Climate Information for Public Health Action

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Health and Climate Colloquium

PAHO/WHO Collaborating Centre on early warning systems for malaria and other climate sensitive diseases
sanitation

THE CITY OF NEW YORK
DEPARTMENT OF SANITATION

20BD-018

Bx.EA

THE ZIKA VIRUS
FIGHT BACK NYC

WE CAN PREVENT THE SPREAD OF ZIKA AND OTHER MOSQUITO-BORNE VIRUSES

KEEP
NEW YORK CITY
CLEAN
DON'T
LITTER

CALL 311 TO REPORT STANDING WATER

Visit nyc.gov/health/zika for more information.

WARNING

SHUTTER AND LOCK;
DO NOT OPEN;
KEEP CLEAR;
USE AIR TOOL FOR SHUTDOWN;
CLEAN SHAFTS DAILY;

SAFETY
SERVICE
SUSTAINABILITY
The UN Onchocerciasis Control Programme (OCP), launched in 1974, has been one of the most successful disease management programmes in Africa.
What caused the unusual occurrence (April-May 1988) of savannah flies (vectors of river blindness) in forested Sierra Leone?

Climate is both a challenge and a resource
There are many drivers of health outcome – what makes climate unique?

Its structured characteristics make it ideal for integration with health surveillance data.
Climate characteristics and drivers

• **Seasonal cycle** – movement of the Earth around the sun

• **Year to year variability** - Short term cyclical changes in sea surface temperature

• **Decadal variability** – long term cyclical changes in sea surface temperature

• **Climate change** – anthropogenic forcing
Also - it is measured routinely all around the world by the meteorological/climate community.
Since the 1980s

Massive increase in satellite observations
Kericho debate

Monthly malaria cases at Kericho Unilever Tea Kenya Ltd Hospital.

Hay et al., (2002).
Four requirements in getting evidence into policy and practice:

• agreement as to the nature of evidence
• strategic approach to the creation of evidence, together with the development of a cumulative knowledge base
• effective dissemination of knowledge; together with development of effective means of access to knowledge
• initiatives to increase the uptake of evidence in both policy and practice

Nutley et al., 2000.
How can climate information improve health outcomes?

• improve understanding of the mechanisms of climates impact on transmission and disease
• estimate populations at risk (risk mapping)
• estimate seasonality of disease and timing of interventions
• monitor and predict year-to-year variations in incidence (including early warning systems)
• monitor and predict longer term trends (climate change assessments)
• improve assessment of the impact of interventions (by removing climate as a confounder)
How this meeting is organized

Day 1
  Policy context
  Data
  *Launch WMO Case study book

Day 2
  Methodologies
  Tools

Day 3
  Education and training
  Prioritization of investment areas
What is the **user problem - policy relevant research question**?

*and what are its spatial and temporal dimensions*
What is the user problem - policy relevant research question? and what are its spatial and temporal dimensions?
What do we expect as an outcome for this meeting?

- Initiate/strengthen network of community of practice
- Identify key resources and capabilities that need to be built/strengthened
- Identify opportunities for action at scale including education and training
- Build institutional partnerships for the long haul
- Motivate and inspire the young professionals and researchers to build their careers in this space
- Capture the knowledge in this room and transform it into a resource for the global public health community
Thank you!