



## Wildfire smoke during extreme heat events

Wildfire smoke may happen at the same time as very hot weather. Smoke and extreme heat can both impact your health, but they have different effects on the body. Some people are susceptible to experiencing health effects from both wildfire smoke and extreme heat, but overheating is more dangerous for most people at risk. Cooler, cleaner indoor air is the best way to protect yourself.



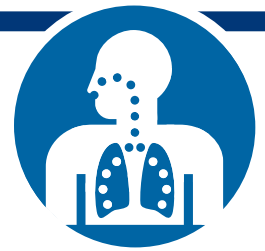
### Extreme heat can affect your health

*On extremely hot days in British Columbia, there may be 100-300 more deaths than expected*

- Your body always tries to maintain a core temperature of 36.6°C (98.6°F).
- When air temperature is high, your body has to work harder to cool itself by sweating and increasing blood flow to the skin.
- If you cannot stay cool, dangerous overheating may occur.
- Overheating can quickly become life-threatening heat stroke.
- Check to see whether there are any heat alerts in your area. <https://rb.gy/41nhfe>

**OVERHEATING:** *symptoms and recommended actions*

MILD	MODERATE	SEVERE
<ul style="list-style-type: none"> <li>• Feeling unwell</li> <li>• Dizziness</li> <li>• Headache</li> <li>• Thirst</li> <li>• Skin is warm and sweaty</li> </ul>	<ul style="list-style-type: none"> <li>• Nausea</li> <li>• Light-headedness</li> <li>• Weakness</li> <li>• Extreme fatigue, malaise</li> <li>• Heat rash, unusual swelling, or cramps</li> </ul>	<ul style="list-style-type: none"> <li>• Fainting or loss of consciousness</li> <li>• Unusual confusion or disorientation</li> <li>• Severe nausea and vomiting</li> <li>• Difficulty speaking</li> </ul>
<p><i>Move to a cool location and drink fluids until symptoms improve. If symptoms do not improve, seek medical attention.</i></p>		<p><i>Seek medical attention immediately.</i></p>



### Wildfire smoke can affect your health

*On extremely smoky days in British Columbia, there may be 5-10 more deaths than expected*

- Smoke is composed of small particles that travel deep into your lungs, where they can cause irritation and inflammation that affects your whole body.
- Smoke usually causes respiratory symptoms that resolve when the air clears.
- Smoke may also cause severe problems such as difficulty breathing or heart problems.
- Use the Air Quality Health Index to assess risks associated with current smoke levels. <https://rb.gy/hnutt8>

**WILDFIRE SMOKE EXPOSURE:** *symptoms and recommended actions*

MILD	SEVERE
<ul style="list-style-type: none"> <li>• Eye, nose, throat irritation</li> <li>• Mild cough</li> <li>• Phlegm production</li> <li>• Wheezy breathing</li> <li>• Headache</li> </ul>	<ul style="list-style-type: none"> <li>• Shortness of breath</li> <li>• Severe cough</li> <li>• Chest pain</li> <li>• Unusual heart palpitations</li> </ul>
<p><i>Find cleaner indoor air or wear a well-fitted respirator or mask outdoors.</i></p>	<p><i>Seek medical attention.</i></p>



## Heat and smoke may interact to produce more severe symptoms

- Smoke and heat both put the human body under stress.
- Combined exposure may lead to more severe symptoms.
- **Overheating is more dangerous than smoke exposure for most people at risk.**

## Some risk factors make people more susceptible to experiencing health effects from both exposures

- Chronic respiratory diseases, such as chronic obstructive pulmonary disease (COPD) or asthma
- Heart and other cardiovascular diseases
- Other chronic illnesses, such as diabetes
- Physical or mental disabilities or impairments, such as dementia
- Mental illnesses, such as schizophrenia
- Living alone or being socially isolated
- Older age (especially 65+) and younger age (especially infants and children)
- Pregnancy
- Working outdoors
- Poor quality housing or no housing

### People spend most of their time inside, so indoor temperature and air quality are important

- Without **air conditioning**, indoor temperatures can get dangerously high during extreme heat
- Without **air cleaning**, indoor smoke increases as the outdoor smoke increases

Sustained indoor temperatures	Who is at risk?
<26°C (79°F)	Generally safe for everyone
26 – 31°C (79-88°F)	May be risky for those susceptible to heat
>31°C (88°F)	Dangerous for those susceptible to heat

## Cooler and cleaner indoor air is the best way to stay safe

- Cooler indoor air can be achieved using air conditioners or other mechanical cooling methods.
- Cleaner indoor air can be achieved using air cleaners (<https://rb.gy/wrwnxu>) or box fan air filters (<https://rb.gy/90uh5s>) with doors and windows closed.
- Focus on decreasing the temperature and the amount of smoke in one room where you spend time, such as your bedroom.

## Prioritize staying cool if you are susceptible to both wildfire smoke and heat but cannot access cooler and cleaner indoor air

- **Overheating poses a bigger health risk than wildfire smoke for most people who are at risk**
- Indoor environments with cooler air typically have cleaner air too.
- Smoke is most risky for those with airway conditions, such as asthma or chronic obstructive pulmonary disease (COPD).
- Consider staying with friends or family who have air conditioning and air cleaners, if possible.
- Spend time in public places with cooler, cleaner indoor air, such as libraries or community centres.
- See the British Columbia extreme heat preparedness guide for more information. <https://rb.gy/infcas>
- Review the fact sheet on preparing for wildfire smoke. <https://rb.gy/5zd1nz>

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BC Centre for Disease Control  
Provincial Health Services Authority

FOR MORE INFORMATION: [bccdc.ca/wildfiresmoke](https://bccdc.ca/wildfiresmoke)



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