

**Chikungunya: A crippling virus hits Karachi, Sindh**

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Madam, Hundreds of people started falling sick with high-grade fever and joints pain in Malir's Khokhrapar locality. After ruling out dengue, malaria and enteric fever, doctors suspected that it could be an epidemic of the Chikungunya virus. Blood samples collected from three of the five patients undergoing treatment at the Sindh Government Hospital Saudabad were dispatched to the NIH. National Institute of Health Islamabad has confirmed that three of the five samples sent from Sindh Government Hospital Saudabad are infected with Chikungunya virus.<sup>1</sup>

The viral disease spread widely in Karachi's Malir district, affecting as many as around 20,000-30,000 victims, according to various conflicting reports.<sup>2</sup>

Chikungunya is a mosquito-borne viral disease, first described during an outbreak in southern Tanzania in 1952. It is an RNA virus that belongs to the alphavirus genus of the family Togaviridae. The virus is transmitted from human to human by the bites of infected female mosquitoes. Most commonly, the mosquitoes involved are *Aedes aegypti* and *Aedes albopictus*, two species which can also transmit other mosquito-borne viruses, including dengue.<sup>3</sup>

In the past few years, a series of outbreaks have been reported over a large geographical area that includes African islands in the Indian Ocean and the Indian subcontinent. The first of the outbreaks occurred in Kenya in 2004, followed by outbreaks on the Comoros Islands, the island of La Réunion, and other islands in the southwest Indian Ocean in early 2005, and by a large outbreak in India in 2005-06.<sup>4</sup>

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A classical triad of signs for CHIKV infection from every documented epidemic includes fever, arthralgia and a rash that may or may not be accompanied by other indicators of the disease. CHIKV illness typically begins with a sudden onset of fever reaching as high as 104°F. In past outbreaks, cases of febrile convulsions in young children were also reported. The non-pruritic rash is typically maculopapular and erythematous in character, is visible starting 2-5 days post infection, may last up to 10 days. The arthralgia is most commonly symmetrical and peripheral being noted in the ankles, toes, fingers, elbows, wrists and knees. The joints exhibit extreme tenderness and swelling with patients frequently reporting incapacitating pain that lasts for weeks or months.<sup>5</sup>

Serological tests, such as enzyme-linked immunosorbent assays (ELISA), may confirm the presence of IgM and IgG anti-chikungunya antibodies. Treatment is directed primarily at relieving the symptoms, including the joint pain using anti-pyretics, optimal analgesics and fluids. There is no commercial chikungunya vaccine. WHO encourages countries to develop and maintain the capacity to detect and confirm cases, manage patients and implement social communication strategies to reduce the presence of the mosquito vectors.<sup>3</sup>

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