
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 20 June 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: Five confirmed cases of chikungunya fever were notified in May 2016 compared to one confirmed case notified during the same month of the previous year. Fourteen cases have been notified in the year to date compared to 40 at the same time in the previous year. All cases travelled during the incubation period for the disease, and countries visited were Fiji (3 cases), Brazil, India and United States of America (1 case each). One case travelled to more than one country.

Cryptosporidiosis: 77 cases of cryptosporidiosis (75 confirmed and 2 under investigation) were notified in May 2016 compared to 25 cases notified during the same month of the previous year (Figure 1). The 12-month rate in May (18.2 cases per 100,000) was higher than at the same time in the previous year (13.1 per 100,000). The highest numbers of cases were reported from Waitemata (22 cases), Counties Manukau and Waikato (10 cases each), and Northland, Auckland and Canterbury (7 cases each) DHBs. The cases ranged in age from 9 months to 68 years, with the highest numbers of cases in the 1–4 years (19 cases), 30–39 years (16 cases), 20–29 years (11 cases) and 5–9 years (10 cases) age groups. Among the cases for which risk factor information was recorded, 37.5% (9/24) had consumed food from a food premises, 32.4% (11/34) had recreational contact with water, 27.9% (12/43) had contact with farm animals, and 25.7% (9/35) had attended school, preschool or childcare.

Dengue fever: 19 confirmed cases of dengue fever were notified in May 2016 compared to four cases notified during the same month of the previous year. All cases had been overseas during the incubation period, with a number of cases visiting more than one country. The countries visited included Indonesia (12 cases), Papua New Guinea (3 cases), Solomon Islands (2 cases), and Chile, Cook Islands, Fiji, India, Brazil, Thailand and Vanuatu (1 case each). One finalised dengue fever outbreak (4 cases) was created in May.

Hepatitis A: Eight cases of hepatitis A (7 confirmed and 1 under investigation) were notified in May 2016 compared to one case notified during the previous month and two cases notified during the same month of the previous year. The cases were reported from Auckland (3 cases), Nelson Marlborough (2 cases), and Northland, Counties Manukau and Canterbury (1 case each) DHBs. All confirmed cases were laboratory confirmed. Ethnicity was recorded for 62.5% (5/8) cases, and were reported as being in Pacific Peoples (2 cases), and Māori, Asian and European or Other (1 case each) ethnic groups. The cases ranged in age from 2 to 58 years, with the highest number of cases in the 20–29 years age group (3 cases). Six of the confirmed cases had travelled during the incubation period for the disease, and countries visited were Solomon Islands

(2 cases), and Republic of Korea, New Caledonia, Pakistan, Singapore, Mexico, Papua New Guinea, and Viet Nam (1 case each). Three cases had travelled to more than one country. The remaining confirmed case had consumed frozen berries.

Invasive pneumococcal disease: 45 cases of invasive pneumococcal disease (43 confirmed and 2 under investigation) were notified in May 2016 compared to 27 cases notified during the same month of the previous year. The highest numbers of cases were reported from Counties Manukau (8 cases) and Auckland (6 cases) DHBs. The cases ranged in age from 5 months to 91 years, with the highest numbers of cases in the 70+ years age group (16 cases). Thirty-six cases were hospitalised and no deaths were reported. Among the cases for which risk factor information was recorded, 64.7% (22/34) had a chronic illness, 20.6% (7/34) were immunocompromised and 16.7% (5/30) were smokers.

Legionellosis: 18 cases of legionellosis (11 confirmed, 4 probable and 3 under investigation) were notified in May 2016 compared to 24 cases notified during the previous month, and 23 during the same month of the previous year. Cases were reported from Counties Manukau and Canterbury (4 cases each), Northland (3 cases), Southern (2 cases) and Waitemata, Auckland, Wairarapa, Hutt Valley and South Canterbury (1 case each) DHBs. The *Legionella* species was identified for 10 cases as: *L. Longbeachae* (7 cases), *L. pneumophila* (2 cases), and *L. micdadei* (1 case). 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: Four cases of non-perinatal listeriosis (3 confirmed and 1 under investigation) were notified in May 2016. The cases were in the 70 years and over (2 cases), and under one years and 60–69 years (1 case each) age groups. Cases were reported from Counties Manukau, Bay of Plenty, Hutt Valley and Southern (1 case each) DHBs. The serotype was identified for three cases as *Listeria monocytogenes* serotype O4 (2 cases) and *Listeria monocytogenes* serotype O1/2 (1 case).

Measles: 47 cases of measles (42 confirmed and 5 under investigation) were notified in May 2016 compared to four cases notified 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 Waikato (22 cases), MidCentral (13 cases), Northland (6 cases) and Nelson Marlborough (3 cases) DHBs.

Meningococcal disease: Eight cases of meningococcal disease were notified in May 2016 compared to no cases notified during the same month of the previous year. Cases were reported from Southern (5 cases), and Waitemata, Counties Manukau and Capital & Coast (1 case each) DHBs. Cases were reported in the 15–19 years and 70+ years (2 cases each) and 20–29 years, 40–49 years, 50–59 years and 60–69 years (1 case each) age groups. All cases were hospitalised and one death was reported. All cases were laboratory confirmed and the strain types were as follows: group B (6 cases, including 3 group B:P1.7-2,4), and group Y (2 cases).

Pertussis: 73 cases of pertussis (25 confirmed, 37 probable, 6 suspect and 5 under investigation) were notified in May 2016 compared to 65 cases in the same month of the previous year. The 12-month rate in May (27.5 cases per 100,000) was higher than at the same time in the previous year (20.6 per 100,000). However, the number of notifications has continued to decrease since the 125 notifications in January 2016. 10 cases were hospitalised and no deaths were reported. Thirty-six percent (26/73) of cases were laboratory-confirmed (17 PCR, 6 by culture and 3 by PCR and culture). The highest numbers of cases were reported from Canterbury (20 cases), Waikato (11 cases), Capital & Coast (8 cases) and Nelson Marlborough (7 cases) DHBs. The cases ranged in age from 1 month to 82 years, with 17.8% (13/73) under 5 years of age (including 5 cases aged less than 1 year). The highest numbers of cases were in the 40–49 years (12 cases) and 30–39 years (9 cases) age groups.

Rheumatic fever: 24 cases of rheumatic fever (21 initial attack and 3 recurrent attack) were notified in May 2016 compared to 19 cases in the same month of the previous year. All cases except one were from the North Island: Counties Manukau (11 cases), and Waitemata, Auckland, Lakes and Capital & Coast (2 cases each), and Northland, Waikato, Bay of Plenty, MidCentral and Canterbury (1 case each) DHBs. The cases ranged in age from 6 to 27 years, with the highest numbers of cases in the 10–14 years age group (10 cases). Cases were reported in the Pacific Peoples (15 cases) and Māori (9 cases) ethnic groups. All 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.

Ross River virus infection: Two confirmed cases of Ross River virus infection were notified in May 2016. One case was a male in the 40–49 years age group from Waitemata DHB. The other case was a male in the 60–69 years age group from Nelson Marlborough DHB. Both cases had travelled during the incubation period to Fiji and Australia, respectively.

Taeniasis: One confirmed case of taeniasis was notified in May 2016. The case was a male in the 30–39 years age group from Capital & Coast DHB. The case reported overseas travel to Thailand during the incubation period for the disease.

VTEC/STEC infection: 38 cases of VTEC/STEC infection (33 confirmed and 5 under investigation) were notified in May compared to 15 cases confirmed during the same month of the previous year. The 12-month rate in May (10.0 cases per 100,000) was notably higher than at the same time in the previous year (5.0 per 100,000). The highest numbers of cases were reported from Counties Manukau (9 cases), Waitemata (8 cases) and Waikato (7 cases) DHBs. The cases ranged in age from 2 to 84 years, with the highest numbers of cases in the 30–39 years (6 cases) and 1–4 years, 20–29 years and 70+ years (5 cases each) age groups. Fifteen cases were hospitalised. Thirty-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 and non-O157 (15 cases each). Of the cases for which risk factor information was recorded, 68.4% (13/19) had contact with animals, 25.0% (3/12) had contact with children in nappies, and 9.5% (2/21) had contact with a person with similar symptoms. 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: 68 cases of yersiniosis (64 confirmed and 4 under investigation) were notified in May 2016 compared to 35 cases notified in the same month of the previous year (Figure 2). The highest numbers of cases were reported from Canterbury (11 cases), Auckland and Capital & Coast (9 cases each) and Waitemata (7 cases) DHBs. The cases ranged in age from 10 months to 91 years, with the highest numbers of cases in the 30–39 years (13 cases), 1–4 years (9 cases) and 70+ years (8 cases) age groups. Two cases were hospitalised. The *Yersinia* species involved was identified for 86.8% (59/68) cases; all were *Y. enterocolitica*. The most common biotypes reported were *Y. enterocolitica* biotype 2 (36 cases), 4 (14 cases), and 1A (7 cases). Among the cases for which risk factor information was recorded, 40.9% (9/22) had consumed food from a food premises, 29.2% (7/24) had contact with faecal matter or vomit, and 26.9% (7/26) had contact with farm animals.

Zika virus infection: Seven cases of zika virus infection (6 confirmed and 1 under investigation) were notified in May 2016. Cases were reported in the 30–39 years (5 cases), 20–29 years and 50–59 years (1 case each) age groups. All cases except one were confirmed by PCR. All cases travelled during the incubation period for the disease, and countries visited were Fiji (6 cases) and Indonesia (1 case).

2. Outbreaks

During May 2016, a total of 57 outbreaks (25 final and 32 interim) were created in EpiSurv (Table 1 and Table 2). Forty-three (75.4%) were outbreaks of acute gastroenteritis (15 finalised and 28 interim) involving 451 cases in total. This compares with 28 acute gastroenteritis outbreaks involving 400 cases in total created during the same month of the previous year. Of the 43 acute gastroenteritis outbreaks, seven were recorded as norovirus, three were sapovirus, and one was norovirus/astrovirus. The most commonly reported mode of transmission in acute gastroenteritis outbreaks (48.8%, 21/43) was person-to-person (20 primary and 1 secondary). Of the outbreaks that had an exposure setting recorded (86.0%, 37/43) the most commonly reported settings were long term care facilities (19 outbreaks), childcare centres (7 outbreaks), and restaurants/café/bakery (4 outbreaks).

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

Organism/Toxin/Illness	DHB(s) where exposure occurred	Number of outbreaks	Total number of cases
<i>Campylobacter</i> ¹	Capital & Coast, Canterbury	2	5
<i>Cryptosporidium</i> ¹	Waitemata	2	9
Dengue fever ²	Hawke's Bay	1	4
Gastroenteritis ¹	Counties Manukau, Bay of Plenty, Taranaki, Hutt Valley, Capital & Coast, Nelson Marlborough, Canterbury, South Canterbury, Southern	12	131
<i>Giardia</i> ¹	Waitemata, Counties Manukau, Bay of Plenty	4	13
Norovirus	Waitemata, Auckland, Hutt Valley	3	41
<i>Salmonella</i> ¹	Bay of Plenty	1	2
Total		25	205

¹ Includes outbreak reported to PHSs prior to May 2016: *Campylobacter* (1) reported in January, *Giardia* (1) reported in February, *Cryptosporidium* (1), gastroenteritis (2), and *Salmonella* (1) reported in April.

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

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

Organism/Toxin/Illness	DHB(s) where exposure occurred	Number of outbreaks	Total number of cases
Acute respiratory infection ²	South Canterbury	1	-
Astrovirus	Counties Manukau	1	56
<i>Bordetella pertussis</i> ¹	Canterbury	1	8
<i>Campylobacter</i>	Southern	1	2
Gastroenteritis ²	Waitemata, Auckland, Waikato, Bay of Plenty, Whanganui, MidCentral, Capital & Coast, Wairarapa, Nelson Marlborough Southern	20	90
<i>Giardia</i> ¹	Auckland	1	3
Norovirus	Counties Manukau, Auckland Bay of Plenty, Tairāwhiti	5	136
Sapovirus	Hawke's Bay, Capital & Coast, Southern	3	53
Total		32	292

¹ Includes outbreak reported to PHSs prior to May 2016: *B. pertussis* and *Giardia* (one each) reported in April.

² Interim outbreak(s) where total number of cases had not been completed.

3. Deaths from notifiable diseases

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

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

Disease	District health board	Age group (years)
Meningococcal disease	Capital & Coast	60–69

4. Trends in selected diseases to May 2016

Figure 1. Cryptosporidiosis notifications by month, January 2009–May 2016

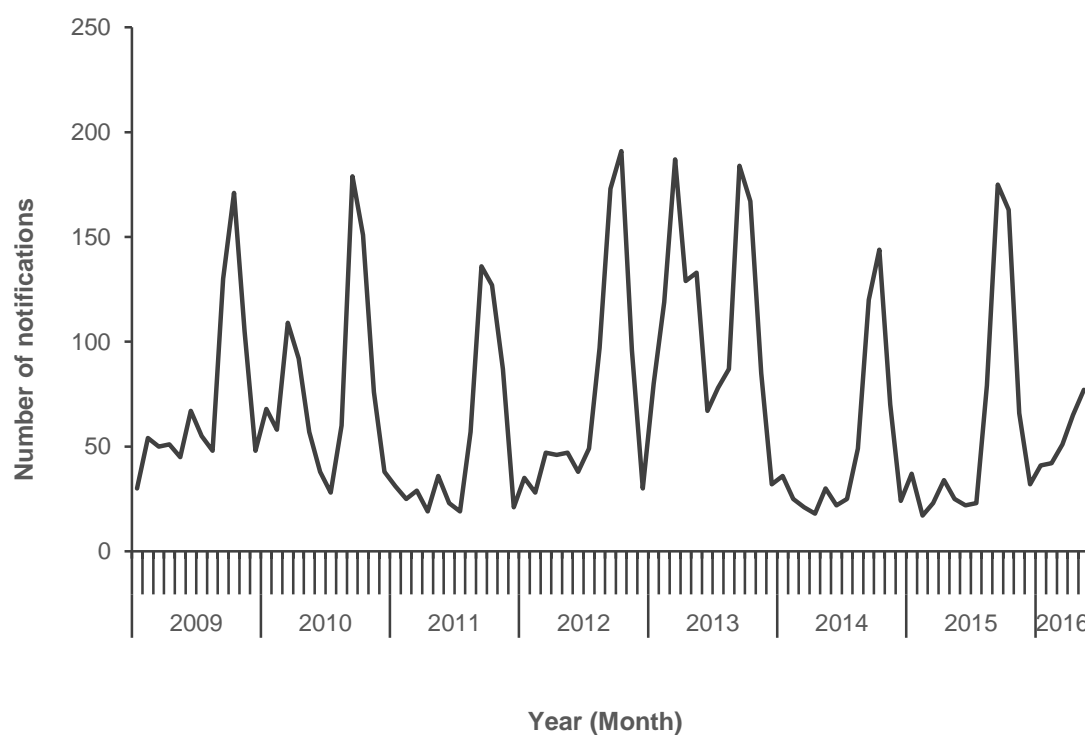
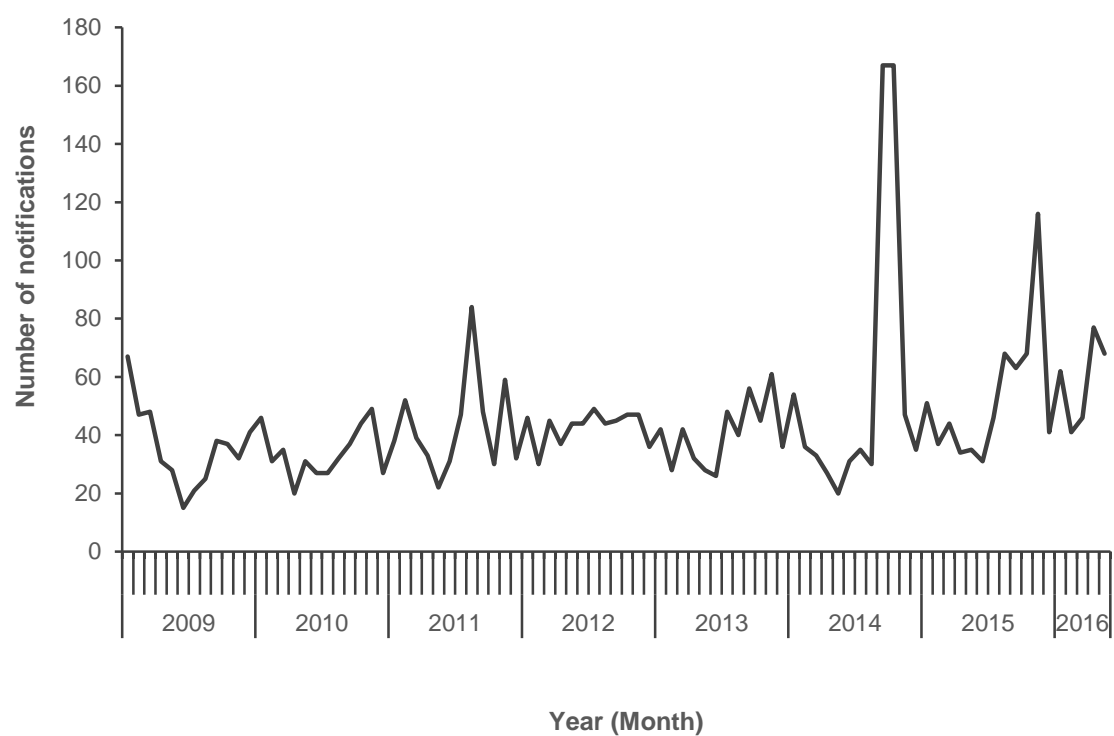


Figure 2. Yersiniosis notifications by month, January 2009–May 2016



5. Data tables

National Notifiable Disease Surveillance Data May 2016

Disease	Current Year - 2016 ¹			Previous Year - 2015		
	May 2016 Cases	Cumulative total since 1 January	Current 12 Month Rate ²	May 2015 Cases	Cumulative total since 1 January	Current 12 Month Rate ²
Campylobacteriosis	391	2347	137.3	380	2255	142.5
Cryptosporidiosis	77	276	18.2	25	136	13.1
Dengue fever	19	104	3.2	4	82	3.5
Gastroenteritis ³	34	211	11.3	32	196	15.4
Giardiasis	129	769	35.3	127	655	35
Haemophilus influenzae type b	0	1	0.1	0	1	0.1
Hepatitis A	8	17	0.9	2	22	1.2
Hepatitis B ⁴	4	12	0.7	4	15	0.8
Hepatitis C ⁴	3	20	0.9	2	13	0.6
Invasive pneumococcal disease	45	134	10.2	27	114	10.2
Legionellosis	18	128	6.6	23	74	3.4
Leptospirosis	10	33	1.3	8	35	1.7
Listeriosis	4	20	0.8	3	8	0.5
Malaria	4	15	0.8	4	15	0.9
Measles	47	67	1.5	4	7	3.4
Meningococcal disease	8	20	1.6	0	9	0.8
Mumps	4	6	0.4	1	2	0.3
Paratyphoid fever	1	17	0.7	2	19	0.6
Pertussis	73	440	27.5	65	342	20.6
Rheumatic fever ⁵	24	67	2.8	19	50	3.7
Rickettsial disease	1	4	0.2	0	1	0.2
Rubella	1	3	0.1	0	0	0.1
Salmonellosis	81	535	23	83	530	23.5
Shigellosis	10	62	2.5	9	60	2.9
Tuberculosis disease	34	134	6.6	29	130	6.5
Typhoid fever	2	24	1.1	2	15	0.8
Viral Haemorrhagic Fever	0	1	0	0	0	0
VTEC/STEC infection	38	261	10	15	131	5
Yersiniosis	68	294	15.8	35	201	15.8

¹ These data are provisional.

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

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 May: Chikungunya fever (5), Paralytic shellfish poisoning (1), Ross River virus infection (2), Taeniasis (1), Zika virus (7).

Notifiable Disease Surveillance Data by District Health Board May 2016

Cases ¹ and current rate ² for May 2016 by District Health Board ³																				
Disease		Northland	Waitemata	Auckland	Counties Manukau	Waikato	Lakes	Bay of Plenty	Tairāhiti	Taranaki	Hawke's Bay	Wairarapa	MidCentral	Hutt Valley	Capital and Coast	Wairarapa	Nelson Marlborough	West Coast	Canterbury	Southern
Campylobacteriosis	Cases	16	43	30	31	27	7	16	6	15	28	4	16	11	21	1	14	3	54	40
	Rate	167.6	146.6	109	95.3	162.1	146	100.7	126.6	200.2	173.8	131	123.8	126.4	119.2	150.5	139.5	214.1	138.8	233.8
Cryptosporidiosis	Cases	7	22	7	10	10	0	0	1	0	2	1	1	2	4	2	0	0	7	1
	Rate	28.5	20.8	16.5	17.4	32.5	12.4	7.2	16.9	18.1	17.4	19.2	27.3	6.9	8.6	32.4	8.3	12.2	15.2	23.9
Dengue fever	Cases	1	1	1	2	0	1	0	0	0	4	0	1	1	3	0	1	0	2	1
	Rate	0.6	3.3	5.3	6.5	1.5	1	1.4	8.4	0.9	2.5	0	1.2	2.1	6.6	0	3.5	0	1.9	2.2
Gastroenteritis	Cases	0	2	7	4	0	0	1	0	3	1	1	0	2	7	2	0	0	3	1
	Rate	2.4	9.9	23.3	8.8	2.8	15.3	11.7	4.2	7.8	1.2	16	30.2	17.4	25.6	20.8	2.8	9.2	5.9	6.1
Giardiasis	Cases	8	9	12	16	13	6	8	7	1	3	0	1	4	16	2	4	0	10	5
	Rate	37.4	33.7	43.7	35.8	30.2	56.3	34.3	111.8	31.1	53	22.4	16.9	18.1	47.5	37	37.3	24.5	30.2	27.3
Haemophilus influenzae type b	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	6.1	0	0
Hepatitis A	Cases	1	0	3	1	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0
	Rate	2.4	1.6	1	1.7	0	0	0.9	2.1	0	0	0	1.7	0.7	0.7	0	1.4	0	0.4	0.6
Hepatitis B	Cases	0	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	Rate	1.2	0.5	1.6	0.2	0.3	1.9	0.5	0	2.6	0.6	0	0.6	1.4	1	0	0	0	0.4	0.3
Hepatitis C	Cases	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
	Rate	2.4	0.5	0.2	0	0	0	0	0	3.5	1.2	1.6	0	1.4	0.7	2.3	4.1	3.1	1.5	1.3
Invasive pneumococcal	Cases	4	3	6	8	3	3	3	3	0	3	0	1	0	2	1	0	0	2	1
	Rate	19.6	5.9	9.8	13.4	10.2	21.9	14	21.1	5.2	10.6	8	8.1	11.1	10	11.6	6.9	12.2	8	8.6
Legionellosis	Cases	3	1	1	4	0	0	0	0	0	0	0	0	1	0	1	0	0	4	2
	Rate	14.3	8.7	5.5	5.4	5.9	2.9	12.6	0	3.5	6.9	1.6	9.9	4.9	4.6	9.3	4.1	9.2	6.8	4.1
Leptospirosis	Cases	2	1	0	2	2	0	0	0	0	1	0	0	0	0	0	1	0	0	1
	Rate	3	0.2	0	1	2.8	1.9	1.8	0	4.3	6.2	1.6	1.7	0.7	0.3	0	0.7	6.1	0.4	1.9
Listeriosis	Cases	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1
	Rate	0	0.7	1	1	0.5	0	3.6	0	0	0.6	1.6	0	2.1	0.3	2.3	2.1	0	0.4	0.6
Malaria	Cases	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0.6	1.4	2	1.2	0.3	0	0	0	0	1.2	0	0.6	1.4	0.3	2.3	1.4	0	0.4	0.3
Measles	Cases	6	0	0	0	23	0	0	0	0	0	0	15	0	0	0	3	0	0	0
	Rate	3.6	0.2	0.2	1	9.2	0	0	0	0	0	0	9.9	0	0	0	2.1	0	0.2	0
Meningococcal disease	Cases	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	5
	Rate	3	1.9	0.4	2.3	1.3	1.9	1.4	2.1	1.7	1.9	1.6	1.2	0	2.3	2.3	0.7	3.1	0.8	3.5
Mumps	Cases	0	1	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0
	Rate	1.8	0.3	0	0.6	0	1	0	2.1	2.6	0.6	0	0.6	0	0.3	0	0	0	0	0.3
Paratyphoid fever	Cases	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.7	1	1	0	1	0.5	0	0	1.9	0	0	0	1	4.6	0.7	0	1	0.6
Pertussis	Cases	0	3	4	3	11	0	1	0	6	2	0	3	0	8	0	7	0	20	5
	Rate	8.9	20.2	15.9	21.3	35.1	9.5	12.2	10.5	17.3	11.2	41.5	11.6	13.9	25.6	6.9	51.8	0	64.8	51.6
Q fever	Cases	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
Rheumatic fever ⁴	Cases	1	2	2	11	1	2	1	0	0	0	0	1	0	2	0	0	0	1	0
	Rate	1.2	2.1	4.7	8.4	1.8	6.7	4.1	4.2	0.9	2.5	0	2.3	2.1	1.7	2.3	0	0	0.6	0.6
Rickettsial disease	Cases	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0.6	1.4	0	0	0.5	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	1	0
	Rate	0	0.2	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0.2	0
Salmonellosis	Cases	5	11	9	5	5	3	1	4	3	3	0	6	3	4	1	3	1	6	4
	Rate	19.6	21	22.4	10.9	18.4	21	16.7	124.5	19.8	18.7	8	24.4	20.8	19.9	25.5	18.6	24.5	26	45.2
Shigellosis	Cases	1	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	1
	Rate	1.2	3.6	4.3	5.2	2	1	1.4	0	0.9	0.6	0	0.6	1.4	2.3	0	0	0	2.1	2.2
Tuberculosis disease	Cases	0	1	6	7	1	0	1	0	0	2	1	3	2	3	0	0	0	6	1
	Rate	1.2	5.9	10.8	12.3	7.7	4.8	4.1	2.1	3.5	8.1	4.8	4.6	3.5	7.3	0	2.8	3.1	7.2	1.9
Typhoid fever	Cases	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.3	2.7	4.8	1	0	1.4	0	0	0	0	0.6	0	0	0	1.4	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
	Rate	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
VTEC/STEC infection	Cases	4	8	2	9	7	0	2	0	0	0	0	1	0	1	0	1	1	0	2
	Rate	27.9	18.6	11.8	15.5	12.8	4.8	9.9	0	8.6	0.6	3.2	2.9	2.8	1.3	0	6.2	9.2	5.3	7.3
Yersiniosis	Cases	3	7	9	5	4	5	3	1	1	1	0	3	1	9	0	2	0	11	3
	Rate	7.1	12.2	14.7	11.7	11.3	17.2	12.6	21.1	13.8	8.1	12.8	7.6	21.5	27.2	4.6	4.1	18.3	33.8	12.7

¹ These data are provisional.

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

Cases ¹ and current rate ² for May 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	16	43	30	31	27	7	16	6	15	28	4	16	11	21	1	14	3	54	8	40
	Rate	167.6	146.6	109	95.3	162.1	146	100.7	126.6	200.2	173.8	131	123.8	126.4	119.2	150.5	139.5	214.1	138.8	233.8	169.7
Cryptosporidiosis	Cases	7	22	7	10	10	0	0	1	0	2	1	1	2	4	2	0	0	7	0	1
	Rate	28.5	20.8	16.5	17.4	32.5	12.4	7.2	16.9	18.1	17.4	19.2	27.3	6.9	8.6	32.4	8.3	12.2	15.2	23.9	20.4
Dengue fever	Cases	1	1	1	2	0	1	0	0	0	4	0	1	1	3	0	1	0	2	0	1
	Rate	0.6	3.3	5.3	6.5	1.5	1	1.4	8.4	0.9	2.5	0	1.2	2.1	6.6	0	3.5	0	1.9	1.7	2.2
Gastroenteritis	Cases	0	2	7	4	0	0	1	0	3	1	1	0	2	7	2	0	0	3	0	1
	Rate	2.4	9.9	23.3	8.8	2.8	15.3	11.7	4.2	7.8	1.2	16	30.2	17.4	25.6	20.8	2.8	9.2	5.9	1.7	6.1
Giardiasis	Cases	8	9	12	16	13	6	8	7	1	3	0	1	4	16	2	4	0	10	4	5
	Rate	37.4	33.7	43.7	35.8	30.2	56.3	34.3	111.8	31.1	53	22.4	16.9	18.1	47.5	37	37.3	24.5	30.2	27.3	23.6
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	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	6.1	0	0	0
Hepatitis A	Cases	1	0	3	1	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0
	Rate	2.4	1.6	1	1.7	0	0	0.9	2.1	0	0	0	1.7	0.7	0.7	0	1.4	0	0.4	0	0.6
Hepatitis B	Cases	0	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	Rate	1.2	0.5	1.6	0.2	0.3	1.9	0.5	0	2.6	0.6	0	0.6	1.4	1	0	0	0	0.4	0	0.3
Hepatitis C	Cases	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
	Rate	2.4	0.5	0.2	0	0	0	0	0	3.5	1.2	1.6	0	1.4	0.7	2.3	4.1	3.1	1.5	5.1	1.3
Invasive pneumococcal disease	Cases	4	3	6	8	3	3	3	3	0	3	0	1	0	2	1	0	0	2	1	2
	Rate	19.6	5.9	9.8	13.4	10.2	21.9	14	21.1	5.2	10.6	8	8.1	11.1	10	11.6	6.9	12.2	8	10.2	8.6
Legionellosis	Cases	3	1	1	4	0	0	0	0	0	0	0	0	1	0	1	0	0	4	1	2
	Rate	14.3	8.7	5.5	5.4	5.9	2.9	12.6	0	3.5	6.9	1.6	9.9	4.9	4.6	9.3	4.1	9.2	6.8	6.8	4.1
Leptospirosis	Cases	2	1	0	2	2	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1
	Rate	3	0.2	0	1	2.8	1.9	1.8	0	4.3	6.2	1.6	1.7	0.7	0.3	0	0.7	6.1	0.4	1.7	1.9
Listeriosis	Cases	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1
	Rate	0	0.7	1	1	0.5	0	3.6	0	0	0.6	1.6	0	2.1	0.3	2.3	2.1	0	0.4	0	0.6
Malaria	Cases	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0.6	1.4	2	1.2	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	6	0	0	0	23	0	0	0	0	0	0	15	0	0	0	3	0	0	0	0
	Rate	3.6	0.2	0.2	1	9.2	0	0	0	0	0	0	9.9	0	0	0	2.1	0	0.2	0	0
Meningococcal disease	Cases	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	5
	Rate	3	1.9	0.4	2.3	1.3	1.9	1.4	2.1	1.7	1.9	1.6	1.2	0	2.3	2.3	0.7	3.1	0.8	1.7	3.5
Mumps	Cases	0	1	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	Rate	1.8	0.3	0	0.6	0	1	0	2.1	2.6	0.6	0	0.6	0	0.3	0	0	0	0	0	0.3
Paratyphoid fever	Cases	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.7	1	1	0	1	0.5	0	0	1.9	0	0	0	1	4.6	0.7	0	1	0	0.6
Pertussis	Cases	0	3	4	3	11	0	1	0	6	2	0	3	0	8	0	7	0	20	0	5
	Rate	8.9	20.2	15.9	21.3	35.1	9.5	12.2	10.5	17.3	11.2	41.5	11.6	13.9	25.6	6.9	51.8	0	64.8	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	2	2	11	1	2	1	0	0	0	0	1	0	2	0	0	0	1	0	0
	Rate	1.2	2.1	4.7	8.4	1.8	6.7	4.1	4.2	0.9	2.5	0	2.3	2.1	1.7	2.3	0	0	0.6	0	0.6
Rickettsial disease	Cases	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0.6	1.4	0	0	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	1	0	0
	Rate	0	0.2	0	0	0	0	0.5	0	0	0	0	0	0	0	0	0	0	0.2	0	0
Salmonellosis	Cases	5	11	9	5	5	3	1	4	3	3	0	6	3	4	1	3	1	6	4	4
	Rate	19.6	21	22.4	10.9	18.4	21	16.7	124.5	19.8	18.7	8	24.4	20.8	19.9	25.5	18.6	24.5	26	51.2	45.2
Shigellosis	Cases	1	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1
	Rate	1.2	3.6	4.3	5.2	2	1	1.4	0	0.9	0.6	0	0.6	1.4	2.3	0	0	0	2.1	0	2.2
Tuberculosis disease	Cases	0	1	6	7	1	0	1	0	0	2	1	3	2	3	0	0	0	6	0	1
	Rate	1.2	5.9	10.8	12.3	7.7	4.8	4.1	2.1	3.5	8.1	4.8	4.6	3.5	7.3	0	2.8	3.1	7.2	0	1.9
Typhoid fever	Cases	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.3	2.7	4.8	1	0	1.4	0	0	0	0	0.6	0	0	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	4	8	2	9	7	0	2	0	0	0	0	1	0	1	0	1	1	0	0	2
	Rate	27.9	18.6	11.8	15.5	12.8	4.8	9.9	0	8.6	0.6	3.2	2.9	2.8	1.3	0	6.2	9.2	5.3	1.7	7.3
Yersiniosis	Cases	3	7	9	5	4	5	3	1	1	1	0	3	1	9	0	2	0	11	3	0
	Rate	7.1	12.2	14.7	11.7	11.3	17.2	12.6	21.1	13.8	8.1	12.8	7.6	21.5	27.2	4.6	4.1	18.3	33.8	29	12.7

¹ These data are provisional.

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

Disease	Current Year - 2016 ¹			Previous Year - 2015		
	May 2016 Cases	Cumulative total since 1 January	Current 12 Month Rate ²	May 2015 Cases	Cumulative total since 1 January	Current 12 Month Rate ²
Campylobacteriosis	391	2347	137.3	380	2255	142.5
Cryptosporidiosis	77	276	18.2	25	136	13.1
Dengue fever	19	104	3.2	4	82	3.5
Gastroenteritis ³	34	211	11.3	32	196	15.4
Giardiasis	129	769	35.3	127	655	35
Haemophilus influenzae type b	0	1	0.1	0	1	0.1
Hepatitis A	8	17	0.9	2	22	1.2
Hepatitis B ⁴	4	12	0.7	4	15	0.8
Hepatitis C ⁴	3	20	0.9	2	13	0.6
Invasive pneumococcal disease	45	134	10.2	27	114	10.2
Legionellosis	18	128	6.6	23	74	3.4
Leptospirosis	10	33	1.3	8	35	1.7
Listeriosis	4	20	0.8	3	8	0.5
Malaria	4	15	0.8	4	15	0.9
Measles	47	67	1.5	4	7	3.4
Meningococcal disease	8	20	1.6	0	9	0.8
Mumps	4	6	0.4	1	2	0.3
Paratyphoid fever	1	17	0.7	2	19	0.6
Pertussis	73	440	27.5	65	342	20.6
Rheumatic fever ⁵	24	67	2.8	19	50	3.7
Rickettsial disease	1	4	0.2	0	1	0.2
Rubella	1	3	0.1	0	0	0.1
Salmonellosis	81	535	23	83	530	23.5
Shigellosis	10	62	2.5	9	60	2.9
Tuberculosis disease	34	134	6.6	29	130	6.5
Typhoid fever	2	24	1.1	2	15	0.8
Viral Haemorrhagic Fever	0	1	0	0	0	0
VTEC/STEC infection	38	261	10	15	131	5
Yersiniosis	68	294	15.8	35	201	15.8

¹ These data are provisional.

² Rate is based on the cumulative total for the current year (12 months up to and including May 2016) or the previous year (12 months up to and including May 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 May: Chikungunya fever (5), Paralytic shellfish poisoning (1), Ross River virus infection (2), Taeniasis (1), Zika virus (7).

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

Disease	May 2016	Apr 2016	Mar 2016	Feb 2016	Jan 2016	Dec 2015	Nov 2015	Oct 2015	Sep 2015	Aug 2015	Jul 2015	Jun 2015
Campylobacteriosis	391	364	418	454	720	756	779	579	570	488	420	371
Cryptosporidiosis	77	65	51	42	41	32	66	163	175	79	23	22
Dengue fever	19	8	21	41	15	6	6	7	4	8	7	5
Gastroenteritis ²	34	47	52	42	36	66	50	27	54	28	43	39
Giardiasis	129	144	182	181	133	112	139	120	123	137	110	114
Haemophilus influenzae type b	0	0	0	0	1	0	0	0	0	0	0	2
Hepatitis A	8	1	4	2	2	3	5	7	0	5	2	3
Hepatitis B ³	4	3	1	4	0	2	2	5	4	4	1	1
Hepatitis C ³	3	5	4	3	5	1	5	4	4	2	3	3
Invasive pneumococcal disease	45	28	24	13	24	34	47	44	42	55	65	50
Legionellosis	18	24	24	21	41	50	42	30	16	7	11	19
Leptospirosis	10	9	5	5	4	2	7	7	0	2	8	2
Listeriosis	4	5	6	2	3	4	3	1	3	0	3	4
Malaria	4	1	3	4	3	6	1	2	5	4	3	2
Measles	47	14	0	5	1	1	0	0	0	0	0	2
Meningococcal disease	8	2	3	1	6	5	4	6	11	15	5	9
Mumps	4	1	1	0	0	1	0	2	3	2	2	1
Paratyphoid fever	1	5	5	4	2	3	3	3	2	1	2	1
Pertussis	73	77	81	84	125	88	109	92	181	161	102	93
Rheumatic fever ⁴	24	15	9	9	10	6	9	9	4	7	13	14
Rickettsial disease	1	1	0	0	2	0	0	1	2	2	0	2
Rubella	1	0	1	1	0	0	0	0	0	0	0	0
Salmonellosis	81	107	102	133	112	79	72	96	94	58	64	58
Shigellosis	10	11	9	15	17	4	8	10	10	7	5	7
Tuberculosis disease	34	26	23	28	23	32	27	22	23	20	22	22
Typhoid fever	2	5	5	5	7	7	9	3	1	3	3	2
Viral Haemorrhagic Fever	0	0	0	0	1	0	0	0	0	0	0	0
VTEC/STEC infection	38	55	55	77	36	35	27	39	34	37	16	11
Yersiniosis	68	77	46	41	62	41	116	68	63	68	46	31

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.