

# Roundtable on Health and Climate Change

## Summary Proceedings

**FINAL REPORT**

February 2001

**CPHA  
ACSP**



CANADIAN PUBLIC HEALTH ASSOCIATION

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*Canadian Public Health Association*

*February 2001*

## Overview of CPHA

- Incorporated in 1912
- National not-for-profit health association
- Represents over 25 health disciplines and the general public
- Governed by a 24-member Board of Directors
- Management board is 8-member Executive Board
- Conducts and supports health and social programs nationally and internationally
- Stresses partnership role with national and international NGOs, federal/provincial governments and private sector corporations
- Provides a “special” health resource at national and international levels of both professionals and non-professionals

## Mission Statement


The [Canadian Public Health Association \(CPHA\)](#) is a national, independent, not-for-profit, voluntary association representing public health in Canada with links to the international public health community. CPHA's members believe in universal and equitable access to the basic conditions which are necessary to achieve health for all Canadians.

CPHA's mission is to constitute a special national resource in Canada that advocates for the improvement and maintenance of personal and community health according to the public health principles of disease prevention, health promotion and protection and healthy public policy.

An electronic version of this document is available at <http://www.cpha.ca/english/natprog/rndtable/page1.htm>

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CPHA appreciates the technical and financial support of [Health Canada](#) and the [Climate Change Action Fund](#) of the [Government of Canada](#).

## 1. Introduction

The [Roundtable on Health and Climate Change](#) started off from the recognition that climatic and environmental factors are among the important determinants of human and ecosystem health.

This important public health concern was apparent in opening remarks by Dr. David Butler-Jones, President of the [Canadian Public Health Association \(CPHA\)](#), who observed that “while scenarios change, the principles of anticipating needs and addressing problems remain the same.” The five Roundtable themes reflect the consistent mandate of public health: to prevent disease, ease suffering, and heal the sick.

Climate change will lead to a broad range of health impacts for Canadians, – both in their day-to-day lives and as citizens of the world. The gradual warming of the earth’s atmosphere is expected to increase the frequency and severity of droughts, winter storms and tornadoes, change the pattern and distribution of many diseases and allergens, and cause a significant rise in the number of very hot days in larger cities. This change in summer weather could aggravate existing smog problems in major centres, leading to an increase in asthma and other respiratory problems for children, seniors, and other vulnerable people.

The design of the Roundtable reflected both the urgency and the multidisciplinary nature of the issue. Held September 17-19, 2000, the event brought together representatives from key sectors to review the scientific consensus on the health impacts of climate change and to discuss the co-benefits of reducing greenhouse gas (GHG) emissions. The Roundtable was co-chaired by Dr. Butler-Jones and Sandra Schwartz, Director of Environmental Programs with the Canadian Institute of Child Health.

This document provides highlights of the Roundtable process and captures the key findings and outcomes that received the most attention in the course of the event. Above all, it reflects the sense of urgency that pervaded much of the discussion. By the end of the Roundtable, it was clear that the hard work on health and climate change has just begun – and that many of the organizations that took part in the Roundtable are poised for further joint action on a matter of immediate and pressing importance.

## 2. Major Themes and Concerns

In the opening session Sunday evening, September 17, panelists reviewed some of the latest scientific evidence on climate change and emerging public health concerns.

## 2.1 Science of Climate Change

Dr. Gordon McBean, Chair of the Board of Trustees of the Canadian Foundation for Climate and Atmospheric Sciences, cited a number of links between health and climate change, including periods of extreme heat and cold, severe weather events like hurricanes, tornadoes, lightning and floods, and a variety of direct and indirect influences on the occurrence and movement of disease. In many countries, the impact of climate change on food supplies will also have implications for human health. Looking ahead, he said atmospheric carbon dioxide (CO<sub>2</sub>) concentrations can be expected to double over pre-industrial levels by 2060 or 2070, an outcome that would only be delayed by 10 to 20 years by full implementation of the Kyoto Protocol. Less extreme cold will mean reduced stress for Canadians, but will make it easier for wintering diseases and pests to survive from one summer season to the next. A warming of up to 5°C during the summer will increase the frequency of extreme heat waves, like the one that led to hundreds of deaths in Chicago a couple of years ago. Bad air days in major cities will also be more common. Climate researchers are concerned that hurricanes, tornadoes, lightning, and winter storms will increase in frequency and intensity. Summer precipitation will decrease over most of North America but increase in the high North, with direct impacts on food production and the frequency of drought and extreme rainfall: for example, a 20-day event that now occurs every 15 years might repeat every 5 years.

## 2.2 Health Risks and Effects

Dr. Paul Epstein, Associate Director of the Center for Health and Global Development, Harvard Medical School, suggested that science has underestimated the rate at which climate change is occurring, as well as the sensitivity of biological systems to small changes in temperature. He noted that throughout history, epidemics and pandemics have come in successive waves. The difference this time is that a response is required at the level of terrestrial and marine ecosystems. Birds eat insects, and coyotes, snakes and owls eat rodents. But when a phenomenon like climate change disturbs those natural biological controls, the larger system goes out of balance. When humanity simplifies nature by reducing biodiversity, when “mosaics of habitat” are removed, infection is more likely to spread. Epstein predicted that a doubling of carbon dioxide levels will expand the area and extend the season in which diseases like malaria can be transmitted, adding that warmer winters have already extended the geographic range for Lyme disease and encephalitis. He indicated that, based on the precautionary principle, the public health response should incorporate three levels of solutions: surveillance, monitoring and response capability; better health early warning systems; and policy related to environment and energy.

## 2.3 Public Health Priorities

Dr. John Last of the University of Ottawa placed climate change in the context of other aspects of global change, such as depletion of the stratospheric ozone layer, the availability of fresh water, food, and other basic resources, the distribution of infectious organisms world-wide, and rapidly-changing sociodemographics of a growing world population. He noted that changes in temperature and humidity will have an effect on virtually every kind of living organism, leading to a proliferation of the microorganisms and insect vectors that spread a wide range of diseases, from malaria to dengue fever. A conservative estimate is that sea levels will rise by 40 centimetres in the next century, forcing an estimated half-billion people to leave their homes and challenging Canada to maintain its public health infrastructure in a high state of readiness. Beyond floods, hurricanes, ice storms, and other “obvious emergencies”, public health will have to cope with the type of social disruption that can bring the country to a standstill over an issue like oil pricing. Meanwhile, increased exposure to ultraviolet (UV) radiation as a result of stratospheric ozone depletion will lead to a whole other range of health effects, some of which will interact with the effects of climate change.

## 2.4 Climate Change Policy

Mr. Chris Henderson, CEO of the Delphi Group, discussed strategies for moving the health dimensions of climate change forward in an integrative fashion. The ultimate question, he said, is how to manage change – arising both from climate change and from efforts to control it – as it affects individuals, communities and industries. In that light, he said the Roundtable could perform a great service by suggesting ways of integrating health into the climate change policy environment. Canada’s climate change process can be confusing, Henderson said, but it’s reasonable to expect broader federal/provincial/ territorial collaboration – an essential element, given the limits to federal powers. Health concerns received relatively little emphasis in the issues table process, partly because there is relatively little specific information on the health impacts of climate change – essentially because the health sector wasn’t included in the process. Henderson listed a number of upcoming opportunities to insert health concerns into the climate change process, including the October 2000 Joint Ministerial Meeting, the FPT process, key analytical bodies that have continued the work that began with the issues tables, and activities planned by Health Canada’s Climate Change and Health office.

### 3. Theme Presentations

Beginning on the first full morning of the Roundtable, panellists addressed a series of five themes that highlighted different aspects of the link between health and climate change.

#### 3.1 Health Impacts and Costs of Climate Change

- The risk to populations and population health was reflected in a study of marine health on the U.S. east coast, presented by Dr. Paul Epstein of the Center for Health and Global Development, Harvard University Medical School. The study examined marine-related diseases along the coast at all biological levels, looking at causes (social issues, loss of wetlands, climate change), costs (related to health, industry, tourism, and other areas), and policy options. After mapping the associations and developing testable hypotheses, the researchers concluded that “climate change runs through and compounds local ecological issues.” Perhaps of most concern are “the diseases of habitat itself”, such as bleaching that makes coral more susceptible to infection. Other factors include runoff, removal of fish that have a cleaning role, and die-off of sea urchins. A participant noted that the increase in temperature may add to the release of persistent organic pollutants (POPs) stored in sediment and the possibility of these migrating north.
- Economist Dr. Philippe Crabbé of the University of Ottawa warned that many climate change models use average temperatures, which mean little in terms of local impacts and, therefore, in terms of policy. As a result, policy may be more dependent on extreme events, which have a clear local effect and involve the element of surprise. Because climate change has a combined impact on environmental, economic and health systems, Crabbé said the issue represents the best opportunity to implement sustainable development. But since the climate is to some extent an open-access resource, international agreements will be needed to support the local mitigation efforts that are needed. Crabbé stressed the importance of research and monitoring, even if the learning is slow, and suggested that the irreversibility of greenhouse gas emissions might generate a bias towards fewer emissions. Ultimately, he said a healthier population means more adaptive institutions, greater ecological integrity, more robust infrastructure, and a society that is less vulnerable.

#### 3.2 Health Implications of Reducing Emissions

- Dr. Quentin Chiotti of the Pollution Probe Foundation discussed the health co-benefits that can result from climate change action. Although the economic costs of climate change have been identified as a primary

concern, Chiotti cautioned that economic costs should not be the only consideration. Avoided premature deaths (APD) constitute 75-85% of all estimated benefits resulting from reduced GHG-related emissions and improved air quality; it is estimated that 16,000 Canadians die prematurely each year because of air pollution. Other health co-benefits include the avoidance of cancer mortality, as well as a range of neurological, reproductive, developmental and immunological diseases. Based on an in-depth study available on the Roundtable website, <http://www.communityzero.com/roundtable>, Chiotti estimated that the overall magnitude of co-benefits to GHG reduction is greater than previously estimated. Health benefits have been understated, non-health benefits are poorly documented, and many issues are not considered at all.

- Based on preliminary analysis, Mr. Jay Barclay from Environment Canada said the clean air benefits of climate change action are likely to be significant relative to their costs, but not to the extent that the literature would suggest. While air quality benefits are felt locally and in the short term, climate change is global, and climate change action will provide more long-term gain. When researchers looked at the relationship between greenhouse gas emissions and critical air contaminants, they determined that fuel switching will generate the most significant improvement in air quality, with sulphur dioxide and nitrous oxides showing the greatest rates of reduction. Sectoral and regional differences in reduction rates were also apparent in the research, resulting in some regions exceeding required reductions for Canada-wide standards. The study results supported the development of sectoral strategies for reducing greenhouse gases, reflecting the opportunities and costs in different industries.

### **3.3 Climate Change Scenarios**

- While nothing should detract from the need to reduce greenhouse gases, Dr. Ian Burton from Environment Canada stressed the need to reduce Canada's vulnerability to climate variation and extremes. He said public health can play a role by strengthening existing programs and capacity, especially monitoring, surveillance and early warning systems. Adaptations related to human health can occur at different points in the cycle of GHG emissions and climate change, corresponding to primary, secondary and tertiary public health prevention measures. Level one involves tactical/private adaptations, level two calls for strategic/ public adaptations, and level three emphasizes sustainable development paths, including changes in lifestyle, values and technology. To date, Burton said, the climate change debate has been mitigation-driven, and has neglected public health.

Discussions have emphasized biophysical impact, and human health impacts have been seen as concerns for the future. He predicted peaks in health emergencies related to weather, and suggested that the meteorological and health communities could work together in formulating links between atmosphere, weather and health. A long-term research agenda would cover five main areas: heat-related morbidity and mortality; weather-related natural disasters; air pollution; water- and food-borne diseases; and vector- and rodent-borne diseases. Burton warned that air quality should not be overemphasized at the expense of other health areas. The response to climate change should be put into a risk assessment framework.

- Mr. Abdel Maarouf from Environment Canada reported on an ongoing two-year study of the adaptive capacity of health infrastructure in the Toronto-Niagara Region. Researchers are looking at what climate change stress is occurring, who is affected, how human health is affected, and the local response. The study design covers health effects related to temperature extremes, extreme weather events, vector- and rodent-borne diseases, air quality (including indoor environments), and other issues, such as UV-B radiation, food and water, and displaced migration. Maarouf outlined preliminary findings related to government coordination, required improvements in health infrastructure, implications for different populations, socio-economic conditions and access to care, the need for greater integration across environmental and health sectors, and the need to address gaps in research knowledge, enhance monitoring and reporting, and develop effective strategies for prevention and adaptation.

### **3.4 The Role of the Health Sector**

- Mr. Peter Krajcovic, Project Development Manager with VESTAR Ottawa, outlined how the health sector can contribute to a reduction in greenhouse gas emissions, noting that the sector contributes to the problem it is now trying to confront. Based on his company's approach to analyzing energy use in a health facility, he said that key factors contributing to GHG emissions include a lack of control, lack of specific training, limited awareness on the part of patients and staff, and vehicle use. Emissions reductions involve a three-part strategy: recognizing impact, identifying and estimating the costs and benefits of corrective action, and implementing a continuous improvement strategy. In one grouping of health care facilities, VESTAR reduced fuel use by 20-55% and electricity use by 12-40% between October 1998 and September 1999, and achieved "ample" water savings as well. The target payback period for this type of project is generally 7 to 10 years, Krajcovic said.

- Dr. John Eyles of the Institute of Environment and Health, McMaster University, stressed the role of professional and public education in informing, persuading, and ultimately changing behaviour. A key challenge is to compete for both public and professional attention in an audience that is increasingly saturated and fragmented. The tone of the message is also a factor: communication based on fear, risk and lack of control does not provoke a good reaction. Eyles suggested that climate change issues are not on the agenda for most Medical Officers of Health, citing a recent document that discussed asthma and indoor air quality but ignored environmental factors. He noted the different concerns that specific audiences bring to climate change, and underscored the importance of dialogue in understanding each audience for climate change messages. Health professionals will ultimately bear the responsibility for communication on climate change and health, even if they are already overburdened.

### **3.5 Collaborative and Coordinated Approaches**

- Dr. David Butler-Jones, President of the Canadian Public Health Association, noted that public health is currently rethinking old assumptions to identify elements of successful collaboration between the health and environmental sectors. In the context of changing politics, he underscored the importance of managing multiple issues and interest groups, addressing jurisdictional debates and external relationships, distinguishing dogma from pragmatism, making decisions in the face of uncertainty, and accepting that an absolute answer is rarely possible. He described successful collaboration as an ongoing balance between competing interests, driven by the need for pragmatism, the desire for perfection, the challenge of reconciling immediacy and importance, and the need to keep in mind why a project is being pursued and with whom. Noting that the best consultation programs are more than what is needed but less than what is desired, he advised participants against channelling 90% of their energy into issues that they are unable to resolve, while noting that effective collaboration means sharing problems and challenges as well as successes.
- Mr. Angus Ross encouraged participants to engage in lateral thinking, noting that the one element missing from discussions so far was a commitment to personal action to reduce GHGs. He recommended follow-up action in the period immediately following the Roundtable, in the form of a news release stressing the relationship between health, climate change and air quality improvements. He also urged each participant to speak out in public, share the results of the Roundtable with neighbours and colleagues, refrain from using SUVs, snowmobiles and small watercraft, make greater use of public transit, and reduce their home energy use.

## 4. Participant Perspectives

In the course of the Roundtable, organizers heard frequent comments on the depth and variety of expertise that participants brought to the discussion. Their perspectives were reflected in the vigorous discussion that took place in breakout sessions on four of the five Roundtable themes.

### 4.1 Participation in the National Process

Participants agreed that co-benefits should be included in the business plan that comes out of the Joint Ministers' Meeting, and recommended that the research agenda include a focus on the relationship between health and the environment.

More generally, there was agreement that the organizations involved with the Roundtable should comment on the business plan.

### 4.2 Research and Knowledge Capacity

- Harmonized, anticipatory and integrated approaches to air quality research must be based on an understanding of how pollution is created and which energy forms play the greatest role.
- It will be important to simplify the link between climate change, as a global issue, and air quality, as a local and regional concern.
- There must be a link between the science of greenhouse gas reduction and related policy.
- Jurisdictional issues are a barrier to action. Participants representing municipalities identified a need for more research at the local level, to back up calls for local action.
- Research by health workers, particularly those in the medical profession, should highlight the links between health and environmental factors, by exploring issues related to policy, costs and benefits, and health care options.

### 4.3 Monitoring and Surveillance

- Enhanced monitoring and surveillance emerged as an important priority for the public health community, although some participants expressed concern that progress might be impeded by a lack of detailed information on climate change effects and adaptation options.

- Some participants noted that globalization of trade has created new challenges in the emerging specialty of travel medicine. Many travellers drink contaminated water, expose themselves to infection, and generally fail to observe basic prevention practices, then neglect to tell their doctors that they've been abroad. The challenge may be augmented by gaps in the ability of the current health care system to deal with emerging problems.
- One breakout group considered whether Canada's surveillance infrastructure needs significant additional resources. While some participants said that the public health system works reasonably well, others warned that the system lacks resources and may soon have to rely on the US to detect new diseases – even though detection is far from perfect south of the border.
- Local surveillance and detection was identified as a key public health challenge that must be addressed within the context of a consistent national methodology. Surveillance could be strengthened through the development of a database of symptoms or some other system for diagnosing emerging diseases. One participant said that the current surveillance system does a good job of tracking infectious diseases, but lacks capacity related to environmental conditions that can lead to illness.

#### **4.4 Engaging Health Professionals**

- Outreach to health professionals is important for a variety of reasons, including their credibility in delivering health messages to the public.
- The best way to involve health professionals in the climate change process is to engage them in a discussion of co-benefits.
- It is imperative to tailor climate messages to different groups of health professionals, to convey the links between environment and health in a clear, concise style. Participants agreed that targeted communication is a time-consuming process, but that the benefits of engaging health professionals justify the effort. It is equally important to reach out to provincial health officials.
- Participants agreed that health professionals must develop a multidimensional understanding of climate change that enables them to incorporate the issue into a holistic approach to health care.
- Contact with health professionals should stress the link between air quality and health, and between climate change and broader social and environmental issues.

- Public health professionals can play an important educational role, just as they have in relation to the HIV/AIDS epidemic and other health challenges. For instance, in addition to suggesting that children and seniors stay indoors on bad air days, they could also recommend that people leave their cars at home to reduce emissions.
- Participants stressed the need to acknowledge the time demands already in place on health professionals, and to ensure that environmental health messages resonate with health professionals and support them in the work they already do. It may be difficult to ask health professionals to add climate change to an already-overloaded list of priorities, without first restoring the medical system itself to health.
- It may be a challenge to link the climate change debate with efforts to build a sustainable health system, and to assign the right priority to climate change and air quality relative to other social issues like poverty.

#### **4.5 Public Engagement and Stakeholder Outreach**

- Changes in behaviour and energy choices will be needed to reduce greenhouse gas emissions.
- Public support would rise if people were informed of the health benefits that are linked to GHG reduction. But health professionals have a crucial role to play in building public awareness. Given the long-term health and environmental impacts of climate change, educational efforts should focus on broad outcomes that will capture public attention and move GHG reduction onto the policy agenda.
- Plain language is an essential element in building greater public understanding of the climate challenge. A new glossary may be needed, and scientific literacy will be an ongoing concern.
- Climate change communications must build broad support for a Canada-wide agenda, by combining local and regional issues with global concerns. Governments and public health agencies should develop integrated messages that are tailored to different parts of the country.
- Another communication challenge will be to make the case for prevention as an ongoing local practice, when sudden, extreme weather events receive the most immediate attention. The emphasis on conditions in Alberta, Ontario, BC and Québec makes it difficult to build a sense of engagement in other parts of the country.

- Effective, savvy media education will be crucial, since print, radio and television will be the main mechanisms for reaching the Canadian public. Some participants were concerned about a tendency toward “doomsday scenarios and headlines” that could demoralize the public rather than raising awareness. Rather than treating reporters as adversaries, it’s important to share information as freely as possible and understand the deadline pressures they face.
- Climate change must be brought into the agenda of national organizations and gatherings, including the upcoming meeting of federal and provincial environment ministers, consultations around the National Children’s Agenda, and meetings on conferences of national associations.
- Some participants suggested it may be easier to reach the public around air quality issues, including childhood asthma and other respiratory diseases, rather than trying to generate commitment around the longer-term challenge of climate change.
- While it may be difficult to integrate material on health and climate change into school curricula, children can be the most important inspiration for families to change their behaviour in ways that can help address climate change.
- Outreach and communication targets should include people in a range of scientific fields, like marine biology, in other economic communities such as forestry, and in municipal public works departments that deal with energy and health infrastructure.
- Continuing outreach is needed to bring the business community together with the health sector, rather than working at cross-purposes.
- A key challenge will be to find the right message to encourage Canadians to make lifestyle changes. “The issue is people and the way we have grown up over the past 50 years,” a participant said. “It’s difficult to get people to change behaviour.”
- Some of the breakout discussion stressed the transition from education and policy to action. Participants noted, for example, that 60 Ontario municipalities have “no idling” bylaws, yet only a handful of tickets have been issued. While education is an easy focal point for political leadership, at least one breakout group expressed concern that Canada’s Kyoto target will not be met through education alone. The health sector should advocate action on climate change, including regulations, enforcement and financial incentives. Enforcement could take a “broken window approach” that implies an obligation to make reparations after breaking regulations.

- Participants cited several specific barriers to climate change action. They noted that food produced in an environmentally conscious way is more expensive, employers seldom provide the necessary aids for people who cycle to work, and the tax system allows deductions for automobile expenses, but not for any other form of transportation.
- Climate change advocates should work together to develop an integrated, clear, powerful and credible message. Expertise could be shared through websites, so that no one has to reinvent the wheel.
- Some participants warned against setting our sights too low, suggesting that the community at large is ready for the challenge of reducing greenhouse gases by much more than 6%. Governments have been paying too much attention to economists, one delegate stated, when they should be listening to environmentalists and health professionals. Government should be told that people are passionate about climate change and health, and will support a major, well-funded initiative. The key to success might be to “paint it in reality”, by linking air emissions to something concrete like childhood asthma and presenting a positive alternative. Many participants identified children as a focal point for communication, both as object and subject. Many parents and grandparents will change their behaviour for the sake of younger generations, if not for their own.
- Several participants asked why there had been little partnering with the provinces, and why provincial governments were not represented at the Roundtable. It was noted that many municipalities find it easy to reduce greenhouse gas emissions by 20% – in Québec, the City of Lachine made money along the way.

## **5. Recommendations for Collaborative Action**

In the closing session, participants divided into six discussion groups to explore the steps that could be taken to address the health implications of climate change in the period following the Roundtable.

### **5.1 Identifying Broader Audiences**

The first of the tables discussing outreach to broader audiences agreed on the need to educate and inform different target groups, and to identify key messages aimed at individuals and the public policy community.

The group concluded that educational efforts should be directed at all levels, from individuals to national coalitions. Specific targets must include:

- Existing community networks, including the organizations represented at the Roundtable;
- New audiences;
- Health professionals;
- Special interest groups;
- All levels of government and the private sector.

The group stated that the resources are already available to support the work that is required. The first steps are to find models of successful audience outreach that health and climate change campaigners can build upon, identify specific communication opportunities (AGMs, publications, websites, road shows), draft letters to provincial governments and to new stakeholders with a potential interest in the issue, and prepare an opinion/editorial article based on content presented at the Roundtable. One strong possibility might be to enter the debate over gasoline prices, by focussing on the health aspects of air pollution. The group also stressed the need to reach young children through school curricula.

The outcome would be to reduce the risks associated with climate change through both mitigation and adaptation, and to promote and protect public health.

Another table dealing with audience outreach also focussed on methods of involving youth in developing a pro-active agenda on climate change. However, participants were concerned about working through “overtaxed” classroom teachers and a tight curriculum. Instead, the group suggested greater reliance on the coordinators and sponsors of national, provincial and territorial science fairs, as well as national youth organizations like Canada World Youth, Katimavik, and the Canadian Institute of Child Health (CICH), which runs a training for trainers program aimed at youth. The first step for this strategy would be to look at ways of encouraging different groups to integrate climate change as a theme in their events and programs, using readily available resources as a reference.

The group also discussed the value of organizing a scoping exercise, designed to identify interested stakeholders for the health and climate change network and to ensure that participation in the national process is transparent. The Canadian Health Network (CHN) was suggested as a means to communicate and share information with health promotion NGOs across the country.

The table's third priority was to inform and coordinate action at the local/municipal level, working through the Federation of Canadian Municipalities (FCM), different federal/provincial/ territorial associations, and the CPHA's provincial and territorial partners. Climate change is already on the agenda, the question is who will champion health and climate change?

Broader involvement of stakeholders could also focus on the health dimensions of sustainable energy development, including clean air, greater fitness, and stress reduction. A first step would be to reach municipalities with solid information on the health implications of climate change and the opportunity to reduce greenhouse gas emissions by saving energy.

Greater engagement is also required at all levels and in all disciplines within the health sector. The best approach would be to deliver targeted information to practitioners and decision-makers, using publications that they already trust and rely upon.

The table identified the under-representation of provincial/territorial governments as a major gap and an "obvious failure", and stressed the need to build a stronger dialogue on the linkages between health and climate change, possibly by demonstrating that greenhouse gas reduction measures save money that can then be used for other purposes.

The life and health insurance and reinsurance industries emerged as another important audience that should receive targeted information through existing networks and channels. Transportation, resource, pulp and paper, agriculture, energy utilities, and energy service companies were also identified as key contacts. Overall, messaging should emphasize the respiratory problems, health costs and extra hospital visits that will result from climate change and related pollution, rather than mortality statistics that may be open to debate.

## **5.2 Participation in the National Process**

The group dealing with participation in the national process agreed on the need for an intervention at the Joint Ministers' Meeting, in the form of a letter reminding Ministers of what is known about the health impact of climate change. The group suggested that the letter should touch on Canada's moral

responsibility toward those countries, particularly in the developing world, that will face a heavier impact from climate change. It should also refer to the co-benefits that flow from climate change action, ask that any ongoing modelling or monitoring include health impacts, and stress the importance of involving health organizations and provincial health ministries in the national process.

The group suggested that [CPHA](#) draft the letter in advance of the mid-October JMM and seek endorsement from health organizations.

The table also stressed the importance of engaging provincial health ministries by working through the Advisory Committee on Population Health. One initial step would be for organizations represented at the Roundtable to ask their provincial ministries to ensure that a future Advisory Committee agenda include an item on the health impacts of climate change.

### **5.3 Engaging Health Professionals**

The first priority for this table was to identify who we mean by health professionals. Some felt that the definition tends to be restricted to physicians and nurses, but should also include public health workers and their organizations, as well as other players at the federal, provincial and territorial levels.

With a more complete list of audiences in hand, the group agreed that the next step would be to work with those people to define what they do and how they could make use of information on health and climate change. This would provide some basis for clarifying the message that the network wishes to deliver. A first step would be to organize a federal/ provincial/territorial health roundtable, involving key players from governments and NGOs in every part of the country, who would then be able to carry information and action items back to the local level.

Accordingly the table suggested that the federal Assistant Deputy Minister of [Health Canada](#) invite her provincial/territorial counterparts and other members of the health community to take part in the event. The ultimate goal would be to educate the health community on health and climate change, determine who should be involved with the issue, build a link to the Children's Agenda, and define the role that health professionals can play. Specifics might include patient education, post-secondary research, front-line monitoring of the outcomes of climate change, and involvement in climate change policy development. Professionals have a strong voice that should be heard at both ends of the spectrum – one-on-one with their patients, and at the policy level through the professional societies.

## 5.4 Research and Knowledge

Noting that researchers and advocates are not starting with a blank slate, the table dealing with research and knowledge agreed on the need to address information gaps and develop effective communication strategies to deliver health and climate change messages beyond the research community.

The group identified increased investment in research and surveillance as a priority. Relevant players include federal and provincial governments, health associations, and front-line community organizations and environmental groups, and a first step is to increase the availability of [Climate Change Action Fund](#) dollars for projects related specifically to health and climate change. Communication with senior decision makers should include this request.

A second key challenge is to identify a champion who can promote research on health and climate change through existing processes. It will be important to determine who that champion might be, and then formally approach them with an offer of support from stakeholders.

Environmental health organizations, [CPHA](#), and other participants should play a role in identifying research gaps, and a network should be established to share research results and advocate for further studies. Key players should include Roundtable participants and provincial health officials. Wide dissemination of the Roundtable report will be critical in generating interest and support for this network.

The group also stressed the need for effective communication strategies to disseminate research results, through health professionals, citizens' groups, and all levels of government.

## 6. The Way Ahead

Dr. Gordon McBean from the University of Western Ontario encouraged participants to think through a strategy for bringing forward the issues that had been identified in the course of the Roundtable, adding that it can be a useful strategy to think of climate change mitigation and adaptation as separate tracks. Emissions reductions have received most of the attention, he said, and they clearly carry large co-benefits. From a health perspective, however, the positive outcomes related to climate change mitigation don't come from carbon dioxide reductions, but from cutting down on the other emissions that are associated with CO<sub>2</sub> emissions.

On the adaptation side, surveillance and monitoring will be required if people are to be informed of changing climatic conditions to which they will be subjected – and of related health impacts.

Based on his work with the Institute for Catastrophic Loss Reduction (ICLR), McBean suggested that the insurance community would have an interest in lending financial resources and clout to a strategy related to health and climate change.

Dr. David Butler-Jones listed a series of convergences that he had drawn from the discussion:

- The importance of reducing the risk of climate change through mitigation and adaptation, to promote and protect public health;
- The value of educating, informing and partnering with a wide range of stakeholders, and of understanding what resources are available;
- The need to identify key messages, and of engaging professionals with information that is relevant to them;
- The opportunity to develop a health and climate change network, by identifying the players who need to be involved and working with key champions of the cause;
- The immediate need to work through the JMM and the broader national climate change process, beginning with a commitment to submit recommendations to the JMM, comment on its work plan, and pursue further steps that will advance a health and climate change agenda;
- An interest in engaging the federal/provincial/territorial process through a variety of mechanisms, such as the FPT advisory committees on population health and occupational and environmental health;
- A commitment to increasing the dialogue around sustainable energy alternatives;
- The need to advance a research agenda on health and climate change, both by investing in research and by linking it to policy, practice and surveillance.

“Nobody’s work is done,” Butler-Jones stressed.

## Appendix 1 – List of Participants

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