Hawaii Climate Change & Health Working Group
Hawaii State Capitol Room 329
October 15, 2015

Attending
Dr. Virginia Pressler (Chair), Nancy Partika (Co-Chair), Dr. Tai Ho Chen, Lt. Col. Liz Erickson (alternate for Dr. Tai Ho Chen), Capt. Barry Choy, Krista Jaspers (alternate for Dr. Victoria Keener), Judy Kern, Dr. Nancy Lewis, Jessica Yamauchi

Guests
Shelby Wardle, Camilo Ora, Liz Tam, Representative from Congressman Mark Takai's office, Holly Kessler-HPHA, Sharon Lum-HPHA Intern.

Welcome & Discussion
Dr. Virginia Pressler and Nancy Partika welcomed and thanked everyone for coming. Meeting notes from September 17 were distributed. Review and discussion of meeting notes and progress of working group to date:

- The interim report due to DOH will need to start being worked on. Target mid-December for draft as we will have good area of what has been covered by that date.
- What is our involvement with Aloha+ Challenge?
- How can we incorporate this initiative into the work group?
- How will we tie all presentations together?
- Important to name vulnerable group, and move forward to focus on vulnerable communities
- Putting climate change and health together is complex. Are there any health providers comfortable with associating the two?
- NYC has really good background info on the national and dynamic effects climate change has on the body. Could use their model.
- Seal level rise - historical records from 5,000 years ago see warming of one degree, which is not linear
- Scope of work group DOH report could encompass developing an outreach that will engage the public
- What is most pertinent to Hawaii and its people?
- People care about human health
- We can use the data for vulnerable communities and refugees
- What can we do to mitigate? From a public health perspective?
- Surveillance on how climate effects our overall population
- Helping health care providers make public health and climate change connections
- What about our workforce?
- We need interaction between infectious diseases during specific seasons
- Inflammatory response for people already infected by chronic diseases
- How can we be proactive? Health care providers can address preventive aspects
- There needs to be communicative action between client and doctor

Presentation #1:

- **"Respiratory and Pulmonary Effects of Climate Change"** (responses to air allergens; heightened sensitivity to air pollution and vog) Presenter: Dr. Elizabeth Tam, Professor & Chair of Medicine/ Interdisciplinary Biomedical Science, UHM JABSOM

Discussion and Recommendations:

- How to measure respiratory effects of global warming?
- How to engage the community?
- Define indicators of GW
- Assess host and environmental factors
- Adapt and apply benchmark respiratory health questionnaires (concerning host factors, environmental factors)
- Use mobile robust instruments that display immediate information and storage data
- 75%-85% participation from Big Island study gave community ownership
- Effects of volcanic air pollution?
- Family history-parent lung diseases
- Racial mix factors may affect Big Island
- Baseline respiratory disability is significant. Our populations need to pay more attention. Who at DOH is working on this? Tobacco Free Coalition
- Volcanic work- clean air branch

Presentation #2

- **"Brief overview of the implications of climate change for the world and Hawaii; and the need for action on climate change starting yesterday"** Presenter: Dr. Camilo Mora, Assistant Professor, Department of Geography, University of Hawaii Manoa

Discussion and Recommendations:

- Implications of climate change for the world and Hawaii; and the need for action on climate change starting yesterday
- Climate change occurs from an accumulation of greenhouse gases
- Humans destroy the ecosystem
- Need to integrate three areas of science to address climate change:
    - Social sciences
    - Geology
    - Mathematics & evaluations
- CO2 emissions are the highest it has ever been
- Temperature warming, rainfall inconsistent, sea level rising
- Species may have to move, or if they can't move they must adapt
- Moving 100-200 years is too fast for species to adapt therefore they become extinct
- Oxygen, PH, phytoplankton, acidic high temp makes it tough for many species

- Animal finds no refuge due to unsuitable environment
- Climate change also may lead to a loss of jobs, food, and revenue
- Plants need more than just good temperatures, water, and sunlight
- Direct changes in temperatures created heat waves in Paris 2003, which killed 2,000 people in two weeks
- By the year 2020, billions of people will face novel temperatures
- What is happening in Hawaii?
- Tourism, jobs, food, health are affected from air warming/sea warming/ sea level rise
- Oceans becoming acidic
- Human health increase vector borne diseases
- Climate change will ruin Hawaii
- It may take 10 million years for the earth to heal itself
- We need to work on becoming carbon neutral
- GOAL - CO2 sequestered=CO2 produced
- We need to achieve balance
- We need to find renewable energy sources in Hawaii
- We can plant trees and educate youth
- Population can be factored into solving climate change
- Dr. Mora's group is working on a project including a website to help people become carbon neutral by calculating the amount of carbon they produce and planting trees to neutralize their footprint.
- 2029 is the year of climate departure (according to his calculations)
- 2047 - we will achieve novel climates by this date
- There is a sense of urgency!

Next meeting: November 19, 2015, Capitol Room 329