



Communicable Diseases Quarterly

Issue 10 | Q4 2015

This is the Communicable Diseases Quarterly report from Public Health Services for the period 1 October to 31 December 2015.

It includes commentary on selected diseases and a table of all diseases reported for this period.

Key Points

- A larger than expected number of campylobacteriosis cases was notified during this quarter (330 cases).
- Four cases of Paralytic Shellfish Poisoning (PSP) were identified in people eating wild shellfish. The shellfish was collected in waters subject to a dinoflagellate bloom.

Campylobacteriosis

There were 330 cases of campylobacteriosis notified during this quarter which is a 27% increase on the five-year average (259 notifications). The increase in notifications was observed statewide, with the largest increase being in residents of the Greater Hobart area. There were a total of 1036 cases of campylobacteriosis notified in 2015, which is the highest yearly total of cases in Tasmania on record.

Campylobacteriosis, a gastrointestinal illness due to an infection of the bacteria *Campylobacter*, is often a foodborne disease. A specific cause for this increase in notifications has not been identified to date, but surveillance and investigation of campylobacteriosis in Tasmania is ongoing.

Influenza (flu)

There were 110 notifications of laboratory-diagnosed influenza (flu) during this quarter; an increase on the five-year quarterly average (54 cases). This is not an unusual change as 114 notifications were received during the fourth quarter of 2013.

The 2015 flu season concluded during October. At the end of the fourth-quarter weekly flu notification counts returned to the low 'inter-seasonal' level: fewer than five notifications per week. No outbreaks of flu in aged care facilities were reported during the fourth quarter.

A total of 1,434 notifications of flu were received during 2015: the highest total on record.

More information on flu can be found in the FluTAS Report.

Zika Virus Surveillance

An outbreak of Zika Virus in Brazil during 2015 spread to other nations in the Americas in early 2016. Zika virus is spread mainly by the mosquito *Aedes aegypti* which is commonly found in the tropical areas but is not endemic to Tasmania.

There were no cases of Zika Virus diagnosed in Tasmania during late 2015.

Paralytic Shellfish Poisoning

During the third quarter an 'algal bloom' of the dinoflagellate *Alexandrium tamarense* was identified in the waters around the east coast of Tasmania. This resulted in several recalls of commercial shellfish products and advice to the public not to consume wild shellfish. Preventative measures included warning signage being erected at various locations along the east coast of Tasmania advising of the risk in eating wild shellfish from the area. A total of four cases of Paralytic Shellfish Poisoning (PSP) were identified in individuals that reported eating wild mussels during the warning period. Symptoms reported included numbness/tingling, muscle weakness, dizziness, nausea, vomiting and experiencing a 'floating sensation'. The onset of symptoms occurred between 0.5 and 12 hours from consumption of wild mussels. Two of the four cases required hospitalisation however all cases recovered. Public health alerts were scaled back in January 2016 when the algal bloom receded.

Varicella zoster

Varicella zoster is the virus responsible for Chickenpox and the painful (blistering) rash commonly known as shingles. During this quarter there were 135 laboratory confirmed cases of varicella zoster. These notifications are 42% greater than the five-year average for this quarter. Investigations identified that 14 cases were chickenpox, 78 were diagnosed as shingles, with information on the remaining cases unknown. Shingles only affects people who have had chickenpox in the past. While greater than the quarterly average 14 cases of chickenpox is not unusual when compared to the variation in notification numbers across recent years.

Institutional Outbreaks

During this quarter there were five non-foodborne institutional outbreaks of gastroenteritis reported to Communicable Diseases Prevention Unit (CDPU). There was an average of 12 institutional outbreaks reported during the fourth quarter of the previous five years (2010-14).

Two outbreaks occurred in aged care facilities. A further two occurred in childcare centres, and one outbreak occurred in a hospital. The facilities were located across the state.

Norovirus was the infectious agent in three institutional outbreaks this quarter. The infectious agent in the remaining two outbreaks (both childcare centres) was unable to be determined as either no specimens were collected or no pathogens were detected in the specimens submitted.

Person-to-person transmission of illness was determined to be the cause of each outbreak. The five outbreaks were separate and unrelated events.

Gastroenteritis in a residential, educational or childcare institution (similar gastrointestinal illness in two or more people within three days) is notifiable in Tasmania and should be reported to the CDPU via the Public Health Hotline - Tasmania **1800 671 738**.

This report is produced by the Communicable Diseases Prevention Unit of Public Health Services. For any queries and feedback please make contact via cdpu.surveillance@dhhs.tas.gov.au

Information about influenza activity in Tasmania is available in the [fluTAS Report](#). Information about notifiable diseases in **Tasmania** is available from [the CDPU website](#).

National communicable disease information and reports are available from the [Department of Health](#) and **summary national data** is available from the [National Notifiable Disease Surveillance System](#).

Table: Notifiable diseases reported in Tasmania during the fourth quarter of 2015 (October-December) with comparison to previous quarters by derived diagnosis date.

	Q4 2015	Q3 2015	Q4 2014	Q4 5y Mean*	Ratio [^]	2015 YTD#
Barmah Forest Virus	0	1	0	0	0	1
Campylobacteriosis	♦ 330	244	269	259	1.27	1036
Chikungunya	0	0	0	0	0	0
Chlamydia	378	395	417	415	0.91	1666
Creutzfeldt-Jakob Disease (CJD)	1	0	0	0	0	1
Cryptosporidiosis	5	9	8	10	0.5	19
Dengue	6	3	3	3	2	19
Gonococcal Infection	13	12	20	13	1	56
Haemolytic Uraemic Syndrome	0	0	0	0	0	0
Haemophilus Influenzae Type B Infection (invasive)	0	0	0	0	0	0
Hepatitis A	0	0	0	1	0	1
Hepatitis B-Newly Acquired	0	0	0	1	0	1
Hepatitis B-Unspecified	10	13	14	12	0.83	40
Hepatitis C-Newly Acquired	5	8	2	4	1.25	26
Hepatitis C-Unspecified	65	64	50	54	1.2	233
Hepatitis E	0	0	0	0	0	1
HIV infection - newly acquired	♦ 2	0	0	0	0	2
HIV infection - unspecified	1	4	5	4	0.25	13
Hydatids	0	0	1	0	0	0
Influenza	110	1152	59	54	2.04	1434
Legionellosis	2	2	1	2	1	7
Leprosy	0	0	0	0	0	0
Leptospirosis	0	0	0	0	0	2
Listeriosis	0	0	2	1	0	0
Lymphogranuloma venereum (LGV)	0	0	0	0	0	0
Malaria	0	0	1	2	0	2
Measles	0	0	0	0	0	0
Meningococcal Disease (invasive)	1	1	0	1	1	2
Mumps	1	0	0	1	1	8
Paralytic Shellfish Poisoning (PSP)	♦ 4	0	0	0	0	4
Paratyphoid	0	0	0	0	0	0
Pertussis	6	13	10	164	0.04	31
Pneumococcal Disease (invasive)	13	16	11	12	1.08	43
Psittacosis (Ornithosis)	0	0	0	0	0	0
Rickettsial Infection	2	0	1	2	1	2
Ross River Virus	0	0	2	2	0	4
Rotavirus	17	6	26	32	0.53	54
Rubella	♦ 1	0	0	0	0	1
Salmonellosis	71	34	75	63	1.13	252
Shiga toxin producing E.coli	0	0	0	0	0	0
Shigellosis	1	3	1	1	1	6
Syphilis-infectious	0	4	5	3	0	15
Syphilis-unknown duration	1	2	5	4	0.25	14
Tuberculosis	3	2	5	3	1	12
Tularaemia	0	0	0	0	0	0
Typhoid	0	1	1	0	0	1
Typhus	0	0	0	0	0	0
Varicella zoster (chicken pox)	14	20	15	8	1.75	68
Varicella zoster (shingles)	♦ 78	56	69	63	1.24	246
Varicella zoster (unspecified)	♦ 43	38	37	24	1.79	148
Vibrio Infection	1	0	1	0	0	1
Yersinia	3	8	1	1	3	18

*This figure is based on the five-year quarterly mean, calculated for this report quarter, for the years 2010-2014.

[^]The ratio is the number of cases notified in the quarter compared to the five-year mean for that quarter.

#Year to date count at the end of the reporting quarter.

♦Disease case numbers are beyond two standard deviations of the historical five-year mean for this period of time.

Data are extracted based on the available date closest to the disease onset date. Data are subject to change over time due to ongoing data review processes.

As well as true changes in disease incidence, changes in surveillance practice, diagnostic techniques and reporting may also contribute to increases or decreases in notifications received over time.