

2024 VCH Summer Health Resource for Community Organizations

The content and health guidance is intended for organizations supporting their community during extreme weather events. Email us to sign up for notifications of heat and air quality events this summer: seasonalreadiness@vch.ca

Who is VCH Seasonal Readiness?

These email notifications are sent from Vancouver Coastal Health (VCH) Public Health (Priority Populations Team & Healthy Environments and Climate Change Team).

What does VCH Seasonal Readiness email me?

- Seasonal readiness webinars and engagement opportunities
- Pre-season messaging and updates
- Health guidance during extreme weather events. Currently extreme heat, cold, and wildfire smoke events, but the team is working to expand to guidance for other events, such as drought and flooding.

How does VCH Seasonal Readiness support community organizations?

- Connections to health services, such as mental health and substance use.
- Letters of supports for funding, programming, community planning.
- Health guidance for planning, response, and daily operations. E.g. infection control, water quality, climate change, emergency response for extreme weather events, harm reduction.
- Health training and presentations. E.g. Heat check-ins, seasonal readiness and naloxone training.
- Community projects to learn how environmental hazards impact community. E.g. air quality monitoring and engaging people with lived experience.
- Please email seasonalreadiness@vch.ca to discuss how we can support your work.

Contents of this Resource

2024 Updates	page 2
Sign up for weather notifications	page 2
Follow verified emergency information	page 2
Types of air quality advisories, heat events, and notifications	page 3
Heat: People at higher risk and health impacts	page 4
Heat: Supportive community actions	page 5
Wildfire Smoke: People at higher risk and health impacts	page 4
Wildfire Smoke: Supportive community actions	page 5
Resources for heat, smoke, mental health, and substance use	pages 6-8

2024 Updates

- **BC HARS:** Like past years, ECCC may issue a public-facing *Special Weather Statement (SWS)* for the first heat of the season (see Special Weather Statement definition below). For 2024, Indigenous governing bodies and local authorities may be eligible for EMCR response funding for an early summer (May or June) SWS if they have the SWS trigger in their heat response plans (and in accordance with [EMCR Extreme Temperature Policy 5.14](#)).
- ***NEW* Wildfire Smoke Notifications:** We are expanding our notifications to include wildfire smoke air quality advisories that are issued by Metro Vancouver or Ministry of Environment (Smokey Skies Bulletin). We will do our best to issue notifications to just the organizations in the affected area but regional or provincial organizations will receive all of the notifications. This is a pilot for 2024 so we appreciate any feedback.
- **Preparing for wildfires and wildfire smoke:** Environment and Climate Change Canada forecasts show current drought conditions, low snowpack, and other conditions may lead to severe wildfires and wildfire smoke this season. Here are some of the ways we can support your communities to prepare:
 - **VCH free Heat and Wildfire Smoke Preparedness Sessions:** We are available to present to staff, volunteers, or community groups, and attend events to share heat/ smoke information.
 - **VCH indoor air quality monitors:** Air quality monitors are available for loan to NGOs with public indoor spaces people may use during smoke events. We can help set up the monitors, send a monthly report on the indoor/ outdoor air quality, and can provide guidance on improving indoor air quality.
 - **VCH consultations:** We recommend organizations [have a building smoke plan](#) and consider [opening a cleaner air space](#). We are available to review plans or consult.

Sign Up for Weather Notifications

Environment and Climate Change Canada (ECCC) is the official Canadian weather service used by health authorities, government, and emergency management professionals.

- ECCC provides **early warning email notifications** for organizations involved in emergency response. Email MeteoPac@ec.gc.ca to sign up. Ensure you also sign up for public weather notifications below.
- Sign up for [EC Alert Me](#) for ECCC **public weather alerts by email**. Select the communities and weather events you would like to be notified about.
- Download the [WeatherCAN](#) app to for ECCC **public weather alerts on your cell phone** (including air quality advisories from Metro Vancouver and Smokie Skies Bulletin). Select the communities you would like to be notified about.
- Organizations operating in the Metro Vancouver Region: Consider signing up for the [Metro Vancouver Air Quality mailing list](#) to get their *Air Quality Updates* typically before and throughout air quality advisories.

Follow Verified Emergency Information

- EmergencyInfoBC [website](#) and [@EmergencyInfoBC](#) on social media for provincial emergency events.
- Local government or First Nation's website, Facebook and sometimes X (formerly Twitter).
- [Local health authority](#) website and social media platforms.

Types of Air Quality Advisories, Heat Events, and Notifications

Heat Warning (Level 1 Alert)

Very hot temperatures, with a moderate public health risk (5% increase in mortality). BC is divided into five Heat Warning regions, each with its own Heat Warning criteria. Most of Vancouver Coastal Health falls under the Southwestern BC Region, which includes: North Shore, City of Vancouver, Richmond, Howe Sound, Whistler, Sunshine Coast and Vancouver Island (except northern sections). 1-3 heat warnings are expected per summer.

- **Check your heat alert region and corresponding temperature thresholds.** Keep in mind that [Heat Warning Regions](#) (BC HARS p. 9), [Emergency Management Regions](#) or [Health Authority Regions](#) are all slightly different.
- **Prolonged Heat Events**
People's bodies in heat are under stress and working hard to cool down, similar to during physical exercise like a marathon. It may be possible to run one marathon but most of us would struggle to run a marathon every day. Longer heat events, with ongoing exposure and a need to cool down day after day, can cause physical strain and health harms in people at higher risk. We recommend checking on people at risk even after a heat event has ended because they could still be recovering and experiencing negative health impacts.

Extreme Heat Emergency (Level 2 Alert)

Dangerously hot temperatures, with a very high public health risk (20% or more increase in mortality). Extreme Heat Emergencies may be issued when Heat Warning criteria has been met and the forecast indicates daily highs will substantively increase day-over-day for three or more consecutive days. The [BC HEAT committee](#) decides when an Extreme Heat Emergency will be issued. 1-2 Extreme Heat Emergencies are expected per decade.

Yellow Weather Notifications

ECCC early warning notification for **possible** high impact weather in British Columbia, as defined in consultation with emergency management officials. VCH Seasonal Readiness will only contact you regarding yellow weather notifications for Extreme Heat Emergencies (not Heat Warnings).

Special Weather Statement

For the first heat event of the year, ECCC may diverge from the standard Heat Warning process/ thresholds and issue a public-facing special weather statement, possibly evolving into a Heat Warning for the B.C. region(s) impacted. The Special Weather Statement is intended to give partners extra time to prepare given it is the first event. Also, the public is less prepared for and acclimatized to heat in the early season so they may be at risk at lower temperatures.

Prolonged Heat Events

People's bodies in heat are under stress and working hard to cool down, similar to during physical exercise like a marathon. It may be possible to run one marathon but most of us would struggle to run a marathon every day. Longer heat events, with ongoing exposure and a need to cool down day after day, can cause physical strain and health harms in people at higher risk. We recommend checking on people at risk even after a heat event has ended because they could still be recovering and experiencing negative health impacts.

Metro Vancouver Air Quality Updates and Advisories

Air quality in the Metro Vancouver Region is monitored by Metro Vancouver. They issue [Air Quality Updates](#) leading up to and throughout an air quality advisory for people who subscribe to their notifications. The updates may then progress to an Air Quality Advisory, which is also shared through ECCC WeatherCAN App, HelloWeather service and online ECCC weather advisories (but called Special Air Quality Statement).

Ministry of Environment Air Quality Advisories and Smokey Skies Bulletins

For the rest of British Columbia (outside Metro Vancouver), air quality is monitored by the [Ministry of Environment](#). They issue Air Quality Advisories and Smokey Skies Bulletins, which is also shared through ECCC WeatherCAN App, HelloWeather service and online ECCC weather advisories (but called Special Air Quality Statement).

People at Higher Risk from Heat

People respond differently to heat, and some people are at higher risk of experiencing health effects. Individuals with multiple risk factors are at higher risk and are more likely to require frequent check-ins.

People at higher risk for heat-related illness:

- seniors aged 60 years or older
- people who live alone or are socially isolated
- people with pre-existing health conditions and/ or disabilities (e.g. diabetes, heart disease, respiratory disease, schizophrenia, depression, anxiety, limited mobility and other disabilities)
- people using substances, including alcohol

Other people at risk for heat-related illness:

- people who are experiencing homelessness or marginal housing
- people who work or live in hot spaces
- people who are pregnant
- infants and young children

Health Effects of Heat

Extreme heat events, also known as "heat waves," can cause heat-related illnesses, and lead to an increase in deaths. Heat-related illness include heat rash, sunburn, heat cramps, heat exhaustion, and, the most severe, heat stroke.

Signs of heat exhaustion include:

- Heavy sweating
- Dizziness
- Nausea or vomiting
- Rapid breathing & heartbeat
- Headache
- Difficulty concentrating
- Muscle cramps
- Extreme thirst
- New skin rash
- Dark urine & decreased urination

Actions for possible heat exhaustion: Move to a cool space, drink water, and apply cool water to large areas of the skin (cool bath, shower or wet their clothes). Take these steps right away because heat exhaustion can quickly develop into heat stroke, which is a medical emergency.

Signs of heat stroke include:

- High body temperature (>38°C/100°F)
- Fainting or drowsiness
- Confusion
- Lack of coordination
- Very hot and red skin

Actions for possible heat stroke: **Heat stroke is a medical emergency.** Seek medical attention immediately at an emergency room or urgent care centre. Call 911 if necessary. While waiting for help, cool the person right away by moving them to a cool space if possible, and apply cool water to large areas of the skin (cool bath, shower, or wet their clothes).

Supportive Community Level Actions for Heat Events

The BC Heat Alert Response System (BC HARS) outlines recommended actions for pre-season and each level of heat warning, based on capacity and funding. [BC HARS recommendations for NGOs](#) are on pages 35-37.

Suggested Actions **BEFORE** a Heat Event:

- Check that staff and volunteers [sign up for weather notifications](#) (page 2).
- Revise or create a heat response plan, with actions like education, outreach to people at risk, opening a cooling space, etc. Consider running heat check-ins. There is a heat check-in training package: [training video](#), [train-the-trainer video](#), [script and framework](#). The [VCH HECC team](#) can also provide free heat check-in training.
- Update related plans, such as business continuity plans. Is there [equipment to keep the building cool](#) or a plan to relocate or cancel programs? Can the [symptoms of heat-related illness](#) be printed for staff/ volunteers to reference, e.g. at the front desk, in first aid kits or kids camp bags.
- Prepare for heat response: coordinate with partners, identify high risk community members, gather equipment, print information materials, train staff and volunteers, etc.
- Encourage community members to [make a heat plan](#), build a [cool kit](#) from things around their home, and apply for [free air conditioning](#).
- For people experiencing homelessness, hand out and post information about local cooling supports. Consider preparing maps of heat supports (e.g. [City of Vancouver](#) and [North Shore Homelessness Task Force](#) maps).

Suggested Actions **DURING** a Heat Warning:

- Activate heat response plans. Notify staff and ensure frontline staff are aware of symptoms of heat-related illness, local cool spaces, and key messages for heat. Conduct outreach to high-risk community members.
- Share key messages:
 - Updates and messaging from government, First Nations, and health (page 2).
 - **Dangers of high indoor temperatures.** If in doubt, go somewhere cooler.
 - Indoor temperatures over 26°C (79°F): Increasing risk of heat-related illness for people at risk.
 - Indoor temp over 31°C (88°F): Significant risk of heat-related illness for people at risk.
 - **Encourage community to check on neighbours, friends and family.** The [NCCEH Health Checks During Heat Events](#) guide is useful for people without any training who want to check on people.
 - **Ways to cool people and spaces.** [VCH Heat Webpage](#) has posters and translated materials. Learn [how best to use fans](#) during heat events.
 - Location of cooling centres, air conditioned spaces, outdoor cool spaces (e.g. parks or lakes) and drinking water. Local governments often share this on their social media or website.
 - Harm reduction tips for heat events. See the [BCCDC Towards the Heat Resources](#).

Suggested Actions **DURING** an Extreme Heat Emergency:

- Continue all actions from heat warning. Notify staff and ensure frontline staff are aware of the increased risk.
- Increase community messaging and outreach, including [heat check-ins](#) for people at high risk
- Consider expanding hours of operation of cooling spaces or supports

People at Higher Risk from **Wildfire Smoke**

People respond differently to smoke, and some people are at higher risk of experiencing health effects. Reducing exposure to wildfire smoke is especially important for the following groups of people:

People who may be more **physically sensitive** to smoke:

- People with pre-existing medical conditions such as asthma, chronic obstructive pulmonary disease (COPD), heart disease, and diabetes
- People who are pregnant
- Infants and young children
- Older adults

People who may be more **exposed** to smoke:

- People experiencing homelessness and under-housing
- People who live in spaces without mechanical ventilation, air filtration systems or portable air cleaners
- People who work or are active outdoors

Health Effects of **Wildfire Smoke**

Smoke contains tiny particles of pollution that travel deep into your lungs when you breathe. Of all the pollutants in wildfire smoke, particulate matter (PM2.5) poses the greatest risk to health. These particles can cause irritation and inflammation that can trigger a short term and potentially long-term health impacts. Infants, unborn children, and those with respiratory conditions such as asthma and COPD are most likely to experience longer-term health impacts.

Common signs of smoke exposure:

- Sore throat
- Irritated eyes
- Runny nose
- Mild cough
- Coughing up thick, sticky phlegm
- Headaches
- Wheezy breathings

Actions for common signs of smoke exposure: Find cleaner indoor air: use a portable HEPA air cleaner, do-it-yourself air cleaners, or spend time in community spaces that have air conditioning since they also tend to have better air quality. Drink plenty of water. Staying hydrated can alleviate some respiratory symptoms. Limit outdoor activities but if outdoor activities cannot be avoided, take it easy, take frequent breaks, and consider using a [high quality, well-fitted mask](#). Continue to manage pre-existing chronic health conditions and use symptom management medications, such as inhalers, as needed. Seek medical attention if symptoms become more severe.

Severe signs of smoke exposure:

- Short of breathe
- Severe cough
- Feel dizzy
- Fast heartbeat
- Chest pain

Actions for severe signs of smoke exposure: **Seek medical attention at an emergency room or urgent care centre. Call 911 if necessary.**

Supportive Community Level Actions for Wildfire Smoke Events

Example actions NGOs can take during a wildfire smoke or air quality event:

Actions **BEFORE** a Wildfire Smoke Event:

- Check that staff and volunteers [sign up for weather notifications](#) (page 2).
- Create a [smoke readiness plan](#) for buildings to help protect occupants. Plans may include actions to [limit smoke entry](#) into buildings and upgrading or adding supplemental air filtration during smoky periods.
- Consider opening a cleaner air space in your building and advertise this to clients/ community. See the Health Canada [Guidance for Cleaner Air Spaces during Wildfire Smoke Events](#).
- Update plans, such as business continuity plans to include smoke contingency plans. For example, what will happen with outdoor events and programs? How will staff, volunteers, and programs be protected from smoke? Can [symptoms of wildfire smoke exposure](#) be posted so staff/volunteers can reference it, e.g. at the front desk, in first aid kits or kids camp bags. There are wildfire smoke resources for [children's programs](#).
- Encourage community members to [make a plan for smoke](#), and check with their healthcare provider if they have health conditions. Can they purchase a HEPA air cleaner, build a DIY air cleaner, or pre-identify local cleaner air spaces to visit? Can volunteers show community members how to check the AQMap and AQHI chart?
- People experiencing homelessness are more exposed to smoke. Consider options to allow people to escape the smoke indoors, e.g. relax policies, extend hours, advocate to community spaces to relax policies outreach to people experiencing homelessness to share local cleaner air space information, etc.

Actions **DURING** a Wildfire Smoke Event:

- Activate smoke readiness plans. Notify staff and ensure frontline staff are aware of symptoms of wildfire smoke exposure, local cleaner air spaces, and key messages.
- Share key messages:
 - Updates and messaging from government, First Nations, and health (page 2).
 - **Find cleaner air:** Use a portable HEPA air cleaner or do-it-yourself air cleaner, in one or more rooms at home and in community spaces. Keep windows and doors closed but ensure the space does not get too hot. If the space is too smoky or hot, spend time in a cleaner air space in the community that has air conditioning.
 - **Check the local air quality and Air Quality Health Index (AQHI):** Open the [AQMap](#). Zoom into your location. Find the closest air quality sensors (colorful dots). Look at the [AQHI chart](#) to learn about actions to take based on the number and color you see on the sensor. Air quality can change quickly so it is important to check the air quality map throughout the day.
 - **Consider postponing or limiting outdoor activities**, especially for people at risk. If outdoor activities cannot be avoided, take it easy, take frequent breaks, and consider a high quality, well-fitted mask.
 - **Heat and air pollution can happen together. Heat is a bigger health concern for most people.** Stay cool, drink plenty of water and spend time in spaces with air conditioning. Check with your municipality to see if cooling centres are available near you.
 - **Monitor for symptoms of smoke exposure and check on people at risk.**

Heat Resources

VCH Heat Webpage with resources for the public and community organizations. www.vch.ca/heat

Translated public resources:

- [VCH Extreme Heat Poster](#) (English, Arabic, Chinese-Simplified, Chinese-Traditional, Hindi, Korean, Farsi, Punjabi, Spanish, Urdu, Vietnamese and Gujarati)
- [PreparedBC Heat Information and Extreme Heat Preparedness Guide](#) (English, French, Simplified Chinese, Traditional Chinese, Punjabi)
- [NCCEH Health Checks During Extreme Heat Events](#) (English, French, Simplified Chinese, Traditional Chinese, Punjabi)

First Nations Health Authority resources:

- [Be Prepared for Hot Weather handout.](#)
- [Stay Safe During Extreme Heat Events Infographic](#)

Towards the Heart heat resources for people who use substances and people living with Schizophrenia:

- [What to do during extreme heat: Guide for service providers](#)
- [Guide for people who use substances](#) and [Using substances during extreme heat](#)
- [Guide for people living with Schizophrenia](#) and [Supporting people living with schizophrenia](#)
- [Getting prescriptions and carries during extreme weather](#)

Resources for organizations:

- VCH: Heat check-in training package: [training video](#), [train-the-trainer video](#), [script and framework](#).
- VCH: [How to create a cooling space](#)
- VCH: [Sample Heat and Wildfire Smoke Plan for Local Governments](#) (word doc your organization can edit)
- VCH: [Heat and wildfire guidance for outdoor gatherings](#)
- VCH: [Extreme Heat: Schools and Childcare Facilities](#)
- BC HARS: [BC Heat Alert and Response System recommended actions and messaging](#)
- BC Housing [heat resources for building operators](#)
- MOSAIC is still running heat wellness checks for seniors who do not speak English or French. Seniors can opt-in or family, friends or organizations can refer them. See [registration page](#) for details.

Wildfire and Wildfire Smoke Resources

VCH Wildfire Smoke Webpage with resources for the public and community organizations. www.vch.ca/wildfiresmoke

Translated public resources:

- VCH [Wildfire Smoke Poster](#) (English, Arabic, Chinese-Simplified, Chinese-Traditional, Hindi, Korean, Farsi, Punjabi, Spanish, Urdu, Vietnamese and Gujarati)
- PreparedBC: [Wildfire Preparedness Guide](#) (English, French, Chinese-Simplified, Chinese-Traditional, Punjabi)
- BCCDC: [Health effects of wildfire smoke factsheet](#). (English, Arabic, Chinese-Simplified, Chinese-Traditional, Korean, Farsi, French, Punjabi, Spanish, Vietnamese)
- BCCDC: [Portable Air Cleaners Factsheet](#) (how to pick an effective air cleaner). (English, American Sign Language, Arabic, Chinese-Simplified, Chinese-Traditional, Korean, Farsi, French, Punjabi, Spanish, Vietnamese)
- SFU/ City of Vancouver: [DIY Air Cleaner Instructions](#). Step-by-step instructions. English, Chinese-Traditional, Chinese-Simplified, Farsi, French, Japanese, Korean, Portuguese, Punjabi, Spanish, Tagalog, Vietnamese.

Additional public resources:

- BCCDC: [Do-It-Yourself Air Cleaner Factsheet](#) (how to build a lower cost air cleaner)
- BCCDC: [Face masks for Wildfire Smoke Factsheet](#) (how to pick an effective face mask)

Resources for organizations:

- ASHRAE: [Planning Framework for Protecting Commercial Building Occupants from Smoke During Wildfire Events](#) (tips for making a building smoke plan)
- Health Canada: [Guidance for Cleaner Air Spaces during Wildfire Smoke Events](#)
- BCCDC: [Wildfire Smoke During extreme heat events factsheet](#) (what to do when there is both heat and smoke)
- VCH: [Heat and wildfire guidance for outdoor gatherings](#)
- BC Housing resources for building operators: sizing portable air cleaners for [single rooms](#) and [common rooms](#)
- VCH: [Wildfire Smoke: Schools and Childcare Facilities](#)
- [SFU DIY Air Cleaner Workshops and Train-the-Trainer package](#). The SFU team still has some capacity to run workshops, but they have also provided their train-the-trainer resources online. These are lower cost and effective options to clean indoor air, as long as they appropriately sized for the room.

Resources to check air quality

- [AQ Map](#): Use this map when there is wildfire smoke or smoke from residential wood burning (PM2.5) because it has air quality information from both government air quality stations and low-cost air quality sensors in areas without government stations.
- [AQHI Map](#): Use this map to check the overall air quality for multiple air pollutants from different sources including ozone, nitrogen dioxide and sulphur dioxide. It only has information from government air quality stations, which may be far away from some rural/ remote communities in BC.
- [Air Quality Health Index \(AQHI\)](#): This chart has recommended actions to protect health at each level of wildfire smoke. There are specific messages for people at risk and the general public. Ideally, people will check the local air quality and use the AQHI to plan activities. Air quality can change quickly so check throughout the day.

Mental Health and Substance Use Resources

Heat and wildfire smoke events can take a toll on physical and mental health, and well-being. If you or someone you are supporting are feeling stressed or overwhelmed, reach out. Supports include:

- VCH [Mental Health and Substance Use](#)
- VCH [Harm Reduction](#)
- VCH [Overdose prevention sites](#)