

# Air pollution may increase risk of appendicitis

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Could there be a link between high levels of air pollution and the risk of appendicitis? New research presented at the 73rd Annual Scientific Meeting of the American College of Gastroenterology in Orlando, suggests a novel connection.

"Adult onset appendicitis is a common condition whose cause is unclear and almost universally requires surgery," explained Dr. Gilaad G. Kaplan of the University of Calgary.

Dr. Kaplan and his colleagues identified more than 5,000 adults who were hospitalized for appendicitis in Calgary between 1999 and 2006. The team used data from Environment Canada's National Air Pollution Surveillance (NAPS) monitors that collect hourly levels of ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, and particulate matter of varying sizes. Regression analysis was used to evaluate whether short-term daily changes in air pollution levels were related to the development of appendicitis.

## **More Appendicitis Hospitalizations on "High Ozone" Days**

Exposure to air pollutants, particularly ozone, was associated with a modest increased risk of developing appendicitis. Previous studies have shown that air pollution may promote other disease states through inflammation, and this may be the mechanism by which air pollution increases the risk of appendicitis.

"If the relationship between air pollution and appendicitis is confirmed,

then improving air quality may prevent the occurrence of appendicitis in some individuals," said Dr. Kaplan.

Source: American College of Gastroenterology

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