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**Kim Haggan**—Maine Department of Health and Human Services  
**Dorean Maines**—Maine Centers for Disease Control and Prevention  
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**Janet Wilson, MEd, MPA**—Missouri Department of Health and Senior Services

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The interpretations of data expressed in this report are those of the authors and may or may not represent the views of the Ohio Tobacco Prevention Foundation and those individuals and organizations who provided data.

**This report was prepared by:**

  - Erika S. Trapl, PhD  
  - Nital Subhas, MPH  
  - Ashley Brooks, MPH  
  - Elaine A. Borawski, PhD

**Suggested citation:**

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Since its release in September 2007, the Ohio Key Indicators Report has been a useful tool in gauging the current state of tobacco control in Ohio. The report presented data on preventing initiation of tobacco use among young people, eliminating nonsmokers’ exposure to secondhand smoke, and promoting quitting among adults and young people. In addition, the Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) data and an update on Issue 5 was also presented, among other data points.

As a continuation of the Ohio Key Indicators Report, this supplement compares data from Ohio with various other states. These states include: Indiana, Kentucky, Michigan, Pennsylvania, West Virginia, Washington, New Mexico, Missouri, Minnesota, Maine, New Jersey, and South Carolina. The rationale for selecting these states is described in the Methodology section. National data is also presented where applicable.

This supplement is divided into three sections. The first section compares Ohio data to data from states that are regionally similar to Ohio. The second section compares data from Ohio to that of states whose tobacco prevention funding is either similar to, less than, or more than Ohio’s funding. Finally, the third section compares Ohio data to data from states whose cigarette tax is either similar to, less than, or more than Ohio’s tax on cigarettes.

<table>
<thead>
<tr>
<th>State</th>
<th>Regional</th>
<th>Funding</th>
<th>Cigarette Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Kentucky</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maine</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Michigan</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Minnesota</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Missouri</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>New Jersey</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>New Mexico</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>South Carolina</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Washington</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>West Virginia</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data from the Youth Tobacco Survey may not be available for all states due to the inconsistency of the years in which the survey was administered in that particular state. We have done our best to present data from the year(s) in which most of the states’ have made their data available.

Although the primary audience is public health officials, policy planners, and tobacco control partners, we hope this supplement is useful to anyone engaging in tobacco control efforts.
For each of the indicators included in this report we have compared Ohio data to other state data based on three different criteria: regional similarity, level of state tobacco prevention and control funding, and level of state excise tax for cigarettes. Through each of these comparisons we aim to triangulate information and arrive at an indication of the current state of tobacco prevention and control in Ohio.

Comparing Ohio data to other states is a difficult endeavor. Each state has a demographic profile and political history of tobacco control that heavily influences indicators like prevalence of tobacco use. Although 46 states participated in the Master Settlement Agreement and received funds for state tobacco prevention and control activities, each state has had a different experience in how funds were used and the type of programs funded. Due to these differences in state support for tobacco prevention and control one would expect various degrees of progress in reducing tobacco use and increasing tobacco use cessation. Each of the three criteria used and a rationale for comparison state selection are described below.

**Regional states:**

The first criteria examined was regional proximity. The demographic make-up of a state’s population and the regional political forces greatly influence tobacco indicators. The first section of this supplement compares the state of tobacco control in Ohio to all of Ohio’s border states: Indiana, Kentucky, Michigan, Pennsylvania, and West Virginia. All of these states except Michigan have a history of growing tobacco.

**Level of state tobacco prevention and control funding:**

The second criteria used was the amount of money the state allocated for tobacco prevention and control activities each year. State tobacco prevention and control funding has been volatile in most states in the U.S. For this reason it is difficult to identify any one state that has had a similar level of funding as Ohio. The table on page 5 presents the total amount of state spending for tobacco prevention and control from 2002 to 2008. While data on state funding is available before 2002, it wasn’t until this time that Ohio began funding a comprehensive community prevention program.

For comparison we chose states that had consistently higher state spending than Ohio (Maine); states that had consistently lower state spending (Missouri); and states with comparable funding during some portion of the years considered (Indiana, New Mexico, Minnesota); or similar funding across all years (Washington) for the time period considered.

In 2002, Washington state allocated $52.5 million for state tobacco control and Ohio allocated $35.1 million. In 2008 Washington had allocated $81.1 million and Ohio allocated $72.4 million. Maine’s tobacco prevention program is funded at the CDC’s minimum recommended funding level; Ohio, Minnesota, New Mexico, and Washington are funding programs at more than 50% of...
Table 1. State tobacco prevention and control spending from 2002 to 2008

<table>
<thead>
<tr>
<th>State</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>Funding level compared to Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indiana</td>
<td>93.4</td>
<td>93.4</td>
<td>31.1</td>
<td>31.1</td>
<td>31.1</td>
<td>31.3</td>
<td>46.6</td>
<td>higher in 2002; lower in 2008</td>
</tr>
<tr>
<td>Maine</td>
<td>122.9</td>
<td>135.6</td>
<td>129.6</td>
<td>126.9</td>
<td>126.9</td>
<td>131.3</td>
<td>151.2</td>
<td>higher at all times</td>
</tr>
<tr>
<td>Minnesota</td>
<td>101</td>
<td>112.9</td>
<td>71.3</td>
<td>65.3</td>
<td>77.2</td>
<td>75.8</td>
<td>77.2</td>
<td>higher in 2002; similar in 2008</td>
</tr>
<tr>
<td>Missouri</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.6</td>
<td>lower at all times</td>
</tr>
<tr>
<td>New Mexico</td>
<td>36.5</td>
<td>36.5</td>
<td>36.5</td>
<td>36.5</td>
<td>43.8</td>
<td>56.2</td>
<td>70.1</td>
<td>similar in 2002 &amp; 2008; lower in other years</td>
</tr>
<tr>
<td><strong>Ohio</strong></td>
<td><strong>35.1</strong></td>
<td><strong>55.1</strong></td>
<td><strong>61.5</strong></td>
<td><strong>86.3</strong></td>
<td><strong>76.4</strong></td>
<td><strong>72.9</strong></td>
<td><strong>72.4</strong></td>
<td></td>
</tr>
<tr>
<td>Washington</td>
<td>52.5</td>
<td>78.7</td>
<td>78.6</td>
<td>81.6</td>
<td>81.6</td>
<td>81.3</td>
<td>81.1</td>
<td>similar at all times</td>
</tr>
</tbody>
</table>

Level of state excise tax for a pack of cigarettes:

The third criteria examined per pack state excise tax on cigarettes. At the time of state selection, Ohio’s cigarette excise tax was $1.64 per pack. Of this amount, $.39 was a federal tax and $1.25 was a state excise tax. Pennsylvania and Minnesota had similar excise taxes in 2006 of $1.74 and $1.88 respectively. New Jersey, at $2.79, and Michigan, at $2.39, had much higher excise taxes, while South Carolina ($.46) and Missouri ($.56) had the lowest tax rates.

Table 2. Cigarette excise tax from 2000 to 2006

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total increase:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>$1.09</td>
<td>$1.09</td>
<td>$1.64</td>
<td>$1.64</td>
<td>$2.39</td>
<td>$2.39</td>
<td>$2.39</td>
<td>$1.30</td>
</tr>
<tr>
<td>Minnesota</td>
<td>$.82</td>
<td>$.82</td>
<td>$.87*</td>
<td>$.87</td>
<td>$.87</td>
<td>$1.88</td>
<td>$1.88</td>
<td>$1.06</td>
</tr>
<tr>
<td>Missouri</td>
<td>$.51</td>
<td>$.51</td>
<td>$.56*</td>
<td>$.56</td>
<td>$.56</td>
<td>$.56</td>
<td>$.56</td>
<td>$.05*</td>
</tr>
<tr>
<td>New Jersey</td>
<td>$1.14</td>
<td>$1.14</td>
<td>$1.89</td>
<td>$2.44</td>
<td>$2.79</td>
<td>$2.79</td>
<td>$2.79</td>
<td>$1.65</td>
</tr>
<tr>
<td><strong>Ohio</strong></td>
<td><strong>$.58</strong></td>
<td><strong>$.58</strong></td>
<td><strong>$.94</strong></td>
<td><strong>$.94</strong></td>
<td><strong>$.94</strong></td>
<td><strong>$1.64</strong></td>
<td><strong>$1.64</strong></td>
<td><strong>$1.06</strong></td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>$.65</td>
<td>$.65</td>
<td>$1.39</td>
<td>$1.39</td>
<td>$1.74</td>
<td>$1.74</td>
<td>$1.74</td>
<td>$1.09</td>
</tr>
<tr>
<td>South Carolina</td>
<td>$.41</td>
<td>$.41</td>
<td>$.46*</td>
<td>$.46</td>
<td>$.46</td>
<td>$.46</td>
<td>$.46</td>
<td>$.05*</td>
</tr>
</tbody>
</table>

*Increase represents a $.05 federal increase and no state specific increase
Data by Regional States
Ohio Tobacco Key Indicators Supplement

Adult cigarette smoking prevalence among regional states

Nationally, and in all the regional states included in this report, there was a decline in the prevalence of adult cigarette smoking from the year 2000 to 2006. Nationally, adult cigarette smoking prevalence declined 3.2% between 2000 and 2006, from 23.2% in 2000 to 20.0% in 2006.

Nationally, the prevalence of adult cigarette smoking declined 3.2% between 2000 and 2006, from 23.2% to 20.0%.

Ohio saw even greater declines between 2000 and 2006 than that of the nation as a whole. In 2000, adult cigarette smoking prevalence in Ohio was above the national median at 26.3%. In 2006 the prevalence had declined 3.8% to 22.5%. None of the other regional states included in this report saw declines as large as Ohio.

While still above the national median, Ohio dropped in rankings from having the 4th highest prevalence to 11th among the 50 states and Washington, DC between 2000 and 2006.
Adult smoking prevalence in West Virginia declined 0.4% between 2000 and 2006, from 26.1% in 2000 to 25.7% in 2006. Other states in the region, including Indiana, Kentucky, Michigan and Pennsylvania, saw declines of approximately 2% to 3%.

<table>
<thead>
<tr>
<th>Percent change in adult cigarette smoking prevalence</th>
<th>2000</th>
<th>2006</th>
<th>% Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Median</td>
<td>23.2</td>
<td>20.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Ohio</td>
<td>26.3</td>
<td>22.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Indiana</td>
<td>27.0</td>
<td>24.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Kentucky</td>
<td>30.5</td>
<td>28.6</td>
<td>1.9</td>
</tr>
<tr>
<td>Michigan</td>
<td>24.2</td>
<td>22.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>24.3</td>
<td>21.5</td>
<td>2.8</td>
</tr>
<tr>
<td>West Virginia</td>
<td>26.1</td>
<td>25.7</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Throughout the years included in the graph on page 7, Kentucky had the highest prevalence rate of adult cigarette smoking. Looking regionally, in 2000 Kentucky was 3.5% higher than Indiana, the state with the next highest prevalence. In 2006 Kentucky was 2.9% higher than West Virginia, which followed Kentucky with a prevalence of 25.7%.

Measure: Current smokers are defined by responding “yes” to “Have you smoked at least 100 cigarettes in your entire life?” AND responding “every day” or “some days” to “Do you know smoke cigarettes every day, some days, or not at all?”. The national median is reported as the midpoint of cigarette smoking prevalence across all states and the District of Columbia.

Source: Ohio Behavioral Risk Factor Surveillance System 1990-2006, US Behavioral Risk Factor Surveillance System 1990-2006. The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys, conducted over the telephone, collecting information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. The core BRFSS survey is conducted in every state, however each state can choose to conduct the supplemental BRFSS survey that measures specific health behaviors. National BRFSS estimates include those residing in the 50 states and the District of Columbia and other territories like Puerto Rico, Guam and the U.S. Virgin Islands. National BRFSS estimates exclude the US Armed Forces overseas and civilian U.S. citizens whose usual place of residence is outside the United States. Website: http://www.cdc.gov/brfss/
Per capita rates of cigarette consumption are an indication of the prevalence of tobacco use. The figure below contains annual rates of cigarette consumption in packs per capita for Ohio as well as five regional states and the national median.

The national median annual cigarette consumption declined between 2000 to 2006. In 2000, the national median adult cigarette consumption was 80.1 packs per capita; adult cigarette consumption gradually declined through 2006, dropping to 63.9 packs per capita.
Ohio adult cigarette consumption was consistently higher than the national median. In 2000, Ohio adult cigarette consumption was 99.9 packs per capita and fell to 70.5 packs per capita in 2006, still higher than the national median of 63.9 packs per capita.

Between 2000 and 2006, Kentucky had the highest rate of adult cigarette consumption as compared to the other regional states. In 2000, consumption in Kentucky was more than 156.2 packs per capita and decreased to 145.3 in 2006. This in part reflects the higher prevalence of cigarette smoking in Kentucky for those same years. Indiana and West Virginia followed Kentucky with the next highest rates in the region. Like Kentucky, both West Virginia and Indiana had higher prevalence rates of adult cigarette smoking than the other regional states.

Michigan and Pennsylvania closely followed the national trend and declined in adult cigarette consumption between 2000 and 2006.

In Ohio, adult cigarette consumption dropped from 99.9 packs per capita in 2000 to 70.5 packs per capita in 2006.

Measure: Pack Sales per Capita—The tax paid per capita sales of cigarette packs. It is measured as total tax paid sales divided by the states’ total population using Census Bureau population numbers. The national median is reported as the midpoint of the pack sales per capita across all states and the District of Columbia.

While cigarettes are the most commonly used tobacco product, there are several other tobacco products that represent a significant source of tobacco exposure. In contrast to cigarette use, questions about the use of other tobacco products are inconsistently included in state and national prevalence surveys leading to a limited availability of comparable data.

The graphs below include data from 2001-2002 and 2003, which is the most recent data available for all the regional comparison states included in this report.


Smokeless tobacco use, while less common than cigarette use, remains a significant form of tobacco use among adults, particularly in some regions of the US.

For the most part, the adult prevalence rates of smokeless tobacco use remained stable between 2001-2002 and 2003.

West Virginia and Kentucky had the highest rates of adult smokeless tobacco use. In 2003, the prevalence in West Virginia (5.7%) was more than double the rate in Ohio (2.3%) and the nation (2.0%).
When examining adult cigar use, Ohio, Indiana, Michigan and Pennsylvania all had higher prevalence rates for adult cigar use as compared to adult smokeless tobacco use. While Kentucky and West Virginia led in rates of smokeless tobacco use, those same states had lower rates of cigar use.

Prevalence rates of adult pipe use were also examined from 2001-2002 to 2003, during which time rates appeared to be fairly stable. State and national rates were all below 1% for the years examined.

Measure: Persons who answered “every day” or “some days” to “Do you NOW use chewing tobacco or snuff some days or not at all?”, persons who answered “every day” or “some days” to “Do you NOW smoke cigars some days or not at all?”, or persons who answered “every day” or “some days” to “Do you NOW smoke pipes some days or not at all?” The national median is reported as the midpoint of the prevalence of smokeless tobacco/cigar/pipe use across all states and the District of Columbia.

Source: Tobacco Use Supplement to the Current Population Survey (TUS-CPS). The Current Population Survey is a monthly survey of about 50,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics. The survey has been conducted for more than 50 years. Estimates obtained from the CPS include employment, unemployment, earnings, hours of work, and other indicators. Supplemental surveys include questions about a variety of topics, including an annual social and economic supplement, school enrollment, work schedules, voting and registration, job tenure and occupational mobility, food security, and tobacco use. Website: http://riskfactor.cancer.gov/studies/tus-cps
A quit attempt is defined as an attempt by a daily smoker to go without smoking for a day or longer. An increase in quit attempts is associated with an increase in successful quitting. The bars in the chart below indicate percent of adult smokers attempting to quit smoking cigarettes in the previous year; the arrows above indicate percent increase or decrease between 2000 and 2006.

The regional states examined in this report had rates of quit attempts between 40% and 60% between the years of 2000 and 2006. In 2006, quit attempts were lowest in Kentucky at 43.4% and highest in Michigan at 57.5%.

From 2000 to 2006, Pennsylvania had the largest increase in quit attempts at 7.4%, followed by Ohio and West Virginia, with increases of 5.3%. In contrast, quit attempts declined in Kentucky between 2000 and 2006. Indiana and Michigan exhibited little change over the years.
Between 2000 and 2006, there were both increasing rates of quit attempts and increasing rates of successful quit attempts in Ohio and Pennsylvania. Although quit attempts increased in West Virginia, rates of successful quit attempts remained relatively stable. While quit attempts declined in Kentucky, successful quit attempts increased between 2000 and 2006.

Measure: Quit attempts: Among every day smokers, persons who answered “yes” to “During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?” Ever Smokers who have quit: Persons who have quit are calculated by dividing the number of former smokers by the number of ever smokers and current smokers. Former smokers is defined as among ever smokers, those persons who answered “not at all” to “Do you now smoke cigarettes every day, some days, or not at all?”. Current smokers is defined as among ever smokers, those persons who answered “every day” or “some days” to “Do you now smoke cigarettes every day, some days, or not at all?”

Source: Ohio Behavioral Risk Factor Surveillance System 1990-2006, US Behavioral Risk Factor Surveillance System 1990-2006. The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys, conducted over the telephone, collecting information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. The core BRFSS survey is conducted in every state, however each state can choose to conduct the supplemental BRFSS survey that measures specific health behaviors. National BRFSS estimates include those residing in the 50 states and the District of Columbia and other territories like Puerto Rico, Guam and the U.S. Virgin Islands. National BRFSS estimates exclude the US Armed Forces overseas and civilian U.S. citizens whose usual place of residence is outside the United States. Website: http://www.cdc.gov/brfss/
Pregnant women are a particularly vulnerable population for exposure to tobacco smoke. Evidence suggests that pregnant women are among the most successful quitters because of the high level of motivation to quit smoking in order to prevent harm to their babies. Unfortunately, data on the prevalence of pregnant women who smoked cigarettes is inconsistently collected in state and national surveys; 2004 was the most recent year that data was available for the states included in this report.

Proportion of pregnant women who smoked cigarettes among regional states

Three indicators were used to examine the proportion of pregnant women who smoked cigarettes: proportion of pregnant women who smoked cigarettes in the three months before pregnancy; proportion of pregnant women who smoked during the last three months of pregnancy; and the proportion of women who smoked cigarettes postpartum.

Ohio’s rates of pregnant women who smoked were higher than Michigan but lower than West Virginia.
In the figure on page 15, Indiana, Kentucky, and Pennsylvania did not have data for the year considered.

In 2004, 33.7% of pregnant women in Ohio smoked cigarettes the three months before pregnancy, 20.9% smoked the last three months of pregnancy, and 26.0% smoked following pregnancy. Ohio’s rates of pregnant women who smoked were higher than Michigan but lower than West Virginia.

The state differences in smoking during pregnancy follow differences in overall prevalence of cigarette smoking. In 2006 the overall prevalence of adult cigarette smoking was slightly higher in Ohio than in Michigan but lower than in West Virginia.

State differences in smoking during pregnancy follow differences in overall prevalence of smoking.

Measure: Proportion of women responding greater than “none” to “In the 3 months before you got pregnant, how many cigarettes did you smoke on an average day?” and “In the last 3 months of your pregnancy, how many cigarettes did you smoke on an average day?” and “How many cigarettes do you smoke on an average day now?”

Source: Ohio Pregnancy Risk Assessment Monitoring System (PRAMS), 2004
   Indiana—Does not participate in the Pregnancy Risk Assessment Monitoring System (PRAMS)
   Kentucky—Does not participate in the Pregnancy Risk Assessment Monitoring System (PRAMS)
   Michigan Pregnancy Risk Assessment Monitoring System (PRAMS), 2004
   Pennsylvania Pregnancy Risk Assessment Monitoring System (PRAMS) began data collection in 2007—(data not available)
   West Virginia Pregnancy Risk Assessment Monitoring System (PRAMS), 2004
Youth cigarette smoking prevalence is measured as smoking at least one cigarette in the past 30 days due to the fact that youth cigarette smoking is less regular and consistent than adult smoking. The figure below presents the prevalence of high school cigarette smoking for Ohio and regionally similar states from the years 2000 to 2006. Due to differences in surveys and surveillance not all of the states have comparable data for the years considered.

In 2000, the prevalence of high school cigarette smoking in Ohio was 33.4%. This number dropped to 25.7% in 2002 and again to 20.5% in 2006. Several other states saw equally dramatic declines. Each of the regional states included in this report saw overall declines from 2000 to 2006. However, Indiana saw an increase in the prevalence from 2002 to 2006 after a large decline from 2000 to 2002.

All regional states saw a decline in the prevalence of high school cigarette smoking between 2000 and 2006.
There was a general pattern of decreasing prevalence of middle school cigarette smoking from 2000 to 2006, similar to declines among high school youth. Ohio, Indiana, Kentucky, and Pennsylvania exhibited declines. West Virginia remained fairly high and stable between 2000 and 2002. Trends were not available for Michigan.

There was decreasing prevalence in the rate of cigarette smoking among middle school students from 2000 to 2006.

Measure: Proportion of youth responding “1 day or more” to “During the past 30 days, on how many days did you smoke cigarettes?”

Michigan Youth Tobacco Survey: 2003, 2007 (2007 data was only collected for high school students. Surveys were completed in the spring of 2003 and 2007. Data were grouped with 2002 and 2006 data.)
West Virginia Youth Tobacco Survey: 2000, 2002, 2005 (The 2005 survey was administered only to high school students and completed in the spring of 2005. Data were grouped with 2004 data. The YTS was not administered in 2006.)
While cigarettes are the most commonly used tobacco product, there are several other tobacco products that represent a significant source of exposure. Despite the large declines in youth cigarette smoking prevalence, the use of smokeless tobacco has remained fairly consistent and troublingly high.

In Ohio the prevalence of smokeless tobacco use among high school youth was relatively stable from 2000 to 2006. Rates in Indiana, Kentucky, Michigan, and Pennsylvania also appeared to be stable. There was a large decline in smokeless tobacco use in West Virginia from 2000 to 2002 from 15.3% to 12.4%, but then no decline in 2004 (12.6%).

Despite the declines in youth cigarette smoking, the use of smokeless tobacco has remained fairly consistent and troublingly high.
The figure above illustrates the prevalence of smokeless tobacco use for middle school youth. Due to the low prevalence rates and the inconsistency in frequency of data collection it is difficult to draw strong conclusions from the figure. The prevalence of smokeless tobacco use among Ohio middle school youth dropped by more than half from 5.1% in 2000 to 2.1% in 2006. Similar declines were seen in Pennsylvania.

The prevalence rates in Indiana, Kentucky, Michigan, and West Virginia appear to be stable.

Measure: Proportion of youth responding “1 day or more” to “During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?”

Michigan Youth Tobacco Survey: 2003, 2007 (2007 data was only collected for high school students. Surveys were completed in the spring of 2003 and 2007. Data were grouped with 2002 and 2006 data.)
West Virginia Youth Tobacco Survey: 2000, 2002, 2005 (The 2005 survey was administered only to high school students and completed in the spring of 2005. Data were grouped with 2004 data. The YTS was not administered in 2006.)
An increase in quit attempts or an expressed desire to quit smoking is associated with an increase in successful cessation. The figures below present the prevalence of quit attempts among high school smokers and proportion of those who want to quit for the years 2000 to 2006. Due to differences in surveys and surveillance not all of the states have comparable data for the years considered. Further, due to the small number of middle school current smokers, middle school data was not considered.

Quit attempts in the previous year among current high school youth smokers were relatively similar across all states between 2000 and 2006, with rates ranging from 57.7% to 65.0% in 2000 and 54.9% to 60.8% in 2006. Ohio, Michigan and West Virginia exhibited declines in high school youth past year quit attempts. In Ohio, the prevalence dropped 8.0% from 65.0% in 2000 to 57.0% in 2006. Similar declines were seen in Michigan, where rates dropped from 61.8% in 2002 to 54.9% in 2006, and in West Virginia where rates declined from 59.4% in 2000 to 55.0% in 2004.
The figure above illustrates the proportion of current high school smokers who want to quit smoking. There is a mixed pattern of change but some indication that the rates may be actually fluctuating around a steady figure. While rates in Indiana and West Virginia appear to have remained fairly stable between 2000 and 2006, Ohio and Kentucky have seen mixed patterns of substantial increases and decreases during the same time period.

Measure: Proportion of young smokers responding “yes” to “During the past 12 months, did you ever try to quit smoking cigarettes?” and proportion of young smokers responding “yes” to “Do you want to stop smoking cigarettes?”

Taxes on cigarettes can be levied at the federal, state, county, or local level. The figure below presents the state excise tax rate for Ohio and five regional states as well as the national average of all states’ excise taxes in 2007.

Michigan, at $2.00 a pack, had the highest tax rate per pack of cigarettes among the regional states examined above. Pennsylvania, at $1.35, Ohio at $1.25, and Indiana at $1.00 were approximately similar. Both Kentucky, at $0.30, and West Virginia at $0.55 per pack were much lower than the national average of all states at $1.06 per pack.

For the regional states in the figure above, Kentucky, West Virginia and Indiana have the lowest state excise tax rates. In the same order, those three states have the highest prevalence of cigarette smoking among the regional states considered in this report.

**Michigan had the highest rates of state excise tax on cigarettes and other tobacco products as compared to other regional states.**
Cigarettes packs are often taxed at a different rate than other tobacco products. The table below describes the state excise tax for smokeless or chewing tobacco and cigars.

### State taxes on other tobacco products (2008)

<table>
<thead>
<tr>
<th>State</th>
<th>Smokeless (Chew) Tax</th>
<th>Cigar Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio</td>
<td>17% wholesale price</td>
<td>17% wholesale price</td>
</tr>
<tr>
<td>Indiana</td>
<td>18% wholesale price</td>
<td>18% wholesale price</td>
</tr>
<tr>
<td>Kentucky</td>
<td>7.5% wholesale price</td>
<td>7.5% wholesale price</td>
</tr>
<tr>
<td>Michigan</td>
<td>32% wholesale price</td>
<td>32% wholesale price</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>West Virginia</td>
<td>7% wholesale price</td>
<td>7% wholesale price</td>
</tr>
</tbody>
</table>

Among the regional states, Michigan has the highest tax rate for both cigars and smokeless tobacco products at 32% of the wholesale price. As with excise tax on cigarettes, Kentucky and West Virginia are among the lowest, taxing smokeless tobacco and cigars at 7.5% and 7.0% of the wholesale price respectively. Pennsylvania is the only state in the United States to have no tax on cigar or smokeless tobacco products.

Measure: State and federal excise tax per pack of cigarettes. Taxes are generally levied in mills per cigarette. Each mill equals 1/10th of a cent. For a tax per cigarette, multiply the number of mills times 10 and then multiply that number by the number of cigarettes in a pack (20). The national average is the average excise tax across all 50 states and the District of Columbia. Tax on non-cigarette products is a percentage of wholesale/manufacturer’s price. Manufacturer’s (Mfr.) Price is the price charged to wholesalers/distributors by the tobacco company that makes the product. Wholesale (W/S) Price is either the price charged to retailers by the wholesalers/distributors.


Updated: June 2008
An increase in the state tax revenue from cigarette sales provides an indication of an increase in the state excise tax for cigarettes. In the absence of a tax increase, an increase in the tax revenue would be a sign of increased consumption of cigarettes and therefore an increase in the prevalence of tobacco use.

National average state tax revenue increased from $163 million in 2000 to $274 million in 2006.

In 2000, the national average of state tax revenue was $163 million. All the states considered raised their state excise tax at least once during the years 2000 to 2006 and therefore, the national average increased to $274 million by 2006. This reflects an increase of 68%.
Between 2000 and 2006, Ohio’s annual gross tax revenue increased from $271 million to more than $1 billion, an increase of more than 270%. Pennsylvania had a similarly dramatic increase in tax revenue during the six years examined, with tax revenue increasing from $334 million in 2000 to more than $1 billion in 2006, which reflects over a 200% increase.

**Annual gross tax revenue in Kentucky increased more than 800% between 2000 and 2006.**

West Virginia and Kentucky had relatively low annual gross tax revenue as compared to other states in the region for both 2000 and 2006 amounts, both states saw a large increase in revenue when viewed as a percent increase. Kentucky increased from $19 million a year in 2000 to $176 million in 2006, an increase of more than 800%. West Virginia’s revenue increased from $34 million in 2000 to $112 million in 2006, an increase of more than 200%.

At the end of fiscal year 2006, three of the regional states included in this report had similarly high levels of annual tax revenue. Michigan, Pennsylvania and Ohio each had an annual revenue of more than $1 billion per year. The gap between these three states and the other states included in the figure can be attributed to differences in population sizes and differences in excise tax rates.
Despite the marketing regulations of the Master Settlement Agreement, tobacco companies continue to spend significant amounts of money on marketing in the United States. The figure below presents marketing expenditures, in millions of dollars, for Ohio and five regional states in 2005.

In 2005 the tobacco industry spent more than 700 million dollars in marketing expenditures in Ohio. During the same year the tobacco industry spent $425 million in Indiana and $416 million in Michigan on marketing.

Despite the differences in population size, both Kentucky and Pennsylvania saw tobacco industry expenditures of approximately the same amount; $545 million in Kentucky and $554 million in Pennsylvania. West Virginia was much lower at $132 million, which may be due to the smaller population size.

Because of the large differences in state populations, these expenditures are also presented as per capita amounts in the figure on the following page.

Despite the regulations of the Master Settlement Agreement, tobacco companies continue to spend significant amounts of money on marketing in the US.

Updated: June 2008
A different picture emerges when the tobacco marketing expenditures are examined as per capita amounts.

In 2005, the tobacco industry spent $63 and $68 per capita respectively in Ohio and Indiana. The per capita amount was slightly higher in West Virginia at $73 dollars while Michigan and Pennsylvania were both lower at $41 and $45 per capita. Kentucky stood out with tobacco industry spending at $128 per capita, an amount almost double the next largest regional state expenditure in West Virginia of $73.

**Tobacco companies spent $128 per capita on marketing in Kentucky, almost double the next largest expenditure amount seen in West Virginia, at $73 per capita.**

Measure: State-specific estimates on how much the tobacco industry spends on marketing in each state based on the number of cigarette packs sold in each state as a percentage of total nationwide sales. Per capita estimates were calculated by dividing the annual tobacco industry marketing expenditures by the state population in 2005.


Updated: June 2008
Data by State Tobacco Prevention and Control Funding Level
Nationally, and in all the states included in this report, there was a decline in the prevalence of adult cigarette smoking from the year 2000 to 2006. Nationally, the prevalence declined 2.6% over the six years, from 22.9% in 2000 to 20.3% in 2006.

Ohio saw even greater declines between 2000 and 2006 than that of the nation as a whole. In 2000 Ohio’s adult cigarette smoking prevalence was above the national median at 26.3%. In 2006 the prevalence had declined 3.8% to 22.5%.

Three other states, Missouri, Washington, and New Mexico, saw declines in smoking prevalence of approximately the same degree as Ohio. Interestingly, adult cigarette smoking prevalence in Missouri declined 3.9% from 27.2% in 2000 to 23.3% in 2006, despite Missouri having relatively low tobacco control funding between those years.
Measure: Current smokers are defined by responding “yes” to “Have you smoked at least 100 cigarettes in your entire life?” AND responding “every day” or “some days” to “Do you know smoke cigarettes every day, some days, or not at all?”. The national median is reported as the midpoint of cigarette smoking prevalence across all states and the District of Columbia.

Source: Ohio Behavioral Risk Factor Surveillance System 1990-2006, US Behavioral Risk Factor Surveillance System 1990-2006. The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys, conducted over the telephone, collecting information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. The core BRFSS survey is conducted in every state, however each state can choose to conduct the supplemental BRFSS survey that measures specific health behaviors. National BRFSS estimates include those residing in the 50 states and the District of Columbia and other territories like Puerto Rico, Guam and the U.S. Virgin Islands. National BRFSS estimates exclude the US Armed Forces overseas and civilian U.S. citizens whose usual place of residence is outside the United States. Website: http://www.cdc.gov/brfss/

Updated: June 2008

Ohio Tobacco Key Indicators Supplement

Adult cigarette smoking prevalence by state funding level

Washington, with state funding levels similar to Ohio since 2000, exhibited declines in prevalence similar to that of Ohio at 3.6%. However, Washington has the lowest prevalence of all states examined in this report.

The smallest decline of 1.5% was seen in Minnesota where the rate is also quite low at 18.3%. As prevalence rates continue to decrease, one would expect a floor effect whereby smaller and smaller declines are seen as prevalence rates fall closer to zero. Given this phenomena, the declines seen in the state of Washington are particularly impressive.

Each of the states examined in this comparative report saw larger declines than the national median, except for Minnesota, which as noted above has a relatively low prevalence rate.

<table>
<thead>
<tr>
<th>Percent change in adult cigarette smoking prevalence</th>
<th>2000</th>
<th>2006</th>
<th>% Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Median</td>
<td>23.2</td>
<td>20</td>
<td>3.2</td>
</tr>
<tr>
<td>Ohio</td>
<td>26.3</td>
<td>22.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Indiana</td>
<td>27</td>
<td>24.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Washington</td>
<td>20.7</td>
<td>17.1</td>
<td>3.6</td>
</tr>
<tr>
<td>New Mexico</td>
<td>23.6</td>
<td>20.2</td>
<td>3.4</td>
</tr>
<tr>
<td>Missouri</td>
<td>27.2</td>
<td>23.3</td>
<td>3.9</td>
</tr>
<tr>
<td>Minnesota</td>
<td>19.8</td>
<td>18.3</td>
<td>1.5</td>
</tr>
<tr>
<td>Maine</td>
<td>23.8</td>
<td>20.9</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Excluding Minnesota, each of the states examined in this comparative report saw larger declines than the national median.
Per capita rates of cigarette consumption are an indication of the prevalence of tobacco use. The figure below includes annual rates of adult cigarette consumption for Ohio and six comparison states in addition to the national median of all states.

The national median of annual cigarette consumption declined between 2000 and 2006. In 2000, the national median adult cigarette consumption was 80.1 packs per capita; adult cigarette consumption gradually declined through 2006, dropping to 63.9 packs per capita.

The national median annual adult cigarette consumption declined between 2000 and 2006 from 80.1 to 63.9 packs per capita.
Ohio’s decline in consumption from 2000 to 2006 follows the national median but is more dramatic. The national median declined from 80.1 packs per capita in 2000 to 63.9 packs per capita in 2006. Ohio declined from 99.9 in 2000 to 70.5 in 2006. During the years of 2000 to 2006, Indiana and Missouri had the highest rates of cigarette consumption as compared to the other regional states. In 2000, the consumption in Indiana was 125.5 packs per capita which decreased to 98.7 in 2006, with the largest drop occurring between 2002 and 2003. This corresponds to the increase in revenue that occurred during those same years.

Both New Mexico and Washington, states with relatively high levels of tobacco prevention and control funding, were below the national median and the other comparison states included in the figure. Missouri was the only state that saw an increase in consumption from 2000 to 2006. Missouri’s consumption was 113.8 packs per capita in 2000 and increased to 105.1 in 2006. Of the comparison states, Missouri had the lowest levels of state tobacco prevention and control funding.

Measure: Pack Sales per Capita—The tax paid per capita sales of cigarette packs. It is measured as total tax paid sales divided by the states’ total population using Census Bureau population numbers. The national median is reported as the midpoint of the pack sales per capita across all states and the District of Columbia.

While cigarettes are the most commonly used tobacco product, there are several other tobacco products that represent a significant source of tobacco exposure. In contrast to cigarette use, questions about the use of other tobacco products are inconsistently included in state and national prevalence surveys.

The graphs below include data from 2001-2002 and 2003, which is the most recent data available for all the comparison states included in this report.


Smokeless tobacco and cigar use, while less common than cigarette use, remains a significant form of tobacco use.

For the most part, the adult prevalence rates of smokeless tobacco use remained stable between 2001-2002 and 2003. Ohio, Indiana, New Mexico, Missouri, Minnesota and Maine all saw minimal declines from 2001-2002 to 2003. Washington state was approximately the same in 2001-2002. The largest decline in smokeless tobacco use was seen in Indiana, however, this decline was still quite small, at 0.8%. There is not a strong relationship between the magnitude of decline and the level of state tobacco prevention control funding.
Prevalence rates of cigar use for the states examined in this report were also fairly stable from 2001-2002 to 2003. Washington and New Mexico saw slight increases while Ohio, Indiana, Missouri, and Maine saw decreases. Minnesota remained approximately the same from 2000 to 2006.

Prevalence rates of adult pipe use were also examined from 2001-2002 to 2003, during which time rates appeared to be fairly stable. State and national rates were all below 1% for the years examined.

Measure: Persons who answered “every day” or “some days” to “Do you NOW use chewing tobacco or snuff some days or not at all?”, persons who answered “every day” or “some days” to “Do you NOW smoke cigars some days or not at all?”, or persons who answered “every day” or “some days” to “Do you NOW smoke pipes some days or not at all?” The national median is reported as the midpoint of the prevalence of smokeless tobacco/cigar/pipe use across all states and the District of Columbia.

Source: Tobacco Use Supplement to the Current Population Survey (TUS-CPS). The Current Population Survey is a monthly survey of about 50,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics. The survey has been conducted for more than 50 years. Estimates obtained from the CPS include employment, unemployment, earnings, hours of work, and other indicators. Supplemental surveys include questions about a variety of topics, including an annual social and economic supplement, school enrollment, work schedules, voting and registration, job tenure and occupational mobility, food security, and tobacco use. Website: http://riskfactor.cancer.gov/studies/tus-cps

Updated: June 2008
A quit attempt is defined as an attempt by a daily smoker to go without smoking for a day or longer. An increase in quit attempts is associated with an increase in successful quitting. The bars in the chart below indicate percent of adult smokers attempting to quit smoking cigarettes in the previous year; the arrows above indicate percent increase or decrease between 2000 and 2006.

The comparison states examined in this report had rates of quit attempts between 40% and 60% between the years of 2000 and 2006. In 2006, Missouri’s rate was lowest at 47.2% and New Mexico’s rate was highest at 56.8%. Missouri had consistently low state tobacco prevention and control funding during that same time period. New Mexico’s state funding levels were similar to Ohio.

All the comparison states had increasing rates of quit attempts and successful cessation from 2000 to 2006.

During the period of 2000 to 2006 all of the states included in this report saw increasing rates of quit attempts by current smokers. The smallest increase was in Missouri (0.3%). In contrast, the state of Minnesota saw an increase of 7.6% from 2000 to 2006. Ohio saw an increase of 5.3% during the same time period.
Just as all the comparison states had increasing rates of quit attempts from 2000 to 2006, the same states had increasing rates of successful quit attempts by ever smokers.

The largest increase in successful quit attempts was in Minnesota (6.2%). The smallest increase was in Washington state which increased 2.6% from 58.1% in 2000 to 60.7% in 2006.

**Measure:** Quit attempts: Among every day smokers, persons who answered “yes” to “During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?” Ever Smokers who have quit: Persons who have quit are calculated by dividing the number of former smokers by the number of ever smokers and current smokers. Former smokers is defined as among ever smokers, those persons who answered “not at all” to “Do you now smoke cigarettes every day, some days, or not at all?”. Current smokers is defined as among ever smokers, those persons who answered “every day” or “some days” to “Do you now smoke cigarettes every day, some days, or not at all?”

**Source:** Ohio Behavioral Risk Factor Surveillance System 1990-2006, US Behavioral Risk Factor Surveillance System 1990-2006. The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys, conducted over the telephone, collecting information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. The core BRFSS survey is conducted in every state, however each state can choose to conduct the supplemental BRFSS survey that measures specific health behaviors. National BRFSS estimates include those residing in the 50 states and the District of Columbia and other territories like Puerto Rico, Guam and the U.S. Virgin Islands. National BRFSS estimates exclude the US Armed Forces overseas and civilian U.S. citizens whose usual place of residence is outside the United States. Website: http://www.cdc.gov/brfss/
Pregnant women are a particularly vulnerable population for exposure to tobacco smoke. Evidence suggests that pregnant women are among the most successful quitters because of the high level of motivation to quit smoking in order to prevent harm to their babies. Unfortunately, data on the prevalence of pregnant women who smoked cigarettes is inconsistently collected in state and national surveys; 2004 was the most recent year that data was available for the states included in this report.

Three indicators were used to examine the proportion of pregnant women who smoked cigarettes: proportion of pregnant women who smoked cigarettes in the three months before pregnancy; proportion of pregnant women who smoked during the last three months of pregnancy; and the proportion of women who smoked cigarettes postpartum.

Ohio’s rates of pregnant women who smoked were higher than any of the other comparison states.
Indiana and Missouri did not have data available for the year considered.

Ohio’s rates of pregnant women who smoked were higher for each of the three indicators than any of the other states examined in the figure. In 2004 33.7% of pregnant women in Ohio smoked cigarettes the three months before pregnancy; 20.9% smoked the last three months of pregnancy and 26.0% of women in Ohio smoked following pregnancy. The relatively high level of state tobacco prevention and control funding may not have had an effect on this indicator until later years.

The state differences in smoking during pregnancy follow differences in overall prevalence of cigarette smoking. In 2006 the overall prevalence of adult cigarette smoking was higher in Ohio than in Maine, Minnesota, New Mexico and Washington.

State differences in smoking during pregnancy follow differences in overall prevalence of smoking.

Measure: Proportion of women responding greater than “none” to “In the 3 months before you got pregnant, how many cigarettes did you smoke on an average day?” and “In the last 3 months of your pregnancy, how many cigarettes did you smoke on an average day?” and “How many cigarettes do you smoke on an average day now?”

Source: Ohio Pregnancy Risk Assessment Monitoring System (PRAMS) 2004
Indiana—Does not participate in the Pregnancy Risk Assessment Monitoring System (PRAMS)
Washington Pregnancy Risk Assessment Monitoring System (PRAMS) 2004
New Mexico Pregnancy Risk Assessment Monitoring System (PRAMS) 2004
Missouri Pregnancy Risk Assessment Monitoring System (PRAMS) began data collection in 2007—(data not available)
Minnesota Pregnancy Risk Assessment Monitoring System (PRAMS) 2004
Maine Pregnancy Risk Assessment Monitoring System (PRAMS) 2004
Youth cigarette smoking prevalence is measured as smoking at least one cigarette in the past 30 days due to the fact that youth cigarette smoking is less regular and consistent than adult smoking. The figure below presents the prevalence of high school cigarette smoking for Ohio and comparison states from the years 2000 to 2006. Due to differences in surveys and surveillance, not all of the states have comparable data for the years considered.

All the states considered saw an overall decrease in prevalence of high school cigarette smoking from 2000 to 2006. In 2000, the prevalence of high school cigarette smoking in Ohio was 33.4%. This number dropped to 25.7% in 2002 and again decreased to 20.5% in 2006.

Minnesota saw a similar decrease from 32.4% in 2000 to 22.4% in 2006. Maine and Missouri exhibited similar declines. While Maine had high levels of state tobacco prevention and control funding the impact of this funding is unclear due to limited data.

Indiana saw a slight increase in youth cigarette smoking prevalence from 20.8% in 2002 to 23.9% in 2006, after a large decrease from 2000 to 2002. Indiana’s state tobacco control funding was similar to Ohio’s in 2000 but has been decreasing since that time.

All states saw a decrease in the prevalence of high school cigarette smoking between 2000 and 2006.
Middle school students exhibited a similar pattern as high school students of decreasing prevalence in the rate of cigarette smoking from 2000 to 2006. In 2000 the prevalence of middle school cigarette smoking in Ohio was 13.7%. This dropped almost in half to 7.2% by 2006. No other states considered saw such dramatic declines.

Measure: Proportion of youth responding 1 day or more to “During the past 30 days, on how many days did you smoke cigarettes?”

Washington Healthy Youth Survey data is available only by grade level and therefore it cannot be compared to other states’ data.
New Mexico Youth Tobacco Survey: 2002, 2004 (The 2004 survey was only administered to middle school students.)
Missouri Youth Tobacco Survey: 2003, 2005, 2007 (The surveys were completed in the spring of the respective years. Data were grouped with 2002, 2004 and 2006 data. The YTS was not administered in 2000.)
Minnesota Youth Tobacco Survey: 2000, 2002, 2005 (The surveys were only administered to high school students. The 2005 survey was completed in the spring of 2005, data were grouped with 2004 data. The YTS was not administered in 2006.)
Maine Youth Tobacco Survey: 2004, 2006 (The YTS was not administered in 2000 or 2002.)
While cigarettes are the most commonly used tobacco product, there are several other tobacco products that represent a significant source of exposure. Despite the large declines in youth cigarette smoking prevalence, the use of smokeless tobacco has remained fairly consistent and troublingly high.

In Ohio the prevalence of smokeless tobacco use among high school youth was relatively stable from 2000 to 2006. Indiana and Maine were also stable.

Of the comparison states, Missouri had the lowest state tobacco control funding and the prevalence rate of youth smokeless tobacco use appears to be on the increase. Minnesota had a decreasing rate of smokeless tobacco use and a relatively well funded state tobacco prevention and control program.

Of the comparison states, Missouri had the lowest state tobacco control funding and the prevalence rate of youth smokeless tobacco use appears to be on the increase.
The figure above illustrates the prevalence of smokeless tobacco use for middle school youth. Due to the low prevalence rates and the inconsistency in frequency of data collection it is difficult to draw strong conclusions from the figure.

The prevalence of smokeless tobacco use among Ohio middle school youth was 5.1% in 2000 and less than half that amount (2.1%) in 2006. Rates of smokeless tobacco use were relatively stable in the comparison states of Indiana, New Mexico, Missouri, Minnesota, and Maine.

Measure: Proportion of youth responding 1 day or more to “During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?”

Washington Healthy Youth Survey data is available only by grade level and therefore it cannot be compared to other states’ data.
New Mexico Youth Tobacco Survey: 2002, 2004 (The 2004 survey was only administered to middle school students.)
Missouri Youth Tobacco Survey: 2003, 2005, 2007 (The surveys were completed in the spring of the respective years. Data were grouped with 2002, 2004 and 2006 data. The YTS was not administered in 2000.)
Minnesota Youth Tobacco Survey: 2000, 2002, 2005 (The surveys were only administered to high school students. The 2005 survey was completed in the spring of 2005. Data were grouped with 2004 data. The YTS was not administered in 2006.)
Maine Youth Tobacco Survey: 2004, 2006 (The YTS was not administered in 2000 or 2002.)
An increase in quit attempts or an expressed desire to quit smoking is associated with an increase in successful cessation. The following figures present the prevalence of quit attempts among high school smokers and proportion of those who want to quit for the years 2000 to 2006. Due to differences in surveys and surveillance not all of the states have comparable data for the years considered. Further, due to the small number of middle school current smokers, middle school data was not considered.

![Graph showing prevalence of current youth smokers who made one or more quit attempts in the past year (high school)](image)

The overall pattern shows some decline in prevalence of quit attempts. In Ohio the prevalence dropped from 65.0% in 2000 to 57.0% in 2006, a decline of 8.0%. Similar declines were seen in Maine, where rates dropped from 55.5% in 2004 to 46.0% in 2006, in Missouri where rates dropped from 60.6% in 2002 to 56.8% in 2006, and finally in Minnesota where rates declined from 61.0% in 2000 to 57.6% in 2004. In contrast, rates in Indiana were fairly stable (61.6% in 2000; 60.8% in 2006.) New Mexico only had one year of comparable data. There does not appear to be a strong relationship between the magnitude of decline and level of state tobacco prevention and control funding.

**In Ohio the prevalence of quit attempts among high school students dropped from 65.0% in 2000 to 57.0% in 2006, a decline of 8.0%.**

Updated: June 2008

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The figure above illustrates the proportion of current high school smokers who want to quit. While there is an increase in prevalence for some years the general pattern over the six years is a decline in the proportion of high school students who smoke who would like to quit.

In Ohio the prevalence of high school smokers who would like to quit decreased from 59.0% in 2000 to 48.0% in 2006. Indiana held steady from 2000 to 2006. New Mexico, Missouri, Minnesota and Maine had less than four years of comparable data, but for each the prevalence declined for the years reported.

Measure: Proportion of young smokers responding “yes” to “During the past 12 months, did you ever try to quit smoking cigarettes?” and proportion of young smokers responding “yes” to “Do you want to stop smoking cigarettes?”

Washington Healthy Youth Survey data is available only by grade level and therefore it cannot be compared to other states’ data.
New Mexico Youth Tobacco Survey: 2002, 2004 (The 2004 survey was only administered to middle school students.)
Missouri Youth Tobacco Survey: 2003, 2005, 2007 (The surveys were completed in the spring of the respective years. Data were grouped with 2002, 2004 and 2006 data. The YTS was not administered in 2000.)
Minnesota Youth Tobacco Survey: 2000, 2002, 2005 (The surveys were only administered to high school students. The 2005 survey was completed in the spring of 2005. Data were grouped with 2004 data. The YTS was not administered in 2006.)
Maine Youth Tobacco Survey: 2004, 2006 (The YTS was not administered in 2000 or 2002.)

Updated: June 2008
Taxes on cigarettes can be levied at the federal, state, county, or local level. The figure below presents the state excise tax rate for Ohio and six comparison states as well as the national average of states’ excise taxes in 2007.

Ohio, at $1.25, and Minnesota at $1.23, were approximately equivalent and both above the national average of states at $1.06. Indiana and New Mexico were just below the national average at $1.00 and $0.91 respectively.

Washington, which has a similar level of state tobacco prevention and control funding as Ohio, has a much higher excise tax rate at $2.03 per pack. Maine had consistently high state tobacco prevention and control funding and also had a high excise tax rate in 2007 at $2.00 per pack.

Missouri was well below all the comparison states at $.17 a pack. Missouri also has the lowest state tobacco control budget.
Cigarettes packs are often taxed at a different rate than other tobacco products. The table below describes the state excise tax for smokeless or chewing tobacco and cigars.

<table>
<thead>
<tr>
<th>State</th>
<th>Smokeless (Chewing) Tax</th>
<th>Cigar Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio</td>
<td>17% wholesale price</td>
<td>17% wholesale price</td>
</tr>
<tr>
<td>Indiana</td>
<td>18% wholesale price</td>
<td>18% wholesale price</td>
</tr>
<tr>
<td>Washington</td>
<td>75% of taxable sales price</td>
<td>75% of taxable sales price, $.50 cap</td>
</tr>
<tr>
<td>New Mexico</td>
<td>25% manufacturer’s price</td>
<td>25% manufacturer’s price</td>
</tr>
<tr>
<td>Missouri</td>
<td>10% manufacturer’s price</td>
<td>10% manufacturer’s price</td>
</tr>
<tr>
<td>Minnesota</td>
<td>70% wholesale price</td>
<td>70% wholesale price</td>
</tr>
<tr>
<td>Maine</td>
<td>78% wholesale price</td>
<td>20% wholesale price</td>
</tr>
</tbody>
</table>

Maine, Minnesota and Washington have the highest tax rates on chewing tobacco and Minnesota and Washington have the highest tax rates on cigars. These states also have relatively high cigarette tax rates. Missouri has the lowest tax rate on other tobacco products at 10% of the manufacturer’s price. Thus it is not surprising that Missouri has the highest rate of smokeless tobacco use.

**Missouri has the lowest tax rate for other tobacco products and the highest rates of smokeless tobacco use.**

Measure: State and federal excise tax per pack of cigarettes. Taxes are generally levied in mills per cigarette. Each mill equals 1/10th of a cent. For a tax per cigarette, multiply the number of mills times 10 and then multiply that number by the number of cigarettes in a pack (20). The national average is the average excise tax across all 50 states and the District of Columbia. Tax on non-cigarette products as a percentage of wholesale/manufacturer’s price. Manufacturer’s (Mfr.) Price is the price charged to wholesalers/distributors by the tobacco company that makes the product. Wholesale (W/S) Price is either the price charged to retailers by the wholesalers/distributors.


An increase in the state tax revenue from cigarette sales provides an indication of an increase in the state excise tax for cigarettes. In the absence of a tax increase, an increase in the tax revenue would indicate an increase in the consumption of cigarettes and therefore an increase in the prevalence of tobacco use.

The average national state tax revenue increased to $274 million by 2006. This reflects an increase of 68%.

In 2000 the national average of state tax revenue was $163 million. All the states except Missouri raised the state excise tax during the years 2000 to 2006. The national average increased to $274 million by 2006, which is an increase of 68%.
During the same time period of 2000 to 2006, Ohio's annual gross tax revenue increased from $271 million to more than one billion, an increase of more than 270%.

At the end of fiscal year 2006 none of the comparison states included in this report had as large an annual tax revenue as Ohio.

While no other states had such a dramatic increase in absolute revenue, several states saw dramatic increases as a percent of previous gross tax revenue. New Mexico increased from $21 million in 2000 to $62 million in 2006, an increase of 195%, and Indiana increased from $118 million in 2000 to $343 million in 2006, an increase of 191%. Both states had increases in state excise tax rates during the same time period.

Missouri was the only state that did not increase the state excise tax at least once between 2000 and 2006 and the only state to have a decrease in annual gross tax revenue during the same time. In 2000, the gross tax revenue was $107 million and in 2006 it decreased to $103 million.

At the end of fiscal year 2006, none of the comparison states included in this report had similarly high levels of gross annual tax revenue as Ohio. The gap between Ohio and the other states included in the figure is largely due to differences in population size and is also due to differences in excise tax rates.

Measure: The annual gross tax revenue from cigarette sales in dollars. Data are based on fiscal years ending June 30. The national average is the average annual gross tax revenue from cigarette sales across all 50 states and the District of Columbia.

Despite the marketing regulations of the Master Settlement Agreement, tobacco companies continue to spend a significant amount on marketing in the United States. The figure below presents marketing expenditures, in millions of dollars, for Ohio and for six comparison states in 2005.

In 2005 the tobacco industry spent more than $700 million dollars in marketing expenditures in Ohio, more than any of the comparison states.

During the same year the tobacco industry spent $425 million in Indiana and $423.5 million in Missouri on marketing. Of those states with comparatively less marketing Minnesota saw $237.9 million in marketing, $164.6 million was spent in Washington, $66.8 million in Maine, and $48.0 million in New Mexico.

Because of the large differences in state populations, these expenditures are also presented as per capita amounts in the figure on the following page.

In 2005 the tobacco industry spent more than $700 million dollars in marketing expenditures in Ohio.
A different picture emerges when the tobacco marketing expenditures are examined per capita. In 2005 the tobacco industry spent the most in Indiana and Missouri at $68 and $73 per capita respectively. Meanwhile, Missouri’s state tobacco prevention and control budget was the smallest of the states examined.

Marketing expenditures in Ohio were slightly lower than Missouri and Indiana at $63 per capita. The expenditures per capita were lower in Minnesota and Maine at $47 and $51 per capita.

Washington and New Mexico were almost half the per capita amount of Ohio at $26 and $25 respectively. Surprising, Washington’s state tobacco prevention and control budget was at a level similar to Ohio in 2005, yet the tobacco industry marketing expenditures were much lower.

Measure: State-specific estimates on how much the tobacco industry spends on marketing in each state based on the number of cigarette packs sold in each state as a percentage of total nationwide sales. Per capita estimates were calculated by dividing the annual tobacco industry marketing expenditures by the state population in 2005.


Updated: June 2008
Data by State Cigarette Excise Tax Level
Nationally, and in all the states included in this report, there was a decline in the prevalence of adult cigarette smoking between 2000 and 2006. Nationally, adult cigarette smoking prevalence declined 3.2% between 2000 and 2006, from 23.2% in 2000 to 20.0% in 2006.

Ohio saw even greater declines between 2000 and 2006 than that of the nation as a whole. In 2000, adult cigarette smoking prevalence in Ohio was above the national median at 26.3%. In 2006 the prevalence had declined 3.8% to 22.5%. In 2006 the prevalence had declined 3.8% to 22.5%.

Nationally, the prevalence of adult cigarette smoking declined 3.2% between 2000 and 2006, from 23.2% to 20.0%.
Only one other state, Missouri, saw declines as large as Ohio. Missouri’s prevalence declined from 27.2% in 2000 to 23.3% in 2006, a decline of 3.9%, despite having one of the lowest excise taxes in the country at $0.17. Although Missouri exhibited the largest decline among the states examined, adult cigarette smoking prevalence was the highest of the states in 2006. South Carolina’s excise tax is also very low $0.07, yet prevalence declined 2.6% between 2000 and 2006.

Michigan and New Jersey, states with high excise taxes, both saw declines in adult cigarette smoking prevalence that were lower than the change in the national median. Interestingly, New Jersey remained below the national median prevalence between 2000 and 2006.

Although Missouri exhibited the largest decline among the states examined, adult cigarette smoking prevalence was the highest of the states in 2006.

Measure: Current smoker are defined by responding “yes” to “Have you smoked at least 100 cigarettes in your entire life?” AND responding “every day” or “some days” to “Do you know smoke cigarettes every day, some days, or not at all?”. The national median is reported as the midpoint of cigarette smoking prevalence across all states and the District of Columbia.

Source: Ohio Behavioral Risk Factor Surveillance System 1990-2006, US Behavioral Risk Factor Surveillance System 1990-2006. The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys, conducted over the telephone, collecting information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. The core BRFSS survey is conducted in every state, however each state can choose to conduct the supplemental BRFSS survey that measures specific health behaviors. National BRFSS estimates include those residing in the 50 states and the District of Columbia and other territories like Puerto Rico, Guam and the U.S. Virgin Islands. National BRFSS estimates exclude the US Armed Forces overseas and civilian U.S. citizens whose usual place of residence is outside the United States. Website: http://www.cdc.gov/brfss/
Per capita rates of cigarette consumption are an indication of the prevalence of tobacco use. The figure below contains annual rates of cigarette consumption in packs per capita for Ohio as well as six comparison states and the national state median.

The national median of annual cigarette consumption declined between 2000 to 2006. In 2000, the national median adult cigarette consumption was 80.1 packs per capita; adult cigarette consumption gradually declined through 2006, dropping to 63.9 packs per capita.

The national median annual adult cigarette consumption declined between 2000 and 2006 from 80.1 to 63.9 packs per capita.
Ohio adult cigarette consumption was consistently higher than the national median. In 2000, Ohio adult cigarette consumption was 99.9 packs per capita and fell to 70.5 packs per capita in 2006, still higher than the national median of 63.9 packs per capita.

Ohio was higher than the national median in 2000, at around 99.9 packs per capita, and fell to 70.5 packs per capita in 2006.

Declines seen in Michigan, Minnesota, and Pennsylvania closely followed the national trend from 2000 to 2006. During the years of 2000 to 2006 Missouri had the highest rate of cigarette consumption as compared to the other comparison states. This in part reflects the higher prevalence of cigarette smoking in Missouri for those same years.

The next two highest states are Ohio and South Carolina. Cigarette consumption in South Carolina decreased only slightly from 103.9 packs per capita in 2000 to 96.4 packs per capita in 2006. Like Missouri, both Ohio and South Carolina had relatively higher prevalence rates of adult cigarette smoking than the other comparison states. For all the years considered New Jersey had the lowest rate of cigarette consumption. Likewise, New Jersey had the lowest prevalence of adult cigarette smoking for almost all of the years considered.

Measure: Pack Sales per Capita—The tax paid per capita sales of cigarette packs. It is measured as total tax paid sales divided by the states’ total population using Census Bureau population numbers. The national median is reported as the midpoint of the pack sales per capita across all states and the District of Columbia.

While cigarettes are the most commonly used tobacco product, there are several other tobacco products that represent a significant source of tobacco exposure. In contrast to cigarette use, questions about the use of other tobacco products are inconsistently included in state and national prevalence surveys leading to a limited availability of comparable data. The following graphs include data from 2001-2002 and 2003, which is the most recent data available for all the comparison states included in this report.

Smokeless tobacco use, while less common than cigarette use, remains a significant form of tobacco use, particularly in some regions of the US. For the most part, the adult prevalence rates of smokeless tobacco use remained stable between 2001-2002 and 2003. Missouri had the highest prevalence rate in both 2001-2002 and in 2003. New Jersey and Michigan both had smokeless tobacco use rates well below the national median of 2%.


Updated: June 2008
Rates of cigar use were comparable, if not higher, than the rates of smokeless tobacco use. Ohio’s rate of adult cigar use declined from 3.1% in 2001-2002 to 2.9% in 2003. The national rate and decline was similar to Ohio.

Prevalence rates of adult pipe use were also examined from 2001-2002 to 2003, during which time rates appeared to be fairly stable. State and national rates were all below 1% for the years examined.

Measure: Persons who answered “every day” or “some days” to “Do you NOW use chewing tobacco or snuff some days or not at all?”, persons who answered “every day” or “some days” to “Do you NOW smoke cigars some days or not at all?”, or persons who answered “every day” or “some days” to “Do you NOW smoke pipes some days or not at all?” The national median is reported as the midpoint of the prevalence of smokeless tobacco/cigar/pipe use across all states and the District of Columbia.

Source: Tobacco Use Supplement to the Current Population Survey (TUS-CPS). The Current Population Survey is a monthly survey of about 50,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics. The survey has been conducted for more than 50 years. Estimates obtained from the CPS include employment, unemployment, earnings, hours of work, and other indicators. Supplemental surveys include questions about a variety of topics, including an annual social and economic supplement, school enrollment, work schedules, voting and registration, job tenure and occupational mobility, food security, and tobacco use. Website: http://riskfactor.cancer.gov/studies/tus-cps
A quit attempt is defined as an attempt by a daily smoker to go without smoking for a day or longer. An increase in quit attempts is associated with an increase in successful quitting. The bars in the chart below indicate percent of adult smokers attempting to quit smoking cigarettes in the previous year; the arrows above indicate percent increase or decrease between 2000 and 2006.

The largest increases were in Minnesota and Pennsylvania which both had increases of more than 7%. Ohio also saw an increase, at 5.3%. Missouri was approximately the same from 2000 to 2006 with an increase of just 0.3%. During this same time period, Missouri was the only state that did not increase the state excise tax for a pack of cigarettes.
The same pattern of increasing rates of quit attempts was seen in successful cessation by individuals who had ever smoked. All of the comparison states saw increases in successful cessation. Ohio increased 5.1% from 46.9% in 2000 to 52.0% in 2006.

Measure: Quit attempts: Among every day smokers, persons who answered “yes” to “During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?” Ever Smokers who have quit: Persons who have quit are calculated by dividing the number of former smokers by the number of ever smokers and current smokers. Former smokers is defined as among ever smokers, those persons who answered “not at all” to “Do you now smoke cigarettes every day, some days, or not at all?”. Current smokers is defined as among ever smokers, those persons who answered “every day” or “some days” to “Do you now smoke cigarettes every day, some days, or not at all?”

Source: Ohio Behavioral Risk Factor Surveillance System 1990-2006; US Behavioral Risk Factor Surveillance System 1990-2006. The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys, conducted over the telephone, collecting information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. The core BRFSS survey is conducted in every state, however each state can choose to conduct the supplemental BRFSS survey that measures specific health behaviors. National BRFSS estimates include those residing in the 50 states and the District of Columbia and other territories like Puerto Rico, Guam and the U.S. Virgin Islands. National BRFSS estimates exclude the US Armed Forces overseas and civilian U.S. citizens whose usual place of residence is outside the United States. Website: http://www.cdc.gov/brfss/
Pregnant women are a particularly vulnerable population for exposure to tobacco smoke. Evidence suggests that pregnant women are among the most successful quitters because of the high level of motivation to quit smoking in order to prevent harm to their babies. Unfortunately, data on the prevalence of pregnant women who smoked cigarettes is inconsistently collected in state and national surveys; 2004 was the most recent year that data was available for the states included in this report.

Three indicators were used to examine the proportion of pregnant women who smoked cigarettes: proportion of pregnant women who smoked cigarettes in the three months before pregnancy; proportion of pregnant women who smoked during the last three months of pregnancy; and the proportion of women who smoked cigarettes postpartum.

Ohio’s rates of pregnant women who smoked were higher than Michigan, Minnesota, and South Carolina.

Updated: June 2008
In the figure on the previous page Pennsylvania, Missouri, and New Jersey did not have data for the years considered.

In 2004, 33.7% of pregnant women in Ohio smoked cigarettes during the three months before pregnancy; 20.9% smoked the last three months of pregnancy and 26.0% smoked following pregnancy. Ohio’s rates of pregnant women who smoked were higher than Michigan, Minnesota, and South Carolina.

The state differences in smoking during pregnancy follow differences in overall prevalence of cigarette smoking. In 2004 the overall prevalence of adult cigarette smoking was slightly higher in Ohio than in any of the comparison states considered.

State differences in smoking during pregnancy follow differences in overall prevalence of smoking.

Measure: Proportion of pregnant women who smoked cigarettes by state tax level

- Proportion of women responding greater than "none" to “In the 3 months before you got pregnant, how many cigarettes did you smoke on an average day?” and “In the last 3 months of your pregnancy, how many cigarettes did you smoke on an average day?” and “How many cigarettes do you smoke on an average day now?”

Source:
- Ohio Pregnancy Risk Assessment Monitoring System (PRAMS) 2004
- Michigan Pregnancy Risk Assessment Monitoring System (PRAMS) 2004
- Pennsylvania Pregnancy Risk Assessment Monitoring System (PRAMS) began data collection in 2007—(data not available)
- Missouri Pregnancy Risk Assessment Monitoring System (PRAMS) began data collection in 2007—(data not available)
- Minnesota Pregnancy Risk Assessment Monitoring System (PRAMS) 2004
- New Jersey Pregnancy Risk Assessment Monitoring System (PRAMS) 2004
- South Carolina Pregnancy Risk Assessment Monitoring System (PRAMS) 2004
Youth cigarette smoking prevalence is measured as smoking at least one cigarette in the past 30 days due to the fact that youth cigarette smoking is less regular and consistent than adult smoking. The figure below presents the prevalence of high school cigarette smoking for Ohio and regionally similar states from the years 2000 to 2006. Due to differences in surveys and surveillance not all of the states have comparable data for the years considered.

All the comparison states considered saw a decrease in prevalence of high school cigarette smoking from 2000 to 2006. In 2000 the prevalence of high school cigarette smoking in Ohio was 33.4%. This number dropped to 25.7% in 2002 and again decreased to 20.5% in 2006. Michigan, Missouri, Minnesota, and South Carolina saw similar declines and prevalence rates for the comparable years that data was available.

New Jersey, which has a high state excise tax on cigarettes, had a lower prevalence than Ohio and declined from 27.6% in 2000 to 15.8% in 2006.

All states saw a decrease in the prevalence of high school cigarette smoking between 2000 and 2006.
There was a similar pattern of decreasing prevalence in the rate of cigarette smoking among middle school students from 2000 to 2006. Ohio, Pennsylvania, Minnesota, and New Jersey all exhibited dramatic declines. Missouri and South Carolina, states with low excise taxes on cigarettes, had higher prevalence rates than the comparison states in 2006.
While cigarettes are the most commonly used tobacco product, there are several other tobacco products that represent a significant source of exposure. Despite the large declines in youth cigarette smoking prevalence, the use of smokeless tobacco has remained fairly consistent and troublingly high.

In Ohio the prevalence of smokeless tobacco use among high school youth was relatively stable from 2000 to 2006. Michigan and Pennsylvania also appeared to be stable. The other comparison states were either increasing or decreasing. Missouri and South Carolina, states with the lowest state excise tax rates, appeared to have increasing prevalence rates. Minnesota and New Jersey, states with higher excise tax rates, appeared to have declines in prevalence rates.
The figure above illustrates the prevalence of smokeless tobacco use for middle school youth. Due to the low prevalence rates and the inconsistency in frequency of data collection it is difficult to draw strong conclusions from the figure.

The prevalence of smokeless tobacco use among Ohio middle school youth was 5.1% in 2000 which dropped to 2.1% by 2006. Rates were relatively stable in the comparison states of Michigan, Pennsylvania, Missouri, Minnesota, New Jersey and South Carolina.

Measure: Proportion of youth responding "1 day or more" to “During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?”

Michigan Youth Tobacco Survey: 2003, 2007 (2007 data was only collected for high school students. Surveys were completed in the spring of 2003 and 2007. Data were grouped with 2002 and 2006 data.)
Pennsylvania Youth Tobacco Survey: 2001, 2002, 200 (The 2001 survey was completed in the spring of 2001. Data were grouped with 2000 data. The YTS was not administered in 2004.)
Missouri Youth Tobacco Survey: 2003, 2005, 2007. The surveys were completed in the spring of their respective years. Data were grouped with 2002, 2004 and 2006 data. The YTS was not administered in 2000.)
Minnesota Youth Tobacco Survey: 2000, 2002, 2005. (The surveys were only administered to high school students. The 2005 survey was completed in the spring of 2005. Data were grouped with 2004 data. The YTS was not administered in 2006.)
New Jersey Youth Tobacco Survey: 1999, 2001, 2004, 2006 (The 1999 and 2001 surveys were completed in the fall of the respective years. Data were grouped with 2000 and 2002 data.)
South Carolina Youth Tobacco Survey: 2005, 2006. The 2005 survey was completed in the spring of 2005. Data were grouped with 2006 data. The YTS was not administered in 2000 and 2004.)
An increase in quit attempts or an expressed desire to quit smoking is associated with an increase in successful cessation. The figures below present the prevalence of quit attempts among high school smokers and proportion of those who want to quit for the years 2000 to 2006. Due to differences in surveys and surveillance not all of the states have comparable data for the years considered. Further, due to the small number of middle school current smokers, middle school data was not considered.

The overall pattern was a decline in the prevalence of quit attempts, with a few exceptions. In Ohio the prevalence dropped from 65.0% in 2000 to 57.0% in 2006, a decline of 8.0%. Similar declines were seen in Michigan, Missouri, Minnesota, and New Jersey.

However other states’ quit attempts increased or stayed nearly steady. Quit attempts in Pennsylvania went from 57.7% in 2000 to 58.0% in 2006 and quit attempts in South Carolina increased from 48.3% in 2004 to 58.9% in 2006.
The figure above illustrates the proportion of current high school smokers who want to quit smoking. There is a general pattern of decreasing prevalence rates. South Carolina was the only state that appeared to be on the increase.

In Ohio the prevalence of high school smokers who would like to quit increased from 59.0% in 2000 to 66.0% in 2004 and then fell to 48.0% in 2006. Declines were also seen in Michigan, Pennsylvania, Missouri, Minnesota, and New Jersey.

Measure: Proportion of young smokers responding “yes” to “During the past 12 months, did you ever try to quit smoking cigarettes?” and proportion of young smokers responding “yes” to “Do you want to stop smoking cigarettes?”

Michigan Youth Tobacco Survey: 2003, 2007 (2007 data was only collected for high school students. Surveys were completed in the spring of 2003 and 2007. Data was grouped with 2002 and 2006 data.)
Missouri Youth Tobacco Survey: 2003, 2005, 2007 (The surveys were completed in the spring of the respective years, data were grouped with 2002, 2004 and 2006 data.)
Minnesota Youth Tobacco Survey: 2000, 2002, 2005 (The surveys were only administered to high school students. The 2005 survey was completed in the spring of 2005, data was grouped with 2004 data.)
New Jersey Youth Tobacco Survey: 1999, 2001, 2004, 2006 (The 1999 and 2001 surveys were completed in the fall of their respective years, data was grouped with 2000 and 2002 data.)
Taxes on cigarettes can be levied at the federal, state, county, or local level. The figure below presents the state excise tax rate for Ohio and six comparison states as well as the national average of all states’ excise taxes in 2007.

New Jersey and Michigan were chosen as comparison states because of the high cigarette tax level. In 2007 New Jersey levied $2.58 a pack and Michigan $2.00 a pack. Minnesota and Pennsylvania were chosen as comparison states because the tax rates are very similar to Ohio in 2007 ($1.25 a pack) at $1.23 and $1.35 a pack respectively.

The other two states have tax rates far below the national average of $1.06; Missouri levied $.17 a pack and South Carolina just $.07 a pack.

For the comparison states in the figure above New Jersey and Minnesota have the lowest adult cigarette smoking prevalence rates and Missouri, Ohio, Michigan and South Carolina have the highest rates.

In 2007 New Jersey levied $2.58 a pack and Michigan $2.00 a pack.
Cigarettes packs are often taxed at a different rate than other tobacco products. The table below describes the state excise tax for smokeless or chewing tobacco and cigars.

### State tax on other tobacco products (2008)

<table>
<thead>
<tr>
<th>State</th>
<th>Smokeless (Chewing) Tax</th>
<th>Cigar Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ohio</td>
<td>17% wholesale price</td>
<td>17% wholesale price</td>
</tr>
<tr>
<td>Michigan</td>
<td>32% wholesale price</td>
<td>32% wholesale price</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Missouri</td>
<td>10% manufacturer's price</td>
<td>10% manufacturer’s price</td>
</tr>
<tr>
<td>Minnesota</td>
<td>70% wholesale price</td>
<td>70% wholesale price</td>
</tr>
<tr>
<td>New Jersey</td>
<td>30% manufacturer's price</td>
<td>30% manufacturer's price</td>
</tr>
<tr>
<td>South Carolina</td>
<td>5% manufacturer's price</td>
<td>5% manufacturer's price</td>
</tr>
</tbody>
</table>

Pennsylvania is the only state in the US to have no tax on smokeless or cigar products.

South Carolina and Missouri have low tax rates for smokeless and cigar tobacco products. South Carolina and Missouri also had the lowest tax rate for cigarettes and among the highest prevalence rates of cigarette smoking and use of other tobacco products.

Of the comparison states Minnesota has the highest tax rate for both cigars and smokeless tobacco. New Jersey and Michigan also have relatively high rates of taxes for other tobacco products at 30% of the manufacturer's price and 32% of the wholesale price respectively.

Measure: State and federal excise tax per pack of cigarettes. Taxes are generally levied in mills per cigarette. Each mill equals 1/10th of a cent. For a tax per cigarette, multiply the number of mills times 10 and then multiply that number by the number of cigarettes in a pack (20). The national average is the average excise tax across all 50 states and the District of Columbia. Tax on non-cigarette products is a percentage of wholesale/manufacturer’s price. Manufacturer's (Mfr.) Price is the price charged to wholesalers/distributors by the tobacco company that makes the product. Wholesale (W/S) Price is either the price charged to retailers by the wholesalers/distributors.


An increase in the state tax revenue from cigarette sales provides an indication of an increase in the state excise tax for cigarettes. In the absence of a tax increase, an increase in the tax revenue would be a sign of increased consumption of cigarettes and therefore an increase in the prevalence of tobacco use.

In 2000 the national average of state tax revenue was $163 million. This figure increased 68% to $274 million by 2006. Except for South Carolina and Missouri, all the states increased the state tax revenue at least once during the years 2000 to 2006. New Jersey increased the state excise tax three times during that time period.
Between 2000 and 2006, Ohio’s annual gross tax revenue increased from $271 million to more than one billion, an increase of more than 270%. No other state saw an increase as dramatic as Ohio.

The next largest increase in annual gross tax revenue was Pennsylvania which increased from $334 million in 2000 to more than $1 billion in 2006, more than a 200% increase.

Minnesota had a relatively low annual gross tax revenue as compared to other comparison states. However, despite the low revenue amounts, Minnesota increased 121%, from $177 million a year in 2000 to $391 million in 2006.

South Carolina was practically steady at $28 million a year in 2000 and $29 million in 2006. Missouri actually saw a decline in revenue of 4% from $107 million in 2000 to $103 in 2006.

At the end of fiscal year 2006 four of the states included in this report had similarly high levels of annual tax revenue. Michigan, Pennsylvania, Ohio, and New Jersey each had annual revenue of more than $1 billion per year.

The gap between these three states and the other states included in the figure is partially due to differences in population sizes, such as in the case of Ohio and Pennsylvania, and also due to differences in excise tax rates, such as Michigan and New Jersey which had state excise tax rates about $2.00 in 2006.

Michigan, Pennsylvania, Ohio, and New Jersey each had annual revenue of more than $1 billion per year in 2006.

Measure: The annual gross tax revenue from cigarette sales in dollars. Data are based on fiscal years ending June 30. The national average is the average annual gross tax revenue from cigarette sales across all 50 states and the District of Columbia.

Despite the marketing regulations of the Master Settlement Agreement, tobacco companies continue to spend significant amounts of money on marketing in the United States. The figure below presents marketing expenditures, in millions of dollars, for Ohio and six comparison states in 2005.

In 2005 the tobacco industry spent more than $700 million dollars in marketing expenditures in Ohio, significantly more than any of the comparison states.

In descending order the expenditures per state were $553.5 million in Pennsylvania, $423.5 million in Missouri, $415.9 million in Michigan, $280.3 million in South Carolina, $237.9 million in Minnesota, and finally $231.2 million in New Jersey.

In 2005 the tobacco industry spent significantly more on marketing in Ohio than any of the comparison states.
When viewed per capita the highest marketing expenditures in 2004 were in Missouri, at $73 per capita, and South Carolina at $66 per capita. Ohio was not far behind at $63 per capita.

The next highest states were Michigan ($41 per capita), Pennsylvania ($45 per capita), and Minnesota ($47 per capita). New Jersey, at $27 per capita, was almost half that amount of the next closest of Minnesota.

Measure: State-specific estimates on how much the tobacco industry spends on marketing in each state based on the number of cigarette packs sold in each state as a percentage of total nationwide sales. Per capita estimates were calculated by dividing the annual tobacco industry marketing expenditures by the state population in 2005.

When viewed together, the indicators in this supplement report demonstrate that the demographic make-up of a state’s population and regional political forces, the level tobacco prevention and control funding, and the state cigarette excise tax rate has an influence on tobacco use. States with a history of tobacco farming and less political support for tobacco prevention and control tend to have worse indicators in areas like youth tobacco use prevalence. States with consistently higher levels of tobacco prevention and control funding generally have larger declines in adult and youth tobacco use prevalence over time. Finally, increases in state cigarette excise tax rates have been shown to influence prevalence rates such that states with higher excise tax rates have lower tobacco use prevalence rates. The challenge for public health officials, policy planners, and tobacco control partners is to make the case for the importance of tobacco prevention and control given the limitations in surveillance.
Behavioral Risk Factor Surveillance System (BRFSS): a state-based system of health surveys, conducted over the telephone, collecting information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. The core BRFSS survey is conducted in every state, however each state can choose to conduct the supplemental BRFSS survey that measures additional health behaviors of interest to each state. National BRFSS estimates include those residing in the 50 states and the District of Columbia and other territories like Puerto Rico, Guam and the U.S. Virgin Islands. National BRFSS estimates exclude the U.S. Armed Forces overseas and civilian U.S. citizens whose usual place of residence is outside the United States. Website: http://www.cdc.gov/brfss/

Campaign for Tobacco-Free Kids: a 501(c)(3) non-profit organization that aims to reduce tobacco use and its consequences in the United States and around the world by changing public attitudes and public policies on tobacco. The Campaign for Tobacco-free Kids provides fact sheets and special reports on state and national tobacco control indicators. Website: http://www.tobaccofreekids.org

Centers for Disease Control and Prevention (CDC) State Tobacco Activities Tracking and Evaluation (STATE) System: an electronic data source containing state-level data on tobacco use prevention and control. The STATE System integrates many data sources to provide a comprehensive summary of the data. The STATE System was developed by the Centers for Disease Control and Prevention in the Office on Smoking and Health (OSH), National Center for Chronic Disease Prevention and Health Promotion. Website: http://apps.nccd.cdc.gov/statesystem

Ohio Adult Tobacco Survey (ATS): The Ohio Adult Tobacco Survey is a telephone based survey that collects detailed data regarding tobacco use and cessation, tobacco-related knowledge, exposure to second-hand smoke, and opinions regarding smoke-free environments. The survey is supported by the Ohio Tobacco Prevention Foundation (OTPF) and the Ohio Department of Health (ODH) and has been conducted from 2003 to 2008. Website: http://www.odh.ohio.gov/

Ohio Pregnancy Risk Assessment Monitoring System (PRAMS): a population-based survey that asks about maternal behaviors and experiences before, during and after a woman’s pregnancy and during the early infancy of her child. PRAMS was developed by the Centers for Disease Control and Prevention in 1987. Ohio has participated in PRAMS since April 1999. Findings are used to develop and assess public health programs and policies to reduce adverse pregnancy outcomes. PRAMS staff collect data through questionnaires mailed to approximately 200 new mothers each month. Website: http://www.odh.ohio.gov/odhPrograms/his/prams/prams1.aspx

Ohio Youth Tobacco Survey (OYTS): conducted by the Ohio Department of Health, the Ohio Youth Tobacco Survey collects information about tobacco from youth in Ohio. The OYTS was initially executed in 2000 and has been implemented again in 2002, 2004, and 2006. The survey was administered to high school students under the age of 17. Website: http://www.odh.ohio.gov/odhPrograms/hprr/tob_risk/tob_risk1.aspx
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>100% Tobacco-Free</strong></td>
<td>No tobacco use by anyone, anywhere, at any time.</td>
</tr>
<tr>
<td><strong>Adult</strong></td>
<td>Persons aged 18 years or older.</td>
</tr>
<tr>
<td><strong>Cigarillo</strong></td>
<td>A short, narrow cigar slightly smaller in size than a cigarette, wrapped in whole-leaf tobacco.</td>
</tr>
<tr>
<td><strong>Excise Tax Revenue</strong></td>
<td>State-appropriated funds resulting from the state's excise tax on tobacco. In some cases, states have dedicated a portion of this excise tax revenue to serve as a stable funding stream for state tobacco control programs.</td>
</tr>
<tr>
<td><strong>High School Youth</strong></td>
<td>Students who were in 9th, 10th, 11th or 12th grade at the time of the survey.</td>
</tr>
<tr>
<td><strong>Middle School Youth</strong></td>
<td>Students who were in 6th, 7th or 8th grade at the time of the survey.</td>
</tr>
<tr>
<td><strong>Per Capita Consumption</strong></td>
<td>The average amount of a product used per person.</td>
</tr>
<tr>
<td><strong>Secondhand Smoke</strong></td>
<td>A mixture of the smoke given off by the burning end of a cigarette, pipe or cigar, and the smoke exhaled from the lungs of smokers.</td>
</tr>
<tr>
<td><strong>Smoking Prevalence</strong></td>
<td>Current estimate of smoking at any point in time, commonly used to track tobacco prevention and cessation efforts.</td>
</tr>
</tbody>
</table>