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## Background

- People with disabilities experience a disproportionate impact of extreme weather events and there is a need to better understand the impact that climate change has for them.
- The United Nations Convention of Rights of Persons with Disabilities allows people with disabilities the right of protection and safety of risk, such as extreme weathers, however they are often not considered during climate adaption.
- The World Health Organization, highlights that climate change is considered to be a critical issue for public health in the 21<sup>st</sup> century and is expected to exacerbate human health risks.
- Past reviews focus on the risk of acquiring a new disability or injury after a climate related event and not on the impact of people with pre-existing disabilities or chronic conditions.

## Objective

To explore the impact of climate change-related extreme weather events on the experiences of people with pre-existing disabilities and chronic conditions



## Methods

- Study Design**
  - A scoping review was conducted by using Arksey and O'Malley's framework to extract relevant information
- Data sources**
  - Web of Science, Scopus, PsychInfo, Healthstar, Medline, Embase, and Proquest
- Key words**
  - Climate change, extreme weather events, disability, chronic conditions
- Inclusion Criteria**
  - Published in a peer-reviewed journal in any language from 2002 to 2022
  - Involved a sample of people with chronic conditions and/or disabilities
  - Had a least one empirical finding reporting on the experiences and/or impact of climate change related extreme weather events or anomalies

## Results

### Study and Participant Characteristics

- 45 studies met the inclusion criteria, involving 2,337,199 participants with pre-existing or chronic conditions across 13 countries over a 20-year period
- Studies focused on hurricanes, extreme winter weathers, extreme heat, floods, wildfires, dust storms, typhoons, and droughts



## Overview of themes

### Impact on health and well-being

- Impact on physical health:
  - Risk of acquiring a new injury or health issue
  - Worsening of pre-existing medical condition
  - Increased risk of mortality
- Impact on mental health:
  - Decline in psychological functioning (e.g., depression, anxiety, stress, grief) and/or quality of life after extreme weather event.

### Impact on education and work

- Impact on education:
  - Having to change schools
  - Reduced instruction time, loss of teachers, resources and supports
- Impact on work:
  - Lack of employment opportunities
  - Loss of or change in employment (impacted health insurance)

### Barriers to accessing health and community services

- Challenges with accessing services (e.g., medications, medical supplies or equipment) and accessible transportation
- Lack of knowledge about people with disabilities and chronic conditions among first responders and community
- Communication challenges during extreme weather (lack of accessible communications, need for more effective information technology systems in community health centres)
- Lack of adequate accessible housing and inadequate housing conditions

### Coping strategies and resilience

- Social supports and connections to resources
- Housing, financial and health supports
- Interventions to help people with disabilities cope with extreme weather
- Resiliency:
  - Family adaptation
  - Previous experience with extreme weather
  - Experience living with a disability
  - Familiarity with local environment

## Implications

- Rehabilitation clinicians and community service providers are in a good position to potentially assess people with disabilities for their preparedness for extreme weather events.
- Rehabilitation clinicians could look for opportunities to educate themselves and their clients about available resources related to extreme weather events and preparedness.
- Rehabilitation and community service providers could seek to partner with local organizations to support their clients with disabilities.
- Rehabilitation health care providers might consider advocating for the inclusion of people with disabilities in climate justice responses at all levels of government.

