Climate Change & Each Change Public Health

Earth Week 2020



Welcome & Zoom 101

1. Please write in the chat box your name, campus and role(s), and where you are calling-in from today:

Example:

Lisa Bjerke, Greener U, Support in UMass Climate Action Plan, calling from Boston

- 2. If you can, please share your video to help each other engage
- 3. Be on mute when you are not speaking (hold the space tab/button to speak)



Earth day in a pandemic

Moment of silence for people impacted by the pandemic.

We hope you and your communities are staying healthy and hopeful. We will move through this pandemic eventually and there will be a new normal.

One thing we know is that the issue of global climate change will continue as one of the most pressing issues of our time and we all have a role to play.



Guidance

- 1. Have fun take personal care so we can last for the long run
- 2. **Practice compassion** we are in unprecedented times requiring grace and kindness
- 3. **Collective wisdom** share your input and let others share theirs
- 4. **Assume good intent** we have different background and experience that we can learn from.



Today's Agenda

- Welcome & Introduction
- Presentation
- Break out and group discussion
- Sharing and next steps
- Thank you!



Introduction



Suzanne Wood, LEED AP Associate Director, Sustainability and Campus Services, UMass Medical School



Emily Wood, Student / Urban Agriculture Farm Share Manager, Office of Sustainability, UMass Lowell



Lisa Bjerke GreenerU



Emily Gentile MS2 UMass Medical School



Goals with today's lunch and learn

By the end of this webinar we will have...

- An overview of current understanding of climate change impact on public healths
- UMass systems research, education, and climate mitigation and adaptation efforts
- Shared our insights, thoughts, and feeling on climate change and public healths



What is climate change?

Any long-term change in weather patterns in a specific area, including but not limited to: atmospheric temperature, ocean temperature, extreme weather events, precipitation, and sea level rise.

Source: https://www.nationalgeographic.org/encyclopedia/climate-change/



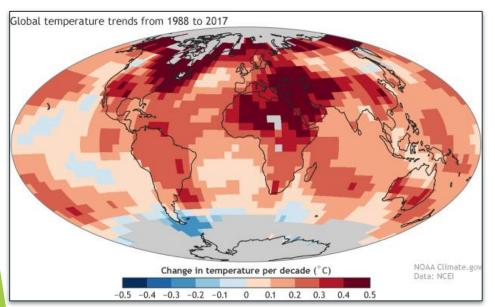
What is Public Health?

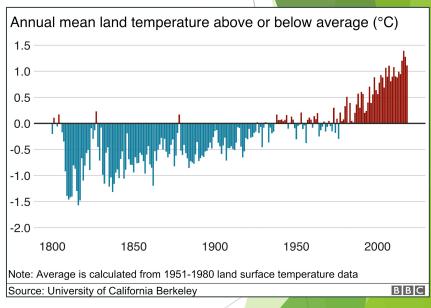
The science and art of preventing disease, prolonging life, and promoting health through the organized efforts and informed choices of society, organizations, public and private communities, and individuals.

Source: https://www.cdc.gov/publichealth101/public-health.html



What is Climate Change?







Source Picture 1: https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature
Source Picture 2: https://www.bbc.com/news/science-environment-24021772

Factors Contributing to Climate Change

- Increasing greenhouse gases due to burning of fossil fuels (greenhouse gases include CO2, methane, nitrous oxide, and fluorinated gases)
- Deforestation
- Destruction of marine ecosystems
- Resource extraction and human consumption of resources
- Increasing livestock farming





Climate Change and Health

Weather

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Air Pollution & Increasing Allergens

Asthma, cardiovascular disease, repiratory allergies

Extreme Heat

Heat-related illness and death, cardiovascular failure

Severe Weather

Injuries, fatalities, loss of homes, mental health impacts

Environmental Degradation

Forced migration, civil conflict, mental health impacts, loss of jobs and income

Rising Temperature



IMPACT OF
CLIMATE CHANGE
ON HUMAN
HEALTH &
EXACERBATION
OF EXISTING
INEQUITIES



1949 Sed Enizig

Adapted from CDC, J. Patz

Degraded Living Conditions & Social Inequities

Exacerbation of existing social and health inequities and vulnerabilities

Changes In Vector Ecology

Malaria, dengue, encephalitis, hantavirus, Rift Valley fever, Lyme disease, chikungunya, West Nile virus

Water & Food Supply Impacts

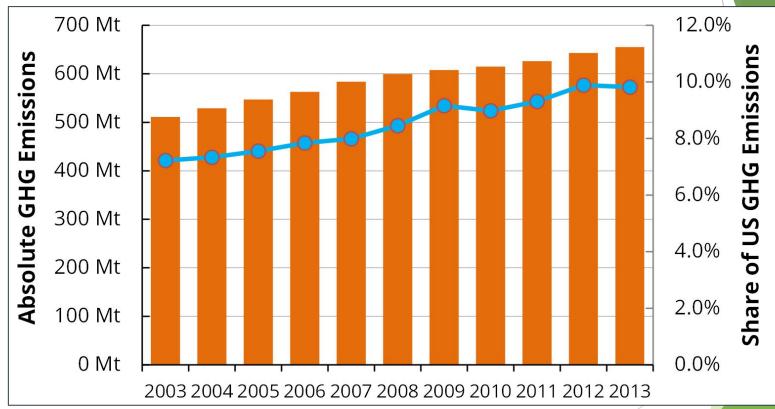
Malnutrition, diarrheal disease

Water Quality Impacts

Cholera, cryptosporidiosis, Campylobacter, leptospirosis, harmful algal blooms



Climate Change and Health





What is UMass doing to promote sustainability, address climate change, and improve public health?

- Policy
 - Executive Order 484 (April 18th, 2007)
 - Determination of Statewide Limit of Net Zero GHG Emissions for 2050 (April 22nd, 2020)
- System-wide Sustainability Policy
 - Carbon neutral by 2050
 - Report to global sustainability assessment and ranking (AASHE's STARS tool)
- Each campus has sustainability dedicated staff
 - Lowell, Dartmouth, Boston, Amherst, UMMS



What is UMass Medical School doing to promote sustainability, address climate change, and improve public health?

- Food and Materials
 - An average of 100 gallons per week of food scraps are used to feed pigs at the Tyde Brook Farm in Holden, MA
 - SWAP Shop has diverted 1.5 tons of waste annually to reuse
- Transportation
 - Electrical vehicle charging stations are located in the West Garage and Plantation Street Garage
- Student Driven Change
 - Community Garden
 - UMMS Coalition for Climate Action



Discussion Groups

Topics:

- Personal Health and Climate Change
- UMass systems responses to climate change
- Public Health actions and efforts today

Note:

- Everyone to have the opportunity to speak once in the group
- Remember the core values in



Welcome back & Sharing

► Each group: Share the three main takeaways from your group

► Everyone: Share in the comments field something you learned, an action you intend to take, or a questions you are holding.



To learn more:

- 1. <u>Climate Action Playbook for Hospitals</u> cool visual tool!
- 2. Organization: (non-profit): Climate change, health, and health care
- 3. Healthcare Pledge Making the pitch to leadership: Health Care Climate

 Challenge and We Are Still In pledge
- 4. Guide: Integrating Public Health into Climate Change Policy and Planning: State of Practice Update
- 5. Free online class: The Health Effects of Climate Change
- 6. UMass Amherst Nursing: CHANT: Climate, Health, and Nursing Tool



Thank you!

Don't be a stranger!

Reach out via email or phone to each schools sustainability office:

- UMass Medical School, https://www.umassmed.edu/growinggreen/
- UMass Amherst, https://www.umass.edu/sustainability/
- UMass Lowell, https://www.uml.edu/sustainability/
- UMass Dartmouth,
 https://www.umassd.edu/campussustainability/green-navigators/
- UMass Boston, https://www.umb.edu/in_the_community/sustainability

List of resources and references of this webinar will be shared online!



Resourced covered

- 1. https://noharm-uscanada.org/MS4SF
- 2. https://climatejusticealliance.org/
- 3. https://www.boston.gov/sites/default/files/imce-uploads/2019-10/city_of_boston_2019_climate action plan update 2.pdf
- 4. https://newbuildings.org/hubs/zero-energy/
- 5. https://www.yaleclimateconnections.org/topic/public-health/
- 6. http://www.massmed.org/News-and-Publications/Vital-Signs/How-Climate-Change-Shapes-He alth.-Health-Care,-and-Physician-Advocacy-in-Massachusetts/#.XgMrN8hKiUl
- 7. https://www.greenribboncommission.org/wp-content/uploads/2017/07/GRC-Case-Study-Clean-Green-Health.pdf
- 8. https://www.greenribboncommission.org/work/health-care-working-group/
- 9. https://reports.aashe.org/institutions/university-of-massachusetts-lowell-ma/report/2019-02-15/
 AC/curriculum/AC-1/
- 10. https://noharm-uscanada.org/sites/default/files/Climate.Physician.Network.pdf
- 11. https://noharm-uscanada.org/sites/default/files/Resilience%202.0%20Boston%20-%20Healthc are%27s%20Role%20in%20Anchoring%20Community%20Resilience.pdf

