

PROTECTING OUTDOOR WORKERS FROM EXTREME WEATHER WILDFIRE SMOKE HAZARDS

WE ARE YOUR DOL



This document offers New York State Department of Labor’s (NYSDOL) guidance for some of the best ways to protect outdoor workers from poor air quality caused by wildfire smoke.

Poor air quality from wildfire smoke is a potential workplace hazard for outdoor workers in New York State, as smoke can be present on worksites outside of the acute wildfire area.

NEW YORK STATE EMPLOYERS SHOULD TAKE THESE 3 STEPS TO PROTECT OUTDOOR WORKERS FROM WILDFIRE SMOKE

(BASED ON THE AIR QUALITY INDEX FOR PM2.5):



ALLOW FOR
REST & RELIEF



DEVELOP AND
PROVIDE **TRAINING**



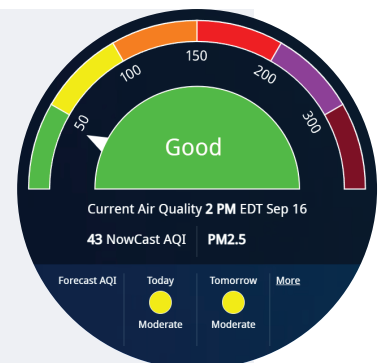
DEVELOP AND
PROVIDE A **PLAN**

REGARDLESS OF THE AIR QUALITY OR WEATHER, EMPLOYERS SHOULD PROVIDE EACH OUTDOOR EMPLOYEE 32 OUNCES OF COOL DRINKING WATER PER HOUR.

- Water should be provided at no cost to workers, available at all times, potable, and as close to the worksite as practicable.
- Workers should be given sufficient time to consume the water.

HOW TO MEASURE AIR QUALITY INDEX

The best way to know whether outdoor workers are being exposed to wildfire smoke is to identify the amount of smoke-related air particles on or near the worksite. Employers should assess air quality by referencing the Air Quality Index (AQI) for particulate matter (PM) 2.5. “PM2.5” is a measure for fine, inhalable particulate matter with diameters that are 2.5 micrometers and smaller. To determine the AQI on a worksite, employers may use **AirNow.gov**, which offers real-time information on the PM2.5 levels in any given ZIP code, as well as basic information on vulnerable groups and tips for how to continue or discontinue outdoor activities.



See the following pages for more detail on each recommended step. **In a unionized workplace, employers must follow any collective bargaining agreement currently in place.**



REST & RELIEF

Employers should provide safe structures, breaks, and personal protective equipment (PPE) when the AQI exceeds 150, with more intensive measures once the AQI exceeds 300.

EMPLOYER BEST PRACTICES FOR WILDFIRE SMOKE EXPOSURE ON AN OUTDOOR WORKSITE

AQI VALUE FOR PM2.5	Recommended Breaks/ Scheduling for Exposure Level	Recommended Employer-Provided PPE for Exposure Level
150-299	<ul style="list-style-type: none">Relocate work to a location where the current AQI value for PM2.5 is lower, change work schedules, and/or reduce work intensityIf workers must be outdoors, offer breaks as necessary in enclosed buildings, structures, or vehicles where the air is effectively filtered	<ul style="list-style-type: none">Provide filtering facepiece respirators for all exposed workers for voluntary use as long as the respirators do not interfere with other safety equipment (see below for details on facepiece respirators)
300 AND BEYOND	<ul style="list-style-type: none">Cancel, reschedule, and/or move work indoorsIf workers must be outdoors, offer breaks as necessary in enclosed buildings, structures, or vehicles where the air is effectively filtered	<ul style="list-style-type: none">When canceling work is not an option, provide respirators to all workers for mandatory use consistent with the employer's respiratory protection programProvide NIOSH-approved respirators with an assigned protection factor (APF) of 25 or more: osha.gov/sites/default/files/publications/3352-APF-respirators.pdf

FILTERING FACEPIECE RESPIRATORS



All facepiece respirators should be devices approved by the National Institute of Occupational Safety and Health (NIOSH)² that effectively protect the wearers from inhalation of PM2.5, such as N95 filtering facepiece respirators¹. When providing respirators, employers must comply with Occupational Safety and Health Administration's (OSHA)³ respiratory protection requirements. Respirators should be cleaned or replaced as appropriate, stored, and maintained, so that they do not present a health hazard to users.



OSHA's respiratory standard includes a handout, Appendix D⁴, that employers must distribute to employees when providing dust masks or disposable respirators for voluntary use. When offering voluntary use of any other type of respirator (anything offering greater protection such as half-face or full-face air purifying respirator) – OSHA rules say that an employer must develop and implement a written respiratory protection program that addresses medical evaluations, procedures for cleaning, maintenance and storage, and still provide employees Appendix D of OSHA's respiratory standard.

1 *NIOSH approved filtering facepiece respirators do not include any "KN" designations, such as KN95s. Such "KN" respirators are not recommended to reduce employee exposure to wildfire smoke. NIOSH-approved filtering facepiece respirators appropriate for wildfire smoke protection include: N95, N99, N100, R95, R99, R100, P95, P99, and P100.*

2 [cdc.gov/niosh/nppt/topics/respirators/disp_part/default.html](https://www.cdc.gov/niosh/nppt/topics/respirators/disp_part/default.html)

3 [osha.gov/respiratory-protection](https://www.osha.gov/respiratory-protection)

4 [osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppD](https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppD)



WORKER & SUPERVISOR TRAINING

Employers should train outdoor workers and supervisors annually and before wildfire smoke exposure.

AN EFFECTIVE TRAINING WILL INCLUDE:



The signs and symptoms of common smoke-related illnesses (see below)



Information on the employer's emergency/first aid plans



An overview of the rest and relief measures that the employer will provide to workers during wildfire smoke exposure



Information on the employer's respiratory protection program for those who are required to work when the AQI for PM2.5 exceeds 300



An overview of workers' rights to not be retaliated against for reporting any workplace health or safety concern

Signs and Symptoms of common illnesses related to wildfire smoke exposure:

- **Eyes:** Burning sensations, redness, and tearing of the eyes caused by irritation and inflammation that can temporarily impair vision
- **Respiratory:** Cough; difficulty breathing; wheezing; shortness of breath; asthma attack; runny nose; sore throat; sinus pain or pressure; or phlegm
- **Cardiovascular:** Chest pain or discomfort; fast or irregular heartbeat; feeling weak, light-headed, faint, or dizzy; or pain or discomfort in the jaw, neck, or back
- **Symptoms concerning for a stroke:** Sudden numbness or weakness in the face, arm, or leg, especially on one side of the body; sudden confusion, trouble speaking, or difficulty understanding speech; sudden trouble seeing in one or both eyes; sudden trouble walking, dizziness, loss of balance, or lack of coordination; or sudden severe headache with no known cause
- Headache, fatigue, or tiredness



PLANNING & PREPAREDNESS

Employers should build a respiratory protection program and document their plans for employee rest and relief, training, and emergency protocols. The plan should be provided to workers during their onboarding and during annual trainings on wildfire smoke hazards.

THE WRITTEN PLAN SHOULD INCLUDE ELEMENTS SUCH AS, BUT NOT LIMITED TO:



Flexibility measures to move work indoors or postpone until the smoke lifts



Methods of alerting affected staff to hazard exposure



Signs and symptoms of common smoke-related illnesses and basic first aid that workers and supervisors can easily follow



A “buddy system” when wildfire smoke hazards are present



Methods of monitoring the conditions to which workers are exposed



A two-way communication system with workers to ensure supervisors are keeping track of all workers when wildfire smoke is present



Procedures for activating the illness prevention and emergency response plans



Site-specific emergency response procedures

NYSDOL advises employers call 911 if severe symptoms of smoke-related illness are present.

Where applicable, these written plans should be negotiated in good faith and implemented under existing collective bargaining agreements. Also, employers should keep daily records of all smoke-related illnesses and injuries, regardless of severity, as they occur.

NYSDOL encourages all employers utilize this guidance as needed. Extreme weather hazards in the workplace correlate to higher accident rates, illness, injuries, and deaths. They can also have an impact on a business through increased workers compensation claims, insurance costs, worker utilization of Paid Sick Leave, and overall decreased or diminished worker productivity.

Employers: You cannot retaliate against workers for reporting any workplace health or safety concern. For more information on worker rights visit the NYSDOL Public Employee Safety & Health (PEOSH) Bureau: dol.ny.gov/public-employee-safety-health or the Federal Occupational Safety & Health Administration (OSHA) webpages: [osha.gov/](https://www.osha.gov/).