The Health Effects of Regional Haze

Particle exposure can lead to a variety of health effects. The particles that make up haze can go deep into the lungs, and in some cases, enter the bloodstream. Numerous studies link particle pollution to increased hospital admissions and emergency room visits - and even to death from heart and lung diseases.

People who suffer from heart or lung disease or respiratory conditions, such as coronary artery disease, congestive heart failure, asthma, or chronic obstructive pulmonary disease, are more at risk during haze events due to fine particle pollution aggravating the heart or the lungs.

People with diabetes are also more at risk, potentially due to underlying cardiovascular disease.

Studies show that when particle levels are high, older adults are more likely to be hospitalized and die when particle pollution aggravates heart or lung disease.

Children are more vulnerable to particle pollution for a number of reasons. First, children’s lungs are continuously developing and, even at rest, their breathing rates can be twice that of adults. Children tend to be far more active than adults, which means they are taking in more air (including particles) into their lungs. Also, many children have asthma that can be aggravated by particle pollution.

Exposure to particles has been linked to heart attacks and irregular heart rhythms in people with heart disease. Recent evidence suggests that such incidences can be triggered by exposure to fine particle pollution for as little as one hour.

Even the lungs of healthy people can be damaged by long-term exposure to fine particle pollution. Healthy people may also experience temporary symptoms from short-term exposure to fine particle pollution, such as irritation of the eyes, nose and throat; coughing; phlegm; chest tightness; and shortness of breath.
Prepared by the Mid-Atlantic/Northeast Visibility Union (MANE-VU), an organization of Mid-Atlantic and Northeastern states, tribes, and federal agencies for coordinated planning and action to reduce regional haze in major national parks and wilderness areas.

For more information, please visit: www.epa.gov/airnow/health.html.