

## Zika Virus, French Polynesia, South Pacific, 2013

**To the Editor:** We wish to clarify an inaccuracy in a letter in *Emerging Infectious Diseases* by Cao-Lormeau et al. (1). The authors state “In 2007, the first ZIKV outbreak reported outside Africa and Asia was retrospectively documented from biological samples from patients on Yap Island, Federated States of Micronesia, North Pacific, who had received an incorrect diagnosis of dengue virus (DENV).” Although the first outbreak of Zika virus (ZIKV) infection reported outside Africa or Asia was in Yap, it was not retrospectively identified from serum samples incorrectly diagnosed as positive for dengue virus. The outbreak was first identified by the Yap State Department of Health Services, and an investigation to determine the etiologic agent was initiated.

Although dengue was initially part of the differential diagnosis, and a few patients had evidence of IgM against dengue virus by a rapid diagnostic test, clinicians in Yap believed that the clinical syndrome was not consistent with dengue. Thus, assistance was requested from the US Centers for Disease Control and Prevention and the World Health Organization to strengthen the epidemiologic investigation and provide confirmatory laboratory testing.

Serum samples collected during the active investigation were sent to the Arboviral Diseases Diagnostic Laboratory at the Centers for Disease Control and Prevention where testing determined that the cause of the infections was ZIKV (2). This discovery of ZIKV as the etiologic agent was not achieved through retrospective testing of serum from patients incorrectly diagnosed as having dengue, but rather the result of an active, coordinated investigation by the Yap State Department of Health Services with instrumental assistance from international partners.

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**In Response:** I want to respond to the letter by Hancock et al. (1) regarding the previously published letter, Zika Virus, French Polynesia, South Pacific, 2013 (2). My comment aims to clarify an inaccuracy in the following sentence. “In 2007, the first Zika outbreak ever reported outside Africa and Asia was retrospectively documented from biological samples of patients on Yap Island, Federated States of Micronesia, North Pacific, who had received an incorrect diagnosis of dengue virus (DENV)” (2).

I recognize that this sentence does not provide an accurate description of the efforts in Yap State to investigate the outbreak and further confirm that it was caused by Zika virus (ZIKV). As specified in the article by Lanciotti et al. (3), outbreak investigations continued although initial laboratory testing suggested dengue virus as the causative agent: “In April 2007, an epidemic of rash, conjunctivitis, and arthralgia was noted by physicians in Yap State, Federated States of Micronesia. Laboratory testing with a rapid

assay suggested that a dengue virus (DENV) was the causative agent. In June 2007, samples were sent for confirmatory testing to the Arbovirus Diagnostic Laboratory at the Centers for Disease Control and Prevention (CDC, Fort Collins, CO, USA).”

I apologize to the Yap EpiNet Team for this inaccuracy, and I encourage the reader to consult the articles by Lanciotti et al. (3) and Duffy et al. (4) to get a complete description of the clinical and laboratory investigations conducted during the ZIKV outbreak in Yap State. If data and laboratory protocols (reverse transcription PCR) related to this first ZIKV outbreak in the Pacific had not been available to the scientific community, identification of ZIKV as the cause of an outbreak in French Polynesia in 2013 would have been greatly delayed.

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