20.1	.	3.2	3.1	18.5	55.1	.	.	22,671	83
Marin, Napa, Sonoma	9.3	1.1	2.6	0.5	21.1	63.8	.	1.7	22,424	116
Butte, Colusa, Del Norte, Glenn, etc.	12.3	5.1	3.0	5.2	22.5	50.8	.	1.2	26,195	99
San Luis Obisbo, Santa Barbara, Ventura	9.4	.	5.3	2.7	18.9	62.3	.	1.5	31,295	84
Amador,Alpine, Calaveras El Dorado,etc.	12.8	3.7	1.3	3.1	22.5	51.8	2.2	2.5	30,100	99
Monterey, San Benito, Santa Cruz	7.0	2.3	1.2	4.0	17.8	66.9	.	0.9	15,682	86
Fresno, Madera, Merced, Stanislaus	15.3	2.3	2.2	5.0	19.6	52.4	2.3	0.9	42,483	101
Imperial, Inyo, Kern, Kings, Mono, Tulare	16.3	1.6	1.4	6.4	13.1	57.5	2.5	1.2	26,797	88

TABLE B.18: COMPLIANCE WITH SCHOOL NONSMOKING RULES (1990 TEEN CTS)

OVERALL	How many students comply with nonsmoking rules?								
	Don't Know (%)	There is no rule (%)	None (%)	A few (%)	Some (%)	Most (%)	All (%)	Population Size (n)	Sample Size (n)
TOTAL	0.9	4.6	10.4	22.6	15.2	25.0	21.4	2,253,296	4,846
SEX									
Male	0.6	5.0	10.7	21.5	13.7	25.9	22.7	1,113,661	2,449
Female	1.1	4.2	10.2	23.6	16.7	24.1	20.1	1,139,635	2,397
AGE									
12-13	1.9	4.1	9.8	17.6	9.8	20.1	36.8	785,200	1,660
14-15	0.4	4.4	10.3	24.2	18.8	27.2	14.7	774,781	1,644
16-17	0.2	5.2	11.4	26.4	17.5	27.9	11.4	693,315	1,542
RACE/ETHNICITY									
Hispanic	0.3	5.5	11.0	24.2	16.2	22.8	20.0	755,103	1,245
Non-Hispanic White	1.1	3.3	10.9	21.2	14.6	27.3	21.6	1,062,328	2,817
African-American	0.1	6.7	10.1	20.3	13.6	23.7	25.5	201,996	288
Asian/PI	2.6	6.4	6.2	25.0	17.7	22.0	20.2	194,392	386
Other	1.6	1.8	9.1	27.5	9.9	24.1	26.1	39,477	110
SCHOOL PERFORMANCE									
Much better than average	1.5	4.2	10.0	21.0	14.1	26.9	22.3	417,546	903
Better than average	0.7	4.5	8.2	22.1	16.4	25.6	22.5	847,029	1,820
Average and below	0.8	4.8	12.6	23.6	14.7	23.6	20.0	988,721	2,123
SEX Male									
AGE									
12-13	1.3	4.4	10.4	15.1	7.1	20.9	40.8	387,292	818
14-15	0.2	4.9	10.7	23.6	17.9	27.8	15.0	388,002	841
16-17	0.3	5.8	11.1	26.3	16.4	29.3	10.8	338,367	790
RACE/ETHNICITY									
Hispanic	.	5.5	11.5	22.6	13.8	24.7	22.0	377,677	636
Non-Hispanic White	1.0	4.0	11.0	20.5	13.8	27.8	21.8	528,776	1,420
African-American	0.2	5.9	10.5	20.0	13.0	25.2	25.1	90,764	143
Asian/PI	1.5	7.7	6.1	23.7	14.0	21.0	26.1	100,066	201
Other	.	0.8	11.9	21.4	11.4	22.9	31.7	16,378	49
SCHOOL PERFORMANCE									
Much better than average	1.3	2.8	11.2	19.7	13.1	30.0	22.0	194,306	433
Better than average	0.7	5.8	8.0	21.5	15.1	26.5	22.3	411,657	891
Average and below	0.3	5.2	12.7	22.1	12.8	23.8	23.2	507,698	1,125
SEX Female									
AGE									
12-13	2.4	3.8	9.2	20.0	12.4	19.4	32.9	397,908	842
14-15	0.7	4.0	9.9	24.7	19.7	26.6	14.4	386,779	803
16-17	0.1	4.7	11.6	26.5	18.5	26.5	12.0	354,948	752
RACE/ETHNICITY									
Hispanic	0.6	5.5	10.5	25.8	18.6	20.9	18.0	377,426	609
Non-Hispanic White	1.2	2.5	10.8	21.9	15.5	26.8	21.4	533,552	1,397
African-American	.	7.3	9.8	20.6	14.0	22.5	25.8	111,232	145
Asian/PI	3.8	5.1	6.3	26.3	21.6	23.0	13.9	94,326	185
Other	2.7	2.4	7.1	31.8	8.9	24.9	22.2	23,099	61
SCHOOL PERFORMANCE									
Much better than average	1.7	5.4	9.1	22.1	14.9	24.2	22.6	223,240	470
Better than average	0.7	3.4	8.3	22.7	17.7	24.7	22.6	435,372	929
Average and below	1.2	4.4	12.4	25.2	16.7	23.4	16.7	481,023	998

TABLE B.18: COMPLIANCE WITH SCHOOL NONSMOKING RULES (1990 TEEN CTS)

REGIONAL	How many students comply with nonsmoking rules?							Population Size	Sample Size
	Don't Know (%)	There is no rule (%)	None (%)	A few (%)	Some (%)	Most (%)	All (%)	(n)	(n)
OVERALL	0.9	4.6	10.4	22.6	15.2	25.0	21.4	2,253,296	4,846
Los Angeles	0.9	4.6	11.3	22.5	15.6	25.5	19.6	664,479	464
San Diego	0.6	3.9	8.9	22.4	14.7	27.0	22.5	190,351	248
Orange	0.2	5.5	7.1	22.0	13.2	26.1	25.9	184,992	258
Santa Clara	1.8	4.9	6.7	21.4	17.5	26.5	21.3	116,029	233
San Bernadino	1.4	4.6	13.0	28.7	14.5	18.5	19.3	105,953	373
Alameda	1.0	4.8	11.6	17.8	16.2	23.4	25.3	97,618	223
Riverside	0.4	5.7	13.1	23.1	18.5	26.0	13.3	87,978	290
Sacramento	1.1	3.2	8.8	26.7	17.0	23.7	19.4	79,366	238
Contra Costa	1.2	7.0	16.1	22.7	16.2	19.8	17.1	61,315	280
San Francisco	0.9	7.9	6.4	30.4	12.1	20.8	21.6	55,269	132
San Mateo, Solano	2.7	4.5	16.2	17.8	11.0	25.2	22.6	75,132	230
Marin, Napa, Sonoma	0.7	2.8	9.0	17.6	10.7	33.5	25.7	55,234	185
Butte, Colusa, Del Norte, Glenn, etc.	1.0	4.0	9.6	21.6	12.6	25.5	25.8	70,444	266
San Luis Obisbo, Santa Barbara, Ventura	1.0	1.9	12.6	22.8	12.6	24.5	24.6	93,900	251
Amador, Alpine, Calaveras El Dorado,etc.	0.4	5.0	9.4	19.3	18.0	25.2	22.6	85,369	253
Monterey, San Benito, Santa Cruz	0.6	5.0	10.5	20.2	13.2	25.7	24.6	45,693	238
Fresno, Madera, Merced, Stanislaus	0.6	4.2	9.8	25.9	18.2	21.2	20.1	99,681	317
Imperial, Inyo, Kern, Kings, Mono, Tulare	.	3.9	8.4	22.7	17.7	25.7	21.6	84,493	367

TABLE B.18: COMPLIANCE WITH SCHOOL NONSMOKING RULES (1992 TEEN CTS)

OVERALL	How many students comply with nonsmoking rules?							Population Size	Sample Size
	Don't Know (%)	There is no rule (%)	None (%)	A few (%)	Some (%)	Most (%)	All (%)	(n)	(n)
TOTAL	1.3	5.1	10.3	23.1	14.5	23.4	22.3	2,265,665	1,725
SEX									
Male	1.3	6.0	12.2	21.4	13.4	22.4	23.3	1,117,624	847
Female	1.3	4.2	8.4	24.7	15.7	24.3	21.3	1,148,041	878
AGE									
12-13	2.5	5.6	8.4	14.2	11.2	21.3	36.8	789,652	610
14-15	0.3	4.7	10.8	28.3	16.6	22.0	17.2	784,433	598
16-17	0.9	5.0	11.9	27.4	16.1	27.3	11.4	691,580	517
RACE/ETHNICITY									
Hispanic	0.9	5.6	9.4	27.5	12.2	21.6	22.8	750,133	520
Non-Hispanic White	1.1	4.2	10.1	21.1	13.4	27.1	23.0	1,070,504	907
African-American	0.8	10.1	13.1	21.5	17.8	13.8	22.9	205,577	114
Asian/PI	4.4	2.7	10.1	19.0	27.0	21.7	15.1	192,458	142
Other	.	6.9	18.4	22.2	11.8	15.7	25.0	46,993	42
SCHOOL PERFORMANCE									
Much better than average	0.8	4.7	7.8	22.1	16.5	23.2	25.0	416,161	325
Better than average	1.4	5.2	10.7	22.6	14.5	22.2	23.4	817,684	619
Average and below	1.3	5.3	11.0	23.9	13.8	24.4	20.3	1,031,820	781
SEX Male									
AGE									
12-13	2.4	6.2	9.8	9.9	10.5	22.0	39.1	388,115	304
14-15	0.2	6.1	13.6	29.5	13.8	18.4	18.4	392,904	291
16-17	1.2	5.7	13.5	25.3	16.0	27.6	10.7	336,605	252
RACE/ETHNICITY									
Hispanic	1.0	5.1	11.7	26.4	13.0	19.7	23.1	385,492	267
Non-Hispanic White	1.4	5.8	11.4	18.7	12.5	24.0	26.2	510,904	428
African-American	1.6	11.5	14.1	19.4	13.6	17.8	22.0	105,390	60
Asian/PI	1.5	3.9	16.4	19.4	18.8	30.6	9.4	90,611	71
Other	.	9.6	13.8	18.0	15.0	21.2	22.4	25,227	21
SCHOOL PERFORMANCE									
Much better than average	1.0	4.7	10.0	22.3	13.1	22.8	26.1	191,535	148
Better than average	1.6	7.2	13.0	21.7	11.6	19.9	25.0	398,998	296
Average and below	1.1	5.7	12.4	20.9	14.8	24.2	20.9	527,091	403
SEX Female									
AGE									
12-13	2.6	5.1	7.1	18.3	11.8	20.5	34.6	401,537	306
14-15	0.5	3.4	8.0	27.0	19.4	25.7	16.1	391,529	307
16-17	0.6	4.3	10.4	29.4	16.2	27.0	12.0	354,975	265
RACE/ETHNICITY									
Hispanic	0.8	6.2	6.9	28.6	11.4	23.6	22.5	364,641	253
Non-Hispanic White	0.8	2.7	8.9	23.4	14.2	29.9	20.0	559,600	479
African-American	.	8.6	12.0	23.8	22.2	9.5	23.8	100,187	54
Asian/PI	7.0	1.6	4.5	18.7	34.4	13.7	20.2	101,847	71
Other	.	3.6	23.7	27.1	8.1	9.4	28.0	21,766	21
SCHOOL PERFORMANCE									
Much better than average	0.7	4.7	5.9	21.8	19.5	23.5	24.0	224,626	177
Better than average	1.2	3.3	8.5	23.5	17.2	24.5	21.9	418,686	323
Average and below	1.6	4.8	9.5	27.0	12.8	24.5	19.6	504,729	378

Regional data not available for 1992

TABLE B.18: COMPLIANCE WITH SCHOOL NONSMOKING RULES (1993 TEEN CTS)

OVERALL	How many students comply with nonsmoking rules?								
	Don't Know (%)	There is no rule (%)	None (%)	A few (%)	Some (%)	Most (%)	All (%)	Population Size (n)	Sample Size (n)
TOTAL	1.0	3.8	11.9	24.5	15.2	22.7	20.9	2,249,392	5,312
SEX									
Male	1.0	4.3	12.4	22.2	14.1	22.7	23.3	1,109,113	2,704
Female	0.9	3.3	11.4	26.6	16.4	22.8	18.7	1,140,279	2,608
AGE									
12-13	2.2	3.2	10.3	20.5	10.4	18.9	34.6	817,139	1,873
14-15	0.5	4.3	12.6	26.1	17.5	25.0	14.1	748,092	1,801
16-17	0.1	3.9	13.1	27.4	18.6	24.9	12.1	684,161	1,638
RACE/ETHNICITY									
Hispanic	0.7	5.1	12.8	26.8	15.9	18.3	20.3	730,685	1,357
Non-Hispanic White	1.1	2.8	10.9	22.8	14.5	27.3	20.6	1,096,837	3,121
African-American	0.4	3.8	16.3	22.5	14.5	18.7	23.8	201,804	311
Asian/PI	2.1	5.0	10.6	26.3	17.9	18.7	19.4	182,404	427
Other	.	0.6	3.8	27.6	15.3	16.8	35.8	37,662	96
SCHOOL PERFORMANCE									
Much better than average	1.5	3.4	8.3	23.5	12.3	27.6	23.2	415,671	1,033
Better than average	1.2	3.9	11.2	24.6	14.3	24.4	20.5	839,830	2,009
Average and below	0.6	3.8	14.0	24.7	17.2	19.3	20.3	993,891	2,270
SEX Male									
AGE									
12-13	2.2	4.3	11.7	16.8	8.9	17.8	38.2	397,470	934
14-15	0.7	4.5	12.3	22.0	18.0	25.0	17.6	371,868	933
16-17	0.1	4.1	13.3	28.9	15.8	25.8	12.0	339,775	837
RACE/ETHNICITY									
Hispanic	1.0	5.5	15.6	26.5	13.9	17.0	20.5	358,741	677
Non-Hispanic White	0.8	3.1	10.5	20.6	13.2	27.2	24.6	539,484	1,598
African-American	.	6.5	17.5	14.7	16.5	20.7	24.1	101,216	161
Asian/PI	4.2	4.3	6.9	22.6	18.9	21.1	22.0	90,752	219
Other	.	1.2	2.7	27.8	7.8	21.0	39.6	18,920	49
SCHOOL PERFORMANCE									
Much better than average	1.1	3.3	9.7	21.0	12.4	26.3	26.1	190,552	485
Better than average	1.2	4.8	10.8	23.3	13.1	26.4	20.5	399,832	989
Average and below	0.9	4.2	14.6	21.9	15.5	18.5	24.3	518,729	1,230
SEX Female									
AGE									
12-13	2.2	2.2	8.9	24.0	11.7	19.9	31.2	419,669	939
14-15	0.3	4.2	12.9	30.1	17.0	24.9	10.6	376,224	868
16-17	0.1	3.7	12.8	26.0	21.3	23.9	12.2	344,386	801
RACE/ETHNICITY									
Hispanic	0.5	4.8	10.2	27.1	17.9	19.5	20.1	371,944	680
Non-Hispanic White	1.4	2.4	11.3	25.0	15.7	27.5	16.7	557,353	1,523
African-American	0.7	1.1	15.2	30.4	12.5	16.6	23.5	100,588	150
Asian/PI	.	5.7	14.2	30.0	17.0	16.2	16.8	91,652	208
Other	.	.	4.9	27.5	23.0	12.6	32.0	18,742	47
SCHOOL PERFORMANCE									
Much better than average	1.8	3.5	7.2	25.7	12.3	28.7	20.8	225,119	548
Better than average	1.1	3.0	11.6	25.9	15.4	22.6	20.5	439,998	1,020
Average and below	0.3	3.4	13.2	27.7	19.2	20.2	16.0	475,162	1,040

TABLE B.18: COMPLIANCE WITH SCHOOL NONSMOKING RULES (1993 TEEN CTS)

REGIONAL	How many students comply with nonsmoking rules?							Population Size	Sample Size
	Don't Know (%)	There is no rule (%)	None (%)	A few (%)	Some (%)	Most (%)	All (%)	(n)	(n)
OVERALL	1.0	3.8	11.9	24.5	15.2	22.7	20.9	2,249,392	5,312
Los Angeles	1.1	3.0	13.6	24.9	14.1	18.3	25.0	670,532	524
San Diego	0.5	0.7	8.6	24.9	15.6	32.1	17.7	188,531	277
Orange	1.8	4.4	7.3	24.1	15.6	22.2	24.4	183,749	236
Santa Clara	1.3	3.9	14.2	22.0	15.2	27.9	15.6	114,742	272
San Bernadino	0.5	4.7	18.8	26.1	13.5	23.6	12.8	107,353	384
Alameda	1.4	9.5	10.7	26.9	12.2	24.1	15.3	96,358	240
Riverside	1.7	4.9	10.0	27.0	20.8	18.5	17.0	90,156	352
Sacramento	1.1	3.1	13.5	24.0	15.6	19.2	23.5	78,130	293
Contra Costa	1.0	8.5	19.6	24.2	14.1	14.8	17.7	60,775	265
San Francisco	.	3.1	12.6	19.1	14.9	25.6	24.8	52,403	92
San Mateo, Solano	0.3	3.4	13.2	25.7	16.2	26.4	14.7	75,024	227
Marin, Napa, Sonoma	2.0	4.2	6.9	23.0	18.3	27.2	18.4	55,422	232
Butte, Colusa, Del Norte, Glenn, etc.	1.4	3.1	8.1	23.3	16.4	23.0	24.8	71,800	309
San Luis Obisbo, Santa Barbara, Ventura	0.2	5.6	11.3	26.3	17.6	19.4	19.7	94,082	299
Amador, Alpine, Calaveras El Dorado, etc.	0.3	2.1	9.4	24.5	16.0	26.4	21.3	83,370	322
Monterey, San Benito, Santa Cruz	0.5	10.9	12.8	21.5	14.7	23.9	15.7	47,025	290
Fresno, Madera, Merced, Stanislaus	0.3	1.4	10.4	23.2	14.9	28.1	21.7	97,509	317
Imperial, Inyo, Kern, Kings, Mono, Tulare	0.8	3.1	9.4	22.0	16.8	26.8	21.1	82,431	381

TABLE B.18: COMPLIANCE WITH SCHOOL NONSMOKING RULES (1996 TEEN CTS)

OVERALL	How many students comply with nonsmoking rules?								
	Don't Know (%)	There is no rule (%)	None (%)	A few (%)	Some (%)	Most (%)	All (%)	Population Size (n)	Sample Size (n)
TOTAL	1.3	1.5	9.7	23.8	23.0	24.6	16.1	2,665,292	6,185
SEX									
Male	1.4	1.9	10.4	23.7	22.1	24.4	16.1	1,395,107	3,167
Female	1.3	1.1	8.9	24.0	24.0	24.8	16.0	1,270,185	3,018
AGE									
12-13	2.6	1.7	13.1	19.2	17.2	20.5	25.6	876,938	2,068
14-15	0.8	0.7	8.6	27.1	25.1	25.7	12.0	940,663	2,185
16-17	0.6	2.1	7.3	24.9	26.7	27.6	10.7	847,691	1,932
RACE/ETHNICITY									
Hispanic	1.7	1.6	9.4	23.8	24.0	22.6	17.0	866,906	1,587
Non-Hispanic White	1.0	1.4	9.6	23.9	20.9	26.7	16.5	1,244,645	3,373
African-American	0.8	1.4	13.8	20.3	25.3	23.9	14.4	172,573	440
Asian/PI	2.4	1.7	7.9	25.7	27.7	21.6	13.0	291,334	581
Other	0.8	1.8	11.7	23.6	22.2	25.8	14.1	89,834	204
SCHOOL PERFORMANCE									
Much better than average	1.1	2.2	9.0	24.2	20.6	24.7	18.3	610,321	1,453
Better than average	1.6	1.4	9.1	22.1	22.8	26.5	16.5	1,008,739	2,396
Average and below	1.3	1.2	10.6	25.3	24.6	22.7	14.4	1,046,232	2,336
SEX Male									
AGE									
12-13	3.0	2.7	14.8	17.7	16.2	19.9	25.8	455,651	1,041
14-15	0.7	0.8	9.4	26.6	24.1	27.1	11.4	490,641	1,125
16-17	0.6	2.1	7.2	26.7	26.0	26.1	11.3	448,815	1,001
RACE/ETHNICITY									
Hispanic	2.0	2.3	9.5	23.6	24.0	22.0	16.6	445,565	793
Non-Hispanic White	0.7	1.5	10.8	24.3	19.7	26.3	16.8	663,581	1,753
African-American	1.1	1.6	13.6	21.8	23.9	23.9	14.2	85,535	212
Asian/PI	2.6	2.6	9.6	23.1	28.0	21.1	13.1	153,652	303
Other	1.6	1.8	10.8	21.7	16.3	33.2	14.5	46,774	106
SCHOOL PERFORMANCE									
Much better than average	0.7	3.4	10.4	23.4	20.5	24.1	17.4	298,194	698
Better than average	1.9	1.6	9.7	21.8	21.2	26.8	17.0	512,834	1,214
Average and below	1.3	1.3	11.0	25.5	23.7	22.5	14.6	584,079	1,255
SEX Female									
AGE									
12-13	2.2	0.7	11.3	20.9	18.2	21.2	25.5	421,287	1,027
14-15	0.9	0.6	7.8	27.8	26.2	24.2	12.6	450,022	1,060
16-17	0.7	2.1	7.5	22.9	27.5	29.3	10.0	398,876	931
RACE/ETHNICITY									
Hispanic	1.3	0.9	9.2	24.0	23.9	23.2	17.4	421,341	794
Non-Hispanic White	1.2	1.2	8.2	23.4	22.4	27.3	16.2	581,064	1,620
African-American	0.6	1.2	14.0	18.8	26.7	23.9	14.7	87,038	228
Asian/PI	2.2	0.8	5.9	28.7	27.5	22.0	12.9	137,682	278
Other	.	1.8	12.7	25.6	28.6	17.7	13.6	43,060	98
SCHOOL PERFORMANCE									
Much better than average	1.4	1.1	7.6	24.9	20.7	25.3	19.1	312,127	755
Better than average	1.3	1.2	8.6	22.4	24.5	26.2	15.9	495,905	1,182
Average and below	1.1	1.1	10.1	25.0	25.6	23.0	14.2	462,153	1,081

TABLE B.18: COMPLIANCE WITH SCHOOL NONSMOKING RULES (1996 TEEN CTS)

REGIONAL	How many students comply with nonsmoking rules?							Population Size	Sample Size
	Don't Know (%)	There is no rule (%)	None (%)	A few (%)	Some (%)	Most (%)	All (%)	(n)	(n)
OVERALL	1.3	1.5	9.7	23.8	23.0	24.6	16.1	2,665,292	6,185
Los Angeles	1.5	1.9	11.4	22.0	23.3	23.6	16.3	779,938	1,070
San Diego	2.3	2.1	7.6	20.6	20.5	28.8	18.1	218,122	349
Orange	1.5	1.3	7.6	27.5	22.3	21.9	17.9	213,218	324
Santa Clara	1.2	1.2	6.3	24.5	26.1	20.8	19.9	124,675	262
San Bernadino	0.6	1.4	8.7	22.4	27.3	24.9	14.7	146,782	328
Alameda	1.0	1.6	8.5	25.2	24.8	22.6	16.3	101,386	232
Riverside	0.7	0.7	11.2	27.0	23.9	24.1	12.4	116,921	309
Sacramento	1.3	0.6	7.1	27.0	20.1	27.7	16.2	90,670	298
Contra Costa	0.4	2.9	11.9	22.0	22.9	24.4	15.4	70,340	281
San Francisco	5.3	2.1	11.3	24.6	18.9	20.3	17.5	41,434	99
San Mateo, Solano	.	0.7	13.2	24.7	20.7	26.2	14.4	83,507	300
Marin, Napa, Sonoma	0.8	1.7	8.7	26.5	23.5	26.1	12.7	56,209	305
Butte, Colusa, Del Norte, Glenn, etc.	1.8	1.4	11.3	23.7	20.8	25.7	15.3	88,172	334
San Luis Obisbo, Santa Barbara, Ventura	0.5	0.8	7.5	29.5	24.7	23.9	13.1	113,531	304
Amador, Alpine, Calaveras El Dorado, etc.	2.1	1.2	13.7	20.8	26.0	20.8	15.4	105,175	352
Monterey, San Benito, Santa Cruz	1.5	0.8	8.7	25.2	18.1	30.8	14.9	54,991	299
Fresno, Madera, Merced, Stanislaus	1.2	1.0	7.1	24.5	22.7	29.8	13.7	139,107	339
Imperial, Inyo, Kern, Kings, Mono, Tulare	0.4	1.3	9.2	24.6	20.8	25.6	18.0	121,114	400

TABLE B.19: USE AND MEANING OF 'LIGHT' CIGARETTE (1996 ADULT CTS)

OVERALL	Use of Light Cigarettes			Meaning of 'Light' or 'Ultra Light'					
	Currently Smoke Light Cigarettes (%)	Considered switching to lights (%)	Never considered switching (%)	Low Tar and/or Low Nicotine (%)	Less Harmful (%)	Filtered (%)	More Air (%)	Milder Taste (%)	Advertising Gimmick (%)
TOTAL	48.1	17.3	34.6	52.8	3.0	4.4	2.1	10.4	5.6
SEX									
Male	44.3	17.5	38.3	51.9	3.2	4.6	2.2	8.9	6.2
Female	53.0	17.0	29.9	53.9	2.8	4.2	2.0	12.3	4.8
AGE									
18-24	41.0	18.9	40.1	49.7	3.7	8.6	1.8	9.2	4.5
25-44	46.9	17.5	35.6	54.9	2.3	4.5	2.5	10.5	5.4
45-64	50.4	17.6	32.0	52.3	4.1	2.4	1.9	10.9	6.0
65+	63.0	10.8	26.3	45.6	2.7	2.6	0.2	10.2	8.1
RACE/ETHNICITY									
Hispanic	38.7	14.8	46.5	40.7	2.9	3.6	1.1	16.8	3.5
Non-Hispanic White	52.8	17.5	29.7	58.0	3.0	5.1	2.7	7.7	6.2
African-American	34.3	22.5	43.3	47.2	2.9	2.2	1.2	12.1	5.9
Asian/PI	57.0	16.5	26.5	58.1	3.1	4.0	0.7	9.0	4.6
Other	42.8	17.4	39.8	43.9	4.0	3.4	2.7	14.7	7.6
EDUCATION									
<12	36.8	19.4	43.8	42.8	2.2	2.7	2.2	14.0	4.3
12	46.6	17.3	36.1	51.4	3.0	5.7	2.2	11.1	5.0
13-15	53.7	16.5	29.8	56.5	3.9	5.1	2.3	8.2	6.6
16+	58.7	15.5	25.8	64.7	2.8	3.2	1.4	7.1	7.0
SEX Male									
AGE									
18-24	38.8	19.7	41.5	51.1	4.2	8.3	1.8	7.5	4.5
25-44	43.3	17.8	38.8	53.8	2.2	4.5	2.6	9.4	6.0
45-64	46.8	16.7	36.5	50.8	4.8	2.8	2.0	8.8	6.6
65+	57.5	10.9	31.6	40.4	2.6	3.3	0.4	8.7	11.0
RACE/ETHNICITY									
Hispanic	35.0	13.6	51.4	40.4	3.1	3.0	1.4	15.0	3.9
Non-Hispanic White	47.8	18.7	33.5	57.8	3.2	5.8	2.7	5.4	7.1
African-American	34.5	24.6	40.9	48.9	2.9	1.2	1.7	9.5	6.9
Asian/PI	59.9	16.2	23.9	56.4	3.5	5.0	0.3	8.9	5.2
Other	40.9	14.4	44.7	38.6	4.3	3.7	4.1	16.3	8.3
EDUCATION									
<12	33.8	17.6	48.6	41.8	2.5	2.9	1.7	12.9	4.8
12	43.8	17.0	39.2	50.1	3.2	6.7	2.2	8.7	6.4
13-15	49.1	17.3	33.5	55.7	4.3	5.2	3.0	7.1	7.2
16+	54.5	18.5	27.0	65.7	2.5	2.3	1.5	5.8	6.5
SEX Female									
AGE									
18-24	44.4	17.6	38.0	47.5	3.0	9.2	1.8	11.8	4.4
25-44	51.9	17.1	31.0	56.4	2.3	4.5	2.5	12.0	4.5
45-64	54.6	18.8	26.6	54.0	3.3	1.8	1.8	13.4	5.2
65+	67.3	10.7	22.1	49.6	2.9	2.0	.	11.4	5.9
RACE/ETHNICITY									
Hispanic	46.2	17.4	36.4	41.3	2.7	4.8	0.5	20.7	2.7
Non-Hispanic White	58.4	16.2	25.4	58.1	2.7	4.4	2.6	10.1	5.3
African-American	34.0	20.4	45.6	45.4	2.9	3.1	0.7	14.6	5.0
Asian/PI	50.8	17.2	32.0	61.7	2.3	2.0	1.6	9.1	3.3
Other	44.7	20.4	34.9	49.2	3.8	3.1	1.3	13.1	6.9
EDUCATION									
<12	41.6	22.2	36.2	44.3	1.8	2.3	2.9	15.7	3.6
12	50.1	17.6	32.4	53.0	2.6	4.5	2.3	14.0	3.4
13-15	59.1	15.5	25.4	57.4	3.4	5.0	1.4	9.5	5.9
16+	64.4	11.4	24.1	63.4	3.3	4.4	1.1	9.0	7.7

TABLE B.19: USE AND MEANING OF 'LIGHT' CIGARETTE (1996 ADULT CTS)

REGIONAL	Use of Light Cigarettes			Meaning of 'Light' or 'Ultra Light'								Population Size	Sample Size
	Currently Smoke Light Cigarettes (%)	Considered switching to lights (%)	Never considered switching (%)	Low Tar and/or Low Nicotine (%)	Less Harmful (%)	Filtered (%)	More Air (%)	Milder Taste (%)	Advertising Gimmick (%)	Don't Know (%)	Other Responses (%)	(n)	(n)
OVERALL	48.1	17.3	34.6	52.8	3.0	4.4	2.1	10.4	5.6	16.2	5.5	4,189,692	8,593
Los Angeles	46.4	17.2	36.5	50.9	3.2	3.6	1.8	12.4	5.5	17.5	5.1	1,172,127	1,615
San Diego	49.9	15.8	34.3	55.2	2.1	6.4	1.7	9.2	5.1	15.7	4.6	335,476	538
Orange	51.2	16.2	32.5	59.2	2.0	3.3	3.8	6.3	6.2	13.7	5.5	302,766	437
Santa Clara	55.7	17.2	27.2	55.7	1.4	4.3	1.2	13.0	3.9	13.3	7.2	143,530	283
San Bernadino	47.1	19.7	33.2	45.5	3.3	7.4	2.3	11.5	5.6	17.5	6.9	210,046	377
Alameda	47.5	17.5	34.9	50.1	3.4	5.1	2.4	13.4	6.6	15.8	3.2	187,077	388
Riverside	51.4	15.3	33.4	45.6	5.6	4.5	2.1	12.0	4.7	19.5	6.1	198,800	384
Sacramento	47.3	20.7	32.0	56.2	2.7	4.2	1.8	9.4	6.6	15.3	3.8	156,875	444
Contra Costa	48.2	15.6	36.2	57.3	2.1	3.8	0.9	9.7	4.4	13.3	8.4	115,261	372
San Francisco	45.1	21.0	33.8	51.3	5.3	4.4	1.2	9.4	6.3	13.5	8.6	137,793	420
San Mateo, Solano	55.7	13.3	31.0	53.1	2.3	3.5	3.3	7.6	7.9	17.0	5.3	163,634	382
Marin, Napa, Sonoma	42.4	16.9	40.8	49.6	2.8	1.5	2.3	7.1	5.9	23.4	7.3	97,298	354
Butte, Colusa, Del Norte, Glenn, etc.	42.8	21.5	35.8	51.6	3.2	5.2	2.7	7.8	7.2	15.7	6.5	160,119	511
San Luis Obisbo, Santa Barbara, Ventura	46.9	17.8	35.4	56.4	2.5	6.2	3.2	7.0	5.0	14.5	5.2	178,276	411
Amador,Alpine Calaveras El Dorado,etc.	51.0	14.5	34.5	55.8	3.9	3.2	2.0	10.0	6.4	13.9	4.8	178,301	452
Monterey, San Benito, Santa Cruz	47.3	24.3	28.4	55.0	3.2	5.3	1.8	10.8	4.2	14.4	5.4	82,536	377
Fresno, Madera, Merced, Stanislaus	49.8	18.6	31.6	56.6	2.4	6.1	1.6	9.2	4.6	14.5	5.0	187,966	396
Imperial, Inyo, Kern, Kings, Mono, Tulare	43.4	14.9	41.7	52.2	3.1	2.6	1.9	11.6	4.6	17.5	6.4	181,811	452

TABLE B.20: SUPPORT FOR REGULATION OF TOBACCO ADVERTISING AND PROMOTION (1990 ADULT CTS)

OVERALL	Advertising Ban (%)	Ban on Samples on Public Property (%)	Ban on Samples by Mail (%)	Ban on Sponsorship of Events (%)	Population Size (n)	Sample Size (n)
TOTAL	61.5	79.9	72.8	56.5	21,567,108	24,296
SEX						
Male	56.4	75.7	69.4	51.5	10,661,782	11,480
Female	66.5	84.0	76.2	61.5	10,905,326	12,816
AGE						
18-24	55.7	78.2	71.5	53.5	3,273,611	3,532
25-44	61.3	79.7	71.5	54.6	10,172,724	11,814
45-64	61.8	80.0	72.7	58.6	5,286,164	6,229
65+	68.6	82.5	79.6	63.4	2,834,609	2,721
RACE/ETHNICITY						
Hispanic	78.9	88.1	83.7	67.8	4,845,718	3,462
Non-Hispanic White	54.7	77.2	68.5	51.4	13,320,587	17,988
African-American	65.4	75.5	74.3	64.9	1,357,052	1,223
Asian/PI	64.1	81.8	76.0	59.5	1,674,503	1,240
Other	55.6	77.8	65.2	51.1	369,248	383
EDUCATION						
<12	77.0	83.5	79.2	66.0	5,083,262	2,975
12	60.1	79.3	73.1	57.4	6,942,656	7,999
13-15	54.4	78.8	69.4	52.9	5,033,696	7,762
16+	54.2	78.1	69.1	48.7	4,507,494	5,560
SEX Male						
AGE						
18-24	51.8	74.9	67.6	46.7	1,754,864	1,775
25-44	57.4	75.6	68.2	50.5	5,150,166	5,701
45-64	55.1	75.9	69.6	52.5	2,551,450	2,906
65+	62.0	77.1	76.3	60.8	1,205,302	1,098
RACE/ETHNICITY						
Hispanic	75.3	85.5	81.2	66.2	2,342,974	1,771
Non-Hispanic White	48.7	72.0	64.2	44.2	6,601,854	8,320
African-American	63.4	72.7	70.5	64.4	650,809	547
Asian/PI	60.8	80.2	78.1	58.1	885,499	664
Other	47.1	73.3	59.5	51.1	180,646	178
EDUCATION						
<12	73.3	78.9	76.6	64.8	2,361,078	1,439
12	55.5	75.9	70.6	52.4	3,183,957	3,431
13-15	48.3	73.9	65.4	45.1	2,526,431	3,585
16+	50.2	74.4	65.2	44.5	2,590,316	3,025
SEX Female						
AGE						
18-24	60.2	81.9	75.9	61.4	1,518,747	1,757
25-44	65.3	83.9	74.8	58.7	5,022,558	6,113
45-64	67.9	83.9	75.6	64.2	2,734,714	3,323
65+	73.4	86.5	82.1	65.4	1,629,307	1,623
RACE/ETHNICITY						
Hispanic	82.2	90.6	86.0	69.3	2,502,744	1,691
Non-Hispanic White	60.5	82.3	72.8	58.5	6,718,733	9,668
African-American	67.3	78.1	77.9	65.4	706,243	676
Asian/PI	67.8	83.7	73.7	61.2	789,004	576
Other	63.7	82.0	70.6	51.1	188,602	205
EDUCATION						
<12	80.1	87.6	81.4	67.0	2,722,184	1,536
12	64.1	82.1	75.1	61.6	3,758,699	4,568
13-15	60.6	83.8	73.5	60.7	2,507,265	4,177
16+	59.6	83.1	74.4	54.4	1,917,178	2,535

TABLE B.20: SUPPORT FOR REGULATION OF TOBACCO ADVERTISING AND PROMOTION (1990 ADULT CTS)

REGIONAL	Advertising Ban (%)	Ban on Samples on Public Property (%)	Ban on Samples by Mail (%)	Ban on Sponsorship of Events (%)	Population Size (n)	Sample Size (n)
OVERALL	61.5	79.9	72.8	56.5	21,567,108	24,296
Los Angeles	64.8	81.7	75.6	58.5	6,423,142	2,474
San Diego	60.2	81.4	72.6	56.7	1,810,285	1,450
Orange	60.4	80.8	73.5	57.5	1,746,931	1,185
Santa Clara	62.6	80.2	73.1	55.9	1,085,293	1,174
San Bernadino	60.9	78.5	71.8	56.3	1,027,826	1,578
Alameda	62.1	79.5	73.0	55.3	927,041	1,216
Riverside	58.8	78.4	69.6	54.1	848,226	1,432
Sacramento	54.0	78.1	67.5	51.8	754,545	1,283
Contra Costa	59.4	78.7	71.0	54.6	582,471	1,347
San Francisco	57.9	74.9	67.8	52.1	524,671	1,039
San Mateo, Solano	61.3	80.7	72.0	57.3	717,511	1,190
Marin, Napa, Sonoma	62.1	76.7	70.4	53.9	528,390	1,119
Butte, Colusa, Del Norte, Glenn, etc.	56.3	78.2	69.9	50.8	687,089	1,397
San Luis Obisbo, Santa Barbara, Ventura	57.8	76.6	70.5	52.6	910,059	1,287
Amador, Alpine, Calaveras El Dorado, etc.	58.8	79.0	72.9	59.2	804,275	1,290
Monterey, San Benito, Santa Cruz	63.0	82.5	75.2	56.3	450,862	1,221
Fresno, Madera, Merced, Stanislaus	62.6	78.6	71.6	58.6	945,344	1,309
Imperial, Inyo, Kern, Kings, Mono, Tulare	62.3	77.7	71.3	58.0	793,147	1,305

TABLE B.20: SUPPORT FOR REGULATION OF TOBACCO ADVERTISING AND PROMOTION (1992 ADULT CTS)

OVERALL	Advertising Ban (%)	Ban on Samples on Public Property (%)	Ban on Samples by Mail (%)	Ban on Sponsorship of Events (%)	Population Size (n)	Sample Size (n)
TOTAL	63.0	80.7	72.9	56.6	21,588,796	11,905
SEX						
Male	58.6	76.1	69.3	50.0	10,673,057	5,684
Female	67.3	85.1	76.5	63.0	10,915,739	6,221
AGE						
18-24	59.4	79.1	73.4	54.1	3,277,155	1,514
25-44	60.4	78.8	69.6	54.0	10,187,108	5,689
45-64	65.6	84.7	74.9	58.9	5,032,967	3,282
65+	71.1	81.9	80.2	63.9	3,091,566	1,420
RACE/ETHNICITY						
Hispanic	80.8	88.7	82.8	70.1	4,872,984	1,817
Non-Hispanic White	56.5	77.7	69.1	50.7	13,312,956	8,662
African-American	66.9	81.6	75.7	63.7	1,357,672	680
Asian/PI	58.8	82.5	75.8	59.4	1,540,666	556
Other	62.7	71.7	63.2	54.3	504,518	190
EDUCATION						
<12	75.4	82.2	77.4	65.3	5,091,113	1,384
12	62.6	80.4	73.3	57.7	6,947,028	3,825
13-15	58.5	80.2	70.1	53.1	5,063,990	3,949
16+	54.6	79.7	70.4	49.0	4,486,665	2,747
SEX Male						
AGE						
18-24	55.3	73.2	67.0	49.0	1,758,732	761
25-44	56.4	74.9	66.7	47.8	5,435,923	2,823
45-64	61.1	80.6	71.8	50.1	2,268,835	1,520
65+	68.3	77.0	79.1	61.3	1,209,567	580
RACE/ETHNICITY						
Hispanic	78.0	87.5	81.5	68.0	2,398,107	900
Non-Hispanic White	51.9	72.0	65.2	42.8	6,531,614	4,065
African-American	63.2	82.3	74.9	61.2	715,323	321
Asian/PI	50.4	73.7	65.1	46.1	756,678	304
Other	58.5	63.7	55.5	46.5	271,335	94
EDUCATION						
<12	71.0	77.8	73.4	61.8	2,454,405	642
12	58.4	76.5	71.0	51.1	3,191,429	1,648
13-15	55.4	75.0	67.0	45.6	2,478,330	1,902
16+	49.8	75.1	65.3	41.8	2,548,893	1,492
SEX Female						
AGE						
18-24	64.3	85.8	80.9	59.9	1,518,423	753
25-44	64.9	83.2	72.8	61.2	4,751,185	2,866
45-64	69.4	88.1	77.5	66.1	2,764,132	1,762
65+	72.8	85.0	80.9	65.6	1,881,999	840
RACE/ETHNICITY						
Hispanic	83.5	89.9	84.0	72.2	2,474,877	917
Non-Hispanic White	61.1	83.3	72.8	58.3	6,781,342	4,597
African-American	71.1	80.7	76.7	66.5	642,349	359
Asian/PI	66.9	90.9	86.2	72.1	783,988	252
Other	67.6	81.1	72.2	63.4	233,183	96
EDUCATION						
<12	79.6	86.3	81.1	68.6	2,636,708	742
12	66.1	83.8	75.3	63.4	3,755,599	2,177
13-15	61.5	85.3	73.1	60.3	2,585,660	2,047
16+	60.8	85.8	77.1	58.4	1,937,772	1,255

Regional data not available for 1992

TABLE B.20: SUPPORT FOR REGULATION OF TOBACCO ADVERTISING AND PROMOTION (1996 ADULT CTS)

OVERALL	Advertising Ban (%)	Ban on Samples on Public Property (%)	Ban on Samples by Mail (%)	Ban on Sponsorship of Events (%)	Population Size (n)	Sample Size (n)
TOTAL	63.9	83.0	77.8	61.8	22,878,901	18,616
SEX						
Male	56.4	77.4	73.0	55.2	11,229,770	9,065
Female	71.2	88.3	82.5	68.2	11,649,131	9,551
AGE						
18-24	60.1	83.3	78.2	61.6	3,029,936	2,473
25-44	63.4	82.3	76.9	59.1	10,688,511	8,778
45-64	64.4	81.8	76.3	62.2	6,039,397	5,394
65+	68.5	87.2	83.6	70.9	3,121,057	1,971
RACE/ETHNICITY						
Hispanic	79.4	89.0	87.2	73.5	5,861,511	3,045
Non-Hispanic White	55.4	79.9	72.6	54.8	12,610,345	12,564
African-American	67.0	80.7	77.0	67.8	1,492,445	1,117
Asian/PI	69.0	87.9	85.5	67.6	2,144,990	1,284
Other	65.2	78.1	73.0	60.4	769,610	606
EDUCATION						
<12	79.8	87.4	84.1	73.5	4,876,751	2,052
12	64.9	81.7	77.8	62.2	5,717,864	6,040
13-15	60.1	82.3	75.5	60.1	6,042,162	5,894
16+	54.3	81.4	75.2	54.1	6,242,124	4,630
SEX Male						
AGE						
18-24	52.8	78.8	72.7	56.9	1,569,047	1,272
25-44	53.9	76.3	71.7	51.7	5,328,315	4,368
45-64	59.6	76.0	71.9	56.6	2,974,175	2,592
65+	62.9	83.5	80.6	64.1	1,358,233	833
RACE/ETHNICITY						
Hispanic	73.8	84.8	83.5	68.6	2,828,290	1,639
Non-Hispanic White	47.3	73.5	67.1	47.5	6,259,222	5,858
African-American	58.8	78.2	73.7	65.0	707,773	512
Asian/PI	60.9	81.4	80.5	60.6	1,057,917	763
Other	58.6	73.9	69.5	49.7	376,568	293
EDUCATION						
<12	74.5	82.4	81.0	67.9	2,320,055	1,094
12	57.4	75.9	73.8	56.7	2,665,524	2,782
13-15	51.5	77.0	69.9	53.1	2,930,166	2,768
16+	47.1	75.5	69.5	47.0	3,314,025	2,421
SEX Female						
AGE						
18-24	67.9	88.2	84.1	66.6	1,460,889	1,201
25-44	72.8	88.4	82.1	66.5	5,360,196	4,410
45-64	69.1	87.4	80.5	67.5	3,065,222	2,802
65+	72.8	90.0	85.8	76.1	1,762,824	1,138
RACE/ETHNICITY						
Hispanic	84.6	92.9	90.6	78.1	3,033,221	1,406
Non-Hispanic White	63.4	86.2	78.0	62.0	6,351,123	6,706
African-American	74.5	83.0	79.8	70.4	784,672	605
Asian/PI	76.9	94.2	90.4	74.4	1,087,073	521
Other	71.5	82.1	76.3	70.7	393,042	313
EDUCATION						
<12	84.7	91.8	87.0	78.5	2,556,696	958
12	71.4	86.7	81.4	67.0	3,052,340	3,258
13-15	68.3	87.3	80.7	66.8	3,111,996	3,126
16+	62.4	88.1	81.6	62.1	2,928,099	2,209

TABLE B.20: SUPPORT FOR REGULATION OF TOBACCO ADVERTISING AND PROMOTION (1996 ADULT CTS)

REGIONAL	Advertising Ban (%)	Ban on Samples on Public Property (%)	Ban on Samples by Mail (%)	Ban on Sponsorship of Events (%)	Population Size (n)	Sample Size (n)
OVERALL	63.9	83.0	77.8	61.8	22,878,901	18,616
Los Angeles	66.9	83.9	80.2	64.9	6,617,607	3,565
San Diego	58.8	82.7	75.3	57.2	1,950,958	1,193
Orange	63.5	81.9	75.8	60.8	1,885,635	1,063
Santa Clara	65.3	85.5	82.0	62.5	1,165,855	752
San Bernadino	64.8	83.0	75.4	58.6	1,048,807	778
Alameda	60.4	81.3	77.7	61.8	990,883	797
Riverside	64.3	82.2	76.7	62.7	958,334	819
Sacramento	58.3	78.9	72.5	54.0	804,664	921
Contra Costa	64.0	82.3	79.1	57.9	654,220	781
San Francisco	54.6	78.9	73.9	59.2	611,685	817
San Mateo, Solano	66.4	82.3	80.3	64.6	797,587	819
Marin, Napa, Sonoma	63.9	85.9	78.6	67.4	590,502	899
Butte, Colusa, Del Norte, Glenn, etc.	61.7	79.9	72.5	58.2	733,408	1,016
San Luis Obisbo, Santa Barbara, Ventura	59.4	84.5	77.4	58.9	956,940	908
Amador, Alpine, Calaveras El Dorado, etc.	59.9	82.5	77.2	58.8	882,608	932
Monterey, San Benito, Santa Cruz	70.1	87.7	81.8	64.9	451,276	852
Fresno, Madera, Merced, Stanislaus	68.0	82.6	77.5	65.8	963,994	820
Imperial, Inyo, Kern, Kings, Mono, Tulare	66.8	83.8	75.8	62.7	813,938	884

TABLE B.21: HEALTH BELIEFS ON ETS (1992 ADULT CTS)

OVERALL	ETS Causes Cancer in Nonsmokers			ETS Harms Babies and Children			Population Size	Sample Size
	Agree	Disagree	No Opinion	Agree	Disagree	No Opinion		
	(%)	(%)	(%)			(%)	(n)	(n)
TOTAL	79.0	10.6	10.4	92.6	4.1	3.3	21,588,796	11,905
SEX								
Male	77.4	11.9	10.6	92.0	4.6	3.4	10,673,057	5,684
Female	80.6	9.3	10.1	93.1	3.7	3.2	10,915,739	6,221
AGE								
18-24	87.3	8.0	4.7	96.7	2.5	0.8	3,277,155	1,514
25-44	81.7	9.5	8.8	93.7	3.8	2.5	10,187,108	5,689
45-64	72.7	13.8	13.5	91.2	4.2	4.7	5,032,967	3,282
65+	72.0	11.7	16.3	86.5	6.9	6.6	3,091,566	1,420
RACE/ETHNICITY								
Hispanic	86.1	7.2	6.7	96.2	2.7	1.1	4,872,984	1,817
Non-Hispanic White	76.9	11.1	12.0	91.8	4.1	4.1	13,312,956	8,662
African-American	77.1	10.9	12.0	91.2	4.4	4.4	1,357,672	680
Asian/PI	82.1	12.9	5.0	91.2	6.8	2.0	1,540,666	556
Other	63.5	21.7	14.9	85.4	9.5	5.2	504,518	190
EDUCATION								
<12	78.3	10.5	11.2	91.6	5.8	2.6	5,091,113	1,384
12	79.2	10.1	10.6	92.6	3.7	3.7	6,947,028	3,825
13-15	79.4	10.8	9.9	93.0	3.6	3.5	5,063,990	3,949
16+	79.2	11.3	9.5	93.0	3.6	3.4	4,486,665	2,747
SEX Male								
AGE								
18-24	88.8	7.1	4.1	96.5	3.0	0.6	1,758,732	761
25-44	79.8	10.3	9.9	92.9	4.3	2.8	5,435,923	2,823
45-64	68.4	17.1	14.5	90.2	4.8	5.0	2,268,835	1,520
65+	67.3	16.5	16.1	85.2	7.6	7.2	1,209,567	580
RACE/ETHNICITY								
Hispanic	84.9	6.8	8.3	94.5	3.9	1.6	2,398,107	900
Non-Hispanic White	75.7	12.9	11.4	91.4	4.8	3.8	6,531,614	4,065
African-American	73.5	12.8	13.7	91.9	3.0	5.0	715,323	321
Asian/PI	78.1	14.7	7.1	91.5	5.6	2.9	756,678	304
Other	61.0	25.8	13.2	87.4	4.7	7.9	271,335	94
EDUCATION								
<12	76.4	11.3	12.3	91.2	5.8	3.1	2,454,405	642
12	79.1	10.7	10.2	92.6	3.9	3.5	3,191,429	1,648
13-15	77.5	12.1	10.5	91.7	4.7	3.6	2,478,330	1,902
16+	76.4	14.0	9.7	92.5	4.1	3.4	2,548,893	1,492
SEX Female								
AGE								
18-24	85.5	8.9	5.5	97.0	2.0	1.0	1,518,423	753
25-44	83.8	8.6	7.6	94.7	3.2	2.1	4,751,185	2,866
45-64	76.2	11.1	12.7	92.0	3.6	4.4	2,764,132	1,762
65+	75.0	8.5	16.5	87.3	6.5	6.2	1,881,999	840
RACE/ETHNICITY								
Hispanic	87.3	7.5	5.2	97.8	1.5	0.6	2,474,877	917
Non-Hispanic White	78.0	9.5	12.6	92.1	3.4	4.4	6,781,342	4,597
African-American	81.2	8.9	10.0	90.5	5.9	3.7	642,349	359
Asian/PI	85.9	11.2	2.9	90.9	8.0	1.1	783,988	252
Other	66.3	16.9	16.8	83.0	15.0	2.0	233,183	96
EDUCATION								
<12	80.0	9.7	10.3	92.1	5.7	2.2	2,636,708	742
12	79.4	9.6	11.0	92.6	3.6	3.8	3,755,599	2,177
13-15	81.2	9.5	9.3	94.2	2.5	3.3	2,585,660	2,047
16+	83.0	7.7	9.3	93.7	2.8	3.4	1,937,772	1,255

Regional data not available for 1992

TABLE B.21: HEALTH BELIEFS ON ETS (1993 ADULT CTS)

OVERALL	ETS Causes Cancer in Nonsmokers				
	Agree	Disagree	No Opinion	Population Size	Sample Size
	(%)	(%)	(%)	(n)	(n)
TOTAL	79.8	9.9	10.2	21,587,775	30,715
SEX					
Male	78.5	11.0	10.5	10,671,517	12,477
Female	81.1	8.9	10.0	10,916,258	18,238
AGE					
18-24	90.8	6.3	2.8	3,275,848	3,702
25-44	83.3	8.6	8.1	10,191,131	14,189
45-64	72.7	12.9	14.3	5,120,292	7,898
65+	68.1	13.2	18.6	3,000,504	4,926
RACE/ETHNICITY					
Hispanic	88.4	7.6	4.0	4,859,668	4,875
Non-Hispanic White	76.9	10.8	12.3	13,336,484	21,648
African-American	77.5	9.6	12.9	1,358,411	1,686
Asian/PI	84.4	7.7	7.9	1,622,912	2,011
Other	64.5	18.8	16.7	410,300	495
EDUCATION					
<12	81.0	9.4	9.6	5,090,098	3,359
12	77.0	11.1	11.9	6,947,051	8,857
13-15	80.6	9.9	9.5	4,999,968	9,802
16+	82.1	8.8	9.2	4,550,658	8,697
SEX Male					
AGE					
18-24	89.9	7.2	2.9	1,828,101	1,693
25-44	81.1	10.0	8.9	5,124,982	6,014
45-64	70.5	14.0	15.5	2,395,854	3,088
65+	67.4	14.6	18.0	1,322,580	1,682
RACE/ETHNICITY					
Hispanic	86.9	8.8	4.3	2,457,143	2,032
Non-Hispanic White	75.1	12.0	12.9	6,456,417	8,624
African-American	80.9	9.9	9.2	644,756	666
Asian/PI	83.5	8.1	8.5	921,836	952
Other	56.1	21.6	22.3	191,365	203
EDUCATION					
<12	80.4	10.1	9.5	2,433,065	1,222
12	76.3	12.0	11.7	3,196,795	3,189
13-15	79.0	11.1	9.9	2,465,579	3,888
16+	79.0	10.4	10.6	2,576,078	4,178
SEX Female					
AGE					
18-24	91.9	5.2	2.8	1,447,747	2,009
25-44	85.6	7.2	7.2	5,066,149	8,175
45-64	74.7	12.0	13.3	2,724,438	4,810
65+	68.7	12.2	19.1	1,677,924	3,244
RACE/ETHNICITY					
Hispanic	90.0	6.3	3.7	2,402,525	2,843
Non-Hispanic White	78.6	9.7	11.7	6,880,067	13,024
African-American	74.4	9.3	16.3	713,655	1,020
Asian/PI	85.6	7.2	7.2	701,076	1,059
Other	71.8	16.4	11.8	218,935	292
EDUCATION					
<12	81.6	8.7	9.7	2,657,033	2,137
12	77.5	10.4	12.1	3,750,256	5,668
13-15	82.2	8.7	9.2	2,534,389	5,914
16+	86.0	6.6	7.4	1,974,580	4,519

TABLE B.21: HEALTH BELIEFS ON ETS (1993 ADULT CTS)

REGIONAL	ETS Causes Cancer in Nonsmokers			Population Size	Sample Size
	Agree (%)	Disagree (%)	No Opinion (%)	(n)	(n)
OVERALL	79.8	9.9	10.2	21,587,775	30,715
Los Angeles	81.6	9.3	9.1	6,429,627	3,219
San Diego	79.4	10.4	10.2	1,812,081	1,785
Orange	81.5	10.0	8.5	1,748,693	1,519
Santa Clara	83.1	8.1	8.8	1,086,331	1,589
San Bernadino	77.7	9.8	12.5	1,028,911	1,784
Alameda	80.6	10.5	8.9	927,988	1,516
Riverside	78.3	10.8	10.8	849,040	1,853
Sacramento	78.7	10.3	11.0	755,336	1,692
Contra Costa	80.0	8.3	11.7	583,028	1,739
San Francisco	77.2	11.0	11.8	525,170	1,442
San Mateo, Solano	80.4	10.3	9.2	718,240	1,516
Marin, Napa, Sonoma	76.0	10.2	13.9	528,885	1,494
Butte, Colusa, Del Norte, Glenn, etc.	72.4	12.5	15.0	686,773	1,688
San Luis Obisbo, Santa Barbara, Ventura	79.7	10.5	9.8	910,992	1,587
Amador,Alpine,Calaveras El Dorado,etc.	77.3	10.5	12.2	805,079	1,469
Monterey, San Benito, Santa Cruz	82.7	7.6	9.7	451,319	1,595
Fresno, Madera, Merced, Stanislaus	77.5	11.4	11.0	946,316	1,613
Imperial, Inyo, Kern, Kings, Mono, Tulare	76.9	11.0	12.1	793,966	1,615

TABLE B.21: HEALTH BELIEFS ON ETS (1996 ADULT CTS)

OVERALL	ETS Causes Cancer in Nonsmokers			ETS Harms Babies and Children			Population Size	Sample Size
	Agree	Disagree	No Opinion	Agree	Disagree	No Opinion		
	(%)	(%)	(%)			(%)	(n)	(n)
TOTAL	82.2	10.2	7.7	93.1	4.3	2.6	22,878,901	18,616
SEX								
Male	79.5	11.8	8.7	91.4	5.5	3.1	11,229,770	9,065
Female	84.8	8.6	6.6	94.8	3.1	2.1	11,649,131	9,551
AGE								
18-24	90.1	7.1	2.8	95.9	3.4	0.7	3,029,936	2,473
25-44	86.7	8.3	5.0	94.6	4.0	1.4	10,688,511	8,778
45-64	75.2	13.7	11.1	90.9	4.6	4.4	6,039,397	5,394
65+	72.5	12.7	14.7	89.8	5.2	4.9	3,121,057	1,971
RACE/ETHNICITY								
Hispanic	89.9	7.0	3.0	94.4	4.7	0.9	5,861,511	3,045
Non-Hispanic White	78.6	11.9	9.5	92.8	3.8	3.4	12,610,345	12,564
African-American	81.2	10.1	8.7	92.6	5.1	2.4	1,492,445	1,117
Asian/PI	83.9	7.7	8.3	93.0	4.3	2.7	2,144,990	1,284
Other	79.3	12.0	8.7	91.3	6.2	2.5	769,610	606
EDUCATION								
<12	83.2	9.9	6.8	91.5	6.6	1.9	4,876,751	2,052
12	81.1	10.7	8.2	93.0	4.4	2.6	5,717,864	6,040
13-15	83.1	9.4	7.5	94.1	3.3	2.6	6,042,162	5,894
16+	81.5	10.6	7.9	93.6	3.3	3.1	6,242,124	4,630
SEX Male								
AGE								
18-24	87.6	9.1	3.3	94.4	4.6	1.0	1,569,047	1,272
25-44	84.0	10.1	5.9	92.5	5.5	2.0	5,328,315	4,368
45-64	72.1	14.8	13.1	89.5	5.4	5.1	2,974,175	2,592
65+	68.3	15.3	16.4	88.2	6.3	5.5	1,358,233	833
RACE/ETHNICITY								
Hispanic	87.2	8.9	3.8	92.8	6.2	1.0	2,828,290	1,639
Non-Hispanic White	75.7	13.9	10.4	90.9	5.0	4.1	6,259,222	5,858
African-American	78.7	11.0	10.4	93.2	4.5	2.3	707,773	512
Asian/PI	81.2	8.8	10.0	90.5	6.0	3.5	1,057,917	763
Other	80.2	10.0	9.9	89.4	7.3	3.3	376,568	293
EDUCATION								
<12	79.6	12.6	7.7	88.8	9.0	2.2	2,320,055	1,094
12	79.8	11.1	9.1	92.6	5.0	2.4	2,665,524	2,782
13-15	80.9	11.0	8.1	92.9	4.0	3.2	2,930,166	2,768
16+	77.8	12.6	9.6	91.0	4.6	4.3	3,314,025	2,421
SEX Female								
AGE								
18-24	92.8	4.9	2.3	97.5	2.0	0.5	1,460,889	1,201
25-44	89.3	6.6	4.1	96.7	2.5	0.8	5,360,196	4,410
45-64	78.2	12.6	9.3	92.3	3.9	3.7	3,065,222	2,802
65+	75.8	10.8	13.4	91.1	4.4	4.5	1,762,824	1,138
RACE/ETHNICITY								
Hispanic	92.5	5.2	2.3	95.9	3.3	0.8	3,033,221	1,406
Non-Hispanic White	81.4	10.0	8.6	94.6	2.7	2.7	6,351,123	6,706
African-American	83.4	9.3	7.3	92.0	5.6	2.4	784,672	605
Asian/PI	86.6	6.7	6.7	95.5	2.6	1.8	1,087,073	521
Other	78.4	13.9	7.6	93.1	5.1	1.8	393,042	313
EDUCATION								
<12	86.5	7.5	6.0	94.0	4.4	1.7	2,556,696	958
12	82.2	10.3	7.5	93.4	3.9	2.7	3,052,340	3,258
13-15	85.2	7.9	6.9	95.3	2.6	2.1	3,111,996	3,126
16+	85.6	8.3	6.1	96.5	1.8	1.8	2,928,099	2,209

TABLE 21: HEALTH BELIEFS ON ETS (1996 ADULT CTS)

REGIONAL	ETS Causes Cancer in Nonsmokers			ETS Harms Babies and Children				
	Agree (%)	Disagree (%)	No Opinion (%)	Agree	Disagree	No Opinion (%)	Population Size (n)	Sample Size (n)
OVERALL	82.2	10.2	7.7	93.1	4.3	2.6	22,878,901	18,616
Los Angeles	84.1	10.0	5.9	92.9	4.8	2.3	6,617,607	3,565
San Diego	81.1	11.5	7.4	94.2	2.6	3.2	1,950,958	1,193
Orange	83.5	9.0	7.5	93.9	4.1	1.9	1,885,635	1,063
Santa Clara	81.4	9.0	9.6	94.0	3.8	2.2	1,165,855	752
San Bernadino	82.5	11.3	6.1	91.7	5.5	2.8	1,048,807	778
Alameda	79.7	8.0	12.3	92.9	4.3	2.8	990,883	797
Riverside	84.7	9.7	5.5	95.4	2.6	2.0	958,334	819
Sacramento	79.6	10.6	9.8	92.6	4.7	2.7	804,664	921
Contra Costa	83.8	9.5	6.7	92.1	4.9	2.9	654,220	781
San Francisco	80.9	11.4	7.7	92.7	4.6	2.7	611,685	817
San Mateo, Solano	80.7	10.8	8.5	92.4	5.0	2.6	797,587	819
Marin, Napa, Sonoma	82.4	9.4	8.2	95.0	2.1	2.9	590,502	899
Butte, Colusa, Del Norte, Glenn, etc.	76.4	11.2	12.4	92.5	3.8	3.7	733,408	1,016
San Luis Obisbo, Santa Barbara, Ventura	80.0	11.6	8.4	92.2	5.2	2.6	956,940	908
Amador,Alpine,Calaveras El Dorado,etc.	80.0	9.4	10.6	92.0	3.2	4.7	882,608	932
Monterey, San Benito, Santa Cruz	86.6	6.8	6.7	95.3	3.0	1.7	451,276	852
Fresno, Madera, Merced, Stanislaus	81.4	10.4	8.2	94.2	3.7	2.1	963,994	820
Imperial, Inyo, Kern, Kings, Mono, Tulare	78.9	13.0	8.1	90.8	6.3	3.0	813,938	884

TABLE B.22: CURRENT TOBACCO USE STATUS (1990 ADULT CTS)

OVERALL	Any Tobacco Product Use (%)	Cigarettes[1] (%)	Cigars (%)	Pipes (%)	Chewing Tobacco / Snuff (%)	Population Size (n)	Sample Size (n)
TOTAL	23.9	21.7	2.5	1.2	1.1	21,567,108	24,296
SEX							
Male	28.9	24.6	4.8	2.4	2.1	10,661,782	11,480
Female	19.0	18.9	0.2	0.1	0.0	10,905,326	12,816
SEX Male							
AGE							
18-24	29.5	25.4	4.0	1.2	3.3	1,754,864	1,775
25-44	31.3	26.9	5.4	1.8	2.5	5,150,166	5,701
45-64	28.7	24.3	4.8	3.8	1.3	2,551,450	2,906
65+	18.0	14.1	3.8	3.3	0.5	1,205,302	1,098
RACE/ETHNICITY							
Hispanic	26.5	24.4	3.3	0.7	0.9	2,342,974	1,771
Non-Hispanic White	29.6	24.0	5.6	3.0	2.8	6,601,854	8,320
African-American	33.8	31.2	2.6	1.8	1.3	650,809	547
Asian/PI	23.3	21.1	2.5	1.6	0.7	885,499	664
Other	45.8	42.8	14.7	4.7	2.2	180,646	178
EDUCATION							
<12	35.8	33.1	5.3	2.3	2.1	2,361,078	1,439
12	31.6	27.2	4.4	1.7	3.1	3,183,957	3,431
13-15	28.7	24.1	5.1	2.6	1.9	2,526,431	3,585
16+	19.5	14.1	4.6	3.0	1.1	2,590,316	3,025

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

TABLE B.22: CURRENT TOBACCO USE STATUS (1990 ADULT CTS)

REGIONAL	Any Tobacco Product Use (%)	Cigarettes[1] (%)	Cigars (%)	Pipes (%)	Chewing Tobacco / Snuff (%)	Population Size (n)	Sample Size (n)
OVERALL	23.9	21.7	2.5	1.2	1.1	21,567,108	24,296
Los Angeles	22.9	21.5	2.3	1.3	0.2	6,423,142	2,474
San Diego	23.1	20.9	2.0	1.0	1.3	1,810,285	1,450
Orange	20.7	19.3	1.8	1.2	1.2	1,746,931	1,185
Santa Clara	20.3	18.6	2.1	1.2	0.7	1,085,293	1,174
San Bernadino	28.4	26.7	3.5	1.4	0.9	1,027,826	1,578
Alameda	25.7	22.7	2.9	1.5	0.9	927,041	1,216
Riverside	26.3	24.8	2.0	1.0	0.6	848,226	1,432
Sacramento	24.9	23.0	1.9	1.4	1.1	754,545	1,283
Contra Costa	24.0	20.7	4.0	0.7	1.2	582,471	1,347
San Francisco	23.4	21.2	2.4	0.8	0.5	524,671	1,039
San Mateo, Solano	23.7	21.3	2.2	0.7	1.0	717,511	1,190
Marin, Napa, Sonoma	24.7	20.5	4.0	1.8	1.8	528,390	1,119
Butte, Colusa, Del Norte, Glenn, etc.	27.7	23.7	2.8	1.0	3.0	687,089	1,397
San Luis Obisbo, Santa Barbara, Ventura	20.3	18.0	2.3	1.0	1.4	910,059	1,287
Amador, Alpine, Calaveras, El Dorado, etc.	29.1	24.2	3.9	1.8	3.1	804,275	1,290
Monterey, San Benito, Santa Cruz	22.9	19.4	3.2	1.0	1.4	450,862	1,221
Fresno, Madera, Merced, Stanislaus	27.1	24.4	3.1	1.3	1.8	945,344	1,309
Imperial, Inyo, Kern, Kings, Mono, Tulare	26.7	23.2	2.6	1.2	2.8	793,147	1,305

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

TABLE B.22: CURRENT TOBACCO USE STATUS (1992 ADULT CTS)

OVERALL	Any Tobacco Product Use (%)	Cigarettes[1] (%)	Pipes / Cigars (%)	Chewing Tobacco / Snuff (%)	Population Size (n)	Sample Size (n)
TOTAL	22.6	20.1	3.0	1.3	21,588,796	11,905
SEX						
Male	27.6	23.0	5.4	2.6	10,673,057	5,684
Female	17.6	17.3	0.6	0.0	10,915,739	6,221
SEX Male						
AGE						
18-24	30.9	25.5	4.5	6.1	1,758,732	761
25-44	30.3	24.9	6.4	2.5	5,435,923	2,823
45-64	24.9	21.8	4.4	1.0	2,268,835	1,520
65+	16.2	12.8	4.3	0.9	1,209,567	580
RACE/ETHNICITY						
Hispanic	22.8	20.5	3.8	1.0	2,398,107	900
Non-Hispanic White	30.4	24.2	6.5	3.6	6,531,614	4,065
African-American	24.7	22.2	3.8	1.0	715,323	321
Asian/PI	19.6	19.1	1.2	0.2	756,678	304
Other	35.1	28.0	9.1	3.3	271,335	94
EDUCATION						
<12	29.7	28.0	4.4	1.4	2,454,405	642
12	33.3	27.8	5.3	3.9	3,191,429	1,648
13-15	26.9	22.1	5.4	2.8	2,478,330	1,902
16+	19.3	12.8	6.6	2.0	2,548,893	1,492

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

Regional Data not Available for 1992

TABLE B.22: CURRENT TOBACCO USE STATUS (1996 ADULT CTS)

OVERALL	Any Tobacco Product Use (%)	Cigarettes[1] (%)	Cigars (%)	Pipes (%)	Chewing Tobacco / Snuff (%)	Population Size (n)	Sample Size (n)
TOTAL	24.1	20.4	4.9	0.8	1.3	22,878,901	18,616
SEX							
Male	30.3	23.4	8.8	1.5	2.5	11,229,770	9,065
Female	18.1	17.5	1.1	0.1	0.1	11,649,131	9,551
SEX Male							
AGE							
18-24	38.0	31.8	12.3	1.6	4.1	1,569,047	1,272
25-44	34.5	25.8	11.0	0.9	3.2	5,328,315	4,368
45-64	26.2	20.9	6.2	1.8	1.2	2,974,175	2,592
65+	13.7	9.8	1.8	2.6	0.4	1,358,233	833
RACE/ETHNICITY							
Hispanic	29.8	26.2	5.7	0.6	0.8	2,828,290	1,639
Non-Hispanic White	32.0	22.4	11.5	2.0	3.4	6,259,222	5,858
African-American	29.8	25.6	6.6	0.9	2.8	707,773	512
Asian/PI	21.4	19.5	2.9	0.8	1.3	1,057,917	763
Other	31.3	28.1	7.2	1.6	1.5	376,568	293
EDUCATION							
<12	32.4	29.8	3.9	0.9	1.5	2,320,055	1,094
12	36.8	30.0	9.1	1.6	4.1	2,665,524	2,782
13-15	30.8	24.3	9.1	1.9	2.7	2,930,166	2,768
16+	23.1	12.9	11.6	1.3	1.7	3,314,025	2,421

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).

TABLE B.22: CURRENT TOBACCO USE STATUS (1996 ADULT CTS)

REGIONAL	Any Tobacco Product Use (%)	Cigarettes[1] (%)	Cigars (%)	Pipes (%)	Chewing Tobacco / Snuff (%)	Population Size (n)	Sample Size (n)
OVERALL	24.1	20.4	4.9	0.8	1.3	22,878,901	18,616
Los Angeles	23.9	21.3	3.5	0.6	0.9	6,617,607	3,565
San Diego	24.8	18.8	7.4	1.0	1.6	1,950,958	1,193
Orange	22.1	17.8	7.0	0.9	0.8	1,885,635	1,063
Santa Clara	17.9	13.4	5.4	0.3	0.2	1,165,855	752
San Bernadino	24.9	21.7	4.9	1.3	1.0	1,048,807	778
Alameda	23.1	19.6	5.0	0.5	0.4	990,883	797
Riverside	27.0	23.2	5.8	0.9	1.5	958,334	819
Sacramento	23.8	20.2	4.9	0.8	2.0	804,664	921
Contra Costa	21.7	18.9	4.1	0.8	0.9	654,220	781
San Francisco	30.2	24.9	6.8	1.1	0.8	611,685	817
San Mateo, Solano	25.6	21.8	5.2	0.2	0.9	797,587	819
Marin, Napa, Sonoma	22.0	17.7	5.5	0.5	1.0	590,502	899
Butte, Colusa, Del Norte, Glenn, etc.	27.8	23.7	3.6	1.0	4.3	733,408	1,016
San Luis Obisbo, Santa Barbara, Ventura	23.9	19.9	4.6	1.2	2.0	956,940	908
Amador, Alpine, Calaveras, El Dorado, etc.	26.6	22.5	4.7	0.5	2.1	882,608	932
Monterey, San Benito, Santa Cruz	21.7	19.0	2.1	0.6	2.4	451,276	852
Fresno, Madera, Merced, Stanislaus	24.6	21.1	4.8	0.7	1.6	963,994	820
Imperial, Inyo, Kern, Kings, Mono, Tulare	26.0	23.2	4.1	0.8	2.3	813,938	884

[1] Use caution in comparing the 1996 data with earlier CTS years because of the change in how smoking status is defined (see Chapter 3, Section 4).