



BORDER HEALTH NEWSLETTER - FEBRUARY 2012

WELCOME!

Hi everyone. It's now the end of summer - did you blink and miss it? The mozzies are still out there doing their best in spite of the temperatures and the recent rainfall will be helping them boost their numbers.

Please remember if you have new staff or people leaving to let us know (taxonomy@nzbiosecure.net.nz) so we can update our distribution list and ensure the newsletter is getting sent to the right people.

INCURSIONS/INTERCEPTIONS

There were no interception callouts during March.

WEBSITE

The SMS NZB website has had a lot of traffic as a result of the December interception of *Aedes aegypti* and *Aedes polynesiensis*. Species profiles in particular are of interest, we think this is a great indication that the public are very interested in keeping New Zealand free of exotic mosquitoes. The species profiles provide current information and an ideal source that the public can be directed to for more detail on mosquito species. The profiles are easily downloaded and accessible to all (<http://www.smsl.co.nz/Services/New+Zealand+BioSecure/Exotic+Mosquitoes.html>).

We now have *Bti* Granules (Mozzie Stop Bits) available on the website. These bits provide a slow release *Bti* residual for between 7-14 days and work well in water under trees where mosquito control is often difficult.

If there is any information you would like to see in the newsletter that is not currently included, or if you have any queries about any of the information, please feel free to contact us through the website, or email us directly at enquiries@smsl.co.nz or taxonomy@nzbiosecure.net.nz.

SAMPLES

During February, 653 samples were collected by staff from 12 District Health Boards, with 218 positive. Sampling numbers were almost identical to last month (652) but with more positives this month and well down on this time last year. The specimens received were:

Species	Adults	Larvae
NZ Mozzies		
<i>Aedes antipodeus</i>	4	1
<i>Ae. australis</i>	0	46
<i>Ae. notoscriptus</i>	1497	2793
<i>Coquillettidia iracunda</i>	21	0
<i>Culex pervigilans</i>	183	2020
<i>Cx. quinquefasciatus</i>	121	2336
<i>Opifex fuscus</i>	2	112
Exotics	0	0
TOTAL MOSQUITOES	1828	7308

MOSQUITO-BORNE DISEASES

INVASIVE MOSQUITOES - UK

Source: Mirror [edited], Thu 9 Feb 2012 reported on ProMED Mail 10 Feb 2012
<<http://www.mirror.co.uk/news/uk-news/deadly-mosquito-found-in-the-uk-for-first-678382>>

A mosquito carrying a deadly virus has arrived in Britain. The insect, *Culex modestus*, bears [can transmit] the West Nile [WN] virus, which causes flu-like symptoms and [can cause] inflammation of the brain and spinal cord.

It has been found breeding in the marshes of north Kent and south Essex over the past 2 years, the 1st sighting of the insect in the UK since the 1940s.

The mosquito is suspected of causing [WN] virus epidemics in southern Europe, but last night [8 Feb 2012], experts stressed no one has ever been infected after being bitten here.



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In the previous 2 UK [WN virus infection] cases, in 2006 and 2007, both the cases had returned from trips to Canada.

West Nile virus is normally passed on to humans via [mosquitoes that feed on] infected birds and is fatal in around 3 per cent of cases.

Nick Golding of the Centre for Ecology and Hydrology said: "It seems likely *Culex modestus* has arrived fairly recently. A handful were collected on the South Coast in the 40s, but they didn't appear to be an established population. Until now, it hadn't been seen since."

Experts are now trying to establish how widespread the mosquitoes are.

[WN virus has been isolated from *Culex modestus* in nature; this mosquito feeds on birds and has been shown to be an efficient vector of the virus in the laboratory. Although WN virus has not been isolated in the United Kingdom, nor have human cases occurred there, given the movement of the virus via birds, it would not be surprising if the virus eventually became established in Britain. Serological evidence of WN virus or a closely related flavivirus infection in sentinel chickens and wild birds in England has been reported previously (see ProMED-mail archive no. 20060920.269). The establishment of *Cx. modestus* adds another potential risk factor for virus transmission there. It will be interesting to learn the extent of *Cx. modestus* distribution in the United Kingdom and changes in its geographic distribution over time.]

YELLOW FEVER IN CAMEROON

Source: WHO Global Alert and Response (GAR) [edited] 3 Feb 2012 reported on ProMED Mail 7 Feb 2012

http://www.who.int/csr/don/2012_02_03/en/index.html

In December 2011, the Ministry of Health of Cameroon notified WHO of a yellow fever outbreak in the North Region of the country.

A total of 23 cases, including 7 deaths, have been reported to have occurred since October 2011 in Guider, Bibemi, Gaschiga, Lagdo, Mayo Oulo and Golombe districts. These cases were identified as part of the surveillance system, with fever and jaundice within 14 days of onset.

At least 13 cases from 6 health districts were laboratory confirmed at the Institute Pasteur of Cameroon by IgM ELISA test, which was followed by the seroneutralizing test (PRNT), the most specific test for yellow fever, and by differential diagnostic [tests] for dengue and West Nile Virus conducted in the WHO regional reference laboratory for yellow fever, the Institute Pasteur of Dakar, Senegal.

The WHO country office has been working with the government/health authorities in the outbreak field investigation to confirm the cases and assess the extent of the outbreak.

GAVI Alliance, UN Central Emergency Response Fund (CERF) and the International Coordinating Group on Yellow Fever Vaccine Provision (YF-ICG) are supporting a reactive mass vaccination campaign which aims to cover over 1.2 million people in 8 health districts considered at high risk, namely Guider, Bibemi, Gaschiga, Lagdo, Mayo-Oulo, Garoua I, Garoua II, and Golombe.

The vaccination campaign began on 23 January 2012, covering these 8 health districts which were not covered in the 2009 preventive mass vaccination campaign because they have no history of yellow fever outbreak or yellow fever virus circulation.

YELLOW FEVER IN GHANA

Source: WHO Global Alert and Response (GAR) [edited] 3 Feb 2012 reported on ProMED Mail 7 Feb 2012

http://www.who.int/csr/don/2012_02_03b/en/index.html

On 20 Dec 2011, the Ministry of Health of Ghana notified WHO of a yellow fever (YF) outbreak occurring in 3 districts; Builsa and



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Kassena-Nankana-West in the Upper East Region and Kitampo-South in the Brong Ahafo Region located in the mid-western part of the country.

A total of 3 laboratory-confirmed cases, including 2 deaths, have been detected by yellow fever surveillance, with the clinical syndrome of fever and jaundice.

The index case, reported from the Kassena-Nankana-West district, was a 12-year-old male who had been going with his father to his farm in a forest bordering Burkina Faso. Onset of symptoms occurred on 11 Oct 2011 and progressively got worse until he died in Sandema Hospital on 18 Oct 2011. District outbreak teams investigated the affected areas but found no additional cases.

A reactive campaign has been planned starting 6 Feb 2012, supported by the International Coordinating Group on Yellow Fever Vaccine Provision (YF-ICG) and the European Community Humanitarian Office (ECHO). Over 235 000 people in the affected districts have been targeted for vaccination, with the exclusion of pregnant women and children aged under 1 year.

This activity will complement the 2-phased YF preventive mass campaign undertaken by the country. The 1st phase was conducted in November 2011 and targeted a population of 5.8 million people covering 40 districts (8 regions). A YF reactive campaign was carried out in 3 more districts. The 2nd phase, planned for this year, seeks to target 1.7 million people spanning 17 districts.

Photo of the Month



Photo of adult female *Culex modestus* (species featured in Mosquito-borne Diseases article above) ex

http://www.ceh.ac.uk/news/news_archive/vector-potential-mosquito-UK_2012_11.html