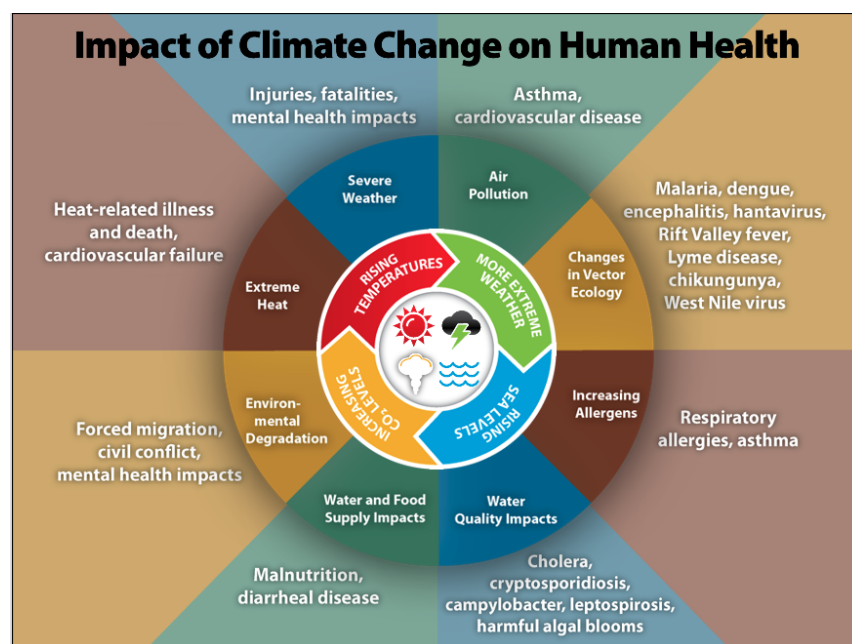


Climate Change and Departments of Family Medicine: An Example and Resource Guide

The impacts of climate change on departments of family medicine and how we can be part of the solution

Created as a supplement to the 2022 ADFM Annual Conference session on climate change and family medicine featuring Jonathan Patz, MD, MPH

Why we care: Climate Change has massive impacts on human & planetary health



The major mission areas of Departments of Family Medicine are all affected by climate change and, in parallel, can all have an impact on addressing climate change. These include:

- Clinical care and population health
- Education (UME, GME, CME/interprofessional education)
- Research
- Advocacy
- Business Operations (Administration)
- *Equity and Justice is threaded throughout, recognizing the unequal impact of climate change on some populations*

For each of these areas, the guide below shares: a) suggestions for taking action; b) specific case examples from peer departments where available; and c) resources to help facilitate these suggested action steps.

CLINICAL CARE

Potential action steps for a department of family medicine

- decarbonization and resilience work being done in a health system

Case example: University of California and UC-Irvine Taking Action

This is a university-wide example. The University of California [announced in 2013 an initiative](#) for the entire University of California system to be carbon neutral by 2025. UC Irvine has been the leader to date, [ranking in the top 10 of “cool schools.”](#) featured by Sierra magazine for 12 years in a row.

Resources

- CDC’s list of climate effects on health:
<https://www.cdc.gov/climateandhealth/effects/default.htm>
- AAFP Member Interest Group on Climate Change and Environmental Health
<https://www.aafp.org/membership/welcome-center/involve/connect/mig.html>
- Ziegler C, Morelli V, Fawibe O. Climate Change and Underserved Communities. Primary Care. 2017 Mar; 44(1):171-184.
<https://www.sciencedirect.com/science/article/abs/pii/S0095454316300744?via%3Dihub>. Accessed January 21, 2020. ***Starting from the section titled “Adaptation Strategies” this article describes a model that Primary Care Physicians can use with patients to discuss climate change, its health impacts and strategies to counteract them.***
- [My Green Doctor](#) - this webpage offers a library of patient education handouts related to climate change, including staying safe in extreme heat, eating less red meat, active transport and avoiding mosquitoes. My Green Doctor intends to keep adding resources to the list. Because the website does not specifically commit to addressing health disparities, consider likelihood to improve or worsen health disparities before sharing them with patients.

EDUCATION

Potential action steps for a department of family medicine

- Teaching medical students and residents about climate change, see resources below for core competencies, access to course materials, etc.
- Sending faculty (and potentially interested residents) for additional training, e.g. the Climate and Health Responder Course noted below
- Mentorship for trainees on how to embed this systematically into their work after completing training
- Integrating climate actions and education into the continuum of medical education

Case example: University of Minnesota Medical School, Duluth Campus

Into our unique *Introduction to Rural Family Medicine and Native American Health (IRFMNAH)* course for first-year medical students, we introduced climate change as a factor of health equity. Our campus mission delivers curriculum and experiences to prepare future family physicians to serve rural communities and Native American communities. For years in the IRFMNAH course we have addressed health equity and social determinants of health. We wanted to ensure our medical students are aware of the anticipated and direct health impacts of climate changes. Health burdens chronically and disproportionately impact low-income and historically marginalized populations that already experience health disparities. The first session covered the health impacts of climate change at an individual level. We developed an active learning exercise to identify factors that would make a patient more vulnerable or more resilient to the impacts of climate change. The second session expanded upon upstream factors and impacts at a community level using an active learning exercise involving role-played community stakeholders engaged in decision making about an environmental justice issue. The goals of this educational training are the following: 1. Medical students will understand how climate change impacts health; 2. Expand medical student perspectives about the impacts of climate change applicable to patient care; and 3. Identify climate-health-equity opportunities beyond the clinical learning environment.

Resources

- Global Consortium on Climate and Health Education resources & educational content <https://www.publichealth.columbia.edu/research/global-consortium-climate-and-health-education/resources>
 - **Core Competencies:** Observable skills and actionable knowledge for health professionals. Many of our members use these competencies as the basis of their health professional courses.
 - **Curriculum-building Resources:** We curate and maintain a library of peer reviewed course materials, resources, data and information to help you succeed.
 - **Climate and Health Responder Course:** This certificate-based online program, taught by world experts, is designed to equip health professionals, health educators and climate leaders with the knowledge needed for transformative action. Participants will receive up to 16, no-cost, continuing education hours through this program

- o **Climate and Health Office Hours:** GCCHE, Project ECHO and NOAA invite you to join an exciting weekly discussion series, bringing together the best experts to examine the latest research, ideas and current events in climate and health. Interdisciplinary health participants are able to join free of charge and can expect 60-minute sessions including a lively Q&A and discussion.
- o **Student Activities:** We have a very active student membership and a student committee who hosts webinars, maintains a “student perspectives” webpage and continuously shares opportunities for student engagement in climate and planetary health work. We welcome students from your institution to [join](#) the GCCHE student group!
- New AAFP module that is part of the *Health Equity: Leading the Change* series called “Understanding the Impact of Climate Change on Population Health” (<https://lms.aafp.org/activity-sets/2021-health-equity#group-tabs-node-course-default3>)
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RESEARCH

Potential action steps for a department of family medicine

- Consideration of climate change impacts on populations of study, as an environmental driver of health, etc.
- Developing evidence to support advocacy proposals to enact change

Case example: UC Irvine Taking Action

UCI has created a new [Center for Environmental Health Disparities](#) to shine a spotlight on inequities research. Although this Center is not part of the family medicine department, Department Chair Cindy Haq is a member of the center.

Resources

- Lancet Countdown <https://www.lancetcountdown.org/>
 - o US Policy Brief, 2021
<https://www.dropbox.com/s/87eo6konlovsrf5/USA%202021%20English%20-%20Lancet%20Countdown%20Policy%20Brief.pdf?dl=0>
- National Institute of Environmental Health Sciences
<https://www.niehs.nih.gov/health/topics/agents/climate-change/index.cfm>

ADVOCACY

Potential action steps for a department of family medicine

- Power mapping your community to see where to help create change
- Speaking to your local, state, and federal governments about the ways to save lives by reducing carbon emissions, etc.
- Connect your students, residents, and department members with your state's climate health advocacy organization (see [MSCCH](#)), or invite them to present to your department
- Join the [Healthcare Without Harm physician network](#)
- Participate in training, for example:
 - EcoAmerica – [Climate ambassador training](#)
 - [Climate Reality Leadership Corps](#)
- Learn more about what others have done, for example:
 - [Health professionals as advocates for climate solutions: A case study from Wisconsin](#)
 - [Health Professionals and the Climate Crisis: Trusted Voices, Essential Roles](#)
- Check out more about [how to get started as an advocate](#)
- Partner with grassroots organizations in your area such as these:
<https://climatehealthequitytoolkit.org/hubs-nonprofit-collaboration-climate-health-and-equity>

Case example: University of Wisconsin Department of Family Medicine & Community Health Taking Action

“This comes from the [Health Equity Curricular Toolkit](#). There are 15 modules now (the newest is on climate change) and each module gets to an "actionable activity" where users/learners apply an equity lens to their proposals which could be a QI proposal but often are advocacy proposals.

As an example, my residents talked about an intervention of shutting down a trash incinerator plant near a hospital in Detroit but while this seemed like a great thing to advocate around from the standpoint of air pollution, I then asked them who would negatively be affected and then they realized they needed to think about who would lose jobs, where the new landfill site would likely be placed, etc. Then they were better able to appreciate other stakeholders they needed to include to create a more comprehensive proposal.”

Resources

- Health Equity Curricular Toolkit (incl climate change module)
<https://www.aafp.org/family-physician/patient-care/the-everyone-project/health-equity-tools.html>
- Medical Society Consortium on Climate and Health (find your state climate group)
<https://medsocietiesforclimatehealth.org/>

- American College of Physicians – Climate Change toolkit - <https://www.acponline.org/advocacy/advocacy-in-action/climate-change-toolkit>
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BUSINESS OPERATIONS

Potential action steps for a department of family medicine

- Environmentally preferable purchasing
- Policies and practices to reduce medical waste/toxicity of waste for clinical operations
- Policies on travel and other large producers of carbon emissions improve energy efficiency, electrification, and renewable sourcing of energy use
- Use your department's voice to advocate for the operational sustainability and resiliency of your larger health system
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Case example: XXX Department Taking Action

Resources

- Health Care Without Harm <https://noharm.org/>
 - Purchasing resources (e.g. sample policies for purchasing, greener cleaners, etc.) - <https://noharm-uscanada.org/issues/us-canada/purchasing-resources>
 - Practice Greenhealth <https://practicegreenhealth.org/>
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