



BORDER HEALTH NEWSLETTER - December 2011

WELCOME!

Happy New Year! I hope you've all had an enjoyable break over the festive season and are starting back at work refreshed. For any of you who happened to have worked through – never mind, the weather's been fairly lousy throughout much of the country so you haven't missed much ☺

INCURSIONS/INTERCEPTIONS

December was a fairly busy month for interceptions with *Aedes albopictus* larvae, pupae and a single adult and *Culex quinquefasciatus* larvae found in used tyres on a ship from Vanuatu while berthed at Ports of Auckland on the 6th Dec. The vessel had already travelled through the Port of Tauranga and offloaded some cargo, so the find triggered a response there.

Later on in the month, *Aedes aegypti* and *Ae. polynesiensis* larvae and pupae were found at Ports of Auckland in used tyres from a ship ex Samoa. Lastly a non-mozzie was found at an Auckland devanning site in a shipment of bananas from Ecuador.

SAMPLES

During December, 635 samples were collected by staff from 12 District Health Boards, with 116 positive. Sampling numbers were up on last month and down on this time last year. The specimens received were:

Species	Adults	Larvae
NZ Mozzies		
<i>Aedes australis</i>	0	1
<i>Ae. notoscriptus</i>	44	1586
<i>Coquillettidia iracunda</i>	1	0
<i>Culex astelliae</i>	0	26
<i>Cx. pervigilans</i>	19	1021
<i>Cx. quinquefasciatus</i>	4	365
Exotics		
<i>Aedes aegypti</i>	0	11
<i>Ae. albopictus</i>	1	7
<i>Ae. polynesiensis</i>	0	3
TOTAL MOSQUITOES	69	3020

WEBSITE

Happy New Year! Mosquito larvae and adult numbers continue to rise, although some would say it can't be due to the weather! Even so, the ambient temperatures are up and with the plentiful rain there is more than adequate habitat. Interception season has started and we recommend you check your response and surveillance supplies and visit the website to see what's available.

Please send us an email (enquiries@smsl.co.nz or taxonomy@nzbiosecure.net.nz) with your interest in any requirements or products we may be able to assist you with. The website and shop is always open <http://www.smsl.co.nz/>.





NEW ZEALAND BIOSECURE

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MOSQUITO-BORNE DISEASES

HEALTH WARNING TO AVOID MOSQUITOES: NSW, AUSTRALIA

Source: 29 Dec 2011 NSW Government Health
http://www.health.nsw.gov.au/news/2011/20111229_00.html
reported on ProMED Mail 30 Dec 2011

NSW Health is warning residents and visitors in southern and western NSW to take extra precautions and protect themselves against mosquitoes following the detection of the Murray Valley Encephalitis (or MVE) virus in NSW.

Because MVE and other more common mosquito borne infection are prevalent in summer and autumn, everyone should take simple measures to avoid mosquito bites.

The MVE virus has been detected in sentinel chickens located near Leeton, Hay and Moama in the south of the state, and also in the Macquarie Marshes, located in the west of the state approximately 100km from the townships of Brewarrina, Walgett, Nyngan and Coonamble.

Sentinel chicken flocks act as a warning system for human infection by being regularly monitored for viruses that mosquitoes can transmit to people and cause illness.

NSW Health Director of Health Protection, Dr Jeremy McAnulty, said the latest detections should serve as an important reminder for people to protect themselves.

"Positive MVE findings in chickens are relatively rare in NSW. The important message is to avoid mosquito bites and be alert to any symptoms," Dr McAnulty said.

"The current area of risk for MVE extends in regions west of the Great Dividing Range and is likely to be highest around rivers and wetlands, especially along the Murray, Darling, and Paroo rivers and their tributaries and in recently flooded areas in western NSW.

"The increased risk of human cases is related to increasing numbers of mosquitoes that carry the virus and can transmit it to birds and occasionally people. Mosquito numbers increase with warmer temperatures and rainfall."

"We saw MVE activity last summer and autumn in sentinel chickens and in mosquitoes, and two human cases of MVE infection were detected in NSW, but there have been no cases reported so far this summer. Both cases were in people who lived near the Macquarie Marshes and both recovered."

"While MVE is relatively rare, and most people will not develop symptoms, it is a serious mosquito-borne disease," Dr McAnulty said.

"In mild cases, symptoms of MVE include fever, headache, nausea and vomiting and muscle aches. In more severe cases symptoms can include neck stiffness, lethargy, drowsiness, confusion, delirium, tremors, neurological problems and coma in severe cases. People with these symptoms should immediately seek medical assistance.

"In young children, fever might be the only early sign, so parents should see their doctor if concerned, and particularly if their child has convulsions, drowsiness, floppiness, irritability, poor feeding or general distress."

Mosquitoes also carry other human diseases including Ross River virus, Barmah Forest virus and Kunjin viruses that can cause fever, rash and joint pains.

The MVE virus is transmitted by infected mosquitoes which breed in flooded, grassy and swamp areas and around rivers and waterways. The mosquito is especially active around dawn and around sundown, with a peak in the first two hours of the night.



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Avoid being bitten by mosquitoes. Mosquitoes that carry the virus are usually most active in the hours after sunset and again around dawn. Simple steps to avoid being bitten by mosquitoes include:

- When outside cover up as much as possible with light-coloured, loose-fitting clothing and covered footwear.
- Use an effective repellent on all exposed skin. Re-apply repellent within a few hours, as protection wears off from perspiration, particularly on hot nights. The best mosquito repellents contain Diethyl Toluamide (DEET) or Picaridin.
- The stronger the concentration of an insect repellent, the less frequently it will need to be applied to stop mosquito bites. Repellents containing low concentrations of DEET or Picaridin provide shorter periods of protection and need to be reapplied more frequently so it's important to read the product information.
- Topical repellents are not recommended for use on children under 3 months. Use of physical barriers such as netting of prams, cots and play areas is preferred. Repellents containing less than 10% DEET or Picaridin are safe for older children if applied according instructions. Parents or carers should apply repellent.
- Light mosquito coils or use vapourising mats indoors. Devices that use light to attract and electrocute insects are not effective.
- Cover all windows, doors, vents and other entrances with insect screens.
- When camping, use flyscreens on caravans and tents or sleep under mosquito nets.

There is no specific treatment for these viruses so prevention depends on avoiding mosquito bites, especially in the summer and autumn months when infections peak.

British troops returning from Afghanistan with cutaneous Leishmaniasis

Source: ProMED Mail 9 Jan 2012

British troops returning from Afghanistan are being struck down by a dangerous flesh-eating bug that can lead to disfigurement.

Infection specialists at Heartlands Hospital have been inundated with military patients infected with the desert boils disease leishmaniasis.

All injured military are flown back to Queen Elizabeth Hospital, in Edgbaston, for life-saving treatment. But many soldiers have been referred to Heartlands after developing nasty, crater-like skin boils that erupt and refuse to heal.

Dr Chris Ellis, clinical director of infection and tropical diseases at Heartlands Hospital, in Bordesley Green, said: "We started getting soldiers from Afghanistan showing signs of a skin infection, caused by a parasite." The treatment isn't simple as we have to keep giving intravenous doses of sodium stibogluconate.

"It takes a long time to heal. It presents itself as a skin ulcer that just won't go away and other infections can then get on top of it. But it is not contagious. "It became common and peaked around 2 years ago, but we are still getting military patients.

"Leishmaniasis is prevalent in parts of Afghanistan and we had 50 military patients alone in 2008." Cutaneous leishmaniasis, the common form among soldiers, is a disease spread by the bite of the female sandfly. It can eventually cause parts of the nose and lips to wear away if left untreated.

Symptoms include breathing difficulties, skin sores and, in the most severe cases, plastic surgery may be needed to correct disfigurement caused by sores on the face.



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There are different types of leishmaniasis ranging from skin sores, which are the most common form, to a more dangerous version that occurs up to 8 months after being bitten with parasites and compromises the immune system.

Dutch troops deployed in northern Afghanistan were also reported with the disease in December 2010 in the American Journal of Tropical Medicine and Hygiene.

Other cases of leishmaniasis were seen in military personnel returning from the Persian Gulf. There are no drugs to prevent the disease, only ones to treat it once a patient is infected.

Photo of the Month

Now that i'm back from maternity leave, I thought you might like to see a photo of our newest mozzie hunter Olivia, born 27th July 2011. Have a good month!

Rachel

