

Ideas. Experience. Practical Answers.

Legal Strategies and Local Solutions to Equitably Mitigate the Health Impacts of Climate Change

March 28th, 2024 | 3 – 4:30 p.m. EST



Moderator



Jill Krueger, J.D., Director, Climate and Health, Network for Public Health Law



Speakers



Jennie McAdams, M.P.H., RESH, Sustainability Section Supervisor, Franklin County Public Health.



Dr. Rachel Roy, Ph.D., M.P.H, Non-Communicable Disease Manager, Harris County Public Health.



Erika Bartlett, Policy and Legislative Liaison, Tacoma-Pierce County Health Department



Dr. Massoud Agahi, M.D., M.P.H., California State University, Northridge; adjunct faculty, College of Health and Human Development



Cameron Salehi, Graduate Student, University of California, Los Angeles, Fielding School of Public Health.

Local Public Health Solutions to Address Climate Change



Franklin County Public Health

Jennie McAdams, MPH, REHS 3/28/2024



Brief overview of Franklin County Public Health Jurisdiction and local climate issues



12-month precipitation values in Franklin County



e averages in Franklin County





Policies vs. Interventions

- Ohio is Home Rule...What does that mean?
 - Municipal corporations (cities and villages) have certain powers granted to them in Article XVIII of the Ohio Constitution that exist outside authority found in the Ohio Revised Code. Because these powers originate in the Constitution, laws passed by the General Assembly that interfere with them may be invalid as applied to municipal corporations unless those laws are sanctioned by other provisions of the Constitution.
 - These powers, granted by the Constitution and known as "home rule" powers, include the power of local self-government, the exercise of certain police powers, and the ownership and operation of public utilities.



Where can public health play a role?

- Air Quality
- Green Spaces
- Equitable and energy saving transportation
- Local food education and access
- Waste reduction
- Preparedness
 - Extreme weather, flooding, heat
- Resilient communities



Improving air quality among our residents





https://map.purpleair.com/1/mAQI/a10/p604800/c C0#10.09/39.9795/-82.992 (3/27/24 at 10:53 am)



Increased equitable access to green spaces







Morning (AM) Temperature









Waste reduction, composting and recycling



FOOD RECOVERY HIERARCHY

In the hierarchy below, options are provided for how to deal with excess food. The methods that are higher up on the hierarchy are the more effective uses of resources and provide the greatest benefit to businesses, communities and

Reducing the amount of food that goes to waste.

2. RESCUE: Capturing food before it becomes waste to

3. RECYCLING: Diverting food waste by feeding animals, composting, anaerobic digestion, etc.

4. LANDFILL: Sanitary and safe disposal.

Wasting 1 POUND OF BEEF water as letting your SHOWER RUN FOR 6 HOURS.

FIND AN ORGANIZATION TO ACCEPT YOUR DONATED FOOD

Central Ohio is home to several food donation organizations who can support your program by transporting food to nearby hunger relief organizations. Find a partner who best fits your needs as well as additional guidance on setting up a safe and efficient food donation program at www.cofwi.org.

Central Ohio Food Waste Initiative

This resource is made possible by the Solid Waste Authority of Central Ohio (SWACO) and more than 60 partner organizations and experts from across Franklin County who comprise the Central Ohio Food Waste Initiative. Together, this collection of public and private partners are working to recapture food waste to serve as a resource for our communities.

www.cofwl.org foodwaste@swaco.org

SWACC

www.swaco.org

COLUMBUS PUBLIC HEALTH

www.publichealth.columbus.gov Local Food Systems Strategies - 614-645-0867



SAVE 🖗 MORE THAN FOOD

WASTED FOOD = WASTED RESOURCES



FOOD DONATION **GUIDELINES** FOR LICENSED FOOD FACILITIES



Final Thoughts and Lessons Learned



Thank you!

Jenniemcadams@franklincountyohio.gov



HARRIS COUNTY: BIG DIVERSE & COMPLEX

Harris County is the third most populous county with over 4.7 million people spread over 1,778 square miles.

Harris County Public Health

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Environmental Justice Drivers in Harris County





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Climate Vulnerability Index

Life Expectancy









Flooding (Hurricane Harvey)

- Lack of zoning facilitates industrial encroachment
- Superfund sites & brownfields in communities may be impacted by flooding
 - San Jacinto Waste Pits
 - Project 11 dredge sites





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Extreme Heat

- BRACE Framework
 - 1. Heat vulnerability index
 - 2. Incorporating health into the index
 - 3. Head Index Analysis proposal for cooling centers





Utilized 16 different indicators for extreme heat

- Heat index
- Night-time cooling
- Cardiovascular disease
- Diabetes
- Respiratory Disease
- Over age 65
- Under age 5
- Outdoor Workers
- Population of Color
- No Health Insurance
- Poverty
- People with Disabilities
- Limited English Proficiency
- Tree Canopy

Harris County

- Access to Cooling Centers
- Air conditioning

blic Health

Building a Healthy Communit

Overall Heat Vulnerability



Sensitivity



Exposure



Adaptive Capacity





- The number of heat illness related encounters increased 225% in 2023 from 2022
- Between 5/1/23 and 8/22/2023 there were 2,673 heat illness encounters
- The greatest number of encounters in a single day was 56 on 6/28/23
- Males made up 76% (2025) encounters
- Hispanic/Latinos made up 38% of encounters while Blacks made up 32%; together these two racial/ethnic accounted for 70% of all encounters



Policies and Legal

- House Bill 2127, which took effect on Sept. 1,
 - This bill eliminates many local ordinances
 - Impacts local ordinances on concrete batch plants
 - Eliminates the requirement of 10-minute breaks every four hours so that construction workers can drink water and protect themselves from the sun.



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Policies and Legal

- Concrete batch plant permitting (HB 1280 and HB 1764)
 - Currently 147 Concrete Batch Plants
- Gulf Coast Hydrogen Hub (HyVelocity Hydrogen Hub; Texas)
- Project 11
- EPA NAAQS (PM2.5)
 - NOW 9µg/m³



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HCPH's Response

- Education/Outreach
- Vulnerability assessments (BRACE) framework
- Heat index analysis (National Weather Service)
- Standard Operating Guides (SOG) for extreme heat
- <u>Upcoming:</u>
 - Climate change workgroup Dashboard
 - Improving and automating environmental health surveillance
 - Pursuing grants for epi studies



What are Heat Related illnesses?

Heat-related illnesses occur when **the body is unable to properly cool itself**. The body normally cools itself by sweating, but sometimes sweating is not enough. Having poor circulation or being dehydrated also limits the body's ability to control body temperature.

Heat Cramps

Heat cramps are **muscle pains or spasms** - usually in the arms, legs, or abdomen. Sweating depletes the body's salt and moisture. If you have heart disease or are on a low-sodium diet, get medical attention for heat cramps.

What to do

- ^o Stop all activity and sit quietly in a cool place
- ^o Drink water, clear juice or a sports beverage
- Seek medical attention for heat cramps if they do not subside in 1 hour





Climate and Health Equity: A Policy Approach

Erika Bartlett, Environmental Health Policy and Legislative Liaison Tacoma-Pierce County Health Department March 2024



Agenda

Pierce County, Washington

- Climate.
- Communities of Focus.

Policy priorities

- Environmental Justice: HEAL Act and Climate Commitment Act
- State Environmental Protection Act (SEPA).

Health Impact Assessment

- Board of Health Resolution.
- Environmental Public Health Funding
- SEPA 2.0: Climate and Health Equity criteria.



Pierce County: Disparate climate impacts





Extreme Heat





Wildfire Smoke: "Super Massive" Plume



Washington Smoke blog, Washington Department of Ecology, Air Program 2020



Harmful Algae Blooms





Pierce County Communities of Focus





Communities of Focus Strategies



Increase investments in the community.



Form new and strengthen existing partnerships.



Improve customer service between the Health Department, residents and partners.



Increase opportunities for civic engagement—training, leadership, community involvement, etc.



Policy Priorities: Environmental Justice

Washington's HEAL Act (2021)

- Mirrors federal Justice 40 Initiative.
- Defines environmental justice.
- Applies to 7 state agencies. Others may opt in.
- Prioritizes policy and Climate Commitment Act spending for:
 - Tribal governments.
 - Overburdened communities.
 - Vulnerable populations.
- Outlines state agency requirements for:
 - Community engagement.
 - Environmental justice assessments.



Policy Priorities: Environmental Justice





Policy Priorities: State Environmental Protection Act (SEPA)

Identifies and analyzes environmental impacts:

- Private projects.
- Public facilities.
- Regulations.
- Policies.
- Plans.

Use SEPA to modify or deny a proposal to avoid, reduce, or compensate for probable impacts.


Health Impact Assessment: Board of Health Resolution

Tacoma-Pierce County Board of Health



RESOLUTION NO. 2016-4483

A RESOLUTION OF THE TACOMA-PIERCE COUNTY BOARD OF HEALTH RECOMMENDING PIERCE COUNTY, AND THE CITIES AND TOWNS THEREIN, USE HEALTH IMPACT ASSESSMENTS IN CONJUNCTION WITH THE REVIEW OF PROPOSED ACTIONS UNDER THE STATE ENVIRONMENTAL POLICY ACT.

WHEREAS, assessing public health starts by examining where we live, learn, and work, and environmental and socio-economic factors play a significant role in determining our health; and

WHEREAS, private and public projects, regulations, policies, or plans can have unintended consequences for public health which may not be adequately assessed under the State Environmental Policy Act (SEPA) (Chapter 43.21C RWC) and implementing rules (Chapter 197-11 WAC); and

WHEREAS, Health Impact Assessments are a nationally and internationally accepted practice to evaluate the potential health effects of proposed projects, regulations, policies and plans; and

WHEREAS, Health Impact Assessments can identify cumulative impacts on the community and public health, including potential impacts to vulnerable and underserved communities; and

WHEREAS, Health Impact Assessments bring potential public health benefits and impacts, and mitigation of potential impacts, into focus for thoughtful consideration and deliberation during the decision-making process; and



2021-22 Environmental Public Health Funding

- Lead exposure.
- Homelessness.
- Schools and air quality.
- Climate change.
- Safe and healthy communities.





SEPA 2.0—Climate & Health Equity

- New SEPA screening criteria and violations.
- Community of Focus.
- Environmental justice.
 - Health outcomes.
 - Urban heat island.
 - Air pollution.
 - Traffic safety.
 - Contaminated sites.
- Climate considerations.
 - Greenhouse gas contributions.
 - Tree canopy and green space.
 - Surface water and drinking water.



Tacoma's Tree Canopy https://www.cityoftacoma.org/cms/one.aspx?pageId= 35885



Health Impact Assessments Underway

- Partnership with the City of Tacoma to complete health impact assessments.
- Two planned action environmental impact statements.
- Home in Tacoma—Citywide strategy to encourage:
 - Housing growth through zoning.
 - Standards.
 - Affordability.
 - Anti-displacement efforts.





Health Impact Assessments Underway

Planned Action Environmental Impact Statements:

- Picture Pacific Ave.—Subarea plan for Pacific Ave. corridor in support of Bus Rapid Transit project.
- Priority investments for infrastructure and public amenities.







Erika Bartlett, Policy Liaison Environmental Health Division (253) 254-3807 ebartlett@tpchd.org





Greener Grassroots™

Community Health Workers (CHWs) as Promoters and Enablers of Effective Environmental Justice

Objectives

Highlight community-centered approach to developing public health laws and policies



Highlight structured <mark>training</mark> to optimize CHW effectiveness



Highlight role of CHWs in community-driven policymaking

Agenda

- Public Health Laws and Policies Must Be Community-Driven
- The "Five Essential Public Health Law Services" Framework
- A Unified Framework for Climate Resilience
- Role of Community Health Workers as Advocates and Policy Promoters
- The Greener Grassroots[™] Initiative
 - Six Curriculum Domains: A Progression of Essential CHW Climate Resilience Com
 - **O** A Model to Enhance CHW Involvement in Public Health Law and Policy Strategies
- Main Takeaway

The Problem

Policies have the potential to cause or perpetuate health inequities if community needs are not central to their drafting...

<u>Climate change can intensify these inequities</u>

Community-Driven Public Health Policy

- "Deep disparities in health, well-being, and economic opportunity that were laid bare during the COVID-19 pandemic"*
 - the essential role of communities "to engage in equitable, self-driven discussions of needs and solutions"
 - "community-centered collaboration within and outside of government to ensure an equitable and thriving future."

FEDERAL PLAN FOR **Equitable Long-Term Recovery and Resilience** FOR SOCIAL, BEHAVIORAL, AND COMMUNITY HEALTH 1/20/22



ALL PEOPLE AND PLACES THRIVING, NO EXCEPTIONS

*ELTRR

Five Essential Services Framework

"Observable, improvable services required for health agencies and systems to develop and enforce laws to improve public health"*

Keeping the focus on equity and inclusion: "Nothing about us, without us"



*Source: S. Burris et al., "Better Health Faster." Public Health Reports 131, no. 6 (October 14, 2016): 747–53

• Six core elements:

- Community risk assessment
- Community asset mapping
- Propose and implement intervention programs
- Coordination with local and wider agencies
- Evaluation of intervention
- Dissemination of best practices
- Embodies "Five Services" philosophy

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• Embodies "Five Services" philosophy



Value of Community Health Workers (CHWs) as Advocates an Promoters

- Community Health Workers (CHWs):
 - A vital yet often underutilized workford
 - Lived experience
 - Knowledge of the community
 - Trust built with the community
 - Impact on policy
- How do we effectively engage CHWs in clir resilience?

"A community health worker is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the worker to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery."

- American Public Health Association



 Aim: train CHWs in mitigating the disproportionate health effects of climate change in urban American Indian/Alaska Native (AI/AN) communities in Southern California





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- <u>Participants</u>: UAII CHWs hired and trained with funding via CDC and Los Angeles County Department of Public Health





CLIMATE, ENVIRONMENTAL CHANGE AND ASSOCIATED HEALTH SCIENCES

CLIMATE, ENVIRONMENTAL CHANGE AND ASSOCIATED HEALTH SCIENCES UPSTREAM DRIVERS OF CLIMATE AND OTHER ENVIRONMENTAL CHANGES

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EVIDENCE, PROJECTIONS, AND ASSESSMENTS

















- CHWs can gather local health data related to climate change impacts, aiding policymakers in integrating this evidence into adaptation and mitigation strategies
- Potential methods include conducting local health surveys that focus on climate change impacts, noting/reporting information and personal stories about environmental- or climate-related challenges, involving people in community-based participatory research, etc.



- CHWs Can Help Integrate Evidence Into Policies Community research, et
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CHW Data-Gathering Can Also Support National Response Planning



- Sharing local community health data and climate vulnerabilities can influence national climate policies
- Can lead to allocation of more resources and funding to address climate-related challenges in the local community and beyond





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CHWs Can Facilitate Community Consultation / Participation



- CHWs can facilitate discussions and gather feedback on how climate change is affecting local health, thus informing decision-making processes
- Potential method includes hosting workshops/forums to educate the community about climate change, gather their observations, and brainstorm local solutions







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CHWs Can Assist in Monitoring,

Evaluation, and Learning



- CHWs can monitor health outcomes related to climate and environmental changes in their communities and then provide valuable feedback for the evaluation and improvement of policies and programs
- This may include tracking community health programs/initiatives addressing climate change, reporting outcomes, and suggesting improvements





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Main Takeaway

CHW training and community engagement is vital to paving the way for ensuring laws and policies are community-driven, both within the scope of climate resilience and across the full spectrum of public health

Thank you!

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Questions & Answers

March 28th, 2024