



# Chikungunya: background and global overview

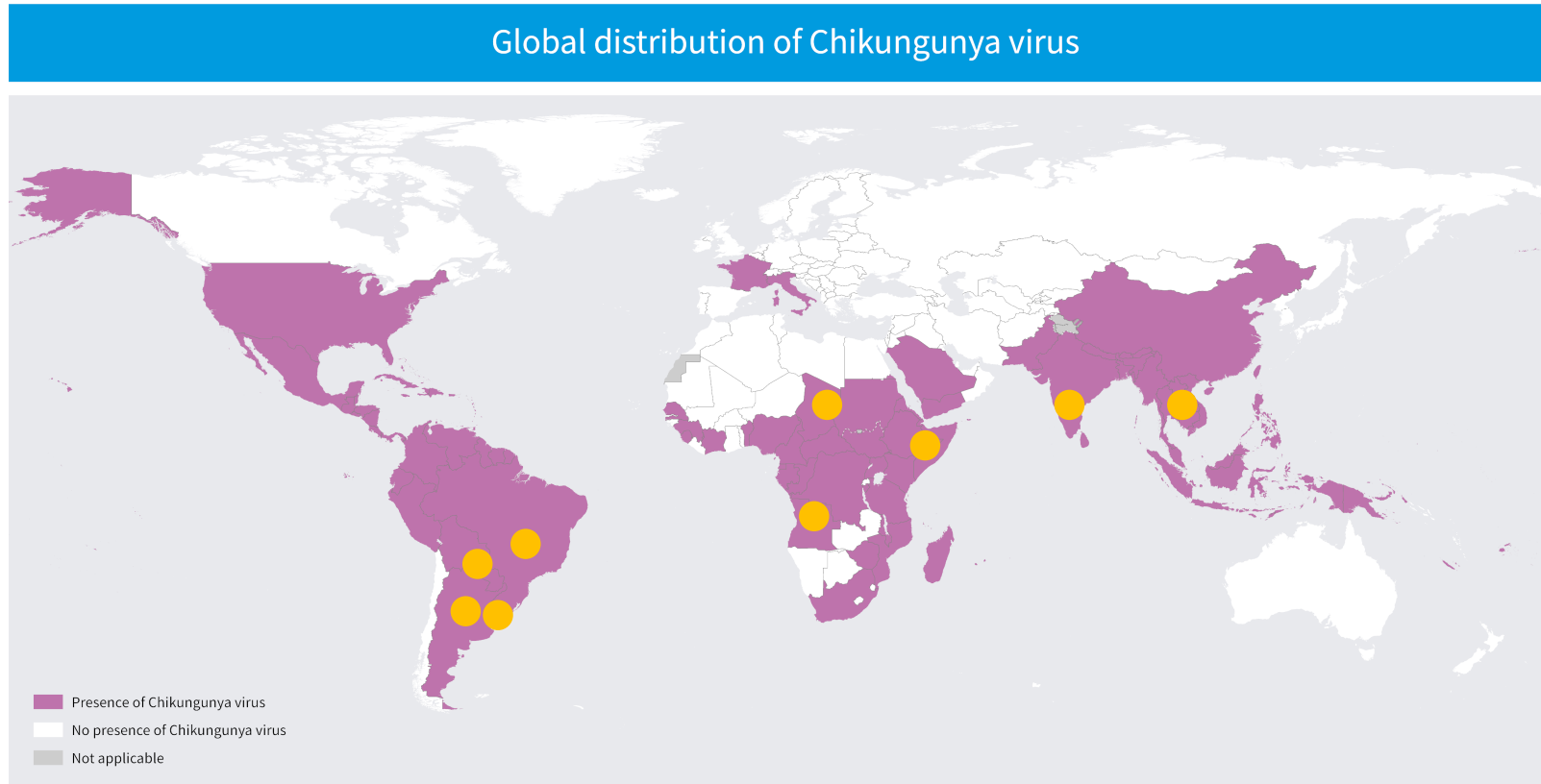


*Diana Rojas Alvarez, MD PhD*  
Technical Lead Chikungunya and Zika  
EZD/EPP  
Health Emergencies Program  
World Health Organization

# Chikungunya overview

- Chikungunya disease is an acute febrile illness caused by the chikungunya virus that is transmitted by the bite of an infected mosquito (*Aedes* spp). 
- Chikungunya virus: *Alphavirus* (four lineages)
- Most infected people will have acute symptoms such as: high fever, severe joint pain, arthritis, stiffness, rash  Chronic disease
- Severity varies by age: newborns, young infants, and the elderly are at greater risk for more severe disease.
- Overall case fatality rate is <1%.
- Disease burden is mainly due to chronic disability and severe impact on patient quality of life.

# Recent chikungunya outbreaks



The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization  
Map Production: WHO Health Emergencies Programme  
Request ID: RITM00065

# Drivers of transmission of chikungunya

Vector	Virus	Human host
<b>Increased density</b> <ul style="list-style-type: none"><li>• Climate (patterns, climate change).</li><li>• Increased breeding sites (water containers)</li><li>• Absent/reduced vector control programmes</li><li>• Insecticide resistance</li></ul> <b>Increased biting</b> <ul style="list-style-type: none"><li>• Environmental adaptation</li></ul> <b>Introduction into new areas</b> <ul style="list-style-type: none"><li>• Goods transportation (e.g., eggs/larvae in tires)</li></ul>	<b>Lineage</b> <ul style="list-style-type: none"><li>• Vector compatibility</li><li>• Enhanced transmissibility</li></ul>	<b>Population immunity</b> <ul style="list-style-type: none"><li>• prior circulation</li><li>• poverty</li></ul> <b>Population movement/travel</b> <b>Population density and urbanization</b> <b>Knowledge and practices to prevent mosquito bites</b>



Source: <http://umash.umn.edu/spotlight-one-health/>

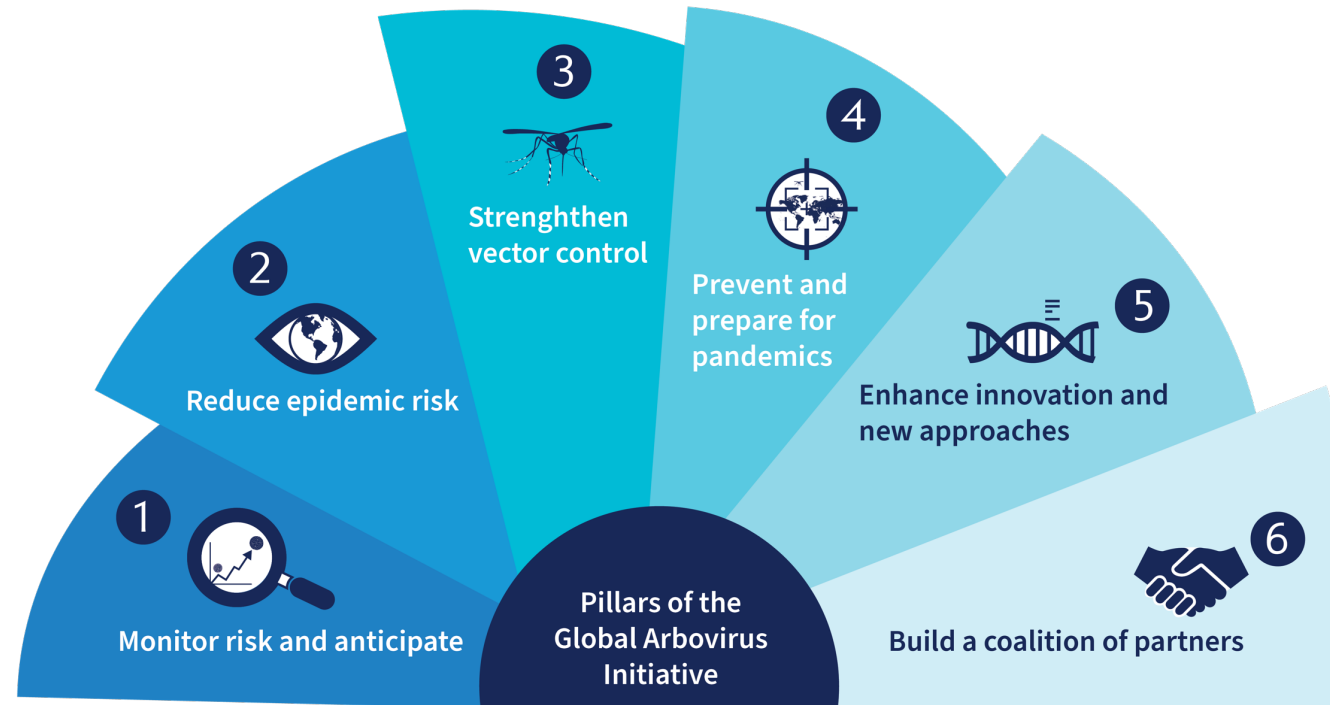
# Epidemiological alert

- In 2023, increased number of cases & deaths in the Region of the Americas
  - Several outbreaks in countries and areas without previous local transmission
  - Increased number of cases in newborns
  - Increased number of severe cases in elderly
  - Increased CFR compared to previous years
- Neonatal chikungunya recorded in previous outbreaks globally
  - risk highest intrapartum
  - ~49% transmission
- Frequent severe disease (fever, pain, rash, peripheral edema, neurologic disease, hemorrhagic manifestations, myocardial disease; may be fatal or cause long term disability)

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# GLOBAL ARBOVIRUS INITIATIVE



# Resources for outbreak response



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Thanks for your attention

