
MONTHLY NOTIFIABLE DISEASE SURVEILLANCE REPORT

Data contained within this monthly report is based on information recorded on EpiSurv by Public Health Service (PHS) staff at 18 November 2016. Changes made to EpiSurv data after this date will not be reflected in this report. The results presented may be updated and should be regarded as provisional.

Table of contents

1. Key notifiable disease trends	1
2. Outbreaks	2
3. Deaths from notifiable diseases	3
4. Trends in selected diseases to October 2016	4
5. Data tables	5

1. Key notifiable disease trends

Brucellosis: One case of brucellosis (under investigation) was notified in October 2016. After further investigation, the case has since been found not to meet the case criteria.

Chikungunya fever: Three confirmed cases of chikungunya fever were notified in October. Twenty-six cases have been notified in the year to date compared to 48 at the same time in the previous year. Cases were in the 50–59 years (2 cases) and 20–29 years (1 case) age groups. Two cases reported overseas travel to India during the incubation period for the disease. The other case reported a prior history of overseas travel to Bali, Singapore and Viet Nam that might account for the infection.

Dengue fever: 10 cases of dengue fever (9 confirmed and 1 under investigation) were notified in October compared to seven cases notified in the same month of the previous year. All cases had travelled overseas during the incubation period for the disease. Countries visited included: Indonesia (5 cases), India (2 cases), Australia, Philippines, Thailand and Viet Nam (1 case each). One case reported travel to more than one country.

Diphtheria: One confirmed case of cutaneous diphtheria was notified in October 2016. The case was a male in the 40–49 years age group from Canterbury DHB. Overseas travel to Samoa during the incubation period for the disease was recorded.

Listeriosis: Two confirmed cases of non-perinatal listeriosis were notified in October. Cases were reported in the 30–39 years and 70 years and over age groups, and were from Auckland and Waikato DHBs, respectively. Risk factor information was recorded for both cases; one case was pregnant and the other case was overseas during the incubation period for the disease. The serotype was identified as *L. monocytogenes* serotype O1/2 and *L. monocytogenes* serotype O4 (1 case each).

Rheumatic fever: Eight cases of rheumatic fever - initial attack (4 confirmed, 3 probable and 1 suspect) and two cases of rheumatic fever – recurrent attack (1 confirmed and 1 probable) were notified in October 2016. This compares with nine cases (all initial attack) in the same month of the previous year. All cases were from the North Island: Auckland (3 cases), Counties Manukau and Waitemata (2 cases each), Northland, Bay of Plenty and Lakes (1 case each) DHBs. Cases ranged in age from 9 to 30 years, with the highest number of cases in the 20–29 years (4 cases) and 10–14 years (3 cases) age groups. Cases were reported in the

Pacific peoples (6 cases), Māori (3 cases) and European or Other (1 case) ethnic groups. Nine cases were hospitalised. Numbers are based on report date which may not be a good indicator of newly incident cases as a high proportion of notifications have reporting delays.

Shigellosis: 15 cases of shigellosis (14 confirmed and 1 probable) were notified in October compared with ten cases notified during the same month of the previous year (Figure 1). The 12-month rate in October (3.2 cases per 100,000 population) was slightly higher than at the same time in the previous year (2.5 per 100,000). The highest number of cases was reported from Waitemata DHB (5 cases). The serotype involved was recorded for 73.3% (11/15) of cases: *S. sonnei* biotype g (6 cases), *S. flexneri* 1b and *S. flexneri* 6 (2 cases each) and *S. flexneri* (1 case). Information on overseas travel during the incubation period was recorded for 93.3% (14/15) of cases, of which 64.3% (9/14) of cases recorded overseas travel during the incubation period for the disease. Countries visited included: Samoa (4 cases), Tonga and Nepal (2 cases each), India, Mexico, Sri Lanka, United States of America and Viet Nam (1 case each). Three case reported overseas travel to more than one country. One case who did not travel during the incubation period for the disease reported a prior history of overseas travel to Bali that might account for the infection.

VTEC/STEC infection: 45 cases of VTEC/STEC infection (41 confirmed and 4 under investigation) were notified in October compared to 39 cases confirmed during the same month of the previous year. After further investigation, one case has since been found not to meet the case criteria. The 12-month rate in October (9.7 cases per 100,000) was notably higher than at the same time in the previous year (6.3 per 100,000). The highest number of cases was reported from Waitemata DHB (10 cases) followed by Counties Manukau DHB (7 cases). Cases ranged in age from 3 months to 93 years, with the highest number of cases in the 1–4 years age group (13 cases). Twelve cases were hospitalised. Thirty-eight cases have been confirmed by the Enteric Reference Laboratory as being infected with VTEC/STEC, and of these the serotype was identified as *Escherichia coli* O157:H7 (17 cases) and non-O157 (2 cases). Nineteen cases have verocytotoxin detected but a serotype has not yet been identified. Of the cases for which risk factor information was recorded, 82.6% (19/23) had contact with animals, 30.4% (7/23) had contact with a person with similar symptoms, and 25.0% (5/20) had contact with children in nappies during the incubation period for the disease. The increase in notifications for DHBs in the Auckland region may be due to a change in laboratory methods in July 2015; all faecal specimens are now screened for VTEC/STEC using PCR.

Yersiniosis: 115 cases of yersiniosis (108 confirmed and 7 under investigation) were notified in October 2016 compared to 68 cases notified in the same month of the previous year (Figure 2). After further investigation, five cases have since been found not to meet the case criteria. The highest numbers of cases were reported from Canterbury (26 cases), Auckland (12 cases) and Waikato (11 cases) DHBs. Cases ranged in age from 9 months to 85 years, with the highest number of cases in the 20–29 years age group (21 cases). Eleven cases were hospitalised. The *Yersinia* species involved was identified by ESR for 85.5% (94/110) cases; *Y. enterocolitica* (89 cases) and *Y. pseudotuberculosis* (5 cases). The most common *Y. enterocolitica* biotypes reported were biotype 1A (36 cases) and 2 (34 cases). Among the cases for which risk factor information was recorded, 43.1% (22/51) had consumed food from a food premises, 24.5% (13/53) had contact with other faecal matter or vomit, 20.0% (11/55) had recreational contact with water, and 19.0% (11/58) attended school, preschool or childcare during the incubation period for the disease.

Zika virus infection: Two cases of zika virus infection (1 probable and 1 under investigation) were notified in October 2016. After further investigation, one case has since been found not to meet the case criteria. The case was a female in the 20–29 years age group, of European or Other ethnicity and from Capital & Coast DHB. Overseas travel to Tonga during the incubation period for the disease was recorded.

2. Outbreaks

During October 2016, a total of 47 outbreaks (21 final and 26 interim) were created in EpiSurv (Table 1 and Table 2). Thirty-eight (80.9%) were outbreaks of acute gastroenteritis (15 finalised and 23 interim) involving 238 cases in total. This compares with 29 acute gastroenteritis outbreaks involving 525 cases in total created during the same month of the previous year. Of the 38 acute gastroenteritis outbreaks, the pathogens were recorded as: norovirus (6 outbreaks), rotavirus, and rotavirus/influenza A virus (1 outbreak each). The most commonly reported mode of transmission in acute gastroenteritis outbreaks (50.0%, 19/38) was person-to-person (16 primary and 3 secondary). Of the outbreaks that had an exposure setting recorded (78.9%, 30/38) the most commonly reported settings were long term care facilities (13 outbreaks) and childcare centres (8 outbreaks).

Table 1. Summary of final outbreaks created in EpiSurv during October 2016

Organism/Toxin/Illness	DHB(s) where exposure occurred	Number of outbreaks	Total number of cases
<i>Bordetella pertussis</i> ¹	Southern	1	3
<i>Campylobacter</i> ¹	Capital & Coast	1	3
<i>Cryptosporidium</i>	Northland, Hawke's Bay,	2	9
Gastroenteritis ¹	Waitemata, Auckland, MidCentral, Hutt Valley, Capital & Coast, Canterbury	10	80
<i>Giardia</i>	Waikato, Taranaki	2	8
Norovirus	Capital & Coast, Wairarapa Nelson Marlborough, Canterbury	4	131
Rotavirus	Bay of Plenty	1	4
Total		21	238

¹ Includes outbreak reported to PHSs prior to October 2016: *B. pertussis*, *Campylobacter*, and gastroenteritis (one each) reported in September.

Table 2. Summary of interim outbreaks created in EpiSurv during October 2016

Organism/Toxin/Illness	DHB(s) where exposure occurred	Number of outbreaks	Total number of cases
<i>Bordetella pertussis</i> ³	MidCentral	1	-
<i>Escherichia coli</i> , enteropathogenic ³	Waikato	1	-
Gastroenteritis ³	Waitemata, Auckland, Waikato, Taranaki, Hawke's Bay Whanganui, MidCentral, Hutt Valley, Capital & Coast Canterbury, Southern	20	19
Influenza A virus ^{1,2,3}	Capital & Coast	1	-
Norovirus ³	Waitemata, Hutt Valley	2	4
Rotavirus ^{1,2,3}	Capital & Coast	1	-
<i>Salmonella</i> ^{2,4}	Auckland	1	2
Total		26	25

¹ Outbreak involved more than one pathogen therefore individual pathogen outbreak numbers may not sum to group totals.

² Includes outbreak reported to PHSs prior to October 2016: *Salmonella* (1) reported in August and rotavirus/influenza A virus (1) reported in September.

³ Interim outbreak(s) where total number of cases had not been completed.

⁴ Includes outbreak with and overseas exposure transmission (Fiji).

3. Deaths from notifiable diseases

One death, where the primary cause of death was a notifiable disease, was reported in October 2016 (Table 3).

Table 3. Summary of deaths from notifiable diseases reported during October 2016

Disease	District health board	Age group (years)
Invasive pneumococcal disease	Northland	70+

4. Trends in selected diseases to October 2016

Figure 1. Shigellosis notifications by month, January 2009–October 2016

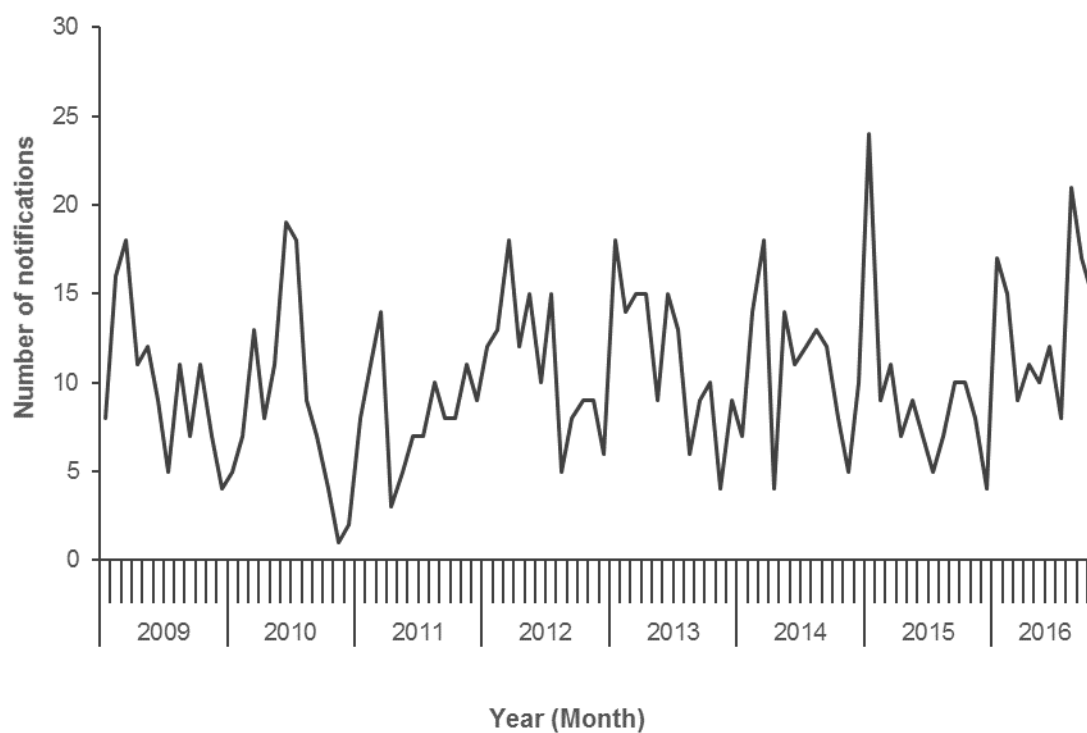
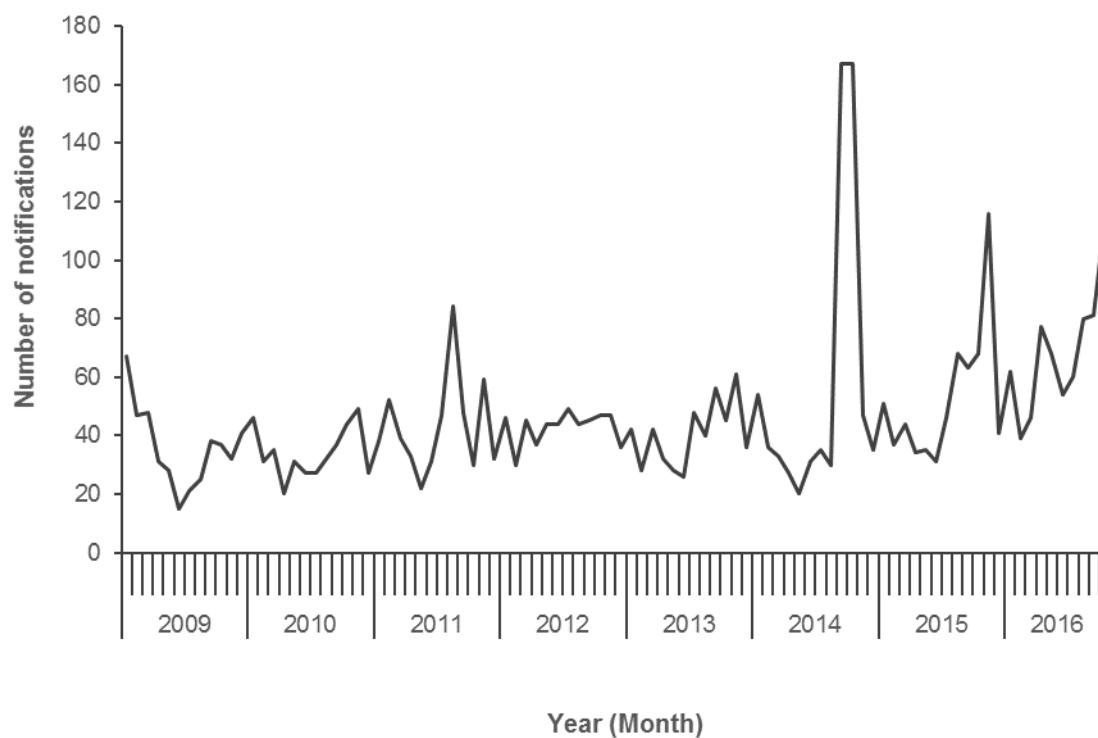


Figure 2. Yersiniosis notifications by month, January 2009–October 2016



5. Data tables

National Notifiable Disease Surveillance Data October 2016

Disease	Current Year - 2016 ¹			Previous Year - 2015		
	October 2016 Cases	Cumulative total since 1 January	Current 12 Month Rate ²	October 2015 Cases	Cumulative total since 1 January	Current 12 Month Rate ²
Campylobacteriosis	856	5560	154.4	579	4683	138.2
Cryptosporidiosis	202	919	22.1	163	598	15.1
Dengue fever	10	173	4	7	113	2.9
Gastroenteritis ³	36	450	12.3	27	387	10.9
Giardiasis	142	1384	35.6	120	1259	32.6
Haemophilus influenzae type b	2	4	0.1	0	3	0.1
Hepatitis A	2	28	0.8	7	39	1.1
Hepatitis B ⁴	3	27	0.7	5	30	0.7
Hepatitis C ⁴	2	31	0.8	4	29	0.6
Invasive pneumococcal disease	41	401	10.5	44	366	9.7
Legionellosis	15	199	6.3	30	156	4.3
Leptospirosis	8	77	1.9	7	54	1.4
Listeriosis	2	30	0.8	1	19	0.5
Malaria	2	25	0.7	2	31	0.8
Measles	2	106	2.3	0	9	0.3
Meningococcal disease	7	60	1.5	6	55	1.3
Mumps	6	13	0.3	2	12	0.3
Paratyphoid fever	4	30	0.8	3	28	0.7
Pertussis	104	876	23.3	92	971	24.4
Rheumatic fever ⁵	10	135	3.3	9	97	2.5
Rickettsial disease	1	6	0.1	1	8	0.2
Rubella	0	4	0.1	0	0	0
Salmonellosis	94	945	23.8	96	900	22.9
Shigellosis	15	135	3.2	10	99	2.5
Tuberculosis disease	30	243	6.5	21	237	6.2
Typhoid fever	3	34	1.1	3	27	0.7
Viral Haemorrhagic Fever	0	1	0	0	0	0
VTEC/STEC infection	45	384	9.7	39	268	6.3
Yersiniosis	115	682	18.3	68	477	12.2

¹ These data are provisional.

² Rate is based on the cumulative total for the current year (12 months up to and including October 2016) or the previous year (12 months up to and including October 2015), expressed as cases per 100,000. This includes cases still under investigation.

³ Cases of gastroenteritis from a common source or foodborne intoxication.

⁴ Only acute cases of this disease are currently notifiable.

⁵ Numbers are based on report date. This may not be a good indicator of newly incident cases as a high proportion of notifications have substantial reporting delays.

Other notifiable infectious disease reported in October: Brucellosis (1), Chikungunya fever (3), Diphtheria (1), Zika virus

Notifiable Disease Surveillance Data by District Health Board October 2016

Disease		Cases ¹ and current rate ² for October 2016 by District Health Board ³																			
		Northland	Waitemata	Auckland	Counties Manukau	Waikato	Lakes	Bay of Plenty	Tairāhiti	Taranaki	Hawke's Bay	Wanganui	MidCentral	Hutt Valley	Capital and Coast	Wairarapa	Nelson Marlborough	West Coast	Canterbury	South Canterbury	Southern
Campylobacteriosis	Cases	28	79	53	58	70	10	23	4	35	172	15	32	20	40	17	21	7	100	22	50
	Rate	178.8	142.3	103.7	97.8	147.7	125	112	141.4	194.1	664.8	159.7	151.7	116.7	128.5	162	124.3	180.4	142.2	259.4	164.6
Cryptosporidiosis	Cases	14	17	11	14	25	8	5	3	16	8	7	8	3	8	5	8	1	19	4	18
	Rate	61.8	24.5	18.4	18.4	31.2	21	6.8	23.2	33.6	17.4	31.9	27.9	10.4	20.6	46.3	15.9	9.2	15.6	23.9	19.7
Dengue fever	Cases	0	3	2	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	2
	Rate	0.6	3.3	4.7	7.3	3.6	1	6.3	6.3	2.6	4.4	0	2.3	3.5	6.6	2.3	5.5	0	2.5	1.7	3.2
Gastroenteritis	Cases	2	3	5	4	0	0	0	0	0	0	0	4	3	8	1	1	0	4	0	1
	Rate	4.8	10.6	23.7	10	2.6	15.3	15.3	2.1	6.9	1.2	19.2	33.1	21.5	28.2	20.8	2.1	15.3	7	1.7	5.7
Giardiasis	Cases	7	24	18	13	14	5	5	3	9	3	1	5	5	5	0	4	0	16	2	3
	Rate	34.5	34.4	40.4	35.5	32.5	50.6	37	137.1	33.6	43.6	28.8	18.6	23.6	43.8	25.5	35.2	24.5	31.7	27.3	29
Haemophilus influenzae type b	Cases	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0	0.4	0.2	0	0	0	2.1	0	0	0	0	0	0	0	0	0	0	0	0
Hepatitis A	Cases	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Rate	1.2	1.2	1.2	0.8	0	0	0.9	0	0.9	0	0	0	1.4	1	0	2.1	3.1	0.4	0	1
Hepatitis B	Cases	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	Rate	0.6	0.2	1.2	1	0.8	0	0.9	0	2.6	1.2	0	0.6	0	1	0	0	0	0.4	0	0.6
Hepatitis C	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
	Rate	0.6	0.2	0.2	0	0	1	0	0	1.7	1.2	0	0	0.7	1	2.3	3.5	3.1	1.9	5.1	1.6
Invasive pneumococcal	Cases	4	7	2	10	1	2	1	1	1	0	0	1	1	2	0	1	0	3	2	2
	Rate	20.8	9.4	11.4	16.5	8.7	20	14	12.7	3.5	8.1	9.6	6.4	6.3	8.6	6.9	6.2	0	7.4	18.8	8.9
Legionellosis	Cases	1	0	1	1	0	0	2	0	0	0	0	0	1	2	0	0	0	5	0	2
	Rate	15.4	6.9	5.5	6.1	5.6	2.9	12.2	0	2.6	3.7	3.2	9.3	6.3	4	11.6	2.1	6.1	7	5.1	5.1
Leptospirosis	Cases	0	1	1	0	3	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0
	Rate	7.7	0.5	0.2	1.2	4.9	1	2.3	0	3.5	8.1	1.6	2.9	0	0.7	0	1.4	6.1	0.8	0	1.6
Listeriosis	Cases	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.9	1.2	1	0.8	0	1.8	0	0	1.2	1.6	0	2.1	0.3	0	2.1	0	0.2	0	1
Malaria	Cases	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	Rate	0.6	0.9	2.2	0.4	0.3	0	0.9	0	0	0.6	0	0.6	1.4	0	2.3	0.7	0	0.8	0	0
Measles	Cases	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Rate	3.6	0.3	0.8	1.2	14.6	0	0	0	0	0	0	12.2	0.7	1.7	0	2.1	0	0.2	0	0.3
Meningococcal disease	Cases	1	1	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
	Rate	1.8	0.7	1	2.3	1.8	1	2.3	2.1	0	0.6	0	0.6	0	2.7	0	0	3.1	0.4	0	5.7
Mumps	Cases	0	2	1	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.9	0.2	0.6	0	0	0	0	0	1.2	0	0	0	0	0	0	3.1	0	0	0.6
Paratyphoid fever	Cases	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Rate	0	0.3	1.8	1.2	0	1	0.5	0	0	1.9	0	0	0.7	1.3	4.6	0	0	1	0	0.6
Pertussis	Cases	2	7	7	9	9	3	10	0	9	1	0	6	1	11	0	1	0	22	1	5
	Rate	3.6	15.3	12.9	12.3	37.1	28.6	19.9	2.1	58.7	8.7	17.6	11	15.3	29.6	2.3	33.8	6.1	57.2	11.9	15.6
Q fever	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rheumatic fever ⁴	Cases	1	2	3	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	2.4	3	5.5	9.6	2	4.8	3.6	4.2	1.7	5	0	2.3	1.4	2.3	0	0	0	0.8	0	0.6
Rickettsial disease	Cases	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.5	0	0.2	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.2	0	0.2	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0.2	0	0
Salmonellosis	Cases	0	7	13	5	19	4	3	0	2	3	0	1	2	8	1	2	0	12	0	12
	Rate	18.4	21.7	21.6	13.4	24.8	21.9	18.1	124.5	19	21.8	16	24.4	22.9	23.6	25.5	21.4	18.3	25.9	46.1	38.5
Shigellosis	Cases	0	5	2	2	1	0	1	2	0	0	1	0	0	1	0	0	0	0	0	0
	Rate	1.8	5.7	5.3	5.8	3.8	0	3.6	8.4	0	0.6	1.6	0	0.7	2.3	0	1.4	0	1.9	0	1.9
Tuberculosis disease	Cases	0	5	1	7	4	1	1	0	0	1	0	4	2	0	0	0	0	3	1	0
	Rate	0.6	5.9	10.6	11.5	8.4	6.7	5	2.1	1.7	8.1	3.2	5.8	4.2	6	2.3	2.8	3.1	6.3	3.4	2.9
Typhoid fever	Cases	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.3	2.9	4	1	0	1.4	0	0	0	0	0	0	0.3	0	1.4	0	0.2	0	0.6
Viral Haemorrhagic Fever	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VTEC/STEC infection	Cases	4	11	3	7	6	0	0	0	3	0	1	0	0	0	0	1	0	0	3	6
	Rate	28.5	18.4	10	14.6	11.5	5.7	10.4	0	12.9	4.4	6.4	2.9	2.8	1	0	4.8	6.1	3.4	6.8	7.6
Yersiniosis	Cases	6	9	12	3	11	4	5	1	0	1	1	1	7	9	0	2	3	27	2	11
	Rate	13.1	17.7	17.6	11.3	13.8	22.9	13.1	10.5	6.9	11.2	9.6	7.6	25.7	32.2	11.6	6.2	30.6	33.8	32.4	18.5

¹ These data are provisional.

² Current rate is based on the cumulative total for the 12 months up to and including October 2016 expressed as cases per 100,000. This includes cases still under investigation.

³ Further data are available from the local Medical Officer of Health.

⁴ Rates are based on report date. This may not be a good indicator of newly incident cases as a high proportion of notifications have substantial reporting delays.

Notifiable Disease Surveillance Data by District Health Board October 2016

		Cases ¹ and current rate ² for October 2016 by District Health Board ³																			
		Northland	Waitemata	Auckland	Counties Manukau	Waikato	Lakes	Bay of Plenty	Tairāwhiti	Taranaki	Hawke's Bay	Whanganui	MidCentral	Hutt Valley	Capital and Coast	Wairarapa	Nelson Marlborough	West Coast	Canterbury	South Canterbury	Southern
Disease	Cases	28	79	53	58	70	10	23	4	35	172	15	32	20	40	17	21	7	100	22	50
	Rate	178.8	142.3	103.7	97.8	147.7	125	112	141.4	194.1	664.8	159.7	151.7	116.7	128.5	162	124.3	180.4	142.2	259.4	164.6
Campylobacteriosis	Cases	14	17	11	14	25	8	5	3	16	8	7	8	3	8	5	8	1	19	4	18
	Rate	61.8	24.5	18.4	18.4	31.2	21	6.8	23.2	33.6	17.4	31.9	27.9	10.4	20.6	46.3	15.9	9.2	15.6	23.9	19.7
Cryptosporidiosis	Cases	0	3	2	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	2
	Rate	0.6	3.3	4.7	7.3	3.6	1	6.3	6.3	2.6	4.4	0	2.3	3.5	6.6	2.3	5.5	0	2.5	1.7	3.2
Dengue fever	Cases	2	3	5	4	0	0	0	0	0	0	0	4	3	8	1	1	0	4	0	1
	Rate	4.8	10.6	23.7	10	2.6	15.3	15.3	2.1	6.9	1.2	19.2	33.1	21.5	28.2	20.8	2.1	15.3	7	1.7	5.7
Gastroenteritis	Cases	7	24	18	13	14	5	5	3	9	3	1	5	5	5	0	4	0	16	2	3
	Rate	34.5	34.4	40.4	35.5	32.5	50.6	37	137.1	33.6	43.6	28.8	18.6	23.6	43.8	25.5	35.2	24.5	31.7	27.3	29
Giardiasis	Cases	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0	0.4	0.2	0	0	0	2.1	0	0	0	0	0	0	0	0	0	0	0	0
Haemophilus influenzae type b	Cases	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Rate	1.2	1.2	1.2	0.8	0	0	0.9	0	0.9	0	0	0	1.4	1	0	2.1	3.1	0.4	0	1
Hepatitis A	Cases	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	Rate	0.6	0.2	1.2	1	0.8	0	0.9	0	2.6	1.2	0	0.6	0	1	0	0	0	0.4	0	0.6
Hepatitis B	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
	Rate	0.6	0.2	0.2	0	0	1	0	0	1.7	1.2	0	0	0.7	1	2.3	3.5	3.1	1.9	5.1	1.6
Hepatitis C	Cases	4	7	2	10	1	2	1	1	1	0	0	1	1	2	0	1	0	3	2	2
	Rate	20.8	9.4	11.4	16.5	8.7	20	14	12.7	3.5	8.1	9.6	6.4	6.3	8.6	6.9	6.2	0	7.4	18.8	8.9
Invasive pneumococcal disease	Cases	1	0	1	1	0	0	2	0	0	0	0	0	1	2	0	0	0	5	0	2
	Rate	15.4	6.9	5.5	6.1	5.6	2.9	12.2	0	2.6	3.7	3.2	9.3	6.3	4	11.6	2.1	6.1	7	5.1	5.1
Legionellosis	Cases	0	1	1	0	3	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0
	Rate	7.7	0.5	0.2	1.2	4.9	1	2.3	0	3.5	8.1	1.6	2.9	0	0.7	0	1.4	6.1	0.8	0	1.6
Leptospirosis	Cases	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.9	1.2	1	0.8	0	1.8	0	0	1.2	1.6	0	2.1	0.3	0	2.1	0	0.2	0	1
Listeriosis	Cases	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0	0.9	0.4	0.3	0	0.9	0	0	0.6	0	0.6	1.4	0	2.3	0.7	0	0.8	0	0
Malaria	Cases	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	Rate	0.6	0.9	2.2	0.4	0.3	0	0.9	0	0	0.6	0	0.6	1.4	0	2.3	0.7	0	0.8	0	0
Measles	Cases	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Rate	3.6	0.3	0.8	1.2	14.6	0	0	0	0	0	0	12.2	0.7	1.7	0	2.1	0	0.2	0	0.3
Meningococcal disease	Cases	1	1	1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
	Rate	1.8	0.7	1	2.3	1.8	1	2.3	2.1	0	0.6	0	0.6	0	2.7	0	0	3.1	0.4	0	5.7
Mumps	Cases	0	2	1	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.9	0.2	0.6	0	0	0	0	0	1.2	0	0	0	0	0	0	3.1	0	0	0.6
Paratyphoid fever	Cases	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	Rate	0	0.3	1.8	1.2	0	1	0.5	0	0	1.9	0	0	0.7	1.3	4.6	0	0	1	0	0.6
Pertussis	Cases	2	7	7	9	9	3	10	0	9	1	0	6	1	11	0	1	0	22	1	5
	Rate	3.6	15.3	12.9	12.3	37.1	28.6	19.9	2.1	58.7	8.7	17.6	11	15.3	29.6	2.3	33.8	6.1	57.2	11.9	15.6
Q fever	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rheumatic fever ⁴	Cases	1	2	3	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	2.4	3	5.5	9.6	2	4.8	3.6	4.2	1.7	5	0	2.3	1.4	2.3	0	0	0	0.8	0	0.6
Rickettsial disease	Cases	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.5	0	0.2	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.2	0	0.2	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0.2	0	0
Salmonellosis	Cases	0	7	13	5	19	4	3	0	2	3	0	1	2	8	1	2	0	12	0	12
	Rate	18.4	21.7	21.6	13.4	24.8	21.9	18.1	124.5	19	21.8	16	24.4	22.9	23.6	25.5	21.4	18.3	25.9	46.1	38.5
Shigellosis	Cases	0	5	2	2	1	0	1	2	0	0	1	0	0	1	0	0	0	0	0	0
	Rate	1.8	5.7	5.3	5.8	3.8	0	3.6	8.4	0	0.6	1.6	0	0.7	2.3	0	1.4	0	1.9	0	1.9
Tuberculosis disease	Cases	0	5	1	7	4	1	1	0	0	1	0	4	2	0	0	0	0	3	1	0
	Rate	0.6	5.9	10.6	11.5	8.4	6.7	5	2.1	1.7	8.1	3.2	5.8	4.2	6	2.3	2.8	3.1	6.3	3.4	2.9
Typhoid fever	Cases	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.3	2.9	4	1	0	1.4	0	0	0	0	0	0	0.3	0	1.4	0	0.2	0	0.6
Viral Haemorrhagic Fever	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VTEC/STEC infection	Cases	4	11	3	7	6	0	0	0	3	0	1	0	0	0	0	1	0	0	3	6
	Rate	28.5	18.4	10	14.6	11.5	5.7	10.4	0	12.9	4.4	6.4	2.9	2.8	1	0	4.8	6.1	3.4	6.8	7.6
Yersiniosis	Cases	6	9	12	3	11	4	5	1	0	1	1	1	7	9	0	2	3	27	2	11
	Rate	13.1	17.7	17.6	11.3	13.8	22.9	13.1	10.5	6.9	11.2	9.6	7.6	25.7	32.2	11.6	6.2	30.6	33.8	32.4	18.5

¹ These data are provisional.

² Current rate is based on the cumulative total for the 12 months up to and including October 2016 expressed as cases per 100,000. This includes cases still under investigation.

³ Further data are available from the local Medical Officer of Health.

⁴ Rates are based on report date. This may not be a good indicator of newly incident cases as a high proportion of notifications have substantial reporting delays.

National Notifiable Disease Surveillance Data October 2016

	Current Year - 2016 ¹			Previous Year - 2015		
Disease	October 2016 Cases	Cumulative total since 1 January	Current 12 Month Rate ²	October 2015 Cases	Cumulative total since 1 January	Current 12 Month Rate ²
Campylobacteriosis	856	5560	154.4	579	4683	138.2
Cryptosporidiosis	202	919	22.1	163	598	15.1
Dengue fever	10	173	4	7	113	2.9
Gastroenteritis ³	36	450	12.3	27	387	10.9
Giardiasis	142	1384	35.6	120	1259	32.6
Haemophilus influenzae type b	2	4	0.1	0	3	0.1
Hepatitis A	2	28	0.8	7	39	1.1
Hepatitis B ⁴	3	27	0.7	5	30	0.7
Hepatitis C ⁴	2	31	0.8	4	29	0.6
Invasive pneumococcal disease	41	401	10.5	44	366	9.7
Legionellosis	15	199	6.3	30	156	4.3
Leptospirosis	8	77	1.9	7	54	1.4
Listeriosis	2	30	0.8	1	19	0.5
Malaria	2	25	0.7	2	31	0.8
Measles	2	106	2.3	0	9	0.3
Meningococcal disease	7	60	1.5	6	55	1.3
Mumps	6	13	0.3	2	12	0.3
Paratyphoid fever	4	30	0.8	3	28	0.7
Pertussis	104	876	23.3	92	971	24.4
Rheumatic fever ⁵	10	135	3.3	9	97	2.5
Rickettsial disease	1	6	0.1	1	8	0.2
Rubella	0	4	0.1	0	0	0
Salmonellosis	94	945	23.8	96	900	22.9
Shigellosis	15	135	3.2	10	99	2.5
Tuberculosis disease	30	243	6.5	21	237	6.2
Typhoid fever	3	34	1.1	3	27	0.7
Viral Haemorrhagic Fever	0	1	0	0	0	0
VTEC/STEC infection	45	384	9.7	39	268	6.3
Yersiniosis	115	682	18.3	68	477	12.2

¹ These data are provisional.

² Rate is based on the cumulative total for the current year (12 months up to and including October 2016) or the previous year (12 months up to and including October 2015), expressed as cases per 100,000. This includes cases still under investigation.

³ Cases of gastroenteritis from a common source or foodborne intoxication.

⁴ Only acute cases of this disease are currently notifiable.

⁵ Numbers are based on report date. This may not be a good indicator of newly incident cases as a high proportion of notifications have substantial reporting delays.

Other notifiable infectious disease reported in October: Brucellosis (1), Chikungunya fever (3), Diphtheria (1), Zika virus (2).

National Notifiable Disease Surveillance Data – Monthly totals for October 2016 and preceding 11 Months¹

Disease	Oct 2016	Sep 2016	Aug 2016	Jul 2016	Jun 2016	May 2016	Apr 2016	Mar 2016	Feb 2016	Jan 2016	Dec 2015	Nov 2015
Campylobacteriosis	856	572	1109	342	334	391	364	418	454	720	756	779
Cryptosporidiosis	202	213	129	51	48	77	65	51	42	41	32	66
Dengue fever	10	12	12	14	21	19	8	21	41	15	6	6
Gastroenteritis ²	36	54	62	53	43	34	43	50	41	34	66	50
Giardiasis	142	128	129	95	121	129	144	182	181	133	112	139
Haemophilus influenzae type b	2	0	1	0	0	0	0	0	0	1	0	0
Hepatitis A	2	3	1	5	1	7	1	4	2	2	3	5
Hepatitis B ³	3	4	2	6	1	3	3	1	4	0	2	2
Hepatitis C ³	2	5	4	2	0	2	4	4	3	5	1	5
Invasive pneumococcal disease	41	69	49	60	48	45	28	24	13	24	34	47
Legionellosis	15	22	15	7	15	18	23	23	21	40	50	42
Leptospirosis	8	7	12	11	6	10	9	5	5	4	2	7
Listeriosis	2	1	3	1	3	4	5	6	2	3	4	3
Malaria	2	0	3	2	3	4	1	3	4	3	6	1
Measles	2	2	4	5	32	41	14	0	5	1	1	0
Meningococcal disease	7	7	12	10	4	8	2	3	1	6	5	4
Mumps	6	4	1	0	0	0	1	1	0	0	1	0
Paratyphoid fever	4	1	4	1	3	1	5	5	4	2	3	3
Pertussis	104	114	83	67	72	70	77	81	84	124	88	109
Rheumatic fever ⁴	10	16	17	11	15	23	15	9	9	10	6	9
Rickettsial disease	1	0	0	0	1	1	1	0	0	2	0	0
Rubella	0	0	1	0	0	1	0	1	1	0	0	0
Salmonellosis	94	93	99	57	67	81	107	102	133	112	79	72
Shigellosis	15	17	21	8	12	10	11	9	15	17	4	8
Tuberculosis disease	30	23	18	20	27	28	25	22	27	23	30	27
Typhoid fever	3	1	2	1	4	2	5	4	5	7	7	9
Viral Haemorrhagic Fever	0	0	0	0	0	0	0	0	0	1	0	0
VTEC/STEC infection	45	23	23	19	16	36	54	56	76	36	35	27
Yersiniosis	115	81	80	60	54	68	77	46	39	62	41	116

¹ These data are provisional.

² Cases of gastroenteritis from a common source or foodborne intoxication.

³ Only acute cases of this disease are currently notifiable.

⁴ Numbers are based on report date. This may not be a good indicator of newly incident cases as a high proportion of notifications have substantial reporting delays.