Protect Yourself

You're exposed to pollution any time you breathe polluted air. But when you exercise, do yard work or other strenuous activities that increase your breathing rate, you take more pollution into your lungs.

You can reduce your exposure by using AQI forecasts to help you plan your day. When the forecast calls for elevated levels of pollution, protect your health by reducing your exposure – especially if you are in a sensitive group.

How do you reduce your exposure when air quality is poor? Reschedule strenuous activities for times when air quality is expected to be better. Take it a little easier. You can cut back on vigorous activities, such as walking instead of jogging. These small changes can help you protect your lungs and heart.

Get Your Local AQI Forecast

You can find your local forecast by logging on to EPA's AIRNow Web page at www.airnow.gov. Once on this site, you can also sign up for EnviroFlash, an e-mail and pager notification service that alerts you when your local air quality reaches certain levels. EnviroFlash gives instant air quality information that you can customize for your own needs, allowing you to take steps to protect the health of you and your family.

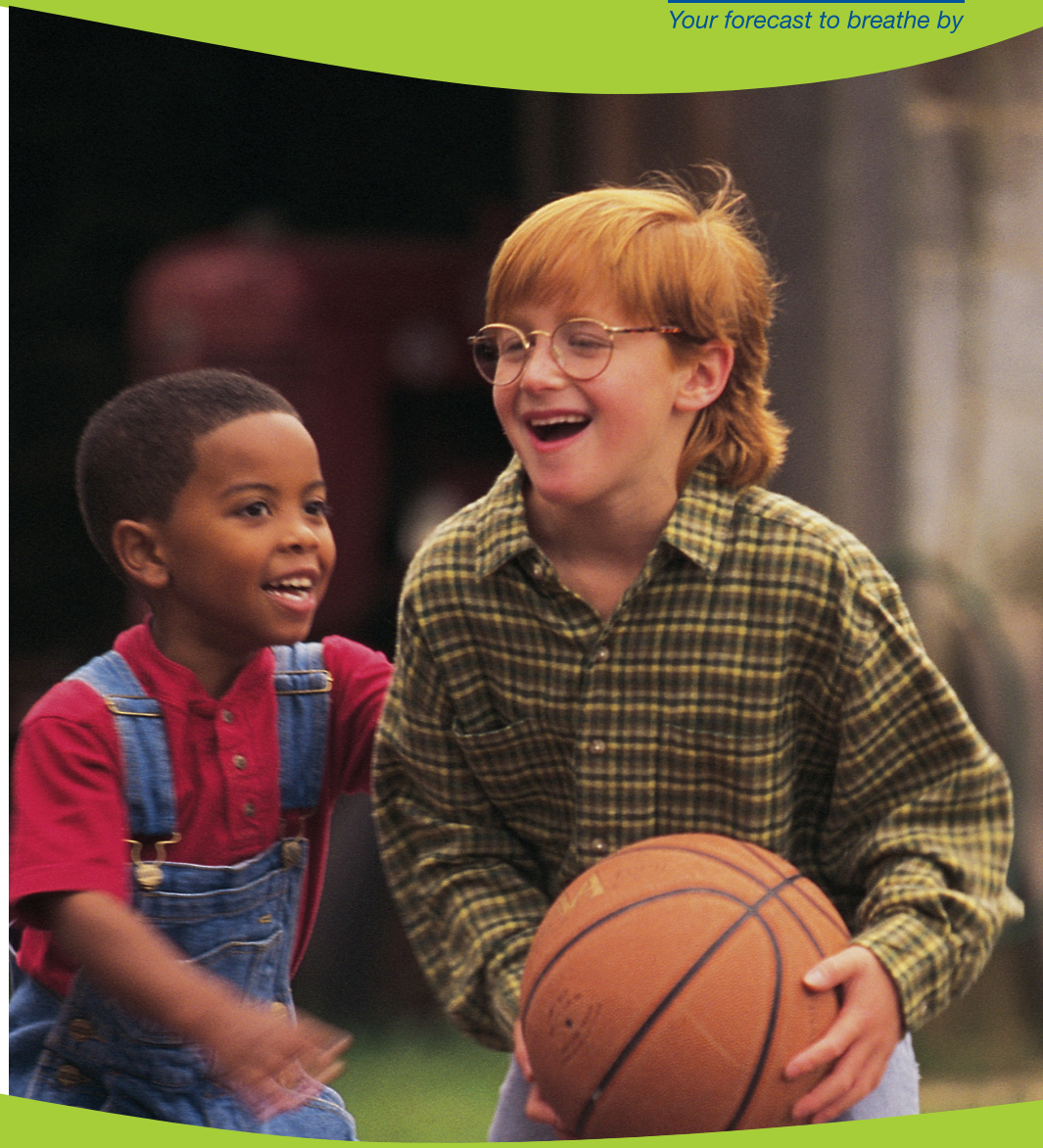
If you have limited Internet access, you'll find that many local television stations, radio stations and newspapers also carry local AQI forecasts.

For more real-time information on air quality visit:
www.airnow.gov

EPA United States Environmental Protection Agency

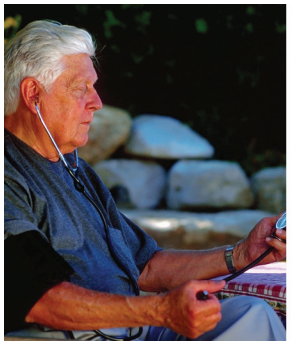
EPA-456/F-07-002
February 2007

AQI
AIR QUALITY INDEX
Your forecast to breathe by



AQI Forecasts:

Your Advance Notification About Unhealthy Air



The Air Quality Index (AQI): As Important as Checking the Weather

You probably check the weather forecast every day. After all, it's a useful tool that helps you plan what to wear and lets you know if you need to carry an umbrella. But there's another forecast you should be checking, too -- the AQI. It can help you plan activities that protect your health.

How the AQI Works

Meteorologists in state and local air quality agencies develop AQI forecasts using actual air quality data, along with weather forecast information. These forecasts are then translated into a simple color-coded key that tells you how healthy or unhealthy the air is. Everyone may begin to experience health effects on a red air quality day.

Color	AQI	Health Message
Green	Good	Air quality is considered satisfactory, and air pollution poses little or no risk.
Yellow	Moderate	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Orange	Unhealthy for Sensitive Groups	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Red	Unhealthy	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Purple	Very Unhealthy	Health alert: everyone may experience more serious health effects.
Maroon	Hazardous	Health warnings of emergency conditions. The entire population is more likely to be affected.

What Does the AQI Tell Me?

The AQI is a fast and effective way to let you know:

- what today's air pollution levels will be in your community;
- who is at risk from that pollution; and
- simple steps you can take to protect yourself.

Ground-level ozone and particle pollution are two of the most common air pollutants; the U.S. Environmental Protection Agency, state and local agencies often provide separate forecasts for each of them.

Ground-Level Ozone

Ground-level ozone is formed when pollutants emitted by vehicles, power plants and industrial plants react in the presence of sunlight, usually during the summer. Ozone aggravates asthma and other respiratory diseases, and can make it difficult for you to breathe as deeply as you normally would. Ground-level ozone can also permanently change the structure of your lungs.

Particle Pollution

Unlike summertime ozone, particle pollution can occur year round. Particle pollution comes from a wide range of sources, including power plants, cars and trucks, wood stoves and forest fires. Airborne, microscopic particles can get deep into your lungs and aggravate heart and lung disease. Symptoms can include coughing, wheezing, shortness of breath, and unusual fatigue. In people with heart disease, particle pollution has been linked to heart attacks and arrhythmias.

Groups sensitive to the effects of air pollution beginning at the orange air quality level:

Ground-level Ozone: People with lung disease (such as asthma), children, and adults who are active outdoors.

Particle Pollution: People with heart or lung disease (such as asthma), older adults, and children.