

Summer Air Quality & Ozone



A Message from the Spokane Regional Clean Air Agency

What is ozone and why is it a summer air pollution problem?

Ozone is “good” or “bad” depending on its location in the atmosphere. In the upper atmosphere, “good” ozone is produced naturally and protects us from UV radiation.

At ground-level, “bad” ozone is a harmful air pollutant. Ground-level ozone, a component of smog, is formed when nitrogen oxides and volatile organic compounds chemically react in the presence of sunlight. It is measured in units of parts per million (ppm) in ambient air. Ozone is a strong oxidizer and can damage lung tissue, thereby impairing respiratory function.

Where does ground-level ozone come from?

The main sources of ozone precursors are motor vehicle emissions and refueling, gasoline storage and transport, paints, solvents and industry.

Who’s at risk from ozone?

Children are at highest risk because their lungs are still developing, they’re very active outdoors, and they’re more likely to have asthma or other respiratory illnesses. Adults with asthma or other respiratory diseases are also at risk. New evidence shows ozone may cause chronic obstructive pulmonary diseases, such as chronic asthma, chronic bronchitis, emphysema. Healthy adults can experience a 15-20% reduction in lung function from prolonged exposure to low levels of ozone.

What should I do when ozone levels rise?

- Limit outdoor activity.
- Exercise early in the morning or indoors.
- Pay attention to respiratory symptoms such as coughing, wheezing and discomfort, and see your doctor if necessary.

How do I find current pollution levels?

Spokane Regional Clean Air Agency monitors air quality daily, and reports air pollution levels on the Air Quality Information Line, 477-2571, and on the web at www.spokanecleanair.org.

What’s being done to reduce ozone?

A number of strategies are underway to reduce emissions that contribute to ozone formation, including:

- Vapor recovery equipment required at gasoline stations.
- Commercial and industrial emissions controls.
- Vehicle emissions check program and emissions standards for new engines.
- Commute Trip Reduction Programs, encouraging workers to share rides, take the bus, bike, or walk to work.

How can we reduce ozone levels?

- Refuel in the evening to keep ozone-forming vapors out of the air during the heat of the day.
- Hold off using gas-powered lawn equipment until evening. Use manual or electric yard and garden tools.
- If you use a charcoal barbecue, start it with an electric probe instead of lighter fluid.
- Use low or zero VOC paints.
- Reduce car trips by combining errands. Walk bicycle or ride the bus once a week, instead of driving alone.



Feb. 2009