

News Center

News Center Home	Categories ▾	Media Coverage	Editor's Picks ▾	News Archives	About Us ▾	
YOU ARE AT: Home » Clinical Breakthroughs » Longitudinal Study Links Air Pollution With Cardiovascular Disease Risk						

Longitudinal Study Links Air Pollution With Cardiovascular Disease Risk



BY SARAH PLUMRIDGE ON NOV 2, 2016

An increased concentration of air pollution within metropolitan areas is associated with progression in coronary calcification and with acceleration of atherosclerosis, according to a study published in *The Lancet*.

In the prospective, 10-year cohort study, Northwestern Medicine scientists and collaborators at other institutions repeatedly measured coronary artery calcium by CT scan in 6,795 participants aged 45 to 84 years, who were enrolled in the Multi-Ethnic Study of Atherosclerosis and Air Pollution (MESA Air) in six metropolitan areas in the U.S.



New research suggests increased concentrations of air pollution are associated with progression of cardiovascular disease.

At Northwestern, [Martha Daviglus, MD, PhD](#), adjunct professor of [Preventive Medicine](#) and of [Medicine](#), was a co-author of the study.

The investigators examined the association between both progression of coronary artery calcium and carotid artery thickness and long-term exposure to ambient air pollutant concentrations.

The study found that coronary calcium increased on average by 24 Agatston units (a clinical measure of calcium) per year, and intima-media thickness (a measurement of the thickness of the innermost two layers of the wall of an artery) by 12 micrometers per year, before adjusting for risk factors or air pollutant exposures.

The research was funded by the Environmental Protection Agency and the National Institutes of Health.

- Preventive Medicine
- Research

ABOUT AUTHOR

Sarah Plumridge

Sarah Plumridge is a content specialist in the Office of Communications. She writes and takes photos for news stories covering education and alumni affairs, as well as research. She studied biology and studio arts at the University of Rochester and completed her master's degree in journalism from Northwestern University's Medill School of Journalism, Media, Integrated Marketing Communications. s-plumridge@northwestern.edu

RECENT CLINICAL BREAKTHROUGHS



NOV 7, 2016

New Drug Clears Atopic Dermatitis in Clinical Trials



NOV 7, 2016

Gene Signature Predicts Response to Radiation Therapy



OCT 10, 2016

Physical Activity Helps Older Adults Maintain Mobility

Latest News



NOV 7, 2016

PhD Student Explores the Development of Eosinophils in Allergic Diseases



NOV 7, 2016

New Drug Clears Atopic Dermatitis in Clinical Trials



NOV 7, 2016

Gene Signature Predicts Response to Radiation Therapy



NOV 3, 2016

Linder Joins Northwestern as Chief of General Internal Medicine



NOV 3, 2016

Taiwo to Lead Division of Infectious Diseases

News Center Home

Media Coverage

News Archives

About Us

FLICKR PHOTOS



Northwestern University

Northwestern University Feinberg School of Medicine

