Public Health Adaptation and Mitigation to Climate Change

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Minister of Health and Social Security and International Business of Grenada
Drivers of change, response and effects

Climate change

Direct impacts
- Extreme weather
- Heat waves
- Wildfires
- Disasters

Impacts through natural systems
- Air pollution
- Food/water contamination
- Biological changes of vectors, hosts and pathogens

Impacts through socioeconomic systems
- Food/water insecurity
- Conflicts due to scarcer resources
- Forced displacements
- Mental disorders

Social and behavioral context

Health system conditions

Health impacts

PAHO, Health in the Americas 2017
WHETHER YOU LIVE IN A...

CLIMATE CHANGE THREATENS YOUR HEALTH

Drought, floods and heat waves will increase.

Vector-borne diseases, like malaria and dengue virus will increase with more humidity and heat.

Basic necessities will be disrupted...

FOOD
Hunger and famine will increase as food production is destabilised by drought.

AIR
Pollution and pollen seasons will increase leading to more allergies and asthma.

WATER
Warmer waters and flooding will increase exposures to diseases in drinking and recreational waters.

Between 2030 and 2050 climate change is expected to cause 250,000 additional deaths per year due to malaria, malnutrition, diarrhoea and heat stress.
Current and Future Climate Hazards for Health in the Americas

- Heat Waves & Wildfires
- Hurricanes & Storm Surges
- Drought, Water & Food Insecurity
- Outbreaks of Vector-borne Diseases
- Altered Patterns of Precipitation & Landslides
- Water-borne Diseases and Toxic Biota
- Severe Storms
- Air Pollution
- Sea Level Rise
PAHO/WHO technical support for V&As and HNAPs

PAHO and the WHO have been providing support for Caribbean representatives to participate in international meetings and negotiations.

PAHO and CARPHA provided training “Health in National Adaptation Plans for Climate Change” to Caribbean ministries of health and environment – in St Lucia, October 2017.

- H-NAPs important for planning actions and for accessing the Green Climate Fund
  - Immediate opportunity for funds, through GCF Readiness ($3M per country + $1M per year to develop NAP and sectoral NAPs)
PAHO/WHO-UNFCCC Climate and Health Country Profiles

- Published: Brazil, Colombia, Jamaica, Mexico, Peru, USA
- Ongoing: Canada, Costa Rica, Dominica, Grenada, Panama
- Proposal: one profile per country, including current and new indicators

- Projections of climate indicators
- Current and future impacts on health
  - Vector-borne diseases
  - Heat-related mortality
  - #People affected by flooding
- National policies on mitigation and adaptation
- National milestones on the progress of the climate change agenda

http://www.who.int/globalchange/resources/countries/en/
Heat Stroke or Heat Exhaustion

- Faint or dizzy
- Excessive sweating
- Cool pale clammy skin
- Nausea or vomiting
- Rapid, weak pulse
- Muscle cramps
- Throbbing headache
- No sweating
- Body temperature above 103°F
- Red, hot, dry skin
- Nausea or vomiting
- Rapid, strong pulse
- May lose consciousness

CALL 9-1-1

- Get to a cooler, air conditioned place
- Drink water if fully conscious
- Take a cool shower or use cold compresses

- Take immediate action to cool the person until help arrives

NWS Heat Index

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Relative Humidity (%)  
- 40% - 50%
- 50% - 60%
- 60% - 70%
- 70% - 80%
- 80% - 90%
- 90% - 100%

Health economic assessment tool (HEAT) for walking and for cycling

Methods and user guide on physical activity, air pollution, injuries and carbon impact assessments
Increase Resilience of Health Care Facilities and Reduce Climate Footprint

- 77% of health facilities in the Americas are located in vulnerable zones for extreme events
- The “SMART Hospitals” initiative is supported by UK Aid and implemented following PAHO’s toolkit with Ministries of Health
- A health facility is “SMART” when they are safe, climate resilient and “Green”

- 2020: At least 50 health facilities in Belize, Dominica, Grenada, Guyana, Jamaica, Saint Vincent and the Grenadines and Saint Lucia will be “smarted”
Grenada’s First Climate Resilient Health Care Facility (PAH)
Grenada’s First Climate Resilient Health Care Facility (PAH) Before & After

2000-gallon water storage capacity

3-day water storage capacity, duplex pump & piping
New Peebles Hospital in Virgin Islands withstands destruction of category 5 Hurricane Irma

Princess Margaret Hospital in Dominica sustained severe damage after Hurricane Maria. Water and electricity quickly restored.

Source: Pan American Health Organization
Increase Resilience of Health Care Facilities and Reduce Climate Footprint

The SMART Princess Alice Hospital in Grenada

SAFE+GREEN+MAINTAINED = SMART
Thank You