

June 7, 2021

Dear Community Leaders and Staff Members,

RE: Preparation for Extreme Heat and Wildfire Smoke

The probabilistic temperature forecast from Environment Canada indicates the southern interior of BC will face above normal temperatures this summer.¹ Interior Health has compiled information that can help communities prevent and reduce the negative health impacts of extreme heat while also complying with public health recommendations to prevent the spread of COVID-19 in your community.

Heat and Health

Several communities in the BC Interior are at risk for extreme heat events.^{2 3} These temperatures may be further increased due to climate change. Extreme heat events can have serious negative effects on health. Community and individual action can reduce the health impacts of heat. The information below may help identify some opportunities to integrate heat and wildfire-related precautions into your organizational activities.

Environment and Climate Change Canada defines an extreme heat event for the Southern Interior of BC as two or more consecutive days with temperatures greater than or equal to 35°C, with minimum overnight temperatures greater than or equal to 18°C. An extreme heat event for the Northern or Central Interior of BC is defined as two or more consecutive days with temperatures greater than or equal to 29°C, with minimum overnight temperatures greater than or equal to 13°C. Additional factors, such as high humidity, lack of wind and exposure to direct sunlight can compound stress on the body. Further, the number of days heat lasts can exacerbate harm caused by extreme heat; the strain on the body increases as heat days extend. Also, some individuals and groups are more susceptible than others.

Those at Higher Risk to Health Impacts of Heat

- Older adults
- People with chronic poor health, heart problems or breathing difficulties
- People on certain medications
- People who live alone or are socially isolated, homeless or unsheltered
- People who are less able, pregnant or already infirm
- Infants and children
- People who are physically active outdoors or work outdoors
- People wearing personal protective equipment (PPE) in places not temperature controlled
- People with low income
- People who perform manual labour

¹ https://weather.gc.ca/saisons/image_e.html?img=s234pfe1t_m1_cal&bc=prob accessed May 26, 2021

² https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf accessed May 26, 2021

³ <https://services.pacificclimate.org/plan2adapt/app/> accessed May 26, 2021

It is important to know that everyone can be affected by extreme heat and can suffer from heat illness or the more serious state of heat stroke. Planning for the heat season and taking action when the weather gets hot is the best way to stay healthy.

Prepare for the Heat Season

Supporting community members to utilize cooler outdoor spaces can be helpful. Outdoor spaces that have protection from the sun can also enable physical distancing. Your organization can promote cooler outdoor areas in the community, such as large parks near to water with shade trees.

Individuals can also take action in their own homes to stay cool in the heat. Air conditioning, if available, can be used to keep indoor space cool. Also, keeping blinds closed during the day, spending time in the coolest areas of the home and using fans can help prevent overheating. Staying hydrated by drinking enough water is also important. Neighbours, friends and relatives should check on people who are the most vulnerable with phone, video or in-person visits using physical distancing precautions and PPE where appropriate. Special attention should be given to those who are unable to leave their home due to illness or disability. Individuals who face vulnerable circumstances or cannot adequately cool themselves indoors or outdoors should be connected with a local cooling shelter or a public facility with air conditioning for reprieve. Given public facilities may be limited due to COVID-19 restrictions, pop-up cooling shelters may need to be established in advance and during heat waves.

Heat Information Resources

The Global Heat Health Information Network has developed an excellent planning [checklist](#) for heat preparation during the COVID-19 pandemic. The links below contain additional information to help individuals and communities manage health impacts of extreme heat.

Heat & Health – COVID-19	Heat & Health – General	Heat Alert & Response Planning
BC Centre for Disease Control: Warm weather safety in a time of COVID-19	HealthLink BC’s Beat the Heat Webpage	Heat Alert & Response Planning for Interior BC Communities: A Toolkit
Global Heat Health Information Network: Heat and COVID-19 Information Series	Health Canada Fact sheets: Staying healthy in the heat	BC Centre for Disease Control: Developing a Municipal Heat Response Plan: A Guide for Medium Sized Municipalities

Wildfires, Smoke Pollution and Health

Wildfires can occur during heat season due to lack of rain and hot temperatures that dry up vegetation. This can lead to smoke pollution which can irritate the lungs, cause inflammation, and alter immune function. Wildfire smoke can also lead to worsening of heart and lung disease.

Wildfire Smoke is a Higher Risk for Some Individuals

The length of exposure to wildfire smoke, as well as a person’s age and underlying health conditions, determine the health impact. Children, older adults and those with respiratory conditions or other chronic illness are at higher risk from the effects of wildfire smoke. Reducing exposure to wildfire smoke is the best way to protect health.

Prepare for Wildfire Smoke

Individuals may be able to take action in their homes to reduce smoke exposure. Portable air cleaners can be used and work the best when run continuously with doors and windows closed. Air conditioners set to re-circulate minimize the amount of smoke that enters the home. People should limit time outside when skies are smoky. More information on creating a cleaner air space at home can be found in section 5 of [this publication](#) from Health Canada.

A **cleaner air shelter** is a room, area, or building that has an air filtration system that reduces the amount of pollution from wildfire smoke. Community members who are experiencing homelessness or who do not have a home to spend the day in may require additional support when there is wildfire smoke. Creating public cleaner air shelters may be necessary for this vulnerable population.

Wildfire smoke is an important consideration when planning small outdoor community events. When possible, identification of an alternate indoor 'cleaner air space' location is ideal. When wildfire smoke is present, the risk to attendees at outdoor events can be reduced by shortening the length of the event (i.e. reduced game time, shorten lesson/presentation/concert). Event organizers and coaches should be aware that people react differently to smoke and should pay special attention to younger, older and/or participants with respiratory or chronic illness.

Smoke Information Resources

The links below describe some actions that you organization and community members can take to stay healthy during wildfire smoke events.

Wildfire & Health – General	Wildfire & Health –Response Planning
BC Centre for Disease Control: Wildfire smoke safety in a time of COVID-19 Fact sheet series- Wildfire Smoke	BC Centre for Disease Control: Wildfire Smoke Response Planning
HealthLink BC: Wildfires and Your Health	Interior Health : Emergency Information Wildfires Page

COVID-19 Considerations

BC is currently in phase 1 of its COVID-19 Restart Plan.⁴ Rates of COVID-19 infections, hospitalizations, and deaths have begun to fall; nevertheless, we must continue to follow the PHO Orders. Local governments are advised to stay up to date with [current orders and restrictions](#) as they may impact how community cleaner air shelters are implemented.

⁴ <https://www2.gov.bc.ca/gov/content/covid-19/info/restart#:~:text=BC's%20Restart%20is%20a%20careful%2C%20four%2Dstep%20plan%20to%20bring,important%20tool%20supporting%20our%20restart.>

It is important to anticipate natural events and consider the role your organization can play to support community members to stay healthy. It is also important to emphasize that **heat-related illness can be a greater immediate threat to health than poor air quality**. We urge you to consider the information enclosed in your organizational planning and post information for the public to help increase awareness of potential health risks and how to mitigate.

Sincerely,



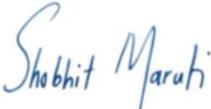
Dr. Albert de Villiers
Chief Medical Health Officer



Dr. Carol Fenton
Medical Health Officer



Dr. Karin Goodison
Medical Health Officer



Dr. Shobhit Maruti
Medical Health Officer



Dr. Silvina Mema
Medical Health Officer



Dr. Sue Pollock
Medical Health Officer