

TECHNICAL BRIEF

Environment, climate change and health in relation to Universal Health Coverage

Environmental protection and climate change mitigation can improve human health and alleviate pressure on health care systems

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A stable climate, safe water, clean air and unpolluted soils are prerequisites for health. The policy areas of environment, climate change and health (ECH) and universal health care (UHC) are therefore inextricably linked. Action towards healthier environments, which could reduce the world's disease burden by a quarter, includes: limiting and protecting from climate change and ecosystem destruction; providing safe water, sanitation and hygiene, and occupational health and workplace safety; implementing World Health Organization (WHO) Air Quality Guidelines; and protecting from the harmful effects of chemicals and radiation (1).

Key messages

- The health sector plays a key role in protecting communities, with preventing disease and promoting health integral parts of its work on both ECH and UHC. Tackling the environmental determinants of health provides significant opportunities for preventing disease, and many actions for healthier environments are perfectly aligned with strengthening UHC.
- Further climate change will put additional pressure on health systems by increasing: the risk posed by infectious diseases, including an increased risk of pandemics; heat-related diseases; malnutrition; and displacement.
- Many of the poorest countries and population groups are, and will continue to be, most affected by climate change. With increasing climate change, health systems need to become increasingly climate resilient in order to provide safe, good-quality health care, particularly for these at-risk groups.
- The most vulnerable members of society are those who are most exposed to environmental risks and at the same time at particular risk for adverse health outcomes. Risks are especially pronounced in low-resource settings where health systems are already inadequately equipped, understaffed and overburdened.
- The health sector can play a key role in protecting communities, not only through practical action but also by raising awareness on the importance of healthy environments for human well-being.
- Safe drinking water and sanitation, adequate hygiene facilities, climate resilience, safe use of radiation, reliable energy sources and a safe and healthy workforce are all essential for providing safe and good-quality health care. However, these provisions are very often not in place, and billions of people lack essential services at their health care facility.
- The health sector is an important contributor to climate change (over 4% of global emissions) and should lead by example in moving towards greater environmental sustainability.

Background and challenges

The world is facing a triple crisis of pollution, climate change and biodiversity loss. This has a huge impact on human health and already threatens the lives of millions of people. Without radical and aggressive action to mitigate these crises, humanity will experience increasing adverse impacts on health, such as from infectious and heat-related diseases, malnutrition, mental health issues and displacement. Whole areas may become uninhabitable in the future – be it from heat, sea level rise or droughts – forcing people into migration, poverty and insecurity.

Disease prevention is an integral part of UHC, and many of the actions it demands need to be ensured, initiated or promoted by the health sector. This means that much of the required action for healthier environments is also an integral part of UHC.

The links between UHC, health systems, and the environment, climate change and health are numerous and include important synergies. The most pressing ECH issues urgently need to be addressed, in order to ensure adequate UHC for the future and a continuing and proper functioning of health systems. As climate change is causing more and more death and disease, with projections for increased health impacts in the future, health systems need to become increasingly resilient – particularly during adverse climate events which are likely to become much more frequent.

One of the most basic requirements for adequate health care is basic environmental services. This includes the provision of safe and adequate water, sanitation and hygiene services, waste management and a reliable energy supply. But even these most basic prerequisites are not available for billions of people around the world. In addition, the health and safety of the health workforce is not always ensured. This workforce is at high risk of disease and injury, and can only maintain proper health care if protected by at least the minimum occupational health standards and services, and essential occupational health interventions.

Finally, environmental health pressures, including those resulting from climate change, are greatest for the most vulnerable – who usually face the highest exposure to, for example, unsafe water and sanitation, inadequate hygiene, air pollution and chemical contaminants. At the same time, these groups are often at higher risk of ill health due to the simultaneous occurrence of multiple health risks. Reducing these pressures will therefore reduce disease in the most vulnerable. Vulnerable populations living in resource-constrained settings, and those most at risk of being pushed into poverty as a result of out-of-pocket expenditures on health care, will benefit most from environmental health interventions – particularly where the social and economic toll of environment-related diseases is avoided or ameliorated.

Key actions and policy recommendations

- Interventions for healthier environments are readily available and should be implemented as a priority to harness synergies between UHC and ECH. These interventions are listed in the Compendium of WHO and other UN guidance on health and environment (2), which points to nearly 200 policy actions and best practices that are relevant to achieving UHC (see column “Level of implementation” in guidance tables).
- As climate change progresses, health systems and health care facilities need to become increasingly resilient in order to continue to fulfil their mission. They must also prepare for an additional, environmental-related disease burden in the future; for example, increased infectious diseases, mental health conditions and malnutrition.
- Health care facilities should all be equipped with the most basic of services. Specific actions for ensuring basic services, such as a safe water supply and sanitation, adequate waste management, a reliable and sustainable energy supply, and a healthy workforce, are set out in a dedicated section of the Compendium (2).
- The provision of health care should not generate unintended environmental threats to health (e.g. chemical or biological releases from health care waste) and health facilities should be able to remain functionally operational in emergencies (e.g. powered by renewable energy and provided with a reliable source of clean water).
- The health sector should lead by example and move towards greater environmental sustainability. The health sector is energy- and resource-intensive: at present, it contributes a substantial fraction of total greenhouse gas emissions and global waste generation, including of hazardous waste, thereby contributing to the cause of environment-related disease.
- Many countries have already committed to becoming carbon neutral in the framework of COP26 health commitments.ⁱ Other countries should follow suit on this.

References and resources

1. Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks. Geneva: World Health Organization; 2016. <https://www.who.int/publications/i/item/9789241565196>, accessed 14 October 2022.
2. Compendium of WHO and other UN guidance on health and environment. Geneva: World Health Organization; 2022. <https://www.who.int/tools/compendium-on-health-and-environment>, accessed 14 October 2022.

i. <https://www.who.int/initiatives/alliance-for-transformative-action-on-climate-and-health/country-commitments>

