The Public Health Problem of the Century

By John Steen

A new report by an interdisciplinary team of academics in the U.K., "Managing the health effects of climate change," *The Lancet UCL*, Vol. 373: 693-733, May 16, 2009, may be accessed at http://download.thelancet.com/flatcontentassets/pdfs/climate-article.pdf (41 pp). Representing a year of research, it finds that the cumulative effects of climate change represent the greatest threat to human health throughout the world. The report is a collaborative effort among research teams from health, anthropology, geography, engineering, political science, economics, law, and philosophy. Its lead author is Anthony Costello, a pediatrician who is Professor of International Child Health and Director of the Institute for Global Health at University College London.

The challenge is unprecedented, and one that needs to be seen as the greatest public health issue, as well as an environmental issue, but their report is written in a strong spirit of moral engagement too, and raises the issue of intergenerational justice. The authors state that the health community has yet to be heard from on the multiple impacts of greenhouse gas emissions and deforestation on human health, the extreme geographic and socio-economic disparity of those impacts, and how adaptation to low-carbon lifestyles will reduce obesity, heart and lung disease, diabetes, and stress as well as ameliorate those impacts. They call for a new public health movement to deal with climate change, one that makes the general public aware of the benefits of adapting to it as well as the costs to all nations of not doing so. The authors propose that a coalition of health experts set priorities for management, implementation, and monitoring of the health effects of climate change within two years.

A related editorial in the *The Lancet* calls for "a new public health advocacy movement... to usher in an unprecedented era of cooperation between widely divergent, but utterly connected, spheres—disease, food, water and sanitation, shelter and settlements, extreme events, and population and migration."

The Four Horsemen of the Apocalypse

Described in the Bible's Book of Revelation as Pestilence, War, Famine, and Death, they symbolize exactly what is to be expected from unmitigated climate change. Due to deaths caused by heart disease, diarrhea, malaria, malnutrition, and injury from coastal flooding and landslides all resulting from climate change, the world's population lost 5.5 million years due to premature death and quality of life reduced by disability in 2000, the most recent year the calculation was made. Identifying where those effects disproportionately occurred further highlights the "massive inequality in health systems."

In April, Oxfam issued a report³ on this in which it stated that 250 million people a year are currently being adversely affected by climate change-related disasters and that the number would rise to 375 million by 2015.

For our own Environmental Protection Agency's take on this, go to: http://www.epa.gov/climatechange/.

¹ Accessible at http://download.thelancet.com/flatcontentassets/pdfs/climate-editorial.pdf.

² For example, the loss of healthy life-years as a result of climate change is predicted to be 500 times higher in Africa, a continent that makes minimal contributions to exacerbate climate change, than in European nations.

³ The Right to Survive: The humanitarian challenge for the 21st century. Accessible at: http://www.oxfam.org.uk/resources/papers/right-to-survive.html.