

Secondhand Smoke Raises Heart Disease Risk



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Although cigarette smoking remains the leading cause of preventable deaths in the US, claiming some 440,000 Americans each year, approximately 25% of adult men and 20% of adult women in the US continue to smoke.

While cigarette smoking is known to increase the risk of a heart attack, secondhand smoke (or environmental tobacco smoke) also increases the risk of a heart attack by about 30%.¹ For those continually exposed to environmental tobacco smoke in the home or workplace, the risk of heart attack doubles. In fact, of the 40,000 annual deaths attributable to environmental tobacco smoke, 35,000 result from heart disease. The American Heart Association estimates that some 90% of nonsmokers are routinely exposed to environmental tobacco smoke.

Within minutes of exposure to cigarette smoke, the capacity of the blood vessels that nourish the heart is impaired, the aorta stiffens, normal heart rate variability is reduced, and antioxidant efficacy is decreased. Within 30 minutes of exposure, secondhand smoke causes an increase in platelet clumping and damages the lining of blood

vessels, increasing the risk of heart attack and stroke.²

In June 2002, the city of Helena, MT, enacted a public smoking ban based on an analysis of hospital admissions data for a six-month period during which a public smoking ban was enforced.³ In a sample comprising smokers, nonsmokers, and former smokers in roughly equal percentages, hospital admissions due to myocardial infarction declined 40% during the six-month period.

This landmark study demonstrated for the first time the immediate benefits of protection from environmental tobacco smoke and may provide the impetus for universal smoke-free environments in public areas.

—Dean S. Cunningham, MD, PhD

References

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