

Communicable Diseases Weekly Report

Week 28, 11 July to 17 July 2016

In summary, we report:

- <u>Salmonella Hvittingfoss</u> outbreak investigation
- Shigella increase in locally acquired infections
- Impact of infection control breaches at four Sydney dental clinics report released
- Summary of notifiable conditions activity in NSW

For further information on infectious diseases on-line see <u>NSW Health Infectious Diseases</u>. Also see <u>NSW Health Infectious Diseases Reports</u> for links to other surveillance reports.

Salmonella Hvittingfoss

During June and July 2016, a notable increase in *Salmonella* Hvittingfoss notifications was detected through routine surveillance (Figure 1). As of 20 July, 25 notifications of *S*. Hvittingfoss had been received with specimen collection dates on or after 14 June 2016.

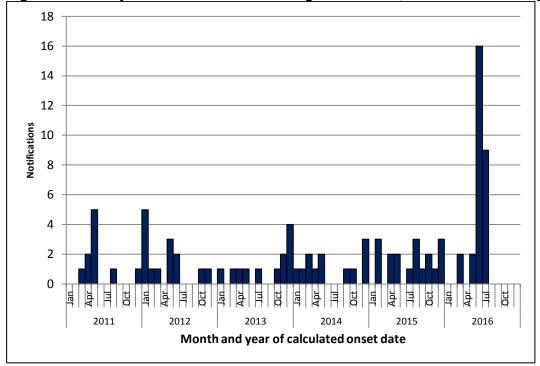


Figure 1. Monthly notifications of *S.* Hvittingfoss in NSW, 1 Jan 2011 - 18 July 2016

Cases ranged in age from 5 months to 67 years, with a median age of 2 years. Seventy-two per cent of cases were under 5 years of age. There were slightly more females than males. The majority of cases reside in the greater Sydney metropolitan area. An investigation has been initiated with the aim of identifying the source of infection. To 20 July 2016, 14 cases have been interviewed with no clear source yet identified.

S. Hvittingfoss is a relatively uncommon *Salmonella* serotype in Australia. Historically NSW received an average of 1.3 notifications of this serotype per month. Queensland is usually the jurisdiction with the highest number of *S*. Hvittingfoss cases. Outbreaks with this Salmonella serotype in Australia have previously been investigated with no clear source identified.

Internationally, S. Hvittingfoss outbreaks are uncommon with the largest reported outbreak being associated with Subway restaurants in Illinois, USA, in 2010. In that outbreak no specific food vehicle was detected but lettuce, tomato, and olives were associated with increased risk of infection.

Salmonellosis is a form of gastroenteritis caused by *Salmonella* bacteria, which are commonly found in animals. Symptoms of salmonellosis include fever, headache, diarrhoea, abdominal pain, nausea, and vomiting. Symptoms usually start 6-72 hours after ingestion of the organism and typically last 4-7 days, but can occasionally persist for weeks. Admission to hospital is sometimes required for management of dehydration, particularly in young babies, elderly people and those with weakened immune systems.

Follow the links for further information on salmonellosis and salmonellosis notifications.

<u>Shigella</u>

There were seven notifications of shigellosis reported this week (Table 1). Two are yet to be interviewed, two were acquired overseas and three were likely acquired locally from male to male sexual contact (MSM). All typed cases are *Shigella* sonnei biotype g.

The number of notifications of *Shigella* infection is highest year to date in 2016 since notifications began in 2001. In 2016 to 17 July, there have been 179 notifications, which is almost twice the expected number (the 5-year average for the same period). There was an increased number of overseas acquired infections notified in January 2016 but higher numbers of locally acquired infections reported in February to June 2016 (Figure 2). The increase is due primarily to cases with MSM exposures.

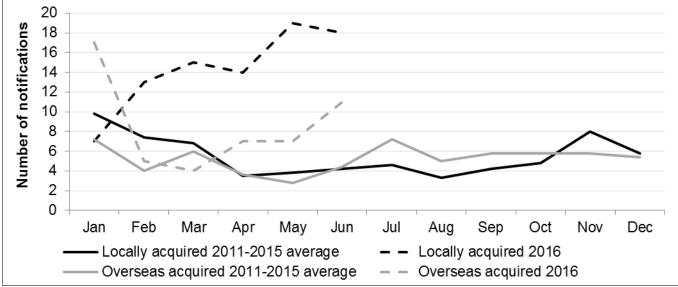


Figure 2. Shigellosis notifications by month and place of acquisition*

* The place of acquisition for 19% of notifications remains unknown

In response to the increase in notifications of shigellosis, Health Protection NSW released information for clinicians about the outbreak amongst men who have sex with men in Sydney, recommending stool specimens with antibiotic resistance testing be requested for patients with diarrhoea. A media alert was released in conjunction with ACON to raise awareness in the gay community and provide advice on preventing shigellosis. ACON have begun a health promotion campaign in the gay press and via social media to target gay and bisexual men. They are also distributing posters to sex on premises and other venues and providing hygiene advice to the managers of these venues.

Shigellosis is a diarrhoeal disease caused by *Shigella* bacteria. Symptoms include diarrhoea (often containing blood and mucous), fever, nausea, vomiting and abdominal cramps. The symptoms usually begin around one to three days after exposure.

Shigella infection spreads easily from person to person by the faecal-oral route. Ingestion of only a small number of organisms is sufficient to result in infection. Shigellosis can be prevented by thorough hand washing after any possible exposures to human faecal material, including after

toileting, changing nappies and sexual activity. People who have shigellosis should not have sex where there is any contact with the anus, to avoid transmitting *Shigella* bacteria to the mouth. People with shigellosis should not go to work or school until their diarrhoea has stopped. Children in child care should be excluded until their diarrhoea has ceased for 24 hours. People who are food handlers, or care for patients, children or the elderly should not attend work until 48 hours after their symptoms have resolved.

Follow the links for further information on shigellosis and Shigella notifications.

Impact of infection control breaches at four Sydney dental clinics

Following an assessment of reports of poor infection control at two Sydney dental practices involving four clinics, approximately 13,400 dental patients were advised in July 2015 by NSW Health to seek testing for hepatitis B, hepatitis C and HIV infection. An investigation was undertaken by Health Protection NSW and public health units across NSW of all dental patients who were subsequently notified to NSW Health with a blood borne virus infection after they had had an invasive procedure at one of the dental practices. These patients were interviewed about risks for acquiring a blood borne virus infection and their past medical history was reviewed.

No definitive evidence of transmission of blood borne virus infection at the clinics was found. However four patients with hepatitis B infection and four with hepatitis C infection reported no other risk factors.

The investigation report is now available on the NSW Health website.

Summary of notifiable conditions activity in NSW

The following table summarises notifiable conditions activity over the reporting period (Table 1).

		Weekly		Year to date			Full Year	
		This week	Last week	2016	2015	2014	2015	2014
Enteric Diseases	Cryptosporidiosis	12	13	747	623	266	1038	429
	Giardiasis	49	55	2217	2038	1700	3415	2942
	Hepatitis E	1	0	13	7	22	20	38
	Rotavirus	6	9	266	185	228	1036	714
	STEC/VTEC	2	0	24	12	27	29	31
	Salmonellosis	70	81	2928	2621	2716	4044	4274
	Shigellosis	10	5	179	92	131	172	212
Respiratory Diseases	Influenza	737	546	5556	3369	2252	30302	20888
	Legionellosis	4	4	77	58	39	96	72
	Tuberculosis	7	10	239	224	232	445	475
Sexually Transmissible Infections	Chlamydia	385	515	14106	12228	12689	22548	22899
	Gonorrhoea	146	138	3758	2833	2646	5401	4877
Vaccine Preventable Diseases	Adverse Event Following Immunisation	5	1	141	103	173	182	256
	Mumps	2	3	23	30	52	63	82
	Pertussis	135	129	5926	3863	1027	12083	3051
	Pneumococcal Disease (Invasive)	12	11	230	208	222	494	511
	Rubella	1	1	9	4	5	6	10
Vector Borne Diseases	Barmah Forest	1	0	20	147	123	185	163
	Dengue	6	6	283	195	270	343	378
	Ross River	4	2	337	1297	347	1638	673

Table 1. NSW Notifiable conditions from 11 to 17 July 2016, by date received *

* 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 <u>Infectious Diseases Data</u> webpage.