



## Letters

# What author really said about malaria and climate change

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EDITOR—I am writing to correct an error in a quotation attributed to me in a News article and to clarify my remarks.<sup>1</sup> Malaria is of course a vector-borne disease, not an airborne disease. Vector-borne diseases are sensitive to climatic factors such as temperature and precipitation. The distribution of a particular vector-borne disease, however, depends on a range of factors, including the biology of the local vector species, the local environment, and the effectiveness of vector control programmes.

In many countries that are free of malaria and have a well developed public health infrastructure, the risk of sustained transmission of malaria with the reintroduction of the disease is low. Where malaria control programmes are ineffective, however, the spread of malaria may occur at the latitudinal or altitudinal edge of distribution (for example, in mountainous regions in Africa).

In the United Kingdom malaria seems to have been an important cause of death between the 16th and 19th centuries in communities living close to brackish marshes (for example, in the fens or the Thames estuary). It declined progressively from the 1820s onwards because of several factors, including improved housing, drainage of marshes, and wider availability of quinine.<sup>2</sup> Cooler summers in the 1800s may also have played a part.<sup>3</sup>

Climate change is unlikely to result in malaria becoming a substantial health problem in the United Kingdom, although the possibility of small outbreaks cannot be excluded. Travellers' malaria might pose an increased threat if British residents were to visit areas of the world affected by a changing distribution of malaria owing to climate change. Effective treatment of such cases, however, should ensure that a reservoir of parasites able to infect mosquitoes is not left in the community.



### Rapid responses

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The potentially wide ranging health impacts and methodological difficulties in developing quantitative estimates will be described in some detail in the forthcoming report by Working Group II of the

Intergovernmental Panel on Climate Change. Given the potentially substantial increases in global mean temperature over the next century,<sup>4</sup> uncertainties about the magnitude of health impacts should not be used as a reason for inaction. Major reductions in use of fossil fuels and increases in energy derived from renewable sources will be needed to reduce the rate and magnitude of the increase in temperature and improve the opportunities for populations to adapt to changes in climate.

## References

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