

CMA POLICY

Environmentally Sustainable Health Systems in Canada

RATIONALE

The Canadian Medical Association's advocacy for Sustainable Health Systems in Canada encompasses (1) maximizing our health care systems' resilience to the increasing health needs and other impacts of the escalating climate crisis, and (2) minimizing negative impacts that our health care systems have on the environment and climate change.

This policy provides specific recommendations and pathways to help guide governments, physicians and other key stakeholders of our health systems to transition to environmentally sustainable, net-zero and climate-resilient health systems in Canada that supports the ecological foundations needed for populations to thrive and health care systems to function.

Threats from ecological change to health and health systems are severe and worsening, leading the World Health Organization (WHO) to name climate change as the greatest threat to global health in the 21st century.¹ Canada is warming at more than twice the global rate and the Canadian Arctic is warming at almost four times the global rate.² Climate change is already harming the health of Canadians, increasing the frequency and intensity of extreme weather events,^{3 4 5} cases of heat stroke,^{6 7} cardiorespiratory issues^{8 9} and Lyme disease from ticks that can now survive Canadian winters because our climate is warming.^{10 11} The 2021 British Columbia heat dome was the deadliest weather event in Canadian history, with an estimated 619 heat-related deaths.¹² More broadly, fossil fuel-related air pollution is estimated to be implicated in almost one-fifth of global deaths,¹³ and habitat losses are frequently placing human, vectors and hosts in novel contact, increasing the threat of future pandemics.¹⁴

Those who experience structural inequities such as colonization, racism and low income are often most vulnerable to climate change risks and impacts.¹⁵ Marginalized populations are more likely to already have poorer health, thereby experiencing more severe negative health effects and a diminished ability to recover from climate-related events.¹⁶

Health care systems themselves are challenged by intensifying climate-related stressors. Already, health care facilities in Canada have been forced to evacuate emergently because of floods¹⁷ and wildfires.¹⁸ Given that temperature and precipitation projections indicate continued change under even the lowest-emission pathways, maintaining functional health systems and a healthy workforce demands resolute attention to both global and local adaptation-related challenges.¹⁹

Determining the best policy measures by which to manage the climate crisis requires reframing “health,” which is frequently conflated with health care, as “planetary health,” which considers simultaneously “the health of human civilization and the state of the natural systems upon which it depends.”²⁰ Within a planetary health frame, the ecological determinants of health, such as biodiversity, climate, air and water, not only influence human health directly but also form the foundation of society. A sustainable society is one that meets our basic needs without surpassing planetary boundaries. Not only does human health depend on a stable ecological underpinning best ensured by tackling climate change and environmental degradation, but so do our health care systems.

The Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) published in February 2022 made clear that ambitious, systemic action must be taken, both to prevent global warming from exceeding 1.5°C and to adapt to the increasingly dangerous impacts of climate change.²¹

Health care systems are a significant source of greenhouse gas (GHG) emissions and must be part of a global net-zero strategy. If health care were a country, it would be the fifth-highest carbon emitter in the world.²² Health care is estimated to be responsible for 4.6% of Canada’s total GHG emissions. Canada has the second highest per-capita GHG emissions from health care in the world.²³

As part of the WHO’s COP26 Health Programme, Canada is one of over 50 countries that have committed to developing low-carbon, sustainable, resilient health systems.²⁴ Follow-up G7 communiqués have articulated a Canadian commitment to achieve net-zero health care emissions by 2050.²⁵ This work aligns with and contributes to federal targets of reducing GHG emissions by 40%–45% below 2005 levels by 2030 and achieving net-zero emissions by 2050.²⁶

Indigenous approaches to health prioritize the interrelationship between humans and nature.⁴ Evidence shows that Indigenous-stewarded areas feature greater degrees of biodiversity.⁵ Land-based teaching and well-being practices, as well as strengths-based approaches to mental health, offer concrete ways to incorporate a planetary health lens into Western approaches to well-being, supporting healthy people and a healthy planet. Given this, the work of building sustainable health care systems must be guided by Indigenous-led, land-based approaches that encourage environmental stewardship and adaptation.

The human health co-benefits of action on climate and biodiversity are many. It has been estimated that if Canada meets its GHG emissions targets, we will save an estimated 112,000 lives between 2030 and 2050 through reductions in air pollution alone relative to a business-as-usual scenario.²⁷ There are numerous additional health co-benefits related to our recommendations presented here, related to improved physical activity levels, mental health benefits, reductions of heat illnesses and other reductions of long-term climate-related health impacts. We have an opportunity to build a better, healthier and more inclusive Canada. We have the means to decarbonize and save lives. We just need to work together to make this vision our reality.

RECOMMENDATIONS

To ensure an inclusive and integrated approach to building sustainable health systems, the CMA calls for:

Type of action:	Calls to action:
<p>An inclusive and integrated approach</p> <p><i>Refers to the lens we must apply to the work of building sustainable health care systems, which is inclusive of Indigenous knowledge and mindful of the linkages between social and environmental determinants of health</i></p>	<ul style="list-style-type: none"> the work building sustainable health care systems to be guided by Indigenous-led, land-based approaches that encourage environmental stewardship and adaptation to warming all levels of government to implement policies that address both the symptoms and root causes of climate-related health threats (we further call on governments to prioritize the health and equity impacts of all policies, focusing on those who are disproportionately affected by climate change) all levels of government to continue to prioritize and invest in policies that address the determinants of health, including the historical and ongoing impacts of colonization, income, education, employment, food security, safe water and living conditions coordinated investments from governments in health promotion, disease prevention and early detection, including implementing and supporting an effective primary care system in every province and territory medical training institutions to incorporate training that addresses both the symptoms and root causes of climate-related health threats, as well as the equity impacts on those who are disproportionately affected by climate change

To achieve climate-resilient health systems, the CMA calls for:

Type of action:	Calls to action:
<p>Health care system climate adaptation, resilience and emergency preparedness</p> <p><i>Refers to minimizing health care systems’ vulnerability to chronic climate-related impacts and climate-related emergencies by strengthening social and physical capacity in the human and built environment</i></p>	<ul style="list-style-type: none"> governments to ensure that health system adaptation work, including initiatives designed to meet Canada’s commitments under the WHO COP26 Health Programme to achieve climate-resilient, low-carbon sustainable health systems, is integrated with the National Adaptation Strategy governments to explicitly incorporate health resilience into climate adaptation and climate mitigation lenses to inform cost-benefit analyses and policy decisions governments and health care institutions to collaborate on the development of a national standard for climate-resilient, net-zero health care facilities in Canada. governments to invest in research on emerging, unknown and local impacts of climate change on health governments to integrate health professionals into the emergency preparedness plans of government and public health authorities governments to strengthen the public health system to improve the capacity of communities to adapt to climate change and ensure adequate surge capacity within Canada’s health systems to handle the increase in climate change–related illnesses

Type of action:	Calls to action:
	<ul style="list-style-type: none"> governments to support health systems in undertaking vulnerability assessments to identify their specific local risks and at-risk populations and developing adaptation and emergency-preparedness plans accordingly medical training institutions to incorporate climate adaptation into the curriculum to ensure future physicians are prepared to appropriately diagnose and treat climate-related illnesses (e.g., tick-related diseases, heat stroke) (we also call on these institutions to incorporate education on emergency preparedness protocols that are specific to regional climate-related disasters, such as floods, droughts, heat waves and forest fires) physicians to be prepared to provide guidance to patients on public health authority or government guidance on climate-related emergency protocols and disasters

To achieve net-zero, environmentally sustainable health systems, the CMA calls for:

Type of action:	Calls to action:
<p>Net-zero targets</p> <p><i>Refers to a road map to achieving a state where our health care systems are completely negating the amount of greenhouse gases it produces</i></p>	<ul style="list-style-type: none"> governments to commit to measuring the carbon footprint of Canada’s health systems, developing metrics to establish baseline measures, providing targeted actions to reduce emissions and modelling the health care system’s pathway in all national sectoral pathways to net zero the federal government to ensure this work is incorporated into national legislation with enshrined targets and accountability by establishing a national secretariat to liaise and collaborate with provinces and territories and international climate-health networks and resources (such as the WHO Alliance for Transformative Action on Climate and Health [ATACH]), to coordinate the transformation of Canada’s health systems into a climate-resilient and low-carbon sustainable health systems the federal, provincial and territorial governments to convene stakeholders to co-develop ambitious, evidence-based health system route maps with net-zero and interim GHG reduction target dates the federal government to join the health care net-zero commitment within the ATACH as established by the WHO hospital and health system administrators to develop organizational sustainability plans, set emissions reduction targets, take actions to make their organizations more sustainable and publicly report on the results physicians and learners to advocate for the need for net-zero targets and commitments from their institutional workplaces or medical training institutions

Type of action:	Calls to action:
<p>Environmentally sustainable buildings</p> <p><i>Refers to the reduction of energy intensity, associated GHG emissions and environmental impact of health care facilities</i></p>	<ul style="list-style-type: none"> governments to mandate environmental performance and resilience standards for new and renovated health care facilities governments to incentivize reduced energy usage through pollution pricing governments to mandate and adequately fund improved energy efficiency and decarbonizing energy use through fuel switching through grants to health care facilities for investments in clean technology and equipment, as well as onsite renewable energy use hospital and health system administrators to reduce energy use through changing energy use practices and investing in equipment such as motion sensor lighting hospital and health system administrators to improve energy efficiency and decarbonize energy use through fuel switching through investments in clean technology and equipment, as well as prioritizing nonpolluting sources of energy within health care facilities physicians who operate their own practice to seek opportunities and support to renovate and improve the resource intensity of their facilities
<p>Sustainable transportation and virtual care</p> <p><i>Refers to reduction of pollution and GHG emissions of all transportation associated with health care systems such as business travel, suppliers, fleet vehicles and caregiver commutes</i></p>	<ul style="list-style-type: none"> governments to set incremental transportation emission reduction targets and implement actions to achieve those targets, including activities such as financing zero-emission vehicle substitutes for health care fleet vehicles, virtual care support structures, public and active low-carbon transit integration and incentives for caregivers and patients governments to enhance access to high-speed, reliable Internet activity across the country that supports in-community services, particularly in northern, rural, remote and Indigenous communities relevant physicians to incorporate virtual care into their practice where appropriate medical training institutions to incorporate virtual care training into the curriculum
<p>Environmentally sustainable purchasing</p> <p><i>Refers to reduction of upstream and downstream adverse environmental impacts of all purchasing and procurement of health care systems</i></p>	<ul style="list-style-type: none"> the federal government to work with ATACH to support the international cooperation required to drive decarbonization of health sector supply chains such as pharmaceuticals and medical devices governments and health administrators to develop and implement sustainable procurement goals and strategies that increase the proportion of sustainable health care purchase orders and contracts, which includes activities such as: aligning with standards, frameworks and guides such as the Impact Purchasing Commitment of the Healthcare Anchor Network, Practice Greenhealth’s sustainable procurement guide or ISO 20400

Type of action:	Calls to action:
	<ul style="list-style-type: none"> • increasing group purchase organizations and contracts certified by third-party sustainability certifications and labels • developing sustainable procurement guides for medical products, nonmedical products, professional services, food, and food service products and services • aligning with circular economy principles such as those published by the Ellen MacArthur Foundation²⁸ or the WHO,²⁹ with a focus on reduction and reuse first, then recycling • governments and health administrators to collaborate on identifying and adopting sustainable food programs, which includes considering plant-forward menus, providing fair-trade goods and local fresh produce for patients, developing procurement criteria for vendors and food management companies to supply food that is produced in systems that eliminate use of toxic pesticides, prohibiting use of hormones and nontherapeutic antibiotics, supporting farmer and farm worker health and welfare and using ecologically protective and restorative agriculture
<p>Waste reduction</p> <p><i>Refers to the reduction or sustainable management of medical-related and nonmedical waste associated with health care systems</i></p>	<ul style="list-style-type: none"> • governments to develop national health care system-wide solid, liquid and air waste accounting to enable waste reduction initiative planning and impact assessments • governments to collaborate with suppliers and health care providers to reduce waste by transitioning from single-use disposable products to reusable products, redesigning common procedure kits and improving disposal, reprocessing and recycling methods for medical products and supplies • governments to collaborate with health care providers to implement a national health care composting program to enable sustainable processing of organic waste
<p>Reduction of excessive and unnecessary health care</p> <p><i>Refers to reducing the adverse environmental impact of health care services via resource stewardship</i></p>	<ul style="list-style-type: none"> • governments to implement the systematic promotion of programs like the Choosing Wisely Canada program to reduce unnecessary investigations or therapies • governments to collaborate with health authorities to develop guidelines for and promote the onsite evaluation of opportunities for deprescribing • physicians to ensure the reduction of unnecessary investigations or therapies • medical training institutions to educate medical learners on reducing excessive or unnecessary health care practices

Type of action:	Calls to action:
<p data-bbox="199 218 423 422">Sustainable medicines – safer chemicals and toxics management</p> <p data-bbox="199 459 436 638"><i>Refers to the reduction of GHG emissions and toxic substances released by health treatments (e.g., inhalers, anesthetics)</i></p>	<ul data-bbox="488 218 1406 1241" style="list-style-type: none"> • governments to design and implement programs for the systematic accounting and reduction of toxic substances released by health care institutions tied to mandatory incremental reduction goals • governments to anticipate increasing challenges to medical device and pharmaceutical supply chains as a result of national and international climate disruption and to ensure institutional purchasing is coordinated with decarbonization and pharmacare-related efforts to increase use of reusable items where appropriate, ensure stability of supply of essential tools and maximize value-for-money of public expenditures through bulk-buy and local employment strategies • governments to commit to sustainable inhaler practices such as patient education and communication on the climate impact of inhalers, prescription education for health care providers, promotion of low-carbon inhaler prescriptions and low-impact inhaler disposal • governments to promote sustainable anesthetic practices such as lowering desflurane use, adopting low gas flow rates, installing anesthetic gas capture and reuse systems, measuring and benchmarking inhaled anesthetic use and optimizing low-carbon anesthetic techniques • physicians to seek resources to integrate prescribing low-carbon inhalers and sustainable anesthetic use as well as participating in patient education on sustainable medication usages • medical training institutions to incorporate education on the reduction of toxic substances in medical practice • relevant professional bodies to incorporate best practices on the reduction of toxic substances into their guidelines • relevant physicians to incorporate best practices on the reduction of toxic substances in their practice
<p data-bbox="199 1293 407 1371">Environmental stewardship</p> <p data-bbox="199 1392 440 1509"><i>Refers to protecting nature and maximizing its benefits for human health</i></p>	<ul data-bbox="488 1293 1406 1776" style="list-style-type: none"> • governments and health institutions to promote and implement nature-driven solutions as a tool to address both human health and climate-related health threats (this would include activities such as investing in community and health system–associated urban tree cover, developing new urban green spaces including for agriculture, improving and expanding existing urban green spaces, upgrading park trails, developing green corridors and creating therapeutic gardens for patients) • hospital and health system administrators to incorporate nature-positive strategies into organizational sustainability plans • medical training institutions to incorporate training that addresses the benefits of prescribing nature to improve mental and physical health • practitioners to incorporate nature-based prescribing to improve mental and physical health

Type of action:	Calls to action:
<p data-bbox="201 218 370 296">Responsible investing</p> <p data-bbox="201 331 438 573"><i>Refers to the integration of ESG considerations and sustainable investing strategies for Canadian health care workers' pension plans and their subsidiaries</i></p>	<ul style="list-style-type: none"> <li data-bbox="488 218 1360 348">• Canadian health care workers' pension plans, their subsidiaries and investment managers to integrate sustainable and responsible investing strategies and ESG (environmental, social and governance) considerations into their portfolio management plans, which includes: <ul style="list-style-type: none"> <li data-bbox="537 369 1360 499">○ implementing governance, accountability and stakeholder materiality engagement and stewardship processes while fulfilling their fiduciary duties to ensure the fund invests in the best interests and values of the contributors and beneficiaries of the fund <li data-bbox="537 520 1406 846">○ annually disclosing carbon footprint and ESG targets, metrics, performance and action plans, which would include aligning to voluntary reporting standards and international goals (e.g., the Task Force on Climate-Related Financial Disclosures (TCFD), the Sustainability Accounting Standards Board (SASB), the CDP (formerly the Carbon Disclosure Project), the United Nations (UN) Sustainable Development Goals) and partnering with relevant investor coalitions and organizations (e.g., the Canadian Coalition for Good Governance, the 30% Club Canada Investor Group, Climate Action 100+/Climate Engagement Canada and the UN Principles for Responsible Investment) <li data-bbox="537 867 1401 1094">○ integrating climate change mitigation investment strategies into the portfolio, which includes investing in hard-to-abate sectors with a clear strategy of financing their decarbonization, setting net-zero targets, planning decarbonization road maps and reporting on GHG metrics aligning with the GHG Protocol (such as Partnership for Carbon Accounting Financials [PCAF]), the CDP, the Paris Agreement Capital Transition Assessment (PACTA) and/or the Science Based Targets initiative (SBTi). <li data-bbox="537 1115 1390 1304">○ integrating climate change risk management strategies, which includes assessing physical and transitional climate risks, conducting climate-risk scenario analysis to test operational resiliency aligned with guidance from the Task Force on Climate-related Financial Disclosures (TCFD) or with the OSFI (Office of the Superintendent of Financial Institutions) B-15 Climate Risk Management guidelines. <li data-bbox="488 1325 1377 1423">• health care workers to advocate for the integration of sustainable investing strategies, ESG considerations and bold climate action from their pension plan and fund managers as illustrated above

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