



BORDER HEALTH NEWSLETTER - April 2012

WELCOME!

Well here we are once again, another month gone and another well underway. Where is the year going to? The shortest day is just around the corner and we all know what that means – nasty weather which makes mozzie hunting very challenging. There are still a few around at the moment though so keep your eyes peeled.

INCURSIONS/INTERCEPTIONS

There were no callouts during April.

WEBSITE

Aquatain AMF has been popular over the last two months; it provides a residual for up to four weeks by blocking the mosquito life cycle. Aquatain is a unique silicone based liquid for mosquito control. It is not a toxic chemical – it works by forming a very thin film on the water’s surface and destroying the aquatic stages of the mosquito lifecycle. It works similarly to Agnique, but doesn’t accumulate at the waters edges. It is an excellent option for containers and pooled water, including unused swimming pools where high organics make *B.t.i.* ineffective (<http://tinyurl.com/cxw7vg4>).

We’ve also sourced some bedbug traps for monitoring bedbugs which seem to be on the increase throughout New Zealand.

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.



Happy Mothers' Day!

SAMPLES

During April, 504 samples were collected by staff from 12 District Health Boards, with 123 positive. Sampling numbers were down on last month and up on this time last year. The specimens received were:

Species	Adults	Larvae
NZ Mozzies		
<i>Aedes antipodeus</i>	30	0
<i>Ae. australis</i>	0	28
<i>Ae. notoscriptus</i>	5	766
<i>Coquillettidia iracunda</i>	2	0
<i>Culex pervigilans</i>	18	988
<i>Cx. quinquefasciatus</i>	143	308
<i>Opifex fuscus</i>	0	59
Exotics	0	0
TOTAL MOSQUITOES	198	2149

MOSQUITO-BORNE DISEASES

MALARIA - NIGERIA

Source: Nigerian Tribune [edited] 2 May 2012 reported on ProMED Mail 3 May 2012

<http://tribune.com.ng/index.php/news/40220-nigeria-has-highest-malaria-cases-in-the-world-health-minister>

The Minister of Health, Professor Onyebuchi Chukwu, has disclosed that Nigeria has the highest number of malaria cases in the world, adding that the country alone contributes 23 per cent, which is almost a quarter of the global malaria cases.

Chukwu, who was represented by Mrs Fatima Bamidele, Permanent Secretary, Federal Ministry of Health, stated this in Lagos on Monday [30 Apr 2012] at a dinner organised to mark the World Malaria Day and also disclosed that the country contributed about 11 per cent of maternal deaths and 30 per cent of child deaths, adding that 47 per cent of the global



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malaria burden came from just 5 countries, of which Nigeria is one.

He said the country had been making efforts to contain the scourge through measures such as massive distribution of long lasting insecticide-treated nets, saying 46.8 million nets had been distributed so far in 30 states of the country.

Other measures taken to combat malaria, according to him, included scaling up the use of indoor residual spraying (IRS) and larviciding; massive distribution of anti-malarial medicines and commodities; capacity building for health workers at both national and states levels, and the establishment of effective coordination structures at national and states levels.

According to him, the Malaria Household Survey conducted in 2010 in 9 states of Kano, Jigawa, Bauchi, Gombe, Kaduna, Anambra, Delta, Akwa Ibom and Rivers revealed an increase in the percentage of households with at least one insecticide treated net (ITN) from 2.2 per cent to 88 per cent.

"There is also an increase in the percentage of children under 5 years of age who slept under nets the night preceding the survey from 3 per cent to 44.6 per cent," he added.

ROSS RIVER VIRUS – AUSTRALIA (VICTORIA)

Source: Geelong Advertiser [edited] 19 Apr 2012 reported on ProMED Mail 20 Apr 2012

http://www.geelongadvertiser.com.au/article/2012/04/19/320835_news.html

Mosquito control efforts have protected Bellarine Peninsula and Geelong residents from a repeat of the Ross River fever outbreak that plagued the region last year [2011]. Department of Health figures show there have been [only] 4 reported cases of the mosquito-borne fever [virus] so far in 2012 in the Barwon South Western region, compared with 82 at the same time last year.

The debilitating illness was particularly prevalent on the Bellarine Peninsula last year [2011], where mozzies were in plague

proportions, aided by warm, wet weather over summer. However, conditions were less favourable for the insects this year [2012], and coastal residents say mozzie numbers were not nearly as bad this summer.

An extensive control program by the City of Greater Geelong, including the use of helicopters to spray wetlands, is also believed to have helped control mosquitoes. Prof Eugene Athan, Barwon Health's director of infectious diseases, said there were far fewer mosquitoes in the region this year [2012]. "No doubt that's the only thing that's changed," he said. "Last year was extraordinary, but we didn't get the increase in mosquito-borne viruses that we expected this year. The number of cases this year is back to a normal level ... (and) we're hoping that trend will continue."

City of Greater Geelong manager of health and local laws Steve Sodomaco said the city treated mosquito larvae in more than 2300 ha [5683 acres; 8.9 square miles] of wetland. "We will continue to monitor breeding sites during the winter months, and ground-based treatments will occur as needed," he said. "However, it is possible mosquito levels will increase in coming months if warmer weather conditions continue and rainfall increases. Remember to keep an eye on any potential mosquito breeding areas around your home and empty any uncovered rainwater tanks, unused swimming pools, spas or fish ponds, and water containers such as bird baths, old tyres, pot plants and buckets on a regular basis. Protect yourself against mosquito bites by wearing clothing that is light-coloured and loose-fitting and covers your arms and legs and by using an effective insect repellent."

INCREASED INCIDENCE OF LYME DISEASE: USA (PA, NJ)

Source: Lehighvalleylive.com [edited] 22 Apr 2012 reported on ProMED Mail 24 Apr 2012

http://www.lehighvalleylive.com/sports/index.ssf/2012/04/lyme_disease_is_on_the_rise_in.html

From spending time with family to getting exercise and enjoying the beauty of nature,



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there are many reasons to love the outdoors. One thing that people who enjoy outdoor recreation don't love, however, are ticks. But thanks to the mild winter [2011-2012], the disease-carrying arachnids are already out in full force this year [2012].

In this area, the biggest threat from ticks, specifically the blacklegged tick (*Ixodes scapularis*), also known as the deer tick, is Lyme disease, which can be transmitted when a tick carrying the disease passes it on to a human after attaching itself to feed.

According to the Centers for Disease Control and Prevention (CDC), more than 250 000 cases of Lyme disease have been reported in the United States since 2000. In 2009, the last year for which complete statistics are available, New Jersey had 4598 confirmed cases – it's most ever in one year -- while Pennsylvania had 4950.

"The incidence of Lyme disease has increased in Pennsylvania over the past decade," said St Luke's University Health Network director of healthcare epidemiology and infection prevention Dr Kara Mascitti.

"It's unclear if that is due to an increased recognition and diagnosis of the disease, or if there is an actual increase in the number of ticks in the area."

While ticks normally become active in spring, this year's [2012] mild winter has brought them out earlier than normal. Although the adults, which are actively feeding now, can transmit the disease, CDC reports that most humans are infected by immature ticks known as nymphs, which feed spring through summer.

When it comes to preventing tick bites, there are several precautions a person can take. The best way to minimize the threat of Lyme disease is to keep contact with the bloodsuckers to a minimum. "This can be done by avoiding places where they are most likely

found, including wooded and bushy areas, or areas with high grass. If you do anticipate contact with one of these high risk areas, it's important to wear a hat, long sleeves and pants, and to use insect repellent containing 20 per cent or more DEET on the exposed skin," Mascitti said. "It's also important to do a thorough tick check when returning indoors to remove any ticks that might have gotten on you despite these measures.

Showering immediately upon returning indoors can also wash away ticks that haven't yet attached to the skin."

When doing a visual inspection for ticks, no area should be overlooked. "Because ticks like hard-to-see areas of the body, you should pay close attention to the armpits, in and around the ears, behind the knees, in the groin and underneath the hair," Mascitti said. "It's also important to check any gear, pets, etc. that may have accompanied you outside, as these can carry ticks inside your home that can later make their way onto your body."

As for clothing and gear that comes in contact with the body such as backpacks, it's a good idea to treat them with a permethrin-based product designed to kill and repel ticks. CDC also recommends putting clothes in the dryer for one hour on high heat to kill any ticks that may be on them. While turkey hunters, anglers, hikers and other outdoor enthusiasts know how easy it is to pick up ticks while moving through woods or brush, the reality is that each year countless unsuspecting individuals are bitten by the arachnids while they are working, gardening or playing right in their own backyards. To help reduce the risk of picking up ticks in the yard, CDC recommends people take preventive actions such as mowing the lawn regularly, removing leaf litter from their yards and clearing tall grasses and brush from around their houses and the edge of yards. If you do find a tick on you, the best way to remove it is to grab it as close to the skin as possible and pull up with a steady, consistent motion.



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Afterward, wash your hands and the bite area thoroughly with rubbing alcohol or soap and water.

Experts say a tick must be attached for at least 36 hours for the Lyme disease bacterium to be transmitted. If you do exhibit signs of the disease, it's important to consult your family doctor or an infectious disease specialist for proper diagnosis and treatment. In most cases, antibiotics are prescribed to treat Lyme disease, and, according to CDC, patients who take the appropriate antibiotics in the early stages of the disease usually make a rapid and complete recovery. "Early Lyme disease usually presents like a "summertime flu", with headache and body aches, fevers and chills, and fatigue," Mascitti said. "Often people will notice the classic bull's-eye-like red rash."

That rash, called erythema migrans, as well as the other symptoms, will usually occur within a few days to a month after a person is bitten by an infected tick. And while the rash can be an indicator that Lyme disease is present, it isn't noticeable in every case. "The bull's-eye rash is a tell-tale sign, but, unfortunately, it is found in

only 70-80 per cent of cases," Mascitti said. "Or, if it occurs, it can occur in an area where it might not be immediately noticed, like the back, armpit or under the hair."

Photo of the Month



Photo of a bedbug on human skin

Ex <http://topnews.net.nz/content/29343-bedbug-epidemic-new-york-city-has-now-spread-other-landmark>.