

## MONTHLY SURVEILLANCE REPORT

This monthly report contains data and commentary on disease trends and events up to and including the end of April 2003 (see also forthcoming issues of the *New Zealand Public Health Report*). Its purpose is to provide timely information for use by designated officers and public health service staff. Data contained within is based on information recorded on EpiSurv by public health service staff up until 13 May 2003. As this information may be updated over time, the results should be regarded as provisional only.

### Table of contents

<b>1. Major surveillance issues</b>	<b>2</b>
<b>2. Key disease trends</b>	<b>3</b>
Campylobacteriosis	3
Cryptosporidiosis	4
Dengue	5
<i>Haemophilus Influenzae</i> type b disease	6
Leptospirosis	6
Measles	7
Meningococcal disease	7
Mumps	9
Pertussis	9
Salmonellosis	11
Tuberculosis	12
VTEC/STEC infection	12
<b>3. Deaths from notifiable diseases</b>	<b>14</b>
<b>4. Outbreaks</b>	<b>15</b>
Final outbreak reports	15
Interim outbreak reports	16
<b>5. National surveillance data and trends</b>	<b>18</b>
Disease incidence and rates	18
Monthly totals for April 2003 and preceding 12 months	19
Surveillance data by health district for April 2003	20

## 1. Major surveillance issues

- *Acute rheumatic fever*: Nineteen cases of acute rheumatic fever were notified in April 2003, compared to just one case during the same month last year. Over half the cases (10 cases) were reported from South Auckland Health District.
- *Cryptosporidiosis*: 46 cases of cryptosporidiosis were notified in April 2003. Of these, 32 were reported from Wellington Health District. One outbreak, linked to an infected Wellington swimming pool, is ongoing.
- *Dengue fever*: 10 laboratory-confirmed cases of dengue fever were notified in April 2003. The most frequently implicated overseas destination was Fiji (6 cases), followed by Thailand (2 cases), and Tonga (1 case).
- *Haemophilus Influenzae type b disease (Hib)*: Two laboratory confirmed cases of Hib in infants have been notified this year to date. Both cases received at least one dose of vaccine. One case died.
- *Meningococcal disease*: 31 cases were reported in April 2003, bringing the year-to-date total to 131 cases. Monthly incidence rates in April were highest in Rotorua Health District.
- *Salmonellosis*: 134 cases of *Salmonella* notified in April 2003. Waikato Health District experienced rates over twice the national average, led by a sharp rise in cases of *S. Infantis*.
- *VTEC/STEC*: 19 cases of VTEC/STEC infection were notified during April 2003. This was the highest monthly notification total ever recorded.

## **2. Key disease trends**

### **Acute Rheumatic Fever**

Nineteen cases of acute rheumatic fever were notified in April 2003, compared to just one case during the same month last year. All four cases for whom hospitalisation status was recorded were hospitalised. All cases were notified from the North Island and over half the cases (10) were reported from South Auckland Health District. Ten cases were Maori, six were Pacific Peoples and three were of 'Other' ethnicity. Most cases (16 cases) were aged between 10 and 14 years.

The NZDep2001 index of socioeconomic deprivation could be linked to 18 cases whose addresses could be geocoded to at least street level. On a scale of one to ten, with ten representing the most deprived score, it was found that a score of 10 was associated with half the cases, and a score of 9 was associated with a further 22% of cases.

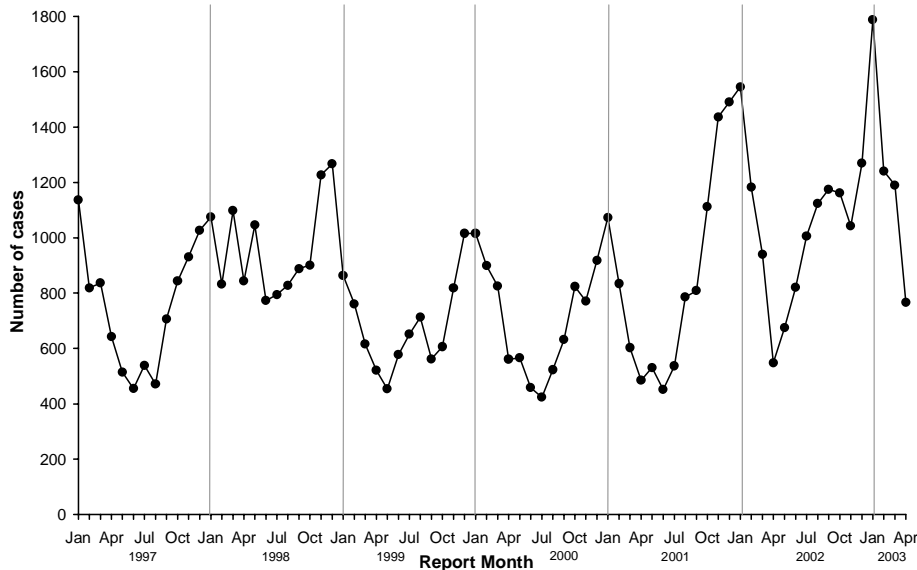
### **Campylobacteriosis**

There were 770 cases of campylobacteriosis notified during April 2003 of whom 752 (98%) were confirmed. Although campylobacteriosis notifications have been steadily decreasing from a peak of 1785 cases in January 2003, the April 2003 total was still the highest number of notifications for the month of April recorded in the past five years.

Incidence rates in April 2003 were highest in the '20 to 29 years' age group with a monthly rate of 31.0 cases per 100 000 (151 cases), and next highest in the '1 to 4 years' age group with a monthly rate of 29.1 per 100 000 population (63 cases). Approximately 87% of April cases (for whom ethnicity was recorded) were of European ethnicity. The male to female ratio was 1.2:1. There were 12 hospitalisations (5.4% of cases for whom this information was recorded).

Among all health districts, the incidence rate in April was highest in Wellington, with a monthly rate of 33.9 per 100 000 (86 cases), compared to a national rate of 20.6 per 100 000. Monthly rates were next highest in South Canterbury, North West Auckland, Hutt and Central Auckland health districts, with rates of 32.0, 27.7, 27.3, and 25.6 per 100 000, respectively. During March 2003, the monthly notification rate was also highest in Wellington Health District. The following graph shows campylobacteriosis notifications each month since January 1997.

*Campylobacteriosis notifications by month,  
January 1997 - April 2003*



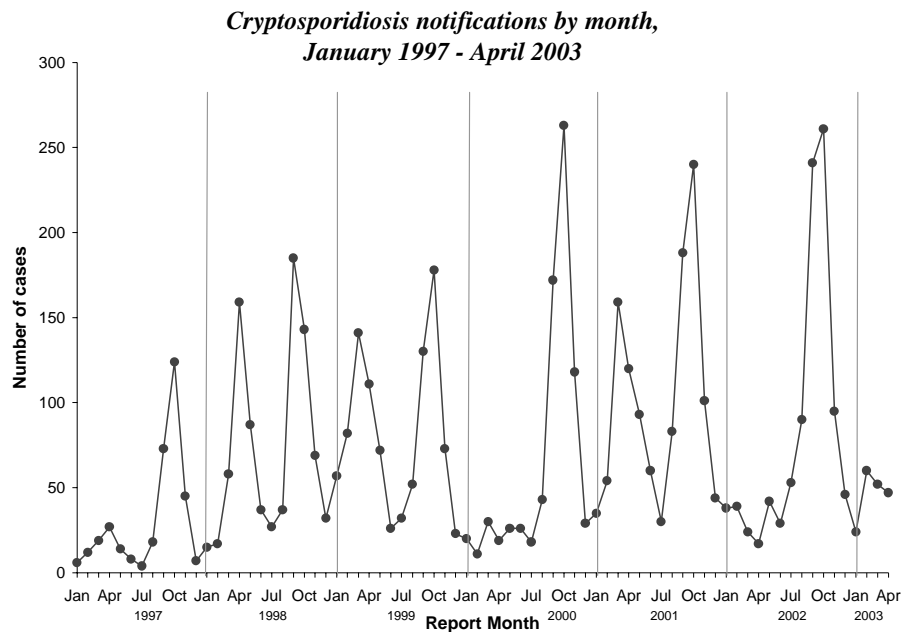
Risk factor information was infrequently recorded on the case report forms, with less than 20% of notifications in April including information on any given risk factor. Among those cases for whom this information was recorded, 59% 'ate out' during the incubation period, 40% reported exposure to farm animals, 27% consumed untreated water, and 14% had a history of contact with other symptomatic people.

At the time of this report, 700 notifications for the month of May 2003 had been received.

## **Cryptosporidiosis**

A total of 46 cases of cryptosporidiosis was notified in April 2003, compared to just 17 cases during April 2002. The majority (76%) of cases was aged nine years or less. Age-specific rates were highest in the '1 to 4 years' age group, with a monthly rate of 12.0 per 100 000, compared to an overall rate of 1.2 per 100 000. Incidence rates were highest in Wellington Health District with a monthly rate of 12.6 per 100 000 (32 cases). Since February 2003, at least half of the cases notified each month have been from Wellington Health District. Of the 38 April cases for whom this information was recorded, 30 (79%) reported recreational contact with water, in particular, swimming pool water (25 cases). Over the past three months, a large number of cases have been linked to one Wellington Aquatic Centre: 19 cases in February, 14 in March and 10 in April. Among April cases for whom this information was recorded, 53% reported contact with children in nappies or other faecal matter, and 11% reported contact with farm animals.

The following graph shows the number of notified cases of cryptosporidiosis each month since January 1997.



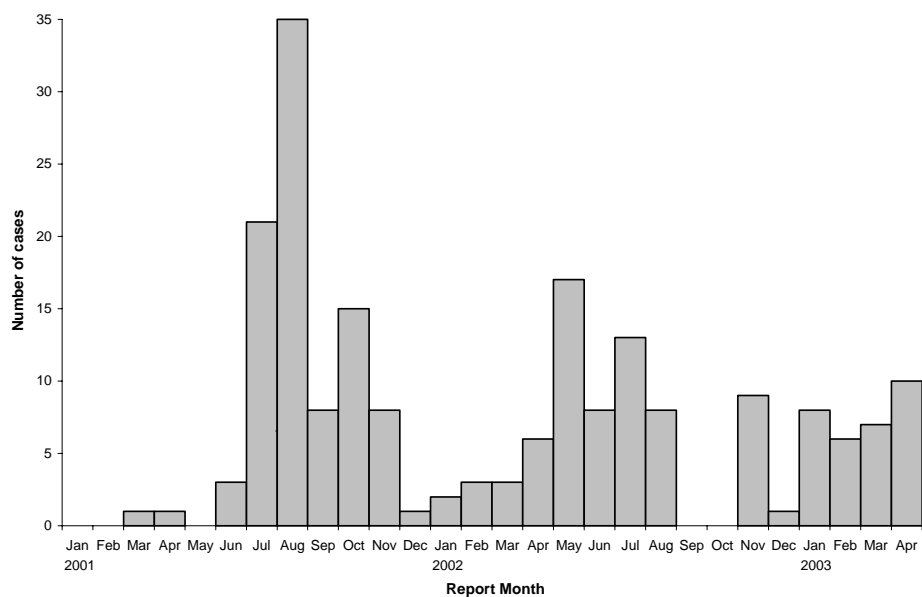
At the time of this report, 31 notifications for the month of May 2003 had been received.

## Dengue

Ten cases of dengue fever were notified in April 2003, all of whom were laboratory-confirmed. This brings the year-to-date total to 32 cases. All ten April cases reported travelling overseas during the incubation period for the disease. The most frequently implicated overseas destination was Fiji (6 cases), followed by Thailand (2 cases), and Tonga (1 case). The majority (79%) of cases notified since the beginning of the year have reported travel to Fiji. April cases ranged in age from 4 to 57 years. Eight cases were male and two were female. Hospitalisation status was recorded for all ten cases, 5 (50%) of whom were hospitalised.

The following graph shows the number of monthly dengue fever notifications since January 2001.

*Dengue fever notifications by month,  
January 2001 - April 2003*



At the time of this report, 14 dengue fever notifications for the month of March 2003 had been received.

### ***Haemophilus Influenzae* type b disease**

There was one probable case of *Haemophilus Influenzae* type b disease (Hib) notified in April 2003 by a specialist pathologist performing a post mortem examination on a female infant. Laboratory testing has since revealed that the case had *Haemophilus Influenzae*, although not type b. There have been two laboratory-confirmed cases of Hib in children notified this year to date: a 10-month-old infant from Manawatu Health District with Hib septicaemia, and a one-year-old child from Canterbury Health District with Hib meningitis (who later died). The former case had received one dose of vaccine, while the latter had received three doses. At the time of this report one further laboratory-confirmed case of Hib meningitis in a one-year-old case from Northland Health District had been notified. In contrast, there were no notified cases of Hib in children during 2003.

### **Leptospirosis**

Seven cases of leptospirosis were notified during April 2003, six of whom were laboratory-confirmed. In comparison, an average of 12 cases have been notified each month over the past 12-month period. Two of the three April cases for whom hospitalisation status was recorded were hospitalised. Three cases were reported from Tauranga Health District, whereas one case each was reported from Central Auckland, Waikato, Manawatu, and south Canterbury health districts. Six male cases were aged over 30 years and one female case was aged 18 years. Occupation was recorded for five cases: one meatworker, one recycling centre worker, one doctor, an unemployed

person, and a bridge builder working in American Samoa. Six cases were of European ethnicity and one was Maori.

At the time of this report, seven notifications for the month of May 2003 had been received.

## **Measles**

There were two cases of measles notified during April 2003, compared to seven cases in March, no cases in February and three cases in January 2003. Both April cases were aged one year. One case, from North West Auckland Health District, was unvaccinated, while the vaccination status of the other case, from Hawke's Bay Health District, was unknown. Neither case was laboratory-confirmed.

At the time of this report, ten notifications (including at least two laboratory-confirmed cases) for the month of May 2003 had been received.

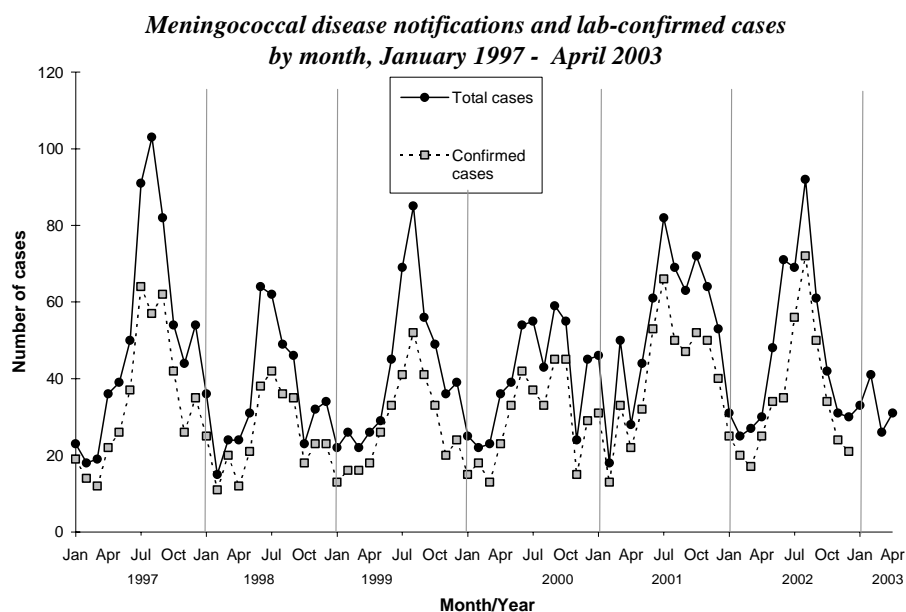
## **Meningococcal disease**

Based on the earliest<sup>1</sup> date available, 31 cases of meningococcal disease were notified during April 2003, of whom 16 (52%) were laboratory-confirmed. In comparison, a total of 30 cases was notified during the same month last year. Updated figures indicate that 26 cases were notified in March 2003, of whom 15 (58%) were laboratory confirmed. This brings the year-to-date total to 131 cases.

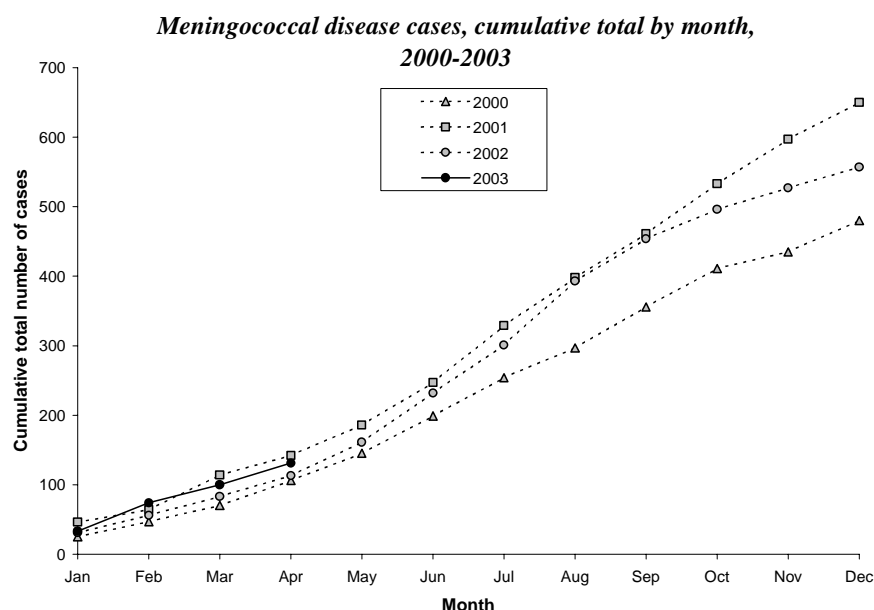
The following graph displays the number of notified and laboratory-confirmed meningococcal disease cases each month since January 1997.

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<sup>1</sup> The 'earliest' date refers to the earliest recorded date among the following: the report date, the onset date, the hospitalisation date and the death date. 'Earliest' date, as opposed to 'report date' alone, is used throughout the analysis of meningococcal disease notification data in this section.



The graph below shows the cumulative number of meningococcal disease cases by month since January 1997.



There were no fatalities reported among April notifications, although all 25 cases for whom hospitalisation information was recorded were hospitalised. Age-specific rates were highest in the '1 to 4 years' and '15 to 19 years' age categories, with monthly rates of 2.3 per 100 000 (5 cases) and 1.9 per 100 000 (5 cases), respectively. Ethnicity was recorded for 26 of the 31 cases. Of these, 12 (46%) were European, 8 (31%) were Pacific Peoples<sup>1</sup>, and 6 (23%) were of Maori ethnicity.

<sup>1</sup> By convention the 'prioritised' classification of ethnicity is used throughout this report - whereby, irrespective of the number of responses to the ethnicity question, cases are assigned to a *single* ethnic group based on the following hierarchy: Maori, Pacific Peoples, Other ethnicity, European. This can



The NZDep2001 index of socioeconomic deprivation could be linked to 28 cases whose addresses could be geocoded to at least street level. On a scale of one to ten, with ten representing the most deprived score, it was found that a score of 9 or 10 was associated with 10 (36%) cases.

Monthly incidence rates in April were highest in Rotorua Health District with a rate of 7.8 per 100 000, almost ten times the national monthly rate of 0.8 per 100 000. The next highest monthly rates were experienced by Gisborne (2.3), Tauranga (2.3), and Eastern Bay of Plenty (2.0) health districts. Annual notification rates over the 12-month period ending 30 April were highest in Rotorua (51.2) and Taupo (50.8) health districts.

## **Mumps**

Five cases of mumps were notified in April, bringing the year-to-date total to 21 cases. One case each was reported from Northland, Taranaki, Canterbury, Otago and Southland health districts. One case, aged 58 years, was laboratory confirmed. Other cases ranged in age between one and 10 years. Vaccination status was recorded for three cases, of whom two had been vaccinated and one had not. Three cases were male and two were female. There were also a further two laboratory-reported yet un-notified cases of mumps in April, aged 19 and 54 years, respectively.

At the time of this report three notifications for the month of May 2003 had been received.

## **Pertussis**

During April 2003 there were 21 cases of pertussis notified, bringing the year-to-date total to 170 cases. This is the smallest number of monthly notifications since the last epidemic in 2000 and 2001. Of the 21 April cases, 14 (67%) were either confirmed by serological means, by PCR or by isolation of *Bordetella pertussis*. One case was epidemiologically linked to confirmed case and the remaining cases were notified on clinical grounds alone.

Hospitalisation information was recorded on EpiSurv for 18 cases in April, of whom one case (aged one month) was hospitalised. Hospital discharge data<sup>1</sup> indicate that the number of pertussis hospitalisations in 2003 (to the end of April) totalled 30, of whom 23 (77%) were aged under one year. Among hospitalised cases, 10 (33%) were of Maori ethnicity, and 5 (17%) were Pacific Peoples. In contrast, just 14% of cases notified this year-to-date were of Maori ethnicity and 3% were Pacific Peoples.

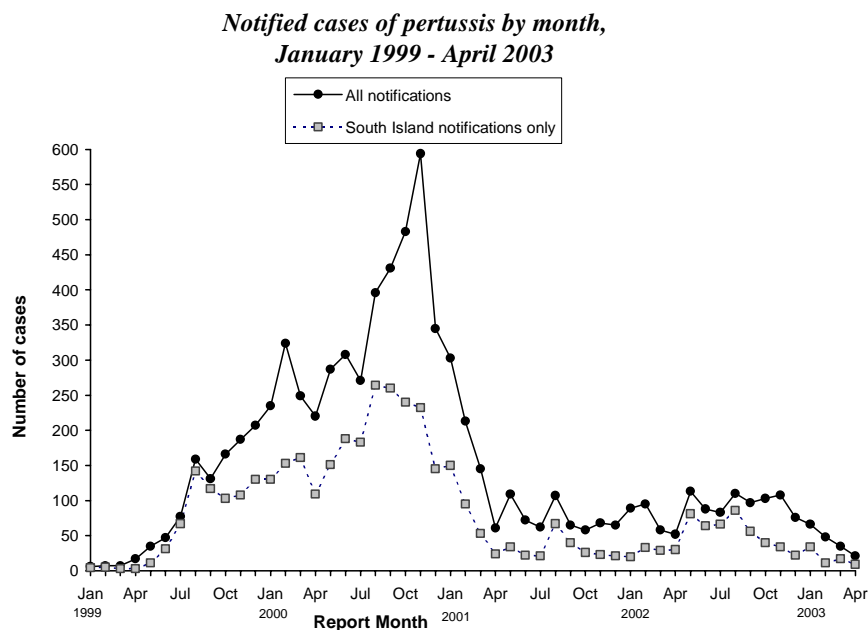
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frequently lead to an undercount of the number of cases identifying themselves as Pacific Peoples, since cases identifying with both Maori and Pacific Peoples are classified as Maori.

<sup>1</sup> Rebecca Kay from NZHIS is thanked for providing the raw hospital discharge data.

Among all health districts, Nelson-Marlborough reported the greatest number of cases (4 cases), followed by Canterbury (3 cases). A total of 9 cases (29%) was notified from the South Island. This is the smallest number of monthly notifications from the South Island since before the last epidemic.

The following graph shows the number of cases of pertussis notified nationally and from the South Island, each month since January 1999.



Notification rates in April were highest in the '1 to 4 years' age group with a monthly rate of 2.3 per 100 000 (5 cases). The female to male ratio was 1.6:1. The following table shows the number of doses of pertussis vaccine given to cases in each relevant age group.

*Age and vaccination status of pertussis notifications, April 2003*

Age group	Total Cases	Vaccination status <sup>1</sup>						
		Vaccinated (no dose info)	One dose	Two doses	Three doses	Four doses	Not vaccinated	Unknown status
0-<6 weeks	1	0	(0)	(0)	(0)	(0)	1	0
6 wks-<3 mths	0	0	0	(0)	(0)	(0)	0	0
3-<5 months	0	0	0	0	(0)	(0)	0	0
5-<15 months	0	0	0	0	0	(0)	0	0
15 mths-<5 yrs	5	1	0	0	0	1	3	0
5+ years	15	4	1	1	1	2	0	6
<b>Total</b>	<b>21</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>6</b>

<sup>1</sup> Bracketed numbers indicate cases ineligible for vaccination

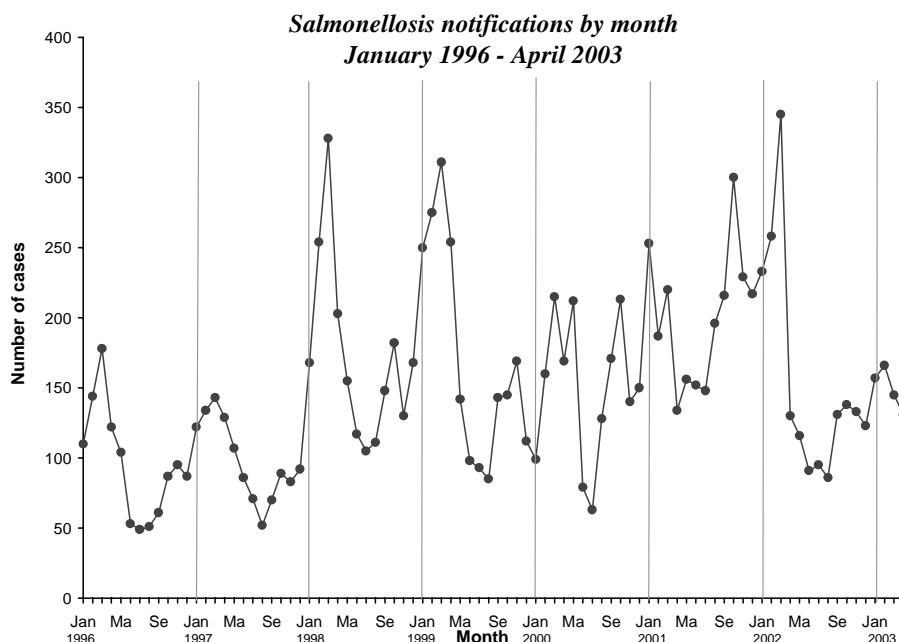
At the time of this report, 27 notifications for the month of May 2003 had been received.

## Salmonellosis

There were 134 cases of *Salmonella* notified in April 2003, compared to 130 cases during the same month the previous year. Age-specific rates were highest in the 'less than one year' and the '1 to 4 years' age groups, with monthly rates of 18.3 and 12.5 notifications per 100 000 respectively, compared to an overall monthly rate of 3.6 per 100 000. Hospitalisation information was recorded for 78 cases, of whom 10 (13%) were hospitalised.

April notifications were highest in Waikato Health District with 25 cases, compared to 17 notifications the previous month. Waikato also experienced the highest monthly incidence rate of 8.1 cases per 100 000.

The following graph shows the number of Salmonellosis notifications each month since January 1996.



Of the 60 April cases for whom overseas travel information was recorded, 5 (8%) had been overseas during the incubation period. Two cases had visited Fiji, and one case each had been in Thailand, Malaysia, and Indonesia.

A total of 131 (98%) April notifications could be matched to human cases identified by the ESR Enteric Reference Laboratory (ERL). Among these 131 cases, the most frequently identified serotype was *S. Typhimurium* (57%). However, *S. Typhimurium* phage type 160 was isolated from just 9% of April cases, compared to 22% of cases notified in January 2003, and 42% of cases notified in January 2002. Other frequently identified types among April notifications included *S. Infantis* (23 cases) and *S. Enteritidis* phage type 9a (12 cases). Whereas most types were distributed fairly uniformly around the country, *S. Infantis* was concentrated in the middle to upper North Island, with 11 of the 23 cases being reported by Waikato Health District.

At the time of this report, 103 notifications for the month of May 2003 had been received.

## **Tuberculosis**

There were 40 cases of tuberculosis notified during April 2003. In comparison, an average of 33 notifications per month were received over the past 12-month period. Of the 33 April cases for whom this information was recorded, 16 (48%) were hospitalised. Most (87%) cases were reported by hospital-based practitioners. Four cases were reported to have an immunosuppressive illness.

Most (85%) April cases were aged 15 years or over, although rates of disease were highest in the 'less than one year' age group, with a monthly incidence rate of 5.5 per 100 000 (3 cases). Ethnicity was recorded for 37 cases, of whom 19 were of 'Other' ethnicity, 14 were Pacific Peoples, two cases were Maori and two were European. Information on country of birth was recorded for 30 cases, of whom 23 (77%) were born overseas. Of the 23 overseas-born cases, 15 were of 'Other' ethnicity and eight were Pacific Peoples. The most commonly recorded overseas country of birth was India (10 cases). Six of the seven cases recorded as born in New Zealand, were Pacific Peoples. Of these, four cases had close contact with a confirmed case of the disease.

All except two April notifications were from the North Island, and over half (73%) the cases were from the Auckland region. The NZDep2001 index of socioeconomic deprivation could be linked to 33 cases whose addresses could be geocoded to at least street level. On a scale of one to ten, with ten representing the most deprived score, it was found that a score of 9 or 10 was associated with 50% of total cases.

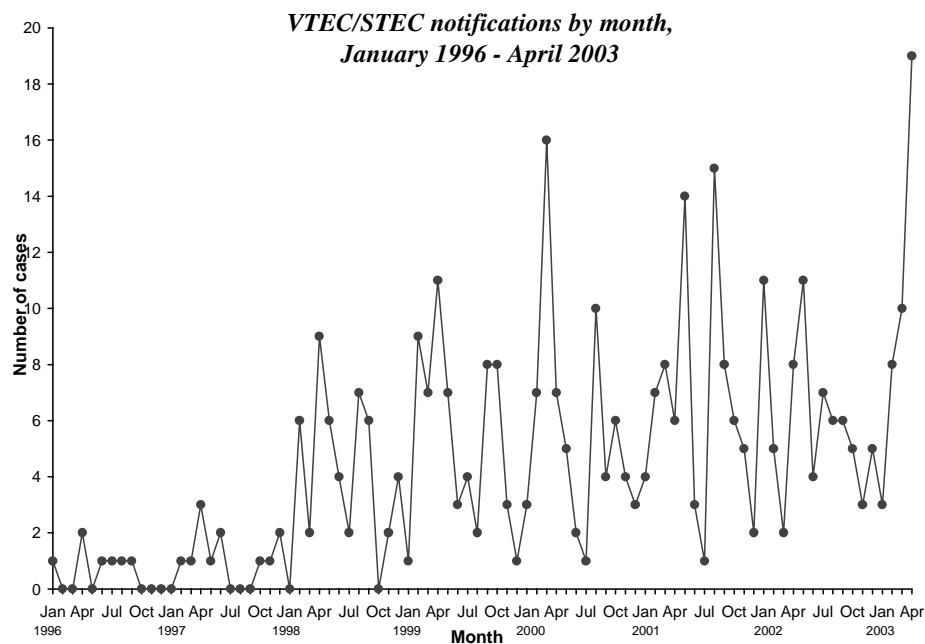
At the time of this report 30 notifications for the month of May 2003 had been received.

## **VTEC/STEC infection**

A total of 19 cases of VTEC/STEC infection was notified during April 2003, of whom 14 cases could be matched to isolates identified by the ESR Enteric Reference Laboratory (ERL). The April notification total was the highest ever recorded. One case of VTEC/STEC-associated haemolytic uraemic syndrome (HUS) was reported. Hospitalisation status was recorded for 12 cases, of whom 3 (25%) were hospitalised.

In April the greatest number of cases was reported from Waikato Health District (4 cases) followed by North West and South Auckland health districts (3 cases each). Monthly incidence rates were highest in the 'less than one year' age group (7.3 per 100 000), and next highest in the '1 to 4 years' age group (4.6 per 100 000). Fourteen (74%) cases were aged under four years. Ethnicity was recorded for 14 cases, of whom 13 were European, and one was Maori.

Six of the seven cases, for whom this information was recorded, reported contact with animals, although just one case reported contact with farm animals - namely chickens. Two cases reported consuming homekill meat, and one case had consumed raw milk during the incubation period. Among the 15 cases whose addresses could be accurately geocoded, 5 (33%) lived in areas classified as 'rural'. In comparison, approximately 12% of the New Zealand population resides in 'rural' areas. The following graph shows the number of notifications each month since January 1996.



At the time of this report, 18 notifications for the month of May 2003 had been received.

### 3. Deaths from notifiable diseases

The table below lists all deaths from notifiable diseases (with the exception of AIDS and CJD) that have been reported in 2003. Note that the 'notification date' (referring to the date on which the relevant Public Health Unit was first notified of the case) is not necessarily the same as the date on which the death was first reported. For a given disease, cases are listed in the order that the deaths were reported.

Disease	Health district	Age group (yrs)	Sex	Notification date	Death date
<i>Haemophilus influenzae</i> type B	Canterbury	1-4	female	21 Mar 03	16 Mar 03
	Canterbury	<1	female	29 Apr 03	7 Feb 03
Legionellosis	Central Auckland	70+	male	22 Jan 03	2 Jan 03
Listeriosis	Hutt	70+	female	10 Mar 03	26 Feb 03
Listeriosis – perinatal	Central Auckland	20+ wks gestation	N/A	6 Jan 03	24 Dec 02
Meningococcal disease	Southland	50-59	female	20 Jun 02	11 Aug 02
Pertussis	South Auckland	<1	male	6 Mar 03	4 Feb 03
Salmonellosis	Otago	40-49	female	24 Dec 02	31 Dec 02
Tuberculosis disease	Central Auckland	70+	female	7 Jan 03	21 Dec 02
	North West Auckland	70+	female	17 Jan 03	23 Jan 03
	Wellington	20-29	male	30 Jan 03	10 Jan 03
	Waikato	70+	male	4 July 02	4 Jul 02
	Canterbury	50-59	female	18 Feb 03	25 Mar 03
	South Auckland	1-4	female	28 Jan 03	4 May 03

## 4. Outbreaks

This Monthly Surveillance Report includes data on outbreaks for which final reports had been entered into EpiSurv during April 2003, and on outbreaks that were initially reported during April 2003 but were still listed as 'interim' as of the 13 May 2003.

### Final outbreak reports

Final reports on 11 outbreaks involving 96 cases were received in April 2003. Of these, three outbreaks of gastroenteritis occurring between October 2002 and April 2003, accounted for 54% of cases.

#### *Summary of final reported outbreaks, April 2003*

Organism/Toxin/Illness	Number of outbreaks	Total number of cases
<i>Bacillus cereus</i>	1	10
<i>Clostridium perfringens</i>	1	6
Gastroenteritis	3	52
<i>Giardia</i>	1	2
<i>Norovirus</i>	2	19
<i>Salmonella</i>	2	5
VTEC/STEC	1	2
<b>Total</b>	<b>11</b>	<b>96</b>

## Details of final reported outbreaks, April 2003<sup>1</sup>

Pathogen/ toxin/ illness	Health district <sup>2</sup>	Month <sup>3</sup>	No. ill	Lab Conf <sup>4</sup>	No. Hosp	Setting	Mode of transmission (vehicle/source)	Evidence <sup>5</sup>
Bacillus cereus	NL	Jan03-Feb03	10	3	0	Restaurant / cafe; takeaways	Foodborne (cooked rice)	Epi-H Lab Env
Clostridium perfringens	WN	Feb03	6	2	0	Restaurant / cafe	Foodborne (chicken liver pate)	Epi-H Lab
Gastroenteritis	AK	Oct02-Nov02	38			School	Person to person	Epi-H
Gastroenteritis	AK	Apr03	2	0	0	Other food outlet	Foodborne (pizza buns & meat pie)	Epi-H Env
Gastroenteritis	WN	Mar02	12		0	Restaurant / cafe	Foodborne	Epi-H
Giardia	AK	Mar03	0	2	0	Home	Person to person	Epi-H
Norovirus	AK	Mar03	3	2	0	Home	Foodborne (contaminated food at birthday party); person to person	Epi-H
Norovirus	RO	Mar03	16	2	0	Wedding function	Foodborne; person to person; fomites	Epi-H Oth
Salmonella	AK	Mar03	2	2	0		Person to person	Epi-H
Salmonella typhimurium PT 160	WG	Feb03	3	3	0	Home	Foodborne (chicken meal eaten by cases on 15/2/03). Waterborne (rainwater at household found to be faecally contaminated - 2/3 cases drunk water). Person to person	Epi-H Oth
VTEC/STEC 0157:H7	AK	Mar03-Apr03	2	2	0	Home	Person to person	Epi-H

<sup>1</sup> Blank fields indicate that no information had been entered in the applicable field in the outbreak report.

<sup>2</sup> Health district of the PHU that reported the outbreak: AK=Auckland, NL=Northland, WN=Wellington, RO=Rotorua, WG=Wanganui

<sup>4</sup> Number of microbiologically-confirmed cases.

<sup>5</sup> Evidence for mode of transmission and vehicle/source: Epi-H=cases had history of exposure to implicated source; Epi-S=statistical evidence from cohort or case-control study; Env=evidence from environmental investigation; Lab=pathogen/toxin/chemical suspected to have caused illness identified in implicated source or from investigation of food handler; Oth=other; Nil=no evidence collected.

## Interim outbreak reports

Interim reports on 19 outbreaks involving at least 60 cases were made in April. Among outbreaks, the most commonly recorded illness or pathogen was gastroenteritis, with 12 outbreaks reported. Details of these outbreaks will be provided once final reports have been received.



*Interim reported outbreaks, April 2003<sup>1</sup>*

Pathogen/toxin/ illness	Health district <sup>2</sup>	Month <sup>3</sup>	No. ill	Lab Conf <sup>4</sup>	No. Hosp	Setting	Evidence <sup>5</sup>
Bacillus cereus	OT	Mar03	7	1			
Campylobacter	RO	Apr03		2	2	Restaurant / cafe	Epi-H
Campylobacter	MB	Apr03	22	9	0	Camp	
Campylobacter jejuni	WC	Apr03		2	1	Home	
Gastroenteritis	AK	Apr03	3				
Gastroenteritis	AK	Apr03					
Gastroenteritis	AK	Apr03	0		0		
Gastroenteritis	AK	Apr03	3				
Gastroenteritis	AK	Apr03	3				
Gastroenteritis	AK	Apr03	4	3			
Gastroenteritis	AK	Apr03	2				
Gastroenteritis	AK	Apr03	2				
Gastroenteritis	AK	Apr03	6				
Gastroenteritis	AK	Apr03	0		0		
Gastroenteritis	AK	Apr03	3				
Gastroenteritis	AK	Apr03	0		0		
Norovirus	AK	Apr03	5		0	Play centre	
Norovirus	TK	Apr03		2	0	Barbeque and after function catering	
Norovirus	SO	Apr03	0		0		

<sup>1</sup> Blank fields indicate that no information had been entered in the applicable field in the outbreak report.

<sup>2</sup> Health district of the PHU that reported the outbreak: AK=Auckland, OT=Otago, MB=Marlborough, WC=West Coast, TK=Taranaki, SO=Southland.

<sup>3</sup> Month outbreak commenced.

<sup>4</sup> Microbiologically-confirmed cases.

<sup>5</sup> Evidence for mode of transmission and vehicle/source: Epi-H=cases had history of exposure to implicated source; Epi-S=statistical evidence from cohort or case-control study; Env=evidence from environmental investigation; Lab=pathogen/toxin/chemical suspected to have caused illness identified in implicated source or from investigation of food handler; Oth=other; Nil=no evidence collected.

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An electronic version of this report and previous month's reports may be downloaded from the Public Health Surveillance section on ESR's Website ([www.esr.cri.nz](http://www.esr.cri.nz)).

## 5. National surveillance data and trends

### Disease incidence and rates

Disease <sup>1</sup>	Current year - 2003 <sup>2</sup>			Previous year - 2002		
	Apr 2003 cases	Cumulative total since 1 January	Current rate <sup>3</sup>	Apr 2002 cases	Cumulative total since 1 January	Previous rate <sup>3</sup>
AIDS	1	12	0.6	3	8	0.6
Campylobacteriosis	770	5009	355.5	548	4216	302.6
Cryptosporidiosis	46	183	27.8	17	119	28.4
Dengue fever	10	32	2.4	6	14	2.7
Gastroenteritis <sup>4</sup>	71	266	28.3	72	296	25.6
Giardiasis	125	533	40.7	132	559	44.2
<i>H. influenzae</i> type b disease	1	4	0.2	0	0	0.2
Hepatitis A	3	29	1.7	18	72	2.6
Hepatitis B (acute) <sup>5</sup>	7	22	1.8	5	21	1.4
Hepatitis C (acute) <sup>5</sup>	6	14	1.4	4	16	1.6
Hydatid disease	0	0	0.1	0	0	0.2
Influenza <sup>6</sup>	0	5	18.1	16	25	17.7
Lead absorption	4	47	2.9	5	28	3.1
Legionellosis <sup>6</sup>	6	22	1.5	3	14	1.3
Leprosy	0	1	0.1	1	1	0.1
Leptospirosis	7	40	3.5	14	51	3.2
Listeriosis	2	10	0.6	1	7	0.5
Malaria	2	15	1.3	6	27	1.4
Measles	2	12	0.7	2	8	1.9
Meningococcal disease <sup>7</sup>	32	135	15.4	32	116	16.8
Mumps	5	21	1.8	4	18	1.5
Paratyphoid	0	7	0.5	1	4	0.8
Pertussis	21	170	25.3	51	291	24.2
Rheumatic fever	19	48	2.6	1	42	3.3
Rickettsial disease	0	0	0.2	0	0	0.1
Rubella	1	9	0.9	5	9	0.7
Salmonellosis	134	607	40.7	130	965	69.2
SARS	0	0	0	0	0	0
Shigellosis	9	28	2.6	12	44	3.5
Tetanus	1	1	0.1	0	0	0.1
Tuberculosis	40	133	10.8	26	112	9.6
Typhoid	0	9	0.5	2	13	0.7
VTEC / STEC infection	19	40	2.3	8	26	2.0
Yersiniosis	18	161	12.0	33	190	12.2

**Notes:** <sup>1</sup> Other notifiable infectious diseases reported in April :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 April 2003) or the previous year (12 months up to and including April 2002), expressed as cases per 100 000

<sup>4</sup> Cases of gastroenteritis from a common source or foodborne intoxication eg, staphylococcal intoxication or toxic shellfish poisoning

<sup>5</sup> Only acute cases of this disease are currently notifiable

<sup>6</sup> Surveillance data based on laboratory-reported cases only

<sup>7</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 January 2003 and preceding 12 months

Disease	Apr 2003	Mar 2003	Feb 2003	Jan 2003	Dec 2002	Nov 2002	Oct 2002	Sep 2002	Aug 2002	Jul 2002	Jun 2002	May 2002	Apr 2002
AIDS	1	2	5	4	0	2	0	4	1	1	1	1	3
Campylobacteriosis	770	1189	1265	1785	1273	1042	1162	1176	1124	1006	820	675	548
Cryptosporidiosis	46	53	60	24	45	95	261	241	90	53	29	42	17
Dengue fever	10	7	7	8	1	9	0	0	8	13	8	17	6
Gastroenteritis <sup>2</sup>	71	94	52	49	142	68	154	69	69	62	143	84	72
Giardiasis	125	147	130	131	114	110	112	107	122	128	128	167	132
Haemophilus influenzae type b	1	1	0	2	0	0	0	0	0	0	1	2	0
Hepatitis A	3	8	12	6	3	8	3	2	2	1	7	9	18
Hepatitis B (acute) <sup>3</sup>	7	3	4	8	10	3	3	5	6	6	7	7	5
Hepatitis C (acute) <sup>3</sup>	6	2	1	5	5	3	1	7	7	3	5	6	4
Hydatid disease	0	0	0	0	1	0	0	0	1	0	0	0	0
Influenza <sup>4</sup>	0	5	0	0	0	1	22	103	136	230	151	30	16
Lead absorption	4	24	15	4	3	9	6	5	10	8	7	14	5
Legionellosis <sup>4</sup>	6	7	4	5	4	2	4	4	4	7	5	4	3
Leprosy	0	0	1	0	0	1	0	0	0	1	1	0	1
Leptospirosis	7	9	8	16	8	14	10	13	6	14	10	16	14
Listeriosis	2	3	3	2	1	2	3	1	3	2	0	0	1
Malaria	2	1	9	3	2	3	3	6	3	6	5	6	6
Measles	2	7	0	3	0	2	2	0	4	3	0	2	2
Meningococcal disease <sup>5</sup>	32	28	41	34	33	28	42	72	87	65	68	45	32
Mumps	5	5	5	6	3	6	10	6	4	4	6	7	4
Paratyphoid	0	1	3	3	1	1	0	0	2	2	3	3	1
Pertussis	21	35	48	66	76	108	103	97	110	83	88	112	51
Rheumatic Fever	19	13	2	14	4	12	8	4	8	4	2	9	1
Rickettsial disease	0	0	0	0	0	0	0	2	2	0	1	1	0
Rubella	1	2	3	3	2	1	1	1	5	1	5	8	5
Salmonellosis	134	148	167	158	123	135	138	131	86	95	91	116	130
SARS	0	0	0	0	0	0	0	0	0	0	0	0	0
Shigellosis	9	3	6	10	9	4	8	4	8	12	10	13	12
Tetanus	1	0	0	0	0	0	0	0	0	0	0	1	0
Tuberculosis	40	27	30	36	36	34	47	28	37	40	22	27	26
Typhoid	0	2	6	1	1	0	3	0	0	2	1	3	2
VTEC/STEC infection	19	10	8	3	5	3	5	6	6	7	4	11	8
Yersiniosis	18	44	43	56	31	49	45	26	30	30	33	42	33

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

<sup>2</sup> Cases of gastroenteritis from a common source or foodborne intoxication eg, staphylococcal intoxication or toxic shellfish poisoning

<sup>3</sup> Only acute cases of this disease are currently notifiable

<sup>4</sup> Surveillance data based on laboratory-reported cases only

<sup>5</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 health district - April 2003

Cases this month

Current rate<sup>1</sup>

Disease	Cases for April 2003, <sup>2</sup> and current rate <sup>1,2</sup> by health district <sup>3,4</sup>																							
	Northland	NW Auck	Central Auck	South Auck	Waikato	Tauranga	Eastern BoP	Gisborne	Rotorua	Taupo	Taranaki	Ruapehu	Hawkes Bay	Wanganui	Manawatu	Wairarapa	Wellington	Hutt	Nelson-Marl	West Coast	Canterbury	South Cant	Otago	Southland
AIDS <sup>5</sup>	0	1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0			0.6	0.8	0	0	1.6	0	0	0	0.7	0	0	0	4.1	0.8	0	0	0	0	0	0
Campylobacteriosis	20	119	94	76	67	25	3	6	8	7	13	0	20	4	11	6	86	36	18	4	72	25	31	19
	211.2	431.9	440.8	351.2	391.4	291.9	130.5	250.3	310.1	349.1	313.2	126.0	315.5	272.3	171.2	256.1	532.5	381.4	187.1	296.7	335.1	428.7	346.8	363.8
Cryptosporidiosis	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	32	2	2	0	6	0	1	0
	5.0	7.7	6.8	5.6	38.6	16.3	4.1	13.7	17.1	57.1	37.8	42.0	40.4	25.7	40.8	18.3	90.3	22.0	21.2	59.3	25.4	70.4	51.8	42.6
Dengue fever	1	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	1.4	2.6	7.9	2.7	1.3	1.5	2.0	0	1.6	3.2	1.0	0	0	1.7	2.0	2.6	2.0	3.0	0	0	2.5	0	0.6	0.9
Gastroenteritis	0	9	8	6	3	1	0	0	2	2	0	0	0	0	0	2	6	4	1	0	13	0	4	10
	8.6	23.0	29.9	15.7	10.7	3.9	0	38.7	29.5	31.7	7.8	0	2.1	27.4	21.1	36.6	35.5	28.8	6.5	9.9	81.2	117.7	21.7	25.9
Giardiasis	3	22	19	7	19	7	0	0	5	0	0	1	7	2	4	2	4	2	3	0	14	0	2	2
	22.1	41.2	66.9	31.7	54.8	45.7	12.2	15.9	43.4	47.6	10.7	21.0	64.8	44.5	31.3	28.7	54.4	49.3	27.8	36.3	33.9	23.0	33.1	15.7
<i>H. influenzae</i> type b disease	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	0	0.2	0	0	0	0.8	0	0	0	0	0	0	0.7	0	0.7	0	0	0	0	0	0.7	0	0	0
Hepatitis A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0
	1.4	1.6	4.6	2.7	1.3	0.8	2.0	0	0	3.2	0	0	3.5	0	1.4	0	2.0	1.5	2.5	0	0.7	1.3	0	0
Hepatitis B	0	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0
	2.1	1.6	3.0	2.1	1.6	2.3	0	15.9	0	6.3	1.9	7.0	2.1	3.4	0.7	5.2	0.8	1.5	2.5	0	1.0	0	0.6	0
Hepatitis C	1	0	2	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
	1.4	0.7	1.1	0.8	0.3	7.0	2.0	2.3	4.7	3.2	1.0	0	2.8	1.7	2.0	2.6	2.4	0	0	6.6	0.7	2.6	0	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	0
	0	0.2	0.0	0.3	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
Lead absorption	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0
	4.3	1.4	3.3	1.1	3.9	0	0	2.3	0	0	8.7	0	4.9	3.4	8.2	5.2	1.6	0.8	1.6	0	3.7	2.6	6.0	1.9
Legionellosis <sup>6</sup>	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	2	0	0	0
	0.7	1.4	1.1	0.3	0	1.5	2.0	0	1.6	3.2	1.9	7.0	1.4	1.7	0	5.2	2.4	3.0	0.8	3.3	3.2	1.3	3.0	0
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
	0	0	0.3	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptospirosis	0	0	1	0	1	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0
	5.7	0.7	0.3	1.1	4.9	4.6	2.0	6.8	0	0	4.8	28.0	19.5	6.9	6.8	2.6	0	0	9.8	3.3	1.2	14.1	3.6	2.8
Listeriosis	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.7	0.9	1.1	0.5	0.3	3.1	0	0	0	0	0	0	0	0	1.4	0	0	0.8	0	0	0.5	0	0	0.9
Malaria	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	1.4	1.1	1.3	2.9	1.5	0	0	0	3.2	1.0	7.0	0.7	0	1.4	0	2.4	0.8	0.8	0	1.5	1.3	0.6	0.9
Measles	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	0	0.7	0	0.3	0.3	0.8	0	0	0	0	0	0	1.4	0	0	0	0.4	1.5	0.8	16.5	1.5	2.6	0	0
Meningococcal disease <sup>6</sup>	2	3	5	5	0	3	1	1	5	0	0	0	1	0	2	0	1	0	0	0	1	0	1	1
	22.1	8.6	15.5	24.2	11.3	30.2	30.6	13.7	51.2	53.9	9.7	14.0	21.6	13.7	6.1	7.8	11.8	10.6	1.6	23.1	8.0	9.0	26.5	13.9
Mumps	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	1
	2.1	1.6	1.4	1.6	1.0	2.3	0	0	1.6	0	1.0	0	4.2	1.7	0	2.6	1.2	0.8	4.1	6.6	1.5	1.3	5.4	2.8
Paratyphoid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.7	1.2	1.1	0.8	0	0	0	0	0	0	0	0	2.1	0	0	0	0.8	0	0	0	0	0	0.6	0
Pertussis	0	2	2	1	1	0	0	0	0	0	1	1	0	0	1	0	2	1	4	1	3	1	0	0
	3.6	17.7	5.7	6.1	19.1	13.2	4.1	0	3.1	9.5	21.3	14.0	11.8	78.8	25.1	13.1	16.9	35.6	70.3	244.0	45.1	189.4	2.4	25.0
Rheumatic fever	1	1	2	10	0	0	1	1	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	5.0	1.9	4.1	9.6	2.6	2.3	4.1	4.6	4.7	0	0	7.0	1.4	1.7	0	2.6	2.8	0.8	0.8	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
	0	1.4	0	0	0	0	0	0	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	1	0	0	0	0	0	0	0	0	0	0	0
	0	0.2	0.5	0	0	1.5	4.1	2.3	0	0	0	0	8.4	0	0	2.6	1.6	0	3.3	6.6	0.2	0	0.6	0
Salmonellosis	7	12	8	10	25	3	0	1	3	2	3	0	3	2	5	3	8	7	4	0	19	5	3	1
	35.0	38.2	38.1	32.7	55.1	24.8	38.7	54.6	45.0	41.3	27.1	42.0	43.9	42.8	31.3	52.3	44.1	31.1	28.6	23.1	44.1	70.4	39.7	72.2
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	0	0	0	0	0	0
Shigellosis	0	1	2	2	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0
	1.4	2.1	6.5	4.5	1.6	0.8	0	0	3.1	0	1.0	0	2.1	1.7	0	5.2	2.0	0.8	0.8	0	3.5	3.8	3.0	0
Tetanus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0	1.3	0	0
Tuberculosis	0	3	15	11	1	3	0	0	0	0	0	0	0	0	0	0	3	2	1	0	0	1	0	0
	5.7	17.2	23.4	18.1	7.8	8.5	2.0	4.6	1.6	6.3	1.9	0	25.1	3.4	3.4	5.2	11.4	13.7	1.6	0	4.7	5.1	4.2	0.9
Typhoid	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	0.2	0.5	2.7	0	0	0	0	0	0	0	0	0	0	0	0	1.2	1.5	0	0	0.2	0	0	0
VTEC / STEC	1	3	1	3	4	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	0
	2.9	0.9	0.8	1.6	6.5	2.3	14.3	0	0	3.2	5.8	0	1.4	1.7	1.4	0	0.8	0	0	0	3.5	6.4	1.8	3.7
Yersiniosis	1	1	5	0	3	0	0	0	1	0	0	0	0	1	0	0	1	2	0	2	0	1	0	0
	2.9	16.5	18.2	9.3	11.0	13.9	6.1	20.5	7.8	15.9	1.9	14.0	9.1	5.1	5.4	15.7	16.2	9.9	1.6	59.3	11.7	20.5	10.8	6.5

1 Current rate is based on the cumulative total for the 12 months up to and including April 2003 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 health district

4 Further data are available from