Outdoor Air Quality and Adult Lung Disease

Poor air quality is unhealthy for everyone, but especially for adults with lung disease — such as COPD, chronic bronchitis, or emphysema. Older people are also at risk because they may have lung conditions they don’t know about. These pages will help you know where and when to exercise. For people with lung disease, poor air quality can cause:

- Coughing, wheezing
- Trouble breathing
- More severe disease symptoms
- More hospital visits
- Permanent lung damage, higher risk of heart attack, and early death

The Air Quality Index (AQI) is a number for reporting how clean or unhealthy your air is every day. You can find it on the Internet at AirNow.gov. It’s also reported in local news sources:

When AQI is: A person with lung disease should:

1–50 GOOD
- Enjoy usual outdoor activities

51–100 MODERATE
- Reduce outdoor exercise — not as long, not as hard
- If you have symptoms, stay indoors

101–150 UNHEALTHY for sensitive groups
- Plan outdoor activities in the morning, when air quality is usually better

151–200 UNHEALTHY for all
- Exercise indoors
- If you are coughing, don’t exercise
- If you are having trouble breathing, get medical help right away and don’t exercise

201–300 VERY UNHEALTHY for all
- Traffic pollution is harmful even when AQI is good
- Whenever possible, avoid outdoor air in places with a lot of traffic
- Always take your medicines as prescribed by your doctor, especially when air quality is unhealthy
What causes poor air quality?

- Smoke stacks
- Wood burning — inside or outside
- Cars and trucks
- Blowing dust

**Particulate matter** is tiny particles in the air like dust, dirt, soot, and smoke. In northern Utah, it’s more common and more of a problem in winter months. Symptoms may come several hours after exposure.

**Ground-level ozone** is a colorless gas. It forms when polluted air comes in contact with heat and sunlight. This is more common in summer months and late in the day. Symptoms usually come right away.

**Particulate matter and your lungs**

- **PM 2.5 particles** are extremely tiny. Even a face mask won’t keep them out of your airways. They can get deep into your lungs and cause inflammation.

- **PM 10 particles** are a bit bigger. They include things like dust and pollen. Your nose and airways can filter some of these before they reach your lungs and heart.

Inflammation in your lungs narrows your airways and makes breathing difficult.

More ways to take action

- **Pay attention to the air in your home**
  Be sure indoor air is free of smoke and chemical fumes. Ask your doctor if you should get an air filter.

- **Listen to your body**
  Get to know your own responses at different AQI levels — and when you need to change your plans.

- **Get to know your neighborhood**
  Pay attention to places and times of day where air quality affects you most.

- **Learn more**
  Get more information about how you can help improve air quality — both outdoors and in your home.

Utah Clean Air
UCAir.org
AirNow.gov
EPA.gov/airquality

© 2015 Intermountain Healthcare. All rights reserved. The content presented here is for your information only. It is not a substitute for professional medical advice, and it should not be used to diagnose or treat a health problem or disease. Please consult your healthcare provider if you have any questions or concerns. More health information is available at intermountainhealthcare.org.