Rural and Urban Trends in the Prevalence of Smoking Bans:
A Report from the National Social Climate Survey of Tobacco Control, 2000-2002

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Support

• The Office of Rural Health Policy of the Department of Health and Human Services

• The Rural Health, Safety, and Security Institute, Social Science Research Center

• Center for Child Health Research of the American Academy of Pediatrics
Health Risks of Smoking

- Tobacco use is responsible for more than 430,000 deaths per year among adults in the US
- Represents more than 5 million years of potential life lost
- Direct medical costs related to smoking total at least $50 billion per year
Health Risks of ETS

- ETS accounts for 53,000 deaths of non-smokers each year
- 3,000 nonsmokers die each year die of lung cancer each year
- 150,000-300,000 infants and children under age 18 months experience lower respiratory track infections
- Other recognized problems of ETS exposure: Low birth weight, asthma, SIDS, behavioral and cognitive functioning
Levels of Urbanization

- Eberhardt’s Urban and Rural Health Chartbook
- Large Central Counties
- Large Fringe Counties
- Small Metropolitan Counties
- Rural Counties with a City
- Rural Counties without a City
Adult Smoking

1997-1998 NHIS
- Rural Counties, 27.3%
- The Most Urban Counties, 22.6%

2003 SCS-TC
- Rural residents, 24.9%
- Urban residents, 20.9%
Rural-Urban Gaps in Smoking Bans
## Rural-Urban Differences in Self-Reported Smoking Bans, p < .05

<table>
<thead>
<tr>
<th>Ban</th>
<th>Most Urban</th>
<th>Most Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household</td>
<td>74.5%</td>
<td>65.7%</td>
</tr>
<tr>
<td>Children Present</td>
<td>88.4%</td>
<td>78.7%</td>
</tr>
<tr>
<td>Family Vehicle</td>
<td>83.2%</td>
<td>72.4%</td>
</tr>
<tr>
<td>Work Areas</td>
<td>67.2%</td>
<td>53.4%</td>
</tr>
<tr>
<td>Convenience Stores</td>
<td>79.6%</td>
<td>70.2%</td>
</tr>
<tr>
<td>Fast Food</td>
<td>69.0%</td>
<td>54.0%</td>
</tr>
<tr>
<td>Restaurants</td>
<td>35.9%</td>
<td>22.0%</td>
</tr>
</tbody>
</table>
Purpose

To determine if smoking bans increasing in both rural and urban areas
Social Climate Survey of Tobacco Control

• Provide timely, comprehensive data about tobacco control attitudes and practices
• Objectively measure, and ultimately monitor, progress towards intermediate objectives
• Annual cross-sectional assessments of the social climate: 2000, 2001, 2000
Methods
Simple Random Sample of Adults

- Computer assisted telephone interviewers

- 2000: N = 1,503; Co-operation Rate = 74%

- 2001: N = 3,002; Co-operation Rate = 84%

- 2002: N = 3,009; Co-operation Rate = 86%
Changes from 2000-2002

- 45.2% of social climate indicators improved from 2000 to 2002
- 30.8% of indicators improved from 2001 to 2002
- Support is increasing for restrictions on smoking in public places
- Smoking restrictions are becoming more prevalent in some private and public settings
## Smokefree Private Settings

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>% Point Difference</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Ban*</td>
<td>69.1</td>
<td>74.1</td>
<td>73.7</td>
<td>4.6</td>
<td>6.7</td>
</tr>
<tr>
<td>Ban in the presence of children*</td>
<td>83.5</td>
<td>87.9</td>
<td>87.8</td>
<td>4.3</td>
<td>5.1</td>
</tr>
<tr>
<td>Ban in the family vehicles</td>
<td>n/a</td>
<td>79.6</td>
<td>78.5</td>
<td>-1.1</td>
<td>-1.4</td>
</tr>
</tbody>
</table>

* p<.05, 2000 vs 2002
## Smokefree Public Settings

<table>
<thead>
<tr>
<th>Setting</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>% Point Difference</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malls*</td>
<td>75.4</td>
<td>77.0</td>
<td>79.2</td>
<td>3.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Convenience Stores*</td>
<td>68.4</td>
<td>73.7</td>
<td>75.4</td>
<td>7.0</td>
<td>10.2</td>
</tr>
<tr>
<td>Fast Food*</td>
<td>52.1</td>
<td>57.8</td>
<td>63.5</td>
<td>11.4</td>
<td>21.9</td>
</tr>
<tr>
<td>Restaurants</td>
<td>24.5</td>
<td>28.1</td>
<td>26.5</td>
<td>2.0</td>
<td>8.2</td>
</tr>
<tr>
<td>Bars</td>
<td>13.0</td>
<td>12.4</td>
<td>13.3</td>
<td>0.3</td>
<td>2.3</td>
</tr>
<tr>
<td>Outdoor Parks*</td>
<td>7.9</td>
<td>7.9</td>
<td>11.3</td>
<td>3.4</td>
<td>43.0</td>
</tr>
</tbody>
</table>

* p<.05, 2000 vs 2002

SSRC
Rural-Urban Trends in the Prevalence of Smoking Bans
Household Smoking Bans

- Rural, ns
- Urban, p=.005

<table>
<thead>
<tr>
<th>Year</th>
<th>Rural (%)</th>
<th>Urban (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>64.6</td>
<td>70.7</td>
</tr>
<tr>
<td>2001</td>
<td>69.8</td>
<td>75.4</td>
</tr>
<tr>
<td>2002</td>
<td>68.3</td>
<td>75.5</td>
</tr>
</tbody>
</table>
Smoking in the Presence of Children

Rural, $p=.009$

Urban, $p<.001$
Workplace Smoking Bans

Year | Rural, ns | Urban, ns
--- | --- | ---
2000 | 55.2 | 68.8
2001 | 59.2 | 70.9
2002 | 57.0 | 67.4
Smokefree Convenience Stores

- Rural, p<.001
- Urban, p=.023
Smokefree Fast Food Restaurants

- Rural, p<.001
- Urban, p<.001
Smokefree Restaurants

- Rural, $p=0.013$
- Urban, ns
Smokefree Outdoor Parks

- Rural, p=.004
- Urban, p=.001

Graph showing the increase in smokefree outdoor parks from 2000 to 2002 with significant p-values for both rural and urban areas.
Limitations

• Telephone surveys may under-represent some populations
• All data are self-report
Summary

• Smoking bans are becoming more common in public and private places.
• Although smoking bans are more common in urban areas, this rural-urban gap does not appear to be increasing.