

Living Near Busy Street Ups Breathing Problems

NEW YORK - The closer people live to a main road, the more likely they are to suffer from respiratory symptoms such as breathlessness and wheezing, a new study from Switzerland shows.

"These findings from a general population provide strong confirmation that living near busy streets leads to adverse respiratory health effects," Dr. Lucy Bayer-Oglesby, of the University of Basel, and colleagues write in the *American Journal of Epidemiology*.

While outdoor air pollution -- especially tiny particles that can be breathed deep into the lungs—is known to be hazardous to people's health, to date no researchers have looked at how proximity to main roads affects respiratory symptoms in a general population, Bayer-Oglesby and her team note.

To investigate, they looked at data from a two-part study of air pollution and lung disease. It involved 9,651 randomly selected men and women aged 18 to 60 who enrolled in the study in 1991, 8,047 of whom re-enrolled for the second phase of the study in 2002.

People's risk of having attacks of breathlessness increased by 13% for every 500-meter segments of main street located within 200 meters of their home. The risk of such attacks among people who had never smoked fell by 12% for each additional 100 meters between their homes and a main street.

Individuals whose homes were within 20 meters of a busy road were 15% more likely to regularly have phlegm in their breathing passages, while they were 34% more likely to have wheezing with breathing problems.

The effects of traffic on respiratory health were stronger for men and for people who had never smoked.

The effects of living near main streets were weaker in 2002 than in 1991, which may have been due to stricter requirements on auto emissions, the researchers note.

"Living close to main streets or in a dense street network increases the risks for certain respiratory symptoms in adults, particularly for asthma-related symptoms such as attacks of breathlessness and wheezing and for bronchitic symptoms such as regular cough and phlegm," they conclude.

SOURCE: American Journal of Epidemiology, December 15, 2006.