

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:

<https://emergency.cdc.gov/preparedness/shelter/index.asp>

<http://www.calgary.ca/CSPS/cema/Pages/Prepare-for-an-emergency/How-to-shelter-in-place.aspx>

- 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.

Links to more information:

- **Alberta Wildfire** <http://wildfire.alberta.ca/>
- **Air Quality Health Advisories** <http://www.albertahealthservices.ca/news/air.aspx>
- **Special Air Quality Statements for Alberta**
http://www.weather.gc.ca/mainmenu/alert_menu_e.html

For more information, please contact your nearest Environmental Public Health office.

Edmonton Main Office
Calgary Main Office
Lethbridge Main Office

780-735-1800
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Grande Prairie Main Office
Red Deer Main Office
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