

# **Climate-Induced Mortality**

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## **Climate-Induced Mortality: A Wake-Up Call for Policy Action**

## **Context:**

In recent years, the **frequency and intensity of extreme weather events**—particularly **tropical cyclones**—have risen sharply due to **climate change**. These events have disproportionately impacted **low- and middle-income countries (LMICs)** that often lack robust healthcare and disaster preparedness systems.

A new multi-country research study has revealed a concerning link between tropical cyclone exposure and increased infant mortality in these vulnerable regions.

## Key Findings of the Study

- The study analysed nearly 1.7 million child health records from 7 LMICs: Bangladesh, India, Madagascar, Cambodia, the Philippines, the Dominican Republic, and Haiti.
- Infants exposed to tropical cyclones, either in the womb or during their first year of life, were found to have a significantly higher risk of death.
- On aver<mark>age:</mark>

• Infant Mortality Rate (IMR) increased by 11% post-cyclone.

• This equals an additional 4.4 deaths per 1,000 live births.

- The **elevated risk** was:
  - Most acute within the first year after the storm.
  - It subsided after two years.

### **Country-wise Impact**

- While the average increase was 11%, the impact varied significantly across countries.
- Countries with major increases in IMR:
  - Bangladesh
  - Haiti
  - Dominican Republic These nations saw more than 10 additional deaths per 1,000 births following cyclone events. NWN. OKKOIO
- Countries with little or no increase:
  - India
  - Madagascar
  - Cambodia
  - Philippines

## **Probable Reasons Behind Variation**

The study suggests several factors influencing differences in impact:

## 1. Geography

- Mountainous terrain in some countries offers natural protection.
- Others have **flood-prone low-lying regions** more susceptible to cyclone damage.
- 2. Disaster Preparedness

• Efficient evacuation mechanisms, public awareness, and early warning systems mitigate risk.

#### 3. Housing & Infrastructure

- **Sturdier housing** can prevent displacement and injury.
- Availability of **healthcare services** during and after disasters is crucial.
- 4. Baseline Health Conditions
  - Regions with high child malnutrition, poor sanitation, and limited healthcare access face compounded risks.

### **Climate Change and Future Risks**

- The study reinforces the growing vulnerability of infants in the face of climate-induced extreme weather events.
- As climate change intensifies, both strong and lower-intensity cyclones are expected to increase in frequency.
- These findings **highlight an urgent need** to:

Strengthen disaster response systems.

• Improve maternal and child health infrastructure.

• Integrate climate resilience into national health policies.

## **Definition: Infant Mortality Rate (IMR)**

• IMR refers to the **number of deaths of infants under one year of age per 1,000 live births** in a given year.

• It is a key indicator of health system performance and socioeconomic development.

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