



**Tobacco Attitudes and Media Survey
2007**

prepared for

**Delaware Department of Health and Social Services
Division of Public Health**


by

**Edward C. Ratledge
Lisa Gilman**

**Center for Applied Demography & Survey Research
College of Human Services, Education and Public Policy
University of Delaware
Tel: 302-831-2394**

Newark, Delaware 19716

January, 2008



The University of Delaware is committed to assuring equal opportunity to all persons and does not discriminate on the basis of race, color, gender, religion, ancestry, national origin, sexual preference, veteran status, age, or disability in its educational programs, activities, admissions, or employment practices as required by Title IX of the Educational Amendments of 1972, Title VI of the Civil Rights Act of 1964, the Rehabilitation Act of 1973, the Americans with Disabilities Act, other applicable statutes, and University policy. Inquiries concerning these statutes and information regarding campus accessibility and Title VI should be referred to the Affirmative Action Officer, 305 Hullihen Hall, 302/831-2835 (voice), 302/831-4552(TDD).

ACKNOWLEDGEMENTS

This report was primarily funded by the Division of Public Health, Delaware Department of Health and Social Services.

TABLE OF CONTENTS

| | Page |
|-----------------------------|------|
| Acknowledgements | iii |
| List of Tables | v |
| List of Figures | vi |
| Introduction | 1 |
| Smoking in Delaware | 3 |
| Second-Hand Smoke | 11 |
| Tobacco and the Media | 17 |
| Observations | 23 |
| Appendix | 25 |

LIST OF TABLES

| Table | Page |
|--|------|
| 3-1 Upper Estimates of Exposure to Smoking at Home | 12 |

LIST OF FIGURES

| Figure | Page |
|--|------|
| 2-1 Frequency of Smoking | 3 |
| 2-2 Percentage Smoking by Age Group | 4 |
| 2-3 Percentage Smoking by Race | 5 |
| 2-4 Percentage Smoking by Gender | 5 |
| 2-5 Planning to Quit Smoking by Race | 6 |
| 2-6 Planning to Quit Smoking by Frequency of Smoking | 7 |
| 2-7 Which Conditions Would Motivate You to Quit Smoking | 8 |
| 2-8 Aware of “Quitline” Message by Frequency of Smoking | 9 |
| 3-1 Percent with No Other Smokers at Home by Frequency of Smoking | 11 |
| 3-2 Days per Week of Exposure to Other’s Smoke at Home by Frequency of Smoking | 12 |
| 3-3 Days per Week of Exposure to Smoke in a Motor Vehicle by Frequency of Smoking | 13 |
| 3-4 Days per Week of Exposure to Other’s Smoke at Work by Frequency of Smoking..... | 13 |
| 3-5 People Should be Protected from Second-hand Smoke by Frequency of Smoking | 15 |
| 3-6 Number of Friends Who Smoke by Frequency of Smoking | 15 |
| 4-1 Seen or Heard Messages about Dangers of Indoor Smoke by Frequency of Smoking | 17 |
| 4-2 Source of Messages about Dangers of Indoor Smoke | 18 |
| 4-3 Heard “Delaware Quitline” Message by Frequency of Smoking | 19 |
| 4-4 Source of “Delaware Quitline” Message..... | 19 |
| 4-5 Heard “Delaware Quitnet” Message by Frequency of Smoking | 20 |
| 4-6 Source of “Delaware Quitnet” Message..... | 21 |
| 4-7 What Percent of Delaware’s Adults Think that 30% or More of Delaware’s Adults Smoke? | 21 |

Introduction

The Delaware Division of Public Health, together with its partners in government, education, the not-for-profit community, health advocates and healthcare industry, has developed and implemented a comprehensive Tobacco Prevention and Control Program. The program includes school and community-based prevention initiatives; a tobacco prevention social marketing campaign designed to educate Delawareans about tobacco; and cessation services that include a telephone Quitline and website which provide information and assistance to current smokers in their efforts to quit smoking.

The purpose of the Adult Tobacco Survey is to provide independent evaluation data that are used to assess Delaware's progress in attaining the goals of *A Plan for a Tobacco-free Delaware*. The 2007 study replicates, in large part, annual studies conducted in 2002 through 2006.

The survey was administered by the Center for Applied Demography & Survey Research (CADSR) located at the University of Delaware and had three primary objectives. First, the survey measured the prevalence of cigarette smoking and other forms of tobacco use within the state, and information about tobacco users' efforts to quit. Second, data were gathered about exposure to smoke from others, and respondents' opinions about the impact of the Clean Indoor Air Act restricting smoking in indoor public places. Finally, questions were asked to determine the reach of several media campaigns and assess public attitudes toward tobacco use.

The survey was conducted in the spring of 2007 with the data centered on June 18, 2007. A total of 1,300 adult Delawareans living in households with land line telephones were interviewed. The telephone numbers were generated randomly to insure that both listed and unlisted numbers had an equal chance of being selected to participate. This is commonly referred to as random digit dialing. Up to 15 attempts were made to contact a potential respondent at each telephone number. Once it was ascertained that the number connected to a private residence, a random adult was chosen and that person was asked to participate. Adults living in institutional settings such as college dormitories and prisons were excluded from the sample. Approximately 59% of those respondents selected were willing to participate and complete the survey.

The sample was selected as a simple random sample of the State of Delaware. Of those interviewed, 227 were from Kent County, 769 were from New Castle County, and 295 were from Sussex County. Overall, the unweighted distribution was within 1% of the households reported in the 2006 American Community Survey (ACS). Female respondents comprised 62% of the sample, which is somewhat higher than what would have been expected from a random sample (52%). Respondents who were 65 years of age or older accounted for nearly 24% of the sample in contrast to 12% reported by the

ACS. Conversely, respondents in the 18-24 and 25-35 year-old sub-populations were under-represented in the sample, with 18-24 year olds comprising a scanty 4% compared to the 13% reported by the ACS, and 25-34 year-olds comprising 12% of the survey sample compared with 18% reported by the ACS. To account for these differences, the data were weighted to reflect the number of adults by age, gender, and county within the state's estimated population. The analyses presented in this document were conducted utilizing the weighted data so that the sample data more accurately correspond to the state population. The final sample size was 1,278. Twenty two of the respondents did not supply critical demographic information required for weighting the data and were thereby excluded from the study.

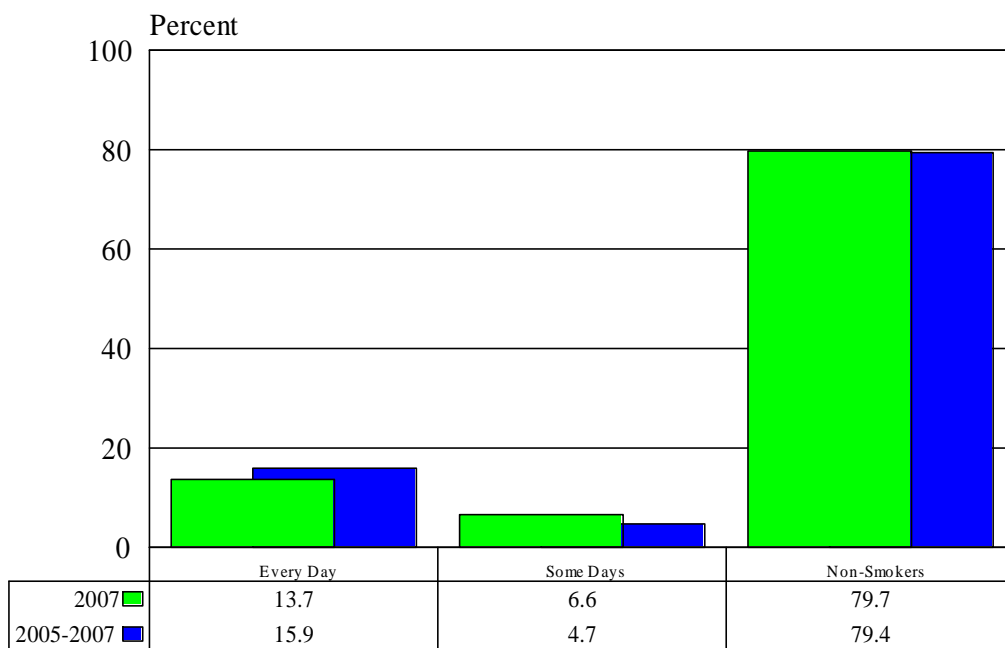
Given the sample size of 1,278 and assuming that only sampling error is at issue, the confidence interval around the estimates for the full sample using a yes-no response will average $\pm 2.2\%$ at the 95% confidence level. Since the sub-sample of smokers is substantially smaller, the confidence intervals will average $\pm 5.6\%$. For county level analysis, there will be substantial differences in the results since the study calls for a simple random sample of the state. In Kent County the confidence interval for a yes-no response at the 95% confidence level is $\pm 5.9\%$. Comparable intervals for New Castle and Sussex counties are $\pm 3.2\%$ and $\pm 5.2\%$ respectively. Finally, there are situations where there may be more than two response categories such as yes, no, and maybe. In this case the confidence intervals will expand by about 11%.

This report has three major sections following this brief introduction. In the first section, the current status of smoking in Delaware is addressed. Information about exposure to second-hand smoke is discussed in the next section. Finally, the third section focuses on data gathered about the public's awareness of the current media campaign and reaction to tobacco advertisements. The report concludes with some general observations gleaned from the results of the 2007 survey.

Smoking in Delaware

Respondents were asked how often they currently smoked. This question separates people into one of three groups: (1) every day smoker, (2) some day smoker, and (3) current non-smokers. The results are summarized in Figure 2-1.

Figure 2-1
Frequency of Smoking



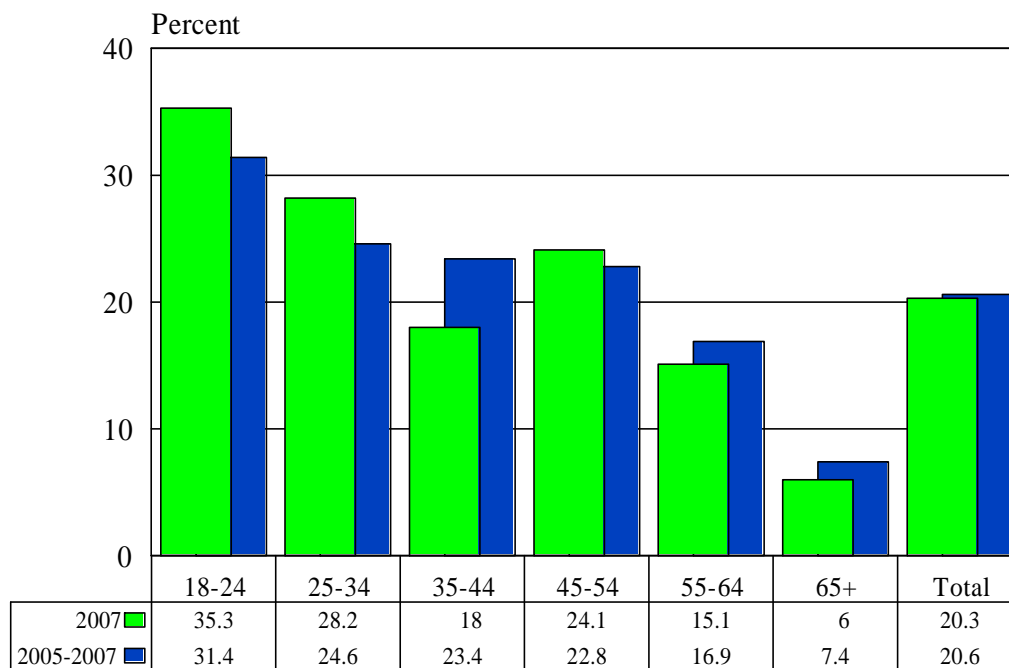
Source: Center for Applied Demography & Survey Research, University of Delaware

The figure shows that 20.3% of adult Delawareans currently smoke. This proportion is not significantly different from the official 2007 prevalence of 18.9% prevalence reported by BRFSS. Of those that are smokers today, about 80% smoke every day (90,000). After examining the distribution of those that smoke on “some days” (44,000 adults), these smokers are fairly evenly split between those that smoke about every other day and those that smoke less frequently, e.g. once or twice a week. Overall, the 2007 data are slightly lower than the three-year average (2005-2007)¹ indicating a slight decline in the percentage of smokers in the most recent survey.

¹ Data were aggregated from the last three Adult Tobacco Surveys (2005, 2006, and 2007) to produce a very stable estimate to compare against the current year. These estimates are labeled 2005-2007 in the tables.

One useful way of looking at the prevalence of smoking is to examine the data using the demographic characteristics of the respondents. The first characteristic of interest is displayed in Figure 2-2 below, namely prevalence of smoking by age group. In general, smoking declines with age. The 2007 data for the two youngest age groups is higher than the 3-year average in contrast to the 2006 survey. This finding is most likely due to random variation.

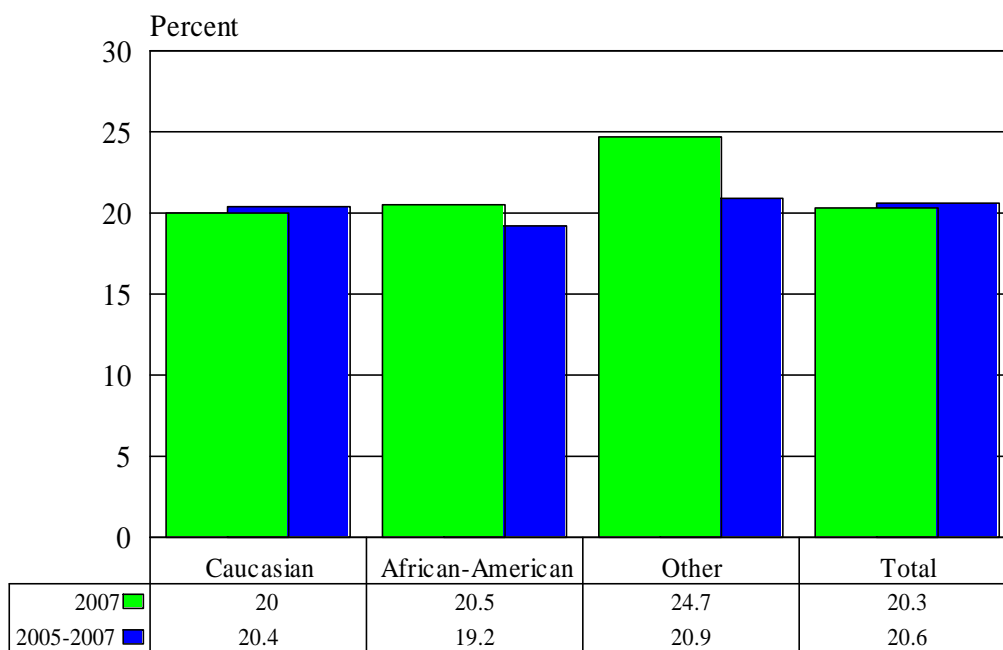
Figure 2-2
Percentage Smoking
by Age Group



Source: Center for Applied Demography & Survey Research, University of Delaware

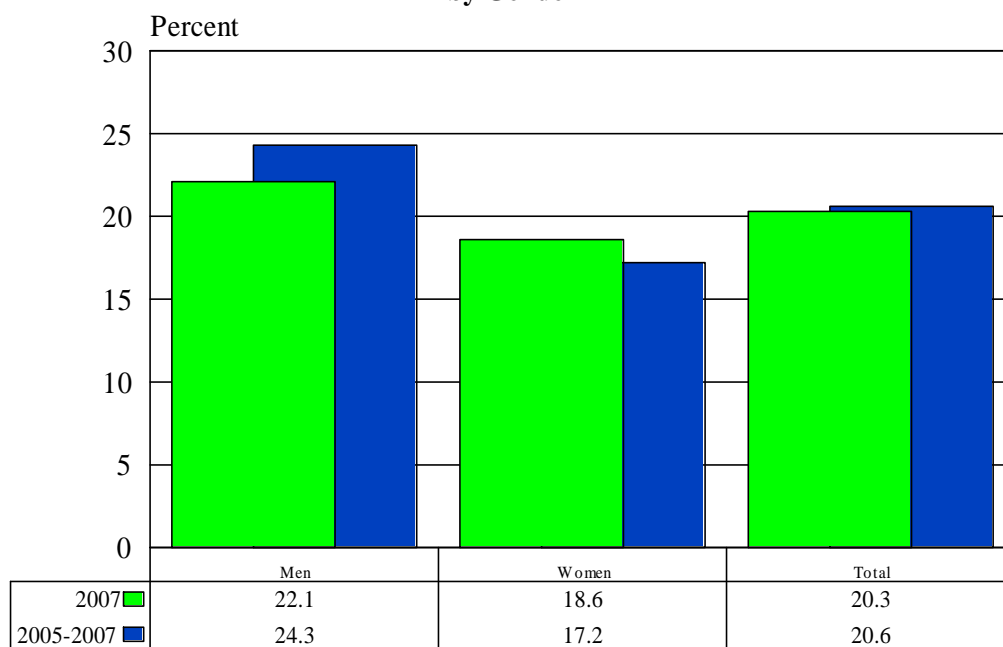
The next two charts, Figure 2-3 and Figure 2-4 below, address the relationship between smoking and race and gender, respectively. Both trend data and the most recent survey indicate that smoking rates for African Americans were statistically equivalent to that of Caucasians. Other includes Asian, American Indian, and unspecified race.

Figure 2-3
Percentage Smoking by Race



Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 2-4
Percentage Smoking by Gender

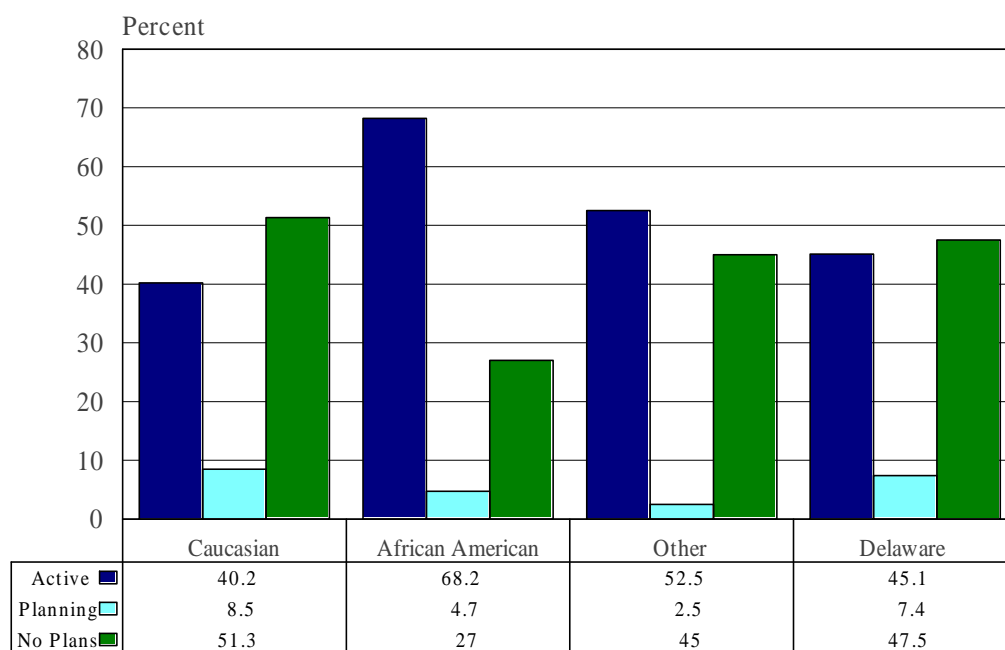


Source: Center for Applied Demography & Survey Research, University of Delaware

Although Figure 2-4 shows a difference of 3.5 percentage points between the smoking rates of men and women, this difference is not statistically significant. Nevertheless, the current estimate for men below the 3-year trend line seems to indicate reduced smoking among Delaware’s adult male population. Similarly, the current estimate for women above the 3-year trend line suggests that an increase in smoking is occurring among Delaware’s adult female population.

Among the population of smokers, there is always a number who are in the process of quitting or who plan to quit smoking in the near future. In the 2005-2007 trend data shown below (Figure 2-5), African American smokers were substantially more likely to respond that they were actively quitting smoking when compared with Caucasians. The 2007 data reflect that the percentage of Caucasians (48.1%) and African Americans (53%) who are actively trying to quit is essentially the same.

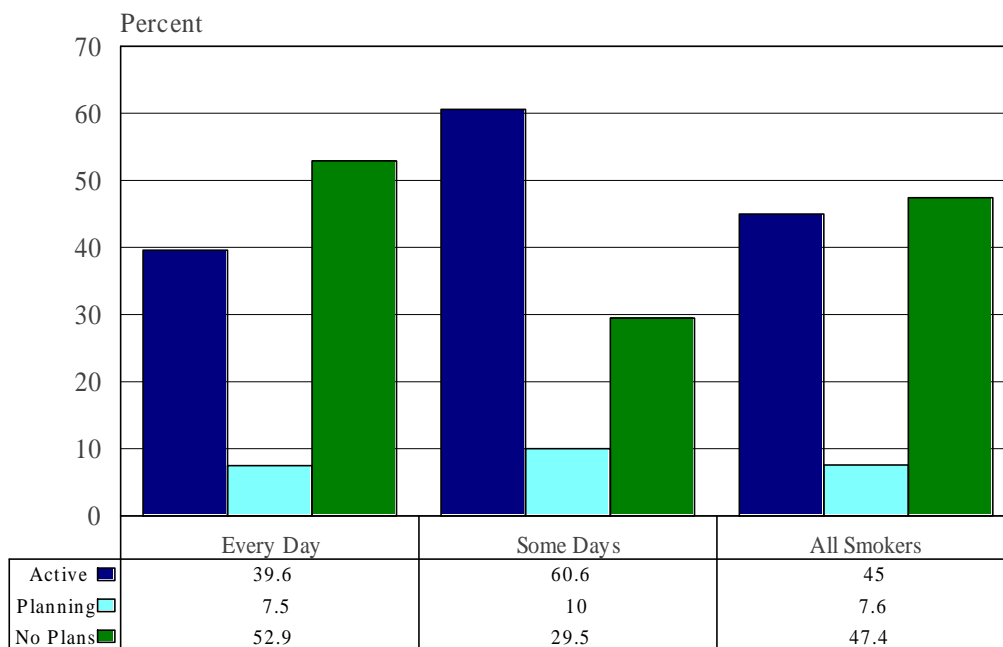
Figure 2-5
Planning or Actively Trying to Quit Smoking
by Race in 2005-2007



Source: Center for Applied Demography & Survey Research, University of Delaware

The data displayed in Figure 2-6 show that “every-day” smokers (48.1%) are significantly less likely to say that they are trying or going to try to quit smoking in the next 30 days than “some-day” smokers (70.6%). “Some-day” smokers are clearly in this status because they are actively trying to quit as opposed to just planning to quit. The results of the 2007 survey suggest that the percentage of smokers actively trying to quit is increasing; in 2007, approximately 51% of all smokers were actively trying to quit.

Figure 2-6
Planning or Actively Trying to Quit Smoking
by Frequency of Smoking in 2005-2007

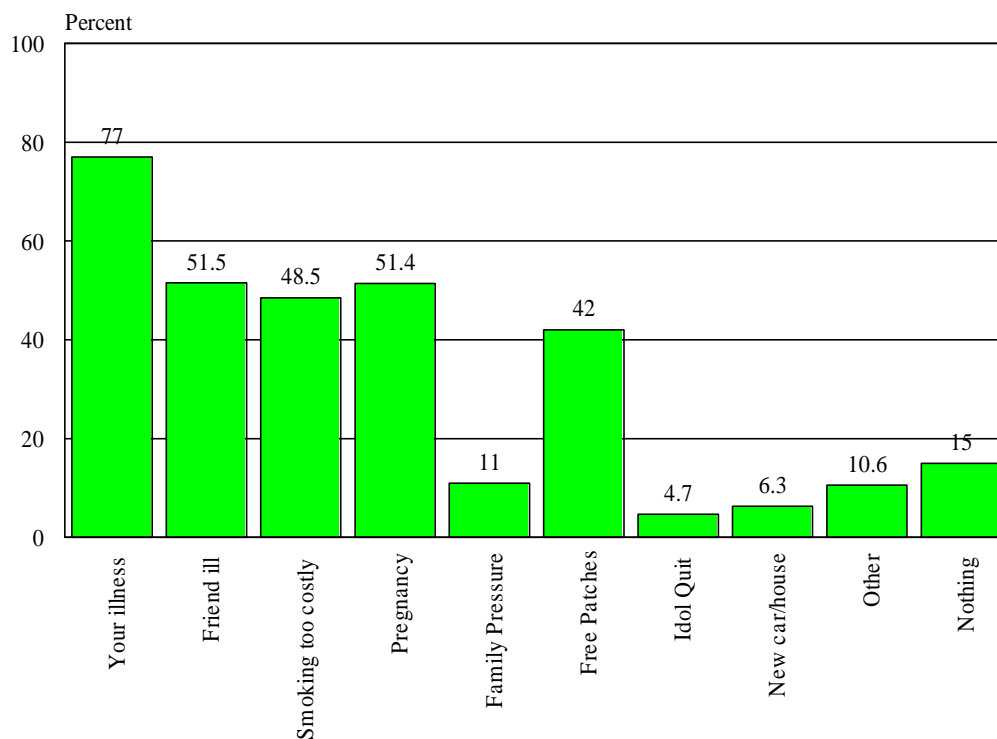


Source: Center for Applied Demography & Survey Research, University of Delaware

In 2007, current smokers who were not actively trying to quit and who did not plan to quit within the next 30 days were asked if any of a series of conditions would encourage them to stop smoking. Their answers are summarized in Figure 2-7 below.

Figure 2-7 clearly shows that smoking-related illness of self or someone close to the smoker is the strongest motivation for quitting smoking. Pregnancy is also a consideration. Fifty-one percent of smokers who are not trying to quit said they would consider quitting if they or someone they live with became pregnant. Cost is also a motivator. If the cost of cigarettes became too expensive, approximately 49% of smokers who are not already trying to quit say they would be motivated to quit. Offering free patches or gum, both of which normally would be an expense, are seen as motivational tools. Eleven percent or fewer of this group indicated that other factors such as “pressure from family or friends” or “purchase of a new home or car” would motivate them to consider quitting. Fifteen percent of smokers who are not already trying to quit reported that “nothing would make them quit”.

Figure 2-7
Which Conditions Would Motivate You to Stop Smoking?

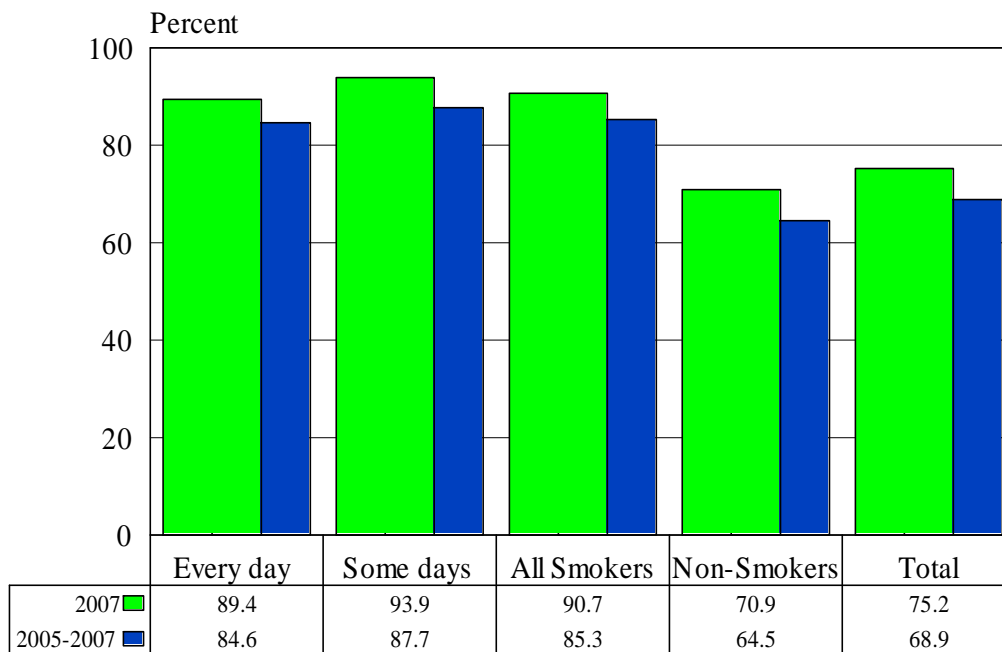


Source: Center for Applied Demography & Survey Research, University of Delaware

Respondents were also asked if their health insurance or their prescription benefits would help defray the cost of tobacco cessation services/products. Less than 25% of smokers were confident about either and 40% of smokers simply had no knowledge about their coverage.

One of the tools used in the program to reduce smoking in Delaware is the “Quitline”. It is a service provided through a toll-free number designed to assist those who would like to stop smoking. Figure 2-8 shows that more than 90% of smokers, the primary target for this service, are aware of the Quitline. All of the measurements are higher than those observed in the 2005-2007 average.

Figure 2-8
Aware of “Quitline” Message
by Frequency of Smoking



Source: Center for Applied Demography & Survey Research, University of Delaware

Even from this brief look at smoking in Delaware, as derived from the survey, it is possible to make several observations. First, the results of the 2007 survey reflect that almost half (48.3%) of all smokers (including every day and some-day smokers) are trying to quit smoking. Some-day smokers comprise nearly a third (32.5%) of all smokers, and are nearly twice as likely as every-day smokers to be trying to quit (69% vs 38%).

The second point is that 91% of smokers are aware of the Quitline. Awareness of the Quitline program has also increased over the last three years in all categories. It is interesting to note that smokers as a group are more aware of the Quitline than non-smokers. These results are positive and reflect that the State’s efforts to raise awareness about the Quitline through various media outlets have been successful and are effectively reaching the target group for these services.

The 2007 survey results show that while about 50% of adults have tried smoking (to the level of 100 or more cigarettes) at some point during their lives, only 20% are current smokers. Further reductions in the smoking prevalence are most likely to come from individuals who are actively trying to

quit or planning to quit during the next 30 days. If just 20% of this “ready to quit” are successful in quitting during the next year, smoking prevalence will be reduced to 18.1% in 2008.²

Promising populations to target for smoking cessation interventions are some-day smokers and young adults, ages 18-24. More than 2/3 of these population sub-groups have indicated that they are actively quitting or are planning to quit smoking within 30 days. Strategies that are most likely to catch the attention of smokers who are currently not motivated to quit are those that focus on the health consequences of tobacco use, raising the price of tobacco products, and providing free cessation products.

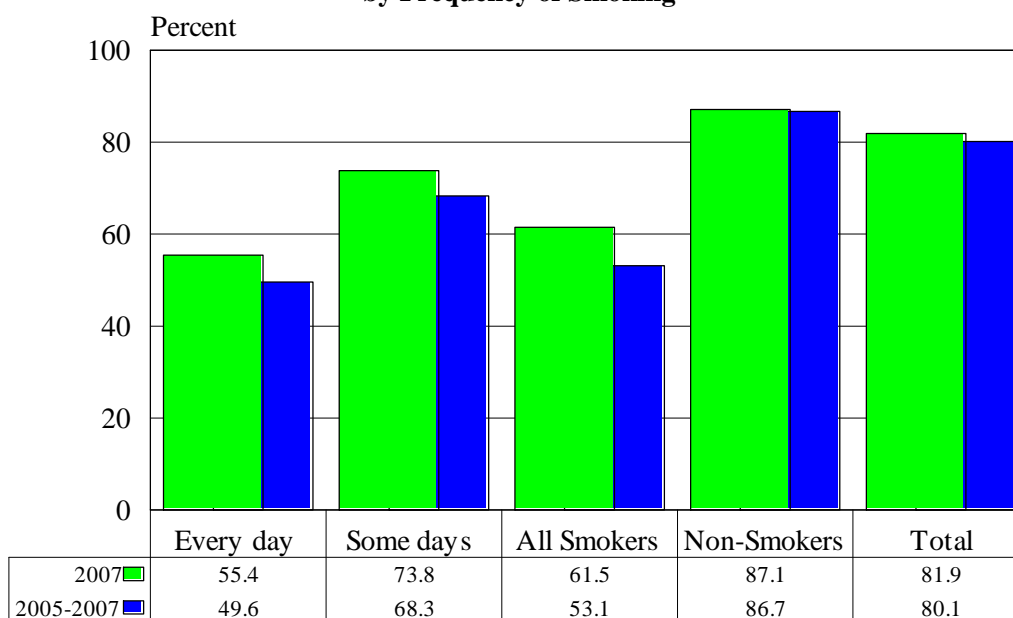
In the next part of this report, the focus will shift to second-hand smoke and the interaction of non-smokers with the smoking environment.

² The calculation of the 2008 smoking prevalence projection is: (Current Prevalence)- (Annual quit rate estimate)(% adult population who are everyday smokers who are ready to quit + % adult population who are some day smokers who are ready to quit) = (.203) – (.20)((.471*.137) + (.706*.066)).

Second-Hand Smoke

During the past decade, health agencies have focused attention on the prevalence and health risks of second-hand smoke in work places, homes, and public facilities. In the past several years the focus has been on developing policies that protect employees and the public in places such as restaurants, nightclubs, bars and casinos. The Delaware Clean Indoor Air Act that went into effect on November 27, 2002 prohibiting smoking indoors in all public places and other places of work in the state has had a direct effect on exposure to second-hand smoke. This year's survey addressed exposure to second-hand smoke at home and in other areas not covered by the legislation. The key findings are provided in this section.

Figure 3-1
Percent with No Other Smokers at Home
by Frequency of Smoking



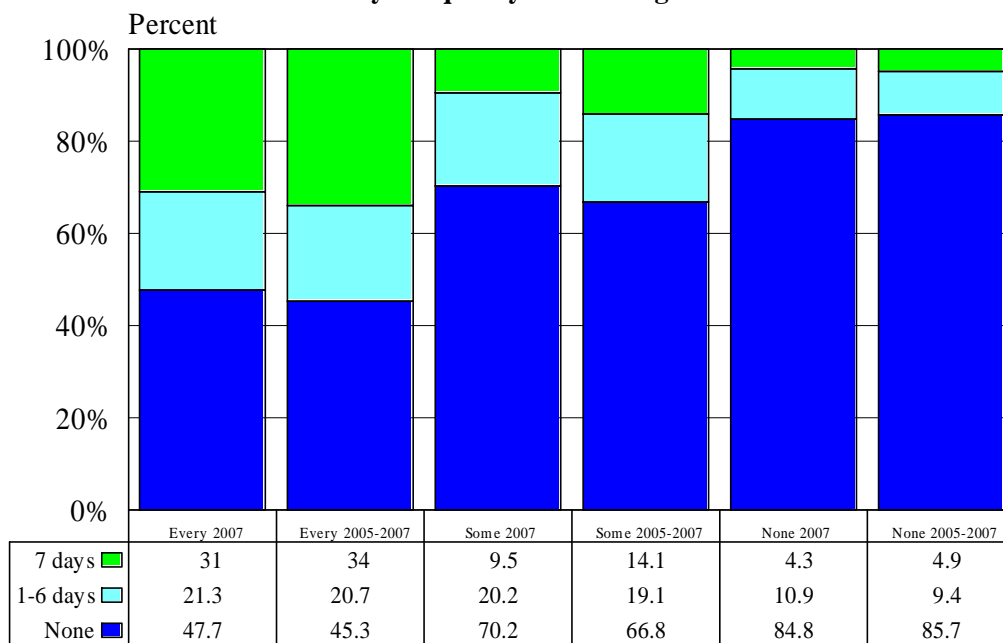
Source: Center for Applied Demography & Survey Research, University of Delaware

In Figure 3-1 above, 55% of everyday smokers are the only persons in their households that smoke while 87% of non-smokers live without a smoker in the household. Overall, just over 69.5% of the households in Delaware are smoke free, at least from the occupants, i.e. not considering visitors. All of these data are comparable to those in the 2005-2007 trend data.

In order to get some idea of the magnitude of the exposure, respondents were asked how many days per week they were exposed to other people's tobacco smoke. Those results are found in Figure 3-2 below. The figure shows that the 31% of "every day" smokers who live with another smoker are exposed to smoke seven days a week. This falls to 10% for "some day" smokers and 4% for non-smokers. Thus,

frequent smokers are also exposed to substantially higher amounts of second-hand smoke in addition to their own. The figure shows that these relationships are fairly stable across the three surveys.

Figure 3-2
Days per Week of Exposure to Other's Smoke at Home
by Frequency of Smoking



Source: Center for Applied Demography & Survey Research, University of Delaware

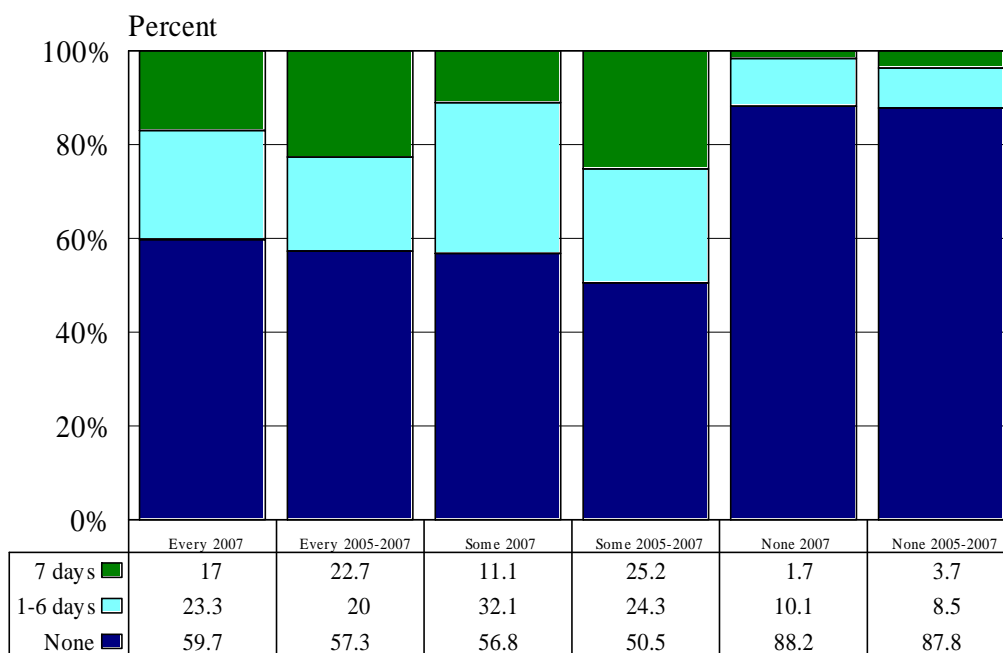
Using these data it is possible to arrive at an estimate of exposure to smoke in the home. The estimates are shown in Table 3-1, below. About 30% of the total population is exposed to smoke at home. This is similar to the estimate of 31% of the households that have someone who smokes.

Table 3-1
Upper Estimates of Exposure to Smoking at Home
by Age Group

| Age Group | Exposed | Not Exposed | Total | Percent Exposed |
|-------------------|---------|-------------|---------|-----------------|
| 0-4 | 18,000 | 39,000 | 57,000 | 32.0% |
| 5-9 | 15,000 | 40,000 | 55,000 | 26.7% |
| 10-14 | 16,000 | 40,000 | 56,000 | 29.4% |
| 15-17 | 9,000 | 28,000 | 37,000 | 24.8% |
| 18+ (non-smokers) | 68,000 | 457,000 | 525,000 | 12.9% |
| 18+ (smokers) | 134,000 | 0 | 134,000 | 100.0% |
| Total | 260,000 | 604,000 | 864,000 | 30.1% |

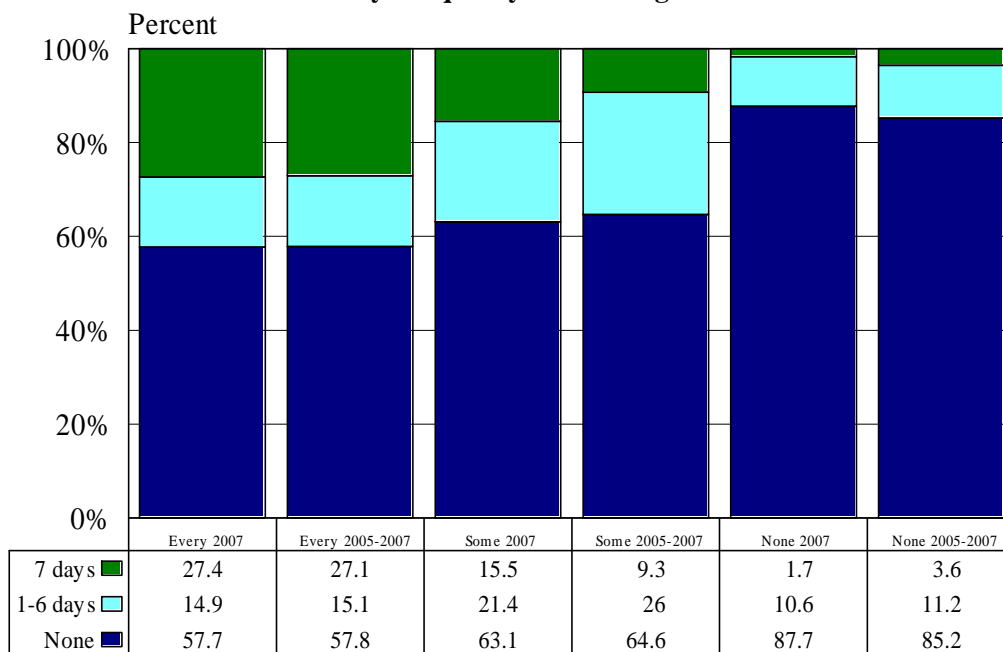
Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 3-3
Days per Week of Exposure to Smoke in a Motor Vehicle
by Frequency of Smoking



Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 3-4
Days per Week of Exposure to Other's Smoke at Work
by Frequency of Smoking



Source: Center for Applied Demography & Survey Research, University of Delaware

Respondents were also asked about the number of children in their households. Smokers are less likely to live alone and are slightly more likely to live with children (43%) than non-smokers (39%). In fact, some 58,000 children (29%) are likely to be exposed to second-hand smoke at home. However, all of these estimates should be considered as upper limits. Over half (53%) of all respondents who smoked said that they did not allow smoking in their home. Non-smokers were much more likely to rule out smoking at home (85%).

Respondents were asked if they were exposed to other people's tobacco smoke while in a motor vehicle. The results found in Figure 3-3 above indicate slightly lower levels of exposure than observed at home for everyday smokers and for non-smokers. For non-smokers the exposure is almost 4% lower in a vehicle than at home. Interestingly, some-day smokers face greater risk of exposure to others' second-hand smoke in a vehicle than at home.

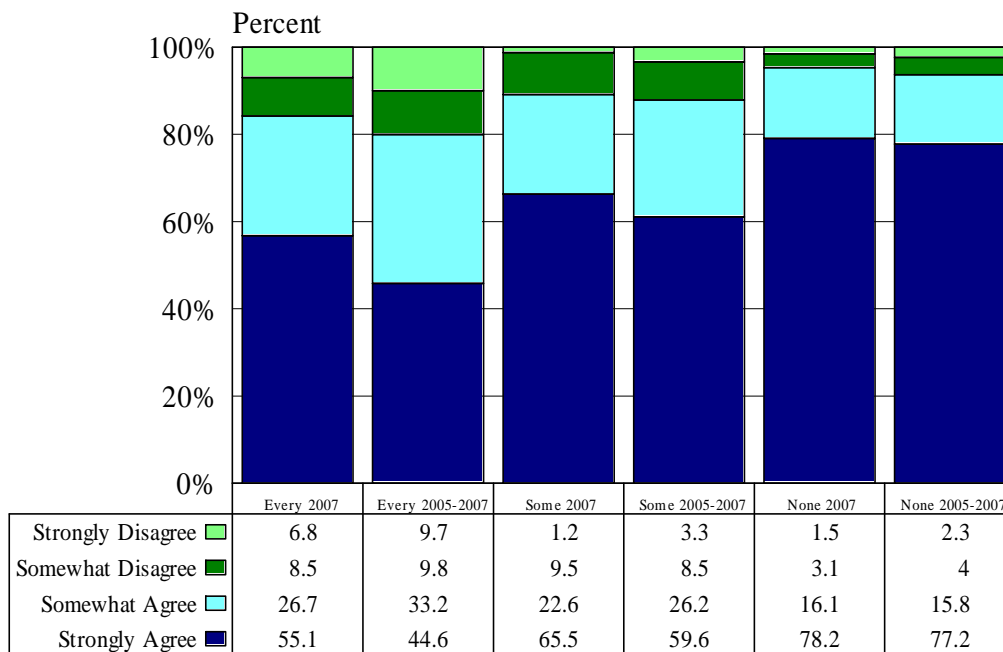
Another location where people can be exposed to second-hand smoke is at work. Respondents were asked how many days of the week they were exposed to other people's tobacco smoke at work. Eighteen percent of adults reported being exposed to other people's smoke at work in the past week. Of these, half were exposed in an outside work area, and another third were exposed from smokers near a building entrance. Smokers (40%) were much more likely than non-smokers (12%) to be exposed to second-hand smoke at work.

Figure 3-4 shows a decline in exposure to second-hand smoke at work for non-smokers in 2007 compared to the 3-year trend. In fact, non-smokers are more likely to encounter second-hand smoke at home than at work.³ Even so, the number of non-smokers who are exposed at work but not at home is estimated to be 52,000. This reduces the total number of people who are not exposed to second-hand smoke from 604,000 (see Table 3-1) to 552,000 or 64% of the population.

In addition to being asked about personal exposure to other people's tobacco smoke, respondents were asked if people should be protected from second-hand smoke. More than 95% of all non-smokers who participated in this survey agreed with the proposition, 86% of smokers also agreed. The 2007 estimate and the 2005-2007 time series are very close as shown in Figure 3-5 below.

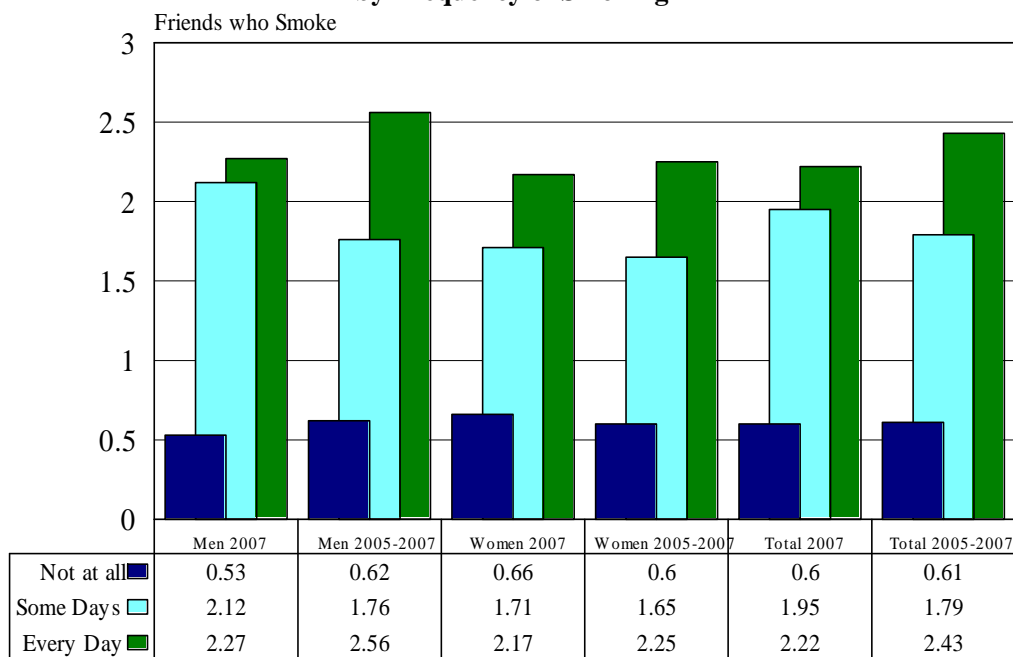
³ A substantial number of Delawareans work outside the state, work outdoors, or work at home. They would not be affected by the Clean Indoor Air Act.

Figure 3-5
People Should be Protected from Second-hand Smoke
by Frequency of Smoking



Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 3-6
Number of Friends Who Smoke (0-4)
by Frequency of Smoking



Source: Center for Applied Demography & Survey Research, University of Delaware

Smokers are more likely to have friends that smoke than non-smokers (see Figure 3-6 above). Smokers on average have 2.1 smoking friends compared to non-smokers who average 0.6 smoking friends. These findings vary little by gender and are consistent across all three years as is clearly shown in the graph.

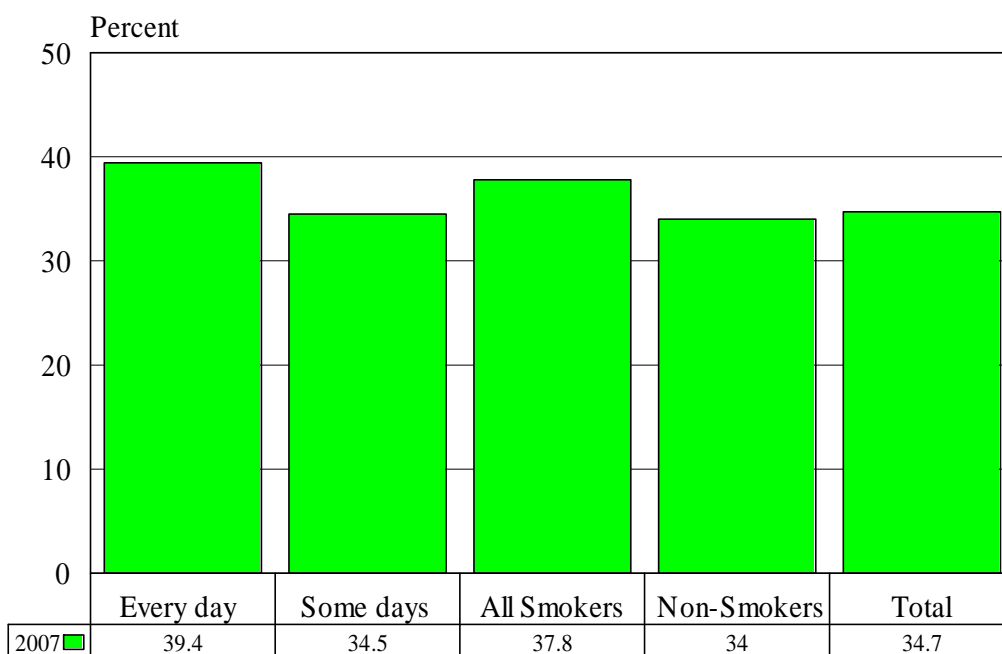
In summary, the data presented in this section show that a significant number of Delawareans are exposed to second-hand smoke at home, in a vehicle, or at work. Fortunately, both smokers and non-smokers are in agreement that people should be protected from second-hand smoke.

The next section deals exclusively with the tobacco media campaign that is intended to promote the Delaware Quitline service and to inform people about second-hand smoke.

Tobacco and the Media

The final objective of the Tobacco Attitudes and Media Survey was to assess the degree to which the current media program was reaching adult Delawareans. While awareness doesn't necessarily translate into action, it is a necessary first step. The survey is used to assess the visibility of the media campaign and to learn how people obtain information about health issues and services. Finally, the reaction of respondents to tobacco advertisements was addressed.

Figure 4-1
Seen or Heard Messages About Dangers of Indoor Smoke
by Frequency of Smoking

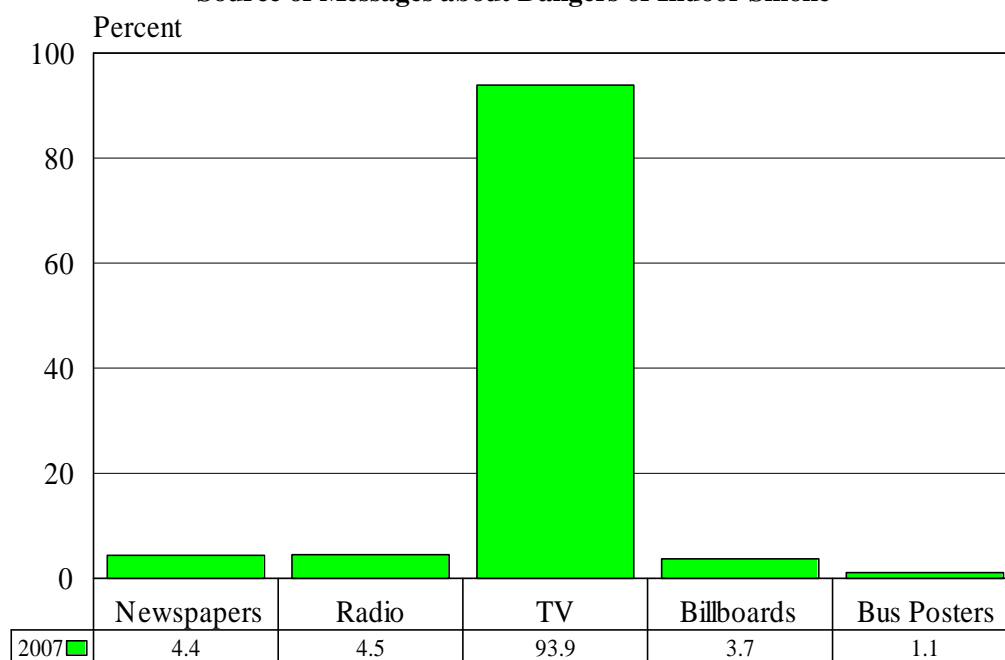


Source: Center for Applied Demography & Survey Research, University of Delaware

The program launched a social marketing campaign encouraging people not to smoke inside their homes because of the dangers of second hand smoke. More than 34% of all adult Delawareans have seen or heard the messages during the past month (see Figure 4-1 above). This finding applies almost uniformly across smokers and non-smokers alike.

While the respondents reported hearing the messages about smoking indoors from a variety of sources, almost all reported hearing the message on television (see Figure 4-2, below). The rest of the sources, with the exception of bus posters, were reported by about 5% of the sample. The pervasiveness of television explains this differential. It also suggests that while the costs are higher, television advertising is the most effective means of reaching most Delawareans. Slightly less than 4% of those that heard the messages heard them from a source other than television, while about 89% heard the information only on television. More than 25% of those who viewed the advertisement and currently allow some smoking in their home considered changing their current policy.

Figure 4-2
Source of Messages about Dangers of Indoor Smoke



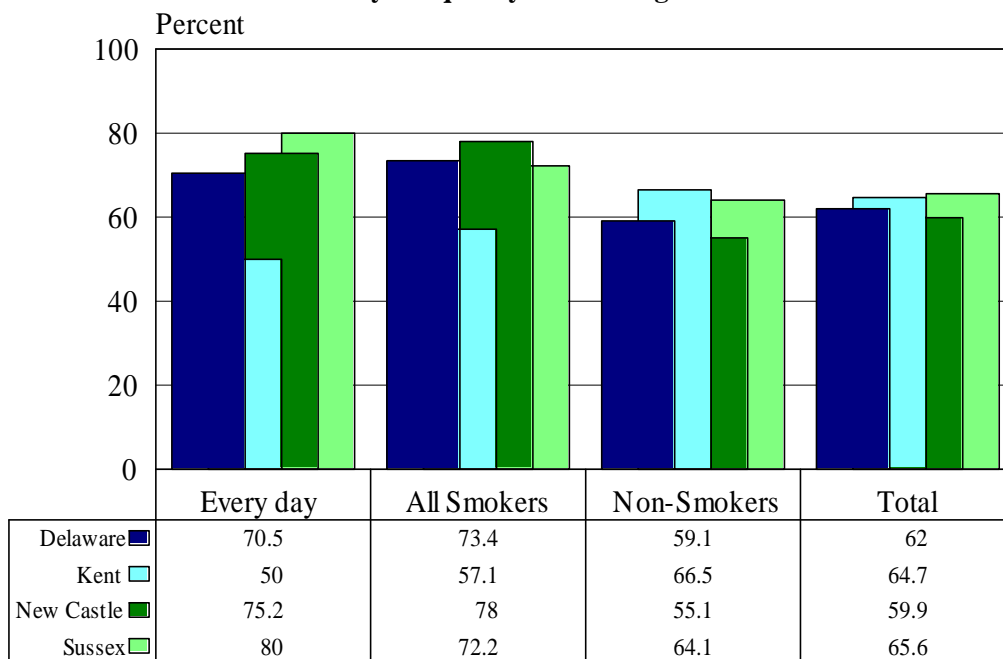
Source: Center for Applied Demography & Survey Research, University of Delaware

In the first section of this report, it was reported that more than 75% of adult Delawareans had heard of the Delaware Quitline. Furthermore, “every day” smokers were the most familiar with the program. Prior to the survey, the program launched a “no nagging, just help” campaign aimed at encouraging smokers to seek assistance with quitting. The messages aired on television, radio, newspapers, magazines and billboards and included side by side taglines for the Quitline and Quitnet. One additional question was asked about the Quitline later in the survey. Respondents were asked specifically if they had seen or heard advertisements about the Delaware Quitline in the past month.

The results are found in Figure 4-3 below. The results in Fig 4-3 show that 62% of all adults and 73.4% of all smokers had seen or heard the specific campaign message. Residents of Kent and Sussex

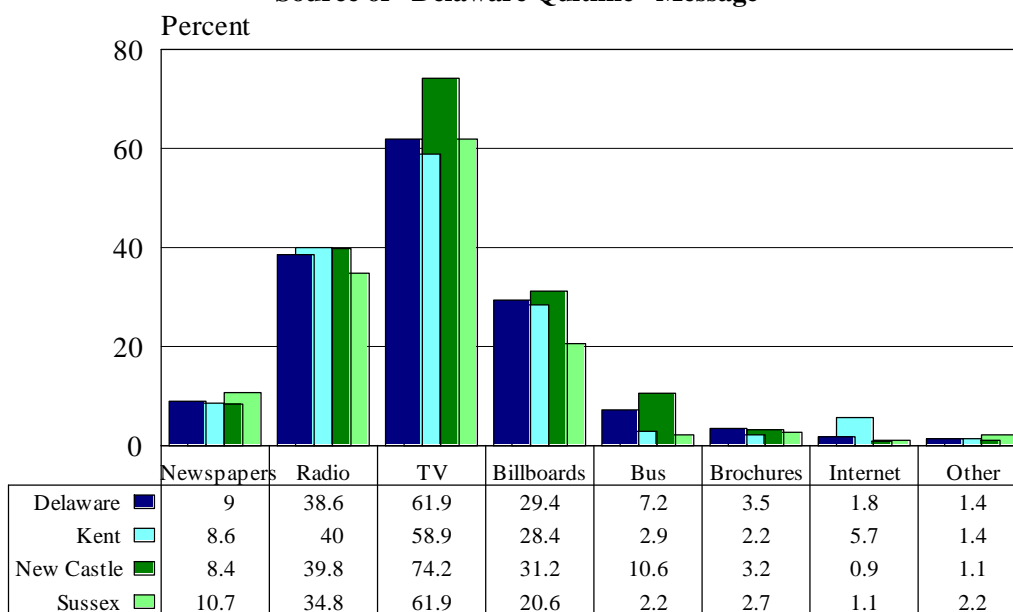
counties were more likely to have seen that specific material than those living in New Castle County. Overall, 72.2% of all smokers reported hearing the message.

Figure 4-3
Heard “Delaware Quitline” Message
by Frequency of Smoking



Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 4-4
Source of “Delaware Quitline” Message

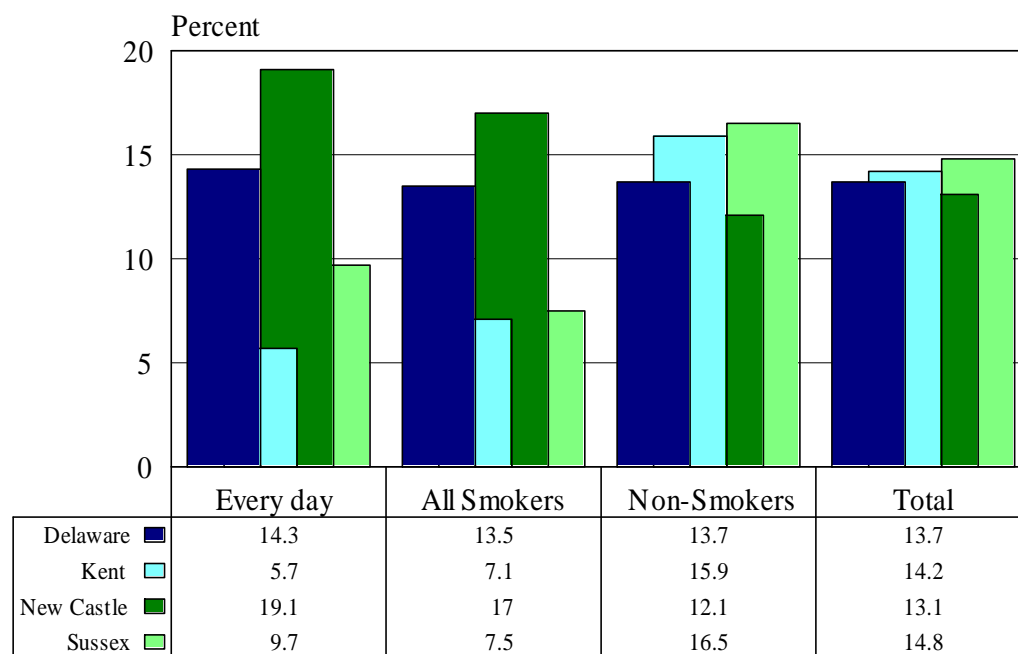


Source: Center for Applied Demography & Survey Research, University of Delaware

Respondents who had heard or seen the “Delaware Quitline” message, were asked where they had heard or seen the material. Although television was the most likely source as is shown in Figure 4-4 above, radio (40%) and billboards (30%) were also identified as significant sources.

Respondents were also asked if they had seen or heard advertisements about the “Delaware Quitnet” in the past month. The results showed that the message reached only about 14% of the population statewide, with no significant differences among counties (Figure 4-5 below).

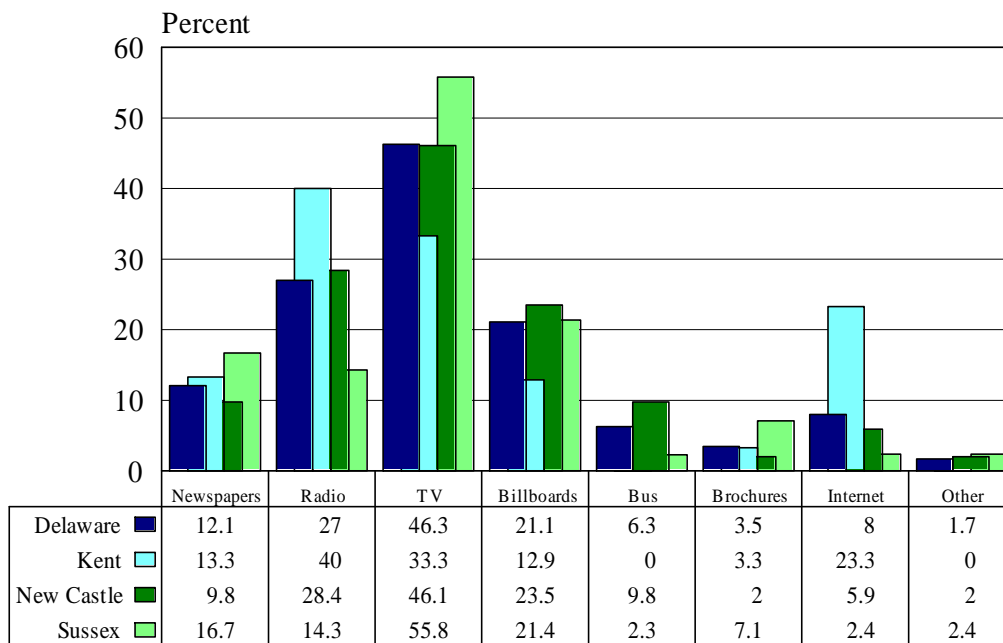
Figure 4-5
Heard “Delaware Quitnet ” Message
by Frequency of Smoking



Source: Center for Applied Demography & Survey Research, University of Delaware

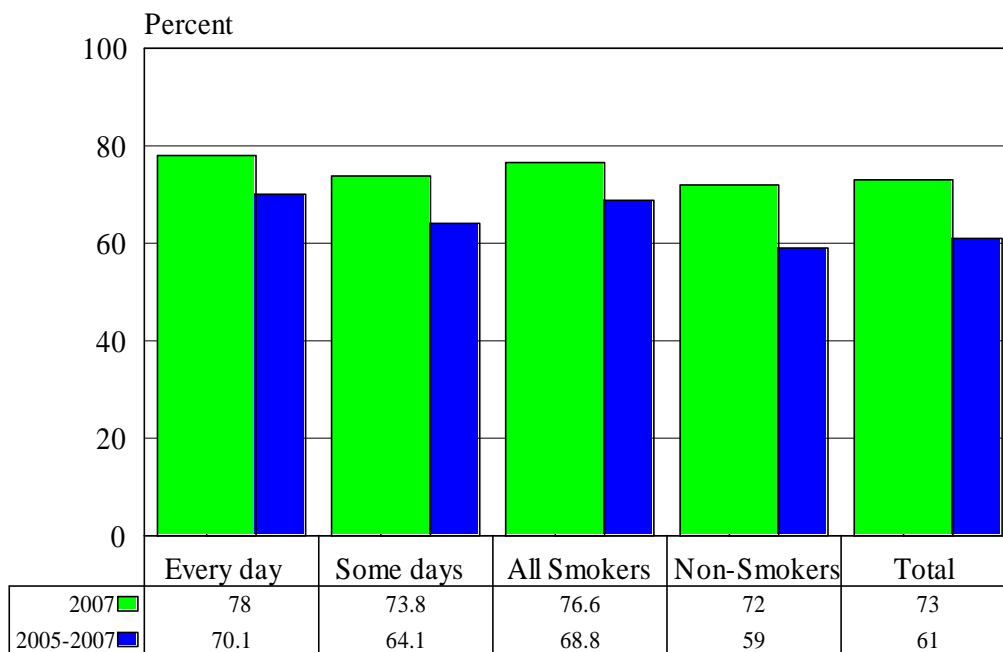
Respondents' who had heard or seen the “Delaware Quitnet” message, were asked where they had heard or seen the material. Television was, once again, the most likely source as is shown in Figure 4-6 below.

Figure 4-6
Source of “Delaware Quitnet” Message



Source: Center for Applied Demography & Survey Research, University of Delaware

Figure 4-7
What Percent of Delaware’s Adults Think
That 30% or More of Delaware’s Adults Smoke?



Source: Center for Applied Demography & Survey Research, University of Delaware

In one final question respondents were asked to estimate the percentage of adult Delawareans that smoke. This survey estimated that percentage to be 20%. In Figure 4-7, above, it is clear that the respondents have a different perception.

Although only 20% of adult Delawareans currently smoke, more than 70% of the respondents think that 30% or more of the adult population smokes, while less than 5% underestimate smokers. Smokers are the furthest off the mark suggesting that they think their numbers are much larger than they actually are. It's important to remember that smokers are more likely to live with someone who smokes and has many more friends that smoke. Men and women were equally off the mark. It may be useful to consider adding the correct percentage of 20% to the current educational campaign.

Finally respondents were asked to express an opinion about four smoking-related issues. First, 75% of non-smokers said they minded being around people who were smoking. Second, 32% of the respondents and 62% of smokers mistakenly thought that smoking helped to relieve stress. Third, almost 95% of the respondents thought smoking during pregnancy may harm the baby. Lastly, 86% of the respondents knew that a person who smokes is more likely to get heart disease.

Observations

This research had three primary objectives. First, the survey was to measure the prevalence of smoking within the state. Second, it was to gather information about exposure to second-hand smoke. Finally, it was to measure both the reach of the media campaign that stresses the danger of second-hand smoke and attitudes toward tobacco company advertising. All three objectives were accomplished. The highlights from the 2007 survey are provided below:

- Just over 20% of adult Delawareans reported smoking either every day or some days.
- The smoking rates of men 22% and women (18%) are not significantly different.
- Nearly 50% of all adult Delawareans have smoked at some point in their lives, but only 20% are currently smoking.
- Of those that are currently smoking, more than half (53%) are trying to quit or have plans to quit. Among “every day” smokers 47% are trying or planning to quit. Those most likely to be planning to quit smoking are the “some day” smokers (70%).
- More than 90% of “every day” smokers reported awareness of the Delaware Quitline. This indicator alone would suggest that the media campaign for cessation is meeting its primary objective.
- Almost 48% of “every day” smokers live in a house where one or more other people smoke. This contrasts with 15% for people who report being non-smokers.
- Almost 29% of all children live with one or more smokers, and are therefore at greater risk of exposure to second-hand smoke at home.
- More than 15% of all adult non-smokers are exposed to second-hand smoke at home.
- About 18% of adult Delawareans are exposed to second-hand smoke at work. However this exposure rate has fallen from 32% in 2002. The vast majority of exposure is in outdoor work sites and entry-ways, although some exposure at indoor settings is still occurring, despite the state law. Exposure at work is far higher for smokers than for non-smokers.
- An additional 52,000 people are exposed to second-hand smoke at work that are not exposed at home.
- Smokers are more likely than non-smokers to live with others who smoke, and have close friends that smoke. They face greater exposure to smoke from other people’s cigarettes at home, while commuting in a private vehicle and at work.
- About 90% of adult Delawareans feel that people should be protected from second-hand smoke.
- About 35% of adult Delawareans reported seeing or hearing about the dangers of indoor smoke.
- Almost 62% reported hearing/seeing the Delaware Quitline message in the past month.

- The principal sources of this information were television, radio, and billboards.
- Almost 14% reported hearing/seeing the new Delaware Quitnet message in the past month.
- The principal sources of this information were television, radio, and billboards.
- In general, people tend to over estimate the proportion of adult Delawareans who smoke. More than half of the population and substantially more smokers think that more than 30% of adult Delawareans smoke when the actual percentage is 20%.

APPENDIX

TOBACCO ATTITUDES AND MEDIA SURVEY 2007

Questionnaire

**TOBACCO ATTITUDES AND MEDIA SURVEY
2007**

Hello, I'm calling from the University of Delaware. We are conducting a survey of Delaware residents on behalf of the Delaware Division of Public Health about tobacco-related behavior, attitudes and issues. We are conducting a survey of Delaware residents for the Delaware Education Research and Development Center to find out how the citizens of Delaware feel about the public education system. Your phone number was chosen randomly by a computer to be included in our study.

We really appreciate your participation in this study. The survey will last only about ten minutes. Your answers will be completely confidential and no response will be identified with you personally. You may refuse to answer any question in the survey. The interview may be monitored for quality assurance purposes, but all information obtained in this study will be confidential.

S1) In what county do you live?

Kent
New Castle
Sussex

SECTION A

QA1) Have you smoked at least one hundred cigarettes in your entire life?

Yes
No
DK
Refused

QA2) Do you now smoke cigarettes every day, some days, or not at all?

Every day
Some days
Not at all [Skip to A8]
DK
Refused

If everyday:

QA2a) On average, how many cigarettes do you smoke a day?

Enter value _____
DK
Refused

If some days:

QA2b) In the past week, on how many days did you smoke?

Enter value _____
DK
Refused

QA2c) On the days that you smoked, what is the average number of cigarettes you smoked per day?

Enter value _____
DK
Refused

QA3) How long have you smoked cigarettes?

Under 6 months
6 months to a year
1 to 2 years
2-10 years
more than 10 years
DK
Refused

QA4) In the past 6 months, would you say you have been smoking . . . :

Fewer cigarettes [Go to A5]
About the same number [Skip to A6]
More cigarettes [Skip to A6]
DK
Refused

QA 5) Why are you smoking less now?

Personal Health
Cost
Policies that restrict smoking [Do not read choices]
Family/friends health
Pressure from family/friends
Pregnant
Role model
Trying to Quit [If this is reason, code A6 “yes” without reading.]
Other
DK
Refused

QA 6) Are you actively trying to quit smoking or to stop using any tobacco product?

Yes [Go to A8]
No
DK
Refused

QA 7) Are you planning to stop smoking or to stop using any other tobacco product within the next thirty days?

Yes [Go to A8]
No
DK
Refused

If no to above question:

QA7a) Would any of the following motivate you to think about quitting? *[Check a response for each item below]*

Yes No Don't Know Refused or Not Applicable

You were diagnosed with a major smoking-related illness such as heart attack, emphysema, or cancer.

Someone close to you had major smoking-related illness

If the cost of cigarettes became too expensive

If you or someone you live with became pregnant

Pressure from family or friends

If someone offered you free nicotine patches or gum

Your favorite singer, actor, athlete or other idol quit smoking

You purchased a new car or home.

Other _____

[INTERVIEWER: If no to all above, read:]

Nothing would motivate me to think about quitting

QA8) Does your health insurance cover the cost of services to help quit smoking?

Yes

Yes, Partly

No

I don't have health insurance

DK

Refused

QA9) Does your prescription benefit cover the cost of tobacco cessation products

Yes

Yes, Partly

No

I don't have prescription benefits

DK

Refused

QA10) Do you know about the Delaware "Quitline" program with a toll-free number to help quit smoking?

Yes

No

DK

Refused

SECTION B

ENVIRONMENTAL TOBACCO SMOKE (ETS) EXPOSURE

QB1) NOT including yourself, how many members of your household currently smoke?

Enter a value _____

DK

Refused

QB2) During the past SEVEN DAYS, when you were at HOME, how many days were you exposed to other family members' or visitors' tobacco smoke?

Enter a value _____

DK

Refused

QB3) Which statement best describes the rules about smoking inside your home?

Please Read:

- Smoking is not allowed anywhere inside your home
- Smoking is allowed in some places or at some times
- Smoking is allowed anywhere inside the home
- OR
- There are no rules about smoking inside the home

Don't Read:

- Don't know/not sure
- Refused

QB4) During the past SEVEN DAYS, when you were in a motor vehicle, how many days were you exposed to other people's tobacco smoke?

- Enter a value
- DK
- Refused

QB5) During the past SEVEN DAYS, when you were at WORK, how many days were you exposed to other people's tobacco smoke?

- Enter a value
- DK
- Refused

QB5A) You said you were exposed to other's people smoke at work, was your exposure in Delaware?

- Yes [Go to QB5B]
- No [Go to QB6]
- DK [Go to QB6]
- Refused [Go to QB6]

QB5B) Was your primary exposure to other people's tobacco smoke...

Please read:

- In an outdoors work area
- From smokers near a building entrance
- Indoors
- At home because that is where I work
- Other_____
- DK
- Refused

QB6) How strongly do you agree or disagree with the following statement: "people should be protected from second-hand smoke". Do you . . .

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree
- DK
- Refused

Delaware's Clean Indoor Air Act –which prohibits smoking in indoor public places such as bars, restaurants and workplaces – is five years old. The purpose of the law was to protect Delaware residents from secondhand smoke.

QB7) Would you agree or disagree with the following statement: "The law has helped protect people from second hand smoke."?

- Strongly disagree
- Somewhat disagree
- Somewhat agree
- Strongly agree
- DK
- Refused

QB8) Would you say the overall impact of the Clean Indoor Air Act on your quality of life has been:

- Very positive
- Somewhat positive
- None/ No impact
- Somewhat negative
- Very Negative
- DK
- Refused

QB9) How many of your four best friends are smokers?

- Enter a value ____
- DK
- Refused

SECTION C

DEMOGRAPHICS

QC1) I just need to verify, are you male or female?

- Male
- Female
- Refused

QC2) Please tell me your age.

- Enter a value ____
- 99+
- Refused

QC3) Do you have children under 18 years of age, living in your household?

- Yes
- No (Skip to C5)
- DK (Skip to C5)
- Refused (Skip to C5)

QC4) How many children are there in this household under 18 that are . . .

- Less than 5 years old
- 5 to 9 years old
- 10 to 14 years old
- 15 to 17 years old
- Refused

QC5) What is the highest grade or year of school you have completed?

Eighth grade or less
Some high school (grades 9-11)
Grade 12 (High School grad or GED)
Some technical school
Technical school graduate
Some college
College graduate
Postgraduate or professional degree
Refused

QC6) Are you Hispanic or Latino?

Yes
No
Refused

QC7) How would you describe your race?

White
Black or African American
Asian/Pacific Islander
American Indian or Native American
Other
Mixed Race
Refused

QC7 OTHER) You said other Race. Please Specify.

Enter response_____

QC8) How long have you lived in Delaware?

All my life
Less than 12 months
1 - 2 years
3 - 4 years
5 - 9 years
10 or more years
DK
Refused

QC9) Is your annual household income from all sources?

Under \$15,000
\$15,000 to \$24,999
\$25,000 to \$34,999
\$35,000 to \$44,999
\$45,000 to \$54,999
\$55,000 to \$74,999
\$75,000 to \$99,999
\$100,000 or more
DK
Refused

QC10) Do you have more than one residential telephone number in your household?

Yes
No
DK
Refused

QC10 Value) If yes to QC10, how many residential (not business, computer or fax lines) telephone numbers do you have?

Enter a value ____

SECTION D MASS MEDIA AND TOBACCO

The next set of questions is about your exposure to media advertising related to tobacco. By media, we mean radio, television, newspapers and billboards.

QD1) In the past month, have you seen or heard any advertisements featuring people using a grill, lawn mower and car inside of a house?

Yes
No [Go to QD4]
DK [Go to QD4]
Refused [Go to QD4]

QD2) Where did you see or hear these messages? [*Check all that apply*]

Newspaper ads or special inserts
Heard radio ads
Seen TV ads
Billboards
Bus transit
Brochure

QD3) If smoking is currently allowed in your home, after seeing this advertisement did you consider not allowing smoking inside of your home?

Yes
No
NA

QD4) In the past month, have you seen or heard any advertisements promoting the Delaware Quitline ?

Yes
No (Skip to QD6)
DK (Skip to QD6)
Refused (Skip to QD6)

QD5) Where have you seen or heard it? On a . . . [*check all that apply*]

Billboard
Brochure
Bus transit
Newspaper ads or special inserts
TV
Radio
Internet
Other

QD5Other) If said OTHER to QD4: Where did you see or hear about it?

Enter response _____

QD6) In the past month, have you seen or heard any advertisements promoting the Delaware Quitnet ?

- Yes
- No (Skip to QD8)
- DK (Skip to QD8)
- Refused (Skip to QD8)

QD7) Where have you seen or heard it? On a . . . [check all that apply]

- Billboard
- Brochure
- Bus transit
- Newspaper ads or special inserts
- TV
- Radio
- Internet
- Other

QD7Oth) If said OTHER to QD4: Where did you see or hear about it?

Enter response _____

QD8) When you look for information about health or health services, what source do you use most often?

- Television
- Radio
- Newspaper
- Magazines
- Internet
- Health care provider (This includes for example, Doctor, Dentist, Nurse, Pharmacist, Acupuncture provider, Chiropractor etc.)
- Other
- DK
- Refused

QD9) In your opinion, what percent of Delaware adults currently smoke cigarettes:

- Enter Percentage _____%
- DK
- Refused

Do you agree or disagree with the following statements:

QD10a) Smoking by a pregnant woman may harm the baby.

- Agree
- Disagree
- Don't Know
- Refused

QD10b) I personally don't mind being around people who are smoking?

- Agree
- Disagree
- Don't Know
- Refused

QD10c) Cigarette smoking helps reduce stress?

Agree
Disagree
Don't Know
Refused

QD10d) A person who smokes is more likely to get heart disease than a person who doesn't smoke?

Agree
Disagree
Don't Know
Refused