

Children living in apartments with nonsmoking adults still exposed

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The majority of children living in apartments are exposed to secondhand smoke, even when they don't live with smokers. This study from the University of Rochester Medical Center is the first to examine whether housing type is a potential contributor to children's exposure to cigarette smoke. The abstract was presented this morning at the Pediatric Academic Society Meeting in Vancouver, Canada.

Among [children](#) who lived in an apartment, 84 percent had been exposed to tobacco smoke, according to the level of a biomarker (cotinine) in their blood that indicates exposure to nicotine found in tobacco, and this included more than 9 of 10 African-American and white children. Even among children who lived in detached houses, 70 percent showed evidence of exposure.

"We are starting to understand the role that seepage through walls and through shared ventilation may impact [tobacco smoke exposure](#) in apartments," said Karen Wilson, M.D., MPH, author of the study and an assistant professor of Pediatrics at the University of Rochester Medical Center's Golisano Children's Hospital. "We see that children are being exposed in ways we are not picking up, and it's important, for their health, that we figure out where this exposure is taking place, and work to eliminate it. Multi-unit housing is one potential source, but a very important one."

Previous studies have shown that children with cotinine levels indicating tobacco smoke exposure have higher rates of [respiratory diseases](#),

decreased [cognitive abilities](#) and decreased antioxidant levels.

The study analyzed data from almost 6,000 children between 6- and 18-years-old in a national database (National Health and Nutrition Examination Survey 2001-2006) to see if there was any relationship between their smoke exposure and their housing type. Apartment living was associated with a 45 percent increase in cotinine levels for African American children and a 207 percent increase for white children. About 18 percent of U.S. children live in apartments, and many of these children are living in subsidized housing communities where smoking is more prevalent.

Wilson said many parents are trying to limit their children's tobacco smoke exposure by not allowing smoking in their apartments, but they say they can smell tobacco smoke coming from other apartments or from common areas. Last summer, the U.S. Department of Housing and Urban Development released a memo recommending that their housing developments enact smoke-free policies. A smoking ban within multi-unit, subsidized [housing](#) could further reduce the tobacco smoke exposure for children and reduce smoking rates among residents.

Provided by University of Rochester

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