

Smoke-free Northern Kentucky Would Save Lives by Reducing Heart Attacks

Reduction in Heart Attacks if Northern Kentucky were Smoke-free

- Comprehensive smoke-free laws in Northern Kentucky would save lives by decreasing the number of heart attacks by **15%** within the first year, and **36%** over three years.¹
- In the first year of a smoke-free law in the three Northern Kentucky counties, there would be an estimated 141 fewer heart attacks. In the next three years, we would expect to prevent an additional 198 heart attacks.²

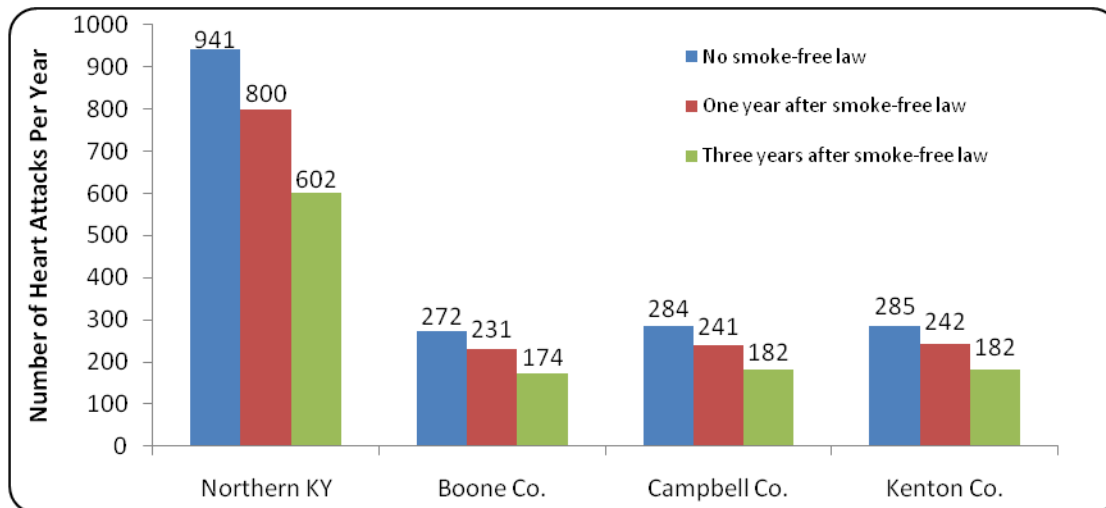


Figure: Projected Reductions in Heart Attacks after Implementing a Smoke-free Law

Secondhand Smoke Exposure and Heart Attacks

- Even brief exposure to secondhand smoke can trigger a heart attack.³
 - In just five minutes of exposure, secondhand smoke makes it harder for the heart to pump blood.⁴
 - In 20-30 minutes, fat and blood clots build up in the arteries, increasing the chance of heart attacks and stroke.⁴
 - After 2 hours of secondhand smoke exposure, the heart rate speeds up, leading to abnormal heart rhythms (which can lead to death).⁴
- The fine particles in secondhand smoke are linked to heart attacks.³
- A heart attack may be more severe than it would have been in the absence of exposure to secondhand smoke.⁵

1. Lightwood J, Glantz SA. Declines in acute myocardial infarction after smoke-free laws and individual risk attributable to secondhand smoke. *Circulation*. 2009;120:1373-1379.
2. Lush CC. *AMI Data-Calendar Year 2008-Boone Kenton Campbell Counties*. Lexington, KY: UK Healthcare; data obtained from the Kentucky Hospital Association; 2010.
3. Institute of Medicine. *Secondhand smoke exposure and cardiovascular effects: Making sense of the evidence*. Washington, DC: The National Academies Press; 2009.
4. 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.
5. 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.

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