

## MONTHLY SURVEILLANCE REPORT

Data contained within this monthly report is based on information recorded on EpiSurv by public health service staff up until 4 July 2006. As this information may be updated over time, the results should be regarded as provisional only.

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## 1. Key notifiable disease trends

- *Campylobacter*: 1283 campylobacter cases were notified in June 2006 compared to 741 cases notified in the same month of the previous year. (Figure 1). Almost 38% of the cases in June were reported from the Auckland region. Overall, 36 cases were hospitalised. During the incubation period, 106 (8.3%) consumed food at a food premise (179/1283 completed data field), 21 (1.6%) had faecal contact (159/1283 completed data field), 16 (1.2%) consumed untreated water (147/1283 completed data field), 7 (0.5%) had recreational water contact (157/1283 completed data field), 5 (0.4%) had contact with a case (246/1283 completed data field) and 5 (0.4%) had contact with a sick animal (138/1283). For the 12 month period ending 30 June 2006, South Canterbury DHB recorded the highest annual incidence rate of 653.6 per 100 000 population (345 cases) compared to the national rate of 432.3 per 100 000 population.
- *Dengue*: two cases of dengue fever were notified in June 2006, bringing the year to date total to 10. Both cases were confirmed by IgM serology. One case travelled to Fiji and the other to Thailand. Both cases were hospitalised. The cases reported taking some precautions against biting insects while overseas.
- *Influenza*: during June 2006 (weeks 22 – 26), 788 consultations for influenza-like illness were reported from 83 general practices (on average) in 23 out of 24 health districts. The average weekly consultation rate for June was 43.5 per 100 000 patient population, compared to a rate of 111.4 per 100 000 patient population during the same month last year. Waikato had the highest consultation rate (122.6 per 100 000), followed by Eastern Bay of Plenty (87.8 per 100 000). A total of 228 swabs were received for testing during June. Of these, 63 influenza viruses were isolated, 40 as A/New York/55/2004 (H3N2)

- like, 21 as influenza A (yet to be sub-typed), one as A/New Caledonia/20/1999 (H1N1)-like, and one as B/Malaysia/2506/2004-like.

In addition, 62 influenza viruses were reported from the laboratory-based (non-sentinel) surveillance, 30 as influenza A (yet to be sub-typed), and 32 as A/New York/55/2004 (H3N2) – like.

- *Meningococcal disease:* based on the earliest date available<sup>1</sup>, 11 cases of meningococcal disease were notified during June 2006, of which 10 (90.9%) were laboratory-confirmed, and none were fatal. In comparison, 10 cases were notified the previous month, May 2006, and 26 cases were notified during the same month last year June 2005. For the 12 month period ending 30 June 2006, Waikato DHB recorded the highest incidence rate of 8.5 per 100 000 population (27 cases). The highest age-specific incidence rate was in infants aged less than one year (53.1 per 100 000 population, 29 cases), followed by those in the 1-4 years age group (13.4 per 100 000 population, 29 cases).
- *Pertussis:* 79 pertussis cases were notified in June 2006, of whom 9 (11.4%) were laboratory confirmed. The number of pertussis notifications per month have decreased from the peak in November 2004 when 613 cases were notified. Of the 79 cases notified in June 2006, two were reported as being hospitalised. Canterbury DHB had the highest number of cases (23). For the 12 month period ending 30 June 2006, South Canterbury DHB had the highest incidence rate of 170.5 per 100 000 population (90 cases), compared to the national rate of 49.6 per 100 000 population. Over this period the incidence rate by age group was highest amongst infants aged less than one year (120.8 per 100 000 population). This was followed by children in the 10-14 years age group (85.0 per 100 000 population) and the 5-9 years age group (72.7 per 100 000 population).

The graph (Figure 2) shows that the age distribution of notified cases has changed significantly in the years following the most recent epidemic that began in 2004. As a proportion of total cases, the older age group is starting to carry the majority of diagnosed pertussis, a trend that looks set to continue in the second half of 2006.

Reported incidence for people aged 15 years and older has increased almost six times from 11 cases per 100 000 people per year (average rate for all years between 1997 and 2003) to 59.4 cases per 100 000 people per year for 2004 and 2005 (statistically significant at  $p < 0.0001$ ). The average incidence-rate among people aged 15+ years since the beginning of 2004 is now one third that of the under 15 population (compared to less than one tenth prior to 2004).

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<sup>1</sup> The 'earliest' date refers to the earliest recorded date for the case (onset or hospitalisation date rather than report date, if available). 'Earliest' date, as opposed to 'report date' alone, is used throughout the analysis of meningococcal disease notification data.

## 2. Outbreaks

### *Completed outbreak reports*

ESR received four completed reports via EpiSurv for outbreaks during June 2006. These are summarised in the table below.

#### *Summary of completed outbreaks reported to ESR during June 2006*

Organism/Toxin/Illness	Reporting Public Health Unit	Number of outbreaks	Total number of cases
<i>Cryptosporidium parvum</i>	AK	1	3
Gastroenteritis	NN	1	17
<i>Mycobacterium tuberculosis</i>	WN	2	4
<b>Total</b>		<b>4</b>	<b>24</b>

AK=Auckland; WN=Wellington; NN=Nelson

### *Interim outbreak reports*

The following outbreaks have been reported as interim. The status of the outbreak and cases involved are subject to change, as more data becomes available.

#### *Summary of interim outbreaks reported to ESR during June 2006*

Organism/Toxin/Illness	Reporting Public Health Unit	Number of outbreaks	Total number of cases
<i>Campylobacter</i>	AK, WN	4	9
<i>Cryptosporidium parvum</i>	AK	1	2
Gastroenteritis	AK, NN, OT	9	14
<i>Giardia</i>	AK	4	10
Norovirus	AK	1	119
VTEC/STEC	AK	1	2
<b>Total</b>		<b>20</b>	<b>156</b>

AK=Auckland; WN=Wellington, NN=Nelson; OT=Otago

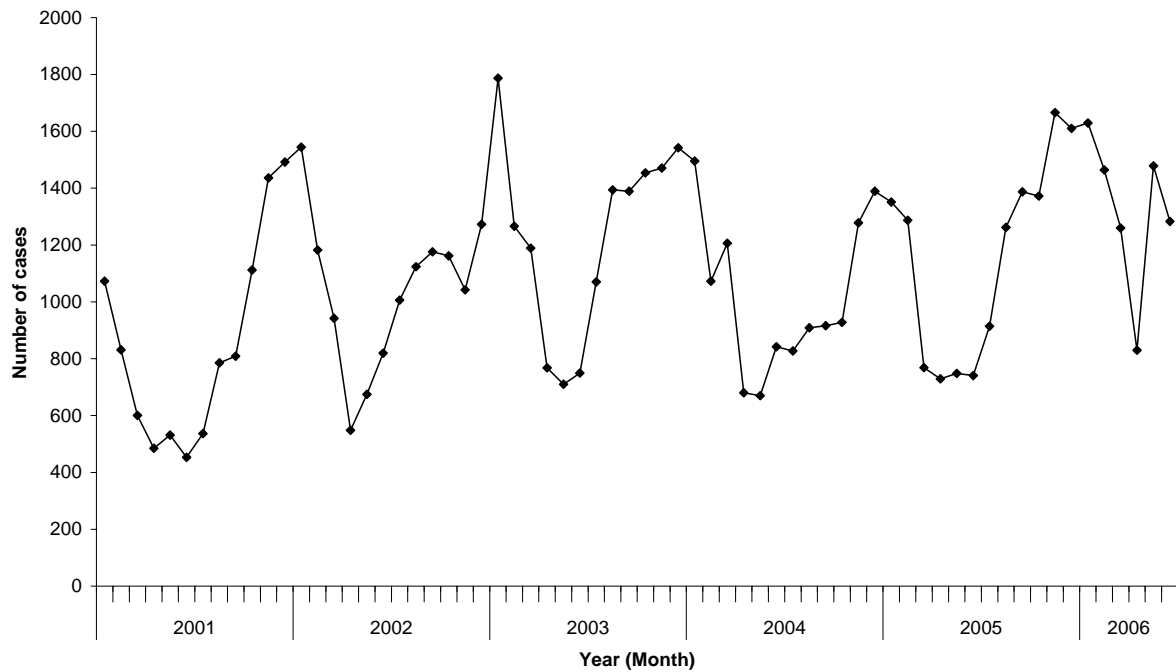
## 3. Deaths from notifiable diseases

The table below shows the death from notifiable diseases in June. Two deaths were reported this month.

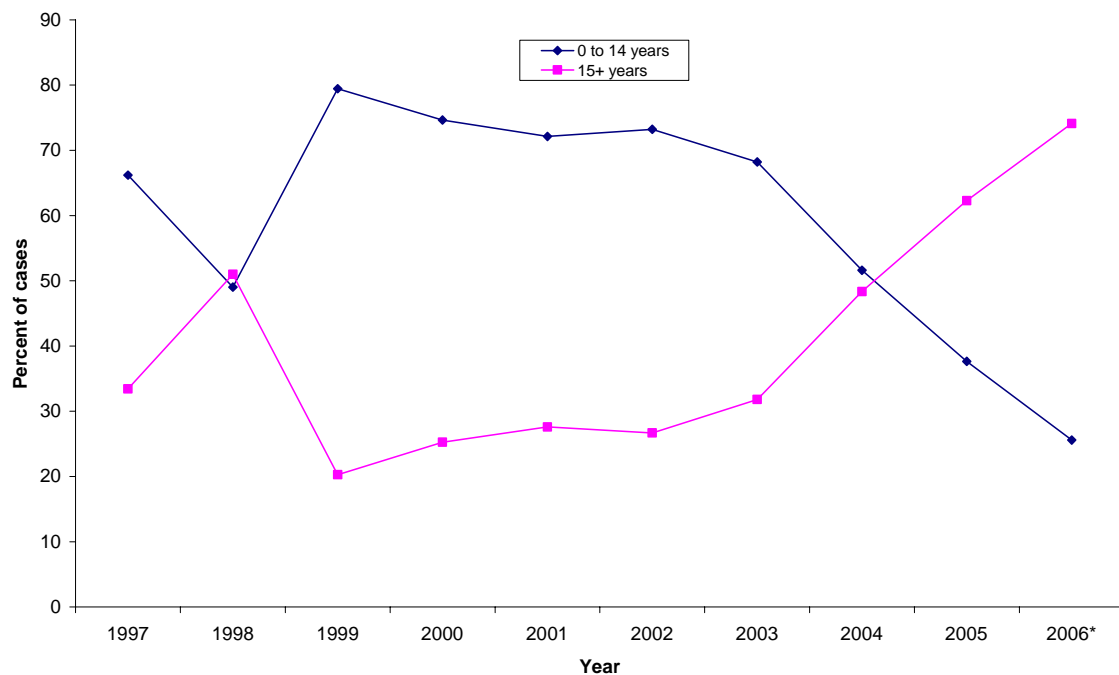
Disease	District Health Board	Age group	Sex
Legionellosis	Nelson-Marlborough	60-69 yrs	M
Tuberculosis disease – new case	Counties Manukau	70+ yrs	F

#### 4. Trends in selected diseases to June 2006

**Figure 1: Campylobacteriosis notifications by month, January 2001 to June 2006**



**Figure 2: Age distribution of pertussis for 0-14 years and 15+ years age group by year, 1997-2006**



\*2006 data year to date

## 4. Data Tables

### *Disease incidence and rates*

Disease <sup>1</sup>	Current year - 2006 <sup>2</sup>			Previous year - 2005		
	Jun 2006 cases	Cumulative total since 1 January	Current 12-month rate <sup>3</sup>	Jun 2005 cases	Cumulative total since 1 January	Previous 12-month rate <sup>3</sup>
AIDS <sup>4</sup>	2	16	0.8	2	32	1.5
Campylobacteriosis	1283	7944	432.3	741	5625	317.7
Cryptosporidiosis	28	178	21.8	33	253	20.5
Dengue fever	2	10	0.5	1	4	0.1
Gastroenteritis <sup>5</sup>	54	562	21.0	56	334	25.8
Giardiasis	101	630	32.9	90	633	35.6
<i>H. influenzae</i> type b disease	3	9	0.3	0	3	0.2
Hepatitis A	7	89	3.2	2	20	1.0
Hepatitis B (acute) <sup>6</sup>	7	35	1.9	5	25	1.2
Hepatitis C (acute) <sup>6</sup>	5	16	0.8	7	17	0.7
Hydatid disease	0	0	0.1	0	0	0
Influenza <sup>7</sup>	114	130	16.7	278	348	32.6
Lead absorption	7	48	2.1	10	41	2.3
Legionellosis	5	31	2.1	2	36	1.6
Leprosy	0	2	0.1	0	1	0.1
Leptospirosis	6	45	2.4	7	42	2.2
Listeriosis	2	9	0.6	0	8	0.5
Malaria	1	12	0.5	2	25	1.0
Measles	1	11	0.6	1	7	0.6
Meningococcal disease <sup>8</sup>	11	58	4.5	28	115	8.6
Mumps	5	20	1.6	3	21	1.3
Paratyphoid fever	2	11	0.5	2	16	0.7
Pertussis	79	629	49.6	185	1495	114.4
Rheumatic fever	4	59	2.8	3	33	1.8
Rickettsial disease	0	1	0.1	0	0	0
Rubella	0	4	0.3	1	6	0.5
Salmonellosis	59	773	38.9	94	703	31.9
SARS	0	0	0	0	0	0
Shigellosis	5	57	4.7	11	64	3.7
Tetanus	0	1	0	0	1	0.1
Tuberculosis	26	141	8.1	33	184	10.5
Typhoid fever	1	12	0.6	7	21	0.9
VTEC / STEC infection	8	61	2.6	4	55	2.5
Yersiniosis	31	220	11.7	24	190	9.3

**Notes:** <sup>1</sup> Other notifiable infectious diseases reported in June : Nil

<sup>2</sup> These data are provisional.

<sup>3</sup> Rate is based on the cumulative total for the current year (12 months up to and including June 2006) or the previous year (12 months up to and including June 2005), expressed as cases per 100 000

<sup>4</sup> All Aids data is provisional. Further information is available from the Aids Epidemiology Group, University of Otago.

<sup>5</sup> Cases of gastroenteritis from a common source or foodborne intoxication. Eg: staphylococcal intoxication

<sup>6</sup> Only acute cases of this disease are currently notifiable

<sup>7</sup> Surveillance data based on laboratory-reported cases only (as reported in ESR's Virology Weekly Reports). The monthly total may differ from the Influenza disease section as the latter is based on the date a specimen is taken

<sup>8</sup> These totals and rates are based on the EpiSurv report date as opposed to the earliest available date used in the meningococcal disease section

*Monthly totals for June 2006 and preceding 12 months<sup>1</sup>*

Disease	Jun 2006	May 2006	Apr 2006	Mar 2006	Feb 2006	Jan 2006	Dec 2005	Nov 2005	Oct 2005	Sep 2005	Aug 2005	Jul 2005	Jun 2005
AIDS <sup>2</sup>	2	1	1	2	7	3	1	1	4	3	4	1	2
Campylobacteriosis	1283	1478	830	1260	1464	1629	1610	1666	1372	1387	1262	914	741
Cryptosporidiosis	28	33	23	28	23	43	26	107	229	176	72	26	33
Dengue fever	2	3	0	3	1	1	1	0	0	1	1	4	1
Gastroenteritis <sup>3</sup>	54	123	60	126	139	60	18	43	44	40	42	36	56
Giardiasis	101	129	83	117	101	99	106	98	81	93	123	97	90
Haemophilus influenzae type b	3	2	3	1	0	0	0	0	1	1	2	0	0
Hepatitis A	7	7	11	16	15	33	7	7	3	5	5	4	2
Hepatitis B (acute) <sup>4</sup>	7	8	3	7	2	8	9	4	7	6	3	6	5
Hepatitis C (acute) <sup>4</sup>	5	1	2	2	3	3	2	3	2	2	3	1	7
Hydatid disease	0	0	0	0	0	0	0	1	0	1	0	0	0
Influenza <sup>5</sup>	114	8	3	4	0	1	3	3	3	40	51	393	278
Lead absorption	7	8	9	5	8	11	6	4	4	6	4	6	10
Legionellosis	5	5	6	4	8	3	9	5	9	4	10	12	2
Leprosy	0	0	0	1	0	1	1	0	0	0	0	0	0
Leptospirosis	6	6	7	5	13	8	5	2	13	7	10	7	7
Listeriosis	2	0	0	1	0	6	3	3	0	2	2	2	0
Malaria	1	2	0	4	3	2	1	2	0	1	0	3	2
Measles	1	1	2	1	5	1	0	3	5	0	3	1	1
Meningococcal disease <sup>6</sup>	11	9	7	14	9	8	11	17	16	13	18	36	28
Mumps	5	3	3	6	1	2	2	5	9	7	12	5	3
Paratyphoid fever	2	0	1	4	2	2	1	0	3	1	3	1	2
Pertussis	79	109	66	139	96	140	173	216	253	223	202	158	185
Rheumatic Fever	4	10	23	6	2	14	5	6	14	4	10	6	3
Rickettsial disease	0	1	0	0	0	0	0	0	0	0	0	1	0
Rubella	0	0	1	3	0	0	0	1	1	1	2	2	1
Salmonellosis	59	127	137	145	159	146	119	131	124	132	107	66	94
SARS	0	0	0	0	0	0	0	0	0	0	0	0	0
Shigellosis	5	4	7	8	15	18	16	53	24	7	9	10	11
Tetanus	0	0	0	1	0	0	0	0	0	0	0	0	0
Tuberculosis	26	26	10	26	30	23	24	27	30	22	36	21	33
Typhoid fever	1	3	0	1	1	6	3	1	0	0	2	3	7
VTEC/STEC infection	8	10	8	20	8	7	5	4	10	6	10	2	4
Yersiniosis	31	49	27	35	34	44	22	51	44	28	40	32	24

**Notes:** <sup>1</sup> Later data are provisional

<sup>2</sup> All Aids data is provisional. Further information is available from the Aids Epidemiology Group, University of Otago.

<sup>3</sup> Cases of gastroenteritis from a common source or foodborne intoxication eg, staphylococcal intoxication or toxic shellfish poisoning

<sup>4</sup> Only acute cases of this disease are currently notifiable

<sup>5</sup> Surveillance data based on laboratory-reported cases only (as reported in ESR's Virology Weekly Reports)

<sup>6</sup> These totals are based on the EpiSurv report date as opposed to the earliest available date used in the meningococcal disease section

# Surveillance data by District Health Board - June 2006

Cases this month

Current 12-month rate<sup>1</sup>

	Cases for June 2006, <sup>2</sup> and current rate <sup>1,2</sup> by District Health Board <sup>3,4</sup>																					
	Northland	Waitemata	Auckland	Counties Manukau	Waikato	Lakes	Bay of Plenty	Tairāwhiti	Taranaki	Hawke's Bay	Whanganui	MidCentral	Hutt	Capital and Coast	Wairarapa	Nelson Marlborough	West Coast	Canterbury	South Canterbury	Otago	Southland	
Disease																						
AIDS <sup>5</sup>	0	2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0.7	0.9			0.6	1.0	0	0	0	1.4	0	0	1.3	0	0.8	1.3	4.4	0	0	0	1.0	
Campylobacteriosis	25	192	157	133	88	41	47	4	26	44	17	33	54	142	14	26	5	122	19	66	28	
	250.5	480.3	451.4	370.1	411.7	449.0	351.9	195.7	506.6	377.5	319.1	220.0	470.2	589.3	246.1	343.7	307.3	519.3	653.6	528.9	471.3	
Cryptosporidiosis	1	2	6	0	3	0	1	0	0	1	0	2	7	3	0	0	0	2	0	0	0	
	16.4	7.7	9.8	8.0	35.3	36.5	20.2	20.5	18.4	28.6	33.0	25.8	15.9	24.4	39.3	22.9	76.0	24.1	94.7	25.2	34.8	
Dengue fever	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	
	0	0.5	0.5	0.5	0	0	0	0	0	0	0	0	0.8	2.4	0	0.8	0	0	0	1.2	1.0	
Gastroenteritis	0	4	7	8	1	0	0	0	1	0	9	1	3	4	0	3	0	12	0	1	0	
	0.7	16.3	21.5	13.0	16.4	10.4	7.9	0	4.9	9.1	77.0	111.0	19.7	27.7	5.2	18.8	9.9	24.1	3.8	10.5	25.2	
Giardiasis	2	6	16	12	9	5	9	0	0	4	6	1	0	9	2	7	0	6	2	4	1	
	35.0	27.5	41.3	30.9	38.1	37.5	38.7	31.9	8.7	38.3	23.6	31.6	22.0	50.4	20.9	37.6	13.2	29.7	24.6	25.2	30.0	
H. influenzae type b disease	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
	0	0.2	0.3	0.3	0.3	1.0	1.7	0	0	0	0	0	0	0.4	0	0	0	0.5	1.9	0	1.0	
Hepatitis A	1	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3.6	2.8	2.4	8.5	2.2	2.1	0.6	0	1.0	0	4.7	1.3	1.5	1.6	0	0	0	9.1	0	0.6	0	
Hepatitis B	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	
	0.7	1.9	3.0	4.0	0.3	1.0	1.7	0	0	0.7	1.6	0.6	0	1.2	2.6	0	0	4.4	0	1.8	1.0	
Hepatitis C	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0	
	2.1	0	0.5	0	0	3.1	0.6	0	2.9	0.7	0	0	0.8	0.4	0	0	3.3	2.8	0	0.6	0	
Hydatids disease	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0.2	0	0	0	0	0	0	0	0.7	0	0	0	0	0	0	0	0	0	0	0	
Lead absorption	0	0	2	0	0	0	0	0	1	0	0	1	2	1	0	0	0	0	0	0	0	
	1.4	0.7	1.9	0.3	3.1	4.2	1.1	2.3	2.9	2.1	4.7	3.2	4.6	3.7	2.6	0.8	0	2.8	3.8	1.8	0	
Legionellosis	0	1	1	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	
	4.3	1.4	1.6	1.3	1.3	0	3.9	0	1.0	0.7	0	0.6	3.0	1.6	2.6	0.8	3.3	5.4	1.9	2.9	2.9	
Leprosy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0.3	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Leptospirosis	2	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	
	7.1	0	0	0.3	3.5	1.0	6.2	6.8	1.0	9.8	3.1	7.7	0	0.4	7.9	0	9.9	1.2	9.5	2.3	1.9	
Listeriosis	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0.9	0.5	1.6	0.3	1.0	1.1	0	0	0.7	0	0.6	0	0.4	0	1.6	0	0	0	0	0	
Malaria	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0.2	0.8	1.6	0.6	0	0	0	0	0.7	0	0	0	1.2	0	0	3.3	0.2	0	0.6	0	
Measles	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0.9	0.5	0.5	0.3	0	1.1	0	0	0	1.6	0.6	0	0	0	1.6	6.6	1.2	1.9	0	0	
Meningococcal disease <sup>6</sup>	1	0	1	1	2	0	0	0	0	1	0	2	0	0	1	0	0	1	0	0	1	
	2.1	3.3	3.8	5.1	8.5	3.1	3.4	2.3	1.9	4.2	0	5.2	2.3	1.6	7.9	7.3	3.3	5.9	5.7	8.2	3.9	
Mumps	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	
	2.9	2.1	1.4	2.9	0.3	0	1.7	0	0	4.2	3.1	0	0	0.8	0	1.6	0	2.3	1.9	2.3	0	
Paratyphoid fever	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0.7	1.2	0.3	1.3	0	1.0	1.1	0	0	0.7	0	0	0	0.4	0	0.8	0	0.2	0	0	1.0	
Pertussis	1	3	0	0	22	3	2	6	0	0	0	0	5	1	0	4	2	23	2	2	3	
	7.8	8.8	3.3	5.3	100.1	42.7	77.5	43.2	4.9	35.5	3.1	11.0	33.4	31.3	2.6	58.8	59.5	163.0	170.5	51.5	92.9	
Rheumatic fever	1	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
	6.4	0.9	1.9	11.2	3.1	4.2	0.6	2.3	0	5.6	3.1	1.3	3.8	3.3	0	0	0	0.2	0	0	0	
Rickettsial disease	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0.3	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0.2	1.1	0.3	0	0	1.7	0	0	0	0	0.6	0	0	0	0	0	0.2	0	0	0	
Salmonellosis	1	8	7	5	3	1	2	0	0	2	0	2	2	7	0	3	0	7	3	6	0	
	41.4	32.3	31.0	30.6	40.9	27.1	37.0	22.8	44.6	50.1	29.9	20.6	35.6	50.8	28.8	40.8	26.4	39.8	75.8	60.9	67.7	
SARS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Shigellosis	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	
	33.5	5.1	8.7	6.1	1.6	1.0	2.8	0	1.0	2.1	6.3	0	2.3	3.7	0	1.6	3.3	2.1	5.7	3.5	0	
Tetanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tuberculosis	2	7	0	7	1	0	0	0	0	0	0	1	0	4	0	0	0	2	1	1	0	
	11.4	9.5	16.6	14.6	6.6	5.2	2.2	0	1.9	4.9	7.9	9.0	5.3	12.2	0	1.6	0	4.9	3.8	3.5	1.9	
Typhoid fever	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0.7	0.5	2.1	0	0	0	0	0	0	0	0	2.3	0	0	1.6	0	0.2	3.8	0	0	
VTEC / STEC	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3	
	2.9	2.1	1.1	1.3	5.7	5.2	3.4	0	2.9	2.8	0	0.6	0	0	0	4.9	3.3	3.0	7.6	4.7	6.8	
Yersiniosis	1	2	3	4	2	0	2	0	0	2	0	0	1	3	0	1	0	7	0	3	0	
	4.3	10.2	11.1	9.1	8.5	12.5	9.5	9.1	4.9	9.1	14.1	5.8	4.6	23.6	0	12.2	33.0	18.5	22.7	17.0	6.8	

1 Current rate is based on the cumulative total for the 12 months up to and including June 2006 expressed as cases per 100 000

2 These data are provisional

3 - AIDS data is reported for the greater Auckland and Wellington areas, rather than by District Health Board

- All Aids data is provisional. Further information is available from the Aids Epidemiology Group, University of Otago.

4 Further data are available from the local medical officer of health

5 These totals and rates are derived from the EpiSurv report date as opposed to the earliest available date used in the meningococcal disease section.