



## BORDER HEALTH NEWSLETTER - AUGUST 2013

### WELCOME!

Hi everyone. Welcome to our first spring newsletter, long may this nice weather continue! The mozzies will soon be increasing rapidly in number with the warmer weather, so it's time to get all your sampling gear sorted for the busy time ahead. Don't forget to let us know if you have any new staff members so they can be given added to the newsletter distribution list.

### INCURSIONS/INTERCEPTIONS

There was only one interception callout during August. This involved two adult female *Culex pervigilans* and two adult fungus gnats found inside a shipping container in Christchurch.

### Photo of the Month



Adult female *Culex pervigilans*



Adult fungus gnat

### SAMPLES

During August, 485 samples were collected by staff from 11 District Health Boards, with 44 positive. Sampling numbers were down on last month but with increased positive samples and up on this time last year, with a similar number of positive samples. The specimens received were:

Species	Adults	Larvae
<b>NZ Mozzies</b>		
<i>Aedes notoscriptus</i>	0	1060
<i>Culex pervigilans</i>	2	176
<i>Cx. quinquefasciatus</i>	4	16
<i>Opifex fuscus</i>	0	5
<b>Exotics</b>	0	0
<b>TOTAL MOSQUITOES</b>	<b>6</b>	<b>1257</b>

### ONLINE MOSQUITO SURVEILLANCE DATABASE

Send us an email or give us a call if you are having any issues with accessing the database.

Don't forget to provide login access for any new employees so they can enter in their sample information.

Please remember to enter in your negative sample information as soon as possible after sampling so the database remains up-to-date for monthly reporting.





NEW ZEALAND BIOSECURE

Entomology Laboratory



## MOSQUITO-BORNE DISEASES

### AUSSIE MOZZIE ALERT AMID BIG VIRUS INCREASE

**Source:** Sydney Morning Herald 9 Sep 2013 reported on Stuff website 9 Sep 2013

<http://www.stuff.co.nz/travel/travel-troubles/9142936/Aussie-Mozzie-alert-amid-big-virus-increase>

*People who seemingly don't get bitten by mosquitoes still need to wear repellent to avoid the Ross River virus and Barmah Forest virus according to University of Sydney lecturer in Entomology Dr. Cameron Webb.*

Experts are warning people to guard against mosquito bites in Australia over the next few months, with the spread of the pest that carries the Ross River virus and Barmah Forest virus.

The National Notifiable Disease Surveillance System reports that so far this year there have been 3500 cases of Ross River (4684 cases in 2012) around Australia.

There has been a big increase in Barmah Forest virus, with 3465 cases (1722 cases in 2012).

In its warning, the medical travel service Travelvax has singled out grey nomads, campers and visitors to bush areas as widespread as south-eastern Australia, tropical Queensland and south-western Western Australia.

But the service director, Eddy Bajrovic, said people in urban areas were also vulnerable.

"You don't have to be on holiday in the bush any more to be at risk," he said. "We are seeing increased reports of Ross River and Barmah Forest virus from the capital cities too."

A mosquito specialist, Cameron Webb, an entomologist based at the University of Sydney, said: "Ross River and Barmah Forest viruses are now commonly reported from southern states.

"In fact, outbreaks are increasingly occurring on the fringes of cities such as Sydney, Melbourne and Perth." Perth is expecting a spring surge of Ross River virus, with 31 people

contracting it in the metro area and eight in the fringes in the month to August 19.

Sydney, with forecasts of warm weather and above-average rainfall for the next three months, may also have a surge in mozzies.

Bajrovic said the migration and spread of the disease-carrying mosquitoes could be linked to global warming and climate change.

Cities are also expanding into mosquito habitats. The viruses are not fatal, but there are no specific treatments or vaccines.

Symptoms can be severe and prolonged, including painful and swollen joints, sore muscles, skin rashes, fever, tiredness, headaches and swollen lymph nodes.

In one case, a Japanese tourist in Melbourne in January was unable to walk after coming down with Ross River virus contracted in the city.

A Perth woman bitten in her backyard seven months ago has suffered fever and joint pain and is still unable to fully move her fingers.

Dengue fever, with similar symptoms to Ross River and Barmah Forest viruses, is another mosquito-borne danger, present north of Townsville.

But most of Australia's reported cases (1238 so far this year) are brought back from overseas.

"There is a risk of dengue fever and chikungunya virus in Indonesia, particularly Bali, where a lot of travellers are going because of cheap prices," Webb said.

"The mosquitoes there have a different bite pattern [attacking during the day] and travellers are not going with the right mindset to take the necessary precautions, like they would if they were holidaying on the coast here.

"If there is a take-home message for travellers, it is that they should use a repellent with DEET or Picaridin."



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### **WEST NILE VIRUS - EUROPE: GREECE**

**Source:** Greek Reporter [edited] 16 August 2013 reported on ProMED Mail 19 Aug 2013

<http://greece.greekreporter.com/2013/08/16/west-nile-virus-cases-reach-26/>

Last week, 9 new West Nile virus [WNV infection] cases were recorded, raising the total to 26.

What mainly seems to worry experts is that cases of patients with symptoms involving the central nervous system have more than doubled, while 3 other municipalities are under quarantine by the National Blood Center due to an increased possibility of virus transmission by mosquitoes.

Regarding the patients' ages, according to KEELPNO [Hellenic Center for Disease Control & Prevention], the youngest patient is 17 years old and the oldest is 100 years old.

Of the last 9 cases, 4 of them were recorded in Attica (2 in Agia Paraskevi, one in Pallini, and another one in Vriliisia), 2 in the municipality of Nestos in Kavala and one in Chalcedon of Thessaloniki, one in Topeiros, and the last one in Abdera of Xanthi.

The good news is that out of the 26 patients, 21 of them have been discharged, while the other 5 remain hospitalized.

[It is becoming increasingly clear that WNV has become endemic in Greece and probably in nearby countries as well. With the transmission season now ongoing, more cases of WNV infection can be expected. It would be of interest to know whether there have been equine cases in this area as well.]

### **YELLOW FEVER - AFRICA: CAMEROON**

**Source:** All Africa [edited] 30 Aug 2013 reported on ProMED Mail 1 Sep 2013

<http://allafrica.com/stories/201308301483.html>

Yellow fever is a major public health problem. Recently, many Cameroonians were gripped

with fear following the detection of 4 new cases of yellow fever; 2 of the cases were from the Littoral, one from the Centre and one from the East Region. Statistics from the Expanded Programme of Immunisation (EPI) show that 30 cases were detected and confirmed in 9 health districts in the country in 2012 and 15 cases in 4 health districts in 2013.

The National Coordinator of Surveillance and Supplementary Immunisation activities in EPI, Dr Irene Emah said the current drop in the number of cases of yellow fever is as a result of the strategy taken by government to contain the disease. The strategy of surveillance of yellow fever cases was introduced in the country by EPI since 2003. According to Dr. Emah, any one case of yellow fever constitutes an epidemic and calls for a riposte. Presently, the riposte consists of a vaccination campaign against yellow fever which is going on in 13 health districts in the Littoral Region. People aged 9 months and above are vaccinated.

Yellow fever is a viral haemorrhagic fever. The virus is transmitted from person to person through the bite of the *Aedes* mosquito which breeds in small stagnant water reserves. Poor environmental hygiene contributes to the transmission. It confers permanent immunity to survivors. In the sylvatic cycle of transmission, medics say, the monkey is the main host; man is just an accidental host. On the other hand, in the urban cycle of transmission, man is the main host. The incubation period is short, 3-6 days.

As for the symptoms of yellow fever, the onset is abrupt. The patient has yellow fever above 39 degrees C [102 degrees F] and is agitated. There are also jaundice, neurological problems and vomiting of black blood. Liver and renal complications can cause death in one out of every 2 cases. The illness is diagnosed through blood test in the laboratory. The only way of preventing the disease is through vaccination and vector control through eliminating stagnant water.