

# Secondhand Smoke and Worker Health

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## Secondhand smoke harms workers exposed on the job.

- Secondhand smoke exposure causes heart disease and lung cancer, and puts workers at significant risk for stroke, asthma, and other breathing disorders.<sup>1</sup>
- At least 250 chemicals in secondhand smoke are known to be toxic or to cause cancer.<sup>1</sup>
- Even brief periods of exposure to secondhand smoke hurt the heart.
  - Five minutes of secondhand smoke exposure makes it harder for the heart to pump blood.<sup>2</sup>
  - In 20-30 minutes, fat and blood clots build up in the arteries, increasing the chance of heart attack and stroke.<sup>2</sup>
  - After 2 hours of secondhand smoke exposure, the heart rate speeds up and abnormal heart rhythms may occur which can lead to death.<sup>2</sup>
- Secondhand smoke is a cause of breast cancer in premenopausal women.<sup>3</sup>

## All workers deserve equal health protection.

- 27% of Kentucky's blue collar workers are exposed to secondhand smoke at work.<sup>4</sup>
- Only 43% of the 6.6 million food preparation and service workers in the U.S. are protected by smoke-free laws.<sup>5</sup>
- Restaurant and bar workers have the greatest risk of developing lung cancer and heart disease compared to other occupations.<sup>5</sup>
- Workers and volunteers in gaming facilities such as bingo halls are exposed to high levels of secondhand smoke despite the fact that casino patrons smoke at about the same rates as the rest of the adult population.<sup>6</sup>

## Smoke-free laws are necessary to protect *all* workers

- Eliminating smoking in indoor spaces is the only strategy that fully protects nonsmokers from exposure to secondhand smoke.<sup>1</sup>
- Separating smokers from nonsmokers, cleaning the air, and ventilating buildings cannot eliminate exposure to secondhand smoke.<sup>1</sup>
- Working in a smoky place for 6-8 hours is the equivalent of smoking nearly a pack of cigarettes (16-20 cigarettes).<sup>7</sup>
- Comprehensive smoke-free workplace legislation reduces the burden of chronic disease and early death.<sup>1</sup>
- Economic impact studies find business stays the same or improves as a result of smoke-free laws.<sup>8,9</sup>

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1. U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. Atlanta, GA: Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease and Prevention and Promotion, Office of Smoking and Health;2006.
  2. Otsuka R, Watanabe H, Hirata K, et al. Acute effects of passive smoking on the coronary circulation in healthy young adults. *JAMA*. 2001; 286(4):436-441.
  3. California Environmental Protection Agency (2005). Proposed Identification of Environmental Tobacco Smoke as a Toxic Air Contaminant. Sacramento, CA, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency.
  4. Hahn E, Begley K, Rayens M, Riker C. Workplace tobacco policy study 2008. Lexington: University of Kentucky; May 2009.
  5. Shopland D, Anderson C, Burns D, Gerlach K. Disparities in smoke-free workplace policies smoke food service worker. *JOEM*. 2004; 46(4): 347-356.
  6. Pritsos CA, Pritsos KL, Spears KE. Smoking rates among gamblers at Nevada casinos mirror US smoking rate. *Tob Control*. Apr 2008; 17(2): 82-85.
  7. Siegel M. Involuntary smoking in the restaurant workplace. A review of employee exposure and health effects. *JAMA*. 1993;270:490-493.
  8. Eriksen M, Chaloupka F. The Economic Impact of Clean Indoor Air Laws. *CA Cancer J Clin*. 2007; 57: 367-378.
  9. Pyles, M, Mullineaux, DJ, Okoli, CTC, Hahn, EJ. (2007). Economic impact of a smoke-free law in a tobacco-growing community. *Tob Control*. 16(1).

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