Nicotine & Mississippi

12 October, 2017
Tobacco & Nicotine Use in Mississippi
12th graders and 11th graders are more likely to be current smokers than 9th graders.

High school Caucasians are more likely to be current smokers than African-Americans.
current cigarette smoking
MS PUBLIC MIDDLE SCHOOLS

1998: 20.6%
1999: 23.0%
2000: 18.1%
2002: 11.9%
2003: 11.0%
2004: 12.0%
2006: 8.4%
2008: 8.9%
2009: 7.2%
2010: 5.7%
2011: 5.8%
2012: 5.8%
2013: 4.1%
2014: 4.7%
2015: 3.0%
2016: 3.8%
**Current Smokeless Tobacco Use**

**Mississippi Public Schools**

High School Males and Caucasians are more likely to currently use smokeless tobacco than females and African-Americans.

- In 2016, 9,536 Mississippi public high school students were current SLT users.
- Since 1998, the prevalence of current SLT use has not changed significantly.
- In the past year, the prevalence of current SLT use has not changed significantly.

Middle School Males and Caucasians are more likely to currently use smokeless tobacco than females and African-Americans.

- In 2016, 4,286 Mississippi public middle school students were current SLT users.
- The prevalence of current SLT use has decreased by 58% since 1998, leading to 6,001 fewer young SLT users.
- In the past year, the prevalence of current SLT use has not changed significantly.
Current electronic cigarette use
Mississippi Public Schools

High Schools (2010-2016)

- High school Caucasians are more likely to currently use e-cigarettes than African-Americans.

Significant Demographic Differences
Adult Cigarette Use

• Per capita consumption, 2016
  • Mississippi ranks 12th
  • 59.2 per capita
    • Down from 107.0 in 1998

• Prevalence of current cigarette smoking, Mississippi ranks 5th
  • 22.7%
    • Down from 25.9% in 2011
Current Cigarette Smoking - BRFSS US vs. MS

Percent Current Smokers

- National (States & DC)
- MS

Year

2012  2014  2016  2018

0.00%  10.00%  20.00%  30.00%
Current E-Cigarette Use

Sources: National and Mississippi Social Climate Survey of Tobacco Control
current e-cigarette use

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>overall</td>
<td>6.0%</td>
</tr>
<tr>
<td>male</td>
<td>8.4%</td>
</tr>
<tr>
<td>female</td>
<td>3.9%</td>
</tr>
<tr>
<td>black</td>
<td>2.4%</td>
</tr>
<tr>
<td>white</td>
<td>7.3%</td>
</tr>
<tr>
<td>18-24</td>
<td>14.4%</td>
</tr>
<tr>
<td>25-44</td>
<td>9.6%</td>
</tr>
<tr>
<td>45-64</td>
<td>2.7%</td>
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<tr>
<td>65+</td>
<td>0.0%</td>
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<tr>
<td>less than HS deg</td>
<td>7.4%</td>
</tr>
<tr>
<td>HS degree or GED</td>
<td>5.8%</td>
</tr>
<tr>
<td>some college</td>
<td>6.1%</td>
</tr>
<tr>
<td>college degree</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

Source: 2016 Mississippi Social Climate Survey of Tobacco Control
Tobacco Control Policies
Raising the age of sale for tobacco to 21 in Mississippi

75% of Mississippi Adults support this policy

Cities and states across the United States have raised or are considering raising the age of purchase for tobacco to 21.

Public Support among MS Adults {for Raising Age of Purchase to 21}

Overall: 74.9%
18-20 Year Olds: 48.5%
Current Smoker: 63.2%
Former Smoker: 70.1%
Never Smoker: 80.3%
Independent: 67.6%
Democrat: 82.7%
Republican: 72.9%

This policy decreases teen smoking by making it harder to get tobacco products for minors.

Raising the age of purchase is effective because it puts legal purchasers outside high school students’ social networks.

2017 • Mississippi Tobacco Data
Tobacco21 (as of 29 Sept 2017)

• 260 municipalities have done this
• Across 18 states and the District of Columbia
• California
• Hawaii
• Applies to 22% of US population
State Tobacco Taxes

- Cigarettes
  - $0.68 per pack, national average is $1.71, Mississippi ranks 39th
- Cigars: 15% of manufacturer price
- Smokeless Tobacco: 15% of manufacturer price
- E-Cigarettes & Hookah:
  - No tax
The Mississippi (Tax) Experience

July 2016

- The Mississippi Legislature increased the state cigarette tax from 18 cents to 68 cents on May 15, 2009.
- The average state cigarette tax is currently $1.63 and Mississippi's tax ranks 39th.

Packs Sold | 2008-2015

<table>
<thead>
<tr>
<th>Year</th>
<th>Packs Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>273,100,000</td>
</tr>
<tr>
<td>2009</td>
<td>263,100,000</td>
</tr>
<tr>
<td>2010</td>
<td>207,400,000</td>
</tr>
<tr>
<td>2011</td>
<td>201,600,000</td>
</tr>
<tr>
<td>2012</td>
<td>198,200,000</td>
</tr>
<tr>
<td>2013</td>
<td>199,800,000</td>
</tr>
<tr>
<td>2014</td>
<td>183,100,000</td>
</tr>
<tr>
<td>2015</td>
<td>187,300,000</td>
</tr>
</tbody>
</table>

Revenues Collected | 2008-2015

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>$49,153,000</td>
</tr>
<tr>
<td>2009</td>
<td>$47,920,000</td>
</tr>
<tr>
<td>2010</td>
<td>$141,064,000</td>
</tr>
<tr>
<td>2011</td>
<td>$137,044,000</td>
</tr>
<tr>
<td>2012</td>
<td>$134,744,000</td>
</tr>
<tr>
<td>2013</td>
<td>$129,739,000</td>
</tr>
<tr>
<td>2014</td>
<td>$124,476,000</td>
</tr>
<tr>
<td>2015</td>
<td>$127,365,000</td>
</tr>
</tbody>
</table>

These data from tax records clearly demonstrate that following the 2009 increase in the state cigarette tax, the number of packs of cigarettes sold in Mississippi decreased by more than 30%, while tax revenue from cigarette sales almost tripled.
What if Mississippi Raised the State Cigarette Tax by $1.50?

- $166.8 million in new revenue
- 4,700 fewer young adult smokers
- 26,500 adult smokers would quit

- $33.8 million in new revenue if the state also raised other tobacco product tax rates to parallel new levels
There are 143 Smoke-Free Municipalities and (3) Smoke-Free Counties in Mississippi. Of which 103 have ordinances that include restrictions on electronic cigarettes.

Partial Smoke-free Communities in Mississippi:
- August 6, 1996 | West
- October 2007 | Greenville
- November 15, 2007 | McComb
- May 1, 2008 | Gulfport
- July 31, 2008 | Walls
- January 6, 2010 | Columbus
- June 3, 2010 | Goodman
- October 5, 2010 | Rienzi
- June 2011 | Olive Branch
- June 6, 2012 | Vaiden
- July 3, 2014 | Gautier
- March 18, 2017 | Fulton

100% Smoke-free Communities in Mississippi
Updated: October 2017

MISSISSIPPI TOBACCO DATA
As of July 1, 2017, 138 municipalities in Mississippi have implemented comprehensive, smoke-free ordinances. These ordinances protect 32% of Mississippi.

If every Mississippi municipality passed a comprehensive smoke-free ordinance, only 55% of Mississippians would be protected. The rest live in rural areas outside of municipalities.

The only way to protect all Mississippians is to pass a state-wide comprehensive smoke-free law.

mstobaccodata.org
designed by: miranda robertson
2016 Mississippi Social Climate Survey of Tobacco Control

Support for Smokefree Air | March 2017

Results from the most recent Social Climate Survey demonstrate strong support for smoke-free air in Mississippi.

- More than three-quarters of Mississippi adults (75.2%) favor a state law prohibiting smoking in most indoor places, including workplaces, public buildings, offices, restaurants, & bars.
- Only 21.0% of Mississippi adults oppose a state law.
- 52.1% of smokers support a state law compared to only 42.9% who are opposed.
- Republicans (79.5%) and Democrats (75.5%) are equally supportive of a state law.

Would you favor or oppose a law in Mississippi prohibiting smoking in most public places, including workplaces, offices, restaurants, and bars?

- Favor a Smoke-Free Law: 75.2%
- Oppose a Smoke-Free Law: 21.0%
- Neither: 3.8%
Hospital Admissions, 2013-2016

Principal Diagnosis

Tobacco Related Diseases
- Acute Coronary Events
- Stroke
- Asthma
- COPD
- Pneumonia

Control Diseases
- Appendicitis
- Bowel Obstruction
- Acute Cholecystitis
Analyses

• Unit of analysis: County
• Predictor Variable: Does the county seat have a smoke-free ordinance?
• Outcome Variable: Rate of hospital admissions per 10,000 county residents
Hospital Admissions, 2016

Tobacco Related Admissions

• 173.1 per 10,000 adults in counties without a smoke-free ordinance in the county seat

• 151.2 per 10,000 adults in counties with a smoke-free ordinance in the county seat, p=.05
Control Variables

- Percent of county that has health insurance, ns
- Percent of county adults who smoke cigarettes, ns
- Ratio of primary care providers, ns
- Percent of county residents who graduated college, p<.05
- Median income, p<.05
- Percent of the county that is African American, ns
Hospital Admissions, 2013-2016

Control Admissions

• 17.9 per 10,000 adults in counties without a smoke-free ordinance in the county seat
• 16.4 per 10,000 adults in counties with a smoke-free ordinance in the county seat, ns
Control Variables

• Percent of county that has health insurance, ns
• Percent of county adults who smoke cigarettes, ns
• Ratio of primary care providers, ns
• Percent of county residents who graduated college, p<.05
• Median income, ns
• Percent of the county that is African American, ns
Emerging Issues

• E-cigarette regulations (or lack thereof)
• Heat-not-burn products
eCigs, Vapes, ENDS, & ANDS
Advanced Personal Vaporizers
Association Between Initial Use of e-Cigarettes and Subsequent Cigarette Smoking Among Adolescents and Young Adults

JAMA Pediatrics (Soneji et al, 2017)

- Odds ratio for subsequent cigarette smoking initiation was 3.62 (95% CI, 2.42-5.41) for ever vs never e-cigarette users
- Odds ratio for past 30-day cigarette smoking at follow-up was 4.28 (95% CI, 2.52-7.27) for past 30-day e-cigarette vs non-past 30-day e-cigarette users at baseline
IQOS

This changes everything.

heat not burn technology.
Figure 3  Cross Section of a Tobacco Stick

- Outer paper
- Hollow acetate tube (8 mm)
- Tobacco plug (12 mm)
- MPF (7 mm)
- PLA (18 mm)
- Tipping paper

Diameter max 7.42 mm

Heatstick total length 45 mm
For More Information

• Visit mstobaccodata.org