Climate-Disaster Toolkit for Vulnerable Communities: A Community-Based Participatory Research Project

Wing Cheong, Farrukh A. Chishtie,, Lillian Hung, Jennifer Baumbusch, Giovanna Boniface, Jeffrey Boniface, Gillian Bever, Jodine M. Perkins, W. Ben Mortenson

Centre for Aging SMART Research Showcase Event, October 9, 2025, Vancouver, BC Canada

BACKGROUND & PROBLEM

- Climate Crisis in BC: 600+ deaths in 2021 heat dome, disproportionately affecting older adults and people with disabilities
- Growing Vulnerability: 27% of Canadians have disabilities; aging population doubling by 2050
- Resource Gaps: Most climate resources are reactive (post-disaster) rather than proactive (prevention-focused)
- Accessibility Barriers: Limited culturally responsive, accessible climate information for vulnerable populations



PROJECT VISION

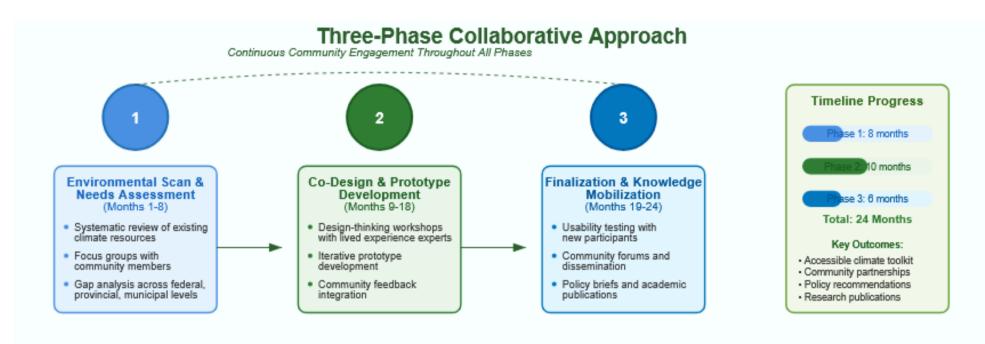
From Reactive Response to **Proactive Adaptation**

- Develop user-centered climatedisaster toolkits for Metro Vancouver
- Target populations: Older adults, people with disabilities, family caregivers, migrant workers
- Community-based participatory research approach
- Focus on prevention rather than crisis response

THE UNIVERSITY OF BRITISH COLUMBIA



PROJECT PLAN & METHODOLOGY



KEY FINDINGS FROM PHASE 1 ENVIRONMENTAL SCAN

- Federal/Provincial: Frameworks exist but lack accessibility features
- Municipal Variation: Uneven resource distribution across Metro Vancouver
- Community Organizations: Essential services but face resource limitations
- Critical Gaps: Proactive adaptation, language accessibility, coordination between levels

PARTNERSHIP NETWORK

Research Team:

- Mobility, Access, and Participation Research Partnership (SSHRC)
- OT Climate Action Network (OT CAN)
- Peaceful Society, Science and Innovation Foundation

Community Partners:

- AMSSA, SCI-BC, disability organizations
- Municipal health authorities (VCH, Fraser

INNOVATIVE APPROACH

- Participatory Design: Community members as co-researchers
- Accessibility First: Universal design principles throughout
- Climate Justice Framework: Addressing structural inequities
- Occupational Security: Protecting meaningful daily activities

EXPECTED IMPACTS

Immediate Outcomes:

- Comprehensive, accessible climate-disaster toolkit
- Strengthened community partnerships
- Enhanced climate preparedness for vulnerable populations

Broader Impact:

- Model for other urban centers facing climate challenges
- Evidence for policy development and system transformation
- Contribution to climate justice and health equity efforts

FUNDING & TIMELINE

- Funder: CIHR Catalyst Grant for Community-Based Research in Climate Change Priority Areas
- Timeline: 2025-2027 (2 years with no-cost extension)
- Current Status: Environmental scan complete, **UBC REB Ethics application filed**

NEXT STEPS

- Phase 1 recruitment planned after ethics approval
- Open to collaboration and feedback















