

Zika virus infections in humans 1954–2007, confirmed by virus isolation

Case number	Year	Location	Description	Reference/ notes
1	1954	Nigeria	10-yr-old African female with fever and headache	MacNamara 1954 ¹
2*	1956	Nigeria	Experimentally induced in a 34-yr-old European male, residing in Nigeria for 4 ½ months before inoculation; symptoms included headache and fever	Bearcroft 1956 ²
3	1964†	Uganda	28-yr-old European male, residing in Uganda for 2 ½ months before illness; with headache, rash, and fever	Simpson 1964 ³
4, 5, 6	1968	Nigeria	Virus isolated from 3 febrile children, aged: <ul style="list-style-type: none"> • 10 months • 2 ½ years • 3 years No clinical details available	Moore 1975 ⁴
7, 8	1979‡	Nigeria	<ul style="list-style-type: none"> • 2 ½ yr-old boy with fever • 10-yr-old boy with fever, headache, and body pains 	Fagbami 1979 ⁵ 40% persons tested had neutralising antibodies to Zika virus (more frequently in younger people), demonstrating high prevalence of immunity in Nigeria. Unreported cases likely misdiagnosed as malaria.

9*	1973	Portugal	Male arbovirus laboratory worker who had been vaccinated against yellow fever 2 months before infection; with chills, fever, sweating, retro-orbital pain, and pain in the back of the neck and in the joints	Filipe 1973 ⁶
10-16	1981§	Indonesia	7 cases in hospitalized patients: <ul style="list-style-type: none"> • 16-yr-old female • 14-yr-old male • 12-yr-old male • 32-yr-old female • 12-yr-old female • 25-yr-old female • 13-yr-old male All cases had fever; none had rash	Olson 1981 ⁷

* Not naturally occurring

† Infection occurred 1962-63; case published 1964

‡ Blood specimens for the 2 isolates were collected in July 1971 and May 1975; cases published in 1979

§ Cases occurred in 1977 and 1978; published 1981

¹ MacNamara FN. Zika virus: a report on three cases of human infection during an epidemic of jaundice in Nigeria. *Trans R Soc Trop Med Hyg.* 1954 Mar;48(2):139–45. [http://dx.doi.org/10.1016/0035-9203\(54\)90006-1](http://dx.doi.org/10.1016/0035-9203(54)90006-1) PMID:13157159.

² Bearcroft WGC. Zika virus infection experimentally induced in a human volunteer. *Trans R Soc Trop Med Hyg.* 1956 Sept;50(5):442-48. doi: 10.1016/0035-9203(56)90091-8.

³ Simpson DI. Zika virus infection in man. *Trans R Soc Trop Med Hyg.* 1964 Jul;58(4):335–8. [http://dx.doi.org/10.1016/0035-9203\(64\)90201-9](http://dx.doi.org/10.1016/0035-9203(64)90201-9) PMID:14175744.

⁴ Moore DL, Causey OR, Carey DE, Reddy S, Cooke AR, Akinkugbe FM, et al. Arthropod-borne viral infections of man in Nigeria, 1964–1970. *Ann Trop Med Parasitol.* 1975 Mar;69(1):49–64. PMID:1124969.

⁵ Fagbami AH. Zika virus infections in Nigeria: virological and seroepidemiological investigations in Oyo State. *J Hyg (Lond).* 1979 Oct;83(2):213–9.

<http://dx.doi.org/10.1017/S0022172400025997> PMID:489960.

⁶ Filipe AR, Martins CM, Rocha H. Laboratory infection with Zika virus after vaccination against yellow fever. *Arch Gesamte Virusforsch.* 1973;43(4):315–9.

<http://dx.doi.org/10.1007/BF01556147> PMID:4799154.

⁷ Olson JG, Ksiazek TG, Suhandiman, Triwibowo. Zika virus, a cause of fever in Central Java, Indonesia. *Trans R Soc Trop Med Hyg.* 1981;75(3):389–93. [http://dx.doi.org/10.1016/0035-9203\(81\)90100-0](http://dx.doi.org/10.1016/0035-9203(81)90100-0) PMID:6275577.