

# The 2007 South Carolina Adult Tobacco Survey: A Statewide Report

S.C. Department of Health and Environmental Control  
Division of Tobacco Prevention and Control



# Message from the Bureau of Community Health and Chronic Disease Prevention

The S.C. Department of Health and Environmental Control's Bureau of Community Health and Chronic Disease and Prevention and its Division of Tobacco Prevention and Control are proud to present the results of the inaugural South Carolina Adult Tobacco Survey (SCATS). This survey provides data on adult tobacco use—including cigarettes, smokeless tobacco, cigars and bidis. This data will allow us to plan effective programs and initiatives to address the complex issue of adult tobacco use, which will be tailored to South Carolinians' knowledge, attitudes and beliefs.

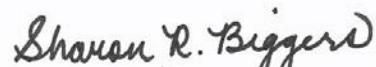
The key findings in this report include:

- 19.2 percent of S.C. adults smoke cigarettes (22 percent of males and 16.6 percent of females).
- Young adults, 18 to 24 years, reported the highest smoking rate (26.1 percent). Rates declined with increased education and increased household income.
- 45 percent of current smokers attempted to quit during the past 12 months.
- Nearly 63 percent of current smokers are seriously considering stopping smoking in the next six months. Of those, only 38.7 percent are planning to quit in the next 30 days.
- S.C. adults generally agree (91.6 percent) that breathing smoke from other people's cigarettes is very or somewhat harmful to one's health.
- 80.5 percent of S.C. adults have rules that forbid smoking anywhere in their house (88.6 percent of nonsmokers and 46.8 percent of smokers).
- About 18.3 percent of South Carolinians reported not going to a restaurant in the past year because smoking was allowed there, compared to only 7.2 percent who did not go to a restaurant because smoking was prohibited.
- 64 percent of South Carolinians would support a cigarette tax increase.
- More than half of S.C. adults (55.4 percent) reported seeing at least one commercial on television, in the past week, about not smoking cigarettes.

These findings provide important insight into how prevalent tobacco use is among S.C. adults and offer critical information about beliefs and attitudes. This information will assist public health professionals and advocates in developing the most effective strategies to address tobacco use and reduce the resulting health and economic burden on our state.



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We would also like to acknowledge:

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# Introduction

DHEC's Division of Tobacco Prevention and Control, as an important part of its comprehensive program, conducted SCATS from June through November 2007.

The survey's goal was to collect data on adult tobacco use prevalence, quitting behaviors and knowledge and attitudes about tobacco use, secondhand smoke and tobacco policy issues. By conducting such a survey, the division can evaluate its effectiveness at implementing and achieving its four key goals, which are to:

1. Prevent young people from starting tobacco use;
2. Promote quitting tobacco use among young people and adults;
3. Eliminate nonsmokers' exposure to secondhand smoke; and
4. Eliminate tobacco-related health disparities.

The Adult Tobacco Survey was designed and developed by the CDC to help states evaluate their tobacco control programs and to ensure comparability among states. This is the first-ever SCATS, and it will be conducted again in 2010.

The SCATS was random-digit dialed telephone survey of S.C. adults ages 18 and older. A total of 5,538 adults were interviewed for this survey. More details about survey administration and data analysis can be found in the Technical Notes section of this report.

Findings in SCATS show that tobacco use is a critical public health problem among S.C. adults, regardless of age, gender or race/ethnicity. Unless prevention and cessation efforts are continued, South Carolinians will become victims of tobacco-related diseases such as lung cancer, heart disease and emphysema.

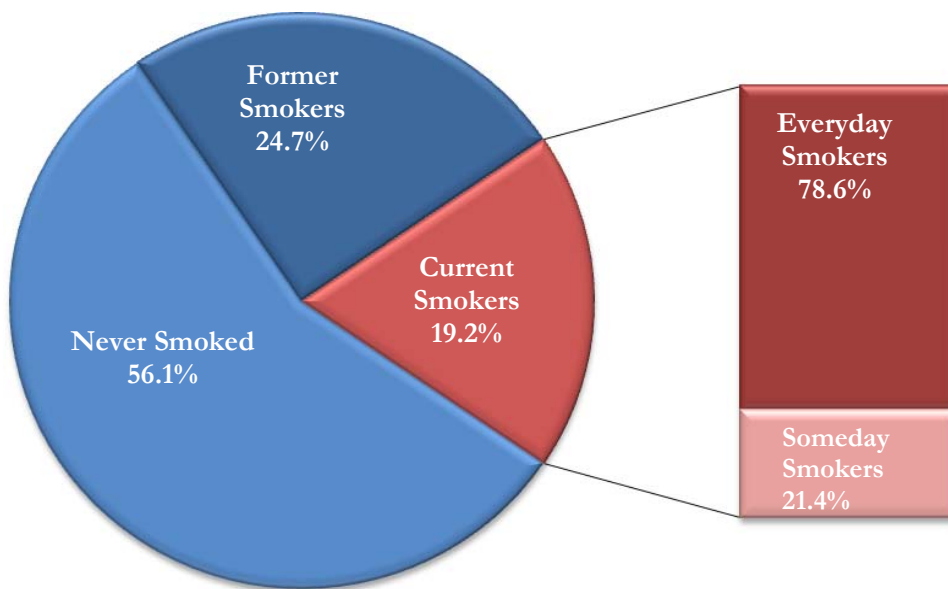
# Results

# 1. Prevalence of Tobacco Use

## Current Cigarette Smoking Prevalence

- In South Carolina, approximately one in five adults (19.2 percent) are current cigarette smokers, one in four adults (24.7 percent) are former smokers and more than half (56.1 percent) have never smoked cigarettes.
- Almost 80 percent of the current smokers report smoking every day, and a little over 20 percent of current smokers report smoking some days only.
- In general, the prevalence of current cigarette smoking among adults in the United States has steadily decreased from 1965 to 2007 <sup>(1-3)</sup>. In 2007, the prevalence of cigarette smoking among U.S. adults 18 and older was estimated as 19.8 percent, which is a decrease from 2006 <sup>(2,4)</sup>.

**Figure 1.1. Cigarette Smoking Status Among Adults**

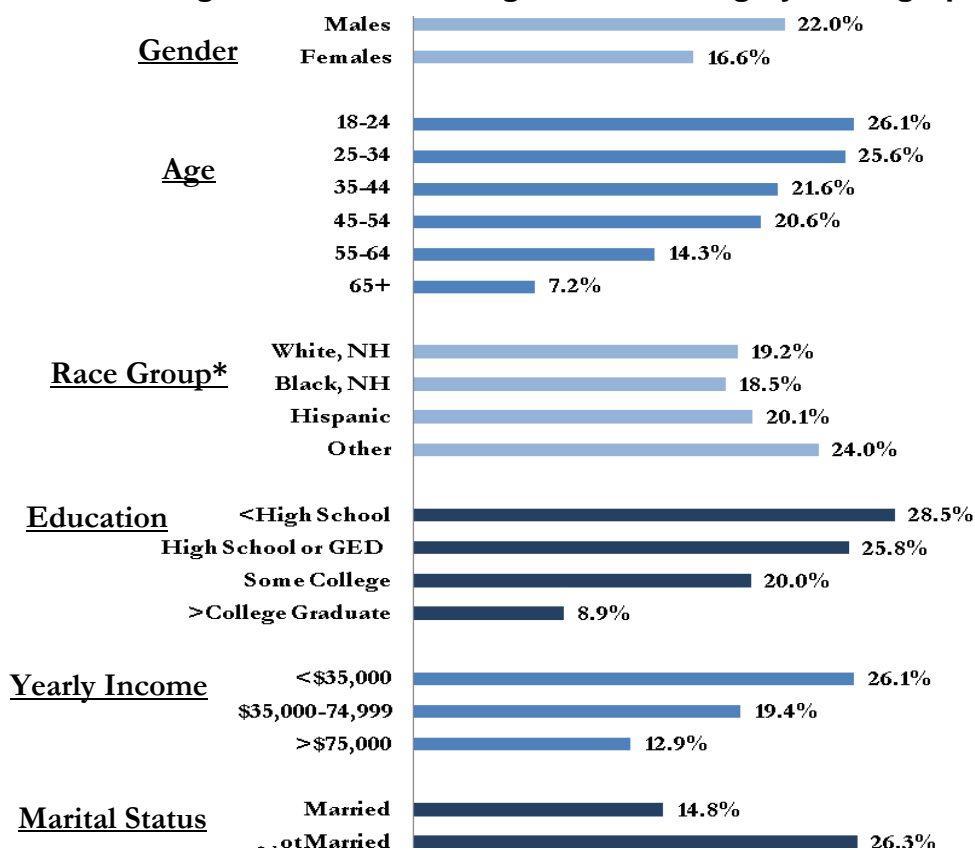


# Demographic Factors and Cigarette Smoking Prevalence

The prevalence of current cigarette smoking among S.C adults varies with several demographic factors.

- Males (22 percent) are more likely to be current smokers than females (16.6 percent).
- The prevalence of cigarette smoking decreases as the respondents' age increases. However, there are no statistically significant differences among the following age groups: 18-24 years (26.1 percent), 25-34 years (25.6 percent), 35-44 years (21.6 percent), and 45-54 years (20.6 percent).
- By contrast, the respondents aged 55-64 years and those 65 and over report statistically lower smoking rates compared to those in younger age groups (14.3 percent and 7.2 percent, respectively).
- No statistically significant differences are observed among racial and ethnic groups.
- As educational attainment increases, smoking prevalence declines. Cigarette smoking is highest among adults who have not completed high school (28.5 percent) and lowest among those who have obtained a college degree or had further education (8.9 percent). The difference in smoking prevalence between these two groups is statistically significant.
- Cigarette smoking prevalence also decreases with increasing household income. For instance, adults earning \$35,000 or less per year have a higher smoking prevalence (26.1 percent) compared to those earning \$35,000-74,999 (19.4 percent) or \$75,000 or more per year (12.9 percent).

**Figure 1.2. Current Cigarette Smoking by Demographic Characteristics**



\* NH: Non-Hispanic

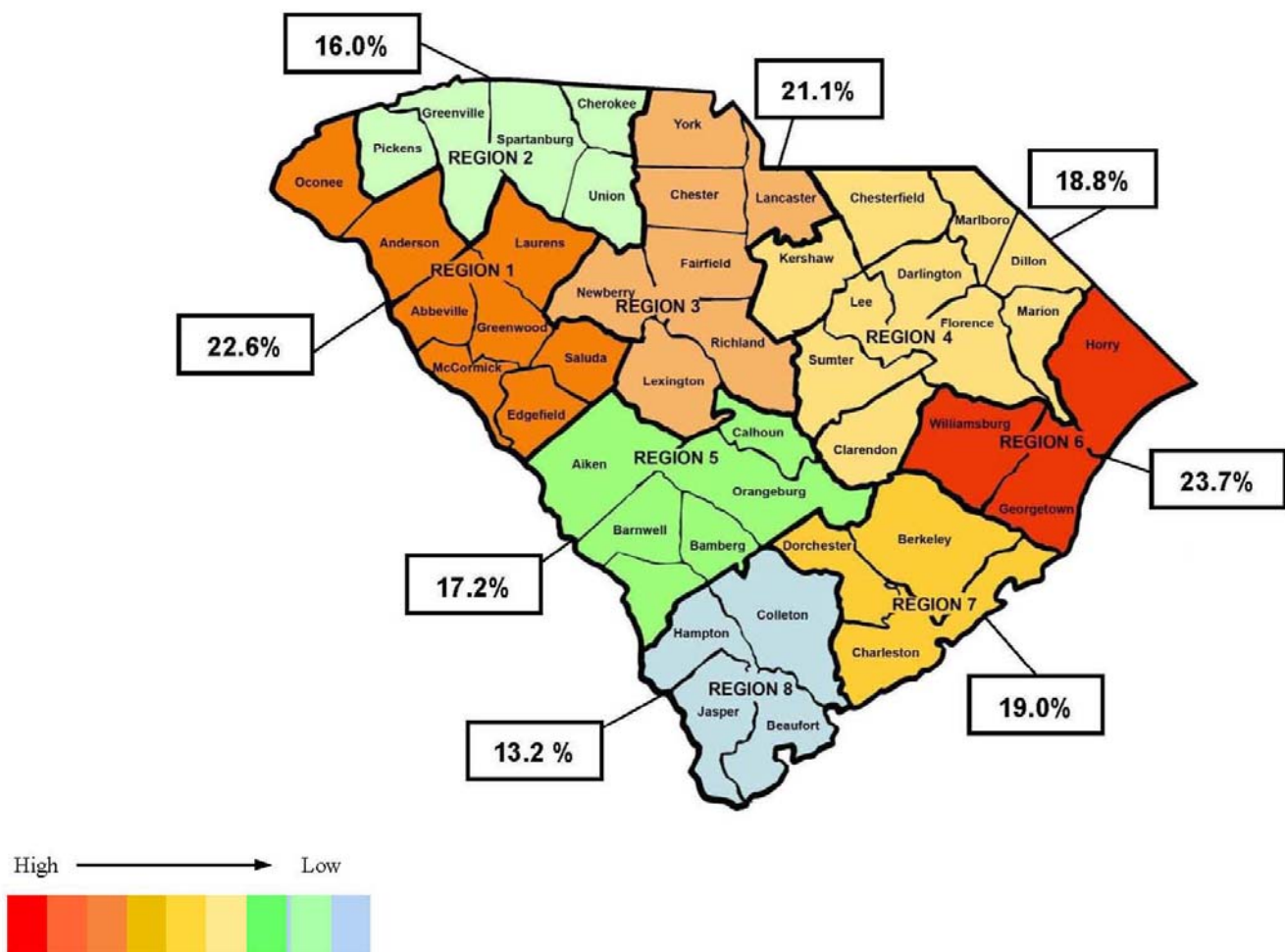


## Cigarette Smoking Prevalence by DHEC Public Health Region

For DHEC planning purposes, the prevalence of adult current cigarette smoking by the eight public health regions in South Carolina was investigated.

- Region 6 had the highest rate of adult smoking (23.7 percent) followed by Region 1 (22.6 percent).
- The lowest rate was noted in Region 8 (13.2 percent).

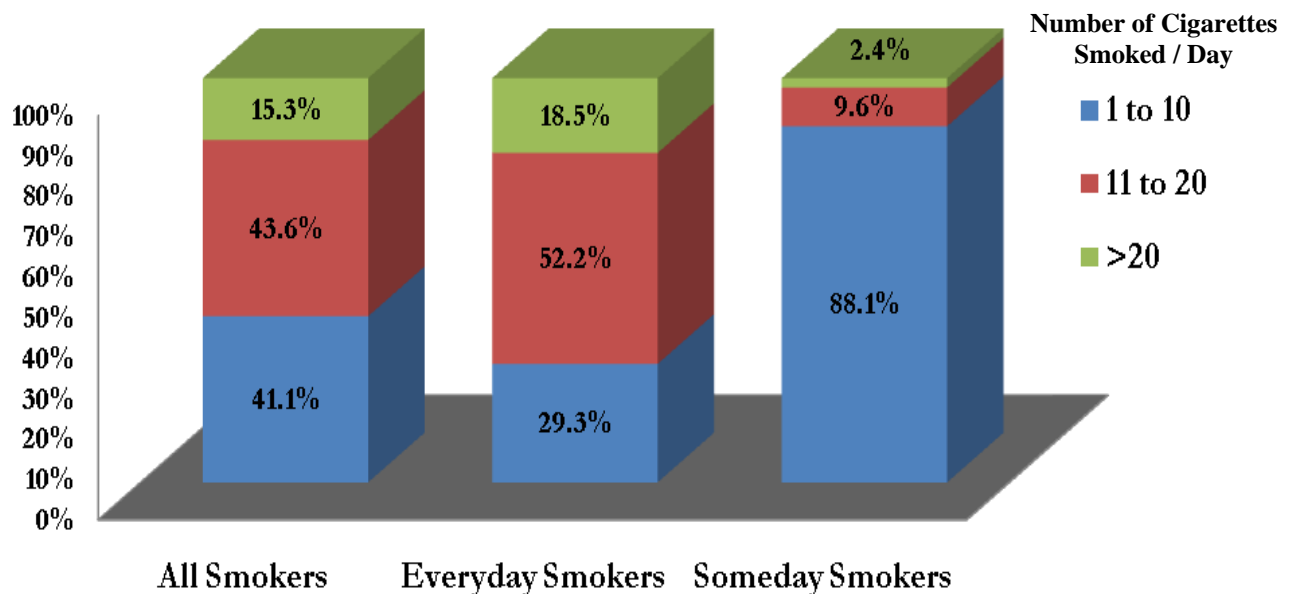
**Figure 1.3. Prevalence of Current Cigarette Smoking by Public Health Regions**



## Cigarette Consumption among Current Smokers

- About 41.1 percent of all current S.C. smokers consume on average one to 10 cigarettes per day, 43.6 percent smoke 11-20 cigarettes per day, and 15.3 percent smoke more than a pack a day.
- The majority of everyday smokers, 70.7 percent, report smoking more than 10 cigarettes a day (52.2 percent smoked 11-20 cigarettes a day, and 18.5 percent smoked more than 20 cigarettes a day).
- By contrast, people who smoke occasionally are, in general, light smokers, 88.1 percent of them smoke on average fewer than 10 cigarettes per day on the days they smoke.

**Figure 1.4. Average Number of Cigarettes Smoked Per Day, on Days Smoked, by Smoking Status**



## Types of Cigarettes Smoked among Current Smokers

It often is thought that smoking light or ultra light cigarettes is safer than smoking regular cigarettes, but this is not true.

- In South Carolina, 45.4 percent of smokers usually smoke regular cigarettes, 39.5 percent smoke light, and 15.1 smoke ultra light cigarettes.

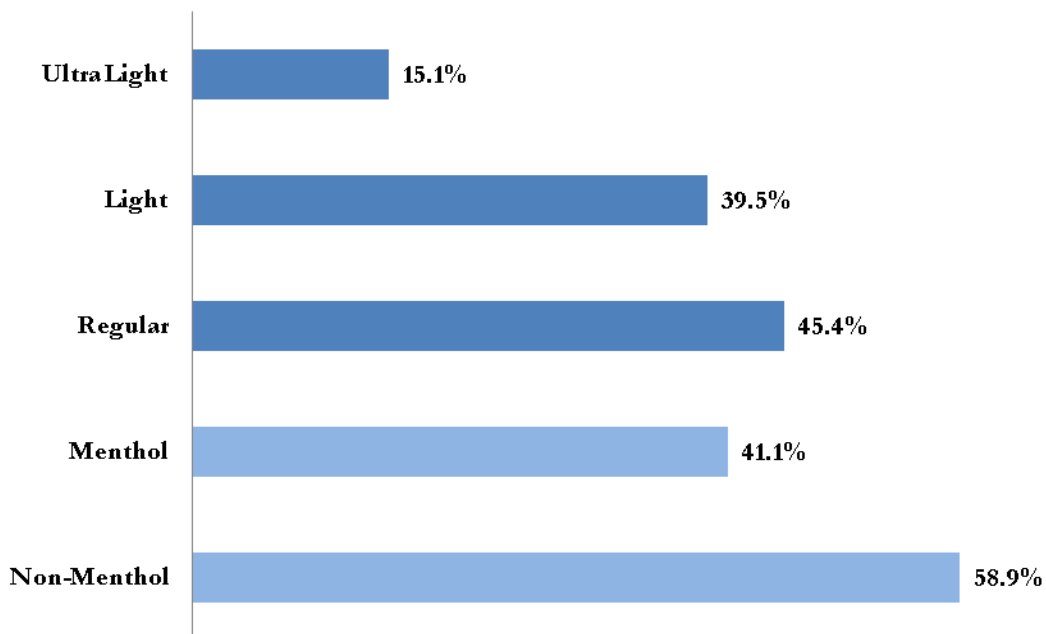
Menthol cigarettes have also been suggested to be responsible, in part, for the higher rates of lung and esophagus cancer in African Americans although findings from research have been mixed<sup>(5,6)</sup>.

- Among South Carolinians, 41.1 percent usually smoke menthol cigarettes.

Significant differences were noted among different age and racial/ethnic groups.

- The rate of menthol cigarette smoking is significantly higher among young adults 18-24 years (75.4 percent), compared to all other age groups where it ranges between 27.9 percent and 38.9 percent.
- Blacks (86 percent) are also significantly more likely than Whites (28.5 percent) to smoke menthol cigarettes.

**Figure 1.5. Type of Cigarettes Smoked by S.C. Adult Smokers**

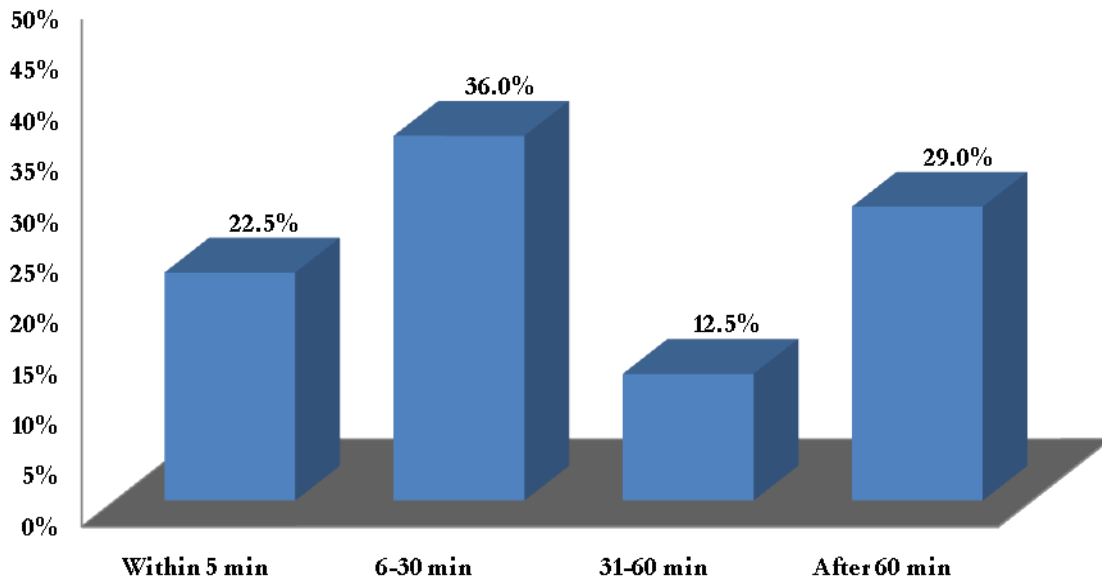


## Cigarette Addiction among Current Smokers

A widely used measure of addiction is the amount of time after waking up that a person waits to smoke his or her first cigarette of the day.

- More than half of S.C. adult smokers (58.5 percent) report that they usually smoke their first cigarette within 30 minutes of waking, which indicates a great level of addiction.
- About one in five smokers (22.5 percent) routinely has his or her first cigarette within five minutes of waking, indicating an even greater level of addiction.

**Figure 1.6. Cigarette Addiction Indicated by Timing of First Cigarette**

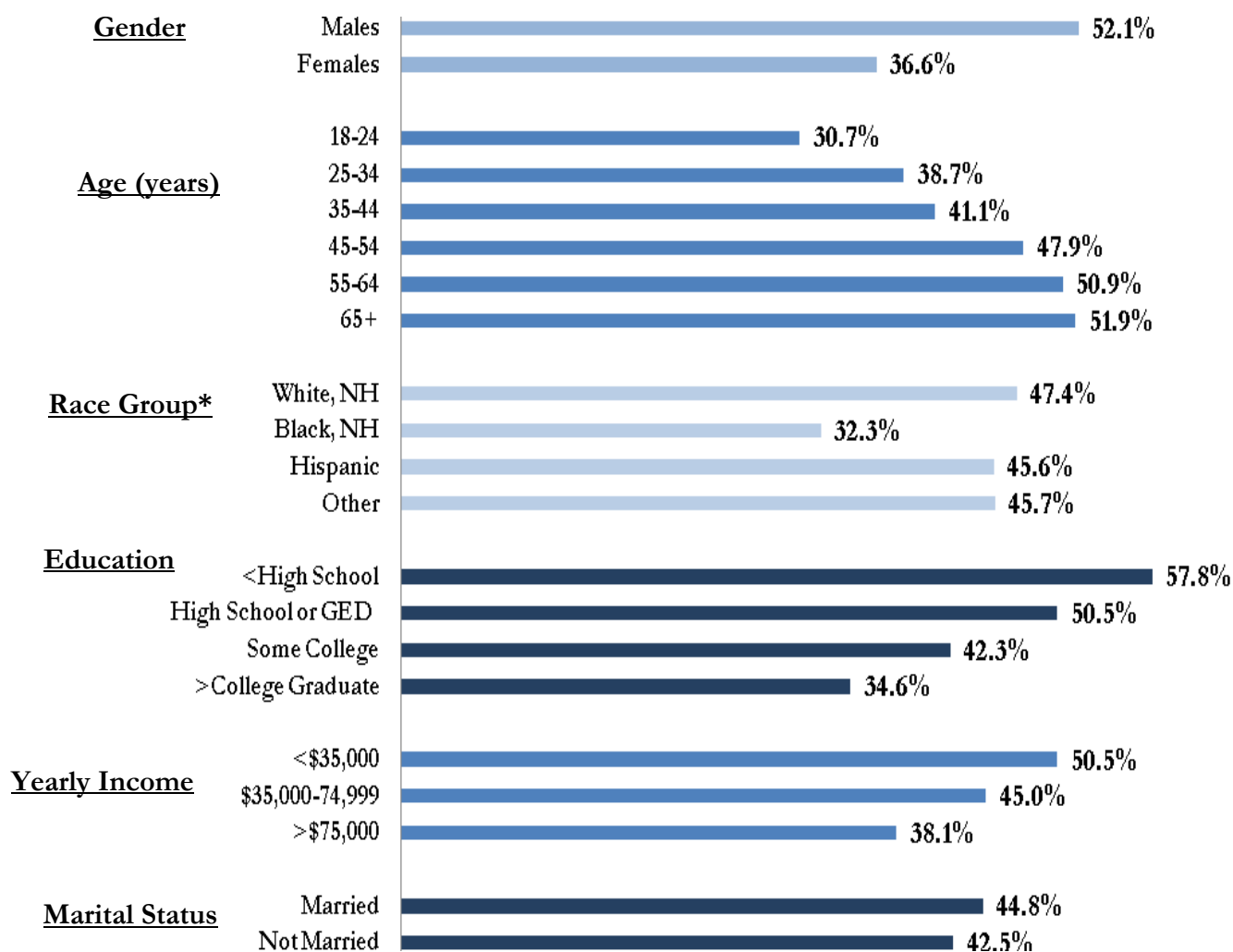


## Lifetime Cigarette Smoking

An estimated 43.9 percent of S.C. adults have smoked at least 100 cigarettes in their lifetime.

- Significantly more men (52.1 percent) than women (36.6 percent) have ever smoked at least 100 cigarettes.
- The prevalence of lifetime cigarette smoking increases with age.
- By race, Whites (47.4 percent) are significantly more likely to have smoked during their lifetime compared with Blacks (32.3 percent).
- Lifetime smoking decreases with increasing education; it is significantly higher among adults with high school diplomas or less education compared to those with some college or more education.
- The prevalence of lifetime cigarette smoking is also significantly higher among those with an income of \$35,000 or less compared to those with an income of \$75,000 or more.

**Figure 1.7. Prevalence of Lifetime Cigarette Smoking by Demographic Characteristics**



\*NH: Non-Hispanic

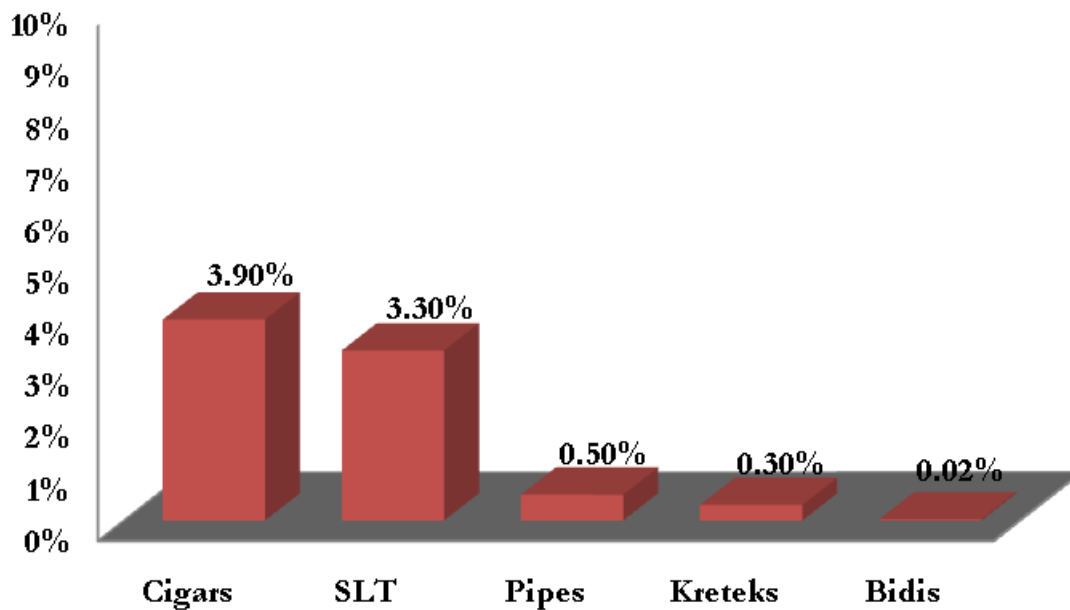
Lifetime Cigarette Smoking Prevalence (%)

## Current Use of Other Tobacco Products

Cigars, pipes, smokeless tobacco (SLT), bidis, and kreteks are not safer alternative forms of tobacco compared to cigarettes. These tobacco products, like cigarettes, contain numerous carcinogens and toxins and contribute to an array of negative health consequences <sup>(3)</sup>.

- Overall 7 percent of S.C. adults are current users of some form of tobacco other than cigarettes.
- After cigarettes, cigars (3.9 percent) were the second most common form of tobacco currently used among S.C. adults.
- Also, 3.3 percent of adults currently use SLT, 0.5 percent smoke pipes, 0.3 percent smoke kreteks, and 0.02 percent smoke bidis.

**Figure 1.8. Current Use of Tobacco Products Other Than Cigarettes**



## Ever Use of Other Tobacco Products

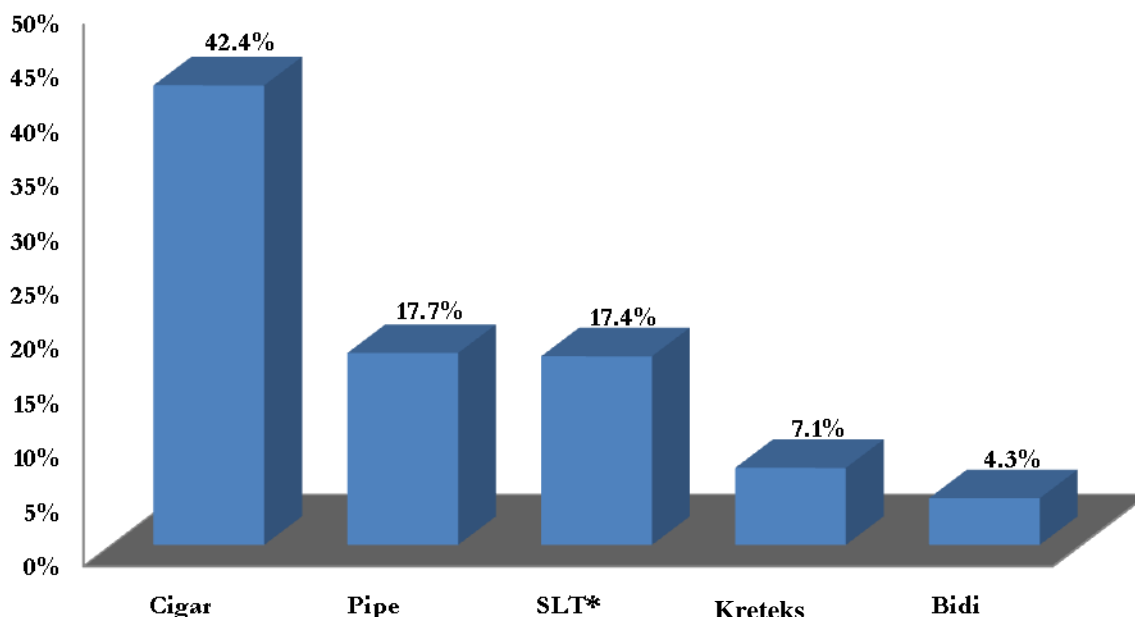
Despite the low prevalence of current use of other tobacco products, approximately half of S.C. adults (48.9 percent) report having tried other tobacco products in their lifetime.

- Of all adults, 42.4 percent have ever smoked a cigar, 17.7 percent have ever used SLT and 17.4 percent have ever smoked a pipe. The percentages of those who have tried kretek or bidi smoking are lower (7.1 percent and 4.3 percent).
- Significantly more men than women report ever using a tobacco product other than cigarettes (74.5 percent versus 25.2 percent).
- By race/ethnicity, Blacks (36.6 percent) have a significantly lower rate of ever using other tobacco products compared to Whites (52.3 percent) and Hispanics (57.4 percent).

Some gender, age, and race/ethnicity differences exist for various types of tobacco products.

- By gender, men are 3.5 times as likely as women to have ever smoked cigars and about eight times as likely as women to have used SLT and pipes.
- Men are also more likely to have tried bidis and kreteks. By age, ever pipe smoking increases with increasing age.
- By race, Blacks are less likely than Whites and Hispanics to have ever smoked cigars and pipes and are less likely than Whites to have used SLT.

**Figure 1.9. Ever Use of Tobacco Products Other than Cigarettes**



\*SLT=Smokeless Tobacco

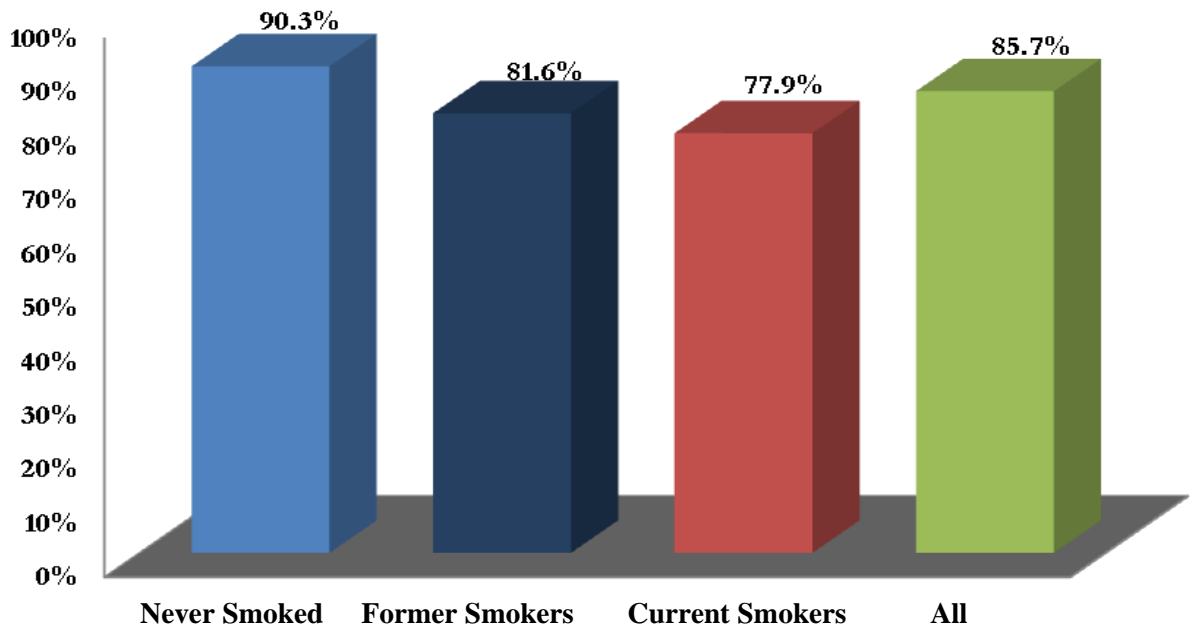
## 2. Smoking Cessation

Quitting tobacco is often a challenging process, which involves several stages of change. Tobacco dependence is due to nicotine addiction, and this addiction often requires many repeated interventions <sup>(3,7)</sup>. Quitting smoking is one of the most important actions a current smoker can do to improve long-term health, regardless of the number of years smoked or the smoker's age <sup>(3,7)</sup>.

### Health perception

- Most S.C. adults (85.7 percent) consider their health to be excellent, very good or good; 10 percent consider their health fair; and 4 percent consider their health poor.
- By smoking status, 77.9 percent of current smokers and 81.6 percent of former smokers consider their health to be good, very good or excellent while a statistically significant higher percentage of adults that have never smoked (90.3 percent) report their health to be good, very good or excellent.

**Figure 2.1. Percentage of S.C. Adults Who Perceive Their Health to be Good, Very Good or Excellent by Smoking Status**

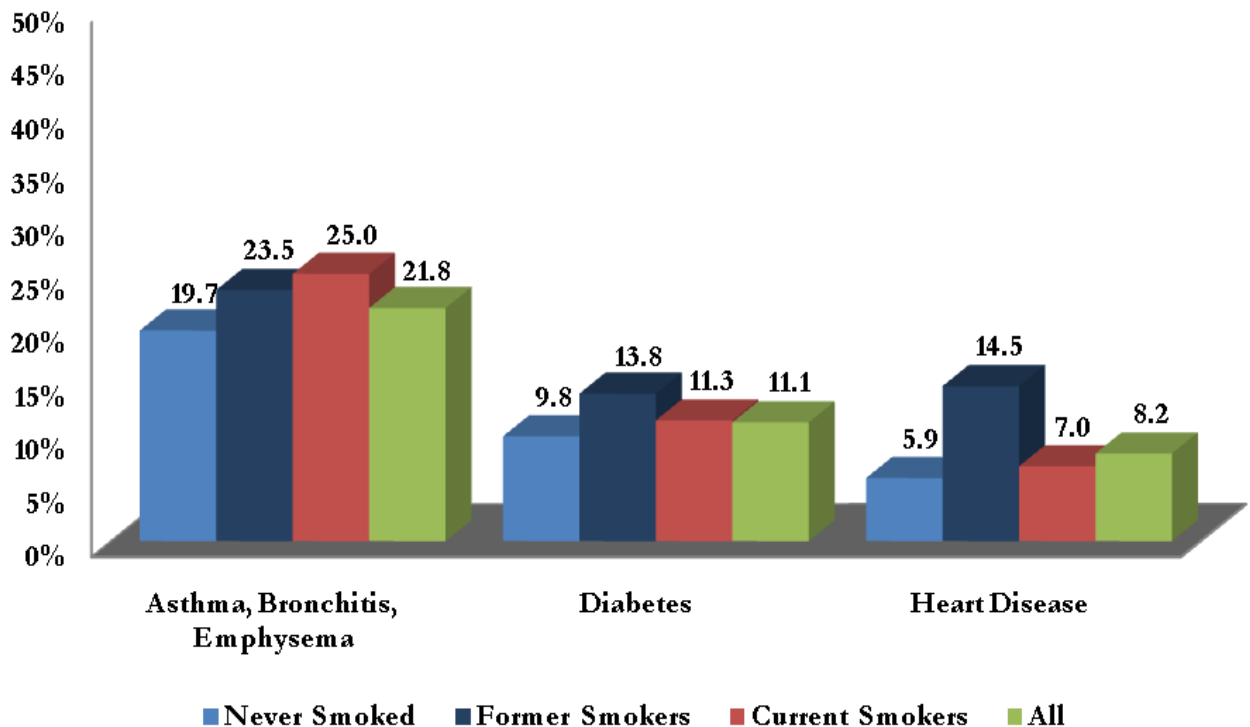




## Prevalence of Adverse Health Conditions

- In South Carolina, 21.8 percent of all adults have ever been diagnosed with a lung disease (asthma, bronchitis or emphysema), 11.1 percent with diabetes, and 8.2 percent with heart disease.
- Slightly more current smokers than never smokers have had a diagnosis of lung disease, but the difference is not statistically significant.
- The lifetime prevalence of diabetes and heart disease among smokers are similar to those who have never smoked.
- However, former smokers have a significantly higher prevalence of diabetes (13.8 percent) and heart disease (14.5 percent) compared to those who never smoked (9.8 percent and 5.9 percent, respectively).

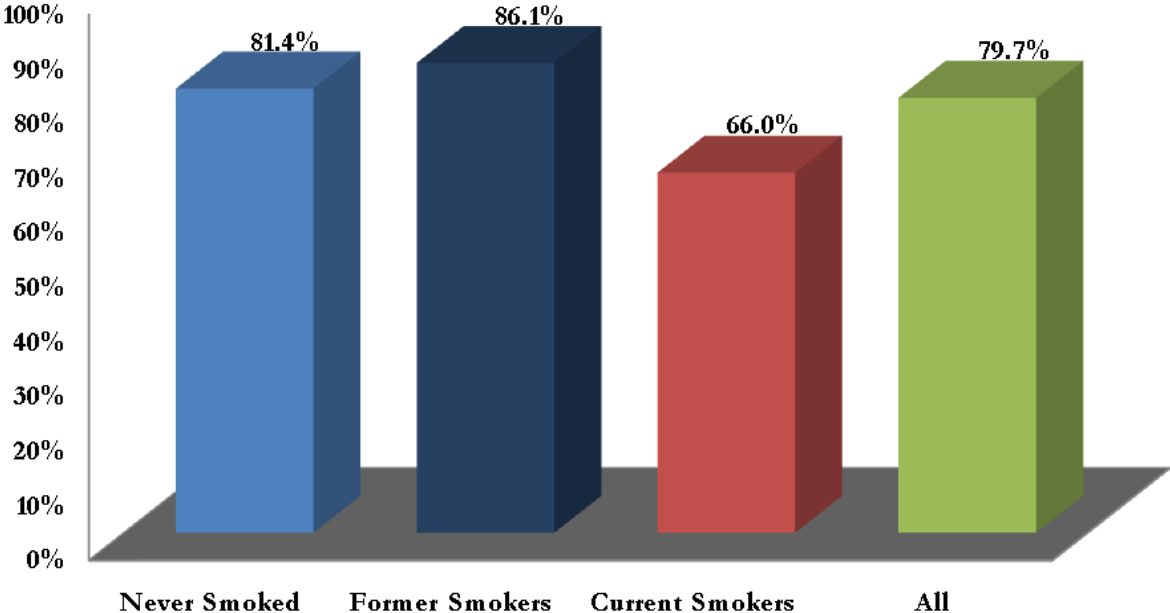
**Figure 2.2. Percentage of Adults Who Have Ever Been Diagnosed With an Adverse Health Condition by Smoking Status**



# Health Care Visits

- Most South Carolinians (79.7 percent) have seen a health care provider in the past 12 months.
- Of current smokers, 66 percent reported seeking medical care in the previous 12-month period compared to 86.1 percent of former smokers and 81.4 percent of adults who have never smoked.

**Figure 2.3. Percentage of S.C. Adults Who Visited a Health Care Professional in The Past 12 Months by Smoking Status**

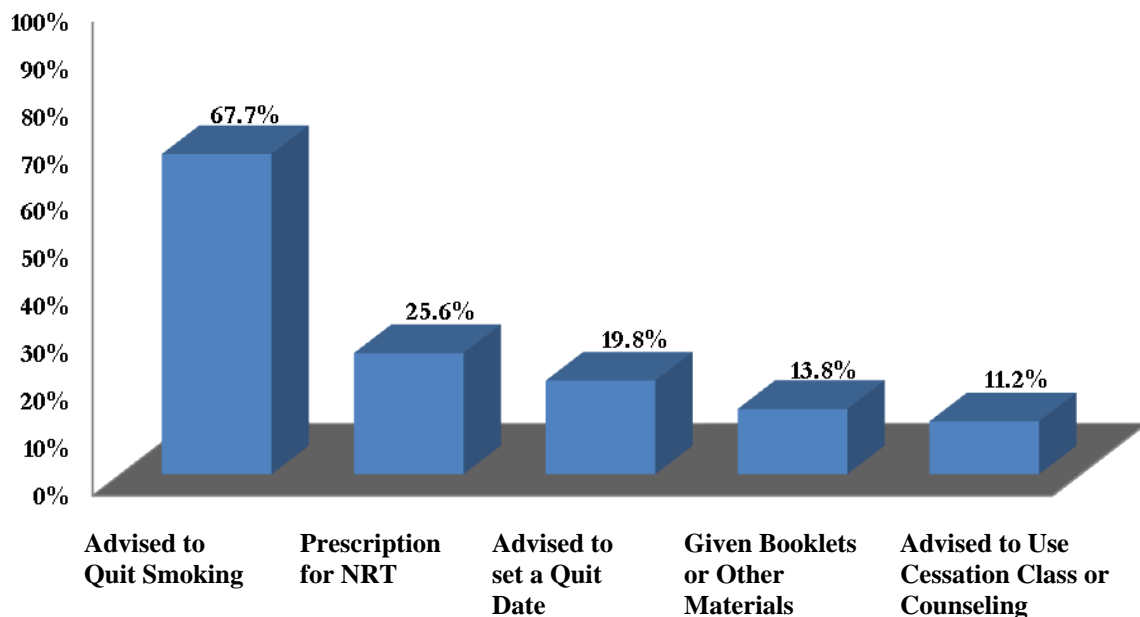


## Health Care Professional Advice on Smoking

Quitting smoking is challenging, and health care professionals can play an important role in assisting smokers <sup>(7)</sup>.

- Of the South Carolinians who visited a health care professional in the past 12 months, 67.8 percent report being asked if they were a smoker.
- Also, 67.7 percent of the current smokers that visited a health care professional during the past 12 months reported being advised not to smoke.
- Additionally, 25.6 percent of the smokers who sought medical care were also given a prescription for nicotine replacement therapy (NRT); 19.8 percent were advised to set a specific date to stop smoking; 13.8 percent were provided with booklets, videos, or other materials; and 11.2 percent were advised to use a smoking cessation class, program, or counseling.

**Figure 2.4. Type of Medical Advice Received by Smokers from Health Care Professionals**

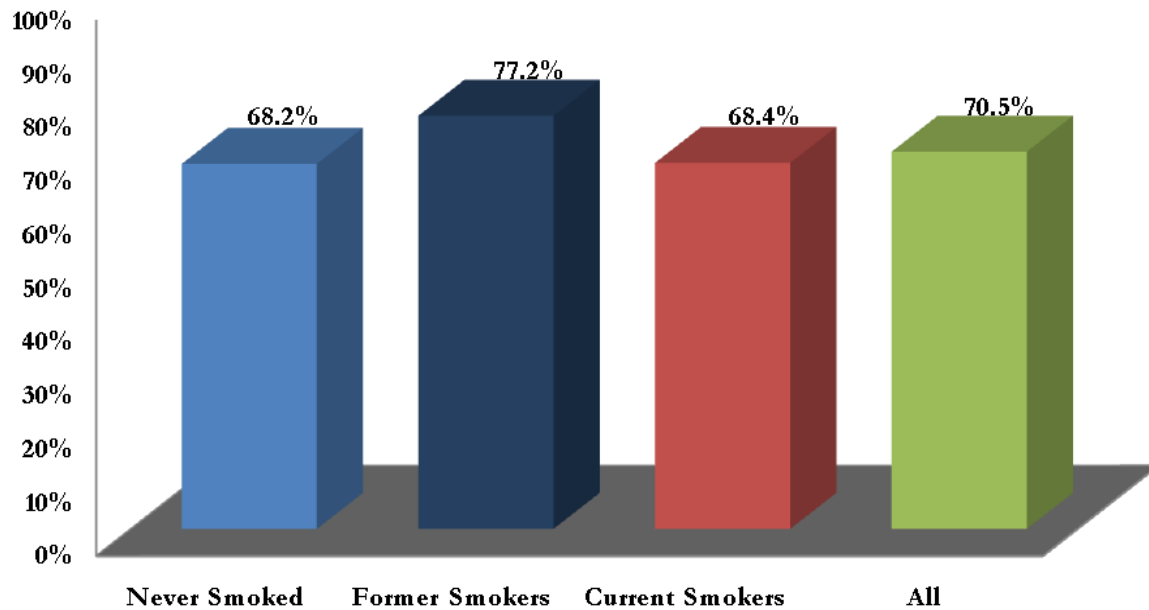


## Perceived Benefits of Quitting Smoking

To determine the knowledge about the benefits of stopping smoking, participants were asked if they believed there is a health benefit by quitting smoking after smoking heavily for 20 years or more.

- The majority of S.C adults (70.5 percent) are aware of the health benefits of quitting smoking even for those who smoked heavily for many years.
- More former smokers (77.2 percent) are aware of the health benefits of quitting compared to current smokers (68.4 percent) and to those who have never smoked (68.2 percent).

**Figure 2.5. Percentage of S.C. Adults Who Believe in the Health Benefits of Quitting Even After Smoking Heavily for 20 Years by Smoking Status**

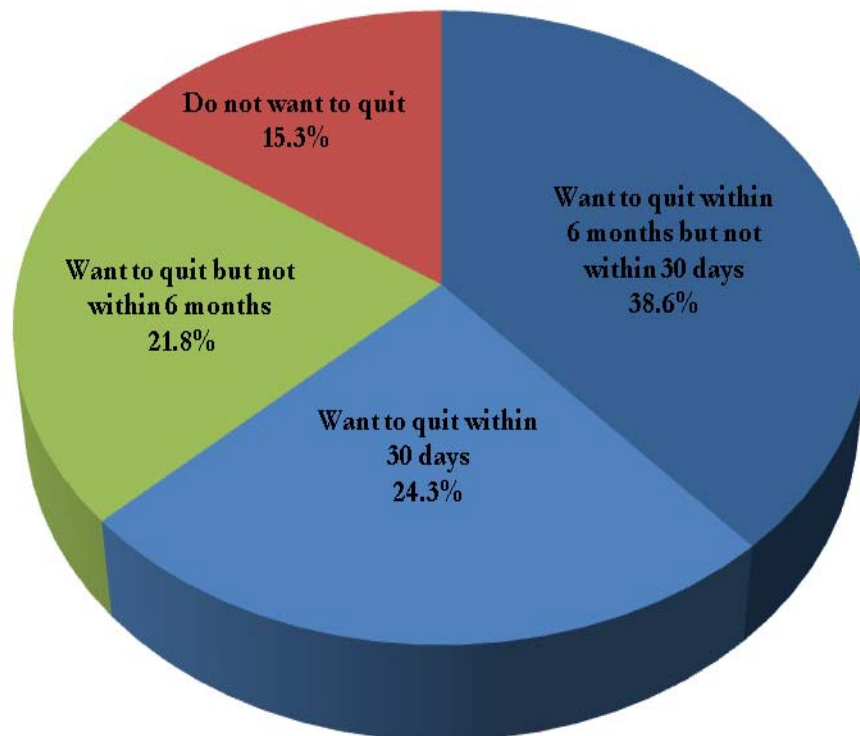


## Intention to Quit Smoking

To assess the readiness to quit smoking among S.C. adult smokers, participants were asked if they were seriously considering stopping smoking either within the next six months or within the next 30 days.

- Approximately eight out of 10 current smokers (84.7 percent) expect to stop smoking at some point.
- A statistically significant higher percentage of occasional smokers than of everyday smokers reported they wanted to quit smoking (94 percent versus 82.2 percent respectively). No statistically significant differences were found by gender, race, education or income level.
- Nearly 63 percent of S.C. smokers are seriously considering quitting in the next six months.
- As expected, more occasional smokers (75 percent) than everyday smokers (60 percent) are thinking about quitting in the next six months. However, only 24.3 percent of the current smokers are planning to quit within the next 30 days. No statistical differences were observed by gender, race, education or income level.

**Figure 2.6. Current Smokers' Intention to Quit by Smoking Status**

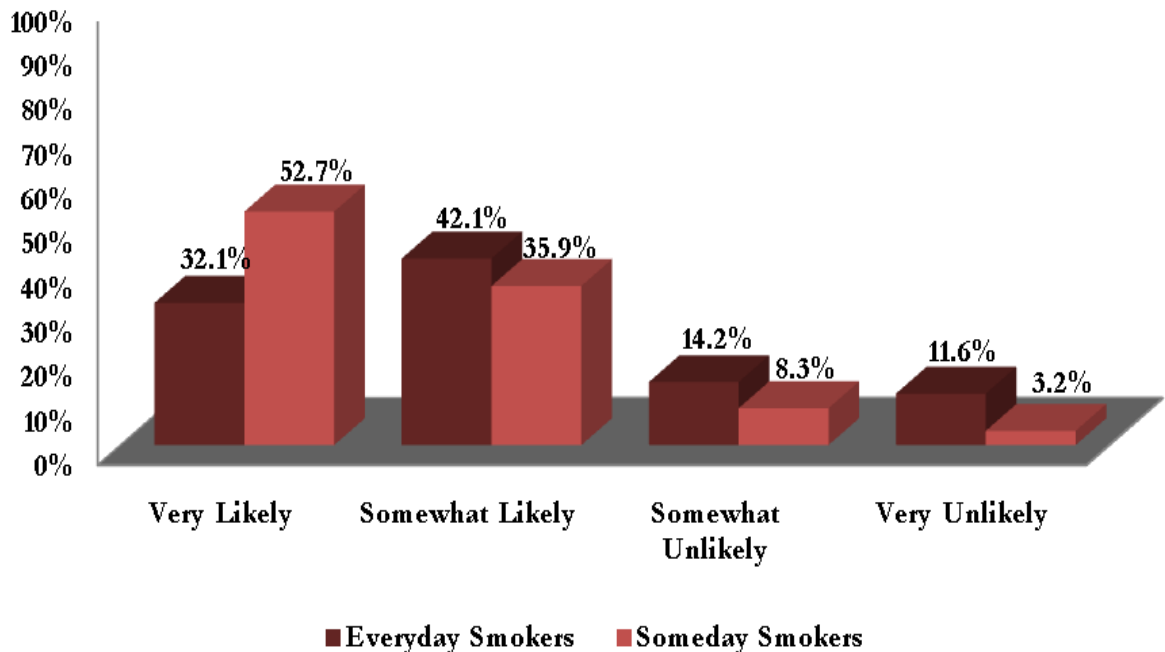


## Perceived Ability to Quit Smoking

Current smokers were asked about their perceived ability to successfully quit smoking.

- Overall, 77 percent of all smokers believe that they would be very or somewhat likely to successfully stop smoking if they decided to.
- Those who smoke less than daily are more likely than everyday smokers to believe that they would be able to stop smoking (88.6 percent versus 74.2 percent).
- While more than half occasional smokers (52.7 percent) believe that they would be very likely to quit, only one third of everyday smokers (32.1 percent) demonstrate this high level of confidence.
- There are no statistically significant differences by gender, education or income.
- By race/ethnicity, Black smokers (89.4 percent) are more likely than White smokers (74.3 percent) to believe that they can successfully stop smoking.

**Figure 2.7. Perceived Ability to Quit Smoking by Current Smoking Status**

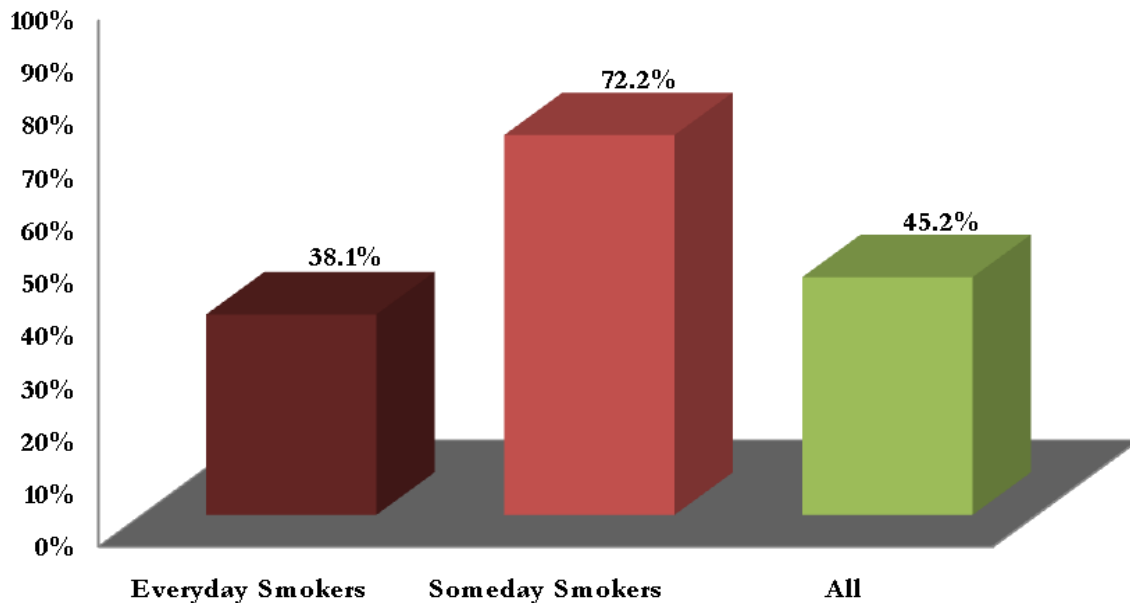


## Quit Attempts

It usually takes several attempts at quitting before a person can stop smoking cigarettes.

- Approximately 45.2 percent of current smokers had stopped smoking for one day or more during the past 12 months in an attempt to quit smoking.
- Significantly more someday smokers (72.2 percent or more than seven out of 10) attempted to quit smoking in the past 12 months compared with everyday smokers (38.1 percent or four out of 10).
- No statistically significant differences in the prevalence of quit attempts are observed among different gender, race/ethnicity, education, or income groups.

**Figure 2.8. Percentage of Current Smokers Who Attempted to Quit in Past 12 Months by Current Smoking Status**



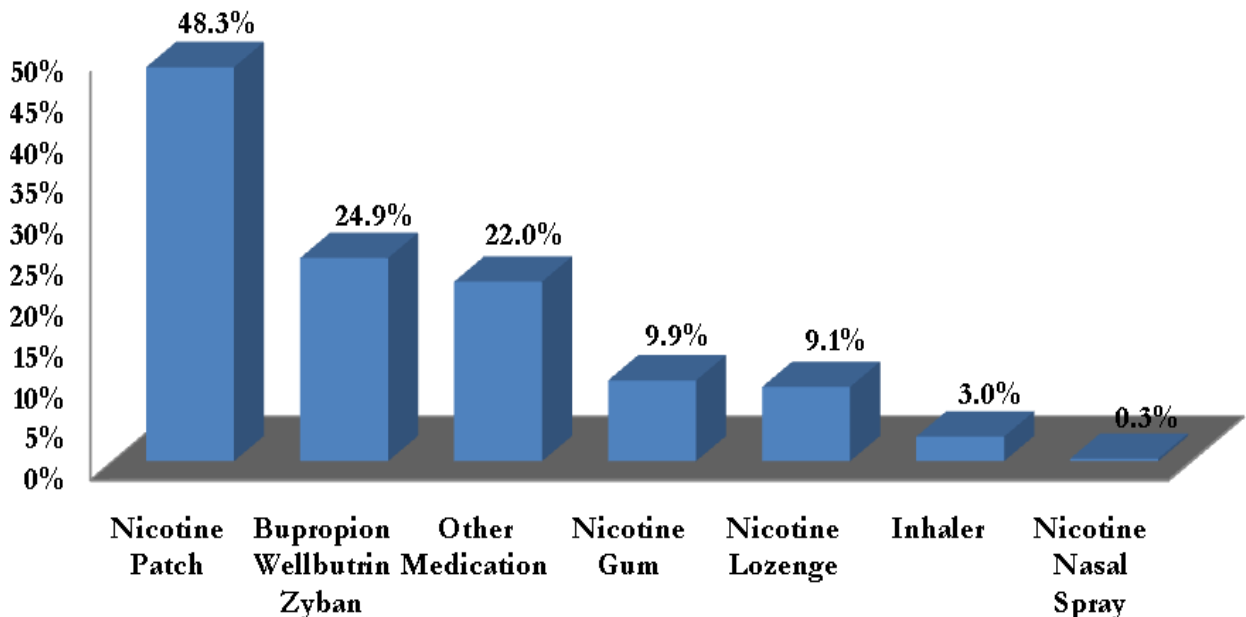
## Quitting Support

There are several methods available to help smokers quit <sup>(7)</sup>. Often, tobacco users are not aware of all of the assistance methods and support services available to them <sup>(3,7)</sup>. A total of 65 percent of current smokers are aware of the assistance available in South Carolina to help them stop smoking.

### Pharmaceutical Methods Used for Quitting

- When asked about the methods used when they quit smoking (former smokers), or the last time they attempted to quit (current smokers), 29.5 percent of those who attempted or succeeded quitting reported use of NRT or some other kind of medication while 3.1 percent used a cessation class or counseling.
- Among pharmaceutical methods used by current smokers the last time they tried to quit, the most widely used method was the nicotine patch (48.3 percent) followed by Bupropion, Wellbutrin or Zyban (24.9 percent); nicotine gum (9.9 percent); nicotine lozenges (9.1 percent); nicotine oral inhalers (3 percent); and nicotine nasal spray (0.3 percent).
- About 22 percent of current smokers answered they used some other medication.

**Figure 2.9. Pharmaceutical Methods Used by Current Smokers at Last Quit Attempt**

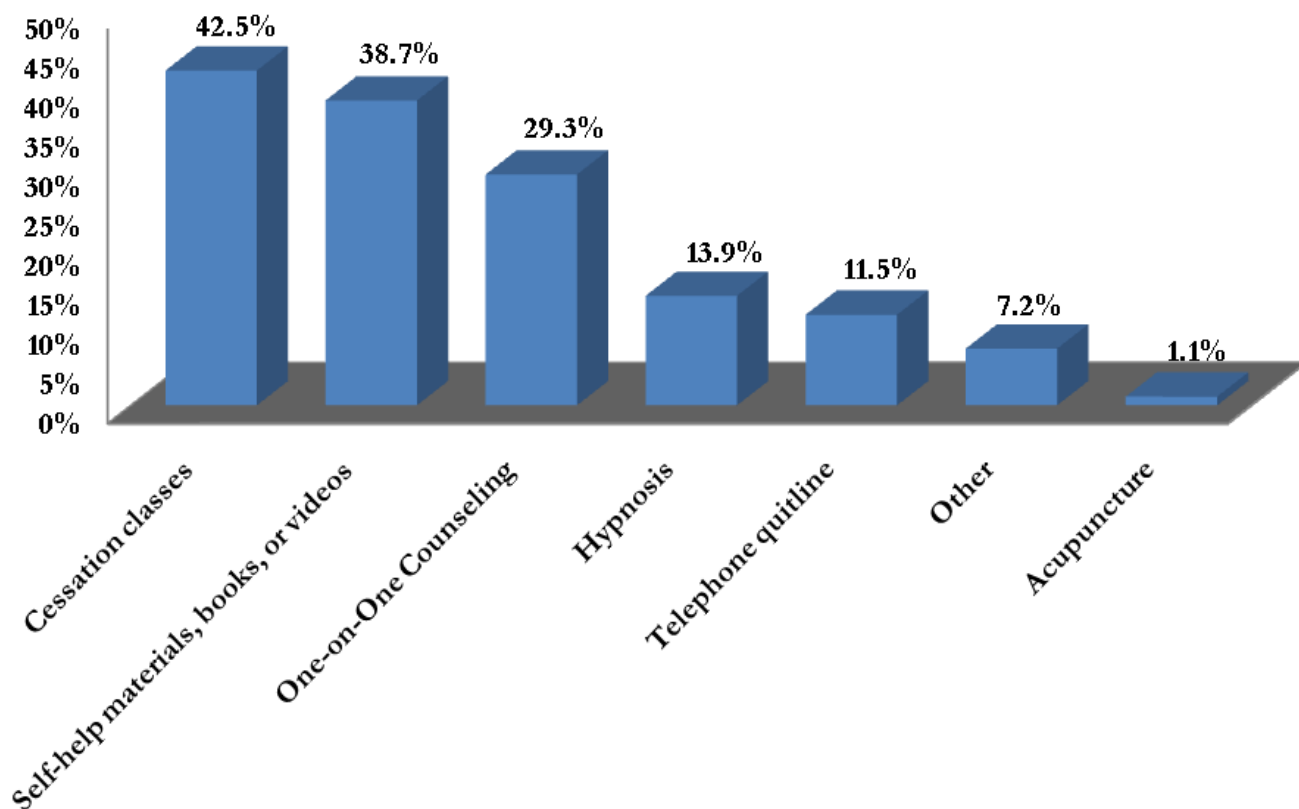




## Non-pharmaceutical Methods Used for Quitting

- Among non-pharmaceutical methods used the last time smokers tried to quit, cessation classes were the most common (42.5 percent), followed by self-help materials, books or videos (38.7 percent), one-on-one counseling from a doctor or nurse (29.3 percent), hypnosis (13.9 percent), a telephone quitline (11.5 percent), and acupuncture (1.1 percent).
- Also, 7.2 percent have used other non-pharmaceutical methods.

**Figure 2.10. Non- Pharmaceutical Methods Used by Current Smokers at Last Quit Attempt**

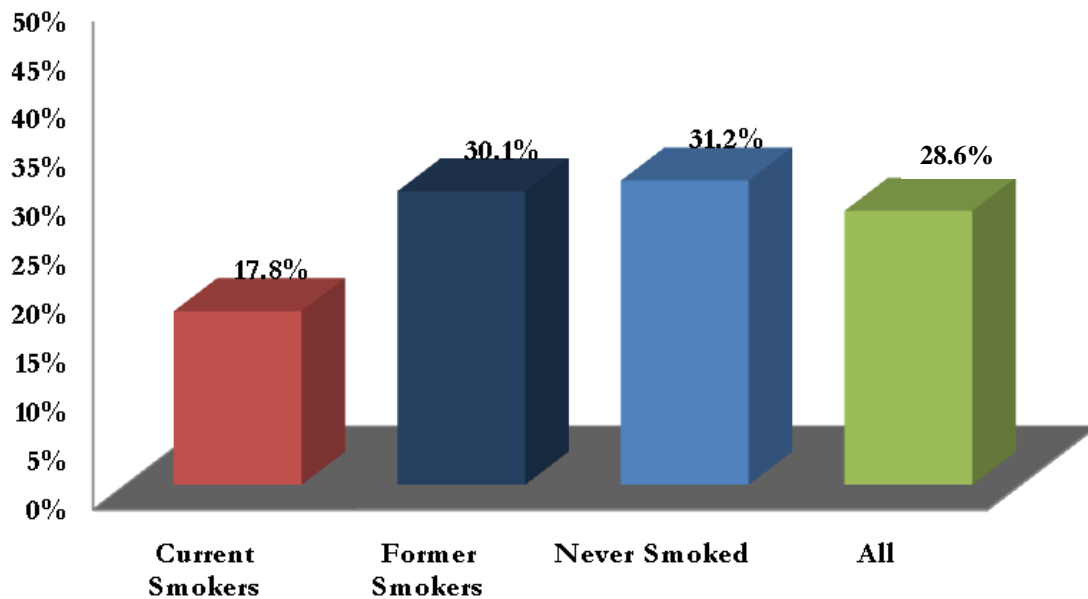


## Employer Assistance in Smoking Cessation

Employer assistance can also be a strong resource to help smokers to quit.

- Overall, 28.6 percent of adults who are employed out of the house report that within the past 12 months, their employer had offered a stop smoking program or some other kind of assistance to employees who wanted to quit smoking.
- Current smokers (17.8 percent) are significantly less likely to report any kind of smoking cessation assistance through work compared with former smokers and with adults who have never smoked (30.1 percent and 31.2 percent respectively).

**Figure 2.11. Percentage of SC Adults who Report Their Employer Offered Assistance for Smoking Cessation by Smoking Status**



### 3. Secondhand Smoke (SHS)

Since investigations in the 1970's, secondhand smoke (SHS) exposure has become an increasing public health concern <sup>(8)</sup>. SHS can lead to many negative health outcomes and is classified as a known human carcinogen by the Environmental Protection Agency (EPA) <sup>(9)</sup>. Nationally, an estimated 3,000 lung cancer deaths per year among non-smokers are attributed to SHS <sup>(9,10)</sup>. According to the Surgeon General's 2006 report, there is no safe level of SHS exposure. Despite these facts smoking is still allowed in many private homes and workplaces <sup>(9)</sup>.

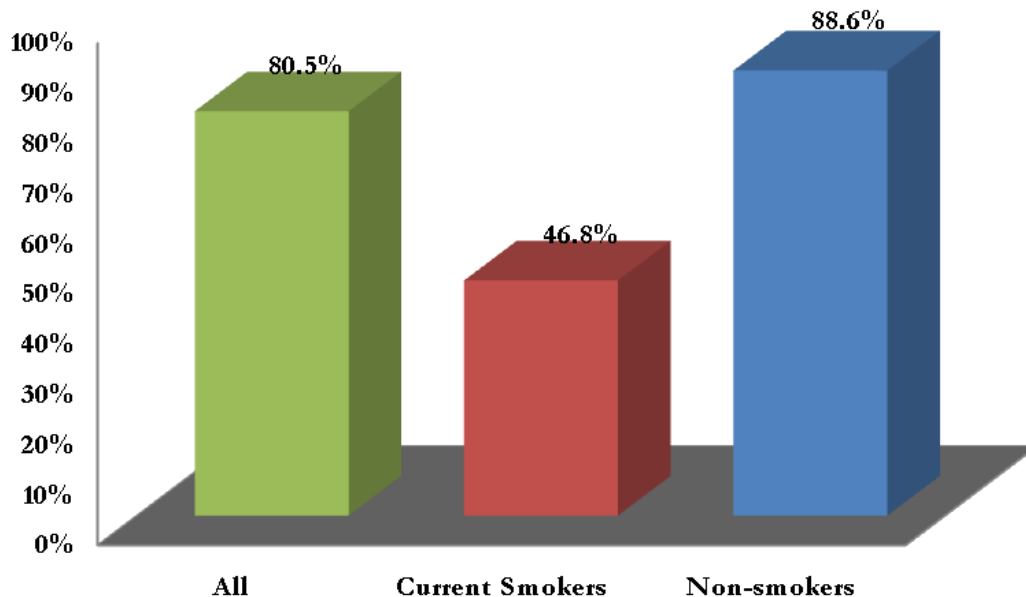
#### Smoking in the Home

Approximately 27 percent of S.C. adults have been exposed to tobacco smoke in either their home or car in the past seven days. Of those who work indoors most of the time, 32 percent have been exposed to SHS at home, in a car or at the workplace in the past seven days.

Smoking restriction in the household is an important step in decreasing SHS exposure.

- Overall, 80.5 percent of S.C. adults reported living in completely smoke-free homes (smoking is not allowed anywhere inside their homes).
- Current smokers (46.8 percent) are significantly less likely than nonsmokers (88.6 percent) to live in smoke-free homes.

**Figure 3.1. S.C. Adults Living in Completely Smoke-Free Homes by Smoking Status**

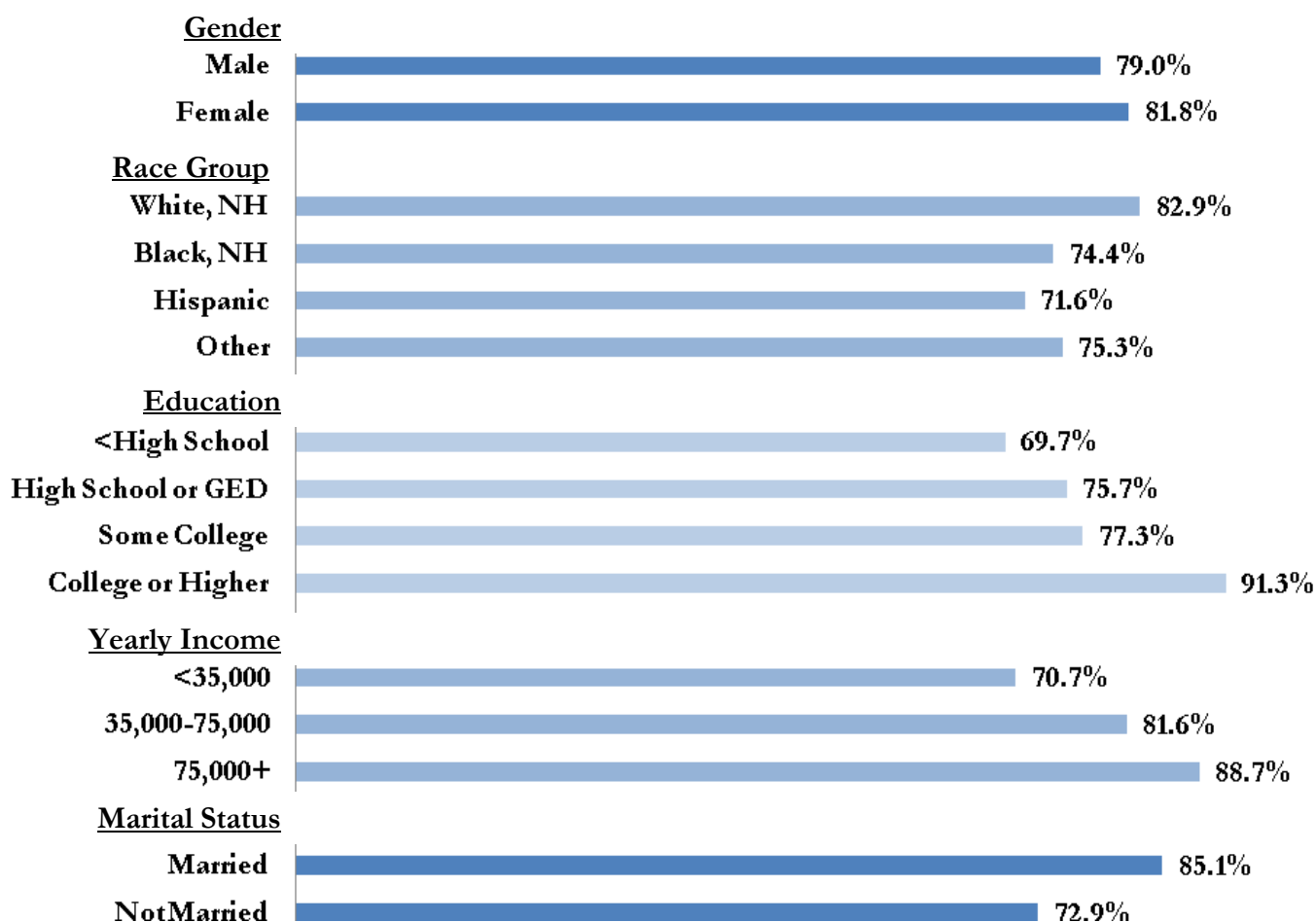


## Demographic Factors and Smoking in the Home

There are some statistically significant demographic differences for smoking in the home.

- Whites (82.9 percent) are more likely than Blacks (74.4 percent) to report living in smoke-free homes.
- South Carolinians with the highest educational level attainment—college graduates or higher—(91.3 percent) are more likely than all other groups to live in smoke-free homes.
- The percentage of adults reporting smoke-free policies at home also increases with increased household income (70.7 percent for those with household income under \$35,000, 81.6 percent for income between \$35,000-75,000, and 88.7 percent for those with \$75,000 or more).
- Finally, more married (85.1 percent) than unmarried adults (72.9 percent) reported having smoke-free homes.

**Figure 3.2. Percentage of S.C. Adults Living in Completely Smoke-Free Homes by Demographics**

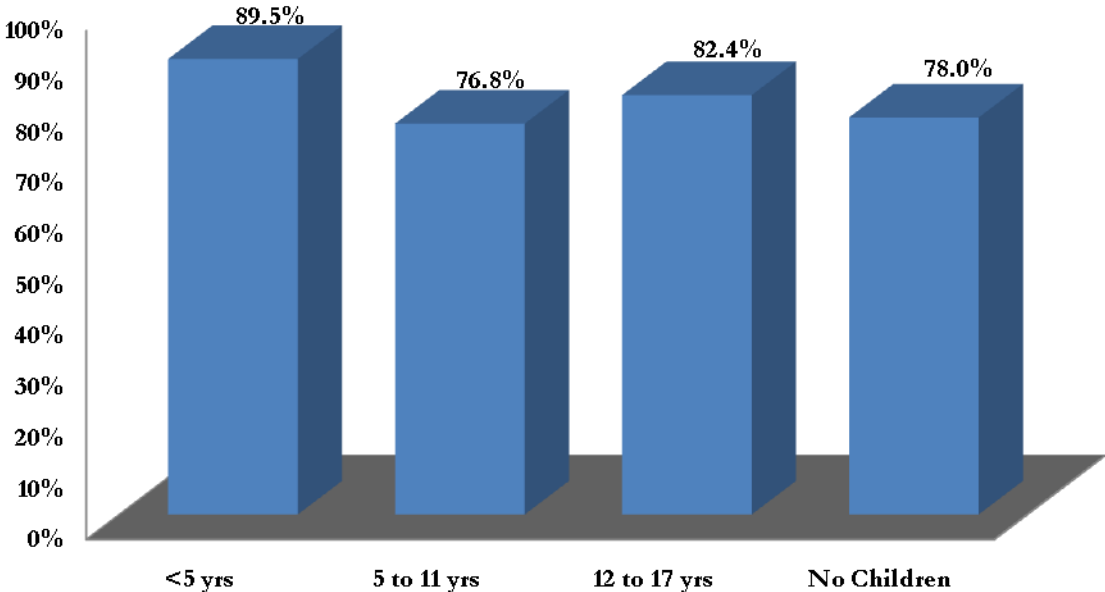


# Smoke-free Households and Children

Having a smoke-free policy in the home is associated with having younger children in the household.

- S.C. adults with children younger than 5 report the highest prevalence of smoke-free policies at home (89.5 percent).
- There are no significant differences among adults with children ages 5-11, 12-17 or without children.

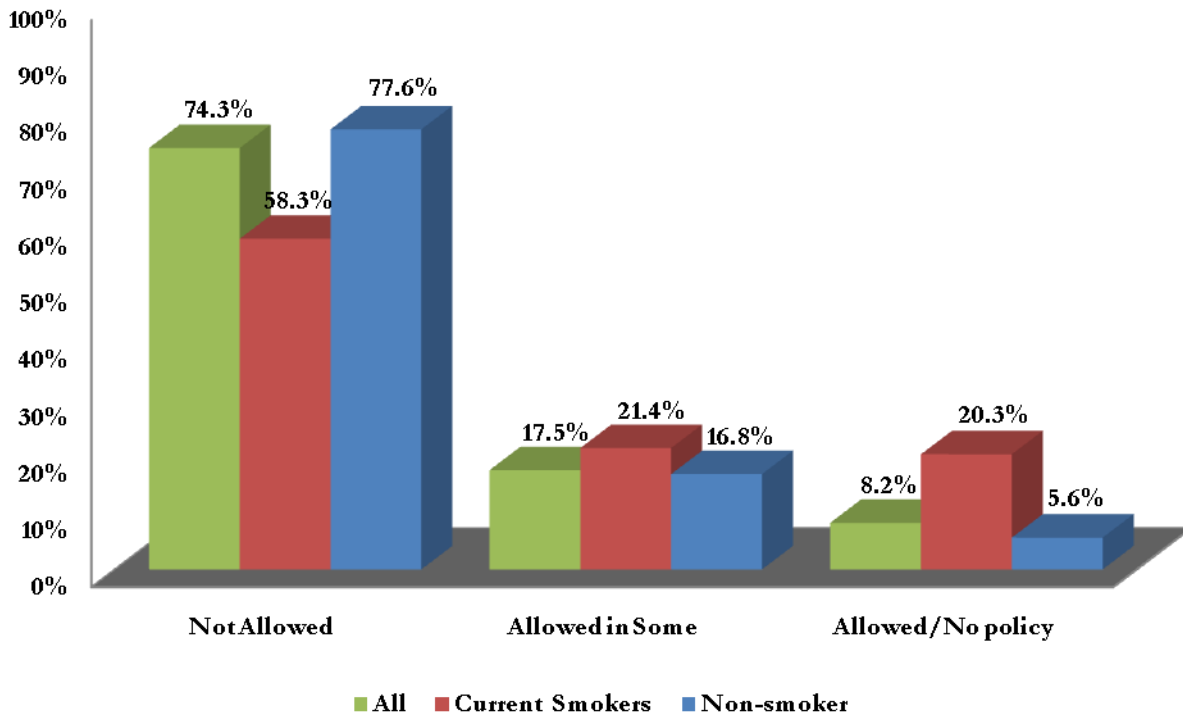
**Figure 3.3. Percentage of SC Adults Living in Completely Smoke-Free Homes by the Age of Children Living in the Home**



## Smoking in the Workplace

- Three quarters (74.3 percent) of all S.C. adults who are employed and work indoors most of the time reported that their workplace does not allow smoking at all in indoor work areas.
- A lower proportion of current smokers (58.3 percent) compared to non-smokers (77.6 percent) are employed at worksites with an official smoke-free policy.

**Figure 3.4. Prevalence of Smoke-Free Policy at the Workplace by Smoking Status**

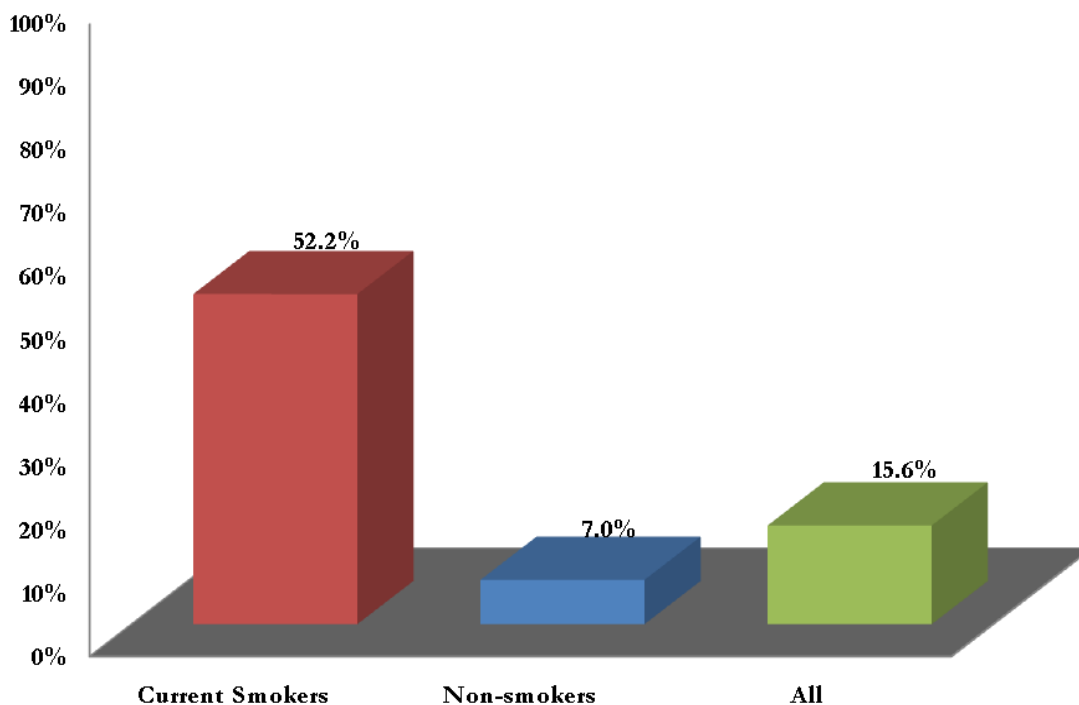


## SHS Exposure at Home

To determine if adults are exposed to SHS at home, participants were asked to recall if anyone had smoked cigarettes, cigars or pipes inside their home in the past seven days.

- An estimated 15.6 percent of S.C. adults reported that someone had smoked in their house during the seven days preceding the survey.
- Significantly more current smokers (52.2 percent) compared to non-smokers (7 percent) reported that someone had smoked inside their home within the past seven days. There are no significant differences between everyday and someday smokers.

**Figure 3.5. S.C. Adults Who Reported that Smoking Occurred in their Home in the Past Seven Days by Smoking Status**

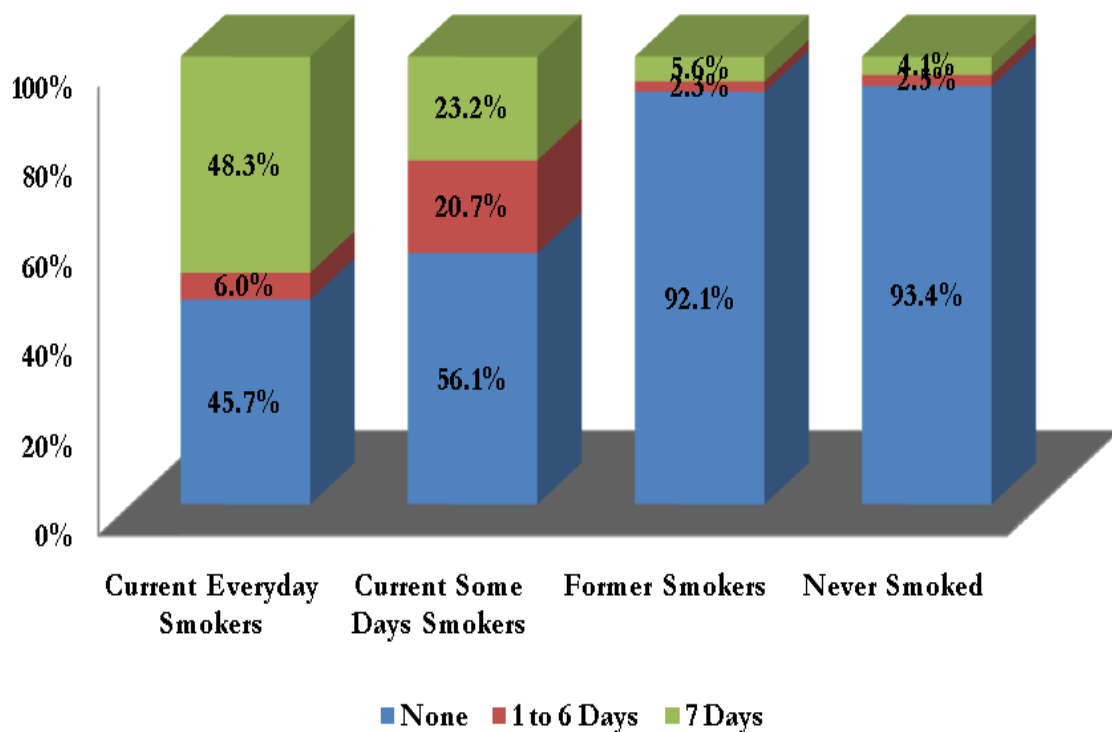


## SHS Exposure at Home

Regarding the level of exposure at home, approximately 12 percent of S.C. adults reported that there was daily smoking in their homes in the past seven days.

- Everyday smokers (48.3 percent) were more likely to report that there was daily smoking in their homes compared to someday smokers (23.2 percent).
- A small percentage of former smokers (5.6 percent) and people who have never smoked (4.1 percent) reported daily exposure to SHS at home.

**Figure 3.6. Number of Days that Smoking Occurred in Home in Past Seven Days by Smoking Status**



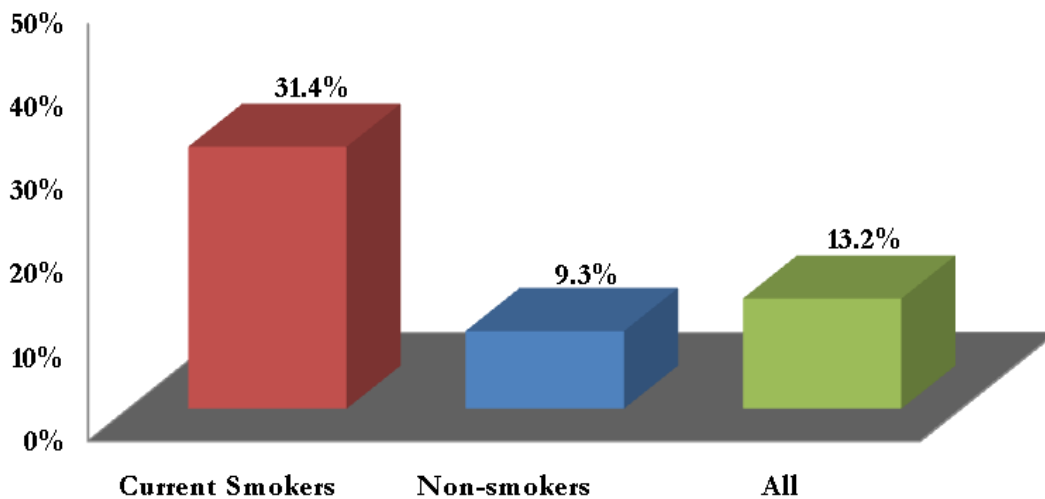


## SHS Exposure in the Workplace

Smoking in indoor work areas is also a source of exposure to SHS from tobacco products. To estimate the SHS exposure at work, participants were asked if anyone had smoked in their indoor work area in the past seven days.

- Overall, 13.2 percent of adults reported that smoking occurred in their work area.
- Smokers were more than three times as likely as non-smokers to report exposure to cigarette smoke in the workplace during the past seven days (31.4 percent versus 9.3 percent respectively).

**Figure 3.7. Percentage of S.C. Adults Reporting that Smoking Occurred in Indoor Work Area in Past Seven Days by Smoking Status**

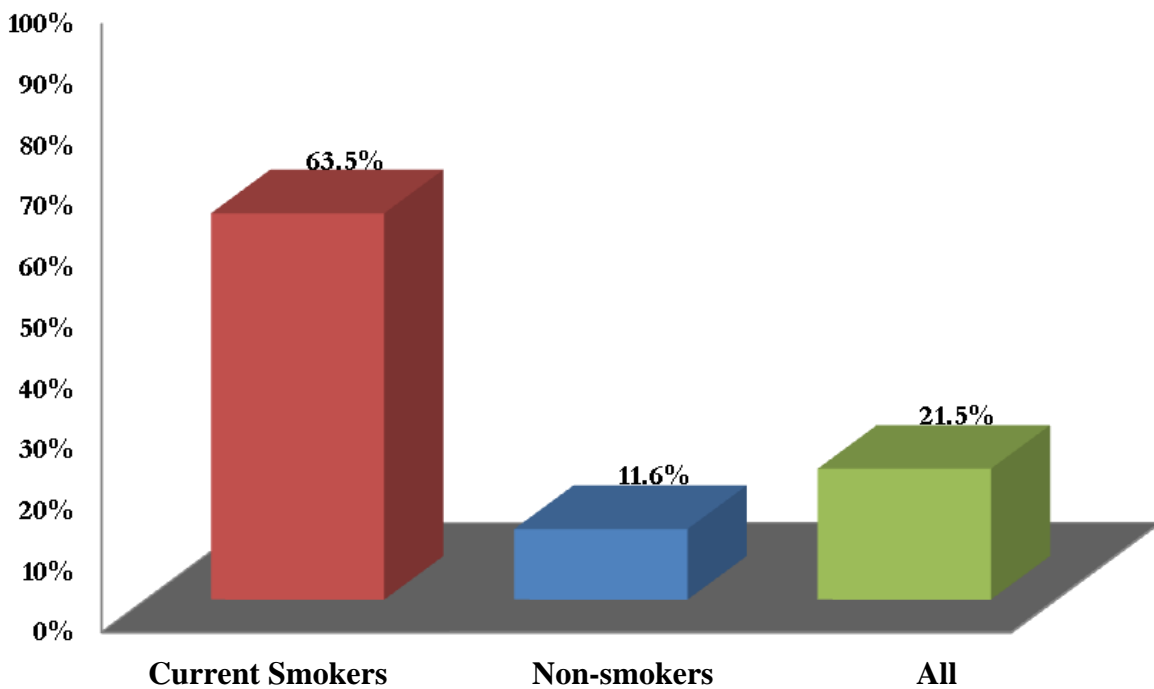


## SHS Exposure in Vehicles

S.C. adults are exposed to cigarette smoke more frequently in a car than at home or in the workplace.

- Approximately 21.5 percent of adults had been in a car in the previous seven days with someone who was smoking.
- Smokers are more than five times as likely as non-smokers to report exposure to SHS in a car (63.5 percent compared to 11.6 percent respectively).
- The difference between everyday smokers (67 percent) and occasional smokers (49 percent) was also statistically significant.

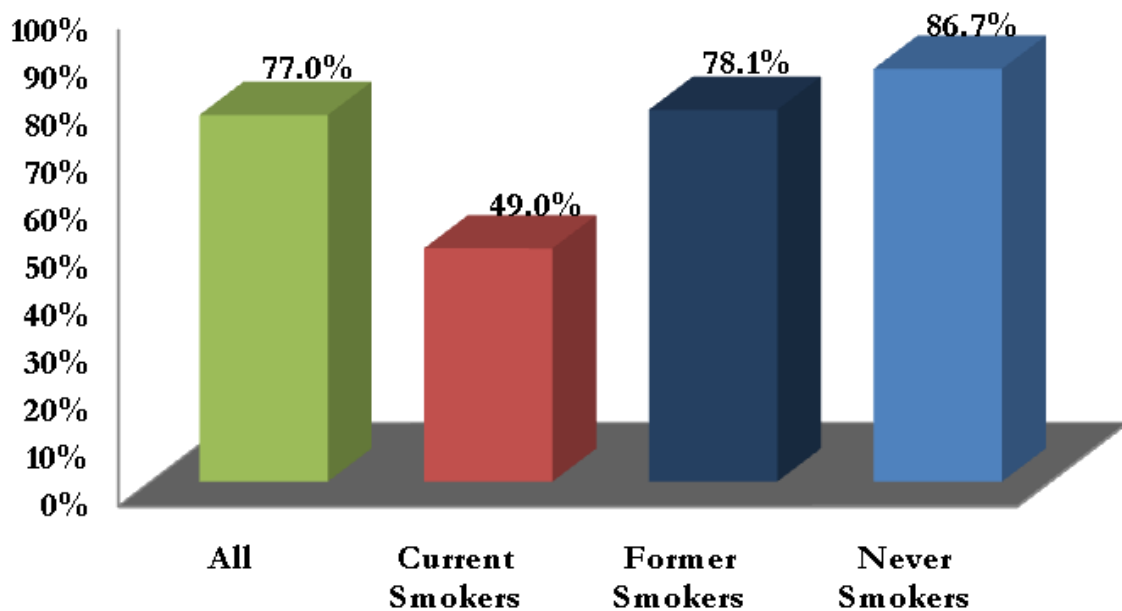
**Figure 3.8. S.C. Adults Reporting Exposure to SHS in Vehicles in Past Seven Days by Smoking Status**



## Opinion About Smoking in Indoor Work Areas

- When asked their opinion, 77 percent of S.C. adults responded that smoking should not be allowed at all in indoor work areas.
- Smokers and non-smokers had significantly different opinions about prohibiting smoking in indoor work areas. While 86.7 percent of adults who had never smoked believed that smoking should not be allowed at all in indoor work areas, only 49 percent of current smokers shared this opinion.

**Figure 3.9. S.C. Adults Who Prefer Smoke-Free Indoor Work Areas by Smoking Status**

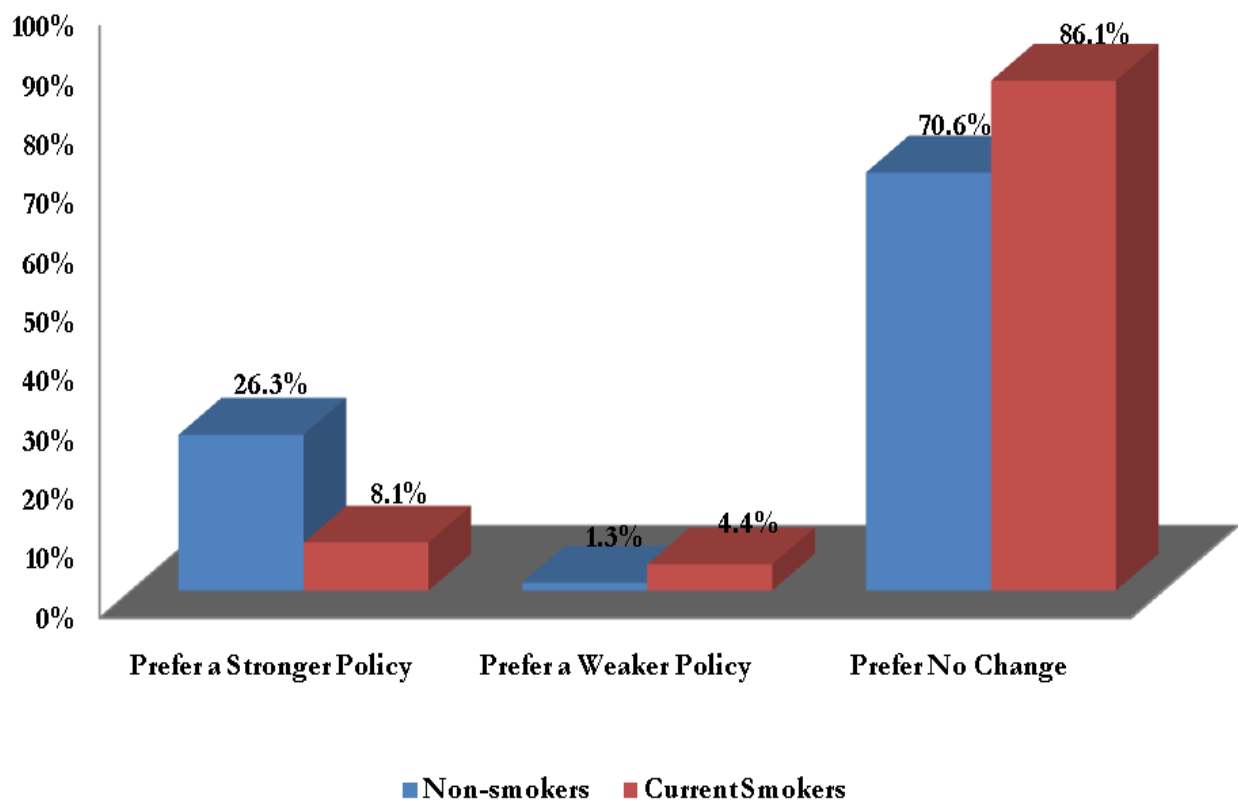


## Opinion About Current Workplace Smoking Policy

Participants were also asked their opinion on the current smoking policy in their workplace.

- While most South Carolinians would prefer no change in their current workplace smoking policy (73.8 percent), about a quarter of them (22.5 percent) would prefer a stronger policy, and 1.9 percent would prefer a weaker policy.
- By smoking status, current smokers were less likely than non-smokers to favor a stronger non-smoking policy at their workplace (8.1 percent versus 26.3 percent) and more likely to prefer that the policy does not change (86.1 percent versus 70.6 percent).

**Figure 3.10. Opinion About Workplace Smoking Policy by Smoking Status**

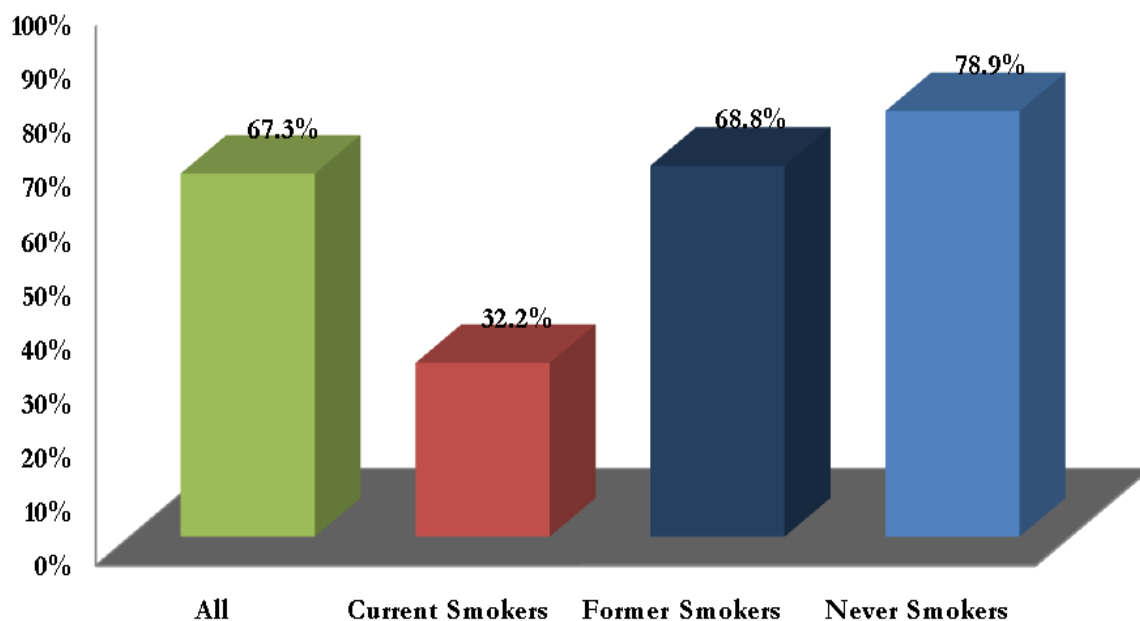


## Opinion About Smoking in Restaurants

Several questions were asked to understand South Carolinians' opinions on restaurant smoking policies.

- The majority of South Carolinians (89 percent) eat in restaurants at least once a month, and there are no significant differences regarding the frequency of dining out between smokers and non-smokers.
- Overall, 67.3 percent of S.C. adults believe that smoking should be completely restricted in the indoor dining areas of restaurants.
- More than three quarters (78.9 percent) of adults who have never smoked think that smoking should not be allowed at all in the indoor dining areas of restaurants while only one third (32.2 percent) of the current smokers share this opinion.

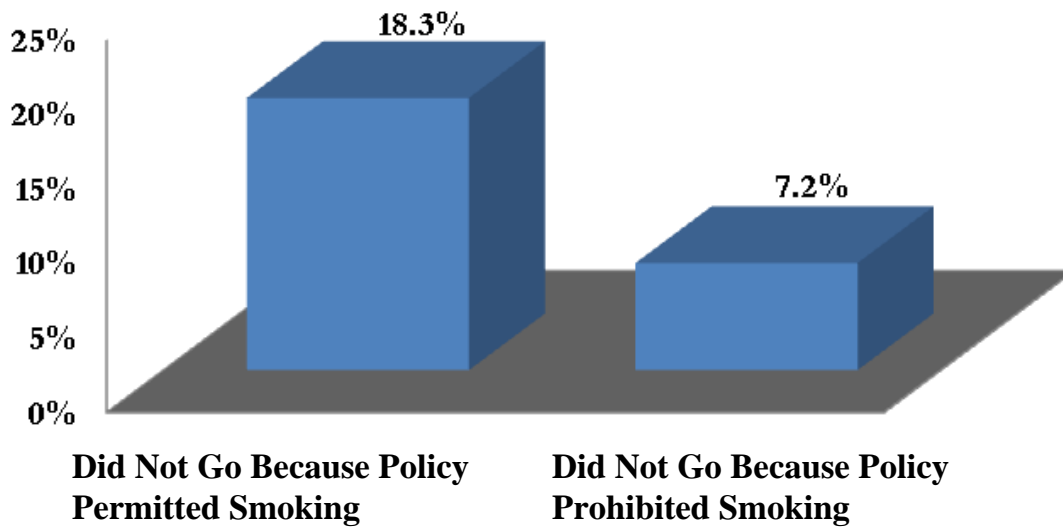
**Figure 3.11. S.C. Adults Who Prefer Smoke-Free Dining Areas in Restaurants by Smoking Status**



## Restaurant Smoking Policy

- Overall, 18.3 percent of South Carolinians reported not going to a restaurant in the past 12 months because smoking was allowed.
- Comparatively, among those that did not go to a restaurant in the past 12 months, only 7.2 percent did not go because there was a no smoking policy.

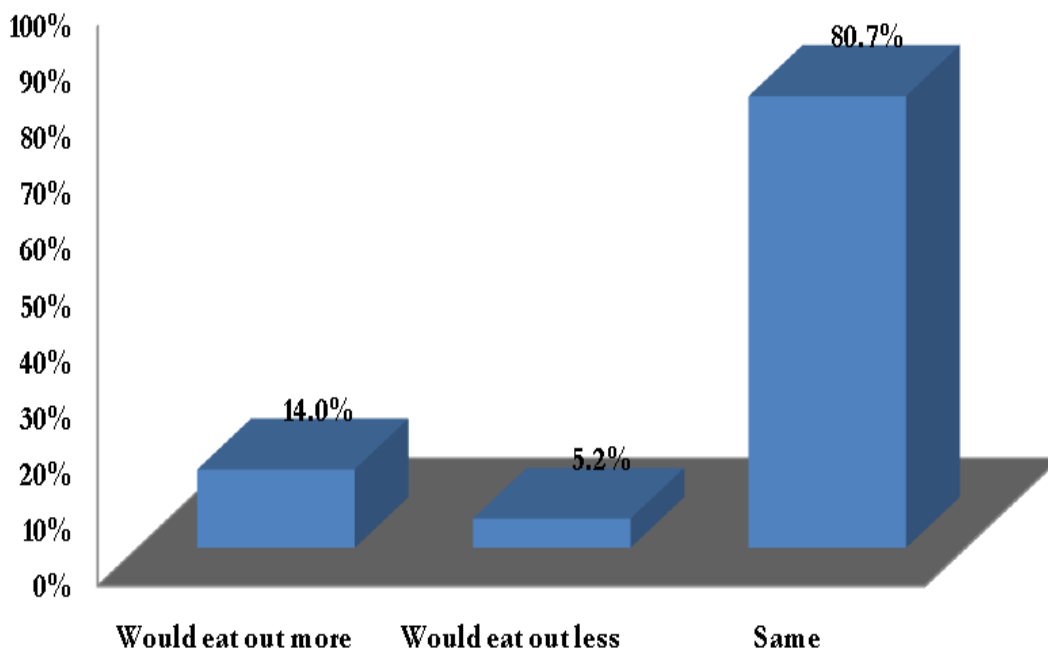
**Figure 3.12. S.C. Adults Who Did Not Go to a Restaurant in Past 12 Months Due to the Restaurant's Smoking Policy**



## Dining Out and Smoke-free Policy

- When asked if their frequency of eating out would change if there were a total restriction on smoking in restaurants, 94.7 percent of South Carolinians responded that they would eat out more or the same as before.
- Only 5.2 percent said they would eat out less frequently.

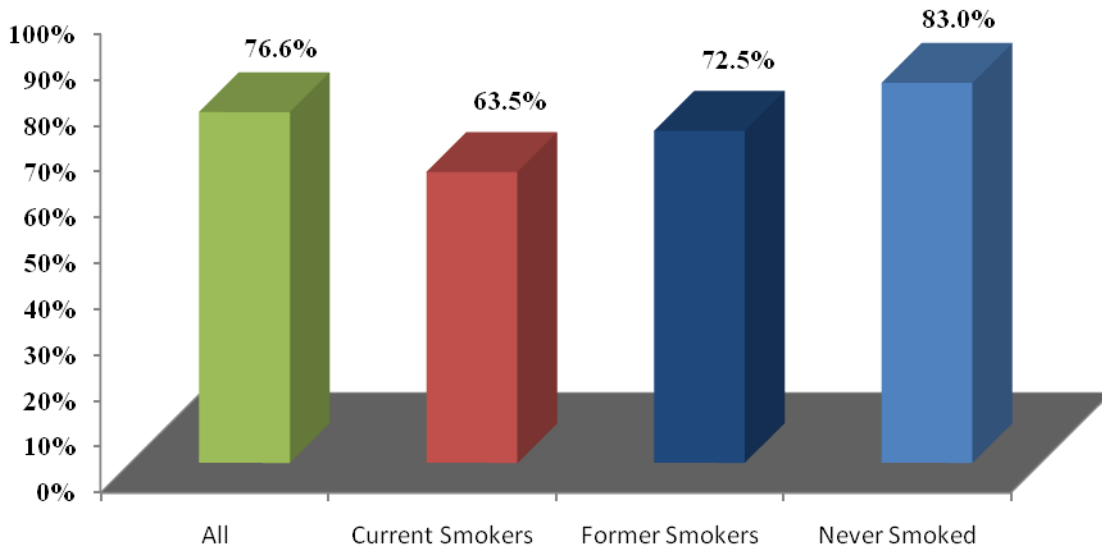
**Figure 3.14. Frequency of Eating Out if Smoking Was Completely Restricted in Restaurants**



## Opinion About Smoking in Shopping Malls

- More than three quarters of S.C. adults think that smoking should not be allowed in shopping malls (83 percent of people who have never smoked compared to 63.5 percent of current smokers).

**Figure 3.15. Percentage of S.C. Adults Who Prefer Smoke-Free Shopping Malls by Smoking Status**



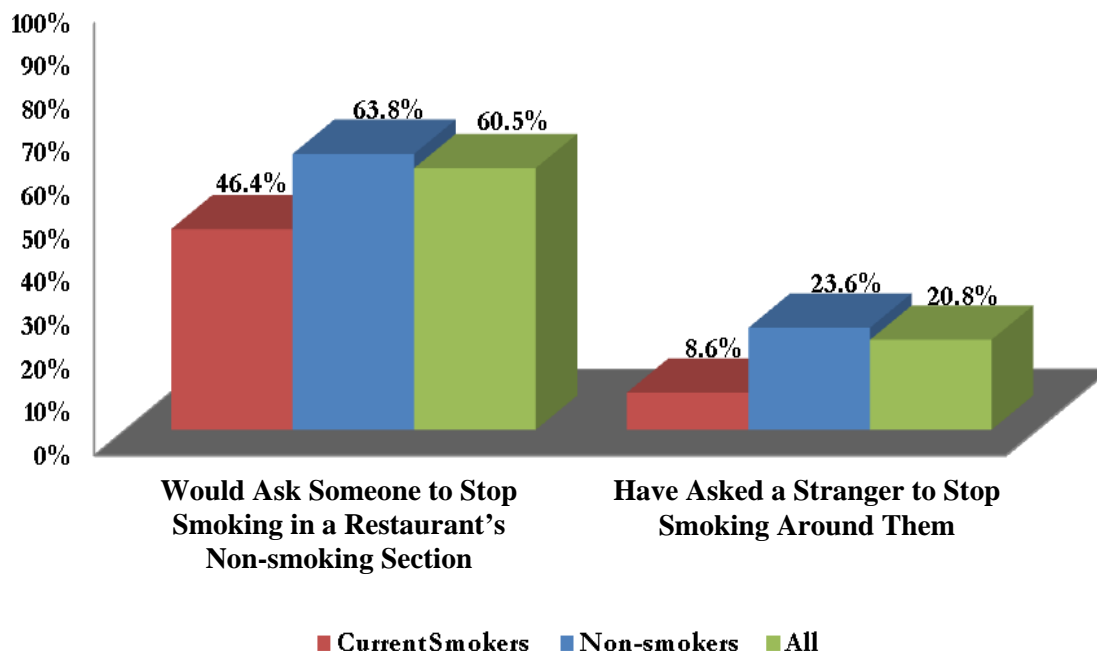


## Attitude About SHS Exposure in Public Places

The general public awareness about the dangers of secondhand smoke exposure has increased.

- Approximately 61 percent of South Carolinians said they would ask someone to stop smoking in the non-smoking area of a restaurant.
- Almost half of smokers (46.4 percent) reported that they would ask someone to stop smoking in the non-smoking section.
- 20.8 percent of S.C. adults have asked a stranger to not smoke around them in the past 12 months.
- Former smokers' opinions about smoke-free public places were very similar to that of the total adult population.
- Among former smokers, 78.1 percent favor smoke-free indoor workplaces, 68.8 percent prefer smoke-free dining areas in restaurants, and 63.5 percent prefer smoke-free shopping malls.

**Figure 3.16. S.C. Adults Who Would Ask Someone To Stop Smoking in a Restaurant's Non-Smoking Area and of Those Who Have Asked a Stranger to Not Smoke Around Them in Past 12 Months by Smoking Status**



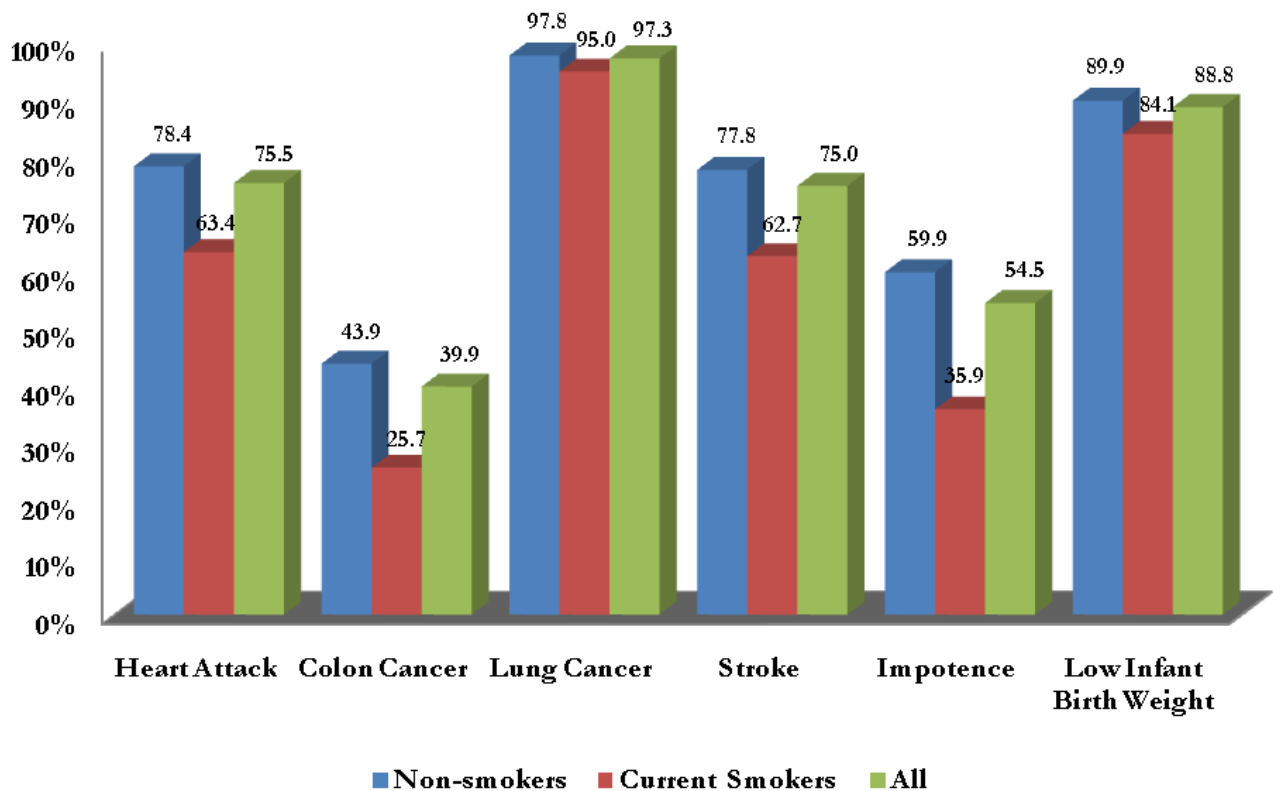
## 4. Risk Perception and Social Influences

### Knowledge of Adverse Health Conditions Caused by Smoking Cigarettes

The 2007 SCATS assessed participants' knowledge of the adverse health conditions smoking cigarettes causes.

- Overall, most of South Carolinians knew that smoking may cause lung cancer (97.3 percent), heart attack (75.5 percent), stroke (75 percent), and low infant birth weight (88.8 percent).
- Relatively fewer people think that smoking is associated with colon cancer (39.9 percent) and impotence (54.5 percent).
- Statistically significant fewer smokers than non-smokers were aware of the adverse health conditions caused by smoking.

**Figure 4.1. Knowledge of Adverse Health Conditions Caused by Cigarette Smoking by Smoking Status**



## Knowledge of Cigarette Smoking Addiction

Survey participants were asked their opinion of physical addiction to cigarettes. The majority of South Carolinians (92.8 percent) agreed that cigarette smoking is physically addictive. There were no statistically significant differences by smoking status.

## Knowledge of Light Cigarette Smoking

Several studies have indicated that many smokers perceive light and ultra light cigarettes to be less dangerous to health than regular cigarettes <sup>(11-13)</sup>. Information from U.S. Senate committee meetings in 2007 revealed that “light” cigarettes are not necessarily less harmful to one’s health than regular cigarettes <sup>(13)</sup>.

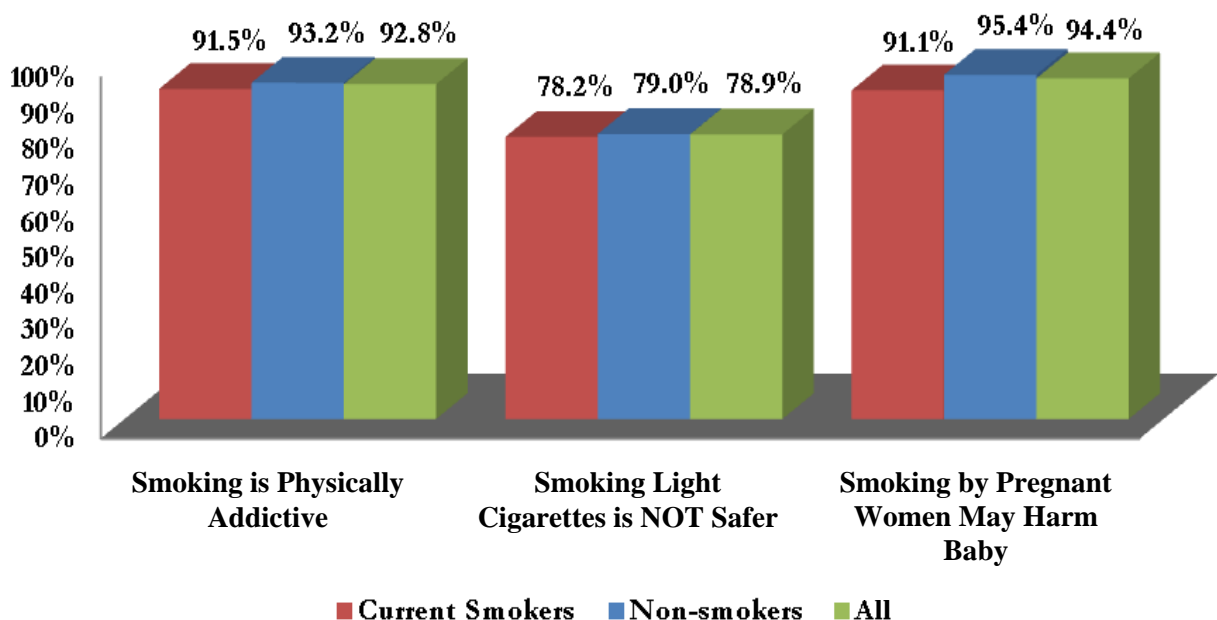
- In South Carolina, 78.9 percent of adults knew that smoking light cigarettes is not a safer alternative.
- A similar proportion of smokers and non-smokers (79 percent versus 78.2 percent) disagreed that smoking light cigarettes is safer.

## Knowledge of Smoking During Pregnancy

Smoking by pregnant women is known to be harmful to the fetus.

- Almost all S.C. adults (94.4 percent) either strongly agreed or agreed that a mother smoking during pregnancy may harm her baby. No statistically significant differences were noted between smokers and non-smokers.

**Figure 4.2. Knowledge of Cigarette Addiction, Light Cigarette Smoking and Smoking During Pregnancy by Smoking Status**

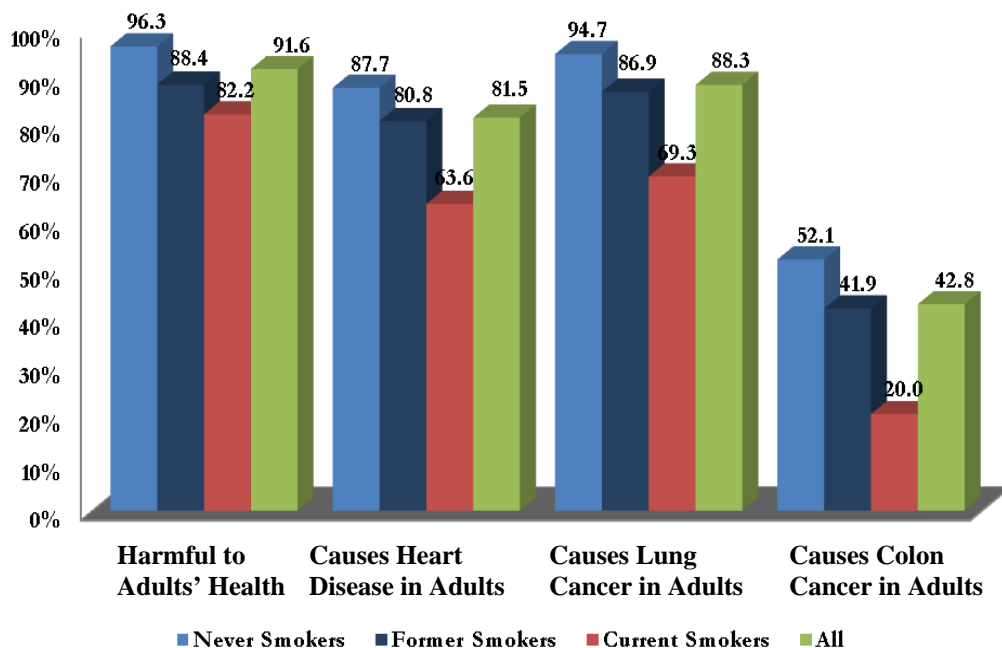


## Knowledge of Adverse Health Conditions Caused by SHS in Adults

Participants were asked several questions concerning their knowledge about the harmful effects of SHS.

- S.C adults generally agreed (91.6 percent) that breathing smoke from other people's cigarettes is very or somewhat harmful to one's health.
- Even though most smokers believed that SHS is harmful, there were statistically significant differences among the percentage of current smokers (82.2 percent), former smokers (88.4 percent) and never smokers (96.3 percent).
- Women appear to be more aware of the harmful effects of SHS compared with men (94.2 percent versus 88.6 percent).
- Knowledge about SHS differs by education. Those with the lowest educational attainment (less than high school graduate) are less likely to believe that SHS is harmful (86.5 percent) compared to the adults who have some college (92.4 percent) or to those who have graduated college or have higher education (93.7 percent).
- Most South Carolinians knew that SHS causes lung cancer and heart disease in adults (88.3 percent and 81.5 percent, respectively).
- A significantly lower proportion (42.8 percent) believed that SHS causes colon cancer.
- There are statistically significant differences among all levels of smoking status regarding these health beliefs.
- Adults who have never smoked are the most likely to believe that SHS causes lung cancer, heart disease, and colon cancer, followed by former smokers and current smokers.

**Figure 4.3. S.C. Adults Who Believe that SHS Has Harmful Effects in Adults by Smoking Status**

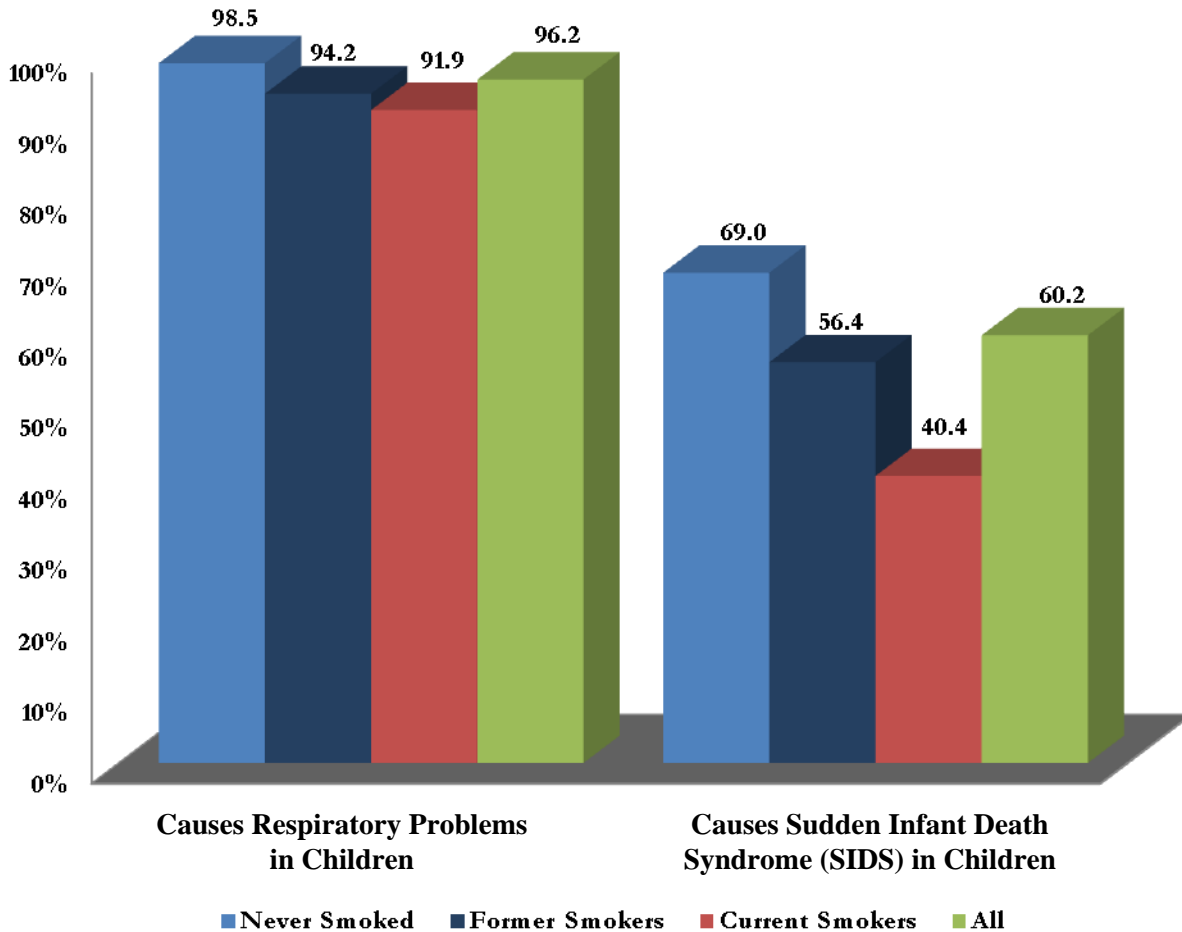


# Knowledge of Adverse Health Conditions Caused by SHS in Children

Secondhand smoke is also associated with several adverse health effects among children.

- The vast majority of S.C. adults (96.2 percent) agree that SHS exposure causes respiratory problems in children.
- In addition, 60.2 percent of S.C. adults believe that SHS causes Sudden Infant Death Syndrome (SIDS).
- There are statistically significant differences between smokers and nonsmokers. Among adults who have never smoked, 98.5 percent believe that SHS causes respiratory problems in children, and 69 percent believe that SHS causes SIDS compared to 91.9 percent and 40.4 percent respectively among current smokers.

**Figure 4.4. S.C. Adults Who Believe that SHS Has Harmful Effects in Children by Smoking Status**

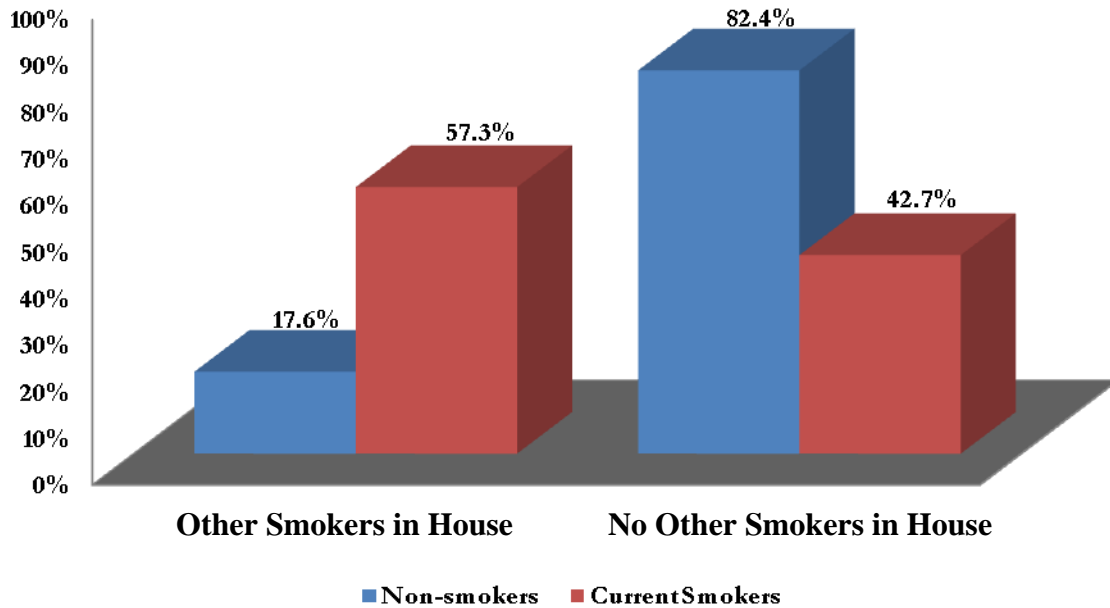


## Living with Other Smokers in the Household

The 2007 SCATS reports that 25.3 percent of South Carolinians live with at least one smoker in the household.

- Smokers are more likely to live with other smokers (57.3 percent), and non-smokers are much more likely to live with other non-smokers (82.4 percent).

**Figure 4.5. Other Smokers in the Household by Smoking Status**

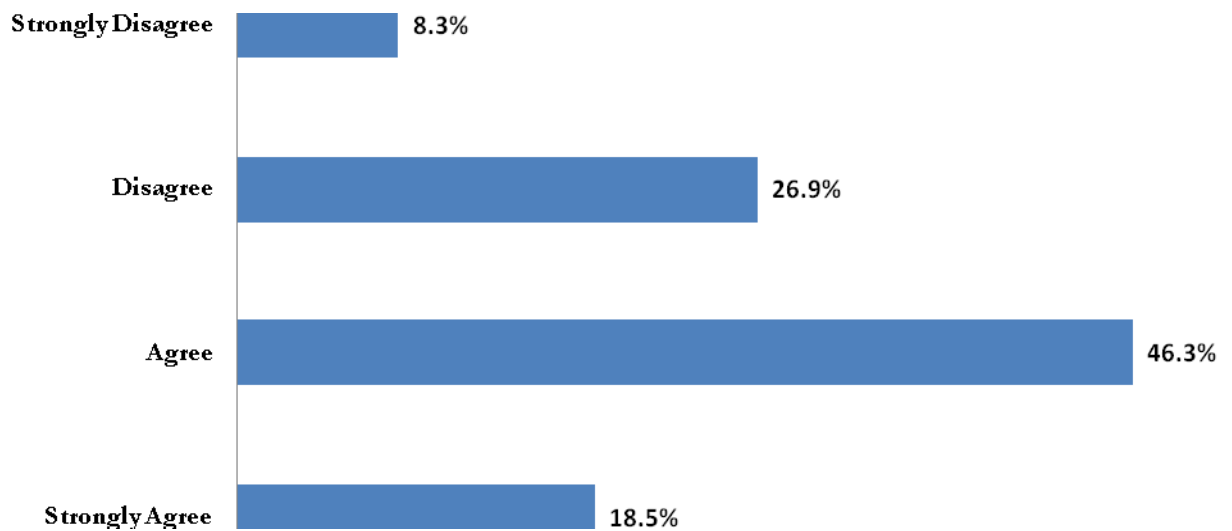


## Children's Attitude about Parent's Smoking

Children may have an impact on their parent's ability to stop smoking.

- More than half of smokers with children either strongly agree (18.5 percent) or agree (46.3 percent) that their children are upset by their smoking habit.
- Also, 61.9 percent of smokers with children reported that their children had asked them to stop smoking.

**Figure 4.6. Prevalence of S.C. Adults Reporting Their Children Being Upset By Parent's Smoking**



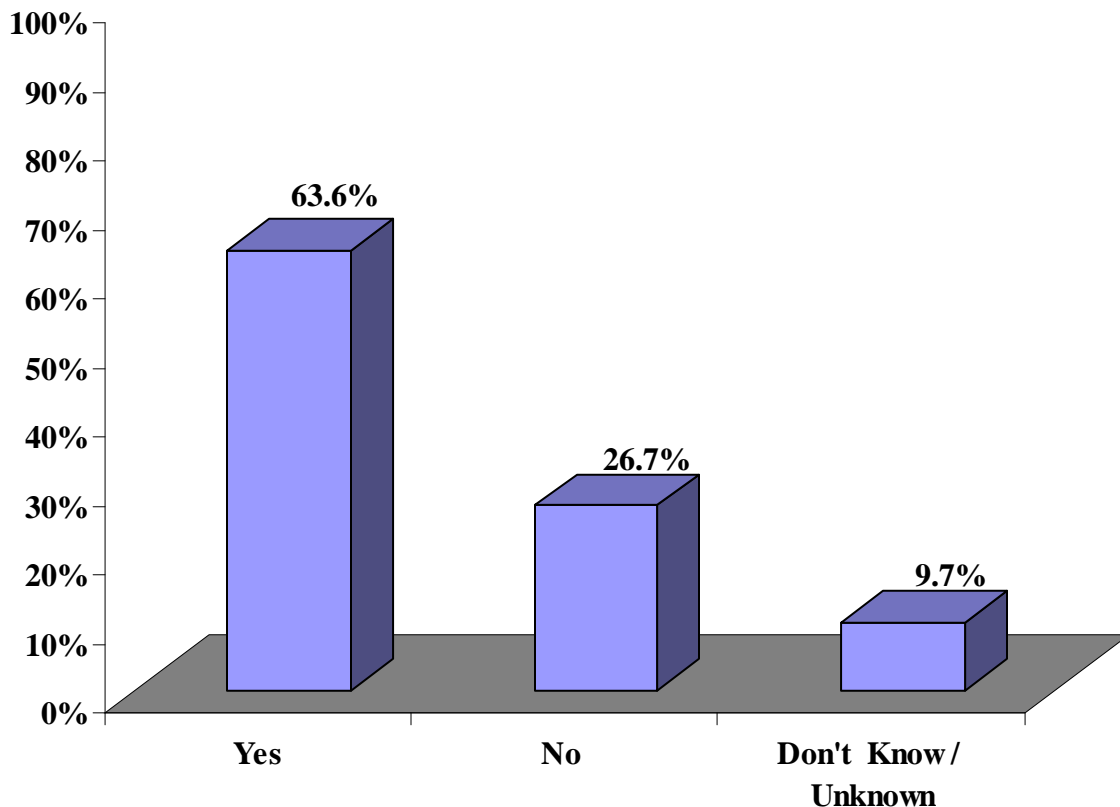
## 5. Policy

### Opinion About Cigarette Tax Increase

Participants were asked how much additional tax on a pack of cigarettes they would support if the money raised were used to fund programs to educate children about the dangers of smoking.

- Almost 64 percent of South Carolinians (68 percent of nonsmokers and 44 percent of smokers) responded they would support a tax increase.
- About one in two adults (53.2 percent) would support an increase of at least \$1 per pack of cigarettes, and one in four adults (25.7 percent) would support an increase of more than \$2 per pack.

**Figure 5.1. Percentage of S.C. Adults Who Would Support a Cigarette Tax Increase**



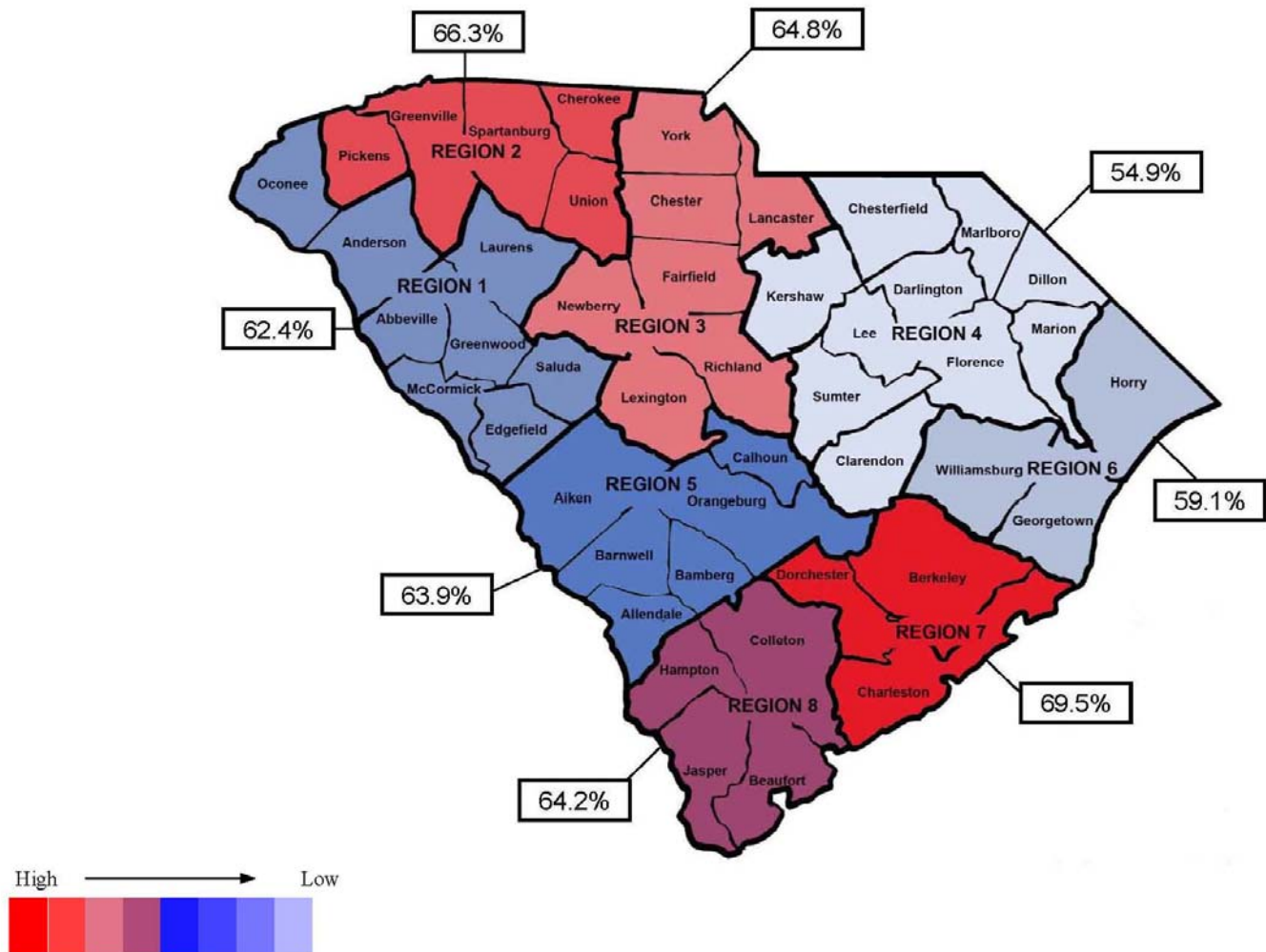


## Support for Cigarette Tax Increase by Region

The support for cigarette tax increase in South Carolina was investigated by DHEC's eight public health regions.

- The percentage of adults willing to support a cigarette tax increase varied between 54.9 percent in Region 4 and 69.5 percent in Region 7.

**Figure 5.2. Percentage of S.C. Adults Who Would Support a Cigarette Tax Increase by S.C. DHEC Public Health Region**



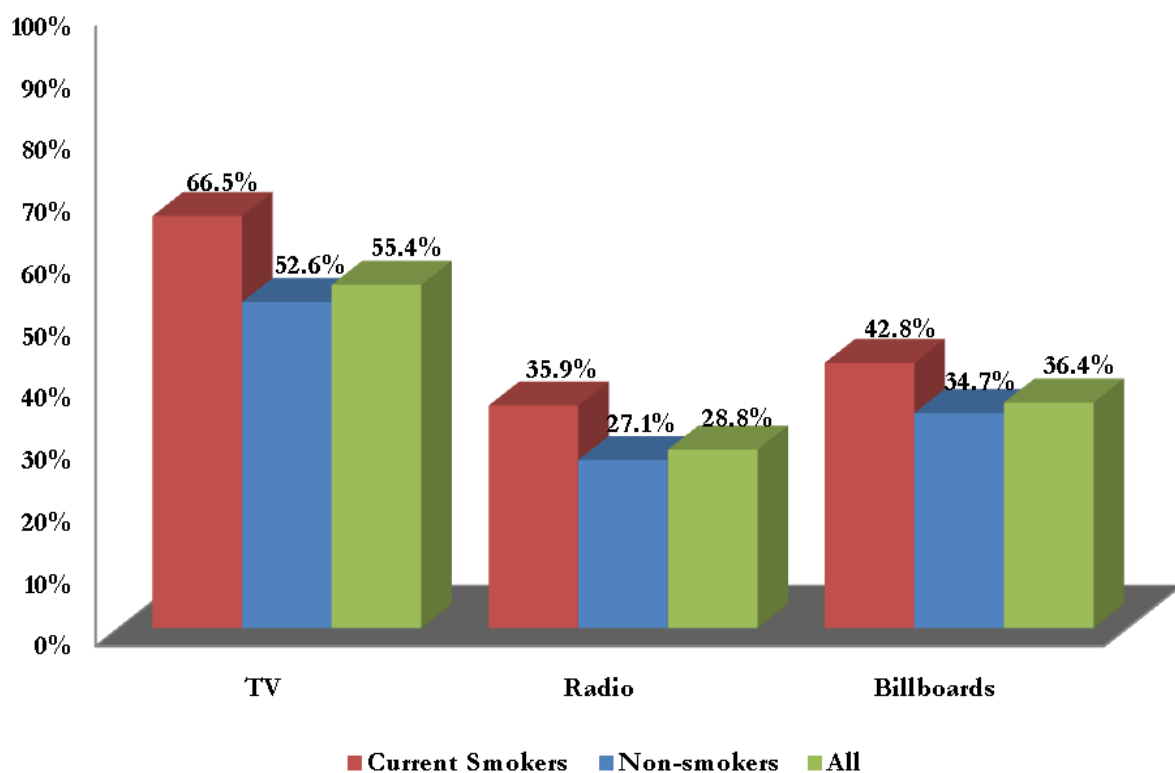
## 6. Media Exposure

### Exposure to Anti-smoking Messages on TV, Radio and Billboards

The survey also assessed S.C. adults' exposure to anti-smoking media messages. Participants were asked the number of commercials about not smoking cigarettes seen or heard on TV and radio and the number of messages they had seen on billboards in the past seven days.

- More than half of S.C. adults (55.4 percent) reported seeing at least one commercial about not smoking cigarettes on TV in the past week.
- Fewer than three out of 10 adults (28.8 percent) had heard a commercial on the radio.
- Fewer than four out of 10 adults (36.4 percent) had seen anti-smoking messages on billboards in the past seven days preceding the survey.
- Current smokers were significantly more likely than nonsmokers to report seeing or hearing antismoking messages on each of the three media channels.

**Figure 6.1. S.C. Adults Who Report Seeing or Hearing at Least One Anti-Smoking Ad on TV, Radio, or Billboards in the Past Seven Days by Smoking Status**



# Technical Notes

## Instrument

The SCATS was conducted by the Institute for Public Service and Policy Research via Computer Assisted Telephone Interview (CATI). The instrument was designed to meet specific needs of DHEC's Division of Tobacco Prevention and Control. Most of the questions were provided by the CDC's Office on Smoking and Health and are identical to questions appearing on Adult Tobacco Surveys in other states.

Four additional questions were included in the SCATS. The SCATS addresses content areas such as cigarette smoking; use of alternative tobacco products; smoking cessation; exposure to secondhand smoke; smoking policies; health beliefs about smoking and exposure to secondhand smoke; opinions about smoking in public places and policy issues; health status and health coverage.

## Sample

The SCATS is a representative survey of the S.C. adult population and was administered by telephone to South Carolinians ages 18 and older from June through November 2007.

The survey design used eight strata corresponding to the eight DHEC Public Health Regions. The sample of telephone numbers was provided by CDC using GENESYS Sampling Systems. Random Digit Dialing procedures were followed.

The interviews were conducted in English only. Therefore, results may not be representative of non-English speaking people, people without household phone numbers, institutionalized or college-campus residents, military personnel living on military campuses, and highly transient people.

Statistical weights were applied so that respondents approximately match the gender and age distribution of the state's population.

The response rate for the 2007 SCATS was 47.5 percent for the screening interview and 42.7 percent for the extended interview. Overall, 5,538 respondents completed the survey

## Analysis

SAS 9.1 statistical software, which correct for the complex sample design, was used to generate frequencies and 95 percent confidence intervals. Differences between estimates were considered statistically significant at the  $p=0.05$  level if the 95 percent confidence intervals did not overlap.

## Glossary

**Bidis** - Small, brown, hand-rolled tobacco products primarily made in India and other Southeast Asian countries. Often flavored.

**CDC** – Centers for Disease Control and Prevention.

**CATI** - Computer Assisted Telephone Interviewing is a system in which a telephone interviewer conducts an interview using a computer and computerized questionnaire. The questionnaire appears on the computer screen, and the interviewer inputs data from respondents directly into a computer file. The computer continuously monitors the sample and interviewing process and automatically dials pre-loaded telephone numbers for the interviewers.

**Current Cigarette Use** – Defined as having smoked at least 100 cigarettes in a lifetime and now smoking cigarettes on some days or all days.

**DHEC** – South Carolina Department of Health and Environmental Control

**Ever Tobacco Use** - Defined as the use of a tobacco product at any time over the course of one's lifetime.

**Lifetime Cigarette Use** - Defined as having smoked at least 100 cigarettes in a lifetime.

**Kretek** – Cigarettes which combine shredded clove buds and tobacco, primarily manufactured in Indonesia.

**Prevalence** – The percentage of people in the population with a given characteristic or condition under study.

**SCATS** – South Carolina Adult Tobacco Survey.

SLT – Smokeless tobacco

**Secondhand Smoke (SHS)** - Smoke discharged from tobacco products (cigarettes, pipes, cigars, bidis, kreteks) or exhaled by the smoker that is released into the environment and inhaled by other people.

**Statistically Significant Difference** - This means that there is statistical evidence for a difference between two measurements. A 95 percent confidence interval or a p-value of 0.05 is often used to determine statistical difference between two measures. If the confidence intervals do not overlap in values, then measures are often determined to be statistically different from each other.

## Appendix I

### Prevalence of Current Tobacco Use Among S.C. Adults

	Any Tobacco		Cigarettes		Cigars		SLT		Pipes	
	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
<b>Total</b>	<b>23.4</b>	<b>± 1.8</b>	<b>19.2</b>	<b>± 1.7</b>	<b>3.9</b>	<b>± 0.8</b>	<b>3.3</b>	<b>± 0.8</b>	<b>0.5</b>	<b>± 0.2</b>
<b>Gender</b>										
Male	30.1	± 3.0	22.0	± 3.0	7.17	± 1.8	6.4	± 1.4	1.0	± 0.4
Female	17.3	± 1.9	16.6	± 1.9	0.8	± 0.4	0.4	± 0.2	0.03	± 0.04
<b>Race/Ethnicity</b>										
White, NH	23.9	± 2.0	19.2	± 1.9	3.9	± 1.0	3.8	± 1.0	0.4	± 0.2
Black, NH	21.1	± 4.4	18.5	± 4.5	3.2	± 2.2	1.5	± 1.2	0.7	± 0.6
Hispanic	25.5	± 8.8	24.0	± 12	6.7	± 5.6	2.2	± 2.2	1.2	± 2.0
<b>Age Group</b>										
18-24	30.0	± 8.0	26.1	± 8.0	4.4	± 4.2	4.1	± 3.2	0.3	± 0.4
25-34	28.6	± 5.2	25.6	± 5.0	3.0	± 2.0	4.7	± 2.4	0.0	± 0.0
35-44	27.0	± 3.8	21.6	± 3.6	4.2	± 1.8	4.6	± 1.6	0.5	± 0.6
45-54	25.5	± 3.2	20.6	± 3.0	5.6	± 1.8	2.4	± 1.2	0.8	± 0.8
55-64	19.0	± 3.0	14.3	± 2.4	3.8	± 1.8	1.7	± 1.0	0.6	± 0.6
65+	10.7	± 2.0	7.2	± 1.6	2.1	± 1.0	2.1	± 1.0	0.6	± 0.4
<b>Education</b>										
<High School	33.5	± 6.4	28.5	± 6.2	5.1	± 3.0	3.2	± 1.7	0.7	± 1.0
High School	30.7	± 3.8	25.8	± 3.8	5.3	± 2.0	4.4	± 1.4	0.7	± 0.4
Some College	22.2	± 3.0	20.0	± 3.0	4.4	± 1.0	2.8	± 1.3	0.3	± 0.2
≥College graduate	14.3	± 2.6	8.9	± 2.2	7.6	± 1.4	2.6	± 1.4	0.4	± 0.4
<b>Income</b>										
<35,000	29.7	± 3.8	26.1	± 3.8	4.7	± 2.2	3.1	± 1.2	0.6	± 0.4
35,000-74,999	24.0	± 3.0	19.4	± 2.8	3.7	± 1.2	3.6	± 1.5	0.4	± 0.2
≥75,000	18.3	± 3.2	12.9	± 3.0	4.3	± 1.6	3.2	± 1.4	0.5	± 0.3
<b>Marital Status</b>										
Married	19.6	± 1.8	14.8	± 1.6	4.0	± 1.0	3.2	± 0.8	0.6	± 0.4
Not married	29.6	± 3.6	26.3	± 3.6	3.7	± 1.6	3.4	± 1.4	0.4	± 0.2

## Appendix II

### Demographic Characteristics of Respondents

Demographic characteristic	Number of Interviews	% Unweighted Sample	% Weighted Sample
<b>Total</b>	<b>5538</b>	<b>100%</b>	<b>100%</b>
<b>Gender</b>			
Male	2101	37.9	48.0
Female	3437	62.1	52.0
<b>Race/Ethnicity</b>			
White, NH	3991	73.8	70.6
Black, NH	1080	20.0	21.8
Hispanic	236	4.4	5.5
<i>Other</i>	101	1.9	2.1
<b>Age Group</b>			
18-24	191	3.5	13.3
25-34	473	8.5	17.6
35-44	824	14.9	18.3
45-54	1082	19.5	18.7
55-64	1317	23.8	15.0
65+	1651	29.8	17.0
<b>Education</b>			
<High School	573	10.4	9.3
High School	1596	29.1	30.4
Some College	1573	28.7	29.7
≥College graduate	1744	31.8	30.5
<b>Income</b>			
<35,000	1807	38.9	33.9
35,000-74,999	1646	35.4	37.3
≥75,000	1192	25.7	28.8
<b>Marital Status</b>			
Married	3164	57.5	61.1
Not married	2338	42.5	38.9

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