

The health impacts – physical and mental – over the short term and long term – are also increasing. The statistics from Canada and the US are similar. As per the US Centers for Disease Control and Prevention forest fires have multiple effects on health:<sup>10</sup>

"Smoke exposure increases respiratory and cardiovascular hospitalizations; emergency department visits; medication dispensations for asthma, bronchitis, chest pain, chronic obstructive pulmonary disease (commonly known by its acronym, COPD), and respiratory infections; and medical visits for lung illnesses."

Addressing Indoor and Outdoor Air Quality Occupational Health & Safety Issues and Filing WorkSafeBC Air Quality Claims 2020

<sup>&</sup>lt;sup>9</sup> Lindsay, B. (2018, August 29). 2018 now the worst fire season on record as B.C. extends state of emergency. *CBC News*. Retrieved February 18, 2020 from <a href="https://www.cbc.ca/news/canada/british-columbia/state-emergency-bc-wildfires-1.4803546">https://www.cbc.ca/news/canada/british-columbia/state-emergency-bc-wildfires-1.4803546</a>

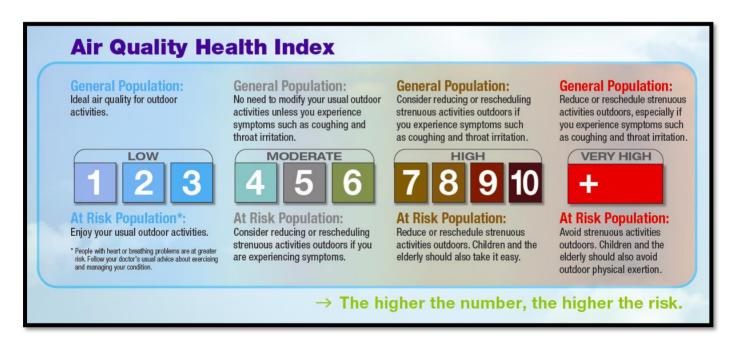
<sup>&</sup>lt;sup>10</sup> Centers for Disease Control and Prevention. Wildfires. Retrieved February 18, 2020 from <a href="https://www.cdc.gov/climateandhealth/effects/wildfires.htm">https://www.cdc.gov/climateandhealth/effects/wildfires.htm</a>

And, as per Yao (2019)(continued):

"The findings show that ambulance calls for heart and lung conditions increased within one hour of exposure to smoke, while calls for diabetic conditions increased after 254 hours."

This is in addition to mental health impacts as per CBC News, the University of Alberta and the Kamloops Canadian Mental Health Association ("CMHA").<sup>11</sup> The traditional view was that workers would only be exposed to hazardous levels of smoke after extended durations e.g. days or weeks. This is incorrect. Hazardous exposures can occur after a few hours. Where workers are chronically exposed to forest fire smoke, even for short durations, there may be significant health impacts. CUPE members in multiple Sectors and occupations may be affected – not just firefighters, Paramedics, municipal workers, etc.

Many different indexes have been created for poor air quality. Information on the Forest Fire ("Wildfire") Season can be found on the Government of British Columbia site – Public Safety & Emergency Services – Wildfire Service at <a href="https://www2.gov.bc.ca/gov/content/safety/wildfire-status/wildfire-situation">https://www2.gov.bc.ca/gov/content/safety/wildfire-status/wildfire-situation</a> For example, here are three sample advisories from health boards and the provincial government as well as a general alert:



<sup>&</sup>lt;sup>11</sup> Henning, C. (2018, August 21). How smokey skies from wildfires are affecting British Columbians' mental health. *CBC News*. Retrieved February 21, 2020 from https://www.cbc.ca/news/canada/british-columbia/forest-fires-smoke-mental-health-1.4792195

Addressing Indoor and Outdoor Air Quality Occupational Health & Safety Issues and Filing WorkSafeBC Air Quality Claims 2020

Health Risk	Air Quality Health Index	Health Messages	
		At Risk Population*	General Population
Low Risk	1-3	Enjoy your usual outdoor activities.	Ideal air quality for outdoor activities.
Moderate Risk	4-6	Consider reducing or rescheduling strenuous activities outdoors if you are experiencing symptoms.	No need to modify your usual outdoor activities unless you experience symptoms such as coughing and throat irritation.
High Risk	7-10	Reduce or reschedule strenuous activities outdoors. Children and the elderly should also take it easy.	Consider reducing or rescheduling strenuous activities outdoors if you experience symptoms such as coughing and throat irritation.
Very High Risk	Above 10	Avoid strenuous activities outdoors. Children and the elderly should also avoid outdoor physical exertion.	Reduce or reschedule strenuous activities outdoors, especially if you experience symptoms such as coughing and throat irritation.





#### MEDIA RELEASE

For Immediate Release - Attention Editor

# SMOKY SKIES BULLETIN AMENDED TO INCLUDE EAST VANCOUVER ISLAND, INLAND VANCOUVER ISLAND, WEST VANCOUVER ISLAND, NORTH VANCOUVER ISLAND, SOUTHERN GULF ISLANDS, GREATER VICTORIA

(August 4, 2017 - Nanaimo) The Ministry of Environment and Climate Change Strategy, in collaboration with Island Health, has amended the area covered by the Smoky Skies Bulletin that was last updated on August 1, 2017 due to changing smoke conditions.

Areas now covered by this Bulletin include: East Vancouver Island, Inland Vancouver Island, West Vancouver Island, North Vancouver Island, Southern Gulf Islands, and Greater Victoria. Outflow winds from the interior of BC continue to carry smoke from active wildfires in the area towards the coast. Smoke concentrations will vary widely as winds, fire behaviour and temperatures change.

Exposure to increased smoke concentrations is particularly a concern for infants, the elderly and those who have underlying medical conditions such as heart or lung disease. Those at risk should avoid strenuous activities and prolonged exposure to smoke. Individuals, who experience any of the following symptoms, should contact their health care provider: difficulty in breathing, chest pain or discomfort, and sudden onset of cough or irritation of airways.

Should symptoms develop (such as an irritated throat or cough) individuals may wish to consider limiting their activity and exposure. Residents can stay informed of air quality and the air quality health index for their area by visiting <a href="http://www2.gov.bc.ca/gov/content/environment/air-land-water/air">http://www2.gov.bc.ca/gov/content/environment/air-land-water/air</a>

#### Tips to reduce your personal health risk:

 People with heart or lung conditions may be more sensitive to the effects of smoke and should watch for any change in symptoms that may be due to smoke exposure.
 If any symptoms are noted, affected individuals should take steps to reduce their exposure to smoke and if necessary see their physician. People with symptoms

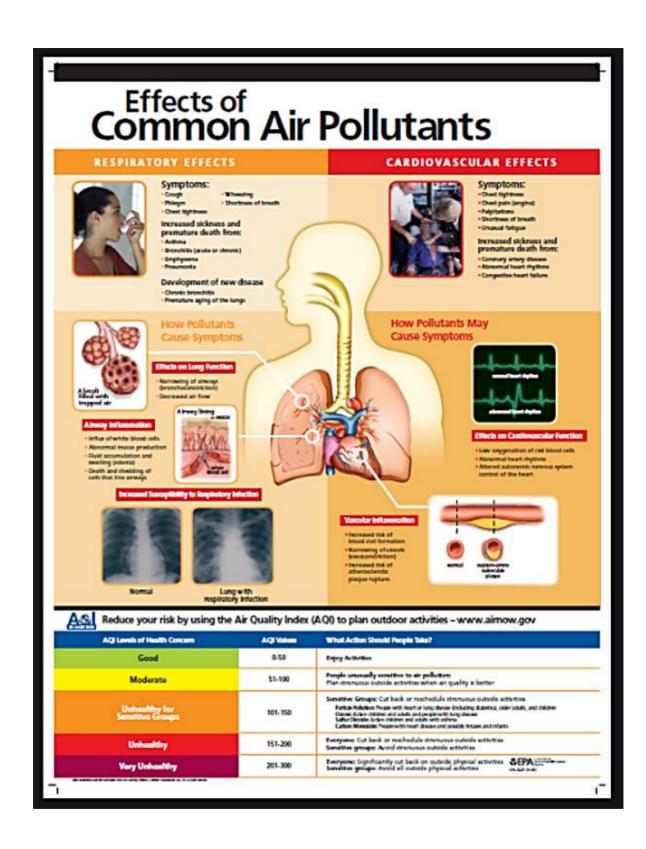


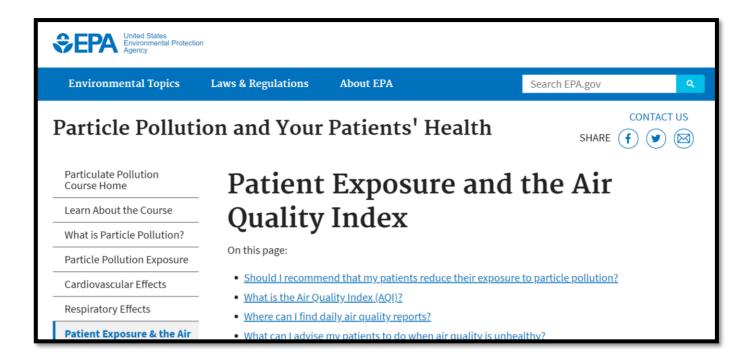
#### II.I. What are outdoor air contaminants:

Examples of common outdoor air contaminants include:

- Carbon dioxide (CO<sub>2</sub>)
- Tobacco smoke
- Smog
- Ozone
- Smoke from forest fires
- Dust
- Pollen
- Mould

- Road dust
- Construction
- Agricultural products e.g. pesticides
- Asbestos
- Silica
- Lead
- Asphalt
- Petrochemical products





Air Quality Index	Who Needs to be Concerned?	What Should I Do?	
Good 0-50	It's a great day to be active outside.		
Moderate 51-100	Some people who may be unusually sensitive to particle pollution.	Unusually sensitive people: Consider reducing prolonged or heavy exertion. Watch for symptoms such as coughing or shortness of breath. These are signs to take it easier.  Everyone else: It's a good day to be active outside.	
Unhealthy for Sensitive Groups 101-150	Sensitive groups include people with heart or lung disease, older adults, children and teenagers.	Sensitive groups: Reduce prolonged or heavy exertion. It's OK to be active outside, but take more breaks and do less intense activities. Watch for symptoms such as coughing or shortness of breath.	
		People with asthma should follow their asthma action plans and keep quick relief medicine handy.	
		If you have heart disease: Symptoms such as palpitations, shortness of breath, or unusual fatigue may indicate a serious problem. If you have any of these, contact your heath care provider.	
Unhealthy 151 to 200	Everyone	Sensitive groups: Avoid prolonged or heavy exertion. Move activities indoors or reschedule to a time when the air quality is better.	
		Everyone else: Reduce prolonged or heavy exertion. Take more breaks during all outdoor activities.	
Very Unhealthy 201-300	Everyone	Sensitive groups: Avoid all physical activity outdoors. Move activities indoors or reschedule to a time when air quality is better.	
		Everyone else: Avoid prolonged or heavy exertion. Consider moving activities indoors or rescheduling to a time when air quality is better.	
Hazardous 301-500	Everyone	Everyone: Avoid all physical activity outdoors.  Sensitive groups: Remain indoors and keep activity levels low. Follow tips for keeping particle levels low indoors.	



II.II. What do the Act, OHS Regulations, Guidelines and Policy say about outside air quality and hazardous substances exposure. The following are examples (not an exhaustive list and subject to change or amendment):

The OHS Regulations do not DIRECTLY address outside air, only inside air quality. Many of the law and policy items in Section I (I.IV) above apply to outdoor air quality. Also see Appendix H – WorkSafeBC Forest Fire Advisory.

- Definitions Part 1.1 of the OHS Regulations
- General Conditions Part 4
- Reporting Unsafe Condition Part 3.10

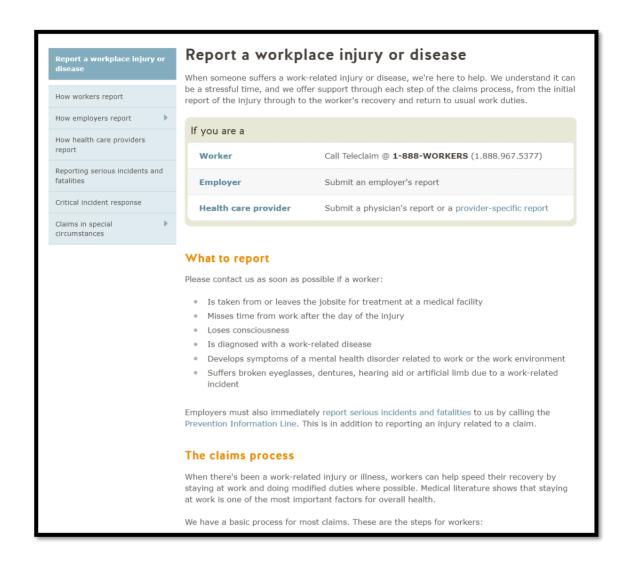
- Right to Refuse Part 3.12
- Chemical Agents and Biological Agents Part 5
- Exposure Control Plans
- Risk Assessments
- Personal Protective Equipment Part 8

As stated in Section I.IV above, many of the components of a health and safety program for Indoor air quality issues also apply to outdoor air quality exposure:

A respiratory protection program includes the following components:

- hazard identification
- hazard control
- exposure assessment
- respirator selection
- respirator fit-testing
- training program
- inspection and record keeping

- cleaning and sanitizing respirators (see Appendix K as well)
- repairing and maintaining respirators (see Appendix K as well)
- proper storage of respirators (see Appendix K as well)
- health surveillance
- policies and procedures
- program evaluation



# C. Filing a WCB Claim (See the previous section on key RSCM Policies and sample WCAT decisions):

What should I do if I have been injured at work - General information which applies to all types of claims:

The Workers Compensation Act states that the WCB must be notified in the case of a worker's death or a serious injury.

There other considerations that may trigger a claim. These include the following (non-

exhaustively):

• A first aid attendant recommends a worker seek medical treatment

• The injury requires medical treatment

• The worker receives medical treatment for the injury

• The worker is unable to return to work beyond the day of the injury

• The injury or accident results, or is claimed to result, in the breakage of an artificial

member, eyeglasses, dentures or a hearing aid

The employee or WCB has requested that an Employer's report be sent

The WCB also requires immediate notification of:

• A major failure or collapse of a structure, equipment, construction support system

or excavation

A major release of a hazardous material

• Other serious mishap, such as multiple employees requiring first aid treatment

Report all serious incidents to the WCB Prevention emergency line:

Lower Mainland: 604 276-3301

• Toll-free: 1 888 621-7233

Report fatalities/serious injuries immediately to:

• The police / RCMP – whichever is applicable

The Employer and the supervisor

- The Union (Local) President
- The JHSC
- WCB's Prevention Emergency Line:

Lower Mainland: 604 276-3301

o Toll-free: 1 888 621-7233

#### **Important Points to Remember:**

- Advise the Employer immediately verbally and in writing, that an injury or condition occurred, even if it occurred over a period of time.
- **Fill** out the Incident / Accident Report (or log) the same day. Include witness reports, even if it was an injury that occurred over time.
- **Seek** medical attention the same day. See the physician within 24 hours, even if it is a Clinic or Hospital (as required due to the injury). The physician should file a Form 8 / 11. Ensure a copy of the Form 6, Incident / Accident Report, Job Description and any other materials describing what happened to the physician for review PRIOR to the physician filling of and filing of the Form 8 / 11. Read the CUPE Form 8 / 11 Guide.
- **Give** a copy of the Job Description, Incident / Accident Report and WCB Form e.g. Form 6, to the physician.
- **Know** the WCB claim process and rights visit the WCB website and be aware of the "Teleclaim" process for new WCB claims.

See <a href="https://www.worksafebc.com/en/contact-us/departments-and-services/claims">https://www.worksafebc.com/en/contact-us/departments-and-services/claims</a>

- **Have** all the forms, reports, chronology of accident details, etc during discussions with WCB.
- Review and correct any Teleclaim comments made in the WCB claim file.

- **Keep** an updated diary of the WCB claim, even after the return to work or the injury appears to have resolved in part or totally.
- Make sure the Employer's report of injury (Form 7) is filled out correctly, obtain a copy and that the JHSC is involved at all stages of the claim process, including the return to work process.

What are the specific steps that workers need to follow for a WCB claim:

#### Step 1

Obtain medical care immediately if required. Where the exposures occurred gradually or over a long period of time, report the exposure to the physician. The WCB primarily looks at the duration of exposure and the concentration when adjudicating air quality exposure claims. Even, where an injury or exposure occurred gradually or over a long period of time, report the exposure to the physician.

# Step 2

Even if First Aid or immediate medical attention is not required, report the condition, illness, or any exposure (even if no symptoms are present) to the Employer immediately.

- You should report all exposures, accidents or incidents to the Employer immediately.
- Please give a detailed explanation to supervisors and the Union representative (e.g. Shop Steward or OH&S Committee member), as soon as possible. All information must be consistent. Keep a diary of all details, calls, meetings, events, etc.

# Step 3

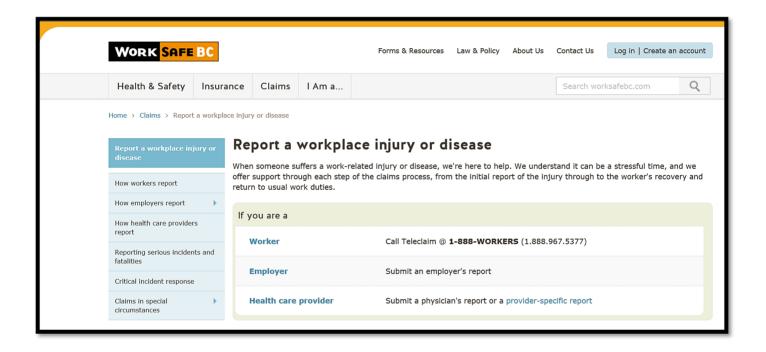
Report the Injury to the WCB, in writing and via Teleclaim, and the physician within 24 hours.

The link to the WCB Form 6 (as opposed to the internal Employer Form 6A which does NOT initiate a claim) is as follows:

http://www.worksafebc.com/claims/report injury/default.asp

Or,

1888 WORKERS (1888 967-5377), or #5377 for Telus, Rogers, and Bell mobility customers.



Pollutant	Description	Sources	Health Effects	Welfare Effects
Carbon Monoxide (CO)	Colorless, odorless gas	Motor vehicle exhaust, indoor sources include kerosene or wood burning stoves.	Headaches, reduced mental alertness, heart attack, cardiovascular diseases, impaired fetal development, death.	Contribute to the formation of smog.
Sulfur Dioxide (SO <sub>2</sub> )	Colorless gas that dissolves in water vapor to form acid, and interact with other gases and particles in the air.	Coal-fired power plants, petroleum refineries, manufacture of sulfuric acid and smelting of ores containing sulfur.	Eye irritation, wheezing, chest tightness, shortness of breath, lung damage.	Contribute to the formation of acid rain, visibility impairment plant and water damage, aesthetic damage.
Nitrogen Dioxide (NO <sub>2</sub> )	Reddish brown, highly reactive gas.	Motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuels.	Susceptibility to respiratory infections, irritation of the lung and respiratory symptoms (e.g., cough, chest pain, difficulty breathing).	Contribute to the formation of smog, acid rain, water quality deterioration, global warming, and visibility impairment.
Ozone (O <sub>3</sub> )	Gaseous pollutant when it is formed in the troposphere.	Vehicle exhaust and certain other fumes. Formed from other air pollutants in the presence of sunlight.	Eye and throat irritation, coughing, respiratory tract problems, asthma, lung damage.	Plant and ecosystem damage
ead (Pb)  Metallic element  Metal refineries, lead smelters, battery manufacturers, iron and steel producers.		Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ.	Affects animals and plants, affects aquatic ecosystems.	
Particulate Matter (PM)	Very small particles of soot, dust, or other matter, including tiny droplets of liquids.	Diesel engines, power plants, industries, windblown dust, wood stoves.	Eye irritation, asthma, bronchitis, lung damage, cancer, heavy metal poisoning, cardiovascular effects.	Visibility impairment, atmospheric deposition, aesthetic damage.

# Can the Union assist me with the completion of the WCB Forms e.g. Form 6:

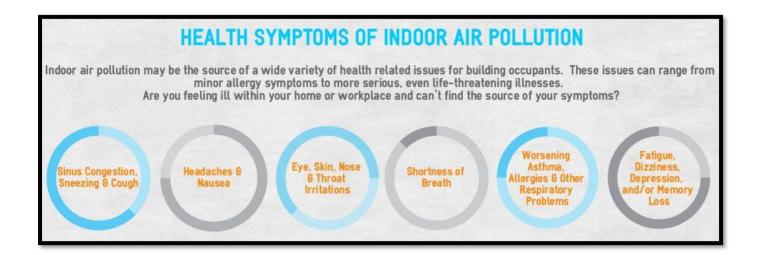
If workers need assistance, contact the Local or contact the CUPE BC Regional Office via the Local President and National Representative.

Not all CUPE Locals provide WCB assistance. WCB assistance is not required under the BC Labour Relations Code.

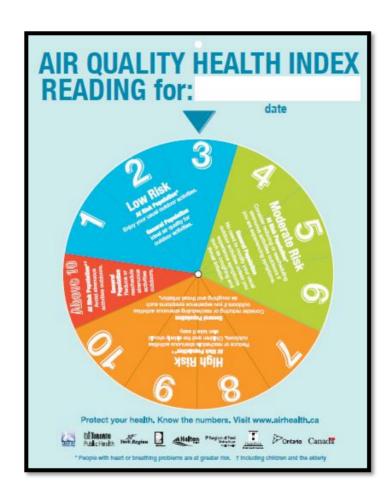
Workers may also call the BC Workers' Advisers Office, as per the contact information located later in this Guide.

The most important WCB document is the Form 6 - accuracy and consistency are critical. Include details of the following in this Form, the Employer's Form 7 and the Form 8 / 11:

- When did the injury or exposure occur?
- What was the duration of symptoms? Note there may be multiple body areas or initial symptoms that mask other symptoms due to severity at the time.
- What was the duration of the event, accident or incident?
- What were the symptoms that were initially experienced? What about later?
- What medications were being used for self-treatment?
- What equipment was used prior to, during and after the injury?
- Was anything broken, missing or out of the ordinary?
- Were there changes in staffing or staff shortages?
- Did anything unusual, unaccustomed, or out of the ordinary occur?
- Were there changes to the job or jobs if there were multiple employments?
- Where there changes in the way work was done or work procedures?
- Are there any similar claims/injuries other people experienced for filed?
- OHS issues that directly relate to the claim, but NOT labour relations issues?
- Were there witnesses to the incident / accident?

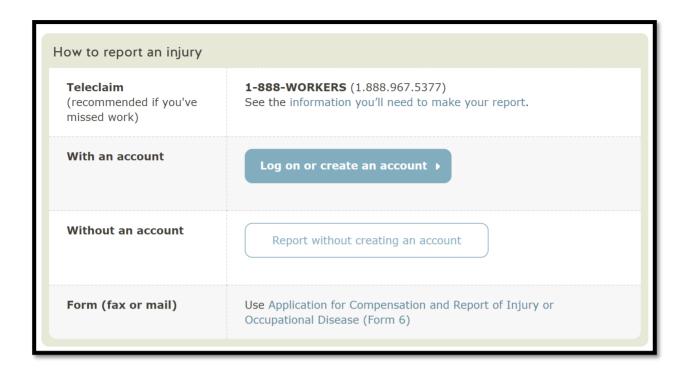


Remember – always keep a copy of the Form 6 for the physician to review and for the Teleclaim call.



# Points to remember when dealing with either the Employer or the WCB on a Claim:

- It is the worker's right to file a WCB claim. Claims suppression and discriminatory action is prohibited by WorkSafeBC Policy and the OHS Regulations
- Advise the Employer of any injury or the possible onset of a work-related disease/condition. If workers feel they are able to continue working, then they still should keep detailed records of the incident, document the names of any witnesses and any conversations, if the worker was working in pain or other symptoms, performing limited duties, had people helping, or if the worker left work early
- Even if the worker is told by the Employer that they will be provided light duty work, a WCB claim should still be filed and the relevant Incident / Accident Reports filed. WCB claims are often denied because of either late reporting to the Employer or the WCB or not seeing a physician the same day
- The WCB requires that the injury or condition occur "out of and in the course of employment" these are key tests
- The work activity need not be the only cause or the primary cause
- There is no requirement in law or Policy that work be the only causative factor or the most significant causative factor
- A pre-existing condition might be aggravated by the work duties and still be acceptable



# Examples of what the WCB might allow if the WCB claim is accepted, in addition to wage loss and treatment:

- Specialized medical testing, Functional Capacity Evaluations, and diagnostic testing such as MRIs
- Wheelchairs, canes, special shoes, hearing aids, dentures, artificial limbs, etc
- Most prescription drugs
- Modification of the workplace
- Return to work programs
- Vocational rehabilitation
- Travel costs for treatment

		MAJOR Sources	HEALTH EFFECTS
	SO <sub>2</sub>	Industry	Respiratory and cardiovascular illness
	NO <sub>x</sub>	Vehicles; industry	Respiratory and cardiovascular illness
	PM	Vehicles; industry	Particles penetrate deep into lungs and can enter bloodstream
	CO	Vehicles	Headaches and fatigue, especially in people with weak cardiovascular health
	Lead	Vehicles (burning leaded gasoline)	Accumulates in bloodstream over time; damages nervous system
	Ozone	Formed from reaction of NO <sub>x</sub> and VOCs	Respiratory illness
	VOCs	Vehicles; industrial processes	Eye and skin irritation; nausea; headaches; carcinogenic

#### What does the WCB look for when investigating a claim?

- Same day reporting to the WCB, the Employer, the physician and same day filing of the First Aid / Accident / Incident Reports
- Concentration and duration of exposure this is very important for air quality exposure claims
- Consistency of information reported to and by the physician, the worker, the Employer and the Accident / Incident reports. The WCB will check for consistency of all information during telephone calls such as during Teleclaim
- Words such as "maybe," "probably," "might have," "could have," etc should not be used by physicians on the claimant on any Form, letter or report
- Continuity of medical treatment (first aid, medication, self-directed treatment)
- Continuity of complaints or symptoms determines the duration of WCB compensation in many cases
- Evidence of non-work causation should be avoided. Was it work related and to what degree?
- Was there evidence of something unusual, out of the ordinary or unaccustomed?
- Employers who protest or object to the claim
- Witnesses
- Gaps in the continuity of symptoms
- Late onset of symptoms

#### What to tell the health care professional/physician:

- The physician cannot act as an advocate they must remain neutral and ideally rely upon as much objective medical evidence as possible
- Please give the CUPE Form 8/11 Guide and the Medical Evidence Guide to the physician for review
- The physician can rely upon subjective complaints but should normally base their opinions on objective medical evidence and Chart Notes / Clinical Notes
- The physician should read the Job Description, copy of the Accident / Incident Report, Form 6, and injury details to ensure they are consistent in reporting to the WCB in the Form 8 / 11 (Physician's Report)
- Report all symptoms, in all parts of the body, and the duration and ensure these are reflected in the Form 6 (Worker report) and Form 7 (Employer report) as well
- Provide copies of all relevant documents, on an ongoing basis, to the physicians

#### Do I need to get witnesses?

Ask witnesses to the accident/incident to write down what they saw. They should include the time and date on their statement, and they should also sign it. In many situations, the onus is on the injured worker to prove that the injury "arose out of and in the course of the employment."

Advise the Employer, the attending physician and other practitioners, as well as witnesses about the symptoms, pain, etc, but not the diagnoses – privacy is important.

# What can I do while I'm off work waiting for my claim to be approved? What if no sick leave is available?

- consider applying for EI / UI sick benefits
- consider applying for LTD
- check the Collective Agreement for other benefits

- apply for CPP benefits
- cooperate with the Employer in Duty to Accommodate investigations and processes
- visit the health care professional on a regular basis

### Do I need to report anything else to the WCB after the Form 6 and Teleclaim are completed?

Report any changes in income, secondary employment, overtime, per diems, return to work status, changes in medical conditions or changes in contact information, etc to the WCB immediately.

#### What if I don't co-operate or my Employer does not co-operate?

The WCB Regulations set out a duty to cooperate for both workers and the Employer. Otherwise a claim may be terminated or rejected if this does not occur.

#### What else can I do?

- ☑ Keep a diary of all communications, correspondence, appointments, and actions have regarding the claim i.e. telephone conversation with the Employer, WCB or the Union.
- When speaking to the WCB representatives remain calm. The WCB documents all telephone calls you have with them on a continuous basis for the duration of the claim.
- ☑ Keep a copy of all correspondence regarding the injury, including prescriptions, health care professionals' notes, forms and letters. A copy should also be given to the Union representative. If you have verbal contact with the WCB, make detailed notes of what both parties said.
- ☑ Cooperate in health care treatment.
- ☑ Cooperate in safe return to work.
- ☑ Complete and return all WCB forms promptly.
- **☑** Copy the Union on all documents as required.

- ☑ Copy the physician or other practitioner e.g. chiropractor, on all correspondence from the WCB.
- Appeal any WCB decisions within the time required. If the claim is denied, appeal it immediately.

# What if the Employer is objecting to ("protesting") the claim? The Employer has a consultant fighting my claim.

Employers may or may not have Human Resources personnel who assist Employers in the filing of claims, review claims, and, in certain cases, protesting claims. Employers are legally allowed to protest a WCB claim, or, in certain limited cases ask the WCB for a review or a re-opening of the claim. An Employer may contract these services to a consultant.

The mandate of these consultants varies widely. Some assist Employers in WCB claims, while others assist Employers and employees with Return to Work Programs, Job Demands Analysis, Functional Capacity Evaluations, obtaining diagnostics such as MRIs, reducing administration costs, claims costs recovery, claims management, scrutinizing claims that go beyond 10 weeks duration, training, or even Occupational Health and Safety program review.

The primary emphasis of the WCB, and many Employers, is to return injured workers to work as soon as possible.

If the Employer is protesting a claim, participating in a WCB appeal, has asked for Cost Relief from the WCB, has asked for a claim to be re-opened, or is utilizing a consultant, contact the Union immediately. Do not sign any Releases or Forms from the Employer or a consultant until you have spoken with the Union. Any Releases, Forms or documents given to you by the Employer or a consultant should be forwarded to the Union for review immediately. Some Employers or consultants attempt to get permission to speak with physicians; this should not be given.

Occasionally, consultants, as well as the WCB, conduct (or contract to be conducted) video surveillance in order to gather evidence that confirms the presence or lack of disability. These videos and attendant reports often become the basis for protesting claims and appeals.



For more information go to the WCB Field Investigations Department at:

https://www.worksafebc.com/en/contact-us/departments-and-services/field-investigations

WORKSAFEBC PRACTICE DIRECTIVE # C12-7 TOPIC: Surveillance and Other Evidence

ISSUE DATE: May 2, 2007, Amended March 16, 2011



#### What if the WCB claim or appeal is denied?

There are strict time limits for appeals, so immediate action is usually required.

Here are some (not an exhaustive list and not legal advice) actions that may need to occur:

1. Workers – including Unionized workers - have the option of obtaining free, expert assistance from the BC Workers' Advisors Office. The BC Workers Advisors Office email and contact information are:

#### http://www.labour.gov.bc.ca/wab/

Vancouver/Lower Mainland 500 - 8100 Granville Avenue Richmond, BC V6Y 3T6

Tel: 604 713-0360 Fax: 604 713-0311

Toll Free: 1800663-4261

- Workers may also hire their own lawyer at their own cost. Fees range widely.CUPE (BC Region) does not have WCB lawyers any assistance is volunteer ONLY.
- **3.** Any lay volunteer CUPE assistance, advocacy or representation (each are a different term), might only occur after the standard Releases are signed and returned to the Union, as well as copies to the CUPE BC Regional Office.

Copies of all Forms and Releases are available from the CUPE BC Regional Office.

**4.** CUPE members should obtain documents which will assist with the process.

#### These include:

- a. Form 6 Guide used at the WCB Claim Filing Stage
- b. Form 8/11 Guide used at the WCB Claim Filing Stage
- c. "How to File a WorkSafeBC Claim and Return to Work Safely" used at the

WCB Claim Filing Stage, Appeal Stage, Return to Work Stage

- d. WCAT Medical Evidence Guide for the physician used at the WCB Claim Filing Stage, Appeal Stage
- e. "Permanent Functional Impairment Pension/Disability Award Decision Review Checklist" – used at the WCB Pensions Stage, Long Term Claims, Appeal Stage

These and other documents are available on the CUPE BC OHS Committee website. See <a href="https://www.cupe.bc.ca/occupational\_health\_and\_safety\_committee">https://www.cupe.bc.ca/occupational\_health\_and\_safety\_committee</a>
Note that the names of these may change as they are updated.

- **5.** Make sure all time lines, due dates, appeal due dates, are adhered to.
- **6.** Mark any of these dates into the calendar and into a diary or log.
- 7. File the appeal paperwork as soon as possible. Should the Union review documents?
- 8. Ask the WCB for Disclosure of the WCB file.

Note: Forms change frequently so check to ensure this is the most current version. <a href="http://www.worksafebc.com/forms/">http://www.worksafebc.com/forms/</a>

Form 25M13

- **9.** Copy the Disclosure and any other documents as required for Advocates and others.
- 10. NEVER assume the Union or the person assisting has a document being referred to.
  The WCB or the appeal tribunals often do not copy other persons on correspondence.
- 11. Provide a copy of the WCB decision being appealed or have concerns about to the physician(s) for review in case they are needed for support as NON-ADVOCATES in the appeal process, including comprehensive written opinions.
- **12.** Provide a copy of the Job Description and Job Duties to the physicians.

- **13.** Provide a copy of the WCB decision and any other correspondence from the WCB attached to that decision to the Union's attention as soon as possible.
- **14.** Review the WCB claim file "portal" frequently using the Personal Access Number and ID/PIN to be aware of any developments or decisions on the claim.
- **15.** Not all WCB decisions are in writing, some are verbal. Both may need to be appealed.
- **16.** Advise the Union Occupational Health and Safety Committee or Worker Representative or Union Executive/Shop Steward as to what has transpired.
- **17.** Keep a detailed record of all actions, calls, receipts, treatment, etc.

# What about a Return To Work ("RTW") Program?

There are many different types of Return To Work Programs (RTW). Some are through the WCB, others are through the Employer or are part of the Duty to Accommodate process. Insurance companies may also have an RTW, where a person returning from Long Term Disability may need assistance. Each is unique. This Guide will only address the WCB RTW and Vocational Rehabilitation process. Make sure the OHS issues giving rise to the claim are addressed prior to returning to work. Involve the JHSC.

#### As per the WCB:

"Return to Work Support Services are designed for the injured worker who does not require a structured treatment program but would benefit from a supported return to work.

Return to Work Support Services may be performed by a physiotherapist, an occupational therapist, or a kinesiologist experienced in the performance of return to work services and job-site visits. The goal of RTW SS is to return injured workers to their pre-injury duties at the work place. Return to Work Support Services provides many supports, such as:

- Job site visit (JSV)
- Graduated Return to Work (GRTW) Planning

- Graduated Return to Work (GRTW) Monitoring
- Job Demands Analysis (JDA)

Description of services:

Job Site Visit: The JSV may include any of the following:

- Brief review of work tasks;
- Confirmation of the worker's critical job demands;
- Exploration of simple job modifications and return to work options;
- Consultation with relevant stakeholders to establish an appropriate return to work plan; or
- Ongoing support of the graduated return to work plan, including job coaching.

Graduated Return to Work Plan:

The GRTW Plan is developed with the participation of the injured worker, the Employer, the attending physician, the WorkSafeBC officer and other relevant stakeholders. It will contain specific hours, duties and a defined end date.

A Graduated Return to Work Monitoring service ensures that a Graduated Return to Work Plan is fully implemented with appropriate support provided as needed. Graduated Return to Work Monitoring provides a minimum of weekly communication with all of the relevant stakeholders and revision of the Graduated Return to Work Plan if warranted.

A Job Demand Analysis is a detailed quantitative and qualitative assessment of the physical demands, environmental and psychosocial stressors associated with a particular job. The JDA will provide quantification of work-place demands including frequency of activities, weights, heights and distances.

#### Admission criteria:

The program is designed for workers who do not require a structured treatment program but require supported return to work. It is possible that the worker could be receiving physiotherapy or hand therapy in conjunction with Return to Work Services.

The program is not appropriate for workers participating in a WorkSafeBC-sponsored rehabilitation program (excluding the Hand Therapy Program).

Length of service:

GRTW plans are generally four to six weeks in duration.

Workers are referred for Return to Work Support Services by a WorkSafeBC officer, usually following recommendations received from various health care providers." See:

https://www.worksafebc.com/en/health-care-providers/rehabilitation/return-work-support

Lastly, a successful return-to-work program requires options available at the workplace that enable an injured worker to safely return to work in a timely manner.

- May involve transitional duties or a gradual return-to-work progression
- Are guided by timelines established with a physician, taking the worker's capabilities and medical restrictions into account
- Have an established start and end

#### Return-to-work tasks:

- Are temporary
- Are meaningful and productive
- Are designed to help return an injured worker to regular full-time duties in a safe and productive manner

- Allow the injured worker to return to the job site for partial days, gradually working up to full-time hours
- Offer graduated hours of transitional or regular duties
- Can combine offsite treatment with transitional or regular duties

WorkSafeBC nurse advisors are available to monitor the progress of the worker and make recommendations to the case manager or entitlement officer regarding the transition to full-time hours, ensuring an effective transition.

#### See:

http://www.worksafebc.com/claims/rehab and rtw/rtw workers/what is a return-to-work program/default.asp

If you have a WCB claim that was accepted for Vocational Rehabilitation benefits, see the following WCB site excerpt:

Vocational rehabilitation helps disabled workers get back to work after a compensable injury or the onset of an occupational disease. Services include:

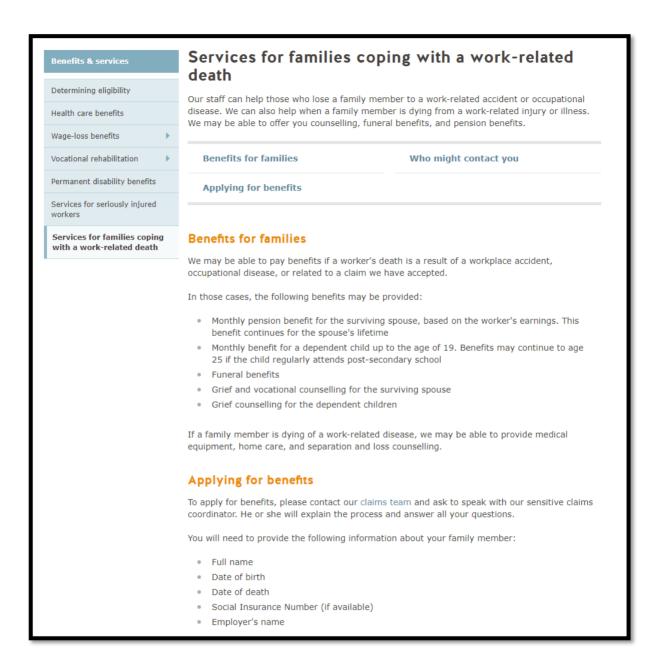
- Vocational assessment and planning
- Counselling
- Work assessment
- Work site job modification
- Job readiness and placement assistance
- Skill development
- Employability assessments

In some cases, the WCB may offer assistance to the surviving dependent spouse of a worker who has died as a result of a compensable injury or occupational disease. The goal of vocational rehabilitation is to help clients return to work in a timely and safe manner.

Quality rehabilitation involves individual vocational assessment, planning, and support that makes the best use of rehabilitation resources and maximizes worker-Employer outcomes.

This is only a small sample of what services are provided. However, whether it is the WCB or the Employer, limitations, restrictions, pain and other considerations must be taken into account. The RTW process is detailed; it may take months or more.

Contact the CUPE BC Regional Office, via the Union, for further information.



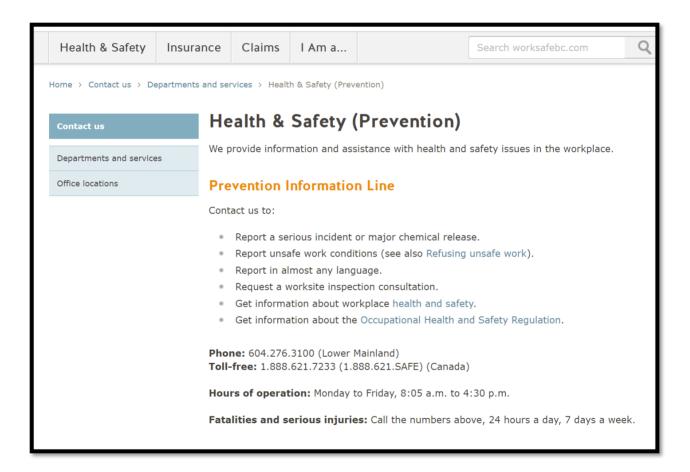
# D. Important Contact Information (BC Region):

WorkSafeBC (Prevention):

Email: http://www.worksafebc.com/

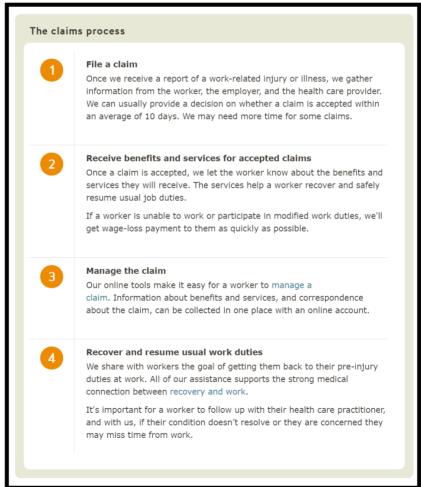
Telephone: 1-888-WORKERS

604-276-3100 1-888-621-7233



#### WorkSafeBC (Claims):

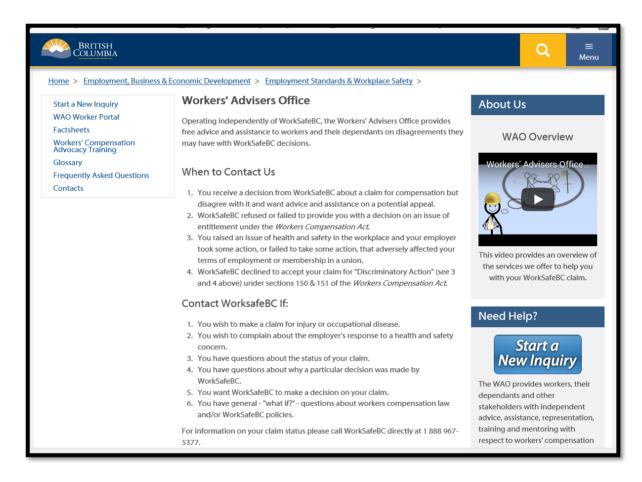




#### BC Workers' Advisers Office:

http://www.labour.gov.bc.ca/wab/ or https://www2.gov.bc.ca/gov/content/employment-business/employment-standards-advice/personal-injury-and-workplace-safety

604-713-0360 or 1-800-663-4261



# **CUPE BC Regional Office:**

BC Regional Office 6222 Willingdon Ave Burnaby, BC V5H 0G3

Telephone: 604-291-1940

Fax: 604-291-1194

# E. Appendices:

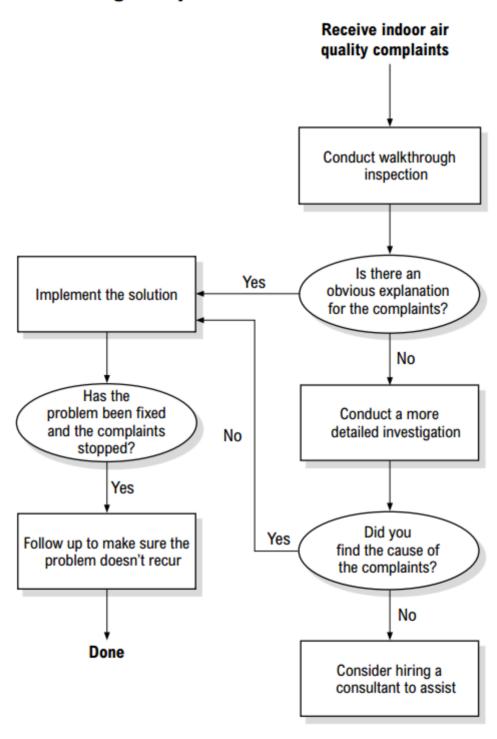
# Appendix A – CCOHS Sample Health Survey

Health Survey - Confidential			
Name:	Department/Position:		
Survey Date:	Interviewer (if applicable):		
Work Location / Building Area			
Background Information:			
How long have you been working for your employer? Yrs.			
Where do you spend most of your time at work?			
Have there been any changes in the office recently? E.g.: new location, renovation, cleaning			
Symptoms & Patterns:			
Check all the symptoms or discomfort you are experiencing:			
□ Headache	□ Blurred Vision		
□ Nausea	□ Sinus Congestion		
□ Dizziness	<ul> <li>Difficulty in concentrating</li> </ul>		
☐ Tiredness / fatigue	Pain and discomfort of:		
<ul> <li>Irritation of eyes, nose, throat</li> </ul>	□ Back		
☐ Breathing Problems	□ Neck		
□ Coughing	□ Hands		
□ Sneezing	□ Wrist		
□ Wheezing	□ Shoulders		
☐ Shortness of Breath	□ Other		
Do you have any other health conditions that may make symptoms worse?			
E.g.: allergies, immune system disorders, or chronic cardiovascular or respiratory disease			
Have you seen a doctor for these symptoms? ☐ Yes ☐ No			
(Do you wish to provide general details?)			

Health S	urvey - Confidential	continued
Timing:		
When do you notice these symptoms	s and how often do they occur?	
On average, when you notice the sy		
Has there been any change to the sy If yes, please explain:	mptoms or patterns?	es 🗆 No
When do the symptoms go away?  □ Overnight □ After a week away  Can you provide more information	DOUBLISH STATES OF THE STATES	
Has the pain or discomfort caused ye	ou to take time off work?	es 🗆 No
Are you aware of other people with s If yes, can you provide more det Suspected or Potential Causes:		□ Yes □ No
Check any of the following that are t	rue:	
☐ Are there any unusual odours?	☐ Is the work area too	warm?
□ Does the air seem stuffy?	Is the work area too	cool?
☐ Is the air dry?	☐ Does the temperatur	re vary from
☐ Is it dusty?	room to room?	
Do you get shocks from static electricity?	☐ Are there drafts whe	re you work?

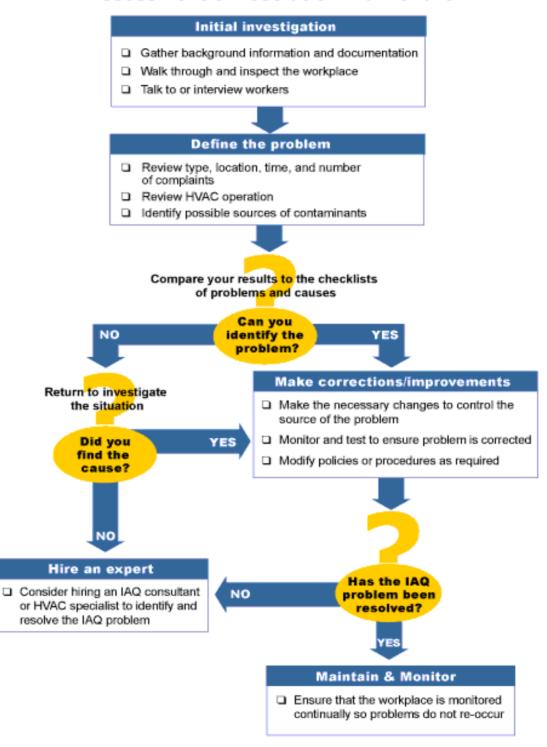
# Appendix B - WorkSafeBC Indoor Air Quality Guide - The Investigation Process

## The investigation process

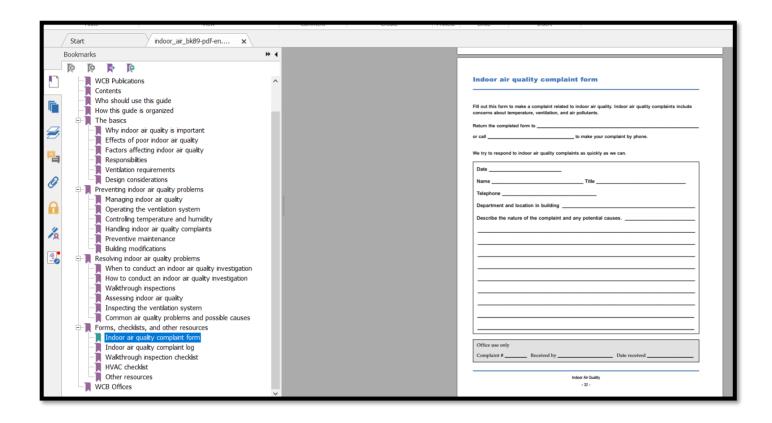


# **Appendix C - CCOHS Assessment & Resolution Flow Chart**

#### **Assessment & Resolution Flow Chart**

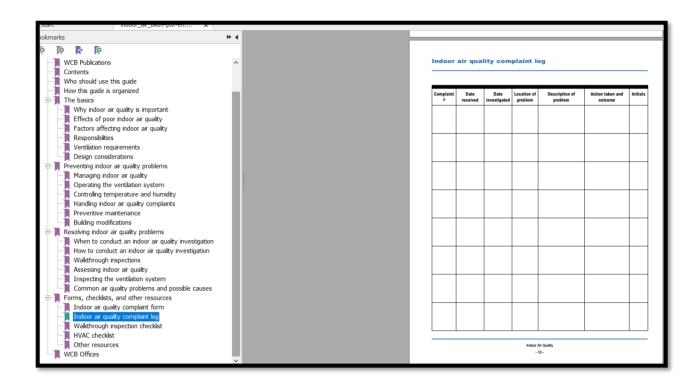


# Appendix D - Air Quality Complaint Form from WorkSafeBC



ill out this form to make a complaint related to indoor air quality. Indoor air quality complaints include oncerns about temperature, ventilation, and air pollutants.		
eturn the completed	form to	
r call	to make your complaint by phone.	
le try to respond to	indoor air quality complaints as quickly as we can.	
Date		
Name	Title	
Telephone		
Department and Ic	ocation in building	
Decade the netwo	f th	
Describe the natur	re of the complaint and any potential causes.	
Office use only		

# Appendix E - Air Quality Log



# Indoor air quality complaint log

Complaint #	Date received	Date investigated	Location of problem	Description of problem	Action taken and outcome	Initials

Indoor Air Quality

- 33 -

# Appendix F – CCOHS Air Quality Sample Checklist

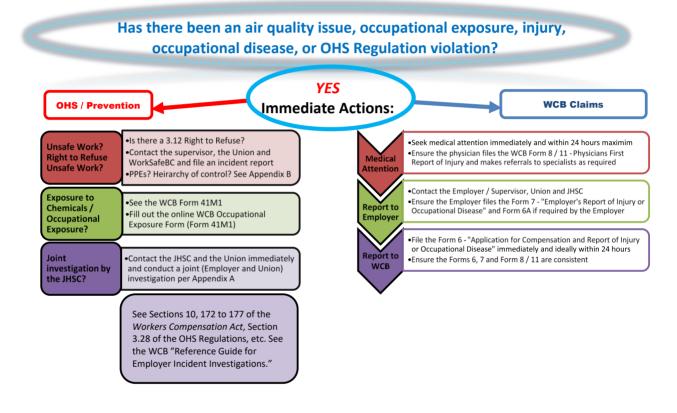
Inspection	Checklist			
Inspector(s)				
Location/Department:	Date:			
✓ Satisfactory X Unsatisfactory, requires attention				
GENERAL OBSERVATIONS	VOLATILE ORGANIC COMPOUNDS			
Walls, Ceilings and Floors	Cleanliness/condition/location of:			
☐ Walls, ceilings and windows free of mould	☐ chemical laboratories			
☐ Indoor plants free of mould and odour	☐ chemical storage areas			
☐ Flat surfaces dust free	new plywood, particle board shelving			
☐ Thermostats in enclosed offices				
☐ Cleanliness of shower facilities and	CIGARETTE SMOKE			
washrooms	☐ Smoking policy in place/enforced			
Open-Concept Offices - cubicles				
☐ Screen heights (max. 1.5 metres)	VENTILATION SYSTEM (HVAC)			
☐ Screens do not touch floor	☐ Adequate outdoor air intake			
Diffusers	☐ Air intake clear of pollution sources			
☐ Diffusers are unobstructed				
☐ Diffuser condition (mould, dust, dirt)	☐ Cleanliness of ducts and plenum			
Air Exhaust Louvers	☐ Ventilation shut-down (nightly/weekends)			
□ Louvers are unobstructed	D vertilation stat-down (highly) weekends)			
☐ Louver condition clean (mould, dirt, dust)	☐ Air filter condition			
Pollutant Sources (~3 metres from work				
areas)				
□ Photocopiers	HUMIDIFIERS			
'	☐ Pans and wetting media are free of slime			
☐ Chemical storage/handling area	☐ Ducts free of mould			
	☐ Fans free of hard water deposits			
☐ Smoking room	☐ Volatile chemicals used for humidifiers			
☐ Paper storage and handling areas				
☐ Number of building occupants	AIR CONDITIONING SYSTEM			
	☐ Condensate trays free of slime			
CARBON MONOXIDE (CO) SOURCES	☐ Cooling coils free of slime			
Air does not enter building from:	☐ Absence of mouldy odours			
parking garage				
☐ loading dock				
other (describe)	CENERAL MAINTENANCE DECICAL			
Condition/location of indoor CO sources:	GENERAL MAINTENANCE, DESIGN  ☐ Windows can be opened			
	☐ Alterations to ventilation system			
gas stoves, heating and other appliances	☐ Number of occupants in area			
D are fixed beating quet	☐ Usage/condition of carpeting			
gas fired heating system	☐ Work areas repainted			
free standing gas heaters	☐ Presence of odours			
other (describe)				

# Appendix G - CUPE (BC Region) OHS & WCB Claims Process Overview

(Repeated here for information purposes)

## AIR QUALITY OHS & WCB CLAIMS PROCESS OVERVIEW CHART

This Flow Chart is an overview of the basic steps for addressing **OHS Prevention** issues and for filing a **WorkSafeBC (WCB)** claim where there are air quality issues. Always refer to the most current online WCB Policy, Regulations, Practice Directives, Forms and *Workers Compensation* at the WorkSafeBC website. Please refer to the main CUPE Guide "Air Quality Addressing Indoor and Outdoor Air Quality Occupational Health & Safety Issues and Filing WorkSafeBC Claims".



# Appendix H - WorkSafeBC (page 2 of July 2017 Forest Fire Bulletin)

Workers should also consider the potential for heat stress or heat exhaustion, as well take precautions against the hazards of driving in low-visibility environments (e.g., drive with lights on, do circle checks).

What should I do to protect my workers who need to work in close proximity to the smoke?

There may be situations that require workers such as health care professionals, first responders, and other essential service workers to be in closer proximity to moderate levels of smoke.

One strategy to help protect these workers is to create a "clean air refuge" with a portable HEPA filtration unit. Keeping windows and doors closed within the refuge area will reduce the ambient smoke.

In some circumstances, personal protective equipment such as respiratory protection may be necessary when workers are exposed to moderate to high levels of smoke.

Should workers use respirators as protection against smoke exposure?

Respirators may be required depending on the level of the smoke and the work activity performed by workers. The most common type of respirator used to protect against wildfire smoke exposure is the N95 particulate-filtering facepiece respirator. For workers who require more advanced protection against fine particulates and irritant gases and vapours, elastomeric respirators (both half-face and full-face types) fitted with a combination of organic vapour cartridge/P100 filter are more appropriate.

Note that masks are not substitutes for respirators. A mask refers to something like a surgical mask that is loose fitting and does not form a tight seal with the face. These masks are not designed to filter the fine particulates or gases and vapours in smoke.

If workers use respirators for protection against wildfire smoke, they must be fit tested and must meet the standards (e.g., NIOSH-approved) for the type of work and hazards faced. Workers must also be instructed in the respirator's use and limitations. Information about respiratory protection is available at worksafebc.com.

What should I do if workers report symptoms consistent with smoke exposure?

If your workers report symptoms of smoke exposure, treat the exposure in the same manner as other workplace injuries and illnesses and respond accordingly. Workers with severe symptoms should seek medical attention immediately.

You are also required to report and investigate certain incidents. See Report a workplace injury or disease and Conducting an employer investigation on worksafebc.com for more information.

# Page 3 of Bulletin

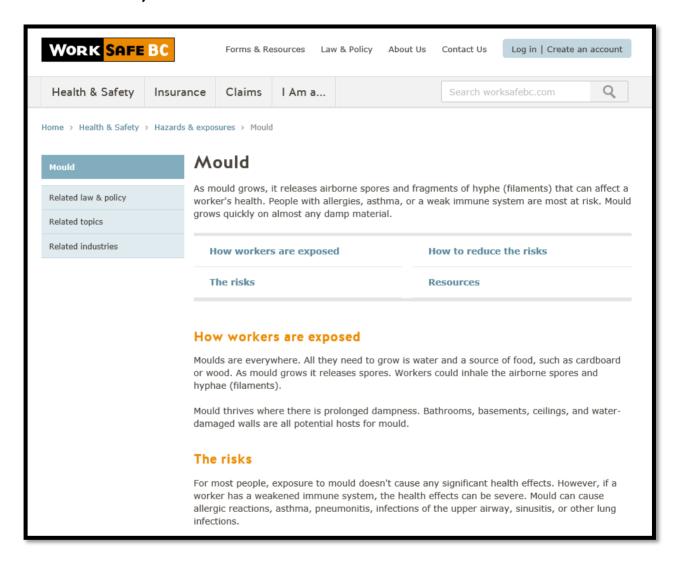
#### Are there any regulatory requirements that apply to wildfire smoke?

The Occupational Health and Safety Regulation does not provide specific requirements for wildfire smoke. However, you must treat this hazard in a similar manner as other general workplace hazards. The Workers Compensation Act and Regulation specify the requirements for employers to ensure the health and safety of workers in all work.

Sections of the Regulation that may also apply to wildfire smoke exposure include the following:

- Part 4, Emergency preparedness and response
- Part 4, Indoor air quality
- Part 5, Containers and storage
- Part 5, Flammable and combustible substances
- Part 5, Controlling exposure
- · Part 8, Personal protective equipment
- Part 26, Forestry operation fire fighting

# Appendix I – Mould Exposure Materials from WorkSafeBC (Remember to check for the most up to date materials).



#### Mould

As mould grows, it releases airborne spores and fragments of hyphe (filaments) that can affect a worker's health. People with allergies, asthma, or a weak immune system are most at risk. Mould grows quickly on almost any damp material.

- How workers are exposed
- The risks
- How to reduce the risks
- Resources

# How workers are exposed

Moulds are everywhere. All they need to grow is water and a source of food, such as cardboard or wood. As mould grows it releases spores. Workers could inhale the airborne spores and hyphae (filaments).

Mould thrives where there is prolonged dampness. Bathrooms, basements, ceilings, and water-damaged walls are all potential hosts for mould.

#### The risks

For most people, exposure to mould doesn't cause any significant health effects. However, if a worker has a weakened immune system, the health effects can be severe. Mould can cause allergic reactions, asthma, pneumonitis, infections of the upper airway, sinusitis, or other lung infections.

#### How to reduce the risks

Prevention is the key to avoiding mould exposure. Always make sure that water leaks on the job site are fixed and standing water is mopped up.

If a worker complains about indoor air quality, the Employer must investigate. If significant mould contamination is found, appropriate measures must be taken to remove it. A trained abatement team is usually needed to safely remove the mould. Once the site is cleaned, locate the source of the water to prevent mould from growing again.

The best way to reduce the risk of exposure to mould is to eliminate the source of exposure and control water leakage and moisture. When choosing controls, start by asking the questions in the following steps, which are listed in order of effectiveness.

#### **Elimination or substitution**

Eliminating the hazard by substituting a safer process or material, where possible, is the most effective control. A question to consider:

 Can you use building materials that are resistant to mould growth in areas where water leaks may occur (e.g., in kitchens and bathrooms)?

#### **Engineering controls**

Making physical modifications to facilities, equipment, and processes can reduce exposure. Some questions to consider:

- o Can mouldy materials be encapsulated or enclosed in the short term?
- How can mould removal work areas be enclosed and the air filtered to prevent the escape of spores and hyphae?

How will worker exposure to moulds be monitored?

#### Administrative controls

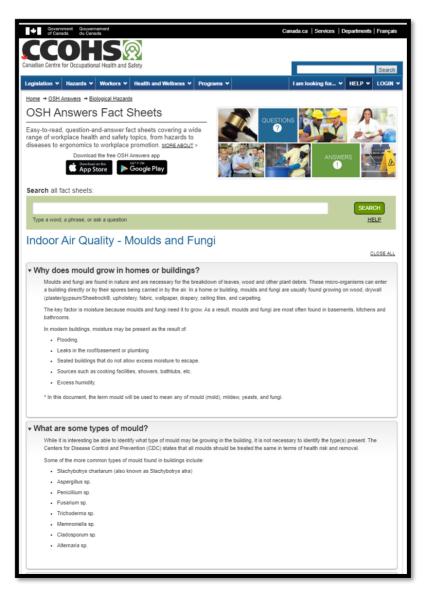
These involve changing work practices and work policies. Providing awareness tools and training also count as administrative controls. All can limit the risk of exposure to mould. Some questions to consider:

- o Have you developed a written exposure control plan for mould?
- How can signs be posted to give unprotected workers effective warning when mould is being removed?
- o Where can written safe work procedures be posted?
- How will you train workers regarding the hazards of mould exposure and how to protect themselves?

## Personal protective equipment

This is the least effective control. It must always be used in addition to at least one other control. Some questions to consider:

- Do workers have the proper respirators, eye wear, and protective clothing for use during mould cleanup?
- Have respirators been checked and fit tested to make sure they will work properly?



# Appendix J - HealthLinkBC materials for exposure to forest fires:

https://www.healthlinkbc.ca/health-feature/wildfires

Wildfires and Your Health

Every year in British Columbia there are hundreds or thousands of wildfires (also called forest fires). Wildfires can affect your health and safety in many ways: the smoke from wildfires can affect the quality of the air, a power outage may spoil your food, or you may have to evacuate if a wildfire is close to your home. Preparing in advance for wildfires can help you keep your family safe.

The BC Wildfire Service posts information on Current Wildfire Activity. You can find information on fires that pose a significant safety risk, air quality, fire danger ratings and more.

Learn what you can do to before an emergency or disaster such as a wildfire, and how to stay safe and healthy during and after a wildfire in your area.

Before a Wildfire

**Emergency Preparedness** 

During wildfire season roads may be closed, you may be cut off from certain supplies and services, or your community may be evacuated. Learn how to prepare for an emergency and stay safe in case there is an evacuation alert or order.

- Build an Emergency Kit
- Government of Canada Get Prepared
- Preparing for an Emergency: A Focus on Water and Food

Emergency Planning if you have specific health conditions:

- BC Children's Hospital: Diabetes Emergency Survival Pack
- BC Government: Preparedness for People with Disabilities
- BC Renal Agency: Emergency Preparedness





For information about protecting your community from wildfire, visit FireSmart Canada, Protecting Your Community from Wildfire.

During a Wildfire

Wildfires

Find information about wildfires in B.C., including where they are and what to do if you are evacuated, below:

- Active Wildfires Interactive Map
- Information for Residents and Evacuees Affected by Wildfire

Some health authorities in B.C. provide local information on wildfires:

- First Nations Health Authority Wildfire Information
- Island Health Wildfires
- Interior Health Wildfire Events

#### **Evacuation Information**

All evacuees are asked to register with the Canadian Red Cross, even if you don't need aid. To register, visit the Canadian Red Cross or call 1 800 863-6582.

If there is a wildfire in or near your community, you may be evacuated to a safer area. Wildfires can impact evacuation routes. Visit DriveBC for the latest updates on driving conditions in your community.

Seniors may need special support in the event of an evacuation. Learn what you can do to be prepared.

- Caring for Seniors in Residential Care in an Emergency (HealthLinkBC File #103c)
- Community Evacuation Information for Seniors (HealthLinkBC File #103a)

#### Want More Information?

HealthLink BC, your provincial health line, is as close as your phone or the web any time of the day or night, every day of the year.

Call **8-1-1** toll-free in B.C., or for the deaf and hard of hearing, call **7-1-1** or for <u>Video Relay Service</u>, call 604-215-5101

#### Health Care for Evacuees

For non-emergency health information or advice, call 8-1-1 to speak with a health services navigator. The navigator will help you find the information you are looking for or connect you with a registered nurse, registered dietitian, qualified exercise professional or a pharmacist.

## **Prescription Medications**

During a state of emergency, pharmacists can provide a drug without a prescription to ensure the health and safety of the public. For more information visit the College of Pharmacists of British Columbia – Providing Continuity of Care for Patients during a State of Emergency.

#### Walk-in Clinics

To find a walk-in clinic in your area, search the FIND Services and Resources Directory or call 8-1-1 to speak with a health services navigator any time of the day, every day of the year.

## Air Quality

If there is an air quality advisory in your area, and you find it is hard to breath or you are wheezing, seek medical attention right away.

Poor air quality can be harmful to your health, especially for children, older adults, and those with heart and lung conditions. For more information about air quality, including current air quality advisories, click on the links below.

- BC Air Quality
  - Air Quality Advisories
- Government of Canada Air Quality
- Particulate Matter and Outdoor Air Pollution (HealthLinkBC File #65e)
- Wildfire Smoke and Your Health

For air quality information from your health authority, click on the links below.

- Fraser Health Air Quality
- Interior Health Air Quality
- Island Health Air Quality
- Air Quality reducing your exposure in smoky conditions
- Vancouver Coastal Health Air Quality

Staying Cool Indoors during an Air Quality Advisory

When there is an air quality advisory in your area, officials may recommend that you keep your windows closed with the air conditioner on (if you have one). Or, they may tell you to keep your windows closed with the air conditioner off. When your windows are closed and the air conditioner is off (or you don't have one), you will need to take special care to stay cool. Make sure to stay up to date on the specific recommendations for your area. Visit BC Air Quality - Advisories for current information. For more information on how to stay cool indoors, see our Beat the Heat Health Feature.

Dealing with Stress and Trauma

Disasters, such as wildfires, can impact your emotional health as much as your physical health. Learn what you can do to recognize signs of stress or trauma in yourself and your family.

- Kelty Mental Health Stress Management Resources for Children, Youth and Families
- Recognizing and Resolving Trauma in Children During Disasters
- Signs of Stress
- Stress Management
- Stress in Children and Teenagers
- Stress Management: Helping Your Child with Stress
- Talk in Tough Times: Support for those affected by the 2017 BC wildfires

#### After a Wildfire

#### **Returning Home**

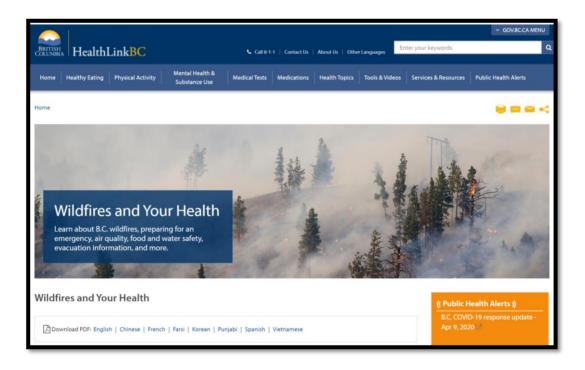
When your local or First Nations government has declared it is safe for you to return home, there are steps you can take to make the transition easier and safer.

Returning Home After a Wildfire

## Food Safety and Water Quality

If there is a wildfire in your area, the power might go out in your community. Fire retardants may be used in or near your community to reduce the size and lessen the impact of the fires. Find out how to protect water supplies and food affected by fire retardants or power outages.

- Disinfecting Drinking Water (HealthLinkBC File #49b)
- Fire Retardants: Recommended Precautions for Water and Food
- Power Outages at Food Facilities
- Water and Food Quality: Information for Evacuees Returning after a Fire
- Wildfire: Its Effects on Drinking Water Quality (HealthLinkBC File #49f)



# Appendix K - CCOHS - PPE - Respirators:

The two main types are air-purifying respirators (APRs) and supplied-air respirators (SARs).

Air-purifying respirators can remove contaminants in the air that you breathe by filtering out particulates (e.g., dusts, metal fumes, mists, etc.). Other APRs purify air by adsorbing gases or vapours on a sorbent (adsorbing material) in a cartridge or canister. They are tight-fitting and are available in several forms:

- mouth bit respirator (fits in the mouth and comes with a nose clip to hold nostrils closed - for escape purposes only)
- quarter-mask (covering the nose and mouth)
- half-face mask (covering the face from the nose to below the chin)
- full facepiece (covering the face from above the eyes to below the chin)

Respirators with a full facepiece also protect the eyes from exposure to irritating chemicals.

Supplied-air respirators (SARs) supply clean air from a compressed air tank or through an air line. This air is not from the work room area. The air supplied in tanks or from compressors must meet certain standards for purity and moisture content (e.g., CSA Standard Z180.1-13): Compressed Breathing Air and Systems).

Supplied-air respirators may have either tight-fitting or loose-fitting respiratory inlets. Respirators with tight-fitting respiratory inlets have half or full facepieces. Types with loose-fitting respiratory inlets can be hoods or helmets that cover the head and neck, or loose-fitting facepieces with rubber or fabric side shields. These are supplied with air through airlines.

Examples of these classes of respirators include:

# Air-purifying respirators (APRs):

- particulate respirators (also called dust, fume, and mist respirators or masks)
- chemical cartridge respirators that can have a combination of chemical cartridges, along with a dust pre-filter. This combination provides protection against different kinds of contaminants in the air
- gas masks (contain more adsorbent than cartridge-type respirators and can provide a higher level of protection than chemical cartridge respirators)
- powered air-purifying respirators (PAPRs)

## Supplied-air respirators (SARs):

- self-contained breathing apparatus (SCBA)
- airline supplied-air respirators
- protective suits that totally encapsulate the wearer's body and incorporate a life-support system

There are some combinations of airline respirators and SCBAs that allow workers to work for extended periods in oxygen-deficient areas or where there are airborne toxic contaminants. The auxiliary or backup SCBA source allows the worker to escape with an emergency source of air if the airline source fails.

There are also combination air-purifying and atmosphere supplying respirators. These devices will offer worker protection if the supplied-air system fails when the appropriate air-purifier units are selected. These cannot be used in oxygen-deficient areas or where the air concentration of a contaminant exceeds the IDLH level (i.e., immediately dangerous to life or health).

Since filters capture particles, caution must be exercised to always check that these filters are not clogged as it makes it harder for air to pass through.

Cartridges can also become "full" or saturated. It will stop working and "breakthrough" will occur – this term means that the gases or vapours will leak through the cartridge. Both cartridges and filters must be replaced on a regular basis by using the manufacturer's recommendations (usually determined by using warning properties or end-of-service indicators).

There are different classes of particulate filters, depending on the particulate material. They are also classified based on levels of oil resistance and filter efficiency. Oil can break down certain types of filters which means it is important to know the materials you are working with at all times and always select the right cartridge for your respirator.

#### The main categories are:

- N series (Not resistant to oil) May be used in any atmosphere where there is no oil particulate.
- R series (Resistant to oil) May be used in any atmosphere where there is no oil particulate, or up to one shift where there is oil particulate present. "One shift" means eight hours of continuous or intermittent use.
- P series (Oil-Proof) May be used in any atmosphere, including those with oil particulates, for more than one shift. If the filter is used in atmospheres with oil particulates, contact the manufacturer to find out the service life of the filter.

This is in addition to other safety equipment e.g. for mould – safety googles, gloves, etc



# Appendix L - Mould - WorkSafeBC Materials:

#### Mould

As mould grows, it releases airborne spores and fragments of hyphe (filaments) that can affect a worker's health. People with allergies, asthma, or a weak immune system are most at risk. Mould grows quickly on almost any damp material.

How workers are exposed	How to reduce the risks	
The risks	Resources	

#### How workers are exposed

Moulds are everywhere. All they need to grow is water and a source of food, such as cardboard or wood. As mould grows it releases spores. Workers could inhale the airborne spores and hyphae (filaments).

Mould thrives where there is prolonged dampness. Bathrooms, basements, ceilings, and water-damaged walls are all potential hosts for mould.

#### The risks

For most people, exposure to mould doesn't cause any significant health effects. However, if a worker has a weakened immune system, the health effects can be severe. Mould can cause allergic reactions, asthma, pneumonitis, infections of the upper airway, sinusitis, or other lung infections.

#### How to reduce the risks

Prevention is the key to avoiding mould exposure. Always make sure that water leaks on the job site are fixed and standing water is mopped up.

If a worker complains about indoor air quality, the employer must investigate. If significant mould contamination is found, appropriate measures must be taken to remove it. A trained abatement team is usually needed to safely remove the mould. Once the site is cleaned, locate the source of the water to prevent mould from growing again.

The best way to reduce the risk of exposure to mould is to eliminate the source of exposure and control water leakage and moisture. When choosing controls, start by asking the questions in the following steps, which are listed in order of effectiveness.



#### **Elimination or substitution**

Eliminating the hazard by substituting a safer process or material, where possible, is the most effective control. A question to consider:

• Can you use building materials that are resistant to mould growth in areas where water leaks may occur (e.g., in kitchens and bathrooms)?



#### **Engineering controls**

Making physical modifications to facilities, equipment, and processes can reduce exposure. Some questions to consider:

- Can mouldy materials be encapsulated or enclosed in the short term?
- How can mould removal work areas be enclosed and the air filtered to prevent the escape of spores and hyphae?
- How will worker exposure to moulds be monitored?



#### Administrative controls

These involve changing work practices and work policies. Providing awareness tools and training also count as administrative controls. All can limit the risk of exposure to mould. Some questions to consider:

- Have you developed a written exposure control plan for mould?
- How can signs be posted to give unprotected workers effective warning when mould is being removed?
- Where can written safe work procedures be posted?
- How will you train workers regarding the hazards of mould exposure and how to protect themselves?



#### Personal protective equipment

This is the least effective control. It must always be used in addition to at least one other control. Some questions to consider:

- Do workers have the proper respirators, eye wear, and protective clothing for use during mould cleanup?
- Have respirators been checked and fit tested to make sure they will work properly?

#### Resources



# Assessing Exposures to Compost Workers from Airborne Biohazards

The purpose of this research was to measure compost workers' exposures to selected biohazards. The study examined different composting technologies, under different environmental conditions, with an...

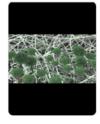
Competition Year: Jan 1, 2006 | PDF | Research | Download | Preview



# Indoor Air Quality: A Guide for Building Owners, Managers, and Occupants

The information in this guide will help you maintain good indoor air quality in your building, prevent air quality problems, and correct problems that may arise. It will also help you understand the indoor...

Publication Date: Mar 2005 | 🎴 PDF | Guide | 🛂 Download | Preview



#### **Mould Exposure**

This video shows how mould can grow quickly on damp materials such as cardboard, paper, wood and drywall. As mould grows, it releases spores into the air. Exposure to mould spores can affect your health,...

Publication Date: Jul 2010 | 🖪 MPEG | Video

More related resources

# F. Links and Resources (Check links frequently):

ANSI/ASHRAE [2016]. Ventilation for acceptable indoor air quality. American National Standards Institute/ASHRAE standard 62.1-2016. Atlanta, GA: American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.

https://www.ashrae.org/technical-resources/standards-and-guidelines/read-only-versions-of-ashrae-standards

British Columbia – Current Air Quality Index Map <a href="http://www.env.gov.bc.ca/epd/bcairquality/readings/find-stations-map.html">http://www.env.gov.bc.ca/epd/bcairquality/readings/find-stations-map.html</a>

British Columbia Municipal Safety Association – Exposure Control Plans <a href="https://www.bcmsa.ca/resources/exposure-control-plans/">https://www.bcmsa.ca/resources/exposure-control-plans/</a>

Canada Labour Code

https://www.canada.ca/en/employment-social-development/services/health-safety/reports/summary.html

CCOHS Indoor Air Quality – General https://www.ccohs.ca/oshanswers/chemicals/iag intro.html

CDC/NIOSH - Asbestos https://www.cdc.gov/niosh/topics/asbestos/

CDC/NIOSH - Guidance for Filtration and Air-cleaning Systems to Protect Building Environments from Airborne Chemical, Biological, or Radiological Attacks <a href="https://www.cdc.gov/niosh/docs/2003-136/">https://www.cdc.gov/niosh/docs/2003-136/</a>

Centers for Disease Control and Prevention <a href="https://www.cdc.gov/niosh/topics/indoorenv/default.html">https://www.cdc.gov/niosh/topics/indoorenv/default.html</a>

Centers for Disease Control and Prevention – Indoor Environmental Quality – Chemicals and Odours

https://www.cdc.gov/niosh/topics/indoorenv/chemicalsodors.html

**CSA Standards** 

https://www.csagroup.org/?s=Air+Quality

https://www.csagroup.org/industry/construction-building-products/hvacr/

Canadian Union of Public Employees ("CUPE") Indoor Air Quality (IAQ) Fact Sheet <a href="https://cupe.ca/orders/indoor-air-quality-iaq-fact-sheet">https://cupe.ca/orders/indoor-air-quality-iaq-fact-sheet</a>

CUPE Historic win for onboard air quality <a href="https://westjet.cupe.ca/2017/11/09/cupes-historic-win-onboard-air-quality/">https://westjet.cupe.ca/2017/11/09/cupes-historic-win-onboard-air-quality/</a>

CUPE Onboard Air Quality: A Critical Issue for All <a href="https://cupe.ca/board-air-quality-critical-issue-all">https://cupe.ca/board-air-quality-critical-issue-all</a>

CUPE Ventilation <a href="https://cupe.ca/ventilation">https://cupe.ca/ventilation</a>

ELI - Topics in School Environmental Health <a href="https://www.eli.org/buildings/topics-school-environmental-health-overview-state-laws">https://www.eli.org/buildings/topics-school-environmental-health-overview-state-laws</a>

Environment Canada

https://weather.gc.ca/airquality/pages/provincial summary/bc e.html

Environmental Protection Agency (EPA) - Indoor Air Quality <a href="https://www.epa.gov/indoor-air-quality-iaq">https://www.epa.gov/indoor-air-quality-iaq</a>

Environmental Protection Agency ("EPA") - Indoor Air Quality Building Education and Assessment Model (I-BEAM) Text Modules: Heating, Ventilation, and Air-conditioning (HVAC)

https://www.epa.gov/indoor-air-quality-iaq

EPA - Indoor Air Quality and Climate Readiness <a href="https://www.epa.gov/indoor-air-quality-iaq">https://www.epa.gov/indoor-air-quality-iaq</a>

EPA - Indoor Air Quality Publications and Resources <a href="https://www.epa.gov/indoor-air-quality-iaq">https://www.epa.gov/indoor-air-quality-iaq</a>

EPA – Outdoor Air Quality https://www.epa.gov/report-environment/outdoor-air-quality

EPA - Mold Remediation in Schools and Commercial Buildings <a href="http://www.epa.gov/mold/mold">http://www.epa.gov/mold/mold</a> remediation.html

Evaluation of Indoor Environmental Quality Concerns in an Elementary School <a href="https://www.cdc.gov/niosh/hhe/reports/pdfs/2017-0030-3277.pdf">https://www.cdc.gov/niosh/hhe/reports/pdfs/2017-0030-3277.pdf</a>

Evaluation of Indoor Air Quality and Health Concerns in a Public University <a href="https://www.cdc.gov/niosh/hhe/reports/pdfs/2015-0118-3249.pdf">https://www.cdc.gov/niosh/hhe/reports/pdfs/2015-0118-3249.pdf</a>

Government of Canada – British Columbia – Air Quality Index https://weather.gc.ca/airquality/pages/provincial summary/bc e.html

Health Authorities <a href="https://www.healthlinkbc.ca/public-health-alerts">https://www.healthlinkbc.ca/public-health-alerts</a>

HealthLinkBC – Combustion By-products <a href="https://www.healthlinkbc.ca/healthlinkbc-files/combustion-products">https://www.healthlinkbc.ca/healthlinkbc.files/combustion-products</a>

HealthLinkBC and Health Region Information at https://www.healthlinkbc.ca/health-feature/wildfires-and-air-quality

HealthLinkBC – Wildfires https://www.healthlinkbc.ca/health-feature/wildfires

HealthLinkBC – Particulate Matter and Outdoor Air Pollution https://www.healthlinkbc.ca/healthlinkbc-files/outdoor-air-pollution

Healthy Indoor Environment Workshop Report <a href="https://www.ncbi.nlm.nih.gov/books/NBK44638/">https://www.ncbi.nlm.nih.gov/books/NBK44638/</a>

Lawrence Berkley National Laboratory - Indoor Air Quality Scientific Findings Resource Bank

https://eta.lbl.gov/ied/sfrb/overview.html

Occupational Health Clinics for Ontario Workers <a href="http://www.ohcow.on.ca/edit/files/25thanniversary/Doing%20something%20about%201/AQ%20presentation%20Oct-31-2014.pdf">http://www.ohcow.on.ca/edit/files/25thanniversary/Doing%20something%20about%201/AQ%20presentation%20Oct-31-2014.pdf</a>

Occupational Safety and Health Administration - Indoor Air Quality <a href="https://www.osha.gov/SLTC/indoorairquality/index.html">https://www.osha.gov/SLTC/indoorairquality/index.html</a>

**OSHAcademy** 

https://www.oshatrain.org/courses/mods/750m2.html

Province of BC

http://www.env.gov.bc.ca/epd/bcairquality/readings/find-stations-map.html https://www2.gov.bc.ca/gov/content/environment/air-land-water/air/air-quality/air-advisories

The Lung Association

https://www.lung.ca/lung-health/air-quality/outdoor-air-quality

Vancouver Coastal Health

http://www.vch.ca/public-health/environmental-health-inspections/healthy-built-environment/air-quality/outdoor-air-quality

World Health Organization - Indoor Air Quality <a href="http://www.searo.who.int/thailand/factsheets/fs0002/en/">http://www.searo.who.int/thailand/factsheets/fs0002/en/</a> <a href="http://www.euro.who.int/">http://www.euro.who.int/</a> <a href="http://www.euro.who.int/">data/assets/pdf</a> <a href="file/0009/128169/e94535.pdf">file/0009/128169/e94535.pdf</a>

WorkSafeBC

https://www.worksafebc.com/en

WorkSafeBC OHS Regulations

https://www.worksafebc.com/en/law-policy/workers-compensation-law/workers-compensation-act-regulations

WorkSafeBC Rehabilitation & Services Claims Manual <a href="https://www.worksafebc.com/en/law-policy/claims-rehabilitation/compensation-policies/rehab-claims-volumeii">https://www.worksafebc.com/en/law-policy/claims-rehabilitation/compensation-policies/rehab-claims-volumeii</a>

cope491