Center for the Environment and Health

Working to integrate sustainability into clinical, research, and educational activities, and to improve the environmental health and well-being of the hospital and our communities







Creating energy from food waste at Mass General Hospital

According to the Environmental Protection Agency (EPA), over one-third of food produced in the U.S. goes to waste. With 24% of the waste ending up in landfill and 22% incinerated, this contributes to greenhouse gas emissions and climate change. Since 2014, MGH has partnered with Agri-Cycle to divert food waste from Eat Street Café to an anaerobic digestion facility for generation of energy. In 2020 alone, 523 tons of diverted food waste generated an amount of energy equivalent to what is needed to power 50 homes. Nurses in Perioperative Services, in collaboration with Environmental Services, are now expanding the Food to Energy program, starting with the Gray 4 employee kitchen area. Next steps in this nurse-led initiative will be to promote education about the Food Recovery Hierarchy and the importance of a Zero Waste Boston.





Upcoming Events

Grand Rounds - co-sponsored by the MGH Center for Environment and Health, the MGH institute of Health Professions Center for Climate Change, Climate Justice, and Health, and Brigham and Women's Hospital





Featured speaker: Jodi Sherman, MD

September 21st, 12pm EDT

Associate Professor of Anesthesiology of the Yale School of Medicine, Associate Professor of Epidemiology in Environmental Health Sciences, and founding director of the Yale Program on Healthcare Environmental Sustainability in the Yale Center on Climate Change and Health. Dr. Sherman also serves as the Medical Director for Yale New Haven Health Center for Sustainable Healthcare.

Register here



Climate change: What role for clinical medicine?

Featured speaker: Dan Schrag, PhD.

October 19th, 12pm EDT

Sturgis Hooper Professor of Geology and professor of environmental science and engineering at Harvard University where he serves as director of the Center for the Environment. Dr. Schrag also co-directs the Program on Science, Technology, and Public Policy at the Belfer Center for Science and International affairs at Harvard's Kennedy School.

Registration opening soon here



Studies of health effects of the external exposome in the Nurses' Health Studies

Featured speaker: Jaime Hart, ScD.

November 16th, 12pm EDT

Associate Professor Spatial and Contextual Exposomics and Epidemiology Laboratory; Channing Division of Network Medicine, Department of Medicine, Brigham and Women's Hospital and Harvard Medical School; Department of Environmental Health, Harvard T.H. Chan School of Public Health.

Registration opening soon here

Climate Change and Health Series - sponsored by the Blum Patient and Family Learning Center



Mental Health Consequences of Climate Change <u>September 19th,12:00pm EDT</u>

The Maxwell & Eleanor Blum Patient and Family Learning Center is offering an online session on the mental health consequences of climate change. Join to learn about how climate change is negatively impacting our mental health and strategies we can use reduce this impact. Participation is free for this event with no registration required.

Zoom link here

Advocacy Day - sponsored by the Medical Society Consortium on Climate and Health



Advocacy training and Capitol Hill meeting

September 19th-20th

In order to leverage the voice of health care to support further climate action, the Medical Society Consortium on Climate and Health is organizing advocacy training for health professionals along with meetings with elected officials.

Register here

Grand Rounds - co-sponsored by Healthcare Without Harm and the Global Consortium on Climate and Health Education





Eye care with a vision for climate-smart surgery

September 22th,11:00pm EDT

Presented with the Global Consortium on Climate and Health Education, this virtual ground rounds series explores strategies to reduce health care emissions and features the leadership of clinicians and researchers. In a session moderated by ENT surgeon Dr. Neelu Tummala, two ophthalmologists will discuss the environmental impact of ophthalmic practice and share how ophthalmologists are leading the climate-smart surgery movement, reducing pharmaceutical waste, and advocating for policy change.

Register here

Climate Preparedness Week - sponsored by Communities Responding to Extreme Weather (CREW)



Multiple Events

September 24th-30h

The Center for Environment and Health is partnering with CREW for climate preparedness week 2022. Several events are schedule through the week to support learning, service, and actions to better prepare our communities for extreme weather events and the effects of climate change. This year's theme explores the many ways that extreme weather and climate change manifest outside of the most noticeable disasters and disruptions. From the toll that climate anxiety and grief can take on mental health to how the invisible threat of extreme heat is most powerfully felt in historically redlined and disenfranchised communities.

See calendar here

Journal Club - co-sponsored by Healthcare Without Harm and Medical Students for a Sustainable Future





Environmentally sustainable inhalers

September 29th, 6:30pm EDT

The Health Care Without Harm Physician Network and Medical Students for a Sustainable Future will be hosting a journal club to discuss two recent articles on the move toward more environmentally sustainable inhalers. The propellants used in metered dose inhalers (MDIs) are potent greenhouse gases with a global warming potential thousands of times greater than carbon dioxide. This journal club will be led by Drs. Gregg Furie and Alex Rabin.

Register here

Awards



Mass General Hospital recognized

In recognition for its achievement and innovation in health care sustainability, Mass General Hospital received the **2022 Circles of Excellence Award** in the categories of Leadership and Climate from Practice Greenhealth, the nation's leading organization dedicated to environmental sustainability in health care. (Read full story)



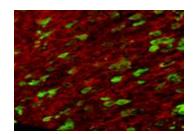
Mass General Brigham leads on climate

The Environmental League of Massachusetts recognized Mass General Brigham as one of five recipients of a 2022 Commonwealth Environmental Leadership Award for those working to address Massachusetts' most pressing climate challenges. (Read full story).

Research

Improving the environmental impact of research at Mass General Hospital

Nearly half of the square footage at Mass General Hospital (MGH) is made up of research space. Research space is highly energy-intensive and produces significant amounts of solid waste and toxic chemicals. The Center for the Environment and Health at MGH Mass General has partnered with the MGH Research Institute (MGRI) and My Green Lab to institute a pilot project to reduce these environmental impacts. My Green Lab is a non-profit company and industry leader in making labs more environmentally friendly.



Six labs have volunteered to participate in the pilot program and members of the CEH will be quantifying environmental benefits, cost and waste savings of the program, along with obtaining feedback from users as to the ease and applicability of the program. MGRI is sponsoring the pilot, and if the program proves successful at MGH, we are working with leadership on ways to incentivize researchers and to expand the program to other labs.

If you are interested in learning more about our pilot program or about My Green Lab (mygreenlab.org), feel free to contact the Center or <u>read more here</u>.

Advocacy

U.S. Supreme Court limits E.P.A. authority to regulate power plants

In their recent ruling on the *West Virginia vs Environmental Protection Agency (EPA)* case the U.S. Supreme court ruled that the Environmental Protection Agency did not have the power to regulate state level greenhouse gas emissions from power plants. The ruling is expected to delay the transition away from coal and other polluting energy sources and negatively impact health and climate goals in the U.S. The Medical Society Consortium on Climate and Energy is encouraging members to <u>contact congress</u> about this decision.

Trainees

Integrating climate education into Internal Medicine Residency Program

The Massachusetts General Hospital Internal Medicine Residency Program is working to train its residents to develop the knowledge and skills necessary to recognize, treat, and prevent current and emerging health effects of the climate crisis. Our curriculum will incorporate climate education into pre-existing lectures in our ambulatory didactics and noon conference series. This approach allows for an efficient and longitudinal means of training residents on this emergent topic and illustrates how the climate crisis implicates medical practice across all specialties. For questions about this initiative, please feel free to reach out Dr. Jake Fox at jfox@mgh.harvard.edu, or for support in integrating climate health education into your MGH/MGB trainee program, contact Dr. Wynne Armand warmand@mgh.harvard.edu.



Listen to Dr. Fox and other colleagues discuss the intersection of climate change, health, and education on the New England Journal of Medicine Resident 360 podcast here.



Climate Curriculum at Harvard Medical School

August ushered in a cohort of first year Harvard Medical students — the first to receive a longitudinal climate curriculum over 4 years with the goal to establish core competencies for climate knowledge and skills to prepare the next generation of climate health leaders. In the first course, Introduction to the Profession, Students for Environmental Awareness in Medicine and the HMS Faculty Working Group on Climate Change and Health (led by Gaurab Basu, MD, MPH) co-developed a session on climate change, health equity, and advocacy. In coming months, students will learn about the impacts of climate change and air pollution on infectious diseases, allergy, asthma, and environmental justice.



Resources

Have any colleagues who want to integrate sustainability into their health care system but don't know where to start? Refer them to our newly launched podcast "Health Care SOS: Sharing on Sustainability." – a podcast series devoted to sharing the ways in which Mass General is integrating environmental sustainability into the clinical, research and educational activities of the hospital, and to providing tools and knowledge to support other health care institutions to do the same.

Episode 1 - Creating a sustainability team

Episode 2 - Performing a waste audit

Episode 3 - Publishing Climate Change and Health Research, and

Greening Research Labs

Episode 4 - Nurses and other health professionals

Episode 5 - Preparing for Climate Change and Disasters

Reduce the use of dirty energy at home

Extreme weather often leads to larger energy demands through cooling or heating use at particular times of the day. These peaks in energy need are often met with energy produced from the dirtiest and most expensive fossil fuels. Sign up to the Shave the Peak effort learn how you can help save energy during these peak hours and help the environment. Sign up for alerts.





Publications

- Armand, W. Your gas stove is dangerous to your health. CommonWealth Magazine. July 16 2022. URL: https://commonwealthmagazine.org/opinion/your-gas-stove-is-dangerous-to-your-health/.
- McKinnon, S., Breakey, S., Fanuele, J. R., Kelly, D., Eddy, E. Z., Tarbet, A., Nicholas, P. K.,
 Viamonte Ros, A. (2022). Roles of health professionals in addressing health consequences of climate change in interprofessional education: A scoping review. Journal of Climate Change and Health. Link
- Nicholas, P. K., Evans, L. A., Albert, M., Kelly, D., & Michelson, N. (2022). The nurse practitioner's role in addressing chronic sequelae of Lyme disease as a climate change related disease. Journal of the American Association of Nurse Practitioners, 34, 579-585.
 Link
- Rabin, A, Furie, G. The Cruel Irony of Inhalers That Make Climate Change Worse. The New York Times. 23 July 2022.
 - URL. https://www.nytimes.com/2022/07/23/opinion/inhalers-climate-pollution.html
- Sabo, K., Starodub, R., Smoller, S., Quinn, L., Kelly, D., Flaherty, K., & Nicholas, P. K. (2022). Occupational heat stress: An overview for nurse practitioners. Journal of the American Association of Nurse Practitioners, 34, 597-603. <u>Link</u>
- Sehgal AR, Slutzman JE, Huml AM. Sources of Variation in the Carbon Footprint of Hemodialysis Treatment. J Am Soc Nephrol. 2022 Jun 2:ASN.2022010086. doi:

10.1681/ASN.2022010086. Epub ahead of print. PMID: 35654600. Link

Slutzman JE, Bockius H, Gordon IO, Greene HC, Hsu S, Huang Y, Lam MH, Roberts T, Thiel CL. Waste audits in healthcare: A systematic review and description of best practices. Waste Manag Res. 2022 Jun 2:734242X221101531. doi: 10.1177/0734242X221101531. Epub ahead of print. PMID: 35652693. Link









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