

Secondhand Smoke: Worker Health

The 2006 U.S. Surgeon General's Report on *The Health Consequences of Involuntary Exposure to Secondhand Smoke* has concluded that **100% smokefree workplace policies are the only “effective way to eliminate secondhand smoke exposure in the workplace.”**

As of January 2021, hundreds of communities, 27 states, Washington D.C., Puerto Rico and the U.S. Virgin Islands have strong 100% smokefree laws in effect to protect worker health in all non-hospitality workplaces and restaurants and bars. However, the workplace remains a major source of exposure to secondhand smoke for millions of Americans. Nearly 40% of the U.S. workforce remains unprotected by a local or state smokefree law for all workplaces.^{1,2}

The World Health Organization (WHO) recommends that legislation be enacted to require that all indoor workplaces and public places be 100% smokefree in order to protect the health of all workers.³

Nonsmokers and former smokers who are exposed to secondhand smoke in confined workplaces display a significant increase in DNA damage associated with a decrease in DNA repair capacity⁴

New York State's clean indoor air law caused a reduction of secondhand smoke exposure in nonsmoking workers, with saliva cotinine levels decreasing by 47.4 percent. Cotinine is a metabolite of nicotine.⁵

Hospitality Workers

Hospitality worker health improves dramatically with the passage of smokefree laws.

- After New York State's smokefree law went into effect, the number of hospitality workers who reportedly experienced irritation of the eye, nose, and throat declined by 62%, 34%, and 45%, respectively. Before the state law went into effect, 59% of hospitality workers reported respiratory symptoms, such as morning cough, shortness of breath, or bringing up phlegm. After the smokefree law took effect, the number of workers who reportedly experienced morning cough dropped by 46%. Another study showed that within three months of implementation of the law, the prevalence of workers reporting sensory symptoms declined by 50%.^{6,7}
- Bartenders working in smoke-filled bars are more likely than other workers to report having red or irritated eyes, coughing in the morning, coughing during the rest of the day, runny noses or sneezing, and a sore or scratchy throat.⁸
- Smokefree ordinances in Appleton and Madison, Wisconsin resulted in a decrease in the bartenders' mean level of exposure to secondhand smoke at work from 20.7 hours a week pre-ordinance to 1.6 hours a week post-ordinance. Secondhand smoke exposure in other places decreased from 8.2 hours to 4.1 hours, and home exposure decreased from 3.9 hours to 2.8 hours. The prevalence of eight upper respiratory symptoms significantly decreased during the post-ordinance period among non-smoking bartenders. Smokers reported a significant reduction of two symptoms.⁹
- After Wisconsin's statewide smokefree law went into effect in July 2010, non-smoking bartenders reported that the prevalence of eight upper respiratory symptoms decreased

significantly, and exposure to secondhand smoke in the workplace decreased from 17.0 hours to 1.7 hours a week.¹⁰

- Smokefree workplaces decrease cigarette consumption in continuing smokers, as well as decrease adult smoking prevalence. Smokefree laws result in fewer respiratory symptoms in workers, and there is strong evidence that these laws result in decreased hospital admissions for heart attacks. There is no negative economic impact for restaurants and bars going smokefree.¹¹

Blue-Collar Workers

- Cadmium, benzene, lead, and arsenic are just a few of the more than 4,000 hazardous chemical components of secondhand smoke that are also toxins common to blue-collar workplaces. Synergistically, cigarette smoke and workplace toxins can multiply the risk of getting lung cancer by as much as 53 times in blue-collar workers.¹²
- African American male workers, construction/manufacturing sector workers, and blue-collar and service workers have the highest levels of cotinine among all workers.¹³

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