# Eileen Dailly Leisure Pool & Fitness Centre 240 Willingdon Ave.

# 2022 HEAT EVENTS SUMMARY



# City of Burnaby

Community Safety | Emergency Management 4949 Canada Way, Burnaby, BC V5G 1M2

Prepared: 2023 March



# **Land Acknowledgement**

The lands which we today call the city of Burnaby are located on the ancestral and unceded homelands of the han q amin am and Skwxwú7mesh speaking peoples. They have been the stewards of these lands for time immemorial.

We extend to them our humble gratitude and appreciation for the opportunity to live, work, learn and play on this shared territory.

# Recognition

Following the unprecedented heat events during the summer of 2021 and the heat-related deaths that resulted, the City established an Extreme Heat Planning Working Group tasked with identifying strategic interconnections between departments, Fraser Health Authority, and the many dedicated Burnaby-based community partners to find feasible and reasonable solutions to mitigate heat-related illness and deaths in Burnaby during periods of extreme heat. The culmination of the efforts of these groups resulted in the creation of the City's Extreme Heat — Operational Response Plan and a portal to enhance communication and connection with nongovernment community-lead programs and support.

For the second year, the Society to End Homelessness in Burnaby and their Extreme Weather Heat Response working group were instrumental partners to the City efforts. They liaised with and linked into their networks to distribute heat health awareness information across their channels. Their two cooling locations provided respite and support to vulnerable populations and complemented the City's four cooling sites and response actions. To them we extend our sincere appreciation for their efforts.

# **Dedication**

This report is dedicated to the memory of Cst. Shaelyn Yang, Regimental number 66231 (December 21, 1990-October 18, 2022). Cst. Yang was a member of Burnaby RCMP and served on the Police Mental Health Outreach Team. She was part of Burnaby RCMP's Outreach Team during the periods of heat during the summer of 2022.

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# **Executive Summary**

August 2022 was the second hottest month ever recorded in British Columbia history. The province experienced six periods of high temperatures over a two month period with temperatures in some regions reaching highs of 35° Celsius.

The province established the BC Health Effects of Anomalous Temperatures Coordinating Committee (BC HEAT Committee) in January 2022 to improve public health coordination around extreme hot weather for summer 2022 and the years following based on the experiences and learnings from the record-breaking high temperatures during the heat dome in late June 2021 and the substantial impacts on both ED visits and deaths that were observed. The BC HEAT Committee created a two-tier heat alert and response system (HARS) for the province, and the BC HARS: 2022 (BC HARS) was launched June 2022.

The City of Burnaby activated its Extreme Heat Initial Response Guideline to coordinate the City's response activities for the six heat events of 2022. Numerous measure were implemented to protect public safety and provide alternatives for the public to mitigate adverse health effects cause by heat exposure.

- Cooling centres were opened and available to all members of the public offering a barrier-free cool space, seating, water for hydration, free Wi-Fi, access to power outlets, immediate first aid, if required., and \$1 showers.
- Emergency Management coordinated four Cooling Centre Open House events which
  included experts from Environment and Climate Change Canada, Fraser Health's Public
  Health and Health Built Environment divisions. Representatives also shared information
  on the City's extreme heat planning efforts and tips on ways to keep cool during hot
  weather. The Open Houses oriented the public with where the Cooling Centres would be,
  and gave attendees the opportunity to learn about programs and services provided by
  community partners.
- Public Affairs and Corporate Marketing and Communications initiated a wide-reaching communications campaign about the cooling centres which was shared via: enewsletters; on the city's website and social media channels; and, on posters and postcards which were placed at all city facilitated, distributed to vulnerable populations through outreach efforts by RCMP, and distributed by Bylaw Enforcement staff to many multi-family buildings where residents may be a higher risk to heat exposure.
- Risk Management and Social Planning staff liaised Fraser Health and other members of the Burnaby Inter-Agency Council to share information, resources, and strategies for community-lead heat-related illness prevention programs.

- Citizen Support Services conducted telephone wellness checks with clients registered with their programs.
- Burnaby RCMP assigned dedicated teams to outreach to vulnerable populations, check on well being and share both heat health information and the cooling site locations.
- City Parks Operations worked together with the Task Force to End Homelessness in Burnaby and their Extreme Weather Heat Response working group to provide two sites, storage and access to services for their outdoor cooling sites which were set up in shaded areas in both Civic Square and Kensington Park.

Climate change is having and will continue to have short and long-term regional impacts, including warmer summer days and nights, drier summers, continued sea level rise, stronger and more frequent extreme rainfall events, and wetter winters. (Metro Vancouver, 2016)



Figure 1:Sophie (chocolate Labrador Retriever) and a family member using a collapsible bucket filled with cool water to help them get relief from the heat, July 2022. (Photo courtesy of M. Lawrence)

# Introduction

Extreme heat events continue to create high amounts of risk for the most vulnerable populations. The Province of British Columbia, municipal governments, community organizations and community partners have been creating and implementing supports to reach the population that become victims of extreme weather. Rising temperature throughout the province continue to have profound implications on the overall health and safety of the population.

#### Climate and Weather

#### Weather tells you what to wear each day.

Weather is the mix of events that happen each day in the part of Earth's atmosphere that is closest to the ground—called the troposphere. Many different factors that can change the atmosphere in a certain area like air pressure, temperature, humidity, wind speed and direction, and altitude, proximity to water bodies, etc. Together, they determine what the weather is at a given time and location.

#### Climate is tells you what types of clothes to have in your closet.

Climate describes what the weather is like over a long period of time in a specific area. Different regions can have different climates. To describe the climate of a place, we might say what the temperatures are like during different seasons, how windy it usually is, or how much rain or snow typically falls.

When scientists talk about climate, they're often looking at averages of precipitation, temperature, humidity, sunshine, wind, and other measures of weather that occur over a long period in a particular place. In some instances, they might look at these averages over 30 years, called Climate Normals.

While descriptions of an area's climate provide a sense of what to expect, they don't provide any specific details about what the weather will be on any given day. (NOAA, 2020)

#### **Previous Heat Events of Note**

The heat events of 2021 including the dangerous and deadly heat dome that occurred in late June and early July revealed that the Province of British Columbia was unaccustomed and unprepared for such extreme temperatures. 815 sudden deaths of all cases and ages (B.C. Coroners Service, 2021) were reported province-wide, with 69 per cent, or 569, preliminary attributed as heat-related deaths by the BC Coroners Service. This heat event identified the necessity for the implementation of extreme weather protocols and procedures to ensure the safety of the residents of British Columbia.

# Changes to BC HARS

The Fraser Health and Vancouver Coastal Health Authorities were early adopters of Heat Alert and Response System (HARS), putting into effect a HARS in 2017. Following the devastating Heat Dome and subsequent heat events across British Columbia in 2021, the FHA/VCH model has now been integrated into the province-wide two-tiered BC HARS: 2022.

BC HARS: 2022 integrates existing heat alert criteria currently used by ECCC in issuing a heat warning in B.C. while also incorporating new criteria called Extreme Heat Emergency. in the 2017 model, the terminology Heat Health Emergency was used to recognizes the impacts on mortality rates linked to dangerous temperatures. The 2022 terminology *Extreme Heat Emergency* simplifies language and strives to improve understanding of the dangers to public health attributed to high temperatures.

The ECCC heat warning criteria for the lower mainland was introduced 2012. In 2018 the National Heat Warning program was introduced and ECCC implemented a province-wide heat warning criteria. ECCC modified the heat warning criteria in 2020 to include nighttime temperatures.

Location	Threshold Criteria
British Columbia – Southwest – Western Metro	Issued when 2 or more consecutive days of
Vancouver including the North Shore, City of	daytime maximum temperatures are expected
Vancouver <sup>1</sup> and Richmond, Howe Sound,	to reach 29°C or warmer and nighttime
Whistler, Sunshine Coast, Vancouver Island	minimum temperatures are expected to fall to
(except northern sections	16°C or warmer
British Columbia - Southwest inland - Eastern	Issued when 2 or more consecutive days of
Metro Vancouver including Coquitlam and	daytime maximum temperatures are expected
Surrey, and the Fraser Valley	to reach 33°C or warmer and nighttime
	minimum temperatures are expected to fall to
	17°C or warmer.

<sup>&</sup>lt;sup>1</sup> Determined by ECCC as Vancouver, Burnaby, New Westminster

(ECCC, 2020)

A newly developed and more dangerous *Extreme Heat Emergency* replaced the BC HARS: 2018 *Heat Health Emergency* that had been specific to Southwest BC. Extreme Health Emergency emphasizes the risk to public health when high temperatures increase day over day.

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(BC HEAT Committee, 2022)

# Extreme Heat Operational Response Plan

The City's Extreme Heat Operational Response Plan (EH-ORP) was developed as an Annex to the Extreme Heat Initial Response Plan. It provides City leadership and personnel with specific operational activities and assignment of responsibility for those tasks extended from the response planning. This plan is flexible and can be adjusted as routines continuously change throughout an extreme heat event.

For simplicity and consistency, the EH-ORP activation triggers utilize the alert criteria of the BC HARS.

#### **Crisis Communications**

Public Affairs developed a two phase communication strategy for the EH-ORP which can also be utilized as and when necessary during periods of heat.

Phase 1 is the pre-heat event phase where awareness communication is shared. This includes providing general awareness for the public about cooling centres, locating resources, and how to prepare for heat events. This information is shared through the "Ways to Stay Cool in City Parks Campaign" and is disseminated using City Connect newsletter, property tax bills, posters and postcards at City facilities, Burnaby's website and social media channels.

Phase 2 is for periods when the EH-ORP is activated or City officials deem appropriate. These communications amplify the warnings issued by the health authorities and Environment and Climate Change Canada (ECCC) - when the EH-ORP is activated - and provide notice to the public regarding open cooling centres and where to find resources for cooling information. These messages are urgently shared by the City through our community partner networks, on the Burnaby website and social media channels. During EH-ORP activation, alerts are also sent to subscribers of via Alertable, the city's public alerting system.

This communications strategy was effective as it overlapped messaging issued by Provincial Public Health, and the local health authorities - Fraser Health and Vancouver Coastal Health.

# Community Partner "Base Camp"

A virtual workspace platform pilot. called "Base Camp", was developed by Fraser Health. Its purpose was/is to improve extreme heat communication and response coordination between Fraser Health, the City and the numerous community-based organizations throughout Burnaby. Base Camp's success stemmed from virtual communication, announcements and document sharing between participating agencies & organizations. Base Camp users included Fraser Health multiple City departments and 16 community partner organizations.

The virtual workspace allowed for documents to be uploaded as resources, instant messaging to enquire about any questions, concerns or share information without ceremony, and create group chats

between members to share and discuss specific information. A total of 39 people joined, over 50 documents were uploaded and shared, and 30 messages were sent through the messaging board – primarily pertaining to activation and deactivation of the City cooling centres.

Base Camp users appreciated having a portal for collaboration and communication. Social Planning has secured funding through the BC Healthy Communities Age-Friendly Grant to develop a multi-sectoral, community-based extreme heat response plan. The plan will include the continuation of the Basecamp platform as well as broader outreach strategies to reach vulnerable populations.

# **2022 Summer Weather Events**

Between June 21 and September 23 – the 2023 summer season - six (6) weather events were observed that had periods of high temperatures; but, only three (3) of these events had daytime high/overnight low combinations that met the criteria for Environment and Climate Change Canada (ECCC) to issue Heat Warnings.

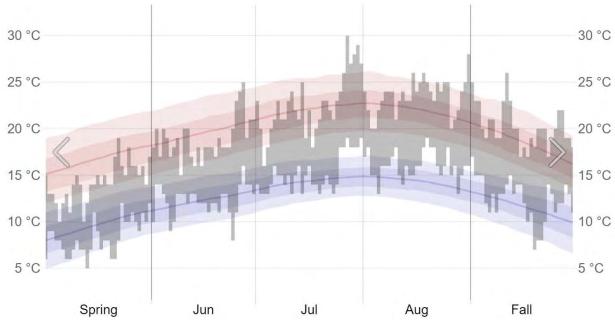


Figure 2: Temperature Summary 2022

None of the heat warning periods reached conditions that met the criteria for the BC HEAT Committee to declare an Extreme Heat Emergency as per the BC HARS.

All the extreme heat events of the summer season in 2022 resulted from a building ridge of high pressure that brought increasing temperatures to the provinces south coast. The record breaking Heat Dome of summer 2021 occurred closely following the summer solstice, as did the first period of heat experienced in 2022.

# Response Statistics

			ECCC Heat			
Period	Highest Max Temp (°C)	Highest Min Temp (°C)	Warning Issued	Cooling Cntr <sup>1</sup> Visits	Cooling Site <sup>2</sup> Visits	Check-In Calls <sup>3</sup>
Jun 25-27	29.1	15.2	Yes	273	135	0
Jul 25-Aug 1	30.7	19.2	Yes	1,844	573	2,757
Aug 08-09	26.6	17.6	No	318	582	620
Aug 16-18	29.0	17.5	Yes	460	436	509
Aug 23-25	28.0	18.0	No	492	443	495
Aug 30-Sep 1	29.2	16.7	No	191	484	463

- 1. Cooling Centres are managed and staffed by the City of Burnaby. They operate indoors within city facilities as identified in the city EH-ORP.
- 2. Cooling Sites are managed and staffed by the Society to End Homelessness in Burnaby, They operate outdoors with equipment and supplies provided by the Society. Sites are identified by the Society and assigned and allotted by the City.
- 3. Check-in calls noted here are specific to those made by the City to clients of the various programs delivered by Citizen Support Services.

#### **Fatalities**

There were a total of 16 deaths in British Columbia during 2022 attributed to heat related illness. These occurred during the period of July 26 through to August 03, with 5 deaths recorded on July 29.

Fifty-percent (50%) or 8 deaths were in the Fraser Health region with the other 50% occurring in the Interior Health region. RCMP noticed an uptick in sudden death calls between July 26 and August 1.

(BC Coroners Service, 2022), (BC Death Review Panel, 2022)

# Comparison of Heat-related Deaths in BC: 2022 vs. 2021



# **Response Measures and Actions**

# **City of Burnaby**

#### **Communications**

Public Affairs, developed a communications strategy for pre-heat (spring) and during heat communications to the public. This included a May article in the City Connect newsletter and in the property tax notices reaching all homes in Burnaby, translation of our Extreme Heat posters, postcards and digital media posts into both traditional and simplified Chinese, Punjabi and Korean, simple and clear signage - including sandwich boards, pop-up banners and posters - identifying the site and location of the City's Cooling Centres, the resharing of key messages from ECCC and Fraser Health via our social media channels, the issuance of cooling centre information alerts to subscribers of Alertable, the City's public alerting system, and 4 Cooling Centre Open House information sharing events held in May.



Figure 3: City of Burnaby Twitter post from 2022Jun26

Digital information sharing was augmented by the inclusion of cooling centre, cooling site, drinking water fountain and misting stations on the City's WebMap.

Communications were supplemented by email distribution from Social Planning staff to members of the Burnaby Interagency Council, a 40+ member network of Burnaby-based community service providers, and provincial and federal elected officials and their respective constituency offices.

# **Cooling Centres**

During the summer 2022 season, a total of six activations were initiated for Cooling Centres that resulted in 2626 visits (reoccurring visits).

The duration of each opening ranged from three to ten days. The cooling centre hours of operation were 10:00am to 10:00pm. These hours were increased from previous years based on feedback from city residents.

The cooling centres were inclusive, barrier free, and welcoming to any and all individuals seeking relief from the heat. Individuals were welcome to stay as long as they needed and these was plenty of seating. The cooling sited included access to water (bottles and fillable stations), wall outlets for charging personal devices, air conditioning, washrooms and \$1.00 showers.

The cooling sites utilized the common lobby areas of each facility. This ensured protection from the high temperatures by providing an air conditions space allowing staff the availability to observe visitors for signs of heat-related illnesses and perform first-aid if necessary.

NOTE: Any public buildings can be a cooling centre during extreme weather events. The public should seek out conveniently located cooler areas such as community centres, libraries, temples, churches, mosques, synagogues or other places of worship, theatres, indoor shopping malls, amenity rooms in buildings, etc. to get a break from the heat.



Figure 4: Cooling Centre at Bonsor Recreation Complex



Figure 5: Cooling Centre at Eileen Dailly Pool Lobby

# **Outdoor Misting Stations**

Outdoor misting stations (aka misting poles) have been permanently installed across the city for heat relief. These amenities have the same operational timeline as drinking water fountains and are winterized and turned off during winter.

In 2022, misting poles were erected in 4 parks:

- Willingdon Heights Park
- Bell Park
- Maywood Park
- Burnaby South Memorial Park

The procurement and installation of a further misting poles is slated for 2023.



Figure 6: Misting Pole

# High Risk Building Poster Campaign

Property Use Coordinators undertook a poster campaign targeting multi-family low-rise walkup buildings located within the areas highlighted in the report Impacts of Extreme Heat Events on Emergency Department Visits and Deaths in Fraser Health, 2021. This campaign, while labour intensive, received feedback from the public that the posters were well-received and the community supported its continuance .

The list of multi-level buildings have been identified as high risk to extreme heat events base on income levels, disabilities and age range. Posters are displayed in these buildings common areas to provide important information on extreme heat events. This information includes, how to identify symptoms for heat related illnesses such as heat exhaustion or heat stroke, tips on staying cool, information on cooling centres, how to get notified about extreme heat events and where to seek out additional information. The objective of this campaign is to provide information to residents that will enable them to prepare for these events and become resilient.

# **Citizens Support Services**

#### **Wellness Checks**

The Citizen Support Services contact vulnerable individuals by phone each day to ensure they are able to keep cool and are not experiencing any symptoms of heat related illnesses. Further steps are taken if needed based on the information gained by these calls. The citizen support services was made up of members of the staff and volunteers.

#### **Grocery Program**

Citizen Support continued their grocery programs where seniors were able to order groceries to their house so they could continue to keep themselves cool rather than travelling to and from a grocery store.

#### RCMP Outreach Teams

RCMP patrol teams were sent to reach out to vulnerable individuals and provide them with care packages. The care packages contained water, electrolytes, sunscreen, lip balm, and a cooling pad. These teams visited 41 vulnerable people and handed out 40 care packages. This was received well and was a proactive part of the Mental Health Outreach Team's work.



Figure 7: Burnaby RCMP Heat Care Package

# Social Planning

The City received a BC Healthy Communities Age-Friendly Grant to develop a multi-sectoral, community-based extreme heat response plan. The plan will include the furtherance of the Basecamp platform and broader outreach strategies to reach vulnerable populations. United Way Lower Mainland will support the implementation of this plan.

The Planning department is partnering with the UBC Sustainability Scholars program to employ a graduate student to research and develop a retrofit toolkit for different building types in response to extreme heat. A final report on this initiative is anticipated to be completed in August 2023.

# **Community Partners**

Community partners came together in an innovative way, called Base Camp. This online information and resource sharing tool was developed by Fraser Health and provided a platform for participating organizations to share activation/deactivation notices, share heat health and safety resources, such as posters, signage, documents, infographics, etc. 39 users utilized Base Camp with over 50 documents uploaded and shared.

# Society to End Homelessness in Burnaby Extreme Weather Response-Heat

The Society to End Homelessness hosted two open-air pop-up cooling sites, one located in a shaded area of Civic Square at the south-east corner of the park and the other located in a shaded area of Kensington Park. These cooling centres run entirely by volunteers and complement the City's four indoor cooling sites by offering a cool and shaded spot for people seeking and escape from the heat. Free water, food, juice, clothing, sunscreen, hand sanitizer, hygiene and harm reduction supplies were available at the sites, all of which were donated. The cooling sites also provided free Wi-Fi, cooling cloths and individual fans/misters for loan. Resource information, housing and service agencies were also available on site.



Figure 8: Pop Up Cooling Site Storage



Figure 9: Pop-Up Cooling Site

The cooling site hours of operation were 11:30 am to 6:30 pm. Cooling sites were inclusive, barrier free and welcome to any and all individuals seeking heat relief.

The City permitted use of the park spaces and provided the Society with modified seacan storage containers for their equipment and supplies, access to water taps for their canopy misters, power supply, Wi-Fi, and temporary portable washrooms. The storage containers were delivered, installed and set-up by May and decommissioned and removed in October.

#### Fraser Health

Fraser Health funded AC units to their clients that were bed bound at home and would not otherwise be able to cool themselves down using alternative methods such as cold water buckets.

# **Burnaby Neighbourhood House**

The BNH created care packages that included a fan with instructions on how to use it properly, a spray bottle and a very large thermometer to see the temperature in the house. These care packages were handed out to all Burnaby residents that signed up.

#### **TransLink**

TransLink took initiative in educating their front line workers such as bus drivers, security, etc., on heat exhaustion so they would be able to recognize the signs during extreme heat events on transit routes.

# Supportive Housing, BC Housing, and Affordable Housing

Landlords of low income buildings incorporated cooling areas or cooling rooms into their buildings to create an escape from the heat for their residents. This included an AC unit, seating and accessible water. This allowed residents a cool place to stay without having to leave their apartment building.

## **Private Citizens**

Some Strata building residents shared with City staff that they utilized amenity rooms or common areas within their condo or townhouse complexes and amended them with portable air conditioners to create safe areas for their residents to find a cool space without having to leave their building.

# **Post-Incident Debrief**

The debriefing process is a pathway of the 360-degree continuous improvement cycle utilized by Emergency Management.

The purpose of the debriefing process is to ascertain "what went well" and if there are any areas that could be enhanced, through review of feedback from as many different perspectives as possible. The end result is an After Action Report (AAR) which outlines successes and recommended areas where planning frameworks and response guidelines could be enhanced.

# **Assessment Tool**

A debrief was not conducted following each of three heat events, rather an interview-based feedback method was used.

Leveraging both the 2021 Quick Start Actions and Early Adoption Response Measures and the Improvements Matrix, departments were interviewed determine what 2021 recommendations they were able to complete and how, and what new initiatives and opportunities were learned from the 2022 summer. The findings are presented in the *Recommendations* table that follows.

# Recommendations

Year	Re	ecommendation	Timeline	Repeating	Responsibility	Status	2022 Comments
2021	1.	Maintain EH-IRG prime directives as serving basic human needs.	Quick Start		<ul> <li>Emergency Planning Committee</li> </ul>	COMPLETED 2021	Sustained for 2022; continue for 2023
2021	2.	Establish interim policies that communicate response Internal Order established for capturing all response-related costs in order to avoid staff posting costs to home cost centre or other internal orders unrelated to response activities.	Quick Start		<ul> <li>Accounting</li> </ul>	COMPLETED 2021	Sustained for 2022; continue for 2023
2021	3.	Early engagement with RCMP communications and Community Policing regarding cooling locations to ensure enhanced police patrols.	Quick Start		Public Affairs	COMPLETED 2021	Sustained for 2022; continue for 2023
2021	4.	EH-IRG Functional Lead Committee key contacts list for distribution to all city parties.	Quick Start	Annually	<ul> <li>GM Community Safety</li> </ul>	COMPLETED 2022	Sustain for 2023 & onwards
2021	5.	Develop a process to disseminate Cooling Site location(s), hours, and services provided to E-Comm 9-1-1, Vancouver 3-1-1, and neighbouring municipalities (Vancouver, Coquitlam, New Westminster, Port Moody) for awareness and informational purposes.	Quick Start	Annually	<ul><li>Burnaby Fire</li><li>Burnaby RCMP</li><li>Public Affairs</li></ul>		Cooling Centres and Cooling Sites were mapped with drinking water fountains, spray parks, splash pools and outdoor pool on the web-version of Burnaby Map.
2021	6.	Determine and communicate details from EMBC and/or PREOC (if activated) regarding Task Number eligibility and period of eligibility.	Quick Start		<ul><li>Emergency Mgmt</li><li>Finance</li></ul>	COMPLETED 2021	Sustained for 2022; continue for 2023
2021	7.	Include in Cooling Site locations the following capabilities::  • Accessibility to power outlets by patrons • Free Wi-Fi for public use.	Quick Start		<ul><li>Recreation</li><li>Lands &amp; Facilities</li><li>IT</li></ul>	COMPLETED 2021	Sustained for 2022; continue for 2023

Year	Recommendation	Timeline	Repeating	Responsibility	Status	2022 Comments
2021	8. Prepare worker Safety Plans that ensure sufficient worker care to prevent staff from feeling isolated at location of Cooling Site.	Quick Start		<ul><li>Recreation</li><li>Occupational Health &amp; Safety</li></ul>		
2021	9. Host and facilitate extreme heat "information sessions" for the public (one in each quadrant) prior to the summer with panel participants that include representation from Council, Community Safety, Citizen Support Services, Social Planning, Parks, Recreation & Cultural Services, Fraser Health Authority, BCCDC, and others, as appropriate.	Quick Start	Annually	<ul><li>Public Affairs</li><li>Emergency Mgmt</li></ul>	COMPLETED 2022	✓ Attendance by the public at the 4 cooling centre Open House events over 2 days was low; however, appreciation was expressed by all attending for the information shared/ Repeat for 2023 to be determined.
2021	10. Develop a more detailed air quality response strategy, outside of wildfire smoke to EH-IRG i.e. ground level ozone, etc. See also #11 for alternate recommendation	Medium-term		<ul> <li>Community Safety</li> <li>Climate Action &amp; Energy</li> <li>Recreation</li> <li>Fraser Health</li> </ul>		
2021	11. Develop a specific Poor Air Quality Response Guideline independent of the EH-IRG See also #10 for alternate recommendation.	Long-term		<ul> <li>Community Safety</li> <li>Climate Action &amp; Energy</li> <li>Recreation</li> <li>Fraser Health</li> </ul>		
2021	<b>12.</b> Prepare external and internal messaging on signs of heat exhaustion and heat stroke.	NONE	NONE	NONE	OMIT	See Note 1 for decision from Emergency Planning Committee.
2021	13. Utilize communication strategies to avoid creating inflated expectations of services at Cooling Facility.	Medium-term		Public Affairs	COMPLETED 2022	Sustain for 2023 & onwards
2021	14. Establish key messaging script templates/placeholder re: Cooling Sites to be utilized annually as necessary.	Medium-term		Public Affairs	COMPLETED 2022	Sustain for 2023 & onwards

Year	Recommendation	Timeline	Repeating	Responsibility	Status	2022 Comments
2021	15. RCMP to develop workflow/checklist for handing out flyers & conduct of outreach and patrols.	Medium-term		Burnaby RCMP	COMPLETED 2022	Sustain for 2023 & onwards
2021	16. Create a citizen support accountability system/support program or network for highly vulnerable populations (elderly, isolated, new immigrants, homeless, etc.) Program suggestion may include a 'buddy system' for neighbor check-in and assistance.	Long-term		<ul><li>Social Planning</li><li>Citizen Support Services</li><li>Community Partners</li></ul>	COMPLETED 2021	<ul> <li>✓ Coordinated efforts with the Society to End Homelessness's Outdoor Cooling Stations</li> <li>✓ Launched "Basecamp", a virtual workspace &amp; information sharing platform</li> <li>✓ Fraser Health provided script for wellness checks with vulnerable populations</li> </ul>
2021	17. Translate the posters and postcards translated into other languages.	Medium-term	Annually	Public Affairs	COMPLETED 2021	<ul><li>✓ Translation into Cantonese, Mandarin, Punjabi</li></ul>
2021	18. Once procured and implemented, utilize the Mass Notification System to quickly disseminate key information to the public and external agencies.	Medium-term		<ul><li>Emergency Mgmt</li><li>Corporate Comms &amp; Marketing</li><li>Public Affairs</li></ul>	COMPLETED 2021	<ul> <li>✓ Public Alerting System implemented in April 2022 and used to notify subscribed users of Cooling Centre activations.</li> <li>Sustain for 2023 &amp; onwards</li> </ul>
2021	19. Engage Climate Action and Energy Division in EH-IRG Functional Lead Committee.	Medium-term		<ul> <li>GM Community</li> <li>Safety</li> </ul>	COMPLETED 2021	Sustain for 2023 & onwards
2021	20. Coordinate with other private facilities to establish arrangements for utilizing their facilities as cooling and clean air spaces. Locations could include: churches, mosques, temples; cultural halls; school gymnasiums, including post-secondary; banquet halls; unoccupied retail spaces/store fronts; and, amenity rooms in	Medium-term		<ul><li>Social Planning</li><li>Community Partners</li></ul>		<ul> <li>✓ BC Housing initiated Cooling Room program at sites with amenity rooms.</li> <li>Social Planning to continue to work with Community Partners for more broadly accessible cooling facilities at non-City</li> </ul>
	multi-family or high-rise complexes.					facilities.

Year	Recommendation	Timeline	Repeating	Responsibility	Status	2022 Comments
2021	21. Pending data from the BC Coroners Service, identify and set-up additional cooling locations in areas where there was a high incidence of death	Medium-term	As/When needed	<ul> <li>Emergency Planning Committee</li> </ul>	COMPLETED 2021	BC Coroner's Service Heat Related Deaths Summer 2022 Knowledge Update issued 2022 Aug 09 reviewed. No specifics provided.
2021	<b>22.</b> Coordinate with TransLink or other private bus charter companies for buses (preferably air conditioned) as mobile Cooling Locations in areas where there was a high incidence of death.	NONE	NONE	NONE	OMIT	See Note 2 for information from TransLink in response to this recommendation.
2021	23. Ensure Functional Lead staff scheduling mitigates or eliminates concurrent vacation periods for essential planning staff.	Medium-term	Annually	<ul> <li>Emergency Planning Committee</li> </ul>	COMPLETED 2021	Sustained for 2022; continue for 2023
2021	24. Establish minimum staffing level plans at all Cooling Facilities for adequate coverage and supports in case of emergency at the facility	Medium-term		<ul><li>Recreation</li><li>Recruitment</li></ul>		
2021	25. Consider alternate uniforms for Security staff assigned to Cooling Site. Alternate uniforms could include use of casual dress as visitors can find uniformed security intimidating. <i>Exception: RCMP members</i>	Medium-term		Risk Mgmt		
2021	<b>26.</b> Explore establishment of alternate and dedicated public transportation options to Cooling Sites	Medium-term		<ul> <li>Citizen Support</li> <li>Services</li> </ul>	COMPLETED	See Note 2 for information from TransLink in response to this recommendation.
2021	27. Develop recording matrices for detailed supply usage records (consumption drawdown on supplies consumed).	Medium-term		<ul><li>Recreation</li><li>Procurement</li><li>Information</li></ul>	COMPLETED 2021	✓ Revised data collection form created; however, still paper-based and results disseminated by email.
				Technology  • GIS		Look into digital data collection opportunities with IT and/or with GIS using ESRI Smart Forms or other similar tools.

Year	Recommendation	Timeline	Repeating	Responsibility	Status	2022 Comments
2021	28. Explore the use of fire hydrants as a water supply for drinking water and/or misting. See Recommendation 2022-30 for alternate solution	NONE	NONE	NONE	OMIT	See Note 3 for supplemental information from BFD.
2021	29. Establish site-specific Cooling Facility Operational Guidelines that include: key information for quick orientation; recommended staffing levels; recommended equipment and supplies; recommended site set-up (schematics); and, reporting forms or templates	Medium-term		• Recreation		
2022	30. Parks Operations to install permanent misting poles at various parks. Misting poles will be 1,829mm (72 inches) in height, have a push-button timed control, and a misting spout.	Medium-term	As/When needed	<ul><li>Parks Operations</li><li>Engineering Water</li></ul>	COMPLETED 2022 PENDING 2023	4 misting poles installed in 2022 at:  ✓ Alam Emmott Park ✓ Bell park ✓ Maywood Park ✓ Willingdon Heights Park  Parks Operations to continue misting pole installation at other parks as part of ongoing park improvement plan for 2023 and onward.
2022	31. Develop Cooling Centre Transportation Plan specific for populations at highest vulnerability and risk for heat-related illness and death (see BCCS Report 2021) augment existing taxi and transit modes			•		

Year	Recommendation	Timeline	Repeating	Responsibility	Status	2022 Comments
2022	32. Social Planning to lead Community Partner engagement through Burnaby Inter-Agency Council and lead by Fraser Health to enhance community-	Medium-term	Annually	<ul><li>Social Planning</li><li>Fraser Health</li></ul>	COMPLETED 2022	Fraser Health developed and launched "Base Camp", a pilot platform for community partners to voluntarily join and share
	based and delivered initiatives and programs aimed to promote heat-related illness awareness and			<ul> <li>Burnaby Inter- Agency Council</li> </ul>		resources, information and announcements.
2022	prevention in vulnerable populations.  33. Create Extreme Heat - Cooling Centre Overnight Operations Plan. (Existing Extreme Heat Operational Response Plan is limited to daytime or regular operational hours of the facility.)	Medium-term		<ul> <li>Emergency Planning Committee</li> <li>Recreation</li> <li>Emergency Mgmt</li> <li>Risk Management</li> <li>People &amp; Culture</li> </ul>		Continue for 2023 and onwards.

### **NOTES to Recommendations**

- 1. 2021: Heat health materials have been developed by the Health Authorities and published via numerous verified health sources, i.e. Fraser Health, HealthLink, and BCCDC. The public will be referred to these sources in any City of Burnaby heat health communications.
- 2. 2021: TransLink representatives informed staff following the 2021 heat dome event that TransLink busses must be running in order for air conditioning systems to be work. Buses not operating their engines are not air conditioned and would provide little to no relief during periods of extreme heat. TransLink also advised that they do not have surplus availability of busses during regular operations. The number of buses held for emergency stand-by are minimal and their diversion for use as cooling locations would inhibit the company's ability to rapidly deploy these stand-by buses for breakdowns or other unforeseen disruption to system services.
- 3. 2021: The Fire Department has cautioned that the connection of drinking water fountains and misting station to fire hydrants could result in fire suppression delays imposed by firefighters having to disconnect fountain/misting apparatus from a fire hydrant. These potential delays could have severe consequences to both the safety of responding firefighter and members of public.

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