

Secondhand Smoke and Heart Disease

Secondhand Smoke Exposure is a Major Cause of Heart Attacks

- Even brief exposure to secondhand smoke can trigger a heart attack.¹
 - In just five minutes of exposure, secondhand smoke makes it harder for the heart to pump blood.²
 - In 20-30 minutes, fat and blood clots build up in the arteries, increasing the chance of heart attacks and stroke.²
 - After 2 hours of secondhand smoke exposure, the heart rate speeds up and leads to abnormal heart rhythms (which can lead to death).²
- A heart attack may be more severe than it would have been in the absence of exposure to secondhand smoke.³

Secondhand Smoke Exposure is a Major Cause of Heart Disease and Stroke

- Fine particle air pollution, carbon monoxide, and nicotine in secondhand smoke are linked to heart disease.¹
- Exposure to secondhand smoke has immediate adverse effects on the heart and blood vessels and it *causes* heart disease and increases the risk of stroke.²
- People who are exposed to secondhand smoke increase their risk of heart disease by 25-30%.¹
- Secondhand smoke and its toxic chemicals damage the cardiovascular system by causing inflammation and blood clots. This evidence suggests that a causal relationship between secondhand smoke and stroke is biologically plausible.^{1,3}
- Adults who breathe secondhand smoke every day have higher levels of the “bad” cholesterol that can clog the arteries of the heart.³

Smoke-free Laws and Heart Attacks

- After strong smoke-free laws go into effect, communities experience a 15% drop in heart attacks during the first year, with continued decline of 36% in 3 years.⁴
- Smoke-free laws create healthy places for workers and patrons to breathe clean air, and they reduce health care costs. Smoke-free laws are a known public health solution.¹

1. Institute of Medicine. *Secondhand smoke exposure and cardiovascular effects: Making sense of the evidence (executive summary)* 2009.
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. 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.
4. Lightwood JM, Glantz SA. Declines in acute myocardial infarction after smoke-free laws and individual risk attributable to secondhand smoke. *Circulation*. Oct 6 2009; 120(14):1373-1379.

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