

EMBARGOED 3 December 2023 - 1:30 pm Dubai Time (11:30 SAST)

Climate Change and Epidemics 2023 - COP28 Report

- *Report highlights how climate change is fuelling new epidemics across the world, particularly in countries from the Global South.*
- *Soundbites to be made available upon request*

3 December 2023, Dubai, United Arab Emirates – Today, on the health day at the COP28, a new report on climate change and epidemics is being released by the head of the WHO AFRO COP28 delegation, the Ministry of Health of Mozambique and by the [Centre of Epidemic Response and Innovation](#) (CERI) at Stellenbosch University in South Africa.

This report, which was compiled by over one hundred scientists and policy makers, highlights how climate change is fuelling new epidemics across the world, particularly in countries from the Global South.

While countries in the Global South contribute less than 10 percent of greenhouse gas emissions, they are likely to suffer the largest health impacts from climate change. Not only are these countries more at risk of climate disasters and harm, but they also have less adaptive capacity and preparedness to respond to these threats, making them highly vulnerable (low preparedness vs climate risk).

According to the authors of the report, the response to climate change should be used as an opportunity to build capacity to protect and support health, especially in underserved and underrepresented communities. As responsible policymakers, it is imperative that we acknowledge this reality and take swift, decisive action to mitigate the impending public health crisis.

The report was compiled by members of the [CLIMADE](#) (Climate Amplified Diseases & Epidemics) consortium. CLIMADE brings together leading global scientists focused on bridging knowledge gaps, improving surveillance tools and expanding adequate interventions to decrease the impact of diseases and epidemics amplified by climate change.

The CLIMADE consortium is co-led by Prof Tulio de Oliveira from South Africa, who was at the forefront of the genomic surveillance activities during the Covid-19 pandemic in South Africa and led the discovery of the Omicron variant. "As the Covid-19 pandemic recedes, we are investing our time and funds to fight other epidemics amplified by climate change. In the last six months, the CLIMADE consortium has responded with quick characterisation of multiple epidemics, including the explosive Cholera outbreaks in Africa and Haiti, Dengue, Chikungunya and Rift Valley and Yellow Fever viruses in multiple South American, South Asian and African countries," comments De Oliveira. "The CLIMADE consortium brings together many of the leading scientific and public health groups worldwide, capable of decisively and rapidly responding to new epidemics amplified by climate change".

The exacerbation of infectious diseases due to climate hazards can be attributed to both direct and indirect factors. The three main factors include: 1) Gradual temperature rise: The slow but relentless increase in global temperatures creates a conducive environment for disease vectors such as mosquitoes, rodents, and ticks to proliferate; 2) Extreme events: Sudden and more frequent occurrences of extreme events, such as floods, further compound the problem;

and 3) Climate Migration: Changes in temperature and precipitation patterns can also impact food and water availability and impact livelihoods.

"Extreme temperatures, droughts, floods and cyclones cause death directly and indirectly through outbreaks of diseases such as cholera and dengue fever that are being witnessed in 16 and 7 African countries respectively. The CLIMADE consortium of global scientists is acting now by developing surveillance tools, knowledge and adequate interventions in order to address climate hazards," says Nicky Gumede-Moeletsi from the World Health Organization's Regional Office for Africa.

The Climate Change and Epidemics 2023 report also identifies the main actions that can be taken to decrease epidemics. The report urges governments, academic institutions, scientists, public health officials, private sector industries and health organisations to collectively address the urgent and interconnected challenges of climate-amplified diseases and epidemics through their diverse expertise, and resources.

The report authors call on the world to act now by:

1. Reporting outbreaks timeously: Immediate and transparent reporting of infectious disease outbreaks is paramount. Governments and health organisations should commit to reporting outbreaks promptly and openly, sharing crucial data with relevant stakeholders. This transparency is essential for global preparedness and response efforts.

2. Strengthen genomic surveillance: Governments, academic institutions and health organizations must invest in and expand genomic surveillance capabilities to monitor the spread and evolution of infectious diseases. This will enable early detection and response to emerging threats, allowing us to prevent outbreaks before they escalate.

3. Prioritising vulnerable populations - The most vulnerable communities are disproportionately affected by the intersection of climate change and infectious diseases. Governments and private sector industries must prioritise these populations by investing in resilient healthcare systems, infrastructure, and disaster preparedness measures.

4. Promoting climate resilience - Academic institutions and private sector industries should collaborate to develop innovative solutions that enhance climate resilience within healthcare systems. This includes designing infrastructure to withstand extreme weather events and ensuring the availability of essential medical supplies during crises.

5. Committing sustainable funding - Governments, private sector industries and health organisations must commit to sustainable funding dedicated to the fight against climate change related infectious diseases. This funding should support research, capacity-building and community engagement to create a robust defense against these converging threats.

The report is being launched at a side event of the COP28 in the Blue Zone in the Mozambique Pavilion on 3 December 2023 at 13:30. The report, call to action, summary presentation and introductory video are available for journalists and media personnel at <https://climade.health/cop28-report/>.

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- Please note the strict **EMBARGO** until 3 December 2023 - 1:30 pm Dubai Time (11:30 South African Standard Time).
- Soundbites to be made available upon request
- Liaise with Ms Maambele Khosa – maambele@sun.ac.za / +27 79 592 9174 for more information and media requests.
- Prof Tulio de Oliveira will attend the COP28 UEA summit and will be available for interviews after the Climate and Infectious Diseases Report Launch, which will take place at the Mozambique Pavilion, Blue Zone, 3 December 2023, 13:30 to 15:00.

ABOUT CLIMADE

The CLIMADE (**C**limate **A**mplified **D**iseases & **E**pidemics) initiative is a global consortium of leading global scientists and public health officials. CLIMADE focuses on bridging knowledge gaps, improving surveillance tools and expanding adequate interventions to decrease the impact of climate amplified diseases and epidemics. The overarching long-term goal of CLIMADE is to predict, track and control diseases and epidemics that are amplified by climate change in some of the most affected countries in the world. www.climade.health

ABOUT CENTRE FOR EPIDEMIC RESPONSE AND INNOVATION (CERI), STELLENBOSCH UNIVERSITY, SOUTH AFRICA.

The [Centre for Epidemic Response and Innovation](http://www.ceri.org.za) (CERI) is a leading academic research centre focused on epidemic preparedness and response. CERI hosts the largest genomics facility on the Africa continent and it is a specialised genomics facility of the WHO AFRO and Africa CDC. CERI is based at Stellenbosch University in South Africa. Connect with us at www.ceri.org.za and on Twitter: @ceri_news