

Epstein (1999): Changes in weather affect human health. For example, high rainfall is connected with increased outbreaks of diseases such as cholera, malaria and Rift Valley fever. Early warning systems should be established to predict outbreaks in order to enact prevention measures. Global climate change may have a profound impact on health and food security, and measures should be taken to reduce human actions currently contributing to climate change.

Epstein (2005): This article documents the many climatological changes that have taken place in recent years and some of their current and projected impacts. Not only are some changes, such as the melting of Greenland, occurring much more rapidly than previously predicted, but evidence shows that climatological changes have sometimes taken place very rapidly in the past. Additionally, there has been a huge amount of variability as well as what appears to be more “outlier” events. These outliers are extreme events that have the potential to cause huge loss of life. Climate change may result in a number of different outcomes that are difficult to predict, with a number of plausible outcomes put forth by scientists. Reducing global greenhouse gas emissions may help to limit some of the effects or slow the climate change.

Walker et al (2005): Unfortunately, past trends show that pledges from governments for disaster recovery are usually only partially fulfilled. Current mechanisms of counting donations typically undercount funds from certain parties, including the general public. Governments pushed private citizens to increase donations during recovery from the recent tsunami instead of being more generous themselves. They should not be allowed to shift responsibility like this. Funding and reconstruction must be done so as to increase disaster prevention and preparedness mechanisms, particularly since the number of disasters is increasing. The authors recommend that UN humanitarian organizations be funded by assessed contributions from member states to provide a minimum level of funding in order to provide continuity; that a new system for tracking pledges to ensure the money is given should be established; and that disaster prevention measures be taken into account in all development projects.

Epstein (2000): Expands on his 1999 paper, particularly relating to mosquito-borne diseases as well as to potential solutions and the global importance of the topic.

Reaction (Epstein 2000): What potentially confounding variables are considered in the models showing that mosquitoes are now existing at higher altitudes due to climate change? I see that Andy Spielman is listed as a co-author of a paper the reader is directed to for more information. Spielman has recently written some papers showing how this intrusion of mosquitoes and malaria into higher altitudes is due to the spread of agriculture, specifically certain types of maize, into higher altitudes than ever before. Are these two separate theories or have they been integrated? Although I do believe there are many reasons we should mitigate our effects on the environment, including actions to prevent climate change, it is very difficult to predict the true consequences that climate change will have. It is difficult, if not impossible, to control for all of the factors involved. However, countries that (at least currently) are malaria-free place very little importance on the development of vaccines or new treatments for this and many other vector-borne diseases. Perhaps the fear of or increasing incidence of these diseases in rich countries will promote funding for combating them. Finally, I would like to understand why the largest temperature increases are seen in coolest seasons/locations (nights, winters and highest latitudes).