



Focusing the Climate Lens on Healthcare

The Joint Commission pledges to reduce the field's carbon footprint.

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If the healthcare field were a country, it would be the fifth-greatest polluter worldwide, according to a 2019 Health Care Without Harm report, *Health Care's Climate Footprint: How the Health Sector Contributes to the Global Climate Crisis and Opportunities for Action*. The top producers of greenhouse gases from healthcare are the United States (27%) and China (17%), with the rest of the world contributing the remaining 56%. Despite having one-fourth the population, the United States produces 57 times more emissions per person than India, according to the report.

In the United States, nearly 9% of total greenhouse gas emissions come from healthcare, according to the 2021 article "Decarbonizing the U.S. Health Sector-A Call to Action" that appeared in *The New England Journal of Medicine*. A 2020 article "Health Care Pollution and Public Health Damage in the United States: An Update" that appeared in *Health Affairs* breaks down those emissions further:

- Seven percent of emissions are generated directly by the health sector, including fluorinated anesthetic gases, propellants for metered-dose inhalers and on-site boilers.
- Eleven percent of indirect emissions are generated by health systems' operations, including electricity for buildings and vehicles and the use of water.
- Eighty-two percent of indirect emissions are from the production and transportation of goods and services procured by the health sector.

Climate change is, of course, an environmental issue, but it also is a health, healthcare equity and social justice issue.

Climate Change: A Health Catastrophe

It may be clear that extreme weather can exacerbate respiratory and cardiovascular conditions and cause injuries and death. However, it may be less evident that extreme weather has also brought diseases once endemic to tropical and subtropical regions (such as Rift Valley fever, chikungunya and West Nile virus) to previously temperate areas.

There have also been increases in foodborne and waterborne illnesses and other infectious diseases due to climate change around the globe. Warming waters are now hospitable to cholera, cryptosporidium and harmful algal blooms, contributing to diarrheal diseases and a shortage of potable waters that threatens farming, aquaculture and fisheries, water prices, and even maintaining once-habitable areas.

Not everyone is equally at risk from the effects of climate change. The individuals least able to compensate are those already burdened with adverse social determinants of health, including poverty, poor housing and healthy food access, and lower education. These individuals' compromised health status renders them more susceptible to the diseases of climate change. They also are unable to "buy themselves out" of adverse circumstances by relocating elsewhere, installing and paying for air conditioning, or even enduring increasing costs of healthy food.

The Joint Commission Action

Many of our colleagues in healthcare are passionate about changing the field's trajectory, and its current approach violates the first principle of healthcare: do no harm. Given that U.S. healthcare is such a potent contributor to both the national and worldwide carbon footprint, we have

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a moral obligation to act swiftly to decarbonize the sector.

In the past three years, 81% of primary care clinics experienced some kind of disruption due to an extreme weather event. Fewer than one-fifth of those staff believed their clinic was "very resilient," according to a 2022 national survey conducted by the Center for Climate, Health, and the Global Environment at Harvard T.H. Chan School of Public Health and its Climate Resilience for Front-line Clinics project.

Extreme weather events can threaten facilities' critical infrastructure, including power outages, water and sewage treatment failures, and more. This makes climate change a direct patient safety and quality issue, too, which is at the heart of The Joint Commission's mission to continuously improve healthcare for the public and to inspire healthcare organizations to excel in providing safe and effective care of the highest quality and value.

Last year, The Joint Commission pledged to reduce the carbon contribution emanating from the healthcare sector and to help support healthcare organizations becoming more resilient to the effects of climate change as part of the White House and U.S. Department of Health and Human Services' Health Sector Climate Pledge. The Joint Commission also committed to reduce emissions by a minimum of 50% by 2030 and achieve net zero emissions by 2050, and it hopes others will do so, too. This commitment marks the reduction necessary to restore atmospheric carbon dioxide to levels that over the past 1 million years have maintained the climate we've known through recorded history.

We've further challenged ourselves to do better. In December 2022, The Joint Commission convened a panel of national leaders in environmental sustainability in healthcare. The panel helped review Joint Commission standards and the Centers for Medicare & Medicaid Services' Conditions of Participation to identify requirements that could inadvertently cause waste and excess carbon emissions and could be changed without hurting quality and safety. Simultaneously, a technical advisory panel provided input on basic

steps that healthcare organizations can take to decrease their carbon footprint. This work continues as we plan to launch a voluntary core certification.

Healthcare Leaders' Essential Role

Healthcare leaders play an essential role in improving environmental sustainability at their organizations. Their commitment to decarbonization starts with providing leadership for this important initiative. They can begin with designating an individual or individuals responsible for the oversight of activities to reduce greenhouse gas emissions.

The National Academy of Medicine has identified decarbonizing healthcare as one of the grand challenges for our generation. It has assembled tremendous resources and will launch web resources, as well. This is an opportunity to not only make the planet healthier but also foster health for generations to come.

Finally, The Joint Commission will continue to work with HHS and other policymaking bodies to support their efforts to reduce the healthcare sector's carbon footprint. As co-chair of the policy, finance and metrics workgroup of the National Academy of Medicine Action Collaborative on Decarbonizing the U.S. Health Sector, I will work with other healthcare leaders to align constructive, collective goals and actions to decarbonize healthcare, even as we grapple with the significant operational challenges of the post COVID-19 era.

We all went into healthcare to help others and improve society. Inadvertent harm violates not only our first principle but also our obligation to our children and future generations. We must reduce healthcare's carbon footprint, not only as a matter of social justice but also as a matter of health and safety.

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Editor's note: Since joining The Joint Commission as its president and CEO in 2022, Perlin has made it a top priority to launch three critical strategic initiatives to help advance healthcare equity, support the workforce and improve environmental sustainability in healthcare. These initiatives are closely linked and have assumed prominence on The Joint Commission's agenda.