

Communicable Diseases Weekly Report

Week 10, 2- 8 March 2015

In summary, we report:

- [Infant botulism](#) – one new case, not associated with formula
- [Gastroenteritis outbreaks in institutions](#) – thirteen notifications this week
- [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.

Infant botulism

One new case of infant botulism was reported this week. The case was reported in a four month old infant who presented with lethargy. Testing showed that the baby was affected by botulinum toxin A2. There is no history of consumption of honey or infant formula.

Botulism is a rare but serious illness that causes paralysis. The paralysis is caused by nerve toxins made by *Clostridium botulinum* bacteria. Human illness is caused when the bacteria produce nerve toxins type A, B, E and rarely F. Botulism can result from eating food that has been contaminated with the toxin (foodborne botulism) or ingesting food, dust or soil that contains the bacteria that produce the toxin (intestinal botulism) or contaminating a wound with the bacteria (wound botulism). Intestinal botulism affecting children under 12 months of age is known as infant botulism. This is the most common form of botulism. Botulism is not known to spread from person to person.

Children under twelve months of age are most at risk of intestinal botulism. Older children and adults are not usually affected because they have natural defences in the gut to prevent production of the toxin. Intestinal botulism in adults is very rare but more likely in those with suppressed immune systems or bowel disorders.

Human-derived botulism immune globulin for intravenous use (BabyBIG®) is licensed by the US Food and Drug Administration for treatment of infant botulism caused by *C. botulinum* serotype A or B. BabyBIG® is made and distributed by the California Department of Public Health (24-hour telephone number (USA): 0011-1-510-231-7600; www.infantbotulism.org).

A small supply of trivalent equine botulinum antitoxin for the treatment of botulism in older children and adults is available through the National Medical Stockpile. Clinicians can make requests for emergency access to the botulinum antitoxin through their local Public Health Unit (1300 066 055).

Follow the link for further information on [botulism data](#).

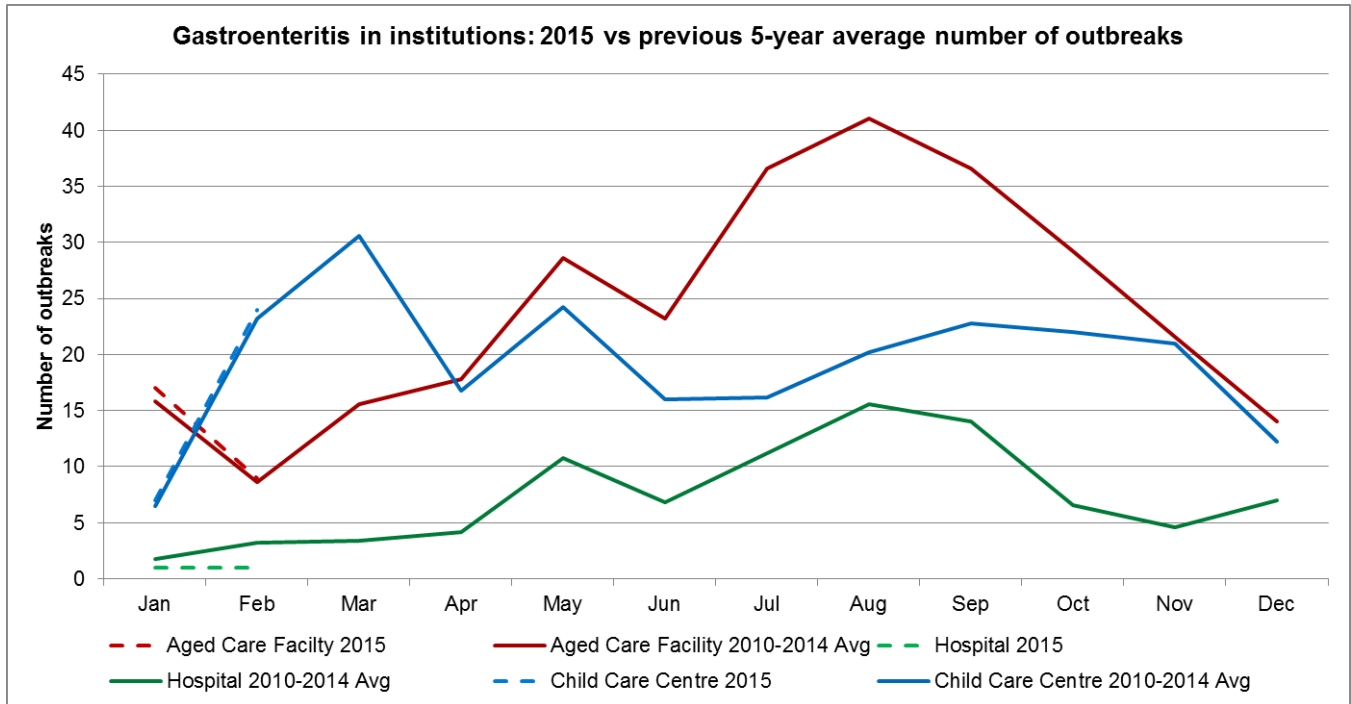
[Back to top](#)

Gastroenteritis outbreaks in institutions

There were 13 outbreaks of gastroenteritis in an institution reported in this period affecting at least 79 people, and slightly above five-year average for March of 11 outbreaks per week. Three outbreaks occurred in an aged care facility and ten occurred in child care centres. All outbreaks appeared to have been caused by a virus and spread from one person to another.

Monthly outbreak data indicated that gastroenteritis outbreaks in child care centres are increasing as per the seasonal trend for this time of year, while outbreaks are decreasing in aged care facilities and hospitals and are rare in hospital settings (Figure 1).

Figure 1. Gastroenteritis in institutions: outbreaks in 2015 (dotted lines) compared to the previous 5-year average, by institution type and month of report.



The majority of notified gastroenteritis outbreaks in institutions at the beginning of the year occur in child care centres. This is likely due to the large intake of new children into child care at this time exposing them to a large number of new people and new viruses to which they are likely to be susceptible. The causes of the child care centre gastroenteritis outbreaks reported this week remain unknown – samples from child care centre outbreaks are rarely collected and submitted for testing.

Historically the main cause of gastroenteritis in children was [rotavirus](#) infection and this was also believed to be the main cause of outbreaks in child care centres. This week, however, there were no cases of rotavirus notified in children, reflecting the success of the [rotavirus vaccination program](#) in infants.

Administration of a course of oral rotavirus vaccination is recommended for all infants in the first half of the first year of life and is part of the routine childhood immunisation schedule under the National Immunisation Program.

Infections in small children may then spread to their other contacts. It is very important to keep small children with gastroenteritis at home, and to not visit family in aged care facilities or hospitals while they are sick, to prevent introducing viral gastroenteritis to these vulnerable people.

Follow the link for further information on [viral gastroenteritis](#).

[Back to top](#)

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 02 to 08 March 2015, by date received

		Weekly		Year to date			Full Year	
		This week	Last week	2015	2014	2013	2014	2013
Enteric Diseases	Cryptosporidiosis	38	41	268	135	441	427	1132
	Giardiasis	79	91	819	682	592	2939	2242
	Hepatitis A	3	4	28	25	29	80	62
	Listeriosis	2	0	6	7	15	23	33
	Rotavirus	9	5	90	80	106	710	508
	STEC/TEC	2	1	7	18	9	31	24
	Salmonellosis	132	143	1316	1302	1055	4298	3483
	Shigellosis	1	6	43	77	33	209	136
Respiratory Diseases	Influenza	88	100	778	654	356	20751	8403
	Legionellosis	1	1	21	15	21	72	108
	Tuberculosis	3	6	60	94	88	466	440
Sexually Transmissible Infections	Chlamydia	512	472	4745	5146	4759	22883	21090
	Gonorrhoea	93	128	1118	1059	997	4863	4267
Vaccine Preventable Diseases	Adverse Event Following Immunisation	7	7	33	60	176	246	509
	Meningococcal Disease	1	0	6	4	4	37	48
	Pertussis	104	102	1221	486	633	3032	2378
	Pneumococcal Disease (Invasive)	6	3	51	49	68	509	490
	Rubella	1	0	5	2	1	10	12
Vector Borne Diseases	Barmah Forest	4	8	41	48	113	163	438
	Chikungunya	1	0	8	4	3	27	22
	Dengue	12	10	89	107	55	378	303
	Malaria	1	2	10	23	22	87	93
	Ross River	128	90	600	95	118	676	512
Zoonotic	Q fever	2	1	37	57	35	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.

[Back to top](#)