

# US researchers hopeful for dengue vaccine

February 17 2011

---

Promising advances have been made in the testing of possible vaccines to prevent the mosquito-borne dengue virus, which kills 25,000 people every year, researchers said Thursday.

"We have some very exciting leads on different types of vaccines that are in various stages of clinical trial that hopefully can be implemented with a reasonable period of time," said Anthony Fauci, director of the [infectious diseases](#) division of the US National Institutes of Health (NIH).

Regional health researchers met Thursday in the Puerto Rican capital to discuss progress and treatment of [dengue](#), which is transmitted to humans by the female Aedes mosquitoes.

Dengue causes a severe flu-like illness for most victims that lasts about a week. There are four strains, one of which is a potentially lethal type.

Dengue has reemerged in recent years as a serious public health threat in tropical regions.

It killed 1,167 people in [Latin America](#) last year. Puerto Rico recorded the largest outbreak in its history with 21,000 cases last year, according to the US Centers for Disease Control. There were 69 cases in the Key West section of the US state of Florida in 2010.

The Philippines recorded more than 730 deaths and Malaysia 134 in 2010, according to figures from the [World Health Organization](#), while

India experienced a 20-year high in infections.

Harold Margolis, director of the CDC's dengue center, said he's hopeful that a [vaccine](#) would soon be available.

"There's been tremendous progress," he said. "There are a number of vaccines that are now in clinical trials and there's now very exciting information there, so we are finally getting (into the last process) but it can take a while."

Fauci, from the NIH, added: "We need a better understanding of the relationship between the [dengue virus](#) and the vector, mainly the mosquito."

Meanwhile, surveillance is vital.

"The important factor is how good our surveillance is to pick up the disease," Margolis said. "I think right now we know where it is and now we need to be creative with the new tools and research to try to make sure that doesn't go any further."

The infectious diseases division of the NIH spent \$45 million in dengue research last year, up from \$5 million in 2000.

One theory for the resurgence is global warming, allowing the mosquitoes, and hence dengue fever, to spread.

Drought conditions in some areas also have worsened the outbreak because people have stored water in and near their living areas, creating breeding grounds for [mosquitoes](#) that harbor the virus.

Authorities in Sri Lanka were so concerned about dengue last year that they introduced heavy fines for people with standing water on their

property, and deployed troops to clean up public places.

The three-day summit in Puerto Rico was hosted by NIH, CDC and the Pan American Health Organization.

(c) 2011 AFP

Citation: US researchers hopeful for dengue vaccine (2011, February 17) retrieved 18 April 2024 from <https://medicalxpress.com/news/2011-02-dengue-vaccine.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.