

Communicable Diseases Weekly Report

Week 25, 15 to 21 June 2015

In summary, we report:

- [MERS Coronavirus \(MERS-CoV\) update](#)
- [Haemolytic Uraemic Syndrome \(HUS\)](#) – 1 new case
- [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 Coronavirus \(MERS-CoV\) update](#)

There has been a recent sharp increase in the number of cases of MERS-CoV reported due to an outbreak in South Korea. The outbreak began with a man who travelled to multiple countries in the Middle East during the 14 days prior to onset before returning to South Korea. As of 24 June 2015 there have been 179 cases including 27 deaths reported by South Korea, mainly arising due to exposures of other patients and health care workers in several health facilities in Seoul, prior to the cause of the man's disease being recognised. Over 2000 contacts of cases are under surveillance in South Korea; down from over 6000 contacts the previous week; and the number of cases reported on a daily basis has reduced significantly in the last week indicating control measures to curb spread of the disease are taking effect.

In the last week the first case of MERS-CoV has been reported in Thailand; in an elderly patient from Oman who was travelling to Thailand for medical treatment for another condition. He was symptomatic on arrival and placed in isolation on presentation to hospital. A number of contacts are under surveillance.

Other Middle Eastern countries continue to report cases to the World Health Organization (WHO), with the majority being reported in Saudi Arabia.

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. As of 10 June 2015, the World Health Organization (WHO) global case count was 1,271 laboratory-confirmed cases of MERS-CoV, including at least 453 deaths (case fatality rate 36%) since the first cases were reported in September 2012.

All cases of MERS-CoV world-wide 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. There have been no cases in Australia.

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.

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.

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 the outbreak.

For more information see the NSW Health MERS-CoV [webpage](#).

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Haemolytic Uraemic Syndrome (HUS)

A case of haemolytic uraemic syndrome (HUS) was notified this week in a child from Western NSW ([Table 1](#)). The case's exposures are being investigated and include living on a rural property as well as travel to Sydney and eating out before the onset of illness. A stool specimen was positive for STEC O26. HUS is a rare condition; and in NSW there are between 5 and 10 cases of HUS reported each year.

HUS is a severe condition characterised by **haemolytic** anaemia (anaemia caused by destruction of red blood cells), acute kidney failure (**uraemia**), and a low platelet count (thrombocytopenia) which can lead to bleeding. It is more likely to affect children and carries a 5-10% mortality rate. The most common cause of HUS is infection with shiga toxin-producing Escherichia coli (STEC) bacteria.

E. coli are bacteria commonly found in the gastrointestinal tract of people and animals. Many strains of E.coli are harmless but some strains produce toxins which can cause a range of diseases including diarrhoeal illnesses and HUS. STEC strains are carried by animals, particularly cattle. People are infected when they come into contact with the faeces of an infected animal or person, either directly or indirectly through consuming contaminated food (e.g. undercooked beef burgers, unwashed salad vegetables, and unpasteurised milk or milk products), drinking or swimming in contaminated water, person-to-person contact, or contact with animals on farms or petting zoos.

STEC infections are prevented by safe food handling and good hand hygiene. Ready to eat foods should not be allowed to come into contact with raw meat, and equipment used to prepare raw meat such as knives and cutting boards should be thoroughly washed immediately after use. Foods made from minced meat, such as hamburger patties and sausages should be cooked thoroughly and not eaten if there is any pink meat inside. Fruit and vegetables should be washed before eating and unpasteurised dairy products should not be consumed. Hands should be washed before eating and preparing food, after touching pets and farm animals, and after using the toilet or changing nappies.

See the STEC/HUS [factsheet](#) for more information.

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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 15 to 21 June 2015, by date received

		Weekly		Year to date			Full Year	
		This week	Last week	2015	2014	2013	2014	2013
Enteric Diseases	Cryptosporidiosis	10	7	593	256	921	429	1132
	Giardiasis	67	57	1891	1616	1279	2942	2242
	Haemolytic Uremic Syndrome	1	1	6	5	7	7	10
	Listeriosis	1	1	15	16	23	23	33
	Rotavirus	4	4	166	210	202	714	508
	Salmonellosis	70	49	2477	2651	2088	4303	3483
	Shigellosis	3	5	83	122	61	210	136
	Typhoid	1	1	25	26	38	44	58
Respiratory Diseases	Influenza	224	150	2449	1623	980	20888	8403
	Legionellosis	1	1	51	38	52	72	109
	Tuberculosis	3	2	181	215	211	473	443
Sexually Transmissible Infections	Chlamydia	379	313	10985	11808	10768	22900	21089
	Gonorrhoea	73	60	2422	2493	2193	4877	4267
Vaccine Preventable Diseases	Adverse Event Following Immunisation	3	3	96	162	376	255	509
	Haemophilus influenzae type b	1	1	2	2	4	6	9
	Meningococcal Disease	3	1	20	17	14	37	48
	Mumps	2	1	26	48	60	82	89
	Pertussis	232	156	3387	944	1211	3051	2379
	Pneumococcal Disease (Invasive)	6	12	179	180	215	512	490
Vector Borne Diseases	Barmah Forest	3	2	141	114	277	163	438
	Dengue	1	5	174	250	140	378	303
	Ross River	10	10	1325	332	334	677	512
Zoonotic	Brucellosis	1	1	6	1	0	3	4
	Q fever	3	1	101	92	80	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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