

# **Communicable Diseases Weekly Report**

#### Week 11, 12 to 18 March 2017

In summary, we report:

- Tetanus one new case in an unvaccinated child
- Hand, foot and mouth disease increase in emergency department presentations
- Summary of notifiable conditions activity in NSW

For further information on infectious diseases on-line see NSW Health Infectious Diseases.

Also see NSW Health Infectious Diseases Reports for links to other surveillance reports.

### **Tetanus**

One clinical case of tetanus was notified this week (<u>Table 1</u>), in a resident of Northern NSW Local Health District (LHD). The case was in an unvaccinated child who developed disease following a foot injury. Tetanus is vaccine preventable and is now rare in NSW with only eight cases reported since 2010.

Tetanus is caused by the bacterium *Clostridium tetani*, an organism which is commonly found in soil, dust and animal faeces. Disease occurs when the organism enters the body through a break in the skin (such as a puncture wound). When the bacterium grows it produces a neurotoxin which causes involuntary muscle contraction; the disease can be life threatening. Tetanus is not transmitted between people.

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 weeks, 4 months and 6 months of age, with boosting doses at 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 the person has not completed a primary tetanus vaccination course, or if there is uncertainty about this, they should also be given tetanus immunoglobulin to provide immediate passive protection.

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

Follow the link for further information on NSW tetanus notifications.

## Hand, foot and mouth disease

Since February 2017, NSW emergency departments have seen an increased number of presentations of hand, foot and mouth disease (HFMD) in children aged under 5 years (Figure 1), with 60 cases in the current reporting week. The increases have been particularly marked in the Illawarra Shoalhaven (Figure 2) and Mid North Coast LHDs. Kempsey Hospital accounted for the majority (73%) of the HFMD presentations in the Mid North Coast LHD (Figure 3). Four of the 60 emergency department presentations were admitted but there were no admissions to a critical care ward or other signals of increased severity, such as meningitis or encephalitis.

Figure 1. Total weekly counts of Emergency Department presentations for hand, foot and mouth disease, for 2017 (black line), compared with each of the 5 previous years (coloured lines), children aged under 5 years, for 60 NSW hospitals.

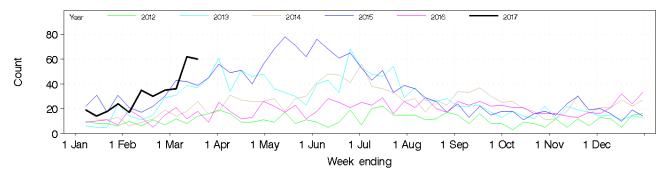


Figure 2. Total weekly counts of Emergency Department presentations for hand, foot and mouth disease, for 2017 (black line), compared with each of the 5 previous years (coloured lines), persons of all ages, Illawarra Shoalhaven LHD.

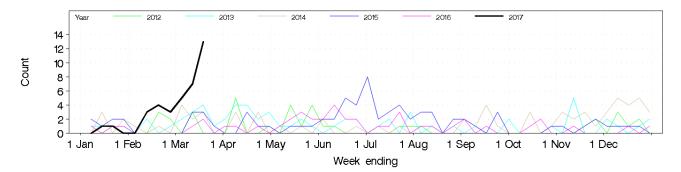
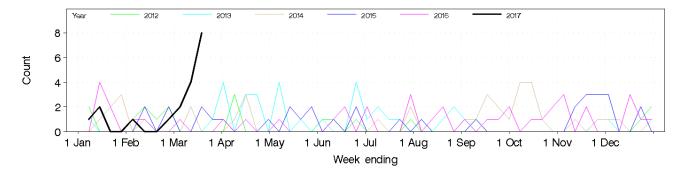


Figure 3. Total weekly counts of Emergency Department presentations for hand, foot and mouth disease, for 2017 (black line), compared with each of the 5 previous years (coloured lines), persons of all ages, Kempsey Hospital.



HFMD is caused by a number of enteroviruses, including coxsackieviruses. It mainly occurs in children under 10 years of age but older children and adults can also be affected. It is not related to the foot and mouth disease that affects cattle. HFMD is usually mild and characterised by blisters inside the mouth, palms of the hands and soles of the feet, and occasionally in the nappy area in infants. Children may also have a low-grade fever, sore throat and irritability.

Rarely, infection with some strains of enteroviruses can lead to neurological (meningitis or encephalitis) complications, particularly among young children aged under 5 years and especially those under 2 years. There is no indicator for which patients are more likely to develop severe disease. The existing near real-time emergency department surveillance program has been enhanced in recent years to monitor HFMD presentations in children and 'Fever and unspecified infection' presentations in children under one year of age. The follows outbreaks of enterovirus infections in 2013 and 2015 associated with more severe illness in young children.

HFMD is usually spread from person to person through contact with respiratory droplets, saliva or faeces from an infected person. Good hygiene is the best protection: hands should be washed with soap and water after going to the toilet, before eating, after wiping noses, and after changing nappies or soiled clothing. The mouth and nose should be covered when coughing and sneezing and tissues disposed of straight away. Treatment is usually not required. Children with HFMD should be excluded from school or childcare facilities until their blisters have dried up, any rash (if present) has resolved and their fever has settled.

For further information on hand, foot and mouth disease, see the <u>Hand, foot and mouth</u> disease fact sheet.

See the <u>Enteroviruses fact sheet - Information for clinicians</u> for further information on enteroviruses and on identifying and managing severe complications.

# **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 12 to 18 March 2017, by date received\*

		Weekly		Year to date			Full Year	
		This week	Last week	2017	2016	2015	2016	2015
Enteric Diseases	Cryptosporidiosis	73	90	639	302	313	1184	1040
	Giardiasis	88	74	879	1018	941	3481	3413
	Haemolytic Uremic Syndrome	1	0	1	2	1	4	11
	Hepatitis A	1	1	10	13	33	41	72
	Rotavirus	6	7	146	146	93	746	1033
	STEC/VTEC	2	2	16	14	8	64	29
	Salmonellosis	133	89	1269	1533	1452	4543	4022
	Shigellosis	4	0	57	70	49	310	172
Respiratory Diseases	Influenza	184	150	1872	1368	907	35537	30301
	Legionellosis	3	4	30	22	23	134	96
	Tuberculosis	5	10	88	112	82	533	444
Sexually Transmissible Infections	Chlamydia	615	590	6652	5659	5340	25999	22547
	Gonorrhoea	205	170	2188	1417	1274	7008	5398
Vaccine Preventable Diseases	Adverse Event Following Immunisation	11	3	56	47	42	254	186
	Mumps	3	1	24	6	15	65	65
	Pertussis	106	108	1448	3253	1352	10956	12079
	Pneumococcal Disease (Invasive)	6	6	76	56	50	542	494
	Tetanus	1	0	1	0	0	0	1
Vector Borne Diseases	Barmah Forest	1	0	16	10	44	35	184
	Dengue	7	9	91	106	113	481	344
	Malaria	1	3	17	10	11	59	47
	Ross River	41	44	820	144	655	541	1636
Zoonotic Diseases	Q fever	2	3	49	60	54	230	264

#### \* 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.