



## Letters

# Deficiencies in disaster funding

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## Malaria epidemics are predicted in tsunami regions from El Niño conditions

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EDITOR—Walker et al describe the deficiencies in disaster funding.<sup>1</sup> The association between the El Niño southern oscillation and health has been documented extensively, and it is now possible to predict these events with increasing accuracy. The National Oceanic and Atmospheric Administration concluded in late 2004 that El Niño conditions have developed and are expected to last through early 2005.<sup>2</sup> Expected impacts included drier than average conditions over Indonesia and northern Australia until February 2005,<sup>2</sup> followed by a period of raised temperatures.

An association between El Niño and malaria epidemics has been predicted for Papua New Guinea and West Papua, Indonesia.<sup>3 4</sup> Historical records indicate that highland malaria epidemics in Papua follow periods of drought, evident during 1997-8 when a widespread epidemic affected many highland villages, some with extremely high death rates owing to lack of immunity and complete absence of treatment.<sup>3 5</sup> Highland epidemics often exhibited two peaks: one towards the end of the drought resulting from increased vector breeding, and one four to six months later, when increased temperatures shortened the sporogonic cycle.

Humanitarian attention is rightfully directed towards aiding victims of the tsunami in the region, but in the light of such a massive effort, possible events of seemingly lesser importance are often neglected. In view of the risk of focal epidemics in drought affected areas, it would be advantageous if healthcare professionals in the Papuan highlands were vigilant for possible malaria epidemics and had preventive or curative resources at their disposal.

## Footnotes

- Competing interests None declared.

## References

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