

# Predictive model developed for polio

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Using outbreak data from 2003-2010, Kathleen O'Reilly of Imperial College London, UK and colleagues develop a statistical model of the spread of wild polioviruses in Africa that can predict polio outbreaks six months in advance. The authors' findings, published in this week's *PLoS Medicine*, indicate that outbreaks of polio in Africa over the study period resulted mainly from continued transmission in Nigeria and other countries that reported polio cases, and from poor immunization status.

The authors highlight how the geographical risk of polio is changing over time in Africa, saying "As the incidence of polio in Nigeria has remained very low in 2010 and 2011, there may be a unique opportunity to eliminate polio from Africa in the near-term through targeted vaccination informed by appropriate [predictive models](#)."

**More information:** O'Reilly KM, Chauvin C, Aylward RB, Maher C, Okiror S, et al. (2011) A Statistical Model of the International Spread of Wild Poliovirus in Africa Used to Predict and Prevent Outbreaks. *PLoS Med* 8(10): e1001109. [doi:10.1371/journal.pmed.1001109](https://doi.org/10.1371/journal.pmed.1001109)

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