

Simplified Wildfire Smoke Guide

Draft V1.1 August 2017
AHS Healthy Physical Environment
CRAZ Engagement Committee
City of Calgary
Alberta Airsheds Council

Please “test drive” this draft version of the Simplified Wildfire Smoke Guide during the 2017 and 2018 wildfire seasons and send us feedback. Is the information in the guide clear? Are there additional materials, such as fact sheets, that would be helpful to you? Let us know what works well for you, and what doesn't. We'll use that feedback to create the next version of the guide, which will help us be prepared for future fire seasons.

Provide your feedback to

Lynn Que, Public Health Inspector and Executive Officer, Alberta Health Services:
Lynn.que@albertahealthservices.ca

Tanya Carlson, Engagement Program Manager, Calgary Region Airshed Zone:
Tanya.carlson@craz.ca

Tanya Sakamoto, Business Strategist, Environmental & Safety Management, City of Calgary:
Tanya.Sakamoto@calgary.ca

Elizabeth Bell, Executive Director, Peace Airshed Zone Association (representing Alberta Airsheds Council):
Elizabeth@paza.ca

Overview

Alberta communities may experience poor air quality related to wildfire smoke from fires within the province, or outside our borders. A wealth of resources are available regarding wildfire smoke and responding to poor air quality events. However, many of these resources are from other jurisdictions, or require technical air quality expertise to interpret and use.

The aim of this Simplified Wildfire Smoke Guide is to provide consistent and Alberta-specific messages, resources and information to help airsheds, municipalities, companies, schools, and other organizations plan for and respond to wildfire smoke events. A primary focus of the guide is communicating and educating the public about the effects of wildfire smoke on health.

The Simplified Wildfire Smoke Guide is intended to be an evergreen document. This draft will be updated with feedback, and future versions will be housed on the Internet to ensure that users have access to the most up-to-date version.

While many resources were consulted in the development of this guide, the US EPA's 2016 *Wildfire Smoke: A Guide for Public Health Officials* is a key resource, and some of its tools were adapted for use in this guide.

Table of Contents

<i>Overview</i>	<i>i</i>
<i>Quick Facts</i>	<i>1</i>
<i>AQHI Apps</i>	<i>3</i>
<i>“Wildfires and Your Health” Tip Sheet</i>	<i>4</i>
<i>AQHI-Based Response Plan Template</i>	<i>7</i>
<i>Children’s Program Response Plan Template</i>	<i>9</i>
<i>Employee and Supervisor Information</i>	<i>12</i>
<i>Communicating through Social Media</i>	<i>18</i>
<i>Airshed Wildfire Smoke Poster</i>	<i>22</i>
<i>Airshed Media Release</i>	<i>24</i>

Quick Facts

Why is wildfire smoke a problem?

Fine particles in wildfire smoke can penetrate deep into the lungs and can lead to serious health effects¹.

Wildfire smoke can irritate your eyes, nose, throat and lungs. It can make you wheeze, and can make it hard to breathe. If you have asthma or another lung disease, diabetes, or heart disease, inhaling wildfire smoke can be especially harmful².

Who is at risk?¹

1. Children, pregnant women and the elderly
2. Anyone with diabetes, lung or heart conditions
3. Anyone involved in strenuous outdoor work or sports
4. During heavy smoke conditions, everyone is at risk

What can I do?

1. Reduce your exposure
 - a. Close windows and air vents; set air conditioning to recirculate.
 - b. Reduce outdoor activities
 - c. Take breaks indoors in clean air, e.g. at home or in a mall, library or recreation centre
2. Reduce your emissions
 - a. Take transit or telecommute
 - b. No gas mowers
 - c. No fires or barbeques
3. Monitor your health, and the health of those around you
 - a. Check the AQHI and public health advisories
 - b. Monitor your symptoms (e.g. cough, through irritation, chest discomfort, shortness of breath)
 - c. Contact your healthcare provider, Health Link (811), or 911 if needed

Should I wear a mask?

Wearing a mask is generally not recommended when it's smoky. Masks can make breathing more difficult and may lead to a false sense of security, which may encourage increased physical activity and time outside and therefore more exposure to smoke. N95 masks requiring proper fitting to be effective.

¹ Environment and Climate Change Canada. (2017). Wildfire Smoke and Air Quality. Retrieved from: <http://www.ec.gc.ca/cas-aqhi/default.asp?lang=En&n=63B57543-1>

² United States Environmental Protection Agency. (2016). Wildfire Smoke: A Guide for Public Health Officials. Retrieved from: https://www3.epa.gov/airnow/wildfire_may2016.pdf

How can I stay informed?

AQHI

The Air Quality Health Index (AQHI) is a tool that relates the air quality outside to your health, using a scale from 1 to 10. The lower the number, the lower the risk. The current and forecast AQHI is available for over 30 communities across Alberta. Visit www.airquality.alberta.ca, www.airhealth.ca or download the app at <https://open.alberta.ca/interact/aqhi-canada>.

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.

Air Quality Advisories

Alberta Air Quality Health Advisories (issued by Alberta Health Services) are posted at <http://www.albertahealthservices.ca/news/air.aspx>.

Special Air Quality Statements (issued by Environment and Climate Change Canada, upon advice from Alberta Health, Alberta Health Services, and Alberta Environment) are available at https://weather.gc.ca/warnings/index_e.html

AQHI Apps

Apps, or applications, are tools that can be downloaded on cellular devices, hand held devices and computers.

The AQHI Canada app informs users of the level of health risk associated with local outdoor air quality. The app provides hourly AQHI readings and daily forecasts for all AQHI communities across Canada. This app can also be set to alert the user of an increase in AQHI. Download the app at: <https://open.alberta.ca/interact/aqhi-canada>



“Wildfires and Your Health” Tip Sheet

This tip sheet is prepared by Alberta Health Services and is posted on their website at: <https://myhealth.alberta.ca/Alberta/Pages/wildfire-smoke-health.aspx>

Wildfire Smoke and Your Health

When smoke from a plant-based fire (e.g., forest fire, grassland fire) enters a community, it can often cause problems for the people who live there. The biggest health risk comes from small particles in the smoke. These particles can get in the eyes and respiratory system, which can cause burning eyes, a runny nose, coughing, or illnesses like bronchitis. If you have a heart or lung problem, these small particles can make it worse.

You might have problems earlier and at lower smoke levels if you:

- Have **heart or lung disease** (e.g., congestive heart failure, angina, chronic obstructive pulmonary disease, emphysema, asthma)
- Are an **older adult** (especially if you have heart or lung disease)
- Are **pregnant**.
- Are a **smoker**.
- Are a **child**. Smoke can be more harmful to children because their respiratory systems are still developing, they breathe in more air than adults, and they are more likely to be active outside.
- Are involved in strenuous outdoor work or outdoor sports.

Smoke can also be harmful to **pets**. Try to keep your pets inside as much as possible and make sure they have lots of water. If your pet has trouble breathing, contact your vet.

If smoke is a problem in my community, what can I do to help lower the health risk of my exposure to smoke?

- Stay inside as much as possible. Keep all windows and doors closed. If the air quality gets better for a short time, air out your house by opening doors and windows to circulate fresh air.
- Close fresh air intakes from furnaces, fireplaces, or stoves. If you have air conditioning, set it to recirculate. Keep it running to help filter the air and keep your family cool.
- If you have room air cleaners with high-efficiency particulate air (HEPA) filters, turn them on. Air cleaners can help, but don't use ones that may produce ozone.
- Humidifiers might help remove some of the smoke. The humid air can also help keep your nose and mouth moist. It's also a good idea to drink lots of water, which also helps keep your nose and mouth moist.
- Don't use wood stoves, gas stoves, or candles because they make the indoor air quality worse.
- If you can, prepare foods that you don't have to cook. Cooking (especially frying and broiling) can increase pollutants in the air in your home.
- Don't use spray air fresheners or electric fragrance dispensers because they can affect air quality.
- Don't vacuum because it stirs up particles that are already inside your home.
- Don't smoke in your home and stay away from people who smoke. Don't use vapor cigarettes.

- When in your vehicle, keep the windows closed. Put the air system on recirculate so smoky air doesn't get inside. When driving through an area with low or no smoke, switch the circulation system to let outside air in your vehicle.
- Most masks you can buy at stores don't help. The harmful particles are so small that they can go around or through the mask. It's best to stay inside with the windows and doors closed.
- If you or a family member is sensitive to smoke, you might need to leave the area. But it's often hard to know how long the situation will last. Only think about leaving if it's safe to travel and if the place you are going is very likely to have less smoke.
- Consider visiting a place like a shopping mall with cooler filtered air. Keep in mind that while staying indoors may help you stay cool and give some relief from the smoke, many air conditioning systems don't filter the air or improve indoor air quality.

Can I still be active?

- When outside, don't do any strenuous activity or exercise. This is because when you exercise and do strenuous activity, you often breathe 10 to 20 times more than you do while you are resting. Stop what you are doing if it makes you feel tired.
- When there is a lot of haze in the air, limit how long your children play outside.
- Drink lots of water to stay hydrated. This will keep your nose and mouth moist, which makes it easier to breathe. This is important when you're inside and outside.
- If you have chest tightness, chest pain, or shortness of breath, call 911 or go to the nearest emergency department right away. If you feel very tired, contact a community health nurse or your doctor. Do this even if you don't have a heart or lung problem. For 24/7 nurse advice and general health information, call [Health Link](#) at 811. If you have an emergency, call 911.

How can I stay aware of what's going on in my community?

- Regularly check all public service announcements on local media (e.g. T.V., radio, online). If you're told to shelter-in-place, don't leave your home or the facility you're in unless someone tells you to. Listen to all public service announcements on local media. These links give more information about shelter-in-place:
 - [Stay Put - Learn How to Shelter in Place](#)
 - [How to Shelter in Place](#)
- If you have neighbours, friends, or relatives who live alone, check on them to make sure they are okay. Older adults and people with heart or lung problems are more likely to get sick from smoke.
- Outdoor events (e.g., sports games or competitions) may be postponed or cancelled if smoke levels are too high.
- When you keep doors and windows closed to keep smoke out, your house might get very warm. Watch for signs of [heat-related illness](#) like heat exhaustion or heat-stroke. Turn on the furnace fan or stand alone fans to circulate the air in your home.
- Know safe places to go in your community if asked to shelter-in-place. These are places like community centres, shopping malls, and movie theatres.
- If you're in the wildfire area, be ready to evacuate. For more information on putting together an emergency preparedness kit, go to <http://www.redcross.ca/how-we-help/emergencies-and-disasters-in-canada/for-home-and-family/get-a-kit>.

What if I have asthma or a heart or lung problem?

- Carefully monitor your health. Take all of your regular medicines and do everything your nurse or doctor told you to. It's a good idea to have a week's supply of medicine with you.

- If you plan to use a portable air cleaner, buy one that is right for the room size (as per manufacturer instructions). Do this before a smoke emergency happens. Don't use units that might produce ozone.
- If you have any health concerns, talk to your nurse or doctor.

Do I lower my smoke exposure the same way with other fires (e.g., buildings, factories, and landfills)?

- Yes, in most cases. However, there may be more chemicals in the smoke that need different safety measures. Listen to all public service announcements.

On AHS EPH website, the [Wildfire Recovery Resources](http://www.albertahealthservices.ca/eph/Page14085.aspx) webpage provides information related to wildfire impacts including air quality.

(<http://www.albertahealthservices.ca/eph/Page14085.aspx>)

The screenshot shows the top portion of a web browser displaying the URL www.albertahealthservices.ca/eph/Page14085.aspx. Below the address bar is a yellow banner with the text "Southern Alberta Wildfire" and a sub-header "For the most current information on Southern Alberta wildfires, and any related alerts, visit emergency.alberta.ca". Below the banner is a blue navigation bar with the following menu items: ABOUT AHS, FIND HEALTHCARE, INFORMATION FOR, CAREERS, NEWS, and AHS IN MY ZONE.

Home > Health Topics > Health & Wellness > Environmental Public Health > Wildfire Recovery Resources

Environmental Public Health
Wildfire Recovery Resources
EPH Health Enforcement Orders
Education Courses
Information for Your Business
Information for Your Home & Family
Restaurant Inspection Findings
Services Offered
Special Events
Environmental Public Health Feedback Form

Wildfire Recovery Resources

Updated Sept. 13, 2017

Southern Alberta Wildfire Information

Returning to Your Home

- [Returning to Your Home](#)
- [Residents returning to your home after a fire when **POWER IS NOT RESTORED**](#)
- [How to Clean and Disinfect a Cistern \(PDF\)](#)
- [How to Collect a Water Sample for Bacteria Testing \(PDF\)](#)
- [Shock Chlorinating a Well](#)

Air Quality

- [Air Quality Advisories](#)
- [Air Quality Health Index \(AQHI\) \(PDF\)](#)
- [Breathing Smoke or Fumes](#)
- [Wildfire Smoke and Your Health \(PDF\)](#)

Food Establishments

- [Reopening Your Food Establishment After a Wildfire](#)

South Zone Contact Information

Alberta Health Services, Environmental Public Health, South Zone

AQHI-Based Response Plan Template

This template may be used by any organization to create a staged response plan based on the Air Quality Health Index. The standardized AQHI health messages appear for the at-risk and general populations. For children's programs, such as schools, daycares, sports organizations, children's clubs and associations, consider using the Children's Program Response Plan as guidance.

Fill in the final column of the AQHI-Based Response Plan Template with your organization- or site-specific response. In your plan, you may wish to consider elements such as communications, facility plans (e.g. ventilation systems), program changes (e.g. modifications to any outdoor programming), and employee/volunteer/program participant safety.

For facilities that are routinely occupied by at-risk populations, consider working with your facility management group to determine whether it is appropriate to install different filters on the Heating, Ventilation and Air Conditioning (HVAC) system during wildfire smoke events. In addition, facility measures could include changing the air intake and circulation rates, and ensuring that doors and windows are closed.

Response Plan for Poor Air Quality due to Wildfire Smoke				
AQHI	AQHI Messages		Wildfire Smoke Response Guidelines	Site Specific Actions
	At-Risk* Population	General Population		
Low Risk	No health effects expected	No health effects expected	If smoke event forecast, implement communication plan and identify site specific actions. For children attending outdoor programs, please see the attached "outdoor activities guidelines". Employer distribute "Tip Sheet".	
	Enjoy your usual outdoor activities.	Ideal air quality for outdoor activities.		
Moderate Risk 4-6	Possible aggravation of heart or lung disease.	No health effects expected	Airshed distribute media release package including the backgrounder. Monitor local media. See the link http://www.ec.gc.ca/cas-aqhi/default.asp?lang=En&n=8727DF6F-1 to determine if an individual is at risk Check the AQHI and Alberta Health Services (AHS) Health Advisories . Check Environment Canada's Special Air Quality Statement Consider distributing information to stakeholders about how to reduce smoke exposure.	
	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	Increasing likelihood of respiratory or cardiac symptoms in sensitive individuals.	Eye, nose and throat irritation in some individuals.	Monitor local media. Check the AQHI and Alberta Health Services (AHS Health Advisories). Distribute information to stakeholder about how to reduce smoke exposure, using messages from AHS and/or Environment and Climate Change Canada (Special Air Quality Statement). If smoke event projected to be prolonged, evaluate and notify possible sites for indoor locations with clean air, as appropriate. Consider activating facility plans to maintain indoor air quality.	
	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.		
	People with Asthma or Respiratory issues should follow management plan			
Very High Risk 10+	Increased aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly.	Increased respiratory effects	Monitor local media. Check the AQHI and Alberta Health Services. Identify indoor locations with clean air to act as shelters for relevant stakeholders (e.g. Employees, program participants). Cancel outdoor events involving activity. Consider cancelling outdoor events that do not involve activity. If AQHI is projected to remain high for a prolonged time, consider evacuation of at-risk populations to indoor locations with clean air	
	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.		

* At risk populations may include people with existing respiratory or cardiovascular conditions, young children, the elderly, and those active outdoors

Children's Program Response Plan

This plan may be used by schools, daycares, sports organizations, children's clubs and associations to create a staged response plan based on the Air Quality Health Index. More specific messaging is provided than in the general AQHI-Based Response Plan Template.

In your plan, you may wish to consider elements such as communications (e.g. parent notifications), facility plans (e.g. ventilation systems), program changes (e.g. modifications to any outdoor programming), and employee/volunteer/program participant safety.

Environment and Climate Change Canada has an educational video for kids about how to use the AQHI to decide which days are best to play outside.

Air Quality Health Index for Kids:

<http://www.ec.gc.ca/cas-aqhi/default.asp?lang=En&n=3D802E46-1>

Air Quality and Outdoor Activity Guidance for Children’s Programs (including Children’s Club and Association, Sport Organizations, Schools, Daycares)

The table below shows when and how to modify outdoor physical activity based on the Air Quality Health Index. This guidance can help protect the health of all children, including teenagers, who are more sensitive than adults to air pollution. Check the air quality daily at www.environment.alberta.ca/apps/aqhi/aqhi.aspx, or download the AQHI Canada App at <https://open.alberta.ca/interact/aqhi-canada>



Air Quality Health Index		Outdoor Activity Guidance
	Low Risk 1-3	Great day to be outside!
	Moderate Risk 4-6	Good day to be active outside! Children who are sensitive to air pollution could have symptoms.*
	High Risk 7-10	It’s OK to be active outside, especially for short physical activities. For longer activities such as athletic practise, take more breaks and do less intense activities. Watch for symptoms and take action as needed.* Children with asthma should follow their asthma action plans and keep their quick-relief medicine handy.
	Very High Risk 10+	For all outdoor activities, take more breaks and do less intense activities. Consider moving longer or more intense activities indoors or rescheduling them to another day or time. Watch for symptoms and take action as needed.* Children with asthma should follow their asthma action plans and keep their quick-relief medicine handy.

*Watch for Symptoms: Air pollution can make asthma symptoms worse and trigger attacks. Symptoms of asthma include coughing, wheezing, difficulty breathing, and chest tightness. Even students who do not have asthma could experience these symptoms. If symptoms occur: The student might need to take a break, do a less intense activity, stop all activity, go indoors, or use quick-relief medicine as prescribes. If symptoms don’t improve, get medical help.

Questions and Answers:

How long can students stay outside when the air quality is unhealthy?

There is no exact amount of time. The worse the air quality, the more important it is to take breaks, do less intense activities, and watch for symptoms. Remember that students with asthma will be more sensitive to unhealthy air.

Why should students take breaks and do less intense activities when air quality is unhealthy?

Students breathe harder when they are active for a longer period of time or when they do more intense activities. More pollution enters the lungs when a person is breathing harder. It helps to:

- a reduce the amount of time students are breathing hard (e.g., take breaks; rotate players frequently)
- reduce the intensity of activities so students are not breathing so hard (e.g., walk instead of run)

If students stay inside because of unhealthy outdoor air quality caused by wildfire smoke, can they still be active? It depends on which pollutant is causing the problem:

Ozone pollution: If windows are closed, the amount of ozone should be much lower indoors, so it is OK to keep students moving.

Particle pollution: If the building has a forced air heating or cooling system that filters out particles then the amount of particle pollution should be lower indoors, and it is OK to keep students moving. It is important that the particle filtration system is installed properly and well maintained.

What physical activities can students do inside? Encourage indoor activities that keep all students moving. Plan activities that include aerobic exercise as well as muscle and bone strengthening components (e.g., jumping, skipping, sit-ups, pushups). If a gymnasium or open space is accessible, promote activities that use equipment, such as cones, hula hoops, and sports balls. If restricted to the classroom, encourage students to come up with fun ways to get everyone moving (e.g., act out action words from a story). Teachers and recess supervisors can work with PE teachers to identify additional indoor activities.

What is an asthma action plan?

An asthma action plan is a written plan developed with a student's doctor for daily management of asthma. It includes medication plans, control of triggers, and how to recognize and manage worsening asthma symptoms. See www.cdc.gov/asthma/actionplan.html for a link to sample asthma action plans. When asthma is well managed and well controlled, students should be able to participate fully in all activities. For a booklet on "Asthma and Physical Activity in the School," see <http://www.nhlbi.nih.gov/health/resources/lung/asthma-physical-activity.htm>

Employee and Supervisor Information

As part of your organization's Occupational Health and Safety program, you may wish to provide information to employees and to supervisors.

Alberta Labour has a tip sheet for workers and employers called "Working When There is Wildland Fire Smoke" that provides information and messages that you may use³.

The City of Calgary has developed tip sheets for employees and for supervisors that are provided here as examples.

³ Alberta Labour. (2017). Working When There is Wildland Fire Smoke. Retrieved from:
<https://open.alberta.ca/dataset/14df5db4-ec33-419e-b1cb-989ba1d58cfa/resource/ab6e8788-8dfa-437f-9276-c822c8b2472b/download/GH020-Wildland-Fire-Smoke.pdf>



For employees:

Poor air quality due to wildfire smoke

Smoke from wildfires can hurt your eyes, irritate your respiratory system, and worsen chronic heart and lung diseases. Take extra steps to keep yourself and your co-workers safe. Talk to your supervisor about how you can integrate these tips into your workday.

SAFETY TIPS FOR POOR AIR QUALITY: Discuss with your supervisor and keep this for quick reference

Tip 1: Plan your work if you can

- Talk to your supervisor about relocating or rescheduling outdoor work
- Reduce levels of physical activity, to decrease inhalation of pollutants

Consider teleworking or Skype meetings instead of travelling, if possible

- Talk to your supervisor about any personal factors that might put you at risk, such as a medical condition. Your supervisor can help you plan safe work options

Tip 2: Keep doors and windows closed

- In the office, close doors, windows and air vents to keep indoor air cleaner
- In your vehicle, close windows and set the air system on re-circulate

Tip 3: If you work outdoors, take breaks

- Take mini breaks when doing heavier work
- Rest indoors in clean air
- Drink plenty of water and stay cool

Tip 4: Monitor yourself and co-workers for symptoms

- Know who your first aiders are in case of an emergency
- If you have diabetes, a respiratory (lung) or cardiovascular (heart) condition, take the precautions routinely recommended by your physician if a worsening of symptoms occurs. Keep any required medications handy
- If you have chest tightness, chest pain, or shortness of breath, call 9-1-1
- Heat can worsen air quality conditions, and their effects. Check whether there is also a heat advisory in place, and make note of extra steps to stay safe in the heat
- Report safety concerns online at [myCity/Safety](#) or use the Safety Reporting [Notepad](#)

ISC: Unrestricted

Safety, we're all responsible.
Visit [myCity/Safety](#) or talk to your supervisor.



For employees:

Poor air quality due to wildfire smoke

Air Quality Health Index (AQHI) [Health Messages](#)

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.

* At Risk Population includes

1. Children, pregnant women and the elderly
2. Anyone with diabetes, lung or heart conditions
3. Anyone involved in strenuous outdoor work or sports

Stay informed

- Check myCity for updates
- Monitor the Air Quality Health Index at www.airquality.alberta.ca, www.airhealth.ca or download the app at <https://open.alberta.ca/interact/aqhi-canada>.

Tips to Take Home

- Avoid using your backyard fire pit or having a smoky barbeque
- Avoid using gas lawn mowers, since their emissions contribute to poor air quality
- Consider taking transit instead of driving
- If you have neighbours, friends or relatives who live alone, check on them to make sure they are okay
- Consider switching to indoor activities, or visiting a recreation centre, library or shopping mall with cooler, filtered air

ISC: Unrestricted

Safety, we're all responsible.
Visit myCity/Safety or talk to your supervisor.



For leaders:

Poor air quality due to wildfire smoke

Smoke from wildfires can hurt your eyes, irritate your respiratory system, and worsen chronic heart and lung diseases. Take extra steps to keep yourself, your employees, and your co-workers safe. Talk to your employees about how you can integrate these tips into everyone's workday.

SAFETY TIPS TO SHARE WITH EMPLOYEES: See employee handout on [myCity/Safety/Extreme Weather](#)

Tip 1: Plan your employees' work:

- Talk to your manager about relocating or rescheduling outdoor work
- Reduce levels of physical activity, to decrease inhalation of pollutants
- Consider teleworking or Skype meetings instead of travelling, if possible
- If the event will contribute to business disruption, contact your Business Continuity Management Plan
- Help employees plan safe work options

Tip 2: Keep doors and windows closed

- In the office, close doors, windows and air vents to keep indoor air cleaner
- In your vehicle, close windows and set the air system on re-circulate

Tip 3: If your employees work outdoors, ensure they:

- Take mini breaks when doing heavier work
- Rest indoors in clean air
- Drink plenty of water and stay cool

Tip 4: Monitor yourself and employees for symptoms:

- Know who your first aiders are in case of an emergency
- If you have diabetes, a respiratory (lung) or cardiovascular (heart) condition, take the precautions routinely recommended by your physician if a worsening of symptoms occurs
- If you have chest tightness, chest pain, or shortness of breath, call 9-1-1
- Heat can worsen air quality conditions, and their effects. Check whether there is also a heat advisory in place, and make note of extra steps to stay safe in the heat
- Encourage employees to report safety concerns online at [myCity/Safety](#) or use the Safety Reporting [Notepad](#)

ISC: Unrestricted

Safety, we're all responsible.
Visit [myCity/Safety](#) or talk to your supervisor.



For leaders:

Poor air quality due to wildfire smoke

Air Quality Health Index (AQHI) [Health Messages](#)

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.

* At Risk Population includes:

1. Children, pregnant women and the elderly
2. Anyone with diabetes, lung or heart conditions
3. Anyone involved in strenuous outdoor work or sports

Stay informed

- Check myCity for updates
- Monitor the Air Quality Health Index at www.airquality.alberta.ca, www.airhealth.ca or download the app at <https://open.alberta.ca/interact/aqhi-canada>.

ACTIONS AND TIPS TO HELP YOU IN YOUR ROLE AS SUPERVISOR: Answering employees' safety questions

There are actions you can take to keep employees safe when they're working in poor air quality

- Eliminate or control workplace hazards, such as relocating or rescheduling outdoor work and keeping indoor air clean by closing doors, windows and vents
 - Work with your safety [advisor](#) to choose the best solution
 - Involve your employees in the hazard assessment process, including identifying appropriate controls
 - Pay special attention to work where respiratory controls are already in place, or that has compounding effects on air quality, such as work that generates vapour, exhaust, or dust
- Consider the compounding effects of hazards on employees. Poor air quality due to wildfire smoke often occurs during periods of hot weather

ISC: Unrestricted

Safety, we're all responsible.
Visit myCity/Safety or talk to your supervisor.



For leaders:

Poor air quality due to wildfire smoke

- Poor air quality doesn't just affect those who work outdoors. Employees in offices can help to keep indoor air clean by closing doors, windows and vents. Also, support employees to telework or use Skype meetings to avoid travelling
- Check first aid supplies during work site inspections and ensure enough employees are trained to give first aid at each work site
- Train staff to recognize common symptoms of exposure to smoky air, including:
 - Watery or dry eyes
 - Persistent cough, phlegm, wheeze, scratchy throat or irritated sinuses
 - Headaches
 - Shortness of breath, asthma attacks or lung irritation
 - Irregular heartbeat, chest pain or fatigue
- Encourage staff to take mini breaks to rest indoors or in their vehicles. This is not "slacking off" – it's a matter of staying healthy and safe
- Consider the physical factors of each employee. Some factors put a person at greater risk for health effects, including age, fitness level, medical conditions, pregnancy, and smoking

Resource: Alberta Labour "[Working when there is Wildland Fire Smoke](#)" information sheet

Applicable legislation: OHS Code, Part 2 (hazard identification, assessment and control), Part 7 (emergency preparedness and response), Part 11 (first aid) and Schedule 2 (first aid).

Tips to Take Home

- Avoid using your backyard fire pit or having a smoky barbeque
- Avoid using gas lawn mowers, since their emissions contribute to poor air quality
- Consider taking transit instead of driving
- If you have neighbours, friends or relatives who live alone, check on them to make sure they are okay
- Consider switching to indoor activities, or visiting a recreation centre, library or shopping mall with cooler, filtered air

Reinforce with employees:

- You are important to the team, both as an individual and as an employee. I want you to work safely
- I can help you access the safety information you need. Talk to me if you have a question or a suggestion for making your work safer
- You can also talk to our safety advisor (provide name) or visit myCity/Safety for safety information

Tips on how to prepare, lead and follow up on safety discussions:

Prepare ahead

- Involve your employees in the hazard assessment process, including identifying appropriate controls
- Look for site hazards related to the topic you are discussing
- Familiarize yourself with recent safety reports, BU processes, guidelines and legislation related to the topic

Get your team actively involved

- Choose a real-life example to talk about in the safety discussion
- Invite your team to ask questions and make suggestions related to the topic. Respond to questions you can answer. Commit to finding answers you don't know
- Involve your team in preparing for or leading future safety talks

Follow up

- Look into suggestions and concerns your team brought up
- Report back on what will be done and the rationale behind decisions made

ISC: Unrestricted

Safety, we're all responsible.
Visit myCity/Safety or talk to your supervisor.

Communicating through Social Media

Social media, such as Twitter and Facebook, can be useful for communicating about changing conditions during wildfire smoke events, and for providing quick tips or information to a broad audience. You may wish to both follow social media posts by other (credible) organizations, and to post your own.

Twitter is an online news and social networking service.

To keep up to date, consider following these Twitter accounts:

Alberta Health	@GoAHealth
Alberta Health Services (AHS) Communications	@AHS_media
Your relevant AHS Zone e.g. South Zone	@AHS_SouthZone
Your relevant airshed e.g. Calgary Region Airshed Zone	@calgaryairshed
Alberta Airsheds Council	@albertairsheds
Environment Canada	@environmentca
Environment Canada's official source for weather alerts for your area e.g. Calgary	@ECAAlertAB52
Alberta Environment and Parks	@AB_EP
Alberta Government	@YourAlberta
Alberta Wildfire	@AlbertaWildfire
Red Cross Alberta	@RedCrossAB
Local news media	Check website of local media
Municipalities in affected areas	Check website of municipality
For wildfires in the Rocky Mountain National Parks, consider local sources Banff National Park Rocky Mountain Outlook Exshaw Fire Rescue	@BanffNP @rmoutlook @ExshawFire

Facebook is a social networking site utilized by a wide variety of organizations.

Consider following these Facebook sites:

- Environment and Natural Resources Canada
- Parks Canada
- Banff National Park, or the location in which the wildfire is occurring

Example Social Media Posts

Posting on social media helps keep members up to date on what is happening during poor air quality and provides valuable information. One tip when writing a post and a URL needs to be shorten, copy and paste URL into the website Bitly.com. By following the recommended sites, it is easy to re-tweet or share and pass on information.

Sample Tweets:

An air quality statement @GoAHealth was issued @Townofcochrane, for more info visit <http://bit.ly/2uHE4Np>

Seniors, children, those with lung or heart conditions most affected by poor #airquality. Reduce time outside, call 811 if you have symptoms <http://bit.ly/2vsiGfW> (Tweet posted by @GoAHealth, 2017-07-2017)



Learn about the #AQHI forecasts to understand the impacts #wildfire smoke may have on your health. <http://bit.ly/2wJ5NyL>

Keep an eye on your AQHI, Air Quality Health Index #yyc @CityofCalgary @City_of_Airdrie <http://bit.ly/1WdvY9n>

Ten tips if your experiencing poor air quality:

#10: Check on the real time data in #yyc @cityofcalgary and learn more about air quality at <http://bit.ly/2w3xc1Z>

#9: Consider moving longer or more intense activities indoors or rescheduling them to another day or time.

#8: Stay informed. Download the AQHI Canada App <http://bit.ly/2uSkth2>

#7: Take breaks indoors in clean air, example: at home or in a mall, library or recreation center

#6: Reduce levels of physical activity, as necessary, to decrease the inhalation of airborne

#5: If you must drive to another location, keep windows and vents closed. Run car fans on re-circulate mode to avoid drawing in outdoor air.

#4: Close fire place dampers on wood burning fireplaces. <http://bit.ly/2uHE4Np>

#3: Avoid running fans, such as “whole-house fans” or “fresh air ventilation systems”, that bring more smoky outdoor air inside

#2: If you have an air-conditioner, keep the fresh-air intake closed and the filter clean to prevent outdoor smoke from getting inside.

#1 Switch all floor registers in your house to a closed position. <http://bit.ly/2uHE4Np>

Sample Facebook Posts:

Just a reminder that it is a great idea to download the AQHI Canada App to your mobile devices. The Air Quality Health Index (AQHI) Canada app informs users of the level of health risk associated with local outdoor air quality. The app provides hourly AQHI readings and daily forecasts for all AQHI communities across Canada. <http://bit.ly/2uSkth2>

Make sure that you check the AQHI daily! <http://bit.ly/2u7tin3>. For the AQHI in Calgary and Airdrie visit the CRAZ website www.craz.ca.

Here are a few tips from the Alberta Health Services Air Advisory Page on what you can do in a poor air quality event: <http://www.albertahealthservices.ca/news/air.aspx>

If air quality is because of smoke reduce presence of smoke in indoor environments:

- Close and lock all outside windows and doors, including attached garage doors.
- Turn down furnace thermostats and furnace fans to the minimum setting. Do not attempt to extinguish pilot light.
- If you have an air-conditioner, keep the fresh-air intake closed and the filter clean to prevent outdoor smoke from getting inside.
- Avoid running fans, such as “whole-house fans” or “fresh air ventilation systems”, that bring more smoky outdoor air inside.
- Switch all floor registers to closed position.
- Close fire place dampers on wood burning fireplaces.
- Do not use wood burning fireplace, wood stoves or other smoke-producing appliances or features, including candles.
- If you must drive to another location, keep windows and vents closed. Run car fans on re-circulate mode to avoid drawing in outdoor air.
- Reduce levels of physical activity, as necessary, to decrease the inhalation of airborne pollutants.
- Do not smoke tobacco – smoking puts added stress on your lungs and those around you.
- Residents are reminded not to use backyard fire pits or fire boxes in parks when the air quality risk is high or very high, as it is now.

Environment and Natural Resources in Canada Environment and Natural Resources in Canada
posted in August, 2017

Young children are among the groups most sensitive to air pollution. Check the Air Quality Health Index before playing outside!
<http://ow.ly/mWYf30efJB4>

The Air Quality Health Index uses a scale to show the health risk associated with the air pollution we breathe. You can take simple steps to protect your health when the air quality is poor.
<http://ow.ly/b3Bb30egICs>

Did you know that Alberta Environment and Parks have free downloadable resources to learn about the AQHI, check them out <http://bit.ly/2wBQfQz>

Airshed Wildfire Smoke Poster

Airsheds and other organizations may wish to develop posters as communication tools for the public about how they can reduce their exposure to wildfire smoke, reduce their emissions to avoid adding to air pollution, and monitor their health. The Calgary Region Airshed Zone has created a poster that is provided here as an example.

Lower Your Exposure to Smoke

When smoke from fires occurs in your community, protect yourself and your loved ones by following a few simple steps:



Close fresh air intakes from furnaces, fireplaces, and stoves.

Stay inside as much as possible. Keep all windows and doors closed.

Keep your windows closed and put the air system on recirculate.

Reduce the amount of time spent outdoors. Avoid strenuous activity.

Listen to your body and contact your healthcare provider or call Health Link 24/7 at 811 if you are experiencing poor health related symptoms

These tips and more can be found at www.ahs.ca/air

Airshed Media Release

Airshed organizations may wish to issue a media release during a wildfire smoke event. A media release can help to reinforce the airshed as a credible source for scientific information about air quality and monitoring. An example media release is provided here.

POOR AIR QUALITY DUE TO WILDFIRE SMOKE

DATE:

LOCATION/S:

Due to the Air Quality Health Index (AQHI) reaching a (low, moderate, high) level in (location) an Air Quality Health Statement has been issued by Alberta Health Services.

(Local Airshed) monitors the air quality in (Locations affected). For more information on air quality and data please contact our Air Quality Program Manager _____.

For real time data on air quality and specific data on PM2.5, which is harmful for human health please visit the (Airshed) website.

To know the AQHI in your community, visit: <http://www.environment.alberta.ca/apps/aqhi/>

To protect yourself, limit exposure by adjusting your activity during episodes of increased air pollution (high AQHI) and save those more strenuous physical and outdoor activities for days when the index is lower.

To better understand the AQHI and the actions to take visit:

<http://aep.alberta.ca/air/air-quality-health-index/default.aspx>

Contact Info:
