Climate resilience 101: Preparing for a changing climate

Climate change and associated climate events are now a fact of life. It is predicted that these events and their related health impacts will intensify over the coming years. In British Columbia, events such as the 2021 heat dome and recurring wildfire seasons have caused hundreds of deaths, worsened chronic disease outcomes, and disrupted health system operations.[1] However, there are many opportunities to prepare for these changes to minimize the associated health harms.

Climate resilience in health systems refers to our ability to withstand climate events while maintaining care and recovering quickly from disruptions. Because of the intimate connection between climate and health, those working in the health system play a critical role in strengthening our systems and communities for the changes to come.

Recognizing climate risks enables more focused, long-term infrastructure and operations planning. In practice, climate projections are now incorporated into building design and maintenance to better align with expected future conditions. To support continuity of care during climate emergencies, measures such as reliable backup power, improved ventilation, and diversified supply chains have proven effective in enhancing facility preparedness. Looking ahead, every facility should undertake a climate change vulnerability and risk assessment and consider climate resilience in all facility-level decisions. Together, these efforts position the health system to better anticipate, absorb, and recover from future climate impacts.

Building resilience isn't limited to infrastructure. It also involves helping patients strengthen their ability to cope with climate-related health challenges. Individual health care providers play an important role in protecting the health and enhancing the resilience of their patients. Certain populations are more vulnerable to the health effects of climate events, including those who are required to work outside and those with impaired mobility, limited social connections, and precarious housing or income. Medical issues such as respiratory illness, mental health problems, and certain medications can also put people at increased risk. For example, providers must monitor patients who are taking strong anticholinergics, nonselective beta blockers, or anti–Parkinson disease agents, as these patients can have impaired thermoregulation and are particularly vulnerable to heat stress.[2] Providers must also recognize that patients with respiratory, cardiac, or other conditions need particular attention during wildfire season, and primary care providers should identify and provide anticipatory guidance and information about understanding the importance of monitoring the air quality index and installing even simple air filters for their homes.

Physicians should ensure patients have adequate medication in case of evacuation. Patients living in flood-prone areas should be provided with information about chemical/microbial hazards, wounds, and drinking-water safety after flooding events.

Although we must continue to work toward reducing our collective impact on the climate, for the foreseeable future, we need to prepare ourselves and our patients to be as climate resilient as possible. ■

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Resources for climate resilience

For health system leaders: Reports that describe opportunities to make health care and infrastructure safer and more resilient:

- *Climate Change and Health in British Columbia: From Risk to Resilience* (https://nrs.objectstore.gov.bc.ca/xedyjn/Projects/2023/ClimateReadyBC/page_health_r2r/Final.pdf).
- *Climate Resilience Guidelines for BC Health Facility Planning & Design* (https://bcgreencare.ca/resource/hf-climate-resilience-guidelines/).

For patients and providers:

- The BC Centre for Disease Control offers an excellent collection of patient and provider resources, including one-page talking points for extreme heat, wildfire, and flooding (www.bccdc.ca/health-info/prevention-public-health/climate-change-health).

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primary care physicians, "Please send the patient without an MRI. Let us see if they need an MRI scan."

What are the harms in ordering an unnecessary MRI scan, apart from costs?
Apart from taking away a slot from someone who might need the scan more urgently, MRI-reported findings can create a lot of anxiety since there is so much documented that is not clinically meaningful for your patient's care. Patients will often read an imaging report line by line and wonder if the constellation of imaging findings explains their problem. While that can be the case, more frequently it is not.

How do you prepare patients for what they might read on the imaging report?
I try to foreshadow what they will see on the report, so they are not surprised. I tell them specifically what I am looking for (e.g., ligament tear) and that other findings are expected age-related changes that are not necessarily clinically relevant. When I see them afterward, I explain the findings and go through the report in more detail, but I always give them a heads-up before the scan is completed.

What is your bottom-line message to physicians who refer patients to orthopaedics?
You generally do not need MRI to refer to a specialist in orthopaedics, specifically for knees, as well as hips. It's rarely useful in changing clinical management. You can refer to orthopaedics when in doubt, and the surgeon can triage the referral and then decide whether further imaging is necessary. If you look hard enough with higher-level imaging, particularly in patients over 50 years of age, you are going to frequently find pathology, and the MRI findings may not change patient treatment. It is better if the orthopaedic surgeon assesses the patient in person first and then decides when MRI can help with diagnosis or treatment. ■

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The low rates of accurate classification of overdose patients expose significant deficiencies in how overdose data are captured and, more broadly, handled in the health care system's response to the toxic drug crisis. To mitigate these challenges, it is imperative to enhance data collection and refine classification systems, thus facilitating a meaningful response to this ongoing crisis. ■

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