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Cool Canadians, Healthy Communities: Preparing Vulnerable Populations for Extreme Heat Events



Community Sharing Network Webinar
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Outline

- Recent climate change and health reports
- Update on Health Canada's extreme heat and health initiative
- Heat health vulnerability assessment
- Opportunities for involvement

"Climate change is the biggest global health threat of the 21st century"


Lancet and UCL, 2009




World Health Assembly Resolution (2009)

Climate Change and Health

- advocacy and awareness raising
- engagement in partnerships with other UN organizations and sectors other than the health sector at national, regional and international levels
- promoting and supporting the generation of scientific evidence
- strengthening health systems to cope with the health threat posed by climate change, including emergencies related to extreme weather events and sea-level rise.



Recent Climate Change and Health Reports

- Climate Change and Children: A Human Security Challenge (Unicef, 2008)
- Managing the Health Effects of Climate Change (The Lancet / UCL, 2009)
- Protecting Health from Climate Change: Global Research Priorities (WHO, 2009)
- Solving the Puzzle: Researching the Impacts of Climate Change Around the World (National Science Foundation, 2009)
- Emergency Management: Taking a Health Perspective (Health Canada, 2009)
- Mudanças climáticas e ambientais e seus efeitos na saúde: cenários e incertezas para o Brasil (Brazil, 2008)




Developing Heat Resilience... An Overview

Five core themes:

- Heat-Health Science
- Clinical Competencies
- Pilot Heat Alert and Response Systems
- Heat Health Messaging
- Partnership and Dissemination

Four Key Deliverables:

- Pilot Heat Alert and Response Systems in 4 communities
- Best Practices Guide for Heat Alert and Response Systems
- Clinical Guidelines on Heat
- National Conference in 2011



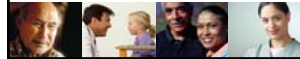
Heat Health Science - Update

- Association between heat (WBGT) & indices of adverse health effects
 - Kingston (3 PHUs, 9 hospital ERs) - Syndromic Surveillance System (QUESST)
- Association between temperature and heat (WBGT) readings between 5 airport-based met stations, and the centres of the contiguous communities
- Association between Spatial Synoptic Classification-based calling (or not) of heat alerts, and the corresponding heat (WBGT) readings in the community
- Spatial distribution of heat within communities, with a focus on areas with populations at risk



Heat Health Science - Update

- Hats and heat – examination of whether hats are beneficial with respect to maintaining a neutral heat balance
- Personal cooling fans – examination of the combinations of temperature and humidity whereby the heat gained by convection becomes greater than the heat lost by sweat evaporation
- Assessing Canadian public health recommendations in relation to extreme heat events



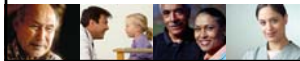
Guidelines for Health Care Workers - Update

Establishing the needs of Health Care Workers

- Formation of the Health Professional Information/Intervention and Training Advisory Committee, first meeting
- Stakeholders Workshop
- Guideline scope and methodology outlined

Ongoing

- Evidence-based technical review report
- Prepare user friendly summaries for quick access
- Full health care worker guidelines document



Pilot Heat Alert and Response Systems - Status

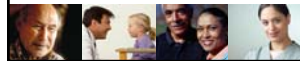
• Canadian Public Health Association providing Technical and Advisory Services to 4 pilot communities in the development of their HARS

• 4 confirmed pilot communities include:

- Winnipeg
- Assiniboine Health Region
- Windsor
- Fredericton



• Steering Committee and Advisory Committee have been formed for the Fredericton Pilot Project. Lead agency is the Office of the Chief Medical Officer of Health (Ministry of Health)



HARS Best Practices Guide - Update

Research to identify best practices

- Vulnerability assessments in communities
- Review of Canadian and international best practices for heat alert and response systems
- Occupational health and safety codes and regulations for extreme heat events in Canada
- Urban heat island mitigation for extreme heat events
- Evaluation of Toronto and Montreal HARS



Health messaging

Challenges:

Scientific basis for messages

Changing behaviour of vulnerable populations

Reaching public health authorities

Reaching caregivers



<http://www.hc-sc.gc.ca/hl-vs/iyh-vs/v/viron/heat-chaleur-eng.php>



Research to Inform Risk Communication


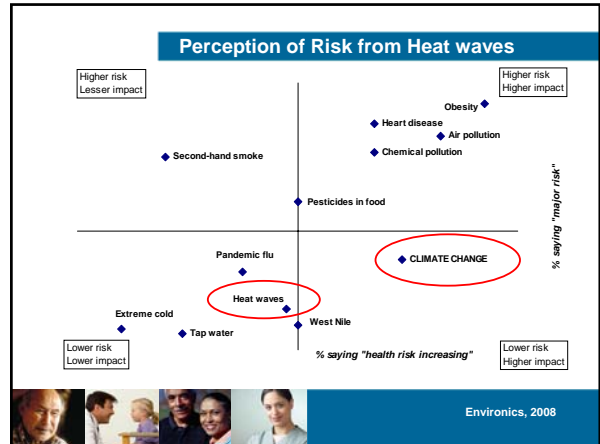
The Role of Risk Perception in Climate Change Adaptation

Develop an inventory of individual level adaptations to health risks posed by climate change advocated by health and emergency management authorities in Canada

Examine to what extent Canadians perceive risks to human health from weather extremes, climate variability and natural disasters

Identify the extent to which individuals are responding to the current advice on needed adaptations related to a range of health risks provided by health authorities and

Characterize variations and gaps in current adaptation efforts among Canadians


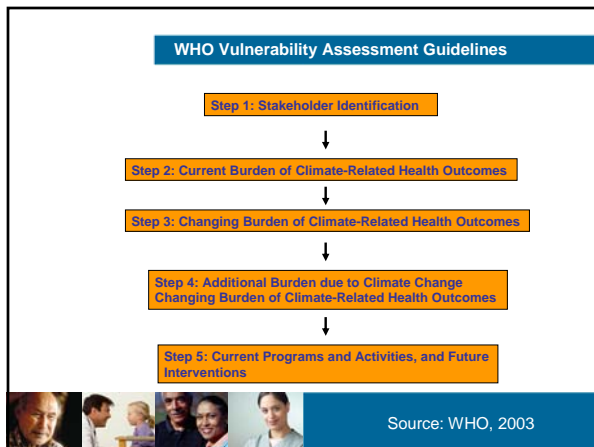
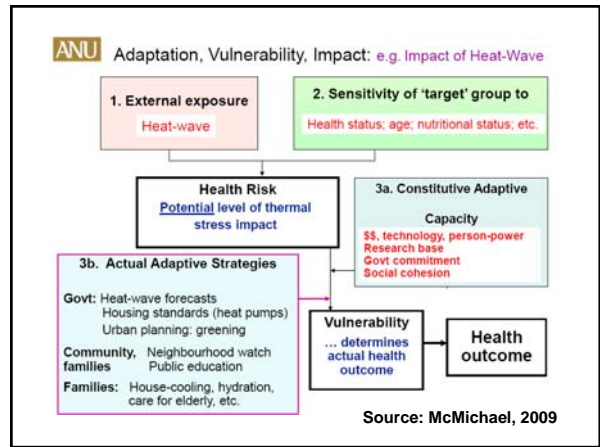
Heat Health Vulnerability Assessments

Objectives:

- Test the applicability of new PAHO climate change and health vulnerability assessment guidelines within the Canadian context
- Inform development of HARS in the 4 pilot communities
- Determine whether a new or revised set of guidelines is required for assessing vulnerability to the health impacts of extreme heat within Canada

Next Steps:

- Confirm Manitoba communities for assessments
- Expert review of CCHO approach/methods for piloting the guidelines
- Undertake the assessments

More Information

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