

## Collaborating With the Healthcare Sector on Climate and Health

Actions for Environmental Public Health Professionals



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This document provides tips for environmental public health professionals to identify key collaboration opportunities with the healthcare sector to reduce climate-related risks in their communities. It also includes actions that hospital administrators and healthcare professionals can take to make their facilities more sustainable and their patients more resilient to the changing climate.

## **Climate Change Impacts Health**

Climate change is the single biggest health threat facing humanity. It is expected to cause approximately 250,000 additional deaths a year between 2030 and 2050 (World Health Organization, 2021). The changing climate affects human health through air quality, extreme heat, drought, wildfires, extreme storms, floods, vectorborne illnesses, and changing local weather patterns.

Though global, the effects of climate change are inherently local. All people are susceptible to physical and mental health impacts; however, certain groups carry a heavier burden. These populations include children, people of color, older adults, people with disabilities, and people in low-income communities (U.S. Environmental Protection Agency, 2022).

The healthcare sector plays a major role in the health and well-being of individuals and communities. Climate change is directly impacting healthcare systems by increasing illnesses and changing disease prevalence. At the same time, the energy intensive nature of healthcare delivery systems is significantly contributing to climate change. Hospitals use 2.5 times more energy per square foot than the average office building (U.S. Energy Information Administration, 2016). Globally, healthcare systems contribute 4.4% of the world's total greenhouse emissions. In the U.S., the healthcare system produces up to 10% of the total nation's emissions (Pichler et al., 2019).

## **Partnering for Solutions**

Environmental public health professionals are well-positioned to collaborate with healthcare professionals on adaptation and mitigation approaches to address the climate crisis. The public views environmental public health professionals as trusted and authoritative sources of information for health. Environmental public health professionals have experience in designing and implementing sustainability initiatives, pursuing goals such as net-zero energy buildings, conserving water, and decreasing waste. Furthermore, healthcare professionals and healthcare systems are increasingly open to addressing climate change. Membership to medical societies addressing climate action is growing and many facilities have begun implementing climate smart initiatives that protect the health of patients and save money (Gould et al., 2022; Health Care Climate Council, 2020).



Improving efficiencies within the healthcare sector can reduce healthcare expenditure. Improving energy efficiency and conservation is often the first step to making hospitals, clinics, doctors' offices, and academic medical facilities part of the solution to climate change, rather than being a major contributor to greenhouse gas emissions.

Additionally, healthcare professionals are considered a trusted source of information to their patients. Along with environmental public health professionals, healthcare professionals are at the nexus of climate change and health. Healthcare professionals can also educate their patients on climate change and actions they can take to protect themselves and their families.

## **Actions for Environmental Public Health Professionals**

- Share green building program initiatives and methods for decreasing greenhouse emissions with healthcare facilities and staff.
- Work with healthcare providers to create continuing education trainings for staff on environmental health issues such as air quality, water quality, hazardous waste and materials, emergency preparedness and disaster response, extreme weather events, food safety, vector control issues, and other programmatic areas impacted by climate change.
- Collaborate with healthcare providers to design patient education materials on environmental public health issues and preventative actions that patients can take to protect themselves.
- Collaborate with universities and academic medical facilities to include environmental public health impacts of climate change to healthcare courses and trainings.
- Collaborate with healthcare facilities to prepare and strengthen emergency department response plans and services for extreme weather events.
- Collaborate with healthcare facilities to highlight the importance of addressing health disparities related to climate change that disproportionately impact people of color, older adults, disabled individuals, and those who suffer from socioeconomic inequalities.
- Work with healthcare facilities to create mechanisms such as fellowship and externship programs for environmental public health professionals to work closely with healthcare professionals on climate change issues.

## **Actions for Hospitals**

- Build and strengthen relationships with Public/Environmental Health departments.



- Prepare for an increase in electricity outages during extreme weather events.
- Prepare for an increase in emergency department visits for extreme weather events.
- Prepare for increased mental health visits post-disaster.
- Find ways to decrease hospital greenhouse gas emissions.
- Consider employing an environmental health sustainability officer.
- Transition from fossil fuels to renewable energy sources.
- Launch green building and resiliency initiatives.
- Serve more local, sustainable, plant-based foods.
- Increase use of recyclable hospital materials.
- Consume less energy, water, and goods overall.
- Install energy efficient lighting.
- Integrate environmentally responsible principles and benchmarks into supply chain management.
- Explore ways to reduce waste.
- Use environmentally safe chemicals and gases.
- Reduce staff commuting emissions by providing and incentivizing public transport, carpools, and green transportation.

## **Actions for Healthcare Professionals**

- Discuss the health risks of extreme weather events with patients and talk about how to stay safe and healthy.
- Educate patients about poor air quality and what steps they can take to minimize its impact on their health.
- Provide education materials and discuss with patients about the impact of disasters on mental health.
- Discuss how to reduce exposure to allergens to minimize allergy and asthma symptoms.
- Talk with patients about the health risks of infectious diseases and how to stay safe and healthy.
- Tailor information to your community's risk of emerging and prevalent infectious diseases (e.g., Lyme disease, West Nile virus, etc.).
- Increase patient awareness about testing for foodborne and waterborne illnesses after flooding events, storms, high heat events, and electricity outages.



- Connect patients to community resources for climate resilience (e.g., Low Income Home Energy Assistance Program).
- Incorporate climate change and health information in education materials.
- Include information about the health impacts of climate change when engaging in community events.

## **Partners for Action**

As identified by the Centers for Disease Control and Prevention (2019), the following healthcare professionals could present collaboration and partnering opportunities related to climate and health for environmental health professionals.

- Communication officials at healthcare facilities.
- Teaching hospitals and academic medical centers.
- Grant writers and resource development coordinators at hospitals and clinics.
- Nursing home and home care programs.
- Emergency medical services.



## Additional Resources

- **Extreme Temperatures: Disaster Management Resources:** American Academy of Pediatrics, <https://www.aap.org/en/patient-care/disasters-and-children/disaster-management-resources-by-topic/extreme-temperatures/>
- **A Physician's Guide to Climate Change, Health and Equity:** Public Health Initiative/Center for Climate Change and Health, <https://climatehealthconnect.org/wp-content/uploads/2016/09/FullGuideTEMP.pdf>
- **Climate and Health: A Guide for Cross-Sector Collaboration:** Centers for Disease Control and Prevention, <https://www.cdc.gov/climateandhealth/docs/CrossSectorClimateandHealth.pdf>
- **Climate Action: A Playbook for Hospitals:** Health Care Climate Council, <https://climatecouncil.noharm.org/>
- **Saving Water in Hospitals:** U.S. Environmental Protection Agency, <https://www.epa.gov/sites/default/files/2017-01/documents/ws-commercial-factsheet-hospitals.pdf>

## References

- Centers for Disease Control and Prevention. (2019). *Climate and health: A guide for cross-sector collaboration*. <https://www.cdc.gov/climateandhealth/docs/CrossSectorClimateandHealth.pdf>
- Gould, R.J., Sarfaty, M., & Maibach, E.W. (2022). *The health promise of climate solutions. A report of the Medical Society Consortium on Climate and Health*. George Mason University. <https://test.ms2ch.org/wp-content/uploads/2022/10/The-Health-Promise-of-Climate-Solutions-5-22-1.pdf>
- Health Care Climate Council. (2020). *Climate action: A playbook for hospitals*. <https://climatecouncil.noharm.org>
- Pichler, P.-P., Jaccard, I.S., Weisz, U., & Weisz, H. (2019). International comparison of health care carbon footprints. *Environmental Research Letters*, 14(6), Article 064004. <https://doi.org/10.1088/1748-9326/ab19e1>
- U.S. Energy Information Administration. (2016). *2012 commercial buildings energy consumption survey: Energy usage summary*. <https://www.eia.gov/consumption/commercial/reports/2012/energyusage/>
- U.S. Environmental Protection Agency. (2022). *Climate change and the Health of Socially Vulnerable People*. <https://www.epa.gov/climateimpacts/climate-change-and-health-socially-vulnerable-people>
- World Health Organization. (2021). *Climate change and health*. <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

