The Evidence is Clear: Secondhand Smoke is Harmful

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For more than two decades, the nation's most respected health organizations have come to the same conclusions about secondhand smoke: it's dangerous and deadly. Each year, the body of evidence continues to grow.

World-renowned health organizations have concluded that secondhand smoke is a significant health danger:

American Medical Association
U.S. Surgeon General
Mayo Clinic
Centers for Disease Control and Prevention
National Cancer Institute
American Lung Association
World Health Organization
U.S. Environmental Protection Agency

Over the past 20 years, hundreds of scientific studies have shown the dangers associated with secondhand smoke. A few of the most noteworthy include:

1986: The U.S. Surgeon General released one of the first studies on the dangers of secondhand smoke. It reported that involuntary smoking is a cause of disease, including lung cancer, in healthy non-smokers.[1]

1992: The U.S. Environmental Protection Agency concluded that widespread exposure to secondhand smoke is a serious and substantial public health danger. Specifically, it reported that secondhand smoke is a human lung carcinogen, responsible for 3,000 lung cancer deaths a year in U.S. non-smokers.[2]

1997: A National Cancer Institute monograph linked significant health effects, including coronary heart disease, nasal sinus cancer and Sudden Infant Death Syndrome with exposure to secondhand smoke.[3]

2006: The U.S. Surgeon General released the most comprehensive scientific report ever produced on the health harms of secondhand smoke. The report states that "massive and conclusive scientific evidence documents adverse effects of involuntary smoking on children and adults, including cancer and cardiovascular diseases in adults, and adverse respiratory effects in both children and adults." The report further concludes that there is no risk-free level of exposure to secondhand smoke.[4]

New research shows secondhand smoke is even more dangerous than previously believed.

2004: A Helena, Montana, study made a connection between secondhand smoke and heart disease. The study observed that hospital admissions for heart attacks declined by approximately 40 percent during a six-month period during which a comprehensive smoke-free air law was in effect, and rebounded after the ordinance was suspended.[5] In 2005, a similar study conducted in Pueblo, Colo., confirmed the findings from Helena.[6] As a result of the Helena study, the Centers for Disease Control and Prevention issued a warning, saying that people at risk of heart disease should avoid exposure to secondhand smoke.[7]

[1] The Health Consequences of Involuntary Smoking: A Report of the Surgeon General. U.S. Department of Health and Human Services. 1986.
[2] Respiratory Health Effects of Passive Smoking: Lung Cancer and Other Disorders. U.S. Environmental Protection Agency. 1992.
[3] Monograph 10: Health Effects of Exposure to Environmental Tobacco Smoke. National Cancer Institute. 1999.
[4] The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. U.S. Department of Health and Human Services. 2006.
[5] Sargent RP, Shepard RM, Glantz SA. Reduced Incidence of Admissions for Myocardial Infarction Associated with Public Smoking Ban: Before and After Study. University of California. 2004.
[6] Bartecchi C, Alsever R, Nevin-Woods C, Thomas, WM, Estacio R, Bartelson B, Krantz M. Reduction in the Incidence of Acute Myocardinal Infarction Associated With a Citywide Smoking Ordinance. *Circulation.* 2006.
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The Dangers of Secondhand Smoke

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When a smoker lights a cigarette, more than 4,000 chemicals are released into the air.[1] Studies have shown that even brief exposure to secondhand smoke puts nonsmokers' health at risk.[2]

Last year, 49,000 nonsmokers died from secondhand smoke.[5]

- Exposure to secondhand smoke causes the deaths of an estimated 3,000 nonsmokers in the United States from lung cancer each year.[5]
- Secondhand smoke contributes to the deaths of 46,000 nonsmokers in the United States from heart disease each year.[5]

Secondhand smoke contains 11 known cancer-causing poisons and 250 known toxins, including:[3,4]

Arsenic *(used in pesticides)*
Cadmium *(used in making batteries)*
Formaldehyde *(used to embalm dead bodies)*
Lead *(once used in paint)*
Benzene *(found in gasoline)*

Secondhand smoke affects children.[5]

Sudden Infant Death Syndrome
Low birth weights
Childhood middle ear infections
Asthma

- Secondhand smoke can trigger asthma attacks in children. Asthmatic children who are exposed to secondhand smoke have worse and more frequent attacks than those who are not. Severe asthma attacks can be life-threatening to children, and more than 40 percent of children who go to the emergency room for asthma live with smokers.[2]
- On average, 430 infants die from Sudden Infant Death Syndrome each year as a result of their exposure to secondhand smoke.[5]

Even limited exposure to secondhand smoke has negative health consequences.

- According to the U.S. Surgeon General, there is no safe level of exposure to secondhand smoke.[2]
- After just four hours in a casino where smoking is permitted, Minnesota nonsmokers showed 112 percent more lung-cancer-causing chemicals in their bodies than normal, and 456 percent more nicotine.[6]

[1] Monograph 10: Health Effects of Exposure to Environmental Tobacco Smoke. National Cancer Institute. 1999.
[2] The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. U.S. Department of Health and Human Services. 2006.
[3] National Cancer Institute. Risks Associated With Smoking Cigarettes with Low Machine-Measured Yields of Tar and Nicotine. 2001.
[4] National Toxicology Program. 11th Report on Carcinogens. 2005.
[5] California Environmental Protection Agency. Proposed Identification of Environmental Tobacco Smoke as a Toxic Air Contaminant. 2005.
[6] Anderson KE, Kliris J, Murphy L, et al. Metabolites of a tobacco-specific lung carcinogen in nonsmoking casino patrons. *Cancer Epidemiol Biomarkers Prev.* 2003.

Smoke-Free Policies Improve Health and Have Positive Economic Benefits for Business

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Comprehensive smoke-free policies are good for health and good for business. They clear the air of cancer-causing chemicals and encourage people who smoke to quit, improving health and decreasing health care costs. In addition, there is a growing body of economic research that reaches the same conclusion: smoke-free policies do not have an adverse economic impact on the hospitality industry.[1]

Smoke-free policies decrease health care costs and increase worker productivity by helping people quit smoking or smoke less, and by reducing people's exposure to secondhand smoke.

DECREASED EMPLOYEE CIGARETTE CONSUMPTION

- Smoke-free workplaces reduce total cigarette consumption per employee by 29 percent.[2]

DECREASED HEALTH CARE COSTS

- Secondhand smoke costs more than $9.5 billion each year in the United States in direct and indirect medical costs.[3]

INCREASED WORKER PRODUCTIVITY

- Cigarette smoking and exposure to secondhand smoke cost $92 billion a year in productivity losses.[4]
- Employees who smoke have twice the lost production time per week for personal health reasons than workers who never smoked—at a cost of $27 billion to U.S. employers.[5]

In 2006, the United States Surgeon General reported that smoke-free policies and regulations *do not have an adverse economic impact on the hospitality industry*. Based on the evidence from peer-reviewed studies, the finding was part of the most comprehensive scientific report ever produced on the health harms of secondhand smoke—the first Surgeon General's report on secondhand smoke since 1986.[1]

INCREASED PROFITS

- Business tax receipts for New York City restaurants and bars increased 8.7 percent from April 1, 2003, to January 31, 2004 (after implementation of a smoke-free law), compared to the same period in 2002-2003.[6]
- A study of U.S. restaurant sales showed a median increase of 16 percent in the sale price of a restaurant covered by a smoke-free law compared to a similar restaurant in a community without such a law.[7]

INCREASED OVERALL EMPLOYMENT

- Despite New York City's smoke-free law going into effect on March 30, 2003, 164,000 people on average worked in city bars and restaurants during the year—the highest number recorded in at least a decade. In fact, in the nine months following the law's enactment, bars and restaurants gained 10,600 jobs.[6]
- Bars and restaurants in California had 218,300 more jobs in 2005 than in 1995, before a statewide smoke-free policy was implemented.[8]

1 The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General. U.S.Department of Health and Human Services. 2006.
2 Fichtenberg CM, Glantz SA. Effect of smoke-free workplaces on smoking behavior: systematic review. BMJ. 2002.
3 Behan DF, Eriksen MP, Lin Y. Economic Effects of Environmental Tobacco Smoke. 2005.
4 Armour BS, Woollery T, Malarcher A, Pechacek TF, Husten C. Annual smoking-attributable mortality, years of potential life lost, and productivity losses – United States, 1997-2001. JAMA. 2005.
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8 Industry Employment & Labor Force – By Annual Average. California Employment Development Department, Labor Market Information Division. 2006.

Benefits of Smoke-Free Policies

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Scientific research and experience have shown us what works to reduce the dangers of secondhand smoke. Comprehensive smoke-free policies clear the air of cancer-causing chemicals, help people quit tobacco use and reduce health care costs. Because of this, such policies are overwhelmingly supported in Minnesota communities that have gone smoke-free.

Smoke-free policies significantly improve public health.

✓ SMOKE-FREE POLICIES = CLEANER AIR

- Hennepin County's comprehensive smoke-free ordinance helped reduce harmful air pollution in bars and restaurants by 99 percent.[1]
- One month after New York's comprehensive smoke-free law went into effect, harmful indoor air pollution decreased by an average of 84 percent.[2]

✓ CLEANER AIR = BETTER HEALTH

- A year after the implementation of a smoke-free law in New York, the number of hospitality workers who experienced eye, nose and throat irritation decreased by 57 percent.[3]
- Between 1988 and 1997, when California implemented smoke-free policies, lung cancer rates dropped significantly more than in other areas of the country. The decline among California men was 1.5 times greater than in other areas. Among California women, lung cancer declined 4.8 percent, while rates increased 13.2 percent elsewhere.[4]

Smoke-free policies reduce health care costs.

Exposure to secondhand smoke costs Americans more than **$9.5 billion** a year because of excess medical care, death and disease.[7]

Smoke-free policies help people quit tobacco use.

- Many studies have shown that smokers whose workplaces are smoke-free are more likely to quit smoking at an increased rate than smokers whose workplaces have weak smoke-free policies or no such policies at all.[5]
- Minnesota's stop-smoking service, QUITPLAN® at Work, experienced three times more inquiries from February to May 2005, during which several Twin Cities smoke-free ordinances were implemented.[6]

Smoke-free policies are overwhelmingly supported in Minnesota communities that have gone smoke-free.[8,9]

✓ IN COMMUNITIES THAT WENT SMOKE-FREE IN 2005 AND 2006:

- Support for smoke-free ordinances now exceeds 70 percent.
- More than eight in ten residents consider secondhand smoke a health hazard.
- More than 70 percent of residents strongly agree that restaurants and bars are healthier.

Smoke-free policies are popular with voters.

In November 2006, an overwhelming majority of Mankato voters (69 percent) voted to keep Mankato's comprehensive smoke-free ordinance in place.

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