
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 23 May 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

Chikungunya fever: Six confirmed cases of chikungunya fever were notified in April 2016 compared to three confirmed and one probable case notified during the same month of the previous year. Nine cases have been notified in the year to date compared to 39 at the same time in the previous year. All cases reported overseas travel to Fiji during the incubation period for the disease.

Cryptosporidiosis: 65 confirmed cases of cryptosporidiosis were notified in April 2016 compared to 34 cases notified during the same month of the previous year. The 12-month rate in April (17.1 cases per 100,000) was higher than at the same time in the previous year (13.2 per 100,000). The highest numbers of cases were reported from Auckland, Counties Manukau, Waitemata (10 cases each), Northland and Canterbury (8 cases each) DHBs. The cases ranged in age from 9 months to 78 years, with the highest numbers of cases in the 30–39 years (15 cases), 1–4 years (12 cases) and 20–29 years (11 cases) age groups. Among the cases for which risk factor information was recorded, 31.3% (5/15) had consumed food from a food premises, 30.8% (8/26) had consumed untreated water, 28.0% (7/25) had recreational contact with water, and 23.3% (7/30) had contact with other symptomatic people during the incubation period.

Giardiasis: 144 cases of giardiasis (139 confirmed and 5 under investigation) were notified in April 2016 compared to 122 cases notified during the same month of the previous year (Figure 1). Six hundred and forty cases have been notified in the year to date compared to 528 at the same time in the previous year. The highest numbers of cases were reported from Auckland (26 cases) and Counties Manukau (18 cases) DHBs. Among the cases for which risk factor information was recorded, 51.6% (32/62) had contact with other symptomatic people, 50.9% (29/57) had contact with faecal matter or vomit, 48.3% (28/58) had recreational contact with water, and 33.9% (19/56) had consumed untreated water during the incubation period. Two finalised *Giardia* outbreaks (6 cases total) and one interim outbreak (case numbers yet to be determined) were created in April.

Hepatitis NOS: One confirmed case of hepatitis NOS (hepatitis E) was notified in April 2016. The case was a male in the 60–69 years age group from Counties Manukau DHB. No risk factor information was recorded as the case was not able to be contacted.

Legionellosis: 27 cases of legionellosis (17 confirmed, 6 probable and 4 under investigation) were notified in April 2016 compared to 23 cases notified during the previous month, and 19 during the same month of the previous year. After further investigation, three cases have since been found not to meet the case criteria. Cases were reported from Auckland (4 cases), Waitemata, Canterbury (3 cases each), Counties Manukau, Bay of Plenty, Nelson Marlborough, Southern (2 cases each), Waikato, MidCentral, Hutt Valley, Capital & Coast, West Coast and South Canterbury (1 case each) DHBs. The *Legionella* species was identified for 16 cases as: *L. longbeachae* (7 cases), *L. pneumophila* (4 cases), *L. sainthelensi* (2 cases), *L. bozeman*, *L. micdadei* and *L. oakridgensis* (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.

Listeriosis: Five cases of listeriosis (4 confirmed non-perinatal and 1 perinatal under investigation) were notified in April 2016. The non-perinatal cases were in the 60–69 years and 70 years and over age groups (2 cases each). Non-perinatal cases were reported from Waitemata (2 cases), Hawke's Bay and Canterbury (1 case each) DHBs. The mother in the perinatal case was in the 20–29 years age group, of Pacific peoples ethnicity and from Waikato DHB. Gestation information was recorded, and the infant was delivered three days after the due date. The infant died the day before delivery and no post mortem was done. The serotype was identified as *Listeria monocytogenes* serotype O1/2 (3 cases) and *Listeria monocytogenes* serotype O4 (2 cases).

Measles: 15 cases of measles (13 confirmed and 2 under investigation) were notified in April 2016 compared to one case notified during the same month of the previous year. After further investigation, one case has since been found not to meet the case criteria. Cases were reported from Waikato (13 cases) and Counties Manukau (1 case) DHBs. One interim measles virus outbreak (case numbers yet to be determined) was created in April.

Pertussis: 79 cases of pertussis (46 confirmed, 29 probable, 1 suspect and 3 under investigation) were notified in April 2016 compared to 70 cases in the same month of the previous year (Figure 2). After further investigation, one case has since been found not to meet the case criteria. The 12-month rate in April (27.4 cases per 100,000) was higher than at the same time in the previous year (21.2 per 100,000). However, the number of notifications has continued to decrease since the 125 notifications in January 2016. Four cases were hospitalised and no deaths were reported. Fifty-nine percent (46/78) of cases were laboratory-confirmed (35 PCR, 9 by culture and 2 by PCR and culture). The highest numbers of cases were reported from Canterbury (25 cases), Capital & Coast (15 cases), Waitemata (9 cases) and Waikato (8 cases) DHBs. The cases ranged in age from 1 month to 84 years, with 17.9% (14/78) under 5 years of age (including 6 cases aged less than 1 year). The highest numbers of cases were in the 5–9 years (12 cases), 20–29 years and 30–39 years (9 cases each) age groups.

Rickettsial disease: Two cases of rickettsial disease were notified in April 2016. After further investigation, one case has since been found not to meet the case criteria. The other case is still under investigation and is a female in the 50–59 years age group from Waitemata DHB.

Ross River virus infection: One confirmed case of Ross River virus infection was notified in April 2016. The case was a male in the 40–49 years age group from Canterbury DHB. The case had travelled to Australia during the incubation period for the disease.

Salmonellosis: 107 cases of salmonellosis (106 confirmed and 1 under investigation) were notified in April 2016 compared to 96 cases notified during the same month of the previous year. The highest numbers of cases were reported from Tairāwhiti (20 cases), Canterbury (15 cases) and Waikato (14 cases) DHBs. The cases ranged in age from 4 months to 86 years, with the highest numbers of cases in the 1–4 years and 20–29 years age groups (18 cases each). Seventeen cases were hospitalised. The *Salmonella* serotypes were identified in 98.1% (105/107) of cases, the most common were *S. Stanley* (17 cases), *S. Enteritidis* phage type 11 (7 cases) and *S. Typhimurium* phage type 101 (6 cases). Uncommon *Salmonella* serotypes confirmed this month included *S. Kottbus* and *S. Typhimurium* phage type 179 (1 case each). Among the cases for which risk factor information was recorded, 54.0% (27/50) had consumed food from a food premises, 21.7% (13/60) had contact with farm animals, 20.8% (11/53) had consumed untreated water, and 18.3% (13/71) had travelled overseas during the incubation period for the disease. Two interim *Salmonella* outbreaks were created in April by Tairāwhiti DHB (case numbers yet to be determined), *S. Stanley* was the causative agent in one of the outbreaks and *S. Infantis* in the other.

Taeniasis: One confirmed case of taeniasis was notified in April 2016. The case was a male in the 30–39 years age group from Bay of Plenty DHB. The case reported overseas travel to the Philippines during the incubation period for the disease.

Typhoid fever: Five cases of typhoid fever were notified in April 2016 compared to one case notified during the same month of the previous year. Twenty-two cases have been notified in the year to date compared to 13 at the same time in the previous year. Cases were reported from Auckland (2 cases), Counties Manukau, Waitemata and Bay of Plenty (1 case each) DHBs. The cases were in the 1–4 years, 15–19 years, 20–29 years, 40–49 years and 50–59 years age groups (1 case each). All cases had hospitalisation information recorded, 80.0% (4/5) were hospitalised. Three cases reported travelling to India during the incubation period for the disease.

VTEC/STEC infection: 59 cases of VTEC/STEC infection (54 confirmed and 5 under investigation) were notified in April compared to 35 cases confirmed during the same month of the previous year. The 12-month rate in April (9.7 cases per 100,000) was notably higher than at the same time in the previous year (5.1 per 100,000). The highest numbers of cases were reported from Waitemata (13 cases), Northland (9 cases) and Counties Manukau (8 cases) DHBs. The highest numbers of cases occurred in the 1–4 years age group (22 cases). Fourteen cases were hospitalised. Fifty-two 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 (30 cases) and non-O157 (22 cases). Of the cases for which risk factor information was recorded, 72.2% (26/36) had contact with animals, 38.5% (9/24) had contact with children in nappies, 26.3% (10/38) had contact with a person with similar symptoms, and 22.6% (7/31) had recreational contact with water 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. Three finalised VTEC/STEC outbreaks (8 cases total) and one interim outbreak (case numbers yet to be determined) were created in April.

Zika virus infection: Four confirmed cases of zika virus infection were notified in April 2016. Cases were reported in the 30–39 years (2 cases), 40–49 years and 70 years and over (1 case each) age groups. All cases were confirmed by PCR. All cases travelled during the incubation period for the disease, and countries visited were Fiji (3 cases) and Venezuela (1 case).

2. Outbreaks

During April 2016, a total of 43 outbreaks (13 final and 30 interim) were created in EpiSurv (Table 1 and Table 2). Thirty-three (76.7%) were outbreaks of acute gastroenteritis (8 finalised and 25 interim) involving 284 cases in total. This compares with 25 acute gastroenteritis outbreaks involving 495 cases in total created during the same month of the previous year. Of the 33 acute gastroenteritis outbreaks, six were recorded as norovirus, one was norovirus/sapovirus, and one was sapovirus. The most commonly reported mode of transmission in acute gastroenteritis outbreaks (30.3%, 10/33) was person-to-person (10 primary). Of the outbreaks that had an exposure setting recorded (60.6%, 20/33) the most commonly reported settings were long term care facilities (13 outbreaks) and childcare centres (4 outbreaks).

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

Organism/Toxin/Illness	DHB(s) where exposure occurred	Number of outbreaks	Total number of cases
Gastroenteritis	Bay of Plenty, Southern	2	14
<i>Giardia</i>	Auckland, Bay of Plenty	2	6
Norovirus ¹	Lakes, Bay of Plenty, Hutt Valley, Canterbury	5	131
Sapovirus ¹	Bay of Plenty	2	27
VTEC/STEC infection	Auckland, Counties Manukau, Taranaki	3	8
Total		13	179

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

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

Organism/Toxin/Illness	DHB(s) where exposure occurred	Number of outbreaks	Total number of cases
Gastroenteritis ¹	Waitemata, Auckland, Counties Manukau, Waikato, Hawke's Bay, MidCentral, Hutt Valley, Capital & Coast, Wairarapa, Nelson Marlborough, South Canterbury, Southern	23	76
<i>Giardia</i> ¹	Capital & Coast	1	2
Measles virus ¹	Waikato	1	-
Norovirus	Southern	2	43
<i>Salmonella</i> ¹	Tairāwhiti	2	7
VTEC/STEC infection	Bay of Plenty	1	2
Total		30	130

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

3. Deaths from notifiable diseases

Four deaths, where the primary cause of death was a notifiable disease, were reported in April 2016 (Table 3).

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

Disease	District health board	Age group (years)
Invasive pneumococcal disease	Waikato	50–59
Legionellosis	Counties Manukau	70+
Listeriosis – perinatal	Waikato	20–29
Tuberculosis disease – new case	Lakes	60–69

4. Trends in selected diseases to April 2016

Figure 1. Giardiasis notifications by month, January 2009–April 2016

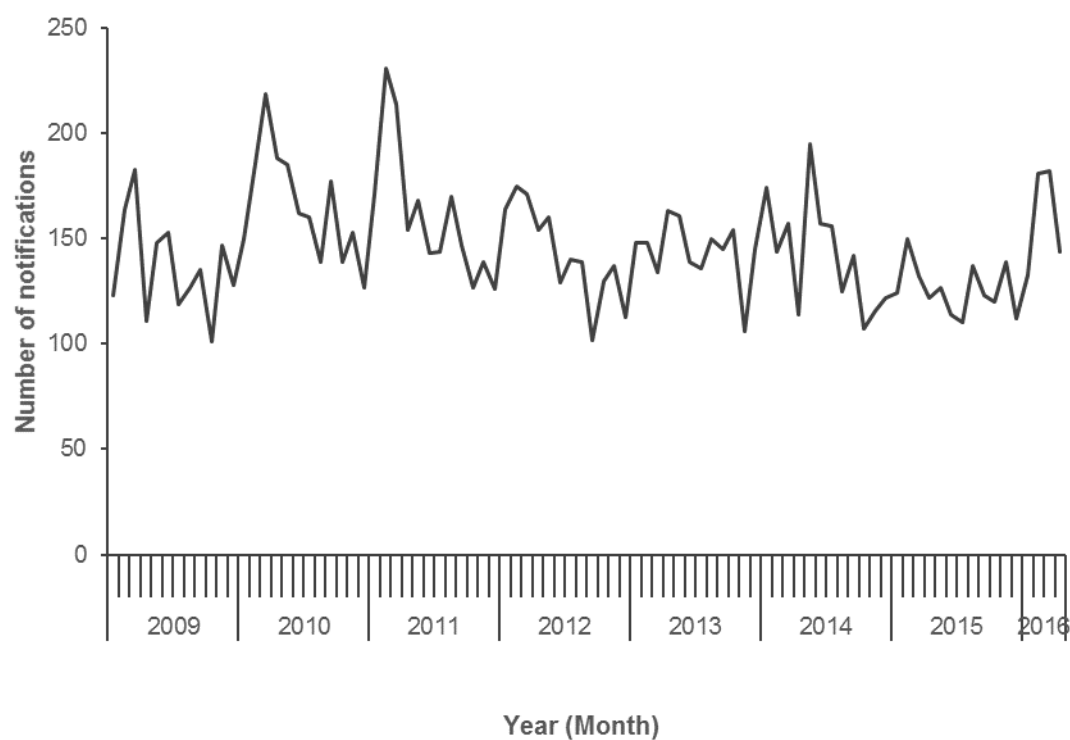
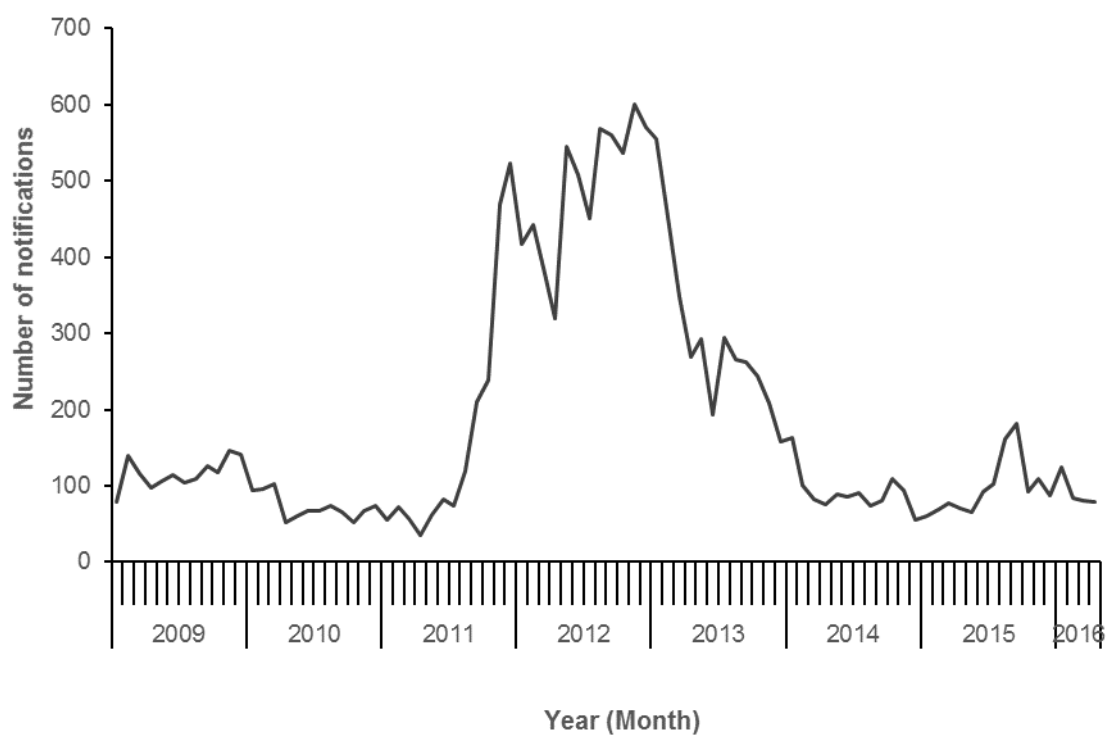


Figure 2. Pertussis notifications by month, January 2009–April 2016



5. Data tables

National Notifiable Disease Surveillance Data April 2016

Disease	Current Year - 2016 ¹			Previous Year - 2015		
	April 2016 Cases	Cumulative total since 1 January	Current 12 Month Rate ²	April 2015 Cases	Cumulative total since 1 January	Current 12 Month Rate ²
Campylobacteriosis	365	1957	137.1	327	1875	142.8
Cryptosporidiosis	65	199	17.1	34	111	13.2
Dengue fever	12	89	3	5	78	3.8
Gastroenteritis ³	47	177	11.2	43	164	15.5
Giardiasis	144	640	35.3	122	528	36.5
Haemophilus influenzae type b	0	2	0.1	1	1	0.1
Hepatitis A	1	9	0.8	2	20	1.2
Hepatitis B ⁴	4	10	0.7	3	11	0.8
Hepatitis C ⁴	6	18	0.9	1	11	0.7
Invasive pneumococcal disease	28	89	9.9	25	87	10.4
Legionellosis	27	112	6.7	19	51	3.1
Leptospirosis	11	25	1.3	4	27	1.6
Listeriosis	5	16	0.8	0	5	0.4
Malaria	1	11	0.8	3	11	0.8
Measles	15	21	0.6	1	3	3.6
Meningococcal disease	2	12	1.5	2	9	1
Mumps	3	5	0.4	0	1	0.3
Paratyphoid fever	5	16	0.7	6	17	0.6
Pertussis	79	369	27.4	70	277	21.2
Rheumatic fever ⁵	15	43	2.7	6	31	3.7
Rickettsial disease	2	4	0.2	0	1	0.2
Rubella	1	3	0.1	0	0	0.1
Salmonellosis	107	454	23	96	447	23.8
Shigellosis	11	52	2.4	7	51	3
Tuberculosis disease	27	104	6.5	25	101	6.4
Typhoid fever	5	22	1.1	1	13	0.8
Viral Haemorrhagic Fever	0	1	0	0	0	0
VTEC/STEC infection	59	233	9.7	35	116	5.1
Yersiniosis	78	228	15.1	34	166	15.4

¹ These data are provisional.

² Rate is based on the cumulative total for the current year (12 months up to and including April 2016) or the previous year (12 months up to and including April 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 April: Chikungunya fever (6), Hepatitis NOS (1), Ross River virus infection (1), Taeniasis (1), Zika virus (4).

Notifiable Disease Surveillance Data by District Health Board April 2016

Disease		Cases ¹ and current rate ² for April 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
Campylobacteriosis	Cases	8	46	31	32	47	7	12	4	9	28	4	10	14	22	2	11	2	35	5	36
	Rate	164.6	148.7	109.2	95.6	161.5	146.9	98	118.1	194.1	167.6	129.4	116.2	123.6	121.9	159.7	144.3	226.3	140.1	233.8	168.5
Cryptosporidiosis	Cases	8	10	10	10	2	0	0	1	0	4	1	4	0	1	1	1	0	8	0	4
	Rate	24.4	17.5	15.9	15.7	30.5	12.4	7.2	14.8	18.1	16.8	17.6	27.3	5.6	8.6	27.8	9	12.2	14.8	25.6	20.7
Dengue fever	Cases	0	0	3	2	0	0	0	0	0	0	0	0	0	1	0	1	0	3	0	2
	Rate	0	3.1	5.5	6.1	1.5	1	1.4	8.4	0.9	0	0	0.6	1.4	6.3	0	3.5	0	1.7	1.7	2.2
Gastroenteritis	Cases	2	7	10	5	0	2	5	0	0	0	1	2	3	5	0	0	0	1	0	4
	Rate	2.4	10.8	24.3	8.2	2.8	16.2	11.7	4.2	5.2	0.6	16	30.2	16.7	25.6	16.2	2.8	9.2	5.7	1.7	5.7
Giardiasis	Cases	4	10	26	18	8	8	5	9	7	2	1	6	5	7	2	7	0	12	0	7
	Rate	35.7	34.2	43.1	35.1	30.7	57.3	33	105.5	30.2	54.8	27.2	19.2	15.3	45.2	34.7	39.4	33.6	31.2	20.5	24.8
Haemophilus influenzae type b	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	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	6.1	0	0	0
Hepatitis A	Cases	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	1.8	1.6	0.4	1.5	0	0	1.4	2.1	0	0	0	2.3	0.7	0.7	0	0	0	0.2	0	0.6
Hepatitis B	Cases	0	0	1	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
	Rate	1.2	0.5	1.2	0.4	0.3	2.9	0.5	0	2.6	1.2	0	0.6	0.7	1.3	0	0	0	0.6	0	0.3
Hepatitis C	Cases	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	2
	Rate	1.8	0.5	0.2	0	0	0	0	0	3.5	0.6	1.6	0	1.4	0.7	2.3	4.1	3.1	1.7	5.1	1.3
Invasive pneumococcal	Cases	0	1	1	5	2	0	2	0	0	1	1	1	2	4	0	0	0	4	2	2
	Rate	17.2	5.7	8.6	12.8	10.5	21.9	12.6	14.8	5.2	9.3	9.6	8.7	11.8	9.6	13.9	6.9	12.2	8.4	8.5	8.3
Legionellosis	Cases	0	3	4	2	2	0	2	0	0	0	0	1	2	1	0	3	1	3	1	2
	Rate	13.1	9.4	5.1	5.8	6.1	2.9	13.1	0	3.5	6.9	1.6	10.5	5.6	5	6.9	4.8	9.2	7.2	6.8	3.5
Leptospirosis	Cases	2	0	0	0	3	0	0	0	1	3	0	0	0	1	0	0	0	1	0	0
	Rate	1.2	0	0	0.6	2.8	1.9	2.7	0	4.3	7.5	1.6	1.7	1.4	0.3	2.3	0	6.1	0.6	1.7	1.9
Listeriosis	Cases	0	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
	Rate	0	0.9	1	0.8	0.8	0	3.2	0	0	0.6	1.6	0	1.4	0.7	2.3	2.1	0	0.4	0	0.3
Malaria	Cases	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	1.4	2	1.3	0.3	0	0	0	0	1.2	0	0.6	1.4	0.3	2.3	1.4	0	0.4	0	0.3
Measles	Cases	0	0	0	1	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.2	0.2	1	4.1	0	0	0	0	0	0	2.3	0	0	0	0	0	0.2	0	0
Meningococcal disease	Cases	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	3	1.7	0.4	2.1	1.3	1.9	1.4	2.1	1.7	1.9	1.6	1.2	0	2	2.3	0.7	3.1	0.8	1.7	1.9
Mumps	Cases	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Rate	1.8	0.7	0	0.6	0	0	0	2.1	2.6	0.6	0	0	0	0.3	0	0	0	0	0	0.3
Paratyphoid fever	Cases	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0
	Rate	0	0.7	0.8	1	0.3	1	0.5	0	0	1.9	1.6	0	0	1	4.6	0.7	0	1	0	0.6
Pertussis	Cases	1	9	4	0	8	0	3	0	1	1	5	2	0	15	0	1	0	25	0	4
	Rate	10.7	21.5	16.5	22.4	33.8	12.4	12.2	10.5	12.1	12.5	41.5	9.9	15.3	25.9	9.3	48.3	0	61.8	8.5	51.6
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	1	5	6	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	Rate	1.2	1.7	4.9	7.3	2.3	5.7	4.5	8.4	0.9	2.5	0	2.3	2.1	1	2.3	0	0	0.6	0	0.6
Rickettsial disease	Cases	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0.6	1.6	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	Cases	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.3	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonellosis	Cases	4	10	10	1	14	0	5	20	2	4	1	2	2	2	1	2	0	15	4	8
	Rate	17.8	21	23.5	12.3	17.9	19.1	18.1	116	18.1	18.1	8	22.1	19.4	20.3	25.5	20	21.4	26.8	47.8	46.2
Shigellosis	Cases	0	0	3	3	1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0
	Rate	0.6	3.3	4.9	5	1.8	1	1.4	0	0.9	0.6	0	0.6	1.4	2.3	0	0	0	2.3	0	2.2
Tuberculosis disease	Cases	0	1	4	4	5	3	1	0	0	1	1	0	0	1	0	2	0	3	0	1
	Rate	1.2	6.1	11	12.5	7.7	7.6	5	2.1	3.5	6.9	3.2	2.9	3.5	7	0	3.5	3.1	6.7	0	1.9
Typhoid fever	Cases	0	1	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.3	2.7	4.6	1	0	1.4	0	0	0	0	0.6	0	0.3	0	1.4	0	0	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	13	5	8	5	0	5	0	6	0	0	0	2	0	0	0	0	2	0	4
	Rate	27.3	18.4	11.6	14.6	12	4.8	9	0	9.5	0.6	3.2	2.3	2.8	1.7	2.3	5.5	9.2	5.5	1.7	6.7
Yersiniosis	Cases	0	16	15	6	2	1	0	1	1	1	2	1	2	12	0	0	0	14	1	3
	Rate	5.3	11.5	13.1	10.7	11.3	12.4	12.6	19	12.9	8.1	16	5.8	21.5	24.2	4.6	4.8	21.4	35	25.6	12.7

¹ These data are provisional.

² Current rate is based on the cumulative total for the 12 months up to and including April 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 – Monthly totals for April 2016 and preceding 11 Months¹

Disease	Apr 2016	Mar 2016	Feb 2016	Jan 2016	Dec 2015	Nov 2015	Oct 2015	Sep 2015	Aug 2015	Jul 2015	Jun 2015	May 2015
Campylobacteriosis	365	418	454	720	756	779	579	570	488	420	371	380
Cryptosporidiosis	65	51	42	41	32	66	163	175	79	23	22	25
Dengue fever	12	21	41	15	6	6	7	4	8	7	5	4
Gastroenteritis ²	47	52	42	36	66	50	27	54	28	43	40	32
Giardiasis	144	182	181	133	112	139	120	123	137	110	114	127
Haemophilus influenzae type b	0	1	0	1	0	0	0	0	0	0	2	0
Hepatitis A	1	4	2	2	3	5	7	0	5	2	3	2
Hepatitis B ³	4	2	4	0	2	2	5	4	4	1	1	4
Hepatitis C ³	6	4	3	5	1	5	4	4	2	2	3	2
Invasive pneumococcal disease	28	24	13	24	34	47	44	42	55	65	50	27
Legionellosis	27	23	21	41	50	42	30	16	7	11	19	23
Leptospirosis	11	5	5	4	2	7	7	0	2	8	2	8
Listeriosis	5	6	2	3	4	3	1	3	0	3	4	3
Malaria	1	3	4	3	6	1	2	5	4	3	2	4
Measles	15	0	5	1	1	0	0	0	0	0	2	4
Meningococcal disease	2	3	1	6	5	4	6	11	15	5	9	0
Mumps	3	2	0	0	1	0	2	3	2	2	1	1
Paratyphoid fever	5	5	4	2	3	3	3	2	1	2	1	2
Pertussis	79	81	84	125	88	109	92	181	161	102	93	65
Rheumatic fever ⁴	15	9	9	10	6	9	9	4	7	13	14	19
Rickettsial disease	2	0	0	2	0	0	1	2	2	0	2	0
Rubella	1	1	1	0	0	0	0	0	0	0	0	0
Salmonellosis	107	102	133	112	79	72	96	94	58	64	58	83
Shigellosis	11	9	15	17	4	8	10	10	7	5	7	9
Tuberculosis disease	27	24	29	24	32	27	22	23	20	22	22	29
Typhoid fever	5	5	5	7	7	9	3	1	3	3	2	2
Viral Haemorrhagic Fever	0	0	0	1	0	0	0	0	0	0	0	0
VTEC/STEC infection	59	61	77	36	35	27	39	34	37	16	11	15
Yersiniosis	78	47	41	62	41	116	68	63	68	46	31	35

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.

Notifiable Disease Surveillance Data by District Health Board April 2016

		Cases ¹ and current rate ² for April 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	8	46	31	32	47	7	12	4	9	28	4	10	14	22	2	11	2	35	5	36
	Rate	164.6	148.7	109.2	95.6	161.5	146.9	98	118.1	194.1	167.6	129.4	116.2	123.6	121.9	159.7	144.3	226.3	140.1	233.8	168.5
Campylobacteriosis	Cases	8	10	10	10	2	0	0	1	0	4	1	4	0	1	1	1	0	8	0	4
	Rate	24.4	17.5	15.9	15.7	30.5	12.4	7.2	14.8	18.1	16.8	17.6	27.3	5.6	8.6	27.8	9	12.2	14.8	25.6	20.7
Cryptosporidiosis	Cases	0	0	3	2	0	0	0	0	0	0	0	0	0	1	0	1	0	3	0	2
	Rate	0	3.1	5.5	6.1	1.5	1	1.4	8.4	0.9	0	0	0.6	1.4	6.3	0	3.5	0	1.7	1.7	2.2
Dengue fever	Cases	0	0	3	2	0	0	0	0	0	0	0	0	0	1	0	1	0	3	0	2
	Rate	0	3.1	5.5	6.1	1.5	1	1.4	8.4	0.9	0	0	0.6	1.4	6.3	0	3.5	0	1.7	1.7	2.2
Gastroenteritis	Cases	2	7	10	5	0	2	5	0	0	0	1	2	3	5	0	0	0	1	0	4
	Rate	2.4	10.8	24.3	8.2	2.8	16.2	11.7	4.2	5.2	0.6	16	30.2	16.7	25.6	16.2	2.8	9.2	5.7	1.7	5.7
Giardiasis	Cases	4	10	26	18	8	8	5	9	7	2	1	6	5	7	2	7	0	12	0	7
	Rate	35.7	34.2	43.1	35.1	30.7	57.3	33	105.5	30.2	54.8	27.2	19.2	15.3	45.2	34.7	39.4	33.6	31.2	20.5	24.8
Haemophilus influenzae type b	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	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	6.1	0	0	0
Hepatitis A	Cases	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	1.8	1.6	0.4	1.5	0	0	1.4	2.1	0	0	0	2.3	0.7	0.7	0	0	0	0.2	0	0.6
Hepatitis B	Cases	0	0	1	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
	Rate	1.2	0.5	1.2	0.4	0.3	2.9	0.5	0	2.6	1.2	0	0.6	0.7	1.3	0	0	0	0.6	0	0.3
Hepatitis C	Cases	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	2
	Rate	1.8	0.5	0.2	0	0	0	0	0	3.5	0.6	1.6	0	1.4	0.7	2.3	4.1	3.1	1.7	5.1	1.3
Invasive pneumococcal disease	Cases	0	1	1	5	2	0	2	0	0	1	1	1	2	4	0	0	0	4	2	2
	Rate	17.2	5.7	8.6	12.8	10.5	21.9	12.6	14.8	5.2	9.3	9.6	8.7	11.8	9.6	13.9	6.9	12.2	8.4	8.5	8.3
Legionellosis	Cases	0	3	4	2	2	0	2	0	0	0	0	1	2	1	0	3	1	3	1	2
	Rate	13.1	9.4	5.1	5.8	6.1	2.9	13.1	0	3.5	6.9	1.6	10.5	5.6	5	6.9	4.8	9.2	7.2	6.8	3.5
Leptospirosis	Cases	2	0	0	0	3	0	0	0	1	3	0	0	0	1	0	0	0	1	0	0
	Rate	1.2	0	0	0.6	2.8	1.9	2.7	0	4.3	7.5	1.6	1.7	1.4	0.3	2.3	0	6.1	0.6	1.7	1.9
Listeriosis	Cases	0	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
	Rate	0	0.9	1	0.8	0.8	0	3.2	0	0	0.6	1.6	0	1.4	0.7	2.3	2.1	0	0.4	0	0.3
Malaria	Cases	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	1.4	2	1.3	0.3	0	0	0	0	1.2	0	0.6	1.4	0.3	2.3	1.4	0	0.4	0	0.3
Measles	Cases	0	0	0	1	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.2	0.2	1	4.1	0	0	0	0	0	0	2.3	0	0	0	0	0	0.2	0	0
Meningococcal disease	Cases	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	3	1.7	0.4	2.1	1.3	1.9	1.4	2.1	1.7	1.9	1.6	1.2	0	2	2.3	0.7	3.1	0.8	1.7	1.9
Mumps	Cases	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	Rate	1.8	0.7	0	0.6	0	0	0	2.1	2.6	0.6	0	0	0	0.3	0	0	0	0	0	0.3
Paratyphoid fever	Cases	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0
	Rate	0	0.7	0.8	1	0.3	1	0.5	0	0	1.9	1.6	0	0	1	4.6	0.7	0	1	0	0.6
Pertussis	Cases	1	9	4	0	8	0	3	0	1	1	5	2	0	15	0	1	0	25	0	4
	Rate	10.7	21.5	16.5	22.4	33.8	12.4	12.2	10.5	12.1	12.5	41.5	9.9	15.3	25.9	9.3	48.3	0	61.8	8.5	51.6
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	1	5	6	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	Rate	1.2	1.7	4.9	7.3	2.3	5.7	4.5	8.4	0.9	2.5	0	2.3	2.1	1	2.3	0	0	0.6	0	0.6
Rickettsial disease	Cases	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0.6	1.6	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	Cases	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.3	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
Salmonellosis	Cases	4	10	10	1	14	0	5	20	2	4	1	2	2	2	1	2	0	15	4	8
	Rate	17.8	21	23.5	12.3	17.9	19.1	18.1	116	18.1	18.1	8	22.1	19.4	20.3	25.5	20	21.4	26.8	47.8	46.2
Shigellosis	Cases	0	0	3	3	1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0
	Rate	0.6	3.3	4.9	5	1.8	1	1.4	0	0.9	0.6	0	0.6	1.4	2.3	0	0	0	2.3	0	2.2
Tuberculosis disease	Cases	0	1	4	4	5	3	1	0	0	1	1	0	0	1	0	2	0	3	0	1
	Rate	1.2	6.1	11	12.5	7.7	7.6	5	2.1	3.5	6.9	3.2	2.9	3.5	7	0	3.5	3.1	6.7	0	1.9
Typhoid fever	Cases	0	1	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.3	2.7	4.6	1	0	1.4	0	0	0	0	0.6	0	0.3	0	1.4	0	0	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	13	5	8	5	0	5	0	6	0	0	0	2	0	0	0	0	2	0	4
	Rate	27.3	18.4	11.6	14.6	12	4.8	9	0	9.5	0.6	3.2	2.3	2.8	1.7	2.3	5.5	9.2	5.5	1.7	6.7
Yersiniosis	Cases	0	16	15	6	2	1	0	1	1	1	2	1	2	12	0	0	0	14	1	3
	Rate	5.3	11.5	13.1	10.7	11.3	12.4	12.6	19	12.9	8.1	16	5.8	21.5	24.2	4.6	4.8	21.4	35	25.6	12.7

¹ These data are provisional.

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

Disease	Current Year - 2016 ¹			Previous Year - 2015		
	April 2016 Cases	Cumulative total since 1 January	Current 12 Month Rate ²	April 2015 Cases	Cumulative total since 1 January	Current 12 Month Rate ²
Campylobacteriosis	365	1957	137.1	327	1875	142.8
Cryptosporidiosis	65	199	17.1	34	111	13.2
Dengue fever	12	89	3	5	78	3.8
Gastroenteritis ³	47	177	11.2	43	164	15.5
Giardiasis	144	640	35.3	122	528	36.5
Haemophilus influenzae type b	0	2	0.1	1	1	0.1
Hepatitis A	1	9	0.8	2	20	1.2
Hepatitis B ⁴	4	10	0.7	3	11	0.8
Hepatitis C ⁴	6	18	0.9	1	11	0.7
Invasive pneumococcal disease	28	89	9.9	25	87	10.4
Legionellosis	27	112	6.7	19	51	3.1
Leptospirosis	11	25	1.3	4	27	1.6
Listeriosis	5	16	0.8	0	5	0.4
Malaria	1	11	0.8	3	11	0.8
Measles	15	21	0.6	1	3	3.6
Meningococcal disease	2	12	1.5	2	9	1
Mumps	3	5	0.4	0	1	0.3
Paratyphoid fever	5	16	0.7	6	17	0.6
Pertussis	79	369	27.4	70	277	21.2
Rheumatic fever ⁵	15	43	2.7	6	31	3.7
Rickettsial disease	2	4	0.2	0	1	0.2
Rubella	1	3	0.1	0	0	0.1
Salmonellosis	107	454	23	96	447	23.8
Shigellosis	11	52	2.4	7	51	3
Tuberculosis disease	27	104	6.5	25	101	6.4
Typhoid fever	5	22	1.1	1	13	0.8
Viral Haemorrhagic Fever	0	1	0	0	0	0
VTEC/STEC infection	59	233	9.7	35	116	5.1
Yersiniosis	78	228	15.1	34	166	15.4

¹ These data are provisional.

² Rate is based on the cumulative total for the current year (12 months up to and including April 2016) or the previous year (12 months up to and including April 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 April: Chikungunya fever (6), Hepatitis NOS (1), Ross River virus infection (1), Taeniasis (1), Zika virus (4).