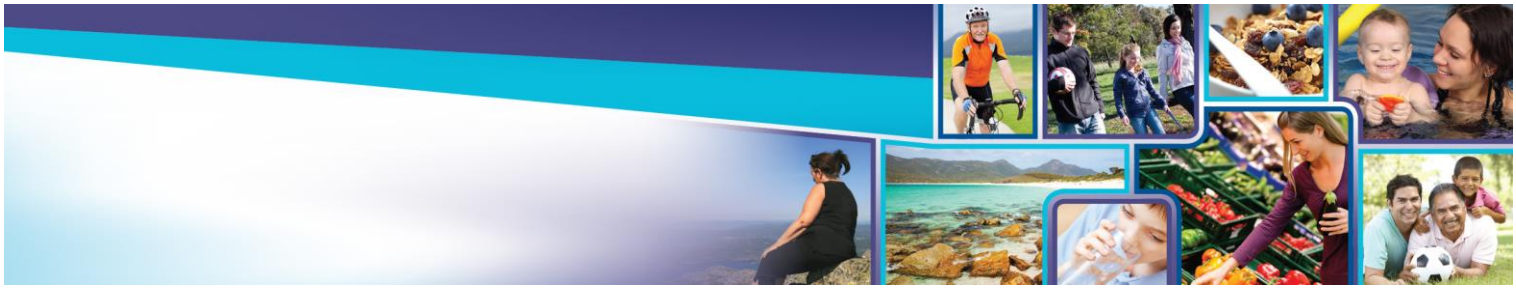

Communicable Diseases Quarterly

Issue 12 | Q2 2016

This is the Communicable Diseases Quarterly report from Public Health Services for the period 1 April to 30 June 2016.

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

Key Points

- Measles outbreak
- Dengue case notification increases
- Invasive pneumococcal disease cases
- Salmonellosis cases elevated this quarter
- *Campylobacter jejuni* outbreak
- Elevated legionellosis notifications

Measles

There were three cases of measles diagnosed in Tasmania in the second quarter of 2016. All cases were part of one outbreak. The index case for the outbreak was a returned traveller from Nepal which was where the infection was acquired. There were 162 people contacted as part of contract tracing for this case. There were two secondary cases that were ill with confirmed measles following contact with the index case. All three cases had Measles Genotype D8.

The best protection against measles is immunisation with two doses of MMR (measles, mumps, and rubella) vaccine. People born before 1966 are likely to be immune. Anyone born in or after 1966 that is not sure of their measles immunisation status should have at least one more dose of MMR vaccine. This is particularly important for healthcare workers and people who plan to travel overseas.

More information on measles is available from the Public Health Services website.

Dengue

There were 14 cases of dengue reported in the second quarter which was greater than the five year mean of four cases, for the same period. All cases of illness were acquired overseas, with travel to various regions. The majority of cases were acquired in Indonesia, with travel to Bali reported by a number of cases.

Dengue is a virus that is spread by mosquitos in many tropical and subtropical areas. There is no specific treatment and no vaccine. The best way to protect against dengue fever is to avoid mosquito bites when in affected tropical and subtropical areas. Tasmania does not have the *Aedes* mosquitos that can spread the dengue virus.

Invasive pneumococcal disease

There were 17 cases of invasive pneumococcal disease (IPD) diagnosed this quarter, which was greater than the historical five year mean of nine cases. The cases were located in all regions of Tasmania. The ratio of female to male cases was 1.42). The median age of cases was 64 years, with case ages ranging from less than one

year to 92 years. There was one case of haemolytic uraemic syndrome diagnosed in association with a case of IPD in an infant.

Pneumococcal vaccine is available free for all children at two, four and six months old and is free for people aged 65 years and older and for Aboriginal and Torres Strait Islander people aged 50 and older. Children and adults who have had pneumococcal disease still need to be vaccinated to be protected from catching the disease again from a different strain.

The Public Health Services website has further information on pneumococcal disease and the current immunisation schedules.

Salmonellosis

There were 76 cases of salmonellosis diagnosed this quarter compared to the five year quarterly mean for the same period of 44 cases.

During this time period there were five 'cluster' investigations into cases of various different types of *Salmonella*. Most of the clusters had small numbers of cases ranging from three to five cases each. No definitive sources were identified.

Salmonellosis can be acquired from food or environmental sources. Information on prevention and control of salmonellosis is available from the public health services website.

***Campylobacter jejuni* Outbreak**

There were 31 cases of gastroenteritis identified following a function held in May. Of these cases, four people were confirmed as having a *Campylobacter jejuni* infection. The likely vehicle for the foodborne disease outbreak was undercooked chicken. *C. jejuni* was isolated from a sample of chicken mince. Fresh poultry products have been known to be contaminated with *Campylobacter* bacteria. Thoroughly cooking meat and poultry kills the bacteria. Specific information on *Campylobacter* can be found on the public health website.

Suspected cases of food or waterborne illness are a notifiable disease by medical practitioners under the current notifiable disease *Guidelines* and can be reported via the Public Health Hotline - Tasmania **1800 671 738.**

Legionellosis

There were five case of legionellosis diagnosed this quarter. There were two cases of *L. longbeachae* and three cases of *L. pneumophila*. No links between cases were identified.

Institutional Outbreaks

During this quarter there were 10 non-foodborne institutional outbreaks of gastroenteritis reported to Communicable Diseases Prevention Unit (CDPU). This number was less than the average number of outbreaks reported during the second quarter of the previous five years (15 outbreaks). All 10 outbreaks were classified as person to person transmission.

Nine outbreaks occurred in child care centres and one outbreak occurred in an aged care facility. The facilities were located across the state.

Norovirus was the infectious agent in one institutional outbreak. The infectious agent in the remaining nine outbreaks was unable to be determined.

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**.

Table: Notifiable diseases reported in Tasmania during the second quarter of 2016 (April-June) with comparison to previous quarters by derived diagnosis date.

		Q2 2016	Q1 2016	Q2 2015	Q2 5y Mean*	Ratio ^	2016 YTD#
Barmah Forest Virus		**0**	0	0	**0**	0	0
Campylobacteriosis		**208**	361	206	**177**	1.18	569
Chikungunya		**0**	1	0	**0**	0	1
Chlamydia		**446**	482	410	**435**	1.03	928
Creutzfeldt–Jakob Disease (CJD)		**0**	0	0	**0**	0	0
Cryptosporidiosis		**5**	7	4	**11**	0.45	12
Dengue	♦	**14**	4	7	**4**	3.5	18
Gonococcal infection		**23**	15	13	**11**	2.09	38
Haemolytic Uraemic Syndrome	♦	**1**	0	0	**0**	0	1
Haemophilus Influenzae Type B infection (invasive)		**0**	0	0	**0**	0	0
Hepatitis A		**0**	0	1	**0**	0	0
Hepatitis B-Newly Acquired		**0**	1	1	**2**	0	1
Hepatitis B-Unspecified		**12**	6	11	**15**	0.8	18
Hepatitis C-Newly Acquired		**4**	8	9	**7**	0.57	12
Hepatitis C-Unspecified		**56**	50	54	**55**	1.02	106
Hepatitis E		**0**	0	0	**0**	0	0
HIV infection - newly acquired		**0**	2	0	**1**	0	2
HIV infection - unspecified		**2**	2	4	**2**	1	4
Hydatids		**0**	0	0	**1**	0	0
Influenza		**73**	49	134	**73**	1	122
Legionellosis	♦	**5**	2	2	**2**	2.5	7
Leprosy		**0**	1	0	**0**	0	1
Leptospirosis		**0**	0	0	**0**	0	0
Listeriosis		**1**	0	0	**0**	0	1
Lymphogranuloma venereum (LGV)		**0**	0	0	**0**	0	0
Malaria		**0**	1	1	**2**	0	1
Measles	♦	**3**	0	0	**0**	0	3
Meningococcal Disease (invasive)		**0**	2	0	**1**	0	2
Mumps		**1**	2	4	**1**	1	3
Paratyphoid		**0**	1	0	**0**	0	1
Pertussis		**9**	7	8	**84**	0.11	16
Pneumococcal Disease (invasive)	♦	**17**	6	10	**9**	1.89	23
Psittacosis(Ornithosis)		**0**	0	0	**0**	0	0
Rickettsial Infection		**0**	0	0	**1**	0	0
Ross River Virus		**2**	3	2	**2**	1	5
Rotavirus		**9**	17	11	**21**	0.43	26
Rubella		**0**	0	0	**0**	0	0
Salmonellosis	♦	**76**	111	46	**44**	1.73	187
Shiga toxin producing E.coli		**0**	0	0	**0**	0	0
Shigellosis		**2**	1	0	**1**	2	3
Syphilis-infectious		**1**	1	4	**4**	0.25	2
Syphilis-unknown duration		**5**	0	5	**3**	1.67	5
Tuberculosis		**1**	2	4	**2**	0.5	3
Tularaemia		**0**	0	0	**0**	0	0
Typhoid		**0**	1	0	**0**	0	1
Typhus		**0**	0	0	**0**	0	0
Varicella zoster (chicken pox)	♦	**21**	20	9	**9**	2.33	41
Varicella zoster (shingles)		**76**	71	47	**57**	1.33	147
Varicella zoster (unspecified)		**38**	39	39	**24**	1.58	77
Vibrio Infection		**0**	8	0	**0**	0	8
Yersinia		**1**	2	5	**2**	0.5	3

*This figure is based on the five-year quarterly mean, calculated for this report quarter, for the years 2011-2015.

^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.