



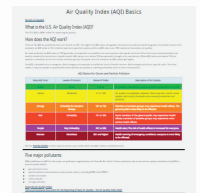
Connecticut Resource Guide for Local Health Officials During Periods of Poor Air Quality

What is in this Guide?

Wildfire smoke and poor air quality events can occur without warning – but we can be prepared. This Guide is intended to provide state, tribal, and local public health officials with information they need to be prepared for smoke and other poor outdoor air quality events. This Guide also provides resources public health officials can use to communicate health risks and take actions to protect public health during poor air quality events. Although this Guide was developed for public health officials, the information in this document should be useful for the general public, healthcare professionals, air quality officials, and town officials.

Air Quality Index (AQI)

The primary resource for understanding outdoor air quality conditions is the Air Quality Index (AQI). The AQI is a tool developed by the US Environmental Protection Agency for reporting daily air quality. The higher the AQI value, the greater the level of air pollution and the greater the health concern. The AQI is divided into 6 color coded categories that correspond to different levels of health concern. The AQI is calculated using data on 5 major air pollutants (ground level ozone, particulates, carbon monoxide, sulfur dioxide and nitrogen dioxide) collected from air monitoring stations. CT has 14 air monitoring stations located throughout the state. Poor air quality (i.e. elevated AQI) in CT is caused by only two of the major air pollutants: particulates and ozone.



View the AQI Chart in [English](#) or [Spanish](#)

The CT Department of Energy and Environmental Protection (CT DEEP) provides the current AQI for locations around CT where there are monitoring stations. Additionally, CT DEEP makes daily AQI forecasts to predict the ozone and particulate levels that CT will experience in the coming day(s).

View Connecticut's current AQI map and AQI forecast for at [AirNowCT](#)



Click [here](#) for more information about CT DEEP's Ambient Air Monitoring Activities



[AirNow.gov](#). is a one-stop source for air quality data at a local, state, national and world view



Health Concerns from Wildfire Smoke and Particulates

Wildfire smoke is a mixture of air pollutants of which **particulate matter** is the principal public health threat. Numerous scientific studies have linked exposure to particulate matter with health effects ranging from eye and respiratory tract irritation to more serious effects including reduced lung function, pulmonary inflammation, bronchitis, exacerbation of asthma and other lung diseases, exacerbation of cardiovascular diseases, such as heart failure, and even premature death. Certain individuals may be at greater risk of experiencing health effects from exposure to particulate matter in air, including people with respiratory or cardiovascular diseases, children and older adults, pregnant women, outdoor workers and people living in environmental justice communities.

[Click here for more information about particulate matter exposure and health](#)



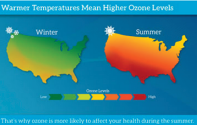
Health Concerns and Ozone Exposure

Ground-level ozone is formed in the environment when heat and sunlight react with volatile organic compounds and nitrous oxides in the air. Ozone is the main component of smog and mostly occurs during the summer. Ground-level ozone is different from the ozone layer that protects the earth from UV radiation.

Breathing ozone is known to irritate the respiratory tract. It can also cause wheezing, shortness of breath and chest pain, and can aggravate lung diseases such as asthma, bronchitis and emphysema.

Certain individuals may be at greater risk of experiencing health effects from exposure to ozone including people with asthma or other lung diseases, children, older adults and people who are active outdoors, especially workers.

[Click here for more information about ozone exposure and health](#)



Public Health Actions to Reduce Exposures during Poor Air Quality Events

Subscribe to the [AQI](#) to receive daily forecasts and encourage the general public (especially sensitive populations to subscribe). Encourage people with chronic diseases to check with their health care provider about precautions they should take when poor air quality is forecasted and have an adequate supply of medication available; asthmatics should have a written asthma action plan.

Communicate the messages in the EPA Guides listed below to reduce exposure and protect public health. These Guides provide activity advice for the general public and for sensitive groups. The Activity Guide for Schools is written specifically for school populations, but the advice can be used for childcare centers, summer camps, and senior centers.

- [Air Quality Guide for Particulates \(English and Spanish\)](#)
- [Air Quality Guide for Ozone \(English and Spanish\)](#)
- [Air Quality Guide for Schools \(English and Spanish\)](#)
- [Tips for Outdoor Workers \(Click Here\)](#)

Air Quality Index	Who Needs to Be Concerned?	What Should I Do?
0-50 (Good)	Everyone	Enjoy your usual outdoor activities.
51-100 (Moderate)	People with respiratory conditions, children, and older adults.	Consider reducing strenuous outdoor activities. Sensitive groups should take extra precautions.
101-150 (Unhealthy for Sensitive Groups)	People with respiratory conditions, children, and older adults.	Reduce strenuous outdoor activities. Sensitive groups should avoid outdoor activities.
151-200 (Unhealthy)	Everyone, especially people with respiratory conditions, children, and older adults.	Avoid strenuous outdoor activities. Sensitive groups should avoid outdoor activities.
201-300 (Very Unhealthy)	Everyone, especially people with respiratory conditions, children, and older adults.	Avoid all outdoor activities. Sensitive groups should avoid outdoor activities.
301-400 (Hazardous)	Everyone, especially people with respiratory conditions, children, and older adults.	Avoid all outdoor activities. Sensitive groups should avoid outdoor activities.

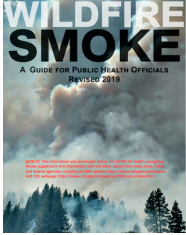
Encourage schools and other organizations to adopt the EPA Air Quality Flag Program, which uses a visual flag alert corresponding to the AQI and helps the community reduce their exposure to air pollution during unhealthy air quality days.



Be aware of these additional public health strategies when poor air quality is caused by Wildfire Smoke

- Stay indoors with the doors and windows closed where you can better control your indoor environment.
- Run your air conditioner if you have one but keep the fresh air intake closed and the filter clean to prevent bringing additional smoke inside.
- Use high-efficiency heating, ventilation, and air-conditioning (HVAC) filters that are rated MERV 13 or higher; they can help reduce particle concentrations indoors.
- Use appropriately sized room air cleaners to reduce particle concentrations in individual rooms. Choose a room air cleaner that produces little or no ozone. The California Air Resources Board provides a [list of air cleaners](#) that meet the ozone emissions limit. Use a room air cleaner in a designated room in the home to create a protected environment called a “clean room.”
- If you do not have air conditioning and it is too hot to keep windows and doors closed, go to an indoor place that is cooler, even if only for a short while. Check to see whether your town has a cooling center. Additional tips for staying cool inside during poor air quality events can be found [here](#).
- Don’t add to indoor air pollution. Don’t smoke or vape. Avoid burning candles, incense and wood in fireplaces and avoid using air fresheners. Limit use of gas stoves or ovens, especially avoid broiling or frying food. Avoid vacuuming.
- If you need to be outside, wearing a NIOSH-certified N95 or P100 particulate respirator that fits closely to the face can help reduce personal exposure to particulates in smoke. Dust masks and surgical masks will not provide protection from particulates in smoke. Respirators are not made to fit children and will not protect them from breathing smoke. No mask or respirator will protect you from poor air quality caused by ozone.
- When traveling, reduce particle levels in vehicles by keeping windows and vents closed and operating the air conditioning in “recirculate” mode.

For more comprehensive guidance, refer to [Wildfire Smoke: A Guide for Public Health Officials \(2019\)](#)



Reach Out! For Questions Regarding Outdoor Air Quality Please call 860-509-7740 or e-mail @ DPH.EOHA@ct.gov

