


The Climate Change and Health Working Group: Breaking Down Silos to Advance Health and Resiliency in Hawai'i

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Abstract

The Spotlight on Nursing is a recurring column from the University of Hawai'i at Mānoa School of Nursing and Dental Hygiene (SONDH). It is edited by Holly B. Fontenot, PhD, APRN, WHNP-BC, FAAN, FNAP; Associate Dean for Research, Professor, and Frances A. Matsuda Chair in Women's Health for SONDH, and HJH&SW Contributing Editor; and Joanne R. Loos PhD, Science Writer for SONDH.

Hawai'i is experiencing the effects of climate change, including increased temperatures, decreased rainfall, and higher frequency of extreme weather. In 2023, the Climate Change and Health Working Group (CCHWG) was formed, bringing together over 250 public health professionals dedicated to catalyzing community action by adopting a health-oriented approach to challenges posed by climate change. To date, members have engaged in crafting public policy initiatives to embed health perspectives into statewide legislation on climate change issues and created community listening sessions aimed at matching resources to the needs of underserved communities. The CCHWG's actions are charting a roadmap to guide collaborative efforts between health professionals and communities aimed at mitigating the health impacts of climate change and bolstering resilience. Future goals include expanding efforts across the state and to other populations across the Pacific to implement similar community-driven transformative change.

Acronyms

AMA: American Medical Association

ANA: American Nurses Association (ANA)

APHA: American Public Health Association

CCHWG: Climate Change and Health Working Group

DOH: Hawai'i State Department of Health

Introduction

Hawai'i is witnessing the effects of climate change, including higher temperatures, rising sea levels, and more frequent extreme weather. Since 1950, the average temperatures in Hawai'i have risen 2 degrees Fahrenheit, and coastal seas are 10 inches higher in some parts of the state.^{1,2} Overall rainfall in the state is decreasing, yet tropical cyclone intensity is predicted to increase, along with

heavier rains and increased flooding.³⁻⁶ The northeast trade winds that normally cool the islands have been decreasing for decades and are projected to decline further.⁷ These effects substantially increase the risks to human health, exposing Hawai'i residents to more extreme heat, more intense hurricanes, and higher risks of wildfires, water-borne infections, and food insecurity.⁸⁻¹¹ The health impacts of climate change are illustrated in a "pinwheel" resource from the Hawai'i State Department of Health (DOH) [Figure 1]. Rising temperatures from greenhouse gases for example, contribute to extreme heat, which can lead to heat-related illness, dehydration, occupational hazards, and worsening of cardiovascular and lung disease.¹²⁻¹⁵ Further, all of these changes can contribute to worsening mental health, including depression and anxiety.¹⁶ The 2023 Maui wildfires, which killed more than 100 people, were fueled in part by climate driven temperature increases and prolonged drought,^{17,18} and resulted in lasting health problems among survivors, including respiratory, cardiovascular, and mental health issues.¹⁹

Health care professionals must work with their communities and patients to mitigate risks and exposures related to the changing climate. The Climate Change and Health Working Group (CCHWG) is a cadre of health professionals dedicated to community-driven climate action in the State of Hawai'i. This paper, authored by members of the CCHWG, will describe how the group is working collaboratively to protect the health of Hawai'i residents in the face of the changing climate with the aim of making the CCHWG a model for climate and health advocacy that other communities, states, and organizations may learn from and replicate.

Breaking Down Climate Change and Health Silos

Nationally, organizations like the American Medical Association (AMA), the American Public Health Association (APHA), and the American Nurses Association (ANA) recognize the public health threat from climate change and support policies and actions to both mitigate and adapt to these threats.²⁰⁻²² In Hawai'i, the CCHWG was formed in 2023 to specifically highlight the impact of climate change on health.⁸ Initiated by volunteers from the Hawai'i State Department of Health (DOH) and the University of Hawai'i John A. Burns School of Medicine, the group has grown to

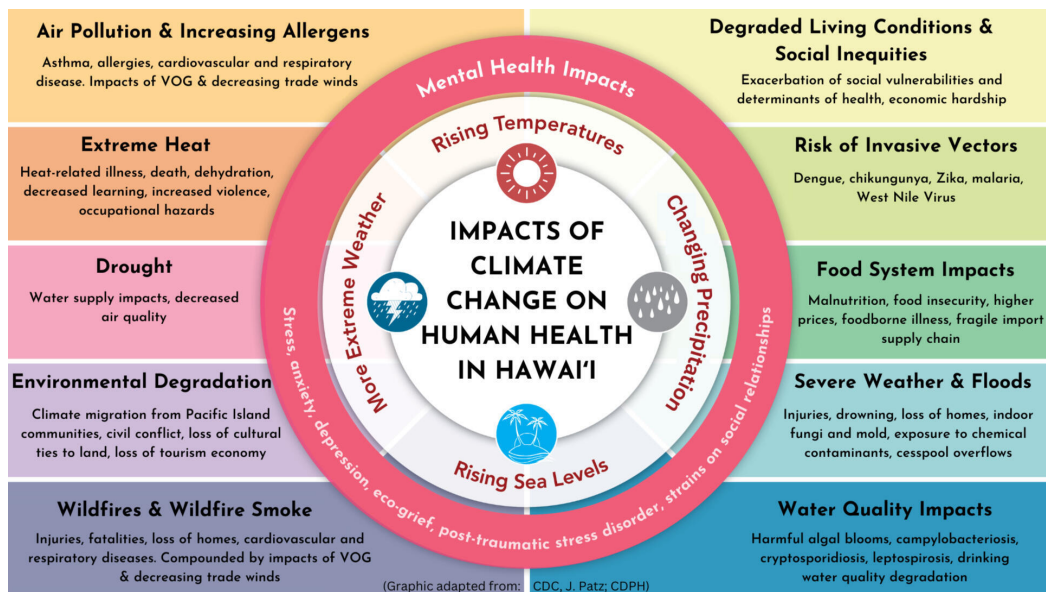


Figure 1. Impacts of Climate Change on Human Health in Hawai'i; Adapted from Centers for Disease Control (CDC) and the California Department of Public Health (CDPH)

involve more than 250 public health professionals. Current members include physicians, nurses, social workers, public health professionals, environmental policy experts, non-profit professionals, undergraduate and graduate students, local elected officials, and state-funded climate change organizations. At the time of its founding, discussions surrounding climate change in Hawai'i were highly focused on environmental protection or infrastructure projects. Few efforts focused on health impacts of climate change, and those that did were siloed and disconnected. Establishment of the CCHWG filled gap by gathering health professionals to approach climate change through a health lens and aligning shared goals and community action. United by the values of equity, justice, and *Aloha*, CCHWG members collaborate across disciplines and communities to strengthen public health resiliency in Hawai'i in response to our changing climate. Using a data-driven approach, the organization's mission is to research and communicate the human health impacts of climate change and to advocate for policy solutions that prioritize the most at-risk community members in Hawai'i.⁸ These goals are accomplished through monthly meetings and activities clustered around policy initiatives, community listening sessions, and climate health education.

Advocating for Climate Change and Health Policy

A major priority of the CCHWG is to influence public policy in ways that highlight health impacts associated with climate change. Testimony for climate-change-related legislation frequently lacks perspectives from health professionals. For example, legislation proposed to address cesspool infrastructure solutions in Hawai'i has historically garnered testimony from landowners, the State Department of Transportation, and environmental groups, but lacked tes-

timony detailing the impact that cesspools can have on health. This is problematic, as the state's 83,000 existing sewage cesspools discharge untreated wastewater and pathogens, putting residents at risk for gastroenteritis, conjunctivitis, diarrhea, and skin infections.²³⁻²⁷

Recognizing the need to improve Hawai'i health professionals' understanding of the legislative process, the CCHWG provided training and guidance to its members to improve public policy advocacy. Activities included educating members on Hawai'i's overall legislative process, effective interaction with state legislators and county officials, and climate-linked public policies. The CCHWG created a rubric to help members evaluate and prioritize legislative initiatives for impact on climate change and health, while also considering issues such as the most appropriate leading voice, whether the bill solved a problem, or the likelihood of a bill to pass [Figure 2]. Student members conducted historical evaluations to provide perspective of how various bills fit into the "pinwheel" of health effects, provided a preview of what bills to possibly expect, gathered the latest evidence for testimony, and created an organizing framework to track legislation. CCHWG members met weekly to track legislation, coordinate testimony, prepare scientific summaries on health and climate change, draft written testimony, and prepare oral testimony in person and via videoconference. In several instances, CCHWG testimony helped amplify community voices. For example, concerns about heat-related illness raised during listening sessions in drought-prone communities led the CCHWG to prioritize the issue, ultimately resulting in a policy proposal submitted to the legislature. Additionally, student CCHWG volunteers drafted original resolutions relating to climate and health which were introduced to legislators. One of these resolutions, Senate Concurrent Resolution 111, became formally adopted in the 2025 session.²⁸ This resolution declared climate change a public health emergency –

POLICY GUIDE

IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN HAWAII

CCHWG MISSION

United by the values of equity, justice, and Aloha, the Hawai'i Climate Change and Health Working Group collaborates across disciplines and communities to strengthen Hawai'i's public health resiliency in response to our changing climate. Using a data-driven approach, our mission is to research and communicate the human health impacts of climate change and to advocate for policy solutions that prioritize our most at-risk community members.

See storymap at bit.ly/ClimateHealthHI

FACTORS*	DETAILS
Climate Change and Health Impact	Directly impact health? What part of pinwheel?
Magnitude of Impact	One community? Statewide?
Best to lead?	CCHWG as the lead? Others better suited where we could support?
Solvability	Will it solve the problem we are trying to solve?
Likelihood to Pass, Committee Assignments?	Champion legislators, opposing dark forces? Community support?
Costs	What are the costs involved?

*Adapted from OHA's Legislative Package Criteria

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Health & Climate Professionals from across the state

Transdisciplinary membership working together for our just climate future.

climatehealthhawaii.org

Figure 2. Policy Guide, Climate Change and Health Working Group 2024

the first such declaration for any state – and urged Hawai'i law makers and state agencies to assess climate impacts on health and collaborate across sectors to strengthen the public health response to the climate crisis.

Listening to the Community

Another key initiative of the CCHWG is to collect community input to understand how climate change impacts health in Hawai'i and to identify the resources needed to support communities facing greater health disparities. Evidence shows that nurses and doctors are viewed as trusted messengers to deliver climate change information.²⁹ Thus, the CCHWG initiated a series of listening sessions to hear

first hand about the perceived health impacts that climate change is having on Hawai'i communities. The goals of the listening sessions were to build trust, identify community expertise, and provide opportunities for community members to be heard.^{30,31} Listening sessions were supported in part by Kaiser Health Systems, which allowed CCHWG to provide community participants with food and remuneration for their time.

The first 2 listening sessions occurred in West O'ahu, an area at risk of drought, wildfires, and infrastructure issues, that is also home to communities with high concentrations of Native Hawaiian individuals and families. Nurses and Native Hawaiian health professionals from the CCHWG provided community attendees with information

regarding climate change and health effects. Participants then shared their own experiences with climate change and health. Community listening sessions revealed climate-related health concerns that might otherwise have remained unnoticed, such as increases in respiratory conditions during wildfire season, worries about heat-related illness in the elderly, or stress related to food insecurity after storms. These sessions not only guided the CCHWG's advocacy priorities at the state legislature but also helped build trust with underrepresented communities. By offering a space for residents to share their experiences and connect with local health and climate leaders, the CCHWG laid the groundwork for more inclusive and community-responsive interventions.

The listening sessions also helped the CCHWG identify gaps in community education, outreach, or action, which the group could then help to fill by leveraging Hawai'i's health network to engage communities and specifically address identified concerns. For example, in response to concerns about heat-related illness among the elderly, the CCHWG partnered with a local senior group on a grant to train members in heat safety, empowering them to support others in their own communities. Future plans include conducting further community educational outreach such as staffing health fairs, making and disseminating health educational materials, creating wider partnerships with communities and health organizations, and involving health professional students, including nursing and public health students, in these efforts.

Strengths and Challenges

The CCHWG has demonstrated how a volunteer-based, interprofessional network can promote health-centered climate action. Through monthly meetings, subgroup formation, and shared leadership, the CCHWG has created a collaborative space where members can initiate and conduct projects responsive to local needs. Thus far, a major accomplishment of the CCHWG has been the breaking down of silos between sectors and disciplines. By introducing a health-focused framework, the CCHWG has successfully brought new voices, particularly from the clinical and public health communities, into the climate conversation. This has led to more comprehensive health-focused testimony at the legislative level, the development of tailored messaging around climate change health impacts, and the integration of lived community experiences into advocacy and education. In this way, the CCHWG has exemplified the missions of national groups, such as the AMA, APHA, and ANA in supporting actions to educate, mitigate, and adapt to climate related health issues.

A major strength of the CCHWG is its conversational approach, which allows ideas to emerge organically. The group's large network of professionals is united by a shared vision for health in a changing climate. Partnerships initiated among CCHWG members have also fostered cross disciplinary collaboration. For example, the group has linked a

statewide food gardening initiative with nurses to educate outdoor workers about the risk of heat-related illnesses. The group also benefits from a structure that allows members to form subgroups that are responsive to the members' interests and the group's capacity. For example, CCHWG was able to pivot its efforts to address growing awareness of climate-related anxiety and trauma among people impacted by the 2023 Maui Wildfires.

Several challenges remain. As a volunteer-led group, the CCHWG faces limitations in time, funding, and capacity. Much of its work relies on the goodwill and energy of a small group of organizers, students, and busy professionals. Institutional support remains inconsistent, and climate-health partnerships must compete with other pressing public health issues for attention and resources. Furthermore, although listening sessions have been a promising engagement tool, scaling these efforts equitably across islands and communities will require greater coordination and sustained funding through grants.

The Road Ahead

The CCHWG illustrates how health professionals can take a central role in climate adaptation and mitigation, not only through clinical practice but through community engagement, policy advocacy, education, and partnership building. Its flexible, inclusive, and data-informed approach may serve as a replicable model for other communities, states or regions seeking to integrate health more fully into climate action. Despite challenges, the CCHWG's first 2 years of work offers valuable lessons for others seeking to link health and climate action. Trusted messengers, especially health care professionals such as nurses and physicians, can play a pivotal role in shifting public and political will. Embedding community stories and lived experiences into policy advocacy enhances both its relevance and legitimacy.

Looking ahead, the CCHWG aims to strengthen its efforts by formalizing partnerships with community health centers, expanding educational outreach, and disseminating findings from its listening sessions to guide evidence-based policy. The CCHWG is also exploring how its model might support climate-resilient health advocacy in Pacific Island nations, many of which bear a disproportionate climate burden despite contributing minimally to global emissions. By sharing lessons learned, organizational structures, and educational resources, the CCHWG hopes to model how health professionals and communities can align efforts to mitigate impacts and bolster resilience to climate change.

*The Hawai'i Public Health Institute (HIPHI) is the fiscal sponsor for the CCHWG

**The opinions expressed in this document are those of the authors and do not reflect the official position of the State of Hawai'i Department of Health.

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