



## SMOKE-FREE LAWS WORK

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Smoke-free laws have proven to be the *only* effective way of eliminating secondhand smoke exposure, a public health hazard<sup>1</sup> responsible for the deaths of more than 41,200 adult non-smokers each year.<sup>2</sup> Deemed entirely preventable by the 2006 Surgeon General's Report, secondhand smoke has been linked with cancer, heart disease, and respiratory illness in non-smokers,<sup>3</sup> and is considered to be a leading cause of indoor air pollution.<sup>4</sup> Indeed, as affirmed in a December 2016 National Cancer Institute monograph, smoke-free laws work not only to protect the public from these toxins in the air and improve the overall health of non-smokers, they encourage smokers to quit and prevent kids from starting to smoke.<sup>5</sup> They are also easily implemented, with high levels of compliance<sup>6</sup> in cities and states throughout the country.

### Smoke-Free Laws Dramatically Improve Air Quality

Secondhand smoke is composed of two different kinds of smoke: sidestream smoke, the smoke released from the burning end of a cigarette, and mainstream smoke, the smoke exhaled by the smoker.<sup>7</sup> This combination dramatically reduces the quality of the air, filling it with 7,000 known chemical compounds.<sup>8</sup> Numerous studies have confirmed, however, that smoke-free laws clean the air, nearly ridding it of these various toxins. According to a 2003 Roswell Park Cancer Institute study that tested the air in Western New York Hospitality venues before and after the New York State Clean Indoor Air Law, respirable particulate matter decreased by an average of 84% post-implementation.<sup>9</sup> In 2008, the Roswell Park Cancer Institute performed a similar investigation into the air quality of establishments in Fargo, North Dakota, finding that fine particle air pollution decreased by 98% after implementation of a smoke-free law.<sup>10</sup> The Institute performed another study in St. Louis, MO in 2008, comparing the air quality of those establishments that were required by law to be smoke-free and those that were not. The study found that the average level of fine particle air pollution was 6 times higher in those places that allowed smoking in comparison to those that were smoke-free.<sup>11</sup>

### Smoke-Free Laws Improve Health

Correspondingly, data continue to mount regarding the positive health impact of smoke-free laws. A 2010 study detailing the impact of the Wisconsin smoke-free law on the respiratory health of bar workers found that eight health problems including wheezing, shortness of breath, coughing, and sore throats were reduced by as much as 36 percent only 3-6 months post-implementation.<sup>12</sup> A 2007 study of the comprehensive smoke-free workplace law in Ireland notes that one year after implementation, non-smoking bar and pub workers showed significant improvement in both pulmonary function and respiratory and irritant symptoms, and even smokers reported fewer incidences of red and itchy eyes, runny noses, and sore throats.<sup>13</sup> Further, the 2009 IOM Report, an analysis of the effects of numerous smoke-free laws on the incidence of acute coronary events, concludes that smoke-free laws reduce the number of heart attacks and save lives.<sup>14</sup> The U.S. Centers for Disease Control and Prevention also noted that studies conducted in several communities, states, and countries have found that implementing smoke-free laws is associated with reductions in hospital heart attack admissions. The CDC notes that, "smoke-free laws likely reduce heart attack hospitalizations both by reducing secondhand smoke exposure among nonsmokers and by reducing smoking, with the first factor making the larger contribution."<sup>15</sup>

## Smoke-Free Laws Reduce Smoking

An added benefit of smoke-free laws is their proven ability to prevent kids from starting to smoke and encourage smokers to quit. The 2012 Surgeon General's Report concluded that in combination with sustained programs and mass media campaigns, tax increases, and other regulatory initiatives, smoke-free laws effectively reduce smoking among youth and young adults.<sup>16</sup> In fact, a 2005 study focused on youth-specific reductions in Massachusetts found that local restaurant smoking regulations reduced smoking by 60% just two years following implementation of the law.<sup>17</sup> Regarding adult-specific reductions, a 2002 study of workplaces in the United States, Australia, Canada and Germany found reductions in smoking prevalence of 3.8 percent, which works out to 3.1 fewer cigarettes smoked per day per continuing smoker.<sup>18</sup> More recently, a 2011 study evaluating the Michigan smoke-free law found that there was a 66% increase in calls to the state quitline in the year following the implementation of the law.<sup>19</sup>

## States Implement Smoke-Free Laws With Ease

In addition to the clear health benefits of smoke-free laws, they have also been implemented across the country with ease. According to the 2004 New York Department of Finance Study, one year post-implementation, 97 percent of establishments were observed to be smoke-free. This means that after thorough NYC Health Department inspection, no patrons or workers were observed smoking, no ashtrays were visible, and "No Smoking" signs were properly posted.<sup>20</sup> A similar evaluation was completed by the Harvard School of Public Health in 2005 assessing compliance of the Massachusetts Smoke-free Workplace Law. Five months post-implementation, 96.3 percent of establishments were observed to be compliant with the law.<sup>21</sup> Further, according to a 2009 Oregon Indoor Air Act study, 6 months post-implementation, 100 percent of Oregon bars were in compliance with the law.<sup>22</sup> Even in a tobacco-growing state like North Carolina, implementation of the statewide smoke-free law has been relatively smooth. One month following the implementation of the law in January of 2010, only 538 formal state-wide complaints were made, and that number dropped to just 37 in November of the same year.<sup>23</sup> Similarly, the Wisconsin smoke-free law went into effect in July of 2010, and in the four months following the law the state received only 524 non-compliance reports. Pete Hanson, Director of Government Relations for the Wisconsin Restaurant Association believes that this near painless transition is due in large part to Wisconsinites' satisfaction with the law. He explains, "Overall the restaurants we've talked to are happy with the smoke free law and indicated that they wouldn't go back, even if they could."<sup>24</sup>

### ***Campaign for Tobacco-Free Kids, February 6, 2017/Becca Knox***

<sup>1</sup> U.S. Department of Health and Human Services (HHS), *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*, HHS, U.S. Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.

<sup>2</sup> U.S. Department of Health and Human Services. *The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014: 666, <http://www.surgeongeneral.gov/library/reports/50-years-of-progress/index.html>

<sup>3</sup> HHS, *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*, HHS, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.

<sup>4</sup> Fichtenberg, CM & Glantz, SA, "Effect of smoke-free workplaces on smoking behavior: systematic review," *British Medical Journal* 325(7357):188, 2002.

<sup>5</sup> U.S.National Cancer Institute and World Health Organization, *The Economics of Tobacco and Tobacco Control*.National Cancer Institute Tobacco Control Monograph 21. NIH Publication No. 16-CA-8029A. Bethesda, MD: U.S.Department of Health and Human Services, National Institutes of Health, National Cancer Institute; and Geneva, CH: World Health Organization; 2016

<sup>6</sup> U.S.National Cancer Institute and World Health Organization, *The Economics of Tobacco and Tobacco Control*.National Cancer Institute Tobacco Control Monograph 21. NIH Publication No. 16-CA-8029A. Bethesda, MD: U.S.Department of Health and Human Services, National Institutes of Health, National Cancer Institute; and Geneva, CH: World Health Organization; 2016

<sup>7</sup> HHS, *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*, HHS, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.

<sup>8</sup> HHS, *How Tobacco Smoke Causes Disease: A Report of the Surgeon General*, HHS, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010.

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- <sup>10</sup> Travers, M & Dobson, KA, *North Dakota Air Monitoring Study: Effect of the Fargo Smoke-Free Air Ordinance*, Department of Health Behavior, Roswell Park Cancer Institute, 2008.
- <sup>11</sup> Travers, M & Dobson, KA, *St. Louis City Bars Air Monitoring Study*, Department of Health Behavior, Roswell Park Cancer Institute, 2008.
- <sup>12</sup> Palmersheim, KA, et al., "The Impact of Wisconsin's Statewide Smoke-free Law on Bartender Health and Attitudes," University of Wisconsin: Milwaukee, Center for Urban Initiatives and Research, 2010.
- <sup>13</sup> Goodman, P, et al., "Effects of the Irish Smoking Ban on Respiratory Health after Establishment of Smoke-free Bars and Taverns," *American Journal of Respiratory and Critical Care Medicine* 175(8):840-845, 2007.
- <sup>14</sup> Institute of Medicine (IOM), *Secondhand Smoke Exposure and Cardiovascular Effects: Making Sense of the Evidence*, Washington, DC: The National Academies Press, 2009, <http://www.iom.edu/Reports/2009/Secondhand-Smoke-Exposure-and-Cardiovascular-Effects-Making-Sense-of-the-Evidence.aspx>.
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- <sup>18</sup> Fichtenberg, CM & Glantz, SA, "Effect of smoke-free workplaces on smoking behavior: systematic review," *British Medical Journal* 325(7357):188, 2002.
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