

Communicable Diseases Weekly Report

Epi-Week 2 06 January 2014 – 12 January 2014

In summary, we report:

- <u>Measles</u> one new case imported from the Philippines
- Human parechovirus update declining activity
- Shiga toxin-producing Escherichia coli (STEC) two new cases reported
- Listeriosis two new cases reported
- Influenza two influenza A outbreaks in aged care facilities
- 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 <u>NSW Health Infectious</u> <u>Diseases Reports</u> webpage.

Measles

One new measles case was notified in this reporting week (Table 1). The case was an 11 month old infant from Western Sydney LHD who acquired measles when taken to the Philippines. This is the third measles case acquired in the Philippines in the past month.

On the family's return to Sydney the infant was taken to a General Practice and a health facility before the diagnosis was made, potentially exposing a number of susceptible contacts. Public health authorities have investigated the case and contacts to control the risk of further transmission.

Measles is highly infectious and is spread easily through the air. Symptoms can include fever, tiredness, runny nose, cough and sore red eyes which usually last for several days before a red, blotchy rash appears. Complications can range from an ear infection and pneumonia to swelling of the brain.

Children should receive two doses of vaccine, one at 12 months and the second at 18 months. Children over 18 months who have not had their second dose of measles vaccine can be vaccinated now. Anyone born during or after 1966 should have two doses of vaccine (at least 4 weeks apart).

NSW Health urges everyone planning international travel to ensure they are up to date with their vaccinations, especially measles, prior to their departure.

The Philippines Department of Health reported over 1,700 cases of measles in 2013 and has recently launched a mass measles vaccination campaign in outbreak areas in Metro Manila (follow the <u>external link</u> for further information.)

Infants travelling to countries in which measles is endemic, or where measles outbreaks are occurring, may be given MMR vaccine from as young as 9 months of age, after an individual risk assessment. In these cases, two further doses of MMR vaccine are still required.

Follow the link for further information on measles disease notifications.

Follow the link for further information on measles vaccination (external link).

Human parechovirus

NSW Health has continues to receive reports of young infants diagnosed with parechovirus infection but activity has continued to decline. In this reporting period there were nine laboratory-confirmed cases of parechovirus from across NSW in infants under one year old, compared to the weekly average of 12 cases in the preceding four weeks.

Other enteroviruses are also been detected through parechovirus sentinel surveillance this week, including coxsackieviruses A9a and B2, and echoviruses 7 and 25. There have been no recent detections of enterovirus 71.

The number of emergency department of presentations this week for fever/unspecified infection in children aged under one year decreased to 171 and was within the usual range for this time of year (Figure 1a). Of these, the number who were also admitted decreased to 48 but remained slightly above usual levels (Figure 1b).

Figure 1a. Total weekly counts of Emergency Department presentations for fever or unspecified infection, for the year to 12 January 2014 (black line), compared with each of the 5 previous years (coloured lines), children aged under 1 year, for 59 NSW hospitals.

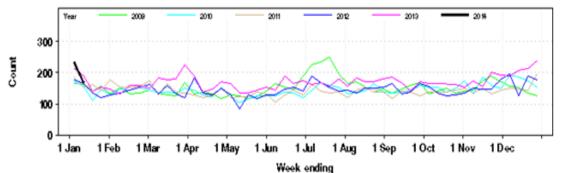
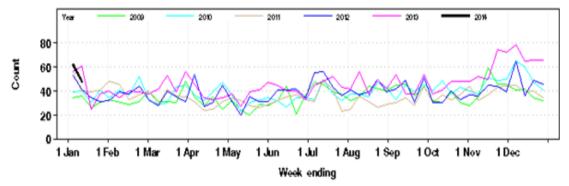


Figure 1b. Total weekly counts of emergency department presentations for fever or unspecified infection that were admitted, for the year to 12 January 2014 (black line), compared with each of the 5 previous years (coloured lines), children aged under 1 year, for 59 NSW hospitals.



Parechovirus infection usually causes mild respiratory or gastrointestinal symptoms, however occasionally it may lead to more severe symptoms. Some infected babies get quite unwell quickly, but typically recover in a few days. Parechovirus is usually spread from person to person through contact with respiratory droplets, saliva or faeces from an infected person.

There is no vaccine to protect from parechovirus infection so maintaining good personal hygiene is the best protection. People who are unwell with colds, flu-like illness or gastro illness should stay away from small babies. If you are caring for a small baby and are unwell, wash your hands or use an alcohol-based hand rub before touching or feeding the baby.

For further information see the parechovirus factsheet and media release (29 Nov 2013).

Shiga toxin-producing Escherichia coli (STEC)

There were two cases of Shiga toxin-producing *Escherichia coli* (STEC) infection reported this week (Table 1) in residents from different parts of NSW. One case was fatal while the other case was complicated by the haemolytic uraemic syndrome (HUS). Public health authorities have been investigating the two cases but have not identified any common exposures.

E. coli are bacteria commonly found in the gastrointestinal tract of humans and animals. Many types of *E. coli* are harmless but some can produce Shiga toxins (also known as verocytoxins, hence 'VTEC') which cause bloody diarrhoea. HUS is a severe and sometimes fatal complication of some STEC infections and is characterised by kidney failure, bleeding and anaemia.

STEC infection is prevented by safe food storage and handling, and by good hand hygiene. For example, hamburgers and sausages should be cooked thoroughly, to at least 71° C - do not eat hamburgers or sausages if there is any pink meat inside. All vegetables and fruit should be washed thoroughly 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.

Follow the links for further STEC/VTEC data and the STEC/HUS factsheet.

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Listeriosis

Two cases of *Listeria* infection (listeriosis) were reported this week (Table 1). Both cases were in adults from greater metropolitan Sydney. Both cases were immunosuppressed due to treatment for serious illness. Public health authorities are investigating these cases to identify possible food sources of infections.

Listeriosis is a rare illness caused by eating food contaminated with bacteria called *Listeria monocytogenes*. *Listeria* bacteria are widespread throughout nature, being commonly carried by many species of both domestic and wild animals.

Listeria infection is most commonly linked to the consumption of raw meat, unpasteurised milk and milk products, soft cheeses, or raw fruit and vegetables. Babies can be born with listeriosis if their mothers eat contaminated food during the pregnancy.

People at higher risk of *Listeria* infection include pregnant women and the foetus, newborns, the elderly and people with weakened immune systems (for example, people on cancer treatment or steroids and people with diabetes, kidney disease, liver disease and HIV infection).

Follow the links for further listeriosis data and the listeriosis factsheet.

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<u>Influenza</u>

Two outbreaks of influenza A in aged care facilities were reported this week. The first outbreak was in a facility in the Murrumbidgee Local Health District (LHD) which has affected over 20 residents and staff. The second outbreak was in a facility in the Hunter New England LHD which has affected 18 residents and staff. Public health authorities have assisted the facilities to manage and control both outbreaks, and will be arranging additional testing of the influenza strains detected.

Influenza, or flu, is a highly contagious respiratory illness caused by influenza viruses. Influenza outbreaks in aged care facilities occasionally occur outside of the winter flu season and can be associated with increased hospitalisations and with deaths, as with these two outbreaks.

There are three main types of influenza virus that cause infection in humans - types A, B and C - and many sub-types or strains. Influenza can occur throughout the year but influenza activity usually peaks in winter. Three strains of influenza – A(H3N2), A(H1N1)pdm09 and B-Yamagata – are continuing to circulate at low levels in the NSW community.

People with flu or cold symptoms should avoid visiting people at risk of severe influenza illness, including patients in hospital and residents of residential care facilities.

Practical steps to stop the spread of influenza include:

- Covering your face when you cough or sneeze and throwing used tissues in a rubbish bin.
- Washing your hands thoroughly and often. Wash hands for at least 10 seconds, especially after coughing, sneezing or blowing your nose, or use an alcohol-based hand rub.
- Stay at home until you're well. Wait at least 24 hours after your symptoms resolve so you that you are less likely to infect other people.

Follow the links for further influenza data and the influenza factsheet.

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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 6 January to 12 January 2014, by date received.

		This week	Last week	Year to date			Full Year	
				2014	2013	2012	2013	2012
Enteric Diseases	Cryptosporidiosis	14	9	21	37	11	1132	65
	Giardiasis	40	23	52	78	70	2245	201
	Haemolytic Uremic Syndrome	1	1	1	2	0	7	
	Hepatitis A	1	0	1	1	0	63	4
	Listeriosis	2	1	2	7	3	33	3
	Rotavirus	5	8	7	25	24	508	176
	STEC/VTEC	2	1	2	2	2	24	1
	Salmonellosis	100	77	133	191	175	3484	294
	Shigellosis	12	2	13	3	12	136	13
	Typhoid	1	0	1	3	0	58	
Respiratory Diseases	Influenza	56	24	73	68	30	8399	803
	Tuberculosis	9	8	12	16	13	398	44
Sexually Transmissible Infections	Chlamydia	430	184	514	718	698	21011	2120
	Gonorrhoea	69	48	91	159	156	4268	411
	LGV	1	0	1	1	1	28	:
Vaccine Preventable Diseases	Adverse Event Following Immunisation	3	0	3	1	7	500	20
	Measles	1	3	2	2	1	33	17
	Pertussis	47	24	56	131	378	2369	599
	Pneumococcal Disease (Invasive)	6	8	9	25	14	492	50
	Rubella	1	0	1	0	1	12	1
Vector Borne Diseases	Barmah Forest	9	5	10	18	6	437	34
	Dengue	3	2	4	8	10	266	28
	Malaria	1	0	1	4	3	91	(

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 <u>Infectious Diseases Data</u> webpage.