

Extreme Heat Check-Ins: **Train the Trainer**

VCH Healthy Environments & Climate Change

Meghan Straight, Analyst

With acknowledgements to:

Dr. Michael Schwandt, Medical Health Officer, VCH

Emily Peterson, Environmental Health Scientist, VCH

Dr. Sarah Henderson, BCCDC

Land Acknowledgement

We wish to acknowledge that the land on which we gather is the traditional and unceded territory of the Coast Salish Peoples, including the Musqueam, Squamish, and Tsleil-Waututh Nations.

Vancouver Coastal Health operates within the traditional territories of the Heiltsuk, Kitasoo-Xai'xais, Lil'wat, Musqueam, N'Quatqua, Nuxalk, Samahquam, shíshálh, Skatin, Squamish, Tla'amin, Tsleil-Waututh, Wuikinuxv, and Xa'xtsa First Nations.



Agenda

- Extreme Heat
- Heat Risk Factors
- Why Heat Check-Ins?
- Heat Check-in Procedures
- Heat Check-In Training
- Additional Considerations (e.g. Wildfires)
- Resources

Agenda

- **Extreme Heat**
- **Heat Risk Factors**
- **Why Heat Check-Ins?**
- **Heat Check-in Procedures**
- **Heat Check-In Training**
- **Additional Considerations (e.g. Wildfires)**
- **Resources**

Agenda

- Extreme Heat
- **Heat Risk Factors**
- Why Heat Check-Ins?
- Heat Check-in Procedures
- Heat Check-In Training
- Additional Considerations (e.g. Wildfires)
- Resources

Agenda

- Extreme Heat
- Heat Risk Factors
- **Why Heat Check-Ins?**
- Heat Check-in Procedures
- Heat Check-In Training
- Additional Considerations (e.g. Wildfires)
- Resources

Agenda

- Extreme Heat
- Heat Risk Factors
- Why Heat Check-Ins?
- **Heat Check-in Procedures**
- Heat Check-In Training
- Additional Considerations (e.g. Wildfires)
- Resources

Agenda

- Extreme Heat
- Heat Risk Factors
- Why Heat Check-Ins?
- Heat Check-in Procedures
- **Heat Check-In Training**
- Additional Considerations (e.g. Wildfires)
- Resources

Agenda

- Extreme Heat
- Heat Risk Factors
- Why Heat Check-Ins?
- Heat Check-in Procedures
- Heat Check-In Training
- **Additional Considerations (e.g. Wildfires)**
- Resources

Agenda

- Extreme Heat
- Heat Risk Factors
- Why Heat Check-Ins?
- Heat Check-in Procedures
- Heat Check-In Training
- Additional Considerations (e.g. Wildfires)
- Resources

Liability

IMPORTANT:

This training provides general information about supporting individuals at higher risk from heat. The information contained in this training does not constitute legal or medical advice. Organizations utilizing this training are encouraged to seek legal guidance regarding their specific context and whether there are potential risks associated with performing check-in services or providing supports during heat events.

Agenda

- **Extreme Heat**
- **Heat Risk Factors**
- **Why Heat Check-Ins?**
- **Heat Check-in Procedures**
- **Heat Check-In Training**
- **Additional Considerations (e.g. Wildfires)**
- **Resources**

What is Extreme Heat?

All of these terms are used for hotter than normal temperatures.

Extreme Heat
Heat Dome
Special Weather Statement
Heat Wave
Heat Emergency
Heat Warning

Weather terms used by Environment and Climate Change Canada.

Special Weather Statement
Heat Dome

Extreme Heat ↔ Heat Wave

Heat Warning
Heat Emergency

Terms for hotter than normal temperatures that last for longer periods of time.

Special Weather Statement
Heat Dome

Extreme Heat ↔ **Heat Wave**

Heat Warning
Heat Emergency

Special Weather Statement
Heat Dome

Extreme Heat ↔ Heat Wave

**New official health-based
terms in British Columbia for
DANGEROUS hot temperatures.**

Heat Warning
Heat Emergency

Predicted Climate Change Impacts in Canada



These are examples and do not represent the full range of possible climate change impacts across Canada.

Predicted Climate Change Impacts in Canada



These are examples and do not represent the full range of possible climate change impacts across Canada.

Heat events are projected to become hotter, more frequent and longer lasting

Extreme Heat in Canada

Extreme heat is the leading cause of illness and death from weather related hazards in Canada.

Historic extreme heat events:

- **2009:** 156 heat-related deaths across British Columbia
- **2010:** 280 heat-related deaths across Quebec
- **2021:** 619 heat-related deaths across British Columbia



**Extreme Heat and Human Mortality:
A Review of Heat-Related Deaths in B.C.
in Summer 2021**

Report to the Chief Coroner of British Columbia

Release Date: June 7, 2022

**Coroner's report on heat wave that
led to 619 deaths says B.C. needs to be
better prepared for what's next**

JUSTINE HUNTER > AND ANDREA WOO >

VICTORIA, VANCOUVER

PUBLISHED JUNE 7, 2022

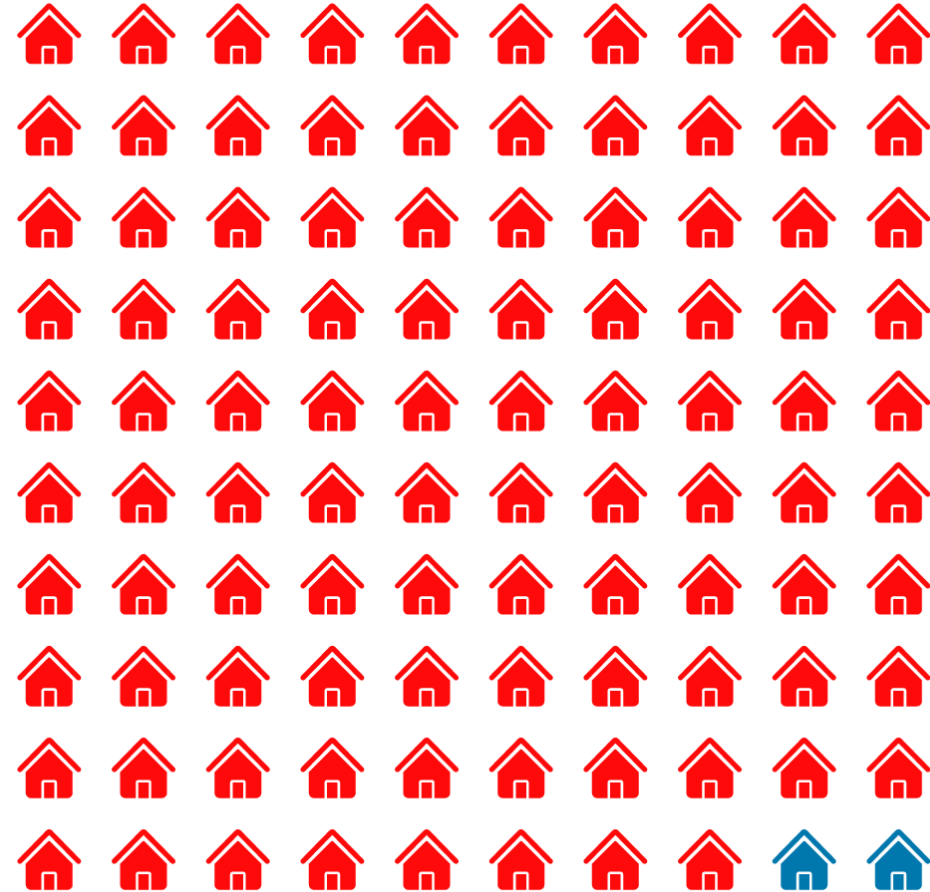
UPDATED JUNE 8, 2022

The Globe and Mail

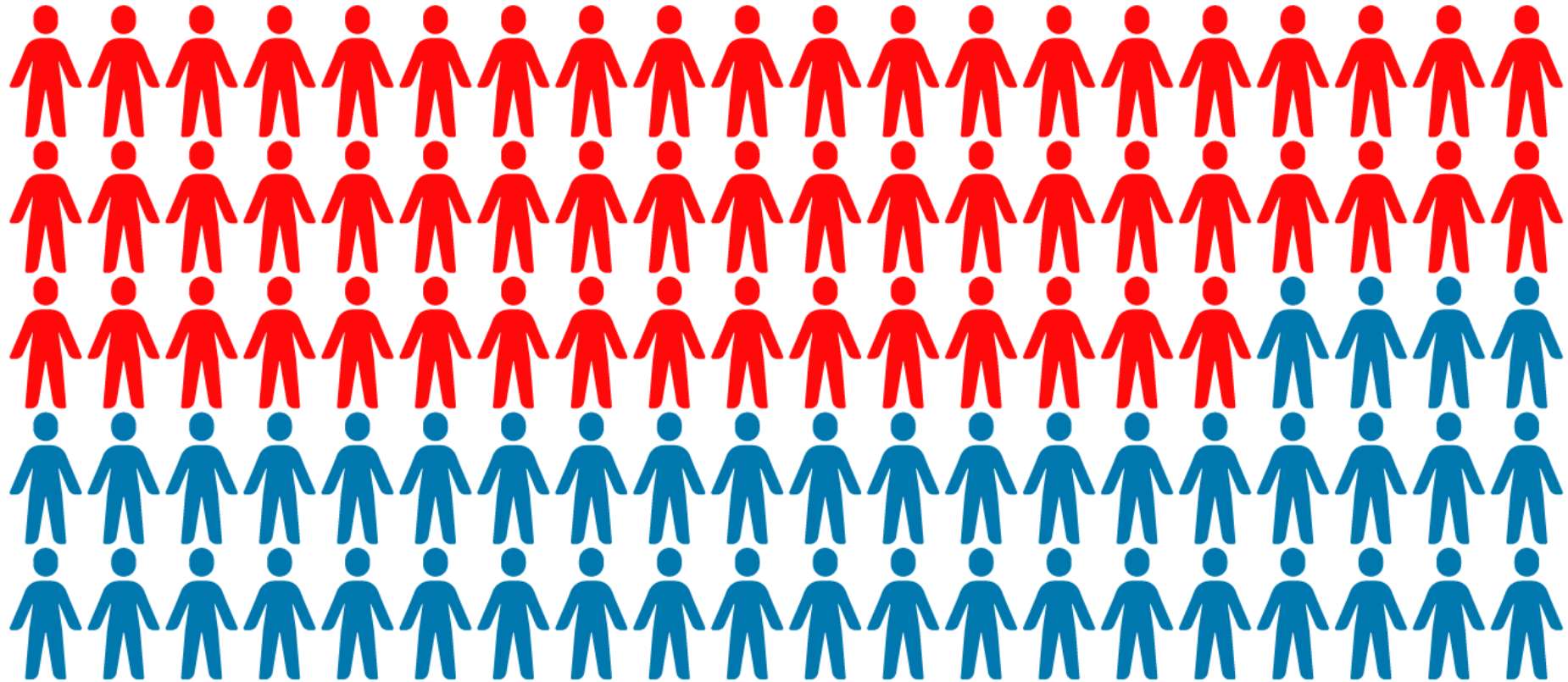
What did we learn....

98% of heat related deaths occurred indoors in a residence

[BC Coroners Service, 2022](#)



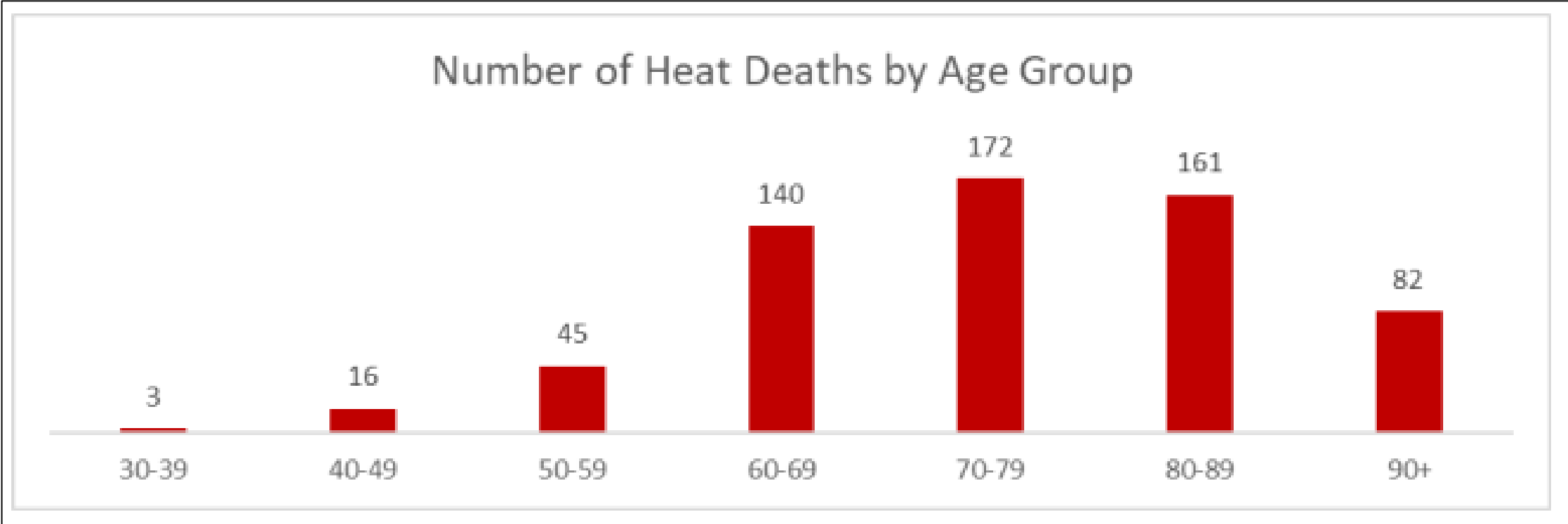
What did we learn...



56% of people who died due to heat lived alone

[BC Coroners Service, 2022](#)

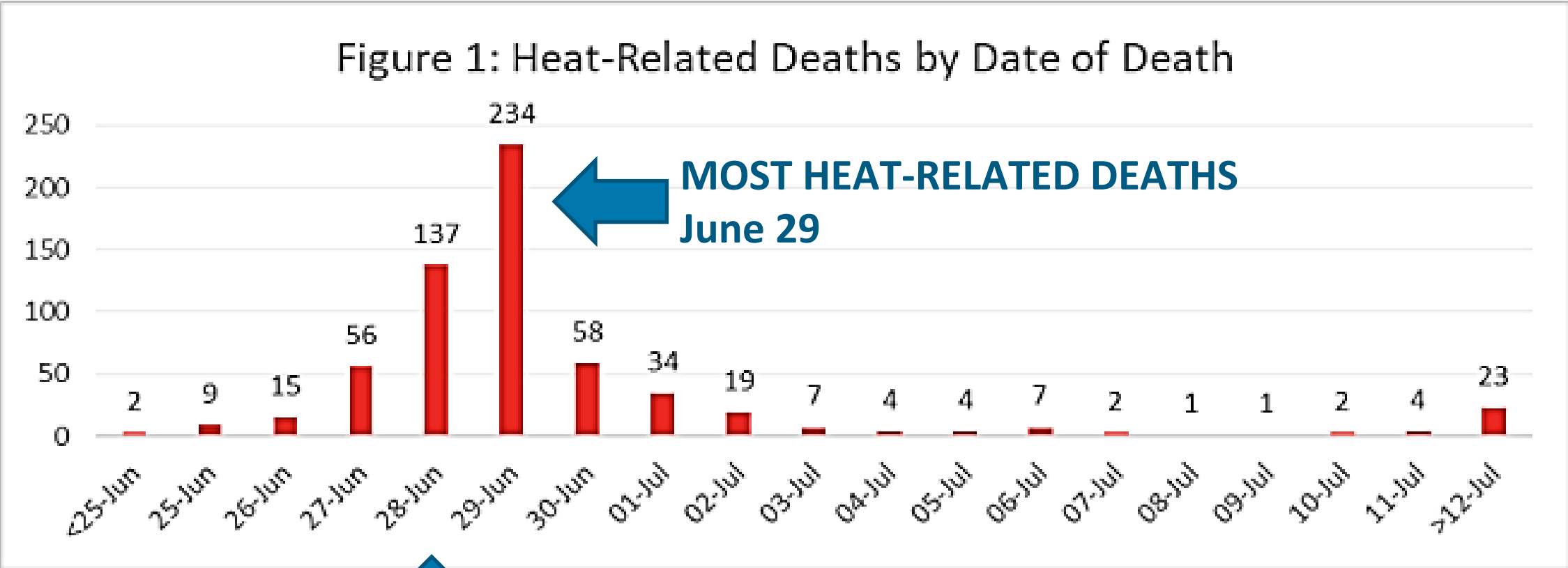
What did we learn



Risk varied by age.

[BC Coroners Service, 2022](#)

What did we learn



MOST HEAT-RELATED DEATHS
June 29

HOTTEST DAY
June 28

[BC Coroners Service, 2022](#)

Emerging Themes in Heat Risk:

Risk factors

- Deprivation
- Isolation
- Mental illness
- Substance use
- Pre-existing illness

Protective factors

- Privilege
- Greenspace
- Being in care

Source: BC Centre for Disease Control



Emerging Themes in Heat Risk:

Risk factors

- Deprivation
- Isolation
- Mental illness
- Substance use
- Pre-existing illness

Protective factors

- Privilege
- Greenspace
- Being in care

Source: BC Centre for Disease Control



Emerging Themes in Heat Risk:

Risk factors

- Deprivation
- **Isolation**
- Mental illness
- Substance use
- Pre-existing illness

Protective factors

- Privilege
- Greenspace
- Being in care

Source: BC Centre for Disease Control



Emerging Themes in Heat Risk:

Risk factors

- Deprivation
- Isolation
- **Mental illness**
- Substance use
- Pre-existing illness

Protective factors

- Privilege
- Greenspace
- Being in care

Source: BC Centre for Disease Control



Emerging Themes in Heat Risk:

Risk factors

- Deprivation
- Isolation
- Mental illness
- **Substance use**
- Pre-existing illness

Protective factors

- Privilege
- Greenspace
- Being in care

Source: BC Centre for Disease Control



Emerging Themes in Heat Risk:

Risk factors

- Deprivation
- Isolation
- Mental illness
- Substance use
- **Pre-existing illness**

Protective factors

- Privilege
- Greenspace
- Being in care

Source: BC Centre for Disease Control



Emerging Themes in Heat Risk:

Risk factors

- Deprivation
- Isolation
- Mental illness
- Substance use
- Pre-existing illness

Protective factors

- **Privilege**
- Greenspace
- Being in care

Source: BC Centre for Disease Control



Emerging Themes in Heat Risk:

Risk factors

- Deprivation
- Isolation
- Mental illness
- Substance use
- Pre-existing illness

Protective factors

- Privilege
- **Greenspace**
- Being in care

Source: BC Centre for Disease Control



Emerging Themes in Heat Risk:

Risk factors

- Deprivation
- Isolation
- Mental illness
- Substance use
- Pre-existing illness

Protective factors

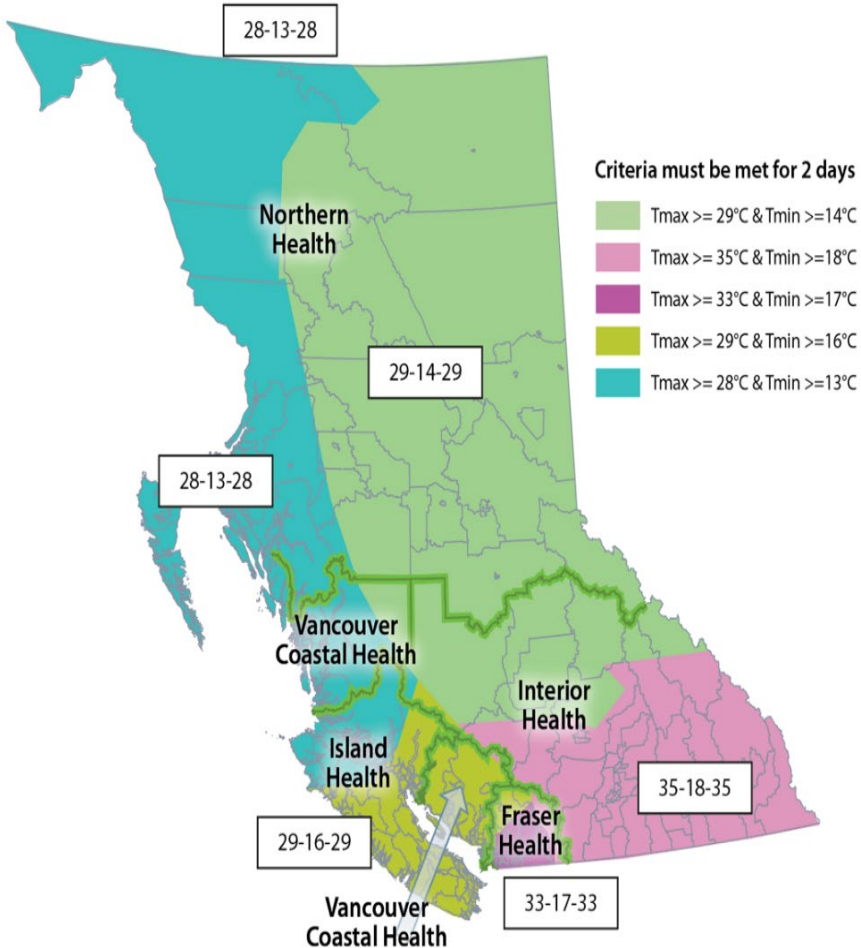
- Privilege
- Greenspace
- **Being in care**

Source: BC Centre for Disease Control



BC Heat Alert Response System

BC Regions



Alert level	Heat Warning (All of Canada)	Extreme Heat Emergency (Only BC)
Public health risk	Moderate (5% increase in mortality)	Very high (20% or more increase in mortality)
Descriptor	Very hot	Dangerously hot
Historic frequency	1-3 per summer season	1-2 per decade
Criteria	Southwest = 29-16-29* Fraser = 33-17-33* Southeast = 35-18-35* Northeast = 29-14-29* Northwest = 28-13-28* *(Daytime high, nighttime high, daytime high)	Heat warning criteria have been met and forecast indicates that daily highs will substantively increase day-over-day for 3 or more consecutive days

Alert Ready

- Alerting system used by provincial, territorial and federal government in Canada
- Intrusive alerts on television, radio and compatible wireless devices
- In British Columbia, Alert Ready may be used for level 2 heat alert: Extreme Heat Emergency.



How does this apply to you?

1. What is the heat warning process in your province or territory?
2. How is emergency information shared in your local community?
E.g. Alertable App or a community Facebook page
3. Is your team signed up for alerts and is there a plan to quickly notify the rest of the organization?

Agenda

- Extreme Heat
- **Heat Risk Factors**
- Why Heat Check-Ins?
- Heat Check-in Procedures
- Heat Check-In Training
- Additional Considerations (e.g. Wildfires)
- Resources

Physiological Vulnerability to Heat

The body's ability to cool is affected by:

- Age
- Pre-existing medical conditions: E.g. heart and lung disease, circulatory diseases, diabetes, neurological conditions, pregnancy
- Acute illness
- Medications and drugs
- Acclimatization





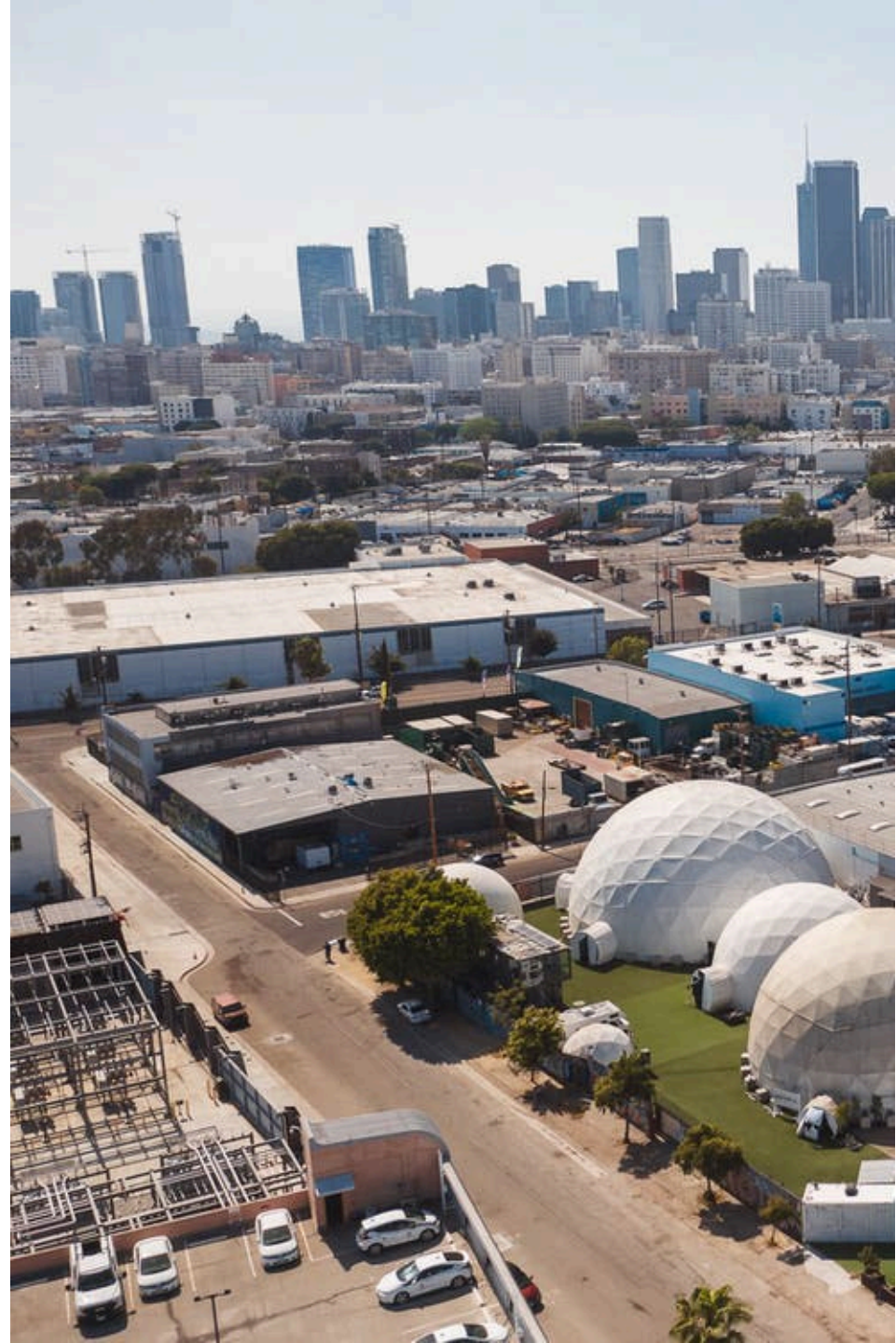
(Ben Nelms/CBC)

Social Vulnerability to Heat

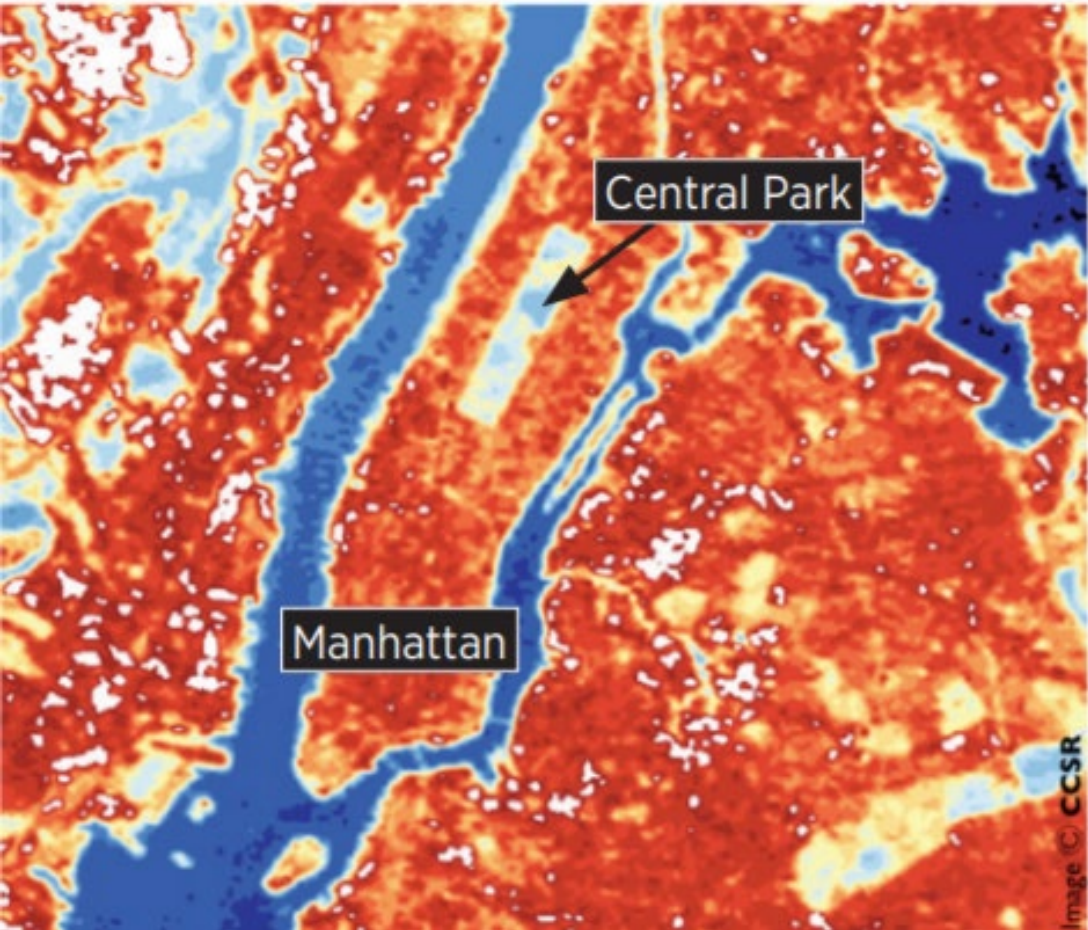
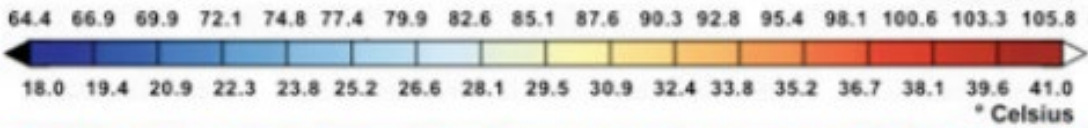
- Less access to cooling facilities and equipment (e.g. A/C)
- Social isolation and barriers to reaching help
- ***Socially*** vulnerable groups may be more likely to live in neighbourhoods with ***environmental*** vulnerability

Environmental Vulnerability to Heat:

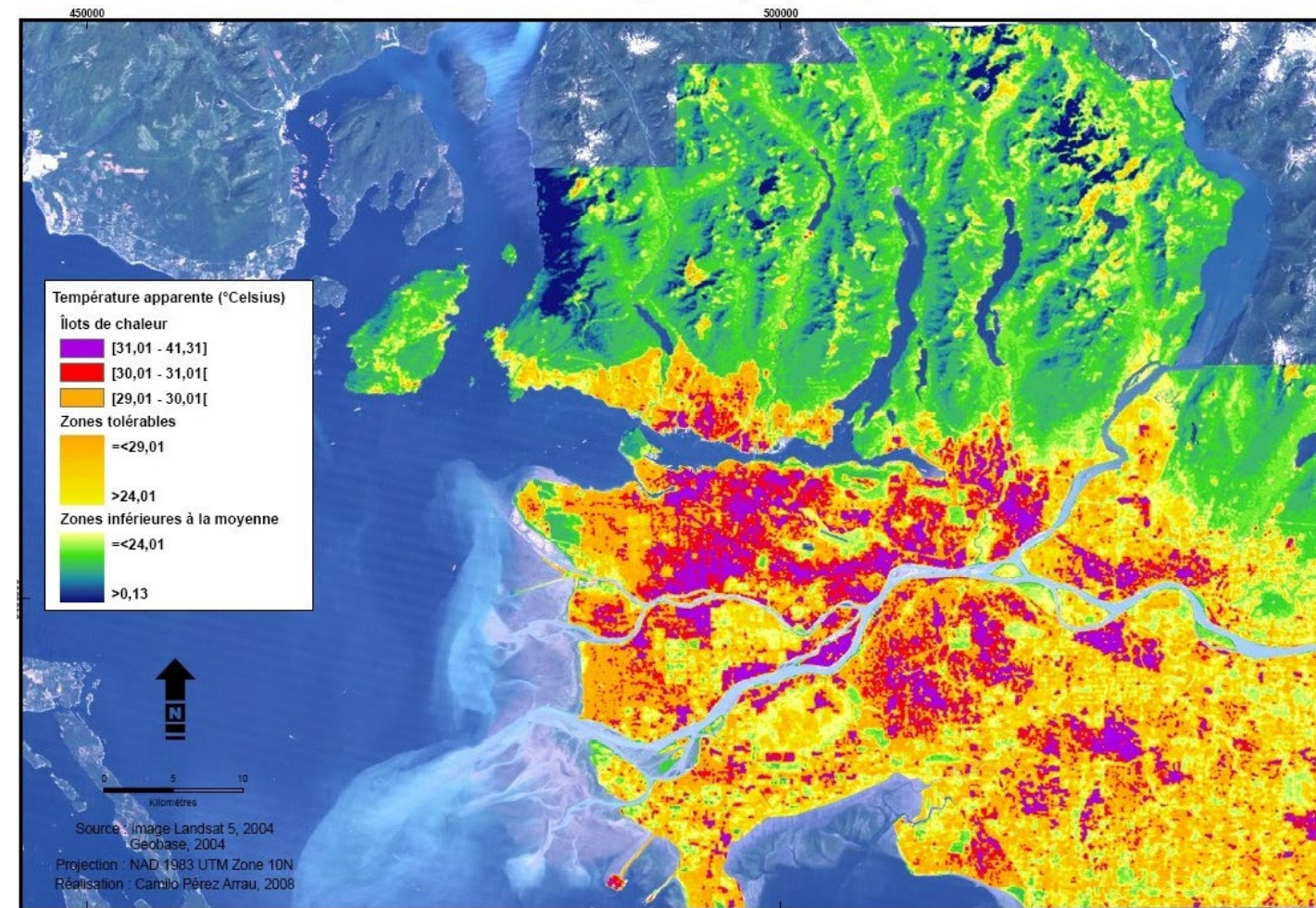
- Sparse vegetation
- Dark roofing and paving materials
- Lack of cool neighbourhood spaces
- Higher heat load in urban areas: “urban heat islands”



Urban Heat Island Effect



Température superficielle apparente dans la RMR de Vancouver le 17 juillet 2004
Classification de température selon la moyenne (24,01°C)



Housing Risk Factors

- No mechanical cooling (A/C)
- Higher floors of buildings
- Directly under the roof
- South and/or west facing windows
- Large window surface area
- Singled pane windows
- No external window shading
- No evening cross breeze
- Low neighborhood greenness

BCCDC





Dangerous Indoor Temperatures

- **Indoor temp over 26 °C (78 °F):**
Increasing risk of heat-related illness for heat-vulnerable people.
- **Indoor temp over 31 °C (88 °F):**
Significant risk of heat-related illness for heat-vulnerable people.
- Without A/C or other mechanical cooling, heat-vulnerable people in consistently high indoor temperatures are advised to move to a cooler space.

Heat Exhaustion Symptoms:

- Heavy Sweating
- Dizziness
- Nausea or Vomiting
- Rapid Breathing and Heartbeat
- Headache
- Difficulty Concentrating
- Muscle Cramps
- Extreme Thirst
- New Skin Rash
- Dark Urine & Decreased Urination
- Body temperature over 38 °C (100°F)

If possible, move them to a cooler location. Give them water. Cool the body with a cool shower, bath or wet their clothes.

Heat Stroke Symptoms:

- Body Temperature over 39 °C (102°F)
- Fainting or Drowsy
- Confusion
- Lack of Coordination
- Very Hot and Red Skin

HEAT STROKE IS A MEDICAL EMERGENCY

Seek medical attention immediately at an emergency room or urgent care centre. Call 911 if necessary. If possible, move them to a cooler location. Cool the body with a cool shower, bath or wet their clothes.

Agenda

- Extreme Heat
- Heat Risk Factors
- **Why Heat Check-Ins?**
- Heat Check-in Procedures
- Heat Check-In Training
- Additional Considerations (e.g. Wildfires)
- Resources

Extreme Heat and Human Mortality: A Review of Heat-Related Deaths in B.C. in Summer 2021

Report to the Chief Coroner of British Columbia
Release Date: June 7, 2022

Housing

In almost all (98%) of the deaths, the heat injury occurred indoors in a residence.

- 73% occurred in private residences (39% in multi-unit buildings and 34% in detached buildings);
- 10% occurred in social housing, single room occupancy (SRO), or supportive housing;
- 7% occurred in trailer homes, mobile homes, RVs, or campers; and
- 7% occurred in senior or long-term care homes (see Appendix 2, Table 7).

Living Situation

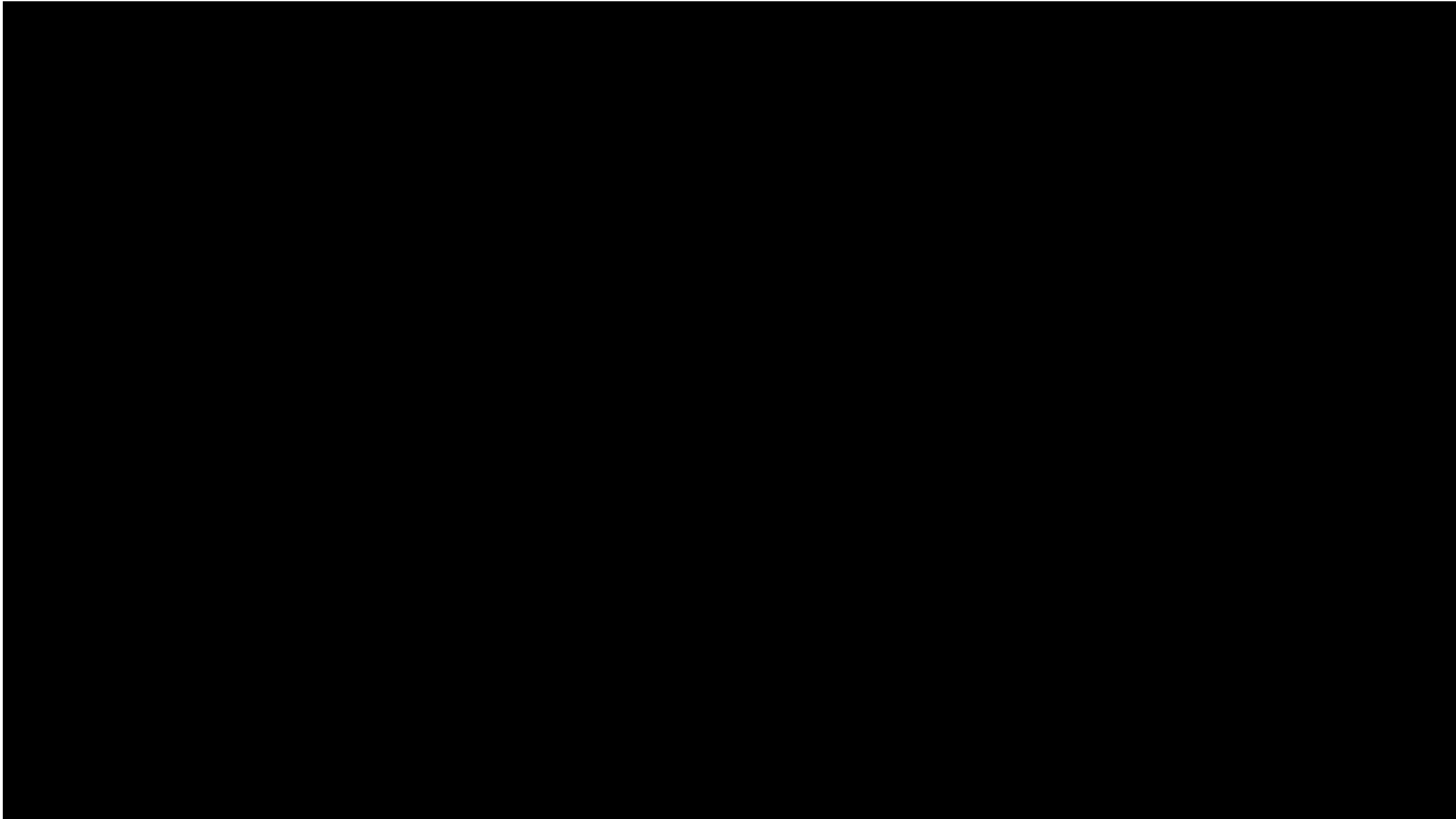
More than half (56%) of decedents lived alone, 30% lived with spouse or family members; 8% lived in community or assisted living situations (i.e. group home, senior homes, long-term care homes); and 5% lived with unrelated friends or roommates (see Appendix 2, Table 8).

Reason Found

Place of injury, living situations and social connectedness influenced why and when the deceased was found (see Appendix 2, Table 9).


Half of those who died were found during a wellness check. Wellness checks were completed by family or friends, support workers or health workers who attended the deceased specifically out of concern for their well-being, or were conducted by police due to reported well-being concerns.

32% of those who died were found by someone during regular or routine contact such as a family member returning home or during a scheduled routine visit.





Social connection as a public health adaptation to extreme heat events

Amani Kafety¹  • Sarah B. Henderson^{1,2} • Amy Lubik³ • Jesse Kancir² • Tom Kosatsky^{1,4} • Michael Schwandt^{1,2}

Received: 1 August 2019 / Accepted: 19 February 2020 / Published online: 16 March 2020
© The Author(s) 2020

Abstract

Climate change is an increasingly important public health issue, reflected in morbidity and mortality outcomes during extreme heat events. At the same time, the harms of social isolation with respect to a wide range of health outcomes are becoming better understood. Given that older adults are at higher risk during hot weather and at higher risk of social isolation, they are among those at highest risk for adverse impacts of extreme heat events. While specific strategies to reduce heat exposure have been described in the literature and promoted in public health practice, these may not be readily available to socially isolated older adults. As such, it is crucial to identify key approaches to address risk due to social isolation in the aging population, and to acknowledge their limitations and barriers. **Interventions rooted in social connection, a concept widely applied in interventions for public health and social well-being, should be applied as a tool for adaptation to extreme heat events.**

How does this apply to you?

1. What are the social connection points in your life and in your community?
2. How can you build social connection in your life, at work or within your community?

Check out [Hey Neighbour Collective](#) to learn more about building social connection.

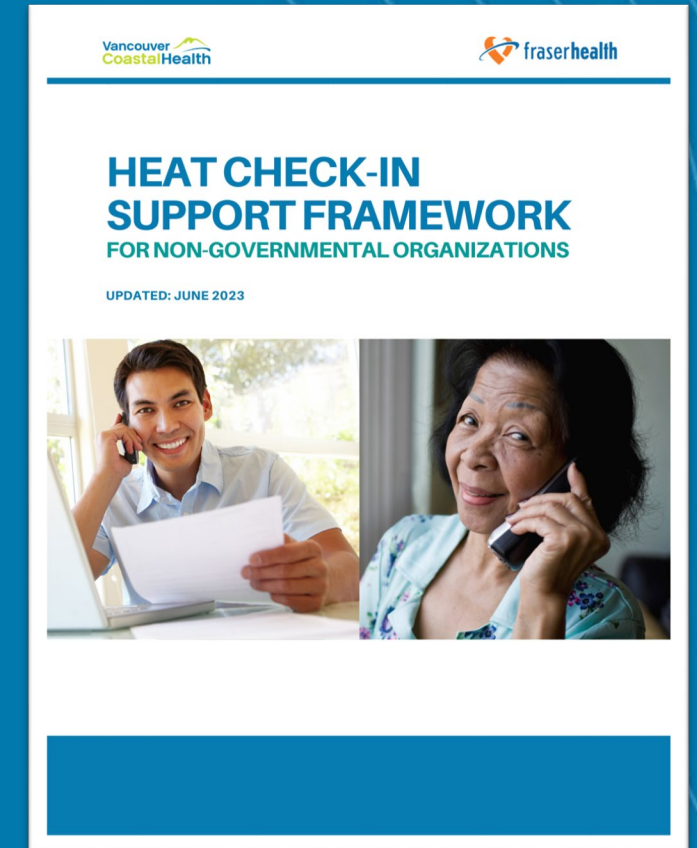


Agenda

- Extreme Heat
- Heat Risk Factors
- Why Heat Check-Ins?
- **Heat Check-in Procedures**
- Heat Check-In Training
- Additional Considerations (e.g. Wildfires)
- Resources

Agenda

- Extreme Heat
- Heat Risk Factors
- Why Heat Check-Ins?
- **Heat Check-in Procedures**
- Heat Check-In Training
- Additional Considerations
- Resources



Heat Check-Ins

What is a heat check-in?

Visit, call or text to a heat-vulnerable person to assess the heat-related safety of their home environment, if they show signs of heat-related illness and if they need help.

Who can do heat check-ins?

Anyone! Check-ins do not require health training and may be done by organizations or people in the community, such as neighbours, building managers or NGOs

Who to check on?

Heat-vulnerable people, especially those who have multiple risk factors and are socially isolated.



Heat Check-In Procedures: **Timing**

Starting heat check-ins:

Start when a Heat Warning or Extreme Heat Emergency is declared.

Ending heat check-ins:

Keep in mind the cumulative effect of heat over days, and that heat-vulnerable people may be at risk even after a heat alert has ended. Set plans based on at-risk communities.

Frequency:

At least once a day, regardless of the time. Increase the frequency of check-ins to multiple times a day for those most at risk, especially if an Extreme Heat Emergency is declared.



Heat Check-In Procedures: Staff and Volunteers

- **Who:** Staff, volunteers, redeployed teams?
- **Training:** Month, type of training, train-the-trainers?
- **Scheduling:** Coverage for weekends/ evenings and during emergencies.
- **Safety:** On-site, off-site.
- **Debriefs:** May be after challenging check-ins, each heat event and end of season.



Heat Check-In Procedures: Recipients

Consider:

- Identifying and registering people for check-ins before the season. Focus on those most at risk during extreme heat events.
- Discussing heat check-ins with the recipient and what their preferences are
- Coordinating with nearby community organizations, local governments, social or health services



Heat Check-In Procedures: Possible Outcomes

- **No Answer:** The procedure for no answer may depend on your organization's role, responsibilities and the previous interactions with an individual.
- **Hand-Offs:** When there is limited capacity, consider assigning check-ins to another reliable person, like an emergency contact, so your organization can free up time to prioritized individuals that are more isolated.
- **Emergencies:** Who will call? Do you have all the information needed?



Heat Check-In Procedures: Operations

Documentation

- What will be recorded?
- How will it be recorded?
- How will privacy be maintained?
- How will personal information be secure stored?

Equipment

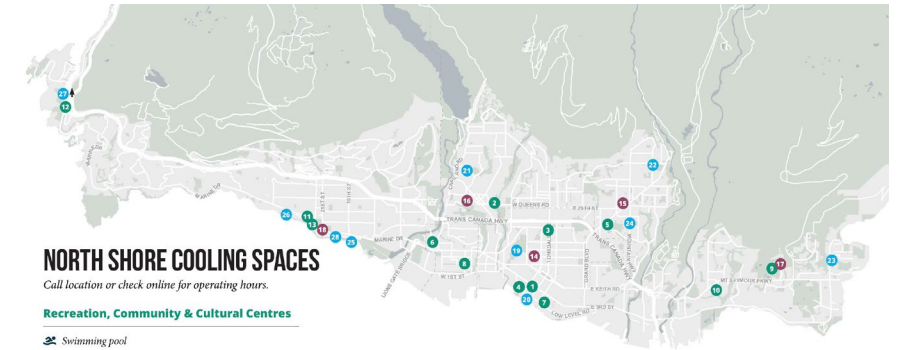
- Phone check-ins
- In-person check-ins
- To cool people and spaces



Heat Check-In Procedures: Local Scenarios

Prepare for scenarios with the population you serve, in the spaces and communities that you work.

- What questions will your community likely ask?
- What resources are nearby? When are they available? Consider both public and private options.
- How will you share information?
- Can you coordinate with nearby community organizations, local governments, social or health services?



Keeping Cool in Vancouver DOWNTOWN EASTSIDE/STRATHCONA



- Library Cooling Centres
- Community Centre Cooling Centres
- Misting Stations
- Spray Parks
- Wading Pools
- Handwashing Stations
- Drinking Fountains

How does this apply to you?

1. Will any of this be useful as you develop procedures or to add to existing procedures?
2. Is there opportunities to seek feedback from check-in recipients and build that into procedures?



Agenda

- Extreme Heat
- Heat Risk Factors
- Why Heat Check-Ins?
- Heat Check-in Procedures
- **Heat Check-In Training**
- Additional Considerations (e.g. Wildfires)
- Resources

VCH Heat Check-Ins Training Package

Resources:

- Extreme Heat Check-Ins: Train-the-trainer video
- Extreme Heat Check-Ins: Training video
- Heat Check-In Practice Scenarios: Facilitation Guide
- Heat Check-In Practice Scenarios
- Heat Check-In Support Framework for NGOs
- Example Heat Check-In Script



Format

Length: 2 hours (approximately)

Location: In-person or online

Participants:

- No previous health or first aid training required.
- May be staff/ volunteers conducting check-ins or attending for their awareness (e.g. maintenance, admin or managers)

Facilitators:

- Previous first aid or health training is an asset but not required. Heat check-in training is about working as a team to learn, practice and plan.

Training Agenda		
Time	Format	Content
45 min	Presentation	<ul style="list-style-type: none">• Extreme heat events• People/ spaces at high risk from heat events• Signs of heat-related illness• Ways to cool people and spaces• Heat check-ins• Wildfire smoke• Available resources
75 min	Practice Scenarios	<ul style="list-style-type: none">• Practice using the heat check-in script and going through a variety of scenarios with a partner.• After each scenario, we will discuss responses, local resources and answers to common questions.

Scheduling

- Consider filling out or emailing team leads the pre-training checklist.
- Send participants the agenda and resources.
- Adjust the training scenarios and session length based on the needs of the group.

Pre-Training Checklist

Please send to facilitator:

1. **What type of check-ins do you plan to run?** E.g. In-person, phone or a combination
2. **Approximately how often do you hope to check-in?** E.g. once a day, more if they are high risk
3. **What information will staff/ volunteers have before contacting the person?** E.g. name, number, address, emergency contact, etc.
4. **Any scenarios from previous summers or the populations you work with that you would like to include in the training?**
5. **Approximate number of attendees.**

For the training day, please provide all participating staff/ volunteers with:

1. **Any scripts and documentation forms staff/ volunteers will use during check-ins.**
2. **Facility procedures for:**
 - **No answer** (the person does not respond)
 - **Hand-offs (If applicable).** If available, will your organization assign check-ins to another reliable person, like an emergency contact, to free up time to prioritize individuals that are more isolated? If yes, how will your organization document handoffs and confirm that the other person understands what to do during a heat emergency.
 - **Calling 911.** Will staff call or will the check-in recipient call? Will staff call back to confirm? Will it be documented?
 - **Other relevant procedures you want to practice**

Facilitation: In Person

Facilitators

- Can be run with one facilitator but for larger groups it may help to have additional facilitators to assist during the scenarios.

Equipment

- Printed heat check-in script for each participant
- Printed practice scenarios, one per pair
- Printed questions for 911 calls
- Printed heat check-in procedures or participants bring this with them from their organization
- Audio visual set up with sound capabilities for the presentation

Space

- Chairs for participants during the presentation and enough space for people to work in pairs or groups of three during the scenarios



Facilitation: **Online**

Facilitators

- One facilitator and one tech host

Equipment

Email ahead of the session and drop links in the chat.

- Heat check-in script
- Practice scenarios
- Questions for 911 call
- Heat check-in procedures or participants bring this with them
- Check that the online platform you are using has closed captions and breakout rooms.

Space

- Together as one big group for the presentation and after each scenario to discuss how things went.
- Breakout groups in pairs for the scenarios.



Heat Check-In Steps

1. Introduction

- Confirm identity and address

2. Check the Person

- Check for heat-related illness and help as needed.

3. Check the Space

- Check for high indoor temperatures and risk factors that may cause the space to heat up.

4. Provide Education

- How to cool people. How to cool spaces. When to go to a cooler space and nearby options. When to seek medical attention.

5. Wrap-Up

- Anyone else who can check on them? When is the next check-in? Any questions?



Scenario Instructions

- In pairs or a group of three
- Partner #1 asks the questions on the script to practice conducting a check-in.
- Partner #2 reads the scenario and pretends to be the check-in recipient. Provide answers from the scenario description and add details as needed.
- When the check-in is complete, switch roles.
- Once each partner has practiced, the large group comes back together to discuss.
- How did it go? What went well? What was challenging? Any creative ideas? Anything to flag for later?





Scenarios 1-3

Scenario 1:

- Practice going through a full, first check-in. Each partner practices the same scenario. Allow 15-20 minutes total.

Scenario 2:

- Practice a 3rd check-in with possible signs of heat stroke. Each partner practices the same scenario. If they are calling 911, practice the 911 questions. Allow 10-15 minutes total.

Scenario 3A:

- Practice managing a check-in with a language barrier. Only partner 1 practices this scenario. Allow 5-10 minutes.

Scenario 3B

- Practice calling an emergency contact. Only partner 2 practices this scenario. Allow 5-10 minutes.



Scenarios 4-5

Scenario 4A:

- Practice a check-in with high heat risk but the recipient does not want to leave their pet. Only partner 1 practices this scenario. Allow 5-10 minutes.

Scenario 4B

- Practice a check-in where the recipient has run out of food and medication. Only partner 2 practices this scenario. Allow 5-10 minutes.

Scenario 5A:

- Practice a check-in where the recipient wants answers to health questions. Only partner 1 practices this scenario. Allow 5-10 minutes.

Scenario 5B

- Practice a check-in where the recipient is anxious about the heat event. Only partner 2 practices this scenario. Allow 5-10 minutes.

Questions

- Work as a team to brainstorm local solutions.
- As much as possible, ask people receiving check-ins what their preference would be.
- Check out the *Quick Facts* section of the *VCH Heat Check-In Support Framework for NGOs* for answers to common questions.
- In British Columbia, call 8-1-1 for non-emergency medical questions and call 9-1-1 for medical emergencies. 9-1-1 call takers are trained to triage and assist with emergencies.



Evaluation

- Prepare paper or email evaluation forms for participants to fill in after the session
- Consider how feedback can be incorporated into future training
- As needed, send follow-up resources or plan additional training if the group has questions or wants more practice.

VCH Heat Check-In Training Feedback Form

Your feedback is essential to improving Heat Check-In Training. All responses are anonymous. The feedback goes to VCH and your leadership team. Thank you very much for taking the time!

BEFORE the training, what was your knowledge of these topics?

	A lot	A little	None at all
Extreme heat. E.g. risks, ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heat check-ins	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

AFTER the training, has your knowledge of these topics increased?

	A lot	A little	None at all
Extreme heat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heat check-ins	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

After the training, do you feel ready to try heat check-ins?

Yes

No

Other...

What aspects of the training were **most useful**? Please check all that apply.

Checkboxes

How does this apply to you?

1. How would you modify or add scenarios that reflect your community. E.g. the population you serve, the environments you work in and the equipment available.
2. Is there scenarios from past heat events or situations your staff/ volunteers want extra practice with?

Agenda

- Extreme Heat
- Heat Risk Factors
- Why Heat Check-Ins?
- Heat Check-in Procedures
- Heat Check-In Training
- **Additional Considerations (e.g. Wildfires)**
- Resources

WILDFIRE SMOKE

Older adults, infants, young children, pregnant women and people with chronic conditions are especially sensitive to health effects of wildfire smoke and should take extra care.



COMMON SYMPTOMS

- Lung Irritation
- Eye Irritation
- Runny Nose
- Sore Throat
- Headaches
- Mild Cough

MORE SEVERE SYMPTOMS

- Shortness of breath
- Severe cough
- Dizziness
- Chest discomfort
- Heart palpitations
- Wheezing

Anyone with these symptoms needs medical attention

Wildfire Smoke Vulnerability

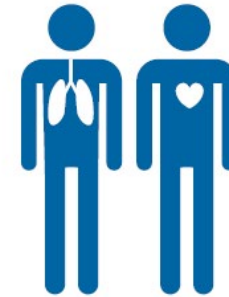
More **sensitive**

- People with pre-existing medical conditions such as asthma and cardiovascular disease
- Infants, young children, and people who are pregnant
- Older adults

More **exposed**

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

THOSE MOST AFFECTED



PEOPLE WITH CHRONIC
LUNG/HEART DISEASE



OLDER
ADULTS



PREGNANT
WOMEN



INFANTS,
YOUNG CHILDREN

Image source: <http://www.bccdc.ca/health-info/prevention-public-health/wildfire-smoke>

Heat and air quality together

Key for both heat and smoke events:
COOL (A/C), CLEAN (HEPA Filter) indoor air

- Heat and air pollution affect your body in different ways, but some people have vulnerabilities that make them susceptible to both
- **Heat is a greater immediate health risk than smoke for most people, so cooling should generally be prioritized**
- Speak with a healthcare provider and check out the BCCDC Smoke Webpage for more information



Other Heat Season Supports

- **Prepare an organizational heat plan:** See resource section of [VCH Heat Check-In Support Framework for NGOs](#)
- **Distribute heat information:** Check out the [VCH Heat Webpage](#) for translated resources
- **Run a community workshop or distribute cool kits to community members:** Check out the [VCH and City of Vancouver Cool Kits](#)
- **Run a community workshop box fan air filter workshop:** Check out the [BCCDC Home-Made Box Fan Air Filter Factsheet](#)
- **Open a cool space:** See the VCH guide: [Creating Cooling Spaces During Hot Weather](#)



CREATING COOLING SPACES DURING HOT WEATHER
GUIDANCE FOR COMMUNITY ORGANIZATIONS

VANCOUVER COASTAL HEALTH

JUNE 6TH 2023

How does this apply to you?

1. Is there other scenarios that may happen in your community at the same time as a heat event? E.g. smoke, drought or flooding.
2. How might staffing or operations be impacted by multiple events at the same time?

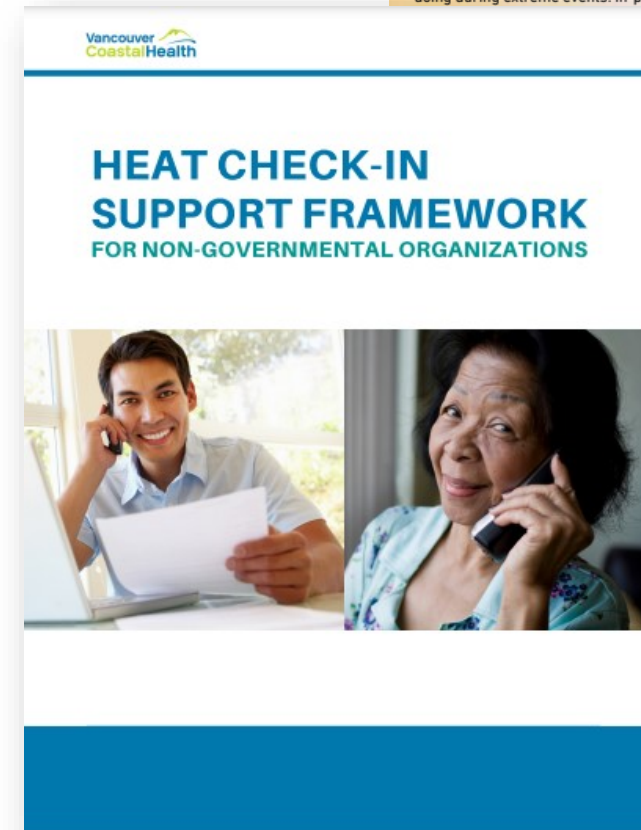


Agenda

- Extreme Heat
- Heat Risk Factors
- Why Heat Check-Ins?
- Heat Check-in Procedures
- Heat Check-In Training
- Additional Considerations (e.g. Wildfires)
- Resources

Heat Check-In Resources

- [VCH Heat Check-In Support Framework for NGOs](#): Procedural considerations, script, workflow, 5 pages of quick facts and additional resource links.
- [Renfrew Collingwood Seniors Society Emergency Support Framework](#): Registration form and lessons learnt.
- [NCCEH Health Checks During Extreme Heat Events](#): Heat Check-In Guide
- [MOSAIC Heat Check-In Resources](#): Script and training materials for multilingual check-in calls



Rapid risk assessment checklist

To assess whether someone is at risk, check all the personal factors that apply on the following list. **The more boxes checked, the higher the potential risk.**

<input type="checkbox"/> Older adult (60 years+)	The body's ability to cool itself is impaired as people age.
<input type="checkbox"/> Mental illness or cognitive impairment	Conditions such as schizophrenia, depression, anxiety, and dementia can reduce awareness of heat-related risks.
<input type="checkbox"/> Chronic disease	Chronic diseases such as diabetes, heart disease, respiratory disease, and cancer can limit the body's ability to cool.
<input type="checkbox"/> Living alone or socially isolated	People who live alone or do not have strong social connections are at higher risk because they have fewer people looking out for them.
<input type="checkbox"/> Substance dependency or use	The ability to sense and respond to heat can be affected by use of drugs or alcohol, especially for those who are dependent.
<input type="checkbox"/> Impaired or decreased mobility	People with impaired or reduced mobility might be less able to take protective measures during extreme heat events.
<input type="checkbox"/> Medication use	Some prescription medications for common conditions can cause dehydration and affect the body's ability to cool itself.
<input type="checkbox"/> Poor physical fitness	People who are not engaged in regular physical activity are less able to keep cool in the heat.

Extreme Heat Resources

PreparedBC Guide: preparedbc.ca/extremeheat

- Make a plan for heat season (translated)

VCH Heat Webpage: vch.ca/heat

- Extreme heat poster (translated)
- Resources for the public, community organizations, building owners/ operators, businesses, licensed facilities, people who use substances, etc.

VCH/ City of Vancouver: vancouver.ca/hot-weather

- DIY Cool Kit using everyday household items (translated)

EXTREME HEAT

Some people are impacted by the heat more than others. People over 65, people with multiple health conditions, people who use substances, people on certain medications, people who are pregnant, infants and young children may need extra care.

HEAT EXHAUSTION SYMPTOMS

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

Anyone with these symptoms should be moved to a cool space, given plenty of water to drink, and cooled down with water applied to the skin (see "Cool Off" section below).

HEAT STROKE SYMPTOMS

- High body temperature
- Fainting or decreased consciousness
- Confusion
- Lack of coordination
- Very hot and red skin

CALL 911 OR SEEK MEDICAL ATTENTION
Submerge some or all of the body in cool water, remove clothes and apply wet towels.

Spending time in a COOL SPACE is the best way to prevent heat-related illnesses.

COOL OFF

- Go to a cool space (e.g. community center, library, café, home of a friend or family, sites with air conditioning).
- Use water to cool off: Take a cool shower, sit or put legs in a cool bath, wear a wet shirt, apply damp towels to the skin.
- Fans may not effectively reduce body temperatures or prevent heat-related illness in people at risk. Do not rely on fans as your primary cooling method during an Extreme Heat Emergency.

CHECK-IN

- Pay attention to how you feel, and watch for symptoms of heat illness in those around you. Monitor indoor temperature. Check-in multiple times a day on others who are at increased risk.

DRESS FOR THE HEAT

- Wear loose-fitting, light-colored, breathable clothing.

STAY INFORMED & PLAN AHEAD

- Check the weather forecast and heat alert information. Take it easy during the hottest times of the day.

KEEP THE SPACE COOL

- Keep shades and blinds closed during the day. If you don't have air conditioning, close windows during the day to trap the cooler air inside and open windows at night to let the cooler air in. Use circulating and exhaust fans to move cooler outdoor air into the space overnight.

HYDRATE

- Drink plenty of water, and offer it to those in your care.

For more information on the symptoms of heat-related illness, how to prepare for the heat season and stay healthy in the heat: www.vch.ca/heat

During the summer months, both heat and wildfire smoke can be a health concern. Find out more about wildfire smoke: www.vch.ca/wildfire/smoke

Fraser Health, Vancouver Coastal Health, and other logos are present at the bottom.

Wildfire Smoke Resources

British Columbia Centre for Disease Control:

[Wildfire Smoke Webpage](#)

- Health guidance, translated fact sheets, DIY Box Fan Filters, etc.

Vancouver Coastal Health: vch.ca/wildfiresmoke

- Health effects of smoke exposure, risk factors and recommended actions.

Government of Canada: [Air Quality Health Index](#)

- Health guidance for general public and people at risk for each level of air quality alert.



The BCCDC has created fact sheets with information about wildfire smoke and its health impacts, including information on how to prepare for wildfire season. You can view and download the fact sheets here:

- [Health effects of wildfire smoke](#)
- [How to prepare for the wildfire smoke](#)
- [Portable air cleaners for wildfire smoke](#)
- [Wildfire smoke and air quality](#)
- [The composition of wildfire smoke](#)
- [Wildfire smoke and outdoor exercise](#)
- [Wildfire smoke and Air Quality Health Index](#)
- [Home-made box air fan filters](#)
- [Face masks for wildfire smoke](#)
- [Wildfire smoke during extreme heat](#)
- [Translated Content](#)

WILDFIRE SMOKE

Different people respond differently to smoke. People with chronic conditions, people who are pregnant, infants and small children, older adults and people with respiratory infections may need extra care.

SYMPTOMS	MORE SEVERE SYMPTOMS
<ul style="list-style-type: none">• Sore throat• Eye irritation• Runny nose• Mild cough	<ul style="list-style-type: none">• Phlegm/mucous production• Wheezy breathing• Headaches• Shortness of breath• Severe cough• Chest pain• Heart palpitations• Dizziness

Anyone with these symptoms needs medical attention

REDUCING EXPOSURE to wildfire smoke is the best way to protect health.

STAY INFORMED & PLAN AHEAD

- Check the latest local air quality readings and advisories regularly.
- Pay attention to how you feel, and watch for symptoms in those around you.

HYDRATE

- Drink plenty of water, and offer water to those in your care.

RELOCATE

- Go to local libraries, community centers or other public spaces that have central air conditioning and cleaner air.

REDUCE EXPOSURE

- Reduce outdoor physical activities and stay indoors when smoke is heavy.

COOL & FILTER

- Filter indoor air using portable HEPA air filters.
- Keep windows and doors closed during high smoke times; but on hot days, make sure the indoor temperature is at a comfortable level because heat can be dangerous.
- Use energy efficient, mechanical cooling in addition to portable air cleaners to create cool spaces with clean air for hot days.

Further information on the health effects of wildfire smoke, how to prepare for the season, and the use of portable air cleaners can be found at www.vch.ca/wildfiresmoke

During the summer months both wildfire smoke and heat can be a health concern. Find out more about heat at www.vch.ca/heat

Logo: Fraser Health, Vancouver Coastal Health, Health Canada



Official Weather Information

Environment and Climate Change Canada (ECCC):

- [Online Weather Alerts for British Columbia](#)
- [WeatherCAN App](#)
- [Hello Weather: Automated telephone forecasts](#)
 - Helpful option for people who cannot access the internet or smart phones
 - **English:** 1-833-794-3556 or 1-833-79HELLO
 - **French:** 1-833-586-3836 or 1-833-58METEO

Thank You

healthy.environments@vch.ca
www.vch.ca/heat