



## Air Quality and Outdoor Activity Guidance for Infants, Children and Youth

Check the local Air Quality Index (AQI) online and do a visual inspection outside. Air quality conditions can change quickly. Compare the AQI information to your local visibility. Use the AQI and visibility that matches the conditions to choose the row to read. If the AQI and local visibility do not match, be cautious and select the worst. Use this guide to determine activity levels and minimize the smoke exposures at different air quality levels. However, if a child has an asthma plan, they should follow it closely. They should also monitor their breathing and exposure to wildfire smoke. Anyone experiencing symptoms should contact a health care provider for further advice. They should call 911 in case of an emergency.

| Air Quality Index              | Visibility Scale                          | Short outdoor activities<br>15 min–1 hour                                                                                                                                                                                                                                                   | Medium-length outdoor activities<br>1 hour–2 hours                                                                                                                                                                                                                                                                                                               | Longer outdoor activities<br>More than 2 hours                                                                                                                                                                                                                                                                                             |
|--------------------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Good                           | More than 5 miles with no haze in the air | It's a great day to be active outdoors!                                                                                                                                                                                                                                                     | It's a great day to be active outdoors!                                                                                                                                                                                                                                                                                                                          | It's a great day to be active outdoors!                                                                                                                                                                                                                                                                                                    |
| Moderate                       | 5–15 miles with haze in the air           | It's a good day to be active outside. <ul style="list-style-type: none"><li>• Watch those who are unusually sensitive to air pollution for symptoms of shortness of breath or coughing.</li></ul>                                                                                           | <ul style="list-style-type: none"><li>• Watch those who are unusually sensitive to air pollution.</li><li>• Look for symptoms of shortness of breath or coughing.</li><li>• Reduce or stop the activity if symptoms arise.</li></ul>                                                                                                                             | <ul style="list-style-type: none"><li>• Watch those who are unusually sensitive to air pollution.</li><li>• Look for symptoms of shortness of breath or coughing.</li><li>• Increase rest periods, reduce effort required or make substitutions as needed.</li><li>• Reduce or stop the activity if symptoms arise.</li></ul>              |
| Unhealthy for sensitive groups | 3–5 miles                                 | It's an OK day to be active outside. <ul style="list-style-type: none"><li>• Allow those sensitive to air pollution to stay indoors if they want to.</li></ul>                                                                                                                              | <ul style="list-style-type: none"><li>• Move activities indoors for those sensitive to air pollution.</li><li>• Limit outdoor activities to light ones or move them indoors.</li><li>• Increase rest periods or make substitutions.</li><li>• Monitor symptoms and reduce or cease activities if symptoms appear.</li></ul>                                      | <ul style="list-style-type: none"><li>• Move activities indoors for those sensitive to air pollution.</li><li>• Limit activities to light ones or move them indoors or to a safer location.</li><li>• Increase rest periods or make substitutions.</li><li>• Monitor symptoms and reduce or cease activities if symptoms appear.</li></ul> |
| Unhealthy                      | 1–3 miles                                 | <ul style="list-style-type: none"><li>• Keep those sensitive to air pollution indoors as much as possible.</li><li>• Move all activities indoors for those sensitive to air pollution.</li><li>• For those who are not sensitive, limit them to only light outdoor activity.</li></ul>      | <ul style="list-style-type: none"><li>• Move all activities indoors for those sensitive to air pollution.</li><li>• For groups without sensitivities:<ul style="list-style-type: none"><li>» Consider moving all activities indoors.</li><li>» Limit all to light outdoor activities.</li><li>» Increase rest periods or make substitutions.</li></ul></li></ul> | Strongly consider doing any of these: <ul style="list-style-type: none"><li>• Cancel the event.</li><li>• Move the event indoors.</li><li>• Postpone the event.</li><li>• Move the event to an area with good air quality.</li></ul>                                                                                                       |
| Very unhealthy or hazardous    | 1 mile or less                            | <ul style="list-style-type: none"><li>• Keep all groups indoors.</li><li>• If any group MUST be outdoors:<ul style="list-style-type: none"><li>» Limit all activities to light ones.</li><li>» Increase rest periods, reduce the effort required or make substitutions.</li></ul></li></ul> | <ul style="list-style-type: none"><li>• Move all activities indoors.</li></ul>                                                                                                                                                                                                                                                                                   | Do any of the following: <ul style="list-style-type: none"><li>• Cancel the event.</li><li>• Move the event indoors.</li><li>• Postpone the event.</li><li>• Move the event to an area with good air quality.</li></ul>                                                                                                                    |

**Watch for symptoms**

Air pollution can make heart and lung conditions worse. It can prompt coughing, shortness of breath, wheezing and chest tightness. Even those without these health conditions can have symptoms when in higher levels of air pollution. Those with asthma should follow their Asthma Action Plan. This will help them decide if they need to take special precautions. Those who may need rescue inhalers should have them readily available. They should be used as directed by their health care provider. Anyone with heart, asthma or other breathing symptoms should contact a health care provider. Call 911 in an emergency. Children without health conditions may experience mild symptoms such as headaches and a scratchy throat. Drinking more water can help.

**Young people’s increased risk**

Younger people are more sensitive to air pollution than adults because their respiratory systems are still developing. Their airways are smaller. They breathe more air per pound of body weight. This is especially true of infants and young children. Younger people with asthma, lung or heart disease, and allergies may be especially sensitive to air pollution. A health care provider can provide advice about how to prevent and treat symptoms. Watch the air quality forecast to decide when to limit the activities of children of any age.

**Air Quality Index**

The Air Quality Index (AQI) rates air quality. It is based on air measures collected from Oregon Department of Environmental Quality (DEQ) air monitors. AQI can tell you how clean or polluted the air is and what the levels of health concern are. For more about AQI in Oregon and how the AQI is calculated, go to [Oregon DEQ Air Quality Today](#) or the [AirNow Air Quality Index](#). During wildfire season the [Oregon Smoke Blog](#) includes a Fire and Smoke Map with both regulatory and temporary monitors.

**Using the Visibility Scale**

In addition to AQI, you can use sight to determine the air conditions in your area. Always use caution and avoid going outside if visibility is limited. This is especially true for persons sensitive to smoke. To do a visual inspection:

1. Go outside.
2. Face away from the sun.
3. Determine the limit of your visible range by looking at things at known distances in miles. Visible range is where you cannot see even high-contrast things.

**Allergies**

Air pollution and allergies can interact to make symptoms worse. To reduce symptoms, take steps to protect children from both air pollution and allergens.

**Mental health**

Disasters, including those that affect AQI away from the disaster, can affect children’s mental health. Disasters can disrupt routines and relationships. The Centers for Disease Control and Prevention (CDC) has tools and resources to help care for children in a disaster. These resources help parents and caregivers understand [children’s developmental needs](#) to [help children cope during and after a disaster](#).

**Masks and respirators**

Respirators that filter out harmful particles do not come in sizes for children. The smallest size respirator is an extra-small adult size. This size may fit and seal well for some tweens and teens. Younger children should not wear adult respirators. They will not fit and seal well. Seek advice from a health care provider before respirator use if you have a child with pre-existing health conditions. For employers and volunteers of all ages in childcare settings, please see the section below “Employees and Volunteers”.

**Indoor air quality**

When outdoor air quality is poor, it is essential to take steps to improve [indoor air quality](#). This can help offset pollutants that come into the building. Consider closing air vents to the outdoors, maintaining adequate airflow, and ensuring air filters are readily available. For more information, visit EPA [Wildfires and Indoor Air Quality in Schools and Commercial Buildings](#). Services delivered to children, such as daycare, often occur in homes. These settings may need to [create clean air space in the home](#).

**School closures**

Each school district decides on school closures, usually working with the local health department. If you have questions about air pollution and health, consult your local health department.

**Employees and volunteers**

This document does not replace Oregon (OR) Occupational Safety and Health (OSHA) authority. Go to the OR-OSHA website for:

- [Wildfire topic](#) page for rules and tools to protect employee and volunteer health during wildfire events.
- [Respiratory protection](#) for other respiratory hazards (for example, volcanic ash).

**Note:** Employers and volunteers agencies should use this guide and OR-OSHA information to make decisions affecting staff or volunteers, including youth volunteers.

**More information**

For more information on how wildfire smoke can affect your health, go to [Oregon Health Authority’s website](#). For other sources of pollution visit the [US EPA Air Quality](#) website. Your local or Tribal health authority may also have resources to answer air pollution and health questions.