

## Air Quality Awareness Guide

Channel 3 Weather has air quality awareness tips that could make breathing a little easier this year.

Always remember:  
“Bad Air Quality Can Affect Your Health”



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### OZONE AND PARTICLE POLLUTION:

Ozone and particle pollution are two of the most common air pollutants in the United States. While ozone is the greatest concern during the summer months, particle pollution can occur anytime throughout the year.

- **What is Ozone?** Ground level-ozone pollution forms through a reaction of heat and sunlight with volatile organic compounds (VOC) and nitrogen oxides. These substances come from such things as gas fumes, various industrial processes, car exhaust, power plant emissions and other sources.
- **What is Particle Pollution?** Particle pollution is a mixture of small solids and liquid droplets in the air that come from smoke, exhaust, dust, pollen, gas and other sources. These fine particles are so small they can not be seen by the naked eye. They are about 1/30th the diameter of a human hair.

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### WHAT CAUSES POOR AIR QUALITY?

Air pollution differs across cities and regions and depends on the amount of emissions from vehicle exhaust, power plants, wood burning, gas fumes and other sources. Natural events like wildfires and volcanic eruptions can also contribute to this process.

Weather can have a big impact on air quality:

- **Hot, sunny days** are prime conditions for ozone pollution to form.
  - **Temperature inversions** can trap polluted air over cities for extended periods of time. Geographic features like mountains can have the same effect by keeping pollution from dispersing.
  - **Wind** can transport air pollutants from one place to another, sometimes covering hundreds of miles.
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## HOW TO REDUCE OZONE AND PARTICLE POLLUTION:

Reducing vehicle emissions can make a big difference for air quality. Here are some ways to reduce your impact:

- **Walk it.** If you can, consider walking to work on nice days. Not only do you reduce vehicle emissions, but you also sneak in some extra exercise.
- **Dust off your two-wheeler.** Consider biking to your destination instead of driving. There is almost one adult-sized bike per household in the United States, but few adults report taking bike trips.
- **Use Public Transportation.** Check out your local transit options and consider taking the bus or train instead of driving.
- **Carpool.** Join a friend to cut your emissions and transportation expenses in half including gas and parking.

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## KEEPING YOUR LUNGS AND HEART SAFE:

Ozone and particle pollution can trigger asthma attacks and other health problems for people with lung conditions, and particle pollution can be dangerous for individuals with heart conditions. Sensitive groups, including children and older adults, can be especially vulnerable to health problems from air pollution.

If you have health conditions that are affected by poor air quality, take simple steps to protect your health:

- **Check the air quality forecast delivered by your local meteorologist.** When particle or ozone pollution levels reach “Code Orange”, it is time to take extra precautions.
  - **Avoid strenuous activities.** When air pollution levels are high, try to avoid strenuous outdoor exercise and yard work to reduce your risk.
  - **Reschedule.** On extremely high air pollution days, such as “Code Red,” consider rescheduling outdoor sporting events, hikes and other strenuous activities.
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## HOW TO GET AIR QUALITY INFORMATION:

About 300 U.S. cities issue regular air quality forecasts, including The Northeast Ohio Areawide Coordinating Agency (NOACA), that oversees air quality for Cuyahoga, Geauga, Lake, Lorain and Medina Counties in Northeast Ohio. Their website is <http://www.noaca.org>

You can check Today's Air Quality anytime at: <http://airnow.gov>

The Air Quality Index (AQI) provides information on air pollution levels in a specific area, as well as the health threats associated with those levels for five pollutants: ground-level ozone, particle, carbon monoxide, sulfur dioxide and nitrogen dioxide.

<b>Air Quality Index (AQI) Values</b>	<b>Levels of Health Concern</b>
0 to 50	Good
51-100	Moderate
101-150	Unhealthy for Sensitive Groups
151-200	Unhealthy
201-300	Very Unhealthy
301 to 500	Hazardous

## WHAT YOU CAN DO:

In addition to using transportation alternatives and protecting your health, there are many other ways to reduce air pollution in your community.

### Reducing Ozone Pollution:

- **Keep it in the tank.** Wait until after 6 p.m. to fill up at the gas station to avoid releasing fumes during the hottest part of the day.
- **Don't top off.** When you do fill your tank, prevent gas spills by resisting the urge to top-off.
- **Postpone yard work.** When you use gas-powered lawn equipment, wait until cooler, evening or early-morning hours. If you are replacing lawn and garden equipment, consider electric or hand-powered versions.

### Reducing Particle Pollution:

- **Burn carefully.** Avoid burning trash and leaves. If you use a fireplace or wood-burning stove, reduce smoking by only using well-seasoned wood.
- **Maintain your vehicle.** Regularly changing oil and air filters can reduce particles emitted from your car.

For more tips on protecting air quality, visit EPA's "What You Can Do To Clean The Air" at <http://www.epa.gov/air/actions>.



*Information Courtesy: Earth Gauge, A Program of the National Environmental Educational Foundation*

<http://www.earthgauge.net>

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