Risk of Chikungunya Epidemic

***Prelims**: Current events of National & International importance and General Science.*

Why in News?

Recently, the World Health Organization warned that a major chikungunya virus epidemic risks sweeping around the globe, calling for urgent action to prevent it.

- **Earlier major outbreak –** Chikungunya epidemic swept across the Indian Ocean, hit small island territories before spreading globally and affecting almost half a million people, in 2004-05.
- **Recent major chikungunya outbreaks -** Since the beginning of 2025, Reunion, Mayotte, and Mauritius have all reported One-third of the population of Reunion is estimated to have been infected.
- It is spreading to countries like Europe, Italy, France, Madagascar, Somalia, Kenya, and South Asia.
- **Chikungunya –** It is a ***mosquito-borne viral disease*** that causes fever and severe joint pain, which is often debilitating.
- **Nomenclature** - The name derives from the Kimakonde language of southern Tanzania, meaning “that which bends up” and describes the contorted posture of infected people with severe joint pain.
- **Transmission -** It is ***transmitted to humans*** by the bites of infected female mosquitoes, most commonly Aedes aegypti and Aedes albopictus mosquitoes, known as the ***tiger mosquito***
- It is venturing farther north as the world warms because of human-driven climate change.
- Bite primarily during daylight hours, *with peak activity often in the early morning and late afternoon.*
- **Symptoms -** It causes fever and severe joint pain, which is often debilitating and may be prolonged.
- **Other symptoms -** Joint swelling, muscle pain, headache, nausea, fatigue, and rash.
- **Diagnostics -** Detected directly in blood samples collected during the first week of illness using tests such as reverse transcriptase–polymerase chain reaction (RT–PCR).
- **Treatment and vaccines -** There is no specific antiviral drug treatment for CHIKV infections.
- The clinical management includes addressing fever and joint pain with anti-pyretic and optimal analgesics, drinking plenty of fluids, and general rest.
- **Diagnosis issues -** According to the WHO, the symptoms of chikungunya are similar to those of dengue fever and Zika virus disease, making it difficult to diagnose.

- **Fatality rate -** Less than 1 % but counts thousands of deaths in a million cases.
- **Vulnerability -** Populations have little or no immunity, and the virus can quickly cause significant epidemics, affecting up to three-quarters of the population.
- **Prevention -** Control of the mosquito vectors and reduction of mosquito breeding sites.
    - Reducing mosquito breeding sites through emptying and cleaning containers that contain water weekly.
    - Disposing of waste and supporting local mosquito control programmes.

Reference

The Hindu| Alarm on Risk of Chikungunya Epidemic

