

Day 1, Extreme Heat: The Physical Effects on Vulnerable Populations & Continuing the Conversation

The session focused on the impacts of extreme heat on health, particularly in Hawaii. Lirio Hittle, the moderator, highlighted her extensive background in climate change coordination. Dr. Chu presented data showing a 1.33°C increase in temperature over 75 years, with significant increases in maximum and minimum temperatures. Dr. Liz Kiefer discussed the health risks, including cardiovascular and kidney diseases, and emphasized the importance of hydration and cooling measures. William Aila shared local observations from Waianae, noting increased use of fans and air conditioning. The panel emphasized the need for targeted education, policy changes, and community engagement to mitigate heat-related health risks.

Conversation continued with Daintry Bartoldus and Dr. Gloria Fernandez joining the panel for Part 2.

Action Items

- [] Provide an update on the analysis of the most recent data on northeast trade wind frequency.
- [] Prepare a response to the question "What do we do next? What is the most important thing for us to do from your perspective?"

Outline

Introduction to the Session and Moderator

- James McCallen introduces Lirio Hittle, highlighting her extensive background in climate change coordination, research, and activism.
- Lirio Hittle expresses her excitement about the conference and the focus on extreme heat.
- The session will explore the impact of extreme heat on health, particularly for vulnerable populations.
- The panel will discuss adaptation measures and state and community efforts to address extreme heat.

Panel Introduction and Structure

- Lirio Hittle introduces the panelists: Dr. Chu, Dr. Liz Kiefer, and Mr. William Aila.
- Dr. Chu will provide background on climate change in Hawaii, focusing on temperature, humidity, and wind trends.

- Dr. Liz Kiefer will discuss the health impacts of extreme heat, including heat-related illnesses and vulnerability factors.
- William Aila will talk about how specific communities are experiencing increasing heat and ways to mitigate these risks.

Dr. Chu's Presentation on Climate Change in Hawaii

- Dr. Chu presents data showing significant increases in temperature, humidity, and wind trends in Hawaii over the past 75 years.
- He highlights the increasing trend in annual average temperature and maximum temperature, with a significant increase of 1.33 degrees Celsius.
- The discussion includes the impact of humidity and wind on heat stress, with a focus on the importance of evaporation for cooling.
- Dr. Chu emphasizes the need for more meteorological stations to understand microclimates and climate change better.

Dr. Liz Kiefer Presentation on Health Impacts of Extreme Heat

- Dr. Liz Kiefer discusses the physiological responses to heat, including vasodilation, sweating, and conduction.
- She highlights the increased risk of cardiovascular and kidney diseases due to heat exposure.
- The presentation includes a meta-analysis showing a 21% increase in cardiovascular mortality for each one-degree Celsius temperature increase.
- Dr. Liz Kiefer emphasizes the importance of early recognition and prevention of heat-related illnesses.

William Aila's Presentation on Community Impacts

- William Aila discusses the unique challenges faced by the Waianae community, including reduced trade winds and increased heat.
- He highlights the use of pop-up tents, more sunscreen, and electrolyte drinks as adaptations to the heat.
- The presentation includes the use of easy-up tents and more air conditioning as strategies to cope with the heat.
- William Aila emphasizes the need for government action, including setting up cooling stations and planting more trees.

Discussion on Microclimates and Data Collection

- Lirio Hittle raises the issue of the lack of data on microclimates within communities.
- Dr. Chu suggests the need for more meteorological stations to understand microclimates better.
- Mr. William mentions the importance of accessing existing data from weather stations to understand local conditions.

- Speaker emphasizes the need for targeted education and specific data to identify vulnerable populations.

Panelists' Perspectives on Preparing for Extreme Heat

- Lirio Hittle asks the panelists for their perspectives on preparing for extreme heat.
- Dr. Liz Kiefer emphasizes the importance of targeted education and specific data to identify vulnerable populations.
- William Aila highlights the need for government action, including setting up cooling stations and planting more trees.
- Dr. Chu suggests the need for more meteorological stations to understand microclimates better.

Daintry Bartoldus' Presentation on Vulnerable Populations

- Daintry Bartoldus discusses the impact of climate change on individuals with intellectual and developmental disabilities (IDD).
- She highlights the challenges faced by individuals with IDD, including the inability to self-regulate and the impact of medications.
- Practical solutions include caregiver training, education on hydration, rest, and cooling, and the use of thermostats to monitor home temperatures.
- Daintry Bartoldus emphasizes the importance of community engagement and collaboration to address these challenges.

Dr. Fernandez's Presentation on Vulnerable Populations (Continued)

- Dr. Fernandez discusses the importance of public policy and safety checks in care programs to address extreme heat.
- She highlights the need for investment in housing and services for long-term family caregivers.
- The presentation includes the importance of community engagement and collaboration to address these challenges.
- Dr. Fernandez emphasizes the need for targeted education and specific data to identify vulnerable populations.

Audience Questions and Discussion

- Speaker raises the idea of changing lifestyle to avoid the hottest part of the day, similar to the siesta period in New Mexico.
- Dr. Liz Kiefer and William Aila discuss the importance of avoiding outdoor activities during the hottest part of the day.
- Speaker asks about the responsibility for cooling stations and their location, considering public safety power shutoffs.
- Dr. Fernandez suggests using evacuation centers as cooling stations for consistency and accessibility.

Final Thoughts and Closing Remarks

- Speaker asks about legislative measures to guarantee the right to cooling, specifically air conditioning for renters.
- Dr. Liz Kiefer and Dr. Fernandez discuss the need for clear guidelines and legislative measures to address this issue.
- Speaker emphasizes the importance of breaking down silos and getting people talking about extreme heat to inform legislators.
- The session concludes with a call for continued discussion and collaboration to address extreme heat and its impacts.