

AIR QUALITY & OUTDOOR EVENT

GUIDANCE DOCUMENT



SHOULD YOU CONSIDER MODIFICATIONS TO YOUR OUTDOOR EVENT DUE TO POOR AIR QUALITY?

Poor outdoor air quality related to unhealthy pollution levels can have major health effects on community members. The purpose of this guidance document is to provide information on what is considered to be unhealthy levels of air pollution so that individuals, event planners and decision-makers within organizations can determine when they should consider limiting outdoor activities, moving, or cancelling outdoor events due to poor outdoor air quality.

AIR QUALITY THRESHOLDS AND RECOMMENDED ACTIONS

The two primary contributors to poor air quality in our region are fine particulate matter and ground-level ozone.

The Environmental Protection Agency issues an Air Quality Index (AQI) based on measured and forecasted air quality. Checking the AQI, and alerts from the Colorado Department of Health and Environment (CDPHE) daily can inform action levels.

The following response actions are recommended. Recommended actions are based on alerts from the CDPHE and the Air Quality Index (AQI).

HOW DO I CHECK THE DAILY AIR QUALITY INDEX?

Sign up for smoke and air quality alerts through links posted on [fcgov.com/AQdata](https://www.fcgov.com/AQdata)

AIR QUALITY THRESHOLDS & RECOMMENDED ACTIONS

AIR QUALITY INDEX CATEGORY	CAUTIONARY STATEMENT	RECOMMENDED ACTION
GOOD	Air Quality is satisfactory and air pollution poses little or no risk	<ul style="list-style-type: none"> • Proceed with scheduled outdoor activities and events
MODERATE	Air Quality is acceptable; however, for some pollutants there may be a moderate health concern for unusually sensitive people	<ul style="list-style-type: none"> • Proceed with scheduled activities and events
UNHEALTHY FOR SENSITIVE GROUPS	While the general public is not likely to be affected, people with heart or lung disease, older adults and children are at greater risk from the presence of particles in the air	<ul style="list-style-type: none"> • Proceed with scheduled outdoor activities • Parents, coaches, volunteers and staff should consider monitoring all participants closely • Those most at-risk should monitor conditions and make decisions that are best for them in terms of their activities • Check for information and education about impacts of poor air quality about the impacts of poor air quality (https://www.fcgov.com/airquality/aqdata)
UNHEALTHY	Everyone may begin to experience some adverse health effects, and members of more sensitive groups may experience more serious effects	<ul style="list-style-type: none"> • Use extreme caution when performing outside activities or holding outdoor events • For special events, consider providing information about the air quality to event staff and participants • Consider providing educational awareness to participants, parents, coaches and staff so they can make educated decision to participate or not • If possible, try to relocate outdoor programs to indoors
VERY UNHEALTHY	This triggers a health alert, meaning that everyone may experience more serious health effects	<ul style="list-style-type: none"> • Cancel or relocate youth outdoor programs • Cancel or relocate outdoor events • Programs or events for adults may continue, however community members will be educated regarding air quality concerns • Consider allowing program to withdraw from program or reschedule activity
HAZARDOUS	This triggers a health warning of emergency conditions. The entire population is likely to be affected	<ul style="list-style-type: none"> • All activities should be cancelled, rescheduled or relocated to indoor facilities • This level is considered too unhealthy for physical activity outdoors



PARTICULATE MATTER

Particulate matter (PM) is a mix of solid and liquid droplets often associated with dust, dirt, soot or smoke.

While wildfires can have ecological benefits, including clearing away brush and returning nutrients to the soil, smoke from fires negatively impacts air quality and health. During the summertime, smoke from regional or local wildfires can travel long distances and be inhaled deep into the lungs causing negative health effects such as coughing, wheezing and difficulty breathing. These effects are worse for at-risk groups such as children, the elderly, and people with respiratory or heart problems.

Wildfire smoke travels, which means people can be impacted by smoke even when fires are miles away. If you see or smell smoke, your air quality may be affected. If visibility is especially poor from smoke (e.g., less than 5 miles or approximately the distance from downtown to the CSU "A" by Horsetooth), then the air quality is impacted.

OZONE

Ozone is a respiratory irritant which commonly occurs at ground level during the summertime.

The City along with the rest of the Front Range, does not meet Federal health-based air quality standards for ground-level ozone, which can impact the health of community members.

The Colorado Department of Public Health and Environment (CDPHE) issues ozone action alerts during the summer ozone season (June 1-August 31).

For additional resources visit: [fcgov.com/wildfire](https://www.fcgov.com/wildfire)

WHAT IS FINE PARTICULATE MATTER (PM2.5)?

- PM2.5 are tiny particles in the air that are 2.5 microns in diameter or smaller (smaller than the width of a single strand of hair)
- PM2.5 can reduce visibility and cause the air to be hazy
- PM2.5 contributes to many negative health effects, especially for children, the elderly, and those with existing respiratory or cardiovascular issues

WHAT IS GROUND-LEVEL OZONE?

- Ground-level ozone is created by a chemical reaction between different types of nitrogen (NoX) and Volatile Organic Compounds (VOCs)
- This happens when pollutants from cars, oil and gas development, and other sources react to sunlight
- Ozone can be harmful to children with asthma, the elderly and other at-risk groups

