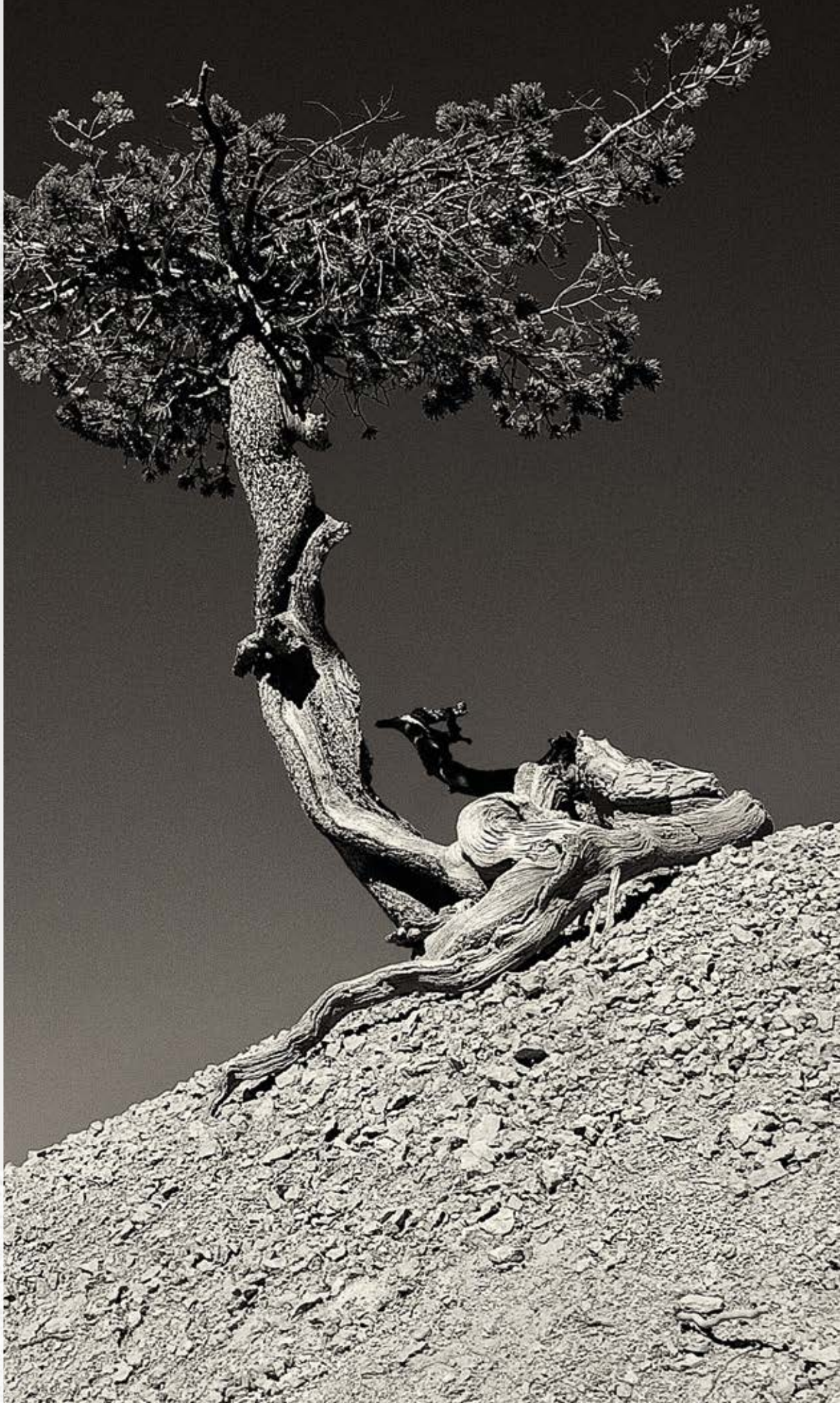


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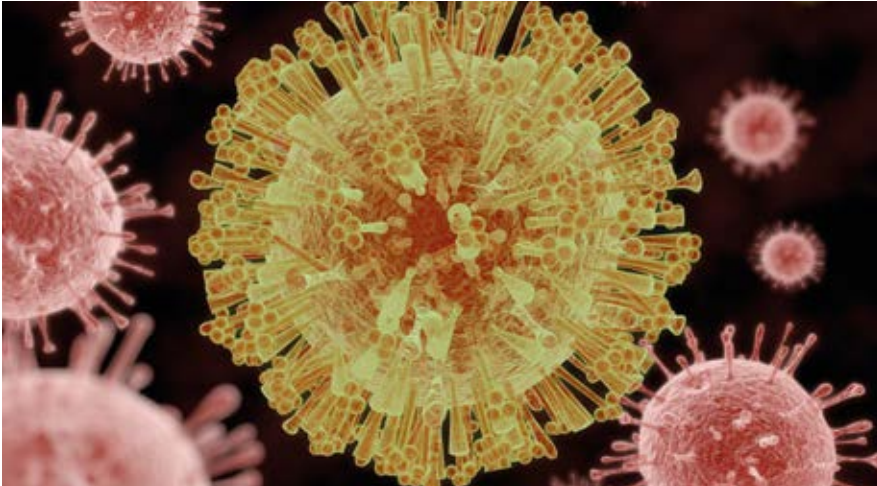
# TRAVELLER

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# Zika virus – why the fuss?

A look at the facts from Dr Nick Beeching and Carolyn Driver of the Liverpool School of Tropical Medicine



**Zika virus has been prominent in the news** for the last few months. Its rapid spread across South America and the Caribbean region since 2015 led the World Health Organization to declare a 'Public Health Emergency of International Concern' in February. But the virus, named after the forest in Uganda where it was first discovered in monkeys in the 1940s, has been with us for decades: so what's so special now?

Zika virus is transmitted by the bite of the *Aedes* mosquito, which is widespread in the tropics. Nicknamed the tiger mosquito because of its prominent stripes, *Aedes* breeds in small puddles and other collections of water in highly populated urban areas, where it is difficult to control. Infection with Zika causes a short-lived fever, often with generalised rash, conjunctivitis (red eyes), swollen lymph nodes (glands) and sometimes joint pains. For most, this is a relatively mild infection and around 75% of those infected have no symptoms.

Until recently, Zika was confined to

Africa and was not known to cause serious problems. However, it spread to the Pacific region in 2007 and during subsequent outbreaks in Polynesia, medics noticed problems in babies born to mothers infected during pregnancy and a specific type of paralysis following infection in some adults (called the Guillain Barré syndrome). Since 2015, the virus has spread across South America and most of the Caribbean, threatening the south and east of the USA, where *Aedes* thrives in the summer. The outbreak has emerged in Cape Verde and could spread to nearby tourist destinations such as Madeira. Travellers have returned with infection and it is now recognised that men can transmit the infection through sexual contact to both female and male partners, even if they do not have symptoms themselves.

The most dramatic and tragic effect is the damage caused to babies born to women who are infected during pregnancy. This results in permanent brain damage and babies are born with small heads (known as microcephaly)

and eye problems. The virus can also attack the brain and nerves of children and adults, leading to permanent disability. The Guillain Barré syndrome is a severe form of paralysis that affects the limbs and breathing muscles.

There is no antiviral drug and it will take at least a year to develop and test a safe vaccine. *Aedes* mosquitoes bite during the day as well as early evening, so sleeping under mosquito nets only provides limited protection. Travellers should cover limbs with long sleeves and trousers, and should use effective mosquito repellents such as those based on DEET throughout the day. Women who are or might be pregnant should avoid travel to affected areas unless essential, and others should avoid becoming pregnant during travel or for a month after returning.

There are still technical problems with tests for past infection, due to cross reactions with other viruses such as dengue and even past yellow fever immunisation, so it may be difficult to reliably confirm if a recent traveller has been infected, especially if they have not had symptoms. Potentially infected individuals should not donate blood. It is not known how long the virus remains in semen after infection, whether men have symptoms or not. Current advice is for all men to abstain from sex or to use condoms (presumed to prevent transmission) during travel and for a month after returning from an affected area even if they have no symptoms of infection. If they have had or develop symptoms after return, they should follow the same advice for six months.