

Understanding the Health Impacts of Weather on People Experiencing Homelessness: Using Research to Inform Healthy Public Policy

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11 am-12 pm CT



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Webinar Objectives

- To understand how weather affects the health of people experiencing homelessness;
- To gain knowledge about a qualitative study that examined the health impacts of weather;
- To explore how research can inform healthy public policy and service planning considerations.



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Climate change and health

- Air quality
- Extreme weather events
- Impact of water and food contamination
- Vector-borne diseases
- Temperature extremes

***“Climate change...the defining issue for public health during this century”
Dr. Margaret Chan, Director General,
WHO, 2007***

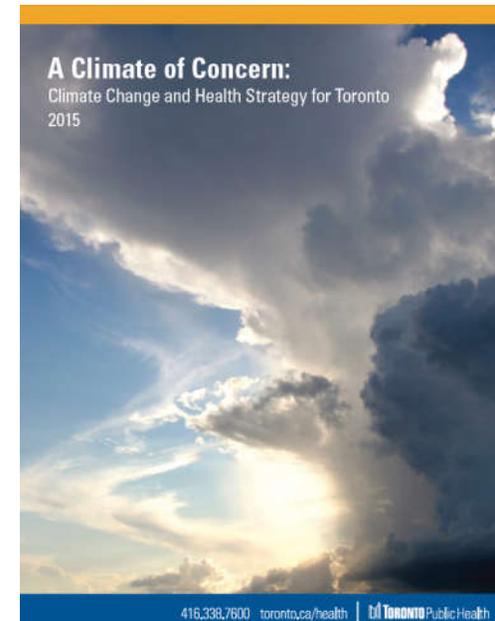


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Most vulnerable at greatest risk

- Children, elderly, low socioeconomic status, pre-existing illness
- People experiencing homelessness – greater environmental exposure
- Extreme events & ongoing, persistent climate-related threats
- Cumulative stresses

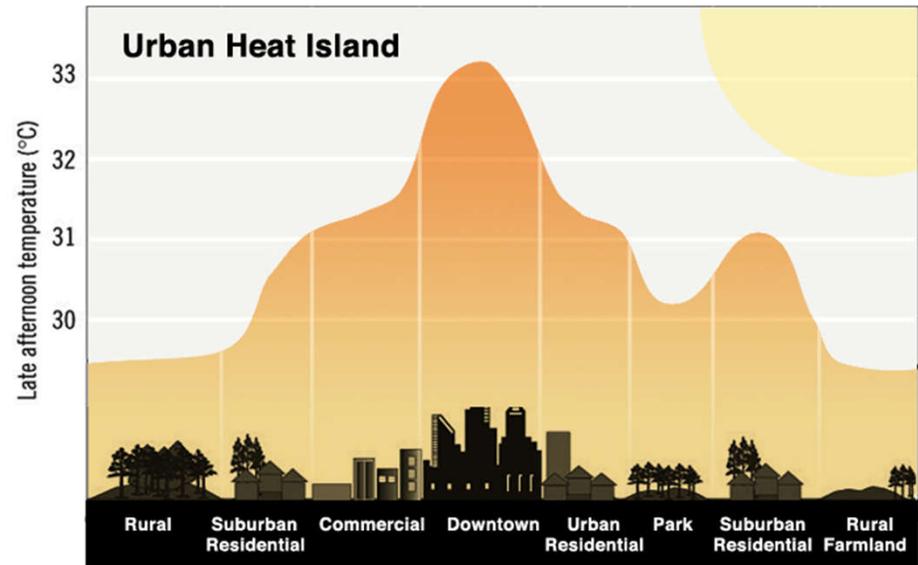


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Temperature and health: heat

- Europe, 2003: > 70,000 excess deaths
- Historical analysis of Canadian cities:
 - Toronto: 120 annual heat-related deaths
 - Projected that in the future these values will more than double by 2050 and triple by 2080



Natural Resources Canada
<http://adaptation.nrcan.gc.ca/perspective/health>



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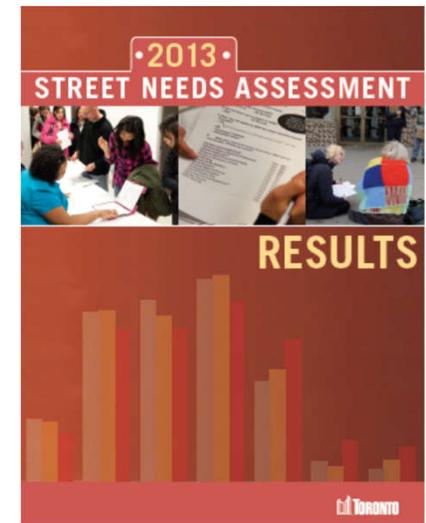
Health impacts of weather

- Both cold and hot weather can result in adverse health impacts
- Cold weather-related injuries:
 - Hypothermia; Frost nip → frost bite; Trench foot
- Hot weather health impacts:
 - Heat-related illnesses
 - Worsening of conditions (cardiovascular and respiratory)



Toronto Street Needs Assessment, 2013

- Point-in-time count of people experiencing homelessness in Toronto, 2013
- Most surveys completed between 7pm and 1am
- Total people experiencing homelessness: 5,253
 - Shelters: 82%
 - Health/justice: 9%
 - Outdoors: 9%



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Extreme weather plans: need for evidence



- In 2013/2014, Toronto experienced its coldest winter in over 20 years
- Board of Health/Council recommended the Medical Officer of Health:
 - Assume responsibility for issuing Extreme Cold Weather Alerts
 - Develop a Cold Weather Response Plan
 - Review the health evidence for cold weather impacts, and the current alert processes



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Extreme Cold Weather Alerts

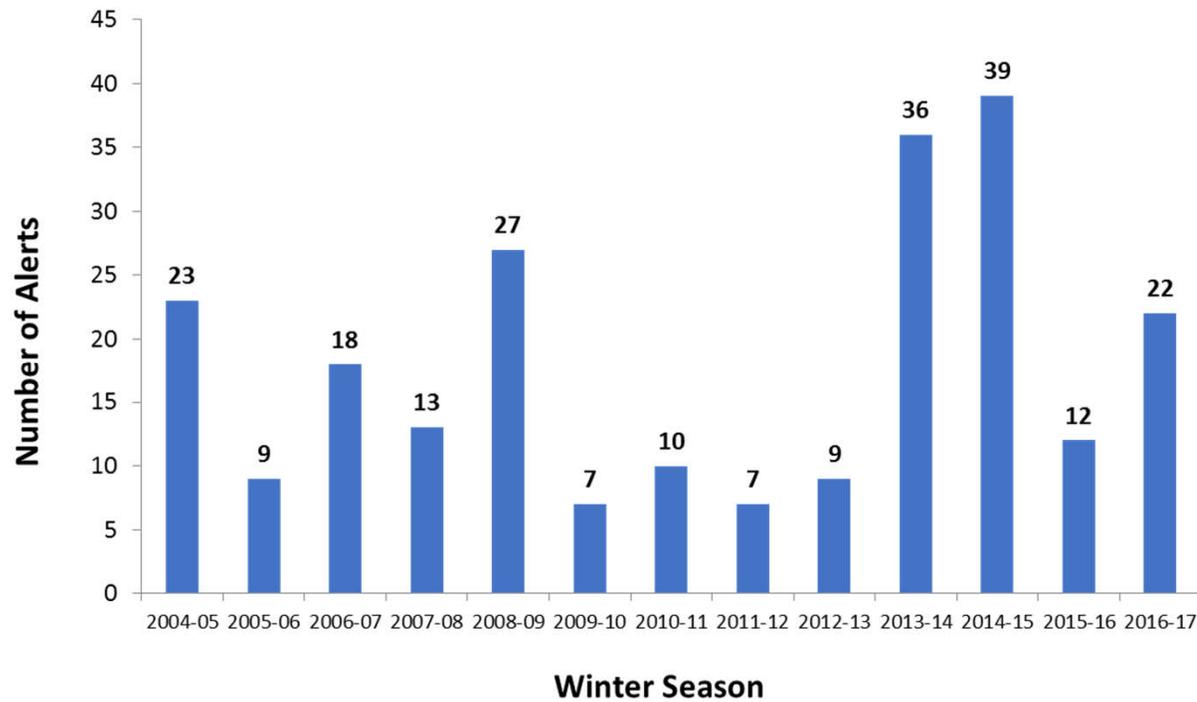
- Issued during the winter season, November 15-April 15
- During that time, alerts were issued when temperature forecast -15°C or colder
- Services focus on people experiencing homelessness



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Number of Extreme Cold Weather Alerts in Toronto



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Available Health Evidence?

- Limited
- General population versus vulnerable groups
- Health outcomes: mortality versus morbidity
- Varying climates – need for local data



Research Collaborations with C-UHS and SSHA

- Literature review on the health impacts and temperature thresholds
- Descriptive analysis of emergency department visits for cold-related injuries
- **Qualitative research with clients of drop-in services**
- Scan of cold weather response in other jurisdictions



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Qualitative study team members and partners

Centre for Urban Health Solutions, St. Michael's Hospital

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Nishi Kumar

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Kate Francombe-Pridham

Toronto Public Health

Paul Coleman

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Hillary Keirstead

Drop-In Services

Brian Harris, St. Felix Centre

Talena Jackson-Martineau, Margaret's
Toronto East

Candace Klimuk, YMCA Vanauley

Cheryl Laliberte, Fred Victor Centre

 **TORONTO** Shelter, Support & Housing Administration

 **TORONTO** Public Health

St. Michael's

Inspired Care.
Inspiring Science.

**Centre for Urban
Health Solutions**



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Qualitative Study: Methods

- Semi-structured interviews conducted in 4 City-funded drop-in services between March and May 2016:
 - 40 people that currently were or had experienced homelessness
 - 8 service providers
 - Interviews lasted between 30-60 minutes
- Service users were asked about their personal experiences with extreme weather:
 - Experience of health impacts
 - Knowledge of weather alerts
 - Response and services accessed during extreme weather
- Service users received a \$20 voucher and two transit tokens



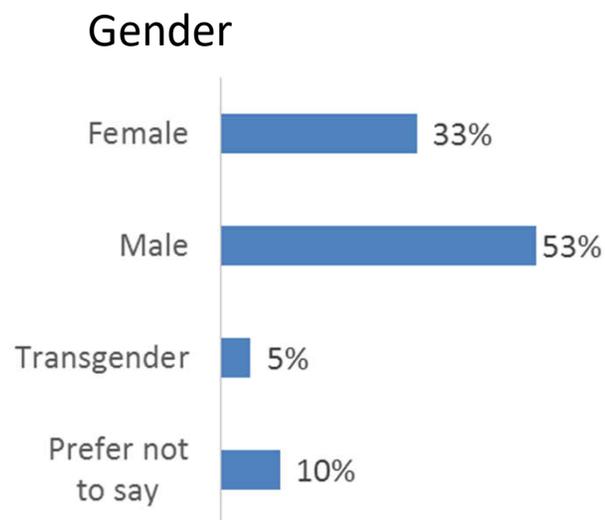
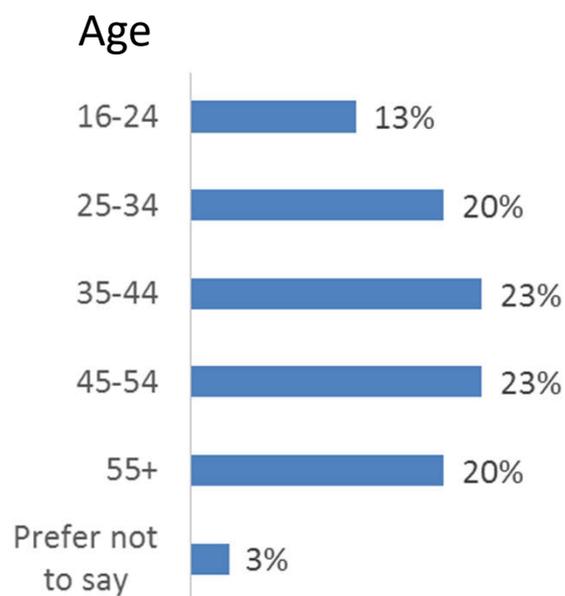
Participation by Drop-In Location (service users)



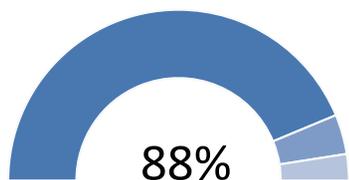
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Participants reflected a diversity of age groups.
Overall, half of survey participants identified as male.



The housing circumstances of the majority of participants were unstable over the last two years.

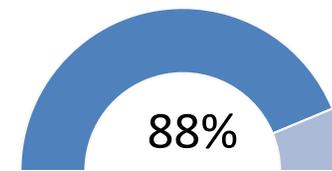
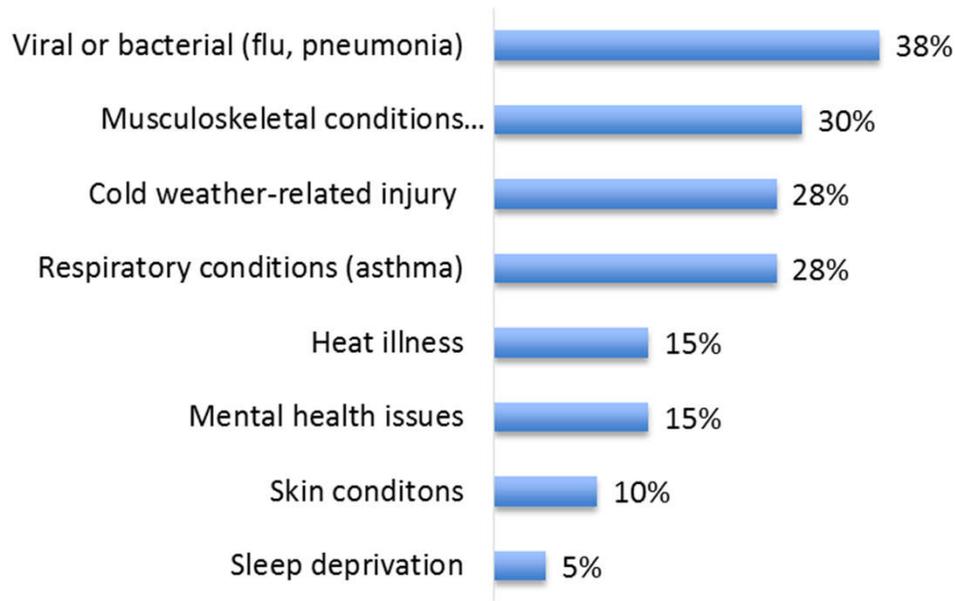


of participants stayed at a combination of places over the last 2 years

Most participants moved often between various locations including shelters, drop-ins, outdoors, their own home, and homes of friends or family.



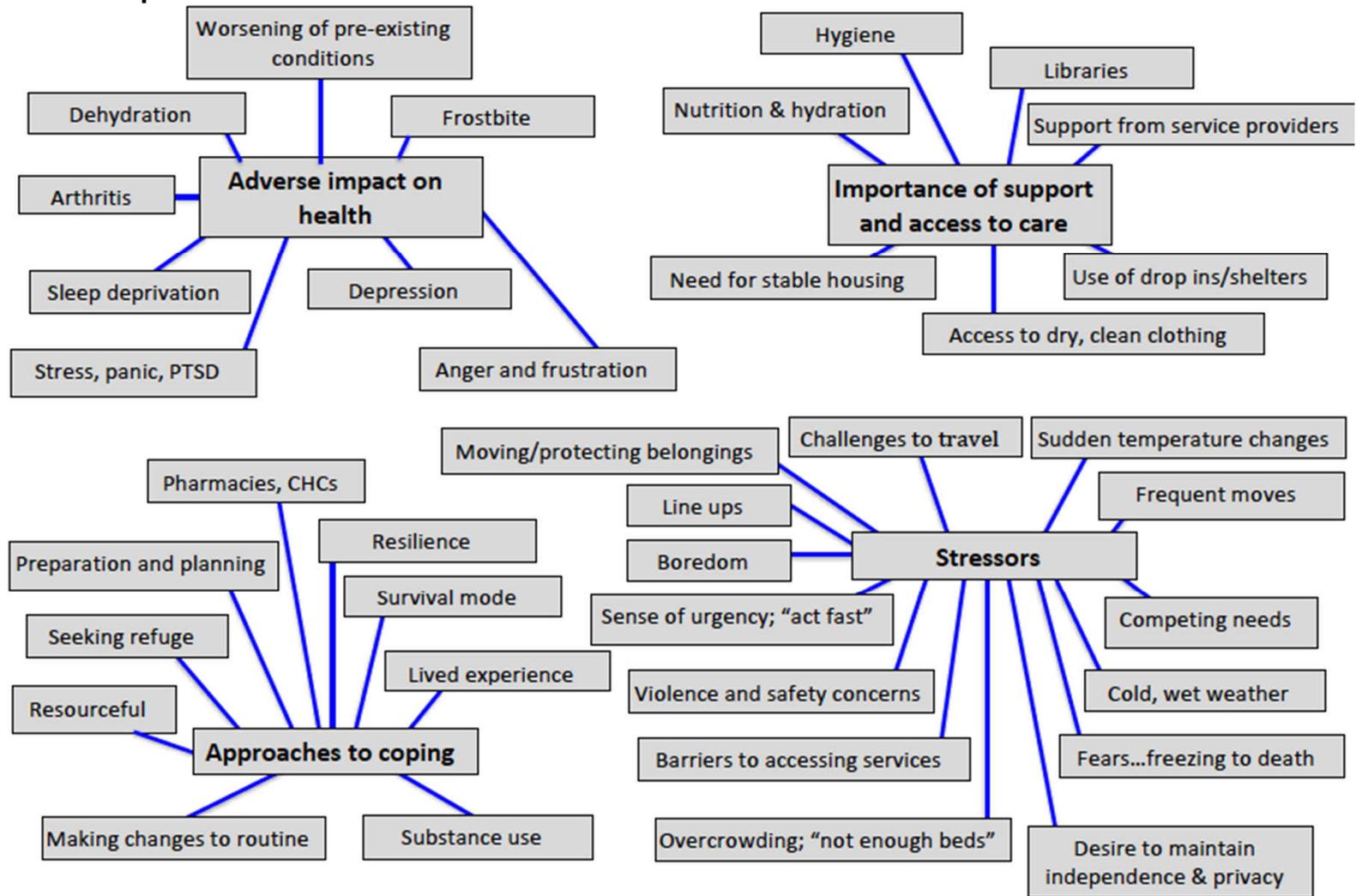
The majority of participants reported personal experiences when weather had adversely impacted their health.



of participants identified that weather had a negative impact on their health



Thematic map



Respondents experienced different impacts on their health in summer vs winter.

- Summer 
- Dehydration
- Fatigue, listlessness, immobility
- Breathing problems
- Sunburn
- Heat stroke, fainting
- Crime, violence, safety concerns
- Irritability
- Seizures

- Winter 
- Frostbite, hypothermia, trench foot
- “Freezing to death”
- Depression
- Stress
- Isolation
- Cold, flu
- Pneumonia



About 60% of participants noted they alter their daily routine during extreme weather.

- Quickly plan for shelter - get to drop-ins, libraries, malls, 24-hr fast food establishments, ride the TTC.
 - “I always go somewhere I feel comfortable like a drop-in or library”; library as a “haven”.
- Seek dry clothes, boots, keep feet clean and dry;
- Reschedule appointments;
- During the summer: stay by the water, access water to drink and cool off with, take showers, keep a fan.



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Summary of Study Findings

- Extreme weather exacerbates existing struggles with health, activities of daily living, social isolation, and stigma in people experiencing homelessness.
- There are many direct and indirect health impacts.
- Extreme weather results in a shift in priorities and competing needs.
- There are many services that meets needs, and actions that are working.
- There are many areas of opportunity for enhancements in assisting with the impacts of extreme weather.



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What approach did the evidence support?

- Cold weather response in Toronto should have multiple components:
 - 24-hour continuous drop-in services during the period of greatest health risk for those most vulnerable
 - Alert-based response on extremely cold days as they occur
 - Messaging and actions to address health risks that persist throughout the winter



Evidence to inform healthy public policy

- Findings were used to support the implementation of 24-hour drop-in services during the winter season for people experiencing homelessness.
- For the 2017-2018 season:
 - 24-hour drop-in services are available for the duration of the winter season, November 15 to April 15.
- In 2018 City Council directed Shelter, Support and Housing Administration to “retain operations of the necessary respite centres, warming centres, and drop-in programs beyond the scheduled April 15, 2018 timeline to respond to the overcrowding in the shelter system.”



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Extreme cold weather alerts are also still issued



- Extreme Cold Weather Alerts are issued by the Medical Officer of Health (MOH) when:
 - Environment Canada forecasts a temperature of -15°C or colder or a windchill of -20 or colder
 - The MOH can apply discretion in calling alerts (e.g. precipitation, sudden cold weather)
- Shelter, Support, and Housing Administration is responsible for coordinating response activities
 - 24 hour drop-in centres, token distribution, shelters, enhanced street outreach



Cold weather services - SSHA

- Drop-in services
 - Low-barrier, warm food and drinks, referrals to shelters and other support services
- Overnight street outreach
- Transit tokens made available at drop-ins
- Additional shelter spaces are opened



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Questions?

More Information

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