Largest air pollution study is released

March 8 2006

A study published Wednesday suggests fine particulate air pollution spikes increase cardiovascular and respiratory hospitalizations across the United States.

Researchers at the Johns Hopkins Bloomberg School of Public Health and at Yale University conducted the largest study of the health effects of soot and other tiny particles of pollution. The study involved 11.5 million Medicare enrollees in 204 urban counties between 1999 and 2003, the Chicago Sun-Times reported.

The researchers found short-term spikes in particulate matter pollution resulted in more people being hospitalized for such conditions as heart and lung ailments; obstructive pulmonary disease; respiratory infections, such as pneumonia; cerebrovascular events such as stroke; and peripheral vascular disease.

Particulate matter is the term used for particles found in the air, including soot, dust, smoke and liquid droplets.

"Our study is specific to the elderly, but there is epidemiological evidence that air pollution also affects the health of the younger population," said Francesca Dominici, a Johns Hopkins associate professor of biostatistics and lead author of the study.

The research is detailed in the current issue of the Journal of the American Medical Association.