

Wildfire Smoke Safety Policy



Smoke from wildfires is a perennial risk for workers in all parts of Canada, particularly during the summer and dry seasons. The danger is especially great to those who engage in physically strenuous work outdoors. Here's a policy template that you can adapt outlining special safety precautions to take if and when smoke from wildfires descend on your own workplace. Go to the OHS Insider [website](#) for a complete [Wildfire Smoke Safety and Compliance Game Plan](#).

Wildfire Smoke Exposure Safety Policy for Outdoor Workers

1. PURPOSE

Smoke from wildfires contains pollutants that can cause lung and heart disease and other damage to health when breathed in, including Fine Particulate Matter (PM_{2.5}), or microscopic solid or liquid particles, suspended in the air, with a size of 2.5 micrometers (millionth of a meter) or less. Risk of exposure to wildfire smoke hazards levels of is particularly great for workers who work outdoors during the summer season and in dry conditions. Dangers may exist even if the wildfires that emit the smoke are thousands of kilometers away in another province or even another country. The purpose of this Policy is to establish procedures and protocols to safeguard outdoor workers from these hazards.

2. DEFINITIONS

For purposes of this Policy:

“AQHI” means the current Ministry of Environment and Climate Change Canada Air Quality Health Index (AQHI)

“High-risk workers” means those who are unusually vulnerable to exposure to PM2.5 and other wildfire smoke pollutants, including but not necessarily limited to workers who:

- Have cardiovascular conditions, asthma, lung cancer, chronic bronchitis or other lung diseases and respiratory conditions;
- Are pregnant;
- Smoke;
- Are seniors; or
- Exhibit signs or symptoms such as coughing, headaches, major nose, throat and sinus irritation, unusual shortness of breath, chest pain or tightness, or significant weakness or fatigue.

“Monitoring” means checking AQHI information from the Canadian Government online at https://weather.gc.ca/airquality/pages/index_e.html, or via receiving alerts from the free WeatherCAN app, and/or equivalent provincial sources [*list the AQHI information reporting resources available from the government of your own province*].

3. POLICY

The special health and safety measures set out in this Policy to guard against exposure to wildfire smoke must be taken when it can be expected that ABC Company workers who work outdoors at [*list location of your worksite*] may be exposed to air with an AQHI level of 4 or above for a sustained and continuous

period.

4. SITES & OPERATIONS THIS POLICY DOES NOT COVER

This Policy **does not** apply to the following workplaces and operations:

- Enclosed buildings where windows, doors, and other openings are kept closed and the air is filtered by mechanical ventilation;
- Enclosed vehicles where windows, doors, and other openings are kept closed and the air is filtered by a cabin air filter;
- Workplaces where the current AQHI does not exceed 3;
- Workers at normal risk who are exposed to a current AQHI of 7 or greater for less than one hour during their shift;
- High-risk workers who are exposed to a current AQHI of 4 or greater for less than one hour during their shift; or
- Firefighters engaged in wildland firefighting.

5. ROLES & RESPONSIBILITIES

5.1 Employer

Owners, corporate officers and directors, upper managers and other representatives of ABC Company who may be defined as an 'employer' under the [*province*] Occupational Health and Safety Act (Act) are responsible for overall establishment, implementation and review of this Policy, including via:

- Establishing the Policy in consultation with the workplace Joint Health and Safety Committee (JHSC) or Health and Safety Representative (Rep.);
- Furnishing the resources necessary to ensure effective implementation of this Policy; and

- Periodically reviewing this Policy in consultation with the JHSC or Rep; and
- Ensuring that appropriate and necessary corrections and improvements are implemented as necessary.

5.2 OHS Coordinator/Site Manager

The ABC Company OHS Coordinator/Site Manager is responsible for managing this Policy, including via:

- Reviewing this Policy at least annually and in response to changes to the Act and corresponding regulations;
- Developing and ensuring that the outdoor workers exposed to wildfire smoke hazards receive the training, information, supervision and direction provided for under this Policy;
- Developing and ensuring the effective implementation, enforcement and review of all safe work procedures required under this Policy;
- Ensuring that exposed workers have and properly use required respiratory protection equipment; and
- Maintaining documentation regarding all phases of implementation of this Policy.

5.3 Supervisors

Supervisors' responsibilities under this Policy include:

- Ensuring that all exposed workers under their charge not only receive but also understand and carry out all safety training and instruction required under this Policy;
- Identifying and creating a list of all high-risk workers under their charge;
- Determining the AQHI when the outdoor workers under their charge may be exposed to wildfire smoke;
- Checking the AQHI before each shift if the potential for AQHI at a level of 4 and above exists;
- Notifying workers of the current AQHI and protective

measures available;

- Implementing the necessary control measures and safe work procedures for outdoor workers exposed to wildfire smoke;
- Ensuring the availability of N95 respirators when conditions require;
- Enforcing the respirator and other safety rules in this Policy;
- Taking action when a worker reports symptoms of poor air quality, such as providing clean air breaks or removing workers from poor AQHI environments.

5.4 Workers

Workers who work outdoors and are exposed to wildfire smoke are responsible for knowing about the hazards they face and the measures in place to protect them, as well as taking all of the necessary steps necessary to benefit from those measures, including via:

- Attending all training sessions;
- Following all of the requirements of this Policy;
- Attend all trainings.
- Talking to their doctor if they have any health issues affecting their ability to wear a respirator;
- Immediately notifying their supervisor if they are high-risk workers;
- Wearing an N95 respirator or other appropriate respiratory protective equipment when conditions warrant;
- Notifying their supervisor;
- Informing their supervisor if air quality is getting worse; and
- Informing their supervisor if they or a co-worker experience any asthma attacks, chest pain, nausea, trouble breathing or other symptoms of poor air quality.

6. DETERMINATION OF WILDFIRE SMOKE EXPOSURE HAZARDS

Determination of wildfire air hazard exposure to outdoor workers will be based on the AQHI, which measures not just PM2.5 but also other potentially hazardous outdoor air pollutants (including ozone and nitrogen dioxide), and lists a health risk score on a scale of 1 to 10, grouped into 4 categories:

| AQHI | Health Risk | Recommendations for At-Risk Workers | Recommendations for General Workers |
|-------------|--------------------|--|--|
| 1 to 3 | Low | Perform usual outdoor activities | Ideal air quality for outdoor activities |
| 4 to 6 | Moderate | Consider reducing or rescheduling strenuous activities outdoors if worker is experiencing symptoms | No need to modify usual outdoor activities unless worker experiences symptoms such as coughing and throat irritation |
| 7 to 10 | High | Reduce or reschedule strenuous outdoor activities | Consider reducing or rescheduling strenuous outdoor activities if worker experiences symptoms such as coughing and throat irritation |
| Above 10 | Very High | Avoid strenuous outdoor activities | Reduce or reschedule strenuous outdoor activities outdoors, especially if worker experiences symptoms such as coughing and throat irritation |



7. CONTROL OF AIR QUALITY HAZARDS

Where reasonably practicable, ABC Company will implement engineering controls to reduce employee exposure to PM2.5 and other wildfire smoke pollutants to safe levels, which may include mechanical filtering or ventilation of the site in which the work is performed. ABC Company will also use administrative/work controls and, if necessary, respiratory protective equipment, where engineering controls are not reasonably practicable or as a supplement to such controls.

7.1 Special Measures Required for Moderate Health Risks (AQHI Levels 4 – 6)

Where in a workplace in which high-risk workers work it is determined that the AQHI level is at 4, 5 or 6:

- The supervisor or another competent person will perform hourly checks of the AQHI until the level drops to level 3 or lower for a sustained period of at least [*list number*] hours;
- The supervisor or other competent person will notify high-risk workers of the results of the hourly checks;
- If it is determined to be necessary, the workday for high-risk workers who perform strenuous work will be cut short or rescheduled for night or hours during the day until the AQHI decreases to level 3 or lower;
- Before work begins, tailgate meetings will be held with high-risk workers who perform strenuous work to review the ABC Company smoke and heat illness prevention procedures, the AQHI and weather forecast and emergency

response procedures.

- If schedule modifications aren't possible, high-risk workers who perform strenuous work will be provided additional water and rest breaks and observed closely for signs and symptoms of smoke and heat illness;
- N-95 particulate filtering facepiece masks or other suitable respiratory protective equipment will be made available to and, if necessary, made mandatory for high-risk workers performing strenuous work to use;
- Each high-risk worker performing strenuous work will be assigned a "buddy," or experienced co-worker, to be on the lookout for signs and symptoms of smoke or heat illness and ensure that emergency procedures are initiated when possible signs or symptoms are displayed.

7.2 Special Measures Required for High Health Risks (AQHI Levels 7 – 10)

Where in a workplace in which it is determined that the AQHI level is at 7, 8, 9 or 10:

- The supervisor or another competent person will perform hourly checks of the AQHI until the level drops to level 6 or lower for a sustained period of at least [*list number*] hours;
- The supervisor or other competent person will notify workers of the results of the hourly checks;
- If it is determined to be necessary, the workday for workers who perform strenuous work will be cut short or rescheduled for night or hours during the day until the AQHI decreases to level 6 or lower;
- The workday for high-risk workers who perform strenuous work **must be** cut short or rescheduled for night or hours during the day until the AQHI decreases to a safe level;
- Before work begins, tailgate meetings will be held with workers who perform strenuous work to review the ABC Company smoke and heat illness prevention procedures, the AQHI and weather forecast and emergency response

procedures.

- If schedule modifications aren't possible, workers who perform strenuous work will be provided additional water and rest breaks and observed closely for signs and symptoms of smoke and heat illness;
- Workers will be provided and may, depending on the circumstances, be required to use N-95 particulate filtering masks or other suitable respiratory protective equipment;
- Each worker performing strenuous work will be assigned a "buddy," or experienced co-worker, to be on the lookout for signs and symptoms of smoke or heat illness and ensure that emergency procedures are initiated when possible signs or symptoms are displayed.

7.3 Special Measures Required for Very High Health Risks (AQHI above Level 10)

Where in a workplace in which it is determined that the AQHI level is above 10:

- The supervisor or another competent person will perform hourly checks of the AQHI until the level drops to level 6 or lower for a sustained period of at least [*list number*] hours;
- The supervisor or other competent person will notify workers of the results of the hourly checks;
- No worker will be allowed to perform strenuous work until the AQHI decreases to a safe level;
- Any non-strenuous work that is performed must be carried out by workers using N95 masks or other suitable respiratory protective equipment;
- Before work begins, tailgate meetings will be held with workers to review the ABC Company smoke and heat illness prevention procedures, the AQHI and weather forecast and emergency response procedures;
- Workers who perform work will be provided additional water and rest breaks and observed closely for signs and

- symptoms of smoke and heat illness;
- Each worker performing work will be assigned a “buddy,” or experienced co-worker, to be on the lookout for signs and symptoms of smoke or heat illness and ensure that emergency procedures are initiated when possible signs or symptoms are displayed.

8. TRAINING

All workers and supervisors with potential exposure to wildfire smoke will receive safety training covering:

- The health effects of wildfire smoke;
- The AQHI and its health risk classes;
- The characteristics or conditions that put workers at high-risk;
- Recommendation that workers at high-risk consult their doctor before taking on work involving potential exposure to wildfire smoke hazards;
- How to get medical assessment or treatment;
- How to get the latest AQHI level for the particular workplace;
- The signs and symptoms of harms from hazardous air quality;
- How to report such signs and symptoms or worsening air quality;
- The safe work procedures in place to guard against wildfire smoke exposure hazards;
- The N95 respirator or other required respiratory equipment, how it protects them from exposure and its limitations; and
- How to properly use, maintain and inspect the respiratory protective equipment.

[*Name/Position*] must keep written training records listing, at a minimum, the date of training, topics covered and methods used to verify that the worker or supervisor understood and

was capable of applying the training on the job.

9. CONSTRUCTORS, PRIME CONTRACTORS & CONTRACTORS

ABC Company will ensure that the constructors, prime contractors and contractors it hires and puts in control of outdoor work at any Company site where workers are at risk of exposure to wildfire smoke hazards are required to ensure that workers involved in such work are protected from hazards by either:

- Directly applying this Policy and assuming all of the employer obligations this Policy assigns to ABC Company; or
- Establishing and implementing an equivalent policy that meets all regulatory requirements, is suitable for the work to be performed, coordinated with and provides at least the same level of protection as this Policy.

10. POLICY REVIEW

ABC Company will review this Policy, in consultation with the JHSC, Rep or where there is no JHSC or Rep at the workplace, directly with workers at the site, at least once a year and more frequently in response to changes and developments affecting workers' health and safety.