

CLIMATE CHANGE



Climate change has both direct impacts on health, due to extreme weather events, and indirect effects, for example resulting from food and water insecurity, and from increasing transmission of vector- and waterborne diseases. Further impacts may include the disruption of health care systems and water and sanitation supplies, increased health inequality, displacement of communities, and resulting health consequences. On the other hand, numerous co-benefits are achieved from climate change mitigation actions, for example through cleaner air and healthier and more sustainable diets.

Flooded roads in
Houston, United
States of America.

KEY RISKS TO HEALTH

Climate change is expected to cause **250 000** additional deaths per year between 2030 and 2050.²

These deaths will result from several factors, including increases in malnutrition, malaria, diarrhoea and heat stress. Direct health costs will amount to an estimated US\$ **2–4 billion** per year by 2030.

TODAY



Between **25 million** and **1 billion** climate change migrants are expected by 2050.



The number of people flooded per year globally is expected to increase by **10–25 million** per year by 2050.



2050



An additional **1.4 billion** persons are projected to experience drought exposure events per year by 2100.



2100

Number of countries supported to strengthen climate-resilient health systems (2019)

Status as of February 2019. Source: WHO.

35 With WHO or joint WHO/partner support.
5 With support of other international agencies.

² Fact sheet on climate change and health: <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>.



Climate change leads to extreme weather events such as droughts and can aggravate water scarcity.

WHAT ARE KEY ACTIONS FOR IMPROVEMENT?

Key actions to combat the adverse health effects of climate change include the following:

1.

Carbon emissions

Implement policies to reduce carbon emissions and meet the targets of the Paris Agreement on Climate Change as a way of gaining health co-benefits, particularly through reduced air pollution.

2.

Energy systems and public transportation

Build cleaner energy systems and public transportation, promote active movement, promote sustainable and healthy diets, and encourage other choices or conditions that have the potential to reduce carbon emissions and result in health co-benefits.

3.

Health systems

Build climate-resilient and sustainable health systems, for example by ensuring that health care facilities have reliable energy and WASH provision, are resilient to extreme weather, and are reducing their environmental impact.

4.

Vulnerability

Reduce health vulnerability to climate change, including through ensuring food and water security, and providing early warning systems for heatwaves or floods.

5.

Heat islands

Design urban plans to include green spaces that reduce heat islands in cities.

MAIN WHO ACTIONS

WHO actions on the adverse health effects of climate change include the following:

International climate negotiations

Ensure that international climate negotiations fully consider health risks and opportunities.

Policy and technical support

Provide policy and technical support to countries to plan, implement and finance programmes to address the health effects of climate change.

Evidence

Synthesize the evidence, raise awareness and monitor progress on climate change and health effects, from global to country level.

Reduce carbon emissions

Support climate change mitigation by promoting actions that reduce carbon emissions and simultaneously improve health.

SECTORAL POLICIES INTERACTING WITH HEALTH PROTECTION FROM CLIMATE CHANGE

Cooperation with the following sectors may be required to sustainably reduce risks to health:



Industry



Energy



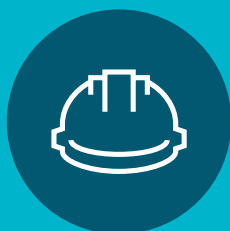
Transport



Housing



Agriculture



Labour



Health

Further information: www.who.int/health-topics/climate-change.

Source: Healthy environments for healthier populations: Why do they matter and what can we do? WHO, 2019.



World Health
Organization