Outdoor Activity & Air Quality Guidelines for Schools and Child Care Facilities

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 (AQI)	0-50	51 - 100	101 - 150	151 - 200	201 +
Recess or Other Outdoor Activity (15-30 minutes)	No limitations	No limitations	Keep students with chronic lung or heart conditions indoors. Make indoor space available for all children to be active, especially young children.	Keep all students indoors and limit students to light or moderate activities.	Keep all students indoors and limit students to light activities.
Physical Education Class (1 hour)	No limitations	Monitor sensitive groups and limit their vigorous activities.	Keep students with chronic lung or heart conditions indoors. Limit these students to light activities. Make indoor space available for all students to be active, especially young children. If outdoors, limit students to light or moderate activities.	Conduct P.E. classes in an indoor environment with good air quality and limit students to light or moderate activities.	Conduct P.E. classes in an indoor environment with good air quality and limit students to light activities.
Athletic Events and Practices (2-4 hours)	No limitations	Monitor sensitive groups and limit their vigorous activities.	Students with chronic lung or heart conditions should abstain from outdoor practices and events based on the severity of their condition and sensitivity to smoke. Consider moving practice and events indoors. If events are not cancelled, increase rest periods and substitutions to allow for lower breathing rates.	Reschedule events or relocate to an area with good air quality. Conduct practices in an indoor environment with good air quality and limit students to light activities.	Reschedule/cancel events. Conduct practices in an indoor environment with good air quality and limit students to light activities.
Visit todaysair.mtdeq.us for local air quality conditions and more information.					

Examples of Activities

Light Activities: Walking, stretching, playing board/card games, dancing slowly

Moderate Activities: Yoga, gymnastics, shooting basketballs, skateboarding, weight training, hiking, biking, golfing

Vigorous Activities: Running/jogging, basketball, football, soccer, swimming, cheerleading, and wheeling your wheelchair

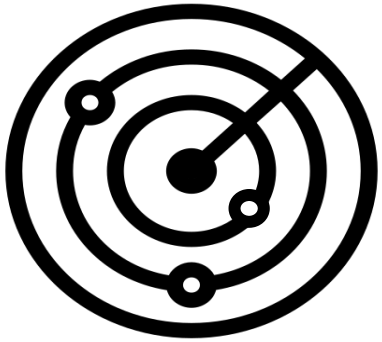
† *Please note that the intensity of an activity can vary by person and ability.*

*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. Students with asthma should be following their Asthma Action Plan in all conditions.
- **Pregnant women**: During pregnancy, changes to a woman's body may increase vulnerability to environmental exposures. Additionally, during critical windows of human development, a pregnant woman's prolonged exposure to wildfire smoke may harm the developing baby.
- **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** website.
  - Review statewide smoke forecasts on the DEQ website: **deq.mt.gov/air/Programs/smokeforecasts**.
  - If your area is not near an air monitor, follow directions below for using the visibility guidelines.
  - 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 teams/participants begin travel.
  - Air quality can change rapidly. Regularly review the PM2.5 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.

Items to Consider When Planning for Poor Air Quality During the School Year

- Is there an indoor/outdoor air quality section in the school or district wellness policy? If so, do you know where it is located?
- Which air quality monitor do you use or what geographic spot do you use for visibility guidelines? Does your school have its own air quality monitors?
- Who makes the decisions to hold, cancel, or reschedule outdoor events? What is the procedure for rescheduling events? How do you communicate your decision with stakeholders? If participants are already traveling, how do you notify them?
- What do you do for recess and athletic practices on days with poor air quality?
- Has the school/district adopted a smoke readiness plan? What are the school/district plans to protect indoor air quality if poor outdoor air quality persists for a long period of time?
- Has the school inspected the air handling system and made necessary improvements to ensure ultimate efficiency?
- How do you document what happened during wildfire smoke or other air pollution events? What went well? What can be done better?

Protection from Particulate Matter

Wildfires, wood burning, and air stagnation increase the fine particulate matter (PM2.5/PM10) 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. Schools should use MERV 13 rated filters or greater in their HVAC systems if the system is capable. Supplemental use of properly sized HEPA air purifiers have also been shown to improve indoor air quality by reducing particulate matter and chemicals found in smoke.

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. Anyone thinking about wearing an N95 mask or respirator should consult their physician prior to doing so. Individuals experiencing symptoms such as wheezing, shortness of breath, chest pain, headache, and dizziness should be seen by a medical provider. Schools should be aware of students with asthma and other chronic conditions and consider accommodations for these students to minimize their exposure to wildfire smoke.

Visit AirQuality.mt.gov for more information on particulate matter and how to protect your health during poor air quality conditions.

DPHHS complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex.
ATENCIÓN: si habla español, tiene a su disposición servicios gratuitos de asistencia lingüística. Llame al 1-406-444-1386 (TTY: 1-800-833-8503).
ACHTUNG: Wenn Sie Deutsch sprechen, stehen Ihnen kostenlos sprachliche Hilfsdienstleistungen zur Verfügung. Rufnummer: 1-406-444-1386 (TTY: 1-800-833-8503).