Protecting Outdoor Workers

from Wildfire Smoke Exposure

With Canada's yearly battle against wildfires, outdoor workers face an increased risk of exposure to hazardous wildfire smoke. Breathing in this smoke may cause short- and long-term health effects; the severity of the impact depends on the level and duration of exposure and the health of those exposed.

Use these safety protocols to protect outdoor workers from wildfire smoke exposure:







Dispatch Operations

- Monitor wildfire locations, weather, and the Air Quality Health Index and plan routes accordingly.
- Provide drivers with traffic updates by monitoring local news.
 Communicate any road closures and have suggestions for rerouting.
- Provide added time and breaks for driver operations. Reduced visibility, poor air quality, and heightened tensions from residents can affect a driver's stress levels.
- Require driver check-in at established and frequent periods to ensure driver wellness, mental and physical.

Bulk Truck Operations

- Check in with dispatch regularly to confirm routes and allow for health and welfare monitoring.
- Monitor local radio for changes to weather and wildfire locations.
- Follow route signs, local law enforcement, and first response directions.
- Watch for reduced visibility. Be prepared to slow down, and add emergency lights such as 4-way flashers or yellow strobes if available to encourage being seen by others.
- Watch for erratic driving from evacuating traffic; travelers may be impatient to leave.
- Do not enter closed routes or routes that have fire activity and watch for wildfire flash-ups.
- Reduce speed, both on-road and during physical activity. Smoke can affect attention and create added stress from heat and smoke inhalation
- Use in-cab climate control including recirculating air to reduce smoke entry into the vehicle.
- Increase radio contact when on leased land or mining/logging roads. If cellular contact is available always call ahead to confirm the wildfire scenario onsite.
- De-escalate confrontations by remaining calm; remember people are reacting to stressful situations.

Protecting Outdoor Workers

from Wildfire Smoke Exposure



Yard Staff

- Ensure staff can identify signs of stress and smoke exposure.
- When possible, move work indoors or rotate staff to allow for more frequent indoor fresh air breaks and heat stress recovery. Check that workers are feeling well.
- Allow for reduced exertion; smokey operations can limit air induction and make work more difficult.
- Have a response plan to react to increased smoke, localized fire response, and heat exposure.
- Masks (N95) if worn correctly, can help reduce inhalation of soot and smoke, however, they may exacerbate existing breathing difficulties.
- Watch for changes in weather, visibility, and wind when close to wildfire scenarios.

It is highly recommended employers make N95 or P100 respirator available for all staff conducting activities outdoors to reduce their exposure.





Health Impacts of Wildfire Smoke

Wildfire smoke is a mix of gases and fine particles from burning vegetation and other materials. Breathing in this smoke can have immediate and longer-term health effects, including:

- Coughing
- Trouble breathing normally
- Stinging eyes
- A scratchy throat
- Runny nose
- Irritated sinuses
- Chest pain
- Headaches
- Tiredness
- Fast heartbeat
- Decreased mental capacity