



BORDER HEALTH NEWSLETTER - MAY 2012

WELCOME!

Hi everyone. Hope you're keeping warm if you are experiencing this latest wintery blast. It's nearly white in all directions, from our place today.



INCURSIONS/INTERCEPTIONS

There were no interceptions during May.

SAMPLES

During May, 442 samples were collected by staff from 11 District Health Boards, with 65 positive. Sampling numbers were down on last month and up slightly compared with this time last year, however with a similar number of positive samples. The specimens received were:

Species	Adults	Larvae
NZ Mozzies		
<i>Aedes antipodeus</i>	5	0
<i>Ae. australis</i>	0	1
<i>Ae. notoscriptus</i>	44	489
<i>Culex pervigilans</i>	10	121
<i>Cx. quinquefasciatus</i>	7	572
<i>Opifex fuscus</i>	1	17
Exotics	0	0
TOTAL MOSQUITOES	67	1200

BORDER HEALTH PROTECTION & SHIPS SANITATION CERTIFICATE TRAINING COURSE

The purpose of this pilot course is to provide training on Ships Sanitation Certificate issuance in line with WHO requirements. The course will be focused on this subject. The Ministry of

Health has requested that SMS approach public health units and invite their nominations for experienced health protection officers to attend the training. This is in order to generate a cohort of HPOs who will be able to return to their public health units and provide a mentoring role to their peers and subordinates. This will embed in each public health unit a core of experienced staff able to impart their knowledge on ship certification to their colleagues in the unit.

Course Administration: SMS are hosting the pilot course at Blue Skies Conference Centre, Kaiapoi, from 30 July to 4 August. The training has been radically reworked to meet WHO requirements to provide a four day "face to face" block training event as part of a comprehensive ship sanitation training programme that will equip health officials with the knowledge and skills to be able to carry out their duties at international points of entry. It is intended to bring to the July training event those HPOs who have the most experience in port health duties and who will be expected to:

- Provide cogent commentary to the Directing Staff that can be incorporated, where necessary, into the training model
- Return to their Public Health Units and to assume a mentoring role for other HPOs, in particular those who are recently graduated or those who have had minimal port health experience

There will remain training in vector control, with the emphasis on container rather than saltmarsh mosquito species. In addition the range of invertebrate and invertebrate vectors that will be discussed will be expanded on. Those who attended the Vector Surveillance Workshop in Snell's Beach last year will recall that, for the first time, vectors and vector borne diseases other than exotic mosquitoes were introduced into the programme, i.e. ticks, lice, mites, fleas and sand flies. These vectors will



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remain, and cockroaches, rodents and bed bugs will be added to the curriculum.

A new Mosquito Biology, Surveillance, Species Profile and Vector-Borne Diseases Workbook has been prepared by Mark Disbury for the course and will be made available as part of pre-course reading on the SMS web site in the near future. Those attending the Kaiapoi course will have access to this along with a number of other resources for the course including the Handbook for Inspection of Ships and Issuance of Ships Sanitation Certificates, both references are key to the course teaching programme.

We are expecting the weather will be kinder to us than last year, when the heavy snow disrupted proceedings and effectively reduced the course from a 5 to a 3 day programme as participants travel arrangements were disrupted.

MOSQUITO-BORNE DISEASES

CHIKUNGUNYA AND DENGUE - CAMBODIA

Source: The Phnom Penh post [edited] 15 May 2012 reported on ProMED Mail 16 May 2012
<http://www.phnompenhpost.com/index.php/2012051556163/National-news/dengue-death-tally-skewed.html>

An old virus that shares similar symptoms to dengue fever had resurfaced in Cambodia in recent months and was a leading factor in this year's sharp spike in deaths attributed to dengue, health officials said yesterday [14 May 2012].

Last seen in Cambodia in the early 1990s, the chikungunya, or CHIKV, virus had re-emerged in Cambodia over the past 6-9 months, World Health Organization epidemiologist Steven Bjorge said. "It's been moving through India, Singapore, Malaysia, Thailand, now it appears it has reached Cambodia," he said.

Although a completely different virus, it is often confused with dengue, as the symptoms are

similar and the species of the mosquito is the same, he said.

However, dengue symptoms tended to be more severe, with people potentially dying from them, unlike CHIKV.



Cambodia location map ex <http://www.top-photogalleries.com/photos/photogallery/Cambodia,-Location-Map,-Cambodia./27/27/180/0/Yes.html>

"The problem is that with those viruses, there is no drug to stop the symptoms, likewise there is no vaccine. The only thing we have left is to protect against mosquitoes," he said.

Aedes mosquitoes [*Aedes aegypti* and *Ae. albopictus* in SE Asia], which transmit the viruses, tended to breed in man-made containers, he said, adding that putting larvicide or guppy fish in pools of water and cleaning up small piles of trash would be a good way of guarding against them.

Char Meng Chur, director of the National Center for Parasitology, Entomology and Malaria Control, said the similarity of the viruses and the rise in CHIKV cases had partly contributed to a 3-fold increase in dengue numbers.

There were 2579 cases, with 14 deaths, more than the 1st 18 weeks of the year [2012] -- an increase of 353 per cent if compared to the same period last year.

Other reasons for the increase in reported dengue cases included more rainfall and this



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year being the climax of a 5-year cycle that tends to see more deaths, he added.

Health officials have distributed 90 tonnes of Abate, a chemical used to kill larvae, and will distribute 180 tonnes during the rainy season.

[Unfortunately, no indication is given about the proportion of the 2579 cases mentioned above that are due to dengue and to chikungunya virus infections, nor the basis on which the presence of chikungunya virus infections was determined. Chikungunya virus is endemic in Southeast Asia, and tends to appear in sporadic outbreaks there.

Although this is the 1st ProMED-mail report of chikungunya virus infections in Cambodia, outbreaks have been reported in neighboring Thailand (see ProMED-mail archive number 20090515.1818).

Dengue viruses are flaviviruses and chikungunya virus is an alphavirus, so there is no serological cross-reactivity between them, although their clinical symptoms are very similar. Although the case fatality rate of chikungunya virus infections is extremely low or nil, they produce acute arthralgia that may persist weeks or even months after the acute phase of the illness, and may be incapacitating. - Mod.TY]

FLEA-BORNE DISEASES

MURINE TYPHUS – USA: (CALIFORNIA)

Source: NBC Los Angeles [edited] 29 May 2012 reported on ProMED Mail 2 June 2012

<http://www.nbclosangeles.com/news/local/symptoms-treatment-typhus-orange-county-155417285.html>

Health officials in Orange County [California] are working hard to stop a single incident of [murine] typhus from becoming an outbreak. But what is typhus and how do you spot it?

A child in Santa Ana [Santa Ana is the county seat and 2nd most populous city in Orange

County, California] was hospitalized with the condition last month [April 2012], and although the child has since recovered, the county's animal control specialists are trying to trap feral cats near 2 schools in the area, Frances E Willard Intermediate School in the 1300 block of North Ross Street and El Sol Science and Arts Academy in the 1000 block of North Broadway.

It was the 2nd case of typhus in the Orange County this year [2012], according to Nicole Stanfield, spokeswoman for the county health department. Infections, once rare in Southern California, have been increasing steadily over the past 6 years, she said. "In 2006 we started seeing an increase, and every year the numbers have gone up," Stanfield said.

[Murine, also called endemic] typhus occurs when fleas that carry *Rickettsia typhi* bite a person. These pests [fleas] live on feral animals, including rats, cats, skunks, raccoons, and opossums. Murine typhus has become more common in Southern California in recent years.

[Murine typhus is similar to epidemic or human louse-borne typhus that is caused by *Rickettsia prowazekii*, but murine typhus is much milder and the fatality rate in untreated cases is under 2 percent. - Mod.ML] Prompt treatment with antibiotics will cure nearly all patients with murine typhus, according to the "Medline" website of the National Institutes of Health [<http://www.nlm.nih.gov/medlineplus/ency/article/001363.htm>].]

[Murine] typhus is characterized by very high fevers of 105 to 106 deg F [40.5-41 deg C], which may last as long as 2 weeks, according to NIH. Other symptoms include: abdominal pain, backache, diarrhoea, and a dull, red rash that begins in the middle of the body and spreads, according to NIH. Sufferers may experience a hacking, dry cough, headache, joint and muscle pain, nausea, and vomiting.

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To avoid infection, stay away from areas where there are rats, raccoons, opossums, skunks, or other carriers. If you or a child have been bitten [by fleas] and develop symptoms, call a doctor right away.

The illness is not related at all to typhoid fever.

[The following is extracted from ProMED-mail post Murine typhus - USA: (TX) archive no: 20110607.1734:

"*Rickettsia* are small obligate intracellular parasites that are maintained in animal and arthropod reservoirs and transmitted by arthropod vectors (ticks, fleas, lice, or mites) to humans. Murine typhus, which occurs throughout the world, is a flea-borne rickettsial disease caused by the *Rickettsia typhi*.

Rats are the primary animal reservoir of *R. typhi*; however, other mammals, such as free-ranging cats, dogs, and opossums and their fleas can maintain this microorganism in areas where rats and rat fleas are absent (Azad AF,

Radulovic S, Higgins JA, et al: Flea-borne rickettsioses: ecologic considerations. *Emerg Infect Dis* 1997; 3(3): 319-27; available at <<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2627639/>>.)]

Photo of the Month



Adult cat flea (*Ctenocephalides felis*)
<http://www.livingwithbugs.com/fleas.html>