New dengue fear

Rainwater tanks may spread disease south

By DANIEL BATEMAN

RESIDENTS installing rainwater tanks in their back yards to drought-proof their homes may inadvertently spread dengue to southern parts of the country.

The warning comes as Queensland Health yesterday declared the North’s current dengue type 3 epidemic as the largest in 50 years, expected to exceed more than 1000 cases by the end of the week.

University of Queensland scientist Dr Nigel Beebe presented the findings from the latest research into the distribution of dengue fever, as spread by the Aedes aegyptii mosquito.

His findings have been published in the journal Public Library of Science: Neglected Tropical Diseases.

As climate change is expected to create further drought conditions in south-east Australia, increased numbers of residents are expected to purchase rainwater tanks to drought-proof their homes.

However, Dr Beebe warned the implementation of rainwater tanks in urban back yards would create stable breeding sites for the dengue mosquito, and was likely to do more to spread the disease than climate change on its own, spreading to major capital cities such as Brisbane and Sydney within 40 years.

“Artificial plastic containers are actually fantastic breeding sites for Aedes aegyptii,” Dr Beebe said.

“Even though the Government’s subsidised tanks are quite well designed, they will probably deteriorate over the next 10 to 15 years. Mosquito access will be quite possible.”

He said residents could reduce the risk of creating dengue breeding sites by reducing mosquito access into tanks.

“The outlet mesh, from my experience, can get blocked fairly quickly, just from the detritus that washes through the inlet,” Dr Beebe said.

“What people will find is that those tanks will fill up to the brim and leave a little pool of water at the top of the tank.

“People will probably remove that outlet mesh, and Aedes aegyptii, being a clever little mosquito, will fly up the stormwater drain to the tanks.

“Unbeknownst to the householder, they’ll be keeping a colony of mosquitoes in their tank without them knowing. These mosquitoes are very, very resourceful.”

As of Tuesday, the North’s total number of dengue type 3 cases had grown to 901, including Cairns (879), Townsville (16), Port Douglas (3), Yarrabah (1), Injinoo (1) and Mareeba (1). The total number of cases – including types 1, 2, 3 and 4 – recorded this wet season across North Queensland stands at 993.

Queensland Health senior medical entomologist Brian Montgomery said the current epidemic exceeded all recorded outbreaks since the 1950s.

“Anecdotal evidence leads us to believe that approximately 15,000 people were infected with dengue fever during the 1953-55 outbreak in Townsville,” Mr Montgomery said.

“Although the number of cases during the current epidemic has slowed, this milestone should serve as a reminder to local residents that we are in the midst of an historic dengue epidemic.”