Canadian Climate Change and Health Vulnerability Assessment 2007: Update on Progress

Health Assessment 2007

In June 2003, the Climate Change and Health Office (CCHO) at Health Canada launched the *Canadian Climate Change and Health Vulnerability Assessment 2007*. This national project on health impacts will allow leading experts across Canada to contribute to a better understanding of how vulnerable Canadian communities are to climate change, and gauge the capacity of Canadians and their institutions, particularly the public health sector, to adapt to risks associated with climate change and climate variability.

Health Assessment 2007 Research

Based on expert advice generated from a series of workshops on the air quality, natural disasters, and adaptive capacity themes of the Assessment, a number of important research projects are planned as part of this initiative. Several examples of these projects under investigation are described below.

Assessment of the Capacity of Atlantic Coastal Communities to Cope with and Adapt to Extreme Weather Events

A full funding proposal has been submitted to Natural Resources Canada's Climate Change Impacts and Adaptation Program (CCIAP) to conduct a study in two Atlantic coastal communities in Winter, 2005. Using functional exercises, the project will assess the capacity of each community to respond to, and cope with, a simulated storm surge exacerbated by sea level rise. The project will involve municipal, provincial and federal partners and will assess the coordination and communication between organizations as they respond to the events. The project will provide a better understanding of the determinants of adaptive capacity and will identify best practices and maladapted strategies. Funding is expected to be announced in Spring, 2005.
(Contact: Anita Walker, anita_walker@hc-sc.gc.ca)

The Okanogan Mountain fire in August 2003 reduced air quality, destroyed more than 240 homes, and forced the evacuation of nearly 30 000 people.

Montreal Heat Event Exercise

The city of Montreal has experienced multiple heat waves in recent years and anticipates that climate change will exacerbate these events in the future. The city has developed a heat event response plan to minimize health impacts resulting from extreme heat and is undertaking a tabletop exercise to test the response plan in June, 2005. Health Canada's Quebec regional office will coordinate this project for Montreal Public Health. The exercise will provide a better understanding of the effectiveness of the response plan and the capacity of the Montreal community to minimize health impacts related to heat events.
(Contact: Dr. Lucie-Andrée Roy, laroy@sympatico.ca)

Psychosocial Impacts of Climate Change and Variability in Canada

Climate change is expected to have psychosocial impacts as a result of people experiencing extreme natural hazard events. This includes both environmental and social stressors, which can negatively impact psychosocial well-being and mental health at the individual, household and community levels. The Centre of Emergency Preparedness and Response, Public Health Agency of Canada, is undertaking a study on this emerging area of research to provide a better understanding of the scope of research, as well as recent developments in health emergency management which are addressing this issue. The study will result in an inventory of documented psychosocial impacts and projected risk levels for various climate-related natural hazards. The project will also describe factors which influence the capacity of communities in Canada to prepare for and respond to the psychosocial impacts of natural hazards. (Contact Dr. David Hutton, dave_hutton@phac-aspc.gc.ca)

Canadian Climate Change and Health Vulnerability Assessment 2007

Examples of vulnerable populations include ill and disabled people, seniors, children, people living off the land, low income and homeless people

Identifying Population Groups Vulnerable to the Health Impacts of Climate Change in Canada

In order to protect vulnerable populations, it is important to first identify those groups who are at greatest risk. Pending funding, the researchers at the Université Laval will attempt to better identify Canadian populations that are vulnerable to negative health impacts related to climate change. To achieve this, the researchers would analyse the potential benefit of using a new facilitating technology (Spatial On-Line Analytical Processing) together with a recently developed systemic method of structuring indicators. Using novel technology and methodologies, vulnerable populations could be identified in ways that will be meaningful to public health decision makers.
(Contact: Pierre Gosselin, Pierre-L.Gosselin@crchul.ulaval.ca)

International Climate Change and Health Survey

Climate change, and its resulting health impacts, is not confined to the borders of a particular nation. To gain a better understanding of the ways in which this global phenomenon is effecting other parts of the world, a portion of the Assessment will involve a survey of international activities related to climate change, and human health and well-being. This survey, conducted by Dillon Consulting of ClimAdapt, will yield information on how the health sector internationally is responding to the expected health impacts of climate change. Specifically, the project's final report will provide information about international organizations and national ministries of health that are involved in research, and/or are taking measures to reduce the impact of climate change on health. The report will also include a summary of the effectiveness of international adaptation strategies.
(Contact: Rob Young, young@dillion.ca)

Cat. H46-2/04-364E
ISBN 0-662-38028-2

Extreme Weather Impacts on Health and Emergency Management Organization Support Services

Climate change is affecting the health and well-being of our Canadian communities, as is evident from an examination of the Halifax region. Hurricane Juan hit in September 2003; in February 2004 a blizzard producing one-metre of snow also devastated the region. Both events severely impeded access to health facilities and raised questions about the cumulative effects of extreme weather on public health systems. A funding proposal has been submitted to Natural Resources Canada's Climate Change Impacts and Adaptation Program (CCIAP) to address these questions. Inter-Cultural Development Innovations of ClimAdapt plans to provide a preliminary assessment of extreme weather impacts and vulnerability to health and emergency management organizations (EMO) support services, together with the health and supporting EMO sector's adaptation during the two extreme weather events in Halifax in 2003 and 2004.(contact: Peter Hayes, idihayes@ns.sympatico.ca)

Hurricane Juan resulted in 5 deaths and the loss of power to 300 000 homes and businesses; six months later the Halifax region was devastated by a blizzard

For more information on the Health Assessment 2007 please contact Anita Walker (anita_walker@hc-sc.gc.ca), or visit us at:

www.hc-sc.gc.ca
or
climatinfo@hc-sc.gc.ca