

Communicable Diseases Weekly Report

Epi-Week 15: 7 April 2014 – 13 April 2014

In summary, we report:

- Salmonellosis two outbreaks linked to raw eggs in uncooked foods
- Invasive meningococcal disease five new cases
- Arbovirus update increase in RRV cases and flavivirus detections in sentinel chickens
- Australian Bat Lyssavirus human exposure to ABLV-positive bat
- Summary of notifiable conditions activity in NSW

For further information on infectious diseases and alerts see the Infectious Diseases webpage.

Follow the A to Z of Infectious Diseases link for more information on specific diseases.

For links to other surveillance reports, including influenza reports, see the <u>NSW Health Infectious</u> <u>Diseases Reports</u> webpage.

Salmonellosis

Two outbreaks of salmonellosis associated with the consumption of foods containing raw eggs were investigated this week, together with the NSW Food Authority (NSWFA). The first outbreak was detected following a report from a doctor to a public health unit of two patients with salmonellosis who had eaten at the same south-east Sydney bakery on 28 March 2014. More complaints were received by the NSWFA and active case finding revealed additional salmonellosis cases with links to food purchased at the bakery. To date there have been 10 laboratory-confirmed salmonellosis cases and 20 clinical cases in people who reported eating Vietnamese style pork and chicken rolls from the same bakery from 28 to 31 March 2014.

The premises were reported to have prepared the implicated rolls with raw egg butter and a pâté made with inadequate temperature monitoring. A number of food and environmental samples were taken and tested positive for *Salmonella* bacteria. The owners have indicated that they will be using pasteurised egg products in the future.

The second outbreak was identified following a report of a cluster of seven salmonellosis case samples which shared a genetic pattern (MLVA 3-26-7-20-496). Interviews with six of the cases revealed they had all consumed a creamy chicken pesto pasta salad bought from a grocery store deli in the eastern suburbs of Sydney from 20 to 22 March 2014. These cases also reported three other suspect cases who had become ill after eating the same salad. The premises reported mixing raw eggs into the pasta salad. The owners have indicated that they will cease using raw eggs in their salads.

The NSWFA will be working with both premises to ensure they meet appropriate food safety and hygiene standards, and will seek to determine the suppliers of the eggs used at each premises.

Restaurants, cafes, bakeries, caterers and manufacturers that make raw egg dressings and sauces need to follow safe handling practices. They should try to use alternatives to raw eggs in foods which are not cooked. Alternatives include commercially produced dressings and sauces, or pasteurised egg products.

Follow the link for further information on safe handling of raw egg products from the NSWFA.

Follow the link for further information on salmonellosis notifications.

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Invasive meningococcal disease

There were five cases of invasive meningococcal disease (IMD) notified this week (Table 1). The five cases reported this week increase the number of IMD cases to nine in NSW in 2014. The cases were aged between 6 months and 86 years and were residents of five Local Health Districts. The local public health units have investigated the cases to identify and manage close contacts.

Meningococcal disease is caused by infection with *Neisseria meningitidis* bacteria, of which there are several serogroups. In NSW, most reported cases are due to serogroup B, for which until recently there has been no vaccine available in Australia. Disease caused by serogroup C bacteria has become rare in NSW since the introduction of serogroup C vaccines into the routine childhood immunisation schedule in 2003.

Meningococcal C vaccination is recommended for all children at one year of age and is provided as part of free routine immunisation. Quadrivalent meningococcal vaccines protect against serogroups A, C, Y and W135 and are recommended for certain groups including travellers to countries where there are epidemics of these strains (eg sub-Saharan Africa) and for pilgrims performing the Hajj or Umrah in Saudi Arabia. The new vaccine against serogroup B disease is expected to provide protection against around 75 per cent of the serogroup B strains in Australia, and can be given as a course of three doses and a booster if started at 6 weeks of age.

Follow the link for further information on meningococcal disease notifications.

Follow the link for further information on meningococcal vaccination (external link).

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Arbovirus Update

There were 16 notifications of Ross River virus (RRV) infection reported this week (Table 1), an increase over the six notifications in the previous week and a sign of the rising trend in RRV notifications since January this year. RRV cases have been mainly in residents of the Hunter New England (coastal part), Mid North Coast, and North Coast Local Health Districts, areas which have usually had the highest rates of infection in the state.

In the past week there were also two reports of flavivirus seroconversions in NSW sentinel chickens: one to Murray Valley encephalitis virus (MVEV) from Deniliquin (collected on 31 March) and one to Kunjin virus (KUNV) from Leeton (collected on 30 March). There were also two Edge Hill virus isolates and one Barmah Forest virus (BFV) isolate from mosquitoes collected at Port Stephens. In NSW, the last reported human cases of MVEV were in 2011 (2 cases) and there was one case of KUNV in 2012.

The NSW Arbovirus Surveillance Program monitors mosquito populations and conducts surveillance of arbovirus activity through virus isolation in the NSW inland, coastal regions and metropolitan Sydney, and monitors flavivirus transmission through the testing of sentinel chickens located across inland NSW. Most sites operate between November and April.

There is no vaccine to protect against the arboviruses that cause human infections in NSW; therefore prevention relies on measures to avoid being bitten by mosquitoes and to reduce mosquito breeding near homes. Mosquitoes that carry these viruses are usually most active in the hours after sunset and again around dawn, but may bite throughout the day.

Cover up and take care - reduce your chances of picking up a serious mosquito-borne infection by following these simple precautions:

- Use an effective repellent on exposed skin areas. Re-apply repellent every few hours, according to the instructions, as protection wears off from perspiration, particularly on hot nights or during exercise.
- The best mosquito repellents contain Diethyl Toluamide (DEET) or Picaridin. Botanical based products (e.g. Eucalyptus, Citronella) provide only limited periods of protection.
- Topical repellents are not recommended for use on children below the age of 3 months.

- Note that prolonged or excessive use of repellents can be dangerous, particularly on babies and young children. Avoid putting repellent near eyes and mouth, spread sparingly over the skin, and rinse off once you are indoors.
- Provide mosquito netting, where necessary—both indoors and outdoors.
- Cover up as much as possible with loose fitting clothing and sensible footwear. Avoid tight clothes.
- Cover your clothes with repellent as mosquitoes can bite through material, but be careful as some repellents stain clothes.
- Use mosquito coils outdoors and plug-in devices with vaporising mats indoors.

Follow the link for the Mosquitoes are a health hazard factsheet.

Follow the link for further information notifications data for particular arboviruses.

Follow the link for weekly updates from the NSW Arbovirus Surveillance Program.

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Australian Bat Lyssavirus (ABLV)

A vaccinated wildlife carer was bitten by a grey-headed flying fox in the eastern suburbs of Sydney this week. The wildlife carer was treated and was commenced on a course of ABLV post exposure prophylaxis (i.e. two additional rabies vaccinations). The bat subsequently tested positive to ABLV, the third time a bat has tested positive to ABLV in NSW in 2014.

Lyssaviruses are a group of viruses that includes rabies and ABLV. The ABLV virus is found in all species of bats, from the small insectivorous microbats to the larger flying fox species. Rabies is carried by mammals in many overseas countries. Both lyssaviruses are spread by bites and scratches. These diseases can be prevented by rapid and thorough cleaning of the wound and by vaccination. Almost all cases are fatal once symptoms commence.

The best protection against being exposed to rabies or ABLV is to avoid handling any type of bat in Australia, or any wild or domestic mammal in a rabies endemic country. This includes bats and wild or domestic dogs, cats, and monkeys.

Only people who have been vaccinated against rabies/ABLV and who have been trained in the care of bats should ever handle bats or flying foxes. Anyone who comes across an injured bat should contact the local Wildlife Information Rescue and Education Service (WIRES) network on 1300 094 737. WIRES have trained staff who can deal with bats safely. A veterinarian may also be able to offer assistance and advice. Do not touch the bat and avoid direct contact with any bat saliva.

Follow the link for the Rabies / ABLV factsheet.

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Summary of notifiable conditions activity in NSW

The following table summarises notifiable conditions activity over the reporting period (Table 1).

Table 1. NSW notifiable conditions from 7 April to 13 April 2014, by date received.*

| | | Weekly | | Year to date | | | Full Year | |
|--------------------------------------|--------------------------------------|-----------|--------------|--------------|------|------|-----------|-------|
| | | This week | Last week | 2014 | 2013 | 2012 | 2013 | 2012 |
| Enteric Diseases | Cryptosporidiosis | 9 | 8 | 170 | 699 | 255 | 1132 | 655 |
| | Giardiasis | 77 | 76 | 987 | 836 | 785 | 2240 | 2012 |
| | Hepatitis A | 1 | 0 | 29 | 31 | 10 | 62 | 41 |
| | Listeriosis | 1 | 0 | 7 | 19 | 14 | 33 | 36 |
| | Rotavirus | 4 | 6 | 103 | 144 | 223 | 508 | 1758 |
| | STEC/VTEC | 1 | 0 | 19 | 14 | 7 | 24 | 14 |
| | Salmonellosis | 112 | 121 | 1704 | 1434 | 1217 | 3486 | 2942 |
| | Shigellosis | 4 | 3 | 102 | 45 | 53 | 136 | 131 |
| Respiratory Diseases | Influenza | 62 | 67 | 847 | 517 | 298 | 8401 | 8037 |
| | Legionellosis | 1 | 1 | 21 | 28 | 47 | 104 | 107 |
| | Tuberculosis | 3 | 6 | 115 | 131 | 144 | 440 | 469 |
| Sexually Transmissible Infections | Chlamydia | 345 | 511 | 6897 | 6702 | 6959 | 21077 | 21261 |
| | Gonorrhoea | 65 | 103 | 1400 | 1414 | 1219 | 4270 | 4115 |
| Vaccine Preventable Diseases | Adverse Event Following Immunisation | 7 | 11 | 100 | 289 | 105 | 508 | 269 |
| | Meningococcal Disease | 5 | 0 | 9 | 9 | 13 | 48 | 68 |
| | Mumps | 1 | 0 | 33 | 27 | 26 | 88 | 110 |
| | Pertussis | 27 | 22 | 537 | 817 | 2476 | 2379 | 5998 |
| | Pneumococcal Disease (Invasive) | 5 | 5 | 77 | 96 | 83 | 490 | 564 |
| | Rubella | 1 | 0 | 3 | 1 | 5 | 12 | 11 |
| Vector Borne Diseases | Barmah Forest | 5 | 3 | 66 | 168 | 123 | 440 | 352 |
| | Dengue | 1 | 3 | 134 | 87 | 107 | 299 | 287 |
| | Ross River | 16 | 14 | 137 | 161 | 248 | 513 | 596 |
| Zoonotic | Q fever | 1 | 2 | 53 | 46 | 50 | 155 | 124 |

* Notes on Table 1: NSW Notifiable Conditions activity

- Data cells represent the number of case reports received by NSW Public Health Units and recorded on the NSW Notifiable Conditions Information Management System (NCIMS) in the relevant period.
- Data cells in the 'Adverse Event Following Immunisation' category refer to suspected cases only. These reports are referred to the Therapeutic Goods Administration (TGA) for assessment. Data on adverse events following immunisation is available online from the TGA <u>Database of Adverse Event Notifications</u>.
- Only conditions for which at least one case report was received appear in the table. HIV and other blood-borne virus case reports are not included here but are available from the Infectious Diseases Data webpage.

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