Did you know that Chronic Obstructive Pulmonary Disease (COPD) is the fourth leading cause of death in the United States, claiming more than 125,000 lives in 2005? In 2006, COPD caused 672,000 hospitalizations and 1.4 million hospital emergency room visits. COPD includes chronic bronchitis and emphysema - lung diseases which frequently coexist and are characterized by obstruction to air flow, making it difficult to breathe. Smokers are particularly at risk of developing COPD, however, it also has been linked to workplace exposure to dust and fumes. Symptoms include chronic cough, increased mucus production, chest tightness, shortness of breath and difficulty breathing.

**Economic Impact of COPD and Asthma**

In 2007, the annual treatment cost for all age groups was approximately $43 billion for COPD. COPD is particularly common among older adults and significantly compromises their quality of life. As baby boomers age, the number of older adults affected by COPD and asthma is expected to grow significantly.

**Environmental Hazards, Triggers for COPD and Asthma**

**Outdoor Air**

Exposure to air pollution can pose a significant risk to older adults, especially those with lung disease. Particle pollution may aggravate lung diseases, including COPD and asthma, and may be responsible for serious health effects, including hospitalization or premature death. Ozone also may aggravate lung diseases and may result in emergency room and hospital admissions.

**Indoor Air**

Pollutants that exist within homes and buildings also may be harmful to persons with COPD or asthma. Many older persons spend up to 90 percent of their time indoors, often at home. Common indoor environmental hazards that may trigger COPD and asthma attacks include tobacco smoke (direct and second-hand smoke), animal dander, dust mites and cockroaches, mold, dust and pollen. Other sources of indoor air pollution that may trigger a COPD or asthma attack include combustion products of oil, gas, kerosene and coal, and building materials and furnishings made of pressed wood products. Pesticides, household cleaning...
Pollutants that exist within homes and buildings also may be harmful to persons with COPD or asthma.

What you can do to control and reduce exposure to environmental hazards

If you or your loved one experience symptoms of COPD or asthma, consult a doctor and follow a management plan outlined by your health care provider. The key to management of these diseases is through preventive measures and reduced exposure to environmental hazards. Take steps to prevent, control and reduce the frequency of symptoms to allow you or your loved one to breathe easier.

- Avoid tobacco smoke
- Avoid smoke from wood-burning stoves
- Reduce mold, dust mites and cockroaches in your home
- Keep pets out of sleeping areas
- Check furnace and heating units annually
- Fix water leaks promptly
- Check the Air Quality Index (AQI)

Reduce outdoor activity as much as possible on poor air quality days. The AQI reports how clean the air is and whether it will affect your health. If you have access to the Internet, you can learn more about the AQI by visiting www.epa.gov/airnow. If you do not have access to a computer or the internet, you can learn more about the daily AQI through newspaper, television and radio weather reports.

Learn More About EPA’s Aging Initiative

The Aging Initiative is working to protect the environmental health of older adults through the coordination of research, prevention strategies and public education. For more information about the Aging Initiative, visit www.epa.gov/aging.

A poster entitled “Age Healthier Breathe Easier” on COPD, asthma and older adults is also available on the website to download.

Endnotes

2. Ibid.

Publication Number EPA 100-F-09-045