

# Communicable Diseases Weekly Report

## Week 26, 22 to 28 June 2015

In summary, we report:

- [Hendra](#) – 1 positive test in a horse
- [Influenza](#) – influenza season has commenced
- [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.

### Hendra Virus.

An unvaccinated 19 year old gelding on the NSW Mid North Coast died on 20 June 2015 after a short illness. Laboratory testing confirmed Hendra virus as the cause of death. This is the first recognised case of Hendra virus infection in a horse in NSW this year. The affected property has been quarantined. There had been minimal human and companion animal contact with the sick horse.

Two other horses and two dogs on the same property are being monitored and they all remain well. Another horse had moved from the property recently and that property has also been quarantined. The contact animals have all tested negative for Hendra virus.

[Further details are available on the NSW Department of Primary Industries \(DPI\) website](#)

Hendra virus (previously called equine morbillivirus) is a paramyxovirus of the genus Henipavirus. The only other agent in this genus is Nipah virus. Fruit bats (*Pteropus* species), also known as flying foxes, are the only known natural reservoir. Antibody to Hendra virus has been found in 20-50 percent of flying foxes in mainland Australian populations. Widespread testing involving 46 other species of animals and arthropods has not shown the natural presence of the virus in any species other than flying foxes.

Transmission from bats to horses is rare, and is thought to occur through contamination of horse-feed by infectious fluids from bats, e.g. bat urine/reproductive products.

The infection has occasionally been passed onto people who have been in close contact with an infected horse. Only seven human cases have been documented, the last occurring in 2009. All seven had a high level of exposure to respiratory secretions and/or other body fluids of horses subsequently diagnosed with Hendra virus infection, or presumed to have Hendra virus infection through review of clinical/epidemiological evidence in the absence of samples for laboratory testing.

### **Hendra virus infection in horses.**

Hendra virus can cause a range of signs in horses. Usually there is a rapid onset of illness, fever, increased heart rate and rapid deterioration with respiratory and/or neurological (nervous system) signs.

Horse owners and carers can take steps to protect horses from becoming infected with Hendra virus by reducing exposure to bats, e.g. by placing feed bins and water troughs under cover and away from areas where bats feed or roost.

A vaccine to prevent Hendra virus infection in horses has been available in Australia since November 2012 (Equivac® HeV). More information on Hendra virus infection in horses is available from:

[NSW Department of Primary Industries \(DPI\)](#)

### Hendra virus infection in humans.

In humans symptoms typically develop between 5 and 21 days after contact with an infectious horse. Fever, cough, sore throat, headache and tiredness are common initial symptoms. Meningitis or encephalitis (inflammation of the brain) can develop, causing headache, high fever, and drowsiness, and sometimes convulsions and coma. Hendra virus infection can be fatal with four of the seven known cases dying from their infection. There is no human Hendra virus vaccine. Vets and other people in close contact with ill horses at risk of Hendra should wear appropriate personal protective equipment (PPE) to prevent horse to human transmission (see DPI link above).

Further information for Hendra virus in humans can be obtained below:

- [Information for people who are being monitored for Hendra virus infection](#)
- [Hendra factsheet](#)

## Influenza

\* Please also note that comprehensive [NSW influenza surveillance reports](#) are also published each week by Communicable Diseases Branch.

The recent sustained increase in influenza cases indicates the influenza season has commenced. Although activity remains relatively low across NSW, all surveillance indicators are showing an increase in activity. To date total influenza notifications are higher than previous years. Much of this increase is from unusually high numbers of imported cases of influenza A from the northern hemisphere in the first four months of 2015 (Table 1).

More recently influenza B strains have had an unusual early season increase and are the most common influenza strains identified in NSW residents. Influenza A (H3) is the dominant circulating influenza A strain.

**Table 1: Influenza notifications in NSW residents, by month of disease onset, January 2011 to 30 June 2015.**

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>Influenza A</b>	<b>2011</b>	114	97	112	87	132	521	1239	894	385	245	159	76	4061
	<b>2012</b>	32	42	95	85	294	1847	2177	1215	272	93	57	61	6270
	<b>2013</b>	81	114	119	105	107	215	608	1987	1255	421	180	150	5342
	<b>2014</b>	250	191	174	154	191	471	3693	9070	3090	417	138	170	18009
	<b>2015</b>	229	274	317	252	209	365							1646

<b>Influenza B</b>	<b>2011</b>	12	15	17	24	46	129	368	678	245	62	18	14	1628
	<b>2012</b>	15	23	24	12	37	114	241	452	517	170	78	26	1709
	<b>2013</b>	31	17	34	24	55	123	359	1126	951	210	80	39	3049
	<b>2014</b>	27	16	54	63	59	77	280	997	861	261	64	71	2830
	<b>2015</b>	50	78	124	148	206	523							1129

Influenza, or flu, is a highly contagious respiratory illness caused by influenza viruses. 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.

The 2015 seasonal influenza vaccines for Australia have been updated to match the new strains of A/H3N2 and B that have been circulating in the northern hemisphere and which circulated in NSW during the 2014 season. It is not too late to get vaccinated. Influenza vaccine is available and is recommended for all people aged 65 years and over, Aboriginal children aged from 6 months to 4 years (new), Aboriginal people aged 15 years and over, pregnant women, and all people aged 6 months and over with medical conditions predisposing to severe influenza. Follow the link for further information on [influenza vaccination](#).

Other practical steps for the public to stop the spread of influenza include the advice below:

- 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.
- Staying at home until you're well. Wait at least 24 hours after your symptoms resolve so you are less likely to infect other people.

Follow the link for further [influenza data](#).

Follow the link for the [influenza homepage](#).

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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 22 to 28 June 2015, by date received**

		Weekly		Year to date			Full Year	
		This week	Last week	2015	2014	2013	2014	2013
Enteric Diseases	Cryptosporidiosis	11	10	602	258	928	429	1132
	Giardiasis	52	67	1953	1656	1308	2942	2242
	Hepatitis A	1	0	49	41	40	80	62
	Rotavirus	8	4	171	216	212	714	508
	STEC/VTEC	1	0	11	27	17	31	24
	Salmonellosis	63	70	2562	2691	2142	4303	3483
	Shigellosis	4	3	87	125	63	210	136
	Typhoid	2	1	28	26	39	44	58
Respiratory Diseases	Influenza	290	239	2848	1867	1118	20888	8403
	Legionellosis	1	1	52	39	56	72	109
	Tuberculosis	8	4	196	222	222	473	443
Sexually Transmissible Infections	Chlamydia	368	382	11437	12246	11127	22898	21089
	Gonorrhoea	97	92	2648	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	191	237	3631	977	1249	3051	2379
	Pneumococcal Disease (Invasive)	18	6	196	196	230	512	490
Vector Borne Diseases	Barmah Forest	4	3	146	120	282	163	438
	Dengue	5	2	183	257	150	378	303
	Malaria	2	0	22	56	46	87	93
	Ross River	17	10	1342	338	339	677	512
Zoonotic	Q fever	1	3	104	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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