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Microscopic Pollution Increases Heart Disease Risks

Beijing smog during Olympics highlights health concerns here at home

A recent report by researchers at Northwestern University and concerns over the high levels of pollution in Beijing, China, the site of the 2008 Olympic Games, is focusing increased attention on the dangers of living with heart disease in polluted areas. Of particular concern, in a 2007 study conducted by lead researcher Dr. Gokhan Mutlu of Northwestern's Feinberg School of Medicine, is microscopic pollution: tiny particles generated by diesel exhaust, buses, and coal-burning factories. People already diagnosed with heart disease are vulnerable to increased risk of heart attack and stroke in these high-pollution areas, but Mutlu recently warned in *Science Daily* that "Being exposed to higher levels of pollution may unmask heart disease even if you've never had any symptoms."

Visitors to the Beijing Olympics were advised to stay indoors during rush-hour periods, when short-term particulate levels are highest, and Scott Budinger, MD, also of Northwestern University, suggested that men over 40 should take an aspirin daily to minimize their blood becoming thick and sticky, also saying that it "probably wouldn't hurt" for women to take one, too. The Food and Drug Administration has approved the use of an aspirin regimen to reduce the incidence of heart attack and stroke in both men and women who already live with heart disease, emphasizing that patients should only begin an aspirin regimen after consulting with their physician.

Unfortunately, you don't have to travel to Beijing to face the same pollution problems here in the United States. The top ten cities most affected by short-term particulates include Pittsburgh, Los Angeles, Detroit, Salt Lake City, and Washington, DC. The American Lung Association reports that 1 in 4 people live in areas with unhealthy short-term particle pollution.

There is good news for those who live in Miami, Colorado Springs, and Sioux Falls — those cities are among the top 25 identified by the American Lung Association as having the lowest levels of the same type of microscopic pollution.

A recent report by the Women's Health Initiative found that exercise in polluted environments does cause a temporary reduction in blood flow to the heart muscle. If you want to get outdoors despite the warnings, doctors advise that exercise be restricted to early morning or evening hours, when particle pollution is at lower levels, while avoiding exercising along roads with heavy traffic.

And here's a handy tip: you can check the daily air quality forecast in your area at <http://www.airnow.gov> and plan your day accordingly.