

UCL–Lancet Commission of Managing the Health Effects of Climate Change: Key Messages

Core

1. One of the world's leading universities and the world's foremost medical journal have joined forces to address the greatest potential health threat of our time – climate change. They find that:

- climate change is the biggest global health threat of the 21st century
- recent scientific findings on greenhouse gas emissions, global temperature, sea-level rise, ice sheets, ocean acidification and extreme climatic events suggest that the 2007 climate forecasts by the Intergovernmental Panel on Climate Change (IPCC) may be too conservative
- the UK government target, to limit global warming to a relatively safe level of 2 degrees, is unlikely to be achieved. Temperature rises above 2 degrees will increase the level of climate disruption through the 21st century and might lead to abrupt, severe and irreversible changes in climate.

2. Climate change will have devastating consequences for human health from:

- changing patterns of infections and insect-borne diseases, and increased deaths due to heat waves
- reduced water and food security, leading to malnutrition and diarrhoeal disease
- an increase in the frequency and magnitude of extreme climate events (hurricanes, cyclones, storm surges) causing flooding and direct injury
- increasing vulnerability for those living in urban slums and where shelter and human settlements are poor
- large scale population migration and the likelihood of civil unrest .

3. Climate change will affect all countries, but will have the greatest impact on those who have the least access to the world's resources and who have contributed least to carbon emissions. This is a gross injustice – and will prove to be a source of historical shame to our generation if nothing is done to address it. It will also have increasingly adverse health effects on our children and grandchildren, an issue of “intergenerational injustice”.

4. The health consequences for our children and grandchildren should be a catalyst for urgent action on greenhouse gas emissions, reforestation and adaptation efforts now. The report identifies five key challenges to be addressed if we are to successfully manage the health impacts of climate change. We need:

- more information at global, national and local levels

- an accelerated drive to address poverty and equity
- new technological approaches to food and water security, prevention of disease, better buildings and reducing vulnerability in poor communities
- stronger engagement by all individuals in the social and political aspects of moving to low-carbon living
- greater co-ordination and accountability of efforts to address the health effects of climate change by international institutions and governments.

5. There are major health benefits from low-carbon living with potential reductions in obesity, heart disease, diabetes and respiratory illnesses.

6. A new advocacy and public health movement is urgently needed, which frames the threat of climate change as a health issue for humankind, and which also seeks to drive the health benefits of low-carbon lifestyles. This should engage all academic and social disciplines, bringing together governments, international agencies, NGOs, communities and academics from every country.

7. The UCL–Lancet report calls for global expertise and representatives from across the world to come together to develop priorities for management, implementation and monitoring of the health effects of climate change. This process should lead to a formal review every two years to share experiences, and to monitor progress using agreed indicators and targets. Advocacy for greater resources and action in poorer countries will be a key element of this review process.

Supplementary

- Climate change adaption and mitigation must be made central to developmental policy. Health can play a crucial role in strengthening carbon mitigation debates and targets.
- Poorer communities need to be empowered to understand climate impacts and to take action – multidisciplinary groups of academics can play a key role in this process.
- Representation on global task forces to address the health impact of climate change is heavily skewed to Northern institutions and we must redress this balance.
- Climate change must be integrated into the entire discourse of today's age.
- Accountability mechanisms and indicators are crucial.
- Fragmented health systems must give way to more coherent, population-based and bottom-up health planning. Health systems must provide the foundation to an effective public health response.

- Moving to a low carbon economy could massively improve human health and lifestyle in both rich and poor countries.
- We must build low carbon and climate resilient cities in emerging economies.
- Three key priorities for action in urban areas are to improve the capacity and accountability of local and municipal government, to change their relationship to informal settlers, and to ensure that government policies encourage rather than hinder the contributions to adaptation made by individuals, community organisations and private enterprise.
- UCL is uniquely placed to help, with its strengths in academic disciplines spanning health, the social sciences and environmental sciences, as well as a commitment to innovative interdisciplinary enquiry.

Facts & Figures

- Despite improvements in health, 10 million children die every year, over 200 million children under five are not fulfilling their developmental potential, 800 million people go to bed every day hungry and 1500 million people do not have access to clean drinking water. Climate change has the potential to increase these figures very significantly.
- The Intergovernmental Panel on Climate Change (IPCC) state that evidence for global warming is unequivocal and there is very high confidence that the increase in global average temperatures since the mid-20th century is due to human activity.
- The level of pollution we have caused in one century is comparable to the natural variations which have taken tens of thousands of years.
- In the last 150 years, the 12 warmest years on record have occurred in the last 13.
- The carbon footprint of the poorest one billion people is around three per cent of the world's total footprint – yet these communities will be affected most by climate change.
- The loss of healthy life years as a result of global environmental change (including climate change) is predicted to be 500 times greater amongst poor African populations than amongst European populations.
- Half of the world's population could face severe food shortages by the end of the century as rising temperatures take their toll on farmers' crops. Declining crop yields could increase food insecurity greatly within the next two decades.
- One third of the world's population lives within 60 miles of a shoreline and thirteen of the world's twenty largest cities are located on a coast. If sea levels rise by up to 13m by the middle of the next century, as some scientists predict, more than a billion

people could be displaced in environmental mass migration. If tipping points cause more abrupt climate change, these effects could occur earlier.