

Climate Change and Human Health

Risk and Responses

Additional Professor, Dept of Preventive and Social Medicine, JIPMER,
Puducherry

Video – short break

www.menti.com

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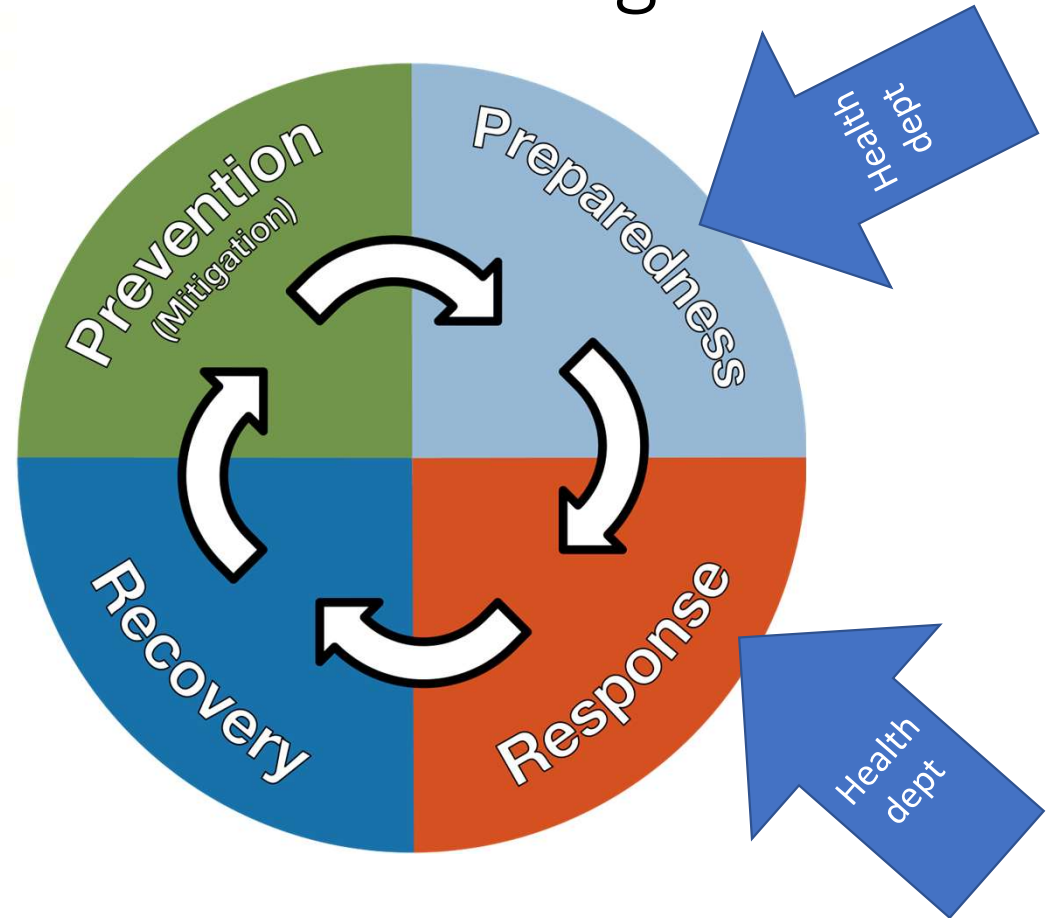
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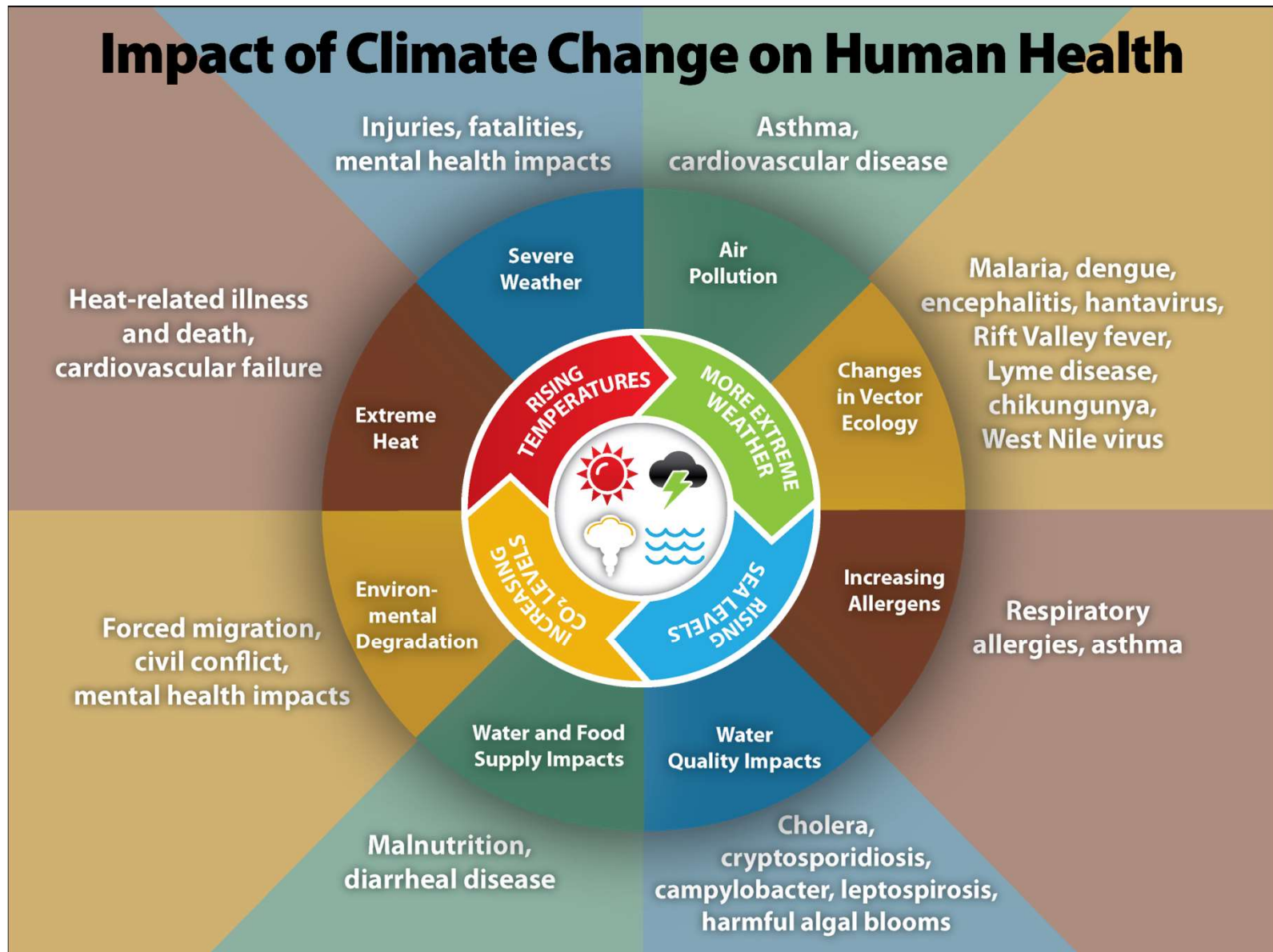


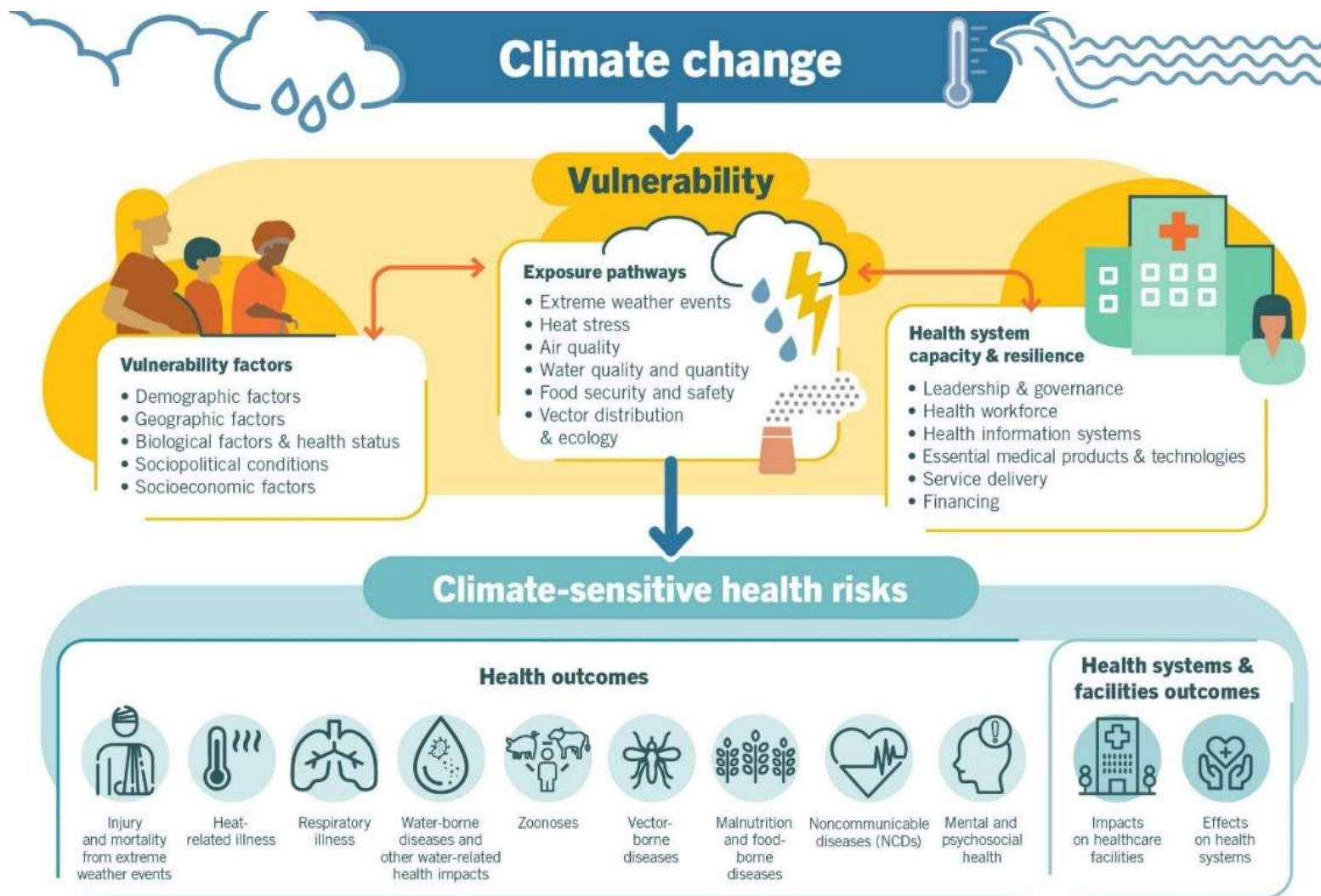


Disaster Management



Impact of Climate Change on Human Health







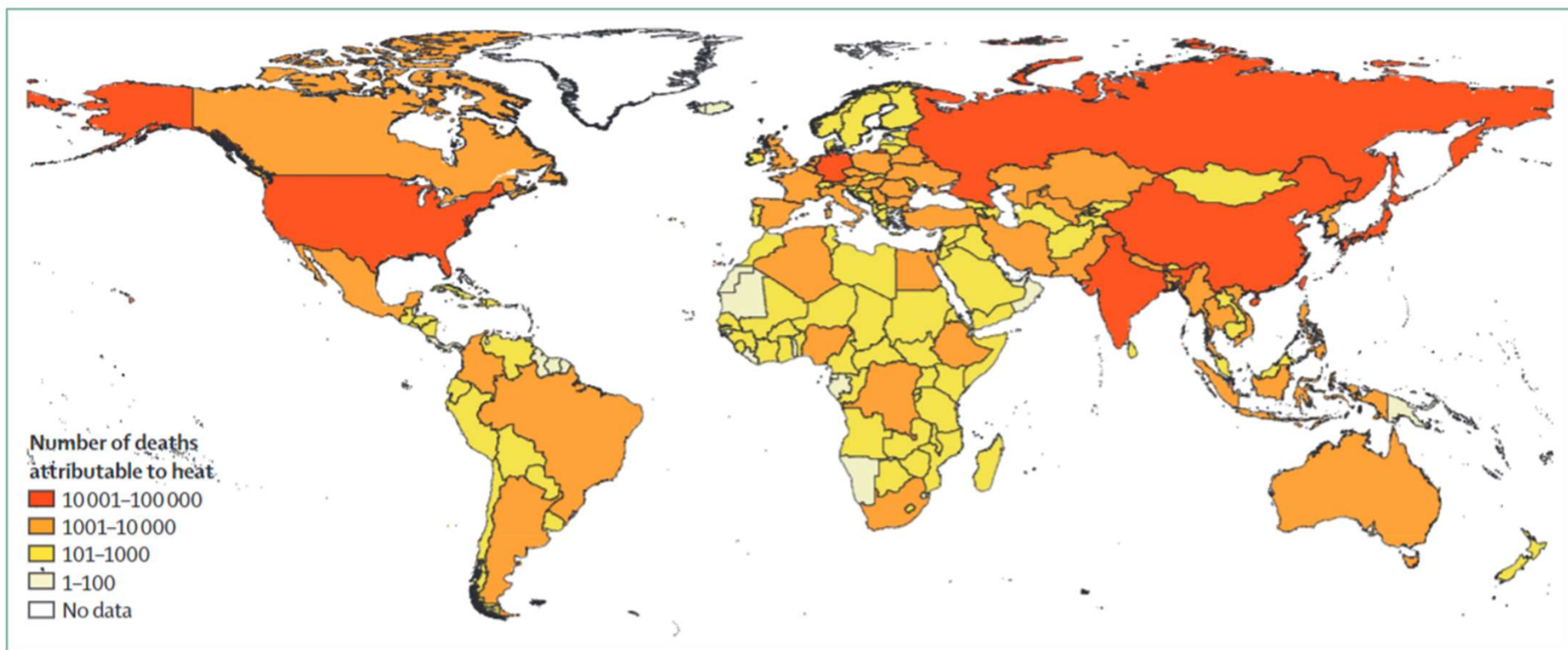
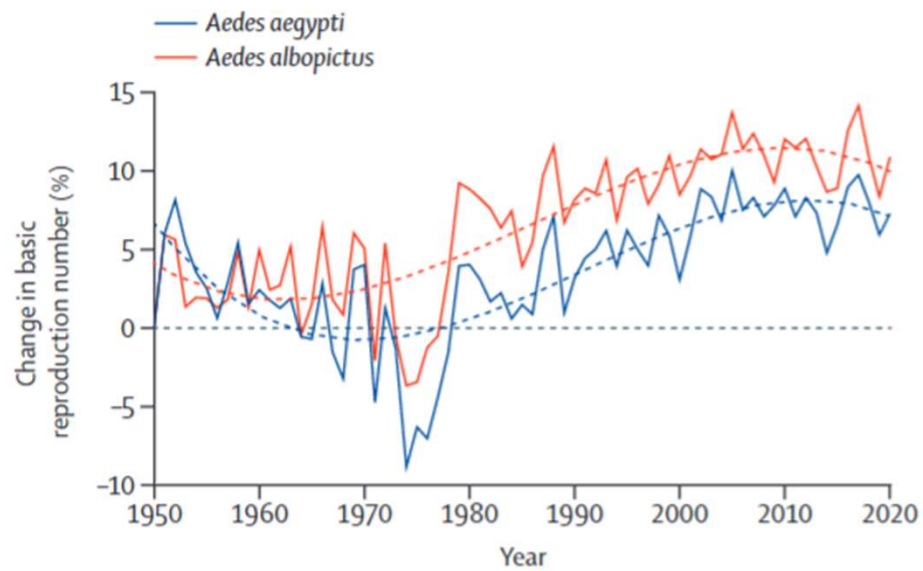
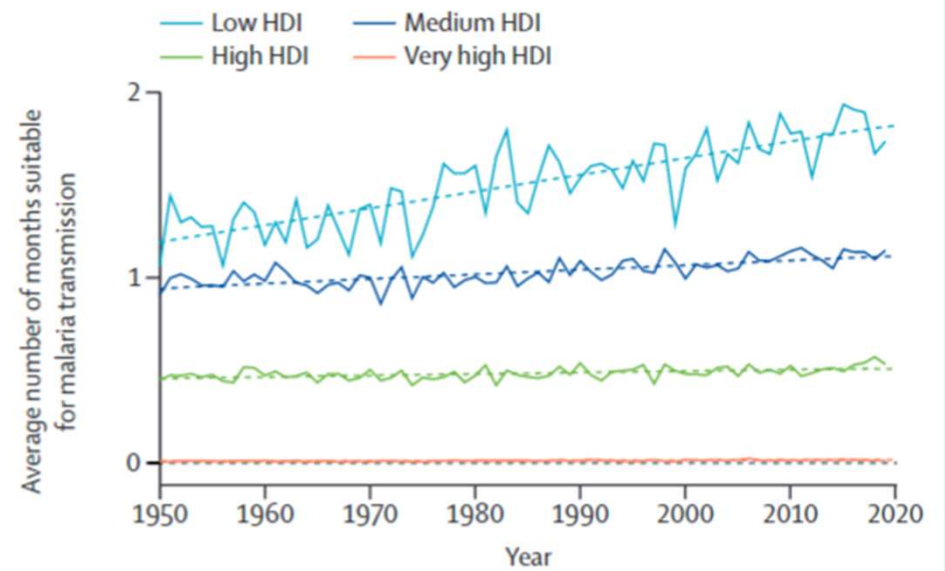


Figure 5: Heat-related deaths of people older than 65 years in each country in 2019

A Dengue (global)



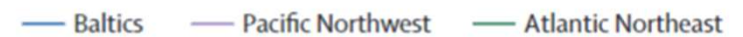
B Malaria (highland areas)



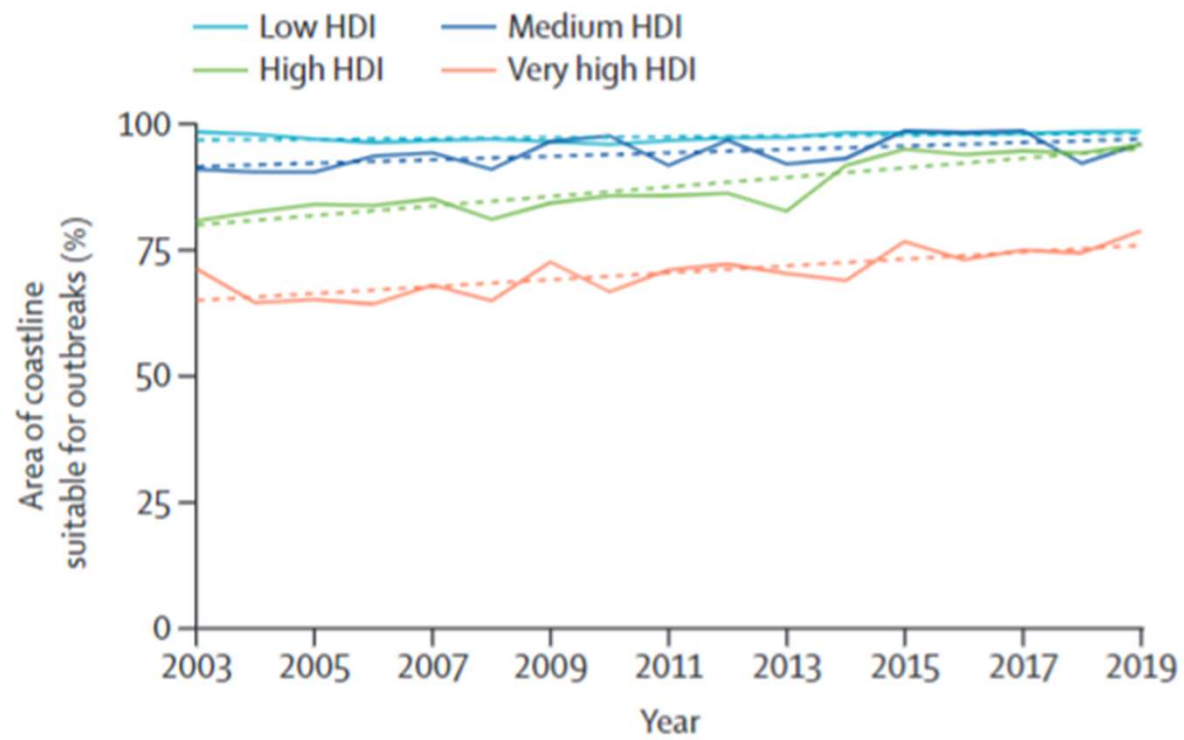
C *Vibrio cholerae*



D *Vibrio bacteria*



C *Vibrio cholerae*



Heat and sentiments

- During heat waves
More negative tweets

National Programme on Climate Change & Human Health (NPCCHH)

Centre of Excellence

1. National Institute of Malaria Research - Vector Borne Disease
2. PGIMER - Illnesses due to Air Pollution
3. V.P. Chest Institute (VPCI) – allergic diseases
4. NIMHANS – mental health
5. National Institute of Cholera and Enteric Diseases - Water borne Diseases
6. National Institute of Nutrition – Nutrition related illness
7. All India Institute of Medical Sciences – Cardio Pulmonary Diseases
8. National Institute of Disaster Management (NIDM) – Disaster
9. Indian Institute of Public Health (IIPH) – heat stress
10. National Institute of Occupational Health – Occupational health
11. Nutrition Foundation of India – food borne illness

General

1. Public Health Foundation of India – green health system
2. International Institute of Health Management Res – vulnerability assessment
3. The Energy and Resources Institute (TERI) – health information system
4. North Eastern Indira Gandhi Regional Institute Medical Sciences (NEIGRIMS)
– Hill regions climate sensitive diseases

Jawaharlal Institute of Postgraduate Medical
Education & Research (**JIPMER**) – Costal
Climate sensitive diseases

Awareness & Behaviour modification of general population or impact, illnesses, prevention and adaptive measures for climate sensitive illnesses

Health Education material
videos, posters



राजेश भूषण, आईएएस
सचिव

RAJESH BHUSHAN, IAS
SECRETARY



भारत सरकार
स्वास्थ्य एवं परिवार कल्याण विभाग
स्वास्थ्य एवं परिवार कल्याण मंत्रालय

Government of India
Department of Health and Family Welfare
Ministry of Health and Family Welfare

D.O.90/NCDC/CEOH&CCH/2020-21/Heatwaveadvisory

30th April 2022

Dear Colleague,

The Seasonal and Monthly Outlook from Indian Meteorological Department (IMD) for March-May 2022 predicts above normal maximum temperatures over many areas of the Country and much higher temperatures in Central, Western and Northern parts of the Country. Temperatures have already touched 46° Celsius at some places and deviation up to 6° Celsius from expected normal temperatures have also been reported.

2. I draw your attention to “**National Action Plan on Heat Related Illnesses**” (released in July 2021), which is available on website of Union Ministry of Health

Public Health Advisory: Extreme Heat/Heatwave

Do's

For general population

Stay hydrated:

- Drink sufficient water whenever possible, even if you are not thirsty. Thirst is not a good indicator of dehydration.

For Employers and workers

- Provide cool drinking water at work place and remind them to drink a cup of water every 20minutes or more frequently to stay hydrated
- Caution workers to avoid direct sunlight
- Provide shaded work area for workers. Temporary shelter can be created at work site.
- Schedule strenuous and outdoor jobs to cooler times of the day i.e., morning and evening hours
- Increase the frequency and length of rest breaks for outdoor activities- at least every 5 minutes after

Train healthcare personnel and equipped institutes/ organization towards achievement of climate resilient healthcare services and infrastructure at district level in each state

Module for Medical Officer, ASHA, ANM and other para-medical staff

- Activity based
- Easy for dissemination
- Power point presentations
- Voice over video
- Training of trainers by the CoE

Integrated monitoring system for collection and analysis of health related data with meteorological parameters, environmental, socio-economic and occupational factors



Evidence-based support to policy makers, programme planners and related stakeholders

Research

Funds for it

Indicators

- Direct indicators

Panel 1: Working group indicator

Climate change impacts, exposures, and vulnerabilities

1.1: health and heat

- 1.1.1: vulnerability to extremes of heat

- 1.1.2: exposure of vulnerable populations to heatwaves

- 1.1.3: heat and physical activity

- 1.1.4: change in labour capacity

- 1.1.5: heat and sentiment

- 1.1.6: heat-related mortality

1.2: health and extreme weather events

- 1.2.1: wildfires

- 1.2.2: drought

- 1.2.3: lethality of extreme weather events

1.3: climate-sensitive infectious diseases

- 1.3.1: climate suitability for infectious disease transmission

- 1.3.2: vulnerability to mosquito-borne diseases

1.4: food security and undernutrition

- 1.4.1: terrestrial food security and undernutrition

- 1.4.2: marine food security and undernutrition

1.5: migration, displacement, and rising sea levels

Summary

- How is human health affected?
- What is being done?