



FAR NORTH QUEENSLAND: THE DENGUE DISTRICT

CLIVE SEED

What is dengue fever?

Dengue fever can be unpleasant with fever, aches, nausea, vomiting and a rash. A severe form also causes bleeding problems which may lead to shock and a risk of death. Fortunately it is usually not lethal, in fact most infections (50–85 percent) are symptom-free.

What causes it?

Dengue fever is caused by the flavivirus – dengue virus (DENV).

How is it spread?

Mozzies. The *Aedes aegypti* to be more precise: a daytime-biting mosquito which lives in both rural and urban areas in the tropics. They love the taste of humans. Direct human to human transmission does not occur but DENV has been transmitted by transfusion.

Do we have dengue in Australia?

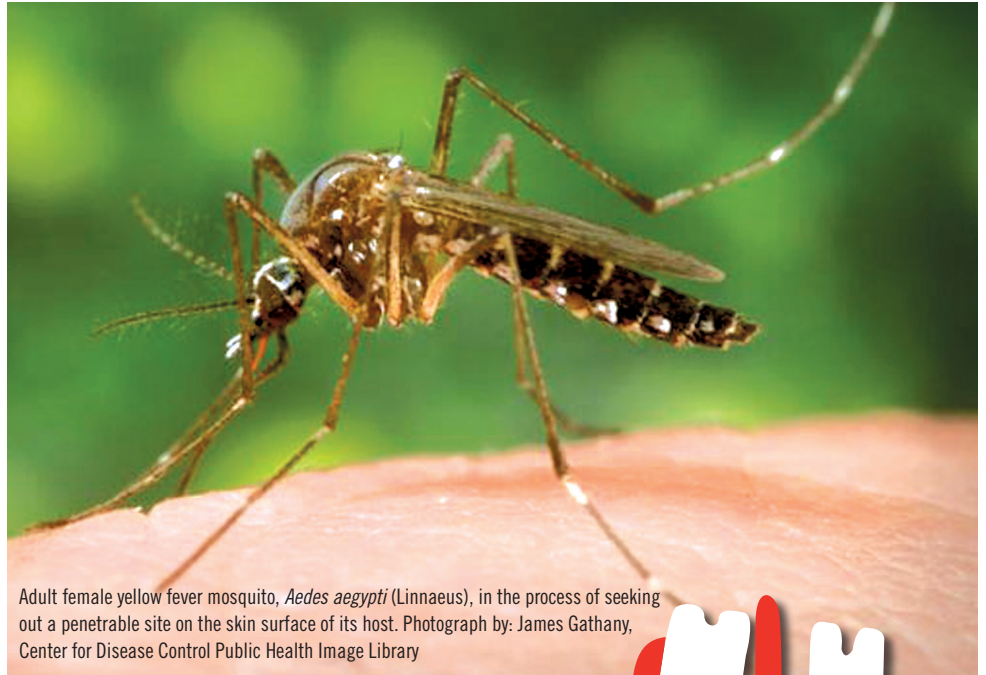
Australia experiences frequent but generally small outbreaks of dengue fever in Far North Queensland, however the 2009 outbreak was one of our largest recorded, with over 1,000 cases and one associated fatality.

Can DENV be detected in donor blood?

Studies of blood donors from highly endemic countries (Honduras, Brazil, and Puerto Rico) show that DENV is detectable in the blood of infected donors without symptoms.

Is there a screening test?

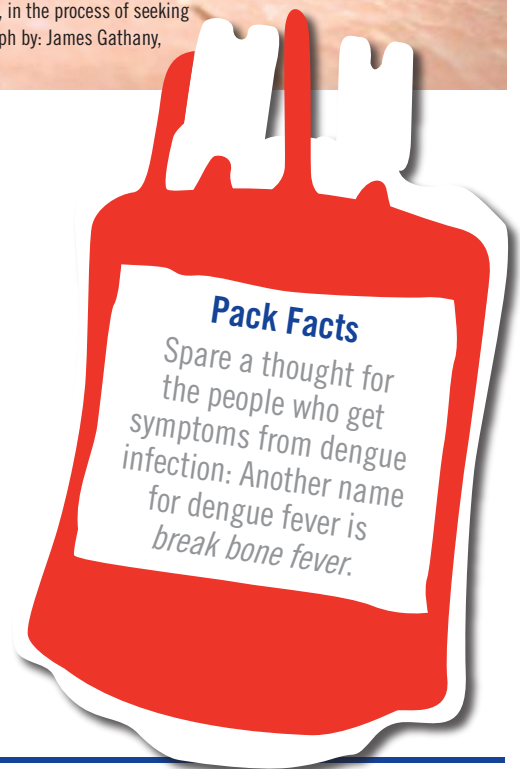
Currently there is no licensed donor screening test available, but there is a NAT (nucleic acid testing) assay in development.



Adult female yellow fever mosquito, *Aedes aegypti* (Linnaeus), in the process of seeking out a penetrable site on the skin surface of its host. Photograph by: James Gathany, Center for Disease Control Public Health Image Library

How can we stop DENV getting in our blood supply?

Most dengue infections are symptom-free, so asking about symptoms is not enough. Because of this, ARCBS policy is to direct the blood collected from donors who have been in epidemic areas for four weeks after their potential exposure to CSL plasma use. ARCBS will not make fresh products from these donations. This is implemented through a “supplementary donor questionnaire” that is used during local dengue outbreaks, and restrictions for donors returning from countries where dengue is endemic. CSL processing is known to be effective in inactivating the virus.



Pack Facts

Spare a thought for the people who get symptoms from dengue infection: Another name for dengue fever is break bone fever.

iTRANSFUSE
JOURNAL CLUB

iTRANSFUSE JOURNAL CLUB takes place on the first Tuesday of every month. Its aim is to help ARCBS staff improve knowledge and share their expertise within the organisation. The meeting takes place on WebEx, allowing everyone to join in, no matter where they are located. If you would like to participate, have ideas for topics, or information and articles you would like to share, send an email to itransfuse@arcbs.redcross.org.au

More details are available on CONNECT, listed under iTransfuse in the Medical and Quality Services area.

For more information visit
transfusion.com.au

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BLOOD SERVICE