

Zika virus's rapid 70-year evolution may have given rise to current outbreak

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Comparing the sequences of 30 strains of Zika virus isolated from humans, 10 from mosquitoes, and one from monkeys has revealed significant evolutionary change over the past 70 years, according to a study published in [Cell Host & Microbe](#). Specifically, the sequences of the viral strains showed notable divergence between the Asian and African lineages and suggest that modern Zika virus strains derived from the Asian lineage, as they are more similar to the Malaysian/1966 strain than the Nigerian/1968 strain. Additionally, the gene for the pre-membrane precursor protein has very high variability among the Zika strains examined, which modeling work suggests may affect the protein's structure.

"We believe these changes may, at least partially, explain why the virus has demonstrated the capacity to spread exponentially in the human population in the Americas," study coauthor Genhong Cheng of the University of California, Los Angeles, said in a [press release](#). "These changes could enable the virus to replicate more efficiently, invade new tissues that provide protective niches for viral propagation, or evade the immune system, leading to viral persistence."

Read full, original post: [Tracking Zika's Evolution](#)