KNOW THE AIR YOU'RE BREATHING

The Air Quality Index

NEW YORK STATE | Department of Environmental Conservation

The U.S. Air Quality Index (AQI) is used by the New York State Department of Environmental Conservation (DEC) and the U.S. Environmental Protection Agency (EPA) to communicate daily air quality levels. Color-coded categories inform you about air quality in your area, groups of people who may be affected, and actions you can take to reduce your exposure to air pollution.

Daily AQI Color	Level of Concern	Index Values	What does this mean for me?	What actions should I take?
Green	Good	0–50	Air quality is satisfactory, and air pollution poses little or no risk.	It's a great day to be outside.
Yellow	Moderate	51–100	Air quality is acceptable. However, there may be a risk for some people, particularly those who are very sensitive to air pollution.	Very sensitive individuals may experience health effects and should consider limiting outdoor activities. For most people without health conditions, it's a great day to be outside.
Orange	Unhealthy for Sensitive Groups*	101–150	Members of sensitive groups* may experience health effects. The general public is less likely to be affected.	Sensitive groups* should make outdoor activities shorter and less intense. Take more breaks. Watch for symptoms such as coughing and shortness of breath and follow your healthcare provider's action plan.
Red	Unhealthy	151–200	Some members of the general public may experience negative health effects. Members of sensitive groups* may experience more serious health effects.	Everyone should reduce long or intense outdoor activities. Take more breaks. Sensitive groups* should move activities indoors** or reschedule outdoor events for another day. If outdoor activity is unavoidable, take frequent breaks and move indoors** if symptoms occur.
Purple	Very Unhealthy	201–300	The risk of negative health effects is increased for everyone.	Avoid all physical activity outdoors. Move indoors.** Follow specific Air Quality Health Advisory guidance.
Maroon	Hazardous	301 and higher	Emergency conditions: everyone is likely to be negatively affected.	Remain indoors** and sensitive groups* should keep all physical activity levels low indoors. Follow specific Air Quality Health Advisory guidance.

**Sensitive groups: these groups include children and teens, the elderly, pregnant people, those with lung or heart conditions, asthmatics, those who exercise or work outdoors, and those in disadvantaged communities.*

***During high-heat air pollution events, seek indoor locations with air conditioning or go to a cooling center.*

For more information, or to sign up for email updates from NYSDEC, visit our website: **www.dec.ny.gov**

Keep an Eye on the AQI

DEC provides daily AQI forecasts for two major pollutants, ground-level ozone and particulate matter, based on EPA's National Ambient Air Quality Standards. The AQI is an 8-hour average for ozone and a 24-hour average for particulate matter. For DEC's current AQI forecasts, visit on.ny.gov/nyaqi. For real-time air pollution data from DEC's monitoring network, visit nyaqinow.net.

DEC's air quality data meet strict EPA standards and are a reliable source of AQI information. Alternative sources of real-time hourly air pollution data online and on smartphone weather apps should not be directly compared to the AQI. Most are short-term measurements, not averages, and may not be accurate.

How to Use the AQI

Check the AQI on a regular basis like you would the weather forecast. Use the AQI forecast to plan your outdoor activities. If the AQI is forecast to exceed 100, DEC and the New York State Department of Health (DOH) will issue an Air Quality Health Advisory with precautionary recommendations for affected areas.

What is Ozone?

While the ozone layer in the upper atmosphere helps protect us from the sun's radiation, ground-level ozone is formed from air pollutants produced by human-made emissions and can lead to eye, nose, and throat irritation; coughing; chest pain; wheezing or shortness of breath; and may trigger asthma attacks. Ground-level ozone also contributes to haze—especially in the summer when high heat and sunlight contribute to ozone formation.

What is Particulate Matter?

Particulate matter is a mixture of solid particles and liquids in the air. Particles like dust, dirt, soot, or smoke can be seen with the naked eye, but other particles can only be seen using a microscope. Particulate matter comes in many sizes and shapes and can include hundreds of different chemicals. Some particulates are emitted directly from sources like construction sites, unpaved roads, fields, smokestacks, or fires. Emissions from power plants, industries, and automobiles also contribute to particulate formation.

The AQI is used to forecast particulate matter that can be inhaled, potentially causing serious health problems like difficulty breathing, heart and lung damage, and heart attacks. Particulate matter can also produce haze and contribute to acid rain.

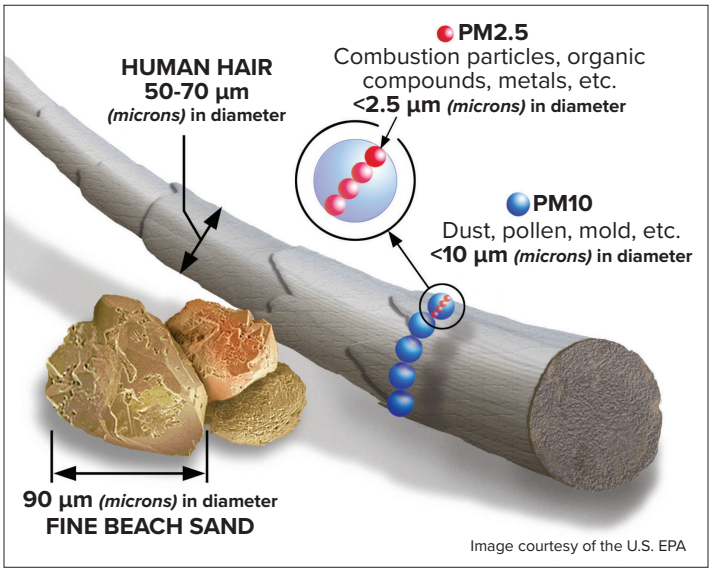
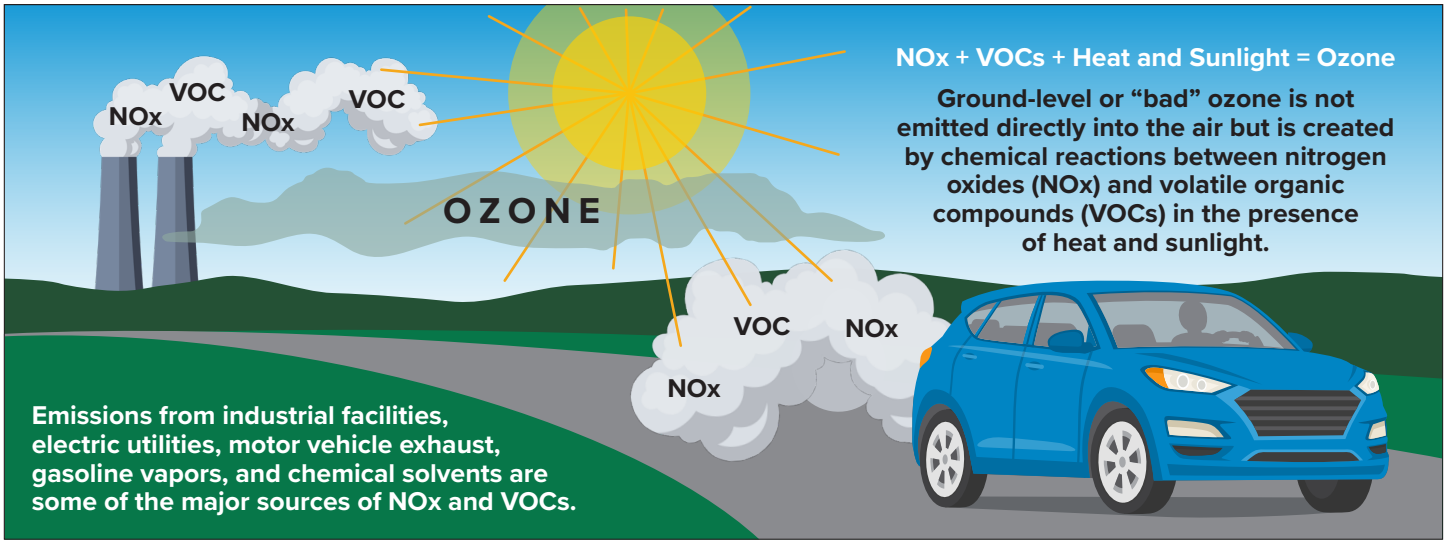


Image courtesy of the U.S. EPA



How You Can Reduce Air Pollution

- Use public transportation, carpool, or ride your bike instead of driving your car.
- Reduce your energy use by lowering home thermostats in the winter and raising them in the summer.
- Go electric: switch to electric vehicles, leaf blowers, and lawn mowers.
- Don't burn garbage, and limit campfires.

For more suggestions on reducing air pollution, visit dec.ny.gov/get-involved/living-green/keep-air-clean.