



BORDER HEALTH NEWSLETTER - AUGUST 2012

WELCOME!

Well spring has well and truly sprung in our region, what a change in the last few weeks! Spring bulbs and blossoms everywhere, warm sunny days and even some warm winds to dry out the soggy ground. The mosquito numbers are on the increase again, a great time to get out to those areas you haven't visited for a while.

As always, if you are hiring new staff this summer to carry out mosquito surveillance work, please email us their contact details so we know who we are dealing with at each location and they can be added to our newsletter distribution list.

INCURSIONS/INTERCEPTIONS

There were two interception callouts during August; a female adult *Culex pervigilans* mosquito was found in a shipping container during devanning in East Tamaki on the 13th August and a non mosquito was handed to Nelson Marlborough District Health Board by Ministry of Primary Industries staff on the 15th August.

Photo of the Month



Coquillettidia xanthogaster adult female

Photo ex

<http://www.photoforum.com.au/showthread.php?48785-Orange-Mosquito-Coquillettidia-xanthogaster>

An Australian species understandably referred to as the golden mosquito, this species is a major pest in many parts of northern Australia. It breeds in swamps, lagoons and creeks and lays its eggs in rafts.

SAMPLES

During August, 352 samples were collected by staff from 12 District Health Boards, with 44 positive. Sampling numbers were up on last month which is expected this time of year and about the same as this time last year. The specimens received were:

Species	Adults	Larvae
NZ Mozzies		
<i>Ae. notoscriptus</i>	0	1376
<i>Culex pervigilans</i>	2	167
<i>Cx. quinquefasciatus</i>	1	0
<i>Opifex fuscus</i>	0	10
Exotics	0	0
TOTAL MOSQUITOES	3	1553

WEBSITE

Mozzie Stop BTI mosquito dunks are on the increase which is a sure indication activity is starting to pick up, although with the weather this last week in the North, we can't imagine any flying pest being too eager to brave the elements. Mozzie Stop also comes in BTI bits or granules which are proving effective in drains and other small areas where the dunks are not suitable.

Don't forget newsletters and reports are all able to be downloaded from the website and if you can't find something please let us know. We hope you are finding this on-line service useful and are always happy to address any enquiries or matters you may wish to discuss. Please feel free to contact us through the website, or email us directly at enquiries@smsl.co.nz or taxonomy@nzbiosecure.net.nz.



MOSQUITO-BORNE DISEASES

TEXAS HEALTH OFFICIALS STUDY WEST NILE OUTBREAK

Source: Voice of America 23 Aug 2012 reported on ProMED Mail 24 Aug 2012

http://www.voanews.com/content/texas_health_officials_study_west_nile_outbreak/1494540.html

Officials in the southwest U.S. state of Texas are tracking the spread of the West Nile virus, which has killed 21 people in the state so far this year and has sickened nearly 700. While the Dallas metropolitan area has had the most cases, the disease is cropping up all across the state.

Technicians in the state's mosquito laboratory are examining mosquito corpses sent from all over Texas, at the Texas Department of Health Services Laboratories in the capital of Austin.

State Laboratories Director Grace Kubin said technicians use animal tissue that is susceptible to West Nile virus to test the mosquito samples.

"We add in, essentially, the ground-up mosquitoes," said Kubin. "We have to grind them up; that releases the virus. And now we have that in a liquid form and we can use that to infect the cells."

Kubin said the tests provide results within 48 hours so the lab can advise local officials on what action to take.

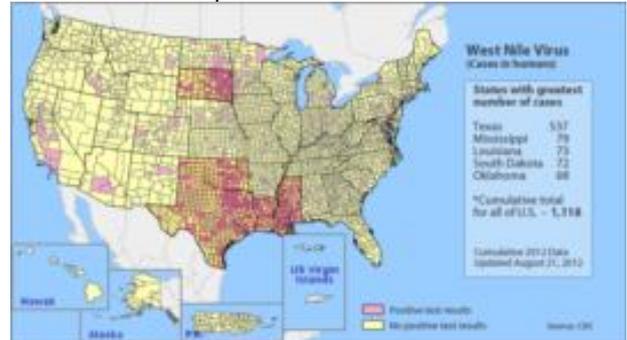
Mosquitoes aren't born with West Nile virus. They generally get it from biting birds that are infected.

Right bird, right time

To ingest the virus, mosquitoes need to find, so to speak, the right bird at the right time, according to Texas State Veterinarian Tom Sidwa. Some birds survive the virus.

"The birds only have the virus remaining in their blood from one to four days after they get infected. Then they have life-time immunity, so

you have to find that bird that has the virus in its blood stream," said Sidwa.



West Nile cases in U.S.

From the Austin command center, Sidwa manages the state effort to track the West Nile outbreak. He said his team got an early warning months ago from routine testing of donated blood.

"This year we got advance notice that there was activity by virtue of that testing and people who were donating blood testing positive for West Nile. That does not mean they are sick. Some of them may be, but they have the virus in their system," he said.

Most infected people unaware of it

Sidwa said most infected people are unaware of it. Symptoms can include fever, headache and feeling tired. For the small percentage whose brains are affected by the virus, it can be debilitating and even deadly.

"The way it manifests is everything from 80 percent of the people with no symptoms, to 20 percent with a lesser disease, and roughly one percent - or one in 150 - will develop the severe neurological form of the disease," said Sidwa.

As the hot weather subsides in the weeks ahead, Sidwa said he expects the number of reported West Nile cases to taper off. And he said what has been learned this year will help in dealing with future outbreaks.



NEW ZEALAND BIOSECURE

Entomology Laboratory



FLEA-BORNE DISEASES

MURINE TYPHUS - USA: CALIFORNIA

Source: Contra Costa Times [edited] 8 Aug 2012 reported on ProMED Mail 16 Aug 2012

http://www.contracostatimes.com/california/ci_21305093/long-beach-health-officials-warn-flea-borne-typhus

Long Beach health officials warn fleaborne typhus cases are on the rise. The number of fleaborne typhus cases is up over last year [2011], and local health officials are warning residents to take precautions. So far this year, 11 cases of the illness have been reported to the Long Beach Health Department, compared with 9 for all of last year.

The fleaborne typhus -- known as murine typhus [also called endemic typhus] -- is a disease spread by fleas living on rats and mice, opossums, cats, and raccoons, health officials explained. People get the disease through the bites of infected fleas, adding that it isn't spread from person to person. The commonest symptoms of fleaborne typhus are high fevers, severe headaches, body aches, and a rash. The disease is rarely fatal, but people can become sick enough to be hospitalized, health officials said.

Prior to 2006, fleaborne typhus wasn't known to be present in Long Beach. For more information about fleaborne typhus, contact the Health Department's Epidemiology Program at

562-570-4302, check online at <http://www.longbeach.gov/health>.

TICK-BORNE DISEASES

ROCKY MOUNTAIN SPOTTED FEVER - USA: TENNESSEE INCREASED INCIDENCE

Source: Nashville Public Radio [edited] 30 Jul 2012 reported on ProMED Mail 3 Aug 2012

<http://wpln.org/?p=39916>

The number of tick-borne illnesses throughout the state [Tennessee] has far surpassed the total last year [2011]. The Tennessee Health Department has reported 304 cases of Rocky Mountain spotted fever as of this month [July 2012], compared to 255 known cases in all of 2011.

Children can contract the illnesses without a tick being found, since the insects can remove themselves after their blood meal.

Medical experts link the increased cases in tick-borne illnesses to an abundance [of ticks] this season following a mild winter and early spring.

[RMSF is caused by the bacterium *Rickettsia rickettsii*. This organism is transmitted to humans by the bite of infected tick species. In the United States, these include the American dog tick (*Dermacentor variabilis*), Rocky Mountain wood tick (*Dermacentor andersoni*), and brown dog tick (*Rhipicephalus sanguineus*)]