

**UCL Lancet Commission on Managing the Health Effects of Climate Change: Selected quotes from 'The Lancet', 15 May 2009**

- Climate change is the biggest global health threat of the 21st century. (p1693 column 1)
- Effects of climate change on health will affect most populations in the next decades and put the lives and wellbeing of billions of people at increased risk. During this century, earth's average surface temperature rises are likely to exceed the safe threshold of 2°C above preindustrial average temperature. (p1693 col 1)
- While we must resolve the key issue of reliance on fossil fuels, we should acknowledge their contribution to huge improvements in global health and development over the past 100 years. (p1693 col 2)
- Management of the health effects of climate change will require inputs from all sectors of government and civil society, collaboration between many academic disciplines, and new ways of international cooperation that have hitherto eluded us. (p1693 col 2)
- Climate change also raises the issue of intergenerational justice. The inequity of climate change – with the rich causing most of the problem and the poor initially suffering most of the consequences – will prove to be a source of historical shame to our generation if nothing is done to address it. (p1694 col 1)
- Luxury emissions are different from survival emissions, which emphasises the need for a strategy of contraction and convergence, whereby rich countries rapidly reduce emissions and poor countries can increase emissions to achieve health and development gain, both having the same sustainable emissions per person. (p 1694 col 1)
- The biggest sociopolitical challenge affecting the success of climate change mitigation is the lifestyle of those living in rich nations and a small minority living in poor nations, which is neither sustainable nor equitable. (p1695 col 2)
- A step towards low-carbon living has health benefits that will improve quality of life by challenging diseases arising from affluent high-carbon societies – obesity, diabetes, and heart disease especially – and reducing the effects of air pollution. (p1696 col 1)
- Health professionals have come late to the climate change debate, but health concerns are crucial because they attract political attention. (p1696 col 2)
- The global financial crisis has stimulated governments of industrialised countries to talk about the so-called green new deal. (p1696 col 2)
- Even the most conservative estimates are profoundly disturbing and demand action. (p1697 col 1)
- The 12 warmest years on record within the past 150 years have been during the past 13 years: 1998 was the warmest, followed by 2005, 2002, 2003, and 2004. The IPCC states that the evidence for global warming is unequivocal and is believed to be due to human activity. (p1698 col 1)

- Currently, a third of the world's population lives within 60 miles of a shoreline and 13 of the world's 20 largest cities are located on a coast. More than a billion people could be displaced in environmental mass migration. (p1699 col 1)
- Estimates show that small increases in the risk for climate-sensitive conditions, such as diarrhoea and malnutrition, could result in very large increases in the total disease burden. (p1701 col 1)
- The carbon footprint of the poorest 1 billion people is around 3% of the world's total footprint; yet, these communities are affected the most by climate change. (p1701 col 2)
- Malaria, tick-borne encephalitis, and dengue fever will become increasingly widespread. (p1702 col 2)
- Half of the world's population could face severe food shortages by the end of the century because rising temperatures take their toll on farmers' crops. (p1704 col 2)
- Poverty reduction needs to be placed at the forefront of the debate on adapting human settlements to climate change. (p1705 col 2)
- 70% of natural disasters between 2004 and 2006 occurred in Asia, the Pacific region, Africa, and the Middle East, where most of the world's vulnerable and exposed populations reside. (p1706 col 2)
- By 2100 northeast India and Australia can expect summer temperatures to peak over 50°C, and the southwest, central west and southern Europe over 40°C. (p1706 col 2)
- The world population is likely to increase from the current 6.7 billion to 9.2 billion in 2050 ... and it will be absorbed mostly by the less developed regions, whose population is projected to rise from 5.4 billion in 2007 to 7.9 billion in 2050. (p1707 col 2)
- The World Bank has estimated that, by the end of the 21st century, the sea level in Bangladesh could rise by as much as 1.8m. In the worst-case scenario, they estimated that this would result in a loss of up to 16% of land supporting 13% of the population and producing 12% of the GDP. (p1712 col 1)
- Nobody doubts that efforts to adapt to the negative health effects of climate change will be expensive. (p1712 col 2)
- Because contraceptive use in a population is the major determinant of birth rate and hence population growth or decline, family planning is not just an adaptation to climatic change but also a mitigation strategy to achieve a sustainable population. (p1715 col 2) ... Worldwide, around 200 million women wish to delay or prevent pregnancy, but are not using effective contraception. Meeting their needs would cost about \$3.9 billion a year, and could prevent 23 million unplanned births, 22 million induced abortions, 142,000 pregnancy-related deaths (including 53,000 from unsafe abortions) and 1.4 million infant deaths. (p1718 col2)
- A major technological challenge is to develop new crops to withstand higher temperatures. (p1716 col 2)

- Climate has no respect for national borders or nation-specific government. Global governance will, therefore, be a central feature of any discussion of climate change and health. (p1719 col 1)
- As people migrate away from areas deteriorated by gradual warming or destroyed by extreme weather events, they not only place substantial demands on the ecosystems and social infrastructures into which they migrate, but also carry illnesses that emerge from shifts in infectious-disease vectors. (p1719 col2)
- Many hospital facilities in industrialised countries lack experience in managing malaria, and even infections or parasitic diseases that have emerged in previously cold climates (eg, dengue fever) are rarely well understood by practitioners. (p1719 col 2)
- Extreme weather events are not always handled well by rich nations. During hurricane Katrina, for example, many people were trapped in New Orleans (LA, USA) because the hurricane occurred at the end of a pay period when poor people had no money to pay for the bus fares. (p1719 col 2)
- Farmers use about three-quarters of the world's water supply: to grow 1kg of wheat requires around 1000L of water, whereas 1kg of beef takes as much as 15 000L. American or European diets require around 5000L of water per person every day, whereas African or Asian vegetarian diets use about 2000L per person every day. The social and political challenge of shifting dietary practices is enormous, especially as populations start to eat more meat as they climb out of poverty. (1720 col 2)
- Climate change will ... have an effect on psychosocial health. Increased spending on appropriate counselling or sympathetic health promotion, and the initiation of such services in poor countries, could be as important as planning to reduce new disease vectors. (p1721 col 1)
- Representation on global task forces to assess the health effects of climate change is heavily skewed in favour of institutions of developed countries. (p1722 col 2)
- Responsibility for climate change is mainly of rich nations and, although the negative public health effects of climate change will not be confined to poor nations, they will be worse there, both in absolute terms and in terms of relative capacity to cope. (p1723 col 1)
- The UK Government energy policy to cut greenhouse gas emissions by 80% by 2050, to increase the use of renewable energies, and to ensure that every home is adequately and affordably heated will increase the achievement of policy objectives in the departments of agriculture, transport, and health. (p1723 col 2)
- A shift in the way in which humanitarian emergencies are dealt with needs to be accelerated. The response still often comes in the form of food aid, which undermines long-term food security in famine-prone regions. (p1724 col 1)
- Only a few countries (such as Netherlands) have seriously initiated any activities related to adaptation to climate change. (p1725 col 1) ... Island states such as Vanuatu have started adaptation policies with a priority on evacuation of the population because they lack the resources to adapt. (p1726 col 2)

- Climate change mitigation and adaptation are essential elements to overall development policy. They are not separate issues that can be divided from the agenda for poverty alleviation or for closing the gap on social inequalities and health. (p1728 col 1)
- The most urgent need is to empower poor countries, and local government and local communities everywhere, to understand climate implications and to take action. (p1728 col 1)
- Accountability mechanisms are crucial. (p1728 col 2)
- Joint statements from national institutes of medicine, representative bodies such as royal colleges, journal editors, organisations such as the Climate and Health Council, and university leaders worldwide, drawing upon a growing evidence base, can create a solidarity and authority that politicians will find hard to resist. (p1728 col 2)
- We call for a collation of global expertise on the health effects of climate change leading up to a major conference within the next 2 years, which will define the priorities for management, implementation, and monitoring. Representation from developing countries should be emphasised. (p1729 col 2)