

If we do our share,  
we can breathe cleaner air!

This region has several days each year when air pollution is poor. On “Air Quality Action Days” citizens are urged to take action to protect their health and also to reduce their pollution-causing activities.

When you hear that it is a Code Red or Code Orange Day, use the Action Guide below, the air is unhealthy!



## Air Quality Action Guide

	AIR QUALITY	RECOMMENDED ACTION
CODE PURPLE	<b>Very Unhealthy</b>	<p><b>During Code Purple:</b></p> <ul style="list-style-type: none"> <li>▶ People with respiratory or heart ailments, children, and older adults should avoid outdoor physical activities.</li> <li>▶ Everyone else should avoid prolonged or heavy exertion outdoors.</li> </ul> <p><b>Residents are strongly urged to take all of the actions listed below.</b></p>
CODE RED	<b>Unhealthy</b>	<p><b>During Code Red:</b></p> <ul style="list-style-type: none"> <li>▶ Children should reduce outdoor activities.</li> <li>▶ Healthy individuals should limit strenuous or prolonged work or exercise.</li> <li>▶ Individuals with respiratory or heart ailments should limit their outdoor activities.</li> </ul> <p><b>Residents are strongly urged to take all of the actions below. In addition,</b></p> <ul style="list-style-type: none"> <li>▶ Avoid mowing lawns with gas-powered mowers.</li> <li>▶ Put off any painting until later.</li> </ul>
CODE ORANGE	<b>Unhealthy for Sensitive Groups</b>	<p><b>The following people should limit prolonged outdoor activities:</b></p> <ul style="list-style-type: none"> <li>▶ Children and adults who experience difficulty breathing outdoors.</li> <li>▶ Those with respiratory and heart ailments.</li> </ul> <p><b>All residents are urged to:</b></p> <ul style="list-style-type: none"> <li>▶ Limit driving and refuel cars after dusk.</li> <li>▶ Avoid using aerosol products.</li> <li>▶ Share a ride, telework from home, use transit, or drive only the best maintained, most fuel-efficient vehicles.</li> </ul>
CODE YELLOW	<b>Moderate</b>	<p><b>Residents should:</b></p> <ul style="list-style-type: none"> <li>▶ Consolidate trips and errands.</li> <li>▶ Limit car idling when possible.</li> <li>▶ Conserve electricity and set air conditioners to 78° F.</li> </ul>
CODE GREEN	<b>Good</b>	<p><b>Residents should try to:</b></p> <ul style="list-style-type: none"> <li>▶ Carpool, use public transit, bike or walk.</li> <li>▶ Keep cars and boats tuned.</li> <li>▶ Use environmentally friendly paints and cleaning products.</li> </ul>

## Ozone: A Big Pollution Problem for All of Us.

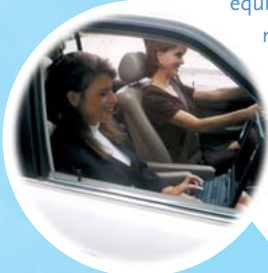
Too much ozone in the air we breathe can be harmful to people who work or exercise outdoors regularly, anyone with respiratory difficulties, and especially our children. The most common symptom that people have when exposed to ozone while exercising is pain when taking a deep breath. Long-term effects may include reduced lung function and scarring of lung tissue.



Children are at greater risk for ozone-related respiratory problems because their lungs are still developing, they breathe more rapidly, and they play outside during the afternoons when ozone is worse. They inhale more pollution per pound of body weight than adults do. Additionally, anyone suffering from lung disease has even more trouble breathing when the air is polluted with high levels of ozone. Prolonged exposure, even to low levels of ozone, can reduce a healthy adult's lung function by 15 to 20%.

### What Causes Ground-Level Ozone?

Ground-level ozone is created when a mixture of common air pollutants react in the heat and strong sunlight, becoming a big concern from May through September. The main ozone-causing pollutants are volatile organic compounds (VOCs) and nitrogen oxides (NOx). They are found in fumes from vehicles and boats, as well as from power plants. Motor vehicles account for about 30-40% of the ozone-causing pollutants in the Washington and Baltimore areas. Other pollution sources are gasoline vapors, oil-based paints, and lawn and garden equipment. Every summer gasoline-powered lawn and garden equipment spew huge amounts of VOCs, making them second in our area behind cars and trucks as the cause of ozone smog.



## Particles: Particle Pollution— What Is It and Where Does It Come From?

“Particles” or “particulate matter” are terms used to describe the mixture of solid particles and liquid droplets in the air we all breathe. Unlike ozone, particles are not a seasonal pollutant — high readings can occur any time of the year. The size of the particles is directly linked to their potential for causing health problems. Small particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into your lungs, and some may even get into your bloodstream. Some particles go directly into the air and come from a variety of sources such as motor vehicles, utilities, construction sites, and wood burning. Other particles may be formed in the air by chemical reactions when gases from burning fuels react with sunlight and water vapor.



### What Are The Health Risks?

Particle exposure can lead to a variety of health problems. Numerous studies link particle levels to increased hospital admissions and emergency room visits -- and even to death from heart or lung diseases. Both long- and short-term exposure to particles have been linked to health problems.

- ▶ When exposed to unhealthy levels of particles, children, the elderly, and people with existing heart or lung diseases are at increased risk of hospitalization and early death.
- ▶ Particles can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases causing more doctor visits and use of medication.
- ▶ Health problems for sensitive people can get worse if they are exposed to high levels of particles several days in a row.





# Be a Part of the Solution

We can all make a difference in improving the region's air quality. Clean Air Partners, the public-private partnership which sponsors Air Quality Action Days, is hoping that everyone will make a small effort to reduce air pollution. Try ridesharing, refueling after dark, or bringing your lunch to work instead of going out to eat. Every little bit helps. Whenever you hear that it is an Air Quality Code Red or Code Orange day consult the Air Quality Action Guide on the pamphlet for ways you can reduce air pollution and protect your health.

Become an Air Quality Action Day participant. Urge your employer to contact Clean Air Partners for further information.

## Resources

[www.air-watch.net](http://www.air-watch.net)

[www.mwcog.org](http://www.mwcog.org)

[www.mde.state.md.us](http://www.mde.state.md.us)

[www.epa.gov/airnow](http://www.epa.gov/airnow)

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