

Communicable Diseases Weekly Report

Epi-Week 47: 17 November – 23 November 2014

In summary, we report:

- [Creutzfeldt-Jakob disease \(CJD\)](#) – 1 reported death
- [Australian bat lyssavirus](#) – Heat event in northern NSW resulted in thousands of dead flying foxes and an increase in post exposure prophylaxis for wildlife volunteers

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.

[Creutzfeldt-Jakob disease \(CJD\)](#)

In the last week, there was a death in a 67 year old person from Western Sydney who had previously met the case definition for a probable case of classical Creutzfeldt-Jakob Disease (CJD). As per the [NSW Health CJD control guidelines](#) this person had displayed a progressive dementia of less than two years duration with a number of neurological symptoms, including muscle jerking and an unsteady gait. An autopsy is being performed to confirm whether the death was directly related to CJD. There have been 9 cases of probable or confirmed classical CJD notified to NSW Health to date so far this year.

CJD is a rare but fatal disease caused by the accumulation of abnormal prion proteins in neurological tissues. There are currently no effective treatments for this disease. Each year around 6-10 classic CJD cases are notified to NSW Health, with a stable age-standardised rate of 1 case per 1 million population, similar to that reported by other jurisdictions in Australia. However it is likely that there is significant under-ascertainment of cases. It is important that clinicians and public health staff remain vigilant for the clinical signs of CJD and understand the limitations of different diagnostic tests available. In particular the 14-3-3 CSF test is a non-specific marker of central nervous system damage and therefore should be interpreted with caution and against the presenting clinical signs and symptoms. Accurate diagnosis is important to help reduce the risk of transmission of CJD within the population and also to limit the impact of any false positive tests on individuals and families.

Under the *Public Health Act 2010 (NSW)*, doctors, hospital and laboratories must notify suspected CJD cases, and other variants of prion diseases including variant CJD (vCJD) to the local public health unit, who will then inform the Australian National Creutzfeldt-Jakob Disease Registry (ANCJDR) for the purposes of national surveillance, exposure investigation, classification of the case, and to inform the public health response.

To facilitate patient and public health management of suspect cases of CJD, mutual sharing of information between NSW Health and the ANCJDR has been agreed, and a new *Creutzfeldt-Jakob Disease (CJD) Related Information Policy Directive, PD2014_041* has been endorsed which describes the information to be disclosed and disclosure procedures. This Policy Directive is available at: http://www0.health.nsw.gov.au/policies/pd/2014/pdf/PD2014_041.pdf

In addition, the [Australian CJD Infection Control Guidelines](#), which provide an evidence-based approach for clinical and PHU staff to be able to confidently assess and manage any potential transmission risk in the healthcare setting were updated in 2013.

Follow the link for further information on [Creutzfeldt-Jakob disease](#)

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Australian bat lyssavirus

A heatwave with temperatures of up to 44 degrees hit parts of northern NSW over the weekend of November 15. This resulted in the death of up to 5000 bats (flying foxes) from a colony in Casino. Among the animals rescued by wildlife volunteers there were approximately 450 flying fox pups that had been orphaned as a result of the heat wave.

During the rescue operation there were 23 wildlife volunteers and two members of the public that were bitten or scratched by the flying foxes potentially exposing themselves to Australian bat lyssavirus (ABLV). Six wildlife volunteers and both members of the public required post exposure prophylaxis which consists of four doses of rabies vaccine plus a single dose of rabies immunoglobulin. The remaining wildlife volunteers had been previously vaccinated and required two booster doses of rabies vaccine only.

ABLV belongs to the lyssavirus genus of viruses and is closely related to rabies virus. There have been three known human cases of ABLV infection; all resulted in death. All three cases were in Queensland and the infection was acquired from a bat bite. The most recent case was in an eight year old child in February 2013.

Evidence of ABLV infection has been found in all four species of flying foxes found in Australia, and in Australian insectivorous microbats. Infected bats may not demonstrate any abnormal behaviour and infection can occur in bats of any age. While ABLV is not common in bats, any Australian bat should be considered to be potentially infected with ABLV.

ABLV causes a rabies-like disease in humans. Early symptoms are flu-like which progress to paralysis, delirium, convulsions and death, usually within two weeks.

The best protection against ABLV infection is to avoid contact with flying foxes and other bats. Only people who have been fully vaccinated against rabies, use protective equipment and have been trained in bat handling should touch a bat. Injured or trapped bats should be reported to the local Wildlife Information Rescue and Education Service (WIRES) network on 1300 094 737 or at www.wires.org.au.

Anyone who is bitten or scratched by a bat should immediately wash the wound thoroughly with soap and copious water for at least five minutes and then apply an antiseptic such as povidone-iodine or alcohol. Urgent medical care should be sought. For most people post exposure prophylaxis consists of four doses of rabies vaccine given over 14 days. People who are immunosuppressed are recommended to have a fifth dose. Rabies immunoglobulin may also be given with the first rabies vaccine for people who have had a particularly high-risk exposure (such as bites or scratches that pierce the skin, or where mucous membranes are contaminated by an animal's saliva). People who have completed a rabies vaccine course prior to the exposure only need two additional doses of rabies vaccine and no immunoglobulin.

Rabies vaccine and PEP recommendations are provided in [The Australian Immunisation Handbook \(10th edition\) in part 4.16: Rabies and Other Lyssaviruses \(including Australian Bat Lyssavirus\)](#). Clinicians should contact their local public health unit on 1300 066 055 for advice and to order PEP for potentially exposed people.

Follow the link for more information on [rabies and Australian bat lyssavirus infection](#).

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 17 to 23 November 2014, by date received.*

		Weekly		Year to date			Full Year	
		This week	Last week	2014	2013	2012	2013	2012
Enteric Diseases	Cryptosporidiosis	8	10	363	1077	604	1132	655
	Giardiasis	51	56	2634	2105	1894	2242	2014
	Hepatitis A	1	3	68	58	37	62	41
	Rotavirus	22	34	629	482	1708	508	1759
	Salmonellosis	98	71	3818	3206	2716	3483	2941
	Shigellosis	1	1	190	122	122	136	131
Respiratory Diseases	Influenza	43	62	20503	8236	7854	8403	8036
	Legionellosis	2	3	62	100	104	108	108
	Tuberculosis	9	7	417	395	431	437	468
Sexually Transmissible Infections	Chlamydia	423	436	20706	19541	19810	21090	21267
	Gonorrhoea	100	102	4438	3964	3875	4267	4116
Vaccine Preventable Diseases	Adverse Event Following Immunisation	3	3	217	491	261	509	269
	Meningococcal Disease	1	4	33	46	65	48	67
	Pertussis	108	131	2423	2186	5673	2378	6000
	Pneumococcal Disease (Invasive)	3	8	461	467	538	490	564
Vector Borne Diseases	Barmah Forest	2	1	157	415	321	438	352
	Dengue	1	3	345	279	274	303	288
	Ross River	13	10	587	488	570	512	598
Zoonotic	Psittacosis	1	0	9	7	20	8	22
	Q fever	2	1	156	157	124	163	131

* 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](#) (external link).
- 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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