

Communicable Diseases Weekly Report

Week 46, 12 to 18 November 2017

In summary, we report:

- Mumps six cases reported
- Human parechovirus increased activity in infants
- Summary of notifiable conditions activity in NSW

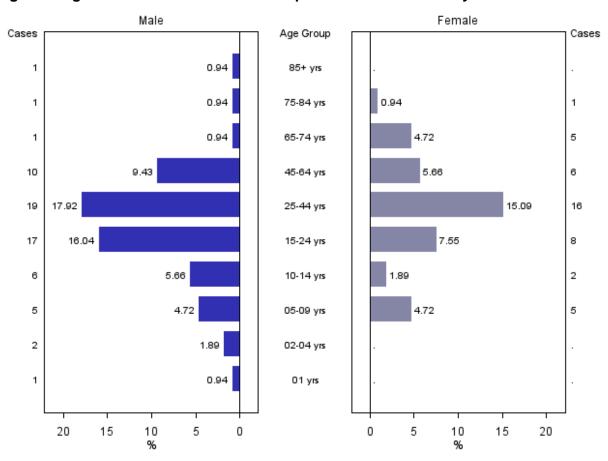
For further information see NSW Health <u>infectious diseases page</u>. This includes links to other NSW Health <u>infectious disease surveillance reports</u> and a <u>diseases data page</u> for a range of notifiable infectious diseases.

Mumps

There were six confirmed cases of mumps notified in this reporting week (<u>Table 1</u>). The cases included two children who were both vaccinated. None of the cases were related.

So far this year there have been 106 notifications of mumps with onset in 2017 compared to 58 in the same period in 2016. Although this is a substantial increase in cases it has not been associated with a known outbreak. Cases were predominately male, and between 15 and 44 years of age (Figure 1). Cases have occurred throughout the state with the greatest proportion occurring in South Eastern and South Western Sydney Local Health Districts. The increase of cases may be reflective of increased circulation of the pathogen in Australia and the region.

Figure 1. Age and sex distribution for mumps notifications in 2017 year to date.



Mumps is an acute viral disease caused by the mumps virus. Common symptoms include fever, loss of appetite, tiredness and headaches followed by swelling and tenderness of the salivary glands. Complications are rare but can be serious and include encephalitis and meningitis, orchitis (infection of the testes), spontaneous abortion and hearing loss. The mumps virus is transmitted through contact with respiratory secretions, usually from respiratory droplets through the airborne route but also through direct contact with the saliva of an infected person.

Mumps is vaccine preventable and it is recommended that anyone unsure of their vaccination status should speak to their local doctor. Vaccination against mumps is with the measles-mumpsrubella (MMR) vaccine which also protects against measles and rubella. MMR is routinely given as part of the National Immunisation Program and scheduled at 12 and 18 months of age.

If you or your child have not received this vaccine it is important that you see your local doctor to discuss a catch-up schedule. This is particularly important if you are planning to travel overseas where the risk of being exposed to the mumps virus is likely to be greater. Additional doses of MMR vaccine are safe so anyone unsure of their vaccination status should be vaccinated. MMR vaccine is provided free in NSW to all people born during or after 1966 who do not have written documentation of receiving two doses. People born prior to 1966 are presumed to be immune.

For more information on Mumps see the NSW Health Mumps fact sheet.

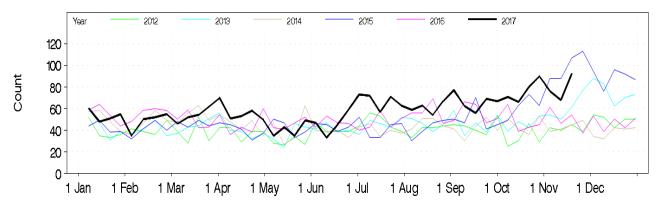
For more information on Mumps notifications see the NSW Health Mumps data page.

Human parechovirus

Human parechovirus (HPeV) has been detected in a number of young infants admitted to NSW hospitals during October and November 2017. Other Australian states and territories have also reported increased HPeV activity in infants recently.

While HPeV is not a notifiable infection in NSW, NSW Health monitors emergency department activity for presentations and hospital admissions for 'fever and unspecified infection' in children aged under one year as a surrogate for serious enterovirus infections, including HPeV. This surveillance has demonstrated a moderate increase in admissions in this category, although not as high as the rise seen in 2015 (Figure 1). Severe HPeV infections were detected in a number of neonates and young infants admitted to NSW hospitals in spring/summer 2013 and again in 2015.

Figure 2. Total weekly counts of Emergency Department presentations for fever or unspecified infection, that were admitted, for 2017 (black line), compared with each of the 5 previous years (coloured lines), children aged under 1 year, for 60 NSW hospitals.



Parechoviruses are a genus in the Picornaviridae, a large family of related RNA viruses that also includes enteroviruses such as polioviruses (which are not found in Australia). Non-polio enteroviruses associated with human infection include a range of coxsackieviruses, echoviruses and numbered enteroviruses.

While more than 90 per cent of HPeV and enterovirus infections either cause no symptoms or result in a non-specific febrile illness, some strains are associated with a greater risk of complications. <u>Hand, foot and mouth disease</u> is a generally mild illness caused by a number of enteroviruses, including coxsackieviruses.

Severe disease from HPeV infection is most likely to develop in children under three months of age but older infants may also be at risk. Most recover with supportive treatment.

Infants with severe HPeV infection may present very unwell with a rapid onset of acute sepsis-like symptoms. This is often followed by an erythematous, often confluent rash. Abdominal complications such as volvulus, intussusception and bowel ischaemia can sometimes occur.

HPeV and enteroviruses are primarily spread by contact with the faeces or respiratory secretions of infected people. Hand hygiene particularly after toileting or nappy changes is an important measure to control the spread of infection.

For further information follow the link to the NSW Health Human parechovirus fact sheet.

Clinicians should also be aware of the NSW Health <u>Enteroviruses (non-polio)</u> and <u>human parechoviruses fact sheet - Information for clinicians</u> which includes advice on warning signs for severe or complicated enterovirus infections. Infants presenting with a fever, sepsis-like signs and/or neurological signs, including irritability, should be assessed and treated for suspected sepsis using local protocols and discussed with an emergency consultant or paediatrician.

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- 18 November 2017, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2017	2016	2015	2016	2015
Bloodborne Diseases	Hepatitis C - Newly Acquired	1	1	37	25	29	25	29
Enteric Diseases	Cryptosporidiosis	5	8	1195	955	829	1184	1040
	Giardiasis	50	51	2724	3173	3058	3480	3413
	Hepatitis A	1	2	61	34	68	41	72
	Hepatitis E	1	0	17	16	15	16	20
	Rotavirus	40	52	2008	586	913	750	1033
	Salmonellosis	81	60	3332	4036	3588	4544	4022
	Shigellosis	2	3	200	273	155	310	172
	Typhoid	2	1	52	32	39	37	41
Respiratory Diseases	Influenza	157	167	103044	34704	30066	35540	30295
	Legionellosis	1	4	122	117	89	134	96
	Tuberculosis	3	16	441	460	397	534	445
Sexually Transmissible Infections	Chlamydia	473	584	25272	23236	20234	25994	22525
	Gonorrhoea	150	151	8124	6185	4834	7004	5395
Vaccine Preventable Diseases	Adverse Event Following Immunisation	2	4	252	237	177	258	186
	Meningococcal Disease	1	2	84	64	41	70	46
	Mumps	6	2	106	58	53	67	65
	Pertussis	83	99	4881	9681	9679	10956	12078
	Pneumococcal Disease (Invasive)	16	16	645	499	459	544	494
Vector Borne Diseases	Barmah Forest	2	2	117	34	178	39	184
	Dengue	6	7	262	441	298	485	344
	Ross River	3	5	1603	442	1559	593	1635

* 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 <u>Database of Adverse Event Notifications</u>.
- Only conditions for which at least one case report was received appear in the table. HIV
 and chronic blood-borne virus case reports are not included here but are available from the
 Infectious Diseases Data webpage.