Building Collaborative Knowledge of Extreme Heat Responses in Vancouver

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Prepared for: Women Transforming Cities & UBC Sustainability Hub



This report was produced as part of the UBC Sustainability Scholars Program, a partnership between the University of British Columbia and various local governments and organisations in support of providing graduate students with opportunities to do applied research on projects that advance sustainability and climate action across the region.

This project was conducted under the mentorship of Women Transforming Cities (WTC) staff. The opinions and recommendations in this report and any errors are those of the author and do not necessarily reflect the views of WTC or the University of British Columbia.

All illustrations in the report were created by the author.

The author acknowledges that this work took place on the stolen ancestral territories of the x^wmə**0**k^wəyəm (Musqueam Indian Band), S<u>k</u>wx<u>w</u>ú7mesh (Squamish Nation), and səlilwətał (Tsleil-Waututh Nation). We acknowledge the leadership of Indigenous peoples since time immemorial and seek to learn and unlearn our own colonial practices as we work in cities as sites of resistance.

Table of Contents

Project Background	5
About the Resource	7
Purpose of the Resource	9
Process of Creating the Resource	9
How to Use the Resource	10
Analysis	11
Gender and Emergency Planning	12
Considerations for People with Disabilities	12
Streamlining Resources and Guides	13
Linguistic and Non-Digital Access to Information	13
Balancing Energy Efficiency with Tenant Protection	13
Enforcement of Heat Safety in Workplaces	13
Heat-Related Poverty Implications	13
About the Contributors	14
About Women Transforming Cities	15
About UBC Sustainability Scholars	15
About the Sustainability Scholar	15
Other Contributors	16
References	17



Project Background

Enhancing Community Heat Preparedness through Collaborative Advocacy and Knowledge Sharing



British Columbia's June 2021 heat wave highlighted the crucial need for preparedness and adaptation to extreme heat events. From June 25 to June 30, the province faced record-breaking temperatures, resulting in the tragic deaths of 619 people. This heat wave was the deadliest disaster in B.C.'s history and one of the most economically devastating (Beugin et al., 2023).

In the lead-up to the 2022 municipal elections, WTC conducted deep engagement with 30 organisations and 600 women and gender marginalised people to understand the priority issues for equity-deserving residents in Vancouver. This engagement informed the eight policy asks put to candidates for mayor and council in WTC's <u>Hot Pink Paper Campaign</u>. Heat preparedness emerged as a priority concern during this community engagement, and informed two of the eight policy asks.

Since then, WTC has continued to have conversations with community and partners on heat responses, identifying gaps and advocating to local governments for support. The idea for the centralised knowledge base emerged from dialogue with organisations and coalitions who have identified the need for information sharing and a collaborative approach, especially when it comes to identifying and coalescing around potential policy asks of various levels of government.



About the Resource

Purpose, Process and Utilisation of the Resource



This resource is a centralised online knowledge base of various heat preparedness measures taking place in and around the City of Vancouver.

The resource created as a part of this project is a consolidated online spreadsheet that categorises organisations and institutions into three groups: grassroots community organisations, agencies and large nonprofits, and government organisations. Each entry briefly outlines the actions undertaken, such as advocacy, research, resources or toolkits, material support, coalition building, outreach and creation of action plan. The spreadsheet also contains links to the resources and key contacts of the listed organisations. To accommodate the evolving nature of the heat preparedness landscape each year, this spreadsheet resource will be periodically updated. It is intended as a dynamic resource to ensure current and relevant information is available. Updates can be requested via google forms.

Following are the important links for the resource: <u>Spreadsheet Resource</u> <u>Knowledge Base Update Form</u>

HEAT PREPAREDNESS IN VANCOUVER (Grassroots Organisations)									
						RESPONSE TYPE LEGEND			
	Last Updated: 8/15/2024 Next Update: 12/1/2024				Advocacy: Promoting policies and actions to address extreme heat.				
					Coalition Building: Forming alliances between organizations to enhance collective heat response efforts.				
	Hello Community Members, As climate change brings more frequent heat waves to Vancouver, it's crucial that we work together and eliminate the existing silos in our heat response efforts. Collaboration is essential! This spreadsheet lists all the organizations and their ongoing actions related to extreme heat. Please note that this list is updated every month. If you wish to contribute, correct, or add information, kindly response to one of these google forms based on your needs. Let's beat the heat together!			Cooling Space: Providing designated spaces for people to cool down during extreme heat events.					
				Material Support: Supplying essential items like water, fans, or cooling equipment.					
TRANSFORMING CITIES				Outreach: Engaging and informing the community about heat risks and resources.					
				Research: Conducting studies to better understand and mitigate the impacts of extreme heat.					
					Resource/Action Plan: Offering guides or tools to help individuals and organizations manage heat-related challenges.				
					Other: Any other heat response.				
Organisation	Response Type	Response Location	Target Population	Description	Key Contact	Additional Information	Links (if any)		
BC ACORN (ACORN CANADA)	Advocacy 🔹	New Westminster	Low to moderate income renters, seniors, young people, racialized identities, and people with disabilities	New Westminster City Council Campaign: Advocating for a policy requiring landlords to ensure at least one room in their apartments stays below 26 degrees Celsius. Residential Tenancy Act Amendment: Pushing for amendments to protect tenants installing air conditioning from eviction.	Emily Armitage bcorg@acorncanada.org		Extreme Heat and Climate Justice Report 2023 Extreme Heat Campaign (Hamilton) Maximum Heat Bylaw passed (News)		
BC Poverty Reduction Coalition	Advocacy 💌	British Columbia	Primarily populations experiencing poverty including seniors, people with disabilities, indigenous etc.	Local systemic advocacy highlighting struggles of low-income people who cannot afford cooling solutions and addressing the need for maximum temperature limits in rental units.	Rowan Burdge (Provincial Director) rowan@bcpovertyreducti	The "Lived Experience Group" engages in local advocacy by personally connecting with community members to deeply understand their challenges related to extreme heat.	Website		
Building Resilient Neighbourhoods + Hey Neighbour Collective	Resource/ Action Plan	British Columbia	BC Residents	In collaboration, published a free guide called "Prepare Together for Extreme Heat"	info@resilientneighbourhood s.ca	Online guide, English Language, Printable	Prepare Together for Extreme Heat Guide Link to Article		

Purpose of the Resource

Many organisations and grassroots collectives are doing great work to address extreme heat in their communities, but often in isolation.

Many organisations and grassroots collectives are doing work to address heat and air quality in their communities. As this is an emerging challenge, groups often operate independently, which can lead to duplication of efforts, inefficient use of resources, lack of coordination, and a lack of unified policy advocacy.

Creating an accessible, centralised knowledge base of various heat preparedness measures already taking place will allow front-line organisations and grassroots groups in Vancouver and beyond to share strategies, resources, and information, identify gaps in their responses, learn about various policy options, and coordinate a more unified advocacy response. Additionally, the project results will guide WTC's future efforts to advocate for local government heat readiness strategies and initiatives.

Process of Creating the Resource

To create this resource, heat preparedness actions of various grassroots, large nonprofits and governments were analysed through a combination of interviews, research, and data analysis.

The resource was created through several key steps. Organisations and leaders known or connected through existing relationships were identified, especially those involved in heat preparedness work. Key community leaders were interviewed via Zoom to understand their actions, identify their needs, and gather insights into their heat preparedness strategies. Additionally, desktop research was conducted, and outreach to other organisations and institutions across Vancouver was made to identify various heat preparedness responses. Data was gathered on the types of responses, populations served, and measures taken to meet the needs of target populations.





How to Use the Resource

Utilise, Collaborate and Contribute!

This online spreadsheet is organised into four pages for easy navigation

- Page 1: Overview of the resource
- Page 2: Heat responses by grassroots organisations
- Page 3: Heat responses from larger nonprofits and agencies
- Page 4: Heat responses from local governments

To make the most effective use of this resource, follow these three steps.

UTILISE

Identify organisations and resources that meet your needs and use the provided contacts to get more information or support.

COLLABORATE

Collaborate with other organisations to share strategies and resources and work together to address gaps in heat response efforts.

CONTRIBUTE

Contribute to the continuous improvement of this resource by providing updates, corrections, or additional information through this google form.



Analysis

Gaps and Observations in Extreme Heat Responses



Gender and Emergency Planning

Due to underlying structural inequalities, extreme heat disproportionately affects women and gender-marginalised individuals. These vulnerabilities are exacerbated by the gender wage gap, unequal participation in labour markets, and the overlooked burden of unpaid domestic labour (Adrienne Arsht-Rockefeller Foundation Resilience Center, 2023). Women's roles often extend beyond paid labour to include extensive unpaid work such as caregiving and household tasks which is rarely acknowledged in economic analyses or policy planning.

Moreover, extreme heat can lead to heightened tensions and stress within households, exacerbating situations of intimate partner violence (Woods & Agoncillo, 2024). The strain from prolonged heat exposure impacts mental health and increases the risk of domestic conflict. It is essential to advocate for emergency planning that recognizes and integrates these gender-specific challenges, ensuring that responses are inclusive and equitable. Emergency plans must integrate support systems, ensuring affected individuals have access to refuge and support services.

Considerations for People with Disabilities

People with disabilities, including seniors, those with chronic illnesses, and individuals with mental or physical disabilities, are particularly vulnerable during extreme heat events. These individuals may face significant barriers to leaving their homes and accessing cooling centres or other resources. The impact of heat on those with mobility challenges, cognitive impairments, or dependence on medical equipment can be severe. Emergency planning must prioritise accessible and inclusive strategies that ensure these populations receive the necessary support, such as home visits, accessible transportation, and tailored public health messaging.



Streamlining Resources and Guides

There is a noticeable overlap in the resources and guides available for heat preparedness, which often leads to inefficient use of resources. Streamlining these materials and creating a unified, central repository can help organisations access the necessary tools and information more effectively. This consolidation will enhance response efficiency and resource utilisation across different sectors.

Linguistic and Non-Digital Access to Information

While there are many resources available in multiple languages, not all materials have been translated, leaving gaps in accessibility. Many populations that are more vulnerable to extreme heat may not speak or read English as a first language. It is crucial to address these language access barriers by ensuring that important information is available in the languages spoken by community members. Additionally, for seniors and individuals who may not have internet access, it's important to offer these resources in printed formats. Distributing printed guides through community centres, healthcare providers, and local organisations will ensure that vital information reaches those who may not have access to digital platforms.

Balancing Energy Efficiency with Tenant Protection

As cities implement retrofitting measures to enhance building energy efficiency for better heat management, there is a critical need to develop policies that protect tenants from potential rent increases or evictions. Policies must be crafted to ensure that improvements in building infrastructure do not lead to unintended negative consequences for renters and maintain accessibility and affordability alongside advancements in energy efficiency.

Enforcement of Heat Safety in Workplaces

Workers, especially those in poorly ventilated indoor environments, are vulnerable during extreme heat events. Despite existing guidelines, there is a significant gap in the enforcement of heat safety measures, with workers often facing retaliation for asserting their rights (Worker Solidarity Network, 2023). Strengthening enforcement mechanisms, developing effective heat assessment plans, and establishing dedicated committees can ensure workplace safety and uphold workers' rights during extreme temperatures.

Heat-Related Poverty Implications

Studies have shown that poverty significantly increases the risk of adverse outcomes during extreme heat events, such as the notable increase in mortality rates in socially or materially deprived neighbourhoods during BC's heat dome (BC Coroners Service, 2022). Addressing this issue requires a multifaceted approach that combines heat preparedness with social support measures to protect the most economically vulnerable populations, ensuring that poverty does not compound the risks associated with extreme heat.



About the Contributors

Recognising the Contributions and Collaborations behind the project

About Women Transforming Cities

Women Transforming Cities (WTC) is a grassroots non-profit based in Vancouver, BC. WTC aims to radically shift social, economic, and political power to equity-deserving groups to reshape who cities are built by and for so that communities' needs are met, and everyone can belong, participate, and thrive. They do this through research, advocacy and civic education from an intersectional feminist lens. Learn more at womentransformingcites.org

About UBC Sustainability Scholars

The UBC Sustainability Scholars Program is an internship initiative designed to empower graduate students to drive meaningful change. Overseen by the UBC Sustainability Hub, this program connects students with diverse sustainability partners both on campus and in the wider community. Participants engage in applied research projects that address critical environmental, economic, and social sustainability issues. By working on these impactful projects, students contribute to broader regional sustainability via research.

About the Sustainability Scholar

This project was completed by Radhika Singh, an Indian architect and graduate student at the School of Community and Regional Planning at the University of British Columbia (UBC). She worked under the mentorship of Clara Prager, Campaign Lead, and Ash Peplow, Executive Director at Women Transforming Cities. Radhika is dedicated to climate action and heat resilience, with a focus on projects such related to air pollution mitigation, heat preparedness, climate migration and related policies in BC, Canada and India over the past two years. Here's the <u>link to her portfolio</u>.





Other Contributors

The creation of this resource was made possible thanks to the invaluable contributions of numerous dedicated individuals from various organisations across Metro Vancouver as listed below. Their insightful perspectives on extreme heat preparedness have been instrumental in shaping this work, and we are deeply grateful for their expertise and support.

Emily Armitage (Lead Organiser, BC ACORN) Jackie Kanyuk (Senior Program Delivery Manager, BC Non-Profit Housing Association) Katia Tynan (Manager, Resilience and Disaster Risk Reduction, City of Vancouver) Linda Nowlan (Senior Director, UBC Sustainability Hub) Miranda Myles (Manager, Emergency Management, City of Vancouver) Pamela Charron (Executive Director, Workers Solidarity Network) Rowan Burdge (Provincial Director, BC Poverty Reduction Coalition) Tim Linsell (Sustainability Program Coordination Assistant, UBC Sustainability Hub)



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