How Lungs Work

The Respiratory System

The respiratory system is very complex. Air enters and leaves your body through this system. Let’s take a closer look at the parts of the respiratory system.

- **Nose** – Entrance and exit for air. The nose has small hairs inside of it to help catch little particles in the air before they reach your lungs.
- **Mouth** – Another entrance and exit for air.
- **Throat (pharynx)** – Captures air and sends it down to the windpipe.
- **Windpipe (trachea)** – Passageway from throat to lungs.
- **Bronchial tubes** – Tube that splits air in half. Each half of air is directed to one of the lungs.
- **Diaphragm** – A very strong muscle that helps move air into and out of the lungs.
- **Lung** – Organ that contains the bronchial tubes, bronchioles, and air sacs.
- **Bronchioles** – Even smaller airways that bring air even further into the lungs.
- **Muscles** – Help move air through bronchioles into the air sacs.
- **Air sacs (alveoli)** – Small sacs deep inside of lungs where air finishes its journey through the respiratory system. In these sacs is where oxygen (O2) enters the blood stream.

On days when air quality is not so good...

**What is an Air Quality Advisory?**

An Air Quality Advisory is a message notifying the public about poor air quality. An AQA is called when pollutants have reached unhealthy levels. Whether you have asthma or not, breathing high amounts of pollution can permanently harm your lungs. So how do you know if there is an Air Quality Advisory? One way is to listen to the radio and television in the morning. In some areas of the state, the weather forecaster will announce if air pollution levels are expected to be high. You can also check the air quality on line at: [dnr.wi.gov/air/](http://dnr.wi.gov/air/)

**What you can do on a poor air quality day to help:**

- **Don’t mow the lawn** – If possible, tell your parents to hold off for a day or two.
- **Ride your bike** – Riding your bike is exercise for your body and helps reduce air pollution emissions. If you don’t feel well when you go outdoors or exercise on poor air quality days, stay indoors.
- **Walk** – Walking is good for your body and gives you time to stop and smell the flowers.
- **Stay inside** – If you have asthma or you just don’t feel good when you go outside, try spending the day inside. This is a great day to go to the library.
- **Don’t burn** – Burning anything causes pollution.
- **Combine trips** – Go to the store and your friend’s house during the same trip. This reduces air pollution, and saves you time too!
- **Don’t mow the lawn** – If possible, tell your parents to hold off for a day or two.
- **Ride your bike** – Riding your bike is exercise for your body and helps reduce air pollution emissions. If you don’t feel well when you go outdoors or exercise on poor air quality days, stay indoors.
- **Walk** – Walking is good for your body and gives you time to stop and smell the flowers.
- **Stay inside** – If you have asthma or you just don’t feel good when you go outside, try spending the day inside. This is a great day to go to the library.
- **Don’t burn** – Burning anything causes pollution.
- **Combine trips** – Go to the store and your friend’s house during the same trip. This reduces air pollution, and saves you time too!

AQI is an acronym for Air Quality Index. The AQI of the day will tell you the amount of pollutants in the air you are breathing. You can call this phone number and find out the AQI in your area. (Some areas are not on the phone message): 1-866-DAILY AIR (1-866-324-5924) or you can find this information on the web at: [www.cleanairwisconsin.org](http://www.cleanairwisconsin.org) or [www.epa.gov/airnow/](http://www.epa.gov/airnow/).

**DNR contact information**

For more information please contact the Department of Natural Resources, Bureau of Education and Information, F.O. Box 7921, Madison, WI 53707-7921, Email: DNRAirEducation@wisconsin.gov