

November 27, 2007

BY EMAIL AND FACSIMILE TRANSMISSION

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Dear Administrator Johnson:

As climate scientists, physicians and public health professionals, we write this letter to highlight the threat to health posed by climate change and respectfully request that you act in accordance with this threat and find that anthropogenic greenhouse gas emissions endanger human health and welfare. We also respectfully ask that you include this letter and the studies referenced herein as part of the administrative record for your decisions implementing the Supreme Court's remand in *Massachusetts v. EPA*.

The 4th Intergovernmental Panel on Climate Change (IPCC) report states that warming of the earth over the past century is "unequivocal" and that most of the warming can be attributed to humans with a greater than 90% level of certainty. Current estimates project that global temperatures will increase by 1.1 to 6.4 degrees Celsius by 2100, and sea levels may rise 0.18 to 0.59 meters or more this century depending on ice sheet dynamics¹. It must be noted that reports from this Nobel Prize-winning scientific body go through multiple layers of peer and governmental review, and thus they represent conservative, mainstream scientific viewpoints. Indications that changes in both the Greenland and West Antarctic ice sheets are occurring more rapidly than anticipated suggest that some numerical projections of the IPCC regarding ice sheet mass balance may have been too conservative.

Public health impacts associated with current projections of global warming and related increases in climate variability include²:

- increases in heat related morbidity and mortality,^{3,4,5,6}
- the health consequences of increases in the intensity of strong typhoons, hurricanes, floods, and other extreme weather events,^{7,8,9}
- changes in the intensity and range of a variety of infectious diseases,^{10,11,12,13,14,15}

- respiratory and cardiovascular illness and deaths associated with increases in ozone air pollution related to higher ambient temperatures^{16,17}, and
- food insecurity in some regions from reduced agricultural and fisheries productivity and associated scarcity or higher costs^{18,19}

Health consequences of these problems are already being felt around the world; the World Health Organization has estimated that over 150,000 deaths in the year 2000 were attributable to the climate change that had already occurred during 1970-2000.²⁰ Because of the long residence time of anthropogenic greenhouse gases already in the atmosphere, the Earth is now committed to decades of increasingly severe climate change. These adverse health impacts are therefore extremely likely to increase in geographic range, severity and frequency in most parts of the world.

Excess mortality and morbidity from extreme heat, hurricanes, flooding, food insecurity, drinking water contaminated by storm water overflows, and increased ozone air pollution are current public health problems in the United States. Outbreaks of infectious diseases related to mosquito vectors and ecosystem disruption are also current health threats in this country. The climate change to which Earth is already committed is expected to make these public health problems more difficult to control in many parts of the United States.

It is clear to the scientific community that ongoing emissions of greenhouse gases into the atmosphere constitute a severe threat to human health and welfare both within the United States and for other nations.

We therefore respectfully request that you make an affirmative finding about human health and welfare endangerment due to greenhouse gases. It is critical that the Environmental Protection Agency be guided by science and the imperative to protect human health and the environment from global warming pollution in carrying out its Clean Air Act responsibilities under the Supreme Court's historic decision in *Massachusetts v. EPA*.

Sincerely,

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