

Oregon evaluates proposed ozone standard

EPA will issue final standard by October 2015

The US Environmental Protection Agency recently proposed tightening the health-based federal standard for ground-level ozone or smog. The proposed range is between 65 to 70 parts per billion. This action is in response to scientific research which shows that exposure to lower levels of ozone air pollution is more harmful than previously thought. Go to EPA's web page [Ground-level Ozone](#) to find more information about the proposed new federal ozone standard and how to comment.

The EPA will adopt a new standard by the fall of 2015. If EPA adopts a value closer to 65 parts per billion, Oregon likely would not have an immediate problem complying with the new standard. However, certain communities in Oregon may have a challenge meeting the standard in the future if ozone levels increase with growth.

DEQ will evaluate the ozone measurements against the standard in these communities to verify their compliance status. If necessary, DEQ will work with community leaders, industry, and the public to maintain and enhance the suite of emission reduction strategies that are needed to ensure that all Oregonians breathe healthy air.

DEQ's success at reducing ozone pollution

In the past, both the Portland-Vancouver and Medford areas violated the ozone standard that was in place at that time. DEQ worked with these communities to develop plans to reduce ozone to meet the standard. These strategies are still in place today and continue to benefit Oregonians.

The following strategies are keeping Oregon's ozone levels slightly below the proposed tougher ozone standards:

- Vehicle Inspection Program (Portland and Medford)

- Reducing air pollution from major industries (Portland and Medford)
- Reducing pollution from small businesses like gas stations (Portland, Salem and Medford) and auto refinishing shops (Portland)
- New technologies to control gasoline vapors from unloading barges (Portland)
- Limits on the amount of volatile gasses known as VOCs in aerosol paints and consumer products (Portland)
- Employee Commute Options Program (Portland)

What is ozone?

Ozone is a colorless gas made up of three oxygen atoms. Ozone is good or harmful, depending on where it occurs. Good ozone is naturally present in the Earth's upper atmosphere 10 to 30 miles above the Earth's surface. This natural ozone shields us from the sun's harmful ultraviolet rays. Harmful ozone forms near ground-level where air pollutants react chemically in the presence of heat and sunlight. Ozone is the main component in smog and is a problem in Oregon during the hot summer months.



Ozone or "smog" pollution is particularly harmful to sensitive people like the elderly and children. People who suffer from heart disease or lung-related illnesses are also more sensitive to smog.

Where does ozone come from?

Unlike most other types of air pollution, ozone is not emitted directly into the air. Rather, it is formed through a chemical reaction on hot days when vehicle exhaust,



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gasoline vapors, paints, solvents and industrial emissions “cook” together in the presence of heat and sunlight.

The main ozone forming chemicals are volatile organic compounds and nitrogen oxides. These chemicals are problems in their own right. Some of them are categorized as [air toxics](#), chemicals known or suspected to cause cancer and other serious health problems.

Ozone formation is highly dependent on weather. If Oregon has more hot days due to [climate change](#), the result may be higher ozone levels.

Health effects of ozone

High ozone levels can aggravate and trigger attacks of asthma and worsen chronic lung diseases like emphysema and bronchitis. It irritates the respiratory system, causing cough and sore throat and can even reduce lung function making it more difficult to breathe. Long term exposure to high ozone levels can cause permanent lung damage.

Children are more sensitive to ozone because they often play outdoors in the summer when ozone levels are higher. Their lungs are still developing and they are more likely to have asthma. Older adults may be more affected because they are more likely to have pre-existing lung disease. Active people of all ages who exercise or work vigorously outdoors also have a higher exposure to ozone.

How can I find out what the ozone level is near me?

To see current pollution levels in your city visit www.deq.state.or.us/aqi/index.aspx. You also can sign up to receive advisories from DEQ when higher levels of ozone are predicted.

Protect your health and help reduce ozone

When ozone levels rise, you can protect your health by avoiding strenuous outdoor activity in the late afternoon and early evening. This is when ozone levels tend to be highest. If you have asthma, talk to your doctor about an asthma action plan.

Because most ozone pollution comes from our everyday activities you can help keep the air clean by taking these actions:

- Drive less (use transit, carpool and combine errands)
- Don't idle your engine while parked or waiting
- Purchase low- or no-VOC consumer products
- Wait to paint, mow the lawn and refuel the car until after it cools off

Alternative formats

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