



Ixchiq Vaccine for Chikungunya

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Why in News?

Recently, the **Food and Drug Administration (FDA) in the United States** approved the world's inaugural vaccine for [chikungunya](#).

- This novel vaccine, named **Ixchiq** and developed by **European vaccine manufacturer Valneva**, marks a significant leap in combating the **chikungunya virus (CHIKV)**.

What are the Key Features of Ixchiq Vaccine?

- It is administered as a single dose via injection into the muscle. It contains a **live, weakened version of the chikungunya virus**, potentially causing symptoms akin to the disease in vaccine recipients.
- The vaccine has been approved for administration **in people who are 18 years or older**, and are at increased risk of exposure to the virus.

What is Chikungunya?

- **About:** Chikungunya is a **mosquito-borne viral disease**. It was **first recognized in 1952** during an outbreak in southern Tanzania.
 - It is a [ribonucleic acid \(RNA\) virus](#) that belongs to the **alphavirus genus of the family Togaviridae**.
- **Symptoms:** Chikungunya causes **fever and severe joint pain**, which is often debilitating and varies in duration.
 - **Dengue and Zika have similar symptoms to chikungunya**, making chikungunya easy to misdiagnose.

Note: The term "**chikungunya**" **originates from the Kimakonde language** (spoken by the Makonde people, an ethnic group of Tanzania and Mozambique), translating to "**to become contorted**," illustrating the stooped posture of individuals experiencing severe joint pain.

- **Transmission: Chikungunya is transmitted to humans by the bites of infected female mosquitoes.**
 - Most commonly, the mosquitoes involved are [Aedes aegypti](#) and *Aedes albopictus*.
 - These two species can also transmit other mosquito-borne viruses, including dengue.
 - They bite throughout daylight hours, although there may be peaks of activity in the early morning and late afternoon.
- **Prevalence:** According to WHO, It is prevalent in **Africa, Asia, and the Americas**; but sporadic outbreaks have been reported in other regions.
- **Treatment Options:** Presently, there is **no cure for chikungunya, with symptomatic relief** being the primary approach. Treatment involves the use of **analgesics, antipyretics, rest, and adequate fluid intake**.
- **Prevention Strategies: Prevention primarily revolves around mosquito control**

activities, including public health outreach, civic maintenance, use of medicated mosquito nets, and eliminating water stagnation to prevent mosquito breeding.

- Related Indian Government Initiatives:
 - The [National Vector Borne Disease Control Programme \(NVBDCP\)](#) is an umbrella programme for prevention and control of vector borne diseases (VBDs), viz., Malaria, Lymphatic Filariasis, Kala-azar, [Dengue](#), [Chikungunya](#) and [Japanese Encephalitis \(JE\)](#).

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q.1 Consider the following statements: (2017)

1. In tropical regions, Zika virus disease is transmitted by the same mosquito that transmits dengue.
2. Sexual transmission of Zika virus disease is possible.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: (c)

Q.2 'Wolbachia method' is sometimes talked about with reference to which one of the following? (2023)

- (a) Controlling the viral diseases spread by mosquitoes
- (b) Converting crop residues into packing material
- (c) Producing biodegradable plastics
- (d) Producing biochar from thermo-chemical conversion of biomass

Ans: (a)