Tobacco Attitudes and Media Survey
2004

prepared for the
Division of Public Health,
Delaware Health and Social Services

by
Edward C. Ratledge

Center for Applied Demography & Survey Research
College of Human Services, Education and Public Policy
University of Delaware
Newark, Delaware 19716
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).
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Tables</td>
<td>iv</td>
</tr>
<tr>
<td>List of Figures</td>
<td>v</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Smoking in Delaware</td>
<td>3</td>
</tr>
<tr>
<td>Second-Hand Smoke</td>
<td>10</td>
</tr>
<tr>
<td>Tobacco and the Media</td>
<td>18</td>
</tr>
<tr>
<td>Observations</td>
<td>23</td>
</tr>
<tr>
<td>Appendix</td>
<td>25</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>3-1</td>
<td>11</td>
</tr>
<tr>
<td>Upper Estimates of Exposure to Smoking at Home</td>
<td>.................................</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1</td>
<td>Frequency of Smoking</td>
<td>3</td>
</tr>
<tr>
<td>2-2</td>
<td>Percentage Smoking by Age Group</td>
<td>4</td>
</tr>
<tr>
<td>2-3</td>
<td>Percentage Smoking by Race</td>
<td>5</td>
</tr>
<tr>
<td>2-4</td>
<td>Percentage Smoking by Gender</td>
<td>5</td>
</tr>
<tr>
<td>2-5</td>
<td>Planning to Quit Smoking by Race</td>
<td>6</td>
</tr>
<tr>
<td>2-6</td>
<td>Planning to Quit Smoking by Frequency of Smoking</td>
<td>7</td>
</tr>
<tr>
<td>2-7</td>
<td>Had Seen “Quitline” Advertisement by Frequency of Smoking</td>
<td>8</td>
</tr>
<tr>
<td>3-1</td>
<td>Percent with No Other Smokers at Home by Frequency of Smoking</td>
<td>10</td>
</tr>
<tr>
<td>3-2</td>
<td>Days per Week of Exposure to Other’s Smoke at Home by Frequency of Smoking</td>
<td>11</td>
</tr>
<tr>
<td>3-3</td>
<td>Days per Week of Exposure to Other’s Smoke at Work by Frequency of Smoking</td>
<td>12</td>
</tr>
<tr>
<td>3-4</td>
<td>People Should be Protected from Second-hand Smoke by Frequency of Smoking</td>
<td>13</td>
</tr>
<tr>
<td>3-5</td>
<td>Number of Friends Who Smoke by Frequency of Smoking</td>
<td>14</td>
</tr>
<tr>
<td>3-6</td>
<td>Use of Smoke Free Restaurants by Frequency of Use</td>
<td>15</td>
</tr>
<tr>
<td>3-7</td>
<td>Use of Smoke Free Bars by Frequency of Smoking</td>
<td>15</td>
</tr>
<tr>
<td>3-8</td>
<td>Use of Smoke Free Casinos by Frequency of Smoking</td>
<td>16</td>
</tr>
<tr>
<td>4-1</td>
<td>Heard Messages about Dangers of Second-hand Smoke by Frequency of Smoking</td>
<td>18</td>
</tr>
<tr>
<td>4-2</td>
<td>Source of Messages about Dangers of Second-hand Smoke</td>
<td>19</td>
</tr>
<tr>
<td>4-3</td>
<td>Heard “Give Your Butts the Boot” Message by Frequency of Smoking</td>
<td>20</td>
</tr>
<tr>
<td>4-4</td>
<td>Source of “Give Your Butts the Boot” Message</td>
<td>20</td>
</tr>
<tr>
<td>4-5</td>
<td>Neutral Reaction to Tobacco Ads in Magazines by Frequency of Smoking</td>
<td>21</td>
</tr>
<tr>
<td>4-6</td>
<td>What Percent of Delaware’s Adults Think that 30% or More of Delaware’s Adults Smoke?</td>
<td>22</td>
</tr>
</tbody>
</table>
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 a telephone Quitline, providing 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 2004 study replicates, in large part, studies conducted in 2002 and 2003.

The survey that was conducted by the Center for Applied Demography & Survey Research (CADSR) located at the University of Delaware had three primary objectives. First, the survey measured the prevalence of smoking within the state. Second, information was gathered about exposure to smoke from those other than the respondent. Finally, questions were asked to measure both the penetration of the media campaign that stresses tobacco control and the reaction to tobacco company advertising.

The survey was conducted in the spring of 2004 with the data centered on April 22, 2004. A total of 1,695 adult Delawareans were interviewed in two waves during this time period. The telephone numbers were generated randomly to insure that both listed and unlisted numbers had an equal chance 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 was in a private residence, a random adult was chosen and that person was asked to participate. Approximately 58% 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, 267 were from Kent County, 1,026 were from New Castle County, and 394 were from Sussex County. Eight of the respondents would not answer this question. Overall the distribution was within 2% of the households reported in the 2000 Decennial Census. Female respondents comprised 59% of the sample, which is somewhat higher than what would have been expected from a random sample (53%). Respondents who were 65 years of age or older accounted for nearly 19% of the sample in contrast to 13% reported by the Census. To account for these differences, even though they are not large, the data was weighted to reflect the adults
by age, gender, and county, and those are the results presented in this document. The final sample size was 1,670. Some 25 of the respondents did not supply critical demographic information required for weighting the data.

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 second-hand smoke is found in the next section. The third section addresses the data gathered about tobacco and the media. The report concludes with some general observations about the 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’s smoker, and (3) current non-smokers. The results are summarized in Figure 2-1.

The figure shows that about 23% of adult Delawareans currently smoke. (This proportion is similar to the results from the BRFSS survey.) Of those that are smokers today, approximately three quarters smoke every day (111,000). After examining the distribution of those that smoke on “some days” (34,000 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 2004 data are slightly lower than the three-year average (2002-2004) indicating a very slight decline in the percentage of smokers in the most recent survey.

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.
Respondents who are in the 18-24 age-group are clearly the most likely to be smokers. This is hardly surprising since experimentation is one of the defining characteristics of people that age. While the difference between the trend rate (41.2%) and the 2004 rate (48.8%) appears large, the sample size is the smallest of any age group in the study and hence it is likely to be volatile.

Respondents in next three age groups (25-54) are much less likely to smoke than those in the youngest age group and hold the rate steady around 23%. As the population ages still further, smoking begins a dramatic decline.

The next two charts, Figure 2-3 and Figure 2-4 below address the relationship between smoking and race and gender respectively. Caucasians are more likely to smoke than African-Americans (23.1% versus 18%). The prevalence among both Caucasians and African-Americans is trending lower.
Figure 2-3
Percentage Smoking by Race

<table>
<thead>
<tr>
<th></th>
<th>Caucasian</th>
<th>African-American</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>23.1</td>
<td>18</td>
<td>23.3</td>
</tr>
<tr>
<td>2002-2004</td>
<td>23.9</td>
<td>20.9</td>
<td>24.3</td>
</tr>
</tbody>
</table>

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

Figure 2-4
Percentage Smoking by Gender

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>26.2</td>
<td>20.3</td>
<td>23.1</td>
</tr>
<tr>
<td>2002-2004</td>
<td>27</td>
<td>21.6</td>
<td>24.1</td>
</tr>
</tbody>
</table>

Source: Center for Applied Demography & Survey Research, University of Delaware
Men are more likely to smoke than women. Figure 2-4 above shows that the difference is about 6% in 2004. Both estimates are below the 3-year trend indicating a reduction in smoking for both genders. The rate for women seems to be falling a little more, but that difference is not statistically significant.

Among the population of smokers, there are always a number who plan to quit smoking within the next 30 days, and this sample is no exception. As is shown in Figure 2-5 below, 32.7% of smokers in 2004 were at least thinking about stopping smoking.

African-American smokers in 2004 were 15% more likely to respond that they were considering stopping smoking when compared with Caucasians. This confirms the result found in the 2002-2004 trend data. Part of this difference may come from the frequency of smoking. While African-Americans are somewhat less likely to smoke than Caucasians, the survey finds that they are less likely to smoke every day (60.6% compared to 80.5%). The impact of that differential is important as is shown in Figure 2-6, below.

The data displayed in Figure 2-6 show that “every day” smokers (27.4%) are significantly less likely to say they are going to try to quit smoking in the next 30 days as “some
day” smokers (48.9%). This relationship coupled with the finding that African-Americans are far less likely to be “every day” smokers, may lead in part to the result found in Figure 2-5 above.

![Figure 2-6 Planning to Quit Smoking by Frequency of Smoking](chart)

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. In Figure 2-7 below, it is clear the advertisement is reaching those most in need of the service. Almost three quarters of the “every day” smokers and more than 64% of the “some days” smokers have been exposed to the material. All of the measurements are higher than those observed in the 2002-2004 average.

Even from this short look at smoking in Delaware, as derived from the survey, it is possible to make several observations. First, three quarters of smokers are “every day” smokers and these “every day” smokers are far less likely to try to quit smoking than those that smoke less frequently. This may suggest that focusing on reducing the frequency of smoking may be a promising strategy.
The second point is that the “Quitline” program is reaching more than 70% of the smokers. The level of penetration has also increased over the last three years in all categories. It is also interesting to see that the awareness of the respondent increases with the frequency of smoking. Even though “every day” smokers are the least likely to quit, they are the most aware of the program. This is very positive.

The 2004 survey results show that while about 48% of adults have tried smoking (to the level of 100 or more cigarettes) at some point during their lives, only 23% are current smokers. Further reductions in the smoking prevalence are most likely to come from individuals whose “readiness to quit” is measured by their indication of 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 21.5% in FY2005. \(^1\) If the remainder of the “ready to quit” group is

---

\(^1\) The calculation of the 2005 smoking prevalence projection is: \(\text{Current Prevalence} - (\text{Annual quit rate estimate}) \times (\% \text{ adult population who are everyday smokers who are ready to quit} + \% \text{ adult population who are some day smokers who are ready to quit}) = (23\%) - (.20)((.274*.177) + (.489*.054))\).
successful in quitting over a 5 year period, the smoking prevalence will be reduced to 15.5%. This is in line with the Healthy Delaware 2010 goal of 15% of the adult population.

Promising populations to target for smoking cessation interventions include African-Americans and Other minority populations. More than 40% of adult smokers in these groups report an intention to quit within 30 days.

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 Similarly, calculation of the 5-year smoking prevalence projection is: (Current Prevalence) - (5*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) = (23%) - (5*20%)((.274*.177) + (.489*.054)).
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. Recently the focus has been on developing policies that protect employees and the public in places such as restaurants, nightclubs, bars and casinos. As a result, the new Delaware Clean Indoor Air Act went into effect on November 27, 2002, which prohibits smoking indoors in all public places and other places of work in the state. This survey addressed public attitudes about these issues, and the key findings are provided in this section.

**Figure 3-1**

Percent with No Other Smokers at Home by Frequency of Smoking

![Bar Chart](chart.png)

<table>
<thead>
<tr>
<th></th>
<th>Every day</th>
<th>Some days</th>
<th>All Smokers</th>
<th>Non-Smokers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>39.7</td>
<td>54</td>
<td>43</td>
<td>85</td>
<td>75.3</td>
</tr>
<tr>
<td>2002-2004</td>
<td>38.7</td>
<td>52.6</td>
<td>42.1</td>
<td>83.4</td>
<td>73.4</td>
</tr>
</tbody>
</table>

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

In Figure 3-1 above, 39.7% of everyday smokers are the only person in their household that smokes while 85% of non-smokers live without a smoker in the household. This, of course, excludes the respondent. Overall, just over 65% 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 the 2002-2004 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 the smoke. Those results are found in Figure 3-2 below. The figure shows that the 38% of “every day” smokers who live with another smoker are...
exposed to smoke seven days a week. This falls to 28% for “some day” smokers and 6% for non-smokers. Thus frequent smokers are also exposed to substantially higher amounts of second-hand smoke as well as their own. The figure shows that these relationships are fairly stable across the three surveys. The volatility from one year to the next for “Some day” smokers is due to the small sample size.

**Figure 3-2**

*Days per Week of Exposure to Other’s Smoke at Home by Frequency of Smoking*

![Bar chart showing exposure to smoke by frequency of smoking.]

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 33% of the total population is exposed to smoke at home. This is similar to the estimate of 35% of the households that have someone who smokes.

**Table 3-1**

*Upper Estimates of Exposure to Smoking at Home by Age Group*

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Exposed</th>
<th>Not Exposed</th>
<th>Total</th>
<th>Percent Exposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>17,000</td>
<td>37,000</td>
<td>54,000</td>
<td>32%</td>
</tr>
<tr>
<td>5-9</td>
<td>15,000</td>
<td>39,000</td>
<td>54,000</td>
<td>28.2%</td>
</tr>
<tr>
<td>10-14</td>
<td>16,000</td>
<td>43,000</td>
<td>59,000</td>
<td>27.5%</td>
</tr>
<tr>
<td>15-17</td>
<td>10,000</td>
<td>25,000</td>
<td>35,000</td>
<td>29.3%</td>
</tr>
<tr>
<td>18+ (non-smokers)</td>
<td>72,000</td>
<td>409,000</td>
<td>481,000</td>
<td>15.0%</td>
</tr>
<tr>
<td>18+ (smokers)</td>
<td>145,000</td>
<td>0</td>
<td>145,000</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>275,000</td>
<td>553,000</td>
<td>828,000</td>
<td>33.2%</td>
</tr>
</tbody>
</table>

Source: Center for Applied Demography & Survey Research, University of Delaware
Respondents were also asked about the number of children in their household. Smokers however are less likely to live alone and are more likely to live with children (43.4%) than non-smokers (34.5%). 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 since we do not know from this survey if there are rules in the smoker’s household that they cannot smoke either in the house or in areas frequented by others. One estimate from the 2002 BRFSS suggests that about 27% of every day smokers do not allow smoking at home.

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

![Column chart showing days per week of exposure to other's smoke at work by frequency of smoking.](chart)

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

The second most likely place 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 smoke at work. The results found in Figure 3-2 above, show a similar pattern to those for exposure in the home. The higher level of exposure for the “every day” smoker is not particularly surprising. They will undoubtedly share designated or off-site smoking areas with other smokers. Non-smokers exhibit the opposite behavior but are less likely to avoid smoke at work than at home. 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. The total number of non-smokers who are exposed at work but not at home is estimated to be 80,000. This reduces

---

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.
the total number of people who are not exposed to second-hand smoke from 553,000 (see Table 3-1) to 473,000 or 57.1% of the population. Figure 3-3 shows decreasing exposure in 2002-2004.

Figure 3-4
People Should be Protected from Second-hand Smoke by Frequency of Smoking

<table>
<thead>
<tr>
<th></th>
<th>Every-02</th>
<th>Every-03</th>
<th>Every-04</th>
<th>Some-02</th>
<th>Some-03</th>
<th>Some-04</th>
<th>None-02</th>
<th>None-03</th>
<th>None-04</th>
<th>Total-02</th>
<th>Total-03</th>
<th>Total-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Don't Know</td>
<td>2.3</td>
<td>1.4</td>
<td>4.7</td>
<td>1</td>
<td>0</td>
<td>1.8</td>
<td>1.8</td>
<td>1.2</td>
<td>1.9</td>
<td>1.7</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>9.1</td>
<td>24.9</td>
<td>12.5</td>
<td>6.8</td>
<td>7.4</td>
<td>2.2</td>
<td>4.6</td>
<td>3.2</td>
<td>5.1</td>
<td>5.5</td>
<td>7.5</td>
<td>6.3</td>
</tr>
<tr>
<td>Somewhat Disagree</td>
<td>10.2</td>
<td>8</td>
<td>10.1</td>
<td>11.3</td>
<td>5.9</td>
<td>20</td>
<td>3.7</td>
<td>3.8</td>
<td>5.3</td>
<td>5.4</td>
<td>4.7</td>
<td>7</td>
</tr>
<tr>
<td>Somewhat Agree</td>
<td>42.2</td>
<td>36.6</td>
<td>36.5</td>
<td>30.8</td>
<td>35.3</td>
<td>27.8</td>
<td>23.1</td>
<td>17.1</td>
<td>13.5</td>
<td>21.8</td>
<td>27.1</td>
<td>18.3</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>36.2</td>
<td>29.1</td>
<td>36.1</td>
<td>50.2</td>
<td>51.5</td>
<td>50</td>
<td>66.8</td>
<td>74</td>
<td>74.9</td>
<td>60.2</td>
<td>64.3</td>
<td>66.7</td>
</tr>
</tbody>
</table>

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

Respondents were asked if people should be protected from second-hand smoke. This, of course, was a much-debated issue in legislation that was signed into law in Delaware during November of 2002. More than 88.4% of all non-smokers in this survey agreed with the proposition, and 74% of smokers also agreed. Overall only 13% of the respondents felt that there was no reason to take action to protect Delawareans from second-hand smoke. Perhaps this indicates that the issue is settled.

Smokers are more than twice as likely to have friends that smoke than non-smokers (see Figure 3-5 below). Smokers on average have 2.5 smoking friends compared to non-smokers with 0.62 smoking friends and these results are consistent across all three years. This varies little by gender as is clearly shown in the graph. The only difference of substance is that non-smoking males are more likely to have friends that are smokers than non-smoking females.
One of the most contentious issues surrounding second-hand smoke is its impact on Delaware’s businesses, in particular the restaurant business. A series of questions was asked of respondents to this survey to better understand and quantify the issue. The questions asked in 2003 and 2004 differ slightly from those in 2002 since at that point the Clean Indoor Air Act was not a reality.

Respondents were first asked whether they were more or less likely to use restaurants excluding fast food restaurants now that the Clean Indoor Air Act was a reality. Given the fact that the law has been in place for about 18 months, these results are more likely to reflect actual behavior. The results for restaurants are found in Figure 3-6, below.

For the overall sample, far more people (27.7%) responded that they were more likely to frequent a restaurant now that the law is in place. This contrasts with 7.6% of the respondents that contended they would use restaurants less. The figure shows that there is a wide difference depending on the frequency of smoking. The every day smokers were negative (although less so than in 2003) with more than 26% saying they would use restaurants less. Non-smokers responded with the same vigor as the every day smokers but in the opposite direction with 34% claiming they would use restaurants more frequently. Part-time smokers were ambivalent.
**Figure 3-6**

Use of Smoke-free Restaurants by Frequency of Use

<table>
<thead>
<tr>
<th>Frequency of Use</th>
<th>Total-2003</th>
<th>Total-2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely Eat Out</td>
<td>13.2</td>
<td>15.3</td>
</tr>
<tr>
<td>Less Likely</td>
<td>40.6</td>
<td>26.4</td>
</tr>
<tr>
<td>Same</td>
<td>42</td>
<td>54.2</td>
</tr>
<tr>
<td>More Likely</td>
<td>4.2</td>
<td>4.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely Eat Out</td>
<td>18.6</td>
<td>17.8</td>
<td>10.1</td>
<td>9.6</td>
<td>11.2</td>
</tr>
<tr>
<td>Less Likely</td>
<td>2.9</td>
<td>21.1</td>
<td>19</td>
<td>2.4</td>
<td>9.1</td>
</tr>
<tr>
<td>Same</td>
<td>61.4</td>
<td>48.9</td>
<td>53.6</td>
<td>53.8</td>
<td>51.9</td>
</tr>
<tr>
<td>More Likely</td>
<td>17.1</td>
<td>12.2</td>
<td>34.5</td>
<td>34.1</td>
<td>27.8</td>
</tr>
</tbody>
</table>

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

---

**Figure 3-7**

Use of Smoke-free Bars by Frequency of Smoking

<table>
<thead>
<tr>
<th>Frequency of Smoking</th>
<th>Total-2003</th>
<th>Total-2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely Use Bars</td>
<td>32.9</td>
<td>43.6</td>
</tr>
<tr>
<td>Less Likely</td>
<td>48.8</td>
<td>28</td>
</tr>
<tr>
<td>Same</td>
<td>15.5</td>
<td>7.4</td>
</tr>
<tr>
<td>More Likely</td>
<td>2.8</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely Use Bars</td>
<td>41.2</td>
<td>28.9</td>
<td>49.2</td>
<td>49.9</td>
<td>45.7</td>
</tr>
<tr>
<td>Less Likely</td>
<td>7.4</td>
<td>16.7</td>
<td>1.5</td>
<td>3.3</td>
<td>10.7</td>
</tr>
<tr>
<td>Same</td>
<td>45.6</td>
<td>45.6</td>
<td>31</td>
<td>28.4</td>
<td>29</td>
</tr>
<tr>
<td>More Likely</td>
<td>5.9</td>
<td>8.9</td>
<td>18.3</td>
<td>18.4</td>
<td>14.7</td>
</tr>
</tbody>
</table>

Source: Center for Applied Demography & Survey Research, University of Delaware
Respondents were then asked whether they were more or less likely to use bars now that the new law is in effect. The results for bars are found in Figure 3-7, above.

The overall sample was more evenly split as to whether they were more likely to frequent a bar now that the law is in place. Among all respondents 15% indicated they would be more likely to use a bar but this contrasts with 8% of the respondents that contended they would use bars less. The figure also shows that there is a wide difference depending on the frequency of smoking. The every day smokers were overwhelmingly negative with more than 28% saying they would use bars less. However they were more negative in 2003. Non-smokers responded positively but not as forcefully as the every day smokers, but in the opposite direction with 20% claiming they would use bars more frequently. Part-time smokers were more or less split.

Finally, respondents were asked whether they were more or less likely to use casinos now that the Clean Indoor Air Act is the law. The results for casinos are found in Figure 3-8, above.

Once again, the overall sample was more evenly split as to whether they were more likely to frequent a casino now that the new law is in place. Just 8% indicated they would be more likely to use a casino but this contrasts with 6% of the respondents that contended they would use casinos less. The figure also shows that there is a wide difference depending on the frequency of
smoking. The every day smokers were overwhelmingly negative with more than 20% saying they would use casinos less. Non-smokers responded positively but less forcefully than the every day smokers with 11% claiming they would use casinos more frequently. Once again, part-time smokers were more or less split.

In summary, the data presented in this section shows that a significant number of Delawareans are exposed to second-hand smoke at home or at work. Even more would be counted if exposure in restaurants and bars were included. Fortunately, both smokers and non-smokers are in agreement that people should be protected from second-hand smoke. Initial indications suggest that restaurants should benefit from the Clean Indoor Air Act. The evidence is less clear for bars and casinos. While the results for these two venues are not glowingly positive, they are not negative either. However, the 2004 results were much less negative for smokers to the point that positive non-smoker results substantially offset the impact.

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 program is primarily focused on promoting awareness of the dangers of second-hand smoke and the availability of the Delaware Quitline. 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**

Heard Messages about Dangers of Second-hand Smoke by Frequency of Smoking

<table>
<thead>
<tr>
<th>Frequency of Smoking</th>
<th>Smokers</th>
<th>Non-Smokers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every day</td>
<td>81.4</td>
<td>73.3</td>
<td>74.3</td>
</tr>
<tr>
<td>Some days</td>
<td>79.5</td>
<td>72.7</td>
<td>72.6</td>
</tr>
<tr>
<td>All Smokers</td>
<td>75.8</td>
<td>74.8</td>
<td>74.3</td>
</tr>
<tr>
<td>Non-Smokers</td>
<td>71.8</td>
<td>71.9</td>
<td>72.6</td>
</tr>
<tr>
<td>Total</td>
<td>79.5</td>
<td>72.7</td>
<td>72.6</td>
</tr>
</tbody>
</table>

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

More than 74% of all adult Delawareans have heard messages about the dangers of second-hand smoke during the last 12 months (see Figure 4-1 above). This finding applies almost uniformly across smokers and non-smokers alike. Perhaps this is part of the reason that smokers and non-smokers also agree that people should be protected from second-hand smoke (see Figure 3-4 earlier). The 2004 results are even higher than those measured in prior years survey for every day smokers.
While the respondents reported hearing the messages about second-hand smoke from a variety of sources, more than two-thirds 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 a third of the sample. The pervasiveness of television explains this differential. It also suggests while the costs are higher, there probably is no other way to reach many Delawareans. Slightly more than 30% of those that heard the messages heard them from a source other than television, while about 26% heard the information only on television.

**Figure 4-2**

*Source of Messages about Dangers of Second-hand Smoke*

<table>
<thead>
<tr>
<th>Source</th>
<th>2004</th>
<th>2002-2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspapers</td>
<td>30.1</td>
<td>30.3</td>
</tr>
<tr>
<td>Radio</td>
<td>34.2</td>
<td>33</td>
</tr>
<tr>
<td>TV</td>
<td>71.6</td>
<td>68.4</td>
</tr>
<tr>
<td>Billboards</td>
<td>38.9</td>
<td>34.6</td>
</tr>
<tr>
<td>Bus Posters</td>
<td>17.4</td>
<td>13.2</td>
</tr>
</tbody>
</table>

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

In the first section of this report, it was reported that more than 50% of adult Delawareans had heard of the Delaware Quitline. Further, “every day” smokers were the most familiar with the program. One additional question was asked about Quitline later in the survey. Respondents were asked specifically if they had seen or heard advertisements with the “Give Your Butts the Boot” message. The results are found in Figure 4-3, below.

Because of the narrowing of the question to just a portion of the media campaign, awareness is about half of the campaign overall with 58% of the respondents replying affirmatively. Not surprisingly, residents of New Castle County were more likely to have seen that specific material than those living downstate. Overall, 61.5% of all smokers reported hearing the message.
Figure 4-3
Heard “Give Your Butts the Boot” Message by Frequency of Smoking

<table>
<thead>
<tr>
<th></th>
<th>Every day</th>
<th>Some days</th>
<th>All Smokers</th>
<th>Non-Smokers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>60.6</td>
<td>63.3</td>
<td>61.1</td>
<td>57</td>
<td>57.9</td>
</tr>
<tr>
<td>Kent</td>
<td>57.4</td>
<td>30</td>
<td>53.5</td>
<td>46.4</td>
<td>48.3</td>
</tr>
<tr>
<td>New Castle</td>
<td>68</td>
<td>69.7</td>
<td>68.4</td>
<td>61.4</td>
<td>63.1</td>
</tr>
<tr>
<td>Sussex</td>
<td>41.4</td>
<td>58.3</td>
<td>43.7</td>
<td>51.9</td>
<td>50.3</td>
</tr>
</tbody>
</table>

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

Figure 4-4
Source of “Give Your Butts the Boot” Message

<table>
<thead>
<tr>
<th></th>
<th>Newspapers</th>
<th>Radio</th>
<th>TV</th>
<th>Billboards</th>
<th>Bus</th>
<th>Brochures</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>14.8</td>
<td>8.7</td>
<td>38.1</td>
<td>53.3</td>
<td>12.4</td>
<td>4.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Kent</td>
<td>19.2</td>
<td>8.5</td>
<td>46.2</td>
<td>48.5</td>
<td>3.1</td>
<td>1.6</td>
<td>5.4</td>
</tr>
<tr>
<td>New Castle</td>
<td>13.5</td>
<td>8.5</td>
<td>28.9</td>
<td>61</td>
<td>16</td>
<td>4.7</td>
<td>2.4</td>
</tr>
<tr>
<td>Sussex</td>
<td>16</td>
<td>9.3</td>
<td>65.4</td>
<td>28.7</td>
<td>6.1</td>
<td>4.4</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Center for Applied Demography & Survey Research, University of Delaware
Respondents that had heard or seen the “Give Your Butts the Boot” message, were asked where they had heard or seen the material. Billboards was the most likely source as is shown in Figure 4-4, above. In this case, the differences between television and other sources are larger than were measured in the 2003 survey.

Respondents were asked about their reaction to advertisements for tobacco products. The reaction to the advertisements themselves does vary by smoking status. This is shown very clearly in Figure 4-5, below. More than half of each smoking sub-group was neither positively nor negatively affected by the ads. Noticeably, that neutrality is declining over time and moving toward a negative reaction especially among non-smokers.

![Figure 4-5](Neutral Reaction to Tobacco Ads in Magazines by Frequency of Smoking)

<table>
<thead>
<tr>
<th>Frequency of Smoking</th>
<th>Every day</th>
<th>Some days</th>
<th>All Smokers</th>
<th>Non-Smokers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>64.5</td>
<td>56</td>
<td>62.5</td>
<td>40.7</td>
<td>45.7</td>
</tr>
<tr>
<td>2002-2004</td>
<td>68.3</td>
<td>62.9</td>
<td>66.9</td>
<td>49.1</td>
<td>53.3</td>
</tr>
</tbody>
</table>

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

These data suggest that the media campaign is reaching the intended audience. Additional work that considers the expenditures for various types of media and the measured recognition of the target audience might prove useful in designing future efforts.

In one final question respondents were asked to estimate the percentage of adult Delawareans that smoke. This survey estimated that percentage to be 23%. In Figure 4-9, below, it is clear that the respondents have a different perception.
Figure 4-6
What Percent of Delaware’s Adults Think That 30% or More of Delaware’s Adults Smoke?

<table>
<thead>
<tr>
<th>Percent</th>
<th>2004</th>
<th>2003-2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every day</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>Some days</td>
<td>68.8</td>
<td>64.4</td>
</tr>
<tr>
<td>All Smokers</td>
<td>64.4</td>
<td>63.3</td>
</tr>
<tr>
<td>Non-Smokers</td>
<td>52.3</td>
<td>51.7</td>
</tr>
<tr>
<td>Total</td>
<td>55.1</td>
<td>54.5</td>
</tr>
</tbody>
</table>

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

Although only 23% of adult Delawareans currently smoke, more than half of the respondents (55.1%) think that more than 30% of the adult population smokes, while less than 8% 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. Only 40% of college graduates and respondents from households with incomes of more than $75,000 were able to correctly estimate the percentage. It may be useful to consider adding the correct percentage of 23% to the current educational campaign.
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 penetration 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 2004 survey are provided below:

- About half of all adult Delawareans start smoking at some point, but only 18% smoke every day.
- Of those that are currently smoking, 33% have plans to quit smoking. Among “every day” smokers only 27% are planning to quit. Those most likely to be planning to quit smoking are the “some days” smokers (69%).
- Three quarters of “every day” smokers reported seeing advertisements about the Delaware Quitline. This indicator alone would suggest the program is meeting its primary objective.
- Almost 60% 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 children are at risk of exposure to second-hand smoke at home unless some or all smokers choose not to smoke at home.
- Approximately 17% of non-smokers are exposed to second-hand smoke at home.
- About 24% of adult Delawareans are exposed to second-hand smoke at work. However this exposure rate has fallen from 32% in 2002. Exposure at work is far higher for smokers than for non-smokers.
- An additional 80,000 people are exposed to second-hand smoke at work that are not exposed at home.
- In general, smokers tend to live with people that smoke, work at places that permit smoking somewhere on the premises, and have twice as many friends that smoke.
- About 86% of adult Delawareans feel that people should be protected from second-hand smoke.
- The Clean Indoor Air Act is probably positive for restaurant businesses since those saying they are now more likely to patronize those businesses outnumber those that say they are less likely to do so (28% to 8%).
- The Clean Indoor Air Act is probably neutral to the bar business with similar numbers saying they will patronize these businesses more and less. Those that
say they are less likely to go to a bar after the new law are overwhelmingly everyday smokers.

- Smoke free casinos are less attractive for some and more attractive to others. The net effect appears to be neutral. However, those everyday smokers who said they were less likely to gamble after the Act has fallen from 32% to 20%. Small sample size restricts drawing a firm conclusion.

- About 74% of adult Delawareans reported hearing about the dangers of second-hand smoke.

- A smaller but substantial number (56%) reported hearing/seeing the “Give Your Butts the Boot” message.

- The principal sources of this information were television and billboards.

- Attitudes toward tobacco company advertisements varied depending largely on smoking status. Non-smokers are now trending from neutral to negative.

- In general, people tend to overestimate the proportion of adult Delawareans that 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 23%.
APPENDIX

TOBACCO ATTITUDES AND MEDIA SURVEY
2004

Questionnaire
Hello, I'm calling from the University of Delaware. We are conducting a survey on behalf of the Delaware Division of Public Health about tobacco-related behavior, attitudes and issues. This survey lasts about ten minutes, and we really appreciate your cooperation in giving us your opinions. Your answers will be completely confidential and no response will be identified with you personally. The interview may be monitored for quality assurance purposes, but all information obtained in this study will be confidential.

S3) 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

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
   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
   No
   DK
   Refused

QA 8) In the past month, have you seen or heard advertising 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) 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

QB4) 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

QB5) How many of your four best friends are smokers?
   Enter a value ____
   DK
   Refused

QB6) In November 2002, Delaware’s “Clean Indoor Air Act” went into effect, prohibiting smoking in indoor public places. Considering only this law, are you likely to eat in restaurants, other than fast-food restaurants . . .
   More often than before the law took effect
   About the same
   Less often than before the law
   I rarely if ever eat in restaurants (before the law and now)
   DK
   Refused
QB7) Considering only this law, are you likely to patronize bars or nightclubs . . .  
   More often than before the law took effect  
   About the same  
   Less often than before the law  
   I don’t drink or patronize bars and nightclubs  
   DK  
   Refused

QB8) Considering only this law, are you likely to patronize one of Delaware’s video lottery casinos . . .  
   More often than before the law took effect  
   About the same  
   Less often than before the law  
   I don’t gamble or visit casinos  
   DK  
   Refused

SECTION C
DEMOGRAPHICS

QC1) INTERVIEWER ONLY: Please code gender  
   Male  
   Female

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 of Hispanic or Spanish origin?
    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) 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

QC9) Do you have more than one residential telephone number in your household?
    Yes
    No
    DK
    Refused

QC9 Value) If yes to QC9, 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 12 months, have you seen or heard any messages about the dangers of secondhand smoke (sometimes called environmental tobacco smoke) in Delaware?
   Yes
   No
   DK
   Refused

QD2) If so, where did you see or hear these messages? [Check all that apply]
   Newspaper ads or special inserts
   Heard radio ads
   Seen TV ads
   Billboards
   Posters on sides of buses

QD3) In the past 12 months, have you seen or heard any advertisements featuring the slogan “Give Your Butts the Boot”?
   Yes
   No (Skip to D5)
   DK (Skip to D5)
   Refused (Skip to D5)

QD4) Where have you seen or heard it? On a . . . [check all that apply]
   Billboard
   Brochure
   Bus transit
   Newspaper ads or special inserts
   TV
   Radio
   Other

QD4 Other) If said OTHER to QD4: Where did you see or hear about it?
   Enter response ______________

QD5) In your opinion, what percent of Delaware adults currently smoke cigarettes:
   0 - 20%
   21-30%
   31-50%
   51-75%
   > 75%
   DK
   Refused

QD9) When you see advertisements promoting tobacco, is your reaction.
   Very positive
   Somewhat positive
   No reaction/neutral
   Somewhat negative
   Very negative
   DK
   Refused

That's all the questions we have. Thank you for your time and effort.