**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**

***Diagram

Description automatically generated***

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



***Resources***

* CDC’s list of climate effects on health: <https://www.cdc.gov/climateandhealth/effects/default.htm>
* HHS [Office of Climate Change and Health Equity](https://www.healio.com/news/primary-care/20210830/hhs-launches-small-but-mighty-office-to-tackle-health-effects-of-climate-change) and their new climate-related public health information series, Climate and Health Outlook <https://www.hhs.gov/climate-change-health-equity-environmental-justice/climate-change-health-equity/news/index.html>
* 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%3Dih  
  ub. 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.\*\**
* *New study about air pollution reduction and the potential to save lives:* Mailloux NA\*, Abel DW, Holloway TA, **Patz JA**. Cross-state PM2.5-related Air Quality Health Benefits and Global Climate-related Social Benefits of 100% Clean Energy in the United States, Geohealth May 16, 2022, <https://doi.org/10.1029/2022GH000603>
* [My Green Doctor](https://mygreendoctor.org/resources/) - 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



***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:**](https://www.publichealth.columbia.edu/research/global-consortium-climate-and-health-education/core-competencies-0)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:**](https://www.publichealth.columbia.edu/research/global-consortium-climate-and-health-education/courses-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:**](https://www.publichealth.columbia.edu/research/global-consortium-climate-and-health-education/climate-and-health-responder-course-health-professionals)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
  + [**Climate and Health Office Hours:**](https://www.publichealth.columbia.edu/node/77461) 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.
  + [**Student Activities:**](https://www.publichealth.columbia.edu/research/global-consortium-climate-and-health-education/students) 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](https://docs.google.com/forms/d/e/1FAIpQLSdZS_utqWAm4qAgJ5BAR-bfpNvsmclNaPu6HOTuclJkiMY4pQ/viewform) 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>
* *AAMCNews*: Medical schools adding climate-related content to the curriculum: [**Read More**](https://urldefense.com/v3/__https:/www.aamc.org/news-insights/climate-change-curriculum__;!!H8mHWRdzp34!_IjMwXMS0IQEZxQcJ7G_jOpXglHEyfeZyo3GoM-qx6uA9Zlw5hKta8aMK4nleHrr5AV_esdrn9X7egUrW_qop04$)
* *AAMCNews:* Protecting firefighters, farmworkers from harmful health effects: [**Read More**](https://urldefense.com/v3/__https:/www.aamc.org/news-insights/climate-change-threatens-firefighters-and-farmworkers-and-s-only-beginning__;!!H8mHWRdzp34!_IjMwXMS0IQEZxQcJ7G_jOpXglHEyfeZyo3GoM-qx6uA9Zlw5hKta8aMK4nleHrr5AV_esdrn9X7egUrUtu1hgI$)

**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



***Resources***

* Lancet Countdown <https://www.lancetcountdown.org/>
  + 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>
* *AAMCNews:* Health consequences that concern doctors and researchers the most: [**Read More**](https://urldefense.com/v3/__https:/www.aamc.org/news-insights/rising-health-threats-hot-planet__;!!H8mHWRdzp34!_IjMwXMS0IQEZxQcJ7G_jOpXglHEyfeZyo3GoM-qx6uA9Zlw5hKta8aMK4nleHrr5AV_esdrn9X7egUr3P6u-Qw$)

**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](https://medsocietiesforclimatehealth.org/)), or invite them to present to your department
* Join the [Healthcare Without Harm physician network](https://healthcareclimateaction.org/professionals)
* Participate in training, for example:
  + EcoAmerica – [Climate ambassador training](https://climateforhealth.org/ambassadors-training/)
  + [Climate Reality Leadership Corps](https://www.climaterealityproject.org/training)
* Learn more about what others have done, for example:
  + [Health professionals as advocates for climate solutions: A case study from Wisconsin](https://www.sciencedirect.com/science/article/pii/S2667278221000493)
  + [Health Professionals and the Climate Crisis: Trusted Voices, Essential Roles](https://onlinelibrary.wiley.com/doi/full/10.1002/wmh3.421)
* Check out more about [how to get started as an advocate](https://noharm-uscanada.org/sites/default/files/HealthProfessionalAdvocate_2020.pdf)
* Partner with grassroots organizations in your area such as these: <https://climatehealthequitytoolkit.org/hubs-nonprofit-collaboration-climate-health-and-equity>



***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>

**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



***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/>
* *AAMCNews:* The health care sector's race to reduce its carbon footprint: [**Read More**](https://urldefense.com/v3/__https:/www.aamc.org/news-insights/hospitals-race-save-patients-and-planet__;!!H8mHWRdzp34!_IjMwXMS0IQEZxQcJ7G_jOpXglHEyfeZyo3GoM-qx6uA9Zlw5hKta8aMK4nleHrr5AV_esdrn9X7egUrDI6C5kk$)

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