

NTS FAST FACTS

PLANETARY HEALTH

Impact of climate crisis on human health

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Planetary health is a concept that entails healthy, stable, and resilient Earth systems as conditions necessary for human and ecological well-being. Nine scientific processes required in regulating these systems have been identified: Climate change, Novel entities, Modification of biogeochemical flows, Stratospheric Ozone Depletion, Land system change, Freshwater change, Ocean acidification, Atmospheric Aerosol Loading, and Biosphere integrity.

In 2024, six of the nine planetary boundaries had been breached, with ocean acidification on the verge of boundary transgression as well, highlighting the rapidly worsening crisis. It has been acknowledged that the transgression of these boundaries and the impact of the climate crisis on human well-being is now observable, wide-ranging and destabilizing, with issues of extreme heat, pollution and water and food supply

disruptions having direct negative outcomes on human health.



FIGURE 1: THE IMPACT OF THE CLIMATE CRISIS ON HUMAN HEALTH

Poor sanitation, malnutrition, water-borne diseases, and food-related illnesses such as diarrhea.

Fatalities, heat-related stress and illnesses such as cardiovascular diseases.

WATER AND FOOD SUPPLY AND QUALITY DEGRADATION

Displacement, migration and related conflicts, mental and emotional health impacts, fatalities.

> **SEA LEVEL RISE** AND ENVIRONMENTAL **DEGRADATION**

Respiratory illnesses, skin diseases, increased mortality among vulnerable populations, noncommunicable diseases.

EXTREME HEAT AND SEVERE WEATHER









IMPACT OF CLIMATE CRISIS ON HUMAN HEALTH

Climate Change

Novel **Entities** Biogeochemical **Flows**

Biosphere

Freshwater

Land Systems

Ocean pH

Ozone

Aerosol

There is now a critical need to address the **impact of the climate crisis on human health**, not just in rapid action towards mitigation and adaptation of climate change, in order to reduce the accelerated transgression of planetary boundaries, but also through a planetary health perspective. By using the planetary health concept to address the climate crisis, crucial progress can be made in assessing health vulnerabilities, integrating health into environmental programmes and building resilient and sustainable health systems.

Integrate climate resilience and sustainability into primary healthcare. Adopting cleaner, more reliable, and cost-effective solutions.

Decarbonize high-emitting health systems.

Incorporate climate resilience and environmental sustainability into health workforce training.

BUILD RESILIENT AND SUSTAINABLE HEALTH **SYSTEMS**



ADAPTATION AND HEALTH RESPONSES INTEGRATING **HEALTH AND CLIMATE** MITIGATION

Assess health vulnerabilities and develop response plans. Implement climate-informed surveillance for risks like extreme heat and infectious diseases.

Health-related sectors adaptation programmes for water and food security.

Equitable transition to a clean energy economy. Health is integrated into climate change mitigation strategies.

Climate mitigation programmes include provision of health benefits.

Mobilize the health community to drive policy change.

FIGURE 2: A PLANETARY HEALTH FRAMEWORK FOR ADDRESSING CLIMATE IMPACTS ON HUMAN HEALTH

Sources for both Figures 1 and 2: Compiled from

- The Planetary Health Check. 2025. "The Planetary Health Check 2024." Planetary Boundaries Science and the Potsdam Institute for Climate Impact Research, https://www.planetaryhealthcheck.org/, accessed 07 March 2025.
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