
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 October 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

Brucellosis: One case of brucellosis (under investigation) was notified in September 2016. The case was a female from Northland DHB, who reported overseas travel to Fiji, Kazakhstan and Mongolia during the incubation period for the disease. Occupational exposure to calves in the three months prior to illness was also recorded.

Campylobacteriosis: 571 cases of campylobacteriosis (554 confirmed, 8 probable and 9 under investigation) were notified in September 2016 compared to 570 cases notified during the same month of the previous year (Figure 1). For the 12 month period ending 30 September 2016, the highest rates were in Hawke's Bay (573.2 cases per 100,000 population, 58 cases), South Canterbury (244.0 per 100,000 population, 16 cases) and West Coast (192.7 per 100,000 population, 8 cases) DHBs, compared to a national rate of 148.4 per 100,000 population. Forty-five people were hospitalised. Cases ranged in age from 1 month to 94 years, and the highest number of cases was reported in the 20–29 years age group (106 cases). One interim outbreak was created in September (case numbers yet to be determined).

Chikungunya fever: Five cases of chikungunya fever (4 confirmed and 1 under investigation) were notified in September 2016. Twenty-three cases have been notified in the year to date compared to 47 at the same time in the previous year. Cases were in the 20–29 years (3 cases), 40–49 years and 70 years and over (1 case each) age groups. All cases reported overseas travel during the incubation period for the disease, and countries visited were India (3 cases), Fiji and Tonga (1 case each).

Cryptosporidiosis: 213 cases of cryptosporidiosis (208 confirmed, 2 probable and 3 under investigation) were notified in September 2016 compared to 175 cases notified during the same month of the previous year. The 12-month rate in September (21.3 cases per 100,000 population) was higher than at the same time in the previous year (14.6 per 100,000). The highest 12-month rates were in Northland (58.2 per 100,000, 34 cases) and Wairarapa (39.4 per 100,000, 6 cases) DHBs. Cases ranged in age from 5 months to 74 years, with the highest numbers of cases in the 1–4 years (71 cases), 20–29 years (36 cases) and 5–9 years (30 cases) age groups. Among the cases for which risk factor information was recorded, 67.1% (102/152) had contact with farm animals, 49.6% (64/129) had consumed untreated water, and 37.8% (51/135) had attended school, preschool or childcare during the incubation period for the disease. Six finalised *Cryptosporidium* outbreaks (25 cases total) and one interim outbreak (case numbers yet to be determined) were created in September.

Hepatitis A: Three confirmed cases of hepatitis A were notified in September 2016 compared to one case notified during the previous month and zero cases notified during the same month of the previous year. Cases were reported in the European or Other (2 cases) and Unknown (1 case) ethnic groups, and were reported from West Coast, Hutt Valley and Southern DHBs, respectively. The cases were in the 40–49 years (2 cases) and 60–69 years (1 case) age groups. One case reported overseas travel to Cambodia during the incubation period for the disease. One case reported consumption of frozen berries as the probable source. One case reported no known risk factors for the disease.

Legionellosis: 23 cases of legionellosis (14 confirmed, 2 probable and 7 under investigation) were notified in September 2016 compared to 14 cases notified during the previous month, and 16 during the same month of the previous year. The highest number of cases was reported from Northland DHB (5 cases). The *Legionella* species was identified for 9 cases as: *L. longbeachae* (5 cases), *L. pneumophila* (3 cases) and *L. micdadei* (1 case). The increase in legionellosis notifications for the year (cumulative total 189 in September 2016 compared with 126 cases in September 2015) may be due to the LegiNZ study, which began in May 2015 and involves 20 hospitals in 17 DHBs.

Meningococcal disease: Seven confirmed cases of meningococcal disease were notified in September 2016 compared to 11 cases notified during the same month of the previous year (Figure 2). Cases were reported from Auckland and Southern (2 cases each), Northland, Counties Manukau and Waikato (1 case each) DHBs. Cases were reported in the 15–19 years and 60–69 years (2 cases each), 1–4 years, 5–9 years and 40–49 years (1 case each) age groups. All cases were hospitalised and no deaths were reported. All cases were laboratory confirmed and the group was determined for six cases: group B (5 cases, including 1 NZ B:P1.7-2,4) and group W (1 case). One interim *Neisseria meningitidis* outbreak was created in September (case numbers yet to be determined).

Rheumatic fever: 16 cases of rheumatic fever - initial attack (5 confirmed, 5 probable, 2 suspect and 4 under investigation) were notified in September 2016 compared to four cases (3 initial attack and 1 recurrent attack) in the same month of the previous year. All cases were from the North Island: Counties Manukau (6 cases), Auckland, Waikato, Hawke's Bay (2 cases each), Waitemata, Bay of Plenty, Hutt Valley and Capital & Coast (1 case each) DHBs. Cases ranged in age from 7 to 33 years, with the highest number of cases in the 10–14 years age group (9 cases). Cases were reported in the Pacific peoples (12 cases) and Māori (4 cases) ethnic groups. Fifteen 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: 17 confirmed cases of shigellosis were notified in September compared with ten cases notified during the same month of the previous year. The 12-month rate in September (3.1 cases per 100,000 population) was slightly higher than at the same time in the previous year (2.4 per 100,000). The highest number of cases was reported from Auckland DHB (5 cases). The serotype involved was recorded for 94.1% (16/17) of cases: *S. sonnei* biotype g (7 cases), *S. sonnei* biotype a (5 cases), *S. dysenteriae* 9, *S. flexneri* 1b, *S. flexneri* 6 and *S. flexneri* 6 biotype Manchester (1 case each). Information on overseas travel during the incubation period was recorded for all cases, of which 52.9% (9/17) of cases recorded overseas travel. Countries visited included: India and Indonesia (2 cases each), Australia, Fiji, Papua New Guinea, Samoa and South America nfd (1 case each). One case reported overseas travel to two countries.

Yersiniosis: 84 cases of yersiniosis (80 confirmed and 4 under investigation) were notified in September 2016 compared to 63 cases notified in the same month of the previous year. After further investigation, 3 cases have since been found not to meet the case criteria. The highest numbers of cases were reported from Canterbury (17 cases), Waitemata (14 cases) and Capital & Coast (10 cases) DHBs. Cases ranged in age from 8 months to 79 years, with the highest numbers of cases in the 1–4 years (16 cases) and 40–49 years (11 cases) age groups. Ten cases were hospitalised. The *Yersinia* species involved was identified by ESR for 84.0% (68/81) cases; *Y. enterocolitica* (59 cases) and *Y. pseudotuberculosis* (9 cases). The most common *Y. enterocolitica* biotypes reported were biotype 2 (24 cases) and 1A (15 cases). Among the cases for which risk factor information was recorded, 50.0% (18/36) had consumed food from a food premises, 23.5% (8/34) had contact with other symptomatic people, and 21.6% (8/37) had attended school, preschool or childcare during the incubation period for the disease.

2. Outbreaks

During September 2016, a total of 71 outbreaks (25 final and 46 interim) were created in EpiSurv (Table 1 and Table 2). Forty-nine (69.0%) were outbreaks of acute gastroenteritis (13 finalised and 36 interim) involving 487 cases in total. This compares with 24 acute gastroenteritis outbreaks involving 515 cases in total created during the same month of the previous year. Of the 49 acute gastroenteritis outbreaks, the pathogens were recorded as: norovirus (12 outbreaks) and rotavirus (2 outbreaks). The most commonly reported mode of transmission in acute gastroenteritis outbreaks (38.8%, 19/49) was person-to-person (15 primary and 4 secondary). Of the outbreaks that had an exposure setting recorded (69.4%, 34/49) the most commonly reported settings were long term care facilities (14 outbreaks) and childcare centres (13 outbreaks).

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

Organism/Toxin/Illness	DHB(s) where exposure occurred	Number of outbreaks	Total number of cases
<i>Bordetella pertussis</i>	Waikato	1	3
<i>Cryptosporidium</i> ¹	Waitemata, Auckland, Counties Manukau, Whanganui	6	25
Gastroenteritis	Counties Manukau, Bay of Plenty, Hutt Valley, Capital & Coast, Nelson Marlborough, Canterbury	7	71
<i>Giardia</i> ¹	Waitemata	1	6
Influenza-like illness	Canterbury	1	14
Influenza A virus	Capital & Coast	1	17
Norovirus	MidCentral, Nelson Marlborough, Canterbury	5	151
Rotavirus	Capital & Coast	1	50
<i>Salmonella</i> ^{1, 2}	Auckland, Southern	2	6
Total		25	343

¹ Includes outbreak reported to PHSs prior to September 2016: *Cryptosporidium* (2), *Giardia* (1), and *Salmonella* (1) reported in August.

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

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

Organism/Toxin/Illness	DHB(s) where exposure occurred	Number of outbreaks	Total number of cases
<i>Campylobacter</i> ¹	MidCentral	1	5
<i>Cryptosporidium</i> ²	MidCentral	1	-
Gastroenteritis ^{1, 2}	Northland, Waitemata, Auckland Counties Manukau, Waikato Hawke's Bay, MidCentral, Hutt Valley, Capital & Coast Southern	28	70
<i>Giardia</i> ²	West Coast, Southern	2	3
Influenza A virus	Capital & Coast	2	17
Influenza B virus	Wairarapa	1	2
<i>Neisseria meningitidis</i>	Counties Manukau	1	2
Norovirus ²	Hutt Valley, Canterbury, Southern	7	109
Rotavirus	Hutt Valley	1	36
<i>Salmonella</i>	Whanganui	1	11
Varicella zoster ²	Northland	1	-
Total		46	255

¹ Includes outbreak reported to PHSs prior to September 2016: gastroenteritis (2) and *Campylobacter* (1) reported in August.

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

3. Deaths from notifiable diseases

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

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

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

4. Trends in selected diseases to September 2016

Figure 1. Campylobacteriosis notifications by month, January 2009–September 2016

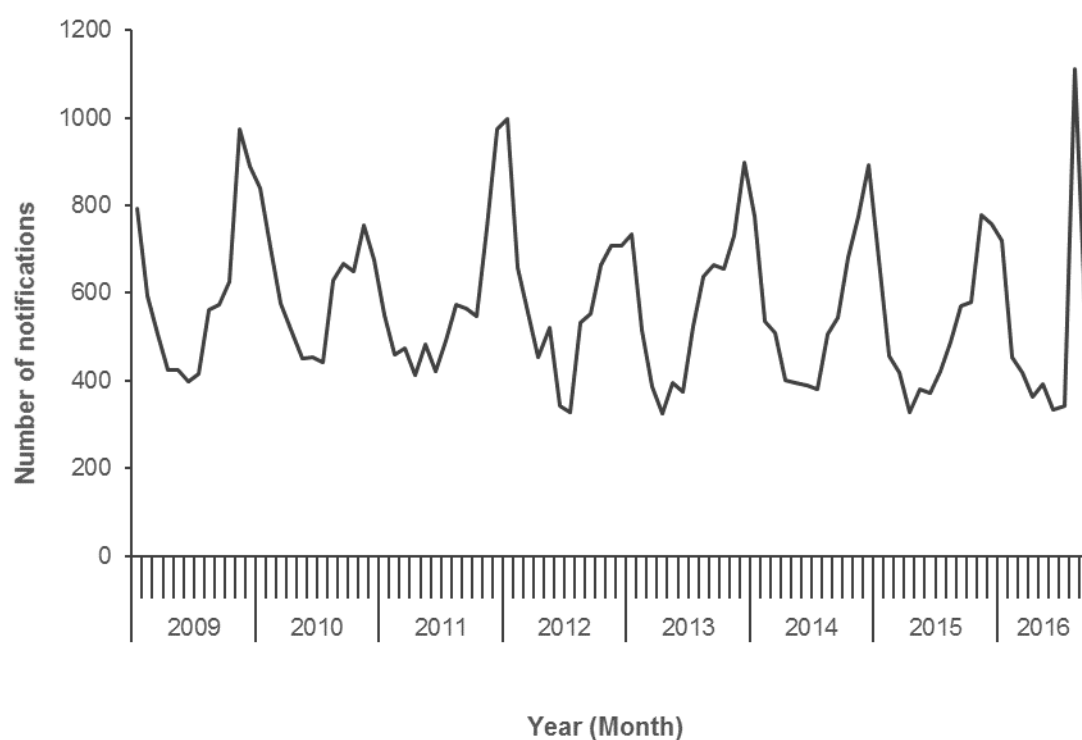
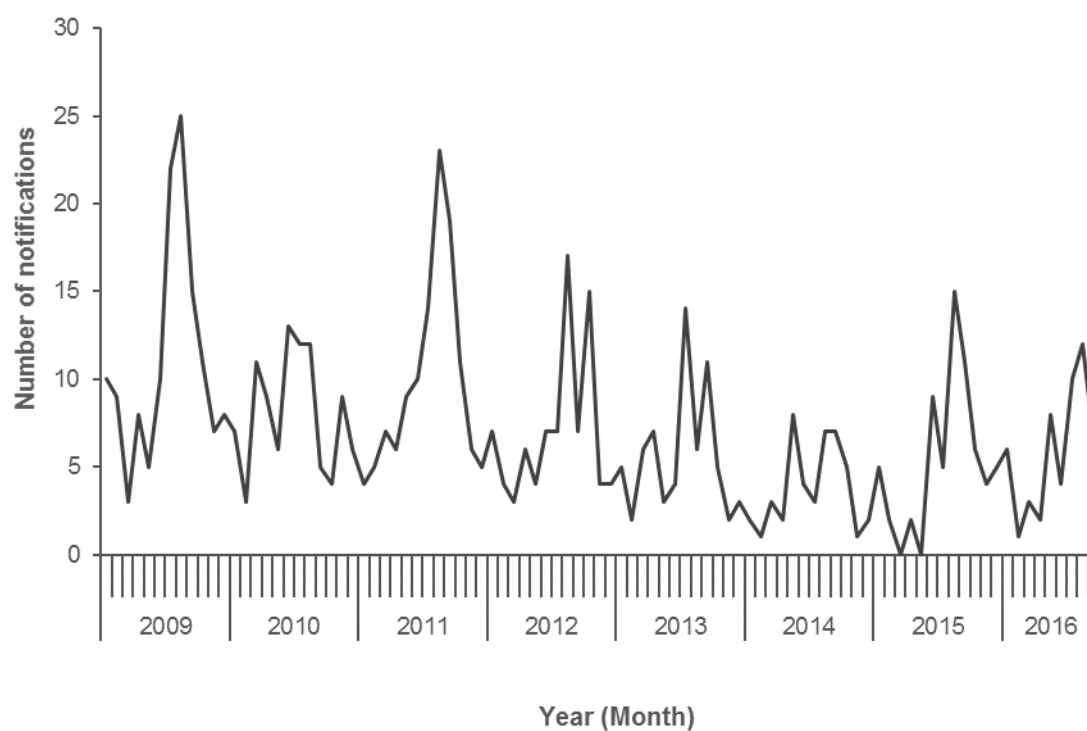


Figure 2. Meningococcal disease notifications by month, January 2009–September 2016



5. Data tables

National Notifiable Disease Surveillance Data September 2016

Disease	Current Year - 2016 ¹			Previous Year - 2015		
	September 2016 Cases	Cumulative total since 1 January	Current 12 Month Rate ²	September 2015 Cases	Cumulative total since 1 January	Current 12 Month Rate ²
Campylobacteriosis	571	4704	148.4	570	4104	140.5
Cryptosporidiosis	213	717	21.3	175	435	14.6
Dengue fever	12	163	4	4	106	3
Gastroenteritis ³	52	412	12.1	54	360	12.7
Giardiasis	128	1242	35.1	123	1139	32.3
Haemophilus influenzae type b	3	5	0.1	0	3	0.1
Hepatitis A	3	27	0.9	0	32	1.1
Hepatitis B ⁴	6	26	0.8	4	25	0.7
Hepatitis C ⁴	5	29	0.8	4	25	0.5
Invasive pneumococcal disease	70	361	10.6	41	322	9.8
Legionellosis	23	189	6.8	16	126	3.8
Leptospirosis	8	70	1.9	0	47	1.4
Listeriosis	1	28	0.8	3	18	0.5
Malaria	0	23	0.7	5	29	0.8
Measles	2	104	2.3	0	9	0.3
Meningococcal disease	7	53	1.5	11	49	1.2
Mumps	4	7	0.2	3	10	0.3
Paratyphoid fever	1	26	0.8	2	25	0.6
Pertussis	114	780	23.3	181	879	24.8
Rheumatic fever ⁵	17	127	3.3	4	88	2.6
Rickettsial disease	0	5	0.1	2	7	0.3
Rubella	0	4	0.1	0	0	0
Salmonellosis	93	851	23.9	94	804	22.6
Shigellosis	17	120	3.1	10	89	2.4
Tuberculosis disease	24	214	6.4	23	216	6.4
Typhoid fever	1	31	1.1	1	24	0.7
Viral Haemorrhagic Fever	0	1	0	0	0	0
VTEC/STEC infection	23	339	9.6	34	229	5.8
Yersiniosis	85	574	17.4	63	409	14.3

¹ These data are provisional.

² Rate is based on the cumulative total for the current year (12 months up to and including September 2016) or the previous year (12 months up to and including September 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 September: Brucellosis (1), Chikungunya fever (5), Zika virus (3).

Notifiable Disease Surveillance Data by District Health Board September 2016

Disease		Cases ¹ and current rate ² for September 2016 by District Health Board ³																			
		Northland	Waitemata	Auckland	Counties Manukau	Waikato	Lakes	Bay of Plenty	Tairāwhiti	Taranaki	Hawke's Bay	Wairarapa	Midcentral	Hutt Valley	Capital and Coast	Wairarapa	Nelson Marlborough	West Coast	Canterbury	South Canterbury	Southern
Campylobacteriosis	Cases	38	43	32	38	56	19	22	11	23	58	9	23	12	28	7	13	8	72	16	43
	Rate	178.3	141.9	101.6	93.9	144.6	140.3	112	141.4	189.8	573.2	150.2	140	111.1	123.2	141.2	125	192.7	136.5	244	163.7
Cryptosporidiosis	Cases	34	14	7	16	40	6	4	1	20	3	5	16	2	9	6	4	1	11	5	9
	Rate	58.2	25.2	18.4	17.1	30.2	18.1	6.8	19	28.5	15.6	27.2	26.7	9	18.3	39.4	12.4	12.2	16.3	23.9	21.3
Dengue fever	Cases	0	1	0	0	1	0	2	0	0	1	0	0	1	1	0	3	0	1	1	0
	Rate	0.6	3.5	4.5	7.5	3.6	1	6.3	6.3	1.7	4.4	0	2.3	3.5	6.6	2.3	4.8	0	2.5	1.7	2.5
Gastroenteritis	Cases	1	6	10	2	0	1	1	0	0	0	1	2	7	7	1	0	0	11	1	1
	Rate	3.6	11.1	23.9	9.4	2.8	18.1	15.3	4.2	6.9	1.2	19.2	28.5	20.1	26.2	20.8	1.4	15.3	7.2	3.4	5.7
Giardiasis	Cases	3	5	10	17	16	2	10	3	1	6	1	3	1	11	0	6	4	16	1	12
	Rate	32.7	32.8	39	34.3	32	55.3	38.4	130.8	28.5	46.7	31.9	16.3	20.8	46.5	27.8	35.9	24.5	31.6	27.3	28.3
Haemophilus influenzae type b	Cases	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hepatitis A	Rate	0	0	0.6	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cases	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1
	Rate	1.2	1.6	1.2	1.3	0	0	0.9	0	0.9	0	0	0	1.4	1	0	2.1	3.1	0.6	0	1
Hepatitis B	Cases	0	1	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	Rate	0.6	0.3	1.6	0.8	0.8	1.9	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	2	0	0	0	2	0	1
	Rate	1.2	0.2	0.2	0	0	1	0	0	3.5	1.2	0	0	0.7	1	2.3	3.5	3.1	1.7	5.1	1.6
Invasive pneumococcal	Cases	5	10	10	10	4	3	5	0	1	1	2	2	1	3	0	2	0	7	1	3
	Rate	19	8.9	11.8	15	9.5	19.1	16.3	16.9	4.3	10	9.6	7	7.6	8.6	6.9	6.9	0	7.4	17.1	8.9
Legionellosis	Cases	5	1	0	3	1	0	2	0	0	1	0	1	1	0	1	0	1	4	0	2
	Rate	20.2	7.6	4.9	6.3	6.4	3.8	13.1	0	3.5	5	3.2	10.5	5.6	3.7	11.6	2.8	6.1	6.8	6.8	5.1
Leptospirosis	Cases	0	0	0	0	2	0	1	0	0	1	0	3	0	0	0	0	0	0	0	1
	Rate	7.7	0.3	0	1.2	4.6	1	1.8	0	5.2	8.1	1.6	3.5	0	0.7	0	1.4	6.1	0.8	0	1.9
Listeriosis	Cases	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	Rate	0	0.9	1	1	0.5	0	1.8	0	0	1.2	1.6	0	2.1	0.3	0	2.1	0	0.4	0	1
Malaria	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	0.4	0.3	0	0.9	0	0	0.6	0	0.6	1.4	0	2.3	0.7	0	0.6	0	0.3
Measles	Cases	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	3.6	0.3	0.6	1.2	14.6	0	0	0	0	0	0	12.2	0.7	1.7	0	2.1	0	0.2	0	0
Meningococcal disease	Cases	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Rate	1.8	1	0.8	2.5	1.5	1	2.3	2.1	0	0.6	1.6	0	0	2.3	0	0	3.1	0.4	0	5.4
Mumps	Cases	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	Rate	0.6	0.5	0	0.4	0	0	0	0	0	0.6	0	0	0	0	0	0	3.1	0	0	0.6
Paratyphoid fever	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	Rate	0	0.3	1.8	1.2	0	1	0.5	0	0	1.2	0	0	0.7	1.3	4.6	0	0	1.1	0	0.3
Pertussis	Cases	1	7	4	3	19	3	8	0	15	0	3	0	3	8	0	8	0	24	0	8
	Rate	4.2	15.6	11.8	14	37.4	26.7	16.3	2.1	51.8	8.7	22.4	8.1	16	27.2	4.6	39.4	6.1	58.5	10.2	15.3
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	2	6	2	0	1	0	0	2	0	0	1	2	0	0	0	0	0	0
	Rate	1.8	2.6	5.3	10	2	3.8	3.6	6.3	1.7	5	0	2.9	2.1	2.7	0	0	0	0.8	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	0.7	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	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	3	13	5	9	8	1	5	0	1	4	7	6	1	5	0	2	0	13	1	9
	Rate	19	22.6	20.2	14	22.3	21	18.1	124.5	19	21.8	16	25	22.2	22.6	23.1	20	24.5	25.9	51.2	42.4
Shigellosis	Cases	1	2	5	2	2	0	3	1	0	0	0	0	0	0	0	0	0	1	0	0
	Rate	1.8	5	5.5	5.9	3.8	0	3.2	4.2	0	0.6	0	0.6	0.7	2.3	0	1.4	0	1.9	0	1.9
Tuberculosis disease	Cases	0	2	8	3	4	0	2	0	0	0	0	0	0	1	1	0	0	1	0	2
	Rate	0.6	5.7	10.8	11.1	7.7	5.7	5.9	2.1	1.7	9.3	3.2	4.1	2.8	6.3	2.3	2.8	3.1	5.9	1.7	3.2
Typhoid fever	Cases	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.3	2.4	4.2	1	0	1.8	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	2	3	3	4	2	0	1	0	3	1	1	0	0	0	0	0	0	0	1	2
	Rate	27.9	17.9	10.4	14	11.3	5.7	11.7	0	10.4	4.4	6.4	2.9	2.8	1.3	0	5.5	9.2	4.2	1.7	6.4
Yersiniosis	Cases	0	15	8	7	6	3	3	0	0	3	0	1	1	10	2	2	2	18	1	3
	Rate	9.5	16.7	15.9	11.7	11.8	21	12.2	14.8	9.5	11.2	8	7	23.6	32.2	11.6	5.5	21.4	34	32.4	16.2

¹ These data are provisional.

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

		Cases ¹ and current rate ² for September 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	38	43	32	38	56	19	22	11	23	58	9	23	12	28	7	13	8	72	16	43
	Rate	178.3	141.9	101.6	93.9	144.6	140.3	112	141.4	189.8	573.2	150.2	140	111.1	123.2	141.2	125	192.7	136.5	244	163.7
Campylobacteriosis	Cases	38	43	32	38	56	19	22	11	23	58	9	23	12	28	7	13	8	72	16	43
	Rate	178.3	141.9	101.6	93.9	144.6	140.3	112	141.4	189.8	573.2	150.2	140	111.1	123.2	141.2	125	192.7	136.5	244	163.7
Cryptosporidiosis	Cases	34	14	7	16	40	6	4	1	20	3	5	16	2	9	6	4	1	11	5	9
	Rate	58.2	25.2	18.4	17.1	30.2	18.1	6.8	19	28.5	15.6	27.2	26.7	9	18.3	39.4	12.4	12.2	16.3	23.9	21.3
Dengue fever	Cases	0	1	0	0	1	0	2	0	0	1	0	0	1	1	0	3	0	1	1	0
	Rate	0.6	3.5	4.5	7.5	3.6	1	6.3	6.3	1.7	4.4	0	2.3	3.5	6.6	2.3	4.8	0	2.5	1.7	2.5
Gastroenteritis	Cases	1	6	10	2	0	1	1	0	0	0	1	2	7	7	1	0	0	11	1	1
	Rate	3.6	11.1	23.9	9.4	2.8	18.1	15.3	4.2	6.9	1.2	19.2	28.5	20.1	26.2	20.8	1.4	15.3	7.2	3.4	5.7
Giardiasis	Cases	3	5	10	17	16	2	10	3	1	6	1	3	1	11	0	6	4	16	1	12
	Rate	32.7	32.8	39	34.3	32	55.3	38.4	130.8	28.5	46.7	31.9	16.3	20.8	46.5	27.8	35.9	24.5	31.6	27.3	28.3
Haemophilus influenzae type b	Cases	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0	0.6	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hepatitis A	Cases	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1
	Rate	1.2	1.6	1.2	1.3	0	0	0.9	0	0.9	0	0	0	1.4	1	0	2.1	3.1	0.6	0	1
Hepatitis B	Cases	0	1	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	Rate	0.6	0.3	1.6	0.8	0.8	1.9	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	2	0	0	0	2	0	1
	Rate	1.2	0.2	0.2	0	0	1	0	0	3.5	1.2	0	0	0.7	1	2.3	3.5	3.1	1.7	5.1	1.6
Invasive pneumococcal disease	Cases	5	10	10	10	4	3	5	0	1	1	2	2	1	3	0	2	0	7	1	3
	Rate	19	8.9	11.8	15	9.5	19.1	16.3	16.9	4.3	10	9.6	7	7.6	8.6	6.9	6.9	0	7.4	17.1	8.9
Legionellosis	Cases	5	1	0	3	1	0	2	0	0	1	0	1	1	1	0	1	0	1	4	0
	Rate	20.2	7.6	4.9	6.3	6.4	3.8	13.1	0	3.5	5	3.2	10.5	5.6	3.7	11.6	2.8	6.1	6.8	6.8	5.1
Leptospirosis	Cases	0	0	0	0	2	0	1	0	0	1	0	3	0	0	0	0	0	0	0	1
	Rate	7.7	0.3	0	1.2	4.6	1	1.8	0	5.2	8.1	1.6	3.5	0	0.7	0	1.4	6.1	0.8	0	1.9
Listeriosis	Cases	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	Rate	0	0.9	1	1	0.5	0	1.8	0	0	1.2	1.6	0	2.1	0.3	0	2.1	0	0.4	0	1
Malaria	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	0.4	0.3	0	0.9	0	0	0.6	0	0.6	1.4	0	2.3	0.7	0	0.6	0	0.3
Measles	Cases	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	3.6	0.3	0.6	1.2	14.6	0	0	0	0	0	0	12.2	0.7	1.7	0	2.1	0	0.2	0	0
Meningococcal disease	Cases	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Rate	1.8	1	0.8	2.5	1.5	1	2.3	2.1	0	0.6	1.6	0	0	2.3	0	0	3.1	0.4	0	5.4
Mumps	Cases	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	Rate	0.6	0.5	0	0.4	0	0	0	0	0	0.6	0	0	0	0	0	0	3.1	0	0	0.6
Paratyphoid fever	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	Rate	0	0.3	1.8	1.2	0	1	0.5	0	0	1.2	0	0	0.7	1.3	4.6	0	0	1.1	0	0.3
Pertussis	Cases	1	7	4	3	19	3	8	0	15	0	3	0	3	8	0	8	0	24	0	8
	Rate	4.2	15.6	11.8	14	37.4	26.7	16.3	2.1	51.8	8.7	22.4	8.1	16	27.2	4.6	39.4	6.1	58.5	10.2	15.3
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	2	6	2	0	1	0	0	2	0	0	1	2	0	0	0	0	0	0
	Rate	1.8	2.6	5.3	10	2	3.8	3.6	6.3	1.7	5	0	2.9	2.1	2.7	0	0	0	0.8	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	0.7	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	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	3	13	5	9	8	1	5	0	1	4	7	6	1	5	0	2	0	13	1	9
	Rate	19	22.6	20.2	14	22.3	21	18.1	124.5	19	21.8	16	25	22.2	22.6	23.1	20	24.5	25.9	51.2	42.4
Shigellosis	Cases	1	2	5	2	2	0	3	1	0	0	0	0	0	0	0	0	0	1	0	0
	Rate	1.8	5	5.5	5.9	3.8	0	3.2	4.2	0	0.6	0	0.6	0.7	2.3	0	1.4	0	1.9	0	1.9
Tuberculosis disease	Cases	0	2	8	3	4	0	2	0	0	0	0	0	0	1	1	0	0	1	0	2
	Rate	0.6	5.7	10.8	11.1	7.7	5.7	5.9	2.1	1.7	9.3	3.2	4.1	2.8	6.3	2.3	2.8	3.1	5.9	1.7	3.2
Typhoid fever	Cases	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rate	0	0.3	2.4	4.2	1	0	1.8	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	2	3	3	4	2	0	1	0	3	1	1	0	0	0	0	0	0	0	1	2
	Rate	27.9	17.9	10.4	14	11.3	5.7	11.7	0	10.4	4.4	6.4	2.9	2.8	1.3	0	5.5	9.2	4.2	1.7	6.4
Yersiniosis	Cases	0	15	8	7	6	3	3	0	0	3	0	1	1	10	2	2	2	18	1	3
	Rate	9.5	16.7	15.9	11.7	11.8	21	12.2	14.8	9.5	11.2	8	7	23.6	32.2	11.6	5.5	21.4	34	32.4	16.2

¹ These data are provisional.

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

Disease	Current Year - 2016 ¹			Previous Year - 2015		
	September 2016 Cases	Cumulative total since 1 January	Current 12 Month Rate ²	September 2015 Cases	Cumulative total since 1 January	Current 12 Month Rate ²
Campylobacteriosis	571	4704	148.4	570	4104	140.5
Cryptosporidiosis	213	717	21.3	175	435	14.6
Dengue fever	12	163	4	4	106	3
Gastroenteritis ³	52	412	12.1	54	360	12.7
Giardiasis	128	1242	35.1	123	1139	32.3
Haemophilus influenzae type b	3	5	0.1	0	3	0.1
Hepatitis A	3	27	0.9	0	32	1.1
Hepatitis B ⁴	6	26	0.8	4	25	0.7
Hepatitis C ⁴	5	29	0.8	4	25	0.5
Invasive pneumococcal disease	70	361	10.6	41	322	9.8
Legionellosis	23	189	6.8	16	126	3.8
Leptospirosis	8	70	1.9	0	47	1.4
Listeriosis	1	28	0.8	3	18	0.5
Malaria	0	23	0.7	5	29	0.8
Measles	2	104	2.3	0	9	0.3
Meningococcal disease	7	53	1.5	11	49	1.2
Mumps	4	7	0.2	3	10	0.3
Paratyphoid fever	1	26	0.8	2	25	0.6
Pertussis	114	780	23.3	181	879	24.8
Rheumatic fever ⁵	17	127	3.3	4	88	2.6
Rickettsial disease	0	5	0.1	2	7	0.3
Rubella	0	4	0.1	0	0	0
Salmonellosis	93	851	23.9	94	804	22.6
Shigellosis	17	120	3.1	10	89	2.4
Tuberculosis disease	24	214	6.4	23	216	6.4
Typhoid fever	1	31	1.1	1	24	0.7
Viral Haemorrhagic Fever	0	1	0	0	0	0
VTEC/STEC infection	23	339	9.6	34	229	5.8
Yersiniosis	85	574	17.4	63	409	14.3

¹ These data are provisional.

² Rate is based on the cumulative total for the current year (12 months up to and including September 2016) or the previous year (12 months up to and including September 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 September: Brucellosis (1), Chikungunya fever (5), Zika virus (3).

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

Disease	Sep 2016	Aug 2016	Jul 2016	Jun 2016	May 2016	Apr 2016	Mar 2016	Feb 2016	Jan 2016	Dec 2015	Nov 2015	Oct 2015
Campylobacteriosis	571	1110	342	334	391	364	418	454	720	756	779	579
Cryptosporidiosis	213	129	51	48	77	65	51	42	41	32	66	163
Dengue fever	12	12	14	21	19	8	21	41	15	6	6	7
Gastroenteritis ²	52	62	53	43	34	43	50	41	34	66	50	27
Giardiasis	128	129	95	121	129	144	182	181	133	112	139	120
Haemophilus influenzae type b	3	1	0	0	0	0	0	0	1	0	0	0
Hepatitis A	3	1	5	2	7	1	4	2	2	3	5	7
Hepatitis B ³	6	2	6	1	3	3	1	4	0	2	2	5
Hepatitis C ³	5	4	2	0	2	4	4	3	5	1	5	4
Invasive pneumococcal disease	70	49	60	48	45	28	24	13	24	34	47	44
Legionellosis	23	14	9	17	18	23	23	21	41	50	42	30
Leptospirosis	8	12	11	6	10	9	5	5	4	2	7	7
Listeriosis	1	3	1	3	4	5	6	2	3	4	3	1
Malaria	0	3	2	3	4	1	3	4	3	6	1	2
Measles	2	4	5	32	41	14	0	5	1	1	0	0
Meningococcal disease	7	12	10	4	8	2	3	1	6	5	4	6
Mumps	4	1	0	0	0	1	1	0	0	1	0	2
Paratyphoid fever	1	4	1	3	1	5	5	4	2	3	3	3
Pertussis	114	85	67	77	71	77	81	84	124	88	109	92
Rheumatic fever ⁴	17	18	11	15	23	15	9	9	10	6	9	9
Rickettsial disease	0	0	0	1	1	1	0	0	2	0	0	1
Rubella	0	1	0	0	1	0	1	1	0	0	0	0
Salmonellosis	93	99	57	67	81	107	102	133	112	79	72	96
Shigellosis	17	21	8	12	10	11	9	15	17	4	8	10
Tuberculosis disease	24	18	20	27	28	25	22	27	23	30	27	21
Typhoid fever	1	2	1	4	2	5	4	5	7	7	9	3
Viral Haemorrhagic Fever	0	0	0	0	0	0	0	0	1	0	0	0
VTEC/STEC infection	23	23	19	16	36	54	56	76	36	35	27	39
Yersiniosis	85	81	60	54	68	77	46	41	62	41	116	68

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.