

Communicable Diseases Prevention Unit,
Public Health Services

OzFoodNet Tasmania Quarterly Report, 2023

April – June 2023

Report prepared on 11 August 2023

Executive Summary

This report describes enteric disease notifications and gastrointestinal outbreak investigations in Tasmania for the second quarter of 2023, covering the period from 1 April 2023 to 30 June 2023.

- During the second quarter of 2023, a total 256 notifications of enteric disease were reported.
- The most frequently notified enteric diseases this quarter were campylobacteriosis (172 notifications) and salmonellosis (59 notifications).
- Notifications of salmonellosis and shiga-toxin producing *Escherichia coli* (STEC) were slightly higher than expected when compared to historical data (Table 1).
- There were 24 non-foodborne outbreaks reported which was nearly twice that expected compared to historical data for the same time period.
- There was one *Salmonella* Typhimurium cluster investigation conducted, with the source not identified.

Data Sources

Case notification data is obtained from the Tasmanian Notifiable Disease Surveillance System (TNDSS). Gastroenteritis outbreak data is obtained from the Communicable Disease Prevention Unit (CDPU) Gastro Outbreak Database and TNDSS.

Notifications of diseases and conditions are reported to Public Health Services under the *Public Health Act* (1997) and [Guidelines for Notifying Diseases and Food Contaminants](#). Pathology laboratories in Tasmania are required to report cases of notifiable diseases diagnosed in the laboratories. Suspected cases of food or waterborne illness and clinical cases of haemolytic uraemic syndrome (HUS) are required to be notified by medical practitioners. Suspected gastroenteritis outbreaks in institutional settings are required to be notified by the relevant facility (aged care, childcare and hospitals).

Data in this report represents notifications of enteric disease where the case residential address is in Tasmania or overseas. Interstate residents are notified in the jurisdiction of residence. Data are presented by 'calculated onset date': which is the true onset date if known, or the earliest of specimen date or notification date. Cases are defined as per the national Communicable Disease Network Australia ([CDNA surveillance case definitions](#)) or local case definitions within CDPU.

Data was extracted on 11 August 2023 and covers the period from 1 January 2018 to 30 June 2023. Data presented in this report is correct at the time of publication and is subject to change due to data cleaning and late notifications.

Table 1: Number of notifications of enteric disease in the second quarter (Q2) 2023 compared to historical five-year means (5YM), Tasmania.

Disease	Q2 2023	Q2 5YM (2018-2022)
Botulism	0	0.0
Campylobacter infection	172	172.8
Cryptosporidiosis	7	6.8
Haemolytic Uraemic Syndrome	0	0.0
Hepatitis A	0	0.8
Hepatitis E	1	0.2
Listeriosis	1	0.0
Paratyphoid	0	0.2
Salmonellosis	59	42.4
Shiga-toxin producing Escherichia coli (STEC)	4	1.8
Shigellosis	5	3.2
Typhoid	0	0.6
Vibrio infection (foodborne)	1	0.6
Yersinia	6	10.0
Total	256	239.2

*Includes both confirmed and probable cases as per national case definition change 1 July 2018

Campylobacteriosis

[Campylobacteriosis](#) is disease caused by the bacteria *Campylobacter*. Symptoms may include diarrhoea, abdominal pain, fever and vomiting and illness may last a few days to a week or longer.

There were 172 notifications of campylobacteriosis reported this quarter. Case notifications were similar to that expected compared to the five-year mean for the same period (173 notifications) and there were no notable differences across regions of Tasmania with numbers in all regions ranging from 7% to 18% lower than expected. There is usually a seasonal decline in cases over the cooler months of this quarter (Figure 1). The most commonly reported *Campylobacter* species reported was *Campylobacter jejuni* (79 notifications, 46% of all notifications), followed by *C. coli* (25 notifications, 15% of all notifications). There were a small number of *C. lari* cases (3 notifications). Over one third of *Campylobacter* isolates were not speciated (65 cases, 38% of all notifications). Species identification is dependent on the methodology in place in each laboratory.

Salmonellosis

[Salmonellosis](#) is a disease caused by the bacterium *Salmonella*. Symptoms may include diarrhoea, abdominal pain, fever, nausea and vomiting and illness may last a few days to a week or longer.

The number of salmonellosis notifications (59 notifications) were higher than the five-year mean for the same period (42 notifications). Notifications across all regions of the state were elevated in comparison to historical data, though notification numbers are small when stratified at this level.

Salmonella Mississippi was the most commonly reported serotype in Tasmania during this quarter, with 22 notifications, representing 37% of all salmonellosis notifications reported. *Salmonella* Typhimurium was the second most commonly reported serotype (13 notifications) though there are usually various cluster types within this serotype. There was one cluster investigation into *S.* Typhimurium cases initiated. The remaining salmonellosis cases consisted of several different serovars with small numbers of cases each. Approximately 22% of salmonellosis isolates were untyped at the writing of this report.

Other enteric diseases

There was one [listeriosis](#) case notified in a 71 year old male. The case has consumed several high risk foods such as soft cheese and sliced meats.

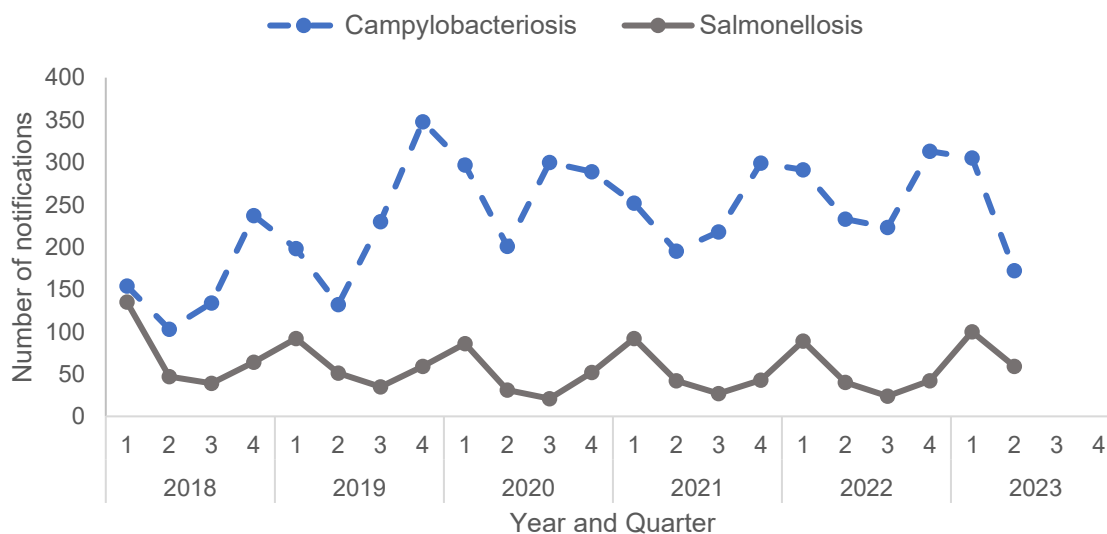
There were five [shigellosis](#) notifications during the second quarter of 2023. The majority were probable cases and associated with overseas travel to a variety of countries. There was one culture confirmed case of multi drug resistant *Shigella sonnei* biotype g which was locally acquired; MSM contact was an identified risk factor.

There was one case of Hepatitis E notified this quarter, which was likely acquired in India.

There was one notification of locally acquired foodborne *Vibrio parahaemolyticus* reported during the second quarter of 2023. The case reported eating Tasmanian oysters prior to symptoms developing, but also reported travel to far north Queensland after illness onset and eating fresh caught seafood and crayfish before the eventual diagnosis of a *Vibrio* infection.

Notifications of [Shiga-toxin producing E coli \(STEC\)](#) were higher than expected but this was possibly due to changes in testing methodology and algorithms in laboratories. Cases were all considered sporadic and unrelated, with no outbreaks or clusters identified.

Figure 1: Number of notifications of Campylobacteriosis and Salmonellosis by year and quarter, Tasmania, January 2018 to June 2023



Foodborne outbreaks

There were no foodborne outbreaks in Tasmania identified during the second quarter of 2023.

Non-foodborne Outbreaks

During the second quarter of 2023 a total 24 non-foodborne outbreaks were reported in Tasmania. This was almost two times the average number of non-foodborne outbreaks reported during the same quarter from 2018 to 2022 (14 outbreaks). A total of 446 people were ill, one person was hospitalised and three deaths were reported. The majority of non-foodborne outbreaks were reported in childcare facilities (16 outbreaks, 67%). There were five outbreaks in aged care facilities, two outbreaks occurred in other institutional settings and one school reported experiencing a gastroenteritis outbreak. Most outbreaks were classified as person to person outbreaks (20 outbreaks, 83%) with a small number classified as unknown mode of transmission (4 outbreaks, 17%). The aetiological agent was identified as norovirus in four outbreaks, and unknown in all remaining non foodborne outbreaks.

Cluster investigations

There was one *Salmonella* cluster investigation conducted during the second quarter of 2023. There were 10 cases in the *Salmonella* Typhimurium cluster, with cases distributed across all regions of Tasmania. Median age of cases was 19 years (range 4 to 83 years) and 60% were female. The source of infection was not identified.



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