

# Wildfire recovery work including fire-damaged structures

## OHS information for employers and workers

This resource explains how to start recovery work in a wildfire-damaged structure. It outlines steps employers and workers must take to ensure fire-damaged buildings are structurally safe for workers to enter.



### Key information

- First steps are hazard assessment – never enter a building without confirming it is structurally sound
- Update hazard assessment often, as conditions may change – communication with workers about changes is essential
- When choosing controls, consider legislative requirements and best practices – personal protective equipment should be easy to clean or disposable

### What to do after a fire – employer and worker obligations

The employer has an overall obligation to protect the health and safety of all workers on their work site. In turn, workers must ensure their health and safety and the health and safety of others around them.



Before any restoration or demolition begins, employers must ensure properly qualified companies are retained to assist with the work. Check that the companies have suitably trained

workers and can provide proof of insurance before hiring.

In addition, the employer must:

- Conduct a hazard assessment and ensure that the appropriate controls are available and in place to protect workers.
- Develop safe work procedures and provide training to workers on these procedures. Workers must participate in this training.
- Ensure that all equipment used at the work site is in proper working condition and used in accordance with the manufacturer's specifications or specifications certified by a professional engineer.
- Assess the potential exposure of workers to harmful substances. If there is an occupational exposure limit (OEL) listed in the Occupational Health and Safety (OHS) legislation, the employer must ensure that exposure does not exceed the OEL.
- Ensure that the personal protective equipment selected is appropriate for the hazards at the work site and meets the listed standards.
- If respiratory protective equipment is required, ensure that it is National Institute of Occupational Safety and Health (NIOSH) approved. If the effectiveness of the equipment depends on a facial seal, ensure workers are fit tested for the equipment and clean shaven where the equipment seals to the skin.
- Ensure workers have a way to properly decontaminate tools, equipment and themselves before leaving the work site.
- Depending on the nature of the work site and the activities to be done, the OHS legislation may have additional specific requirements that must be followed.

## Assess hazards

As an employer, you must first ensure fire-damaged buildings are structurally safe before workers enter the structure. This includes getting advice from a qualified professional, such as a structural engineer.

Fire may create hazards other than structural damage. Some examples are:

- contamination from harmful substances on surfaces, such as soot or heavy metals,
- exposure of hazardous building materials such as asbestos or lead,
- tripping hazards from debris or damaged contents,
- restricted or impeded access to areas of the building,
- creation of restricted or confined spaces, or
- damaged electrical systems.

The burning of building material, house contents, vehicles, asphalt or other materials may also create harmful substances.

### Hazards related to asbestos

If a structure was built before the early 1990s, there is a potential for asbestos-containing materials to be present. You cannot tell if a structure contains asbestos by visual examination. You must have a proper survey done, with samples of the building materials collected and analyzed by a competent person.

There are a wide variety of building materials that can contain asbestos, including stucco, plaster, drywall mud, flooring materials, ceiling tiles and insulation.

If renovations are done in a structure containing asbestos, the asbestos-containing materials in the area of the renovation must be enclosed, encapsulated or removed prior to the renovation. If a structure is to be demolished, the asbestos-containing materials must be removed prior to demolition.

More information is available in the following, which are also linked in our 'For more information' section at the end of



this bulletin: [Asbestos Exposure in the Demolition and Renovation Industries](#) the [Alberta Asbestos Abatement Manual](#) and [Respiratory Protective Equipment](#).

### Air quality

The [Air Quality Health Index \(AQHI\)](#) provides information on the relative health risk associated with air quality in Alberta. The higher the AQHI number, the greater the risk and need to take precautions. The AQHI is updated hourly and can be accessed online. Monitoring the AQHI will give an idea of the air quality at your work site and whether control measures are required for workers.



Outdoor workers and those performing strenuous activities are most exposed; however, workers in any number of jobs may be exposed to wildfire smoke or other airborne contaminants. The health effects can range from eye, nose and throat irritation to reduced lung function, bronchitis, and intensify pre-existing medical conditions like asthma. How reduced air quality affects health depends on factors such as the length of exposure, age, current health state and the type of smoke.

Occupational exposure limits are legal limits included in the Alberta OHS legislation intended to protect most workers from the health effects from exposure to hazardous substances over a work day. These limits are different than the standards for public health. If workers need to work in wildfire areas, the employer must ensure that occupational exposure limits are not exceeded.

### Workers who may be at-risk

Employers should ensure the health of each worker has been assessed before starting wildfire recovery work. A sample [Health screening questionnaire](#) is included in the 'For more information' section of this bulletin. If workers answer "yes" to any of the screening questions, ensure they get clearance from a doctor before beginning work.

If workers have concerns about air quality, health or wildfire recovery work, the workers should speak

with their employers about such concerns. Air quality conditions should be assessed often and proper PPE should be available.

## Control hazards

Eliminating or preventing any hazard is the best way to protect health and safety. When employers cannot eliminate the hazard, they must control potential exposure and risk to the worker. Employers must follow the hierarchy of controls set out in Part 2 of the OHS Code.



When developing controls, employers should consider the following:

- If diesel-powered equipment is needed, the exhaust must be ventilated out of the work site to prevent the build-up of contaminants such as carbon monoxide.
- Since workers will be doing manual tasks in warm environments while wearing protective equipment, the employer should have procedures in place to address heat stress.
- Make sure workers are wearing appropriate protective equipment (respirators, footwear, and clothing) that is easy to clean or dispose of.
- Drink water and stay hydrated to help ensure your nose and mouth are moist. Workers must not eat, drink or smoke in the work area. The employer should designate a separate area for these activities once workers have been able to decontaminate.

### Limit airborne contaminants

- Reduce levels of physical activity, as necessary, to decrease inhaling pollutants.
- Pay attention to warning – [public health warnings](#) apply to you and should be followed.
- When in your vehicle, keep the windows closed - the air system should be set on recirculate so smoky air doesn't get inside.

When administrative controls are unable to reduce airborne exposures to acceptable levels, [Respiratory protective equipment](#) may be used and must be selected in accordance with the Canadian Standard Association [Standard Z94.4-02, Selection, Use, and Care of Respirators](#).



For more information on how to control workplace hazards to meet legislated requirements, read [Hazard Assessment and Control: a handbook for Alberta employers and workers](#).

### Mental health considerations

Traumatic events like emergencies and natural disasters can have an impact on workers' mental health. To cope with the stress and emotions during the disaster, and in the days and weeks that follow, offer workers support:

- ensure staff are aware of, and have access to, the organization's employee assistance program, if there is one
- direct workers to Alberta Health Services' [Help in tough times](#) web page for a list of resources - [Mental Health Help Line](#): 1-877-303-2642

## Dangerous work refusals

Work involving health and safety hazards that are not normal for the job is considered a dangerous condition that could trigger a work refusal. Workers have the right to refuse dangerous work and are protected from reprisal for exercising this right.

- Workers must continue to be paid while a work refusal is being investigated.
- Employers must ensure workers understand the hazards at the workplace, know what needs to be reported and have the support to exercise their right.
- Employers must investigate the matter in cooperation with the joint work site health and safety committee or health and safety representative, if applicable.
- Employers cannot take or threaten discriminatory action against a worker for exercising their rights and duties under the legislation.

- Other workers may be assigned to the work if they are advised of the refusal, reason for it and are made aware of their own right to refuse work after the employer determines there is not a risk.

Poor air quality does not necessarily constitute a dangerous work situation. Employers are required to put appropriate controls in place (such as respirators and other protective equipment) and have procedures to be followed for poor air quality.

Air quality changes continually. Areas impacted by wildfire smoke will change based on wind direction and fire location. When workers are asked to mobilize to these areas, employers must ensure workers have the required protective equipment and know what the safe work procedures are.

For more on work refusals, including employer and worker obligations, read [Right to refuse dangerous work](#).



## Volunteer workers

The *Occupational Health and Safety Act* applies to all workers, including volunteers, except:



- the owner of a farm or ranch operation and their family members, unpaid workers such as relatives, neighbours and children doing chores or participating in 4-H,
- federal government employees, and
- workers in federally regulated industries such as banking and aviation.

Organizations coordinating the use of volunteers must ensure volunteers have the appropriate equipment and training to perform the tasks that they have volunteered for.

Volunteers should:

- identify hazards before they start working,
- only do work they are trained to do,
- wear proper safety equipment, and
- ask questions or speak up if they are concerned something is unsafe.

Archiving

## Contact us

### OHS Contact Centre

(Complaints, questions, reporting serious incidents)

Anywhere in Alberta

- 1-866-415-8690
- Edmonton & surrounding area
- 780-415-8690
- Deaf or hearing impaired
- 1-800-232-7215 (Alberta)
  - 780-427-9999 (Edmonton)

### OHS Online Incident Reporting

(Potentially serious, mine or mine site incidents)

[oirportal.labour.alberta.ca/pre-screening/](http://oirportal.labour.alberta.ca/pre-screening/)

### Website

[alberta.ca/OHS](http://alberta.ca/OHS)

## Get copies of the *OHS Act*, Regulations and Code

### Alberta Queen's Printer

[qp.gov.ab.ca](http://qp.gov.ab.ca)

### Occupational Health and Safety

[alberta.ca/ohs-act-regulation-code.aspx](http://alberta.ca/ohs-act-regulation-code.aspx)

## For more information

### Alberta Asbestos Abatement Manual (ASB001)

[ohs-pubstore.labour.alberta.ca/asb001](http://ohs-pubstore.labour.alberta.ca/asb001)

### Alberta Health Services – Health Advisories

[albertahealthservices.ca/news/Page1926.aspx](http://albertahealthservices.ca/news/Page1926.aspx)

### Alberta Environment and Sustainable Resource Development – Air Quality Technical Map

[airquality.alberta.ca/map/](http://airquality.alberta.ca/map/)

### Asbestos Exposure in the Demolition and Renovation Industries (ASB004)

[ohs-pubstore.labour.alberta.ca/asb004](http://ohs-pubstore.labour.alberta.ca/asb004)

### Hazard Assessment and Control (BP018)

[ohs-pubstore.labour.alberta.ca/bp018](http://ohs-pubstore.labour.alberta.ca/bp018)

### Respiratory Protective Equipment (PPE001)

[ohs-pubstore.labour.alberta.ca/ppe001](http://ohs-pubstore.labour.alberta.ca/ppe001)

### Right to refuse dangerous work (LI049)

[ohs-pubstore.labour.alberta.ca/li049](http://ohs-pubstore.labour.alberta.ca/li049)

### Selection, Care and Use of Respirator

[scc.ca/en/standardsdb/standards/18348](http://scc.ca/en/standardsdb/standards/18348)

### Wildfire Recovery: Sample Health Screening Questionnaire (FI005)

[ohs-pubstore.labour.alberta.ca/fi005](http://ohs-pubstore.labour.alberta.ca/fi005)

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