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Human Health in a Changing Climate:

A Canadian Assessment of
Vulnerabilities and Adaptive Capacity



Canada 

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A Canadian Assessment of
Vulnerabilities and Adaptive Capacity

Edited by:

Jacinthe Séguin
Health Canada

Health Canada is the federal department responsible for helping the people of Canada maintain and improve their health. We assess the safety of drugs and many consumer products, help improve the safety of food, and provide information to Canadians to help them make healthy decisions. We provide health services to First Nations people and to Inuit communities. We work with the provinces to ensure our health care system serves the needs of Canadians.

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PREFACE

Doctors, nurses, and public health and emergency management officials are continually on alert for changes that will affect the well-being of the population. Increasingly they have recognised the impacts that environmental degradation can have on health and are seeking information to support needed clinical interventions and public health programs. Awareness of climate change and of the possible repercussions on health is growing among these health care professionals and decision makers but gaps in the knowledge of existing and future risks remain important barriers to adaptation. Health Canada undertook this publication in response to a growing number of requests for information about how Canadians will be impacted by climate change. We believe that increased knowledge can empower Canadians and their communities. It provides opportunities to educate people about the risks and actions needed to protect the most vulnerable in our society and, ultimately, improves lives.

Human Health in a Changing Climate: A Canadian Assessment of Vulnerabilities and Adaptive Capacity represents the first comprehensive assessment of health vulnerabilities to climate change in Canada. It provides an up-to-date synthesis of knowledge on how the health of Canadians is affected by our climate today, and what may lie ahead under future climate change.

The goal of this publication is to raise awareness of the health risks posed by climate change among those charged with protecting health. It is hoped that the results will provide guidance to the public health and emergency management communities and support their efforts to adapt plans, policies and programs in order to prevent or reduce risks to health. The regional studies in this Assessment show how multiple sectors, levels of government, and individual Canadians play important roles in protecting health. They also demonstrate the need to understand the effects of climate change on local and regional scales. Some of the findings are not conclusive and therefore we look to researchers and decision makers in Canada to continue increasing our understanding of risks to Canadians, so that we can further the development of needed adaptations.

What started as a much smaller project grew into a larger undertaking as partners and stakeholders encouraged us to learn more about the impacts of concern to Canadians. We received valuable advice through early workshops and through the contribution of many experts during the project. I am indebted to the many individuals who shared our vision and took time to conduct research, provide expert opinions, and review draft chapters. The contribution of so many individuals from organisations and institutions across Canada is a testament to the multi-disciplinary and collaborative nature of this endeavour. Their commitment to advancing our knowledge in this area made this publication possible and I thank them for their dedication.

Jacinthe Séguin
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FOREWORD

Climate change presents significant challenges in efforts to maintain and improve the health and well-being of people living around the world. Developed countries such as Canada are not immune to the impacts of climate hazards such as weather extremes. As health risks from extreme weather events and global warming continue, the scientific information needed to address these risks must reach health and emergency officials and individual citizens so that they can take needed measures to adapt.

This new report published by Health Canada is a timely assessment of new research on health risks posed by climate change. The theme of World Health Day in 2008 is “Protecting Health from Climate Change”, which reminds us of the urgency of this issue and of the need to take necessary actions to protect those most vulnerable to the health impacts of climate change.

This Assessment draws from guidance provided in the “Methods for Assessing Climate Change and Health Vulnerabilities and Public Health Adaptation”, which were the result of a multi-year collaboration among the World Health Organization, Health Canada, the United Nations Environment Programme and the World Meteorological Organization. Continued collaboration among researchers, government officials and health organizations in efforts to address the impacts of climate change is essential if we are to reduce risks to the health of the most vulnerable populations.

Findings and lessons learned from the Health Canada Assessment can benefit other countries in their investigations of existing vulnerabilities and in the engagement of the health sector in future adaptation work.

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