



**CHASE**

CANADIAN HEALTH ASSOCIATION  
FOR SUSTAINABILITY & EQUITY

# Taking Local Action to Reduce Climate Change Health Risks

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OPHA Forum  
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# Creating Healthy and Sustainable Environments

- ▶ Reactivated in February 2020
- ▶ **Executive Director, Directors & Associates** - public health professionals with long history of work on environmental & built environment issues
- ▶ **Making the health case for climate action**
- ▶ Research, capacity building & advocacy
- ▶ <https://chase-canada.org/>

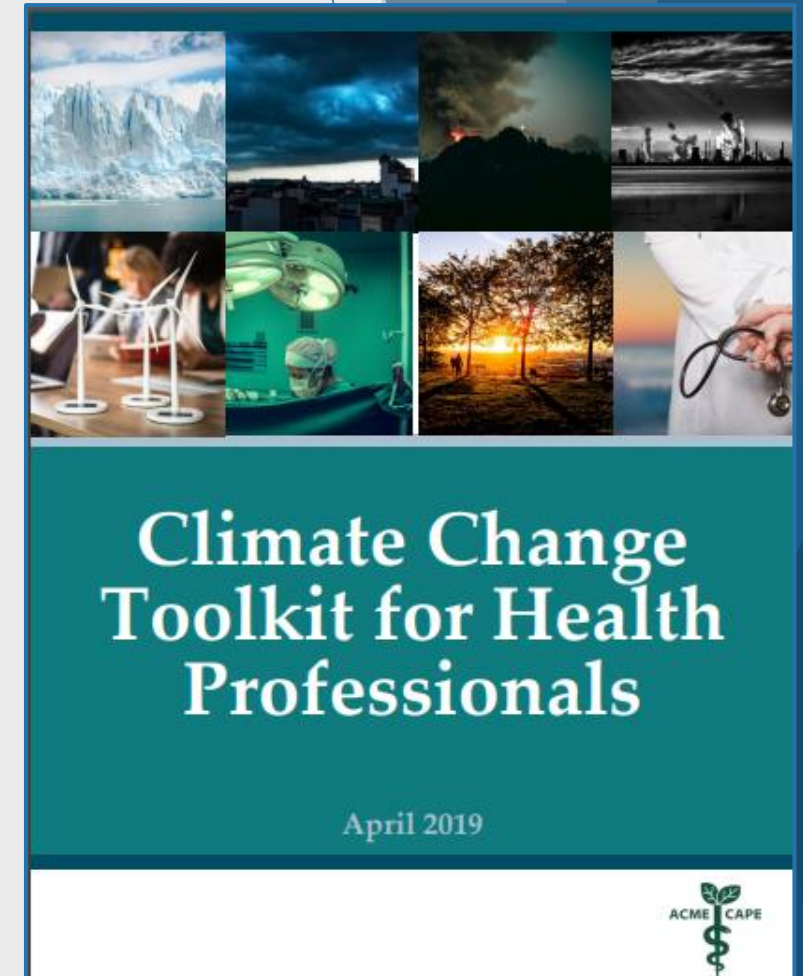


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# Climate Change Toolkit for Health Professionals

- ▶ Produced by Kim Perrotta while the ED at CAPE
- ▶ Funded by the ECCC Climate Action Fund
- ▶ 8 Stand-Alone Modules & 7 Factsheets
- ▶ Available English and French
- ▶ Open access:
- ▶ <https://chasecanada.org/wp-content/uploads/2021/01/Climate-Change-Toolkit-for-Health-Professionals-Full-Toolkit.pdf> (240 page)
- ▶ <https://chasecanada.org/wp-content/uploads/2021/08/Boite-a-outils-sur-les-changements-climatiques-pour-les-professionnels-de-la-sante-2019.pdf> (280 pages)



# Preparing for Climate Change in our Communities

- ▶ Addresses programs/policies that can be used to prepare for climate-related events & changes
- ▶ Also addresses steps that can be taken to increase community resiliency
- ▶ Provides examples & tips for health professionals
- ▶ [Module-7-April-2019.pdf \(chasecanada.org\)](#)



# Promising News

- ▶ Many actions are being taken by local governments and communities to reduce climate-related risks and improve community resiliency
- ▶ Actions include those focused on:
  - ▶ Temperature Extremes (Heat & Cold)
  - ▶ Floods
  - ▶ Water Quality
  - ▶ Wildfires
  - ▶ Vector Borne Diseases
  - ▶ Food Systems
  - ▶ Building Community Resiliency

# Extreme Heat

- ▶ Promote heat warnings and actions to take to protect health
- ▶ Provide or promote local cooling spaces
  - ▶ Government buildings (libraries, community centres, shelters, drop ins); extended hours for pools
  - ▶ Community based heat relief networks - some private and non profit organizations including shopping malls and YMCA locations
  - ▶ Landlords in multi-residential rental apartments are required to post heat-related information on their community notification boards including tenant options to keep cool
  - ▶ Outreach and wellness checks for those who are underhoused
- ▶ Exploring bylaws for multi-residential rental apartments to require minimum and maximum temperatures and cooling rooms in common spaces (Toronto, Durham Region)
  - ▶ Building Retrofits resources/grants



# Extreme Heat

- ▶ Reduce urban temperatures through use of reflective surface materials such as green & cool roofs
  - ▶ Green Roof bylaws (Rosemont-La Petite-Parti Quebec, Toronto)
- ▶ Reduce urban temperatures by increasing green spaces
  - ▶ Increased greenspace through street tree management plans (Kingston, Peel Region, Surrey BC)
  - ▶ EcoHealth Ontario - Toolkit provides resources and guidance to those communities interested in making green space improvements
  - ▶ Schoolyard Oasis Project -transformed schoolyards from asphalt into greenspace that serve as community and cultural hubs after school (Paris)



# Extreme Cold

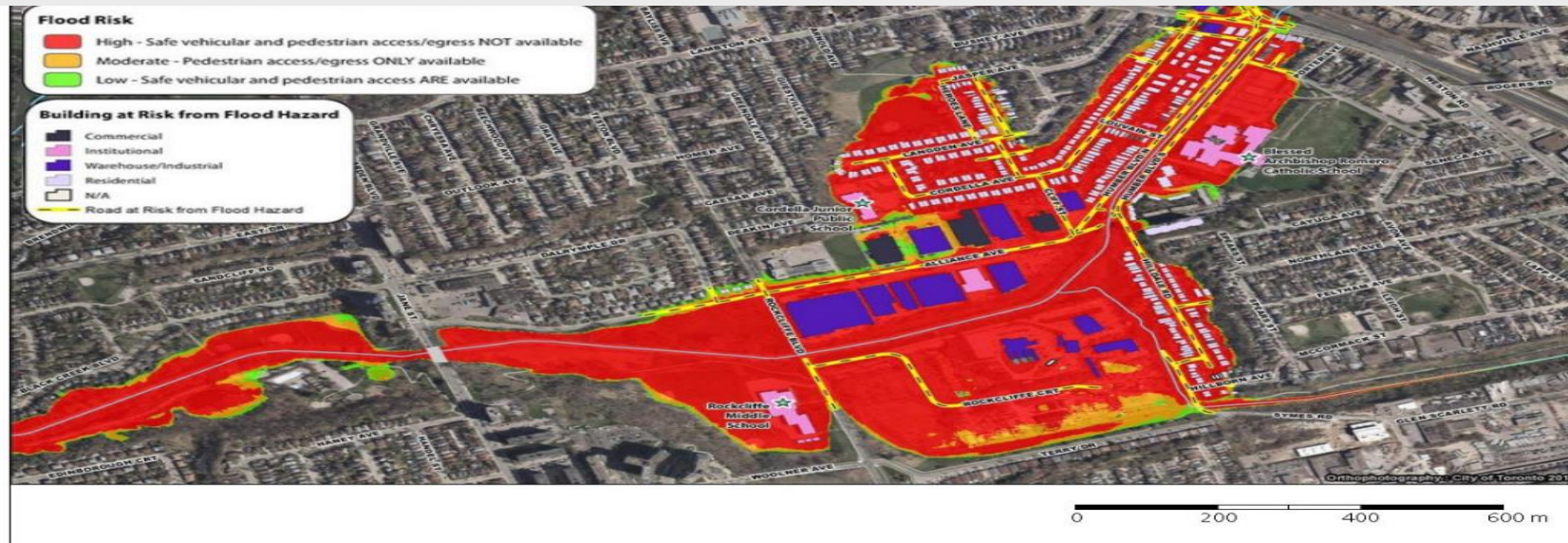
- ▶ Promote extreme cold warnings and education about the risks to vulnerable populations (seniors, cardiovascular disease and those who are under-housed)
- ▶ Alerts trigger local cold weather responses - warming centres, outreach checks, additional shelter beds
  - ▶ Vancouver - warming centres promoted through partner agencies especially those serving individuals experiencing homelessness
  - ▶ Montreal - use of transit stations for warming
  - ▶ Toronto - 24 hour continuous respite drop in services during the winter months providing resting spaces, meals and service referrals





# Flooding

- ▶ Flood forecasting and warning protocols
- ▶ Public education and outreach about local flooding risks and associated health impacts (exposure to mould, contamination of well drinking water, high anxiety and post traumatic stress disorder)
  - ▶ Annapolis Royal, Nova Scotia developed flood maps and held forums followed by mock disaster scenarios. Local fire, medical, emergency response teams and the public were involved



Flood Risk Map by the Toronto and Region Conservation Authority

# Flooding

- ▶ Proactive maintenance of flood control structures; re-grading of lots and roadways
- ▶ Construction of new or upgrading stormwater facilities
- ▶ Build flood resilient communities through development of guidelines/policies for flood prone areas
  - ▶ Policies in Alberta prohibit future development in flood-ways; homeowners take on future risk if they opt to stay in homes in flood prone areas



# Water Quality

- ▶ Stormwater management plans to reduce runoff
  - ▶ Use of natural infrastructure such as rain gardens, green roofs, trees
  - ▶ Improve the design of paved surfaces such as parking lots to expand the proportion of permeable surfaces
- ▶ Community education about the impacts of intense rainfalls/snow melt on sanitary systems, beaches & drinking water
  - ▶ Barrie hosted a workshop for real estate agents, home inspectors and plumbers to promote the Disconnect to Protect Rebate Program (removal of downspouts or sump pumps connected illegally to the sanitary system)
  - ▶ Blue Flag programs



# Wildfires

- ▶ Public education and outreach about direct injury from fire and associated health impacts from exposure to smoke/air pollution, stress related the event, evacuation and safely returning to their homes
  - ▶ Alberta Health Services provides education such as testing water quality, awareness of the air quality/AQHI advisories and mental health concerns
- ▶ Kamloops BC's Community Wildfire Protection Plan requires wildfire mitigation measures be included in development plans (such as fire resistant roofing materials)



Forest fire in Terrace Bay, Ontario  
Photo: Gary Gusol

# Food Systems and Security

- ▶ Integrate food systems into emergency plans
- ▶ Address food safety (power outages)
- ▶ Food Action Plans (Toronto, Metro Vancouver) to better understand and mitigate the risks to the food producing lands and the agricultural lands
  - ▶ Community gardens
  - ▶ Zoning bylaws to expand support for local food urban gardening



# Vector Borne Disease

- ▶ Surveillance programs
  - ▶ Collect exposure data and identify effective public health interventions
- ▶ Prevention programs
  - ▶ Public education about protection from ticks & mosquitoes
  - ▶ Source reduction such as removing pools of stagnant water
  - ▶ Larviciding



# Increasing Resiliency in Communities

- ▶ Partnerships and collaboration are key to building a resilient community and to act on climate related risks
- ▶ Faith based organizations and the City of Brampton's Lighthouse project:
  - ▶ identified vulnerable populations during extreme weather events
  - ▶ volunteers were trained and disseminated information to their communities about ways to help each other in emergencies



Faith & the Common Good | Sustainable Eastern Ontario

# Health Professionals Taking Action

- ▶ Highlight the health threats of climate change and advocate for actions to reduce risk
  - ▶ CANADA'S CHIEF PUBLIC HEALTH OFFICER (CPHO) ANNUAL REPORT: MOBILIZING PUBLIC HEALTH ACTION ON CLIMATE CHANGE (Oct 2022)

**"We must continue to bring climate considerations into public health work to prepare for, and respond to, the now inevitable health impacts. This means supporting communities to adapt to the climate risks they will face."**

- ▶ Integrate health research and messages into community plans such as Official Plans, Strategic Plans, local Climate Action Plans, Green Development Standards, Emergency Preparedness Plans
- ▶ Stay current about climate changes/health risks and new strategies





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