

# ECHO Series: Climate & Health: Towards Climate Informed Care Graciously supported by a grant from the NH Endowment for Health

### RESOURCES

Offered by speakers, panelists, and participants during the Series.

### Planetary Health and Science of Climate Change – Session 1

- IPCC (Intergovernmental Panel on Climate Change) Sixth Assessment. Climate Change 2022
   Impacts, Adaptation, Vulnerabilities. The IPCC Report is the state of the art, international assessment on the status of climate change. <u>https://www.ipcc.ch/report/ar6/wg2/</u>
- NASA Global Climate Change website. Facts and information on the science of climate change with links to other respected organizations for further climate information. <u>https://climate.nasa.gov/scientific-consensus/</u>
- National Oceanographic and Atmosphere Administration. Climate pages. <u>www.climate.gov</u>; <u>https://www.noaa.gov/climate</u>
- Yale Climate Communications Program. Has extensive resources aimed at helping people communicate more effectively about climate change <a href="https://climatecommunication.yale.edu/">https://climatecommunication.yale.edu/</a>
- Science study about investment in clean energy and efficiency. https://www.science.org/doi/10.1126/science.abc9697
- Multisolving resources. Multisolving is using one policy to solve diverse problems across sectors.
  - Multisolving at the Intersection of Health and Climate Report https://www.multisolving.org/wp-content/uploads/2022/01/Multisolving-at-the-Intersection-of-Health-and-Climate-1.pdf
  - o Multisolving Institute Website. https://www.multisolving.org
  - o Multisolving Institute Newsletter. https://www.multisolving.org/#newsletterVideo on
  - o Multisolving. Dr. Elizabeth Sawin. <u>https://www.youtube.com/watch?v=OWdajcTU25k</u>
- Video: Swimming Upstream: Indigenous Environmental Justice for Our Waterways
   A video weaving the history of the Abenaki, Pennacook and Wabenaki peoples, their traditional connections to the Earth, and the impacts of dams on the Great Bay estuary and its inhabitants.
   The film was largely responsible for a 2022 vote to remove Oyster River Mill Pond dam.
   <u>https://www.youtube.com/watch?v=iszQ07r0gRY</u>

### Extreme Weather Events: Patterns, Preparation, Responses - Session 2

 CDC Climate and Health website. Information on the health impacts of climate change, including heat and other extreme weather events and how to address them <u>https://www.cdc.gov/climateandhealth/default.htm</u>

- American College of Emergency Physicians, statement on Climate Change. <u>https://www.acep.org/patient-care/policy-statements/impact-of-climate-change-on-public-health-and-implications-for-emergency-medicine/</u>
- Federal Emergency Management Assn (FEMA) Climate Change preparedness pages. https://www.fema.gov/emergency-managers/national-preparedness/climate-change
- Urban Heat and Environmental Justice articles/pages
  - Definition of "Urban Heat Islands". <u>https://www.epa.gov/green-infrastructure/reduce-urban-heat-island-effect#:~:text=%22Urban%20heat%20islands%22%20occur%20when,heat%2Drelated%20illness%20and%20mortality</u>
  - 2021 Urban Heat Island Study. <u>https://climate.ncsu.edu/research/uhi/</u>
  - Populations of concern bear the brunt of urban heat island effects. <u>https://indyweek.com/news/durham/urban-heat-islands-black-neighborhoods-in-</u> <u>durham-are-hotter/</u>
  - Urban green space, public health and environmental justice. <u>https://escholarship.org/content/qt8pf8s47q/qt8pf8s47q.pdf</u>'
  - Do the characteristics of new green space contribute to gentrification? https://journals.sagepub.com/doi/abs/10.1177/0042098021989951?journalCode=usja&
  - The impact of greenspace on urban crime. <u>https://www.mdpi.com/1660-4601/16/24/5119</u>
- Last Child in the Woods: Saving our Children from Nature-Deficit Disorder. About the impact of losing our relationship with nature. <u>http://richardlouv.com/books/last-child</u>
- NH HCWCA Climate Justice Working Group, <u>https://www.nhclimatehealth.org/working-groups-nh-healthcare-workers-for-climate-action</u>

# Evolving Ecosystem Impacts on Vector-Borne and other Diseases – Session 3

- **One Health resources.** One health is an integrated, unifying approach that aimes to sustainable balance and optimize the health of people, animals and ecosystems.
  - U.S. CDC One Health <u>https://www.cdc.gov/onehealth/index.html</u>
  - One Health Commission, an interprofessional commission.
     <u>https://www.onehealthcommission.org/en/why\_one\_health/what\_is\_one\_health/</u>
- Infectious Disease Society of America pages on Climate Change. <u>https://www.idsociety.org/public-health/climate-change/</u>
- **Newsletters** providing alerts and up-to date information on infectious diseases and other urgent health issues.
  - NH DHHS Health Alert Network <u>https://www.dhhs.nh.gov/programs-services/population-health/nh-health-alert-network</u>
  - CDC Health Alert Network (HAN) https://emergency.cdc.gov/han/
  - University of Minnesota Center for Infectious Disease (CIDRAP) has a newsletter about global emergence of disease. <u>https://www.cidrap.umn.edu/newsletter</u>
  - John Hopkins COVID Alerts https://www.hopkinsmedicine.org/coronavirus/newsletter
- o Key articles

- Caminade C, McIntyre KM, Jones AE. Impact of recent and future climate change on vector-borne diseases. Ann N Y Acad Sci. 2019 Jan;1436(1):157-173. <u>https://pubmed.ncbi.nlm.nih.gov/30120891/</u>
- McIntyre KM, Setzkorn C, Hepworth PJ, Morand S, Morse AP, Baylis M. Systematic Assessment of the Climate Sensitivity of Important Human and Domestic Animals Pathogens in Europe. Sci Rep. 2017 Aug 2;7(1):7134. https://pubmed.ncbi.nlm.nih.gov/28769039/
- Related resources
  - Permethrin and other vector repellants, information. <u>https://www.epa.gov/insect-repellents/repellent-treated-clothing</u>
  - Tick free NH. Resources and information to prevent tick related harm. <u>https://tickfreenh.org/</u>
  - **Preventing Tick Born Disease**. From Seacoast Public Health Network. <u>https://www.seacoastphn.org/preventing-tickborne-disease.html</u>
  - **Tips for Preventing Tick Bites**. From BeBop Labs, based in Salisbury, NH. <u>https://www.beboplabs.org/prevention/</u>
  - Information on Deer Keds. <u>https://extension.psu.edu/deer-keds</u>
  - Article on forest management to reduce ticks. <u>https://pubmed.ncbi.nlm.nih.gov/34155574/</u> Conte CE, Leahy JE, Gardner AM. Active Forest Management Reduces Blacklegged Tick and Tick-Borne Pathogen Exposure Risk. Ecohealth. 2021 Jun;18(2):157-168.

### Health Impacts of Air Pollution – Session 4

- Air Now. Find current air quality in specific locations and access to information on the meaning and impacts of different levels of air quality. <u>www.airnow.gov</u>
- **National Ambient Air Quality Standards** (NAAQS). EPA's standards not to be exceeded to protect public health for six air pollutants. <u>https://www.epa.gov/criteria-air-pollutants/naaqs-table</u>
- **National Institute of Environmental Health Sciences**. Research on how the environment, including air quality, impacts human health. <u>https://www.niehs.nih.gov/</u>
- U.S Environmental Protection Agency (EPA). Specific information on air quality found here. linked to extensive information on all aspects of the environment and climate changes. <u>https://www.epa.gov/environmental-topics/air-topics</u>
- NH Department of Environmental Services (NH DES). Specific information on air quality found here, linked to extensive information on environmental and climate change issues in NH. <u>https://www.des.nh.gov/home-and-recreation/air-quality</u>
- o Information on indoor air quality and filters. <u>https://www.epa.gov/indoor-air-quality-iaq</u>

### Connecting Earth, Body, Mind and Spirit - Session 5

• The **Climate Psychiatry Alliance** (CPA). Has many other climate and mental health related resources and is working on developing climate aware therapy trainings and <u>https://www.climatepsychiatry.org/</u>

- The Global Consoritium on Climate and Health Education. Includes extensive educational resources related to climate and mental health. <u>https://www.publichealth.columbia.edu/research/global-consortium-climate-and-health-education/resources</u>
- The Effects of Climate Change on Mental Health The Essentials. A 7 minute video by Joshua Wortzel, <u>https://vimeo.com/581937111</u>
- The Behavioral Health Work Group of NH Healthcare Workers for Climate Action. Resources to help climate and mental health issues in clinical care. <u>https://www.nhclimatehealth.org/behavioral-health</u>
- Sustainability Champions. An Instagram site that every day posts positive things being done around the world towards sustainability <u>https://www.instagram.com/sustainabilitychampions/?hl=en</u>
- **Climate Cafes.** Virtual groups that bring together people with climate-related feelings to talk and process their feelings. <u>https://climatecafes.org/</u>
- **Coco's Fire: Changing Climate Anxiety into Climate Action**. A book by Joshua Wortzel and Lina Champlin and the Committee on Climate Change and Mental Health of the Group for the Advancement of Psychiatry that addresses how to talk to children about climate change.
- **Braiding Sweetgrass**. A book that "inspires us to be grateful for earth" and "responsible for taking care of earth the way mother earth has taken care of us". <u>https://milkweed.org/book/braiding-sweetgrass</u>
- The Disordered Cosmos by Chanda Prescod-Weinstein (a physicist) A book that "dreams into existence a world that allows everyone to experience and understand the wonders of the universe." <u>https://www.akpress.org/the-disordered-cosmos.html</u>
- **Robyn Wilson's** work is relevant to farming and sustainability issues. <u>https://senr.osu.edu/our-people/robyn-s-wilson</u>

# Putting Climate Informed Care into Practice - Session 6

- $\circ$   $\;$  Key articles on climate informed practice
  - Philipsborn RP, Cowenhoven J, Bole A, Balk SJ, Bernstein A. A Pediatrician's Guide to Climate Change-Informed Primary Care. Curr Probl Pediatr Adolesc Health Care. 2021 Jun;51(6):101027. doi: 10.1016/j.cppeds.2021.101027. Epub 2021 Jul 7. PMID: 34244061. Available free at <u>https://pubmed.ncbi.nlm.nih.gov/34244061/</u>
  - Boland TM, Temte JL. Family Medicine. *Patient and Physician Attitudes Toward Climate Change and Health in Wisconsin*. Wilderness Environ Med. 2019 Dec;30(4):386-393.
- Professional education on climate and health websites and articles\
  - WHO Pages on Climate and Health. https://www.who.int/news-room/factsheets/detail/climate-change-and-health <u>https://www.who.int/publications/i/item/cop26-special-report</u>
  - Global Consortium on Climate and Health Education. A website with extensive educational materials for healthcare providers and others on climate and health. <u>https://www.publichealth.columbia.edu/research/global-consortium-climate-and-health-education</u>

- Alliance of Nurses for Healthy Environments. Website with extensive educational materials on climate and health. <u>https://envirn.org/</u>
- Philipsborn RP, Sheffield P, White A, Osta A, Anderson MS, Bernstein A. *Climate Change* and the Practice of Medicine: Essentials for Resident Education. Acad Med. 2021 Mar 1;96(3):355-367. Available free at <u>https://pubmed.ncbi.nlm.nih.gov/32910006/</u>
- Goshua A, Gomez J, Erny B, Burke M, Luby S, Sokolow S, LaBeaud AD, Auerbach P, Gisondi MA, Nadeau K. Addressing Climate Change and Its Effects on Human Health: A Call to Action for Medical Schools. Acad Med. 2021 Mar 1;96(3):324-328. <u>https://pubmed.ncbi.nlm.nih.gov/33239537/</u>
- Patient and family climate and health resources <u>https://www.nhclimatehealth.org/family-</u> resources
- Posters on climate & health intended to inspire discussion (available free) <u>https://www.nhclimatehealth.org/merchandise</u>
- Food, climate & health information
  - Food in the Anthropocene: the EAT-Lancet Commission on Healthy Diets from Sustainable Food systems. A comprehensive scientific report on healthy diets from sustainable food systems with numerous references and links. <u>https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)31788-4/fulltext</u>
  - Climate Change and Nutrition pages. From C-Change, the Center for Climate, Health and the Global Environment at Harvard School of Public Health. https://www.hsph.harvard.edu/c-change/subtopics/climate-change-nutrition/
  - A Guide for Clinicians: Sustainable Diets. A 12 Minute video on counseling patients on a diet that is healthy for individuals and the planet, with patient resources. <u>https://www.gaplesinstitute.org/sustainable-diets-clinicians/</u>
  - Article on the role of the gut microbiome and inflammation and depression/anxiety. <u>https://onlinelibrary.wiley.com/doi/abs/10.1002/jnr.24476</u>
- Healthcare Decarbonization information
  - HHS Healthcare Sector Pledge & Resources. U.S. DHHS defines national goals for health systems in achieving sustainability with the opportunity to pledge to achieve them. <u>https://www.hhs.gov/climate-change-health-equity-environmental-justice/climate-change-health-equity/actions/health-care-sector-pledge/index.html</u>
  - National Institutes of Medicine's Decarbonizing the U.S. Health System. Open to all healthcare entities, provides a neutral platform to align around collective goals and actions for decarbonization, based on evidence, shared solutions, and a commitment to improve health equity.

https://nam.edu/programs/climate-change-and-human-health/action-collaborative-ondecarbonizing-the-u-s-health-sector/

- Healthcare without Harm. Works to support healthcare worldwide in reducing emissions, anchoring community sustainability, & leading environmental health & justice. <u>https://noharm.org/</u>
- **Practice Green Health.** A source for information, tools, data, resources, and expert technical support healthcare sustainability initiatives. <u>https://practicegreenhealth.org/</u>

- **GHG Protocol. (Green House Gas Protocol)** Provides tools enabling companies to develop comprehensive and reliable inventories of carbon emissions. <u>https://ghgprotocol.org/</u>
- Science-Based Targets Initiative. Supports corporate entities in by setting ambitious, science-based emissions reduction targets towards a net-zero carbon economy. https://sciencebasedtargets.org/