

Protecting Employees from Wildfire Smoke



Why is Wildfire Smoke Harmful? The main harmful pollutant for people is particulate matter (PM), tiny particles suspended in the air. The greatest hazard comes from breathing the fine particles in the air, which can reduce lung function, worsen asthma and other existing heart and lung conditions, and cause coughing, wheezing and difficulty breathing.

If the work area has a current air quality index (AQI) for PM 2.5 of 150 or more, Cal/OSHA's emergency regulation requires employers to take several actions:

1. Find out what the current AQI is for the location of employees

Various government agencies monitor the air at locations throughout California and report the current AQI for those places. The easiest place to find the current and forecasted AQI for PM 2.5 is at www.airnow.gov and enter the zip code.

Air Quality Index - Particulate Matter	
301 – 500	Hazardous
201 – 300	Very Unhealthy
151 – 200	Unhealthy
101 – 150	Unhealthy for Sensitive Groups
51 – 100	Moderate
0 – 50	Good

2. If AQI is above 150, lower employee exposures by:

- Locating work in enclosed structures or vehicles
- Moving workers to a place with a lower AQI
- Reducing work time in areas with unfiltered air
- Increasing rest time and frequency
- Providing a rest area with filtered air
- Reducing physical intensity of work to help lower breathing and heart rate

3. Communication System

Establish and implement a system for communicating with employees to notify them of PM2.5 levels; protective measures that will be available, the changes in conditions that lead to worsening in air quality along with the health effects resulting from exposure.

4. Provide Respirators

If outside air is 150 or above, employers must provide filtering facepiece respirators to employees for voluntary use. These respirators do not require a fit test or medical evaluation.

To filter out particles, respirators must be labeled N-95, N-99, N-100, R-95, P-99, or P-100 and must be labeled as approved by the U.S National Institute for Occupational Safety and Health (NIOSH).



5. Provide training to employees on:

- Health effects of wildfire smoke
- Employer's communication system
- Right to obtain medical treatment
- How employees can check AQI
- Requirements of OSHA regulation
- Employer's methods to protect employees
- Benefits and importance of using respirator and how to properly use and maintain respirators
- Emergency evacuation actions to take if needed

The regulation can be found at



Learn more

<https://www.dir.ca.gov/dosh/doshreg/Protection-from-Wildfire-Smoke/Discussion-Draft-plus-Appendices-2019-05-08.pdf>