

Module 2d: Health, WASH and climate

Fact sheet

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Photo: IFRC

Fact sheet on WASH and climate change

What is the global picture on WASH?

Water, Hygiene and Sanitation (WASH) are interconnected. Although access to WASH services has been recognized as a human right by the United Nations in 2010, that goal is far from been achieved. 2.2 billion people around the world do not have safely managed drinking water services, 4.2 billion people do not have safely managed sanitation services, and 3 billion lack basic handwashing facilities.

How does climate change affect the water cycle?

The climate crisis intensifies the water cycle because as air temperature increase, more water evaporates into the air. Warmer air can hold more water vapor, which can lead to more intense rainstorms, causing major problems like extreme flooding around the world. Meanwhile, some people are experiencing more dry air and even drought.

How does climate change affect WASH?

Climate change affects water availability and quality. While water demand keeps raising globally climate change is expect to cause water stress by increasing rainfall in certain regions and decrease it in others.

In addition, water and sanitation infrastructure is vulnerable to the impacts of climate change such as floods, droughts or storms, which can result in service disruption and water contamination.

How does that affect human health?

44% of the deaths associated with inadequate access to water and sanitation are caused by diarrhoeal diseases. Climate change also results in variations in temperature and humidity which can increase mosquito development and cause vector-borne diseases such as dengue or malaria.

Water and sanitation infrastructure damage due to climate change can increase the risk of exposure to pathogens through environmental contamination and the risk of disease resulting from lack of access to sanitation.

Who is the most affected?

Climate change does not affect everyone in the same way. Vulnerability factors can include geography, health status, or socio-economic conditions: people living in coastal areas are at higher risk of sea-level rise and flooding, undernourished children are more vulnerable to diarrhoeal diseases, rural populations relying on farming for subsistence are at higher risk of undernutrition and water-related diseases in case of drought.

People who lack access to health and WASH infrastructure are also more vulnerable to the consequences of climate change.

What can we do about it?

Different types of actions can be put in place in order to mitigate the negative consequences of climate change on WASH.

Climate-smart programming can allow National Societies to anticipate, absorb and adapt to climate shocks. WASH climate-smart interventions can include rainwater harvest, the protection of natural buffers which can serve as a protection against extreme weather events, or the promotion of underground water storage to minimize evaporation.

Early-Warning / Early Action systems can also be put in place in order to anticipate, reduce and prepare for changing risk. They allow to minimize human suffering and economic losses in case of flooding or drought for example. National Societies are encouraged to engage dialogue with the HydroMet services of their countries in order to identify historic data and projections on weather patterns and develop a partnership.

More Q & A See more questions and answers in the 'Frequently asked questions (FAQ)' in this module

UN Sustainable Development Goal 6:

