# Tackling Emerging Infectious Threats through Innovative Collaboration in the Era of Climate Change

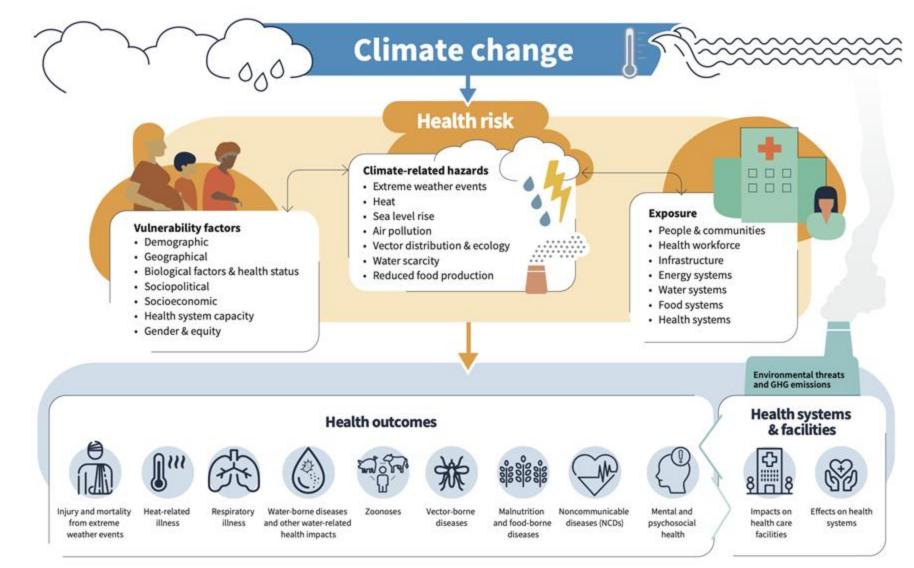
COP29 - Japan Pavilion Dr Maria Neira

Director, Environment, Climate and Health Department

Our new reports here









#### Climate change increases the transmission of deadly infectious diseases

- Transmission increases in dengue, malaria, West Nile virus, Vibriosis and respiratory infections, including pneumonia, Legionella, TB, Covid-19 and influenza, across existing and new locations.
- The climatic suitability for the transmission of dengue:
  - ... by Aedes albopictus and Aedes aegypti increased by 46.3% and 10.7% respectively between 1951–1960 and 2014–2023
  - The transmission potential for dengue increasing by over 27% since the 1950s.
- Malaria transmission is intricately connected with temperature and rainfall patterns, and extreme weather events have been shown to cause rapid spikes in cases.
- Climate-related displacement and gathering behaviours aggravate disease transmission.





- Rising temperatures, increased rainfall, and extreme weather events create ideal conditions for pathogens and their carriers, leading to increased risks for diseases such as dengue, malaria, cholera, and West Nile virus.
- Climate-induced ecosystem changes, such as deforestation, habitat loss, and altered water sources, push wildlife closer to human populations, increasing the risk of zoonotic diseases, which jump from animals to humans.
- These effects are amplified in **vulnerable, low-income regions,** where climate-related displacement, overcrowding, and poor sanitation further facilitate the spread of infectious diseases.



#### Health is the argument for climate action

## **Prescription for healthy NDCs**

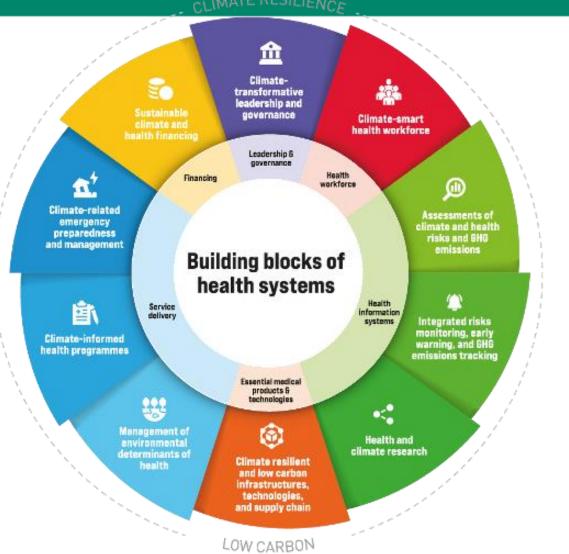


## **PEOPLE:** The lived experience of the climate crisis is health – health, well-being and equity must be at the heart of climate action.

Build future-proofed health systems. Invest in low-carbon climate- resilient health systems and a fit-for-purpose, well- supported global health workforce.

The WHO-led Alliance for Transformative Action on Climate and Health (ATACH), in which over 91 countries and over 75 partners work together to ensure countries have the technical and financial resources they need to protect health from climate change.





## 2021 WHO health and climate change global survey

extreme weather events 22% 74% 15% 20% 35% 57% 65 27 11% 40 countries with countries with countries with health surveillance health surveillance health surveillance system system system 43% 23% Malnutrition and Mental and psychosocial health Noncommunicable diseases foodborne diseases 13% 11% 27% 29% 15% 70 28% 72 47 countries with countries with countries with nealth surveillance nealth surveillance ealth surveillance system system system 59% 62% 56% Vector-borne diseases Waterborne diseases Zoonoses 32% 22% 19% 39% 21% 27% 78 78 66 countries with countries with countries with nealth surveillance health surveillance nealth surveillance system system system 42% 46% 52%

Heat-related illness

Injury and mortality from

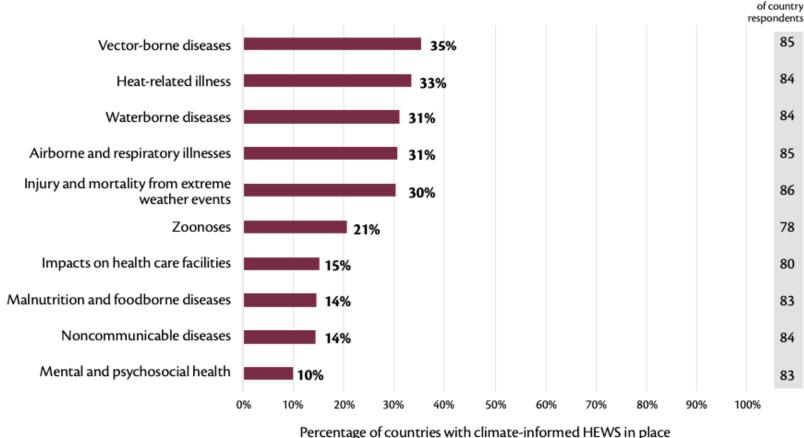
Number of surveyed countries that reported having a health surveillance system in place (centre of chart) and what percentage of these health surveillance systems include meteorological information (95 country respondents)



Airborne and respiratory illnesses

## 2021 WHO health and climate change global survey

Approximately one third of countries reported having climate-informed HEWS in place for vector-borne, waterborne, airborne diseases or heatrelated illnesses



Percentage of countries that reported collaboration between the ministry of health and other institutions to strengthen evidence or research on climate change and health (95 country respondents)

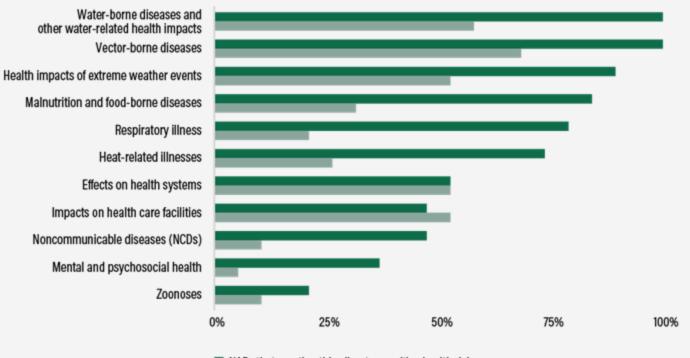


Total number

# **Review: Health in National Adaptation Plans**

There are gaps between the CSHRs identified in NAPs and **specific actions** to address them

The comprehensiveness of climate-sensitive health risks in NAPs:

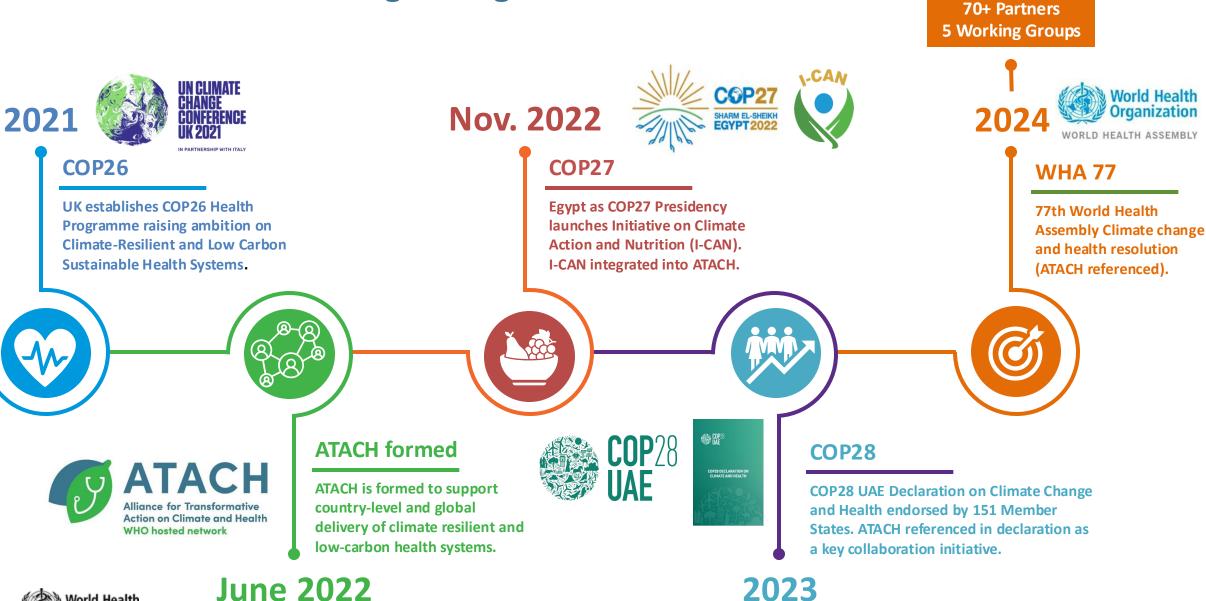


NAPs that mention this climate-sensitive health risk

NAPs with at least one adaptation action specifically targeted at this climate-senstive health risk



### **Evolution of ATACH with growing attention on CCH**



**90** Countries

World Health Organization

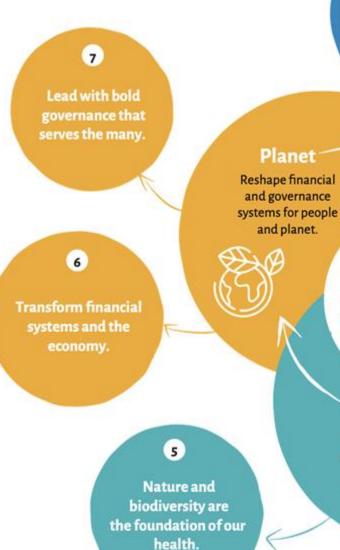




#### **Read the reports here:**







1 Our health is not negotiable. End fossil fuel reliance and ensure people-centred adaptation and resilience



People The lived experience of the climate crisis is health. Health, well-being and Health is the

equity must be at the heart of climate action.

2

Unlock human development and put people at the heart of climate action.

3

**Build future-proofed** health systems.

Place

**Argument for** 

**Climate Action** 

Realise the co-benefits of stewarding environments for health and the critical opportunity and savings of investing in prevention.

4

Cities are key to unlocking climate and health co-benefits.