

# CLIMATE CHANGE AND HEALTH

## CNA POSITION

The Canadian Nurses Association (CNA) believes that, as changes in our climate continue worldwide, nurses<sup>1</sup> have a role in supporting adaptation and mitigation with respect to climate change through nursing practice, research, administration, education and policy. An Intergovernmental Panel on Climate Change (IPCC) report (2014) concluded unequivocally that our climate has been changing since the mid-20th century in response to human activities, and that human health is affected by them.

The CNA *Code of Ethics for Registered Nurses* supports nursing action on climate change:

There are broad aspects of social justice that are associated with health and well-being and that ethical nursing practice addresses. These aspects relate to the need for change in systems and societal structures in order to create greater equity for all. Nurses should endeavour as much as possible, individually and collectively, to advocate for and work toward eliminating social inequities by: . . . Supporting environmental preservation and restoration and advocating for initiatives that reduce environmentally harmful practices in order to promote health and well-being [and] Maintaining awareness of broader global health concerns such as . . . environmental pollution. (2008, pp. 20-21)

## Adaptation and mitigation

CNA believes that Canadian nurses need to promote climate change adaptation (that is, responding to the effects of climate change) and mitigation (taking action to reduce it), since changes in health are already a severe consequence for individuals, families and communities. While nurses could do this in a wide variety of ways, an example would include providing resources and education to clients and communities to reduce heat-related illness, cardiovascular failure and death during extreme heat.

Nurses are uniquely positioned to proactively support such adaptation and mitigation. They have the necessary scientific background and communication skills to explain

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<sup>1</sup> Unless otherwise stated, *nurse* or *nursing* refers to any member of a regulated nursing category (i.e., a registered nurse, nurse practitioner, licensed/registered practical nurse or registered psychiatric nurse). This definition reflects the current situation in Canada, whereby nurses are deployed in a variety of collaborative arrangements to provide care.

climate change to the public. Their expertise in health promotion and behaviour change also equips them to foster lifestyle choices that support health under changing climatic conditions.

### **How nurses can help**

CNA believes that the nursing profession plays an integral role in helping individuals, families and communities adapt to climate change. Nurses have a long history of promoting positive adjustments to major life changes, such as the birth of a child or the diagnosis of a chronic illness, and increasing the capacity of communities to meet a range of stressors. Nurses can use this expertise for adaptation to climate change.

CNA believes the health risks from climate change are now so great that mitigation measures, which nurses have the skills to support, are also essential. One area that Canada's 400,000 nurses can have an enormous influence on is promoting behavioural changes to reduce greenhouse gas (GHG) emissions. Emissions from transportation, heating and commercial products can be significantly affected by the choices consumers make (IPCC, 2014).

Supporting individuals in changing behaviours must be coupled with lobbying all levels of government to create structures, policies and environments that enable and encourage Canadians to live healthier lives. Examples include accessible and effective public transportation systems, infrastructure for bike lanes and pedestrian zones, environmental health modules in schools, energy efficient technology, income tax incentives to support green choices, and environmental and social-justice frameworks for sustainable development and urban planning. Given the incremental nature of climate change, such investments should be used to inhibit future harms (Rice, Thurston, Balmes, & Pinkerton, 2014).

### **Greenhouse gases and health outcomes**

Nurses know that many consumer choices to lower GHGs create better health outcomes. For example, walking or cycling to work or school promotes cardiovascular fitness, driving at the speed limit is safer, building homes with low-emission materials improves air quality, consuming natural and pesticide-free foods protects the ecosystem and insulating homes properly helps prevent the growth of mould.

CNA also believes that businesses, including those in the health sector, must take responsibility for reducing the production of GHGs. To support such efforts, CNA believes advocating for environmentally responsible policies is an effective way to mitigate climate change.

## Nurses and policy

Nurses across Canada must continue to act on climate change policy, given that the debates and negotiations are occurring in all jurisdictions. CNA believes that nurses can help to influence policy related to climate change in several ways:

- ▶ Showing leadership in changing personal practices to reduce their own contributions to GHG emissions
- ▶ Encouraging their professional associations and workplaces to support policy efforts to reduce GHG emissions
- ▶ Working with coalitions of non-governmental organizations to identify where their support will be most useful
- ▶ Reviewing the [Energy Efficiency Program](#) at Natural Resources Canada and the [Reducing Canada's Greenhouse Gas Emissions](#) strategy, targets and progress at Environment and Climate Change Canada
- ▶ Advocating for the creation of healthy and complete communities

## Summary

There is strong evidence that actions taken to mitigate GHG emissions — even in the face of continuous population growth — are far more cost-effective than allowing CO<sub>2</sub> levels to rise while postponing any ameliorative actions (National Round Table on the Environment and the Economy, 2011). Delaying action on emissions may result in more costly efforts in the future and will have an increasingly negative effect on the economy. Insufficient action on climate change will also have harmful effects on the health status of vulnerable Canadians.<sup>2</sup> It will increase their exposure to the adverse effects of climate change and worsen health outcomes over the long term. Climate change is altering global patterns of disease, and its health effects are expected to last long after any programs to adapt and mitigate them (Samet, 2010). Action against climate change is therefore important for short- and long-term global population health.

Nurses, who focus on the health and well-being of individuals, families and communities, are a trusted source of information. As such, they are in a good position to support adaptation to climate change and evaluate how vulnerabilities within a population may evolve in the course of coping with its effects. As a profession, nurses can and should support the types of policies and lifestyle choices that will reduce GHG emissions and improve the health and well-being of all people in Canada. Nurses can also participate in policy discussions on corporate and industrial contributions to climate change and provide nursing leadership on policies aimed at minimizing its results. CNA believes

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<sup>2</sup> Vulnerable populations in Canada include infants and children, seniors, Indigenous populations, “resource-dependent and remote communities,” people with low incomes, pregnant women, and people with compromised health status (Health Canada, 2008, p.15).

that nurses, by working together, can help address the significant threat climate change poses to the health of the planet we all depend on to live.

## **BACKGROUND**

Climate change affects all basic life systems (i.e., air, water, health, shelter and security) and poses a significant threat to human health and survival (Gould & Rudolph, 2015). The health consequences of climate change are now considered a collective syndrome, as these no longer produce singular health events and have reached all parts of the world. While populations are affected in different ways,<sup>3</sup> the effects of climate change are evident in shifting ecosystems, food availability and the frequency and severity of extreme weather events (McMichael, 2013). Climate change is also a social justice issue. People in mid-latitude regions must face the effects of climate change despite having lower CO<sub>2</sub> emission rates per capita than the industrialized world. Likewise, populations with existing health risks based on socioeconomic factors will be disproportionately affected as environmental health declines (International Energy Agency, 2015).

Vulnerable populations in Canada are experiencing health effects from heat, poor outdoor air quality, changes in traditional ways of life and extreme weather events. Without collective efforts to address climate change, it is likely that these effects will continue to worsen.

Adapting to climate change will continue to evolve over time as the variability of its effects continue. Such adaptation includes education and awareness campaigns, water conservation and treatment systems, reusable energy sources, and infrastructure systems like heat and air-conditioning. Yet, adaptation methods should not be regarded as fixed solutions, since further strategies may be needed in the future to cope with the intensifying effects of climate change (Dilling, Daly, Travis, Wilhelmi, & Klein, 2015).

Mitigation of climate change refers to the reduction of GHG emissions through multiple strategies to decrease the use of fossil fuels while increasing the use of alternate energy and sustainable resources (Barrett, Charles, & Temte, 2014). Mitigation efforts may also influence individuals, communities and the environment at different levels. Actions to reduce GHGs may negatively affect health and other fields (e.g., economic) or else work well over the short-term while hindering results over the long term (Chalabi & Kovats, 2014). Thus, to be most effective, mitigation efforts require balance and collaboration between the health sector and multiple communities, industries and governments.

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<sup>3</sup> This is not to say that climate change effects all areas equally.

The federal government has amended the *Canadian Environmental Protection Act* multiple times to reflect greater awareness and research on environmental issues. It now includes regulations to achieve cleaner air and to restrict chemical substance waste, biofuel production and plastic microbeads in personal care products.<sup>4</sup>

Since the Canadian government's original action plan in 2007, many resources and commitments on climate change have emerged. Canada's national, international, provincial and territorial action plans have multiplied as the urgency of addressing climate change has become indisputable.<sup>5</sup> For example, several provinces and territories have become members of the [Climate Registry](#), following British Columbia, which was one of its founding partners in 2007. In 2015, Canada joined 194 countries in signing the Paris Agreement,<sup>6</sup> which outlines collaborative promises to respond to the ever-growing threat of climate change. The global community is affected by climate change and must continue to work collaboratively to reduce GHG emissions and improve environmental and human health.

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*Replaces: Climate Change and Health (2009)*

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<sup>4</sup> Information on the health implications of the *Canadian Environmental Protection Act* is available from the Environment and Climate Change Canada [website](#).

<sup>5</sup> See [Canada's Way Forward on Climate Change](#) on the Government of Canada website.

<sup>6</sup> See the UN Framework Convention on Climate Change [website](#) for further information.

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### Also see:

CNA position statements:

*Nurses and Environmental Health* (2017)

[Toward an Environmentally Responsible Canadian Health Sector](#) (joint position statement, 2009)

International Council of Nurses position statements:

[Health Care Waste: Role of Nurses and Nursing](#) (2010)

[Nurses, Climate Change and Health](#) (2008)

[Reducing Environmental and Lifestyle Related Health Risks](#) (2011)