

Communicable Diseases Weekly Report

Week 36, 30 August to 5 September 2020

In summary, we report:

- Brucellosis one new case
- Novel coronavirus 2019 (COVID-19)
- Summary of notifiable conditions activity in NSW

For further information see NSW Health <u>infectious diseases page</u>. This includes links to other NSW Health <u>infectious disease surveillance reports</u> and a <u>diseases data page</u> for a range of notifiable infectious diseases.

Brucellosis

One new case of brucellosis was reported this week (Table 1) in a male from Sydney. He presented with a four-week history of fevers, night sweats and weight loss, and subsequently had *Brucella suis* isolated on blood culture. He had a history of exposure to animal tissues.

Brucellosis is an infection caused by the bacterium *Brucella* that is spread to humans from infected animals. Different types of *Brucella* bacteria usually infect different animals. There are five types of *Brucella* bacteria that are known to cause brucellosis in humans. Two *Brucella* species that are of particular importance to Australian residents and travellers are *Brucella suis* and *Brucella melitensis*. *Brucella suis* is widespread in the feral pig population in northern NSW and Queensland, and has caused infections in humans and dogs who have hunted feral pigs in these areas. *Brucella melitensis* infects goats, sheep and camels in the Mediterranean, Middle East, Central Asia and Central America, and travellers to these countries may become infected after consuming unpasteurised dairy products.

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. *Brucella 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.

Brucella bacteria are found in the blood, urine, semen, vaginal discharge, placenta, milk and aborted foetuses of infected animals. It may also be found in their saliva, and nasal, ocular, and joint fluids. Humans usually become exposed by contact with these contaminated fluids through abraded skin or mucous membranes, or by ingestion of infected animal products. Person-to-person transmission is very rare.

Feral pig hunting is the main risk factor for human brucellosis infection acquired in NSW, and it is also a risk for hunting dogs. NSW Health and DPI recommend that infected dogs be euthanised or treated with antibiotics and desexed as they pose a potential risk to humans and other animals. Dogs in the same household as an infected dog should be tested for *B. suis*.

There are ways to prevent human brucellosis infections. People who hunt or have contact with feral pigs should follow the precautions outlined in the <u>brucellosis and feral pig hunting factsheet</u>. Owners of dogs diagnosed with brucellosis should follow the recommendations outlined on the <u>advice on brucellosis for dog owners</u> page, to prevent spread to humans or other domestic animals. Other general ways to prevent infection include:

- Thoroughly cooking meat from feral pigs before eating
- People vulnerable to severe disease, including pregnant women, should avoid all contact with feral pigs, hunting activities and pig-hunting dogs
- Avoiding consumption of unpasteurised dairy products or undercooked meat when travelling to high-risk countries
- Avoiding direct (bare skin) contact with animal tissues, blood and other body fluids when travelling to high-risk countries

Follow the link for the brucellosis factsheet to read further information about the disease.

Novel coronavirus 2019 (COVID-19)

For up-to-date information regarding the COVID-19 outbreak and the NSW response, please visit the NSW Health COVID-19 page.

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 30 August – 5 September 2020, by date received*

		<u>Weekly</u>		<u>Year to date</u>			<u>Full Year</u>	
		This week	Last week	2020	2019	2018	2019	2018
Bloodborne	Hepatitis C - Newly Acquired	1	0	9	20	27	29	38
Enteric Diseases	Cryptosporidiosis	1	4	440	471	551	669	708
	Giardiasis	20	22	1324	2511	2079	3271	2936
	Rotavirus	3	3	394	691	567	1755	807
	Salmonellosis	32	19	2236	2606	2397	3559	3335
	Shigellosis	5	5	419	598	272	868	529
	Typhoid	1	0	34	50	41	64	58
Respiratory Diseases	Influenza	4	3	7408	103900	11079	116455	17408
	Legionellosis	2	5	107	105	105	153	171
	Tuberculosis	18	21	402	397	350	593	508
Sexually Transmissible Infections	Chlamydia	453	518	18724	22262	22053	32444	31176
	Gonorrhoea	171	204	6920	8262	7439	11704	10601
Vaccine Preventable Diseases	Mumps	1	0	45	39	56	56	72
	Pertussis	1	2	1380	4345	3042	6387	6280
	Pneumococcal Disease (Invasive)	8	10	254	447	464	692	681
Vector Borne Diseases	Barmah Forest	2	2	214	51	57	63	74
	Malaria	1	0	22	47	46	73	66
	Ross River	5	11	1806	490	444	577	571
Zoonotic Diseases	Q fever	4	1	144	180	151	248	228

* Notes on Table 1: NSW Notifiable Conditions activity

- Only conditions which had one or more case reports received during the reporting week appear in the table.
- Due to the rapidly evolving nature of the situation, data on COVID-19 notifications can be found separately on the NSW Health Latest Updates on COVID-19 page.
- 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 (i.e. by report date).
- Note that <u>notifiable disease data</u> available on the NSW Health website are reported by onset date so case totals are likely to vary from those shown here.
- Cases involving interstate residents are not included.
- The shigellosis case definition changed on 1 July 2018 to include probable cases (PCR positive only), hence case counts cannot be validly compared to previous years.
- 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.
- Chronic blood-borne virus conditions (such as HIV, hepatitis B and C) are not included here.
 Related data are available from the <u>Infectious Diseases Data</u>, the <u>HIV Surveillance Data Reports</u> and the <u>Hepatitis B and C Strategies Data Reports</u> webpages.
- Notification is dependent on a diagnosis being made by a doctor, hospital or laboratory.
 Changes in awareness and testing patterns influence the proportion of patients with a particular infection that is diagnosed and notified over time, especially if the infection causes non-specific symptoms.