



# Protecting Workers from Wildfire Smoke



Wildfire smoke is a mixture of gases and fine particles from burning trees and other plant material that can be dangerous if inhaled. Smoke can irritate your eyes and respiratory system and worsen chronic heart and lung diseases. The amount and length of smoke exposure, as well as a person's age and degree of susceptibility, play a role in determining if someone will experience smoke-related health problems. If you are experiencing serious medical problems, seek medical attention immediately.



### Protecting Indoor Workers

Wildfire smoke can be a hazard for workers in offices and other commercial buildings. The following steps can improve indoor air quality.

- Ensure the heating, ventilation and air conditioning (HVAC) system is working properly, and that air filters are clean and properly seated.
- Work with an HVAC technician to determine the highest filtration rating your HVAC system will support, and use the highest rating possible when smoke is present. Filters with high filtration ratings require more frequent change-outs, but this step can improve indoor air quality.
- Consult with a qualified HVAC technician or ventilation engineer before reducing building air intake to ensure air pressure remains slightly positive. If the air pressure becomes negative compared to the outdoors, pollution will infiltrate the building through the exhaust system and other openings.
- Portable high-efficiency HEPA air cleaners can improve air quality in small, defined spaces by removing fine particulates.

### Protecting Outdoor Workers

- When outdoor air quality is unhealthy, reduce contact time with wildfire smoke to minimize health risks. Workers may also be affected by high temperatures, and some workers may be more susceptible than others to poor air quality. Consider the following recommendations:
- Relocate work to less smoky areas.
- Reschedule work until air quality improves.
- Reduce the level or duration of physical exertion.
- Where feasible, provide enclosed structures with filtered air for employees to work in.
- Where feasible, provide enclosed vehicles.
- When air quality is poor, set the air conditioning to "recirculate" mode and keep vents and windows closed.

### The United States Particle Pollution – Air Quality Index (AQI) and Canadian Air Quality Health Index (AQHI)

Particle pollution comes from many sources. The U.S. Environmental Protection Agency (EPA) and Environment and Climate Change Canada have each developed air quality indexes, and both scales are used for determining potential health impacts of air pollution.

