As a society, we all pay the price for exposure to secondhand smoke. We know that secondhand smoke causes death and disease in people who don’t smoke. New research now confirms that exposure to secondhand smoke is responsible for substantial excess medical costs in Minnesota—costs that affect each and every resident in our state.

Rising health care costs place a burden on the taxpayer, the employee, and the Minnesota business owner. In this environment, curbing health care costs is a priority among businesses and policymakers. Eliminating major causes of preventable disease—such as exposure to secondhand smoke—provides a clear roadmap for controlling health care costs and, equally, alleviating unnecessary suffering.

This report provides a never-before-seen portrait of the devastating impact of secondhand smoke on Minnesota. Inside are the estimated costs of health care in Minnesota that are directly attributable to secondhand smoke exposure—costs that are completely preventable by eliminating exposure to this toxic substance.

REFERENCES

2. Ibid.


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REFERENCES
2. Ibid.
3. Minnesota Partnership for Action Against Tobacco (now ClearWay Minnesota); Blue Cross and Blue Shield of Minnesota; Minnesota Department of Health; University of Minnesota; Tobacco Control; Minnesota Department of Health, “Minnesota Secondhand Smoke in Minnesota, 1999-2003.” Minneapolis, Minn., 2003.
5. General Fund Balance Analysis, Expenditures by Omnibus Bill Detail, Department of Finance, June 12, 2006.
Each year, secondhand smoke is responsible for $215.7 million in excess medical costs in Minnesota—costs borne by individuals, businesses, and government. This estimate is conservative; it does not include costs for long-term care, nor does it consider the significant economic cost of lost productivity due to the more than 60,000 individuals suffering from these diseases caused by secondhand smoke.

While the harm caused by exposure to secondhand smoke cannot be adequately quantified, the chart below reveals the serious economic impact of secondhand smoke on the state of Minnesota, which touches the lives of every resident.

The chart below compares Minnesota’s $215.7 million in public and private health care expenditures caused by secondhand smoke with items in Minnesota’s state budget to get a sense of the magnitude of these medical costs. The Health care costs caused by secondhand smoke in Minnesota, 2003: $215.7 million. The chart illustrates just how much taxpayers, businesses, and Minnesota’s government spend on these preventable costs in contrast to how much the state is able to spend on the well-being of its residents.

Today, despite progress, most Minnesotans continue to face the health hazards of secondhand smoke. While Minneapolis, Saint Paul, Minneapolis, and other communities have passed policies protecting residents from secondhand smoke, these measures protect only a portion of the state. If Minnesota were to substantially reduce the overall economic and health impact of preventable disease, protecting the entire state from the dangers of secondhand smoke would be a logical place to start.

The researchers included Hugh R. Waters, Ph.D., a health economist and Assistant Professor of International Health at Johns Hopkins University; Steven S. Foldes, Ph.D., the Director of Research and Evaluation at Blue Cross and Blue Shield of Minnesota; and Jon Samet, M.D., M.S., the Jacob I. and Irene B. Fabrikant Professor in Health, Risk and Society and Chair of Epidemiology at Johns Hopkins University. The Health care costs caused by secondhand smoke vs. state Budget Items. The researchers used Minnesota-specific data sources to determine a causal link to secondhand smoke.

The scientific evidence confirms there is no risk-free level of exposure to secondhand smoke.

The U.S. Surgeon General’s six Conclusions on Secondhand Smoke

1. Secondhand smoke causes premature death and disease in children and in adults who do not smoke.
2. Children exposed to secondhand smoke are at an increased risk for sudden Infant Death Syndrome (SIDS), acute respiratory infections, ear problems, and more severe asthma. Smoking by parents causes respiratory symptoms and slows lung growth in children.
3. Exposure of adults to secondhand smoke has immediate adverse effects on the cardiovascular system and causes chronic heart disease and lung cancer.
4. The scientific evidence confirms there is no risk-free level of exposure to secondhand smoke.
5. Many millions of Americans, both children and adults, are still exposed to secondhand smoke in their homes and workplaces.
6. Eliminating smoking in indoor spaces fully protects nonsmokers from exposure to secondhand smoke. Separating smokers from nonsmokers, cleaning the air, and ventilating buildings can eliminate nonsmokers’ exposure to secondhand smoke.

EXPOSURE TO SECONDHAND SMOKE: AN ONGOING THREAT TO MINNESOTANS

Two out of three (65%) adult Minnesotans reported exposure to secondhand smoke in the previous seven days in 2003, the most recent year for which data are available. That means in any given week, an estimated 2.4 million Minnesotans were exposed to secondhand smoke. Restaurants and bars were among the most commonly reported locations of secondhand smoke exposure.

A STATE HEALTH TRAGEDY: HUNDREDS OF LIVES LOST

At least 581 infants and adults in Minnesota succumbed to the deadly effects of secondhand smoke in 2005 alone. These infants and adults died from diseases that the U.S. Surgeon General has definitively linked to secondhand smoke—more than a third of Minnesota’s total number of SIDS deaths that year.4

Behind each of these numbers lies a human tragedy that was completely preventable. For instance, 14 infants died in 2005 of Sudden Infant Death Syndrome (SIDS) caused by secondhand smoke—more than a third of Minnesota’s total number of SIDS deaths that year.

The U.S. Surgeon General determined a causal link between the causes of death and secondhand smoke exposure in the 2005 report, The Health Consequences of Involuntary Exposure to Secondhand Smoke.5

The chart summarizes Minnesota’s $215.7 million in public and private health care expenditures caused by secondhand smoke, with items in Minnesota’s state budget to get a sense of the magnitude of these medical costs. The chart illustrates just how much taxpayers, businesses, and Minnesota’s government spend on these preventable costs in contrast to how much the state is able to spend on the well-being of its residents.

CONSEQUENCES OF INVOLUNTARY EXPOSURE TO SECONDHAND SMOKE

The Costs: $215.7 Million Annually

The Medical Costs of Health Conditions Caused by Secondhand Smoke in Minnesota, 20037

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Number of Deaths</th>
<th>Death Care Costs (in 2003 dollars)</th>
<th>Total Costs (in 2003 dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Birth Weight (under 5.5 lbs.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sudden Infant Death Syndrome (SIDS)</td>
<td>44</td>
<td>$21,129,913</td>
<td>$215,712,572</td>
</tr>
<tr>
<td>Lung Cancer</td>
<td>112</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart Attacks and other Heart Diseases</td>
<td>411</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>581</strong></td>
<td><strong>$215,712,572</strong></td>
<td></td>
</tr>
</tbody>
</table>

The U.S. Surgeon General determined a causal link between these causes of death and secondhand smoke exposure in the 2005 report, The Health Consequences of Involuntary Exposure to Secondhand Smoke.

† The U.S. Surgeon General determined a causal link between these causes of death and secondhand smoke exposure in the 2005 report, The Health Consequences of Involuntary Exposure to Secondhand Smoke.

† The number of people who died from secondhand smoke—more than a third of Minnesota’s total number of SIDS deaths that year.

† Based on 2003 data, reported in 2006 dollars.

† The U.S. Surgeon General determined a causal link between these causes of death and secondhand smoke exposure in the 2005 report, The Health Consequences of Involuntary Exposure to Secondhand Smoke.

† Number of deaths caused by secondhand smoke are at an increased risk for sudden infant death syndrome (SIDS), acute respiratory infections, ear problems, and more severe asthma. Smoking by parents causes respiratory symptoms and slows lung growth in children.

† Secondhand smoke causes premature death and disease in children and in adults who do not smoke.

† The number of SIDS deaths that year.

† Number of Minnesotans treated total cost based on 2003 data, reported in 2006 dollars by individuals, businesses, and government.

† The Costs: $215.7 Million Annually

† Medical Costs of Health Conditions Caused by Secondhand Smoke in Minnesota, 20037

† Secondhand smoke causes premature death and disease in children and in adults who do not smoke.

† Today, despite progress, most Minnesotans continue to face the health hazards of secondhand smoke.2

† While Minneapolis, Saint Paul, and other communities have passed policies protecting residents from secondhand smoke, these measures protect only a portion of the state. If Minnesota were to substantially reduce the overall economic and health impact of preventable disease, protecting the entire state from the dangers of secondhand smoke would be a logical place to start.

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The costs: $215.7 million annually

Each year, secondhand smoke is responsible for 215.7 million in excess medical costs in Minnesota—costs borne by individuals, businesses, and government. 1 This estimate is conservative; it does not include costs for long-term care, nor does it consider the significant economic cost of lost productivity due to the more than 66,000 individuals suffering from these diseases caused by secondhand smoke.

<table>
<thead>
<tr>
<th>CONDICTIONS BY AGE GROUP</th>
<th>NUMBER OF MINNESOTANS TREATED</th>
<th>TOTAL COST (IN 2006 DOLLARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth to Age 17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Birth Weight (under 5.5 lbs.)</td>
<td>795</td>
<td>$3,061,594</td>
</tr>
<tr>
<td>Acute Lower Respiratory Illness (birth to age 3)</td>
<td>7,988</td>
<td>$3,756,287</td>
</tr>
<tr>
<td>Otitis Media and Middle Ear Effusion</td>
<td>32,947</td>
<td>$16,687,419</td>
</tr>
<tr>
<td>Asthma</td>
<td>17,547</td>
<td>$21,120,913</td>
</tr>
<tr>
<td>Ages 18+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lung Cancer</td>
<td>388</td>
<td>$13,995,955</td>
</tr>
<tr>
<td>Heart Attacks and other Heart Diseases</td>
<td>7,034</td>
<td>$110,041,403</td>
</tr>
<tr>
<td>TOTAL</td>
<td>66,699</td>
<td>$215,712,572</td>
</tr>
</tbody>
</table>

1 The U.S. Surgeon General determined a causal link between these conditions and secondhand smoke exposure in the 2006 report.

The Cost of Exposures: $215.7 million annually

Exposure to secondhand smoke is an ongoing threat to Minnesotans.

Two out of three (65%) adult Minnesotans reported exposure to secondhand smoke in the previous seven days in 2003, the most recent year for which data are available. That means in any given week, an estimated 2.4 million adult Minnesotans were exposed to secondhand smoke. 2 Restaurants and bars were among the most commonly reported locations of secondhand smoke exposure.

Today, despite progress, most Minnesotans continue to face the health impacts of secondhand smoke. While Minneapolis, Saint Paul, Mankato, and other communities have passed policies protecting residents from secondhand smoke, these measures protect only a portion of the state. If Minnesota were to substantially reduce the overall economic and health impact of preventable diseases, protecting the entire state from the dangers of secondhand smoke is a logical place to start.

While the harm caused by exposure to secondhand smoke cannot be adequately quantified, the chart below reveals the various economic impact of secondhand smoke on the state of Minnesota, which touches the lives of every resident.

At least 181 infants and adults in Minnesota succumbed to the deadly effects of secondhand smoke in 2003 alone. These infants and adults died from diseases that the U.S. Surgeon General has definitively linked to secondhand smoke. 3

Deaths Caused by Secondhand Smoke in Minnesota, 2005*

<table>
<thead>
<tr>
<th>CAUSE OF DEATH*</th>
<th>NUMBER OF DEATHS CAUSED BY SECONDHAND SMOKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung Cancer</td>
<td>112</td>
</tr>
<tr>
<td>Sudden Infant Death (SIDS)</td>
<td>44</td>
</tr>
<tr>
<td>Heart Attacks and other Heart Diseases</td>
<td>411</td>
</tr>
<tr>
<td>TOTAL</td>
<td>581</td>
</tr>
</tbody>
</table>

1 The U.S. Surgeon General determined a causal link between these causes of death and secondhand smoke exposure in the 2006 report.

The U.S. Surgeon General’s Six Conclusions on Secondhand Smoke

1. Secondhand smoke causes premature death and disease in children and in adults who do not smoke.

2. Children exposed to secondhand smoke are at an increased risk for sudden infant death syndrome (SIDS), acute respiratory infections, ear problems, and more severe asthma. Smoking by parents causes respiratory symptoms and slows lung growth in children.

3. Exposure of adults to secondhand smoke has immediate adverse effects on the cardiovascular system and causes chronic heart disease and lung cancer.

4. The scientific evidence confirms there is no risk-free level of exposure to secondhand smoke.

5. Many millions of Americans, both children and adults, are still exposed to secondhand smoke in their homes and workplaces.

6. Eliminating smoking in indoor spaces fully protects nonsmokers from exposure to secondhand smoke. Separating smokers from nonsmokers, clearing the air, and ventilating buildings cannot eliminate nonsmokers’ exposure to secondhand smoke. 4

The researchers included Hugh R. Waters, Ph.D., a health economist and Assistant Professor of International Health at Johns Hopkins University; Steven D. Phillips, Ph.D., the Director of Research and Evaluation at Blue Cross and Blue Shield of Minnesota; Alan I. Marcus, M.P.H., a Senior Research Consultant at Blue Cross and Blue Shield of Minnesota; and Jon Samuel, M.D., M.S., the Jacob I. and Ingrid F. Faber Professor in Health, Risk and Society and Chair of Epidemiology at Johns Hopkins University. Dr. Samuel was the senior scientific editor for the 2004 and 2005 Surgeon General reports on smoking and secondhand smoke, respectively.

Medical Costs Caused by Secondhand Smoke vs. State Budget Items

<table>
<thead>
<tr>
<th>HEALTH CARE COSTS CAUSED BY SECONDHAND SMOKE</th>
<th>STATE BUDGET ITEMS</th>
<th>DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>$215.7 million</td>
<td>Transportation: $103 million</td>
<td>$112.7 million</td>
</tr>
<tr>
<td></td>
<td>Child Care Programs: $95 million</td>
<td>$120.7 million</td>
</tr>
<tr>
<td></td>
<td>Early Childhood Education: $47 million</td>
<td>$168.7 million</td>
</tr>
<tr>
<td></td>
<td>Department of Agriculture: $40 million</td>
<td>$215.7 million</td>
</tr>
<tr>
<td></td>
<td>Community and Family Health Programs: $40 million</td>
<td>$255.7 million</td>
</tr>
<tr>
<td></td>
<td>Public and Private Health Care Expenditures: $225 million</td>
<td>$165.7 million</td>
</tr>
</tbody>
</table>

The chart below compares Minnesota’s $215.7 million in public and private health care expenditures caused by secondhand smoke with its Minnesota state budget—just to get a sense of the magnitude of these medical costs.

To get a sense of the magnitude of these medical costs, consider how much the state is able to spend on the well-being of its residents.

The researchers examined Minnesota-specific data sources to examine the state’s health care costs and deaths associated with conditions for which the U.S. Surgeon General has determined a causal link to secondhand smoke. 4

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Each year, secondhand smoke is responsible for $215.7 million in excess medical costs and a loss of productivity due to the more than 66,000 individuals who die from smoking-related diseases. That means in any given week, an estimated 2.4 million Minnesota adults were exposed to secondhand smoke. At least 581 infants and adults in Minnesota succumbed to the deadly effects of secondhand smoke in 2005 alone. These infants and adults died from diseases that the U.S. Surgeon General has definitively linked to secondhand smoke—a third of Minnesota’s total number of SIDS deaths that year.

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1. Secondhand smoke causes premature death and disease in children and adults who do not smoke.
2. Children exposed to secondhand smoke are at an increased risk for sudden infant death syndrome (SIDS), acute respiratory infections, ear problems, and even more severe asthma. Smoking by parents causes respiratory symptoms and slows lung growth in children.
3. Exposure of adults to secondhand smoke has immediate adverse effects on the cardiovascular system and causes coronary heart disease and lung cancer.
4. The scientific evidence confirms there is no risk-free level of exposure to secondhand smoke.
5. Many millions of Americans, both children and adults, are still exposed to secondhand smoke in their homes and workplaces.
6. Eliminating smoking in indoor spaces fully protects nonsmokers from exposure to secondhand smoke. Separating smokers from nonsmokers, clearing the air, and ventilating buildings continue to protect nonsmokers’ exposure to secondhand smoke.

The chart below compares Minnesota’s $215.7 million in public and private health care expenditures caused by secondhand smoke with items in Minnesota’s state budget to get a sense of the magnitude of these medical costs. It is important to note that Minnesota spends more on excess medical costs caused by secondhand smoke than it does on early childhood education, transportation, and Veterans Homes combined. For purposes of comparison only, this chart includes just how much taxpayers, businesses, and Minnesota’s government spend on these preventable costs in contrast to how much the state is able to spend on the well-being of its residents.

Medical Costs Caused by Secondhand Smoke vs. State Budget Items

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Secondhand Smoke Costs</th>
<th>State Budget Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care Costs</td>
<td>$215.7 million</td>
<td>Public Safety: $65 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Child Care Programs: $55 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Early Childhood Education: $47 million</td>
</tr>
<tr>
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