



Media Release

For immediate release

Aussie mozzies a Chikungunya risk

The probability of an outbreak of Chikungunya virus in Australia could be far greater than previously thought, following confirmation by Australian scientists that native mosquitoes can be infected when exposed to the virus.

Scientists from Queensland Health's Forensic and Scientific Services will reveal evidence at a workshop convened by the Australian Biosecurity Cooperative Research Centre for Emerging Infectious Disease in Brisbane this week that Australian mosquitoes are susceptible to infection with the East African strain of Chikungunya, which has infected more than 1.5 million people worldwide since 2005, with over 200 fatalities.

"This is the first study to prove that Australian mosquitoes can be infected by Chikungunya virus," said entomologist Dr Andrew van den Hurk who led the study. "It seems that they may have the potential to carry the disease just as efficiently as vectors that transmit the virus overseas."

Chikungunya is a mosquito-borne virus most commonly spread by the Dengue mosquito (*Aedes aegypti*), which is also responsible for spreading the Yellow Fever virus overseas. Both viruses may also be transmitted by the Asian tiger mosquito (*Aedes albopictus*).

The virus is endemic in the Asia Pacific region and many countries are in the midst of outbreaks. There have been no known outbreaks of the disease in Australia. While there have been a number of recently reported cases of Chikungunya in Australia all known cases have been in people who were infected while visiting countries where the disease is endemic.

"Until now, the only proven vectors for transmission of Chikungunya were limited to northern Queensland," says Dr van den Hurk. "But some of the species implicated in our study are distributed throughout most of coastal Australia. Bottom line is, if a person infected with Chikungunya comes into Australia we have mosquitoes capable of spreading the virus."

Chikungunya is similar to Dengue Fever and Ross River Fever, with symptoms including fever, headache, vomiting, extreme fatigue, and muscle and joint pain lasting for several days. In some people joint pain can continue for several weeks. Chikungunya is not generally considered lethal, although an outbreak in Reunion in 2005 led to over 200 deaths. While this event may suggest a significant change in the disease there have been no Chikungunya-related deaths anywhere since.

"The current epidemic activities of Chikungunya virus show no sign of abating," says Professor John Mackenzie, deputy CEO of the Australian Biosecurity Centre.

"Outbreaks in the region are increasing, with new outbreaks in Singapore, Malaysia and Indonesia. This greatly increases the chance of an outbreak in Australia and we simply can't ignore the risk anymore. We desperately need more information on possible vertebrate hosts and mosquito vectors so that we can more accurately assess the threat."

The potential for establishment and transmission of Chikungunya in Australia, as well as the implications of the new findings, will be discussed at a workshop in Brisbane on February 13.

END

../ continued

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The Australian Biosecurity Cooperative Research Centre for Emerging Infectious Disease was established in 2003 under the Federal Government's CRC Programme to build national capacity to respond to emerging infectious disease threats. The Centre has major research nodes in Brisbane, Geelong, Sydney and Perth, and partners in Bangkok (Thailand), New York (USA) and Winnipeg (Canada). For more information about the AB-CRC visit www.abcrc.org.au



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