

Communicable Diseases Weekly Report

Week 49 02 December 2013 – 08 December 2013

In summary, we report:

- [Parechovirus](#) – over 80 cases now confirmed
- [Salmonellosis](#) – 82 notifications this reporting week
- [Cryptosporidiosis](#) – 14 cases notified 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.

Parechovirus

As reported last week, an increase in hospital admissions of very sick young babies with fever and irritability has been seen across NSW in recent weeks. Enhanced surveillance has been implemented by informing hospitals and doctors about the increase, and requesting that sick babies who meet the case definition for suspected parechovirus infection be tested.

There are now over 80 confirmed cases of parechovirus, almost all in infants. Results of typing of the parechovirus detected from the earliest cases show infection with human parechovirus type 3. Type 3 parechovirus is known to be associated with a more severe clinical manifestation, particularly in neonates and infants, than parechovirus types 1 and 2. Type 3 was first isolated from a person in Japan in 1999 and since then has been detected in Asia, Europe, Canada, South America and the United States. There are at least 16 types of parechovirus that have been characterised.

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[Salmonellosis](#)

A total of 82 cases of *Salmonella* infection (salmonellosis) were notified in this reporting week, compared with 64 in the previous week. This is a seasonally expected rise as salmonellosis typically peaks in NSW in the summer months.

Salmonellosis is a form of gastroenteritis caused by *Salmonella* bacteria. There are around 2,500 different strains of *Salmonella*, many of which cause infections in both animals and humans.

In Australia, most *Salmonella* infections occur after eating food which has been contaminated, often from an animal source. It is also sometimes spread from person to person.

In Australia in 2012, there were 11,268 notifications of salmonellosis, of which nearly 3,000 were in NSW. Over 20% of notifications are in children under the age of 5 years. The symptoms of salmonellosis include fever, headache, diarrhoea, abdominal pain, nausea, and vomiting. Symptoms usually start around 6 to 72 hours after ingestion of the organism. Symptoms typically last for 4 to 7 days, but can continue for much longer. Occasionally hospitalisation is required for management of dehydration, particularly in young babies, elderly people and those who have weakened immune systems.

Most *Salmonella* infections occur from eating under-cooked animal products, such as poultry, eggs and meat. Thorough cooking kills the bacteria. *Salmonella* infections can also be acquired by cross contamination in the kitchen when kitchen equipment or hands that are contaminated from raw animal products come into contact with uncooked foods such as salad items. *Salmonella*

bacteria are excreted in the stools of infected people and can thereby spread from person to person. Transmission can also occur directly from animals to humans.

Salmonella gastroenteritis can be prevented by thorough cooking, good hygiene and proper food storage practices.

Minced meat, sausages, hamburgers and chicken should be cooked until the juices run clear and there are no pink areas inside. Steaks only need to be seared on the outside and can be rare inside. Any cracked or dirty eggs should be discarded. Eggs should be cooked until the white is firm and the yolks begin to thicken.

To prevent cross contamination of food:

- use different chopping boards, trays and utensils when preparing raw and ready-to-eat foods, and wash hands and equipment that have been in contact with raw animal products with hot soapy water immediately after use; and
- store raw foods (such as meat) in sealed containers to prevent fluid spilling onto other food.

Poor food storage can allow *Salmonella* to grow. The fridge temperature should be kept under five degrees Celsius. Leftover foods should be placed in the fridge as soon as possible and not left outside the fridge to cool, particularly in summer. Reheat food until all parts of the food are steaming hot. It's best to thaw frozen foods in the fridge or microwave.

It's important to always wash hands after contact with animals, and especially before eating or handling food. Young children's hands should always be washed before eating, and frequently during the day, particularly if there are pets in the household.

People with *Salmonella* infection should ensure they wash their hands frequently, particularly after going to the toilet, and avoid preparing food for others. Infected people who are food handlers, or whose work involves care for children, patients or the elderly should be excluded from work until 48 hours after their symptoms resolve. Children with salmonellosis should not attend childcare until 24 hours after their diarrhoea has ceased.

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

Follow the link for further information on [Salmonella notifications](#).

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Cryptosporidiosis

There were 14 cases of cryptosporidiosis reported this week, compared with 15 in the previous week. A range of exposures have been identified with four cases exposed to untreated water in a rural location, two cases attending a petting zoo and one case reporting swimming in a public pool. The other cases have not yet been interviewed.

Cryptosporidiosis is a diarrhoeal disease caused by the parasite, *Cryptosporidium*, which infects the intestine. Infection occurs when the parasite is ingested. As well as infecting humans, *Cryptosporidium* infects a variety of animals including dogs and cats, farm and native animals.

The most common symptom of cryptosporidiosis is diarrhoea, which is usually watery and can be profuse. Other symptoms include abdominal pain, fever, nausea, vomiting and loss of appetite. Symptoms usually begin about 7 days (range 1 to 12 days) after a person becomes infected. In healthy young children the illness resolves by itself and lasts only a few days. In healthy adults the symptoms often come and go but recovery occurs in less than a month. People with weakened immune systems may not be able to clear the parasite and symptoms may persist for months.

Cryptosporidium is shed in the faeces of infected humans and animals from when symptoms begin and shedding may persist for several weeks after symptoms have resolved. The parasite can survive in a moist environment for up to six months. Transmission most often occurs through:

- person to person contact, particularly in households and child care centres;
- contaminated food and water, including swallowing water in contaminated swimming pools and other recreational water sites; and
- handling of infected animals or their manure.

Community outbreaks associated with contaminated swimming pools occur every few years. *Cryptosporidium* is resistant to the usual levels of chlorine in swimming pools. High doses of chlorine (superchlorination) and cleaning of pool filters are required to ensure removal of *Cryptosporidium* from a contaminated pool.

There are a number of precautions that can be taken to prevent exposure to *Cryptosporidium*, which include:

- hand washing after handling animals or animal manure, changing nappies, working in the garden and before preparing food;
- not drinking untreated water, such as from lakes or streams (boiling water will kill *Cryptosporidium*);
- avoiding swallowing water when swimming as far as possible; and
- avoiding swimming in natural waters within a week of heavy rain.

To avoid spreading cryptosporidiosis, infected people should:

- not swim for at least two weeks after the diarrhoea has stopped;
- not share towels or linen for at least two weeks after the diarrhoea has stopped;
- not prepare food for at least 48 hours after the diarrhoea has stopped;
- be scrupulous with hand washing; and
- be excluded from childcare, preschool and playgroup until 24 hours after the diarrhoea has stopped.

Public swimming pool operators are required to manage their pools in accordance with the *Public Health Regulation 2012* which includes requirements regarding the level of disinfectant (usually chlorine) required. NSW Health provides further guidance on additional steps that public pool operators can take to manage the risk of cryptosporidium, including advice on superchlorination if the pool operator is informed by NSW Health that two or more cases of cryptosporidiosis have been associated with the swimming pool.

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

Follow the link for further information on [Cryptosporidium notifications](#).

Follow the link about advice for [public swimming pool operators](#).

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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 02 December 2013 to 08 December 2013, by date received.

		This week	Last week	Year to date			Full Year	
				2013	2012	2011	2012	2011
Enteric Diseases	Cryptosporidiosis	14	15	1088	619	336	655	354
	Giardiasis	45	43	2139	1935	2280	2013	2373
	Listeriosis	1	0	31	31	17	36	20
	Rotavirus	11	14	487	1733	1168	1761	1208
	STEC/VTEC	1	1	23	14	9	14	9
	Salmonellosis	82	64	3243	2767	3408	2941	3567
	Shigellosis	7	4	128	125	122	131	126
	Typhoid	2	0	54	38	43	43	45
Respiratory Diseases	Influenza	45	55	8267	7894	5731	8039	5791
	Legionellosis	2	3	93	102	103	105	105
	Tuberculosis	6	3	364	416	517	443	540
Sexually Transmissible Infections	Chlamydia	442	474	19841	20299	19503	21261	20448
	Gonorrhoea	89	96	4029	3958	2650	4115	2818
Vaccine Preventable Diseases	Adverse Event Following Immunisation	1	3	485	258	355	264	363
	Meningococcal Disease	3	1	49	67	71	68	72
	Pertussis	61	45	2226	5765	12772	5996	13411
	Pneumococcal Disease (Invasive)	3	7	466	547	497	563	530
	Rubella	1	0	13	11	17	11	17
Vector Borne Diseases	Barmah Forest	5	3	418	326	460	344	471
	Chikungunya	1	0	18	1	8	1	11
	Dengue	4	2	249	283	132	289	149
	Malaria	1	3	88	66	77	68	82
	Ross River	10	7	487	579	575	596	590
Zoonotic	Brucellosis	1	1	4	5	5	5	6

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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