

MONTHLY SURVEILLANCE REPORT

This monthly report contains data and commentary on disease trends and events up to and including the end of March 2003. It delivers timely information for use by designated officers and public health service staff. The data contained is based on information recorded on EpiSurv by public health service staff prior to 7 April 2003. This information may be updated over time, thus the results are provisional only.

Table of contents

1. MAJOR SURVEILLANCE TRENDS	2
2. KEY DISEASE TRENDS	3
Campylobacteriosis	3
Cryptosporidiosis	4
Dengue fever	5
Giardiasis	6
Lead absorption	7
Measles	7
Meningococcal disease	8
Pertussis	9
Salmonellosis	10
Shigellosis	11
Tuberculosis	11
3. UNUSUAL NOTIFICATIONS	12
A case of cyanide poisoning	12
Background	12
Methods	12
Results of Cyanide Testing	12
Discussion	12
Conclusion	13
References	13
4. DEATHS FROM NOTIFIABLE DISEASES	14
5. OUTBREAKS	15
Final outbreak reports	15
Interim outbreak reports	16
6. NATIONAL SURVEILLANCE DATA AND TRENDS	17
Disease incidence and rates	17
Monthly totals for March 2003 and preceding 12 months	18
Surveillance data by health district for March 2003	19

1. Major Surveillance Trends

- *Campylobacteriosis*: There were fewer notifications of Campylobacteriosis in March 2003 (1189) than in January (1784) or February (1266). This March had the highest number of notifications compared to the same month in the last nine years.
- *Cryptosporidiosis*: 52 cases of cryptosporidiosis were notified in March 2003, more than the 24 cases reported in March 2002. Most cases were seen in Wellington (33) and Hutt (6) Health Districts.
- *Dengue fever*: 7 dengue fever notifications were received in March. Of these, six cases reported recent travel to Fiji.
- *Lead absorption*: 24 lead absorption notifications were received in March, compared to seven the same time last year.
- *Meningococcal disease*: 27 cases were reported in March 2003, fewer cases than the 38 reported in February 2003.
- *Pertussis*: 33 cases were notified during March 2003, and one death was reported. This is the fewest monthly notifications since the epidemic in 2000 and 2001.
- *Salmonellosis*: 147 notifications were received in March 2003. Southland experienced the highest monthly incidence rate of 8.3 cases per 100 000 - over twice the national crude incidence rate of 3.9 per 100 000.

2. Key disease trends

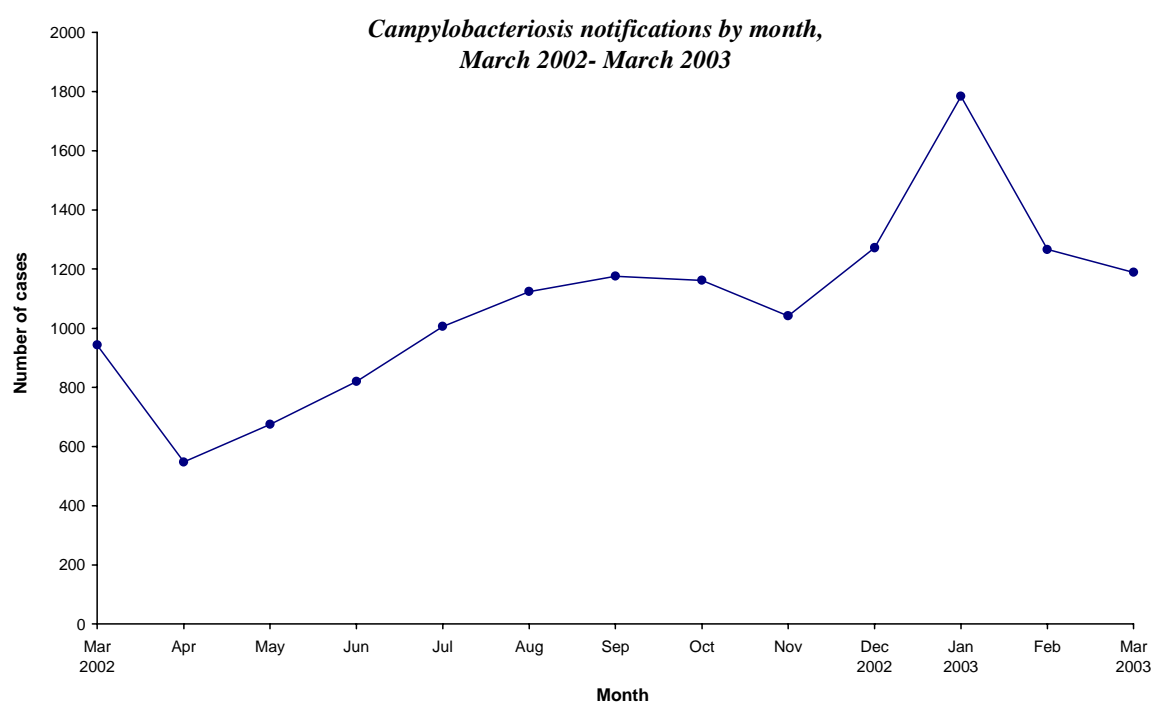
Campylobacteriosis

There were 1189 cases of campylobacteriosis notified during March 2003, which is more than the 942 cases in March 2002. Although this is a 34% decrease from a peak of 1788 cases notified in January 2003, it is still the highest number of notifications for the month of March recorded in the past nine years. This appears to be linked to the epidemic last summer, when the highest number of cases was recorded. Incidence rates in March 2003 were highest in the '20 to 29 years' age group with a monthly rate of 50.7 cases per 100 000 (247 cases). The '1 to 4 years' age group had a monthly rate of 45.8 per 100 000 population (99 cases).

Approximately 88% of March cases (for whom ethnicity was recorded) were of European ethnicity. There were 35 hospitalisations (9.2% of cases for whom this information was recorded).

Among all health districts, the incidence rate in March was highest in Wellington, with a monthly rate of 51.6 per 100 000 (131 cases), compared to a national rate of 31.8 per 100 000. Monthly rates were next highest in Canterbury and Hutt health districts, with rates of 48.6 and 35.6 per 100 000, respectively.

The following graph shows campylobacteriosis over the last 12 months.



Risk factors were infrequently recorded in the case report forms. Among cases for whom this information was recorded, 20.7% (34) had contact with farm animals during the incubation period, 16.8% (25) reported recreational contact with water, 14.4% (22) had consumed untreated water, 15.9% (25) had contact with faecal matter, and 12.2% (34) were food handlers.

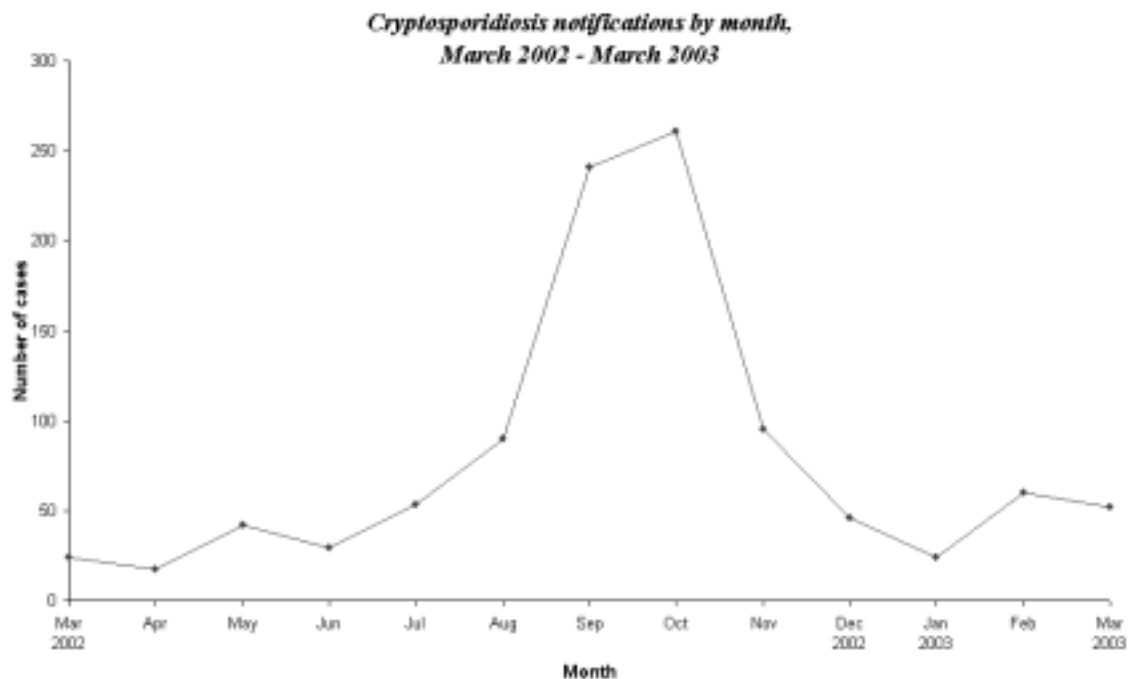
Cryptosporidiosis

Fifty-two cases of cryptosporidiosis were notified in March 2003, more than the 24 cases reported in March 2002.

The majority (65.4%) of cases were aged nine years or less. Age-specific rates were highest in the '1 to 4 years' age group, with a monthly rate of 9.3 per 100 000, compared to an overall rate of 1.4 per 100 000. Thirty-three (63.5%) cases were reported from Wellington Health District. Incidence was next highest in Hutt Health District with six cases (11.5%).

Among cases for whom this information was recorded, 73.2% (30) reported recreational contact with water. Contact with faecal matter was a risk for 52.6% (20) of cases, and 12.5% (5) reported contact with untreated food or water.

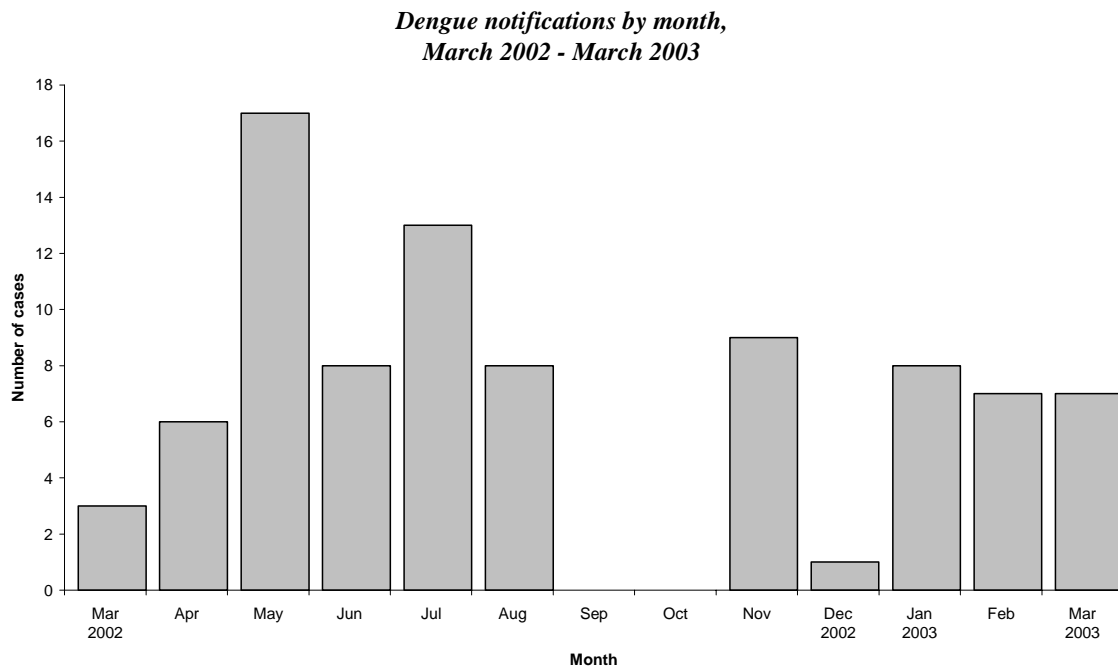
The following graph shows Cryptosporidiosis over the last 12 months.



Dengue fever

Seven cases of dengue fever were notified in March 2003, six cases were laboratory-confirmed. So far, in 2003, 22 cases have been reported. All cases for whom travel information had been recorded (6) had been in Fiji during the incubation period. The cases ranged in age from 15 to 54 years. Two cases were male and five were female. Five cases were hospitalised (status recorded for all cases).

The following graph shows the number of monthly dengue notifications since March 2002.

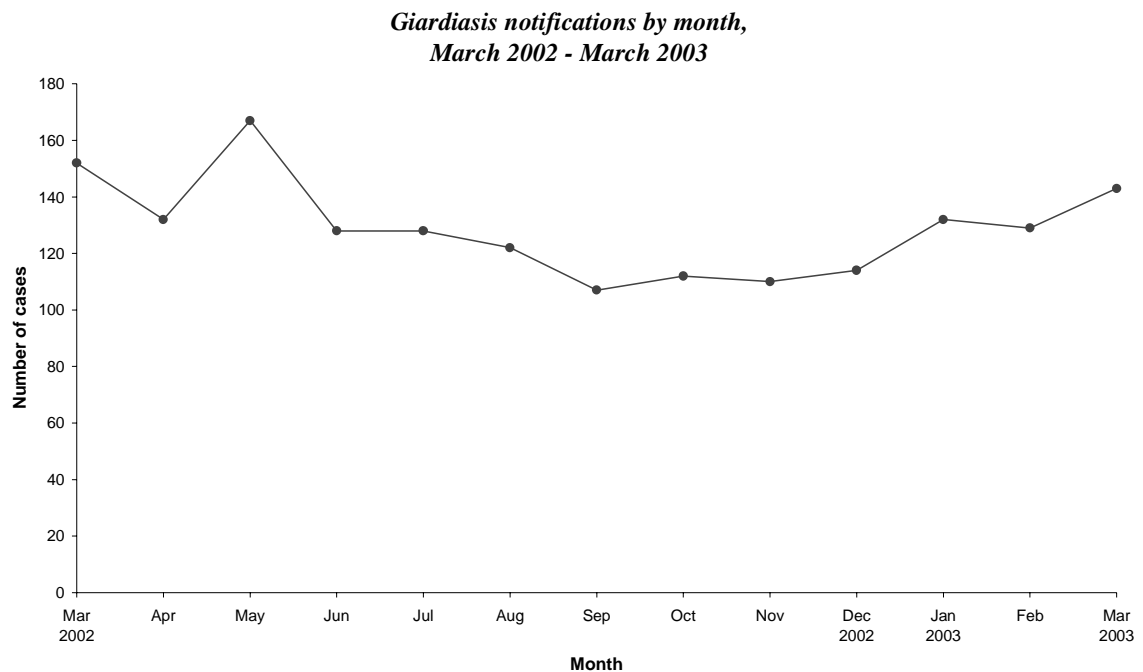


Giardiasis

One hundred and forty-three cases of giardiasis were notified during March 2003, 9 cases less than in March 2002. Central Auckland experienced the highest monthly rate of 7.1 cases per 100 000, followed by Tauranga (7.0), and Hawkes Bay (6.3). The national monthly rate was 3.8 cases per 100 000.

Risk factors were infrequently recorded in the case report forms. Among cases for whom this information was recorded 48.3% (14) had contact with recreational water, 30.0% (9) had consumed untreated water. Overseas travel was a risk factor for 23.9% (11) of cases, and 23.7% (9) had contact with another case.

As can be seen from the following graph, giardiasis typically exhibits less seasonal variation than other enteric diseases under surveillance. Prevalence fluctuates around 125 notifications per month.



Lead absorption

Twenty-four cases of lead absorption were notified during March 2003, compared to seven during March 2002. Of these cases, one was aged under 1 year, 4 cases were between 1 and 9 years of age, and the remaining cases (19) were aged '20 to 69' years.

Risk factor information was available for 11 cases. Of these, eight cases were recorded as living in a pre-1970s built home and six had the old paints stripped. The remaining three cases were exposed to lead through: hobby (making train models), occupational exposure as a demolition worker, from pellets in the back from gunshot wounds.

Measles

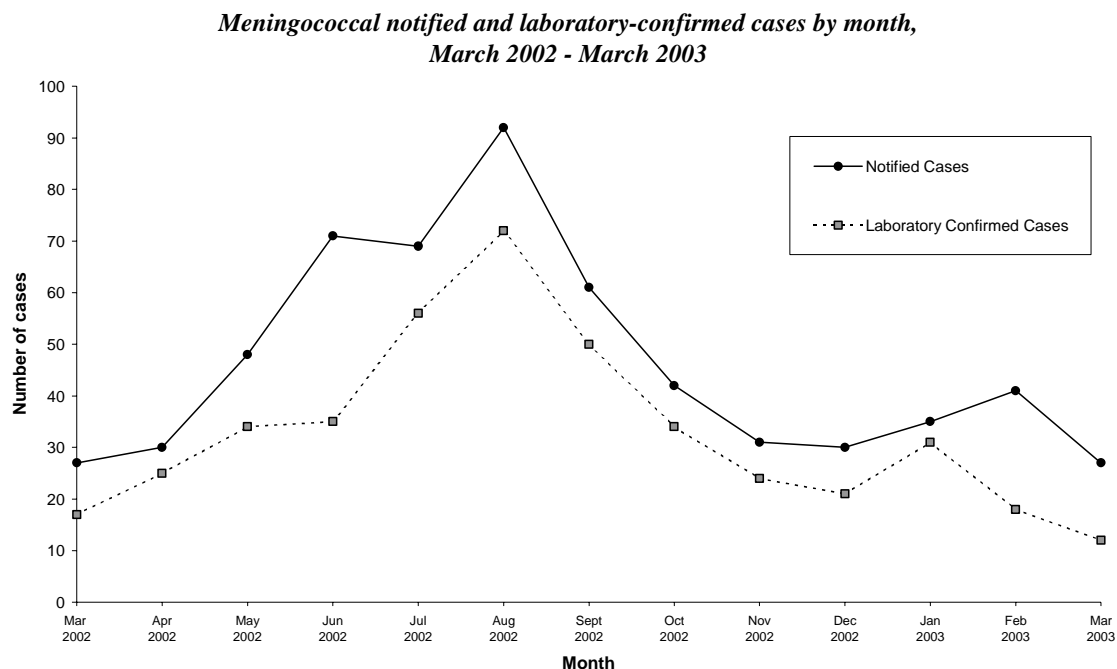
Seven cases of measles were notified during March 2003, bringing the year to date total this year to ten cases. There were more notifications in March than in any other month this year. The cases were distributed across five health districts (Tauranga, Hawkes Bay, Wellington, Canterbury and South Canterbury). The cases were aged from nine months to nine years, and no cases indicated overseas travel. The one laboratory-confirmed case had not been immunised.

Meningococcal disease

Based on the earliest¹ date available, 27 cases of meningococcal disease were notified during March 2003, bringing the total to 103 this year. Twenty-seven cases were also notified in March last year, however the equivalent year to date total for 2002 was slightly lower (83 cases).

Only 12 of the 27 cases for March 2003 were laboratory-confirmed as of 28 April 2003. Nearly 60% of the 103 cases this year have been laboratory-confirmed.

The following graph displays the number of notified and laboratory-confirmed meningococcal disease cases each month since March 2002.



No fatalities were reported in March. Information on hospitalisation was recorded for 25 (92.6%) of the March cases; all but one was hospitalised. The rate was highest in the 'less than one year' age group, with a monthly rate of 7.3 per 100 000 (4 cases). Ethnicity was recorded for 25 of the 27 cases, 11 (44%) were of European ethnicity, 8 (32%) Maori, 5 (20%) Pacific Peoples, and one was of 'Other ethnicity'. Most cases were notified from Northland (5 cases), South Auckland (5), Central Auckland (4) and Otago (4) Health Districts.

¹ 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.

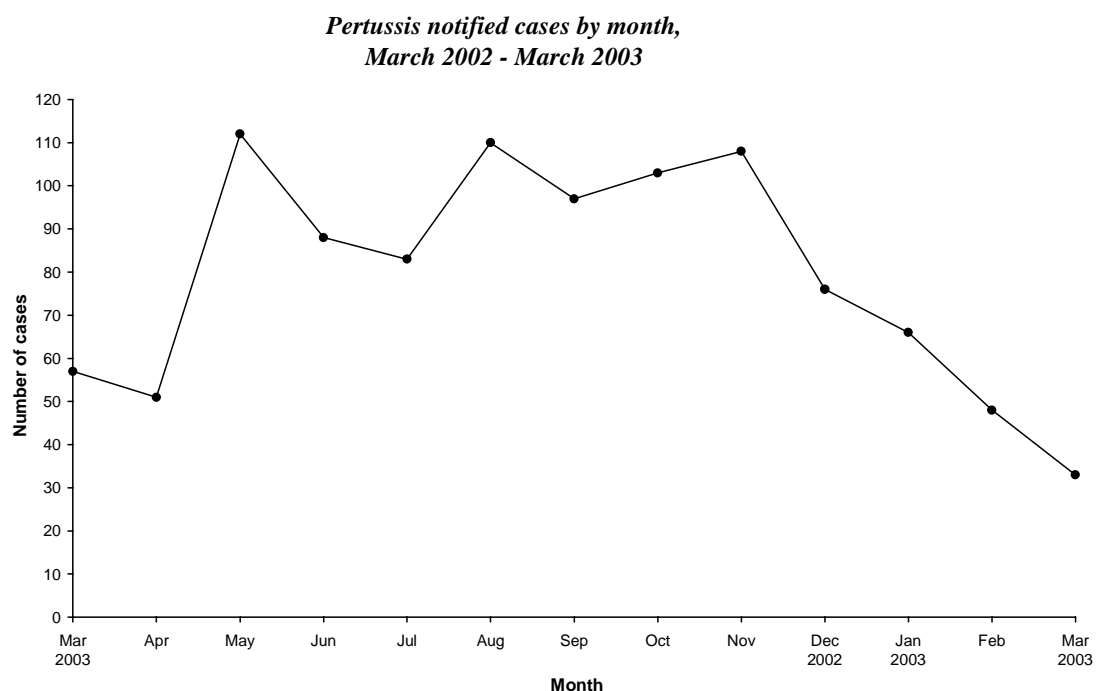
Pertussis

During March 2003 there were 33 cases of pertussis notified. 57.6% were laboratory-confirmed either by isolation or antibody testing.

There have been six hospitalisation (22.2% of the 27 cases for whom this information was recorded) and one death reported. Five of the hospitalised cases were infants under one year of age, the remaining case was aged 67 years.

West Coast Health District experienced the highest monthly incidence rate of 16.5 cases per 100 000, compared to a crude national rate of 0.9 per 100 000. 17 cases (51.5%) were notified from the South Island.

The following graph shows pertussis over the last 12 months.



Ethnicity was recorded for 26 of the 33 March notifications. Of these, 18 cases (69%) were of European ethnicity, 5 (19%) Maori, Pacific people (2 cases), and one case of 'Other' ethnicity. Cases ranged in age from one month to 73 years. Notification rates were highest in the 'less than one year' age group and next highest in the '15 to 19 years' age group with monthly rates of 11.0 per 100 000 (6 cases) and 15 (4 cases), respectively.

Salmonellosis

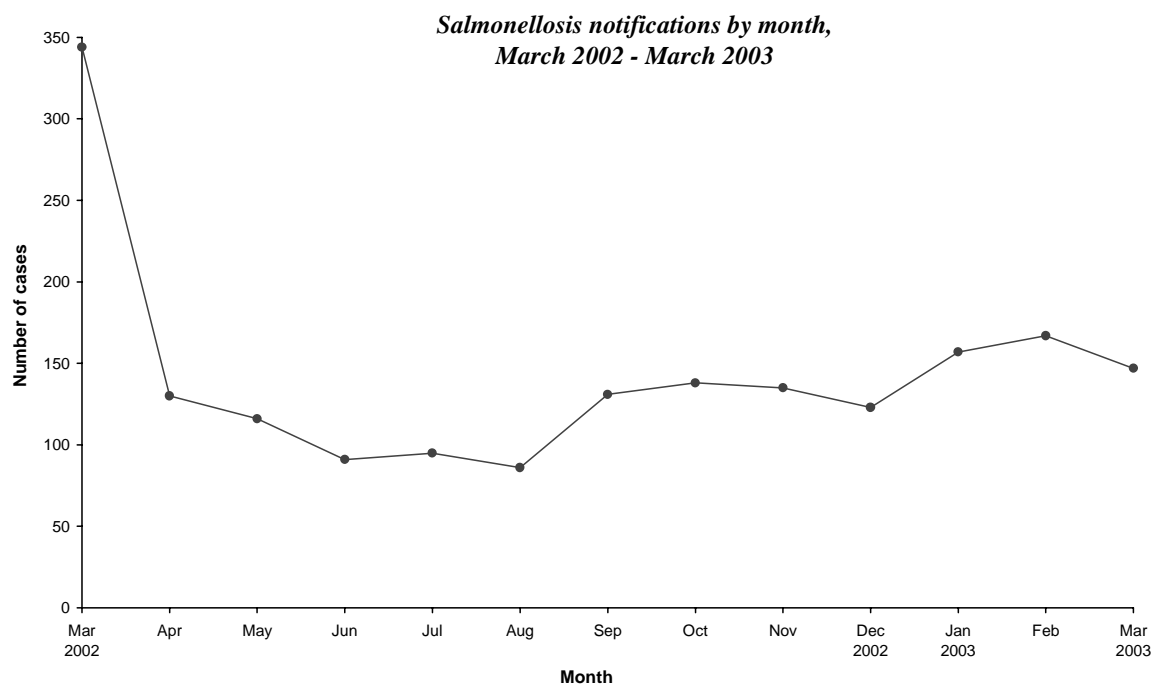
There were 147 cases of *Salmonella* notified in March 2003, compared to 166 cases the previous month. The number of monthly notifications is less than the previous autumn peak of 345 cases in March 2002.

Age-specific rates were highest in the 'less than one year' and the '1 to 4 years' age groups, with monthly rates of 22.0 and 14.8 notifications per 100 000 respectively, compared to an overall national monthly rate of 3.9 per 100 000. Hospitalisation information was recorded for 91 cases, of whom 11 (12.1%) were hospitalised.

Of the 76 March cases for whom overseas travel information was recorded, 10 (13.2%) had been overseas during the incubation period. Countries visited included Fiji (4), Thailand (3), Australia (2), and Malaysia (1).

While most March notifications were reported from North West Auckland Health District (30), followed by Waikato (17), Canterbury (14), and Central Auckland (13) health districts the highest monthly incidence rate was in Southland (8.3 cases per 100 000) which is over twice the overall rate of 3.9 per 100 000.

The following graph shows the number of Salmonellosis notifications each month since March 2002.



The ESR Enteric Reference Laboratory (ERL) identified 157 human cases, from the *Salmonella* isolates received during March 2003. The predominant types identified were *S. Typhimurium* phage type 160 (19 cases), *S. Typhimurium* phage type 156 (15), *S. Typhimurium* RDNC (15), *S. Typhimurium* phage type 101 (13), *S. Typhimurium* phage type 1 (10), and *S. Infantis* (10).

Shigellosis

Three cases of shigellosis were reported in March 2003. This brings the total this year to 19, fewer than the 10 cases notified in March 2002. Two cases were reported from South Auckland Health Districts, and one from Wairarapa Health District. The cases from South Auckland were a male and a female aged 43 and 57 years respectively. The 43-year-old had been hospitalised. The 57-year-old male had been overseas. The Wairarapa case was a 4-year-old female who had contact with her sister who had a case of shigellosis reported in February. .

Tuberculosis

There were 27 cases of tuberculosis notified during March 2003, more than the 24 cases notified in March 2002. Of the 25 cases for whom this information was recorded, 14 (56%) were hospitalised.

Two cases were younger than 15 years old. Rates of disease were highest in the '20 to 29 years' age group.

Information on country of birth was recorded for 25 cases, of whom 18 (72%) were born overseas. Of the 18 overseas-born cases, 13 were of 'Other' ethnicity and five were Pacific Island people. Most cases were born in India (5 cases), followed by Vietnam (3). Among New Zealand born cases, recorded ethnicities were as follows: European (4 cases), and Maori (3).

All March notifications were from the North Island, and 74% (20 cases) were from the Auckland region. The remaining cases were from Hawkes Bay Health District (3 cases), and one each from Waikato, Manawatu, Hutt, and Wellington Health Districts.

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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).

3. Unusual notifications

A case of cyanide poisoning

Background

North Shore Hospital notified a single case of cyanide poisoning to the Auckland Regional Public Health Service on 6 March 2003. The case, a 51-year old American woman suffering from secondary cancer, was visiting New Zealand for a 1-month holiday. An article in a New Zealand women's magazine prompted her and her husband to visit a health shop in Auckland on 4 March 2003 to purchase vitamin B17, a reported alternative therapy for cancer patients. They were advised that it is illegal to sell B17 but could obtain it in the form of apricot kernels. The case's husband ordered one kilogram of kernels, which they picked up from the shop on 5 March 2003. They also purchased a coffee grinder to grind the kernels and gelatin capsules to fill with the kernel grounds.

At 11.30pm on 5 March 2003 the case consumed 60 ground apricot kernels mixed with orange juice. She immediately vomited. Five minutes later she vomited a larger amount of fluid. At this time the case's husband called North Shore Hospital and was advised to bring her in if he was concerned. They arrived at the hospital at midnight.

Within 30 minutes of consuming the apricot kernels the case experienced tachycardia, low pulse and blood pressure (70/37). She was disoriented, confused, "zombie-like", she had chills and difficulty walking. The hospital staff treated her with charcoal and saline.

Methods

The investigation consisted of an interview with the case and her husband at North Shore Hospital. The case's husband gave a written statement of the events leading up to and following the consumption of the apricot kernels.

The remaining apricot kernels were sent to ESR for analysis. The health shop was visited and the owner was interviewed. The shop's supplier was also visited and interviewed.

Results of Cyanide Testing

Analysis revealed cyanide present in the kernels at a level of 130mg/kg.

Discussion

Vitamin B17 (also known as Laetrile and Amygdalin) has been used as an anticancer treatment in humans worldwide. However, there is much controversy regarding the benefits and risks of B17. The arguments centre on the presence of cyanide in the B17 molecule. Proponents claim that an enzyme called beta-glucosidase is necessary to "unlock" the molecule to release the cyanide. They claim that this enzyme is present in huge quantities at cancer sites, thus, when released the cyanide acts on only the cancerous cells. Those opposed to using B17 as a treatment for cancer highlight the lack of empirical evidence supporting its use and the dangers of cyanide poisoning.

The case and her husband were aware of the dangers associated consuming apricot kernels but as they followed the dosage listed in the magazine article they did not expect any side-effects of cyanide poisoning.

The owner of the health shop where the kernels were purchased claimed to be unaware of both the presence of cyanide in the kernels and the risks associated with consuming them. As a result of the visit to his premise by Auckland Regional Public Health Services he agreed to inform future customers of the risks associated with consuming apricot kernels.

The New Zealand Food Safety Authority (NZFSA) were informed of the cyanide poisoning case and requested that a visit be made to the importer of the kernels. The NZFSA ordered a recall on all apricot kernels but indicated that they would be willing to hear a case against the recall. During the visit the importer of the kernels claimed to be aware of the presence of cyanide in the kernels but not of any cyanide poisoning cases as a result of consuming them. In his opinion a recall of kernels would not be successful, as his clients were predominantly cancer patients who were desperate to obtain apricot kernels, and would import them privately if they could not purchase them in New Zealand. He requested an opportunity to present his case to the NZFSA. Currently the importer is speaking directly with the NZFSA and the Auckland Regional Public Health Services is no longer involved.

Conclusion

It is very likely that the cause of the cyanide poisoning was the consumption of 60 apricot kernels.

References

National Centre for Complementary and Alternative Medicine. (2002). *Laetrile/Amygdalin: Questions and Answers*. http://cis.nci.nih.gov/fact/9_3/htm

4. 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. 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	Sex	Notification date	Death date
<i>Haemophilus influenzae type B</i>	Canterbury	1 to 4	female	21 Mar 03	16 Mar 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
Pertussis	South Auckland	<1	male	06 Mar 03	04 Feb 03
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
	Canterbury	50 to 59	female	18 Feb 03	25 Mar 03

5. Outbreaks

This Monthly Surveillance Report includes data on outbreaks for which final reports had been entered into EpiSurv during March 2003 and on outbreaks that were initially reported during March 2003 but were still listed as 'interim' as of the 7th April 2003.

Final outbreak reports

Final reports on six outbreaks involving 28 cases were received in March 2003. Of these, three *Giardia* outbreaks occurring between February and March 2003 accounted for 35.7% of cases. Person to person transmission at home was the mode of transmission of two of the *Giardia* outbreaks, but mode of transmission was not recorded for the other.

One norovirus outbreak that was spread by person to person transmission at a restaurant accounted for 46.4% of the cases.

Summary of final reported outbreaks, March 2003

Organism/Toxin/Illness	Number of outbreaks	Total number of cases
Gastroenteritis	1	3
<i>Giardia</i>	3	10
Norovirus	1	13
<i>Salmonella</i>	1	2
Total	6	28

Details of final reported outbreaks, March 2003¹

Pathogen / Toxin / Illness	Health District	Month ²	No.III	Lab Conf ³	No. Hosp ⁴	Setting	Mode of transmission (vehicle / source)	Evidence ⁴
Gastroenteritis	Auckland	Feb 03	3			Home	Foodborne (smoked tuna)	Epi-H
<i>Giardia</i>	Auckland	Feb 03 – Mar 03	4	3		Home	Person to person	Epi-H
<i>Giardia</i>	Auckland	Feb 03	4	3	0	Home	Person to person	Epi-H
<i>Giardia</i>	Auckland	Feb 03	2	2	0		Unknown	Nil
Norovirus	Canterbury	Mar 03	13	0	0	Restaurant / café	Person to person	Epi-H
<i>Salmonella</i>	Auckland	Mar 03	2	2	0	Restaurant / café; private house on holiday	Foodborne (filo pie); Waterborne	Epi-H

¹ Blank fields indicate that no information had been entered in the applicable field in the outbreak report

² Month outbreak commenced

³ Number of microbiologically-confirmed cases.

⁴ 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 20 outbreaks involving 60 cases were recorded in March.¹

The most commonly recorded illness was gastroenteritis; fourteen outbreaks reported accounting for 29 (48.3%) of the cases.

There was one campylobacter outbreak involving 16 (26.7%) of the cases.

Details of these outbreaks will be provided once final reports have been received.

Details of interim reported outbreaks, March 2003¹

Pathogen / toxin / illness	Health district ²	Month	No. ill	Lab Conf ⁴	No. Hosp	Setting	Evidence
<i>Bordetella pertussis</i>	WC	Mar03*					
<i>Bordetella pertussis</i>	WC	Mar03*	2	2	1		
Campylobacter	CB	Feb03#	16	5	1	Sports tournament	Epi-H
<i>Cryptosporidium parvum</i>	CB	Mar02*		2			
Gastroenteritis	AK	Mar03*	3				
Gastroenteritis	AK	Mar03*	2				
Gastroenteritis	AK	Mar03*	3				
Gastroenteritis	AK	Mar03*	2				
Gastroenteritis	AK	Mar03*				Hospital (continuing care)	
Gastroenteritis	AK	Mar03*	2				
Gastroenteritis	AK	Mar03*	4				
Gastroenteritis	AK	Mar03*	2				
Gastroenteritis	AK	Mar03*	2				
Gastroenteritis	AK	Mar03*	2				
Gastroenteritis	AK	Mar03	2				
Gastroenteritis	AK	Mar03*	5				
Gastroenteritis	AK	Mar03*	0		0		
Gastroenteritis	NN	Mar03*	0		0		
<i>Giardia</i>	OT	Nov02-Feb03	6	5	0	Home	
Norovirus	TG	Feb03*	3	2	3	Rest home	
<i>Salmonella</i>	AK	Mar03*	2	1			
<i>Yersinia enterocolitica</i>	AK	Mar03*	2	1			

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

² Health district of the PHU that reported the outbreak. (See note two under the Final Reported Outbreak table for details).

³ Month outbreak commenced.

⁴ Number of microbiologically-confirmed cases.

⁵ 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.

¹ Total cases were recorded for 15 of the 20 outbreaks.

6. National surveillance data and trends

Disease incidence and rates

Disease ¹	Current year - 2003 ²			Previous year - 2002		
	Mar 2003 cases	Cumulative total since 1 January	Current rate ³	Mar 2002 cases	Cumulative total since 1 January	Previous rate ³
AIDS	2	11	0.6	1	5	0.6
Campylobacteriosis	1189	4239	349.5	943	3669	302.6
Cryptosporidiosis	52	136	27.0	24	102	28.4
Dengue fever	7	22	2.2	3	8	2.7
Gastroenteritis ⁴	68	166	27.5	101	224	25.6
Giardiasis	143	404	40.8	152	427	44.2
<i>H. influenzae</i> type b disease	1	3	0.2	0	0	0.2
Hepatitis A	8	26	2.1	28	54	2.6
Hepatitis B (acute) ⁵	3	15	1.8	3	16	1.4
Hepatitis C (acute) ⁵	2	8	1.3	8	12	1.6
Hydatid disease	0	0	0.1	0	0	0.2
Influenza ⁶	5	5	18.6	3	9	17.7
Lead absorption	24	43	2.9	7	23	3.1
Legionellosis ⁶	7	16	1.4	4	11	1.3
Leprosy	0	1	0.1	0	0	0.1
Leptospirosis	9	33	3.7	8	37	3.2
Listeriosis	3	8	0.6	2	6	0.5
Malaria	1	13	1.4	3	21	1.4
Measles	7	10	0.7	2	6	1.9
Meningococcal disease ⁷	30	106	15.5	28	84	16.8
Mumps	5	16	1.8	5	14	1.5
Paratyphoid	1	7	0.5	3	3	0.8
Pertussis	33	147	26.1	57	240	24.2
Rheumatic fever	2	18	1.9	9	41	3.3
Rickettsial disease	0	0	0.2	0	0	0.1
Rubella	2	8	1.0	2	4	0.7
Salmonellosis	147	471	40.6	344	835	69.2
SARS	0	0	0	0	0	0
Shigellosis	3	19	2.6	10	32	3.5
Tetanus	1	1	0.1	0	0	0.1
Tuberculosis	27	95	10.5	24	86	9.6
Typhoid	2	9	0.6	6	11	0.7
VTEC / STEC infection	10	21	2.0	2	18	2.0
Yersiniosis	44	143	12.4	42	157	12.2

Notes: ¹ Other notifiable infectious diseases reported in March : Nil

² These data are provisional

³ Rate is based on the cumulative total for the current year (12 months up to and including March 2003) or the previous year (12 months up to and including March 2002), expressed as cases per 100 000

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

⁵ Only acute cases of this disease are currently notifiable

⁶ Surveillance data based on laboratory-reported cases only

⁷ 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 March 2003 and preceding 12 months

National surveillance data - monthly totals for March 2003 and preceeding 12 months¹

Disease	Mar 2003	Feb 2003	Jan 2003	Dec 2002	Nov 2002	Oct 2002	Sep 2002	Aug 2002	Jul 2002	Jun 2002	May 2002	Apr 2002	Mar 2002
AIDS	2	5	4	0	2	0	4	1	1	1	1	3	1
Campylobacteriosis	1189	1266	1784	1272	1042	1162	1176	1124	1006	820	675	548	943
Cryptosporidiosis	52	60	24	46	95	261	241	90	53	29	42	17	24
Dengue fever	7	7	8	1	9	0	0	8	13	8	17	6	3
Gastroenteritis ²	68	50	48	141	68	154	69	69	62	143	84	72	101
Giardiasis	143	129	132	114	110	112	107	122	128	128	167	132	152
Haemophilus influenzae type b	1	0	2	0	0	0	0	0	0	1	2	0	0
Hepatitis A	8	12	6	3	8	3	2	2	1	7	9	18	28
Hepatitis B (acute) ³	3	4	8	10	3	3	5	6	6	7	7	5	3
Hepatitis C (acute) ³	2	1	5	5	3	1	7	7	3	5	6	4	8
Hydatid disease	0	0	0	1	0	0	0	1	0	0	0	0	0
Influenza ⁴	5	0	0	0	1	22	103	136	230	151	30	16	3
Lead absorption	24	15	4	3	9	6	5	10	8	7	14	5	7
Legionellosis ⁴	7	4	5	4	2	4	4	4	7	5	4	3	4
Leprosy	0	1	0	0	1	0	0	0	1	1	0	1	0
Leptospirosis	9	8	16	8	14	10	13	6	14	10	16	14	8
Listeriosis	3	3	2	1	2	3	1	3	2	0	0	1	2
Malaria	1	9	3	2	3	3	6	3	6	5	6	6	3
Measles	7	0	3	0	2	2	0	4	3	0	2	2	2
Meningococcal disease ⁵	30	41	35	33	29	43	72	87	65	69	45	32	28
Mumps	5	5	6	3	6	10	6	4	4	6	7	4	5
Paratyphoid	1	3	3	1	1	0	0	2	2	3	3	1	3
Pertussis	33	48	66	76	108	103	97	110	83	88	112	51	57
Rheumatic Fever	2	2	14	4	12	8	4	8	4	2	9	1	9
Rickettsial disease	0	0	0	0	0	0	2	2	0	1	1	0	0
Rubella	2	3	3	2	1	1	1	5	1	5	8	5	2
Salmonellosis	147	167	157	123	135	138	131	86	95	91	116	130	344
SARS	0	0	0	0	0	0	0	0	0	0	0	0	0
Shigellosis	3	6	10	9	4	8	4	8	12	10	13	12	10
Tetanus	1	0	0	0	0	0	0	0	0	0	1	0	0
Tuberculosis	27	31	37	36	34	47	28	37	41	22	27	26	24
Typhoid	2	6	1	1	0	3	0	0	2	1	3	2	6
VTEC/STEC infection	10	8	3	5	3	5	6	6	7	4	11	8	2
Yersiniosis	44	43	56	31	49	45	26	30	30	33	42	33	42

Notes: ¹ Later data are provisional

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

³ Only acute cases of this disease are currently notifiable

⁴ Surveillance data based on laboratory-reported cases only

⁵ 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 - March 2003

Cases this month

Current rate¹

Disease	Cases for March 2003, ⁴ and current rate ^{1,2} by health district ^{3,4}																							
	Northland	NW Auck	Central Auck	South Auck	Waikato	Tairanga	Eastern BoP	Gisborne	Rotorua	Taupo	Taranaki	Ruapehu	Hawkes Bay	Wanganui	Manawatu	Wairapa	Wellington	Hutt	Nelson-Marl	West Coast	Canterbury	South Cant	Otago	Southland
AIDS ⁵	0	1			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	0	0			1.0	0.8	0	0	1.6	0	0	0	0.7	0	0	0	4.4	0.8	0	0	0	0	0	0
Campylobacteriosis	19	146	126	129	100	28	6	7	10	8	26	2	32	8	13	12	131	47	22	4	195	26	58	34
	210.5	420.3	436.4	342.9	380.1	279.5	132.5	248.0	314.7	330.0	313.2	126.0	319.0	272.3	172.6	248.3	516.8	365.5	180.6	290.1	336.9	415.9	344.9	365.6
Cryptosporidiosis	0	0	3	1	0	3	0	0	0	0	0	0	0	0	0	0	33	6	1	2	3	0	0	0
	5.0	8.1	6.5	5.9	38.9	16.3	4.1	13.7	18.6	57.1	36.8	42.0	40.4	25.7	41.4	18.3	78.0	20.5	22.1	62.6	24.4	71.7	51.8	43.5
Dengue fever	0	1	4	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.7	1.9	7.1	3.5	1.3	2.3	2.0	0	1.6	3.2	1.0	0	0	1.7	2.0	2.6	2.0	3.0	0	0	2.2	0	0.6	0.9
Gastroenteritis	0	3	13	3	1	1	0	1	1	1	0	0	1	0	0	0	12	2	0	0	28	0	1	0
	8.6	21.9	29.9	13.0	9.7	3.1	0	38.7	6.2	25.4	9.7	0	3.5	27.4	22.4	39.2	33.5	27.3	12.3	13.2	82.9	117.7	22.3	17.6
Giardiasis	3	20	26	8	13	9	2	1	1	1	0	0	9	1	6	0	11	0	5	0	17	2	8	0
	22.8	40.7	68.0	33.8	51.2	42.6	14.3	15.9	37.2	47.6	11.6	14.0	69.7	49.7	31.3	26.1	55.2	50.8	27.0	36.3	33.4	23.0	33.1	15.7
H. influenzae 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	0.5	0	0	0
Hepatitis A	1	0	3	1	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
	1.4	2.8	6.0	3.5	2.3	0.8	2.0	0	0	3.2	0	0	4.2	0	1.4	0	1.6	1.5	1.6	0	0.7	1.3	0	0
Hepatitis B	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2.1	1.4	2.7	1.9	1.6	2.3	0	18.2	0	6.3	1.9	7.0	2.1	3.4	0.7	2.6	0.4	1.5	2.5	0	1.5	0	0.6	0
Hepatitis C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
	0.7	0.7	0.5	0.8	0.3	7.7	2.0	0	4.7	3.2	1.0	0	2.1	0	2.0	2.6	3.2	0	0	9.9	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	1	1	3	1	4	0	0	0	0	0	1	0	3	0	2	0	0	0	1	0	5	0	1	1
	4.3	1.6	3.0	1.1	4.2	0	0	4.6	0	0	8.7	0	4.9	3.4	7.5	5.2	1.2	0.8	1.6	0	4.0	2.6	5.4	2.8
Legionellosis ⁶	0	2	0	1	0	1	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0
	0.7	1.2	1.4	0.3	0.3	1.5	2.0	0	1.6	6.3	1.9	7.0	1.4	1.7	0	5.2	1.6	3.0	0.8	0	2.7	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	0.5	0.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptospirosis	1	0	0	0	0	0	1	0	0	0	0	1	3	0	0	0	0	0	1	0	1	1	0	0
	6.4	1.2	0	1.1	4.5	3.1	2.0	6.8	0	0	4.8	28.0	20.9	8.6	6.1	2.6	0	0	13.1	6.6	1.2	14.1	4.2	2.8
Listeriosis	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	0	0.9	1.4	0.3	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1.6	1.1	1.3	3.2	1.5	0	0	0	6.3	1.0	14.0	0.7	0	2.0	0	2.4	0.8	0.8	0	1.2	1.3	0.6	0.9
Measles	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	3	1	0	0
	0	0.5	0.3	0.3	0.6	0.8	0	0	0	0	0	0	0.7	0	0	0	0.4	1.5	0.8	16.5	1.5	2.6	0	0
Meningococcal disease ⁶	5	0	5	6	1	1	0	0	1	0	0	0	0	0	0	1	2	1	0	0	2	0	4	1
	21.4	8.1	15.0	24.5	12.6	31.0	28.5	11.4	54.3	60.3	9.7	14.0	20.9	13.7	6.1	7.8	11.4	10.6	1.6	23.1	9.0	9.0	27.7	13.0
Mumps	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	1	1	0	0	0	0	0	0	0
	1.4	1.6	1.4	1.9	1.0	2.3	0	0	1.6	0	0	0	4.9	1.7	0	2.6	1.2	0.8	4.9	6.6	1.2	1.3	4.8	2.8
Paratyphoid	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	0.7	1.4	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	3	0	2	3	0	0	0	0	0	0	0	3	2	1	0	1	1	2	5	8	1	0	1
	3.6	18.2	5.4	6.1	19.8	12.4	4.1	2.3	4.7	12.7	21.3	7.0	11.8	80.5	23.8	13.1	18.5	35.6	67.8	267.0	47.8	195.8	2.4	25.9
Rheumatic fever	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
	4.3	0.9	2.4	5.9	2.6	3.1	2.0	2.3	1.6	0	0	7.0	1.4	1.7	0	2.6	2.4	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	0	0	0	0	0	0	1	1	0	0	0	0
	0.7	0.2	0.5	0	0	1.5	4.1	2.3	0	0	0	0	9.1	0	0	2.6	1.6	0.8	3.3	9.9	0.2	0	0.6	0
Salmonellosis	5	30	13	11	17	2	1	3	2	0	1	1	4	2	3	3	8	5	4	0	14	4	5	9
	34.2	37.7	38.9	32.0	50.9	24.8	46.9	56.9	43.4	41.3	25.2	42.0	45.3	42.8	31.3	47.0	46.1	27.3	33.5	26.4	43.1	71.7	40.9	74.1
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	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	2.1	2.6	6.3	4.8	1.3	0.8	0	0	4.7	0	1.0	0	1.4	1.7	0	5.2	2.0	0.8	0.8	0	3.2	5.1	3.0	0.9
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	9	8	1	0	0	0	0	0	0	0	3	0	1	0	1	1	0	0	0	0	0	0
	7.1	17.2	20.7	16.2	8.1	7.0	2.0	4.6	1.6	9.5	1.9	0	26.5	3.4	3.4	10.5	11.8	13.7	0.8	0	5.0	3.8	4.2	0.9
Typhoid	0	0	1	1	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	3.2	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	0	1	0	0	3	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	0	0
	2.1	0.5	0.8	0.8	5.2	2.3	12.2	0	3.1	3.2	4.8	0	1.4	1.7	1.4	0	0.8	0	0	0	3.7	5.1	1.2	3.7
Yersiniosis	0	13	6	5	3	0	0	0	0	1	1	1	0	0	1	0	6	2	0	0	1	0	3	1
	2.1	18.8	17.4	10.7	10.7	13.9	6.1	20.5	7.8	15.9	1.9	28.0	9.1	3.4	8.8	15.7	16.2	8.3	1.6	52.7	12.2	19.2	11.4	7.4

1 Current rate is based on the cumulative total for the 12 months up to and including March 2003 expressed as cases per 100 000

2 These data are provisional

3 AIDS data is reported for the greater Auckland and