

Puerto Rico declares dengue epidemic as cases climb

March 28 2024, by Robin Foster



Puerto Rico has declared a dengue epidemic following a surge in cases of the mosquito-borne disease in the U.S. territory.

In total, there have been 549 cases, including 341 hospitalizations and 29 severe cases, reported since the start of the year, the most recent data from the Puerto Rico Department shows. Cases are concentrated in the cities of San Juan, Bayamon, Guaynabo and Carolina, the Washington Post reported.

Dr. Albert Ko, an infectious disease expert and epidemiologist at the Yale School of Public Health, told the Post the jump in cases is unusual because transmission of the virus in the drier months of winter is typically low.

"The fact that it's happening now is really kind of a heads up, a [warning sign](#) for us... We're having introductions of the virus by people traveling, and we're seeing these outbreaks in Puerto Rico that are out of the season, which are really unusual," Ko noted.

Still, dengue is not a new problem for Puerto Rico: Between 2010 and 2020, [more than 30,000 dengue cases](#) were reported from four U.S. territories, with Puerto Rico reporting the most.

Meanwhile, the U.S. Centers for Disease Control and Prevention told the *Post* that it is helping the Puerto Rico Department of Health and the Puerto Rico Vector Control Unit with tracking and curbing the outbreak.

For its part, the Puerto Rico Department of Health said it is working to enhance surveillance, laboratory testing, vector control and outreach interventions.

"We work on a community-based strategy approach. ... Those interventions can [include]: [educational materials](#), field visits to identify environmental health risks, coordination with municipalities to eliminate potential mosquitoes breeding sites and applications of larvicides or adulticides," Melissa Marzán, chief epidemiologist officer of the Puerto

Rico Department of Health, told the Post.

Dengue, a disease that is most common in tropical and subtropical climates, can cause [high fever](#), severe headache, joint and muscle pain, rash and, in severe cases, death.

According to the [CDC](#), about 1 in 4 people who get infected with dengue develop symptoms, and 1 in 20 people who get sick from the virus suffer severe illness. Infants, [older adults](#) and those who are pregnant or immunocompromised have a greater risk of developing severe disease.

Public health experts say surges like the latest one in Puerto Rico are likely to become more common because of [climate change](#) and the fact that diseases are spreading more because of increased travel worldwide.

"A good example is what we experienced during Zika, also transmitted by the same mosquito [*Aedes aegypti*] when infections in travelers spread the virus quickly across the Americas," Ko noted.

There are no antiviral medications to treat dengue. Instead, treatment involves ibuprofen, acetaminophen and other nonsteroidal anti-inflammatory drugs (NSAIDs).

Luckily, there are two vaccines that can tackle dengue: One is Dengvaxia, developed by Sanofi, while the other is Dengue Tetravalent Vaccine, developed by Takeda Pharmaceuticals. Both shots provide protection against all four dengue virus serotypes, the Post reported.

Dengvaxia is the only vaccine approved for children ages 9 to 16. But children must have proof of a prior infection before getting the shot.

Why?

Ko said that for people who have never been exposed to dengue and get the vaccine, it has been shown they have a higher risk of developing severe dengue if they become infected.

There is "incomplete protection against the four serotypes [some more than others], so the problem is when breakthrough infections occur, there is an increased risk of severe outcomes such as hospitalizations in those who weren't exposed previously to [dengue](#)," Ko explained.

More information: Visit the U.S. Centers for Disease Control and Prevention for more on [dengue](#).

© 2024 [HealthDay](#). All rights reserved.

Citation: Puerto Rico declares dengue epidemic as cases climb (2024, March 28) retrieved 28 April 2024 from <https://medicalxpress.com/news/2024-03-puerto-rico-declares-dengue-epidemic.html>

<p>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.</p>
--