

Communicable Diseases Weekly Report

Week 50, 8 to 14 December 2014

In summary, we report:

- Human immunodeficiency virus (HIV) report on notifications from 01 January to 30 September 2014
- Haemolytic Uremic Syndrome (HUS) and Raw Milk
- 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.

Human immunodeficiency virus (HIV)

There were 82 notifications of newly diagnosed HIV infection in NSW residents in the third guarter (01 July to 30 September) of 2014, making a total of 263 new diagnoses to 30 September in 2014 (Figure 1). This is a two per cent (%) decrease compared with the same period in 2013, and a 15% decrease compared with the same period in 2012.

Number of new diagnoses ■ Fourth quarter ■ Third quarter ■ Second quarter First quarter Jan-Sept Year diagnosed

Figure 1: Number of NSW residents newly diagnosed with HIV, 1 January 2009 to 30 September 2014

Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 13 November 2014

Forty-eight per cent of the notifications had evidence of early stage infection. This is higher than that for the full year in 2013 (42%) and for the combined period of the previous five years, 2009 to 2013 (44%) (Figure 2).

100% Stage of infection 90% Early = Evidence Percentage of new diagnoses 80% 130 147 135 195 of HIV infection 165 126 70% acquired within 12 months of Early 60% diagnosis 44 CD4 500+ 55 50% 44 36 40 68 CD4 500+, CD4 39 ■ CD4 350-499 40% 350 to 499, CD4 33 45 34 24 ■ CD4 200-349 31 30% 36 200 to 349 each 31 28 43 24 38 Advanced excludes early 20% and advanced 67 Unknown 52 53 39 10% 62 52 categories 18 1/1 10 0% Advanced = CD4 2009 2010 2011 2012 2013 Jan-Sept count less than 2014 200 or AIDS Year diagnosed defining illness

Figure 2: Number and percentage of HIV notifications by stage of infection at diagnosis¹, 1 January 2009 to 30 September 2014

Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 13 November 2014 ¹Evidence of early stage infection was defined as notification of a seroconversion illness or negative or indeterminate HIV test within 12 months of diagnosis, irrespective of CD4 or presentation with an AIDS defining illness at diagnosis.

There were 351,475 HIV serology tests performed in NSW in 2014 to 30 September 2014; a four per cent increase compared to the same period in 2013 (337,907 tests) and a 10% increase compared to the same period in 2012 (318,534 tests). Data from NSW publically funding sexual health clinics shows testing in these services has increased, including testing in high risk groups.

Health Protection NSW is now recording information on the treatment status, CD4 count and viral load of people newly diagnosed with HIV infection at six months after their diagnosis. Of people newly diagnosed with HIV infection in 2013, 49% had commenced antiretroviral (ART) therapy within three months of diagnosis and 60% had commenced ART within six months of diagnosis (Figure 3).

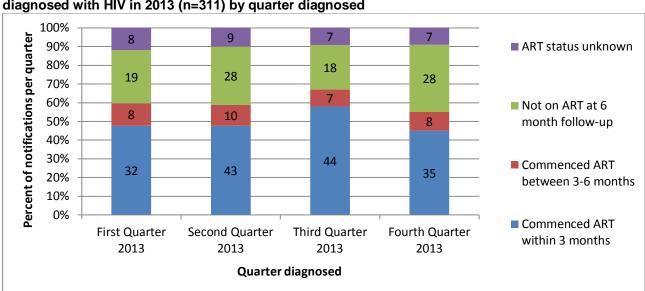


Figure 3: Time from diagnosis to commencement of antiretroviral (ART) therapy in NSW residents diagnosed with HIV in 2013 (n=311) by quarter diagnosed

Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 13 November 2014

Follow the link to the <u>NSW Quarter 3 2014 HIV Data Report</u> for more information on HIV notifications, testing and treatment to 30 September 2014.

Follow the link for more information about HIV infection.

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Haemolytic Uremic Syndrome (HUS) and Raw Milk

Last week the Victorian Health Department released a <u>media statement</u> regarding five recent cases of gastroenteritis in children, including one death, associated with the consumption of unpasteurised milk labelled as 'bath milk'. Two children had cryptosporidiosis and three had haemolytic uremic syndrome (HUS). The NSW Food Authority has released a <u>public health</u> <u>warning</u> regarding the consumption of raw milk products.

In Australia, it is illegal to sell unpasteurised milk for human consumption. However it is sold as a cosmetic, usually labelled as 'bath milk', with warnings that it is not for human consumption. The unpasteurised milk is sold from the fridge and in containers which resemble commonly used milk containers. The Australian Competition and Consumer Commission (ACCC) has <u>recalled</u> the bath milk associated with the illnesses and are considering whether suppliers of unpasteurised cosmetic milk have breached any provisions of the Australian Consumer Law, including misleading and deceptive conduct prohibitions.

Cryptosporidiosis is a diarrhoeal disease caused by the parasite, *Cryptosporidium*, which infects the intestine. *Cryptosporidium* infections have been reported in humans and in a variety of farm, pet and native animals. People become infected either directly by person to person contact (or touching infected animals and then putting their hands in their mouth before washing them), or indirectly by swallowing water (or rarely food) contaminated by faeces of infected animals or people. The most common symptoms of cryptosporidiosis are watery diarrhoea and stomach cramps. Other symptoms may include fever, nausea, vomiting and loss of appetite. Some people with the infection have no symptoms at all. The first signs of illness appear between 1-12 days (average 7 days) after a person becomes infected. Symptoms may come and go and may last days to weeks. People with a weak immune system may have more severe symptoms that can last for months. See the cryptosporidiosis factsheet for more information.

HUS is a severe condition characterised by kidney failure, bleeding and anaemia. It can sometimes be fatal. HUS can be caused by a variety of infections including shiga toxin producing *Escherichia coli* (STEC). *Escherichia* coli (E.coli) are bacteria commonly found in the gastrointestinal tract of people and animals. Some strains of *E.coli* produce toxins which can cause a range of diseases including diarrhoeal illnesses and HUS. STEC is carried by animals, such as cattle. People are infected when they come into contact with the faeces of an infected animal or person, either directly or indirectly through consuming contaminated food (e.g. undercooked burgers, unwashed salad vegetables, and unpasteurised milk or milk products), drinking or swimming in contaminated water, person-to-person contact, or contact with animals on farms or petting zoos. See the HUS factsheet for more information.

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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 08 to 14 December 2014, by date received*

		Weekly		Year to date			Full Year	
		This week	Last week	2014	2013	2012	2013	2012
Enteric Diseases	Cryptosporidiosis	8	15	398	1124	649	1132	655
	Giardiasis	84	55	2818	2227	2002	2242	2014
	Hepatitis A	2	0	73	62	41	62	41
	Listeriosis	1	0	20	32	32	33	36
	Rotavirus	12	12	670	507	1758	508	1759
	STEC/VTEC	1	0	31	24	14	24	14
	Salmonellosis	112	108	4090	3432	2909	3483	2941
	Shigellosis	2	7	200	135	130	136	131
Respiratory Diseases	Influenza	58	50	20636	8386	8023	8403	8036
	Legionellosis	3	0	69	108	107	108	108
Sexually Transmissible Infections	Chlamydia	438	453	22048	20900	21132	21090	21267
	Gonorrhoea	96	96	4686	4230	4086	4267	4116
	LGV	1	0	12	28	27	28	28
Vaccine Preventable Diseases	Adverse Event Following Immunisation	7	3	234	508	268	509	269
	Meningococcal Disease	1	2	36	48	66	48	67
	Pertussis	100	121	2737	2344	5960	2378	6000
	Pneumococcal Disease (Invasive)	9	12	493	488	562	490	564
Vector Borne Diseases	Barmah Forest	1	1	159	431	348	438	352
	Dengue	3	5	362	298	286	303	288
	Ross River	19	24	636	509	595	512	598
Zoonotic	Q fever	7	3	171	161	131	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 <u>Database of Adverse Event Notifications</u>.
- 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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