

October 2009

# Results from the 2008 Indiana Youth Media Tracking Survey

## Final Report

Prepared for

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## EXECUTIVE SUMMARY

This report, which highlights results from the 2008 Indiana Youth Media Tracking Survey (YMTS), summarizes progress that has been made to address three of the 2010 priority areas identified by the Indiana Tobacco Prevention and Cessation Program (ITPC):

- Decrease Indiana youth smoking rates.
- Increase the proportion of Hoosiers not exposed to secondhand smoke.
- Increase antitobacco knowledge, attitudes, and beliefs necessary for smoking behavior change to occur.

Specifically, the purpose of the Indiana YMTS is to track progress toward reaching these goals by asking Indiana youth about their experiences with tobacco and tobacco control. The results of this investigation were used to

- provide feedback on recent Indiana media campaign advertisements and estimate awareness of each ITPC component among Indiana youth,
- monitor program-specific outcomes, and
- provide a picture of the current beliefs and attitudes of Indiana youth that can help guide ongoing prevention efforts.

### ***ES.1 Summary of Key Results***

**Campaign Awareness.** In general, in 2008, overall campaign awareness and television advertisement awareness were low, but one of the individual advertisements fared well in recognition. Confirmed awareness of “Right to Breathe” was 33.6%, the highest among all individual advertisements. Given the limited resources ITPC had to implement media campaigns, this level of awareness is impressive and may be indicative of the impact of this type of advertising, especially considering that youth were not the primary target of the advertisement and its message. It is important to note, however, that a higher percentage of nonsmokers were aware of the ad compared with smokers, which should be considered as possible selective attention among those predisposed to agree with its secondhand smoke prevention message.

**VOICE Brand Equity.** The relatively high levels of brand equity for the VOICE brand indicate that youth who are familiar with the brand and its message are also likely to agree with it and to participate in the call to action promoted by VOICE. This was especially true for the brand leadership (e.g., VOICE is for people like me) construct, which has been shown to have significant preventive effects elsewhere.

#### **Campaign Awareness and Antitobacco Knowledge, Attitudes, and Beliefs.**

Awareness of several of the White Lies (adult focused) and VOICE (youth targeted) advertisements was related to a more antitobacco position on targeted attitudes. The percentage of Indiana youth who thought that breathing smoke from someone else’s

cigarette is very harmful or somewhat harmful was significantly higher among those who were aware of the "Right to Breathe" White Lies ad than among those who were not aware. Although no other statistically significant relationships were observed, it is important to note that the vast majority of all youth demonstrated that they understand the secondhand smoke messages and agree with the idea that individuals should be protected from secondhand smoke.

Awareness of the "Body Bags" VOICE advertisement was related to tobacco industry-related attitudes. Significantly more youth who were aware of the "Body Bags" VOICE advertisement agreed that tobacco ads influence youth to smoke than those who were not aware. In addition, significantly more youth who were aware of the "Body Bags" VOICE advertisement disagreed that smoking cigarettes makes you cool or fit in compared to youth who were not aware.

Differences in attitudes concerning youth empowerment were evident among youth who were aware of the "Protest" and "Pledge" VOICE advertisements. Significantly more youth who were aware of the "Protest" VOICE advertisement than those who were not agreed that they wanted to be involved in efforts to get rid of smoking and felt comfortable telling people their age about the risks of tobacco. Awareness of the "Pledge" VOICE advertisement was also related to respondents' willingness to confront their peers about tobacco use.

**Tobacco Use Prevention and Education.** Seven in 10 Indiana youth reported being exposed to at least three of the four tobacco use prevention education (TUPE) topics in schools in the past year. In general, a higher percentage of youth who were taught three or more TUPE topics had antitobacco positions than youth who were taught fewer than three TUPE topics. Although the reasons for these differences are not completely clear, some impact may be attributed to the effect that TUPE is having on tobacco-related attitudes. More nonsmokers than smokers report TUPE participation, which may also indicate selective attention among those who would be more likely to report more antitobacco positions regardless of their exposure. In addition, significantly more 12- to 14-year-olds reported that they were taught three or more TUPE topics compared to 15- to 17-year-olds.

**Self-Reported Secondhand Smoke Exposure.** Results from the 2008 Indiana YMTS indicate that nearly three-quarters of Indiana youth live in homes where smoking is completely banned. However, the percentage of current smokers who reported living in smoke-free homes (46.4%) was significantly lower compared to the percentage of nonsmokers who reported living in smoke-free homes (76.1%). Although a high percentage of Indiana youth reported being protected from secondhand smoke exposure at home, a substantial percentage of youth reported being exposed to secondhand smoke in rooms and cars. Overall, 44.6% of Indiana youth reported being exposed to secondhand smoke in a room in the past week, and 35.6% of Indiana youth reported being in a car with someone smoking in the past week.

## ES.2 Recommendations

Although ITPC's efforts have resulted in some key successes, the following are recommendations for continued success and to facilitate change in program outcomes where progress has not been made:

- **Greater emphasis on health communications**—Currently, 75% of ITPC's budget must fund community organizations. Consequently, this limits the amount of resources that can be devoted to public education, including media campaigns. To best use the available funds, ITPC should consider the following:
  - *Rely on consistent, "high sensation value" messages to provoke behavior change.* ITPC should incorporate advertisements that have high message sensation value (e.g., the use of intense images, strong emotions) as part of their media campaigns, such as advertisements from the "Every Cigarette is Doing You Damage" adult-targeted campaign.
  - *Explicitly coordinate community-based activities and media messages.* By having a consistent message between community-based activities and media campaigns, community-based efforts will become more salient to the public when advocating for support for policy initiatives. This is especially true for VOICE media (including advertising and the VOICE Web site) and grassroots activities.
  - *Focus on building brand equity among older youth.* Although there is some evidence indicating that equity in youth-focused brands decreases as youth get older, it is important that younger youth continue to aspire to the brand, and that older youth continue to identify with it. Current results indicate that older youth still have a stake in VOICE (especially the brand leadership and brand awareness constructs), but as the difference between younger and older youth grows, a renewed focus on ways to get older youth involved may be necessary.
  - *Consider a general audience campaign.* With limited resources to dedicate to youth-targeted media, ITPC may consider focusing all public education efforts on a general audience campaign with advertisements and messages that might resonate with both adults and youth. The "Right to Breathe" secondhand smoke prevention advertisement is a clear example that some messages address both populations.
  - *Conduct in-depth analyses into performance of advertisements.* An analysis of media buys and media placement should offer some insight into the performance of public education efforts. By looking at the levels at which media were run (e.g., Target Rating Points by advertisement), evaluators and program planners will be able to better understand the ways that youth interpret messages and to develop methods for improving exposure.
- **Continue to focus on smoke-free environments**—Although Indiana youth, in general, expressed an understanding of the health risks of secondhand smoke exposure, many are still reporting that they are in environments where they are exposed. Continuing public education efforts that encourage more supportive attitudes about smoke-free policies in the home and the workplace may help reduce the frequency of these situations because adults who often have control over the rules in the home or car are better educated about the dangers people in their household or vehicles face.

# 1. INTRODUCTION

This report highlights results from the 2008 Indiana Youth Media Tracking Survey (YMTS). The procedures described in this report were carried out by RTI International under contract to Indiana Tobacco Prevention and Cessation (ITPC). Focusing on tobacco-related issues among Indiana youth, the report summarizes progress that has been made to address three of the 2010 priority areas identified by ITPC (ITPC, 2009a):

- Decrease Indiana youth smoking rates.
- Increase the proportion of Hoosiers not exposed to secondhand smoke.
- Increase antitobacco knowledge, attitudes, and beliefs necessary for smoking behavior change to occur.

Specifically, the purpose of the Indiana YMTS is to track progress toward reaching these goals by asking Indiana youth about their experiences with tobacco and tobacco control. The results of this investigation are used to

- provide feedback on recent Indiana media campaign advertisements and estimate awareness of each ITPC component among Indiana youth,
- monitor program-specific outcomes, and
- provide a picture of the current beliefs and attitudes of Indiana youth that can help guide ongoing prevention efforts.

This report describes awareness of and reactions to recent television advertisements and activities associated with Indiana's tobacco countermarketing campaigns. In particular, the report focuses on the youth-targeted VOICE media campaign. Because youth are also exposed to adult-targeted media, some measures of exposure and reactions to components of the adult-focused White Lies campaign are included as well. In addition, the report provides findings on key beliefs and attitudes targeted by Indiana's campaign messages. The major concentration is on exposure to advertisements associated with these campaigns, although other campaign activities (e.g., Web sites, grassroots advocacy, cessation services) are influential and may contribute to overall awareness of the campaign brands and messages (ITPC, 2009b, 2002).

Section 2 of the report details the study methodology and provides information on the survey instrument, sampling scheme, survey administration, and data analysis procedures. The remainder of the report summarizes findings from the Indiana YMTS in some of the key areas of tobacco control:

- Section 3 describes the methods used to gauge media awareness/exposure and provides results for awareness of Indiana's VOICE and White Lies campaigns. This section also discusses youth reactions to advertisements and briefly looks at overall media usage among youth.

- Section 4 takes an initial look at the affinity of Indiana youth with the VOICE brand and examines the four branding constructs used to create brand equity.
- Section 5 investigates tobacco-related beliefs and attitudes among Indiana youth and their relationship to campaign awareness. Tobacco-related attitudes targeted by campaign messages are highlighted.
- Section 6 discusses school-based tobacco use prevention education (TUPE) and its potential impact on tobacco-related beliefs and attitudes.
- Section 7 reports Indiana youth's exposure to secondhand smoke.
- Section 8 provides an early look at youth awareness of snus, an alternative tobacco product that has been marketed extensively in Indiana.
- Section 9 presents a brief summary of the report and some basic recommendations.

## **2. DATA AND METHODS**

### **2.1 Sampling Procedures**

The 2008 YMTS is a random-digit-dial survey of Indiana youth aged 12 to 17. African American and Hispanic youth were oversampled, as were youth living in rural areas of the state. In addition, approximately 40% of the sample was drawn from households for which we had an address match. Cases for which we had an address were sent a lead letter briefly describing the study and asking for their participation. Lead letters have been shown to improve response rates; therefore, we chose a higher proportion of our sample from address-matched households.

Data collection for the 2008 YMTS occurred between July 11 and August 24, 2008. Approximately 11,599 calls were made to sample members, which resulted in 1,122 completed cases. Overall response rates were 26.5% (according to American Association for Public Opinion Research [AAPOR] calculations) and 40.8% (according to Council of American Survey Research Organizations [CASRO] calculations). There is not a comparable youth-targeted standard survey to which these rates can be compared. Not unexpectedly, these response rates are slightly lower than response rates observed for the adult-targeted Behavioral Risk Factor Surveillance System (BRFSS) in Indiana (Centers for Disease Control and Prevention [CDC], 2009). These differences are likely due primarily to the subjects being minors and the need for an additional layer of consent before proceeding with the survey. There is no indication that the minor difference adds to any existing nonresponse bias.

### **2.2 Survey Preparation and Data Collection Procedures**

The survey was developed in collaboration with ITPC staff to provide timely feedback on youth reactions to campaign messages as well as to provide information on changes over time in knowledge, attitudes, and secondhand smoke exposure. The measures used in the survey to gather data on campaign exposure and campaign-related beliefs and attitudes are shown in Exhibit 2-1. The measures used in the survey to assess tobacco use are shown in Exhibit 2-2. These measures are described in more detail in their respective sections.

Before starting data collection for the study, the research protocols and materials (including the body of the questionnaire and the informed consent text) were reviewed and approved by RTI's Institutional Review Board (IRB) for the protection of human subjects. Because the surveys only consisted of a telephone interview and were considered of minimum risk to participants, an expedited, instead of a full, IRB review was possible. No modifications were requested.

**Exhibit 2-1. Key Measures: Confirmed Awareness, Brand Equity, and Attitudes and Beliefs**

Measure	Description
Confirmed awareness	<p>Awareness of a campaign and its message is considered to be a short-term outcome. In this evaluation, awareness of individual and combined campaign components is measured:</p> <p><u>Theme/slogan awareness</u></p> <ul style="list-style-type: none"> <li>▪ Recall of the campaign brand, taglines, themes, or logo</li> </ul> <p><u>Specific advertisement awareness</u></p> <ul style="list-style-type: none"> <li>▪ Recall of individual ads (or ad series) around the time of the survey</li> <li>▪ Organized by medium</li> </ul> <p><u>Combined awareness</u></p> <ul style="list-style-type: none"> <li>▪ Awareness of at least one item from at least one component (e.g., aware of campaign slogan or one television ad)</li> </ul>
Affinity with the VOICE brand	<p>The study measured agreement with various aspects of the VOICE brand, including</p> <ul style="list-style-type: none"> <li>▪ brand awareness—agreement with the messages of VOICE;</li> <li>▪ brand loyalty—willingness to advocate on behalf of VOICE;</li> <li>▪ brand leadership—agreement with the leadership of VOICE; and</li> <li>▪ brand personality—recognition of key messages of VOICE.</li> </ul>
Attitudes and beliefs	<p>Considered an intermediate outcome, tobacco-related attitudes and beliefs are important as demonstrated precursors to behavior change. After campaign and program awareness, they are often the first measures of change in a population as ideas about behaviors begin to shift. Attitudes and beliefs can be related to campaign awareness and reactions in an effort to gauge the influence of messages. In the YMTS surveys, measures are organized around five major constructs:</p> <ol style="list-style-type: none"> <li>1. Social perceptions of smoking</li> <li>2. Health effects</li> <li>3. Secondhand smoke</li> <li>4. Tobacco industry</li> <li>5. Empowerment and activism</li> </ol> <p>Responses to attitude and belief items are organized on a 5-point agreement scale, ranging from “Strongly Agree” to “Strongly Disagree.” Agreement with the strongest points on the scale (“strongly”) has been shown to be the most likely to predict later changes in behavior.</p>

**Exhibit 2-2. Key Measures: Tobacco Use Behavior**

	Measure	Definition
<b>Smoking status<sup>a, b</sup></b>	Never smokers	Have not tried smoking, even one or two puffs
	Current smokers	Have tried smoking (at least one or two puffs), <i>and</i> Have smoked at least 1 day in the past 30 days
	Former smokers	Have tried smoking (at least one or two puffs), <i>and</i> Have <i>not</i> smoked in the past 30 days

<sup>a</sup> The Indiana YMTS is not designed to provide accurate estimates of smoking prevalence among youth. Because telephone surveys have been shown to underreport sensitive behaviors, including smoking (Fendrich and Johnson, 2001), youth tobacco use prevalence is measured using the school-administered Youth Tobacco Survey (YTS). Current smoking is used in this report only for comparative analyses.

<sup>b</sup> Smoking behavior was defined using a method that accounts for all inconsistencies in responses.

Once the final questionnaire was in place, RTI project staff developed detailed specifications on how the instrument would be programmed in computer-assisted telephone interviewing (CATI). Once programming was complete, the instrument went through multiple test phases, in which programmers tested the instrument through every possible scenario to ensure proper function and to work out any potential problems.

Youth interviews were conducted electronically through a subcontract with Indiana University's Center for Survey Research (IU CSR). Interviewers received full training manuals, hard-copy forms of frequently asked questions, answering machine messages, and supervisor contacts to aid them in the interviewing process. They were also trained on the content of the campaign and were shown ITPC advertisements as they reviewed the instrument. Advertisements and other campaign materials were made available for review throughout the survey administration.

### 2.3 Analysis Methods

All estimates presented in this report were poststratified and weighted to account for the stratified sampling design and to reflect 2007 Census population estimates of Indiana youth aged 12 to 17 (U.S. Census Bureau, 2007). Data were analyzed in a software package, Stata 9.0 (StataCorp, 2005), that correctly adjusts for the design effects of the survey design. In many cases, analyses excluded missing cases that resulted from skip patterns or nonresponse. Except where noted, "don't know" responses were also excluded, as were cases where the respondent declined to answer the question. In most cases, these responses represented less than 5% of the sample, and the exclusion did not substantively affect the results.

In addition, estimates for the following demographic groups are also presented for many of the measures: gender, race/ethnicity, age group, and geographic region. Statistical significance across demographic groups was determined by Pearson's chi-squared tests. Only statistically significant differences ( $p < 0.05$ ) are discussed in the body of this report. Where appropriate, logistic regression analyses were computed to control for demographic characteristics (age group, gender, race/ethnicity, and region) as well as other factors that have sometimes been related to differences in tobacco-related attitudes, beliefs, and behaviors: smoking status, performance in school, home smoking and smoking rules, Tobacco Use Prevention Education (TUPE) participation, advertisement awareness, church attendance, and employment status. Exhibit 2-3 presents final unweighted and weighted sample characteristics.

**Exhibit 2-3. 2008 Indiana YMTS Sample Characteristics**

	<b>N</b>	<b>Unweighted %</b>	<b>Weighted %</b>
<b>Overall</b>	1,122	100.0	100.0
<b>Gender</b>			
Female	563	50.2	54.1
Male	559	49.8	45.9
<b>Race/Ethnicity</b>			
White non-Hispanic	960	85.6	75.3
Black non-Hispanic	64	5.7	13.3
Hispanic	44	3.9	5.5
Other race/ethnicity	54	4.8	6.0
<b>Age Group</b>			
12–14	547	48.8	67.0
15–17	575	51.2	33.0
<b>Region</b>			
North West	339	30.2	35.8
North Central	112	10.0	12.4
North East	74	6.6	5.4
Central West	45	4.0	3.1
Central (Indy)	186	16.6	17.3
Central East	41	3.6	2.4
South West	275	24.5	19.8
South East	50	4.5	3.8

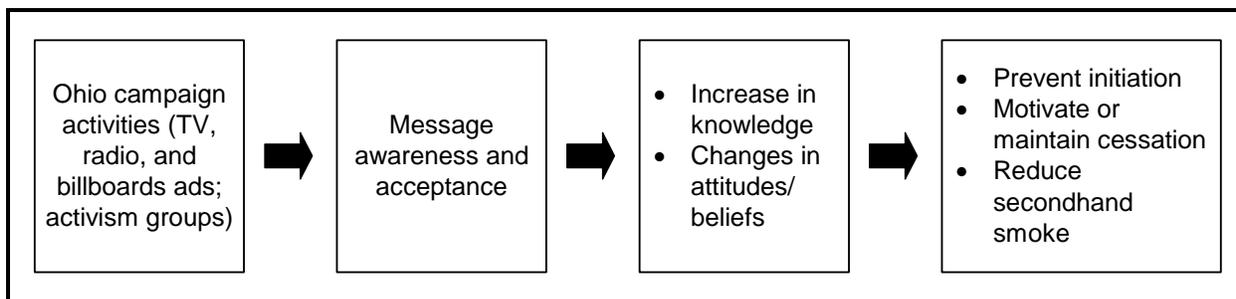
### 3. CAMPAIGN AWARENESS

In this section, we present various measures of media campaign awareness, including awareness of ITPC-sponsored campaigns in general and awareness of individual advertisements. In addition, we provide a more comprehensive measure of combined awareness, which estimates exposure to any of several campaign components. Furthermore, we discuss youth reactions to the included advertisements along with the time spent by Indiana youth using various media.

Indiana campaign progress is evaluated in a manner consistent with notable theories of behavior change, such as the Theory of Reasoned Action (Fishbein and Azjen, 1975). Exhibit 3-1 presents a simple four-step conceptual model for evaluating media campaigns. Similar models have been used to evaluate similar state and national social marketing campaigns (Hersey et al., 2007).

The first box in this model represents the inputs, which involves all campaign activities, including television, radio, and billboard advertisements; promotional materials; public relations events; and other related activities. Understanding all factors that could influence awareness and acceptance of the campaign is essential in understanding the remaining parts of the model (outcomes). In taking the first step from the inputs, early outcomes are realized as a result of the efforts of the campaign activities (represented in the second box). The target audience is aware of the campaign and is able to confirm awareness by providing details about the campaign (either in the form of advertisements, themes, or events). The next step represents the first real intermediate outcome (represented in the third box). As the audience becomes aware of the campaign components, they start to think about them and the messages they promote. These thoughts are translated into an increased understanding of the issue/problem and into changes in related attitudes and beliefs. The final outcome (i.e., long-term outcome), which takes much longer to accomplish, is the change in the end outcomes of interest: decline in acceptance and prevalence of tobacco use and a reduction of secondhand smoke exposure (represented in the final box of the model).

**Exhibit 3-1. Media Campaign Model**



This section of the report is divided into the following sections to discuss outcomes related to exposure to the ITPC-sponsored campaigns:

- General Campaign Awareness—awareness of the VOICE and White Lies campaign names, themes, or slogans
- Individual Advertisement Awareness—awareness of selected VOICE and White Lies television advertisements that were aired around the time of survey administration
- Combined Campaign Awareness—awareness of the general campaign or individual advertisements
- Reactions to Advertising—reactions to the VOICE and White Lies advertisements by those who saw them
- Media Usage—weekly time spent with various media (television, radio, Internet, text messaging)
- Summary—highlights of major findings and interpretation

### **3.1 General Campaign Awareness**

Two sets of measures were used to assess general campaign awareness in the Indiana YMTS: the more stringent *confirmed awareness* measure of advertisements and other campaign components and unverified *aided awareness* of the VOICE and White Lies brands.

#### **3.1.1 Confirmed Awareness**

The more conservative confirmed awareness method was used in the YMTS to measure general awareness of Indiana campaigns (e.g., the campaign name, theme, or slogan). This technique is used in evaluations of many state and national antitobacco/tobacco prevention campaigns and is recognized as an effective method for gauging exposure to campaign messages and predicting associated changes (Farrelly et al., 2002; Sly et al., 2002).

Measuring general campaign awareness using the confirmed awareness scheme actually involves asking two questions. First, respondents were asked if they know of any antitobacco advertising or campaigns taking place:

- Are you aware of any advertising or campaigns against smoking or against cigarette companies that are now taking place in Indiana?

Those who say “yes” or “maybe” were considered to have claimed awareness. These respondents were then asked to name or describe the theme or slogan of the advertisement or campaign, without any prompting from interviewers.

- What is the theme or slogan of this advertising or campaign?

Respondents were given up to five opportunities to identify more than one slogan/campaign. A list of precoded responses corresponding to campaign names and taglines were provided to assist interviewers in coding responses, but any response given by the respondent was recorded. All responses were coded by trained analysts for accuracy in

describing the campaign. Respondents who were able to accurately identify an Indiana campaign name, theme, or slogan (e.g., VOICE, White Lies, youth protesting against tobacco, 1-800-QUIT-NOW) were considered to have confirmed awareness of Indiana’s campaign brands or slogans. It is important to note that an accurate description of an adult-targeted campaign or message (e.g., White Lies) still resulted in a *confirmed* code.

### 3.1.2 Aided Awareness

In contrast, aided awareness is the broadest measure of knowledge of a campaign. This method determines exposure to or awareness of a campaign component by naming or describing it and by directly asking respondents whether they are familiar with it. It is assumed that those who claim to recognize the campaign as familiar are accurately reporting their awareness, though it is not possible to verify their exposure or awareness. To determine the level of aided awareness of antitobacco campaigns, respondents in the Indiana YMTS were asked a single question:

- Have you seen or heard any antismoking advertising or campaigns with the following themes or slogans?

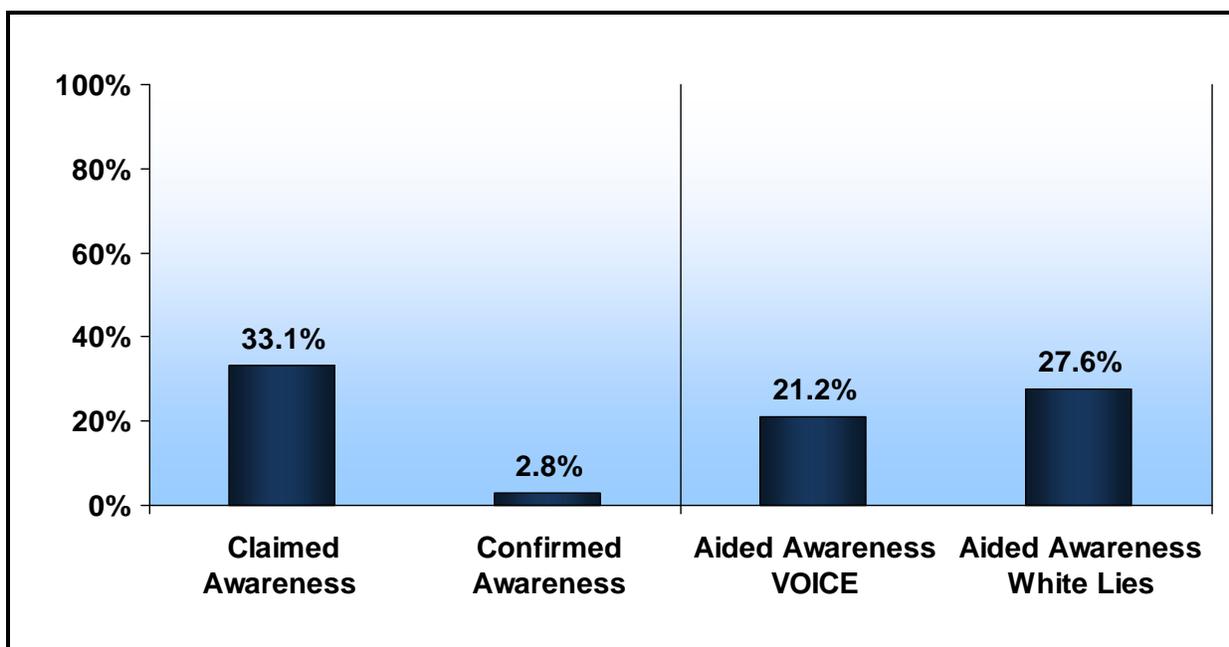
A series of antitobacco campaign slogans (from Indiana and elsewhere) were read to the respondent. Anyone who said “yes” when asked if they had seen or heard of “VOICE” or White Lies was considered to have aided awareness of the Indiana campaign.

Exhibit 3-2 presents general campaign awareness among Indiana youth. The first two columns represent claimed and confirmed awareness of any ITPC campaign name, theme, or slogan, and the second two columns represent aided awareness of the VOICE and White Lies brands. While 33.1% of Indiana youth had claimed awareness of any ITPC campaign, only 2.8% could confirm awareness by giving accurate examples of a campaign name, theme, or slogan (e.g., VOICE, White Lies, 1-800-QUIT-NOW).

Although general campaign claimed awareness in Indiana was only slightly lower than claimed awareness observed for similar recent campaigns elsewhere, confirmed awareness and aided awareness in Indiana were substantially lower. For example, general campaign confirmed awareness of Ohio’s youth-targeted **stand** campaign ranged from 38.8% to 52.4% in cross-sectional surveys conducted between 2003 and 2007 (Hersey et al., 2007). Aided awareness of **stand** during the same time period ranged from 82.9% to 94.2%—about four times higher than the proportion with aided awareness of VOICE (Hersey et al., 2007).

These differences may be due to a variety of factors and likely are, in part, the result of limitations set on the budget and spending for public education in Indiana (ITPC, 2008). For example, expenditures on *youth-targeted* media (only) in Ohio in the years corresponding to the aforementioned **stand** surveys ranged from a low of \$3.2 million to a high of \$6.2 million (Hersey et al., 2007). In comparison, the budget for all public education in Indiana

**Exhibit 3-2. General Campaign Awareness**



(targeting youth *and* adults and including media advertisements as well as other outreach activities) for the time associated with the 2008 Indiana YMTS was substantially lower: \$2.65 million in fiscal year 2008 and \$1.9 million in fiscal year 2009 (ITPC, 2008). Awareness of the associated campaigns reflects the lower funding levels.

Exhibit 3-3 presents general campaign awareness among Indiana youth by demographics and region. Confirmed awareness significantly differs by region, with the highest levels of awareness observed in the North Central (8.1%) and Central (Indianapolis) (5.6%) regions and the lowest levels seen in the Northeast, Central West, and Central East regions (0.1% in each). Aided awareness of White Lies also varies significantly by region, with the highest levels observed in the Central (Indianapolis) region (45.5%).

Aided awareness of both VOICE and White Lies was significantly higher among Indiana youth aged 15 to 17 vs. those aged 12 to 14, likely because of additional time older youth have been exposed to the campaign. However, considering the magnitude of the difference, the lower levels of campaign recognition among younger youth may be something to monitor in conjunction with age of smoking initiation. The difference in confirmed awareness of the campaign between age groups was not significant.

Aided awareness of the White Lies campaign was significantly higher among white non-Hispanic youth (31.2%) and black non-Hispanic youth (26.2%) compared to Hispanic youth

**Exhibit 3-3. General Campaign Awareness by Demographics<sup>a</sup>**

	<b>Confirmed Awareness of Campaign (%)</b>	<b>Aided Awareness of VOICE (%)</b>	<b>Aided Awareness of White Lies (%)</b>
<b>Gender</b>			
Female	3.1	19.5	23.0
Male	2.5	23.1	33.0
<b>Race/Ethnicity</b>			
White non-Hispanic	3.3	22.0	<b>31.2</b>
Black non-Hispanic	2.7	24.1	<b>26.2</b>
Hispanic	0.0	11.9	<b>2.0</b>
Other race/ethnicity	0.05	13.0	<b>9.2</b>
<b>Age Group</b>			
12–14	2.3	<b>16.4</b>	<b>19.4</b>
15–17	3.9	<b>30.8</b>	<b>44.2</b>
<b>Region</b>			
North West	<b>0.8</b>	21.3	<b>15.6</b>
North Central	<b>8.1</b>	18.6	<b>32.7</b>
North East	<b>0.1</b>	17.8	<b>25.6</b>
Central West	<b>0.1</b>	14.1	<b>38.5</b>
Central (Indy)	<b>5.6</b>	26.2	<b>45.5</b>
Central East	<b>0.1</b>	17.1	<b>13.7</b>
South West	<b>2.2</b>	20.9	<b>30.0</b>
South East	<b>3.6</b>	20.0	<b>32.2</b>
<b>Smoking Status</b>			
Nonsmoker	2.8	21.4	27.9
Smoker	2.5	16.1	22.3

<sup>a</sup> Estimates in bold font indicate statistically significant relationship ( $p < 0.05$ ).

(2.0%).<sup>1</sup> There were no significant differences among race/ethnic groups in aided awareness of the VOICE campaign.

The current smoking status of youth was not related to confirmed or aided awareness of the campaigns. Similar proportions of smokers and nonsmokers reported awareness or recognition of VOICE and White Lies—a positive indication that it is unlikely that smokers have “tuned out” the campaign.

Further research may provide insight into the reasons behind these differences. A more extensive analysis of campaign targeting, media placement, media buy levels, and advertising characteristics are necessary to understand any patterns observed.

<sup>1</sup> The small number of Hispanic youth in the survey sample ( $n = 44$ ) may affect these results.

### 3.2 Awareness of Individual Advertisements

The 2008 YMTS included a series of questions to assess awareness of five individual television advertisements that were aired during the period immediately preceding survey administration. Two of the advertisements were part of ITPC's adult-targeted White Lies campaign:

- "Right to Breathe"—Features a mother strapping her child into a car seat in a car, getting in, and lighting a cigarette. As the smoke drifts upward, the child can be viewed in the rearview mirror. The screen includes the message that "everyone has a right to breathe smoke free air."
- "This is Real"—Part of a series of advertisements featuring stand-up comic René Hicks. She talks about being diagnosed with lung cancer as a result of secondhand smoke exposure in her workplace. The screen includes the message that "everyone has a right to breathe smoke free air."

The remaining three advertisements were part of a youth-targeted VOICE campaign series that featured youth protesting against and standing up to the tobacco industry:

- "Pledge"—Shows youth protesting outside of a tobacco company, and features them taking a pledge to "do anything... to fight back against the tobacco industry." Encourages youth to stand up against tobacco.
- "Body Bags"—Shows youth stacking "body bags" to represent the "27 Hoosiers that die every day from tobacco-related diseases."
- "Protest"—Shows footage of 400 Indiana youth participating in a protest against tobacco.

Exposure to campaign advertisements was measured using a confirmed awareness scheme (similar to measures described above in Section 3.1). For individual advertisements, respondents were first provided very brief descriptions of each advertisement and asked whether they recognized the description as something they had seen or heard:

- Have you recently seen an antismoking or antitobacco ad on TV that features ... (followed by a brief description of the advertisement. For example, "a mother and a child in a car")?

The questions were crafted to provide enough information for those who had seen the advertisement to recognize it, but not enough information for the respondent to claim awareness of the advertisement without having actually seen it (Farrelly et al., 2002; Sly et al., 2002). Those who said "yes" or "maybe" were considered to have claimed awareness and were then asked with a single item to report what else happened in the advertisement without providing additional cues:

- What happens in this ad?

As with general campaign awareness, precoded responses were provided based on primary events in the ad. Other responses were coded for accuracy. Those who repeated the cue or gave general answers (e.g., "Don't smoke") did not confirm awareness and were only

considered to have claimed awareness. Those who accurately described ad events were considered to have confirmed awareness.

Exhibit 3-4 presents the percentage of Indiana youth with claimed and confirmed awareness of each individual advertisement included in the survey. Confirmed awareness of “Right to Breathe” was highest among any other ad that aired (33.6%), which is consistent with findings in a similarly timed survey of adults (Arnold et al., 2009). Confirmed awareness for all other advertisements was below 10%. The “Body Bags” ad generated the highest level of confirmed awareness (8.6%) among youth-targeted VOICE ads. Further analyses into the media placement and media buys may help explain the differences in awareness levels.

**Exhibit 3-4. Awareness of Individual Advertisements**

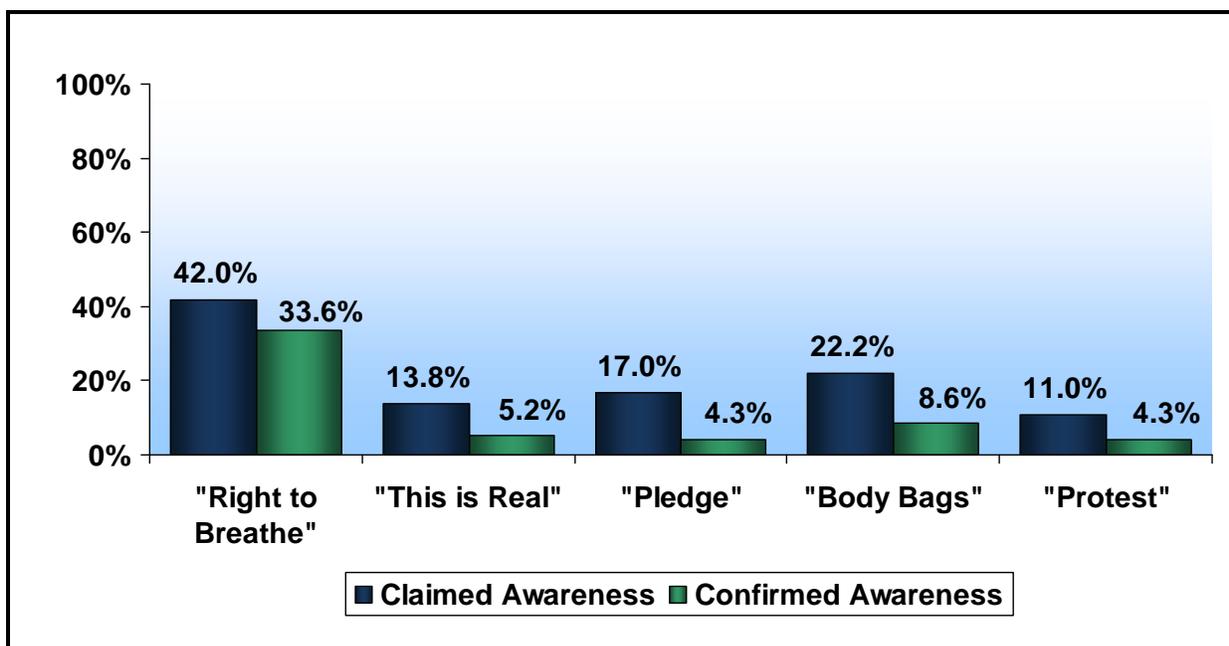


Exhibit 3-5 presents confirmed awareness of individual advertisements by demographics and smoking status. There was a statistically significant relationship between confirmed awareness of “Right to Breathe” and region, with the highest levels in the Central East (57.8%) and Northeast (53.3%) regions and the lowest level in the North West region (15.3%). In addition, a significantly higher proportion of nonsmokers (34.6%) than smokers (16.2%) confirmed awareness of “Right to Breathe.” This difference may indicate that this secondhand smoke message did not resonate as much with smoking youth or that the advertisement did not catch their attention enough to remember it. Although overall awareness was fairly high for this ad, this difference may be something to consider in future planning.

**Exhibit 3-5. Confirmed Awareness of Individual Advertisements by Demographics and Smoking Status<sup>a</sup>**

	<b>"Right to Breathe"</b>	<b>"This is Real"</b>	<b>"Pledge"</b>	<b>"Body Bags"</b>	<b>"Protest"</b>
<b>Gender</b>					
Female	38.8%	5.2%	4.2%	7.4%	5.4%
Male	34.2%	5.2%	4.4%	10.0%	2.9%
<b>Race/Ethnicity</b>					
White non-Hispanic	36.3%	4.6%	<b>2.6%</b>	8.9%	5.0%
Black non-Hispanic	29.9%	10.6%	<b>13.6%</b>	5.7%	3.4%
Hispanic	12.3%	6.0%	<b>9.5%</b>	12.4%	0.2%
Other race/ethnicity	27.5%	0.1%	<b>0.4%</b>	7.3%	0.2%
<b>Age Group</b>					
12–14	31.9%	3.6%	5.3%	7.5%	5.3%
15–17	37.1%	8.5%	2.3%	10.7%	2.2%
<b>Region</b>					
North West	<b>15.3%</b>	3.6%	8.2%	6.2%	3.1%
North Central	<b>48.3%</b>	8.9%	3.5%	9.3%	11.2%
North East	<b>53.3%</b>	4.8%	5.5%	5.5%	7.7%
Central West	<b>47.8%</b>	1.2%	0.0%	2.8%	0.6%
Central (Indy)	<b>33.5%</b>	11.3%	2.9%	17.3%	6.1%
Central East	<b>57.8%</b>	0.7%	0.0%	0.1%	0.0%
South West	<b>46.2%</b>	2.7%	0.6%	8.3%	1.4%
South East	<b>38.5%</b>	0.0%	0.0%	5.8%	0.5%
<b>Smoking Status</b>					
Nonsmoker	<b>34.6%</b>	5.1%	4.4%	8.7%	4.4%
Smoker	<b>16.2%</b>	7.2%	2.2%	7.0%	1.4%

<sup>a</sup> Estimates in bold font indicate statistically significant differences among categories ( $p < 0.05$ ).

The only other significant differences were observed for the "Pledge" ad, with African Americans reporting higher levels of awareness (13.6%) than any other race/ethnicity group.

### 3.3 Combined Campaign Awareness

To better understand awareness of television advertisements, awareness of individual ads was combined to create an overall advertisement awareness measure. This measure was then combined with general campaign awareness (name, theme, or slogan—described in

Section 3.1) to create the broadest measure of exposure to one or more Indiana campaign components. These measures are defined as follows:

- Claimed combined awareness
  - One or more TV ads—having claimed awareness of any of the five individual advertisements that aired in 2008
  - One or more campaign components—having general claimed awareness of an ITPC campaign (e.g., White Lies, VOICE) or having claimed awareness of any of the five individual TV ads
- Confirmed combined awareness
  - One or more TV ads—having confirmed awareness of any of the five individual advertisements that aired in 2008
  - One or more campaign components—having general confirmed awareness of an ITPC campaign (e.g., White Lies, VOICE) or having confirmed awareness of any of the five individual TV ads

Exhibit 3-6 presents the percentage of Indiana youth who reported claimed or confirmed awareness of one or more TV ads or had claimed or confirmed awareness of one or more campaign components (a TV ad or general campaign awareness). In 2008, 44.3% of Indiana youth had confirmed awareness of one or more TV advertisements and 44.9% of Indiana youth had confirmed awareness of one or more campaign components. As mentioned earlier, much of the overall awareness is attributable to the high levels of exposure reported for the “Right to Breathe” advertisement.

**Exhibit 3-6. Confirmed Combined Campaign Awareness**

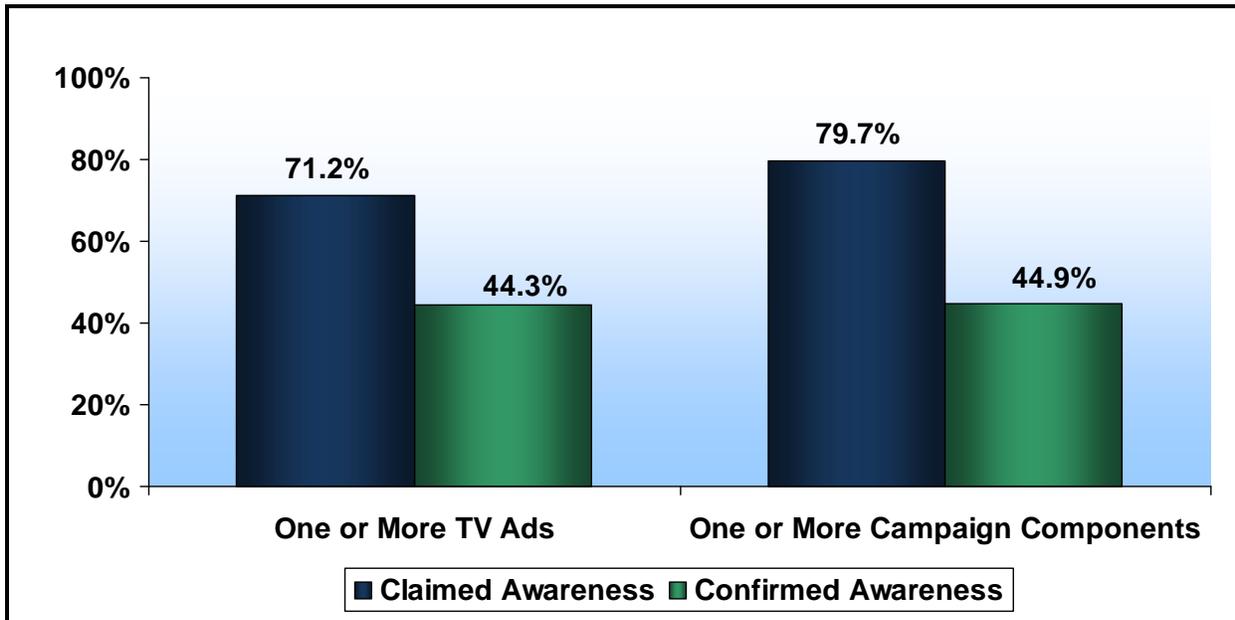


Exhibit 3-7 presents confirmed awareness of combined awareness measures by demographics. There were no significant differences among demographic groups.

**Exhibit 3-7. Confirmed Combined Campaign Awareness by Demographics**

	One or More TV Ads	One or More Campaign Components
<b>Gender</b>		
Female	44.9%	45.1%
Male	43.7%	44.7%
<b>Race/Ethnicity</b>		
White non-Hispanic	44.5%	44.8%
Black non-Hispanic	51.8%	54.4%
Hispanic	37.9%	37.9%
Other race/ethnicity	31.8%	31.8%
<b>Age Group</b>		
12–14	42.4%	42.5%
15–17	48.2%	49.8%
<b>Region</b>		
North West	34.9%	35.4%
North Central	52.1%	52.2%
North East	53.9%	53.9%
Central West	48.6%	48.6%
Central (Indy)	47.1%	48.8%
Central East	57.9%	57.9%
South West	49.2%	49.3%
South East	44.3%	46.3%

**3.4 Reactions to Advertising**

In addition to delivering vital information on youth awareness of ITPC ads, the Indiana YMTS also helps assess youth perceptions and reactions to the ads, which may influence their ability to change attitudes and beliefs. Respondents who claimed awareness of an advertisement were subsequently asked a series of reaction items:

1. How much do you like this ad? (“Liked it a lot,” “Liked it somewhat,” “Didn’t like it much,” “Didn’t like it at all”)

2. Would you say the ad made you try to avoid secondhand smoke? (for White Lies ads)

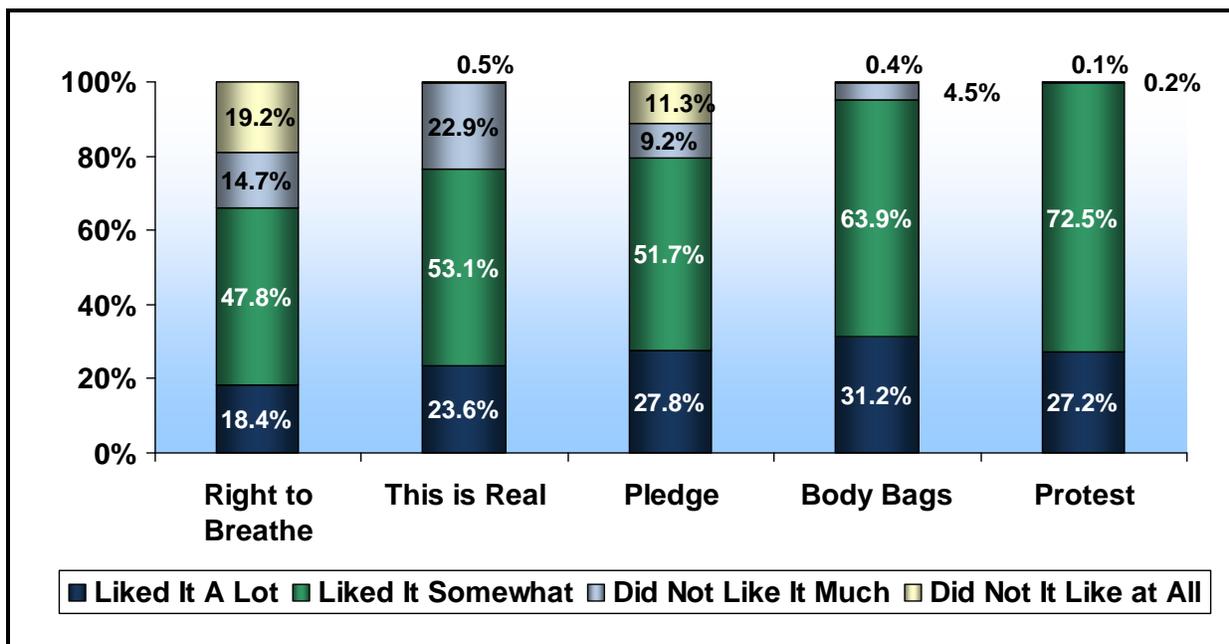
OR

3. Would you say the ad gave you ways to stand up against tobacco? (for VOICE ads)
4. Have you talked to friends about this advertisement?

For the purposes of this report, we have limited analyses of reactions to youth who also confirmed awareness of the individual advertisements. Because confirmed awareness was below 10% for several of the advertisements, these results should be interpreted with caution.

Exhibit 3-8 presents youth responses to the question, “How much do you like this ad?” In general, youth who saw the ads reported liking them. For all of the ads, more than two-thirds of those with confirmed awareness said they liked the ad they saw “a lot” or “somewhat.” More youth who confirmed awareness of the “Body Bags” and “Protest” ads said they liked them “a lot” or “somewhat” than any other ad (99.7% and 95.1%, respectively). It is important to note, however, that confirmed awareness (the basis for inclusion in this analysis) was low for these two ads (4.3% and 8.6%, respectively), so the sample size of the denominator should be taken into consideration when interpreting these results.

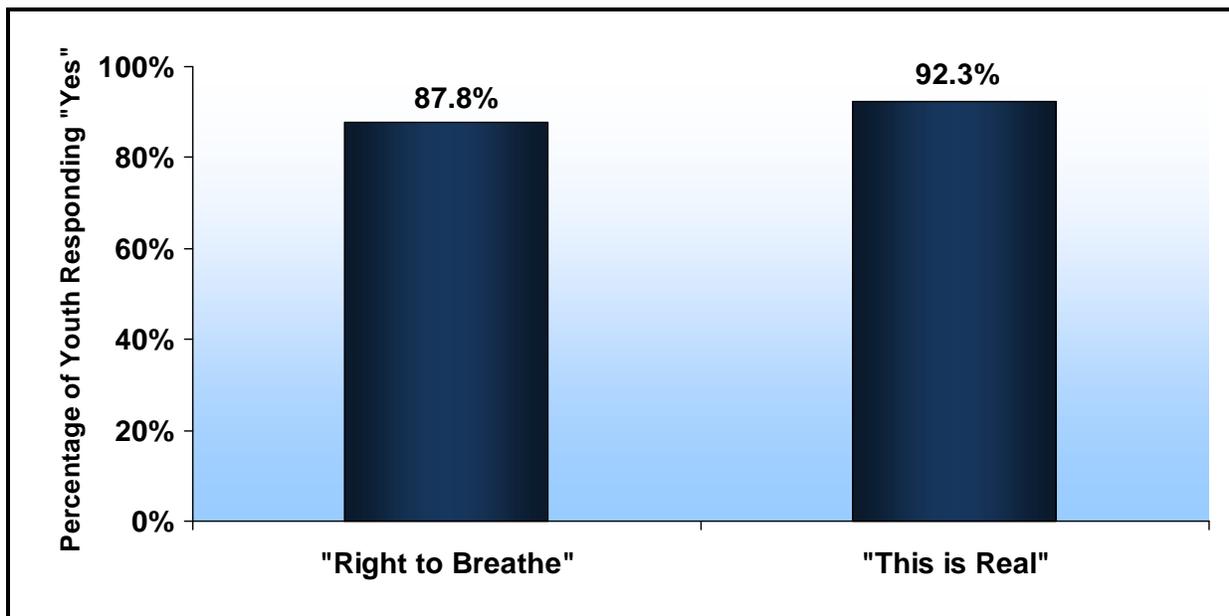
**Exhibit 3-8. Percentage of Indiana Youth Who Reported that They “Liked the Ad”<sup>a</sup>**



<sup>a</sup> Among youth with confirmed awareness of the ad. For those ads with less than 10% confirmed awareness, the resulting sample size was very low.

For the adult-focused White Lies advertisements (“Right to Breathe,” “This is Real”), which focused on reducing exposure to secondhand smoke, youth were asked if the ads made them try to avoid secondhand smoke. Exhibit 3-9 presents the percentage of Indiana youth

**Exhibit 3-9. Percentage of Indiana Youth Who Reported that the Ad “Made [Me] Try to Avoid Secondhand Smoke”<sup>a</sup>**

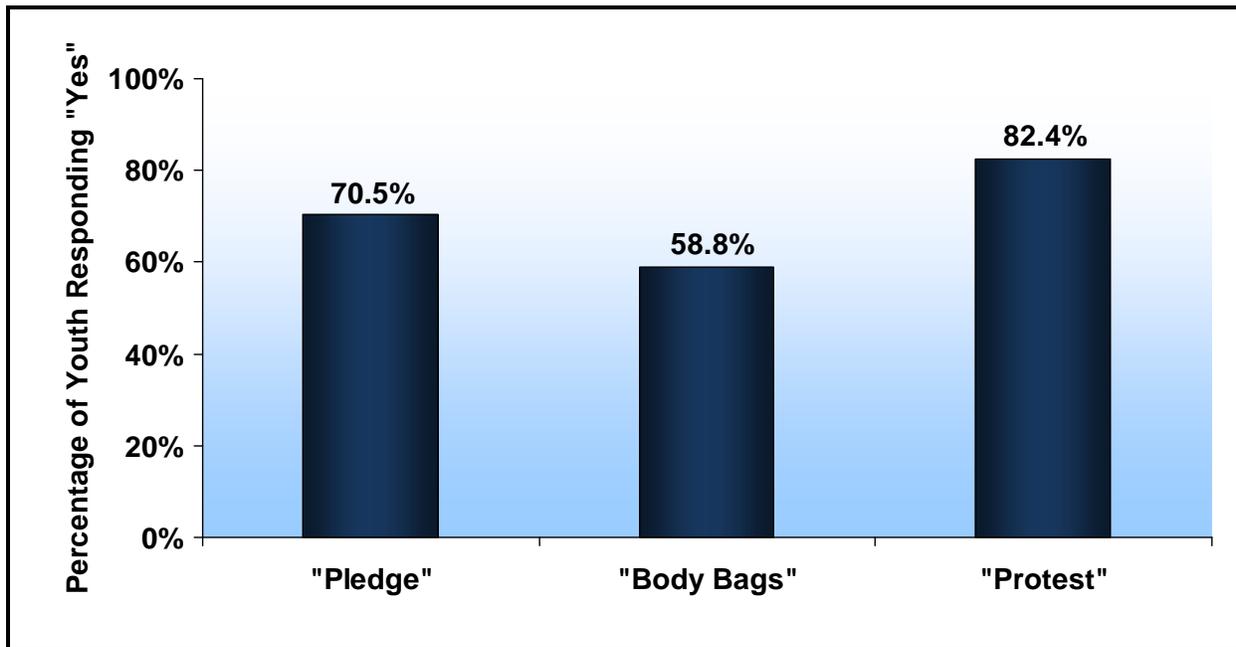


<sup>a</sup> Among youth with confirmed awareness of the ad.

with confirmed awareness of the individual advertisements who responded “yes.” Nearly 90% of Indiana youth with confirmed awareness of the “Right to Breathe” advertisement, and 92.3% of those with confirmed awareness of the “This is Real” advertisement reported that the ad made them try to avoid secondhand smoke exposure.

For the youth-focused VOICE advertisements (“Pledge,” “Body Bags,” “Protest”), which focused on youth standing up to the tobacco industry, respondents with claimed awareness were asked if the ads gave them ways to stand up against tobacco. Exhibit 3-10 presents the percentage of Indiana youth with confirmed awareness of the individual advertisements who responded “yes.” For each of the ads, more than half of those with confirmed awareness reported that the ad gave them ways to stand up against tobacco. For “Protest,” more than four in five Indiana youth with confirmed awareness said that it gave them ways to stand up against tobacco (82.4%), and approximately 71 of those with confirmed awareness of “Pledge” reported that the ad gave them ways to stand up against tobacco (70.5%). Among Indiana youth with confirmed awareness of the “Body Bags” advertisement, nearly 60% reported that the ad gave them ways to stand up against tobacco (58.8%).

**Exhibit 3-10. Percentage of Indiana Youth Who Reported that the Ad “Gave [Me] Ways to Stand Up Against Tobacco”<sup>a</sup>**

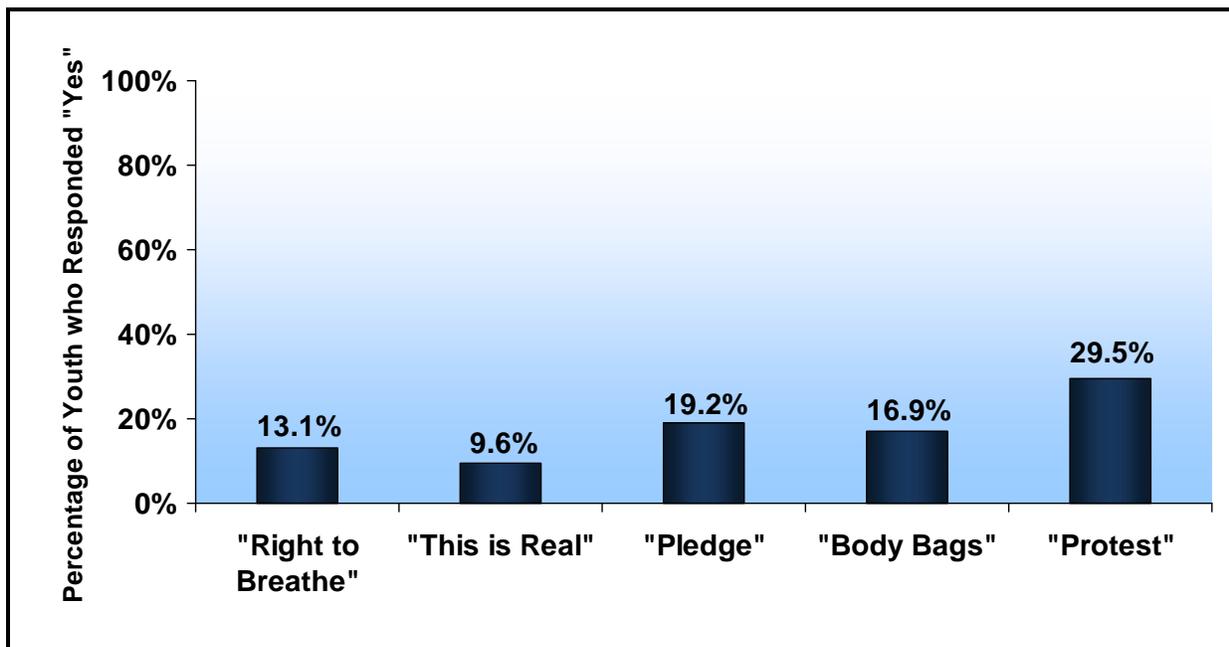


<sup>a</sup> Among youth with confirmed awareness of the ad.

For all advertisements, Indiana youth with claimed awareness of individual advertisements were asked if they talked to their friends about the advertisement. Exhibit 3-11 presents the percentage of Indiana youth who answered “yes” to this question. Although no ad generated talk among a majority of youth, the youth-focused VOICE ads (“Pledge,” “Body Bags,” “Protest”) were talked about more than those with an adult focus. For example, nearly 30% of Indiana youth with confirmed awareness of the “Protest” advertisement talked about it with their friends, while the least “talked about” advertisement was the adult-focused White Lies ad, “This is Real.” Only 9.6% of Indiana youth with confirmed awareness of the “This is Real” advertisement talked about it with their friends. These results are within the range observed for similar campaigns elsewhere (Hersey et al., 2007).

As with other reaction measures, it is important to consider the sample size of the denominator of these analyses (those with confirmed awareness of the individual advertisements) when interpreting these results.

**Exhibit 3-11. Percentage of Indiana Youth Who Reported that They Talked to Friends about the Ad<sup>a</sup>**



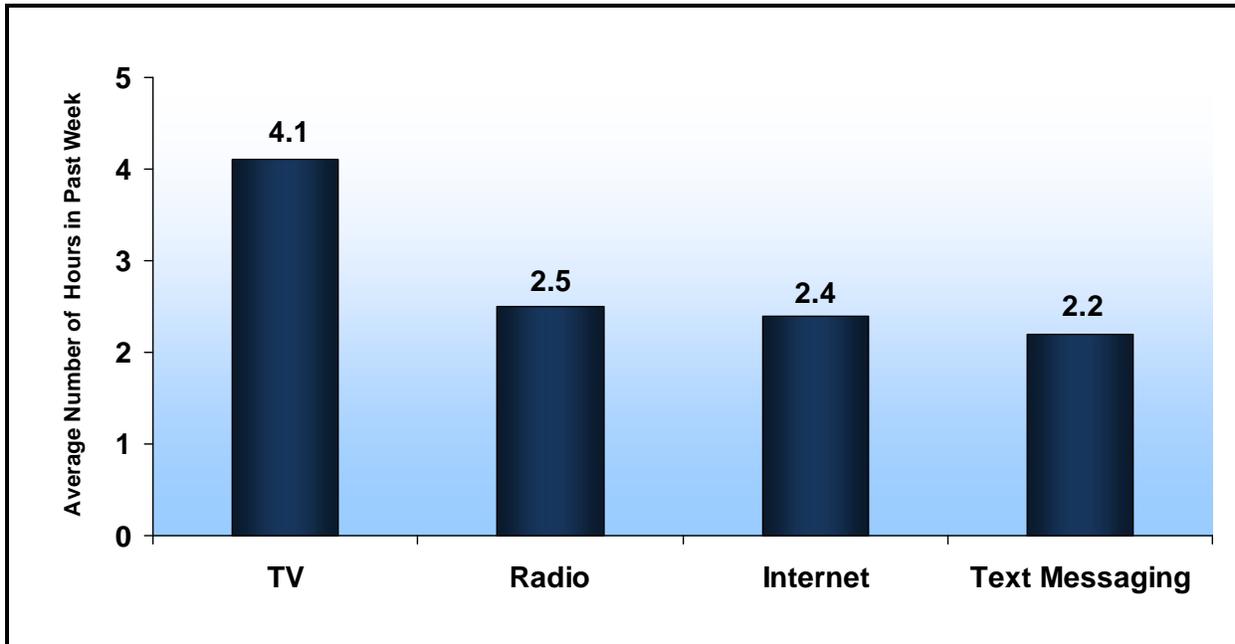
<sup>a</sup> Among youth with confirmed awareness of the ad.

### 3.5 Media Usage

Considering youth media usage is important for program planners as the decisions on media mix, timing, and overall public education dollars are allocated. The 2008 YMTS asked Indiana youth about their use of television, radio, Internet, and cell phones for text messaging using a series of four items:

1. During the past 7 days, on average, how many hours a day did you watch TV?
2. During the past 7 days, on average, how many hours a day did you listen to the radio?
3. During the past 7 days, on average, how many hours a day did you browse or surf the Internet?
4. During the past 7 days, on average, how many hours a day did you text message on a cell phone?

Exhibit 3-12 presents media use among Indiana youth in the past 7 days. In the week prior to the survey, Indiana youth spent more time watching television (4.1 hours) than using any other medium. Time spent listening to the radio, browsing the Internet, and text messaging was about the same (a little over 2 hours per week).

**Exhibit 3-12. Media Use in the Past 7 Days**

<sup>a</sup> Among youth with confirmed awareness of the ad.

### 3.6 Summary

In 2008, awareness of ITPC-sponsored campaigns and advertisements was low. Less than 3% of Indiana youth could name an ITPC campaign or slogan (e.g., VOICE, White Lies). Furthermore, confirmed awareness for all but one of the individual advertisements that ran during 2008 was less than 10%. Even when prompted with the name of the campaign—VOICE or White Lies—just over one in five Indiana youth recognized VOICE (21.2%) and just over one in four recognized White Lies (27.6%). These measures show lower levels of exposure than seen in other states (Renaud et al., 2007; Hersey et al., 2007), although to make a true comparison, controlling for funding and media weight (e.g., media buy levels) would be necessary.

In general, campaign awareness was low, but one of the individual advertisements fared well in recognition. Confirmed awareness of “Right to Breathe” was 33.6%, the highest among all individual advertisements, with exposure levels in line with other successful national and state countermarketing campaigns (Renaud et al., 2007; Sly et al., 2002). It is also likely that the “Right to Breathe” advertisement brought combined campaign component awareness levels up to 45%. Given the limited resources ITPC had to implement media campaigns, this level of awareness is impressive and may be indicative of the impact of this type of advertising, especially considering that youth were not the primary target of the advertisement and its message. CDC recommends that ads should reach 75% to 80% of the target audience each quarter of the year during a media campaign (CDC, 2007). It is

important to note, however, that a higher percentage of nonsmokers were aware of the ad compared with smokers, which should be considered as possible selective attention among those predisposed to agree with its secondhand smoke prevention message.

A majority of Indiana youth with confirmed awareness of an individual advertisement reacted well to the ads. For example, approximately two-thirds of youth with confirmed awareness of "Right to Breathe" liked the advertisement "a lot" or "somewhat" (66.2%). For all other individual advertisements, the percentage of Indiana youth with confirmed awareness of an individual advertisement who reported liking it "a lot" or "somewhat" ranged from 76.7% ("This is Real") to 99.7% ("Protest"). An average of 90% of Indiana youth reported that the individual advertisements made them try to avoid secondhand smoke. Between 60% and 85% of youth reported that the individual advertisements gave them ways to stand up against tobacco. In general, a low percentage of youth talked about individual advertisements with friends, but results are in line with findings from other campaigns (Renaud et al., 2007).

## 4. VOICE BRAND EQUITY

### 4.1 Behavioral Branding and VOICE

Aaker (1996) defines brands as “a set of attributes and associations that an individual ... has regarding a product or service.” Brand equity is a multidimensional measure of a brand’s persuasive appeal. Evans et al. (2002) expand this definition beyond product marketing to include social marketing efforts and to define behavioral branding as a set of attributes or associations with a lifestyle or set of behaviors.

VOICE is a youth-led initiative exposing the deceptive marketing tactics of the tobacco industry. Through VOICE, youth can communicate with their peers and work to fight back against the tobacco industry, thus mobilizing their peers to reject tobacco (ITPC, 2007). Youth participate in media outreach, including paid and earned media efforts coordinated through the ITPC media campaign and a Web site ([www.VOICE.tv](http://www.VOICE.tv)) that reaches thousands of youth in Indiana (Thomas, Schmitt, and Zhang, 2008).

Respondents who have expressed aided awareness of the VOICE brand are asked the series of items, which can be divided into four constructs:

- Brand awareness—agreement with the messages of VOICE
- Brand loyalty—willingness to advocate on behalf of VOICE
- Brand leadership—agreement with the leadership of VOICE
- Brand personality—recognition of key messages of VOICE

These constructs and the individual items included in them were based on work by Evans et al. (2007) for the evaluation of Ohio’s **stand** campaign. In turn, the **stand** branding scales were developed after considerable research for the American Legacy Foundation’s truth<sup>®</sup> campaign (Evans et al., 2002; Evans, Price, and Blahut, 2005) and CDC’s VERB: It’s What You Do (Huhman, Heitzler, and Wong, 2004). The scales developed for these campaigns are based on Aaker’s (1996) brand equity ten, which represents marketing research scales that can be applied across product sectors. The four behavioral constructs described most closely relate to the objectives of the VOICE campaign.

Exhibit 4-1 lists the survey items from the 2008 YMTS that were used to define each brand equity construct. For each survey item, youth could respond “strongly agree,” “agree,”

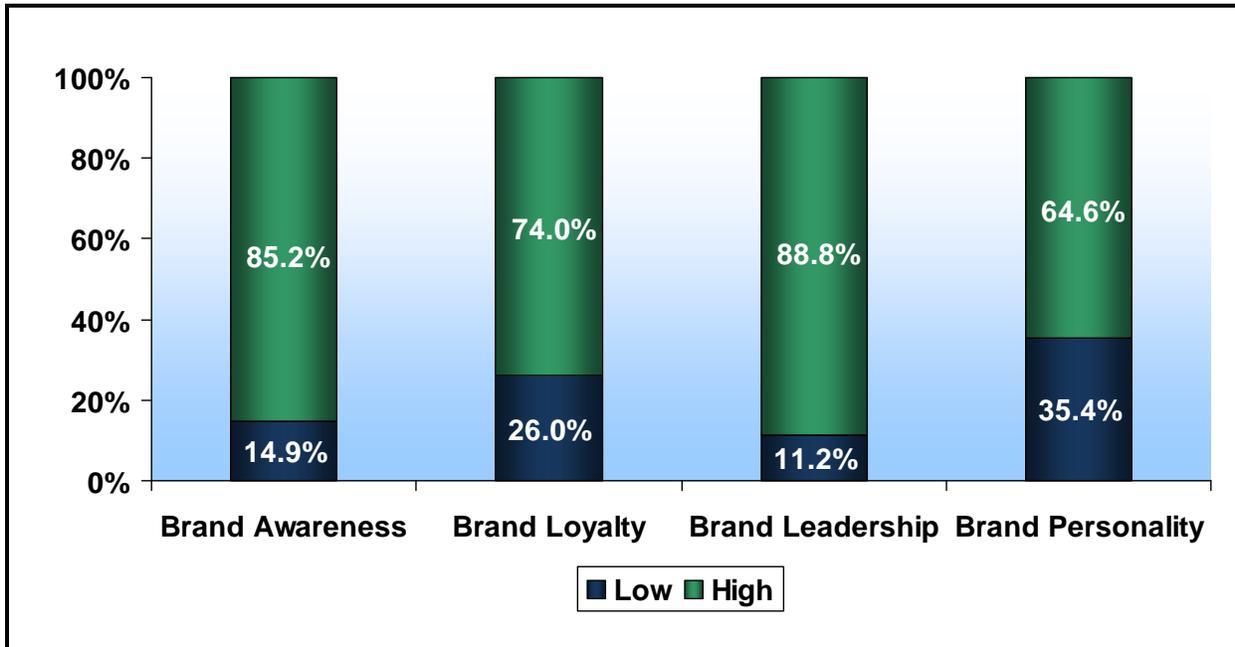
**Exhibit 4-1. Survey Items Used to Create VOICE Brand Equity Constructs**

Brand Measure	YMTS Brand Measure Items
Brand awareness (When you think VOICE, you think ...)	I should get involved Not smoking is cool Young people can take action to get other people to quit smoking I am not alone in my views against tobacco I think people I care about need to stop smoking I can do something to stop exposure to secondhand smoke
Brand loyalty	I'd like to help VOICE make a difference I'd talk about VOICE in front of my friends who smoke I'd wear a VOICE t-shirt or other gear If I had the chance, I would tell other kids my age to get involved with VOICE
Brand leadership	VOICE is becoming more popular with kids like me VOICE is for people like me People my age created VOICE and its message
Brand personality	The people in VOICE generally get involved The people in VOICE generally speak their minds The people in VOICE are just like me The people in VOICE are just like the people I hang out with

“disagree,” “strongly disagree,” or “no opinion.” The “no opinion” response was treated as missing and, therefore, was not included in the creation of the scales described below.

For this analysis, individual items in each dimension were combined to create overall construct measures. Youth were classified as “high” on each construct (e.g., brand awareness) if their combined responses were above the median on the scale of the included items, with the most desired response being “strongly agree.”

Exhibit 4-2 presents measures of “high” and “low” brand equity for each of the four constructs. The majority of Indiana youth who recognized the VOICE brand expressed positive feelings toward the brand. The highest percentages of “high” responses were found for the brand leadership (88.8%) and the brand awareness (85.2%) constructs. These two constructs represent agreement with the messages and leadership with the brand.

**Exhibit 4-2. VOICE Brand Equity<sup>a</sup>**

<sup>a</sup> Constructs defined among youth with aided awareness of VOICE.

Exhibit 4-3 presents differences between demographic groups in reporting high levels of brand equity for the four constructs. Brand equity is consistently higher among younger youth (aged 12 to 14) than among older youth (aged 15 to 17). For example, 50% more 12- to 14-year-olds reported high levels of brand equity on the brand personality construct than their older counterparts (76.7% vs. 49.7%). These results are consistent with longitudinal evaluations of youth tobacco countermarketing brands elsewhere, which found that brand equity decreases as youth get older (Hersey et al., 2007). The magnitude of the differences observed here may be something to continue to monitor to ensure that younger youth continue to aspire to the brand, and that older youth do not begin to shun the ideals associated with it. Of note, although not significant, there are somewhat higher levels of brand equity across constructs for females than for males.

**Exhibit 4-3. High VOICE Brand Equity by Demographics<sup>a</sup>**

	<b>Brand Awareness</b>	<b>Brand Loyalty</b>	<b>Brand Leadership</b>	<b>Brand Personality</b>
<b>Gender</b>				
Female	84.9%	87.7%	91.8%	79.7%
Male	85.5%	57.9%	85.5%	49.1%
<b>Age Group</b>				
12–14	<b>92.6%</b>	<b>83.2%</b>	<b>97.3%</b>	<b>76.7%</b>
15–17	<b>75.5%</b>	<b>62.2%</b>	<b>78.9%</b>	<b>49.7%</b>

<sup>a</sup> Because of small sample sizes, estimates by race/ethnicity and region are not presented.

## 4.2 Summary

The relatively high levels of brand equity for the VOICE brand indicate that youth who are familiar with the brand and its message are also likely to agree with it and to participate in the call to action promoted by VOICE. The best results were reported for the brand leadership (e.g., “VOICE is for people like me”) construct, with 89% of respondents classified as having “high” brand equity. This is especially encouraging for an early look at branding, because previous findings associated with the state of Ohio’s similarly branded youth campaign, **stand** (Evans et al., 2007; Hersey et al., 2007), have suggested that brand leadership has the strongest prevention effect among the four branding subscales.

## **5. CAMPAIGN AWARENESS AND ANTITOBACCO KNOWLEDGE, ATTITUDES, AND BELIEFS**

In this section, we compare positions on selected antitobacco knowledge, attitude, and beliefs (KAB) by confirmed awareness measures for individual advertisements. We focus on KAB items that would potentially be influenced by confirmed awareness of individual advertisements based on what the advertisements addressed. For example, because the “Right to Breathe” and “This is Real” advertisements focused on secondhand smoke exposure, we assessed the relationship between confirmed awareness of these advertisements and secondhand smoke-related KAB items. Similarly, since the “Pledge,” “Body Bags,” and “Protest” advertisements focused on influencing perceptions about the tobacco industry and empowering youth to stand up against tobacco, we assessed the relationship between confirmed awareness of these advertisements and tobacco industry-related KAB items and youth empowerment-related KAB items, respectively.

This section of the report is divided into the following sections to highlight the relationship between campaign awareness and three categories of KAB items:

- Campaign Awareness and KAB Concerning Secondhand Smoke Exposure
- Campaign Awareness and KAB Concerning the Tobacco Industry
- Campaign Awareness and KAB Concerning Youth Empowerment and Activism

Finally, a summary highlights major findings and provides interpretation.

### **5.1 Campaign Awareness and Knowledge, Attitudes, and Beliefs Concerning Secondhand Smoke Exposure**

Exhibit 5-1 presents antitobacco positions concerning secondhand smoke exposure by confirmed awareness of the two advertisements that focused on a secondhand smoke prevention message, “Right to Breathe” and “This is Real.” Both of these ads feature messages highlighting the dangers of being exposed to secondhand smoke. In “Right to Breathe,” a young child breathes the smoke of her mother’s cigarettes inside their car, and in “This is Real,” stand-up comic René Hicks talks about contracting lung cancer as a result of secondhand smoke.

Although the vast majority of all Indiana youth reported understanding the dangers of secondhand smoke and supporting protection from secondhand smoke (between 85% and 93%), one item stood out because of the somewhat lower levels of support shown. Just over half of all respondents (51.2%) said that they strongly disagreed or disagreed (the most antitobacco position) with the statement, “If people want to smoke, I say let them.” Further research into the characteristics of respondents who disagreed may provide more insight into these findings.

**Exhibit 5-1. Secondhand Smoke-Related Knowledge, Attitude, and Belief Items and Confirmed Awareness of Relevant Individual Advertisements<sup>a</sup>**

KAB Item (Antitobacco Position)	Overall	"Right to Breathe"		"This is Real"	
		Aware	Unaware	Aware	Unaware
Smoke from other people's cigarettes bothers me (Strongly Agree or Agree).	84.7%	87.0%	83.5%	92.3%	84.2%
If people want to smoke, I say let them (Strongly Disagree or Disagree).	51.2%	47.9%	52.9%	42.6%	51.7%
It is harmful to a person's health if they live in a house where someone smokes tobacco indoors (Strongly Agree or Agree).	90.1%	93.9%	88.2%	83.1%	90.5%
Think that breathing smoke from other people's cigarettes is very harmful or somewhat harmful.	92.5%	<b>96.6%</b>	<b>90.4%</b>	100.0%	92.1%
Believe that people working indoors, including those working in restaurants and bars, should have a right not to be exposed to secondhand smoke. <sup>b</sup>	92.9%	—	—	97.2%	92.7%

<sup>a</sup> Estimates in bold font indicate statistically significant relationship ( $p < 0.05$ ).

<sup>b</sup> Because the message of the advertisement did not address smoking in public places, the relationship between awareness of "Right to Breathe" and the attitude item "Believe that people working indoors ... should have a right not to be exposed to secondhand smoke" was not investigated.

The percentage of youth who thought that breathing smoke from other people's cigarettes is harmful or very harmful was significantly higher among youth who were aware of "Right to Breathe" (96.6%) compared to youth who were unaware (90.4%). Logistic regressions controlling for a variety of factors (see Section 2.3 for the list of factors) showed similar results. There were no other significant differences between those with awareness of the ads and those without.

## 5.2 Campaign Awareness and Knowledge, Attitudes, and Beliefs Concerning the Tobacco Industry

Exhibit 5-2 presents antitobacco positions concerning the tobacco industry, by confirmed awareness of the three VOICE advertisements with tobacco industry-related messages: "Pledge," "Body Bags," and "Protest." The three ads make up a series in which Indiana youth protest against the tobacco industry.

**Exhibit 5-2. Tobacco Industry-Related Knowledge, Attitude, and Belief Items and Confirmed Awareness of Relevant Individual Advertisements<sup>a</sup>**

KAB Item (Antitobacco Position)	Overall	"Pledge"		"Body Bags"		"Protest"	
		Aware	Unaware	Aware	Unaware	Aware	Unaware
Smoking cigarettes makes people your age look cool or fit in (Strongly Disagree or Disagree).	90.0%	87.5%	90.1%	<b>97.4%</b>	<b>89.3%</b>	93.8%	88.9%
Cigarette companies try to get young people to start smoking (Strongly Agree or Agree).	63.7%	72.1%	63.3%	70.0%	63.1%	70.0%	63.4%
Tobacco ads influence youth to smoke (Strongly Agree or Agree).	63.5%	70.1%	63.2%	<b>93.2%</b>	<b>69.5%</b>	<b>87.0%</b>	<b>79.0%</b>
Tobacco companies put profits over people's health (Strongly Agree or Agree).	71.6%	88.4%	70.8%	83.9%	78.6%	71.6%	79.4%

<sup>a</sup> Estimates in bold font indicate statistically significant relationship ( $p < 0.05$ ).

Between 64% and 90% of all youth agreed with the antitobacco position for these items. Notably, 9 in 10 youth strongly disagreed or disagreed that "smoking cigarettes makes people [their] age look cool or fit in," indicating that Hoosier youth do not see smoking cigarettes as a necessary component of social acceptance.

Several significant differences were observed between those with confirmed awareness of the ads and those without. The percentage of youth who strongly disagreed or disagreed with the statement "Smoking cigarettes makes you look cool or fit in" was significantly higher among youth who were aware of "Body Bags" (97.4%) than among youth who were unaware (89.3%). In addition, the percentage of youth who strongly agreed or agreed with the statement "Tobacco ads influence youth to smoke" was higher among youth with confirmed awareness of "Body Bags" (93.2%) and "Protest" (87.0%) than among youth who were unaware of these advertisements (69.5% and 79.0%, respectively). There were no significant relationships among tobacco industry-related attitudes for the "Pledge" advertisement.

Logistic regressions confirmed these results, although differences between those who were aware and those who were not aware were not statistically significant when combining awareness of the three ads (i.e., confirmed aware of "Pledge" or "Body Bags" or "Protest"), with one exception. The likelihood of respondents agreeing that "tobacco companies put profits over people's health" was more than six times higher for those who were aware of one of the ads than for those who could not confirm awareness of at least one ad (OR = 6.12;  $p < .01$ ).

### **5.3 Campaign Awareness and Knowledge, Attitudes, and Beliefs Concerning Youth Empowerment and Activism**

Exhibit 5-3 presents antitobacco positions concerning youth empowerment by confirmed awareness of the three VOICE ads with a youth empowerment message: "Pledge," "Body Bags," and "Protest." As mentioned earlier, these ads make up a series that shows how youth can be empowered to speak out against tobacco use and the tobacco industry by joining the VOICE movement.

More than three-quarters of all youth showed antitobacco beliefs for items in the youth empowerment construct. Youth were especially prepared to tell others not to smoke: 87.5% strongly agreed or agreed that they felt "comfortable telling other people my age that they should not smoke or use tobacco."

There were a few examples where exposure to specific advertisements was related to even higher rates of antitobacco agreement. Awareness of the "Protest" ad was significantly related to two youth empowerment-related attitudes. First, the percentage of youth who strongly agreed or agreed with the statement "I want to be involved in efforts to get rid of cigarette smoking" was significantly higher among youth who were aware of "Protest" (97.7%) compared to those who were unaware (75.6%). In addition, the percentage of youth who strongly agreed or agreed with the statement "I feel comfortable telling other people my age about the risks of tobacco" was significantly higher among youth with confirmed awareness of "Protest" (96.2%) compared to those without (81.3%).

In addition, the percentage of youth who strongly agreed or agreed that they felt "comfortable telling other people my age that they should not smoke or use tobacco" was higher among youth with confirmed awareness of "Pledge" (96.7%) compared to youth who were unaware of "Pledge" (87.1%). There were no significant differences related to awareness of the "Body Bags" ad. Logistic regressions showed no significant relationships between awareness of at least one of the ads and any of the empowerment-related attitudes.

**Exhibit 5-3. Youth Empowerment-Related Knowledge, Attitude, and Belief Items and Confirmed Awareness of Relevant Individual Advertisements<sup>a</sup>**

KAB Item (Antitobacco Position)	Overall	"Pledge"		"Body Bags"		"Protest"	
		Aware	Unaware	Aware	Unaware	Aware	Unaware
Choosing not to smoke is a way to express your independence (Strongly Agree or Agree).	79.0%	78.4%	79.1%	83.9%	78.6%	71.6%	79.4%
I want to be involved in efforts to get rid of cigarette smoking (Strongly Agree or Agree).	76.5%	91.2%	76.0%	75.1%	76.7%	<b>97.7%</b>	<b>75.6%</b>
I feel comfortable telling other people my age about the risks of tobacco (Strongly Agree or Agree).	82.0%	66.6%	82.7%	91.0%	81.1%	<b>96.2%</b>	<b>81.3%</b>
I feel comfortable telling other people my age that they should not smoke or use tobacco (Strongly Agree or Agree).	87.5%	<b>96.7%</b>	<b>87.1%</b>	90.9%	87.2%	95.5%	87.1%
I am confident that I can convince my friends not to smoke or use tobacco (Strongly Agree or Agree).	78.1%	75.1%	78.2%	71.8%	78.7%	91.3%	77.5%

<sup>a</sup> Estimates in bold font indicate statistically significant relationship ( $p < 0.05$ ).

## 5.4 Summary

Overall, there were some statistically significant relationships between tobacco-related KAB items and demonstrated awareness of White Lies (adult focused) and VOICE (youth targeted) advertisements. However, significant differences were not consistent across all ads.

The "Right to Breathe" advertisement was the only one of the White Lies ads to be related to a secondhand smoke attitude. The percentage of Indiana youth who thought that

breathing smoke from someone else's cigarette is very harmful or somewhat harmful was significantly higher among those who were aware of the "Right to Breathe" ad than among those who were not aware. Although no other statistically significant relationships were observed, it is important to note that the vast majority of all youth demonstrated that they understand the secondhand smoke messages and agree with the idea that individuals should be protected from secondhand smoke.

Awareness of the "Body Bags" VOICE ad was related to several tobacco industry-related attitudes. For example, the percentage of Indiana youth who disagreed that smoking cigarettes makes you cool or fit in was 10% higher among youth who were aware of the ad versus those who were not aware, and the percentage of youth who agreed that tobacco ads influence youth to smoke was nearly 35% higher among those who were aware than those who were not aware.

In addition, differences in attitudes concerning youth empowerment were evident among youth who were aware of the "Protest" and "Pledge" advertisements. The percentage of youth who agreed that they wanted to be involved in efforts to get rid of smoking was nearly 30% higher among those who were aware of "Protest" versus those who were not. In addition, the percentage of Indiana youth who agreed that they felt comfortable telling people their age about the risks of tobacco was nearly 20% higher among those who were aware of "Protest" versus those who were not. Awareness of "Pledge" was also related to respondents' willingness to confront their peers about tobacco use: 11% more youth who were aware of "Pledge" agreed that they felt comfortable telling people their age that they should not use tobacco than those who were not aware.

## 6. TOBACCO USE PREVENTION EDUCATION

The 2008 YMTS asked Indiana youth about tobacco use prevention education (TUPE) topics taught in their classes at school. The questions related to TUPE in the Indiana YMTS were taken from the National Youth Tobacco Survey (a nationwide telephone survey designed to measure many of the same constructs as the YMTS). The four items are based on their ability to measure exposure to “four research-based tobacco use prevention strategies” (Wenter et al., 2002), including knowledge of short-term health consequences, normative education, reasons young people smoke, and training in refusal skills. These topics have been shown to have preventive effects on smoking uptake, especially in combination with other prevention efforts (e.g., countermarketing) (Hersey et al., 2007). *TUPE participation* is defined as agreement with at least three of the four following items:

1. During the past year, were you taught about the effects of smoking in any of your classes?
2. During the past year, were you taught about the reasons why people your age smoke in any of your classes?
3. During the past year, did you practice ways to say no to cigarettes/tobacco in any of your classes?
4. During the past year, were you taught about the dangers of secondhand smoke in any of your classes?

For the purposes of this report, we compared Indiana youth who were taught three or more TUPE topics (participated in TUPE) to Indiana youth who were taught fewer than three topics. This section of the report is divided into the following sections to focus on the extent of TUPE exposure in Indiana and the potential impact it may have on tobacco control:

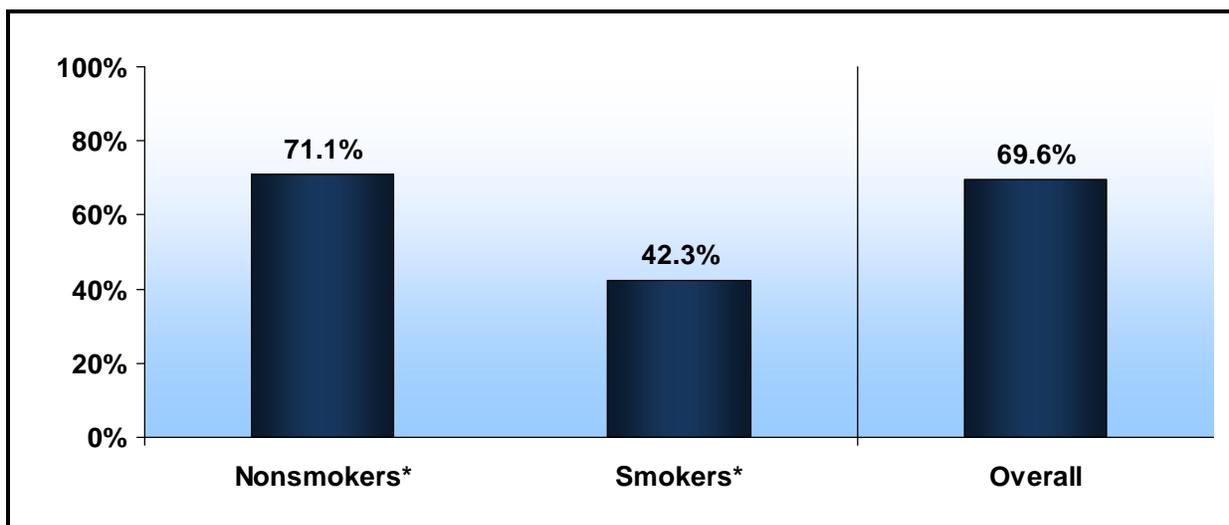
- Tobacco Use Prevention Education among Indiana Youth
- Tobacco Use Prevention Education and Antitobacco Knowledge, Attitudes, and Beliefs

Finally, a summary highlights major findings and provides interpretation.

### 6.1 Tobacco Use Prevention Education among Indiana Youth

Exhibit 6-1 presents the percentage of Indiana youth who participated in TUPE overall and by smoking status. In 2008, nearly 70% of Indiana youth reported that they were taught three or more TUPE topics in their classrooms. In addition, the percentage of smokers reporting TUPE participation was significantly lower than the percentage of nonsmokers reporting participation (42.3% and 71.1%, respectively). These results likely represent selective attention, where nonsmokers who understand and believe in the subject of the lessons are more likely to remember lessons (or overreport based on experiences elsewhere), and smokers forget the lessons or do not pay as much attention to the messages as their nonsmoking peers.

**Exhibit 6-1. Indiana Youth Who Were Taught Three or More TUPE Topics, Overall and by Smoking Status**



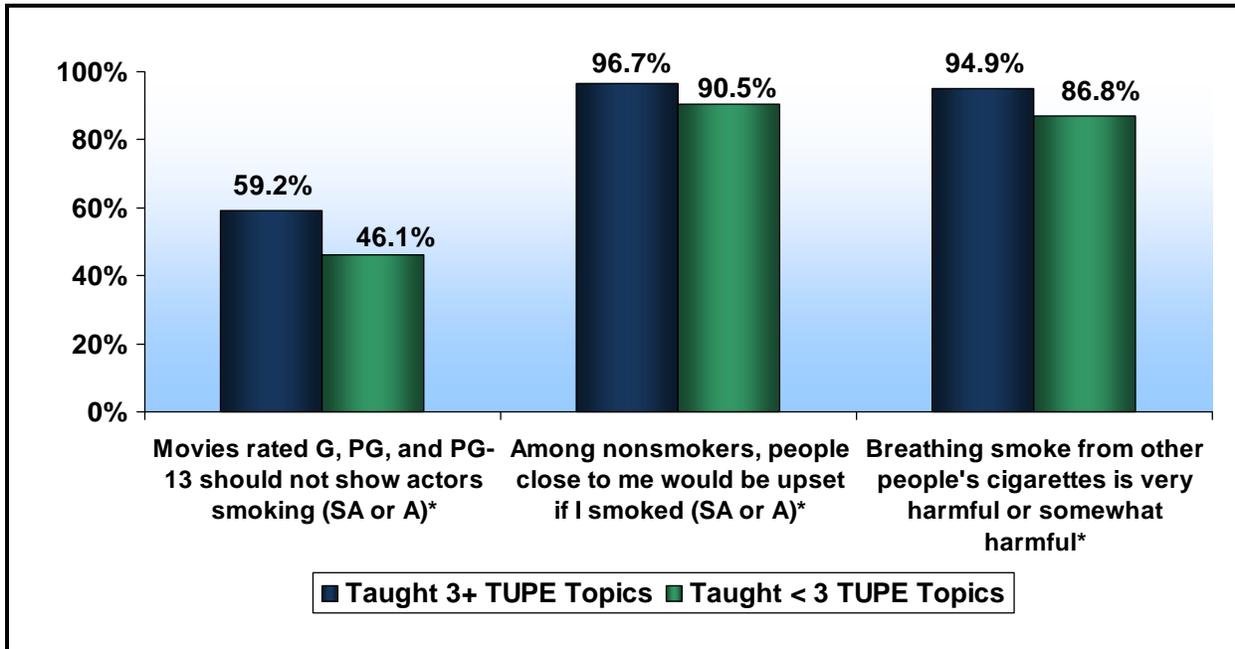
\* Statistically significant relationship between reporting exposure to three or more TUPE topics and smoking status.

## **6.2 Tobacco Use Prevention Education and Antitobacco Knowledge, Attitudes, and Beliefs**

Exhibits 6-2 and 6-3 present differences in selected KAB items by participation in TUPE. Exhibit 6-2 includes items related to social perceptions about smoking and secondhand smoke. Exhibit 6-3 includes items related to youth empowerment. The items included in these exhibits were selected as illustrations of significant differences in attitudes between youth who participated in TUPE and those who did not.

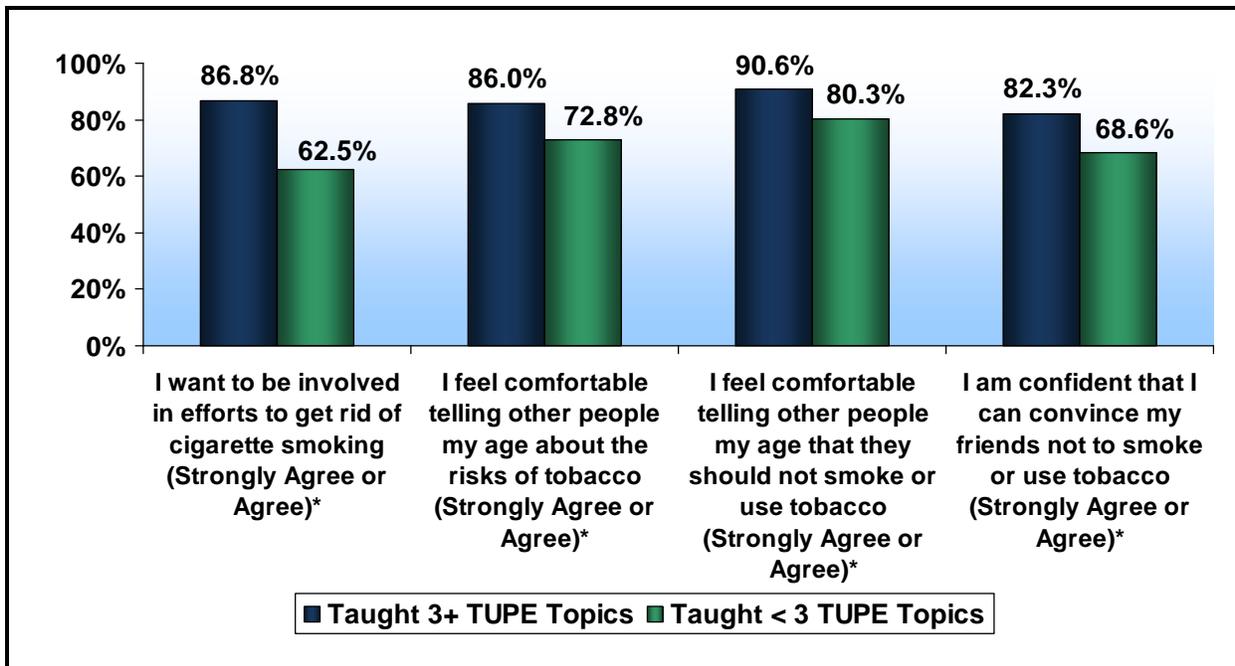
Exhibit 6-2 shows that, among KAB items related to social perceptions, the percentage of Indiana youth who strongly agreed or agreed that “Movies rated G, PG, and PG-13 should not show actors smoking” was significantly higher among those who had participated in TUPE (59.2%) compared to those who had not (46.1%). In addition, the percentage of nonsmokers who strongly agreed or agreed that “People close to [them] would be upset if [they] smoked” was significantly higher among those who participated in TUPE (96.7%) compared to those who had not been exposed to TUPE (90.5%). Among KAB items related to secondhand smoke exposure, nearly 95% of Indiana youth who were taught three or more TUPE topics (94.9%) reported that breathing smoke from other people’s cigarettes is very harmful or somewhat harmful—nearly 10% higher than the same responses reported among those who were did not receive the same level of TUPE lessons.

**Exhibit 6-2. Selected Knowledge, Attitude, and Belief Items by TUPE**



\* Statistically significant relationship between KAB survey item and reporting 3 or more TUPE topics.

**Exhibit 6-3. Youth Empowerment-Related Knowledge, Attitudes, and Beliefs by Participation in TUPE**



\* Statistically significant relationship between KAB survey item and reporting three or more TUPE topics.

Logistic regressions showed no significant relationships between TUPE participation and either of the attitudes related to social perceptions of smoking. However, a logistic regression analysis found that the likelihood of youth responding that “breathing smoking from other people’s cigarettes [was] ‘very harmful’ or ‘somewhat harmful’” was more than three times higher for those with confirmed TUPE participation than for those without (OR = 3.28;  $p < .05$ ).

Exhibit 6-3 presents KAB items related to youth empowerment by TUPE participation. The percentage of youth reporting that they strongly agreed or agreed with the statement, “I want to be involved in efforts to get rid of cigarette smoking” was nearly 25% higher among youth who were taught more than three TUPE topics compared to youth who were taught fewer than three TUPE topics (86.8% vs. 62.5%). Furthermore, the percentage of Indiana youth who strongly agreed or agreed that they were comfortable telling their friends about the risks of tobacco or that they should not smoke was significantly higher among those who participated in TUPE lessons compared to youth who did not participate (86.0% vs. 72.8% and 90.6% vs. 80.3%, respectively). Finally, the percentage of youth reporting that they strongly agreed or agreed with the statement “I am confident that I can convince my friends not to smoke or use tobacco” was nearly 14% higher among youth who were taught three or more TUPE topics compared to youth who were taught fewer than three TUPE topics (82.3% vs. 68.6%).

Logistic regression analyses confirm these relationships, even when controlling for a variety of demographic and other related factors. For instance, the likelihood of those who had been taught three or more TUPE topics agreeing that they “want to be involved in efforts to get rid of cigarette smoking” was twice as high as it was for those who were taught fewer than three topics (OR = 2.00;  $p < .05$ ). It was more than twice as high for agreement that respondents felt “comfortable telling other people [their] age about the risks of tobacco” (OR = 2.33;  $p < .01$ ) and for agreement that respondents felt “comfortable telling other people [their] age that they should not smoke/use tobacco” (OR = 2.35;  $p < .05$ ).

### **6.3 Summary**

In general, a higher percentage of youth who were taught three or more TUPE topics had antitobacco positions than youth who were taught fewer than three TUPE topics. Although the reasons for these differences are not completely clear, some impact may be attributed to the effect that TUPE is having on tobacco-related attitudes. More nonsmokers than smokers report TUPE participation, which may also indicate selective attention among those who would be more likely to report more antitobacco positions regardless of their exposure. In addition, significantly more 12- to 14-year-olds reported that they were taught three or more TUPE topics compared to 15- to 17-year-olds (75.1% versus 58.5%). Because of the preventive effects of TUPE in schools demonstrated elsewhere (Hersey et al., 2007), continuing to monitor the progress of participation in TUPE and the relationships between

TUPE exposure and changes in attitudes and beliefs will be an important task for evaluators and program planners.

## **7. SELF-REPORTED SECONDHAND SMOKE EXPOSURE**

Because the White Lies campaign in particular addresses the 2010 priority area of increasing the proportion of Hoosiers not exposed to secondhand smoke, this topic is an important consideration when assessing the success of the campaigns. For youth, the extent to which they are protected from secondhand smoke exposure provides some insight into whether campaign messages targeted at both youth and adults encouraging protection of nonsmokers, as well as the protective benefit of clean indoor air ordinances, are working.

This section of the report is divided into the following sections to focus on exposure of Indiana youth to secondhand smoke and the places they may be exposed:

- Percentage of Indiana Households with Smokers
- Rules about Smoking in the Home
- Secondhand Smoke Exposure in the Past Week

Finally, a summary highlights major findings and provides interpretation.

### **7.1 Households with Smokers**

The 2008 YMTS asked Indiana youth a single question related to smokers (other than the respondent) living in their household:

- Does anyone who lives with you now smoke cigarettes?

Exhibit 7-1 presents the percentage of Indiana youth who live in households with smokers, overall and by demographics and smoking status. Overall, 36.2% of Indiana youth live in a household with at least one person who smokes. Youth who report current smoking behavior were more likely to report that they lived with someone else who smoked (79.5%), compared with nonsmokers (33.8%).

### **7.2 Rules about Smoking in the Home**

In addition to investigating how many Indiana youth may be exposed to secondhand smoke by those who live with them, the 2008 YMTS also asks Indiana youth to identify which statement out of the following best described the rules about smoking in their home:

1. Smoking is not allowed anywhere in the home.
2. Smoking is allowed in some areas or at some times.
3. Smoking is allowed anywhere in the home.
4. There are no rules about smoking in the home.

**Exhibit 7-1. Prevalence of Households with Smokers, Overall and by Demographics and Smoking Status**

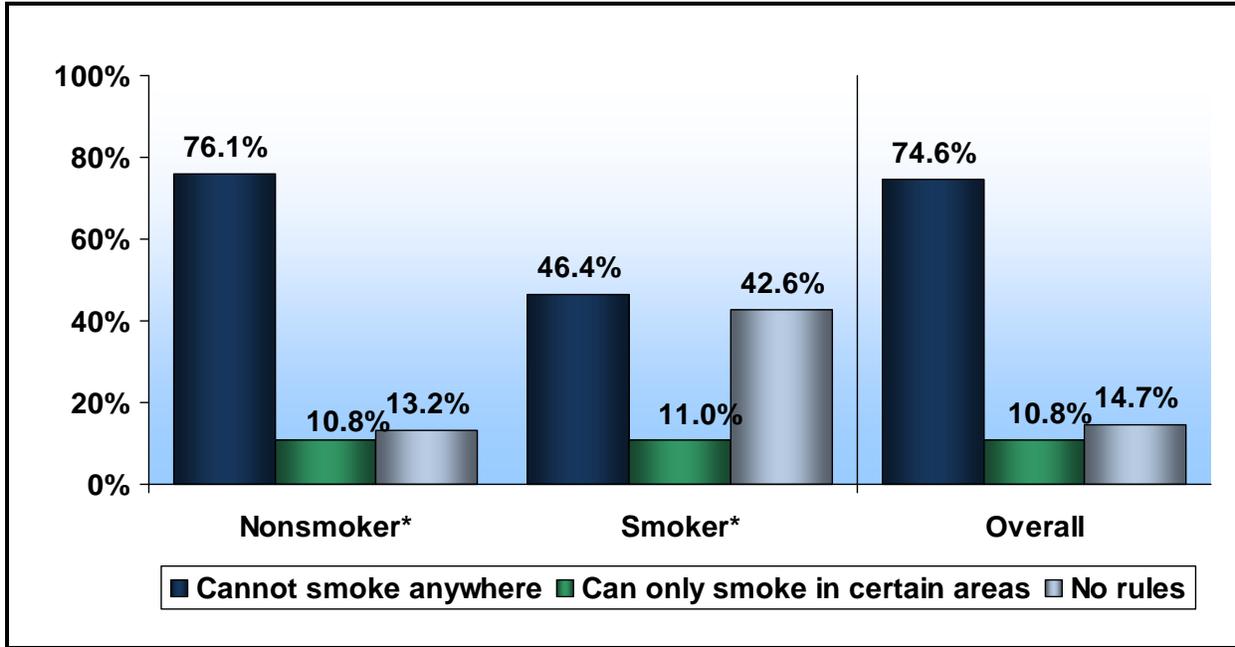
	Percentage
<b>Overall</b>	36.2
<b>Gender</b>	
Female	35.5
Male	36.9
<b>Race/Ethnicity</b>	
White non-Hispanic	35.7
Black non-Hispanic	34.1
Hispanic	36.3
Other race/ethnicity	46.2
<b>Age Group</b>	
12–14	34.9
15–17	38.7
<b>Region</b>	
North West	39.1
North Central	44.5
North East	32.2
Central West	17.3
Central (Indy)	32.0
Central East	25.3
South West	33.5
South East	41.6
<b>Current Smoking Status</b>	
Nonsmoker	<b>33.8</b>
Smoker	<b>79.5</b>

<sup>a</sup> Estimates in bold font indicate statistically significant relationship ( $p < 0.05$ ).

Only youth who reported that smoking is “not allowed anywhere in the home” were considered to live in smoke-free homes. Youth who said that smoking was allowed “in some areas or at some times” are indicated as such in Figure 7-2. Both youth who reported that smoking is “allowed anywhere in the home” and youth who reported that there are “no rules about smoking in the home” were considered to have no rules about smoking in the home.

Exhibit 7-2 presents rules about smoking in the home, overall and by smoking status. Nearly three-quarters of all Indiana youth (74.6%) reported that they live in smoke-free homes. However, it is important to note that the percentage of smokers reporting that they live in smoke-free homes (46.4%) is significantly lower than the percentage of nonsmokers reporting that they live in smoke-free homes (76.1%). In addition, over 40% of smoking youth report that there are no rules about smoking in the home (42.6%). These

**Exhibit 7-2. Rules about Smoking in the Home, Overall and by Smoking Status**



\* Rules about smoking in the home statistically different between nonsmokers and smokers (p < 0.05).

results give further evidence to support current efforts aimed at encouraging all Hoosiers, and especially those who smoke, to ban smoking in their homes.

### 7.3 Secondhand Smoke Exposure in the Past Week

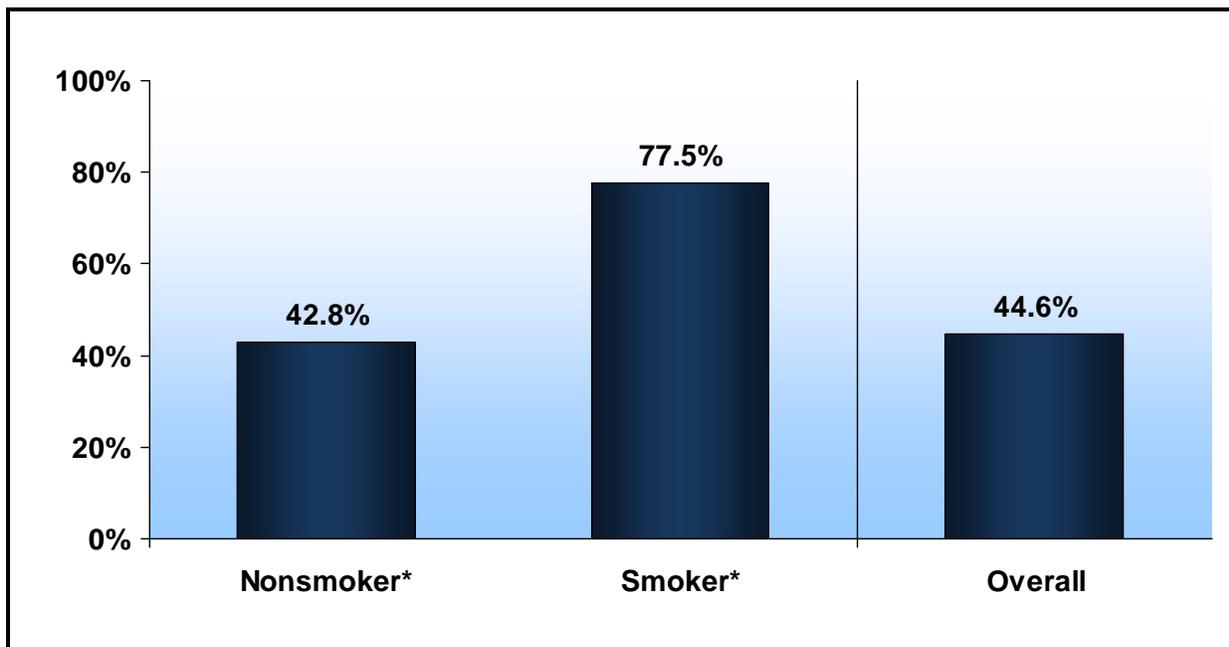
Two items in the 2008 YMTS were used to measure recent exposure to secondhand smoke in the home and in vehicles in which they were riding:

1. During the past 7 days, on how many days were you in a room with someone who was smoking cigarettes?
2. During the past 7 days, on how many days were you in a car with someone who was smoking cigarettes?

Exhibit 7-3 presents the percentage of Indiana youth who were exposed to secondhand smoke in a room on 1 or more days in the past week. Overall, nearly 45% of Indiana youth reported being exposed to secondhand smoke in a room in the past week. Not surprisingly, a significantly higher percentage of smokers reported that they were exposed to secondhand smoke in a room in the past week compared to nonsmokers (77.5% vs. 42.8%).

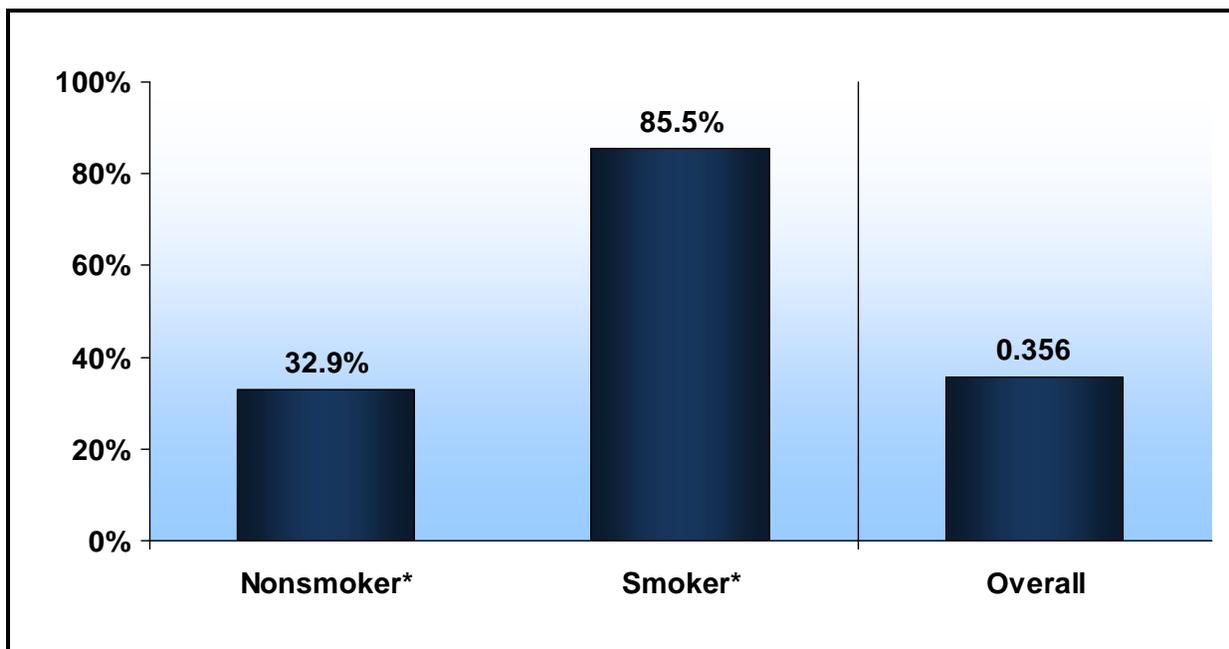
The 2008 YMTS also asked Indiana youth about the number of days in the past week that they were in the same car as someone who was smoking cigarettes. Exhibit 7-4 presents the percentage of Indiana youth who were exposed to secondhand smoke in a car on 1 or

**Exhibit 7-3. Indiana Youth Exposed to Secondhand Smoke in a Room on 1 or More Days in the Past 7 Days, Overall and by Smoking Status**



\* Statistically significant relationship between secondhand smoke exposure and smoking status (p < 0.05)

**Exhibit 7-4. Indiana Youth Exposed to Secondhand Smoke in a Car on 1 or More Days in the Past 7 Days, Overall and by Smoking Status**



\* Statistically significant relationship between secondhand smoke exposure and smoking status (p < 0.05).

more days in the past week. Overall, approximately 36% of Indiana youth reported being exposed to secondhand smoke in a car in the past week. A significantly higher percentage of smokers reported that they were exposed to secondhand smoke in a car in the past week compared to nonsmokers (85.5% and 32.9%, respectively).

#### **7.4 Summary**

Results from the Indiana YMTS indicate that nearly three-quarters of Indiana youth (74.6%) live in homes where smoking is forbidden. However, the percentage of current smokers who report living in smoke-free homes was significantly lower (46.4%) than in the homes of nonsmokers. Among this group, more than 40% reported having no rules about smoking in the home. Despite these rules, a substantial percentage of youth are still exposed to secondhand smoke in rooms and cars. Nearly 45% of all youth reported that they had been in a room with someone smoking in the week before they were surveyed, and that percentage jumped to 77.5% for youth who were current smokers. Though fewer youth overall reported being in a car with someone smoking in the past week (35.6% of all youth), more than 85% of current smokers were exposed to secondhand smoke in a car. These results are similar to the findings of the Indiana Youth Tobacco Survey (IYTS) (Thomas et al., 2007).

## **8. AWARENESS OF SNUS**

Snus is an alternative tobacco product that was originally marketed in Sweden and Norway as a reduced-risk product that would help smokers stop smoking. In recent years, major tobacco manufacturers in the United States have been developing their own brands of snus and selling them as an alternative product that is smoke free and spit free and can be used in places where more traditional tobacco products have been banned.

Because of its relatively recent introduction into the market, the primary focus is on awareness that the snus product exists. This section looks at general awareness of snus, awareness by demographic groups, and awareness by perceived ease of access to cigarettes.

### **8.1 Awareness of Snus**

The 2008 YMTS asked Indiana youth a single item related to exposure to snus:

- Tobacco companies have recently introduced spitless, smokeless tobacco products called Camel Snus and Marlboro Snus Taboka. Have you ever heard of either of these products?

Exhibit 8-1 presents the percentage of youth who are aware of snus overall, by demographics, and by smoking status. Overall, 22.3% of all Indiana youth reported that they had heard of snus. There were no significant differences in awareness of snus between demographic groups, including by smoking status.

Exhibit 8-2 presents the percentage of Indiana youth who are aware of snus by perceptions of how easy or hard it is to buy cigarettes in their community. Awareness of snus is significantly higher among youth who report that it is easy to buy cigarettes in their community (27.7%) compared to youth who report that it is hard to buy cigarettes in their community (16.5%). Although further investigation is needed to confirm, this may be because youth who perceive cigarettes as being relatively easy to buy have actually been in retail locations (e.g., convenience stores) where cigarettes and snus are being marketed and sold.

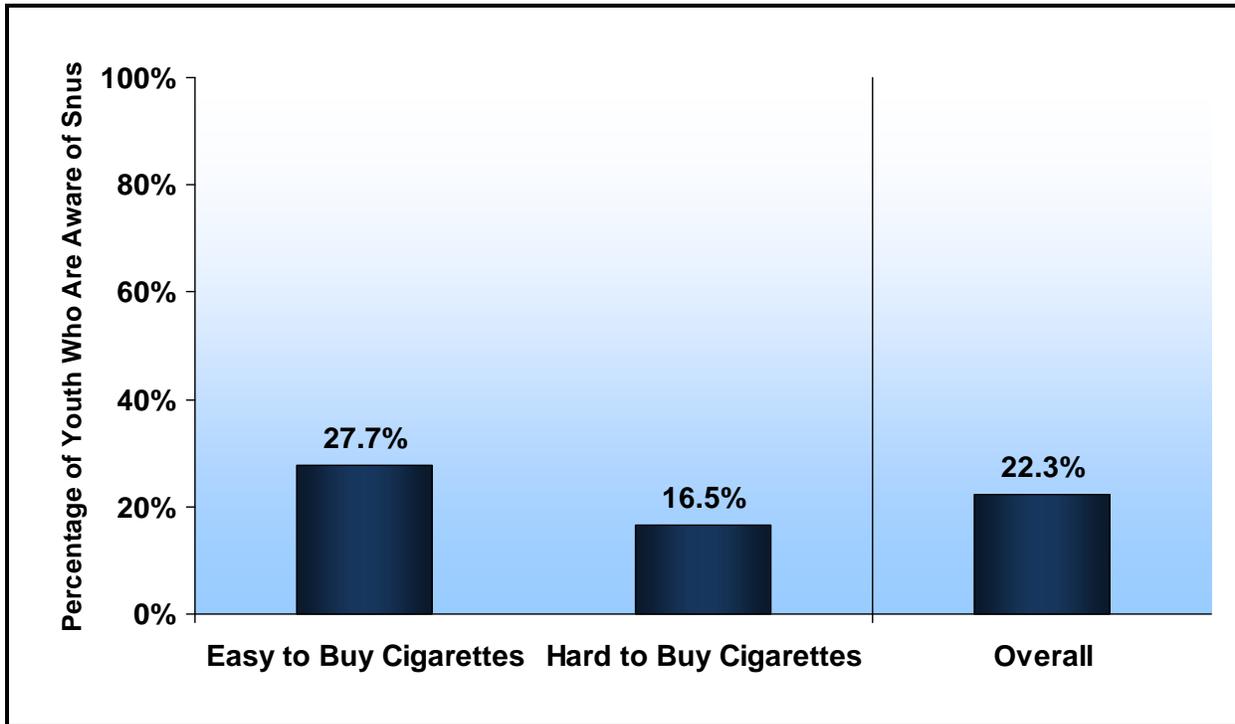
### **8.2 Summary**

Although not much is known about the impact of snus on youth tobacco use behavior, continuing to monitor awareness of the product and initiation into more regular tobacco use through experimentation will be important for program planners. Awareness is currently fairly low, with just over one in five youth reporting that they had heard of it. Even among adults aged 18 or older who reported awareness of snus (about 40% of all Indiana adults), fewer than 5% had tried it in the past year (Arnold et al., 2009). As a new product in the marketplace, however, understanding youth perceptions as well as tobacco industry monitoring should continue.

**Exhibit 8-1. Awareness of Snus, Overall and by Demographics and Smoking Status**

	<b>N</b>	<b>Percentage</b>
<b>Overall</b>	1,122	22.3
<b>Gender</b>		
Female	563	24.1
Male	559	20.1
<b>Race/Ethnicity</b>		
White non-Hispanic	960	21.3
Black non-Hispanic	64	28.9
Hispanic	44	24.3
Other race/ethnicity	54	18.4
<b>Age Group</b>		
12–14	547	22.5
15–17	575	21.9
<b>Region</b>		
North West	339	19.1
North Central	112	32.8
North East	74	31.5
Central West	45	37.2
Central (Indy)	186	25.2
Central East	41	28.4
South West	275	13.3
South East	50	21.7
<b>Current Smoking Status</b>		
Nonsmoker	1,057	22.5
Smoker	65	19.0

Exhibit 8-2. Awareness of Snus, Overall and by Ease of Access to Cigarettes



## 9. OVERALL RECOMMENDATIONS

Using results from the 2008 YMTS, this report summarizes the status of progress toward addressing the following 2010 priority areas identified by the ITPC:

- Decrease Indiana youth smoking rates.
- Increase the proportion of Hoosiers not exposed to secondhand smoke.
- Increase antitobacco knowledge, attitudes, and beliefs necessary for smoking behavior change to occur.

As discussed earlier, the Indiana YMTS investigates progress toward these goals by asking Indiana youth about their experiences with tobacco and tobacco control. The following are some key results:

- In general, overall campaign awareness and television advertisement awareness is low. Confirmed awareness of an Indiana countermarketing brand was 2.8%, and only one in five Indiana youth recognized the VOICE brand name when it was read to them. With one exception, fewer than 10% of interviewed youth were able to identify countermarketing television ads.
- One TV ad, "Right to Breathe," generated 33.6% confirmed awareness, a level that is consistent with levels observed for other successful tobacco countermarketing campaigns. Although analyses into media buys and placement may be necessary to fully understand reports of exposure, this ad may be indicative of the type of ad that ITPC should consider when faced with budget shortfalls.
- Brand equity in the VOICE brand—for those who recognized it—was relatively high. This was especially true for the brand leadership (e.g., VOICE is for people like me) construct, which has been shown to have significant preventive effects elsewhere.
- Awareness of several of the included advertisements was related to a more antitobacco position on targeted attitudes. For example, significantly more youth who were aware of the "Body Bags" VOICE ad agreed that tobacco ads influence youth to smoke (an anti-industry attitude) than those who were not aware.
- Seven in 10 Indiana youth reported being exposed to at least three of the four TUPE topics in schools in the past year.
- Three-quarters of Indiana youth said that smoking was completely banned in their homes, although there were significant differences between nonsmokers and smokers (76.1% vs. 48.4%).
- Still, 44.6% of youth were exposed to secondhand smoke in a room and 35.6% were in a car with someone smoking in the past week.

While ITPC's efforts have resulted in some key successes, the following are recommendations for continued success and to facilitate change in program outcomes where progress has not been made:

- **Greater emphasis on health communications**—Currently, 75% of ITPC's budget must fund community organizations. Consequently, this limits the amount of

resources that can be devoted to public education, including media campaigns. To best use the available funds, ITPC should consider the following:

- *Rely on consistent, “high sensation value” messages to provoke behavior change.* ITPC should incorporate advertisements that have high message sensation value (e.g., the use of intense images, strong emotions) as part of their media campaigns, such as advertisements from the “Every Cigarette is Doing You Damage” adult-targeted campaign (Arnold et al., 2009). This type of advertisement has been shown to have higher rates of awareness and more favorable audience reactions (Biener, McCallum-Keeler, and Nyman, 2000; Niederdeppe et al., 2007; RTI International, 2007).
  - *Explicitly coordinate community-based activities and media messages.* By having a consistent message between community-based activities and media campaigns, community-based efforts will become more salient to the public when advocating for support for policy initiatives. This is especially true for VOICE media (including advertising and the VOICE Web site) and grassroots activities.
  - *Focus on building brand equity among older youth.* Although there is some evidence indicating that equity in youth-focused brands decreases as youth get older, it is important that younger youth continue to aspire to the brand and that older youth continue to identify with it. Current results indicate that older youth still have a stake in VOICE (especially the brand leadership and brand awareness constructs), but as the difference between younger and older youth grows, a renewed focus on ways to get older youth involved may be necessary.
  - *Consider a general audience campaign.* With limited resources to dedicate to youth-targeted media, ITPC may consider focusing all public education efforts on a general audience campaign with advertisements and messages that might resonate with both adults and youth. The “Right to Breathe” secondhand smoke prevention advertisement is a clear example that some messages address both populations.
  - *Conduct in-depth analyses into performance of advertisements.* An analysis of media buys and media placement should offer some insight into the performance of public education efforts. By looking at the levels at which media were run (e.g., Target Rating Points by advertisement), evaluators and program planners will be able to better understand the ways that youth interpret messages and to develop methods for improving exposure.
- **Continue to focus on smoke-free environments**—Although Indiana youth, in general, expressed an understanding of the health risks of secondhand smoke exposure, many are still reporting that they are in environments where they are exposed. Continuing public education efforts that encourage more supportive attitudes about smoke-free policies in the home and the workplace may help reduce the frequency of these situations because adults who often have control over the rules in the home or car are better educated about the dangers people in their household or vehicles face.

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**APPENDIX A:  
MEDIA AWARENESS MEASURES BY DEMOGRAPHICS**

**Table A-1. General Campaign Awareness, Overall and by Demographics, 2008  
YMTS [95% Confidence Interval]**

	Claimed Awareness (%)	Confirmed Awareness (%)	Awareness of VOICE (%)	Awareness of White Lies (%)
<b>Overall</b>				
(N = 1,122)	33.1 [28.1, 38.6]	2.8 [1.5, 5.4]	21.2 [17.2, 25.8]	27.6 [23.4, 32.3]
<b>Gender</b>				
Female (N = 563)	32.1 [25.0, 40.2]	3.1 [1.1, 8.2]	19.5 [14.0, 26.5]	23.0 [17.9, 29.0]
Male (N = 569)	34.4 [27.7, 41.7]	2.5 [1.2, 5.0]	23.1 [17.7, 29.6]	33.0 [26.6, 40.2]
<b>Race/Ethnicity</b>				
White non-Hispanic (N = 960)	33.1 [27.6, 39.1]	3.3 [1.6, 6.7]	22.0 [17.5, 27.3]	31.2 [26.2, 36.7]
Black non-Hispanic (N = 64)	37.9 [22.7, 55.9]	2.7 [0.6, 10.4]	24.1 [12.4, 41.7]	26.2 [15.2, 41.3]
Hispanic (N = 44)	17.5 [7.5, 39.4]	0.0 —	11.9 [4.1, 29.7]	2.0 [0.5, 6.8]
Other race/ethnicity (N = 54)	37.6 [17.2, 63.2]	0.05 [0.01, 0.4]	13.0 [4.3, 33.4]	9.2 [3.2, 23.7]
<b>Age Group</b>				
12–14 (N = 547)	35.2 [28.4, 42.7]	2.3 [0.8, 6.7]	16.4 [11.6, 22.7]	19.4 [14.6, 25.3]
15–17 (N = 575)	29.0 [23.2, 35.7]	3.9 [2.0, 7.4]	30.8 [24.7, 37.7]	44.2 [37.5, 51.2]
<b>Region</b>				
North West (N = 339)	30.4 [21.8, 40.7]	0.8 [0.2, 2.6]	21.3 [14.3, 30.5]	15.6 [10.3, 23.0]
North Central (N = 112)	28.5 [15.97, 45.7]	8.1 [1.7, 31.1]	18.6 [8.5, 35.8]	32.7 [20.1, 48.3]
North East (N = 74)	12.1 [4.6, 28.3]	0.1 [0.03, 0.5]	17.8 [7.2, 37.7]	25.6 [12.1, 46.3]
Central West (N = 45)	34.7 [14.8, 61.9]	0.1 [0.02, 0.9]	14.1 [4.2, 38.4]	38.5 [18.7, 63.1]
Central Indy (N = 186)	54.0 [41.3, 66.2]	5.6 [2.4, 12.6]	26.2 [17.0, 38.2]	45.5 [33.5, 58.1]
Central East (N = 41)	25.3 [7.7, 57.9]	0.1 [0.01, 1.0]	17.1 [4.7, 46.4]	13.7 [4.5, 34.6]
South West (N = 275)	27.8 [19.4, 38.1]	2.2 [0.8, 6.3]	20.9 [14.1, 30.0]	30.0 [21.5, 40.1]
South East (N = 50)	41.1 [20.4, 65.5]	3.6 [0.9, 13.6]	20.0 [7.8, 42.5]	32.2 [14.0, 58.1]

**Table A-2. Awareness of Adult-Focused Advertisements, Overall and by Demographics, 2008 YMTS [95% Confidence Interval]**

	"Right to Breathe"		"This is Real"	
	Claimed Awareness (%)	Confirmed Awareness (%)	Claimed Awareness (%)	Confirmed Awareness (%)
<b>Overall</b>	42.0	33.6	13.8	5.2
(N = 1,122)	[36.7, 47.5]	[28.7, 39.0]	[10.4, 18.1]	[3.2, 8.3]
<b>Gender</b>				
Female	43.2	38.7	14.8	5.2
(N = 563)	[35.5, 51.2]	[18.7, 63.5]	[9.8, 21.7]	[2.6, 10.2]
Male	40.6	34.2	12.6	5.2
(N = 569)	[33.5, 48.0]	[27.6, 41.6]	[8.7, 18.1]	[2.7, 9.7]
<b>Race/Ethnicity</b>				
White non-Hispanic	42.5	36.3	12.4	4.6
(N = 960)	[36.6, 48.6]	[30.7, 42.3]	[9.1, 16.7]	[2.8, 7.5]
Black non-Hispanic	43.7	29.9	18.3	10.6
(N = 64)	[27.7, 61.0]	[17.1, 46.9]	[7.4, 38.6]	[3.2, 29.9]
Hispanic	38.5	12.3	24.6	6.0
(N = 44)	[18.6, 63.1]	[4.0, 31.8]	[9.0, 51.8]	[1.2, 25.2]
Other race/ethnicity	35.0	27.5	11.3	0.1
(N = 54)	[15.4, 61.5]	[10.4, 55.4]	[3.0, 34.7]	[0.01, 0.4]
<b>Age Group</b>				
12–14	41.1	31.9	11.3	3.6
(N = 547)	[34.0, 48.6]	[25.4, 39.2]	[7.1, 17.4]	[1.5, 8.5]
15–17	43.7	37.1	19.0	8.5
(N = 575)	[37.0, 50.6]	[30.7, 43.9]	[14.1, 25.0]	[5.4, 13.1]
<b>Region</b>				
North West	25.4	15.3	11.6	3.6
(N = 339)	[18.0, 34.7]	[9.4, 23.8]	[6.3, 20.5]	[1.0, 12.3]
North Central	53.4	48.3	18.5	8.9
(N = 112)	[36.9, 69.2]	[32.3, 64.7]	[8.7, 35.1]	[3.0, 23.8]
North East	56.7	53.3	11.2	4.8
(N = 74)	[31.7, 78.7]	[29.2, 76.0]	[4.0, 27.4]	[1.3, 16.6]
Central West	66.8	47.8	14.8	1.2
(N = 45)	[39.8, 85.9]	[25.0, 71.6]	[3.4, 46.0]	[0.4, 3.4]
Central Indy	43.8	33.5	20.1	11.3
(N = 186)	[31.8, 56.6]	[23.2, 45.6]	[11.8, 32.2]	[5.9, 20.8]
Central East	58.2	57.8	9.8	0.7
(N = 41)	[25.7, 84.8]	[25.3, 84.7]	[1.6, 42.3]	[0.1, 3.4]
South West	53.9	46.2	11.8	2.7
(N = 275)	[42.7, 64.6]	[35.4, 57.4]	[6.5, 20.4]	[1.1, 6.5]
South East	38.7	38.5	6.6	0.0
(N = 50)	[18.7, 63.5]	[18.4, 63.3]	[1.2, 28.4]	—

**Table A-3. Awareness of Adult-Focused Advertisements, Overall and by Demographics, 2008 YMTS [95% Confidence Interval]**

	"Pledge"		"Body Bags"		"Protest"	
	Claimed Awareness (%)	Confirmed Awareness (%)	Claimed Awareness (%)	Confirmed Awareness (%)	Claimed Awareness (%)	Confirmed Awareness (%)
<b>Overall</b>	17.0	4.3	22.2	8.6	11.0	4.3
(N = 1,122)	[13.3, 21.4]	[2.9, 7.6]	[18.0, 27.1]	[6.1, 12.0]	[7.8, 15.2]	[2.3, 7.8]
<b>Gender</b>						
Female	15.8	4.2	19.6	7.4	10.5	5.4
(N = 563)	[10.8, 22.4]	[1.7, 9.8]	[13.9, 26.8]	[4.3, 12.6]	[6.5, 16.8]	[2.4, 11.7]
Male	18.4	4.4	25.3	10.0	11.5	2.9
(N = 569)	[13.5, 24.7]	[2.0, 9.2]	[19.4, 32.1]	[6.5, 15.0]	[7.2, 17.8]	[1.2, 6.6]
<b>Race/Ethnicity</b>	14.2	2.6	19.8	8.9	12.0	5.0
White non-Hispanic	[10.6, 18.7]	[1.2, 5.5]	[15.4, 25.0]	[6.0, 13.0]	[8.3, 17.1]	[2.6, 9.5]
(N = 960)	27.4	13.6	35.5	5.7	7.7	3.4
Black non-Hispanic	[14.5, 45.6]	[4.8, 33.1]	[20.8, 53.6]	[2.0, 15.4]	[2.9, 19.2]	[0.7, 15.0]
(N = 64)	22.9	9.5	26.3	12.4	11.5	0.2
Hispanic	[9.1, 46.7]	[2.3, 31.6]	[11.6, 49.2]	[3.3, 36.9]	[1.8, 47.8]	[0.02, 1.1]
(N = 44)	24.1	0.4	19.4	7.3	4.8	0.2
Other race/ethnicity	[10.2, 47.0]	[0.1, 1.9]	[7.4, 42.1]	[1.9, 24.7]	[0.8, 24.6]	[0.04, 1.0]
(N = 54)						
<b>Age Group</b>						
12-14	17.6	5.3	20.2	7.5	11.7	5.3
(N = 547)	[12.8, 23.6]	[2.7, 10.2]	[14.8, 27.0]	[4.5, 12.4]	[7.6, 17.7]	[2.6, 10.6]
15-17	15.8	2.3	26.3	10.7	9.5	2.2
(N = 575)	[11.0, 22.1]	[0.9, 6.0]	[20.7, 32.7]	[7.3, 15.5]	[6.0, 14.7]	[1.1, 4.4]
<b>Region</b>						
North West	22.6	8.2	20.7	6.2	9.3	3.1
(N = 339)	[15.5, 31.6]	[3.9, 16.6]	[14.1, 29.4]	[3.1, 11.8]	[4.7, 17.8]	[0.7, 12.1]
North Central	18.6	3.5	19.2	9.3	15.8	11.2
(N = 112)	[9.7, 32.6]	[0.5, 19.7]	[9.0, 36.2]	[2.4, 30.4]	[6.2, 34.9]	[3.3, 32.1]
North East	17.2	5.5	11.6	5.5	10.8	7.7
(N = 74)	[6.8, 37.1]	[1.2, 22.1]	[4.6, 26.3]	[1.2, 21.6]	[4.3, 24.6]	[2.6, 20.9]
Central West	13.8	0.0	5.5	2.8	1.0	0.6
(N = 45)	[2.9, 46.2]	-	[1.5, 18.0]	[0.5, 13.2]	[0.4, 2.5]	[0.2, 1.9]
Central Indy	15.5	2.9	4.2	17.3	14.7	6.1
(N = 186)	[8.1, 27.7]	[0.7, 11.4]	[29.7, 55.2]	[9.9, 28.4]	[7.7, 26.3]	[2.2, 15.6]
Central East	7.0	0.0	4.4	0.1	8.8	0.0
(N = 41)	[1.2, 31.0]	-	[0.9, 19.6]	[0.01, 0.9]	[1.2, 43.6]	-
South West	11.6	0.6	18.9	8.3	10.6	1.4
(N = 275)	[6.4, 20.3]	[0.1, 3.4]	[12.0, 28.4]	[4.5, 14.7]	[5.3, 20.0]	[0.5, 4.0]
South East	2.1	0.0	14.0	5.8	5.9	0.5
(N = 50)	[0.4, 9.6]	-	[5.1, 33.2]	[0.9, 29.8]	[1.0, 27.8]	[0.1, 2.1]

**Table A-4. Combined Awareness Overall and by Demographics, 2008 YMTS [95% Confidence Interval]**

	One or More TV Ads		One or More Campaign Components	
	Claimed Awareness (%)	Confirmed Awareness (%)	Claimed Awareness (%)	Confirmed Awareness (%)
<b>Overall</b> (N = 1,122)	71.2 [66.0, 76.0]	44.3 [38.9, 49.9]	79.7 [75.0, 83.8]	44.9 [39.5, 50.4]
<b>Gender</b>				
Female (N = 563)	71.8 [64.0, 78.5]	44.9 [37.1, 52.9]	80.7 [73.6, 86.2]	45.1 [37.3, 53.1]
Male (N = 569)	70.6 [63.5, 76.8]	43.7 [36.6, 51.2]	78.5 [71.9, 84.0]	44.7 [37.5, 52.1]
<b>Race/Ethnicity</b>				
White non-Hispanic (N = 960)	68.1 [62.1, 73.6]	44.5 [38.5, 50.6]	74.7 [68.9, 79.8]	44.8 [38.8, 50.9]
Black non-Hispanic (N = 64)	84.4 [69.8, 92.6]	51.8 [34.7, 68.4]	97.1 [89.5, 99.2]	54.4 [37.0, 70.7]
Hispanic (N = 44)	90.9 [72.3, 97.5]	37.9 [19.0, 61.3]	95.3 [78.5, 99.1]	37.9 [19.0, 61.3]
Other race/ethnicity (N = 54)	63.3 [37.2, 83.4]	31.8 [13.3, 58.5]	89.8 [70.7, 97.0]	31.8 [13.3, 58.5]
<b>Age Group</b>				
12–14 (N = 547)	67.3 [60.1, 73.9]	42.4 [35.2, 50.0]	77.2 [70.5, 82.7]	42.5 [35.3, 50.1]
15–17 (N = 575)	79.2 [73.2, 84.1]	48.2 [41.3, 55.2]	84.9 [79.5, 89.0]	49.8 [42.8, 56.7]
<b>Region</b>				
North West (N = 339)	66.6 [57.2, 74.9]	34.9 [25.9, 45.1]	78.2 [70.1, 84.6]	35.4 [26.4, 45.5]
North Central (N = 112)	70.0 [52.0, 83.4]	52.1 [35.7, 68.1]	73.2 [54.7, 86.0]	52.2 [35.8, 68.1]
North East (N = 74)	72.8 [41.8, 90.9]	53.9 [29.8, 76.5]	73.1 [41.9, 91.1]	53.9 [29.6, 76.5]
Central West (N = 45)	83.6 [55.8, 95.4]	48.6 [25.6, 72.3]	83.9 [55.8, 95.5]	48.6 [25.6, 72.3]
Central Indy (N = 186)	80.0 [68.1, 88.2]	47.1 [34.9, 59.7]	87.4 [77.0, 93.5]	48.8 [36.4, 61.4]
Central East (N = 41)	73.8 [43.1, 91.3]	57.9 [25.4, 84.7]	77.3 [46.8, 92.9]	57.9 [25.4, 84.7]
South West (N = 275)	72.7 [61.7, 81.5]	49.2 [38.2, 60.2]	83.8 [73.7, 90.5]	49.3 [38.3, 60.3]
South East (N = 50)	57.3 [33.2, 78.4]	44.3 [22.9, 68.0]	67.3 [41.3, 85.7]	46.3 [24.5, 69.6]

**Table A-5. VOICE Brand Equity Constructs—Percentage of Indiana Youth with High Brand Loyalty and High Brand Leadership, Overall and by Demographics, 2008 YMTS [95% Confidence Interval]**

	Brand Loyalty		Brand Leadership	
	N	(%)	N	(%)
<b>Overall</b>	174	74.0 [62.0, 83.2]	158	88.8 [79.0, 94.4]
<b>Gender</b>				
Female	83	87.7 [74.8, 94.5]	71	91.8 [77.7, 97.3]
Male	91	57.9 [40.1, 73.8]	87	85.5 [69.5, 93.9]
<b>Race/Ethnicity</b>				
White non-Hispanic	149	73.4 [59.9, 83.7]	133	85.0 [72.3, 92.4]
Black non-Hispanic	10	72.4 [35.9, 92.5]	12	100.0 -
Hispanic	6	82.9 [30.9, 98.1]	5	100.0 -
Other race/ethnicity	9	95.7 [77.3, 99.3]	8	98.6 [87.8, 99.9]
<b>Age Group</b>				
12–14	79	83.2 [67.1, 92.3]	69	97.3 [89.6, 99.4]
15–17	95	62.2 [45.5, 76.5]	89	78.9 [62.0, 89.5]
<b>Region</b>				
North West	48	66.2 [44.1, 83.0]	44	85.5 [66.3, 94.6]
North Central	11	89.3 [54.2, 98.3]	12	99.8 [98.0, 100.0]
North East	11	36.5 [6.9, 81.7]	12	67.3 [19.6, 94.6]
Central West	6	100.0 -	5	6.6 [0.7, 39.9]
Central Indy	32	76.2 [47.7, 91.9]	30	99.6 [98.1, 99.9]
Central East	5	92.1 [58.4, 99.0]	6	99.4 [94.0, 99.9]
South West	53	83.6 [59.3, 94.7]	45	88.6 [63.9, 97.2]
South East	8	67.3 [17.4, 95.3]	4	100.0 —

**Table A-6. VOICE Brand Equity Constructs—Percentage of Indian Youth with High Brand Personality and High Brand Awareness, Overall and by Demographics, 2008 YMTS [95% Confidence Interval]**

	Brand Personality		Brand Awareness	
	N	(%)	N	(%)
<b>Overall</b>	187	64.6 [51.6, 75.7]	196	85.2 [75.6, 91.4]
<b>Gender</b>				
Female	82	79.7 [63.3, 90.0]	92	84.9 [71.2, 92.7]
Male	105	49.1 [32.9, 65.5]	104	85.5 [69.9, 93.8]
<b>Race/Ethnicity</b>				
White non-Hispanic	162	62.2 [47.8, 74.8]	169	82.4 [70.9, 90.0]
Black non-Hispanic	12	72.7 [38.8, 91.8]	12	91.9 [58.4, 98.9]
Hispanic	4	98.3 [79.5, 99.9]	5	100.0 —
Other race/ethnicity	9	57.3 [12.1, 92.9]	10	100.0 —
<b>Age Group</b>				
12–14	78	76.7 [57.7, 88.8]	87	92.6 [81.1, 97.3]
15–17	109	49.7 [34.5, 64.9]	109	75.5 [59.7, 86.6]
<b>Region</b>				
North West	46	70.9 [47.8, 86.7]	53	80.5 [61.7, 91.3]
North Central	15	85.6 [37.6, 98.3]	14	99.6 [97.5, 99.9]
North East	13	50.1 [14.9, 85.2]	13	39.3 [10.0, 79.1]
Central West	7	5.4 [1.0, 24.1]	8	96.0 [73.8, 99.5]
Central Indy	37	65.3 [34.7, 87.0]	37	88.3 [63.3, 97.0]
Central East	6	78.5 [25.6, 97.5]	7	99.3 [93.1, 99.9]
South West	57	54.8 [32.2, 75.6]	57	89.4 [66.7, 97.3]
South East	6	55.6 [9.5, 93.7]	7	100.0 —

**APPENDIX B:  
ANTITOBACCO KNOWLEDGE, ATTITUDES, AND BELIEFS BY  
MEDIA AWARENESS MEASURES**

**Table B-1. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Confirmed Campaign Awareness, 2008 YMTS [95% Confidence Interval]<sup>a</sup>**

	Overall (%)	Aware (%)	Unaware (%)
<b>Social Perceptions</b>			
People who have a cigarette or two on weekends or at a party should not be thought of as smokers (Strongly Disagree or Disagree) (N = 1,121)	70.0 [64.6, 74.8]	<b>91.3</b> [ <b>73.8, 97.5</b> ]	<b>69.4</b> [ <b>63.9, 74.3</b> ]
Young people who smoke cigarettes have more friends (Strongly Disagree or Disagree) (N = 1,121)	87.0 [82.7, 90.3]	<b>97.6</b> [ <b>89.2, 99.5</b> ]	<b>86.6</b> [ <b>82.3, 90.0</b> ]
Smoking cigarettes makes people your age look cool or fit in (Strongly Disagree or Disagree) (N = 1,122)	90.0 [86.3, 92.8]	100.0 —	89.7 [85.9, 92.6]
People your age who smoke are less attractive (Strongly Disagree or Disagree) (N = 1,122)	62.6 [57.1, 67.7]	77.4 [49.5, 92.3]	62.1 [56.6, 67.4]
If people want to smoke, I say let them (Strongly Disagree or Disagree) (N = 1,122)	51.2 [45.7, 56.7]	47.3 [19.5, 76.8]	51.4 [45.8, 56.9]
Movies rated G, PG, and PG-13 should not show actors smoking (Strongly Agree or Agree) (N = 1,121)	55.2 [49.7, 60.5]	45.6 [18.7, 75.2]	55.5 [50.0, 60.9]
People close to me would be upset if I smoked (Strongly Agree or Agree) [Nonsmokers only] (N = 1,057)	94.89 [91.9, 96.8]	100.0 —	94.7 [91.6, 96.7]
People close to me are upset with my smoking (Strongly Agree or Agree) [Smokers only] (N = 65)	56.5 [37.12, 74.1]	0.0 —	58.0 [38.1, 75.6]
<b>Health Effects</b>			
Most people your age do not believe all the bad things they hear about tobacco products (Strongly Disagree or Disagree) (N = 1,122)	27.3 [22.7, 32.5]	22.1 [7.4, 50.4]	27.5 [22.8, 32.7]
Smoking one or two cigarettes would have no effect on your health (Strongly Disagree or Disagree) (N = 1,122)	81.7 [77.2, 85.5]	80.5 [53.2, 93.8]	81.7 [77.2, 85.6]

(continued)

**Table B-1. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Confirmed Campaign Awareness, 2008 YMTS [95% Confidence Interval]<sup>a</sup> (continued)**

	Overall (%)	Aware (%)	Unaware (%)
<b>Secondhand Smoke and Regulations</b>			
Smoke from other people's cigarettes bothers me (Strongly Agree or Agree)	84.7	<b>98.2</b>	<b>84.3</b>
(N = 1,122)	[80.4, 88.2]	<b>[88.2, 99.8]</b>	<b>[79.9, 87.9]</b>
It is harmful to a person's health if they live in a house where someone smokes tobacco indoors (Strongly Agree or Agree)	90.1	93.2	90.0
(N = 1,122)	[86.2, 93.0]	[73.4, 98.5]	[86.0, 93.0]
Breathing smoke from other people's cigarettes is very harmful or somewhat harmful (Strongly Agree or Agree)	91.1	100.0	92.2
(N = 1,119)	[86.8, 94.1]	—	[88.2, 95.0]
People working indoors, including those working in restaurants and bars, should have a right not to be exposed to secondhand smoke (Strongly Agree or Agree)	92.9	98.3	92.7
(N = 1,118)	[89.3, 95.4]	[87.8, 99.8]	[89.0, 95.3]
<b>Tobacco Industry</b>			
Cigarette companies try to get young people to start smoking (Strongly Agree or Agree)	63.7	64.6	63.6
(N = 1,121)	[58.0, 69.0]	[25.5, 90.7]	[57.9, 69.0]
Tobacco ads influence youth to smoke (Strongly Agree or Agree)	63.5	44.4	64.1
(N = 1,120)	[57.9, 68.8]	[18.4, 74.0]	[58.4, 69.4]
Tobacco companies put profits over people's health (Strongly Agree or Agree)	71.6	83.8	71.2
(N = 1,111)	[66.0, 76.6]	[58.0, 95.1]	[65.5, 76.3]
<b>Youth Empowerment</b>			
Choosing not to smoke is a way to express your independence (Strongly Agree or Agree)	79.0	87.2	78.8
(N = 1,122)	[74.0, 83.3]	[60.6, 96.8]	[73.7, 83.2]
I want to be involved in efforts to get rid of cigarette smoking (Strongly Agree or Agree)	76.5	77.3	76.5
(N = 1,122)	[71.8, 80.7]	[48.1, 92.6]	[71.6, 80.8]
I feel comfortable telling other people my age about the risks of tobacco (Strongly Agree or Agree)	82.0	90.5	81.7
(N = 1,122)	[77.4, 85.8]	[63.0, 98.2]	[77.1, 85.6]
I feel comfortable telling other people my age that they should not smoke or use tobacco (Strongly Agree or Agree)	87.5	92.9	87.3
(N = 1,122)	[83.7, 90.5]	[73.5, 98.4]	[83.5, 90.4]
I am confident that I can convince my friends not to smoke or use tobacco (Strongly Agree or Agree)	78.1	83.8	77.9
(N = 1,121)	[73.4, 82.1]	[57.5, 95.2]	[73.2, 82.1]

<sup>a</sup> Estimates in bold font indicate statistically significant relationship ( $p < 0.05$ ).

**Table B-2. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Awareness of VOICE, 2008 YMTS [95% Confidence Interval]<sup>a</sup>**

	Overall (%)	Aware of VOICE (%)	Unaware of VOICE (%)
<b>Social Perceptions</b>			
People who have a cigarette or two on weekends or at a party should not be thought of as smokers (Strongly Disagree or Disagree) (N = 1,121)	70.0 [64.6, 74.8]	76.7 [67.1, 84.2]	68.2 [61.9, 73.8]
Young people who smoke cigarettes have more friends (Strongly Disagree or Disagree) (N = 1,121)	87.0 [82.7, 90.3]	83.9 [74.1, 90.5]	87.8 [82.9, 91.4]
Smoking cigarettes makes people your age look cool or fit in (Strongly Disagree or Disagree) (N = 1,122)	90.0 [86.3, 92.8]	91.2 [82.6, 95.8]	89.7 [85.3, 92.9]
People your age who smoke are less attractive (Strongly Disagree or Disagree) (N = 1,122)	62.6 [57.1, 67.7]	59.7 [48.0, 70.3]	63.3 [57.1, 69.2]
If people want to smoke, I say let them (Strongly Disagree or Disagree) (N = 1,122)	51.2 [45.7, 56.7]	<b>41.3</b> <b>[30.8, 52.6]</b>	<b>53.9</b> <b>[47.6, 60.1]</b>
Movies rated G, PG, and PG-13 should not show actors smoking (Strongly Agree or Agree) (N = 1,121)	55.2 [49.7, 60.5]	48.5 [37.4, 59.8]	57.0 [50.8, 63.0]
People close to me would be upset if I smoked (Strongly Agree or Agree) [Nonsmokers only] (N = 1,057)	94.89 [91.9, 96.8]	96.7 [91.5, 98.8]	94.4 [90.6, 96.7]
People close to me are upset with my smoking (Strongly Agree or Agree) [Smokers only] (N = 65)	56.5 [37.12, 74.1]	58.6 [20.1, 88.9]	56.1 [34.7, 75.5]
<b>Health Effects</b>			
Most people your age do not believe all the bad things they hear about tobacco products (Strongly Disagree or Disagree) (N = 1,122)	27.3 [22.7, 32.5]	22.6 [15.2, 32.2]	28.6 [23.3, 34.6]
Smoking one or two cigarettes would have no effect on your health (Strongly Disagree or Disagree) (N = 1,122)	81.7 [77.2, 85.5]	85.9 [77.3, 91.7]	80.6 [75.3, 85.0]

(continued)

**Table B-2. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Awareness of VOICE, 2008 YMTS [95% Confidence Interval]<sup>a</sup>  
(continued)**

	Overall (%)	Aware of VOICE (%)	Unaware of VOICE (%)
<b>Secondhand Smoke and Regulations</b>			
Smoke from other people's cigarettes bothers me (Strongly Agree or Agree) (N = 1,122)	84.7 [80.4, 88.2]	84.7 [75.8, 90.8]	84.6 [79.6, 88.6]
It is harmful to a person's health if they live in a house where someone smokes tobacco indoors (Strongly Agree or Agree) (N = 1,122)	90.1 [86.2, 93.0]	<b>96.5</b> <b>[90.1, 98.8]</b>	<b>88.4</b> <b>[83.6, 92.0]</b>
Breathing smoke from other people's cigarettes is very harmful or somewhat harmful (Strongly Agree or Agree) (N = 1,119)	91.1 [86.8, 94.1]	94.2 [85.5, 97.8]	92.0 [87.2, 95.1]
People working indoors, including those working in restaurants and bars, should have a right not to be exposed to secondhand smoke (Strongly Agree or Agree) (N = 1,118)	92.9 [89.3, 95.4]	95.6 [90.4, 98.1]	92.2 [87.6, 95.1]
<b>Tobacco Industry</b>			
Cigarette companies try to get young people to start smoking (Strongly Agree or Agree) (N = 1,121)	63.7 [58.0, 69.0]	<b>73.8</b> <b>[62.0, 82.9]</b>	<b>60.9</b> <b>[54.4, 67.0]</b>
Tobacco ads influence youth to smoke (Strongly Agree or Agree) (N = 1,120)	63.5 [57.9, 68.8]	68.5 [57.0, 78.1]	62.2 [55.8, 68.2]
Tobacco companies put profits over people's health (Strongly Agree or Agree) (N = 1,111)	71.6 [66.0, 76.6]	<b>86.1</b> <b>[77.1, 91.9]</b>	<b>67.6</b> <b>[61.1, 73.6]</b>

(continued)

**Table B-2. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Awareness of VOICE, 2008 YMTS [95% Confidence Interval]<sup>a</sup> (continued)**

	Overall (%)	Aware of VOICE (%)	Unaware of VOICE (%)
<b>Youth Empowerment</b>			
Choosing not to smoke is a way to express your independence (Strongly Agree or Agree)	79.0	83.6	77.8
(N = 1,122)	[74.0, 83.3]	[74.8, 89.8]	[71.8, 82.8]
I want to be involved in efforts to get rid of cigarette smoking (Strongly Agree or Agree)	76.5	79.6	75.7
	[71.8, 80.7]	[70.2, 86.5]	[70.1, 80.6]
I feel comfortable telling other people my age about the risks of tobacco (Strongly Agree or Agree)	82.0	80.3	82.4
(N = 1,122)	[77.4, 85.8]	[69.5, 88.0]	[77.3, 86.6]
I feel comfortable telling other people my age that they should not smoke or use tobacco (Strongly Agree or Agree)	87.5	89.6	86.9
(N = 1,122)	[83.7, 90.5]	[82.1, 94.2]	[82.4, 90.4]
I am confident that I can convince my friends not to smoke or use tobacco (Strongly Agree or Agree)	78.1	77.4	78.3
(N = 1,121)	[73.4, 82.1]	[67.2, 85.1]	[72.9, 82.8]

<sup>a</sup> Estimates in bold font indicate statistically significant relationship ( $p < 0.05$ ).

**Table B-3. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Awareness of White Lies, 2008 YMTS [95% Confidence Interval]<sup>a</sup>**

	Overall (%)	Aware of White Lies (%)	Unaware of White Lies (%)
<b>Social Perceptions</b>			
People who have a cigarette or two on weekends or at a party should not be thought of as smokers (Strongly Disagree or Disagree)	70.0	76.7	67.4
(N = 1,121)	[64.6, 74.8]	[68.5, 83.4]	[60.7, 73.5]
Young people who smoke cigarettes have more friends (Strongly Disagree or Disagree)	87.0	88.6	86.3
(N = 1,121)	[82.7, 90.3]	[81.4, 93.3]	[81.0, 90.4]
Smoking cigarettes makes people your age look cool or fit in (Strongly Disagree or Disagree)	90.0	90.5	89.9
(N = 1,122)	[86.3, 92.8]	[82.6, 95.0]	[85.3, 93.1]
People your age who smoke are less attractive (Strongly Disagree or Disagree)	62.6	67.3	60.8
(N = 1,122)	[57.1, 67.7]	[58.3, 75.1]	[54.0, 67.2]
If people want to smoke, I say let them (Strongly Disagree or Disagree)	51.2	45.5	53.4
(N = 1,122)	[45.7, 56.7]	[36.9, 54.4]	[46.6, 60.1]
Movies rated G, PG, and PG-13 should not show actors smoking (Strongly Agree or Agree)	55.2	51.0	56.8
(N = 1,121)	[49.7, 60.5]	[42.2, 59.7]	[50.1, 63.3]
People close to me would be upset if I smoked (Strongly Agree or Agree) [Nonsmokers only]	94.89	97.0	94.1
(N = 1,057)	[91.9, 96.8]	[93.5, 98.7]	[89.9, 96.6]
People close to me are upset with my smoking (Strongly Agree or Agree) [Smokers only]	56.5	50.0	58.4
(N = 65)	[37.12, 74.1]	[20.5, 79.5]	[35.3, 78.3]
<b>Health Effects</b>			
Most people your age do not believe all the bad things they hear about tobacco products (Strongly Disagree or Disagree)	27.3	31.7	25.7
(N = 1,122)	[22.7, 32.5]	[24.0, 40.6]	[20.2, 32.0]
Smoking one or two cigarettes would have no effect on your health (Strongly Disagree or Disagree)	81.7	80.9	82.0
(N = 1,122)	[77.2, 85.5]	[73.3, 87.7]	[76.4, 86.5]

(continued)

**Table B-3. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Awareness of White Lies, 2008 YMTS [95% Confidence Interval]<sup>a</sup> (continued)**

	Overall (%)	Aware of White Lies (%)	Unaware of White Lies (%)
<b>Secondhand Smoke and Regulations</b>			
Smoke from other people's cigarettes bothers me (Strongly Agree or Agree) (N = 1,122)	84.7 [80.4, 88.2]	88.3 [81.7, 92.7]	83.3 [77.7, 87.7]
It is harmful to a person's health if they live in a house where someone smokes tobacco indoors (Strongly Agree or Agree) (N = 1,122)	90.1 [86.2, 93.0]	94.3 [88.5, 97.3]	88.5 [83.4, 92.2]
Breathing smoke from other people's cigarettes is very harmful or somewhat harmful (Strongly Agree or Agree) (N = 1,119)	91.1 [86.8, 94.1]	94.7 [89.4, 97.4]	91.6 [86.3, 95.0]
People working indoors, including those working in restaurants and bars, should have a right not to be exposed to secondhand smoke (Strongly Agree or Agree) (N = 1,118)	92.9 [89.3, 95.4]	<b>96.6</b> <b>[93.0, 98.4]</b>	<b>91.5</b> <b>[86.5, 94.7]</b>
<b>Tobacco Industry</b>			
Cigarette companies try to get young people to start smoking (Strongly Agree or Agree) (N = 1,121)	63.7 [58.0, 69.0]	<b>73.9</b> <b>[64.6, 81.4]</b>	<b>59.7</b> <b>[52.8, 66.4]</b>
Tobacco ads influence youth to smoke (Strongly Agree or Agree) (N = 1,120)	63.5 [57.9, 68.8]	64.1 [54.8, 72.4]	63.3 [56.4, 69.7]
Tobacco companies put profits over people's health (Strongly Agree or Agree) (N = 1,111)	71.6 [66.0, 76.6]	<b>84.0</b> <b>[76.4, 89.4]</b>	<b>66.8</b> <b>[59.7, 73.2]</b>

(continued)

**Table B-3. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Awareness of White Lies, 2008 YMTS [95% Confidence Interval]<sup>a</sup> (continued)**

	Overall (%)	Aware of White Lies (%)	Unaware of White Lies (%)
<b>Youth Empowerment</b>			
Choosing not to smoke is a way to express your independence (Strongly Agree or Agree)	79.0	82.9	77.6
(N = 1,122)	[74.0, 83.3]	[76.3, 88.0]	[71.0, 83.0]
I want to be involved in efforts to get rid of cigarette smoking (Strongly Agree or Agree)	76.5	79.5	75.4
	[71.8, 80.7]	[72.4, 85.1]	[69.3, 80.6]
I feel comfortable telling other people my age about the risks of tobacco (Strongly Agree or Agree)	82.0	85.4	80.7
(N = 1,122)	[77.4, 85.8]	[78.9, 90.1]	[74.8, 85.5]
I feel comfortable telling other people my age that they should not smoke or use tobacco (Strongly Agree or Agree)	87.5	87.4	87.6
(N = 1,122)	[83.7, 90.5]	[80.5, 92.1]	[82.8, 91.1]
I am confident that I can convince my friends not to smoke or use tobacco (Strongly Agree or Agree)	78.1	77.6	78.3
(N = 1,121)	[73.4, 82.1]	[69.6, 83.9]	[72.5, 83.2]

<sup>a</sup> Estimates in bold font indicate statistically significant relationship ( $p < 0.05$ ).

**Table B-4. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Confirmed Awareness of One or More TV Advertisements, 2008 YMTS [95% Confidence Interval]<sup>a</sup>**

	Overall (%)	Aware (%)	Unaware (%)
<b>Social Perceptions</b>			
People who have a cigarette or two on weekends or at a party should not be thought of as smokers (Strongly Disagree or Disagree) (N = 1,121)	70.0 [64.6, 74.8]	<b>81.6</b> <b>[75.1, 86.8]</b>	<b>60.7</b> <b>[53.1, 67.7]</b>
Young people who smoke cigarettes have more friends (Strongly Disagree or Disagree) (N = 1,121)	87.0 [82.7, 90.3]	<b>91.7</b> <b>[87.0, 94.8]</b>	<b>83.2</b> <b>[76.5, 88.2]</b>
Smoking cigarettes makes people your age look cool or fit in (Strongly Disagree or Disagree) (N = 1,122)	90.0 [86.3, 92.8]	90.7 [85.2, 94.3]	89.5 [83.9, 93.3]
People your age who smoke are less attractive (Strongly Disagree or Disagree) (N = 1,122)	62.6 [57.1, 67.7]	61.9 [53.4, 69.8]	63.0 [55.8, 69.8]
If people want to smoke, I say let them (Strongly Disagree or Disagree) (N = 1,122)	51.2 [45.7, 56.7]	<b>44.5</b> <b>[36.4, 52.9]</b>	<b>56.6</b> <b>[49.3, 63.8]</b>
Movies rated G, PG, and PG-13 should not show actors smoking (Strongly Agree or Agree) (N = 1,121)	55.2 [49.7, 60.5]	54.8 [46.5, 62.8]	55.5 [48.2, 62.6]
People close to me would be upset if I smoked (Strongly Agree or Agree) [Nonsmokers only] (N = 1,057)	94.9 [91.9, 96.8]	97.0 [93.5, 98.7]	93.1 [88.0, 96.1]
People close to me are upset with my smoking (Strongly Agree or Agree) [Smokers only] (N = 65)	56.5 [37.12, 74.1]	49.7 [22.9, 76.6]	58.7 [35.0, 79.0]
<b>Health Effects</b>			
Most people your age do not believe all the bad things they hear about tobacco products (Strongly Disagree or Disagree) (N = 1,122)	27.3 [22.7, 32.5]	24.9 [18.5, 32.7]	29.2 [23.1, 36.3]
Smoking one or two cigarettes would have no effect on your health (Strongly Disagree or Disagree) (N = 1,122)	81.7 [77.2, 85.5]	82.2 [75.3, 87.5]	81.3 [75.1, 86.3]

(continued)

**Table B-4. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Confirmed Awareness of One or More TV Advertisements, 2008 YMTS [95% Confidence Interval]<sup>a</sup> (continued)**

	Overall (%)	Aware (%)	Unaware (%)
<b>Secondhand Smoke and Regulations</b>			
Smoke from other people's cigarettes bothers me (Strongly Agree or Agree) (N = 1,122)	84.7 [80.4, 88.2]	86.1 [79.7, 90.8]	83.5 [77.4, 88.2]
It is harmful to a person's health if they live in a house where someone smokes tobacco indoors (Strongly Agree or Agree) (N = 1,122)	90.1 [86.2, 93.0]	<b>94.0</b> [ <b>89.0, 96.8</b> ]	<b>87.1</b> [ <b>80.9, 91.4</b> ]
Breathing smoke from other people's cigarettes is very harmful or somewhat harmful (Strongly Agree or Agree) (N = 1,119)	91.1 [86.8, 94.1]	<b>97.1</b> [ <b>93.7, 98.6</b> ]	<b>88.9</b> [ <b>82.4, 93.2</b> ]
People working indoors, including those working in restaurants and bars, should have a right not to be exposed to secondhand smoke (Strongly Agree or Agree) (N = 1,118)	92.9 [89.3, 95.4]	<b>97.4</b> [ <b>94.6, 98.7</b> ]	<b>89.3</b> [ <b>83.1, 93.4</b> ]
<b>Tobacco Industry</b>			
Cigarette companies try to get young people to start smoking (Strongly Agree or Agree) (N = 1,121)	63.7 [58.0, 69.0]	64.2 [55.4, 72.2]	63.2 [55.7, 70.1]
Tobacco ads influence youth to smoke (Strongly Agree or Agree) (N = 1,120)	63.5 [57.9, 68.8]	63.3 [54.7, 71.1]	63.7 [56.3, 70.5]
Tobacco companies put profits over people's health (Strongly Agree or Agree) (N = 1,111)	71.6 [66.0, 76.6]	75.0 [66.4, 82.0]	68.8 [61.3, 75.5]

(continued)

**Table B-4. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Confirmed Awareness of One or More TV Advertisements, 2008 YMTS [95% Confidence Interval]<sup>a</sup> (continued)**

	Overall (%)	Aware (%)	Unaware (%)
<b>Youth Empowerment</b>			
Choosing not to smoke is a way to express your independence (Strongly Agree or Agree)	79.0	78.4	79.6
(N = 1,122)	[74.0, 83.3]	[70.9, 83.3]	[72.4, 85.2]
I want to be involved in efforts to get rid of cigarette smoking (Strongly Agree or Agree)	76.5	78.3	75.1
	[71.8, 80.7]	[71.2, 84.0]	[68.5, 80.8]
I feel comfortable telling other people my age about the risks of tobacco (Strongly Agree or Agree)	82.0	81.5	82.3
(N = 1,122)	[77.4, 85.8]	[74.3, 87.1]	[76.2, 87.1]
I feel comfortable telling other people my age that they should not smoke or use tobacco (Strongly Agree or Agree)	87.5	88.5	86.7
(N = 1,122)	[83.7, 90.5]	[82.9, 92.4]	[81.3, 90.8]
I am confident that I can convince my friends not to smoke or use tobacco (Strongly Agree or Agree)	78.1	75.6	80.1
(N = 1,121)	[73.4, 82.1]	[67.8, 81.9]	[74.2, 84.9]

<sup>a</sup> Estimates in bold font indicate statistically significant relationship ( $p < 0.05$ ).

**Table B-5. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Confirmed Awareness of One or More Indiana Campaign Components, 2008 YMTS [95% Confidence Interval]<sup>a</sup>**

	Overall (%)	Aware (%)	Unaware (%)
<b>Social Perceptions</b>			
People who have a cigarette or two on weekends or at a party should not be thought of as smokers (Strongly Disagree or Disagree)	70.0	<b>81.7</b>	<b>60.4</b>
(N = 1,121)	[64.6, 74.8]	<b>[75.2, 86.8]</b>	<b>[52.8, 67.5]</b>
Young people who smoke cigarettes have more friends (Strongly Disagree or Disagree)	87.0	<b>91.8</b>	<b>83.0</b>
(N = 1,121)	[82.7, 90.3]	<b>[87.1, 94.9]</b>	<b>[76.3, 88.1]</b>
Smoking cigarettes makes people your age look cool or fit in (Strongly Disagree or Disagree)	90.0	90.8	89.4
(N = 1,122)	[86.3, 92.8]	[85.4, 94.4]	[83.8, 93.2]
People your age who smoke are less attractive (Strongly Disagree or Disagree)	62.6	62.0	63.0
(N = 1,122)	[57.1, 67.7]	[53.6, 69.8]	[55.7, 69.8]
If people want to smoke, I say let them (Strongly Disagree or Disagree)	51.2	<b>44.4</b>	<b>56.8</b>
(N = 1,122)	[45.7, 56.7]	<b>[36.4, 52.7]</b>	<b>[49.5, 63.9]</b>
Movies rated G, PG, and PG-13 should not show actors smoking (Strongly Agree or Agree)	55.2	54.5	55.8
(N = 1,121)	[49.7, 60.5]	[46.3, 62.4]	[48.5, 62.9]
People close to me would be upset if I smoked (Strongly Agree or Agree) [Nonsmokers only]	94.89	97.1	93.1
(N = 1,057)	[91.9, 96.8]	[93.5, 98.7]	[87.9, 96.1]
People close to me are upset with my smoking (Strongly Agree or Agree) [Smokers only]	56.5	45.0	60.7
(N = 65)	[37.12, 74.1]	[20.7, 71.9]	[36.1, 80.8]
<b>Health Effects</b>			
Most people your age do not believe all the bad things they hear about tobacco products (Strongly Disagree or Disagree)	27.3	25.5	28.8
(N = 1,122)	[22.7, 32.5]	[19.1, 33.2]	[22.6, 35.9]
Smoking one or two cigarettes would have no effect on your health (Strongly Disagree or Disagree)	81.7	82.1	81.4
(N = 1,122)	[77.2, 85.5]	[75.3, 87.3]	[75.1, 86.4]

(continued)

**Table B-5. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Confirmed Awareness of One or More Indiana Campaign Components, 2008 YMTS [95% Confidence Interval]<sup>a</sup> (continued)**

	Overall (%)	Aware (%)	Unaware (%)
<b>Secondhand Smoke and Regulations</b>			
Smoke from other people's cigarettes bothers me (Strongly Agree or Agree) (N = 1,122)	84.7 [80.4, 88.2]	86.3 [79.9, 90.9]	83.3 [77.1, 88.1]
It is harmful to a person's health if they live in a house where someone smokes tobacco indoors (Strongly Agree or Agree) (N = 1,122)	90.1 [86.2, 93.0]	<b>93.6</b> [ <b>88.8, 96.5</b> ]	<b>87.3</b> [ <b>81.0, 91.7</b> ]
Breathing smoke from other people's cigarettes is very harmful or somewhat harmful (Strongly Agree or Agree) (N = 1,119)	91.1 [86.8, 94.1]	<b>97.1</b> [ <b>93.8, 98.7</b> ]	<b>88.8</b> [ <b>82.2, 93.1</b> ]
People working indoors, including those working in restaurants and bars, should have a right not to be exposed to secondhand smoke (Strongly Agree or Agree) (N = 1,118)	92.9 [89.3, 95.4]	<b>97.4</b> [ <b>94.7, 98.8</b> ]	<b>89.2</b> [ <b>82.9, 93.3</b> ]
<b>Tobacco Industry</b>			
Cigarette companies try to get young people to start smoking (Strongly Agree or Agree) (N = 1,121)	63.7 [58.0, 69.0]	64.2 [55.5, 72.1]	63.2 [55.6, 70.2]
Tobacco ads influence youth to smoke (Strongly Agree or Agree) (N = 1,120)	63.5 [57.9, 68.8]	62.9 [54.4, 70.7]	64.0 [56.5, 70.9]
Tobacco companies put profits over people's health (Strongly Agree or Agree) (N = 1,111)	71.6 [66.0, 76.6]	75.1 [66.6, 82.1]	68.6 [61.0, 75.3]

(continued)

**Table B-5. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Confirmed Awareness of One or More Indiana Campaign Components, 2008 YMTS [95% Confidence Interval]<sup>a</sup> (continued)**

	<b>Overall (%)</b>	<b>Aware (%)</b>	<b>Unaware (%)</b>
<b>Youth Empowerment</b>			
Choosing not to smoke is a way to express your independence (Strongly Agree or Agree)	79.0	78.5	79.5
(N = 1,122)	[74.0, 83.3]	[71.1, 84.4]	[72.3, 85.2]
I want to be involved in efforts to get rid of cigarette smoking (Strongly Agree or Agree)	76.5	77.7	75.6
	[71.8, 80.7]	[70.6, 83.4]	[68.9, 81.3]
I feel comfortable telling other people my age about the risks of tobacco (Strongly Agree or Agree)	82.0	81.8	82.2
(N = 1,122)	[77.4, 85.8]	[74.6, 87.3]	[76.0, 87.0]
I feel comfortable telling other people my age that they should not smoke or use tobacco (Strongly Agree or Agree)	87.5	88.2	87.0
(N = 1,122)	[83.7, 90.5]	[82.7, 92.1]	[81.4, 91.0]
I am confident that I can convince my friends not to smoke or use tobacco (Strongly Agree or Agree)	78.1	75.6	80.1
(N = 1,121)	[73.4, 82.1]	[67.9, 81.9]	[74.2, 85.0]

<sup>a</sup> Estimates in bold font indicate statistically significant relationship ( $p < 0.05$ ).

**APPENDIX C:  
ANTITOBACCO KNOWLEDGE, ATTITUDES, AND BELIEFS BY  
TOBACCO USE PREVENTION EDUCATION**

**Table C-1. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Exposure to Tobacco Use Prevention Education, 2008 YMTS [95% Confidence Interval]<sup>a</sup>**

	Overall (%)	Taught 3 or More TUPE Topics (%)	Taught Less than 3 TUPE Topics (%)
<b>Social Perceptions</b>			
People who have a cigarette or two on weekends or at a party should not be thought of as smokers (Strongly Disagree or Disagree) (N = 1,121)	70.0 [64.6, 74.8]	71.3 [64.7, 77.0]	67.0 [57.5, 75.4]
Young people who smoke cigarettes have more friends (Strongly Disagree or Disagree) (N = 1,121)	87.0 [82.7, 90.3]	89.2 [84.0, 92.8]	81.9 [73.5, 88.1]
Smoking cigarettes makes people your age look cool or fit in (Strongly Disagree or Disagree) (N = 1,122)	90.0 [86.3, 92.8]	90.7 [86.2, 93.9]	88.4 [80.8, 93.3]
People your age who smoke are less attractive (Strongly Disagree or Disagree) (N = 1,122)	62.6 [57.1, 67.7]	64.9 [58.1, 71.1]	57.3 [47.9, 66.2]
If people want to smoke, I say let them (Strongly Disagree or Disagree) (N = 1,122)	51.2 [45.7, 56.7]	53.7 [46.9, 60.3]	45.6 [36.5, 55.1]
Movies rated G, PG, and PG-13 should not show actors smoking (Strongly Agree or Agree) (N = 1,121)	55.2 [49.7, 60.5]	59.2 [52.5, 65.5]	46.1 [36.9, 55.6]
People close to me would be upset if I smoked (Strongly Agree or Agree) [Nonsmokers only] (N = 1,057)	94.9 [91.9, 96.8]	96.7 [93.5, 98.3]	90.5 [82.5, 95.0]
People close to me are upset with my smoking (Strongly Agree or Agree) [Smokers only] (N = 65)	56.5 [37.12, 74.1]	63.2 [32.7, 85.9]	51.6 [28.4, 74.2]
<b>Health Effects</b>			
Most people your age do not believe all the bad things they hear about tobacco products (Strongly Disagree or Disagree) (N = 1,122)	27.3 [22.7, 32.5]	25.8 [20.3, 32.2]	30.8 [23.1, 39.7]
Smoking one or two cigarettes would have no effect on your health (Strongly Disagree or Disagree) (N = 1,122)	81.7 [77.2, 85.5]	84.2 [78.8, 88.4]	76.1 [67.4, 83.0]

(continued)

**Table C-1. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Exposure to Tobacco Use Prevention Education, 2008 YMTS [95% Confidence Interval]<sup>a</sup> (continued)**

	Overall (%)	Taught 3 or More TUPE Topics (%)	Taught Less than 3 TUPE Topics (%)
<b>Secondhand Smoke and Regulations</b>			
Smoke from other people's cigarettes bothers me (Strongly Agree or Agree) (N = 1,122)	84.7 [80.4, 88.2]	87.1 [82.2, 90.8]	79.2 [70.0, 86.1]
It is harmful to a person's health if they live in a house where someone smokes tobacco indoors (Strongly Agree or Agree) (N = 1,122)	90.1 [86.2, 93.0]	91.0 [86.1, 94.2]	88.2 [80.3, 93.2]
Breathing smoke from other people's cigarettes is very harmful or somewhat harmful (Strongly Agree or Agree) (N = 1,119)	91.1 [86.8, 94.1]	94.9 [90.4, 97.3]	86.8 [77.7, 92.6]
People working indoors, including those working in restaurants and bars, should have a right not to be exposed to secondhand smoke (Strongly Agree or Agree) (N = 1,118)	92.9 [89.3, 95.4]	94.0 [89.5, 96.7]	90.2 [82.9, 94.6]
<b>Tobacco Industry</b>			
Cigarette companies try to get young people to start smoking (Strongly Agree or Agree) (N = 1,121)	63.7 [58.0, 69.0]	66.0 [59.0, 72.3]	58.3 [48.5, 67.4]
Tobacco ads influence youth to smoke (Strongly Agree or Agree) (N = 1,120)	63.5 [57.9, 68.8]	66.0 [59.1, 72.2]	58.0 [48.3, 67.1]
Tobacco companies put profits over people's health (Strongly Agree or Agree) (N = 1,111)	71.6 [66.0, 76.6]	69.6 [62.6, 75.7]	76.4 [66.9, 83.8]

(continued)

**Table C-1. Tobacco-Related Knowledge, Attitudes, and Beliefs, Overall by Exposure to Tobacco Use Prevention Education, 2008 YMTS [95% Confidence Interval]<sup>a</sup> (continued)**

	Overall (%)	Taught 3 or More TUPE Topics (%)	Taught Less than 3 TUPE Topics (%)
<b>Youth Empowerment</b>			
Choosing not to smoke is a way to express your independence (Strongly Agree or Agree)	79.0	80.6	75.4
(N = 1,122)	[74.0, 83.3]	[74.4, 85.6]	[66.2, 82.8]
I want to be involved in efforts to get rid of cigarette smoking (Strongly Agree or Agree)	76.5	86.8	62.5
	[71.8, 80.7]	[76.9, 87.2]	[53.5, 70.8]
I feel comfortable telling other people my age about the risks of tobacco (Strongly Agree or Agree)	82.0	86.0	72.8
(N = 1,122)	[77.4, 85.8]	[80.6, 90.0]	[63.9, 80.3]
I feel comfortable telling other people my age that they should not smoke or use tobacco (Strongly Agree or Agree)	87.5	90.6	80.3
(N = 1,122)	[83.7, 90.5]	[86.4, 93.7]	[72.2, 86.5]
I am confident that I can convince my friends not to smoke or use tobacco (Strongly Agree or Agree)	78.1	82.3	68.6
(N = 1,121)	[73.4, 82.1]	[76.8, 86.7]	[59.5, 76.4]

<sup>a</sup> Estimates in bold font indicate statistically significant relationship ( $p < 0.05$ ).



**APPENDIX D:  
SELF-REPORTED SECONDHAND SMOKE EXPOSURE MEASURES  
BY DEMOGRAPHICS AND SMOKING STATUS**

**Table D-1. Rules about Smoking in the Home, Overall and by Demographics and Smoking Status, 2008 YMTS [95% Confidence Interval]**

	Cannot Smoke Anywhere (%)	Can Only Smoke in Certain Areas (%)	No Rules (%)
<b>Overall</b>	74.6	10.8	14.7
(N = 1,122)	[69.6, 79.0]	[7.7, 14.8]	[11.3, 18.8]
<b>Gender</b>			
Female	75.1	9.4	15.5
(N = 563)	[67.6,81.4]	[5.4,15.8]	[10.7,21.9]
Male	73.9	12.4	13.7
(N = 569)	[67.1,79.7]	[8.4,18.0]	[9.6,19.2]
<b>Race/Ethnicity</b>			
White non-Hispanic	75.0	11.0	13.9
(N = 960)	[69.5,79.8]	[7.7,15.5]	[10.4,18.4]
Black non-Hispanic	72.2	15.7	12.1
(N = 64)	[54.8,84.8]	[6.3,34.0]	[5.4,25.1]
Hispanic	79.0	1.8	19.3
(N = 44)	[51.9,92.9]	[0.3,10.3]	[5.9,47.4]
Other race/ethnicity	70.2	4.5	25.3
(N = 54)	[44.2,87.5]	[0.8,22.1]	[9.5,52.3]
<b>Age Group</b>			
12–14	74.9	12.5	12.5
(N = 547)	[68.0,80.8]	[8.3,18.4]	[8.5,18.2]
15–17	73.8	7.2	19.0
(N = 575)	[67.4,79.4]	[4.7,10.8]	[14.0,25.2]
<b>Region</b>			
North West	70.6	10.4	19.0
(N = 339)	[61.3,78.5]	[5.7,18.1]	[12.8,27.3]
North Central	84.9	6.3	8.8
(N = 112)	[69.7,93.2]	[2.2,17.0]	[2.8,24.7]
North East	75.1	22.7	2.2
(N = 74)	[44.4,91.9]	[6.6,54.9]	[0.5,10.0]
Central West	67.0	9.9	23.1
(N = 45)	[39.7,86.2]	[2.9,28.8]	[7.0,54.4]
Central Indy	75.2	11.3	13.6
(N = 186)	[62.7,84.5]	[5.4,21.9]	[7.0,24.9]
Central East	78.7	8.9	12.4
(N = 41)	[47.0,93.9]	[1.5,38.9]	[2.6,43.1]
South West	74.2	11.8	14.0
(N = 275)	[63.5,82.6]	[6.0,21.8]	[8.3,22.6]
South East	80.8	5.9	13.3
(N = 50)	[59.1,92.4]	[1.4,22.2]	[4.2,35.2]

(continued)

**Table D-1. Rules about Smoking in the Home, Overall and by Demographics and Smoking Status, 2008 YMTS [95% Confidence Interval] (continued)**

	Cannot Smoke Anywhere (%)	Can Only Smoke in Certain Areas (%)	No Rules (%)
<b>Smoking Status</b>			
Nonsmoker (N = 1,057)	76.1 [71.0,80.6]	10.7 [7.6, 15.0]	13.2 [9.9, 17.3]
Smoker (N = 65)	46.4 [28.9,64.9]	11.0 [4.5, 24.6]	42.6 [24.8, 62.5]

**Table D-2. Secondhand Smoke (SHS) Exposure in Past Week, Overall and by Demographics and Smoking Status, 2008 YMTS [95% Confidence Interval]**

	Exposed to SHS in Room in Past 7 Days (%)	Exposed to SHS in Car in Past 7 Days (%)
<b>Overall</b>	44.6	35.6
(N = 1,122)	[39.2,50.1]	[30.5,41.0]
<b>Gender</b>		
Female	42.8	33.8
(N = 563)	[35.1,50.8]	[26.7,41.7]
Male	46.8	37.7
(N = 569)	[39.6,54.2]	[30.8,45.1]
<b>Race/Ethnicity</b>		
White non-Hispanic	45.6	34.1
(N = 960)	[39.6,51.7]	[28.6,40.1]
Black non-Hispanic	56.8	36.5
(N = 64)	[39.3,72.7]	[21.8,54.3]
Hispanic	23.7	46.3
(N = 44)	[10.7,44.5]	[24.8,69.3]
Other race/ethnicity	24.8	42.2
(N = 54)	[10.5,47.9]	[21.1,66.5]
<b>Age Group</b>		
12–14	41.5	30.4
(N = 547)	[34.4,49.0]	[24.0,37.8]
15–17	50.9	46.1
(N = 575)	[44.0,57.8]	[39.2,53.1]
<b>Region</b>		
North West	49.1	39.7
(N = 339)	[39.6,58.8]	[30.8,49.3]
North Central	42.9	26.6
(N = 112)	[27.8,59.5]	[14.7,43.3]
North East	53.1	29.3
(N = 74)	[29.6,75.2]	[11.1,58.0]
Central West	47	33
(N = 45)	[24.2,71.0]	[14.6,58.7]
Central Indy	33	39.2
(N = 186)	[22.2,45.8]	[27.3,52.5]
Central East	36.3	20.9
(N = 41)	[12.6,69.1]	[5.9,52.7]
South West	42.6	33.5
(N = 275)	[32.1,53.8]	[23.9,44.7]
South East	62.4	41.2
(N = 50)	[37.6,82.0]	[20.6,65.4]

(continued)

**Table D-2. Secondhand Smoke (SHS) Exposure in Past Week, Overall and by Demographics and Smoking Status, 2008 YMTS [95% Confidence Interval] (continued)**

	Exposed to SHS in Room in Past 7 Days (%)	Exposed to SHS in Car in Past 7 Days (%)
<b>Smoking Status</b>		
Nonsmoker (N = 1,057)	42.8 [37.3,48.6]	32.9 [27.8,38.5]
Smoker (N = 65)	77.4 [59.0,89.1]	85.5 [70.4,93.6]