

Simplicity is knowing your health  
and wellbeing are being cared for

**PHILIPS**  
sense and simplicity

◀ [Back to Article](#)

🖨️ [Click to Print](#)



Thursday, Jun. 28, 2007

## New Dangers of Secondhand Smoke

By Alice Park

Researchers have known that secondhand smoke can be just as dangerous for nonsmokers as smoking is for smokers, but now there's fresh evidence quantifying just how hazardous the after burn from cigarettes can be, and how quickly it affects your body. Scientists at the Oregon Department of Health documented for the first time an hourly buildup of a cancer-causing compound from cigarette smoke in the blood and urine of nonsmokers working in bars and restaurants in the state.

Reporting in the *American Journal of Public Health*, the researchers found that waitstaff and bartenders working a typical night shift gradually accumulated higher levels of NNK, a carcinogen in cigarette smoke, at the rate of 6% each hour they worked. NNK is known to be involved in inducing lung cancer in both lab rats and smokers.

"We were somewhat surprised by the immediacy of the effect and the fact that we could measure the average hourly increase," says Michael Stark, the lead author of the study and a principal investigator at the Multnomah County Health Department in Oregon.

Previous studies conducted in homes where one family member smoked, or in work environments where some employees lit up, had found that nonsmokers in these environments on average increased their risk of developing lung cancer, as well as other health conditions such as heart disease and respiratory ailments, by 20%. And the Surgeon General, in a comprehensive report last year on the health effects of secondhand smoke, determined that there is "no risk-free level of exposure to secondhand smoke." But until now, it wasn't clear how quickly the carcinogens became absorbed.

The authors are confident that the increases in NNK in the workers they tested most likely came from their exposure to smoke — the study included a control group of similar subjects in restaurants where no

smoking was allowed, and these workers showed no differences in the amount of NNK in their urine before and after their shifts.

The findings only underscore what public health officials have been arguing for decades — that cordoning off smokers in indoor environments or relying on ventilation systems in restaurants and bars is not enough. "There is experimental evidence from studies where you put nonsmokers in a room, blow smoke into the room and measure their artery function, that you see the platelets get sticky, which can cause clots and lead to a heart attack, and the ability of the arteries to dilate decreases very rapidly," says Dr. Matthew McKenna, director of the office on smoking and public health for the Centers for Disease Control.

All of which could mean more time loitering outside buildings and in alleyways for smokers intent on grabbing a puff. Thirteen states now prohibit smoking in restaurants altogether (most of these include bars as well), and while 11 states still put no restrictions on lighting up, individual cities within those states — such as Austin in Texas, for example — have passed legislation banning smoking in eating establishments and other public areas. Many of these regulations are the direct result of grassroots advocacy efforts; "It's been a very effective strategy," says McKenna. "If the discussion moves to a centralized place like the state legislatures, opponents can concentrate their efforts and water down the argument for a ban. But if there are 40 municipalities working on smoking bans at the same time, it's difficult for opponents to fight so many battles at the same time."

More states are also passing laws to override a loophole — known as a pre-emption — that prevents cities and local municipalities from passing more restrictive laws than the state. It's just getting harder to refute the scientific evidence; in a study done in Scotland several months after that nation instituted a ban on smoking in public places, researchers found that following the ban, bar patrons showed stronger lung capacity and reduced levels of inflammation (a red flag for a number of chronic diseases, including heart disease and asthma). "We made it pretty clear that the science on this is pretty irrefutable," says McKenna. And if smokers have fewer places to smoke, that message may finally get heard.

 [Click to Print](#)

**Find this article at:**

<http://www.time.com/time/health/article/0,8599,1638535,00.html>

---

Copyright © 2007 Time Inc. All rights reserved. Reproduction in whole or in part without permission is prohibited.

[Privacy Policy](#) | [Add TIME Headlines to your Site](#) | [Contact Us](#) | [Customer Service](#)