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**A Closer Look at Disparities in  
Tobacco Use Among Ohioans**

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Professor**

# Objectives of the Presentation

- To describe prevalence of tobacco use among subgroups of Ohio residents that include



- Medicaid subscribers
- People living in poverty
- People diagnosed with mental illness
- Pregnant women



- To discuss state level policy levers to assist these Ohio residents with tobacco cessation



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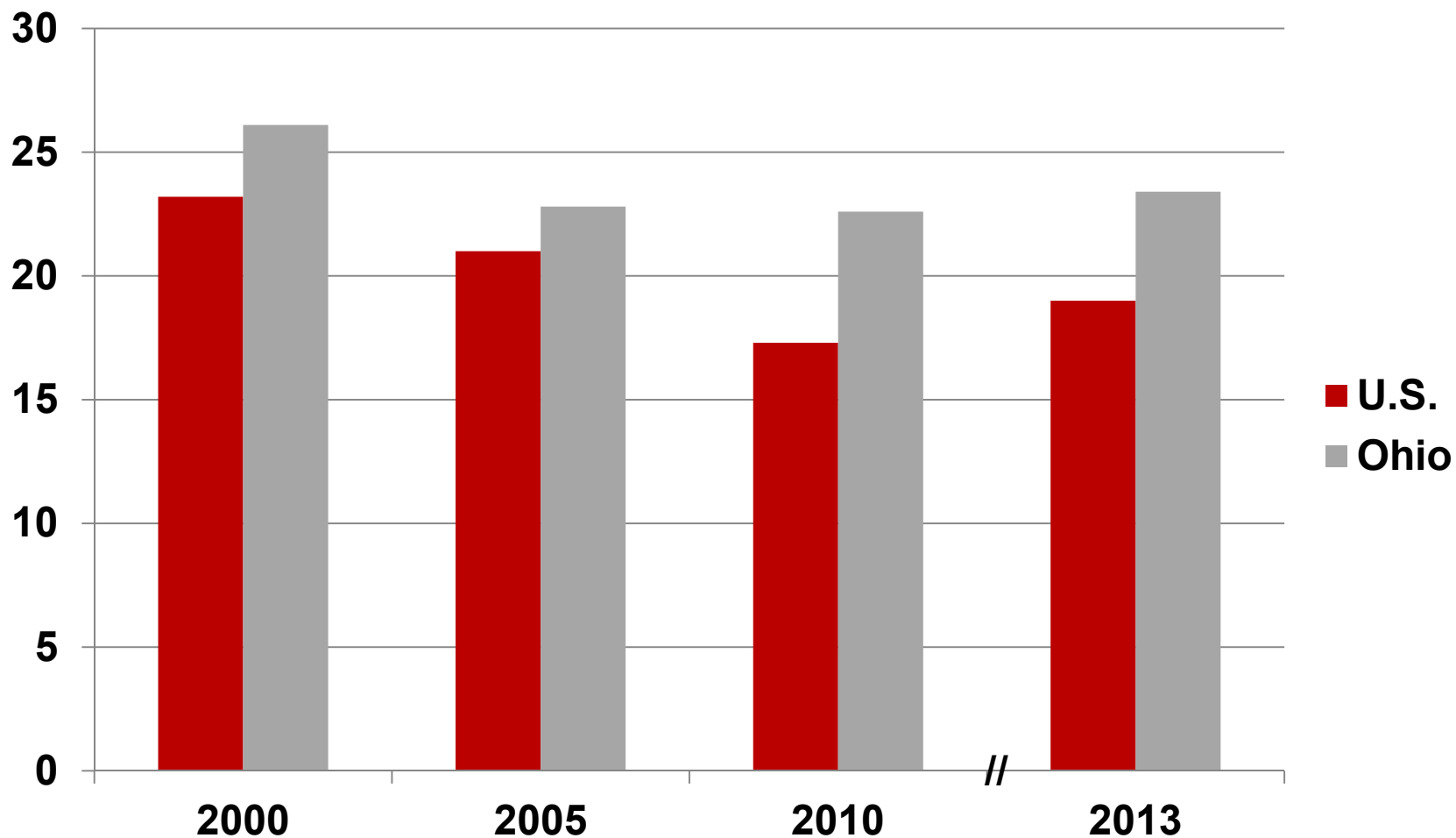
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# **Prevalence of tobacco use**

# Cigarette smoking is higher in Ohio adults

CDC 2014

Percent



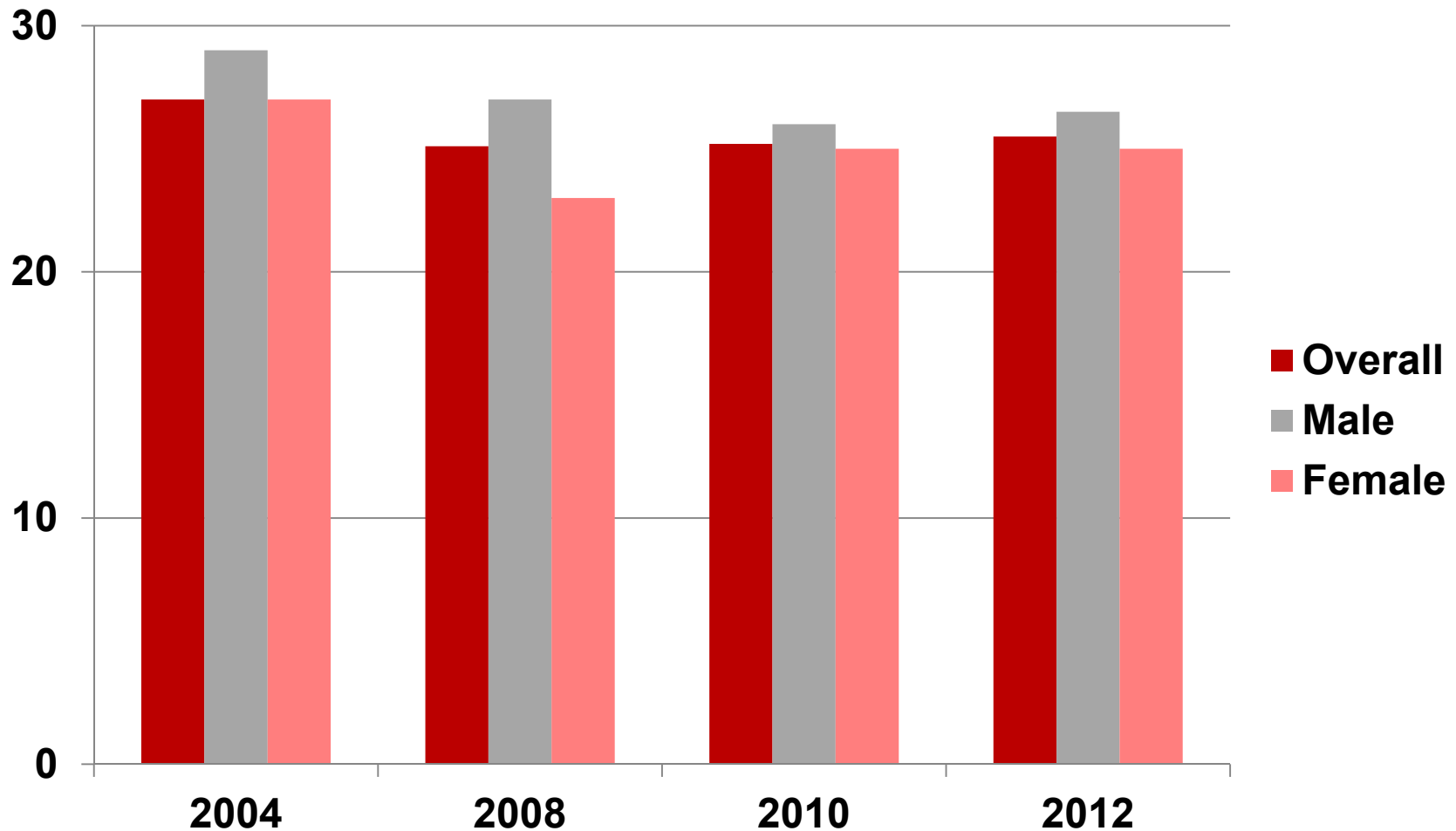
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# Smoking prevalence over time by gender in Ohio

Percent

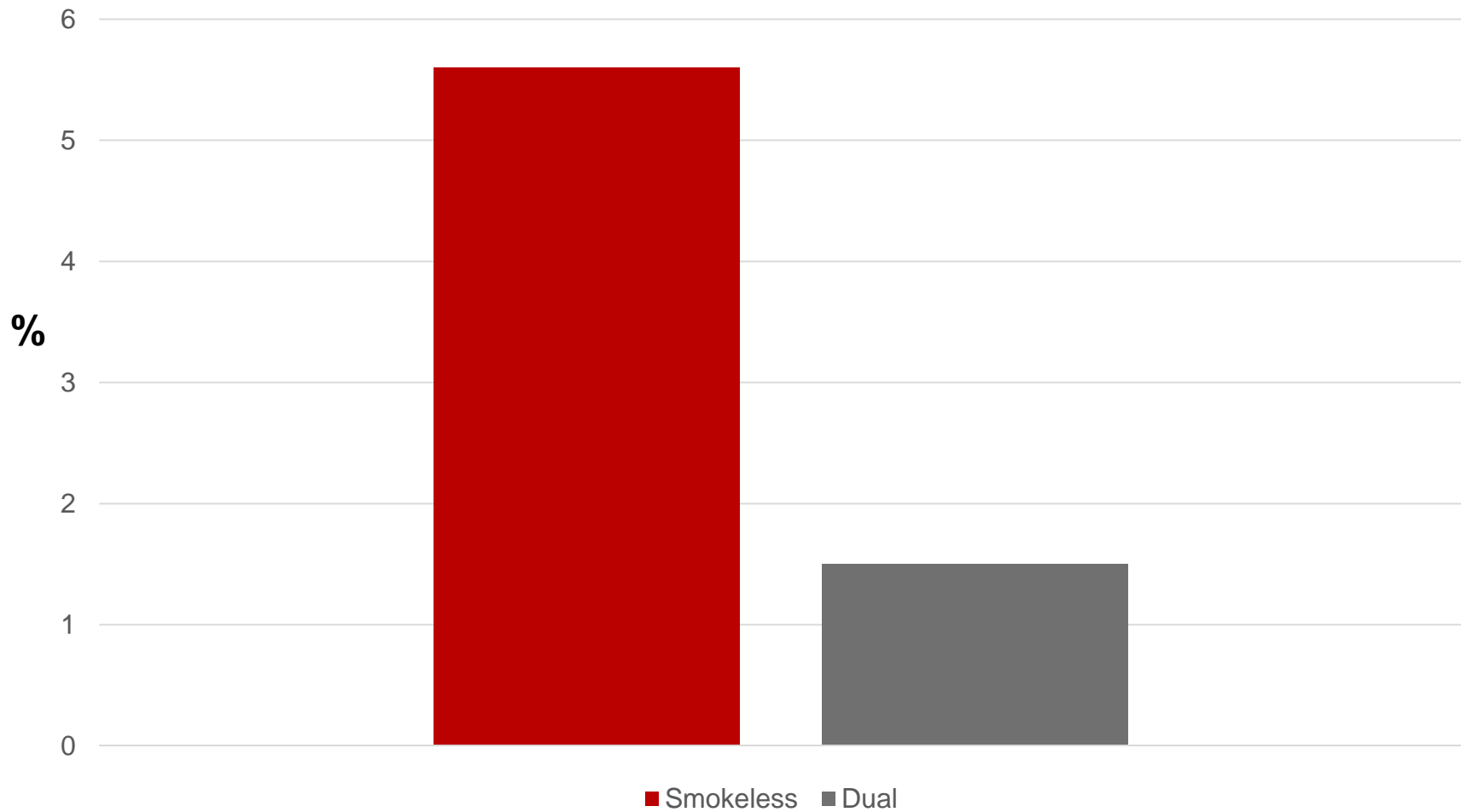
OMAS 2013



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# Smokeless tobacco and dual use prevalence in Ohio adult males

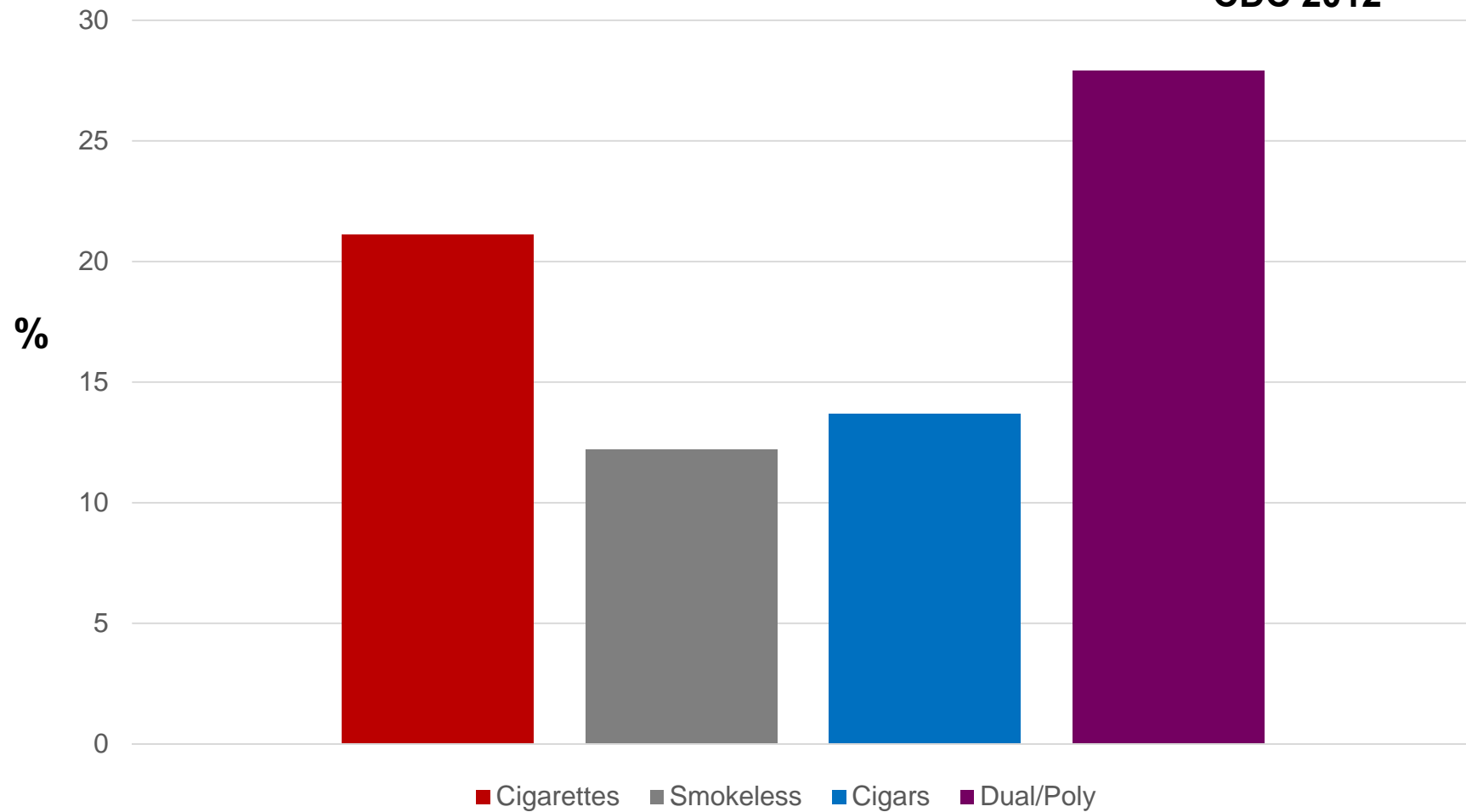


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# Youth Current Tobacco Use

CDC 2012



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# ***Four factors are consistently associated with smoking among adults in Ohio***

- **Insurance status**
- **Education**
- **Income**
- **Mental health**

**OMAS 2013**



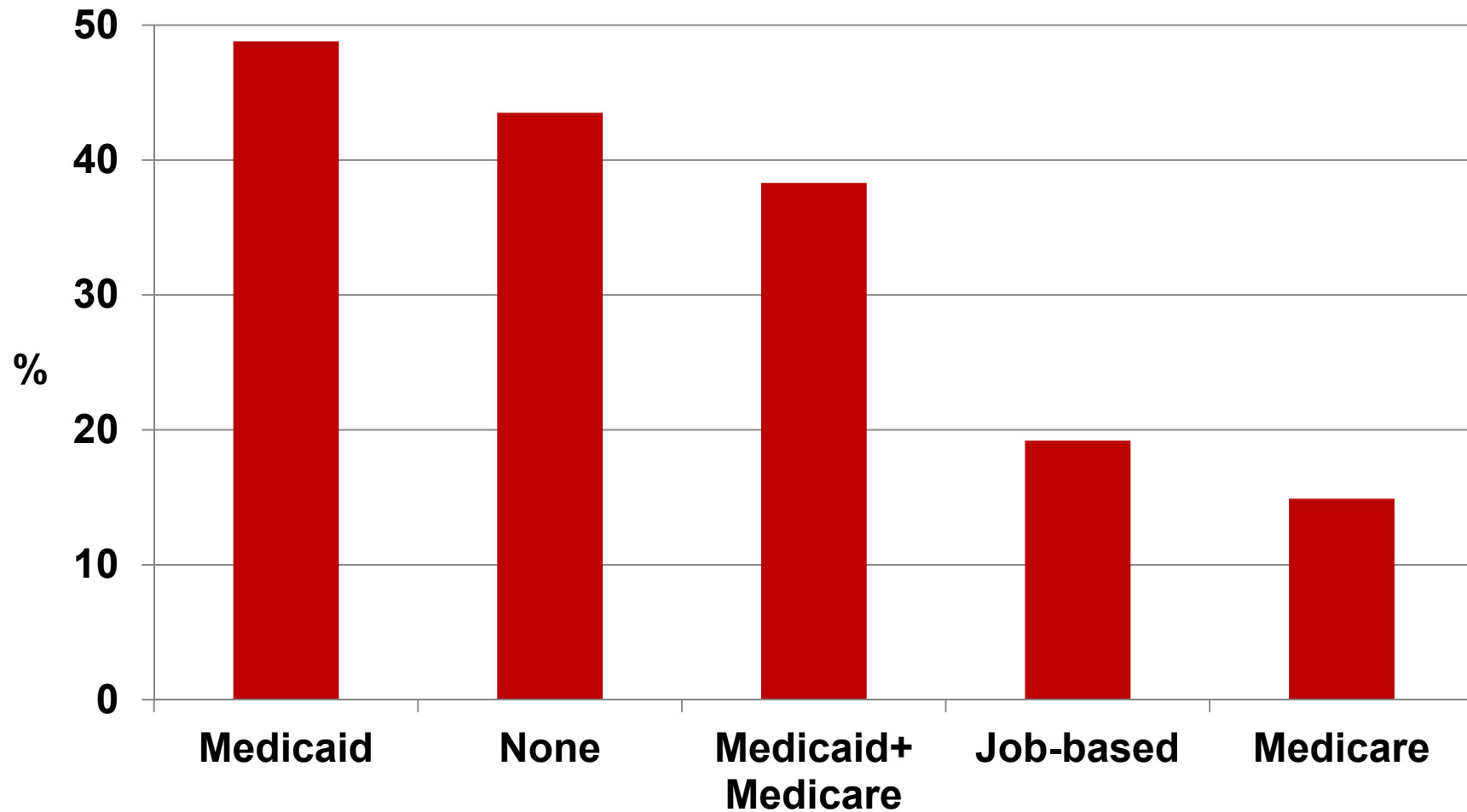
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# Current smoking according to *insurance status* in Ohio adults

OMAS 2013



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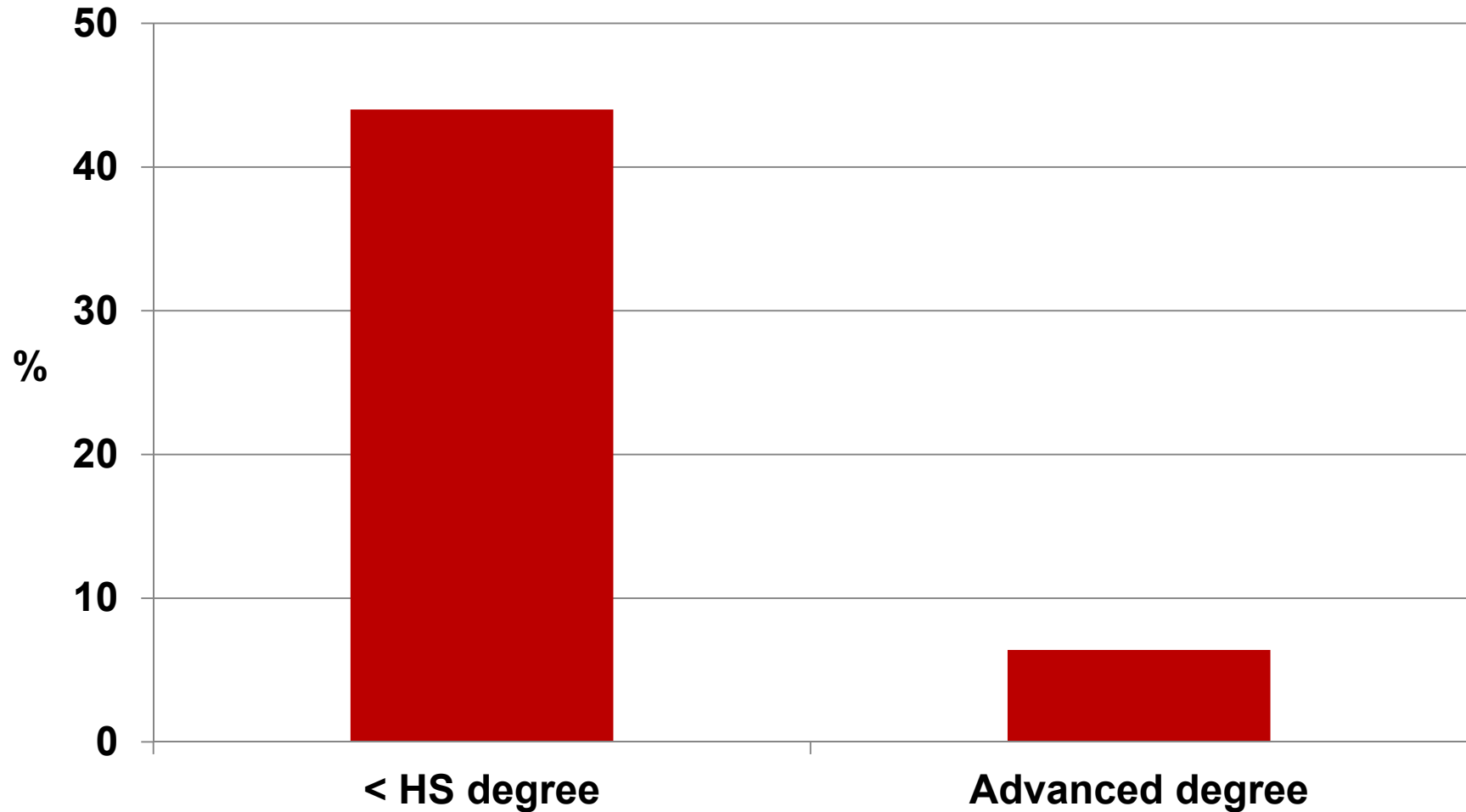
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# Smoking Prevalence in Medicaid Managed Care Service Regions

<b>Ohio Region</b>	<b>Medicaid Adults (%)</b>	<b>Non-Medicaid Adults (%)</b>
<b>Northwest</b>	<b>36.3</b>	<b>20.3</b>
<b>Northeast</b>	<b>41.8</b>	<b>21.7</b>
<b>Northeast Central</b>	<b>45.7</b>	<b>29.9</b>
<b>East Central</b>	<b>47.8</b>	<b>22.3</b>
<b>Central</b>	<b>51.7</b>	<b>21.2</b>
<b>West Central</b>	<b>43.8</b>	<b>24.6</b>
<b>Southwest</b>	<b>47.1</b>	<b>21.4</b>
<b>Southeast</b>	<b>50.4</b>	<b>32.6</b>

# Current smoking according to *education* among Ohio adults

OMAS 2013

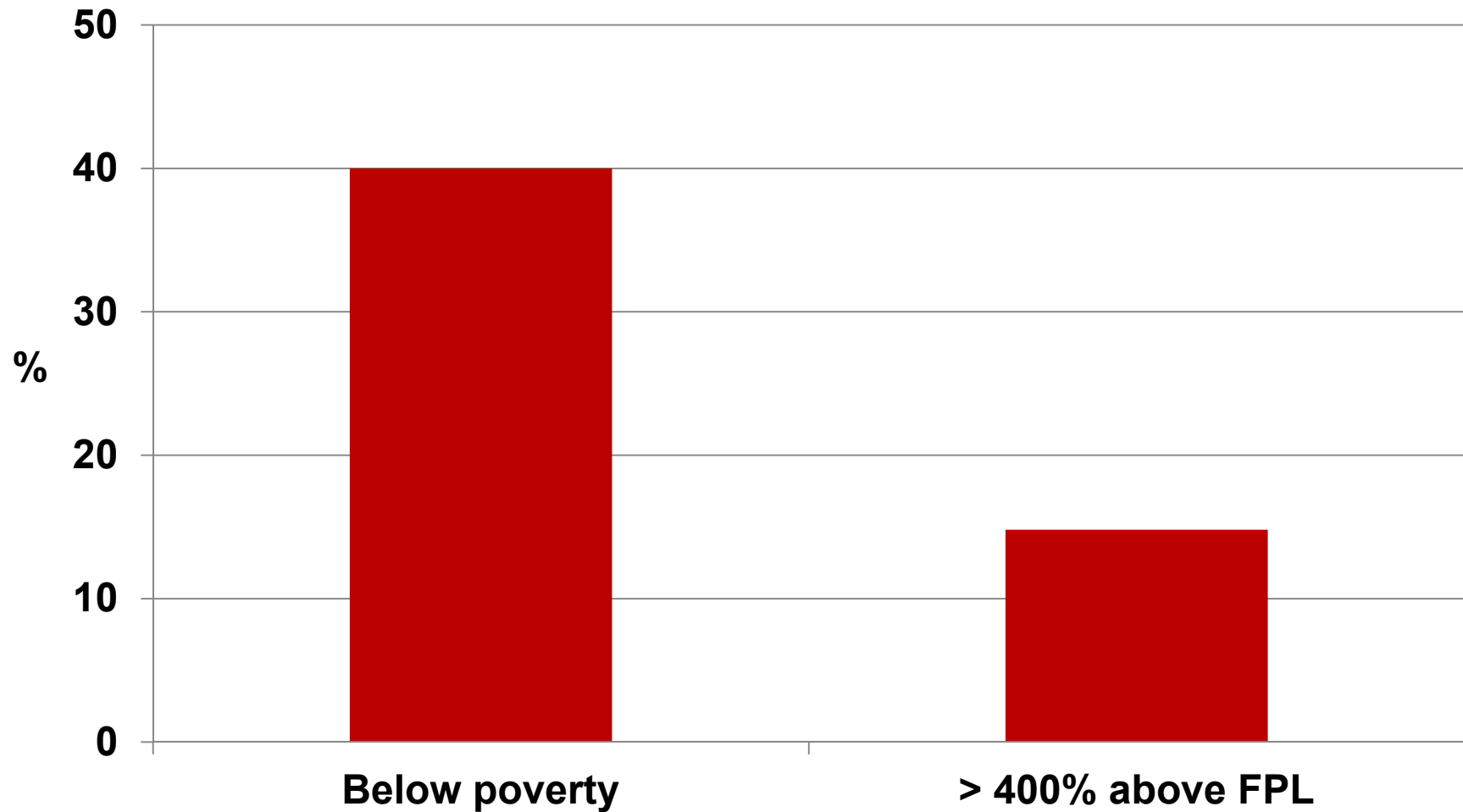


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# Current smoking according to *poverty level* among Ohio adults

OMAS 2013

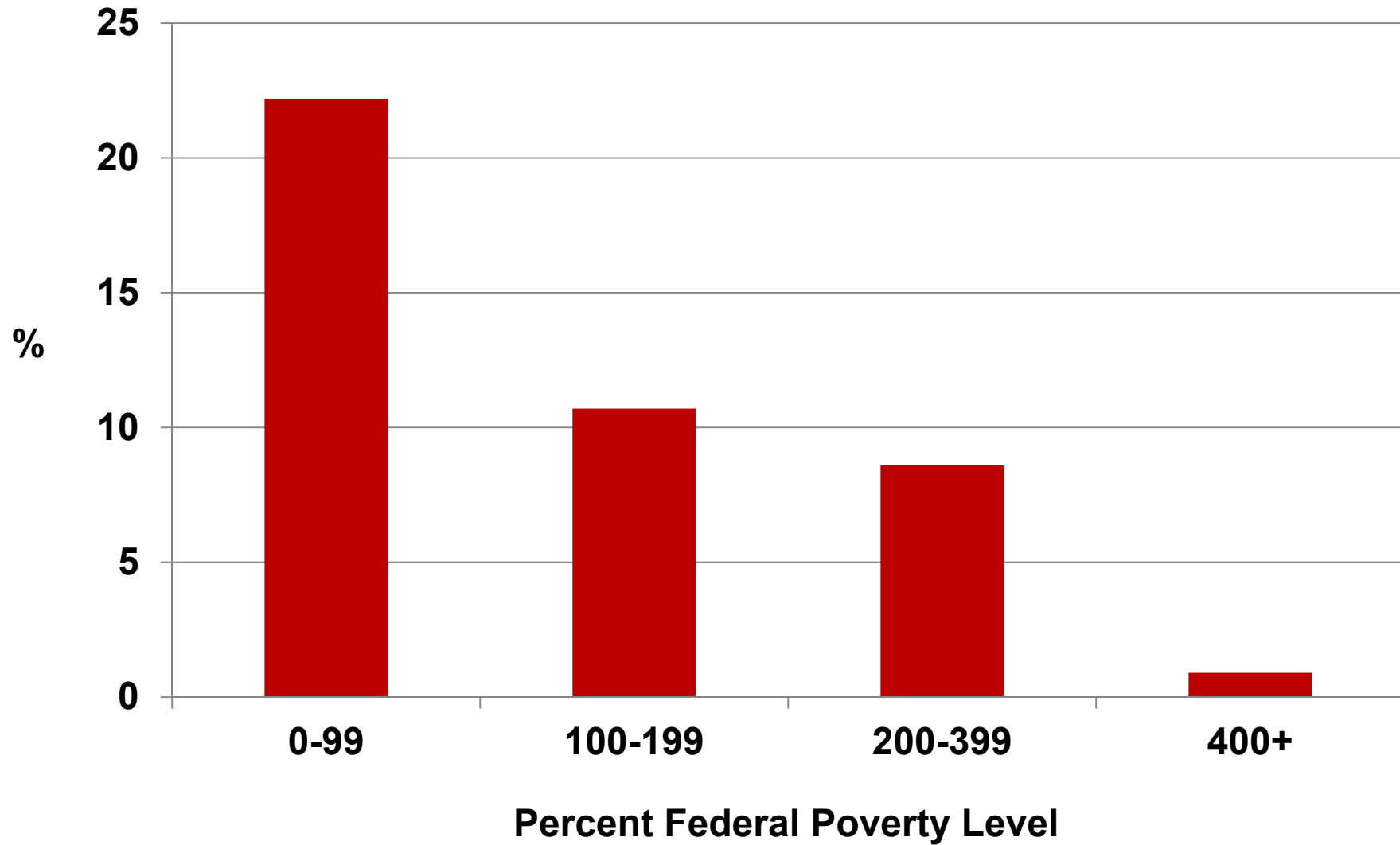


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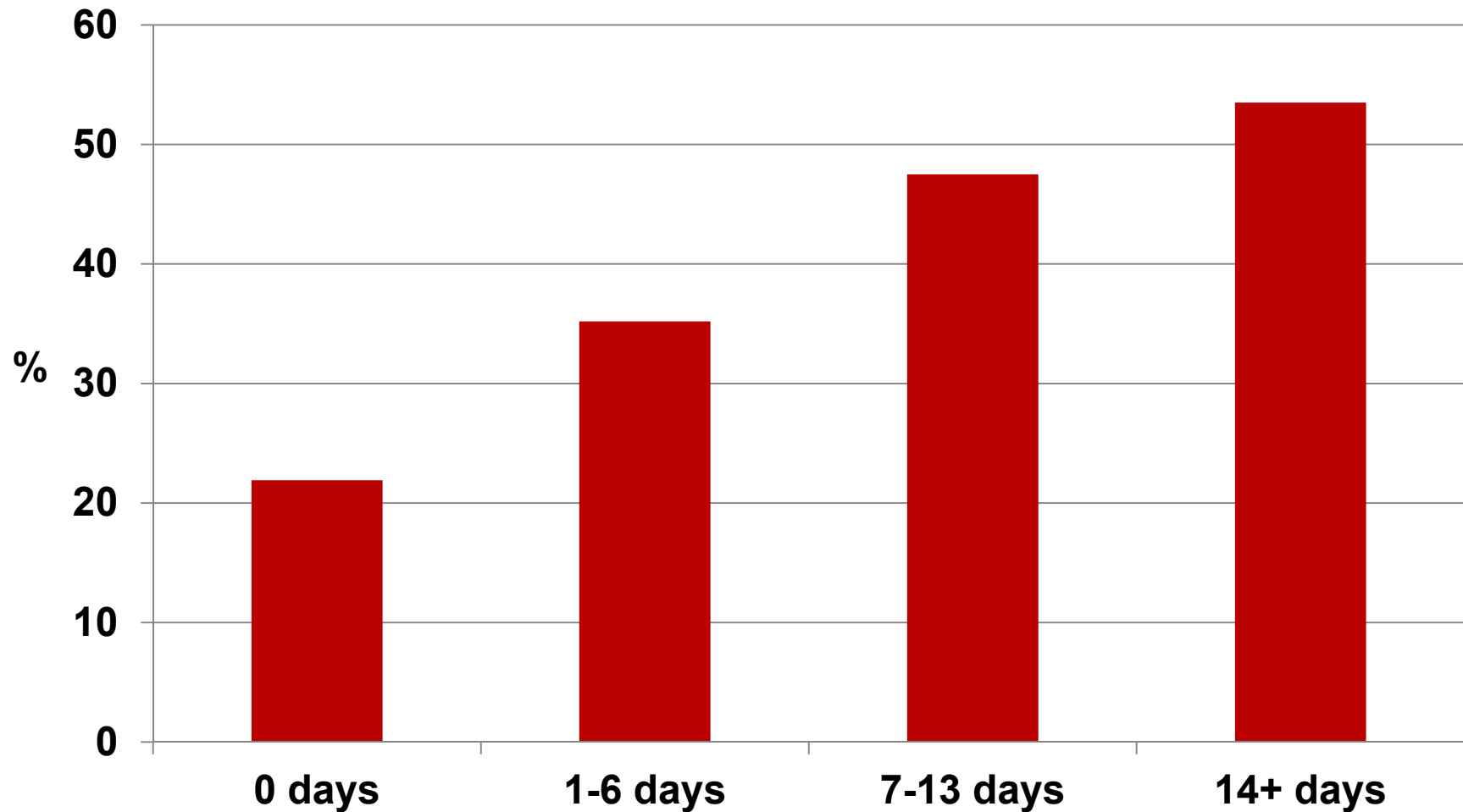
# Secondhand smoke exposure among children according to *poverty level*

OMAS 2013



# Current smoking according to number of *mentally distressed days* for past 30 days among Ohio adults

OMAS 2013

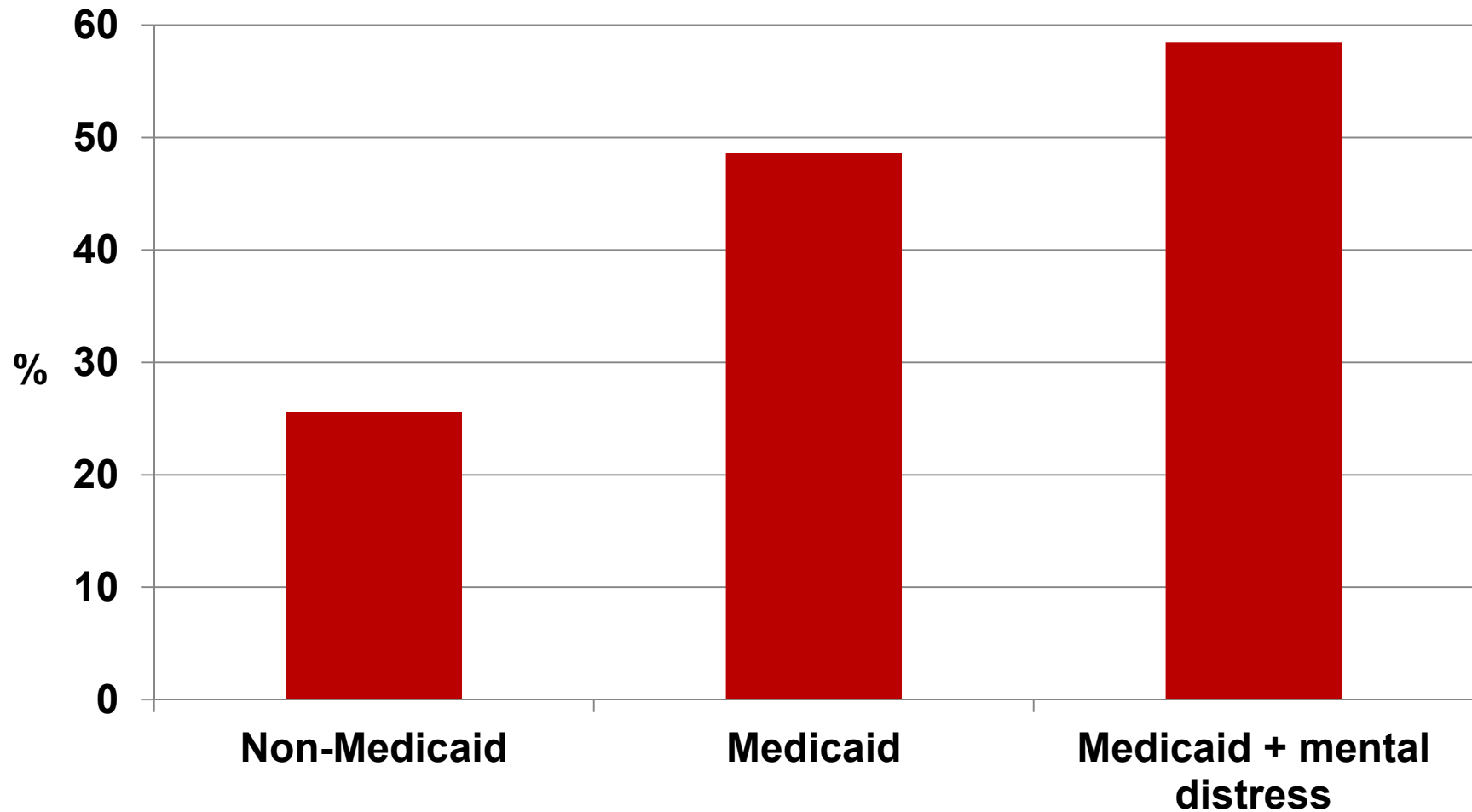


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# Current smoking according to *insurance status and mental distress* among Ohio adults

OMAS 2013

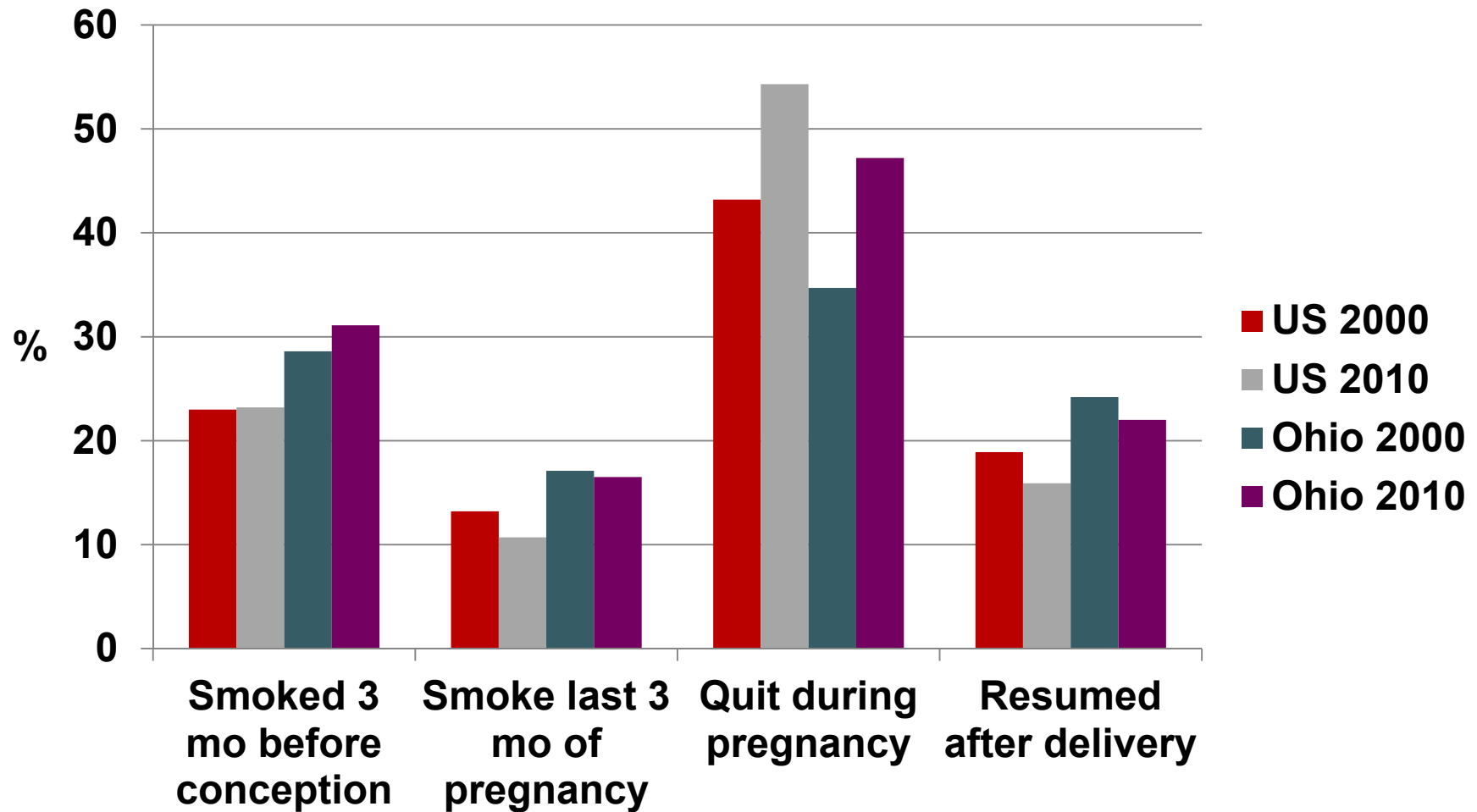


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# Cigarette smoking is higher in Ohio *pregnant women*

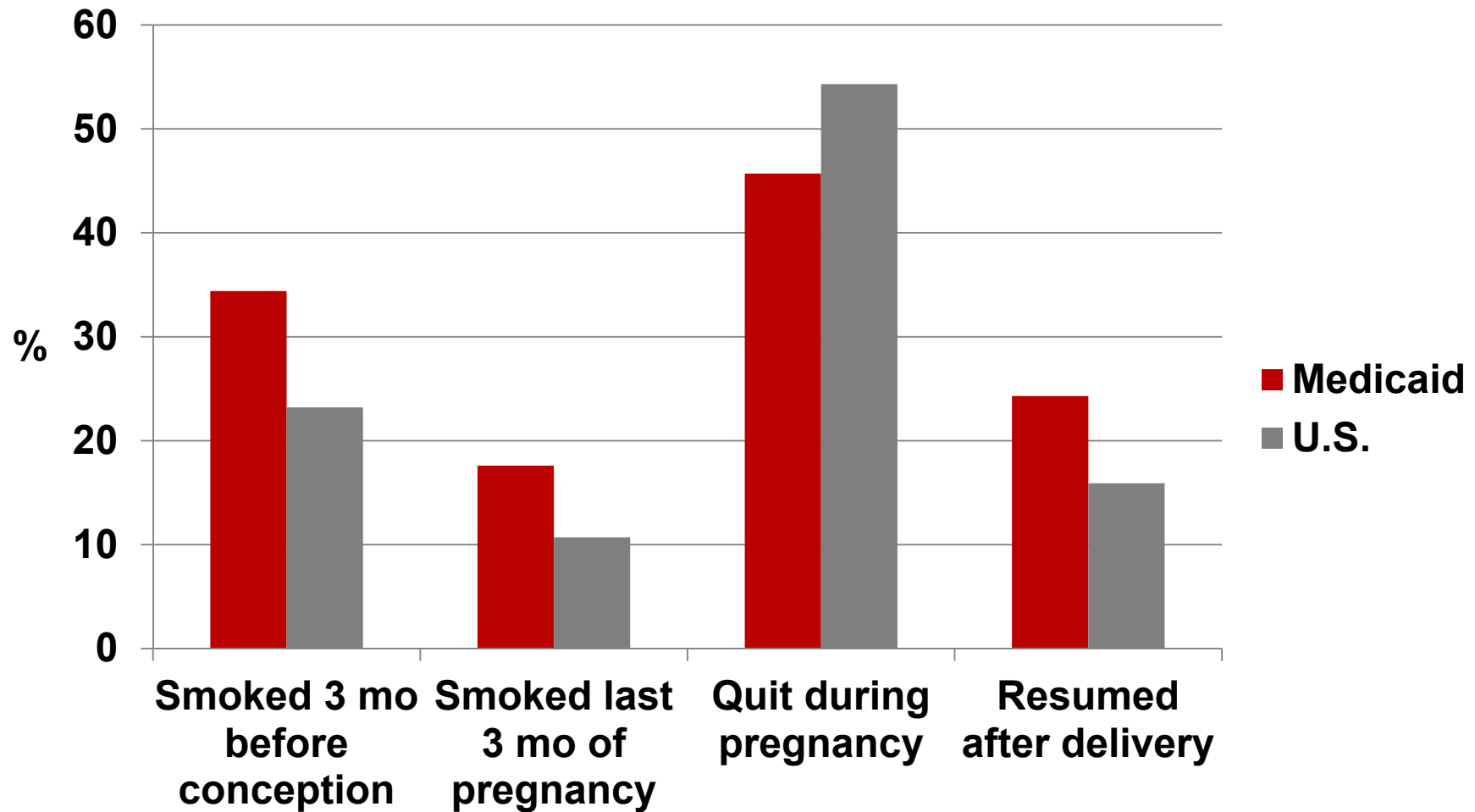
CDC PRAMS



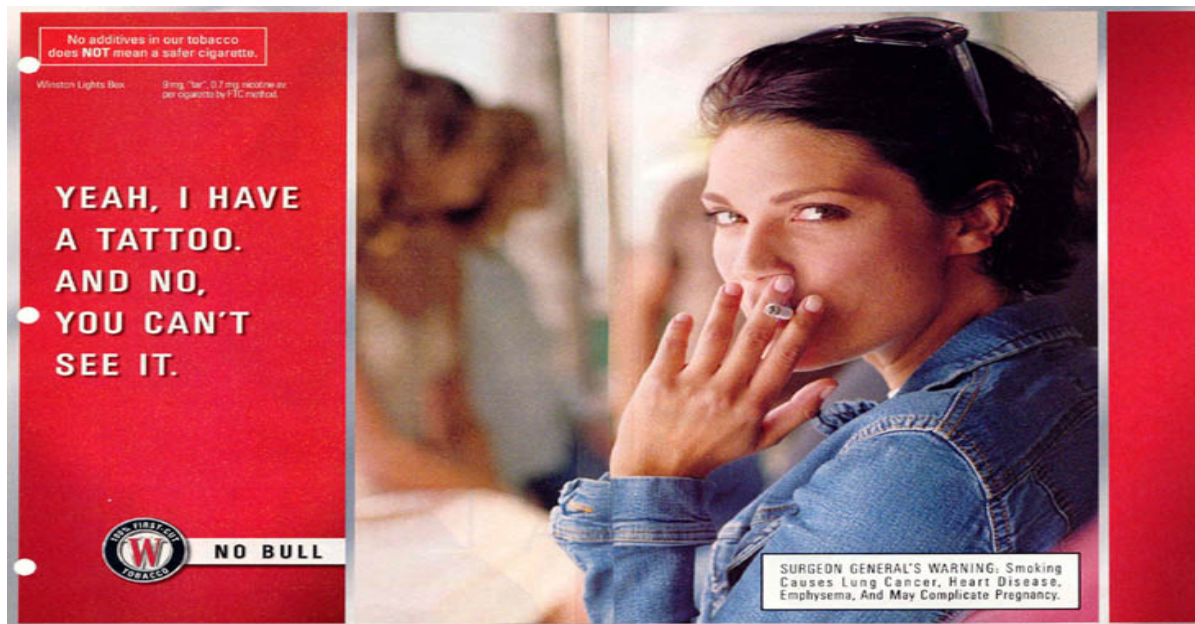


# Cigarette smoking is higher among *pregnant women with Medicaid insurance*: 2010

CDC PRAMS



# Social factors are related to tobacco use among Ohio women



# Social Characteristics of 570 Ohio Appalachian Women

*Sample: Adult women randomly selected from 14 primary care clinics in Ohio Appalachia; Non-pregnant; no history of cancer*

<b>Variable</b>	<b>Never Smoker</b>	<b>Former Smoker</b>	<b>Current Smoker</b>
<b># Participants (%)</b>	<b>297 (52.1)</b>	<b>117 (20.5)</b>	<b>156 (27.4)</b>
<b>% &lt; High School</b>	<b>4.0</b>	<b>12.0</b>	<b>12.8</b>
<b>% Unskilled labor</b>	<b>31.1</b>	<b>34.1</b>	<b>49.4</b>
<b>% Uninsured</b>	<b>11.1</b>	<b>12.3</b>	<b>24.4</b>

Wewers et al. 2012



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## Social Risk Factor Characteristics

Risk Factor	Never Smoker	Former Smoker	Current Smoker
% Low SEP (child)	48.8	64.7	68.6
% Low SEP (adult)	54.5	73.6	87.4
% CES-D $\geq$ 16	24.2	23.3	48.7
% Pregnant < age 20	29.0	40.0	52.3
% Single mother	6.1	11.9	12.9

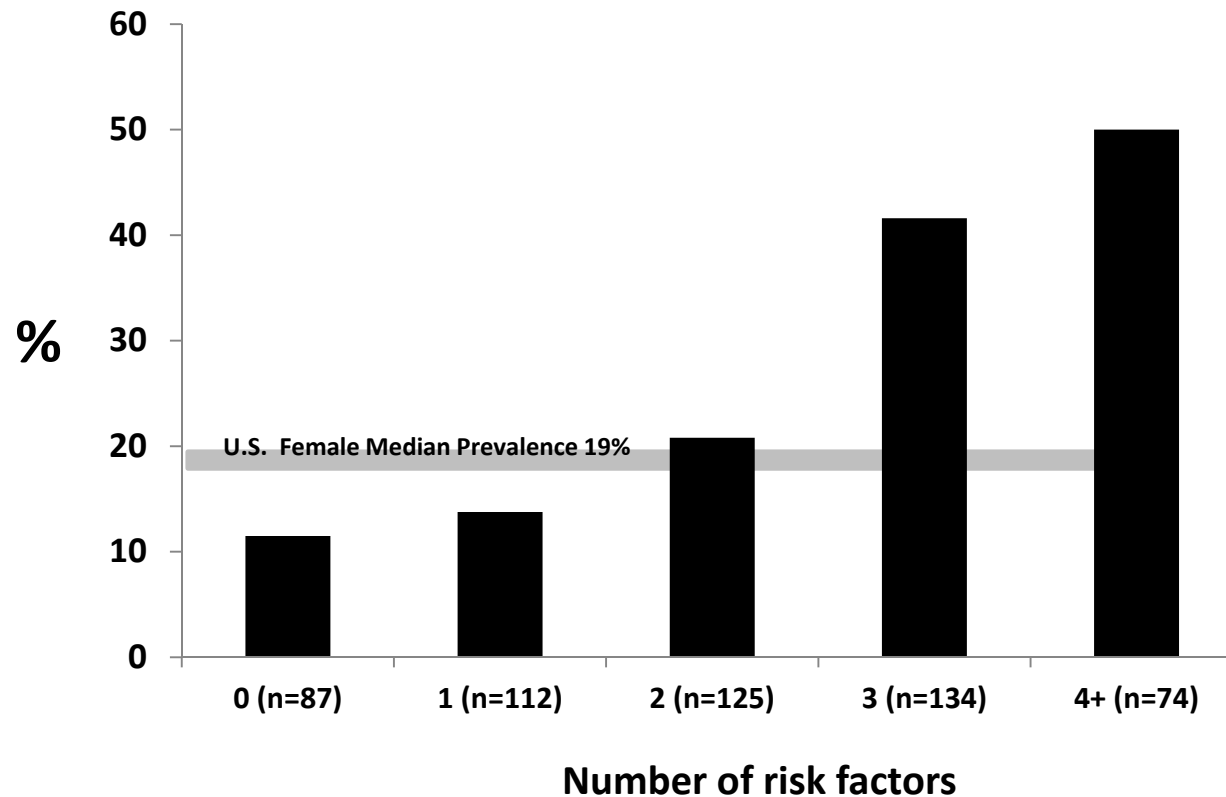
**Low Socioeconomic Position (child)**

**Lived with one parent only OR one parent < HS**

**Low Socioeconomic Position (adult)**

**$\leq$  HS; OR no health insurance; OR poverty/income ratio < 2**

# Prevalence of Current Smoking by Number of Risk Factors



**Risk factors: Low child SEP, Low adult SEP, Pregnant<20, CES-D $\geq$ 16, Single mom**

# **State level policy levers to assist Ohio residents with tobacco cessation**

# Comprehensive Tobacco Control Elements

- **Protect from exposure to second-hand smoke**
  - Implement and enforce clean air ordinances
- **Restrict tobacco advertising and marketing**
  - Counter with mass-media approaches
- **Increase tobacco taxes**
- **Reduce youth access to tobacco products**
  - Increase age of purchase
- **Provide treatment services**

World Health Organization



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# Tobacco Prevention and Control Funding



- Ohio spends 7% of the CDC recommended funding level

American Lung Association 2015



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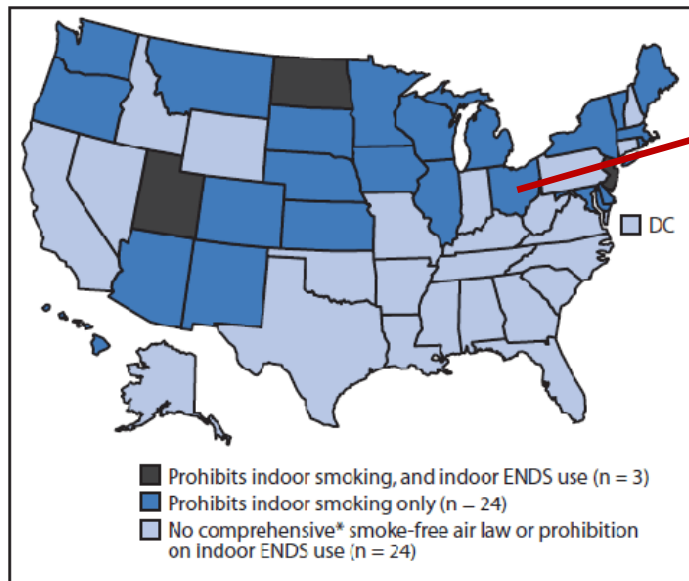
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**Protect from exposure to second-hand smoke**  
**Implement and enforce clean air ordinances**

# Ohio Smoke Free Policy

- **2006 Smoke-Free Workplace Act**
  - Prohibits smoking in public places
  - Prohibits smoking in places of employment
    - Includes restaurants and bars



CDC 2014

12th state to enact



American Lung Association 2015



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**Increase tobacco taxes**

# Ohio Tobacco Product Excise Taxes



**Cigarettes**  
**\$1.25/pack**

U.S. Range = \$0.30 - \$4.35  
Ohio ranks 29<sup>th</sup>



**Cigars**  
**17% wholesale price/cigar**



**Little cigars**  
**37% wholesale price/pack of 20**



**Smokeless tobacco**  
**17% wholesale price**



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**Provide treatment services**

# Tobacco Dependence Treatment

## USPHS Recommendations 2008

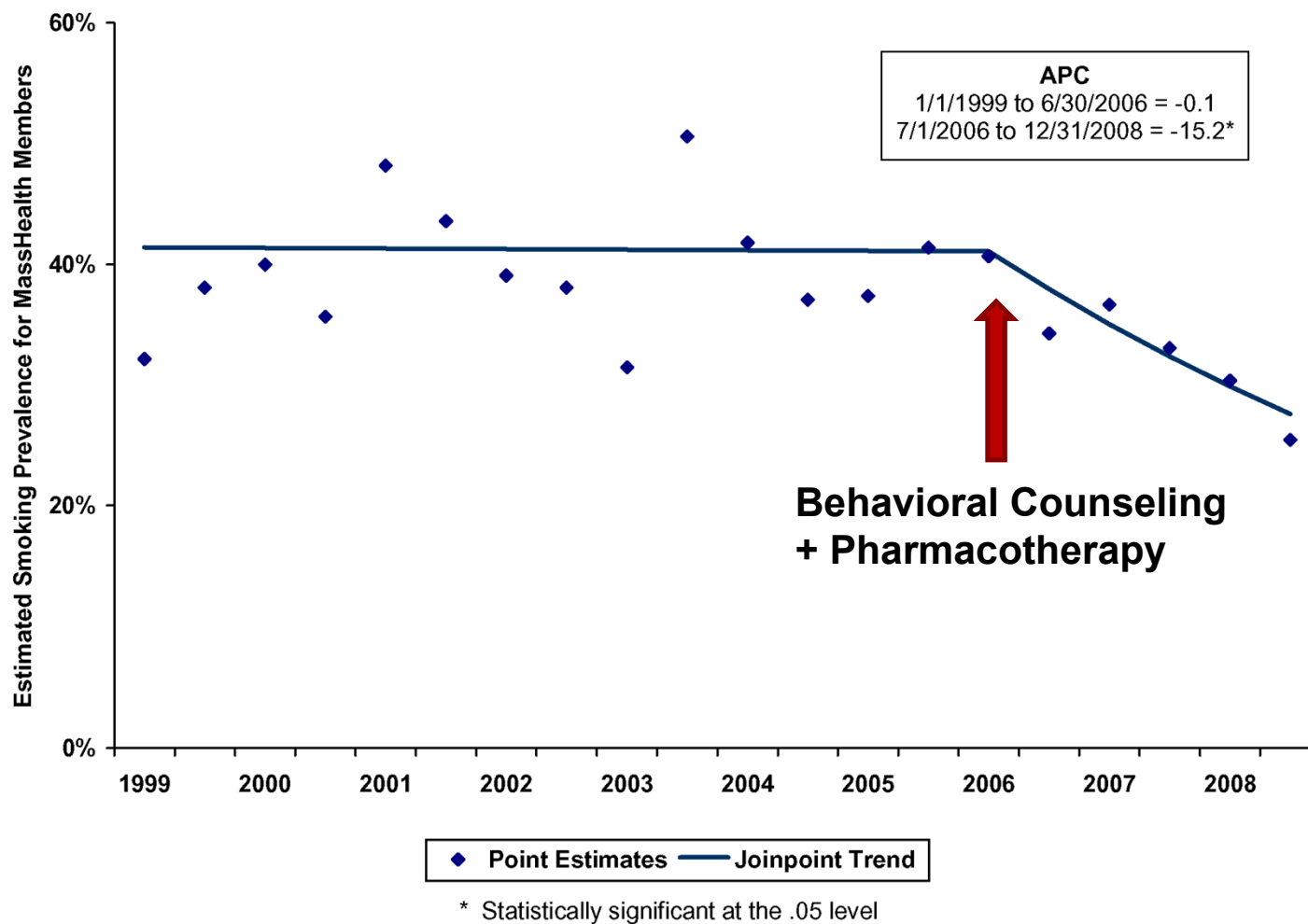
- **Behavioral Counseling**
  - Problem Solving
  - Social Support
- **Pharmacotherapy**
  - Varenicline
  - Bupropion
  - Nicotine Replacement Therapy



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# Medicaid Coverage for Tobacco Dependence Treatments in Massachusetts and Associated Decreases in Smoking



# Awareness about treatment options

- **Both Medicaid subscribers and health care providers lack awareness about evidence-based treatment options**
- **Health care providers who are aware are more likely to use pharmacotherapy**

**McMenamin et al. 2004, 2005**  
**Murphy et al. 2005**



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# Ohio Treatment Options

- **Ohio Department of Health**
  - **Ohio Quit Line 1-800-QUIT-NOW (1-800-784-8669)**  
**Free counseling service and pharmacotherapy**
    - Uninsured Ohioans
    - Medicaid enrollees
    - Pregnant women
    - Members of the Ohio Tobacco Collaborative
      - Health plans and employers
  - **Ohio QuitLogix Online Program** <https://ohio.quitlogix.org>
- **Tobacco Treatment Specialist Training & Provider Resources**
- **Ohio Partners for Smoke Free Families**
  - **Perinatal Smoking Cessation Program (5 A's)**

# Ohio Treatment Options

- **Ohio Department of Medicaid**
  - **Ohio expanded coverage for tobacco dependence treatment to Medicaid subscribers**
    - **In 2014 Ohio became one of 19 states to offer behavioral counseling and FDA-approved pharmacotherapy**
    - [http://www.healthy.ohio.gov/~media/HealthyOhio/ASSETS/Files/tobacco%20of%20CBT/MedicaidBilling\\_TobaccoCessation.ashx](http://www.healthy.ohio.gov/~media/HealthyOhio/ASSETS/Files/tobacco%20of%20CBT/MedicaidBilling_TobaccoCessation.ashx)



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# Treatment options for those diagnosed with mental illness

- **Depression**

- Behavioral counseling + psychosocial mood management
- Bupropion
  - + past depression
  - ± current depression

van der Meer et al. 2013

- **Schizophrenia**

- Psychiatric management
- Bupropion +
- Varenicline ±

Tsoi et al. 2013



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# Conclusions

- **Tobacco use among Ohio residents is higher compared to U.S.**
- **Certain vulnerable groups have higher rates of tobacco use**
- **The State of Ohio has dedicated limited resources towards tobacco use prevention and control**
- **State policy levers have been unevenly implemented**
- **Additional resources will be necessary to confront the tobacco use epidemic that persists in Ohio**



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# Thank you



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