

## Outdoor Activity Guidelines Based on Air Quality

| Health Effect Category                    | Good           | Moderate  | Unhealthy for sensitive groups*   | Unhealthy  | Very Unhealthy/ Hazardous  |
|---|----------------|---|---|--|--|
| Visibility (miles)                        | 13+            | 9-13  | 5-9   | 2-5  | Less than 2  |
| Air Quality Index                         | 0-50           | 51 - 100  | 101 - 150   | 151 - 200  | 201 +  |
| <b>Outdoor Activity (15 - 30 minutes)</b> | No limitations | No limitations  | Sensitive groups should remain indoors as much as possible.<br>If outdoors, limit vigorous activity.  | Everyone should remain indoors as much as possible. Keep indoor activity levels light to moderate. If outdoors, keep activity levels light.                        | Everyone should remain indoors as much as possible. Keep indoor activity levels light.   |
| <b>Outdoor Activity (1 hour)</b>          | No limitations | Monitor sensitive groups and limit their vigorous activities. | Sensitive groups should remain indoors as much as possible. If outdoors, keep activities light to moderate.   | Everyone should remain indoors as much as possible. Find alternative indoor activities in an environment with good air quality. Keep indoor activity levels light. | Everyone should remain indoors as much as possible. Find alternative indoor activities in an environment with good air quality. Keep indoor activity levels light. |
| <b>Outdoor Activity (2-4 hours)</b>       | No limitations | Monitor sensitive groups and limit their vigorous activities. | Sensitive groups should remain indoors as much as possible. If outdoors, sensitive groups should keep activities light and avoid activities over 2 hours.<br><br>Consider moving practices and events indoors. If events are not cancelled, increase rest periods to allow for lower breathing rates. | Everyone should remain indoors as much as possible. Reschedule events or relocate to an area with good air quality. Keep indoor activity levels light.             | Everyone should remain indoors as much as possible. Reschedule events or relocate to an area with good air quality. Keep indoor activity levels light.             |

Visit [todaysair.mtdeq.us](http://todaysair.mtdeq.us) for local air quality conditions and more information.

### Examples of Activities

**Light Activities:** Walking, stretching, playing board/card games, dancing slowly, light yard work

**Moderate Activities:** Brisk walking, yoga, gymnastics, tennis, skateboarding, weight training, light biking/hiking, hunting, canoeing, swimming

**Vigorous Activities:** Aerobics, Running/jogging, competitive sports, swimming, digging, biking uphill, wheeling a wheelchair

† Please note that the intensity of an activity can vary by person and ability.

### \*For the purpose of this document, sensitive groups include:

- **Children (ages 0-17 years).** Children may be more sensitive to air pollution as their lungs are still developing and they may have an unknown underlying health condition.
- **People with chronic conditions.** People with chronic conditions, such as asthma or another respiratory disease, or cardiovascular disease, may be more sensitive to air pollution and should talk with their healthcare provider about managing their condition. People with chronic conditions should be medically managing their condition during air quality that is unhealthy for sensitive groups or worse. People with asthma should be following their Asthma Action Plan in all conditions.
- **Pregnant people.** During pregnancy, changes to a person's body may increase vulnerability to environmental exposures. Additionally, during critical windows of human development, a pregnant person's prolonged exposure to wildfire smoke may harm the developing fetus.
- **Older adults.** Older adults are at increased risk of health effects from short-term exposures to wildfire smoke because of their higher prevalence of pre-existing lung and heart diseases.



## How to Use This Table and the Today's Air Website

- Start planning early. Well before your event, start monitoring the air quality by visiting the [todaysair.mtdeq.us](https://todaysair.mtdeq.us) website.
  - Review the smoke forecast on the DEQ website: [deq.mt.gov/air/Programs/smokeforecasts](https://deq.mt.gov/air/Programs/smokeforecasts).
  - If your area is not near an air quality monitor, follow directions below for using the visibility guidelines. You may also consider reviewing private outdoor ambient air quality monitors listed on the [fire.airnow.gov](https://fire.airnow.gov) website. It's important to note that private monitors may not be as accurate as DEQ monitors for a variety of reasons.
  - Make adjustments to your plans depending on the forecast and the health effect category.
- Continue to monitor the air quality and the forecast in your area.
  - Be sure to leave adequate time for decisions to be made before you travel.
  - Air quality can change rapidly. Regularly review the concentration levels before and throughout lengthy events to assess for deteriorating conditions.



## How to estimate air quality based on visibility

1. Use pre-determined landmarks that were established on a clear day for distances (face away from the sun).
2. Determine the limit of your visible range by looking for targets at known distances (miles).
3. Use the visibility values in the table to determine the local wildfire smoke health effect category.

## What to Consider When Planning for Poor Air Quality

- Know which air quality monitor to reference or what geographic spots to use for visibility guidelines.
- Maintain an adequate supply of food and medication (more than five days).
- If you have a chronic lung or heart condition, check with your health care providers before the fire season about precautions to take during smoke events.
- Know how to maintain good indoor air quality.
  - Keep windows and doors closed.
  - Set air conditioning or furnace blower to recirculate and close the fresh air intake.
  - Do not perform any activities that will add to indoor pollution.
  - If you plan to use a portable HEPA air cleaner, buy one prior to wildfire season. Visit [airquality.mt.gov](https://airquality.mt.gov) for help deciding what air cleaner is best for your situation.
  - Use the air recirculate feature in vehicles when possible.
- If traveling, be aware of the air quality in the area and have a back up plan.

## Protection from Particulate Matter

Wildfires, wood burning, and air stagnation increase the fine particulate matter (PM<sub>2.5</sub>/PM<sub>10</sub>) in the air we breathe. Fine particulate matter travels easily indoors, especially through doors, windows, and small openings. Over time, concentrations of fine particulate matter indoors can approach the level of concentration outdoors. Supplemental use of properly sized HEPA air purifiers have been shown to improve indoor air quality by reducing particulate matter and chemicals in smoke. Buildings should consider adopting smoke readiness plans to ensure the best indoor air quality possible.

Cloth face coverings and dust masks offer little protection against harmful air pollutants in wildfire smoke because these coverings do not capture most small particles in smoke. The right respirator and proper fit can reduce your exposure to wildfire smoke. Anyone with lung or heart disease should check with their health care provider before using any mask.

Visit [airquality.mt.gov](https://airquality.mt.gov) for more information on air pollution and how to protect your health during poor air quality conditions.