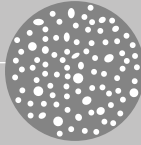


Wildfire Smoke

A Definite Concern for All [Ontario] Workers

Wildfire Smoke is made up of a complex mixture of:



FINE PARTICLES (PM2.5)



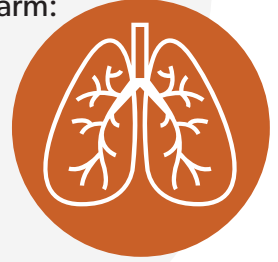
GASES

...produced when wood, plastics and other materials burn.

- The **biggest health concern** from smoke is from fine particles (PM2.5). These microscopic particles can irritate or harm:



EYES



RESPIRATORY SYSTEM

Smoke from wildfires can affect you when working both **indoors** and **outdoors**.

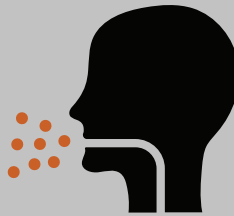
Signs and Symptoms



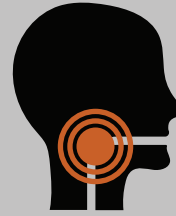
BURNING EYES



RUNNY NOSE



PHLEGMY COUGH



SORE THROAT



DIFFICULTY BREATHING

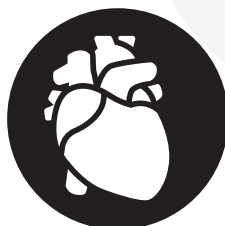
Vulnerable Workers

Some people are more vulnerable than others to harm from the smoke:



RESPIRATORY CONDITIONS

(e.g. Asthma, COPD, COVID)



HEART CONDITIONS



OTHER HEALTH CONDITIONS



OTHER HIGH RISK GROUPS

Prevention

Working Outdoors



CONSULT the Air Quality Health Index (AQHI)* for your region for recommendations

*www.airqualityontario.com/aqi/



TAKE BREAKS indoors - in buildings or vehicles (vehicle air filters do filter PM2.5)



WEAR a tight fitting respirator (N95 or better)



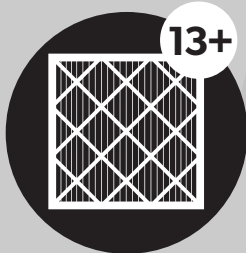
AVOID over exertion

Working Indoors

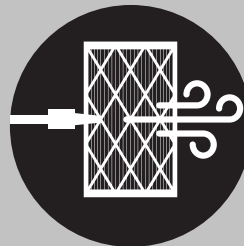
REDUCE exposure to outdoor air:



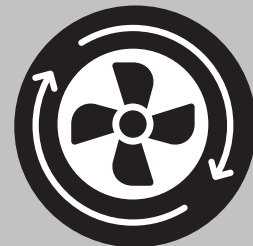
REPORT ALL questions, concerns and symptoms to your supervisor or Health and Safety Committee / Representative



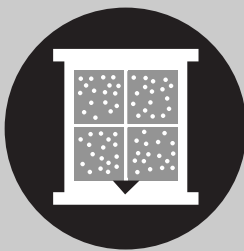
MAKE SURE air filters in the HVAC system are MERV 13 or higher



CLEAN or **REPLACE** air filters that are dirty or in poor condition



CHECK that the furnace fan is running



KEEP all windows and doors closed



IMPROVE on mechanical ventilation systems with portable air cleaners (e.g. DIY Corsi-Rosenthal Box)



AVOID air purifiers with ionizers

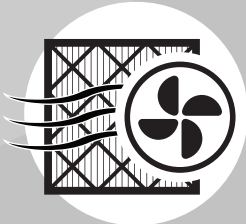
REMEMBER

People will react differently or have different tolerances for wildfire smoke.

Unfortunately, there are no specific rules for employers about outdoor or indoor air. However, the law still says they must do everything 'reasonable' to protect workers.

Employer Responsibilities

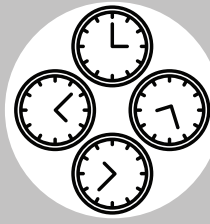
Employers should provide:



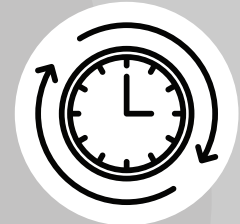
PROPER AIR FILTERING, VENTILATION / MOVEMENT



PROPER FITTING RESPIRATORS (N95 or better)



ADDITIONAL BREAKS



RE-SCHEDULE STRENUOUS WORK



ENVIRONMENTAL / EMERGENCY RESPONSE PLAN



INFORMATION and TRAINING



AQHI MONITORING and COMMUNICATION

Employers should also have a process to **IDENTIFY, PREVENT and REDUCE** factors that contribute to the effects of wildfire smoke. This process should:



INCLUDE workers, health and safety representatives, and/or joint health and safety committee members.

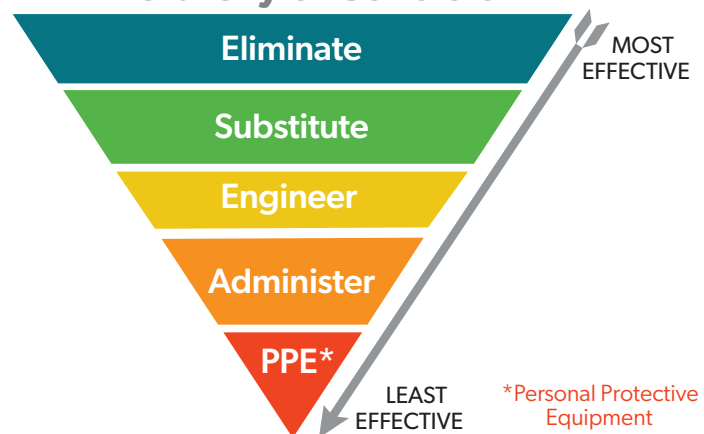


PROVIDE translation / interpretation as needed to allow everyone to contribute effectively.



BE SUPPORTED by the employer so workers feel comfortable participating.

Hierarchy of Controls



- R** **RECOGNIZE** a hazard / possible improvements
- A** **ASSESS** risk level of hazard
- C** **CONTROL** the hazard using the Hierarchy of Controls
- E** **EVALUATE** effectiveness and identify room for improvement

Air Quality Health Index (AQHI) Health Recommendations

To find the state of the air in **your** area, check the Index at:
www.airqualityontario.com/aqhi/

	1	2	3	4	5	6	7	8	9	10	10+	
Health Risk	LOW			MODERATE			HIGH			VERY HIGH		
AQHI	1-3			4-6			7-10			Above 10		
At Risk Population	Enjoy your usual outdoor activities.			Consider reducing or rescheduling strenuous outdoor activities			Reduce or reschedule strenuous outdoor activities. Vulnerable people should also take it easy.			Avoid strenuous outdoor activities. Vulnerable people should also avoid outdoor physical exertion.		
General Population	Ideal air quality for outdoor activities.			No need to modify your usual outdoor activities unless you experience symptoms such as coughing and throat irritation.			Consider reducing or rescheduling strenuous activities outdoors if you experience symptoms such as cough and throat irritation			Reduce or reschedule strenuous outdoor activities, especially if you experience symptoms such as coughing and throat irritation.		
Vulnerable workers are at greater risk. Follow your doctor's usual advice about exercising and managing your condition												

Additional Tools and Resources

- [Wildfire smoke, air quality and your health](#) [Government of Canada]
- [Wildfire smoke and your health](#) [Government of Canada]
- [How to prepare for wildfire smoke](#) [Government of Canada]
- [Combined wildfire smoke and heat](#) [Government of Canada]
- [Using an air purifier to filter wildfire smoke](#) [Government of Canada]
- [Air Quality Health Index \(AQHI\)](#) [Government of Ontario]
- [Wildfires and Indoor Air Quality \(IAQ\)](#) [United States Environmental Protection Agency]
- [My AQI Air - PM2.5 / Pollution](#) [Apple / JB STEVENARD]
- [Firesmoke Canada](#)
- [Make Your Own Air Filters](#) [OHCOW]

06-22-23