

Communicable Diseases Weekly Report

Week 27 29 June 2015 -5 July 2015

In summary, we report:

- [MERS-CoV](#) –situation update
- [Brucellosis](#) -one new case reported
- [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.

MERS-CoV

Worldwide update

Since 1 January 2015, 423 laboratory-confirmed cases of MERS have been reported to World Health Organization (WHO), notably from the Kingdom of Saudi Arabia and the Republic of Korea. The ongoing outbreak in the Republic of Korea – resulting from a single exported case with travel history in the Middle East (Saudi Arabia, Qatar, United Arab Emirates and Bahrain) and subsequent human-to-human transmission to close family contacts, to patients who shared a room or ward with infected patients, to health care workers providing care for patients before MERS was suspected or diagnosed – is similar to nosocomial outbreaks in other countries (e.g. Saudi Arabia and UAE).

As of 9 July there have been 186 cases, reported by South Korea, including 35 deaths; 32 of the deaths were in people with significant pre-existing medical conditions. There have been 39 cases in health care workers (21%). No new cases have been reported in the last 3 days and the number of people in quarantine has dropped below 1000, down from a high of over 6000 at any one time. Over 15 000 contacts under surveillance by public health authorities have completed monitoring.

WHO also reported a case of MERS-CoV in the Philippines on 6 July in a traveller from Finland who had visited Saudi Arabia and United Arab Emirates in Middle East prior to arrival in Manila. This is the second imported case in the Philippines.

Australia

There have been no cases of MERS-CoV in Australia. A total of 21 people have been reported to Communicable Diseases Branch as undergoing testing for MERS-CoV in NSW during 2014 and 2015. The majority of these people have presented with a compatible illness and a history of travel to affected countries in the Middle East, rather than other countries where cases have been reported.

Background

MERS-CoV is a respiratory infection due to a new type of coronavirus, first recognised in 2012. Infection with MERS-CoV can cause a rapid onset of severe respiratory disease. Other symptoms include fever, muscle pain, diarrhoea and vomiting. Most severe cases have occurred in people with underlying conditions that may make them more likely to get respiratory infections.

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All cases of MERS-CoV worldwide have had a history of residence in or travel to the Middle East (mainly Saudi Arabia), or contact with travellers returning from these areas, or can be linked to an initial imported case.

Camels are suspected to be the primary source of infection for humans, but the exact routes of direct or indirect exposure are not fully understood, and further studies (particularly case control studies) are needed. The WHO advises that people should avoid drinking raw camel milk or camel urine, or eating camel meat that has not been properly cooked.

The WHO emphasises the need for universal application of standard infection control precautions, and transmission-based precautions when in contact with suspected or confirmed cases, and that it is not possible to distinguish MERS-CoV from other respiratory infections except with laboratory testing.

There is no evidence of ongoing community transmission in any country and only occasional instances of household transmission. Transmission in health care settings has been a feature of outbreaks.

Brucellosis

One case of brucellosis was reported this week (Table 1). The case was an elderly man with a number of comorbidities who had exposures in NSW to pig hunting over 30 years ago and unpasteurised milk over 10 years ago. Culture results to determine the *Brucella* species are not available. Although chronic brucellosis infection is well recognised, further investigation of more recent potential exposures are underway.

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. Five other cases of brucellosis have been reported in NSW this year: all were acquired overseas.

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 a number of 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.

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 29 June 2015 -5 July 2015, by date received

		Weekly		Year to date			Full Year	
		This week	Last week	2015	2014	2013	2014	2013
Enteric Diseases	Cryptosporidiosis	11	10	609	258	928	429	1132
	Giardiasis	52	67	1974	1656	1308	2942	2242
	Rotavirus	8	4	171	216	212	714	508
	STEC/VTEC	1	0	11	27	17	31	24
	Salmonellosis	63	69	2576	2691	2142	4302	3483
	Shigellosis	4	3	87	125	63	210	136
	Typhoid	2	1	28	26	39	44	58
Respiratory Diseases	Influenza	296	240	2968	1867	1118	20888	8403
	Legionellosis	1	1	53	39	56	72	109
	Tuberculosis	8	4	197	222	222	473	443
Sexually Transmissible Infections	Chlamydia	393	390	11603	12246	11127	22898	21089
	Gonorrhoea	97	92	2714	2565	2287	4876	4266
Vaccine Preventable Diseases	Adverse Event Following Immunisation	2	3	98	164	380	255	509
	Mumps	1	2	29	50	60	82	89
	Pertussis	193	237	3683	977	1249	3051	2379
	Pneumococcal Disease (Invasive)	18	6	198	196	230	512	490
Vector Borne Diseases	Barmah Forest	4	3	146	120	282	163	438
	Dengue	5	2	188	257	150	378	303
	Malaria	2	0	22	56	46	87	93
	Ross River	17	10	1343	338	339	677	512
Zoonotic	Brucellosis	1	0	7	1	0	3	4
	Q fever	2	3	108	95	84	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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