# Communicable Diseases Weekly Report

## Week 19, 4 May to 10 May 2015

In summary, we report:

- **Tetanus** – one new case reported following a scratch
- **Brucellosis** – one new case reported; pig-hunting as a risk factor
- **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 NSW Health Infectious Diseases Reports webpage.

## Tetanus

One clinical case of tetanus was notified this week (Table 1), in a resident of Western NSW Local Health District. The case was in an elderly woman suspected to have acquired the infection following an incidental scratch from a wire fence. The woman is in a serious condition and is currently receiving treatment in an intensive care unit.

Tetanus is a life-threatening disease caused by infection with the bacterium *Clostridium tetani*. These bacteria are commonly found in the environment. Infection may occur after minor injury to the skin that is contaminated with soil, dust or manure or after major injuries and burns. Symptoms of the disease usually develop 3 to 21 days after exposure but the onset can sometimes be delayed for several months. Toxin produced by the bacteria attack the central nervous system causing muscle rigidity with painful spasms, including the characteristic muscle spasms of the jaw muscles ("lock jaw"). Muscle spasms can become generalised but the major concern is muscle spasm around the airways (laryngospasm) that threatens breathing.

Tetanus is now rare in NSW. There are only 1 or 2 cases reported each year, occurring primarily in older adults who have never been vaccinated or who were vaccinated in the distant past. Immunisation protects against tetanus. Tetanus vaccine is routinely given at 6–8 weeks, 4 and 6 months of age, with boosting doses at 3½ - 4 years, and 12 years of age. Adults who reach the age of 50 years without having received a booster in the last ten years should be given a booster dose.

The definition of a tetanus-prone wound is not straightforward. All wounds other than clean minor cuts are considered tetanus-prone and should be cleaned and assessed. Adults who have a tetanus-prone wound should receive a booster dose of tetanus-containing vaccine if more than 5 years have passed since their last vaccine. If it is unclear that the person had completed a primary tetanus vaccination course they should also be given tetanus immunoglobulin to provide immediate passive protection.

See the Australian Immunisation Handbook (10th Ed.) for further information on tetanus vaccination and the management of tetanus-prone wounds.

Follow the link for further information on NSW tetanus notifications.

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## Brucellosis

One case of brucellosis was reported this week (Table 1). The case was in a traveller recently returned from the Middle East. There have been two other cases of brucellosis this year acquired during travel in the Middle East. All were caused by the *Brucella melitensis* strain and were likely associated with the consumption of unpasteurised dairy products.

There has also been one locally-acquired case of brucellosis this year caused by the *B. suis* strain. The case was a man who hunted pigs in northern NSW and who reported regular exposure to pig animal tissue and blood.

People travelling to countries where brucellosis is common may become infected after eating unpasteurised dairy products, such as raw milk and some cheeses. They may also be exposed to infected tissues and body fluids when caring for, handling or hunting infected animals.

Human brucellosis typically begins with a flu-like illness. This may include fever, headache, weakness, drenching sweats, chills, weight loss, joint and muscle pain, and generalised aches. Inflammation of the liver and spleen, and gastrointestinal or respiratory symptoms may also occur. In males, the testicles may become inflamed. *B. suis* infections are particularly associated with an increased risk of spontaneous abortion in pregnant women. Rarely, the heart valves become infected and this can be fatal. Symptoms usually start 5-60 days after infection and typically last for days or months. Symptoms can occasionally last for a year and can be recurrent.

Hunting of feral pigs is the main risk factor for human brucellosis infection acquired in NSW, and it is also a risk for hunting dogs. NSW Health works closely with the Department of Primary Industries (DPI) who report that four pig-hunting dogs with exposures in northern NSW have been diagnosed with *B. suis* so far this year. NSW Health and DPI recommend that infected dogs be euthanized as they pose a potential risk to humans and other animals who come into contact with them. No clinical illness was reported in the owners of the infected dogs or their family members.

To reduce the risk of brucellosis associated with pig hunting, people should take the following precautions:

- Cover all cuts or abrasions with waterproof dressings
- Wear gloves, overalls and face masks when slaughtering animals or handling carcasses
- Wash hands and arms in soapy water after handling animals or carcasses. Wash off all urine, faeces, blood and other body fluids, and thoroughly clean all working areas with soapy water
- Avoid opening the swollen joints and testicles of feral pig carcasses as these may be brucellosis related
- Slaughter and butcher feral pig carcasses away from areas that are used for handling meat for human consumption
- Avoid feeding domestic animals raw feral pig meat.
- Ensure that feral pig meat (or other game) is thoroughly cooked prior to consumption

Follow the links for the brucellosis factsheet and for information on brucellosis notifications.

Follow the link for advice on brucellosis for dog owners from DPI.

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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 4 May to 10 May 2015, by date received**

| | | Weekly | | Year to date | | | Full Year | |
|---|---|---|---|---|---|---|---|---|
| | | This week | Last week | 2015 | 2014 | 2013 | 2014 | 2013 |
| Enteric Diseases | Cryptosporidiosis | 19 | 29 | 525 | 217 | 821 | 429 | 1132 |
| | Giardiasis | 77 | 62 | 1517 | 1284 | 1007 | 2942 | 2242 |
| | Haemolytic Uremic Syndrome | 1 | 1 | 4 | 4 | 6 | 7 | 10 |
| | Hepatitis A | 2 | 0 | 45 | 35 | 32 | 80 | 62 |
| | Listeriosis | 1 | 0 | 10 | 13 | 20 | 23 | 33 |
| | Rotavirus | 2 | 3 | 131 | 142 | 174 | 714 | 508 |
| | Salmonellosis | 81 | 82 | 2135 | 2202 | 1737 | 4304 | 3483 |
| | Shigellosis | 7 | 1 | 71 | 110 | 55 | 210 | 136 |
| | Typhoid | 1 | 1 | 21 | 21 | 32 | 44 | 58 |
| Respiratory Diseases | Influenza | 99 | 87 | 1628 | 1129 | 637 | 20888 | 8403 |
| | Legionellosis | 1 | 2 | 36 | 34 | 37 | 72 | 109 |
| | Tuberculosis | 2 | 6 | 123 | 159 | 162 | 472 | 444 |
| Sexually Transmissible Infections | Chlamydia | 365 | 396 | 8475 | 9187 | 8222 | 22899 | 21088 |
| | Gonorrhoea | 64 | 76 | 1909 | 1902 | 1740 | 4876 | 4266 |
| Vaccine Preventable Diseases | Adverse Event Following Immunisation | 6 | 5 | 71 | 138 | 333 | 255 | 509 |
| | Pertussis | 110 | 121 | 2332 | 735 | 983 | 3051 | 2379 |
| | Pneumococcal Disease (Invasive) | 7 | 9 | 105 | 107 | 135 | 512 | 490 |
| | Tetanus | 1 | 0 | 1 | 1 | 2 | 1 | 2 |
| Vector Borne Diseases | Barmah Forest | 7 | 9 | 127 | 98 | 212 | 163 | 438 |
| | Dengue | 1 | 8 | 148 | 188 | 107 | 378 | 303 |
| | Ross River | 45 | 53 | 1220 | 235 | 231 | 677 | 512 |
| Zoonotic | Brucellosis | 1 | 0 | 4 | 1 | 0 | 3 | 4 |
| | Q fever | 6 | 1 | 74 | 74 | 61 | 190 | 163 |

**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 Database of Adverse Event Notifications.
- 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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