

## **Smoking Ban Saves Lives in Montana Town 6 Smoke-Free Months Lead to a 60% Drop in Heart Attacks**

By Peggy Peck  
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April 1, 2003 (Chicago) -- Anti-smoking groups have long contended that smoking bans can have a positive effect on public health, and now they have proof: When Helena, Mont., enacted a smoking ban in public buildings, there was a 60% drop in heart attack admissions at local hospitals.

"What surprised us was how quickly there was an impact from this ordinance," says Richard Sargent, MD, who presented the study at the American College of Cardiology's 52nd Annual Scientific Session. "Also interesting, we found that people from the surrounding area around Helena, where smoking was permitted, still had similar heart attack levels. I liken it to a doughnut. In the hole is smoke-free Helena. In the dough is high-smoke, high-heart-attack surrounding area."

"This striking finding suggests that protecting people from the toxins in secondhand smoke not only makes life more pleasant; it immediately starts saving lives," says co-author Stanton Glantz, PhD, professor of medicine at the University of California, San Francisco, Cardiovascular Research Institute and a statistics authority. "This work substantially raises the stakes in debates over enacting and protecting smoke-free ordinances."

A similar debate is going on in New York City, where a two-day-old ban forbids smoking in bars, restaurants, and other indoor public places. A more stringent smoking ban will go into effect statewide later this year.

From June 2002 to December 2002, an ordinance in Helena, the capital of Montana, banned smoking in bars, restaurants, casinos, and workplaces in the city. "Helena represents a unique situation," says Glantz. The city of

65,000 people is relatively isolated and is served by one general hospital.

Researchers at St. Peter's Community Hospital reviewed records for the previous four years and determined that about 6.8 admissions for heart attacks occurred each month. During the time of the smoking ban, there were three admissions per month. "That represents a 60% decline in admissions and is highly statistically significant," Glantz tells WebMD.

Though there is a possibility that the findings are due to chance, Glantz says that the odds for this to be a chance occurrence are about 2 in a 1,000.

Sargent says the idea for the study came about when he and a colleague were having a casual conversation about a drop in heart attack admissions. Sargent recalls that his friend said the decline was unbelievable, which led Sargent to search the medical records. Sargent says the records were meticulously scrutinized to make sure the findings were real. "We believe this is the first time we have been able to show that a smoking ban has resulted in such a reduction in heart attacks."

"This is a small study, so we have to be cautious in how we interpret these results," say Richard Pasternak, MD, associate professor of medicine at Harvard Medical School. "However, the direction of the impact is correct. We know that the smoke from one cigarette can rupture a plaque in blood vessels." That rupture can cause a heart attack or stroke. Pasternak says that secondhand smoke is also known to have similar impact on people with heart disease.

"So when we have less people exposed to smoke, as was the case in Helena, it makes sense that the hospital admission rate will be decreased," Pasternak says.

Unfortunately, smoke-free Helena is only a memory.

Robert Shepard, MD, of St. Peter's Community Hospital, another co-

author, says the smoking ban was overturned by a court ruling. "We are seeing an increase in heart attacks again since December," Shepard says.

In December, there were six heart attacks; eight occurred in January, five in February, and nine in March. He says that in a couple of more months he will be able to confirm that the suspension of the smoking ban can be blamed on causing 14 to 16 heart attacks in the city.

Sargent says the results of the Montana study may be able to help other communities that are attempting to implement smoking bans, such as in the city of Chicago and the states of Delaware and Florida.

SOURCES: American College of Cardiology's 52nd Annual Scientific Session. Richard Sargent, MD, St. Peter's Community Hospital, Helena. Stanton Glantz, PhD, professor of medicine, University of California, San Francisco, Cardiovascular Research Institute. Richard Pasternak, MD, associate professor of medicine, Harvard Medical School. Robert Shepard, MD, St. Peter's Community Hospital, Helena.  
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