

There is an irrefutable link between climate change and its effect on cardiovascular health. The Canadian Cardiovascular Society (CCS) recognizes the urgent need to address the climate emergency.

**We call on the federal government to take the following bold climate actions:**

1

Immediately implement measures to meet Canada's 2030 greenhouse gas (GHG) emissions reduction target (40-45% below 2005 levels) and increase ambition in the near term.

2

End public financing to oil and gas companies in 2022.

3

Enact "just transition" legislation and invest funds to help Canadian workers and communities succeed in a low-carbon economy.

## What we know

The World Health Organization has identified climate change as the "single biggest health threat facing humanity."<sup>1</sup>



- There is an association between cold temperature, air pollution, seasonal variation, extreme heat and cardiovascular risk.<sup>2,3,4</sup>
- Several environmental air pollutants are associated with increased hospitalization and death due to cardiovascular disease.<sup>5</sup>
- >20% of all cardiovascular disease deaths are caused by air pollution.<sup>6,7</sup>
- Extreme temperatures are associated with increases in cardiovascular disease mortality.<sup>8</sup>
- Extreme heat is associated with a greater risk of negative cardiovascular health outcomes.<sup>2</sup>

## Without bolder climate action, we expect:

- More cardiovascular disease deaths caused by air pollution;<sup>6</sup>
- Continued and intensified stress on our health systems;<sup>9</sup> and
- Added and increasing health care costs that are expected to be >\$100B/year by mid-century.<sup>9</sup>



## About us

The CCS is the national voice for cardiovascular clinicians and scientists, representing over 2,300 cardiologists, cardiac surgeons and other heart health specialists across Canada. We advance heart health for all by setting standards for excellence in heart health and care, building the knowledge and expertise of the heart team, and influencing policy and advocating for the heart health of all Canadians.

## The CCS stands ready to support Canada's involvement in the COP26 Health Programme on Climate Resilient and Low Carbon, Sustainable Health Systems.<sup>10</sup>

1 World Health Organization. Climate change and health. Available at: <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>. Accessed on November 30, 2021.

2 Chaseling GK, Iglesias-Grau J, Juneau M, Nigam A, Kaiser D, Gagnon D. Extreme Heat and Cardiovascular Health: What a cardiovascular health professional should know. *Can J Cardiol* 2021;37:1828-36.

3 Stewart S, Keates AK, Redfern A, McMurray JJ. Seasonal variations in cardiovascular disease. *Nat Rev Cardiol* 2017;14:654.

4 Claeys MJ, Rajagopalan S, Nawrot TS, Brook RD. Climate and environmental triggers of acute myocardial infarction. *Eur Heart J* 2016;38:955-60.

5 Brook RD, Franklin B, Cascio W. Air Pollution and Cardiovascular Disease: A Statement for Healthcare Professionals From the Expert Panel on Population Science of the American Heart Association. *Circulation* 109;21:2655-71.

6 World Heart Federation. Air pollution and cardiovascular disease: A window of opportunity. Available at: <https://world-heart-federation.org/news/air-pollution-and-cardiovascular-disease-a-window-of-opportunity/>. Accessed on November 30, 2021.

7 World Health Organization. Preventing disease through healthy environments: A global assessment of the burden of disease from environmental risks. Available at: <https://www.who.int/publications/i/item/9789241565196>. Accessed on November 30, 2021.

8 Peters A, Schneider A. Cardiovascular risks of climate change. *Nat Rev Cardiol* 2021;18:1-2.

9 Canadian Institute for Climate Choices. The health costs of climate change: How Canada can adapt, prepare, and save lives. Available at: [https://climatechoices.ca/wp-content/uploads/2021/06/ClimateChoices\\_Health-Report\\_-\\_Summary\\_June2021.pdf](https://climatechoices.ca/wp-content/uploads/2021/06/ClimateChoices_Health-Report_-_Summary_June2021.pdf). Accessed on November 30, 2021.

10 World Health Organization. COP26 Health Programme. Available at: <https://www.who.int/initiatives/cop26-health-programme>. Accessed on November 30, 2021.