Arizona Department of Health Services

Arizona Youth Tobacco Survey
2013 Report

Bureau of Tobacco and Chronic Disease
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Thanks and Appreciation Are Extended to
The students who participated in the survey
And
The teachers and principals who facilitated their participation
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DEFINITION OF TERMS

Ever smokers or ever tobacco users. *Ever users* of cigarettes, smokeless tobacco, cigars or cigarillos, pipe, bidis or kreteks are defined as students who have ever smoked (even one or two puffs), taken one dip of smokeless tobacco, or tried any other tobacco product in their lifetime.

Current smokers or current tobacco users. *Current users* of cigarettes, smokeless tobacco, cigars or cigarillos, pipe, bidis or kreteks are defined as students who reported product use on at least one of the 30 days prior to the survey.

Frequent smokers or frequent tobacco users. *Frequent users* of cigarettes, smokeless tobacco, cigars or cigarillos, pipe, bidis or kreteks are defined as students who reported product use on at least 20 of the 30 days prior to the survey.
EXECUTIVE SUMMARY

Youth who smoke or use other forms of tobacco are exposing themselves to products known to have serious health consequences. Because many adult smokers (and users of other tobacco products) report that they started smoking (or using) before the age of 18, it is important to monitor youth smoking and tobacco use trends. The long-term health implications of using tobacco products are not of concern to many youth who take up tobacco, even if they are aware of them. Monitoring use trends and understanding the attitudes, beliefs, and behaviors of youth regarding tobacco helps prevention educators, health practitioners, and other concerned adults design and implement effective prevention programs, counter-marketing strategies, and quit programs for youth.

This report presents data from the 2013 Arizona Youth Tobacco Survey on tobacco use prevalence rates (including smoking and other forms of tobacco), access to tobacco products, the influence of the media, information on desires and attempts to quit smoking, and exposure to secondhand smoke. It was designed and implemented in coordination with the Centers for Disease Control, Office of Smoking and Health. The survey administration was coordinated with the Arizona Department of Education.

Long-term trends of student smoking show important declines – of over 30 percent – over the past ten years. It is highly likely that youth prevention programs have contributed to the decline. However, current tobacco use rates have become stable since 2003, and sustained efforts are needed for the decline to continue. Many students in Arizona (about one-third) continue to be exposed to secondhand smoke regularly in homes and cars where family members smoke. Rules that prohibit smoking in the home are far less frequent in households with smokers than households without smokers. The more that is discovered about the impact of secondhand smoke on youth, the more health practitioners and other public officials call for strategies to protect children from exposure in homes and cars where they spend much of their time.

With the help of its partners, the Arizona Department of Health Services will continue to monitor youth tobacco use to inform and shape the direction of tobacco prevention control in the state.
INTRODUCTION

1.1. Design and Purpose of the Survey
The 2013 Arizona Youth Tobacco Survey (YTS) was completed in the spring of 2013 and a biannual school-based survey first implemented in the spring of 2000. The survey is designed to help monitor trends in tobacco use among public school students in grades 6 through 8 and to compare changes in rates over time. The survey also collects data on topics including: tobacco use; tobacco-related knowledge, attitudes and beliefs; access to tobacco products; exposure to environmental tobacco smoke; initiation and cessation; influence of family, friends and the media; and social, school and community interventions.

This report provides information on prevalence rates, access to tobacco, influence of the media, quitting smoking, and exposure to secondhand smoke.

The 2013 Arizona YTS was centrally coordinated by the Bureau of Tobacco and Chronic Disease, under the Arizona Department of Health Services, in collaboration with the Arizona Department of Education and the Centers for Disease Control, Office on Smoking and Health (CDC).

1.2. The Instrument
The Arizona Youth Tobacco Survey uses a core set of questions developed by the Centers for Disease Control and Prevention, Office on Smoking and Health (CDC) to assist states with their tobacco control efforts. The Arizona YTS was administered simultaneously with the Arizona Youth Risk Behavior Survey in the spring of 2013 as part of a collaborative effort between the Arizona Department of Education (ADE) and the Arizona Department of Health Services (ADHS). The Arizona YTS contains 81 multiple-choice questions, including approximately 65 core questions from the CDC’s Youth Tobacco Survey. The questions cover prevalence, sources of tobacco products, attitudes and beliefs, environmental tobacco smoke, and media exposure modeled after the standard CDC recommended core YTS questionnaire. Results from the Arizona YTS can therefore be compared with results from other states and the National Youth Tobacco Survey conducted by the CDC.

1.3. Sampling
The sampling methods for the 2013 Arizona YTS were devised by the CDC and a subcontractor, ORC Macro. The sampling involved a two-stage cluster sampling design to obtain a representative sample of students at the state (but not county) level in grades 6-8. In the first sampling stage, district and charter schools were selected randomly within grade range. In the second sampling stage, classes were selected randomly from each middle school with equal probability sampling and all the students within a selected class are surveyed.

1.4. School and Student Response Rates
Classes from 18 district middle schools, and 14 charter middle schools were selected for the sample. All students in selected classes were eligible to participate. The student and school response rates, presented below, are regarded as very good.
### 2013 YTS School and Student Response Rates

<table>
<thead>
<tr>
<th></th>
<th>Student</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Selected</td>
<td>Participated</td>
</tr>
<tr>
<td>Public Middle</td>
<td>1364</td>
<td>1209</td>
</tr>
<tr>
<td>Charter Middle</td>
<td>523</td>
<td>412</td>
</tr>
<tr>
<td>Total</td>
<td>1887</td>
<td>1621</td>
</tr>
</tbody>
</table>

Table 1 2013 YTS Student and School Response Rate

### 1.5. Weighting and Analysis

A weighting system was devised based on the probability of selecting the school and selecting the classroom, a non-response adjustment factor for school size, a class adjustment factor calculated by school, a student-level non-response adjustment calculated by class, and a post-stratification adjustment factor calculated by gender, grade and race. The weighting system was designed to allow statewide inferences to be made concerning tobacco use risk behaviors for all public school students in grades 6-8.

The analyses presented in this report were calculated using SAS version 9.3 using the sampling weights. In compliance with the survey methodology, all findings reported in this document are based on weighted data.


Table 2 below provides estimates of the Arizona population between the ages of ten and nineteen in 2013. The YTS primarily includes students between the ages of eleven and eighteen, but a small number of students below age eleven and above age eighteen are included. The table also provides the number of student respondents by race/ethnic group with and without the weighting scheme. Two racial/ethnic groups had a very low number of respondents. Because these groups are so small, responses to questions presented by race/ethnicity are not reliable and therefore are not included in this report.

<table>
<thead>
<tr>
<th></th>
<th>White, non-Hispanic</th>
<th>Hispanic/Latino</th>
<th>African American/Black</th>
<th>American Indian or Alaskan Native</th>
<th>Asian or Pacific Islander</th>
<th>Not Identified</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>427,139</td>
<td>372,610</td>
<td>44,404</td>
<td>54,588</td>
<td>23,467</td>
<td></td>
<td>922,208</td>
</tr>
<tr>
<td>% of Total Population</td>
<td>46.3%</td>
<td>40.4%</td>
<td>4.8%</td>
<td>5.9%</td>
<td>2.6%</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Number of Unweighted Survey Population</td>
<td>965</td>
<td>619</td>
<td>167</td>
<td>214</td>
<td>94</td>
<td>261</td>
<td>1,621</td>
</tr>
</tbody>
</table>

Table 2 Population Estimates for Arizona Residents Age 10-19 (2012) and Survey Population

1.7. Student Sample (Unweighted Counts)
The tables below present the number and percent of students by age, grade and gender. Unless otherwise specified, the findings and graphs in this report refer to the entire sample. If not, the unweighted count of the sub-sample for each particular graph is specified.

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 years old or younger</td>
<td>172</td>
<td>9.9%</td>
</tr>
<tr>
<td>12 years old</td>
<td>505</td>
<td>29.5%</td>
</tr>
<tr>
<td>13 years old</td>
<td>615</td>
<td>36.3%</td>
</tr>
<tr>
<td>14 years old</td>
<td>295</td>
<td>22.3%</td>
</tr>
<tr>
<td>15 years old</td>
<td>23</td>
<td>1.5%</td>
</tr>
<tr>
<td>16 years old or older</td>
<td>6</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Table 3 Student Sample by Age

<table>
<thead>
<tr>
<th>Grade</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>539</td>
<td>32.7%</td>
</tr>
<tr>
<td>7th</td>
<td>628</td>
<td>33.6%</td>
</tr>
<tr>
<td>8th</td>
<td>427</td>
<td>33.7%</td>
</tr>
</tbody>
</table>

Table 4 Student Sample by Grade

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>831</td>
<td>48.8%</td>
</tr>
<tr>
<td>Male</td>
<td>782</td>
<td>51.2%</td>
</tr>
</tbody>
</table>

Table 5 Student Sample by Gender

1.8. Utility of the Survey
The survey provides timely and reliable data on the prevalence of tobacco use among Arizona’s school-based youth and permits the formulation of trends over time. In addition, the survey:

1) increases our knowledge and understanding of youth’s attitudes and behaviors regarding tobacco use;
2) provides data relevant for enhancing the design, implementation, and evaluation of comprehensive tobacco prevention and control programs directed at Arizona youth;
3) combines with data from other sources to help develop strategies to target youth who are at higher risk of tobacco use;
4) allows for comparison of Arizona students’ tobacco use rates with those of students from other states and nationwide; and,
5) allows for the identification of issues in need of further research and study.
RESULTS AND TRENDS

2. PREVENTION

Prevention efforts include educational programs to steer young people away from using tobacco, controlling and monitoring where and how students obtain tobacco, and social marketing campaigns to influence young people’s choices about taking up tobacco. The first three sections of the report provide findings that are related to these three areas: tobacco prevalence rates, access to tobacco products and the influence of the media.

2.1. Prevalence of Tobacco Use among Arizona Middle School Students

This section of the report presents prevalence rates for students who reported using any type of tobacco product, not just cigarettes, since all forms of tobacco are covered in the survey and all pose health risks. Some students used more than one type of tobacco product.

Ever, Current and Frequent Tobacco Use, YTS 2013

About one-fifth of middle school students (22%) reported ever trying some form of tobacco in their lifetime (Figure 1). Current use, defined as the use of any form of tobacco during the past 30 days, including just a puff of a cigarette or dip of chew, was reported by seven percent of middle school students (Figure 2). Cigarettes were the most commonly used form of tobacco by both ever and current users in middle school. Current cigarette use was reported by three percent of middle school students. Current use of cigars and cigarillos was also reported at three percent for middle school students. The rates for additional tobacco products are reported in Figures 1 and 2, below.

![Students' Self-reported Ever Use of Tobacco Products, YTS 2013](image)
Frequent tobacco use, defined as use on 20 or more of the past 30 days, was reported by one percent of middle school students. About 37 percent of these students reported living with a smoker.

**Trends in Ever, Current and Frequent Tobacco Use, YTS 2000, 2003 and 2005**
Trends in ever and current tobacco use are presented for middle school students in Figures 3 to 6, looking at data from 2003 and 2013. Prevalence rates for specific tobacco products are reported only for the types of tobacco surveyed consistently across both surveys.

**Trends in Ever Use**
Middle school students’ ever use of any tobacco product declined from 42 percent in 2003 to 22 percent in 2013, a decrease of almost 50 percent during the ten year period. The decrease in ever use applied to all forms of tobacco that the surveys collected data on across those years: cigarettes, cigars/cigarillos, smokeless, and bidis/kreteks (Figure 3).
When broken down by product, ever use for all tobacco products has decreased in the last ten years (Figure 4). Cigarettes, cigars/cigarillos, and bidis or kreteks have all decreased by more than 50 percent since 2003. The only reported type of tobacco that did not show a significant decrease was smokeless tobacco, which decreased by only one percent. While smokeless tobacco use is still less than cigarette use and cigar use, the lack of a significant decrease in prevalence is something that needs to be addressed. Ever use of pipe tobacco was asked during the 2013 survey, with seven percent of youth having ever tried it. However, ever use of pipe tobacco was not asked in prior years; therefore it is not presented in the figure.
**Figure 4 Students' Self-reported Ever Use of Tobacco Products, YTS 2003, 2013**

**Trends in Current Use**
Trends in current use (past 30 days) declined significantly for several tobacco products – cigarettes, cigars/cigarillos, bidis, and pipe tobacco – from 2003 to 2013. Current use remained stable for smokeless tobacco product use in 2003 (2%) and 2013 (2%, Figure 5). This shows a clearly defined need for research and additional interventions aimed at this particular tobacco product.
Trends in Frequent Use
Trends in frequent tobacco use among middle school students have varied by product between 2003 and 2013. Frequent use of cigarettes has decreased by more than one third. Frequent smokeless tobacco use has decreased by half. Frequent cigar use and frequent pipe use has remained stable over the last ten years. The only category that has shown an increase in frequent users is with Bidis.
**Tobacco Use by Grade, YTS 2013**

Figure 7 presents tobacco use by grade for ever, current, and frequent use in 2013. The overall trend shows that tobacco use typically rises at each grade level. This shows that young people continue to try and use tobacco from grade 6 through grade 8.

![Students' Self-reported Tobacco Use by Grade, YTS 2013](image)

**Comparing Tobacco Use by Grade in 2003 and 2013**

Ever, current, and frequent tobacco use was lower in all grades in 2013 than in 2003. The rate decreased by 50 percent in almost every grade and category, with the exception of frequent use among seventh grade students.

**Comparing Arizona Students’ Use Rates (YTS 2013) With National Rates (NYTS 2011)**

The most recent national student tobacco survey data available are for the 2011 National Youth Tobacco Survey conducted by the Centers for Disease Control. The national survey uses the same core questions as Arizona YTS. Overall, current use rates reported nationally among students were similar to rates reported in Arizona. In 2011, the national rate for current use of any tobacco product among middle school students was just over seven percent. The current use rate for Arizona’s middle school students in 2013 was just under seven percent. Current use rates for specific tobacco products among Arizona middle school students showed slight variations from the rates reported nationally (Figure 8).
Students Reporting Ever, Current and Frequent Tobacco Use by Gender

In 2013, ever, current, and frequent tobacco use rates were higher for male students in middle school than for female students. The differences in use rates were more than six percent for ever use, two percent for current use and almost one percent for frequent use (Figure 9).
Use of Specific Tobacco Products by Gender

Figure 10 presents current use rates by gender for specific tobacco products. The rates are similar for cigarettes, smokeless tobacco and bidis. The only two products having higher use rates for males than females is cigar/illos and pipe tobacco (Figure 10).

Figure 10 Students’ Self-reported Current Use of Tobacco Products by Gender, YTS 2013

Trends in Ever, Current and Frequent Use by Gender

Looking at trends in middle school ever use and current use rates by gender over time, both males and females reported lower rates in 2013 than in 2003 (Figure 11). However, frequent use rates in both males and females in middle school remained stable over time.
Tobacco Use Rates by Race/Ethnicity

There are important differences in ever, current and frequent tobacco use rates across racial/ethnic groups (see Figures 12 to 14 below). Findings for Asians and Hawaiian or Pacific Islanders are not reported due to low numbers of respondents.

American Indian/Alaskan Native students reported the highest rates for ever tobacco use (29.8%). The ever tobacco use rate for American Indians in middle school was higher by almost three percent than the next highest group, Hispanic/Latino (27%). American Indian/Alaskan Native, African American/Black and Hispanic/Latino students all had similar rates for current tobacco use (9%, 9%, 9%). Frequent use rates were higher for African American/Black students by more than three percent than for any other racial/ethnic group (6%).

It is important to recognize, however, that any use of tobacco for traditional or ceremonial purposes by American Indians was not recorded in the survey and may be contributing to these rates. In addition, the sample of American Indian students was located mostly in urban areas.

Current tobacco use rates were lowest for Whites (12%) in all categories. Hispanic/Latino students had rates similar to White students with frequent tobacco use.
Figure 12 Students' Self-reported Ever Use of Tobacco by Race/Ethnicity, YTS 2013

Figure 13 Students' Self-reported Current Use of Tobacco by Race/Ethnicity, YTS 2013
Figure 14 Students’ Self-reported Frequent Use of Tobacco by Race/Ethnicity, YTS 2013

**Trends in Tobacco Use Rates by Race/Ethnicity, YTS 2003 and 2013**

Figure 15 presents trends in current tobacco use rates for middle school students between 2003 and 2013. Overall, current tobacco use rates among middle school students decreased a little over two percent for American Indian/Alaskan Native, White and African American/Black students. Current tobacco use rates remained stable for Hispanics (9%).
**Trends in Cigarette Smoking Prevalence Rates**

This section of the report provides information on cigarette smoking only (no other tobacco products).

Figure 16 presents ever, current and frequent smoking rates for middle students for 2003 and 2013. Ever, current and frequent smoking rates have decreased by more than 50 percent since 2003.

![Figure 16 Students' Self-reported Ever, Current and Frequent Smoking, YTS 2003, 2013](image)

Figure 17 presents current smoking rates by grade. Current smoking rates more than double from sixth grade to eighth grade. All grades have shown significant decrease from 2003 rates, with all grades decreasing by more than half.
Figure 17 Students’ Self-reported Current Cigarette Use by Grade, YTS 2003, 2013

Table 6 presents current cigarette smoking rates by gender. Current smoking rates are very similar for males and females and follow the same trend in 2013 as in 2003.

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Current Smokers</td>
<td>9.0%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Female Current Smokers</td>
<td>8.8%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

Table 7 presents current cigarette smoking rates by race/ethnicity. In 2003, African American/Black students had the highest current smoking rates (12%) and showed the most dramatic decrease in 2013 (1%). American Indian/Alaskan Natives were the second lowest in 2003 (7.4%) and decreased by two percent in 2013 (5%); however this is currently the highest rate of all ethnicities.

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian / Alaskan Native</td>
<td>7.4%</td>
<td>5.3%</td>
</tr>
<tr>
<td>White</td>
<td>7.1%</td>
<td>3.0%</td>
</tr>
<tr>
<td>African American / Black</td>
<td>11.9%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Hispanic / Latino</td>
<td>8.9%</td>
<td>4.1%</td>
</tr>
</tbody>
</table>
2.2. Access to Cigarettes and Other Tobacco Products

How and Where Students Reported Getting Tobacco
Youth access to tobacco products has been a major focus of concern in tobacco control efforts across the country. Federal and state laws in Arizona make it illegal for merchants to sell tobacco to youth under the age of 18. Nonetheless, students in Arizona are able to get tobacco from multiple sources, both social and commercial.

Figure 18 presents data on ways that current cigarette smokers under 18 reported getting their cigarettes. The majority of current smokers who reported getting their cigarettes in a specific way reported social sources as the most common, such as borrowing or bumming them (16%). Having someone else buy them was the next most common way of obtaining cigarettes (13%). However, the largest single source for obtaining cigarettes for middle school smokers was “some other way”, that is, a way not included in the answer options. Surveillance surveys like the YTS have not been successful at identifying all the sources youth have for obtaining cigarettes. This indicates a need to conduct qualitative research, such as interviews and focus groups with youth to help identify alternative sources.

Figure 18 How Current Smokers under 18 Reported Getting Cigarettes, YTS 2013

Figure 19 presents data on how current users of tobacco products other than cigarettes acquired them. Respondents were able to choose more than one answer, as they could have gotten their tobacco from more than one source in the past 30 days.

Current tobacco users were more likely to purchase tobacco products other than cigarettes than any other specified way (27%). Social sources such as borrowing or bumming tobacco from someone (24%), and someone giving tobacco to the student (23%) were the next most likely
ways of obtaining tobacco. The majority of respondents stated they obtained their tobacco from some other way (29%).

![How Current Tobacco Users under 18 Got Tobacco Products Other Than Cigarettes during the Past 30 Days, YTS 2013](image)

**Figure 19 How Current Tobacco Users under 18 Got Tobacco Products Other Than Cigarettes during the Past 30 Days, YTS 2013**

**Where Current Smokers Buy Cigarettes**

Figure 20 presents data about where current cigarette smokers in middle school buy cigarettes, including social and commercial sources. These data present responses only for current smokers who reported that they *bought* cigarettes during the past 30 days. The majority of students under 18 who identified a specific location bought cigarettes in a store, such as a gas station, convenience store, grocery store or drug store (19%, 7%, 8%, 14%). However, the majority of students reported buying cigarettes some other way (39%). Very few current smokers reported buying from a vending machine, on the internet, or through the mail (3%, 3%, 4%).
Figure 20 Where Current Smokers under 18 Who Bought Cigarettes During the Past 30 Days Reported Buying Them, YTS 2013

Figure 21 compares data from 2003 to 2013 on stores where current smokers reported buying cigarettes. Few differences exist other than grocery store and drugstore purchases more than doubling over time. The “other” places category remains high and unexplained.

Figure 21 Where Current Smokers under 18 Who Bought Cigarettes During the Past 30 Days Reported Buying Them, YTS 2003, 2013
Vendors Requesting Proof of Age
To get a sense of the extent of merchant compliance with statutes forbidding the sale of tobacco to underage youth, the students were questioned on whether someone in a store refused to sell them cigarettes during the past 30 days because of their age. More than two thirds of students (67.4%) attempted to buy cigarettes in a store during the past 30 days reported that no one refused to sell them cigarettes because of their age.

Comparing data from 2003 to 2013, among the students who bought or attempted to buy cigarettes in a store, student reports of sales refusals were 57 percent in 2003 and decreased to 33 percent in 2013 (Figure 22).

![Sale Refusals to Current Smokers under 18 Who Bought Cigarettes from a Store During the Past 30 Days, YTS 2003, 2013](image)

2.3. Influence of the Media
The American Legacy Foundation, the Campaign for Tobacco Free Kids, and other organizations have devoted considerable energy and resources to gain a better understanding of the impact of the media, especially tobacco companies’ advertising campaigns, on young people taking up tobacco and on their smoking behaviors. The questions related to media on the YTS do not provide comparable scope or depth of information on this subject, but they do give us an indication of the relationship between students viewing smoking in the media, using articles with tobacco branding, hearing messages in the media on the dangers of tobacco use and their smoking behaviors.

In addition to being the target of direct marketing on the part of tobacco companies, youth are exposed to adult smoking in the mass media, especially on television and in the movies. Viewing admired television, sports, and movie stars using tobacco is believed to present an influential role model promoting tobacco use to youth. In this survey, students were asked how often they saw...
actors and athletes using tobacco on television and/or in the movies when they watched them. The majority reported seeing actors use tobacco some or most of the time.

However, how much influence seeing actors use tobacco has on students’ tobacco use is not clear. In the YTS, current tobacco users reported slightly lower levels (58%) of seeing actors use tobacco on TV and in the movies than students who hadn’t used tobacco in the past month (64%, Figure 23). Frequent tobacco users reported seeing actors using tobacco more often than any other group (88%).

Tobacco companies target youth with advertising paraphernalia such as lighters, t-shirts, hats and sunglasses. Less than ten percent of never smokers reported they would definitely or probably use or wear something with a tobacco company name or picture on it (7.2%). In contrast, this was true for almost 40 percent of ever smokers (38.9%, Figure 24). Counter marketing campaigns might be helpful in reducing this appeal.
### 3. CESSATION

This section of the report presents data on current smokers’ responses to questions about quitting. The number of respondents is included in each graph since current smokers are a subset of the total sample.

#### 3.1. Desire to Quit and Quit Attempts

In 2013, almost 40 percent of the current smokers reported that they want to quit smoking cigarettes (38.3%, Figure 25). This has decreased more than ten percent from 2003. Just over half the current smokers reported they had tried to quit smoking during the past twelve months, which shows a slight increase from 2003 (56%, Figure 25).

In attempting to quit, more students reported trying one time in the past 12 months than any other number of quit attempts (24%, Figure 26). The next highest percentage of students tried to quit ten or more times during the past month (14%).

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Figure 24 Percent of Students Who Reported They Would Use or Wear Something that has a Tobacco Company Name or Picture on it, YTS 2013

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Figure 25 Percent of Current Smokers Who Reported Wanting to Stop Smoking and Who Tried to Quit Smoking During the Past 12 Months, YTS 2003, 2013

Figure 26 Students' Self-reported Quit Attempts During the Past 12 Months, YTS 2013
3.2. Planning to Quit Within the Next Year
The majority of current youth smokers either do not identify themselves as smokers or do not plan to give up smoking within the next year (Figure 27). Of the students who plan on quitting within the next year, the majority identify the next sixth months as when they want to quit (12.3%).

![Percent of Current Smokers Who Are Planning to Quit Within the Next Year, YTS 2013](image)

3.3. Methods of Quit Attempts
Figure 28 shows the majority of current smokers did not try to quit within the past year (19%). Of those that did attempt to quit for good, trying to quit on their own, or “cold turkey”, was the method that was used most often (13%). Less than ten percent had utilized a program either within their school or within their community (8%). Almost five percent reported they had called a telephone help line or quit line, and none of the students reported visiting an internet quit site.
4. SECONDHAND SMOKE

Secondhand smoke contains cancer causing chemicals and contributes to numerous diseases in both adults and children. The impact of secondhand smoke on young people’s health is heightened due to their ongoing physiological development. Young people are particularly vulnerable to exposure to secondhand smoke at home and in cars.

4.1. Exposure in Rooms and Cars

Students were asked on how many of the past seven days they had been in the house or the same car with someone who was smoking cigarettes. Students reported 20 percent exposure to cigarette smoke at least once in their house during the past week, and 19 percent also reported exposure at least once in a car (Figure 29).

Repeated exposure in the home (three or more times in the past week) was reported by 15 percent of students. Repeated exposure in a car was reported by 10 percent of students.
Figure 30 compares exposure to secondhand smoke between students who live with a smoker and those who do not. Differences in exposure rates between the two groups are high. One or more exposures in the home during the past seven days was reported by 47 percent of students living with a smoker compared to four percent of the students that do not live with a smoker. One or more exposure in a car during the past seven days was reported by 40 percent of those living with a smoker compared to eight percent of those who do not.

The difference in repeated exposures (three or more times) in the home and cars is particularly pronounced. Repeated exposure in the home was reported by 37 percent of those who live with a smoker compared to two percent of those who do not. Repeated exposures in a car were reported by 24 percent of those living with a smoker and three percent of those who do not.
4.2. Comparing Exposure Rates from 2003 to 2013

Reports of exposure rates among middle school students in 2013 decreased in all categories from 2003. Reports of exposure at least once in a room were 49 percent in 2003 and decreased to 21 percent in 2013. Repeated exposures in the home decreased by almost half, from 28 percent in 2003 to 15 percent in 2013. Reports of single exposure in a car were lower by 16 percent (35% to 19%) and repeated exposures in a car were lower by 11 percent (21% to 10%).
When comparing exposure rates of students living with a smoker from 2003 to 2013, both rates for a single exposure in a room and single exposure in a car decreased by more than 20 percent. Repeated exposures in a room decreased by 15 percent and repeated exposures in a car decreased by almost 20 percent (Figure 32).
From 2003 to 2013, exposure rates of students not living with a smoker decreased more for exposures in a room (by 28 percent for single exposure and 10 percent for repeated exposures) than in a car (by eight percent for single exposure and two percent for repeated exposures, Figure 33).

Figure 33. Exposure to Secondhand Smoke in Homes and Cars among Students Not Living with a Smoker, Comparing YTS 2003 and 2013

4.3. Rules about Smoking in the Home

Eight out of ten students (81%) reported that smoking is not allowed anywhere inside their home. Less than ten percent of students (8%) reported that smoking is allowed in some places or at some times in their home. Five percent of middle school students reported that smoking is allowed anywhere in their home (Figure 34).
Rules about smoking in the home vary considerably with or without the presence of a smoker in the home. Seventy-two percent of students who do not live with a smoker reported that smoking is not allowed anywhere in the home. Only 30 percent of students who live with a smoker reported that smoking is not allowed anywhere in the home (Figure 35). This is extremely important because it demonstrates that there is an opportunity to educate parents who smoke at home about the risks of secondhand smoke to their children. Parents who smoke at home could be targeted with media campaigns to implement smoking bans in their homes. Smoking bans may provide an extra incentive for their children not to take up smoking or at least not to smoke inside the home.
4.4. Students Bothered by Other People’s Cigarette Smoke
Most students (84%) reported that they were definitely or probably bothered by other people’s cigarette smoke. Among students not living with a smoker, 91 percent reported they were bothered by other people’s cigarettes smoke (67% definitely and 24% probably). This was true for 89 percent of students living with a smoker (61% definitely and 25% probably).

Responses were quite different for students who are current smokers. Of current smokers, 71 percent reported that other people’s cigarette smoke definitely or probably bothered them, compared to 86 percent of non-smokers.

5. DISCUSSION OF FINDINGS

5.1. Prevention: Tobacco Use, Access to Tobacco Products and the Influence of the Media
There are mixed results in trends regarding tobacco use rates among middle and high school students since 2000, the first year of the YTS.

Ever tobacco use (trying any form of tobacco sometime in one’s life) is going down. Ever tobacco use (or lifetime use rates for all tobacco products combined) has decreased for middle school students from 46 percent in 2000 to 22 percent in 2013, a decrease of 48 percent. This suggests that experimentation with tobacco products has decreased in recent years.

Current tobacco use (using any form of tobacco even minimally at least once during the past 30
days) has decreased by more than half since 2000 for middle school students. Because current use included students who used tobacco only once during the past month, it is important to recognize that all current users were not necessarily regular users.

Frequent tobacco use (using on 20 or more of the past 30 days) has decreased by more than a third. It is fair to assume that frequent users (less than two percent of middle school students) are approaching addiction or are already addicted to tobacco.

Current *smoking* rates have declined among middle students (from 11% in 2000 to 3% in 2013).

A look at prevalence by race/ethnicity across YTS surveys (2000 to 2013) shows that rates have decreased for all groups except for Hispanic/Latinos, which has remained stable (the numbers sampled for Asians and Hawaiian/Pacific Islanders are too small to give reliable estimates). American Indian, Whites, and African American/Blacks in middle school show declines in current smoking within the last ten years.

Regarding tobacco use by gender for all products, females have lower use rates than males. Ever and current tobacco use went down for both males and females in middle school, but frequent use saw little change.

Much progress has been made over the past ten years in curbing tobacco use. One of the most important trends in the data shows that current tobacco use rates (including smoking) jump substantially at each grade level. As students get older, more take up tobacco and use it on a regular basis. This indicates that opportunities continue to exist beyond middle school and into high school to steer young people away from experimentation to regular use of tobacco. It also indicates that providing effective interventions to high school students may be a tough challenge.

5.2. Access to Cigarettes and Other Tobacco Products

Students under 18 reported they acquired tobacco products through social sources and social networks more than through commercial venues. Social sources are friends, acquaintances and family members. Commercial venues are stores such as gas stations, tobacco shops, convenience stores, grocery stores and drug stores.

Monetary exchange for tobacco products other than cigarettes was reported by 28 percent of middle school current tobacco users (27 percent reported buying the tobacco themselves), however borrowing or bumming tobacco products was also high on the list (24%).

A significant number of students reported getting both cigarettes and other tobacco products “some other way,” which may include a monetary exchange. These other ways need to be researched so that targeted interventions can take place.

Although a small proportion of students reported buying cigarettes from commercial sources (7%), only about one-third of those who bought in a store reported they were asked for proof of age.
Clamping down on tobacco sales to minors in commercial venues is extremely important but will not curtail youth’s access to tobacco as social sources are more difficult to regulate. Conducting inspections of retail tobacco vendors that are close to schools and to places where young people congregate may help. Informing the public about the extent and dangers of social sources of tobacco for youth is also needed. Consideration might be given to developing communications that would discourage sales by older to younger persons, or even to friends.

5.3. Influence of the Media

Frequent tobacco users reported seeing actors use tobacco on tv and in the movies more than any other group (88%). Students who had not used tobacco in the past month reported seeing actors use tobacco 64% of the time, whereas current tobacco users reported seeing actors use tobacco 58% of the time. How much impact this has on their taking up tobacco is not clear, especially when compared to the influence of family and friends. Ever smokers showed much more interest in using or wearing something that has a tobacco company name or logo on it than never smokers (39% for ever smokers, 7% for never smokers).

5.4. Cessation

Over a third of current smokers reported a desire to quit smoking, and just under half reported trying to quit sometime during the past twelve months. About one-third reported two or more quit attempts. The highest percentage of current smokers who attempted to quit within the past 12 months reported trying “cold turkey” (13%). Eight percent reported using a school or community program. Fewer than 5 percent used a patch or nicotine gum to help them quit.

If students truly want to quit smoking, they need help to quit successfully. An examination of successful quit programs and approaches to quitting that appeal to youth is in order. In addition, strategies to get smokers who aren’t interested in quitting (more than half) to consider it would also be beneficial.

5.5. Secondhand Smoke

In 2013, the frequency of students’ exposure varied substantially with the presence of a smoker in the home. Almost 30 percent of students reported living with someone who smokes. Students living with a smoker reported far higher rates of being exposed to secondhand smoke once or multiple times in the home or a car during the previous week than students not living with a smoker. Rates were reported at eight to ten times higher, with almost half of students living with a smoker exposed at least once in the home during the previous week. Students living with a smoker reported decreases in the number of exposures in the home and in cars during the past seven days since 2003.

Rules about smoking in the home also varied substantially based on the presence of a smoker in the home. About three quarters of students living with a smoker reported that smoking was not allowed anywhere in their home compared to 95 percent of students not living with a smoker. This means that about 25 percent of students living with a smoker are exposed to secondhand smoke on a regular basis at home.

Most students reported that they are bothered by other people’s cigarette smoke (84%). Almost three quarters of students who were current smokers reported so (71%).
Information about the harms of secondhand smoke is constantly being updated by researchers and scientists. The more that is discovered, especially with regard to children, the more health practitioners and other public officials call for strategies to protect children and youth from secondhand smoke in homes and cars, where they are most likely to be exposed. There are important social and health costs to having large numbers of youth exposed to secondhand smoke. Efforts to get smokers in Arizona to refrain from smoking in the home and in cars would be a good first step to alleviating those costs.

5.6. Survey limitations

There are important limitations to surveillance methodology and to this survey in particular: 1) The prevalence rates reported are based on self-reported behaviors, are estimates and are meant to capture general trends. The most important functions of the survey are to detect general trends and to uncover points of interest for further inquiry and study. 2) The data in this survey are representative of the public school student population. Private schools, parochial schools, juvenile detention centers and other special schools are not included in the survey. This limitation is important because of existing evidence demonstrating that adolescents who are not in school (and those with high numbers of absences) have higher rates of tobacco use than do adolescents who are in school. This is known to be true for high school drop-outs in particular.