In-depth coverage of leading state and territorial public health issues.

November 2022

Climate Change and Environmental Justice A Snapshot of Jurisdiction Activities

Background

In spring 2022, ASTHO hosted a call with the Climate Change Collaborative to discuss initiatives, capacity, and challenges related to climate change and environmental justice (EJ). Specific issues discussed included state and territorial health agency (S/THA) initiatives to improve the public health impact in communities disproportionately impacted by environmental pollution; training opportunities on integrating health equity (HE) into statewide climate policy and program planning; usual partners for EJ work; and gaps and/or challenges to targeting climate resiliency programs in EJ communities. The call included 29 participants representing 19 jurisdictions, federal partners from CDC and EPA, and ASTHO staff.¹

Polling Results

ASTHO presented a collection of polling questions to better understand some common trends observed by the participants. Based on the first poll, common climate hazards in the participating jurisdictions included flooding, extreme heat, and wildfires (Figure 1).

In the second poll, participating jurisdictions responded with population groups who they felt were the most vulnerable to climate-related impacts. Top answers included low-income or socio-economic individuals, older adults, outdoor workers, residents on rural or small water systems, and non-English speakers (Figure 2).



Figure 1: Common Climate Hazards

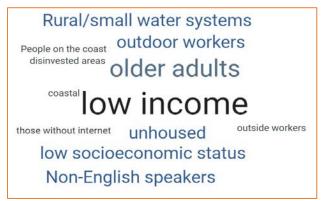


Figure 2: Vulnerable Populations

¹ Jurisdictions represented included AK, AL, CA, HI, MA, MD, MI, MO, MS, MT, NM, OR, PA, RI, RMI, TN, UT, USVI, and WI.



State and Territorial Initiatives Targeting Environmental Justice Communities

ASTHO heard from several jurisdictions with initiatives targeting resources and/or implement decisionmaking tools aimed at EJ communities. Through Rhode Island's <u>Health Equity Zone Initiative</u>, the state is supporting community-led, place-based approaches to promote healthy communities, eliminate unjust health disparities, and enhance neighborhoods' socioeconomic and environmental conditions across the state. Issue areas related to climate, food, housing, and drug overdose are all part of these efforts.

Our conversations on climate change focused on community resilience to climate impacts such as urban heat islands, river flooding, and reduced tree canopy cover. Partners are creating cohorts and involving people from across their communities, such as engaging youth in tree planting efforts and building community gardens. Rhode Island has passed a new statewide climate bill, and while it does not provide a statewide definition of EJ, HHS is collaborating with other state agencies to develop a standardized EJ definition.

The Wisconsin Department of Health Services' climate and health program helped build the <u>Wisconsin</u> <u>Environmental Equity Tool</u>, a comprehensive web-based EJ and HE mapping tool developed by four state agencies in consultation with other organizations, community members, and local governments. Collaborators include the Department of Administration, Department of Natural Resources, and Wisconsin Economic Development Corporation. Their goal is to incorporate this tool more fully into climate policies and plans, as well as higher-level strategic planning.

California has embedded health and equity into its climate change programming using HE tools and metrics.² The state encourages an equity framework for resource allocation at the state level by identifying communities facing inequities and investing resources into them, including funding, facilities, services, training, jobs, and decision-making power.

The <u>Cal EnviroScreen</u> helps identify California communities disproportionately burdened by multiple sources of pollution and is used to direct at least 35% of cap-and-trade revenues to "disadvantaged communities." The Department of Public Health's <u>Climate Change and Health Equity Section's Climate Change and Health Vulnerability Indicators for California</u> has an interactive viewer of 19 climate exposures, population sensitivities, and adaptive capacities down to the census tract level, many stratified by race and ethnicity. This tool helps agencies identify communities facing disproportionate climate and health risk for investments and technical support.

California also contributed climate indicators to the <u>Healthy Places Index</u> tool via the Public Health Alliance of Southern California, which ranks census tracts based on health-promoting factors correlated with life expectancy. For example, the domain of "economics" is weighted most heavily, as evidence shows economic factors tend to influence health outcomes most strongly. The climate program also provides agencies with tools and guidance to integrate health equity objectives and metrics into climate change policies and investments. The program uses a racial justice frame to address structural racism. However, due to anti-affirmative action Proposition 209, the program cannot use explicit racial categories to direct resources or funds to communities experiencing racism.

² While California's language often refers to "HE" instead of "EJ," the programs serve the same groups of people.



Integrating Health Equity into Statewide Climate Policy and Planning

During a discussion around training on integrating health equity into statewide climate policy planning, representatives highlighted their efforts. California provides training on its HE and EJ tool to aid decision-making on resource allocation for their programs, as well as to help other agencies develop their own tools. In addition, they have racial and HE trainings for internal staff to support development and implementation of these efforts. Wisconsin recently hired health equity specialists to provide training for its agency. Meanwhile, multiple states expressed interest in seeing sample training tools to deliver to their own agencies, but don't have the capacity to develop their own materials right now.

Partnerships to Address Environmental Justice Concerns

During a conversation around which partners S/THAs work closely with when addressing EJ in their communities, several allies surfaced. Rhode Island has worked well with the state's <u>Infrastructure Bank</u>, which has been a valuable resource to fund green infrastructure, stormwater management, and infrastructure resilience.



American Forests[®]

Rhode Island also partners with <u>American Forests</u>, a group working to implement restoration and reforestation plans in impacted communities. The group has helped Rhode Island reduce the impact of climate change and related health impacts on frontline communities and vulnerable populations by piloting tools, such as the <u>Tree Equity</u>

<u>Score Analyze</u>r, to increase urban forests' ability to soak up carbon. In 2021, the Pawtucket and Central Falls Health Equity Zone was <u>awarded</u> a \$100,000 Tree Planting for Climate Resilience and Human Health grant to expand tree coverage in neighborhoods that do not have enough trees.

While Hawaii does not have a formal EJ program, it has successfully worked with the state's Office of Planning and Sustainability Program during the COVID-19 pandemic to address health disparities. Hawaii indicated that this relationship is a model for extension into broader EJ issues, including climate impacts and health equity. Meanwhile, Oregon has partnered with community-based organizations, including 501c3 and grassroots groups. The state is modernizing public health to fund non-regulatory EH work with emergency preparedness and communicable disease groups.

New Mexico has engaged community emergency managers on heat management plans and partnered with the New Mexico Department of Health's Bureau of Health Emergency Management (BHEM). The state also communicated with the National Weather Service (NWS) about creating scaled advisories corresponding to its understanding of heat stress morbidity thresholds. New Mexico has also implemented a heat communications plan, including heat thresholds, allowing for advisory messaging through social media, press releases, and the <u>NMTracking</u> portal.



In Pennsylvania, the emergency preparedness division with the SHA recently formed a climate and water workgroup and hired an intern to focus on HE. In California, the lead agency for most climate work is the Air Resources Board, which has an EJ advisory committee to help inform decision-making. Wisconsin has <u>Great Lakes Inter-Tribal Epidemiology Center</u> representation on their Science Advisory Team and reaches out to tribes on flood resilience work.



Evaluation of Climate and Environmental Justice Efforts

Multiple states discussed the need for evaluation metrics to better understand the impact their efforts have made. Wisconsin and Oregon are both looking to bring on an evaluator for their climate work to answer this question. States with CDC <u>BRACE</u> funds are required to complete evaluation as part of their grant, but several jurisdictions noted they could use more metrics. While a few jurisdictions are creating their own evaluation metrics, they highlighted the need for training, as well as for a template for developing an evaluation framework for climate and EJ efforts.

Challenges to Targeting Climate Resiliency Programs

There were many challenges highlighted during our listening session, including competing crises leading to limited bandwidth and government mistrust in EJ communities. Alaska is addressing government mistrust by partnering with community-based partners that are well-known and trusted by the community. New Mexico has experienced challenges when trying to work with some of its climate-vulnerable populations, such as homeless communities. In USVI, communities often work in silos, which leads to many logistical challenges. The USVI Department of Natural Resources leads air quality work as it relates to vulnerable populations, but staffing capacity is a consistent issue. The jurisdiction also recently applied for a new grant to staff this type of work, and has worked with students to take on some of the work via a train-the-trainer approach.

Project Highlights

The USVI has a few projects underway to address climate-related issues. They have collaborated with the U.S. Department of Agriculture (USDA), National Weather Service, and the National Oceanic and Atmospheric Administration to develop a drought report covering the USVI and Puerto Rico. The drought report is available every other month and is written by staff from the University of the Virgin Islands (UVI) College of Science and Math. In addition, UVI College of Science and Math, along with the School of Agriculture, have embarked on a drought-tolerant food project that provided more than 1500 slips of Pitaya (i.e., dragon fruit) to provide a drought-tolerant food source to communities across the territory. They have also been using a USDA-funded project to increase science literacy related to climate.

In addition, the UVI College of Science and Math and the Community Foundation of the Virgin Islands <u>teamed up</u> to aid farmers and families by donating more than 2000 fruit trees on St. Thomas, St. John and St. Croix, targeting areas most vulnerable to increased food insecurity. The project team distributed four varieties of papaya as part of the project and helped to develop more than 30 new orchards across the USVI. The is part of a broader native tree planting project focused on fruit trees to aid in reducing greenhouse emissions and increasing shade areas in communities across the territory.

In Oregon, <u>SB 762</u> was passed to help the state modernize and improve wildfire preparedness. This bill enables the state to distribute air filtration devices that can filter wildfire smoke to low-income and medically vulnerable homes to help improve indoor air quality. They aligned their efforts with the Oregon Medicaid program to find out which communities are most in need of this equipment.



Conclusion and Next Steps

To learn more about S/THA initiatives, capacity, and challenges related to climate change and EJ, ASTHO identified several common themes. The first is that partnerships, both among state agencies and with local and NGO partners, are key to helping reach the goal of addressing HE and EJ concerns. This is especially true when staff capacity is limited, such as during competing events like the COVID-19 response.

Another commonality that we found is that many jurisdictions are already utilizing innovative tools to address climate change impacts in EJ communities, including mapping tools to help with resource allocation. Many jurisdictions have formal policies or programs in place that promote EJ and HE and have added online tools to their toolbox to further help them reach their goals. Finally, we identified a common challenge related to training. There is a need for additional training materials (e.g., on-demand web trainings) or templates for states to have on hand when trying to educate staff within their agency or with partners on the importance of integrating equity into statewide climate planning efforts, as well as evaluating these efforts. ASTHO will use the information shared during this listening session to better target our support of state and territorial health agencies in their climate work and develop resources to fill the gaps identified by our state and territorial partners.

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