

Air Quality and Your Lungs

Air quality affects the way you live and breathe. The Air Quality Index (AQI) measures air pollution. It is reported every day as a number between 0 and 500. The higher the number the more pollution is in the air. This index measures these four elements that can make breathing more difficult:

- Ozone levels
- Particles (solids and liquids droplets)
- Carbon Monoxide
- Sulfur Dioxide

Ozone

There is good ozone and bad ozone. The good ozone protects you from the harmful effects of the sun's rays. The bad ozone is formed when pollution from cars, power plants, and other places reacts with sunlight. Ozone can irritate the lungs and cause coughing, sore throat or discomfort in the chest.

If you have asthma or other lung condition, higher levels of bad ozone can make you more sensitive to allergens.

Particles

All air is made up of very small solids and liquids that form into air droplets that you breathe in. They come from cars, industrial plants, burning wood and other things. When they get into your lungs, particles can cause coughing and shortness of breath.

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Learn more about your health care.

Carbon Monoxide

Carbon monoxide is a colorless and odorless gas that goes into the air when carbon in fuel is not burned off fully. When you breathe, the gas gets into your blood and attaches to your red blood cells. This makes it harder for your body to get the oxygen it needs. Low oxygen in the body causes shortness of breath and confusion. It is common to find higher levels of carbon monoxide occur in colder months of the year.

Sulfur Dioxide

Sulfur dioxide is another type of gas that is produced when coal or oil fuels are burned. If you breathe through your nose, most of the sulfur dioxide does not go into the body. However, when breathing through your mouth, it can cause narrowing of your breathing tubes and inflammation in your lungs. This can lead to wheezing, chest tightness and shortness of breath..

When You Have Asthma or a Lung Condition

Use the air quality index to help plan you activities.

- **Limit time** outside working or exercising if the AQI is **over 100**.
- **Do not** exercise or work outside if the AQI is **over 200**.
- If you are extra sensitive to air pollution limit outdoor work or exercise if the AQI is between 50 and 100.
- Wear a mask if the air is “dusty”.
- Do not leave your car running in a garage or other covered place.
- Avoid driving in heavy traffic jams.
- Check the AQI in Ohio or anywhere in the United States at the website: www.airnow.gov.

✦ **Talk to your doctor or others on your health care team if you have questions. You may request more written information from the Library for Health Information at (614) 293-3707 or email: health-info@osu.edu.**