

# Communicable Diseases Weekly Report

## Week 19, 9 to 15 May 2016

In summary, we report:

- [Malaria](#) – four new cases
- [Cholera](#) – one new imported case of non-toxigenic *Vibrio cholera* O1
- [Summary of notifiable conditions activity in NSW](#)

For further information on infectious diseases on-line see [NSW Health Infectious Diseases](#). Also see [NSW Health Infectious Diseases Reports](#) for links to other surveillance reports.

## Malaria

Four new cases of malaria infection were notified in this reporting week (Table 1). One of the cases had been acquired in Ghana while the other three cases were from one family who had recently arrived from Malawi. All were due to infections with *Plasmodium falciparum*.

Malaria is an infection of the liver and red blood cells caused by protozoan parasites. Malaria symptoms usually develop 9-14 days after being bitten by an infected mosquito. Occasionally symptoms develop weeks or months later. Some types of malaria can recur months or years after exposure.

There are five types of *Plasmodium* parasites that cause malaria: *P. ovale*, *P. malariae*, *P. knowlesi*, *P. vivax* and *P. falciparum*. Symptoms of malaria include sudden onset of fever, chills, headache, sweating, nausea, vomiting and pain in joints and muscles. In severe cases symptoms can include seizures, confusion, kidney failure, breathing difficulty and coma. The infection is sometimes fatal. Malaria caused by the *P. falciparum* parasite can be especially dangerous.

Mainland Australia is free of malaria, but malaria is occasionally found in the Torres Strait Islands. Australians can contract malaria while travelling in tropical and subtropical areas of Asia, Africa, Central and South America, the Pacific Islands and parts of the Middle East.

Malaria is endemic in most parts of West Africa and it is a more likely cause of febrile illness than Ebola viral disease in travellers returning from that region. Of the 17 cases of malaria reported for the year to date (Table 1), ten cases (59%) have been acquired in countries in Africa and four cases (24%) have been acquired in Papua New Guinea.

Most malaria infections occur in people who have travelled to malaria-affected countries and who did not take anti-malarial medications or who did not take them as directed. Overseas travellers can prevent malaria by taking actions to avoid mosquito bites and taking anti-malarial medications which kill the parasite. People intending to travel to malaria-affected areas should visit their local doctor or a travel health clinic from four to six weeks before their travel to obtain specific advice about preventing malaria based on their itinerary, season of travel and medical history.

For further information on malaria, including practical measures to avoid being bitten by mosquitoes while travelling, see the [malaria factsheet](#). Follow the link for [malaria notifications data](#). Also see the [Staying health while travelling overseas](#) and [Mosquitoes are a health hazard](#) factsheets.

## Cholera

One case of *Vibrio cholerae* infection was notified in this reporting week in an adult who developed watery diarrhoea, vomiting and abdominal pain shortly after returning from Bali, Indonesia. The isolate was identified as *V. cholerae* O1 El Tor serotype Inaba, but was non-toxigenic (i.e. lacking the *ctx* toxin gene). For surveillance purposes, this case does not meet the national case definitions for cholera. Just one other confirmed case of cholera has been notified during 2016 to

date – a traveller returning from Thailand from whom toxigenic *V. cholerae* O1 serotype Ogawa was isolated.

Cholera is a severe diarrhoeal illness caused by infection with cholera bacteria, *V. cholerae*. In Australia, the spread of toxigenic strains (serogroups O1 and O139) have been eliminated by modern water and sewage treatment systems and food safety programs. Most infections occur in travellers to developing countries, including those visiting friends or relatives. The bacteria is spread through drinking contaminated water, eating raw or undercooked seafood from contaminated waters, or eating other contaminated foods.

Only toxigenic strains of serogroups O1 and O139 cause widespread epidemics; however, non-toxigenic strains within these serogroups also exist in the environment, and may cause sporadic cases of disease. Similarly, non-epidemic strains (non-O1/O139) are ubiquitous to a variety of aquatic ecosystems worldwide (including Australia), and occasionally infect humans causing a relatively milder disease.

To prevent cholera infections, travellers to developing countries should only drink bottled or boiled water, avoid ice and drinks that may have been made with untreated water, avoid uncooked foods including fruit and vegetables unless you are able to peel them yourself, avoid raw or undercooked seafood, avoid eating from street vendors, protect food from flies, and always practice good hygiene by thoroughly washing hands with soap and running water before meals and after using the toilet.

A cholera vaccine is available but is generally only recommended for travellers at increased risk of the infection because of a pre-existing medical condition, or for humanitarian disaster workers deployed to regions with endemic cholera.

Follow the links for further information on [cholera](#) and [cholera vaccination](#).

## 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 9 to 15 May 2016, by date received**

		Weekly		Year to date			Full Year	
		This week	Last week	2016	2015	2014	2015	2014
Enteric Diseases	Cryptosporidiosis	26	39	594	512	205	1038	429
	Giardiasis	81	62	1626	1484	1226	3415	2942
	Hepatitis E	1	0	11	4	10	20	38
	Rotavirus	6	1	192	130	134	1036	714
	STEC/VTEC	1	0	16	11	21	29	31
	Salmonellosis	84	103	2230	2078	2072	4045	4275
	Shigellosis	8	6	111	67	107	172	211
Respiratory Diseases	Influenza	151	118	2625	1596	1080	30301	20888
	Legionellosis	3	7	54	36	31	96	72
	Tuberculosis	1	2	161	141	152	443	475
Sexually Transmissible Infections	Chlamydia	530	631	9692	8352	8707	22549	22900
	Gonorrhoea	123	178	2390	1935	1790	5400	4876
Vaccine Preventable Diseases	Adverse Event Following Immunisation	13	5	86	74	130	182	256
	Meningococcal Disease	2	0	17	12	13	46	37
	Pertussis	161	182	4620	2287	712	12077	3052
	Pneumococcal Disease (Invasive)	12	9	131	105	96	494	511
	Rubella	2	0	7	3	3	6	10
Vector Borne Diseases	Barmah Forest	1	0	14	122	91	185	163
	Dengue	12	8	212	151	179	341	378
	Malaria	4	0	17	19	35	47	87
	Ross River	11	16	275	1154	211	1638	673
Zoonotic Diseases	Leptospirosis	1	0	7	5	6	15	16
	Q fever	1	4	81	86	71	267	190

### 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.