
MONTHLY NOTIFIABLE DISEASE SURVEILLANCE REPORT

Data contained within this monthly report is based on information recorded on EpiSurv by Public Health Service (PHS) staff as at 19 April 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.

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1. Key notifiable disease trends

Cholera: One case of cholera was notified in March 2016. The case was a male in the 70 years and over age group from Waikato DHB. After further investigation, the case has since been found not to meet the case criteria.

Cryptosporidiosis: 51 cases of cryptosporidiosis (49 confirmed and 2 under investigation) were notified in March 2016 compared to 23 cases notified during the same month of the previous year. The 12-month rate in March (16.4 cases per 100,000) was higher than at the same time in the previous year (12.8 per 100,000). The highest numbers of cases were reported from Auckland (11 cases), Waitemata (9 cases), Canterbury and Southern (6 cases each) DHBs. The cases ranged in age from 16 months to 88 years, with the highest numbers of cases in the 1–4 years (12 cases) and 40–49 years (8 cases) age groups. Among the cases for which risk factor information was recorded, 53.3% (8/15) had recreational water contact, 41.7% (5/12) had consumed food from a food premises, 33.3% (4/12) had contact with farm animals, and 25.0% (3/12) had consumed untreated water during the incubation period. One finalised *Cryptosporidium* outbreak was created in March (2 cases).

Hepatitis NOS: One confirmed case of hepatitis NOS (hepatitis epsilon) was notified in March. The case was a male in the 20–29 years age group from Auckland DHB. The case was recorded as being overseas during the incubation period for the disease.

Legionellosis: 22 cases of legionellosis (13 confirmed, 4 probable and 5 under investigation) were notified in March 2016 compared to 20 cases notified during the previous month, and 10 during the same month of the previous year. The 12-month rate in March (6.5 cases per 100,000) was notably higher than at the same time in the previous year (2.9 per 100,000). Cases were reported from Northland (5 cases), Counties Manukau, Capital & Coast, Canterbury (3 cases each), Waikato, Bay of Plenty, Auckland (2 cases each), Waitemata and Southern (1 case each) DHBs. The *Legionella* species was identified for 12 cases as: *L. longbeachae* (7 cases), *L. pneumophila* (3 cases), *L. bozemanii* and *L. jordanii* (1 case each). The increase in legionellosis notifications compared to the same time in the previous year may be due to the LegiNZ study, which began in May 2015 and involves 20 hospitals in 17 DHBs.

Leptospirosis: Seven cases of leptospirosis (5 confirmed and 2 under investigation) were notified in March compared to ten cases notified during the same month of the previous year (Figure 1). After further investigation, one case has since been found not to meet the case criteria. Cases were reported from Hawke's

Bay (2 cases), Counties Manukau, Waikato, Wairarapa and Whanganui (1 case each) DHBs. The highest number of cases was in the 20–29 years age group (5 cases). Occupational exposure risk factor information was recorded for 83.3% (5/6) of cases, three worked in the meat processing industry and two were farmers or farm workers. The case that did not have occupational risk factor information recorded had travelled to Bali during the incubation period for the disease. The *Leptospira* species was recorded for three cases; *L. Hardjo* (2 cases) and *L. Tarassovi* (1 case).

Listeriosis: Seven cases of listeriosis (6 confirmed non-perinatal and 1 perinatal under investigation) were notified in March 2016 compared to two cases (both non-perinatal) in the same month of the previous year. The mother in the perinatal case was in the 30–39 years age group, was of Pacific peoples ethnicity and was from Auckland DHB. The infant survived after delivery at 32 weeks gestation. The non-perinatal cases were in the 60–69 years and 70 years and over (2 cases each), 20–29 years and 50–59 years (1 case each) age groups. The serotype of all non-perinatal cases was confirmed: *Listeria monocytogenes* serotype O1/2 (4 cases) and *Listeria monocytogenes* serotype O4 (2 cases).

Measles: Six cases of measles were notified in March 2016 compared to two cases notified during the same month of the previous year. After further investigation, all cases have since been found not to meet the case criteria.

Pertussis: 82 cases of pertussis (33 confirmed, 44 probable and 5 under investigation) were notified in March 2016 compared to 77 cases in 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 March (27.3 cases per 100,000) was higher than at the same time in the previous year (21.3 per 100,000). Six cases were hospitalised and no deaths were reported. Forty-two percent (34/81) of cases were laboratory-confirmed (7 by culture, 24 by PCR, and 3 by culture and PCR). The highest numbers of cases were reported from Canterbury (17 cases), Waitemata and Waikato (12 cases each) and Capital & Coast (9 cases) DHBs. The cases ranged in age from 1 month to 82 years, with 19.8% (16/81) under 5 years of age (including 4 cases aged less than 1 year). The highest numbers of cases were in the 40–49 years (14 cases), 1–4 years (12 cases) and 50–59 years (10 cases) age groups. One finalised *B. pertussis* outbreak was created in March (2 cases).

Salmonellosis: 101 cases of salmonellosis (100 confirmed and 1 under investigation) were notified in March 2016 compared to 103 cases notified during the same month of the previous year (Figure 2). The highest numbers of cases were reported from Canterbury (14 cases), Auckland and Waikato (11 cases each), and Tairāwhiti (10 cases) DHBs. The cases ranged in age from 2 months to 80 years, with the highest numbers of cases in the 1–4 years (21 cases), 50–59 years (14 cases), and 30–39 years (13 cases) age groups. Fifteen cases were hospitalised. The *Salmonella* serotypes were identified in 96/101 (95.0%) of the cases, the most common were *S. Stanley* (9 cases) and *S. Enteritidis* phage type 11 (8 cases). Uncommon *Salmonella* serotypes confirmed this month included *S. Enteritidis* phage type 7, *S. Enteritidis* phage type 26 variant, *S. Haifa*, *S. Kiambu*, *S. Sandiego* and *S. Victoria* (1 case each). Among the cases for which risk factor information was recorded, 56.8% (21/37) had consumed food from a food premises, 27.3% (12/36) had contact with farm animals, 20.5% (8/39) had recreational contact with water, 15.1% (8/53) had travelled overseas, and 13.5% (5/37) had contact with other symptomatic people during the incubation period for the disease. One finalised *Salmonella* outbreak was created in March (2 cases).

VTEC/STEC infection: 69 cases of VTEC/STEC infection (57 confirmed and 12 under investigation) were notified in March compared to 40 cases confirmed during the same month of the previous year. After further investigation, four cases have since been found not to meet the case criteria. The 12-month rate in March (9.4 cases per 100,000) was notably higher than at the same time in the previous year (4.8 per 100,000). The highest numbers of cases were reported from Waitemata (15 cases), Counties Manukau (14 cases), Waikato (10 cases) and Northland (9 cases) DHBs. The highest numbers of cases occurred in the 1–4 years (13 cases), 20–29 years (12 cases), 70 years and over (8 cases) and 60–69 years (7 cases) age groups. Fourteen cases were hospitalised. Fifty-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 (36 cases) and non-O157 (22 cases). Of the cases for which risk factor information was recorded, 60.0% (15/25) had contact with animals, 37.5% (9/24) had recreational contact with water, 33.3% (7/21) had contact with children in nappies, 14.3% (4/28) had travelled overseas, and 8.3% (2/24) had contact with a person with similar symptoms 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. Two interim VTEC/STEC outbreaks were created in March (case numbers yet to be determined).

Zika virus infection: 11 cases of zika virus infection (7 confirmed, 3 probable and 1 under investigation) were notified in March 2016. After further investigation, one case has since been found not to meet the case criteria. The highest number of cases was reported in the 20–29 years and 50–59 years age groups (3 cases each). Laboratory testing information was recorded for all cases, of which 70.0% (7/10) of cases were confirmed by PCR. All cases travelled during the incubation period for the disease, and countries visited included Tonga (6 cases), Samoa (3 cases), and Papua New Guinea (1 case, who had also been in transit in Australia).

2. Outbreaks

During March 2016, a total of 51 outbreaks (15 final and 36 interim) were created in EpiSurv (Table 1 and Table 2). Thirty-seven (72.5%) were outbreaks of acute gastroenteritis (8 finalised and 29 interim) involving 216 cases in total. This compares with 45 acute gastroenteritis outbreaks involving 856 cases in total created during the same month of the previous year. Of the 37 acute gastroenteritis outbreaks, two were recorded as norovirus and one was norovirus/sapovirus. The most commonly reported mode of transmission in acute gastroenteritis outbreaks (27.6%, 8/29) was person-to-person (6 primary and 2 secondary). Of the outbreaks that had an exposure setting recorded (48.6%, 18/37) the most commonly reported settings were restaurants/café/bakery (5 outbreaks), long term care facilities (4 outbreaks) and childcare centres (3 outbreaks).

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

Organism/Toxin/Illness	DHB(s) where exposure occurred	Number of outbreaks	Total number of cases
<i>Bordetella pertussis</i>	Waikato	1	2
<i>Cryptosporidium</i>	Southern	1	2
Gastroenteritis	Northland, Auckland, Counties Manukau, Hawke's Bay, Capital & Coast	6	59
<i>Giardia</i>	Waitemata, Auckland, Waikato, Hawke's Bay	4	14
Norovirus ¹	Taranaki, Bay of Plenty	2	53
Sapovirus ¹	Bay of Plenty	1	26
<i>Salmonella</i> ^{2,3}	Southern	1	2
Total		15	132

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

² Include outbreaks reported to PHSs prior to March 2016: *Salmonella* (one outbreak) reported in February.

³ Includes outbreak with an overseas exposure transmission (India).

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

Organism/Toxin/Illness	DHB(s) where exposure occurred	Number of outbreaks	Total number of cases
<i>Campylobacter</i>	Southern	2	6
Gastroenteritis ¹	Waitemata, Auckland, Counties Manukau, Waikato, Taranaki, Hawke's Bay, Whanganui, Capital & Coast, Wairarapa	28	102
<i>Giardia</i> ¹	Taranaki	1	-
Influenza-like illness ¹	Capital & Coast	1	-
<i>Mycobacterium tuberculosis</i> ²	Counties Manukau	1	3
Norovirus	Canterbury	1	2
VTEC/STEC infection ¹	Auckland, Waikato	2	2
Total		36	115

¹ Interim outbreak(s) where total number of cases had not been completed.

² Includes outbreak with an overseas exposure transmission (Indonesia).

3. Deaths from notifiable diseases

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

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

Disease	District health board	Age group (years)
Invasive pneumococcal disease	Waikato	50–59

4. Trends in selected diseases to March 2016

Figure 1. Leptospirosis notifications by month, January 2009–March 2016

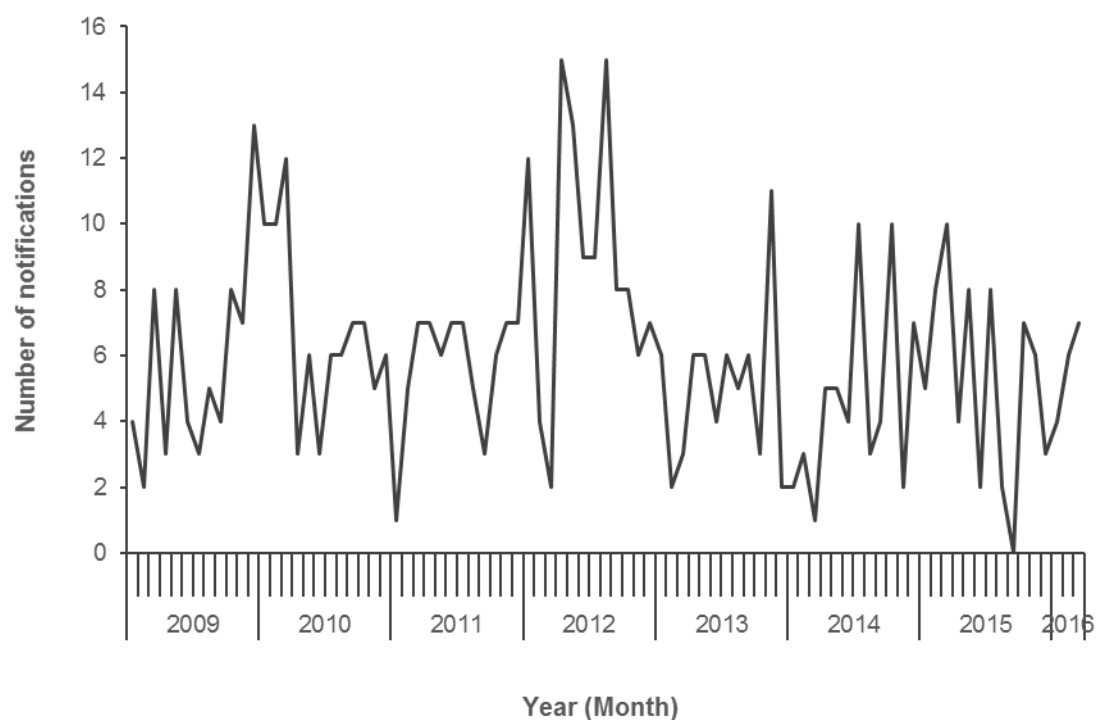
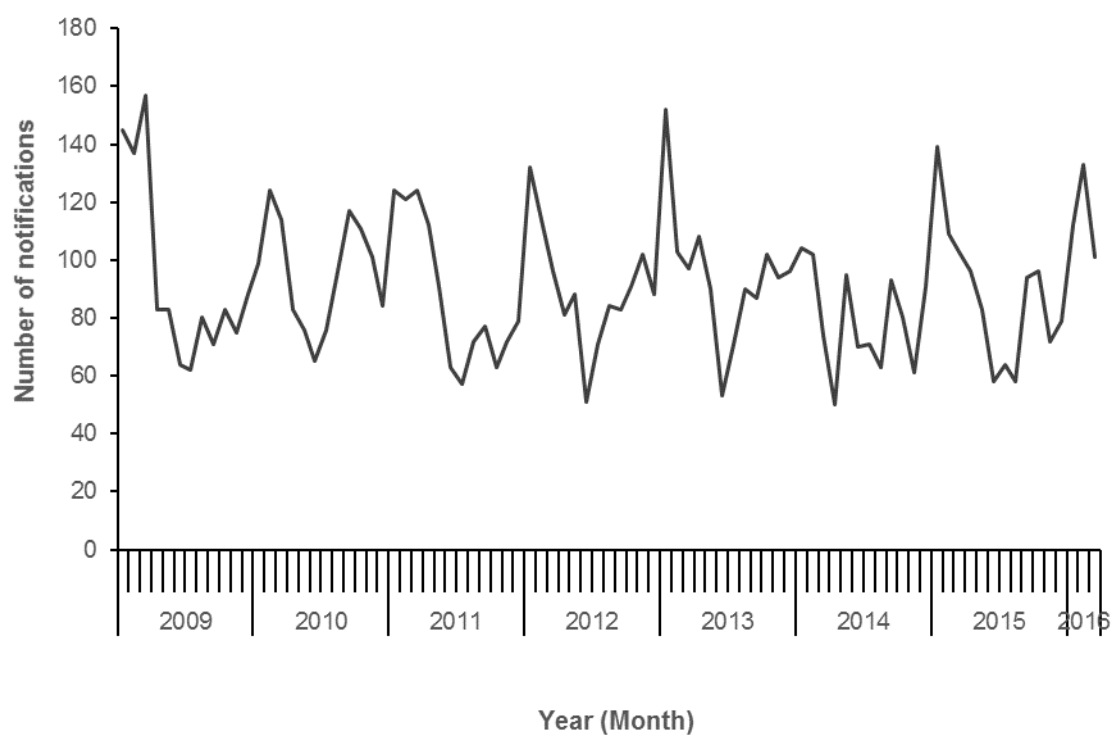


Figure 2. Salmonellosis notifications by month, January 2009–March 2016



5. Data tables

National Notifiable Disease Surveillance Data March 2016

Disease	Current Year - 2016 ¹			Previous Year - 2015		
	March 2016 Cases	Cumulative total since 1 January	Current 12 Month Rate ²	March 2015 Cases	Cumulative total since 1 January	Current 12 Month Rate ²
Campylobacteriosis	416	1590	136.2	417	1548	144.4
Cryptosporidiosis	51	134	16.4	23	77	12.8
Dengue fever	21	77	2.8	21	73	4.1
Gastroenteritis ³	52	131	11.2	41	121	15.7
Giardiasis	183	496	34.8	132	406	36.4
Haemophilus influenzae type b	2	3	0.1	0	0	0.1
Hepatitis A	5	9	0.8	2	18	1.2
Hepatitis B ⁴	6	10	0.8	4	8	0.8
Hepatitis C ⁴	5	13	0.8	1	10	0.7
Invasive pneumococcal disease	24	61	9.8	29	62	10.7
Legionellosis	22	82	6.5	10	32	2.9
Leptospirosis	7	17	1.2	10	23	1.6
Listeriosis	7	12	0.7	2	5	0.5
Malaria	3	10	0.9	2	8	0.8
Measles	6	12	0.4	2	2	3.8
Meningococcal disease	3	10	1.5	0	7	1
Mumps	6	7	0.4	0	1	0.3
Paratyphoid fever	4	10	0.7	3	11	0.5
Pertussis	82	292	27.3	77	207	21.3
Rheumatic fever ⁵	9	28	2.5	4	25	3.8
Rickettsial disease	0	2	0.2	0	1	0.2
Rubella	2	3	0.1	0	0	0.1
Salmonellosis	101	346	22.8	103	351	22.8
Shigellosis	9	41	2.3	11	44	2.9
Tuberculosis disease	25	78	6.5	34	76	6.4
Typhoid fever	7	19	1.1	4	12	0.8
Viral Haemorrhagic Fever	0	1	0	0	0	0
VTEC/STEC infection	69	182	9.4	40	81	4.8
Yersiniosis	50	154	14.3	44	132	15.3

¹ These data are provisional.

² Rate is based on the cumulative total for the current year (12 months up to and including March 2016) or the previous year (12 months up to and including March 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 March: Cholera (1), Hepatitis NOS (1), Zika virus (11).

Notifiable Disease Surveillance Data by District Health Board March 2016

		Cases ¹ and current rate ² for March 2016 by District Health Board ³																			
Disease		Northland	Waitemata	Auckland	Counties Manukau	Waikato	Lakes	Bay of Plenty	Tairāwhiti	Taranaki	Hawke's Bay	Wanganui	MidCentral	Hutt Valley	Capital and Coast	Wairarapa	Nelson Marlborough	West Coast	Canterbury	South Canterbury	Southern
Campylobacteriosis	Cases	25	39	43	28	44	7	16	4	14	8	3	16	12	27	4	10	5	58	14	39
	Rate	164.6	147.7	107.6	94.3	156.9	150.8	99.3	111.8	199.3	155.1	134.2	113.3	120.1	122.9	171.3	147.1	232.4	140.3	238.9	167.8
Cryptosporidiosis	Cases	4	9	11	1	4	0	0	0	0	1	0	2	1	3	2	0	0	6	1	6
	Rate	19.6	16.3	14.1	14.8	31	14.3	9	14.8	19	16.2	16	25.6	6.3	9.3	25.5	8.3	12.2	13.5	25.6	20.7
Dengue fever	Cases	0	6	1	5	1	0	0	0	0	0	0	0	1	3	0	0	0	2	0	2
	Rate	0	3.1	5.1	5.9	1.8	1	1.4	8.4	0.9	0	0	0.6	1.4	6.3	0	2.8	0	1.1	1.7	1.9
Gastroenteritis	Cases	0	2	8	10	2	1	3	0	0	0	3	3	2	8	2	0	0	7	0	1
	Rate	0.6	10.4	24.1	8.2	2.8	13.4	9.5	8.4	5.2	0.6	25.6	32.5	14.6	26.6	16.2	2.8	9.2	5.7	1.7	5.4
Giardiasis	Cases	7	26	18	25	12	2	6	12	5	12	0	2	3	15	1	5	1	24	1	6
	Rate	36.8	35.1	40.6	35.3	31.5	54.4	32.1	86.5	25	55.5	27.2	17.4	13.2	47.2	30.1	39.4	33.6	29.7	22.2	27.1
Haemophilus influenzae type b	Cases	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.2	0.2	0	0	0	0.5	0	0.9	0	0	0	0	0	0	0	6.1	0	0	0
Hepatitis A	Cases	0	1	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
	Rate	1.8	1.6	0.2	1.5	0	0	1.8	2.1	0	0	0	2.3	0.7	1	0	0	0	0.2	0	1
Hepatitis B	Cases	0	0	1	0	0	1	2	0	0	1	0	0	0	1	0	0	0	0	0	0
	Rate	1.2	0.7	1.2	0.4	0.5	2.9	1.4	0	0.9	1.2	0	0.6	0.7	1.7	0	0	0	0.6	0	0.3
Hepatitis C	Cases	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	1	0
	Rate	1.8	0.3	0.2	0	0	0	0	0	3.5	1.2	1.6	0	1.4	1	0	4.1	3.1	1.3	5.1	0.6
Invasive pneumococcal	Cases	3	4	3	5	2	2	1	0	0	0	1	0	0	3	0	0	0	0	0	0
	Rate	17.8	5.9	8.6	13	10.8	23.9	11.7	14.8	6	10	8	8.7	10.4	8.6	13.9	6.9	12.2	7.8	5.1	8.9
Legionellosis	Cases	5	1	2	3	2	0	2	0	0	0	0	0	0	3	0	0	0	3	0	1
	Rate	13.1	8.7	4.5	5.8	5.9	2.9	13.1	0	3.5	6.9	1.6	11	4.2	5	6.9	2.8	6.1	7.8	5.1	3.2
Leptospirosis	Cases	0	0	0	1	1	0	0	0	0	2	1	0	0	0	1	0	0	0	0	1
	Rate	0	0.3	0	0.6	2	1.9	2.7	0	3.5	6.2	1.6	1.7	1.4	0.7	4.6	0.7	6.1	0.4	1.7	1.9
Listeriosis	Cases	0	0	2	1	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0
	Rate	0	0.5	1.2	0.8	0.5	0	3.2	0	0	0	1.6	0	1.4	0.7	2.3	2.1	0	0.2	0	0.3
Malaria	Cases	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	1.6	2	1.3	0.3	0	0	0	0	1.2	0	0.6	1.4	0.3	2.3	1.4	0	0.6	0	0.3
Measles	Cases	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.5	1	1	0.5	0	0	0	0	0	0	2.3	0	0	0	0	0	0.2	0	0
Meningococcal disease	Cases	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	Rate	3.6	1.7	0.4	1.7	1.3	1.9	1.4	2.1	1.7	1.9	1.6	1.7	0	2	2.3	0.7	3.1	0.8	1.7	1.9
Mumps	Cases	0	2	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
	Rate	1.8	0.7	0.2	0.6	0	0	0	2.1	2.6	1.2	0	0	0	0.3	0	0	0	0.2	0	0
Paratyphoid fever	Cases	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
	Rate	0	1	0.6	0.8	1	1.9	0.5	0	0	1.9	1.6	0	0	0.7	2.3	0.7	0	0.6	0	0.6
Pertussis	Cases	0	12	3	3	12	0	3	0	4	4	0	2	1	10	0	4	0	17	2	5
	Rate	11.9	20.5	16.7	25.1	33	14.3	11.3	10.5	11.2	12.5	33.5	11	17.4	25.6	9.3	51.8	0	57.6	10.2	52.5
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	0	1	1	5	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	Rate	1.8	1.7	3.9	6.5	2.6	4.8	4.5	8.4	0.9	2.5	0	1.7	2.1	1	2.3	0	0	0.6	0	0.6
Rickettsial disease	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0.6	1.2	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	Cases	0	0	0	1	0	0	1	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	0	0
Salmonellosis	Cases	6	6	11	6	11	3	3	10	3	2	0	6	4	4	1	2	1	14	1	7
	Rate	17.2	21.2	23.9	13	15.6	19.1	18.1	75.9	19.8	16.8	9.6	25.6	18.8	21.9	25.5	23.5	24.5	26	46.1	45.5
Shigellosis	Cases	0	3	1	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
	Rate	0.6	3.3	4.5	5	1.5	1	1.4	0	0.9	0.6	0	0.6	2.1	1.7	0	0	0	2.3	0	2.2
Tuberculosis disease	Cases	0	4	6	6	2	0	2	1	1	0	0	0	0	1	0	0	0	2	0	0
	Rate	1.2	6.8	11.6	12.5	6.4	6.7	5	2.1	3.5	6.2	1.6	4.1	3.5	7.6	0	2.1	3.1	6.5	0	1.6
Typhoid fever	Cases	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	Rate	0	0.2	2.4	4.4	1	0	0.9	0	0	0	0	0.6	0	0.7	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	9	17	6	14	10	0	1	0	0	0	1	1	0	1	0	0	1	2	0	6
	Rate	23.8	17.7	12.2	13.4	12.8	4.8	7.2	0	6	1.2	4.8	2.3	2.1	2	2.3	5.5	12.2	5.3	6.8	5.7
Yersiniosis	Cases	2	5	6	1	1	0	1	0	0	1	1	0	1	7	0	0	0	20	1	3
	Rate	6.5	9.6	10.8	10.2	11	11.5	12.6	19	12.1	7.5	12.8	5.8	21.5	21.6	4.6	4.8	21.4	34.4	23.9	13.1

¹ These data are provisional.

² Current rate is based on the cumulative total for the 12 months up to and including March 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 March 2016

		Cases ¹ and current rate ² for March 2016 by District Health Board ³																			
Disease		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
Campylobacteriosis	Cases	25	39	43	28	44	7	16	4	14	8	3	16	12	27	4	10	5	58	14	39
	Rate	164.6	147.7	107.6	94.3	156.9	150.8	99.3	111.8	199.3	155.1	134.2	113.3	120.1	122.9	171.3	147.1	232.4	140.3	238.9	167.8
Cryptosporidiosis	Cases	4	9	11	1	4	0	0	0	0	1	0	2	1	3	2	0	0	6	1	6
	Rate	19.6	16.3	14.1	14.8	31	14.3	9	14.8	19	16.2	16	25.6	6.3	9.3	25.5	8.3	12.2	13.5	25.6	20.7
Dengue fever	Cases	0	6	1	5	1	0	0	0	0	0	0	0	1	3	0	0	0	2	0	2
	Rate	0	3.1	5.1	5.9	1.8	1	1.4	8.4	0.9	0	0	0.6	1.4	6.3	0	2.8	0	1.1	1.7	1.9
Gastroenteritis	Cases	0	2	8	10	2	1	3	0	0	0	3	3	2	8	2	0	0	7	0	1
	Rate	0.6	10.4	24.1	8.2	2.8	13.4	9.5	8.4	5.2	0.6	25.6	32.5	14.6	26.6	16.2	2.8	9.2	5.7	1.7	5.4
Giardiasis	Cases	7	26	18	25	12	2	6	12	5	12	0	2	3	15	1	5	1	24	1	6
	Rate	36.8	35.1	40.6	35.3	31.5	54.4	32.1	86.5	25	55.5	27.2	17.4	13.2	47.2	30.1	39.4	33.6	29.7	22.2	27.1
Haemophilus influenzae type b	Cases	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.2	0.2	0	0	0	0.5	0	0.9	0	0	0	0	0	0	0	6.1	0	0	0
Hepatitis A	Cases	0	1	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
	Rate	1.8	1.6	0.2	1.5	0	0	1.8	2.1	0	0	0	2.3	0.7	1	0	0	0	0.2	0	1
Hepatitis B	Cases	0	0	1	0	0	1	2	0	0	1	0	0	0	1	0	0	0	0	0	0
	Rate	1.2	0.7	1.2	0.4	0.5	2.9	1.4	0	0.9	1.2	0	0.6	0.7	1.7	0	0	0	0.6	0	0.3
Hepatitis C	Cases	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	1	0
	Rate	1.8	0.3	0.2	0	0	0	0	0	3.5	1.2	1.6	0	1.4	1	0	4.1	3.1	1.3	5.1	0.6
Invasive pneumococcal disease	Cases	3	4	3	5	2	2	1	0	0	0	1	0	0	3	0	0	0	0	0	0
	Rate	17.8	5.9	8.6	13	10.8	23.9	11.7	14.8	6	10	8	8.7	10.4	8.6	13.9	6.9	12.2	7.8	5.1	8.9
Legionellosis	Cases	5	1	2	3	2	0	2	0	0	0	0	0	0	3	0	0	0	3	0	1
	Rate	13.1	8.7	4.5	5.8	5.9	2.9	13.1	0	3.5	6.9	1.6	11	4.2	5	6.9	2.8	6.1	7.8	5.1	3.2
Leptospirosis	Cases	0	0	0	1	1	0	0	0	0	2	1	0	0	0	1	0	0	0	0	1
	Rate	0	0.3	0	0.6	2	1.9	2.7	0	3.5	6.2	1.6	1.7	1.4	0.7	4.6	0.7	6.1	0.4	1.7	1.9
Listeriosis	Cases	0	0	2	1	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0
	Rate	0	0.5	1.2	0.8	0.5	0	3.2	0	0	0	1.6	0	1.4	0.7	2.3	2.1	0	0.2	0	0.3
Malaria	Cases	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	1.6	2	1.3	0.3	0	0	0	0	1.2	0	0.6	1.4	0.3	2.3	1.4	0	0.6	0	0.3
Measles	Cases	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.5	1	1	0.5	0	0	0	0	0	0	2.3	0	0	0	0	0	0.2	0	0
Meningococcal disease	Cases	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	Rate	3.6	1.7	0.4	1.7	1.3	1.9	1.4	2.1	1.7	1.9	1.6	1.7	0	2	2.3	0.7	3.1	0.8	1.7	1.9
Mumps	Cases	0	2	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
	Rate	1.8	0.7	0.2	0.6	0	0	0	2.1	2.6	1.2	0	0	0	0.3	0	0	0	0.2	0	0
Paratyphoid fever	Cases	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
	Rate	0	1	0.6	0.8	1	1.9	0.5	0	0	1.9	1.6	0	0	0.7	2.3	0.7	0	0.6	0	0.6
Pertussis	Cases	0	12	3	3	12	0	3	0	4	4	0	2	1	10	0	4	0	17	2	5
	Rate	11.9	20.5	16.7	25.1	33	14.3	11.3	10.5	11.2	12.5	33.5	11	17.4	25.6	9.3	51.8	0	57.6	10.2	52.5
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	0	1	1	5	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	Rate	1.8	1.7	3.9	6.5	2.6	4.8	4.5	8.4	0.9	2.5	0	1.7	2.1	1	2.3	0	0	0.6	0	0.6
Rickettsial disease	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0.6	1.2	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	Cases	0	0	0	1	0	0	1	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	0	0
Salmonellosis	Cases	6	6	11	6	11	3	3	10	3	2	0	6	4	4	1	2	1	14	1	7
	Rate	17.2	21.2	23.9	13	15.6	19.1	18.1	75.9	19.8	16.8	9.6	25.6	18.8	21.9	25.5	23.5	24.5	26	46.1	45.5
Shigellosis	Cases	0	3	1	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1
	Rate	0.6	3.3	4.5	5	1.5	1	1.4	0	0.9	0.6	0	0.6	2.1	1.7	0	0	0	2.3	0	2.2
Tuberculosis disease	Cases	0	4	6	6	2	0	2	1	1	0	0	0	0	1	0	0	0	2	0	0
	Rate	1.2	6.8	11.6	12.5	6.4	6.7	5	2.1	3.5	6.2	1.6	4.1	3.5	7.6	0	2.1	3.1	6.5	0	1.6
Typhoid fever	Cases	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	Rate	0	0.2	2.4	4.4	1	0	0.9	0	0	0	0	0.6	0	0.7	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	9	17	6	14	10	0	1	0	0	0	1	1	0	1	0	0	1	2	0	6
	Rate	23.8	17.7	12.2	13.4	12.8	4.8	7.2	0	6	1.2	4.8	2.3	2.1	2	2.3	5.5	12.2	5.3	6.8	5.7
Yersiniosis	Cases	2	5	6	1	1	0	1	0	0	1	1	0	1	7	0	0	0	20	1	3
	Rate	6.5	9.6	10.8	10.2	11	11.5	12.6	19	12.1	7.5	12.8	5.8	21.5	21.6	4.6	4.8	21.4	34.4	23.9	13.1

¹ These data are provisional.

² Current rate is based on the cumulative total for the 12 months up to and including March 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 March 2016

Disease	Current Year - 2016 ¹			Previous Year - 2015		
	March 2016 Cases	Cumulative total since 1 January	Current 12 Month Rate ²	March 2015 Cases	Cumulative total since 1 January	Current 12 Month Rate ²
Campylobacteriosis	416	1590	136.2	417	1548	144.4
Cryptosporidiosis	51	134	16.4	23	77	12.8
Dengue fever	21	77	2.8	21	73	4.1
Gastroenteritis ³	52	131	11.2	41	121	15.7
Giardiasis	183	496	34.8	132	406	36.4
Haemophilus influenzae type b	2	3	0.1	0	0	0.1
Hepatitis A	5	9	0.8	2	18	1.2
Hepatitis B ⁴	6	10	0.8	4	8	0.8
Hepatitis C ⁴	5	13	0.8	1	10	0.7
Invasive pneumococcal disease	24	61	9.8	29	62	10.7
Legionellosis	22	82	6.5	10	32	2.9
Leptospirosis	7	17	1.2	10	23	1.6
Listeriosis	7	12	0.7	2	5	0.5
Malaria	3	10	0.9	2	8	0.8
Measles	6	12	0.4	2	2	3.8
Meningococcal disease	3	10	1.5	0	7	1
Mumps	6	7	0.4	0	1	0.3
Paratyphoid fever	4	10	0.7	3	11	0.5
Pertussis	82	292	27.3	77	207	21.3
Rheumatic fever ⁵	9	28	2.5	4	25	3.8
Rickettsial disease	0	2	0.2	0	1	0.2
Rubella	2	3	0.1	0	0	0.1
Salmonellosis	101	346	22.8	103	351	22.8
Shigellosis	9	41	2.3	11	44	2.9
Tuberculosis disease	25	78	6.5	34	76	6.4
Typhoid fever	7	19	1.1	4	12	0.8
Viral Haemorrhagic Fever	0	1	0	0	0	0
VTEC/STEC infection	69	182	9.4	40	81	4.8
Yersiniosis	50	154	14.3	44	132	15.3

¹ These data are provisional.

² Rate is based on the cumulative total for the current year (12 months up to and including March 2016) or the previous year (12 months up to and including March 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 March: Cholera (1), Hepatitis NOS (1), Zika virus (11).

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

Disease	Mar 2016	Feb 2016	Jan 2016	Dec 2015	Nov 2015	Oct 2015	Sep 2015	Aug 2015	Jul 2015	Jun 2015	May 2015	Apr 2015
Campylobacteriosis	416	454	720	756	779	579	570	488	420	371	380	327
Cryptosporidiosis	51	42	41	32	66	163	175	79	23	22	25	34
Dengue fever	21	41	15	6	6	7	4	8	7	5	4	5
Gastroenteritis ²	52	44	35	66	50	27	54	28	43	40	32	43
Giardiasis	183	180	133	112	139	120	123	137	110	114	127	122
Haemophilus influenzae type b	2	0	1	0	0	0	0	0	0	2	0	1
Hepatitis A	5	2	2	3	5	7	0	5	2	3	2	2
Hepatitis B ³	6	4	0	2	2	5	4	4	1	1	4	3
Hepatitis C ³	5	3	5	1	5	4	4	2	2	3	2	1
Invasive pneumococcal disease	24	13	24	34	47	44	42	55	65	50	27	25
Legionellosis	22	20	40	49	42	30	16	7	11	19	23	19
Leptospirosis	7	6	4	3	6	7	0	2	8	2	8	4
Listeriosis	7	2	3	4	3	1	3	0	3	4	3	0
Malaria	3	4	3	6	1	2	5	4	3	2	4	3
Measles	6	5	1	1	0	0	0	0	0	2	4	1
Meningococcal disease	3	1	6	5	4	6	11	15	5	9	0	2
Mumps	6	1	0	1	0	2	3	2	2	1	1	0
Paratyphoid fever	4	4	2	3	3	3	2	1	2	1	2	6
Pertussis	82	85	125	88	109	92	181	161	102	93	65	70
Rheumatic fever ⁴	9	9	10	6	9	9	4	7	13	14	19	6
Rickettsial disease	0	0	2	0	0	1	2	2	0	2	0	0
Rubella	2	1	0	0	0	0	0	0	0	0	0	0
Salmonellosis	101	133	112	79	72	96	94	58	64	58	83	96
Shigellosis	9	15	17	4	8	10	10	7	5	7	9	7
Tuberculosis disease	25	29	24	32	27	22	23	20	22	22	29	25
Typhoid fever	7	5	7	7	9	3	1	3	3	2	2	1
Viral Haemorrhagic Fever	0	0	1	0	0	0	0	0	0	0	0	0
VTEC/STEC infection	69	77	36	35	27	39	34	37	16	11	15	35
Yersiniosis	50	42	62	41	116	68	63	68	46	31	35	34

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.