Our mission is to utilize evidence-based strategies in tobacco control surveillance, evaluation, program management, communication, and resources development to advance policies promoting a tobacco-free Louisiana.

2011 Louisiana Youth Tobacco Survey

A publication of the Louisiana Tobacco Control Program
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Louisiana is facing a tobacco epidemic among its youth population (age 11-17). Nearly 30% of youth {weighted N=91,547} in the state are tobacco users. About 25% of youth smoke some tobacco product, and 10% smoke cigarettes daily. The highest utilization is seen among high school students; nearly 40% of them are tobacco users with the majority of them using some combustible product (a form of tobacco that is ignited and then smoked).

This report provides results for the 2011 survey. These results, in conjunction with trend analysis from 2008-2011, help to characterize the tobacco epidemic among Louisiana youth. Tobacco was easily accessible to youth in Louisiana; many youth were able to purchase cigarettes in stores illegally. Moreover, students were inclined to believe smokers are cooler and have more friends. Fewer students were being taught ways to say “NO” to tobacco products in 2011 compared to 2008. These results suggest that the physical and social environment for youth in Louisiana was conducive to and possibly promoted tobacco use.
Each day, more than 3,800 youth nationwide smoke their first cigarette and more than 1,000 youth become daily smokers (US DHHS, 2012). Approximately 90% of current adult smokers began smoking before age 18 (US DHHS, 2012). Youth are at greater risk for tobacco addiction because the adolescent brain is still developing; research indicates that adolescent brains are more susceptible and receptive to nicotine than the adult brain (Adriani, 2003 & Schochet et al, 2005). This suggests that young people become dependent on nicotine at even low levels of tobacco consumption.

Tobacco use in youth can have lasting effects on their health and development. Exposure to tobacco is known to cause cardiovascular disease, cancer and chronic obstructive pulmonary disease (COPD). These effects are seen in adolescents and often form the precursors for chronic disease in adulthood (US DHHS, 2012). Moreover, the effects of tobacco are cumulative; an earlier initiation age translates to a longer exposure and increased risk for chronic disease development (US DHHS, 2012).

Active smoking causes cancer, cardiovascular disease, COPD, and other chronic diseases (US DHHS, 2012). The antecedents for these smoking-related diseases are documented in youth and young adults who use tobacco (Sherril et al, 1999 & Gold et al, 1996). Tobacco use is associated with the prevalence of plaque lesions in the abdominal aorta, a major blood vessel in the body; the development of these lesions increases the risk for cardiovascular disease (McGill et al, 2000, McMahen et al 2005, 2006 & US DHHS, 2012). Results across studies indicate a consistent, statistically significant and causal relationship between tobacco use among youth and early development of smoking-related morbidity (US DHHS, 2012). The survey is conducted every other year.

With nearly all tobacco use beginning in young populations, it is imperative to prevent tobacco initiation among this group. Preventing initiation of tobacco use among youth requires a comprehensive understanding of the social, environmental, advertising and marketing influences that youth encounter. The Louisiana Youth Tobacco Survey (LYTS) provides a tool to assess tobacco use, access, cessation, knowledge, beliefs and exposure to secondhand smoke. The 2011 LYTS is the third survey of its kind; the first two were conducted in 2008 and 2009, respectively.

The results in this report provide an overview of tobacco use among youth in Louisiana. Further, it provides additional information about the environment where youth live, work and play. This report comments on the social and physical mechanisms that perpetuate tobacco use among youth. The results of this report should guide future prevention projects in an effort to reduce the tobacco epidemic among youth in Louisiana.
Methods

The Chronic Disease Prevention and Control Unit, under the Louisiana Department of Health and Hospitals’ Bureau of Primary Care and Rural Health, in conjunction with the Tobacco Control Program, the Centers for Disease Control and Prevention, the Louisiana Department of Education, the Louisiana Campaign for Tobacco-Free Living, Macro International and many other local partners, including school districts, conducted this survey in the spring of 2011. LYTS provides data from a representative sample of public middle and high school students in Louisiana. The sample design for the survey is a two-stage cluster with the probability of selection being proportional to school enrollment size. Every student in the sampled school has a chance of being selected for the survey.

In 2011, 30 middle schools were sampled, with 24 schools choosing to participate. Likewise, 30 high schools were sampled, with 23 agreeing to participate. Informed consent was acquired from the district and school-level administrators. Trained interviewers administered the survey in the schools. Students taking the survey used a Scantron for their answers. All survey responses were anonymous.

Of the middle school participants, 1,601 middle school students were sampled and 1,409 agreed to participate. Similarly, 1,223 high school students were sampled and 1,003 agreed to participate. The school participation rate for both middle and high school was 79.71%, and the student participation was 85.0%; this provides a complete response rate of 67.85% for the 2011 LYTS. The table to the right provides a demographic breakdown of respondents in the 2011 LYTS.

Table 1.1. Distribution of Key Characteristics Among 2011 YTS Population

<table>
<thead>
<tr>
<th>Race</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>51.3</td>
</tr>
<tr>
<td>African American</td>
<td>42.2</td>
</tr>
<tr>
<td>Other</td>
<td>6.4</td>
</tr>
<tr>
<td>Gender</td>
<td>% respondents</td>
</tr>
<tr>
<td>Male</td>
<td>49.8</td>
</tr>
<tr>
<td>Female</td>
<td>50.2</td>
</tr>
<tr>
<td>Grade</td>
<td>% respondents</td>
</tr>
<tr>
<td>Middle school</td>
<td>42.2</td>
</tr>
<tr>
<td>High school</td>
<td>57.8</td>
</tr>
<tr>
<td>Tobacco status</td>
<td>% respondents</td>
</tr>
<tr>
<td>Non user</td>
<td>71.3</td>
</tr>
<tr>
<td>User</td>
<td>28.7</td>
</tr>
<tr>
<td>Smoking status</td>
<td>% respondents</td>
</tr>
<tr>
<td>Non smoker</td>
<td>83.8</td>
</tr>
<tr>
<td>Smoker</td>
<td>16.2</td>
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</table>

The statistical analyses found within the report were performed by members of the Chronic Disease Prevention and Control Epidemiology Unit (CDPCEU) at the Louisiana State University Health Sciences Center (LSUHSC) School of Public Health. Similarly, the 2011 LYTS report was compiled by members of the CDPCEU in conjunction with the Louisiana Tobacco Control Program.
It is important to note the sample size of the Other race group is small. This places limitations on the data and analysis performed in this report. When a sample size is low, performing sub-group or stratified analysis yields invalid estimates. Interpretation of estimates that are stratified for other races should be made with caution. Additionally, several questions in the report are not stratified using the Other race category due to this limitation. Statistics designated with an asterisk (*) should be interpreted with caution.

The 2011 LYTS consisted of 72 questions addressing students’ use of various tobacco products including cigarettes, smokeless tobacco, cigars, bidis and Black & Milds™. Furthermore, questions addressing knowledge and beliefs, media/advertising and secondhand smoke are further stratified based on smoking status. This report stratifies many questions by gender, grade and race. Furthermore, questions addressing knowledge and beliefs, media/advertising and secondhand smoke further stratify based on smoking status.

The 2011 LYTS report is the first to provide trend analysis for Louisiana youth. LYTS results from 2008, 2009 and 2011 are combined to illustrate patterns in use, access, knowledge and beliefs, media/advertising and secondhand smoke exposure. Moreover, statistical tests were performed to identify any significant change over time.

Variables Definition

Middle School Student: Public school students in 6th, 7th or 8th grade.
High School Student: Public school students in 9th, 10th, 11th or 12th grade.
Youth: Refers to students in middle or high school (6th-12th grade).
Other Race Category: A race other than White or Black/African American.
Overall: A statistic that includes both middle and high school students.
Over Time: Refers to trend analysis over all survey years (2008, 2009 and 2011).
Initiation Age: Age at which the student smoked a whole cigarette for the first time.
Prevalence: The proportion of the surveyed youth found to have a particular risk factor.
Secondhand Smoke: Also known as passive smoking or environmental tobacco smoke is produced while a combustible tobacco product is lit. It is composed of side stream and main stream smoke.
Cigarettes: Small rolls of cut tobacco wrapped in paper.
Combustible Tobacco Product: Any tobacco product that requires ignition to smoke.
Cigar: A roll of dried and fermented tobacco.
Cigarillo: A little cigar, similar in size to a cigarette, but is typically wrapped in a whole-leaf tobacco.
Black & Mild™: A specific type of cigar, similar in size to a cigarillo. They are often flavored.
Smokeless Tobacco Product: Refers to any tobacco product that does not require ignition to use. It includes, but is not limited to chewing tobacco, dipping tobacco, snuff dissolvable tobacco and snus.
Bidi: Also known as a beedi, it is a thin cigarette filled with tobacco and wrapped in a tendu leaf.
Any Tobacco Product: Refers to the use of any product listed above.
Tobacco Use: Refers to consumption of any product containing tobacco.
Smoking: Refers to smoking of a cigarette.
The following section provides prevalence estimates for the use of tobacco products in Louisiana during 2011. Prevalence is a measure that can assess the amount of tobacco use in a given community. The information presented in this section will comment on the tobacco burden among the youth population in Louisiana. Information is presented as an overall figure (representing all youth in Louisiana) and broken down by race (African American, Caucasian and other), gender, grade (high school vs. middle school) and tobacco status.

It is important to note that other races were represented as a smaller sample size compared to African Americans and Caucasians. The small sample size places limitations on the data, and all interpretations involving this racial group should be reviewed with caution. Prevalence estimates among other races are high due to the small sample size. This will affect statistical significance when comparing prevalence estimates by racial category; for instance, a large difference may exist between estimates, but the small sample size among other races limits the ability to find a significant difference. While limitations exist, it is important for the reader to identify the large burden among other races, even if a statistical test determines no significant difference between racial groups. As a reminder, estimates for other races are marked with an asterisk (*) and should be interpreted with caution.

Compared to national and other state estimates, Louisiana had the sixth-highest smoking rate for high school students (YRBS, 2011). Moreover, Louisiana consistently ranked above national estimates for all types of tobacco use (YRBS & NYTS, 2011). In 2011, the national smoking prevalence for middle school and high school students was 4.3% and 15.8%, respectively. Louisiana smoking rates during 2011 were 6.2% and 24.0% for these respective groups. Similar trends were seen in Louisiana across all tobacco types.

The most notable tobacco trend was seen in the transition between middle and high school. Middle school students in Louisiana had a significantly (p<0.001) lower prevalence across all tobacco types. A large increase in smoking initiation was seen between the ages of 13 and 14; this traditionally marks the age where students transition from middle to high school.

This report illustrates the high tobacco burden among youth in Louisiana. The State continues to face excessively high rates of tobacco use, especially when compared to national estimates. Furthermore, prevalence estimates indicate no unique trends among races or tobacco types. Instead, the youth in Louisiana face a high prevalence across races and tobacco types.
Cigarettes

Cigarette prevalence: having smoked a cigarette(s) on at least one of the 30 days preceding the survey.

- Overall, youth smoking prevalence in Louisiana for 2011 was about 16%.
- High school students’ smoking prevalence was 24% compared to about 6% of middle school students.
- Male students smoked at higher rates than female students—nearly 18% and 14%, respectively.
- Overall, other and Caucasian racial categories had the highest smoking prevalence at 23%* and 20%, respectively.

Daily Smokers

Daily smoker: having smoked at least one cigarette on each of the 30 days preceding the survey.

- Overall, the daily smoker prevalence among youth in Louisiana was about 10% in 2011.
- High school students experienced a daily smoking prevalence that was more than twice as high as middle school students—about 14% and 5%, respectively.
- Caucasians and other races experienced a nearly equal but higher prevalence for daily smoking (12% and 13%, respectively) compared to African Americans (7%).
- Males had a slightly higher prevalence for daily smoking than females—12% and about 9%, respectively.
Combustible Tobacco

*Combustible tobacco: having smoked one combustible tobacco product on at least one of the 30 days preceding the survey.*

Combustible Tobacco Prevalence Among Youth in Louisiana in 2011

- Overall, the combustible tobacco prevalence in 2011 was about 25%.
- In Louisiana, the prevalence of combustible tobacco products was excessively high compared to each national counterpart. The Louisiana high school and middle school prevalence was about 35% and 14%, respectively; while the national high school and middle school prevalence was about 21% and 6%, respectively.
- Caucasians and African Americans experienced a similar combustible prevalence—about 25% and 24%, respectively; while other races had the highest prevalence at about 39%.
- Males had a slightly higher prevalence than females—about 27% and 25%, respectively.

Cigar Prevalence

*Cigars: having smoked a cigar/cigarillo or Black & Mild™ on at least one occasion during the 30 days preceding the survey.*

Cigar/Cigarillo/Black & Mild™ Prevalence Among Youth in Louisiana in 2011

- Overall, about 18% of youth in Louisiana used cigars/cigarillos or Black & Mild™ in 2011.
- The highest prevalence was seen among African Americans and other races—21% and 32%, respectively.
- A large difference in usage existed between high school and middle school students; about 23% of high school students compared to about 10% of middle school students use of cigar/cigarillos/Black & Mild™.
- Nearly 22% of male youth compared to 15% of female youth were cigar/cigarillo/Black & Mild™ users.
- Louisiana estimates for cigar consumption were excessively high compared to national figures. In 2011, about 4% of middle school and 12% of high school students nationally used cigar/cigarillo or Black & Mild™, compared to about 10% of middle school and 23% of high school students in Louisiana.
Bidi Prevalence

*Bidi: having smoked a bidi(s) on at least one of the 30 days preceding the survey in 2011.*

Bidi Prevalence Among Youth in Louisiana in 2011

- Bidi use had the lowest reported prevalence for tobacco use, at about 7% compared to other types of tobacco products. Other races had the highest prevalence of bidi use at almost 23%, followed by African Americans at about 8% and Caucasians at about 4%.
- Males had a slightly higher prevalence than females—about 7% compared to 5%, respectively.
- While the prevalence of bidi use was low in Louisiana, the observed prevalence estimates were still higher than national estimates. In 2011, 2% of middle and 2% of high school students used bidis nationally, compared to about 4% of middle and 9% of high school students in Louisiana.

Smokeless Tobacco

*Smokeless tobacco prevalence: having used a smokeless tobacco product(s) on at least one of the 30 days preceding the survey.*

Smokeless Tobacco Prevalence Among Youth in Louisiana in 2011

- Overall, youth smokeless tobacco prevalence in 2011 was about 8%.
- Among high school students, 11% used smokeless tobacco; however, the prevalence of smokeless tobacco was lower among middle school students at roughly 5%.
- The national average for smokeless tobacco in 2011 was about 2% for middle and 7% for high school students.
- Males had a much higher prevalence (14%) than females (2%).
- Moderate differences in usage were seen between racial groups, with other races having the highest prevalence at about 13%, followed by Caucasians at about 10% and African Americans at about 6%.
Any Tobacco Use

Any tobacco use: if students used any tobacco product(s) on at least one of the 30 days preceding the survey.

Any Tobacco Use Among Youth in Louisiana in 2011

- Overall, youth tobacco prevalence in 2011 was about 28%.
- High school students experienced significantly higher tobacco prevalence than middle school students—about 38% compared to nearly 16%, respectively. Nationally, 7% of middle and 23% of high school students were tobacco users at the time of the survey.
- Caucasians had the higher prevalence for cigarettes, smokeless tobacco, combustible and overall tobacco use, as compared to African Americans. This pattern was seen in both high school and middle school students. African Americans experienced a higher prevalence of cigars/cigarillos/Black & Mild's™ across middle and high school.
Trend Analysis:
Prevalence Estimates

Three years of data in Louisiana are available for the LYTS, allowing, for the first time, a discussion of trends in youth tobacco consumption. The data describes patterns in tobacco consumption over time among youth in Louisiana. It also provides specific patterns for gender, race and grade. Overall, the most significant discernible pattern is the large increase in tobacco usage seen among high school students. It is particularly noteworthy because tobacco use declined among middle school students between 2009 and 2011. However, this decline is negated by the exponential increase in tobacco consumption seen in the high school population.

While several gender and racial trends are discernible, no single demographic group experiences disparities in tobacco prevalence. Instead, tobacco consumption was excessively high across all demographic groups among high school students. Moreover, the data shows a growing gap between middle and high school students.

It is important to note that trend analysis was not performed on the cigar/cigarillo/Black & Mild™ variable. The definition of this variable changed between survey years. The 2009 and 2011 definition of the variable includes use of Black & Mild™ -- a product not explicitly included in the 2008 cigar variable. The new variable is more comprehensive and a better representation of the true prevalence. The difference in variable definition does not allow for trend analysis. Moreover, the increase in overall tobacco consumption between 2008 and 2009 may not represent a true increase in usage, but more a reflection of the adjustment in the variable. Instead, the new variable better captures tobacco use among youth.

Tobacco trends over time (2008, 2009, and 2011) showed a moderate decrease in tobacco utilization. Between 2008 and 2009, tobacco consumption increased across all tobacco products (p<.0001). A subsequent, yet slight decline was seen between 2009 and 2011 across all tobacco products. While a slight decline was observed in the entire youth population between 2009 and 2011, tobacco prevalence across all products remained stagnant but high among the high school population. Conversely, the middle school population experienced a significant decline in all tobacco products between 2009 and 2011 (p<.0001). As a result, a large gap in tobacco consumption existed between middle and high school.

Patterns of tobacco usage are unique for gender, racial groups and survey years. Caucasian males were even more likely to use tobacco compared to their female counterparts (p<.0001). Between 2008 and 2011, bidi use and any tobacco use increased significantly among all students (p=.0001 and p<.0001, respectively). Among African American students, smokeless tobacco use significantly increased between 2008 and 2011 (p<.0001). African American males were more likely to smoke cigarettes than African American females (p=.0005); but among other races, male and female students had an equal likelihood of smoking cigarettes or bidis.

While 16.2% of Louisiana youth smoked cigarettes, use of other combustible tobacco products occurred in greater frequency. About 18% of youth smoked a cigar/cigarillo/Black & Mild™ and another 6.5% smoked bidis. High school students and minority groups were more likely to consume these products; 23.4% of high school students, 32.2% of other races, and 21.0% of African Americans smoked a cigar/cigarillo/Black & Mild’s™, compared to 14.6% of Caucasian students. Moreover, 22.9% of other races and 7.5% of African American students smoked bidis, compared to 3.5% of Caucasian students.
• Tobacco consumption increased over time (p<.0001).
• Students in 2009 were 1.63 times as likely to consume any tobacco product, compared to 2008 (p<.0001).
• Students in 2011 were 1.34 times as likely to consume any tobacco product, compared to 2008 (p<.0004).
• Youth bidi consumption increased over time (p=.0001).


• Male and female Caucasians had an equal likelihood of smoking cigarettes, and no difference between these groups existed for cigarette consumption over time.
• Caucasian males were 12 times more likely to use smokeless tobacco products compared to their female counterparts (p<.0001).
• Caucasian males were 1.53 times as likely to consume any tobacco product compared to their female counterparts (p<.0001).
• Caucasian high school students were 2.30 times as likely to consume any tobacco product compared to their middle school counterparts (p<.0001).
African American students were the least likely of all youth to use any type of tobacco (p<.001).

Among African American students, males were 1.81 times as likely to consume cigarettes compared to their female counterparts (p=.0005).

African American males were 3.50 times more likely to consume smokeless tobacco compared to their female counterparts (p<.0001).

A difference in smokeless tobacco consumption was observed for African Americans. An increase was seen between 2008 and 2009 (p<.0001) and again between 2009 and 2011 (p=.0005).

A statistically significant difference in any tobacco use was seen over time. In 2009, Louisiana youth were 2.76 times as likely to consume any tobacco product compared to 2008; and in 2011, they were 2.26 times as likely to consume any tobacco product compared to 2008 (p<.0001, p<.0001, respectively).

African American males were 1.61 times as likely to use any tobacco product compared to females of the same race (p<.0001).

African American high school students were 1.75 times as likely to use any tobacco product compared to middle school students of the same race (p<.0001).

Among other races, male and female students had equal likelihood of smoking cigarettes or bidis.

Male students of other races were 2.66 times more likely than their female counterparts to use smokeless tobacco (p=0.49).

High school students of other races were 2.75 times as likely to use any tobacco product compared to middle school students of the same race (p<.0001).

Male students of other races were 1.63 times as likely to use any tobacco product compared to females of the same race (p=.050).
• Over time, male students were 1.66 times as likely to consume any tobacco compared to their female counterparts (p<.0001).

• Males, over time, were 1.33 times as likely to smoke cigarettes compared to female students (p=.0018).

• Across the three-year period, male high school students were 2.44 times and female high school students were 2.73 times as likely to smoke cigarettes compared to their respective middle school counterparts (p<.0001, p<.0001, respectively).

• Over time, males were 7.59 times as likely to use smokeless tobacco compared to their female counterparts (p<.0001).

• Over time, male high school students were 1.83 times as likely to use smokeless tobacco compared to their male counterparts in middle school (p<.0001).

• Female students, over time, were 1.33 times as likely to smoke cigarettes in 2009 compared to 2008 (p=.046).

• Male high school students, across the three-year period, were 1.66 times as likely to smoke bidis compared to middle school counterparts (p=.0001).

• Female high school students were 2.36 times as likely to smoke bidis compared to their middle school counterparts across the three year period (p=.0008).
• Among middle school students, usage of all tobacco products increased between 2008 and 2009, but subsequently decreased in 2011. In 2009, Louisiana youth were 1.73 times as likely to use any tobacco product compared to youth in 2008 (p<.0001).

• Male middle school students, over time, were 1.85 times as likely to use any tobacco product compared to their female counterparts (p<.0001).

• Between 2008-2011, male middle school students were 6.10 times as likely to use smokeless tobacco products compared to female middle school students (p<.0001).

• Among middle school students, Caucasians were the least likely of all races to smoke bidis between 2008 and 2011 (p<.0001).

• Over time, male middle school students were 2.03 times as likely to smoke bidis as their female counterparts (p=0.0015).

Tobacco Consumption Trends Among High School Students in 2008, 2009 and 2011

• Among high school students, use of any tobacco increased over time. In 2009, Louisiana youth were 1.58 times as likely to use any tobacco product compared to 2008 (p<.0001). Similarly, youth in 2011 were 1.71 times as likely to use any tobacco product as youth in 2008 (p<.0001).

• Over time, high school males were 1.44 times more likely to use any tobacco product compared to their female counterparts, and they were 8.03 times as likely to use smokeless tobacco (p<.0002 and p<.0001, respectively).
High school males, over time, were 8.28 times as likely to use smokeless tobacco products compared to their middle school male counterparts (p<.0001).

Over time, other races were 2.33 times more likely to smoke cigarettes compared to Caucasian and African American high school students (p=.023); while Caucasians are 1.86 times more likely to smoke cigarettes compared to African American (p=.048).

Cigarette use experienced a statistically significant and steady increase in smoking across three years (p=.029).

Between 2008 and 2011, other races were 4.28 times as likely to smoke bidis compared to Caucasian and African American high school students (p=.024).

Over time, male high school students were 1.53 times more likely to smoke bidis than their female counterparts (p=.049).

A statistically significant increase in bidi usage is seen over time (p=.0074).

High School vs. Middle School

The most notable trend seen below is the growing gap between middle and high school tobacco use. This trend is seen across all types of tobacco and involves two important characteristics: a slight decline in tobacco use among middle school students and a slight to moderate increase in high school use over time. This creates approximately an 18% difference in numbers seen between middle and high school students.

![High School vs. Middle School Cigarette Usage Over Time](chart.png)

- A statistically significant difference exists between middle and high school cigarette usage (p<.0001). Over time, high school students were 2.57 times as likely to smoke cigarettes compared to their middle school counterparts (p<.0001).
- An increase in cigarette consumption was seen among high school students during the period studied. In 2011, Louisiana youth were 1.37 times as likely to smoke cigarettes compared to the 2008 baseline (p=.017).
- A decrease in cigarette consumption was seen among middle school students between 2009 and 2011 (p=.0005).
Over time, high school students were 1.76 times as likely to use smokeless tobacco compared to their middle school counterparts (p<.0001).

Trends in Cigar & Cigarillos Consumption Among Middle and High School Students Over Time
• Over time, high school students were 1.89 times more likely to smoke bidis than middle school students (p=.0001).

• Bidi consumption among high school students fluctuated across the three-year time span (p=.0087).

• Between 2008 and 2011, high school students were 2.09 times as likely as middle school students to use any tobacco product (p<.0001).

• In 2009, high school students were 1.60 times as likely to use any tobacco compared to those in 2008 (p<.0001).

• In 2011, high school students were 1.70 times as likely to use any tobacco compared to those in 2008 (p<.0001).

• In 2009, middle school students were 1.73 times as likely to use any tobacco compared to students in 2008 (p<.0001).
Access to Cigarettes in 2011

- Overall, the majority of cigarettes were bought in a store.
- The next two major methods for obtaining cigarettes were through borrowing or “bumming” them and having a person of legal age (18+) give them. The least used method (about 3% of youth respondents) reported was purchasing cigarettes from a vending machine.

Overall in 2011

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store bought</td>
<td>30.7%</td>
</tr>
<tr>
<td>Vending Machine</td>
<td>3.5%</td>
</tr>
<tr>
<td>Gave someone else money to buy them</td>
<td>20.6%</td>
</tr>
<tr>
<td>Borrowed or bummed them</td>
<td>20.1%</td>
</tr>
<tr>
<td>A person 18+ gave them</td>
<td>8.2%</td>
</tr>
<tr>
<td>Took from a store or family</td>
<td>7.9%</td>
</tr>
<tr>
<td>Another way</td>
<td>8.8%</td>
</tr>
</tbody>
</table>

Tobacco is considered by the FDA to be a controlled substance (US DHHS, 2012). Furthermore, it is illegal for minors to purchase or use tobacco. Despite the law, youth in Louisiana continue to purchase tobacco for themselves and their friends. In Louisiana, the majority of youth, regardless of gender or race, purchase cigarettes from a store. For Caucasians and African Americans, the next most popular method for acquiring cigarettes has been through borrowing or bumming them. Individuals in the Other race category most frequently bought cigarettes from a vending machine. Effective June 22, 2010, cigarette vending machines were prohibited, except in locations with an age restriction of 18+ (FDA, 2011).

The cigarette consumption patterns for other races indicate a unique buying trend. Members of this group bought cigarettes from vending machines in greater frequency than African Americans or Caucasians. Since vending machines with cigarettes are almost exclusively located in a bar or casino, it is possible to assume an explanation could be the presence of youth in age-restricted areas. If, for example, parents of these youth worked at or owned a bar, it was possible that their children spent time in an area where a cigarette vending machine was located. Further research is needed to determine if there is any validity to this assumption, particularly given the importance of determining how youth access tobacco products.

In 2011, the majority of youth respondents reported that they purchased cigarettes in a store. However, borrowing or bumming cigarettes from someone else was the most popular method utilized in 2008 and 2009. At this point, the data cannot expand on who the youth bummed or borrowed cigarettes from, but it was likely a member of their peer group. The literature shows that adolescents are more likely to obtain cigarettes from their peers than from adults or through commercial transactions (Harrison et al, 2000, Forster et al, 2003, White et al, 2005, Robinson et al, 2006). The change noted in the most common method for how youth access cigarettes may reflect society’s acceptance of ill social norms related to smoking. Conversely, the least likely method has consistently been use of vending machines over time.

Overall, most student smokers purchased their cigarettes from a store or borrowed/bummed them from someone else. Caucasian and African American students followed this trend precisely, but other races had a large percentage of students who purchased their cigarettes from a vending machine. About 22% of all youth said that they would accept a cigarette from a friend, regardless of their smoking status. However, about 62% of all youth have no close friends who smoke. Ultimately, a large percentage of youth in Louisiana purchased their cigarettes themselves in a store or facility with a cigarette vending machine.
<table>
<thead>
<tr>
<th>Method for Buying Cigarettes</th>
<th>Caucasian</th>
<th>African American</th>
<th>Other*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store Bought</td>
<td>28.0</td>
<td>38.4</td>
<td>23.8</td>
</tr>
<tr>
<td>Vending Machine</td>
<td>1.0</td>
<td>1.9</td>
<td>29.3</td>
</tr>
<tr>
<td>Gave Someone Else Money to Buy Them</td>
<td>23.7</td>
<td>14.5</td>
<td>10.4</td>
</tr>
<tr>
<td>Borrowed or Bummed Them</td>
<td>23.3</td>
<td>17.0</td>
<td>7.9</td>
</tr>
<tr>
<td>A Person 18+ Gave Them</td>
<td>7.7</td>
<td>11.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Took From a Store or Family Member</td>
<td>8.9</td>
<td>5.9</td>
<td>5.7</td>
</tr>
<tr>
<td>Another Way</td>
<td>7.3</td>
<td>8.2</td>
<td>20.2</td>
</tr>
</tbody>
</table>

Caucasians
- The majority of Caucasian young smokers obtained their cigarettes from a store.
- Nearly 24% gave someone else money to buy them and another 24% borrowed or bummed them from someone else.
- The least utilized method to obtain cigarettes was through use of a vending machine.

African Americans
- Almost 39% of African American youth reported purchasing cigarettes from a store.
- About 17% of African American respondents reporting borrowing or bumming cigarettes from another person.
- Only 2% of African American youth reported purchasing cigarettes from a vending machine.
- African American students surveyed purchased cigarettes at stores more than their Caucasian or other racial counterparts (about 38% for African Americans compared to 28% for Caucasians and 24%* for others).

Other Races*
- About 29%* of other race respondents reported purchasing cigarettes from a vending machine.
- Nearly 24%* of other races reported purchasing cigarettes from a store.
- About 20%* of other races reported some other way to purchase cigarettes.
Overall, about 22% of Louisiana youth would have smoked a cigarette if offered one by a friend. Among youth smokers, 80% would have accepted a cigarette if offered by a friend and about 9% of nonsmokers would have accepted a cigarette if offered by a friend.

Caucasians and other races showed the greatest likelihood—about 27% and 24%*, respectively—for smoking a cigarette from a friend when compared to African Americans (about 15%).

Males were slightly more likely than females to smoke a cigarette offered by a friend (about 23% vs. 20%, respectively); while high school students showed a higher rate than middle school students (about 29% and 12.0%, respectively).
Trend Analysis for Cigarette Purchases

• Similar trends were seen in cigarette purchases over time.
• A greater percentage of students purchased cigarettes at a store in 2011 compared to previous years.

Youth in Louisiana without Close Friends Who Smoked in 2011

• Among youth surveyed, about 62% had no close friends who smoked.
• Nonsmoking youth were more likely to have no close friends who smoked than youth who smoked (72% vs. 18%, respectively).
• Middle school students had a greater percentage of close friends who did not smoke when compared to high school students—about 71% and 45% respectively.
The initiation of tobacco use among youth marks a pivotal point for continued tobacco usage in later years. Not only are youth more susceptible to tobacco than adults, but also they are even more vulnerable to nicotine addiction (US DHHS, 2012). The adolescent brain is still developing and becomes addicted to nicotine at lower levels than adults (USDHHS, 2012). In this capacity, youth can become addicted with only small exposures to tobacco. Once youth become addicted, it is likely they will continue on to be adult smokers (US DHHS, 2012). Nearly 90% of adult smokers began smoking before the age of 18 (US DHHS, 2012).

The majority of students surveyed in Louisiana smoked their first cigarette after 12 years of age. About 34% began smoking between ages 13 and 14, and only 5.5% began at or above the age of 17. A greater proportion of females began smoking at 11-12 years of age compared to males; whereas a larger percentage of males began smoking between 13-16 years of age. Other races had the largest percentage of smoking initiation before 8 years of age, while the majority of Caucasian and African American students began between 13-14 years.

Over time, similar trends in the age of smoking initiation were seen. The majority of youth in Louisiana tried their first full cigarette between 13 and 14 years of age. In 2011, a sharp peak was seen at age 13 to 14. This marked increase indicates that the initiation of smoking was closely associated with the transition from middle to high school. Moreover, the lack of variability in these trends over time suggests that smoking patterns among youth are well established.

Initiation Age for Smokers in 2011

Initiation age: is defined as the age at which the student smoked a whole cigarette for the first time

- Approximately 42% of youth smokers began smoking by the age of 12. The remaining began smoking after 12 years of age. The greatest number of youth smokers began smoking between 13 and 14 years of age. This age marks the transition from middle school to high school.
- Almost 11% of youth in Louisiana surveyed began smoking before the age of 8 compared to about 6% who began at or after the age of 17.
Initiation by Gender

Female youth were more likely to begin smoking by the age of 12 than male youth (about 44% vs. 38%, respectively).

Male youth more often began smoking after the age of 12 than female youth (about 62% vs. 56%, respectively).

Both genders experienced the greatest initiation between 13 and 14 years, suggesting that the social pressure during the transition between middle and high school was not gender-specific.

Initiation by Race

Students of other races showed the earliest initiation age, with about 36%* who began to smoke before the age of 8.

The majority of young Caucasian and African American smokers began smoking between 13 and 14 years.

There are three primary age groups (11-12, 13-14 and 15-16) for which Caucasians reported having their first cigarette, with the greatest initiation rates having occurred among Caucasians 13-14 years of age.
Trend Analysis for Initiation

Age at First Cigarette in 2008, 2009 and 2011

- Over time, the age at first cigarette appeared to follow a similar pattern.
- Each year, the majority of youth reported having their first cigarettes between 13 and 14 years of age; however, the number of students ages 13-14 who reported this increased in 2011.
- Very few respondents reported having their first cigarette at or after 17.
It is important to gain information about the learning environment of Louisiana youth, particularly as it pertains to tobacco. The information that follows describes practices of saying “NO” to tobacco in class during 2011. These practices entail role playing sessions that taught kids ways to say “NO” to tobacco during classes in the 2011 school year.

An estimated 28% of youth reported having practiced ways to say “NO” to tobacco in school. The number was similar for smokers and nonsmokers (about 28%). Middle school students had a larger percentage of respondents who practiced ways to say “NO” in school compared to high school students (34.4% vs. 24.0%, respectively). In 2011, about 29% of high school tobacco users reported practicing ways to say “NO” compared to 60% of high school tobacco non-users. Among middle school tobacco users, however, 48.4% reported never having practiced ways to say “NO.”

The number of students who reported practicing ways to say “NO” to tobacco declined over time. The trend, however, is not statistically significant. High school students were more likely to have practiced ways to say “NO” to tobacco use in school compared to middle school students.
Tobacco Policy & Use at School

- When students were asked about the last 30 days preceding the survey, nearly 26% of all Louisiana students reported smoking and about 25% reported using smokeless tobacco on school property.

Ways to Say “NO” in 2011

- Overall, 28% of Louisiana youth reported performing ways to say “NO” to tobacco in school during 2011.
- Only moderate differences existed between smokers and nonsmokers; both groups had about 28% of respondents who reported practicing ways to say “NO” to tobacco in school.
- About 14% of students overall reported being unaware of practicing ways to say “NO” to tobacco in school. This number was similar among smokers and nonsmokers.
- Trends among tobacco users were similar to students who smoked; nearly 57% of them reported never practicing ways to say “NO” in any class.

- A greater number of high school students did not practice ways to say “NO” to tobacco in school compared to middle school students—nearly 64% and 49% of high school and middle school students, respectively, reported never practicing ways to say “NO” to tobacco.
- About 34% of high school students reported practicing ways to say “NO” in school.
- About 24% of middle school students reported practicing ways to say “NO” in school.
• Among high school tobacco users, about 29% reported having practiced ways to say “NO” to tobacco in school compared to about 38% of middle school students.
• Middle school tobacco users reported practicing ways to say “NO” in school during 2011 more frequently than high school tobacco users.

Trend Analysis for Saying “NO” to Tobacco in School

• The number of respondents who reported practicing ways to say “NO” to tobacco in school declined over time. The decline, however, is not statistically significant. No known change to funding occurred that could have contributed to the decline.
• A difference existed between middle and high school students. High school students were 2.13 times more likely to have practiced ways to say “NO” in school than high school students (p<.0001).
• No difference existed by gender or racial groups.
Secondhand Smoke

Secondhand smoke, also known as environmental tobacco smoke (ETS), is a harmful product of combustible tobacco. Secondhand smoke includes a combination of gases and fine particles that are produced from a burning combustible tobacco product or exhaled smoke from a person smoking (CDC, 2012). Moreover, secondhand smoke has more than 7,000 chemicals including 70 that are carcinogenic (CDC, 2012).

Secondhand smoke is known to cause ear infections, severe asthma attacks, and respiratory infections among children (CDC, 2012). Further, it increases the rate of heart disease and lung cancer among adults. There is no risk-free level of secondhand smoke exposure, and even minimum exposure is harmful (CDC, 2012).

In 2011, nearly 53% of youth in Louisiana had been in a room with a smoker at least once in the past seven days. However, almost 19% of youth reported being in the same room with a smoker for all seven days of a week. About 41% of students were exposed to secondhand smoke in a car, and nearly 32% of smoking students said they were in the same car with another smoker all seven days in a given week. Among working students, only 12% were never exposed to secondhand smoke at work, and about 3% were always exposed (exposed all seven days in a given week). Of those students always exposed to secondhand smoke at work, about 10.5% were smokers. Overall, as exposure to secondhand smoke increased, the prevalence of youth who smoke also increased.

Opinions on the dangers of secondhand smoke have changed over time. Respondents in 2008 were more likely to believe the effects of secondhand smoke are harmful when compared to respondents in 2009 and 2011 (p<.0001). While opinions on secondhand smoke shifted among youth, so did their exposure to it. There has been a significant downward trend in the number of youth exposed to secondhand smoke in a given week. However, student workers experienced a slight increase in exposure to secondhand smoke at work, but the trend is not significant.
Exposure

In the Same Room as a Smoker Among Youth in Louisiana in 2011

- Overall, 53% of Louisiana youth reported being in the room with a smoker for at least one day out of a given week.
- About 62% of Caucasian students reported being in a room with a smoker at least once in a given week, compared to 43% of African American students and 46%* of other students.

In the Same Room as a Smoker Overall in 2011

- Overall, almost 47% of Louisiana youth report never being in a room with a smoker during a given week.
- Almost 19% of Louisiana youth report being in the same room as a smoker every day during a given week.
• Overall, about 53% of Louisiana youth nonsmokers had never been in a room with a smoker in a given week.

• Nearly 44% of smokers surveyed said they were in the same room with another smoker all seven days in a given week.

• Almost 41% of Louisiana youth overall reported being in a car with a smoker at least once in a given week.

• Among youth smokers, about 82% reported being in a car with a smoker at least once in a given week.

• Nonsmokers and African American students had the lowest percentage of secondhand smoke exposure in a car at about 32% and 33%, respectively.
Among youth smokers, nearly 32% reported being in a car while someone was smoking every day in a given week compared to about 7% of nonsmokers.

Nonsmokers had the greatest percentage of respondents who reported zero days of secondhand smoke exposure in a car.

The chart below provides information about secondhand smoke exposure at work. The information is only applicable to students who worked during the seven days preceding the survey (% of total of youth respondents).

Among working students, those who smoked had a higher exposure to secondhand smoke than their nonsmoking counterparts.

About 3% of students who worked were exposed to secondhand smoke at work every day, while about 2% of them were exposed four-to-six days and almost 4% were exposed one-to-three days in a given week.
A statistically significant difference existed between survey years. Respondents in 2011 were less likely to believe secondhand smoke was harmful compared to 2008 (p<.0001).

Over time, male students were less likely to believe secondhand smoke was harmful compared to their female counterparts (p<.0001).

No difference in opinion existed between racial groups or between high school and middle school students over the three survey years.
Youth in Louisiana Ever in the Same Room as a Smoker in a Given Week Between 2008, 2009 and 2011 by Racial Group

A downward trend is illustrated above. The decrease over time is statistically significant. Respondents in 2008 were more likely to be in a room with a smoker in a given week (p<.0001). The increased likelihood for secondhand smoke exposure in 2008 may have contributed to a greater awareness of secondhand smoke effects.

Respondents in 2009 were less likely to be in the same room as a smoker compared to the 2008 baseline (p=.026). In 2011, respondents were even less likely to be in the same room with a smoker compared to respondents in 2008 (p<.0001).

Over time, females were more likely than males to be in a room with a smoker in a given week (p<.0001).

Over time, Caucasian students were 2.52 times as likely to be in a room with a smoker in a given week compared to African American and other races* (p<.0001).

Youth in Louisiana Ever in a Car with a Smoker in a Given Week Between 2008, 2009 and 2011 by Gender

A downward trend is visible; the trend is statistically significant. Respondents in 2011 were less likely to be in a car with a smoker in a given week compared to the 2008 baseline (p=.001).

Over time, females were more likely to be in a car with a smoker in a given week (p=.001).

Over time, Caucasian students were 1.60 times as likely to be in car with a smoker in a given week compared to African American and other races* (p=.009).

Across all years, no difference was seen between high school and middle school students.
Among student smokers surveyed in Louisiana, 53% wanted to quit smoking cigarettes. Among students with a desire to quit, about half were in high school and one-third were in middle school. African Americans represented the greatest number of students with a desire to quit smoking (70%). However, only half of African American smokers made an attempt to quit in the last 12 months before the surveyed period. Caucasians and others races exhibited a much lower interest in quitting—48% and 56%*, respectively.

Overall, about 56% of youth smokers attempted to quit smoking in the 12 months preceding the survey. Male respondents had the highest percentage of first time quit attempts, while females had the largest percentage of ten or more quit attempts. In addition, 44%* of other races never made a quit attempt, and about 20%* tried more than ten times to quit smoking.

Between 2008, 2009 and 2011, a slight increase was seen in the number of respondents with a desire to quit smoking. While the trend is visible, it is not significant. The trend does show differences in desire to quit by racial group. A moderate change was seen in the number of quit attempts made over time; however, the trend is not significant.
Want to Quit

Among Louisiana youth smokers, about 53% wanted to quit smoking cigarettes.

Among high school smokers surveyed, about 48% wanted to quit smoking, while nearly 30% of middle school smokers wanted to quit. The smaller number of middle school smokers interested in quitting was likely attributed to the low number of middle school smokers, and does not reflect a lower interest in quitting among middle school students. For example, less than 100 middle school students were reported cigarette users.

African American students showed the highest percentage of individuals who wanted to quit at about 69%, followed by female smokers and other races (58% and 56%*, respectively).

Louisiana Youth Who Tried Quitting in the Last 12 Months

About 56% of Louisiana youth who smoked tried quitting within the last 12 months before the start of the survey. Similar percentages were found across race and gender.

While African American students experienced the greatest desire to quit smoking, their reported quit attempts were not congruent with their desire. In fact, Caucasian students were slightly more likely to have reported trying to quit in the last 12 months before the survey than African American youths (57% vs. 55%, respectively).
• About 24% of all youth smokers in Louisiana attempted to quit once during the last year preceding the survey, 15% tried twice, 10% tried three to five times, about 2% tried six to nine times, and nearly 12% tried more than ten times.

• Male respondents had the highest percentage of first-time quit attempts, while females reported the highest number of ten or more quit attempts.

• The lowest percentage of quit attempts was seen in the six-to-nine time category (less than 3%); however, nearly 12% of youth smokers attempted to quit more than ten times in the last 12 months preceding the survey.

• About 40% of male smokers had never made a quit attempt in the last 12 months compared to 34% of females.
• About 44%* of other races never attempted to quit in the last 12 months before the start of the survey, followed closely by Caucasians at nearly 39%. African American students were most likely to have one quit attempt during the 12 months preceding the survey.

• African American students had the highest percentage of youth reporting three-to-five and six-to-nine quit attempts.

• Twenty percent (20%*) of other races reported ten or more quit attempts in the last year.

Length of Quit Time

• About one-third of youth smokers in Louisiana had never made any quit attempts. Among respondents who had made a quit attempt, the greatest length of quit time was up to one week.

• Overall, about 25% of youth smokers quit for up to one week; about 9% quit for up to one month; 19% quit for up to six months, and about 15% quit for one year or longer.

• Other races* and females had a slightly higher percentage of one-year quit time compared to their demographic counterparts.

• Similarly, others and females had a higher percentage of up to one week quit time.

• Up to one month quit time was the lowest reported category for nearly every demographic group averaging 8.5% overall.

<table>
<thead>
<tr>
<th>Number of Quit Attempts</th>
<th>Caucasian</th>
<th>African American</th>
<th>Other*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never Attempted</td>
<td>33.3</td>
<td>27.6</td>
<td>33.8</td>
</tr>
<tr>
<td>Up to 1 Week</td>
<td>24.0</td>
<td>26.7</td>
<td>35.6</td>
</tr>
<tr>
<td>Up to 1 Month</td>
<td>9.1</td>
<td>7.9</td>
<td>7.5</td>
</tr>
<tr>
<td>Up to 6 Months</td>
<td>19.9</td>
<td>23.0</td>
<td>4.3</td>
</tr>
<tr>
<td>1 Year or More</td>
<td>13.8</td>
<td>14.8</td>
<td>19.9</td>
</tr>
</tbody>
</table>
Cessation Programs

Cessation programs: programs that offer different modalities to assist individuals in their attempt to quit tobacco use.

Participated in a Cessation Program by Demographics in 2011

- Overall, about 20% of smokers surveyed had participated in a cessation program.
- Other races showed the highest participation rate at 41%*, while Caucasians showed the lowest participation of all demographic groups at nearly 13%.
- Male and female cessation participation was nearly equal at roughly 20% and 19%, respectively.
- Middle school students showed higher participation percentages than high school students—about 23% and 18%, respectively.

Trend Analysis for Quitting and Cessation

Between 2008 and 2011, an increase in desire to quit smoking was seen among youth surveyed in Louisiana. While there was a slight upward trend, the increase was not statistically significant. Desire to quit differed based on racial groups. African American students were the racial group with the greatest desire to quit (p=.002), followed by other races (p=.025*) and then Caucasians (p=.027). No difference existed between any other demographic groups.

No difference was seen in number of quit attempts made over time. In addition, no difference was seen between racial groups or gender. A significant difference, however, was seen in quit attempts made by high school students compared to middle school students. High school students were more likely to make a quit attempt over time (p<.0001).
An estimated 17% of surveyed youth in Louisiana believed tobacco is not addictive; of these, 17% were smokers. Similarly, about 17% of youth believed smoking makes you look cool. Only 14% of youth who believed smoking makes you look cool were nonsmokers and about 28% of them were smokers. Overall, about 26% of youth believed smokers have more friends, with nearly 32% of them being smokers. In 2011, about 14% of youth believed smoking one-to-five cigarettes a day is harmless, and 23% believed smokeless tobacco is less harmful than cigarettes.

A growing trend was seen among students who believed tobacco is not addictive between 2008, 2009 and 2011. In addition, middle school students were less likely to believe tobacco is not addictive compared to their high school counterparts over time (p=.0079). This opinion was concentrated among students of other* races, who were twice as likely to believe tobacco is not addictive.

Table 1.4. Racial Distribution of Respondents Who Believed Tobacco is Not Addictive in 2011

<table>
<thead>
<tr>
<th>Race</th>
<th>% Who Believed Tobacco is Not Addictive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>12.5</td>
</tr>
<tr>
<td>African American</td>
<td>20.5</td>
</tr>
<tr>
<td>Other*</td>
<td>23.5</td>
</tr>
</tbody>
</table>

Similarly, Louisiana youth in 2009 and 2011 were more likely to believe smokers have more friends. This opinion was concentrated among males and students of other races. Moreover, youth in 2009 and 2011 were more likely to think smoking makes a person cool. Caucasian students were three times* as likely to believe smoking 1-5 cigarettes a day is not harmful compared to African American and students of other races (p<.0001).
Knowledge & Beliefs in 2011

Believed Tobacco is Not Addictive in 2011

- About 17% of youth surveyed in Louisiana believed that tobacco is not addictive.
- More males than females believed tobacco is not addictive—about 20% and 13%, respectively.
- Only 13% of Caucasian youth believed tobacco is not addictive compared to about 21% of African Americans and 24%* of students of other races.

Youth in Louisiana Who Believed Smoking Makes You Look Cool in 2011

- Overall, about 17% of youth in Louisiana believed smoking makes people look cool.
- Nearly 28% of smokers surveyed believed smoking makes you look cool, while only 14% of nonsmokers believed this.
- A slight difference in opinion existed between females and males—about 16% and 19%, respectively.
• Nearly 26% of youth surveyed in Louisiana believed smokers have more friends.
• About 32% of youth smokers believed smokers have more friends because they smoke.
• About 29% of African Americans and 29%* of students of other races believed smokers have more friends, while only 22% of Caucasian students believed this.

• Nearly 14% of youth in Louisiana believed smoking one-to-five cigarettes a day is harmless.
• About 13% of smokers and nonsmokers believed consuming one-to-five cigarettes a day is harmless.
• Almost 21%* of students of other races believed smoking one-to-five cigarettes a day is harmless, compared to 17% of African Americans and 10% of Caucasians.
About 23% of youth surveyed in Louisiana believed smokeless tobacco is safer than cigarettes. Almost 40% of youth smokers in Louisiana believed smokeless tobacco is safer than cigarettes. This pattern was fairly consistent across racial groups, but more males believed smokeless tobacco is safer than cigarettes when compared to females — about 28% and 17%, respectively.

About 14% of youth in Louisiana believed that secondhand smoke is not harmful, but 20% of youth smokers believed it is harmless. African Americans and males showed a similar level of agreement in thinking secondhand smoke is harmless at about 16%. Caucasians, nonsmokers and females showed a similar opinion regarding other people's smoke being harmless, and low prevalence of that belief when compared to other demographic counterparts.
Trend Analysis for Knowledge and Beliefs


- In 2009, respondents were 1.33 times more likely to think smoking makes you look cool compared to 2008 (p=.0015). Similarly, respondents in 2011 were 1.34 times as likely to think smoking makes you look cool compared to the 2008 baseline (p=.0019).
- Over time, male students were 1.25 times as likely to think smoking makes you look cool compared to female counterparts (p=.0036).
- No difference existed between high school and middle school students across years.
- Over time, opinions did not differ across racial groups.

Youth in Louisiana Who Believed Smokers Have More Friends in 2008, 2009 and 2011 by Gender

- An upward trend was seen between 2008 and 2009. In 2009, Louisiana youth were 1.20 times as likely to believe smokers have more friends compared to youth in 2008 (p=.015). Similarly, in 2011, youth were 1.20 times as likely to believe smokers have more friends compared to youth in 2008 (p=.042).
- Male students, over time, were 1.14 times as likely to believe smokers have more friends than female students (p=.046).
- Over time, Caucasian students were least likely to believe smokers have more friends compared to African American and other races* (p=.0012).
• A difference existed in opinions on the harm of one-to-five cigarettes a day between 2008 and 2009 respondents (p=.012).
• Over time, females were more likely than male students to believe one-to-five cigarettes a day is not harmful (p=.0003).
• Caucasian students, over time, were 3.08 times as likely to believe one-to-five cigarettes a day are harmful compared to African Americans and students of other races* (p<.0001).

Youth in Louisiana Who Believed Tobacco is Not Addictive in 2008, 2009 and 2011

• An increase was seen in the number of respondents who believed tobacco is not addictive; this difference is statistically significant. Louisiana youth in 2009 and 2011 were more likely to believe tobacco is not addictive compared to youth in 2008 (p<.0001 and p=.0015), respectively.
• Middle school students were less likely than high school students to believe tobacco is not addictive (p<.0001).
• Caucasian students were 2.22 times as likely to believe tobacco is not addictive compared to African American and Other races* (p=.0013).
A youth’s peer group is also influential on developing behaviors surrounding tobacco (US DHHS, 2012). Adolescents learn about tobacco use by observing behaviors exhibited by members of their own peer group (US DHHS, 2012). A peer group with tobacco users exposes youth to tobacco and normalizes its use more than a peer group without tobacco users. Moreover, previous research indicates that having friends who smoke predicts tobacco use, and youth who have more friends who smoke are more likely to initiate smoking or progress to more frequent smoking (Wang, 2001, Dierker et al, 2004, Audrain-McGovern et al, 1998, Scal et al, 2003).

Overall, about 28% of youth in Louisiana surveyed believed tobacco companies mislead youth to encourage product purchasing. The highest percentage of Louisiana youth who believed this are smokers. About 63% of youth reported seeing a commercial(s) on the dangers of smoking, with the highest percentage being among smokers. Comparatively, about 78% of Louisiana youth reported seeing tobacco use on television or in movies. About 27% of youth in Louisiana indicated that they would accept products from a tobacco company; the highest percentage was noted among smokers.

Similar patterns were seen over time for media and influence. No major time trends were seen among youth who saw or heard commercials that discussed the dangers of cigarette smoking between 2008, 2009 and 2011. The number of Louisiana youth who saw tobacco use in TV or movies decreased over time. In 2011, the percentage of youth who reported never seeing tobacco use on TV or in movies increased compared to responses in 2008 and 2009.

Slight differences among demographic groups existed for youth who would wear/use a product from a tobacco company; however, the difference was not significant. A discernible pattern was seen among high school students and male students. Both groups were more likely to wear/use a product from a tobacco company than middle school and female students.
Tobacco Companies

Youth in Louisiana Who Believed That Tobacco Companies Mislead Youth to Encourage Product Purchasing

- Twenty-eight percent (28%) of youth in Louisiana believed tobacco companies mislead them.
- Almost 34% of youth smoker believed tobacco companies mislead them compared to 27% of nonsmokers.
- Nearly 32% of African American youth believed tobacco companies mislead them compared to 30%* of other races and 25% of Caucasians.
- Only a slight variation in opinion existed between males and females.

Would Have Accepted Products from Tobacco Companies in 2011

- About 27% of Louisiana youth indicated that they would have accepted a product from a tobacco company.
- Youth smokers reported the highest percentage at almost 64%; nonsmokers reported the lowest percentage at 20%.
- About 28% of Caucasian youth surveyed said they would have accepted products from a tobacco company compared to 25% of African Americans; but almost 35%* of other races would have accepted such product.
- More males than females would have accepted products from tobacco companies—about 32% and 23%, respectively.
Tobacco and Media

Saw Commercial(s) on the Dangers of Smoking in 2011

- Nearly 63% of youth in Louisiana surveyed saw or heard commercials on the dangers of smoking.
- Almost 71% of youth smokers saw or heard such commercials compared to 61% of nonsmokers.
- About 66% of Caucasian youth reported having seen or heard these commercials compared to 61% of African American and 47%* of other races.
- Females reported seeing or hearing dangers of smoking commercials more than males—about 68% and 57%, respectively.

Saw Tobacco Use on TV or in Movies in 2011

- Nearly 78% of youth in Louisiana saw tobacco use on TV or in movies.
- Smokers reported the highest viewing of tobacco in the media at nearly 84%.
- With the exception of other races*, all other demographic groups experienced a similar rate of tobacco exposure in the media, around 78%.
• About 53% of youth in Louisiana reported never seeing ads for tobacco on the internet.
• Similar trends were seen across demographic groups and smoking status.
• Youth smokers reported the lowest percentage of never seeing ads for tobacco on the internet, but may have been more likely to seek smoking-related information (e.g., cessation) due to their smoking status.
A slight variation was seen between survey years; however, this difference is not statistically significant.

Over time, high school students were 1.49 times as likely to wear/use a product from a tobacco company when compared to their middle school counterparts (p<.0001).

Over time, male students were 1.64 times as likely as female students to wear/use a product from a tobacco company (p<.0001).

A greater percentage of respondents reported not hearing or seeing a commercial in 2011, despite several media campaigns targeted at tobacco prevention (LA TCP, 2010). Further, a lower percentage of youth reported hearing or seeing daily commercials in 2011 than in previous years.

No major trends were seen between 2008, 2009 and 2011.
- Similar trends were seen between 2008, 2009 and 2011.
- A larger percentage of youth in 2011 reported never seeing tobacco use in TV or movies compared to 2009 and 2008.

**Youth in Louisiana with Close Friends Who Smoked in 2008, 2009 and 2011 by Gender**

- An upward trend was seen over time; the trend was not statistically significant.
- Over time, females were less likely to have a friend who smoked compared to male students (p=.037).
- No trends were seen among racial groups.
Beyond tighter restrictions on tobacco sales to youth, it is also important to provide youth with the tools to stay tobacco-free. This effort requires more than just cooperation from school districts; it is a collective effort that must involve family and community organizations. Louisiana must strive to become tobacco-free in all facets of life. Reducing youths' exposure to tobacco products will help reduce perceived acceptability of its use. Similarly, with the appropriate tools, students can delay initiation of tobacco. If initiation of first-time tobacco use is delayed beyond the age of 16, it is likely that a greater percentage of youth will not become permanent adult tobacco users.

Communities where youth congregate should make every effort to limit exposure to secondhand smoke. Nearly 60% of Louisiana schools are tobacco-free facilities, and the Louisiana Smoke-Free Air Act (no. 815) prohibits smoking in most public spaces and workplaces. It is paramount for the health and safety of Louisiana youth to promote and protect clean air. Limiting exposure to secondhand smoke is important for two primary reasons; it limits exposure to harmful smoke and it limits their exposure to situations where tobacco use is normalized.

A major component of tobacco-free living includes the adjustment of attitudes and opinions related to tobacco use. It is imperative to augment the attitudes and opinions of both youth and adults. We require an environment that transforms the norms surrounding tobacco. The environment in Louisiana must convince its citizens that tobacco use is not only unhealthy, but also an unflattering nuisance. Furthermore, these attitudes and opinions must be shared among communities.

Ending the tobacco epidemic among youth is an overwhelming endeavor. However, the excessively large tobacco prevalence among youth is a predictor for future tobacco prevalence among adults. Moreover, it foreshadows smoking-related morbidity and mortality that is inevitable unless steps are taken to reduce tobacco use among youth in Louisiana.

Suggestions Looking Forward

Moving forward, it is important for Louisiana to take decisive action toward limiting tobacco use among its school-aged population. Foremost, the accessibility of tobacco, particularly to youth, requires immediate attention. It is clear from the survey that young people are able to illegally purchase cigarettes from stores around Louisiana. Stricter restrictions, along with fines and penalties, are needed to help curb tobacco accessibility among youth in Louisiana.

100% TOBACCO FREE CAMPUS

All activities associated with this school, on or off school grounds, are tobacco free, promoting healthy lifestyles for Louisiana’s children.

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DEPARTMENT OF HEALTH AND HOSPITALS
Tobacco Control Program
Works Cited


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