

### **Purpose of this note:**

On June 14, 2022, the MacEachen Institute for Public Policy and Governance hosted a virtual roundtable with 25 invited participants. They represented academics, public agencies, emergency managers, non-profit organizations, and organizations that represent persons with disabilities. Invitations to attend the virtual roundtable were sent to Advisory Board members and partners for the project titled Interdisciplinary Study of Evacuating Persons with Disabilities from an Urban Centre funded by Accessibility Standards Canada and Social Sciences and Humanities Research Council (SSHRC). Kevin Quigley is the principal investigator.

This briefing note summarizes research findings and the roundtable discussions, including recommendations.

### **About the MacEachen Institute:**

The MacEachen Institute for Public Policy and Governance at Dalhousie University is a nationally focused, non-partisan, interdisciplinary institute designed to support the development of progressive public policy and to encourage greater citizen engagement.

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# **Communication and Alert for Mass Evacuations:**

## **Improving Accessibility for People with Disabilities June 2022**

The people responsible for mass evacuations are confronted with significant challenges: they must coordinate limited resources in a dynamic context, often in degraded conditions, and their decisions are consequential, time-constrained, and sometimes irreversible. These events are happening more often and at a growing and significant human, financial, and environmental cost.

Advancements in accessibility and rights for people with disabilities have increased concern at all orders of government for improving emergency services for people with disabilities. Often the main focus of emergency managers is to increase public emergency awareness, but how can emergency processes be better informed by the perceptions and needs of the public, especially people with disabilities?

Interdisciplinary Study of Evacuating Persons with Disabilities from an Urban Centre is supported by Accessibility Standards Canada and Social Sciences and Humanities Research Council (SSHRC)

The project analyzes four stages of evacuation: communication and alert, transportation, shelter, and return to community with a focus on improvements for people with disabilities.

Academics, public agencies, emergency managers, non-profit organizations, and organizations that represent persons with disabilities met to discuss our recent survey results and opportunities improve evacuation for persons with disabilities.

This briefing note focuses on the communication and alert phase of the project. Following the presentation, participants discussed the issues raised and their perspective on them from their professional and personal experiences. Their comments are summarized but not attributed.

## What We Recommend

- ◆ Develop robust governance arrangements that are agile, adaptable, and take these complex issues into account; are rehearsed in advance; have appropriate governance mechanisms in place to connect with the right people at the right time.
- ◆ Implement mechanisms where people with disabilities support the development and evaluation of risk communications. Knowledge and lived experience of people with disabilities should be treated as a form of expert knowledge.
- ◆ Design universally accessible and user-friendly tools to help people better understand the complexity of evacuation for persons with disabilities. These should account for a variety of social, cultural, practical, and legal considerations, as well as respond to diverse functional needs. Brochures and infographics are common communication tools. Halifax Regional Municipality, for example, has an opt-in service to receive municipal alerts with a variety of alert types (e.g., mobile app, telephone, and email).
- ◆ Identify and engage with key stakeholders (e.g., emergency organizations, first responders, volunteers, building managers) and improve understanding of their responsibilities. Ensure roles and responsibilities for an emergency evacuation are well known and communicated in advance of an emergency, including:
  - Members of the public, specifically people with disabilities, knowing what they are responsible for, how to connect with necessary services, what their expectations for support should be, and their options for transportation and shelter.
  - Staff and volunteers for various organizations and orders of government involved in evacuation.
  - Building owners, employers, and business owners, focusing on understanding liability considerations to plan for evacuations, and developing communication strategies and incentives to promote emergency preparedness. How regulators monitor regulations is also important.
  - Communities of people with disabilities and policymakers, raising awareness about how demographic changes and government policies are changing the context in which evacuations occur. For example, more people with disabilities and seniors are living at home, and rates of disability increase as the population ages.
- ◆ Identify disparities between communication standards and practice; training and behaviour change can help fill in these gaps.
- ◆ Develop strategies to prepare for many first-time evacuations since many people have not experienced an evacuation. Communication strategies to prepare for many first-time evacuees will be especially important. Communities should be engaged in advance of an emergency to prepare, but many challenges can still arise with first-time evacuees even with advance preparation.
- ◆ Ensure risk communications are readily available in accessible formats, developed to meet the needs of specific communities and populations, and distributed through several sources with particular attention to grassroots organizations and community leaders. This is especially important when there is distrust of authorities. Community-led committees and groups that supported the COVID-19 response can be adapted to other emergency response purposes by strengthening these community relationships.

## Presentation on Research Findings from Communication and Alert Project

There are four key stages to evacuation: communication and alert, transportation, shelter, and return to community. This presentation focuses on communication and alert and the purpose of the presentation is to understand how we can improve communication about evacuation of people with disabilities. Unless otherwise stated, we refer to "communication" as the act of conveying information to a given audience, specifically information about evacuation and associated risks more generally.

To develop a shared understanding of evacuation risks, we partnered leading risk scholars with those responsible for mass evacuation and organizations that advance the concerns of people with disabilities. We have been examining what guides the thinking and actions of those responsible for evacuation, considering the knowledge we have of certain risks and the contextual pressures exerted on the emergency response regime. One of our goals is to improve dialogue among researchers, practitioners, and people with disabilities about evacuation.

## Key Findings from Scholarly Literature

- ◆ Many factors influence risk perception for individuals. The behaviour of others, personal experience with risks, trust in institutions and authorities, and socio-demographic considerations are among key factors that influence how a person receives, interprets, and responds to risk messages. Sources of information are not trusted equally.
- ◆ Sociological and institutional factors influence how risks are shaped and managed; emergency management is a highly complex, multi-sectoral, and interdisciplinary field. Risk communication is complex with focus shifting from physical infrastructure to social systems. There are several organizations and sectors involved in the development and distribution of risk messages, which further complicates the space.
- ◆ Mental Model approaches can be expanded to improve integration of expert knowledge between people with disabilities and experts in risk communications; lived experience of people with disabilities can be thought of as a form of expert knowledge. Mental Model approaches are risk communication methods that work to align different ways of thinking of risks by experts and the public (Aliperti et al. 2020; Boase et al. 2017; Sheppard et al. 2012; Bostrom et al. 1992). When working with people with disabilities, mental models should be informed by the knowledge and lived experience of people with disabilities in addition to risk-expert knowledge.

## Key Findings from Surveys

*(Conducted between October and December 2021)*

- ◆ Lack of public experience with evacuation: 90% of survey respondents (people with disabilities and caregivers) have not experienced an evacuation, which poses significant challenges for emergency managers. People's plans likely have significant gaps. People may also experience physical and psychological stress that will further complicate an evacuation.
- ◆ Lack of awareness of evacuation supports for people with disabilities: All survey respondents (people with disabilities and caregivers) rated the perceived accessibility of current evacuation processes between 3 and 6 out of 10, with 30% rating this 4 out of 10. This suggests modest to low confidence in current evacuation processes to meet a variety of functional needs and current awareness of supports for people with disabilities and caregivers.
- ◆ People with disabilities are looking for information on accessible transportation options, expected access to supplies, and who to contact for support in an evacuation. Survey respondents (people with disabilities and some caregivers) identified areas of concern relating to evacuation and accessibility—transportation, access to equipment and supplies, reliance on someone to intervene—especially for people without personal support networks, knowledge of where to relocate, how to get there, and how to access medical treatment.
- ◆ There are jurisdictional and organizational differences. 60% of respondents (emergency managers) rate the accessibility of current evacuation processes at 6 out of 10 whereas the remaining 40% rate this 2 out of 10. This suggests a discrepancy, even within the emergency management community, about

the degree of accessibility of current evacuation processes. Part of this can be attributed to differences between jurisdictions, the disconnect between strategy, standards, and implementation, as well as issues communicating evacuation planning in advance that reaches the public effectively.

### What We Discussed

- ◆ How do we capture the intersectional nature of risk and make progress (e.g., age, race, gender, ability, Indigeneity, income, English proficiency, religion)?
- ◆ What mechanisms are there to engage and communicate with stakeholders such as building managers for residential and commercial spaces? How can this be improved? How can we increase general awareness of these relationships?
- ◆ What tools and resources can be developed from this information? What would be most helpful?
- ◆ What kind of process do we need to integrate perceptions and experiences of persons with disabilities into evacuation processes?

The roundtable discussion informed our recommendations and will continue to inform our research in this area. For more information about the project, see the MacEachen Institute website.

### Methods Statement

We surveyed 29 people with disabilities, some caregivers, and eight emergency managers to understand key considerations from different perspectives. Survey responses were collected between October and December 2021. We reviewed academic literature and other publicly available material, such as reports, media articles, and policies.

### References

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**MacEachen Institute Briefing Notes on Emergency Evacuation for People with Disabilities**  
[Mass Evacuation Planning for the Halifax Peninsula](#)

[Accessible, Functional Sheltering for People with Disabilities](#)

[Return and Recovery from Evacuations: Improving Accessibility for People with Disabilities](#)