



Sixty seconds on . . . Zika virus

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Who or what is Zika anyway?

It's a forest in Uganda where this virus was first found, in a rhesus monkey in 1947. Since last year Zika fever has swept across South America and is now penetrating the Caribbean.¹ Nine months after its arrival, the incidence of microcephaly in newborns has rocketed in South America.

"Rocketed" by how much, exactly?

Before the outbreak microcephaly occurred in 0.07% of births in Brazil, but it now occurs in 1-2%. Brazil has had 3893 cases of microcephaly since October, up from fewer than 150 in the whole of 2014.

Anything else?

The virus is being investigated for spikes of Guillain-Barré syndrome in adults.

This all seems to have come out of nowhere

Zika reached southeast Asia decades ago, but for reasons that still aren't understood it never seems to have caused major epidemics there.

Is there a treatment or vaccine?

No. But a vaccine was just approved in several countries for the related flavivirus dengue virus, so developing one for Zika seems feasible.

Meanwhile what's being done?

Zika infection is not dangerous in itself, so beyond ordinary mosquito control measures the trick is to not get infected while

pregnant. Or to not get pregnant while local mosquitoes are infected. Jamaica just advised women to avoid pregnancy for 6-12 months, El Salvador for two years.

Will that work? Will it blow over by then?

On small islands, yes. On big islands, mostly. On the mainland, hopefully.

So could it spread to the United States?

There will always be sporadic local cases, as with dengue. But widespread air conditioning in the US tends to stop mosquitoborne diseases getting a foothold.

Is this all down to global warming?

Not yet. Zika's spread so far owes more to growing trade and air travel. One theory is that it reached Brazil during the World Cup.

"Not yet"?

One species of mosquito, *Aedes albopictus*, the Asian tiger mosquito, is spreading slowly around the globe. Though it's not Zika's principal vector (that's *Aedes aegypti*), it is believed capable of spreading the virus. *Albopictus* isn't in Britain, but it has spread in the past two decades to France, Germany, and Spain.

1 Torjesen I. Zika virus outbreaks prompt warnings to pregnant women. *BMJ* 2016;352:i500.

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