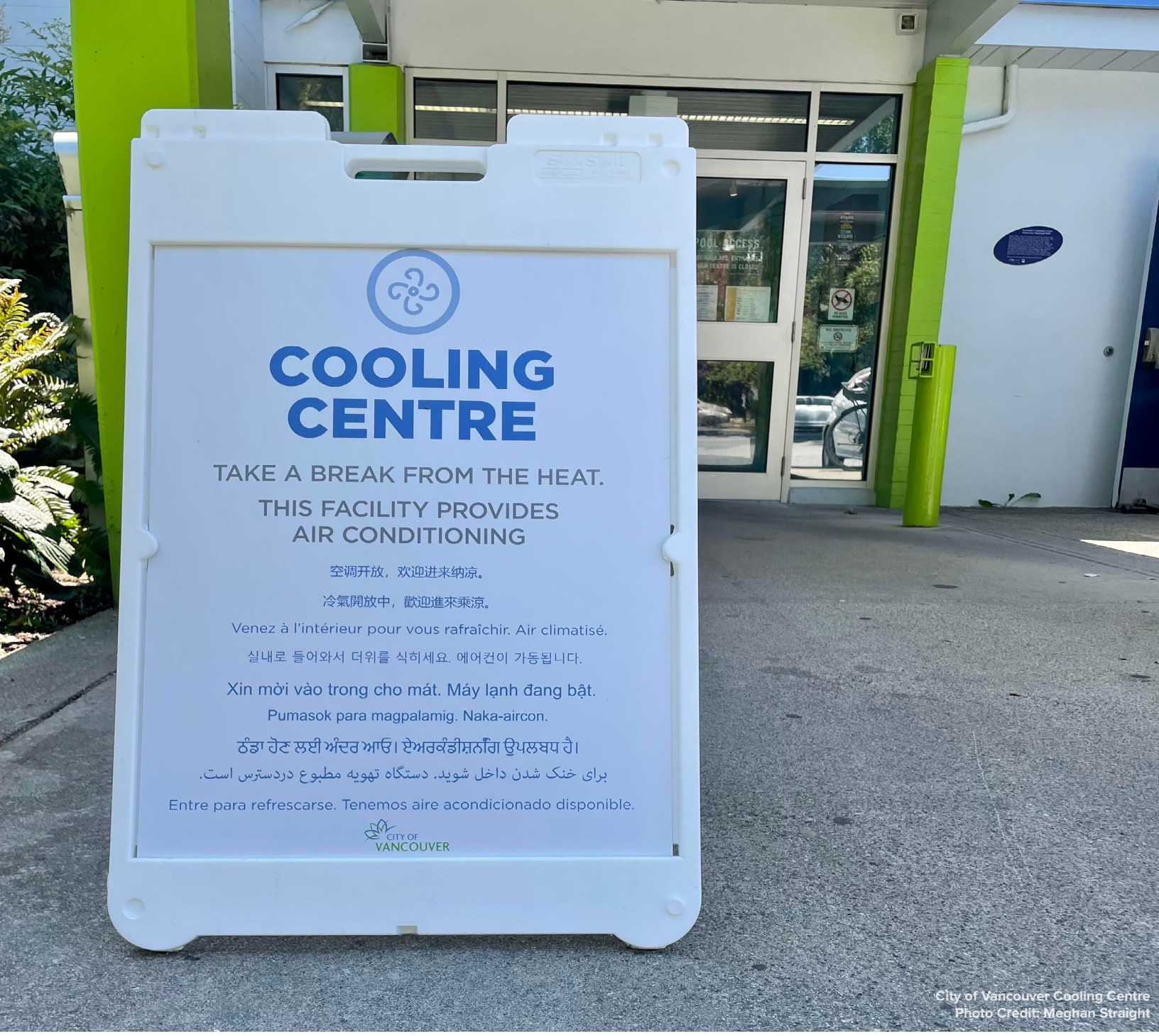

City of Vancouver Cooling Centre
Photo Credit: Meghan Straight

CREATING COOLING SPACES DURING HOT WEATHER

GUIDANCE FOR COMMUNITY ORGANIZATIONS

VANCOUVER COASTAL HEALTH

JUNE 6TH 2023

Vancouver Coastal Health

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The work of VCH takes place on the traditional unceded homelands of fourteen First Nation communities and three Metis Chartered communities in the region, 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. The office where this work was carried out is located on the unceded territories of the Musqueam, Squamish, and Tsleil-Waututh Nations.

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Protecting health during hot weather

Hot weather can negatively impact health, in some cases leading to serious illness or death. Heat-related illness is an umbrella term for conditions caused by heat, such as heat rash, heat cramps, heat exhaustion, and, the most severe, heat stroke. Anyone with signs of heat exhaustion should move to a cool space, drink water, and apply cool water to large areas of the skin. Heat stroke, on the other hand, is a medical emergency and those experiencing it must seek medical attention immediately at an emergency room or urgent care centre. More information on both conditions can be found at www.vch.ca/heat.

Different people respond differently to heat, and some people are at higher risk of negative health effects, including:

- older adults (i.e. over 60)
- people who live alone
- people with mental health conditions such as schizophrenia, depression, or anxiety
- people with other health conditions such as diabetes, heart disease, or respiratory disease
- people who use substances, including alcohol
- people with limited mobility and other disabilities
- people who are marginally housed
- people who work outdoors or in hot environments
- people who are pregnant
- infants and young children

Risk for heat-related illness typically increases when indoor temperatures are over 26°C (78°F) and significantly increases when indoor temperatures reach over 31°C (88°F). Without air conditioning or other mechanical cooling, alternative cooling measures such as adjusting window shades may only decrease indoor temperatures by a few degrees. **Ideally, housing design and actions taken keep our homes under 26°C (78°F), but if that is not possible people are advised to seek cool spaces in the community.**

People's bodies work very hard to stay cool when it is hot, and work even harder for people at higher risk from heat. Spending time in a cool space allows the body to rest and take a break from fighting the heat. It is recommended that people spend at least two hours at a time in a cool space, but ideally they should spend as much time as possible, especially in the afternoon and early evening when indoor temperatures peak. **People may feel refreshed from the time spent in the cool space, but once someone returns to a hot environment, the risk of heat-related illness returns.** After leaving a cool space, people should continue monitoring the indoor temperature of their home and take actions to cool their body.

Cooling spaces and/or centres ("cooling spaces" hereafter) can provide an option for those who may not otherwise have access to cool indoor spaces during hot weather. However, there can be various barriers for people to access cooling spaces. For example, people who are marginally housed may not feel welcomed or accommodated when they cannot bring their possessions into a cooling space. Making cooling spaces accommodating, equitable and culturally safe maximizes their ability to protect health during hot weather.

Purpose

This document provides evidence-informed public health guidance for community organizations to set up and operate inclusive, acceptable, and effective cool spaces. The intended audience is varied, based on our understanding that although local, regional, and First Nation governments assume a primary role in emergency management, community-based organizations—and their volunteers—help to create a whole-of-community approach when preparing for and responding to hot weather.

Definitions

The terms “cooling centre” and “cooling space” are often used interchangeably, as they refer to similar goals. We propose several distinctions in the table below. Note that this is new terminology and not all organizations will implement this immediately or uniformly.

	Cooling Centre	Cooling Space
Purpose	» Specifically identified and advertised as a “Cooling Centre” during the heat season, as outlined in the BC Heat Alert Response System (BC HARS) » Offer air conditioning or cool indoor temperatures	» Already-operating spaces; role may be expanded during heat season to including access to cooling » Offer air conditioning or cool indoor temperatures
Open to	» All members of the public	» Can be either: • Public (e.g. local government buildings) • Semi-public (e.g. Non-government organizations (NGOs) or faith-based spaces) • Private (e.g. common rooms in apartment buildings)
Operated by	» Typically local government staff	» Wide variety of operators, including: • NGO staff • Trusted community members / organizations • Business owners
Examples	» Dedicated community centre or school gymnasiums	» Libraries » Faith-based spaces » Cafes and commercial spaces


Photo Credit: Unsplash

Under an inclusive definition of cooling spaces, both for-purpose local government sites and the pre-existing community sites contribute to overall capacity for cooling in a community. Having different options increases availability, accessibility, and acceptabilitiy of these spaces and provides an opportunity for people to select which cooling options will work best for them. Examples of different cooling spaces are provided in the table below.

	Public	Semi-Public	Private
Entry Requirements	» Open to all	» Open to some » May be targeted to specific populations or uses	» Open to some » May be specific to existing residents or members
Examples	» For-purpose cooling centres » Community centres » Libraries » Other civic spaces	» Malls and private businesses » NGOs » Faith-based spaces » Movie theatres » Shelters » Neighbourhood Houses	» Common rooms in residential or commercial buildings

A broad and diverse set of cooling spaces can support community members who may not otherwise access conventional civic cooling centres. Consider purposeful programming for community members who are at higher risk and may not intentionally seek a cooling space. For example, space operators can provide targeted on-site programming for seniors or other groups, and support social connection to create attractive cooling spaces during the day.

Outdoor cooling spaces can also provide refuge from unsafe hot indoor temperatures if cool spaces are not available. These can include shaded parks or bodies of water. Some of these spaces may not sufficiently cool individuals at higher-risk of heat-related illness. All of the guidance from this document still applies to outdoor cool spaces, and BC Housing also has guidance available.

Guidance

ACTIVATION

Following BC Heat Alert and Response System (HARS) protocols, cooling spaces operated by local authorities should be activated during a declared heat alert. Community organizations may choose to activate their own cooling spaces at this time as well. Depending on organizational capacity, the community served, and other considerations, an operator may choose to activate cooling spaces earlier or to keep them running longer than the heat alert. The decision to open or close a site on borderline days may be nuanced. In case of questions, VCH recommends consultation with the local public health program (information included in this document).

Primary considerations for operation

There are several considerations for operating a cooling centre and/or space that contribute to a user's health and wellbeing. Space operators should aim to keep spaces at or below 26°C (78°F) to reduce risk for individuals at highest risk from heat-related illness.

The following are also recommended for operators of cooling spaces:

- Consistent and protective hours of operation (e.g. staying open during the afternoon and evening when temperatures in buildings are at their highest, and considering overnight hours during extreme heat emergencies)
- Drinking water
- Accessible washrooms
- Seating

Cooling spaces are only effective when community members know they are available. Approaches to broaden communication channels and community awareness include:

- Social media platforms—e.g. Facebook, Twitter
- Low tech, high touch spaces—e.g. posters on doors, elevators, or in washrooms
- Word of mouth—e.g. announce during community programs or ask frontline staff to promote
- Signage visible from the street—e.g. sandwich boards, community message boards
- Alternative tech spaces—e.g. WhatsApp groups for newcomer seniors
- Local media—e.g. radio stations, newsletters, or local news papers
- Translated advertising materials

Best and promising practices

In addition to the primary considerations, numerous considerations can support and increase the use of cooling spaces. These approaches may support attendance, increase the duration and length of visits, and help to protect the health of community members.

SUPPORTIVE ENVIRONMENTS

- Culturally safe spaces[2]
- Free from discrimination and stigma[3]
- Low barriers to entry (e.g. no ID required)
- Accessible for people with a variety of abilities (e.g. sensory needs, mobility)[4]
- Staff training including trauma-informed practice, harm reduction and de-escalation (contact VCH to learn about training opportunities using details at the end of this document)

AMENITIES

- Secure places to store belongings, including strollers and mobility devices. This is particularly important for supporting access among people experiencing homelessness
- Welcoming approach for pets
- Snacks or meals, or access to food close by
- Microwaves and fridges
- Reusable ice/gel packs, towels
- Private and quiet spaces
- Variety of comfortable seating options (e.g. chairs with arm rests)
- Free masks and hand sanitizing stations

SUPPORT SAFETY WITH SUBSTANCE USE

- Keep naloxone kits onsite and have staff trained to respond in the event of an overdose[5]
- Provide harm reduction supplies for people using substances (sharps container, clean needles if possible)
- Make bathrooms safer for people who use substances and have staff check bathrooms on a regular basis[6]
- Consider utilizing peer volunteers and staff to support attendees

ENGAGEMENT, EDUCATION, AND PROGRAMMING

- Wi-Fi, charging outlets, and tables
- Offering programs and/or activities, such as cards, games, books and magazines
- Spaces for children to play, toys
- Opportunities for social connection
- Educational materials on heat and health in multiple languages

SUPPORTIVE FACTORS

Governments at all levels, health authorities, and communities may consider coordinating to enhance accessibiility and acceptability.

- Geographic coverage and proximity to people who require cool spaces—for example, by 2030 the City of Barcelona aims to have a cooling refuge site within a five-minute walk for the entire population
- Availability of reliable, affordable, and accessible transportation options, including shuttles
- Funding for operational costs of a cooling space may be available—connect with your local government to see if funding is possible
- Operators are encouraged to collect quantitative/anecdotal information about the use of their service and to share this with partners engaged in similar work, where this does not present a barrier to access
- Some jurisdictions publicly list participating sites and provide stickers that are displayed on sites—for example, Toronto's Heat Relief Network members are publicly listed and can identify themselves on the door. Barcelona also uses a window decal for its rapidly expanding network of sites

Other considerations

While disinfection and reducing risk of communicable disease is important, extreme heat is a more immediate risk for most people and should be prioritized. Precautions for communicable disease should not conflict with cooling space operations. See considerations below to reduce transmission of communicable diseases and contact your local public health program for consultation as needed. Reducing communicable disease risks during heat waves will allow more community members, including those who are immunocompromised, to access cool spaces.

Good practices to minimize the spread of communicable diseases during heat events include:

PROMOTE HAND HYGIENE AND RESPIRATORY ETIQUETTE

- Support proper handwashing, surface cleaning, and food handling
- Support decisions to wear masks, including with availability of free masks

SUPPORT LINKAGE TO MEDICAL ASSESSMENT IF NEEDED

- Nurse hotline (8-1-1) is available for non-emergent clinical assessment—be prepared to contact emergency officials in the case of severe illness requiring medical assistance
- In the case of a medical emergency, including heat stroke as described in this document, support immediate access to health care (calling 9-1-1 if neceessary)

ENSURE ADEQUATE VENTILATION AND FILTRATION

- Maximize air flow and filtration where possible, including through building HVAC systems

COMMUNICABLE DISEASE CONTROL INFORMATION

- Gastroenteritis Infections: Information for shelters, drop-ins, and social housing facilities
- Mask usage: Follow current public health guidelines on mask/face covering usage
- WorkSafe BC: Communicable disease prevention: A guide for employers

Additional support

For support with applying this guidance to community spaces, please contact the VCH Health Environments & Climate Change program at healthy.environments@vch.ca or 604-675-3800. Public health staff including Environmental Health Officers and Medical Health Officers can provide advice as needed.

Resources

1. PreparedBC. (2023). Extreme heat preparedness guide.

2. Northern Health. (2017). Cultural safety: Respect and dignity in relationships.

3. Toward the Heart. (2023). Reducing stigma.

4. Centers for Disease Control and Prevention. (2020). Disability inclusion.

5. Providence Health Care and Vancouver Coastal Health (2018). Opioid overdose: Management of suspected opioid overdoses in community settings.

6. Canadian Institute for Substance Use Research, University of Victoria. (2022). The safer bathroom toolkit.