

MONTHLY SURVEILLANCE REPORT

This monthly report contains data and commentary on disease trends and events up to and including the end of November 2002 (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 4th November 2002. As this information may be updated over time, the results should be regarded as provisional only.

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1. Major surveillance issues

- *Meningococcal disease*: 27 cases (including two fatalities) were reported in November 2002. This brings the year-to-date total to 519 cases, including 17 fatalities.
- *Dengue*: 8 notifications (including several late notifications) of dengue fever were made in November 2002. The majority of cases (5/8) reported recent overseas travel to Rarotonga or the Cook Islands.
- *Pertussis*: 109 cases of pertussis were notified in November 2002, compared to 68 cases during the same month last year. Incidence rates were highest in Wanganui Health District where an outbreak is ongoing.
- *Salmonellosis*: 134 cases were notified in November 2002. Of these, 52 cases (38.8%) were identified as *S. Typhimurium* 160.

2. Key disease trends

Campylobacteriosis

There were 1044 cases of campylobacteriosis notified during November 2002, of whom 987 (94.5%) were confirmed. In comparison, 1436 cases were notified during the same month last year.

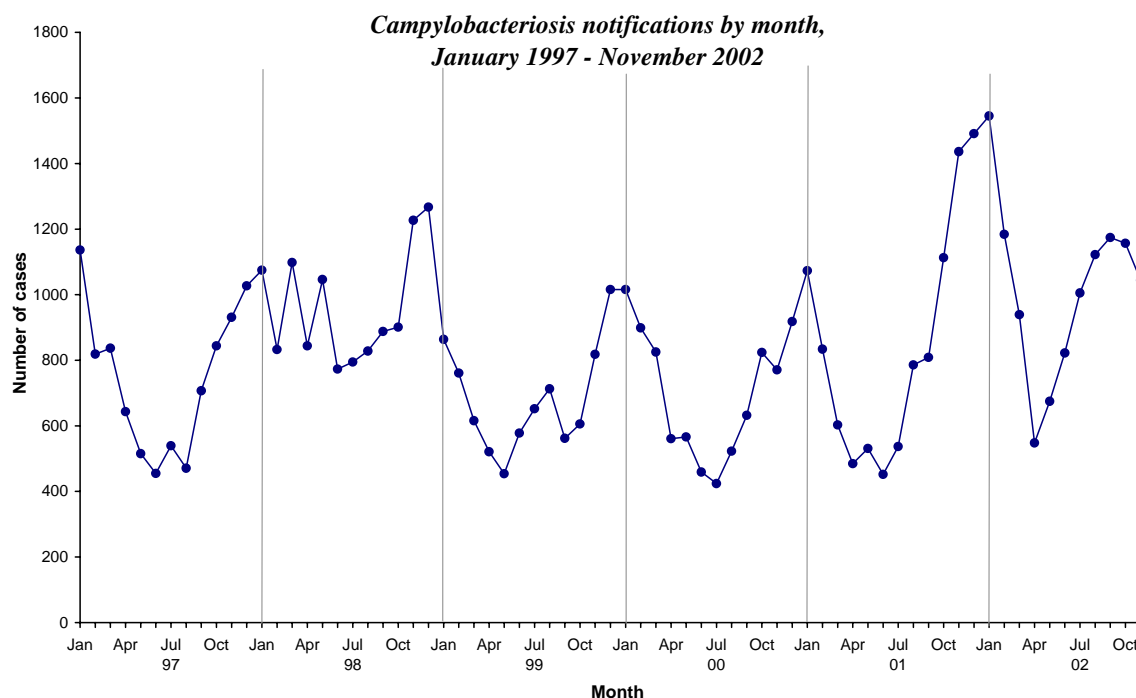
Incidence rates in November 2002 were highest in the '1 to 4 years' age group, with a monthly rate of 52.3 per 100 000 population (113 cases), and next highest in the 'less than one year' age group with a monthly rate of 47.6 cases per 100 000 (26 cases). The overall monthly rate was 27.9 per 100 000. Approximately 89% of cases (for whom ethnicity was recorded) were of European ethnicity. There were 37 hospitalisations (7.1% of cases for whom this information was recorded).

Among all health districts, the incidence rate in November¹ was highest in Waikato Health District, with a monthly rate of 37.9 per 100 000, followed by Central Auckland (37.3 per 100 000) and Rotorua (34.1) health districts. Over the 12-month period ending 30th November 2002, the incidence rate was highest in the Wellington Health District, with an annual rate of 446.6 per 100 000 population. South Canterbury Health District experienced the next highest rate of 437.7 per 100 000. In comparison, during 2001, the annual rate² of campylobacteriosis was highest in Wellington Health District, whereas during both 1999 and 2000 it was highest in South Canterbury Health District.

¹ The incidence rate for November is the number of November notifications from a given region divided by the size of the population of the region and multiplied by 100 000. This ratio represents a monthly notification rate per 100 000 population.

² Both the *crude* annual rate and the *directly age-standardised* annual rate of campylobacteriosis were highest in Wellington during 2001 and highest in South Canterbury during 1999 and 2000.

The following graph shows campylobacteriosis notifications by month since January 1997.



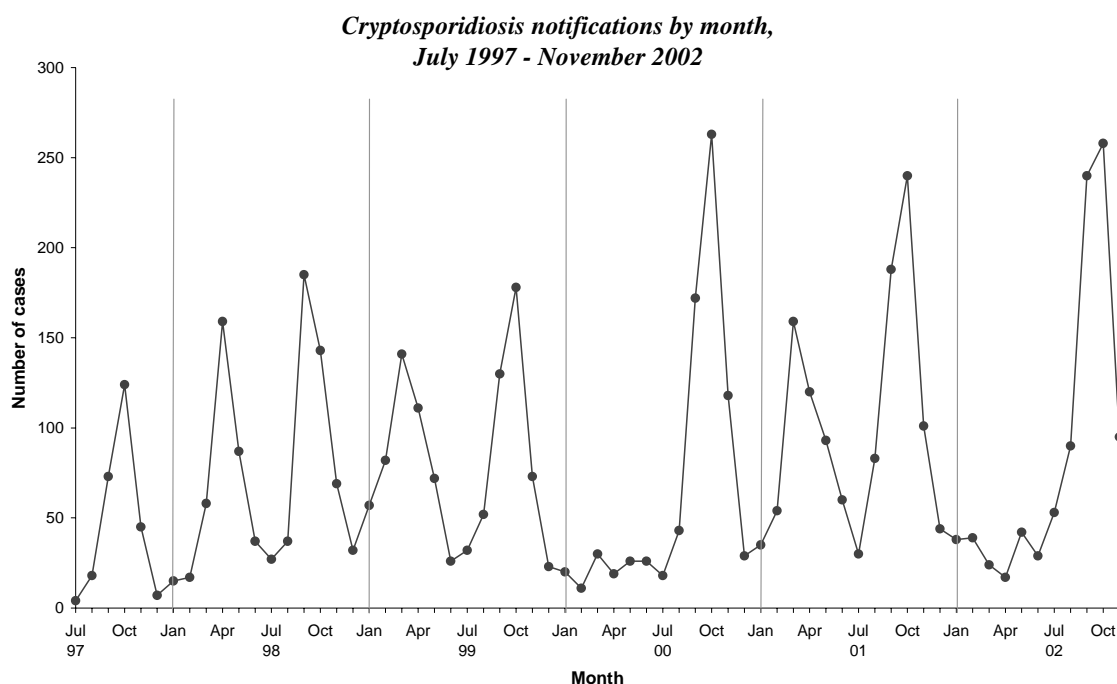
Risk factor information was infrequently recorded on the case report forms, with only 18.2% (190/1044) of notifications in November including information on human contact and only 19.2% (200/1044) including information on contact with farm animals. Of these, 12.1% (23/190) had a history of contact with other symptomatic people, and 35% (70/200) reported exposure to farm animals.

Cryptosporidiosis

A total of 95 cases of cryptosporidiosis was notified in November 2002, of whom 77 (81.0%) were confirmed. In comparison, 258 cases were notified during October 2002. For the past four years, cryptosporidiosis notifications have peaked in the month of October. The majority (66.3%) of November cases was aged nine years or less. Among all age groups, the incidence rate was highest in the '1 to 4 years' age group, with a monthly rate of 19.9 cases per 100 000 population, compared to an overall monthly incidence rate of just 2.5 per 100 000.

Among all health districts, the monthly incidence rate was highest in November in the South Island health districts of West Coast (13.2 per 100 000), Southland (10.2), South Canterbury (9.0) and Otago (8.4).

The following graph shows the number of notified cases of cryptosporidiosis each month since January 2000. It demonstrates the typical spring peak in incidence, which has been particularly prominent these last three years.



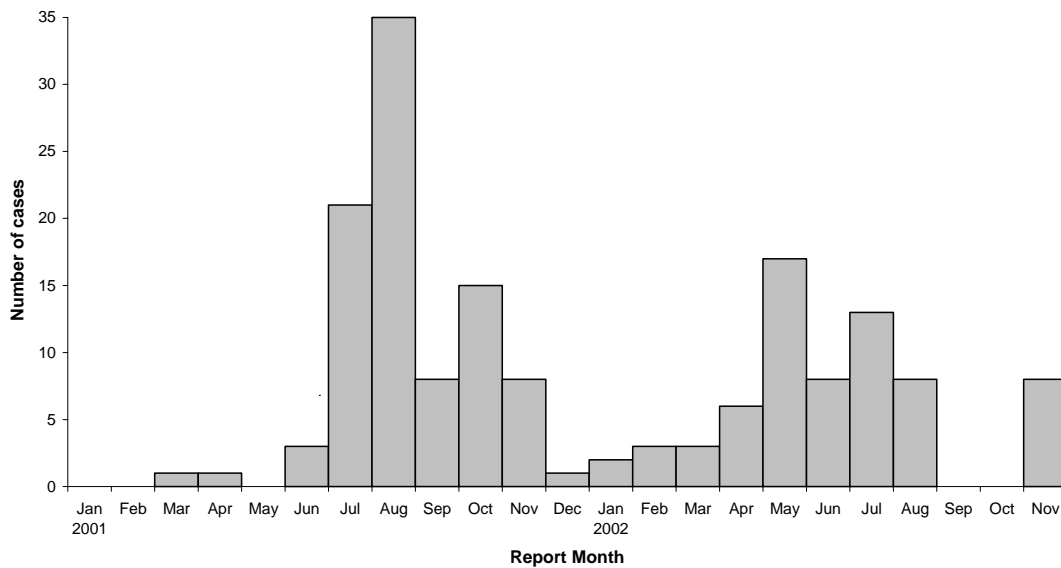
Dengue

Eight cases of dengue fever were notified in November 2002, bringing the year to date total to 68. Seven cases have been laboratory confirmed, and one case is under investigation. The cases, five females, and three males, ranged in age from 30 to 66 years. Two cases have been hospitalised. Six of the eight November notifications had onset dates recorded. The earliest recorded onset date was as far back as January 2002, and the most recently recorded onset date was September 2002.

All seven of the cases for whom travel information was recorded had recently travelled overseas. Five cases had recently visited Rarotonga or the Cook Islands, one case had been in Thailand, and one case was a visitor to New Zealand from Fiji. Since the beginning of the year, over half (55.9%) of notified cases have reported travel to Rarotonga or the Cook Islands.

The following graph shows the number of dengue notifications each month since January 2001.

*Dengue fever notifications by month,
January 2001 - November 2002*



Leprosy

One probable case of leprosy was notified in November from the South Auckland Health District. The case was a 50-year-old Pacific Island female with borderline leprosy. No information on risk factors was recorded. This is the third case of leprosy notified this year. In comparison, three cases of tuberculoid leprosy were notified during 2001. Since 1995 a total of 37 cases of leprosy have been notified: twenty-five Pacific Islands people, five Indians, four East or South East Asians and three Africans. Of these, 30 (81.1%) resided in the Auckland region.

Leptosporidiosis

Fourteen cases of leptospirosis were notified in November 2002, bringing the year to date total to 137. Leptospirosis notifications exhibit no obvious seasonality. The average number of monthly notifications over the 12-month period ending 30th November was 12. The average number notified each month for the previous 12 month period was eight.

Nelson-Marlborough and Otago health districts each reported three cases in November; Waikato Health District reported two cases; and one case each was reported were reported by North West Auckland, Hawkes Bay, Manawatu, Wanganui, Wairarapa and South Canterbury health districts. All three cases from Nelson-Marlborough Health District worked at the same freezing works. Of the 137 cases notified this year to date, the greatest number was reported by Hawkes Bay Health District (27 cases), followed by Waikato (20 cases) and Manawatu (12) health districts.

Occupation was recorded for 12 of the 14 November cases. Of these, five were farmers and seven cases worked in the meat processing industry. No risk factors were recorded for the remaining two cases. Cases ranged in age from 25 to 60 years. Twelve cases were male and two were female. Of the twelve cases for whom ethnicity was recorded, eleven were of European ethnicity and one was Maori. There were three hospitalisations among the seven cases for whom this information was recorded.

Measles

During November 2002 four cases of measles were notified, bringing the year-to-date total to 28. In November one case each was notified by Canterbury, Nelson-Marlborough, Southland and West Coast health districts. One case was aged eight months, two cases were aged one year, and one case was aged four years. Neither one-year-old had been vaccinated. Vaccination status was unknown for the eight-month-old and the four-year-old. No cases were known to have been laboratory confirmed. Since September all notifications of measles have been from the South Island.

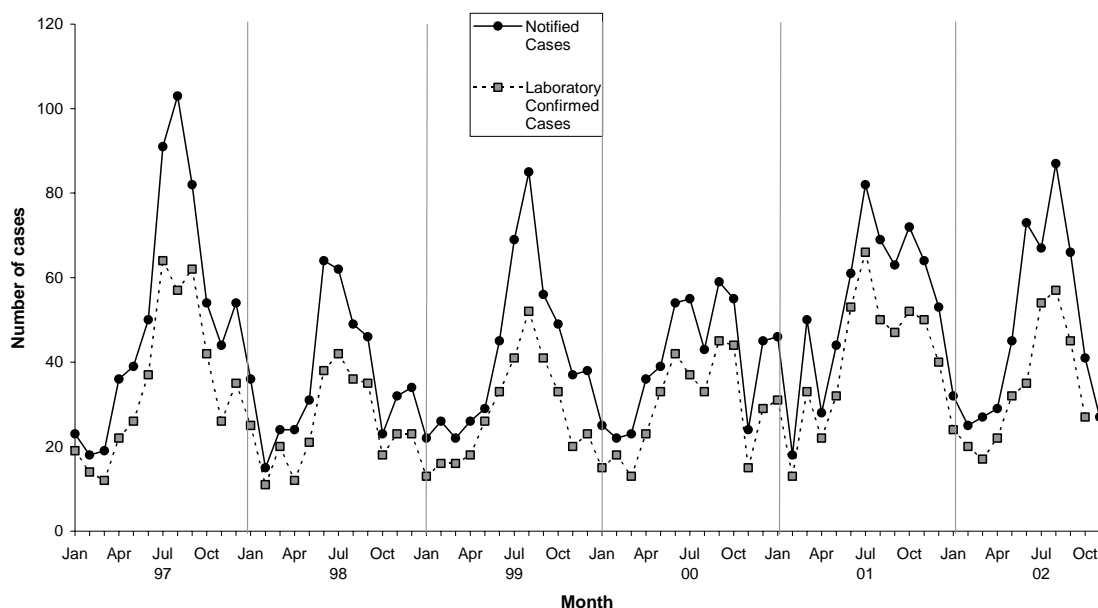
Meningococcal disease

Based on the earliest¹ date available, 27 cases of meningococcal disease were notified during November 2002, bringing the year to date total to 519 cases. At the time of this report, the number of laboratory confirmed cases was unavailable. In comparison, 67 cases were notified during the same month last year. Updated figures indicate that a total of 41 cases of meningococcal disease were notified during October 2002, compared to 70 cases during October 2001.

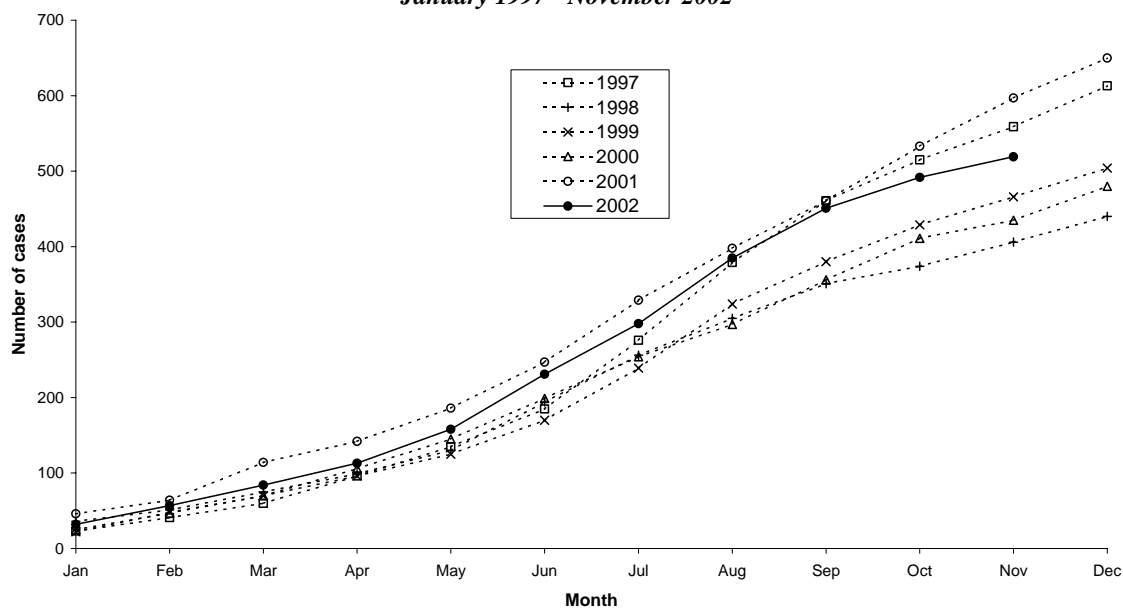
The following graphs show (i) notified and laboratory-confirmed meningococcal disease cases by month since January 1997 and (ii) the cumulative number of meningococcal disease cases each month since 1997.

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.

***Meningococcal notified and laboratory-confirmed cases by month,
January 1997 - November 2002***



***Meningococcal disease cases, cumulative total by month,
January 1997 - November 2002***



All 25 November cases, for whom hospitalisation information was recorded, were hospitalised. Two cases were fatal: a 43-year-old female from Hutt Health District, and a 44-year-old female from Rotorua Health District. This brings the number of fatal cases this year to seventeen.

Ethnicity was recorded for 25 of the 27 cases reported this month. Of these, 15 (60%) were of European ethnicity, 6 (24%) were Maori, and 4 (16%) were Pacific Islands

people¹. In comparison, for all 519 year-to-date notifications, the percentage of European, Maori and Pacific Islands cases was 50%, 30% and 17% respectively; and during 2001, the percentage of European, Maori and Pacific Islands cases was 41%, 33% and 24% respectively.

During November, age-specific rates were highest in the 'less than one year' and 'one to four years' age categories, with monthly rates of 9.1 per 100 000 (5 cases) and 2.3 per 100 000 (5 cases) respectively; compared to an overall monthly rate of 0.7 per 100 000. Of the 519 cases reported this year to date, 36.6% were aged 15 years or over. In contrast, 59.3 % of cases in November were aged 15 years or over.

In November, Northland, Canterbury and Otago health districts reported the greatest number of cases, with three cases each. Of the 519 cases notified this year to date, the greatest number was reported by South Auckland Health District (81 cases), followed by Otago (46 cases) and Central Auckland (41 cases) health districts. The highest annual incidence rate for the 12-month period ending 30th November was experienced by Rotorua (65.1 per 100 000), followed by Taupo (60.3) and Eastern Bay of Plenty (32.6) health districts.

The following table provides details of recent case numbers and notification rates.

¹ 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 Islands People, Other ethnicity, European. This can frequently lead to an undercount of the number of cases identifying themselves as Pacific Islands People, since cases identifying with both Maori and Pacific Islands ethnic groups get classified as Maori.

Notifications and incidence rates of meningococcal disease

Health District	Notifications Nov 2002	Notifications Jan to Nov 2002	Rate per 100 000 Dec 01 to Nov 02
Northland	3	28	21.4
North West Auckland	2	34	8.6
Central Auckland	2	41	12.2
South Auckland	1	81	24.0
Waikato	2	35	13.3
Tauranga	0	27	22.5
Eastern Bay of Plenty	2	15	32.6
Gisborne	0	6	15.9
Rotorua	2	33	65.1
Taupo	1	18	60.3
Hawkes Bay	0	30	25.1
Taranaki	1	8	8.7
Ruapehu	0	1	7.0
Wanganui	1	5	8.6
Manawatu	0	9	6.8
Wairarapa	0	3	7.8
Wellington	0	26	11.0
Hutt	1	12	12.9
Nelson-Marlborough	0	3	2.5
West Coast	0	7	23.1
Canterbury	3	31	7.7
South Canterbury	2	7	10.2
Otago	3	46	29.5
Southland	1	13	13.0
Total	27	519	15.4

Mumps

Six cases of mumps were notified in November, bringing the year-to-date total to 62. One case each was reported by North West Auckland, Central Auckland, South Auckland, Rotorua, Hutt and Nelson-Marlborough health districts. No cases were laboratory confirmed. The cases ranged in age from four years to 43 years.

Vaccination status was recorded for two cases: a four-year-old received two doses of the vaccine and a six-year-old received one dose. All cases were male, and all three cases for whom ethnicity was recorded were Pacific Islands people.

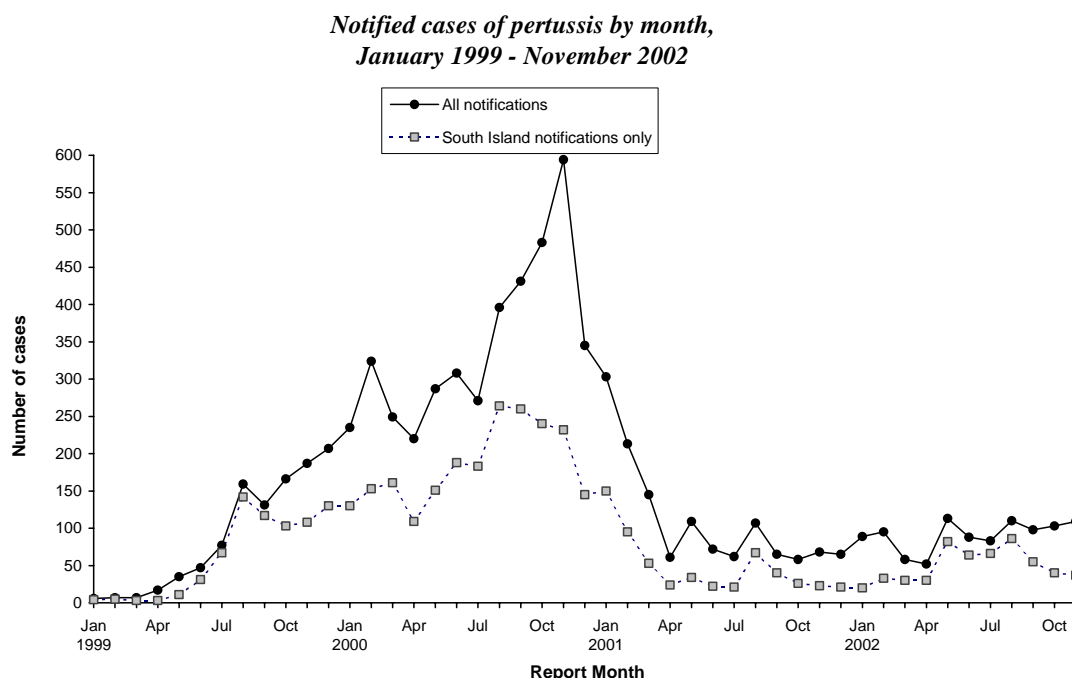
Pertussis

During November 2002, there were 109 cases of pertussis notified, compared to 68 cases during the same month last year. Of the 109 cases, 71.3% (72 cases) were either confirmed by serological means, by PCR or by isolation of *Bordetella pertussis*. Eighteen of the remaining 37 cases were epidemiologically linked to confirmed cases of the disease. A further 11 were recorded as having had a cough lasting two or more weeks and one or more of the following: (i) a cough ending in apnoea or vomiting, (ii) a paroxysmal cough, (iii) an inspiratory whoop. Of the 89 cases for whom this

information was recorded, a total of 51.7% (46 cases) reported contact with a laboratory confirmed case of the disease.

Hospitalisation information was recorded for 97 of the 109 cases, of whom 10 (10.3%) were hospitalised. Seven hospitalised cases were infants under one year of age; two were children aged six and nine years; and one case was aged 26 years. Among the 998 cases notified this year to date, there have been a total of 88 hospitalisations recorded on EpiSurv. Sixty (68.1%) hospitalised cases were aged under one year, and 14 (15.9%) were aged between one and four years. In comparison, hospital discharge data¹ indicate that the number of hospitalised cases of pertussis from 1st January to 30th November 2002 totalled 139. Of these, 97 (69.8%) were aged under one year and 25 (18.0%) were aged between one and four years.

Thirty-seven (33.9%) of the 109 November notifications were from the South Island. In comparison, the percentage of notifications from the South Island during the months of October, September and August was respectively, 38.8%, 56.1% and 78.2%. Wanganui and Hutt health districts both reported large relative increases in notifications in November: Wanganui's notifications jumped to 22 from four in October², and Hutt's seven October notifications doubled to fourteen. Among health districts, Wanganui not only reported the greatest number of cases in November, but also experienced the highest monthly incidence rate of 37.7 cases per 100 000. West Coast Health District experienced the second highest monthly rate (26.4 per 100 000), as well as the highest annual rate for the 12-month period ending 30th November (260.4 per 100 000). The following graph shows the number of cases of pertussis notified nationally and from the South Island, each month since January 1999.



¹ Rebecca Kay from NZHIS is thanked for providing the raw hospital discharge data.

² An outbreak of pertussis occurring in Rangitikei Territorial Authority Area of Wanganui Health District has been recorded on EpiSurv. The outbreak, so far accounting for 14 cases, is ongoing.

Ethnicity was recorded for 100 of the 109 notifications. Of these 76 cases were European, 18 Maori, four Pacific Island people and two of 'Other' ethnicity. Cases ranged in age from one month to 84 years. Notification rates were highest in the 'less than one year' age group with a monthly rate of 25.6 per 100 000 (14 cases). Rates were next highest in the '5 to 9 years' and the '1 to 4 years' age categories with monthly rates of 12.6 (36 cases) and 9.7 (21 cases), respectively. The overall monthly notification rate was 2.9 per 100 000. The following table shows the number of doses of pertussis vaccine given to November cases in each relevant age group.

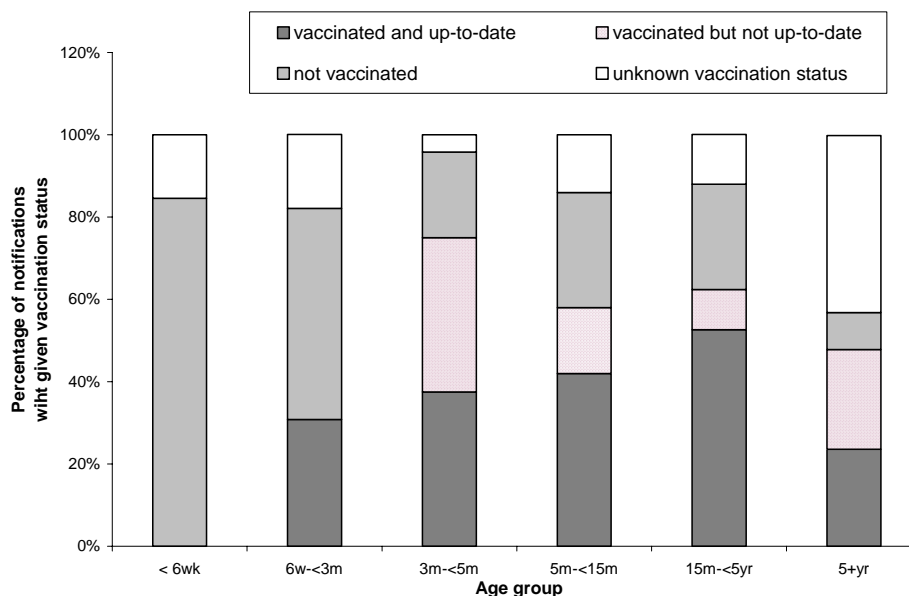
Age and vaccination status of pertussis notifications, November 2002

Age group	Total Cases	Vaccination status						
		Vaccinated (without dose information)	One dose	Two doses	Three doses	Four doses	Not vaccinated	Unknown status
0-<6 weeks	2	0	(0)	(0)	(0)	(0)	2	0
6 wks-<3 mths	4	0	1	(0)	(0)	(0)	2	1
3-<5 months	5	0	1	2	(0)	(0)	1	1
5-<15 months	4	0	1	0	2	(0)	1	0
15 mths-<5 yrs	20	1	0	0	4	8	6	1
5+ years	74	17	2	1	6	17	10	21
Total	109	18	5	3	12	25	22	24

Bracketed numbers indicate cases ineligible for vaccination

The following graph illustrates the relative proportion of cases in each age group with given vaccination status¹, for pertussis notifications this year-to-date.

*Vaccination status of pertussis notifications by age group
January - November 2002*



¹ Cases recorded as vaccinated, but without dose information, have been assigned 'unknown' vaccination status.

Rubella

Three cases of rubella were notified in October, bringing the year to date total to 35. The cases, aged four months, one year, and three years, were reported by Nelson-Marlborough, Wellington and West Coast health districts, respectively. Vaccination status was recorded for just one case: a three-year-old who had received one dose of vaccine. No cases have as yet been laboratory confirmed.

Salmonellosis

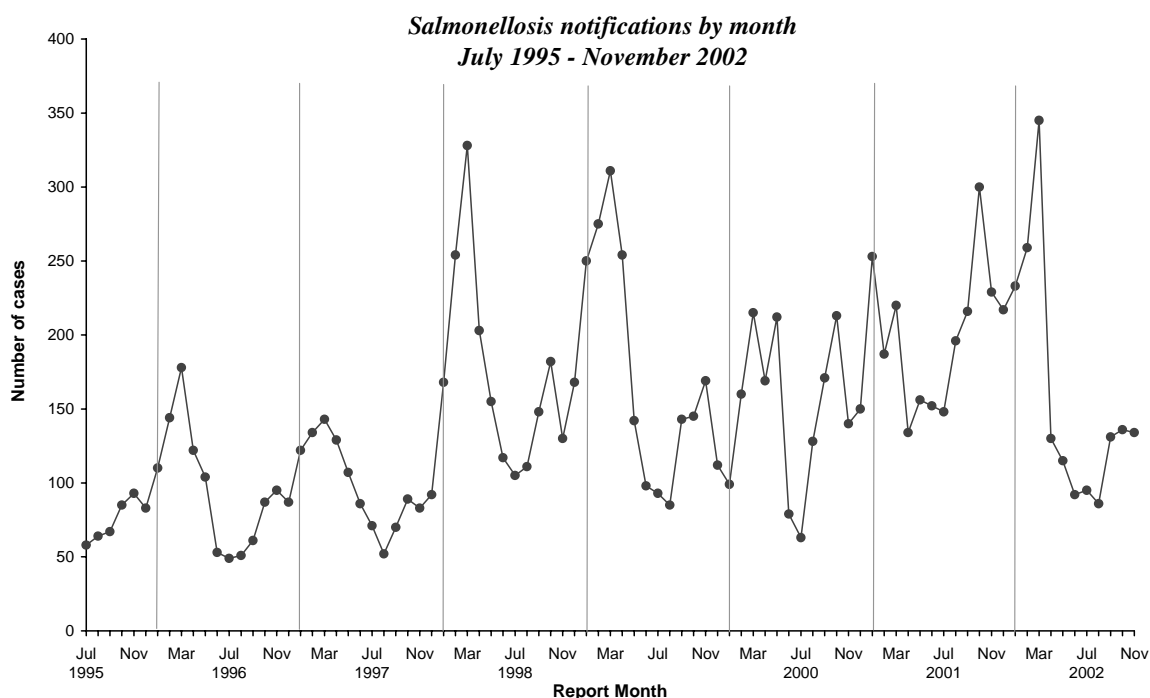
A total of 134 cases of *Salmonella* was notified in November 2002, compared to 136 notifications in October, and 131 in September. Hospitalisation information was recorded for 68 cases, of whom nine (15%) were hospitalised. Age-specific rates for the month of November were highest in the 'less than one year' and the '1 to 4 years' age groups, with respectively 22.0 and 16.2 notifications per 100 000, compared to an overall monthly rate of 3.6.

Of the 48 cases for whom overseas travel information was recorded, 10 (20.8%) had been overseas during the incubation period. The most commonly visited countries were Fiji (3 cases) and Bali (2 cases). Other travel destinations were the United Kingdom, Thailand, Malaysia, Australia and Antarctica (1 case each).

November notifications were highest in the three Auckland health districts: South Auckland reported 18 cases, Central Auckland reported 17, and North West Auckland reported 14 cases. Of South Auckland's 18 cases, 13 (72.2%) were identified as *S. Typhimurium* 160 (STM 160). In comparison, South Auckland reported just eight cases in October, of whom four (50%) were identified as STM 160.

Incidence rates in November were highest Southland Health District, with a monthly rate of 9.3 per 100 000 (10 cases). Annual rates of disease for the 12-month period ending 30th November 2002 were highest in Nelson-Marlborough (117.7 cases per 100 000) and South Canterbury (98.5) health districts.

The following graph shows the number of Salmonellosis notifications each month since July 1995.

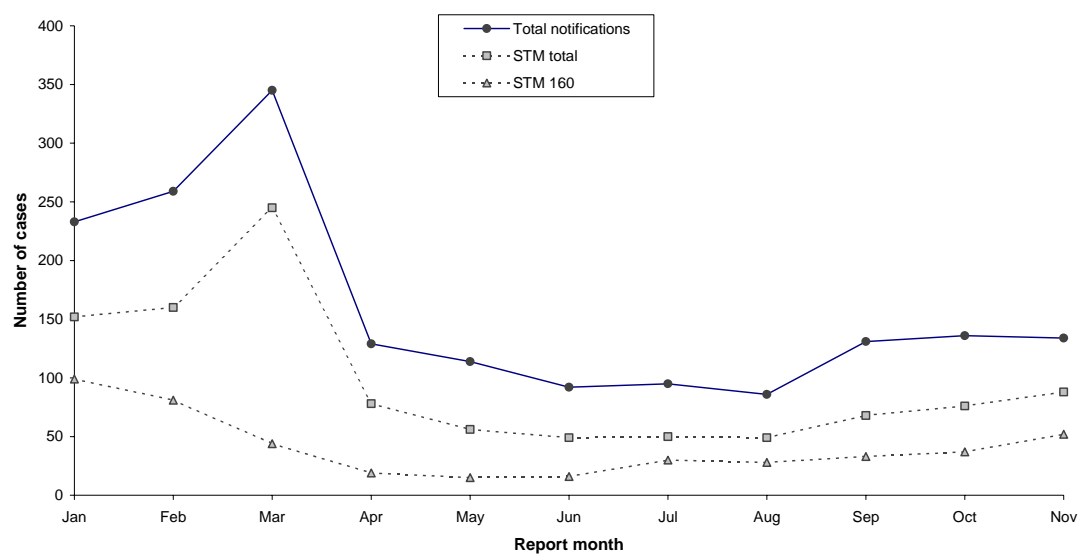


Of the 134 notifications in November, 131 (97.8%) could be matched to human cases identified by the ESR Enteric Reference Laboratory (ERL)¹. The predominant type identified was *S. Typhimurium* 160 (STM 160) with 52 cases, or 38.8% of notifications. This is the largest number of STM 160 notifications since February 2002, when 81 cases were reported. Moreover, it represents the highest proportion of monthly notifications since January 2002, when 42.5% of the 233 salmonellosis cases were identified as STM 160.

The following graph illustrates the trend in the number of *S. Typhimurium* isolations among notified cases, since the beginning of the year.

¹ Note that over 95% of notifications this year to date have been matched to ERL reported cases.

*Salmonella notifications by month
January 02 - November 02*



3. Deaths from notifiable diseases

The table below lists all deaths from notifiable diseases (with the exception of AIDS and CJD) in cases notified this year to date. It should be noted that the 'report date' refers to the date when the relevant Public Health Unit was first notified of the case and not necessarily when the case record was updated to reflect the death. Therefore report dates may in some instances pre-date death dates.

Disease	Health district	Age	Sex	Report date	Death date
Campylobacteriosis	Canterbury	82y	female	20 Feb 02	17 Feb 02
<i>Haemophilus influenzae b</i> (Hib)	Canterbury	86y	female	30 May 02	11 Jul 01
Pertussis	Taupo	9m	female	7 Jun 02	4 Oct 01
Legionellosis	Canterbury	62y	male	22 Mar 02	15 Mar 02
	South Canterbury	73y	male	3 May 02	8 May 02
	Canterbury	81y	female	15 May 02	23 May 02
Perinatal listeriosis	Central Auckland	33w gestation	N/A	15 Apr 02	13 Apr 02
	Tauranga	Unknown	N/A	8 Aug 02	Unknown
Meningococcal disease	Waikato	1y	male	8 Feb 02	10 Feb 02
	North West Auckland	42y	male	25 Feb 02	25 Feb 02
	North West Auckland	4m	male	22 Mar 02	21 Mar 02
	Otago	18y	male	29 Mar 02	31 Mar 02
	South Auckland	9m	male	3 Apr 02	2 Apr 02
	Central Auckland	6m	male	12 May 02	12 May 02
	Tauranga	69y	female	4 Jun 02	4 Jun 02
	South Auckland	16y	female	14 Jun 02	13 Jun 02
	Northland	1y	male	2 Jul 02	2 Jul 02
	Canterbury	17y	female	10 Jul 02	11 Jul 02
	Waikato	7y	female	8 Aug 02	6 Aug 02
	South Auckland	2m	female	11 Sep 02	11 Sep 02
	North West Auckland	75y	female	18 Sep 02	16 Sep 02
	Eastern Bay of Plenty	1y	female	24 Sep 02	24 Sep 02
	Otago	16y	female	23 Oct 02	24 Oct 02
	Hutt	43y	female	6 Nov 02	7 Nov 02
	Rotorua	44y	female	18 Nov 02	17 Nov 02
Tuberculosis disease	South Auckland	27y	female	15 Mar 02	24 Mar 02
	South Auckland	73y	male	17 Jun 02	22 May 02
	South Auckland	57y	female	12 Aug 02	8 Aug 02
	North West Auckland	69y	male	17 Sep 02	20 Sep 02

4. Outbreaks

This Monthly Surveillance Report includes data on outbreaks for which final reports had been entered into EpiSurv during November 2002, and on outbreaks that were initially reported during November 2002 but were still listed as 'interim' as of 9th December 2002.

Final outbreak reports

Final reports on 29 outbreaks were received in November 2002. These outbreaks involved 326 cases, 46 of whom had been laboratory-confirmed. Three cases were hospitalised.

Ten Norwalk-like virus (NLV) outbreaks, accounting for 252 cases (77.3%) were reported. These outbreaks were reported from Auckland (6 outbreaks), Taranaki (3), and Canterbury (1) health districts. The outbreak setting was recorded for eight of the ten outbreaks: five occurred in restaurants or cafés, of which four were attributed to foodborne transmission and one to person-to-person transmission; and three outbreaks, attributed to person-to-person transmission, occurred in resthomes. The following two tables provide a summary and details of all final outbreak reports.

Summary of final outbreak reports, November 2002

Organism/Toxin/Illness	Number of outbreaks	Total number of cases
<i>Bordetella pertussis</i>	1	14
<i>Campylobacter</i>	2	6
<i>Clostridium perfringens</i>	1	2
<i>Cryptosporidium parvum</i>	1	3
Gastroenteritis	7	22
<i>Giardia</i>	2	9
Norwalk-like virus	10	252
<i>Salmonella</i>	1	2
<i>Shigella</i>	3	14
Tuberculosis	1	2
Total	29	326

Details of final outbreak reports, November 2002¹

Pathogen/ toxin/ illness	Health district ²	Month ³	No. ill	Lab Conf ⁴	No. Hosp	Setting	Mode of transmission (vehicle/source)	Evidence ⁵
<i>Bordetella pertussis</i>	WG	Oct02	14	3		Home; child care centre; school	Person to person	
<i>Campylobacter</i>	AK	Sep02	4	4	0		Unknown	Nil
<i>Campylobacter</i>	AK	Oct02	2	2	0	Farm	Foodborne (raw milk) waterborne; zoonotic	Epi-H
<i>Clostridium perfringens</i>	CB	Aug02	2	1	0	Restaurant / cafe	Foodborne (battered fish)	Epi-H
<i>Cryptosporidium parvum</i>	MW	Oct02	3	3	0	Home; farm	Zoonotic	Nil
Gastroenteritis	AK	Jul02	2	0	0	Restaurant / cafe	Foodborne (roast lamb meal)	Epi-H
Gastroenteritis	AK	Sep02	3	0	0	Takeaways	Foodborne (meal KFC chicken)	Epi-H
Gastroenteritis	AK	Sep02	2	0	0	Pembles island	Foodborne (wild mussels)	Epi-H
Gastroenteritis	AK	Sep02	4	0	0	Restaurant / cafe	Foodborne (sushi)	Epi-H
Gastroenteritis	AK	Oct02	2	0	0	Takeaways	Foodborne (chicken teriyaki sandwich)	Epi-H
Gastroenteritis	AK	Oct02	2	0	0	Takeaways	Foodborne (potato and gravy); person to person	Epi-H Env
Gastroenteritis	CB	Oct02	7	0	0	Caterers	Person to person	Epi-H Oth
<i>Giardia</i>	TG	Jul02	6	3	0	Home	Waterborne; person to person; zoonotic	Epi-H
<i>Giardia</i>	OT	Jul02	3	3				
Norwalk-like virus	AK	Sep02	106	3	1	Rest home	Person to person	Epi-H
Norwalk-like virus	AK	Sep02	2	1	0	Restaurant / cafe	Foodborne (oysters)	Epi-H
Norwalk-like virus	AK	Sep02	5	2	0	Restaurant / cafe	Foodborne (common premises)	Epi-H
Norwalk-like virus	AK	Sep02	10	1	0		Unknown	Nil
Norwalk-like virus	AK	Nov02	2	2	0	Restaurant / cafe	Foodborne (BBQ prawn pizza, pacific pizza)	Epi-H Env
Norwalk-like virus	AK	Nov02	2	2	0		Unknown	Epi-H
Norwalk-like virus	TK	Sep02	84	3	0	Rest home	Person to person	Epi-H Oth
Norwalk-like virus	TK	Sep02	17	2	0	Rest home	Person to person	Epi-H
Norwalk-like virus	TK	Sep02	5	1	0	Restaurant / cafe	Foodborne (imported Korean pacific oysters)	Epi-H Lab
Norwalk-like virus	CB	Nov02	19	1	0	Hostel; restaurant / cafe	Person to person	Oth
<i>Salmonella</i>	AK	Oct02	2	2	0		Person to person	Epi-H
<i>Shigella</i>	AK	Aug02	5	3	0	Home	Person to person	Epi-H
<i>Shigella</i>	AK	Oct02	6	1	0	Home	Person to person	Epi-H
<i>Shigella</i>	AK	Oct02	3	1	0	Home	Person to person	Epi-H
Tuberculosis	SC	Feb02	2	2	2	Home	Person to person	

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: AK=Auckland; TG=Tauranga; TK=Taranaki; WG=Wanganui; MW=Manawatu; CB=Canterbury; SC=South Canterbury.

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.

Interim outbreak reports

Interim reports on 16 outbreaks involving at least 108 cases¹ were made in November 2002. Among outbreaks, the most commonly recorded illness or pathogen was gastroenteritis (8/16 outbreaks). Norwalk-like viruses (4 outbreaks) accounted for the majority (57.4% or 62/108) of cases. The following table lists all interim outbreak reports made in November. Details of these outbreaks will be provided once final reports have been received.

Interim reported outbreaks, November 2002¹

Pathogen/toxin/ illness	Health district ²	Month ³	No. ill	Lab Conf ⁴	No. Hosp	Setting	Evidence ⁵
Gastroenteritis	AK		2				
Gastroenteritis	AK		10				
Gastroenteritis	AK		5				
Gastroenteritis	AK		2				
Gastroenteritis	AK		2				
Gastroenteritis	AK		2				
Gastroenteritis	AK		2				
Gastroenteritis	WN				0		
<i>Giardia</i>	AK		3	2			
<i>Giardia</i>	AK		4	2			
<i>Giardia</i>	AK		10	4			
Norwalk-like virus	SC	Oct02 ⁶			0	Hotel / motel	Epi-H
Norwalk-like virus	CB	Nov02	20			Restaurant / cafe	
Norwalk-like virus	CB	Nov02	32		0	Rest home	
Norwalk-like virus	CB	Nov02	10			Rest home	
<i>Salmonella</i>	AK		4	3			

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: AK=Auckland; WN=Wellington; CB=Canterbury; SC=South Canterbury.

³ Month outbreak commenced.

⁴ 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.

⁶ Interim outbreak first reported to PHU in October but entered onto EpiSurv in November.

¹ Total cases were recorded for 14 of the 16 outbreaks.

An outbreak following a club afternoon tea

Abstract

A member of the public notified the Public Health Unit of a suspected outbreak. Twenty people had attended an afternoon tea function with 75% of attendees developing gastrointestinal illness following the event. The median incubation period was 26.5 hrs (range 4-45 hrs). No food source was identified as the likely source. One attendee had children at home ill with gastroenteritis. It was reported he might have been symptomatic at the time of the function. Norwalk-like virus was identified in the faecal specimens of three of the cases. Health education and advice were provided to cases, other attendees and their families.

Introduction

A Medical Officer of Health at the Public Health Unit of the Waikato DHB was contacted by a member of the public on Tuesday 26th November. She reported that she knew of approximately 14 people who had developed gastrointestinal symptoms following an afternoon tea function on the previous Sunday. A case herself, she provided information on the venue, foods eaten, other cases and detail regarding her own family. The case was referred on to the Health Protection Officer (HPO) to investigate further.

Methods

The HPO visited the families who had attended the function. The standard Outbreak – Master questionnaire was modified for the investigation of this outbreak. No food served at the function remained for sampling. The case definition used for case finding was the following:

An attendee of the club afternoon tea of 24th November 2002 who developed diarrhoea and/or vomiting with stomach pains or cramping within 72 hours of the function.

The timeframe was chosen due to the speed of onset of symptoms originally reported. A detailed food history was taken from the attendees. Cases were provided with lab request forms and sample pots and requested to provide faecal samples for laboratory analysis. Environmental sources at the venue - a private home - were considered.

Results

Of the 20 attendees, 15 met the case definition as cases - a 75% attack rate. Of the cases, 11 consented to complete detailed outbreak questionnaires. Of these cases, the median age was 29 years (range 8 – 56yrs). The median incubation period was 26.5 hours (range 4 – 45 hrs), and the median duration of illness was 34 hours (range 12 – 72 hrs). Attendees identified themselves as NZ European/Pakeha.

No environmental source at the venue was identified with respect to water source, domestic or farm animals.

The food histories of the attendees indicated the range of food eaten by individuals was generally limited. This included one attendee eating only the food she took to the function due to her dietary restrictions. Many ate solely commercially produced and packaged biscuits. No specific food item was indicated as the source of the illness. No unpasteurised milk was consumed. The afternoon tea was self-service with no dedicated tongs or servers available.

Nine of the cases provided faecal specimens. Samples of three of the cases were positive for Norwalk-like virus (NLV). One sample was positive for NLV and also *Yersinia enterocolitica*.

Discussion

Many of the attendees referred to the member whose family was ill at the time of the function. This person was the first to develop symptoms, four hours following the afternoon tea. He did not report vomiting or having diarrhoea at the venue. As it was an afternoon tea, the range and amount of food eaten was limited. There was no indication of unsafe food handling with respect to source, handling, storage or serving of the food items. It was possible that contamination of food by an infected person, and cross contamination, could have occurred, as the afternoon tea was self serve with no dedicated tongs or servers available. The venue was a private home with 20 people being entertained in a domestic setting.

Conclusion

The likely causative agent is thought to be Norwalk-like virus. The likely mode of transmission is thought to be person to person spread originating from an attendee with reported contemporaneous exposure to a household case. It is possible there was airborne transmission via fomites to explain the high attack rate among a group with limited consumption of the same foods.

(Reported by Dr. Felicity Dumble, Medical Officer of Health, Waikato.

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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).

5. National surveillance data and trends

Disease incidence and rates

Disease ¹	Current year - 2002 ²			Previous year - 2001		
	Nov 2002 cases	Cumulative total since 1 January	Current rate ³	Nov 2001 cases	Cumulative total since 1 January	Previous rate ³
AIDS	2	18	0.6	1	22	0.6
Campylobacteriosis	1044	11215	340.0	1436	8655	256.1
Cholera	0	1	0	0	3	0.1
Cryptosporidiosis	95	926	26.0	101	1164	31.9
Dengue fever	8	68	1.8	8	92	2.5
Gastroenteritis ⁴	64	946	27.2	71	870	24.6
Giardiasis	107	1431	41.4	142	1486	42.8
<i>H. influenzae</i> type b disease	0	3	0.1	1	11	0.3
Hepatitis A	8	105	3.0	7	55	1.6
Hepatitis B (acute) ⁵	3	59	1.6	5	54	1.6
Hepatitis C (acute) ⁵	2	48	1.4	4	54	1.5
Hydatid disease	0	1	0	0	7	0.2
Influenza ⁶	1	698	18.7	1	665	17.9
Lead absorption	9	88	2.5	11	123	4.0
Legionellosis ⁶	0	42	1.3	3	52	1.5
Leprosy	1	3	0.1	0	3	0.1
Leptospirosis	14	134	3.9	12	95	2.7
Listeriosis	3	19	0.5	3	17	0.5
Malaria	2	58	1.7	4	49	1.4
Measles	4	28	0.9	10	77	2.1
Meningococcal disease ⁷	29	522	15.5	66	592	17.0
Mumps	6	62	1.7	1	54	1.6
Paratyphoid	1	14	0.4	3	31	0.9
Pertussis	109	998	28.4	68	1269	43.2
Rheumatic fever	1	75	2.1	3	113	3.7
Rickettsial disease	0	6	0.2	0	5	0.1
Rubella	3	35	1.0	1	27	0.7
Salmonellosis	134	1756	52.8	229	2201	62.9
Shigellosis	4	103	2.9	6	152	4.3
Tetanus	0	1	0.1	0	3	0.1
Tuberculosis	36	352	10.5	29	331	9.5
Typhoid	0	22	0.7	3	23	0.7
VTEC / STEC infection	3	68	1.8	4	75	2.1
Yersiniosis	49	444	12.9	34	391	11.1

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

² These data are provisional

³ Rate is based on the cumulative total for the current year (12 months up to and including November 2002) or the previous year (12 months up to and including November 2001), 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 November 2002 and preceding 12 months

Disease	Nov 2002	Oct 2002	Sep 2002	Aug 2002	Jul 2002	Jun 2002	May 2002	Apr 2002	Mar 2002	Feb 2002	Jan 2002	Dec 2001	Nov 2001
AIDS	2	0	4	1	1	1	1	3	1	3	1	4	1
Campylobacteriosis	1044	1157	1174	1122	1005	822	675	548	939	1184	1545	1491	1436
Cholera	0	0	0	0	0	0	0	1	0	0	0	0	0
Cryptosporidiosis	95	258	240	90	53	29	42	17	24	39	39	44	101
Dengue fever	8	0	0	8	13	8	17	6	3	3	2	1	8
Gastroenteritis ²	64	155	69	70	62	143	85	72	102	62	62	72	71
Giardiasis	107	112	107	123	128	128	167	132	152	145	130	117	142
Haemophilus influenzae type b	0	0	0	0	0	1	2	0	0	0	0	0	1
Hepatitis A	8	3	2	2	2	7	9	18	28	17	9	6	7
Hepatitis B (acute) ³	3	4	5	6	6	7	7	5	3	5	8	2	5
Hepatitis C (acute) ³	2	2	7	7	3	5	6	4	8	2	2	5	4
Hydatid disease	0	0	0	1	0	0	0	0	0	0	0	0	0
Influenza ⁴	1	22	103	136	230	151	30	16	3	3	3	1	1
Lead absorption	9	6	5	10	9	7	14	5	7	9	7	7	11
Legionellosis ⁴	0	4	4	4	7	5	4	3	4	0	7	5	3
Leprosy	1	0	0	0	1	1	0	0	0	0	0	0	0
Leptospirosis	14	10	13	6	14	10	16	14	8	18	11	10	12
Listeriosis	3	3	1	3	2	0	0	1	2	2	2	1	3
Malaria	2	3	6	3	6	5	6	6	3	8	10	5	4
Measles	4	3	0	4	3	1	2	2	3	4	2	6	10
Meningococcal disease ⁵	29	41	72	87	65	69	44	31	28	24	32	57	66
Mumps	6	11	6	4	4	6	7	4	5	6	3	2	1
Paratyphoid	1	0	0	2	2	2	3	1	3	0	0	1	3
Pertussis	109	103	98	110	83	88	113	52	58	95	89	65	68
Rheumatic Fever	1	4	5	8	4	2	9	1	9	16	16	4	3
Rickettsial disease	0	0	2	2	0	1	1	0	0	0	0	0	0
Rubella	3	2	2	5	1	5	8	6	1	1	1	3	1
Salmonellosis	134	136	131	86	95	92	115	130	345	259	233	217	229
Shigellosis	4	8	4	8	12	10	13	12	10	11	11	5	6
Tetanus	0	0	0	0	0	0	1	0	0	0	0	1	0
Tuberculosis	36	48	29	36	41	23	27	26	24	27	35	42	29
Typhoid	0	3	0	0	2	1	3	2	6	4	1	4	3
VTEC/STEC infection	3	5	6	6	7	4	11	8	2	5	11	1	4
Yersiniosis	49	45	25	30	30	33	42	33	42	44	71	38	34

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 - November 2002

Cases this month

Current rate¹

Disease	Cases for November 2002, ² and current rate ^{1,2} by health district ^{3,4}																							
	Northland	NW Auck	Central Auck	South Auck	Waikato	Tairāngia	Eastern BoP	Gisborne	Rotorua	Taupo	Taranaki	Ruapehu	Hawkes Bay	Wanganui	Manawatu	Wairarapa	Wellington	Hutt	Nelson-Marl	West Coast	Canterbury	South Cant	Otago	Southland
AIDS ⁵	0	1			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0			0.6	0.8	0	0	1.6	0	0	0	0	0	0	0	4.7	0	0	0	0	0	0	0
Campylobacteriosis	16	136	137	123	117	17	9	6	22	7	30	3	35	15	21	6	78	29	23	10	106	20	50	28
	216.2	419.8	435.9	316.8	354.8	250.1	140.7	213.9	277.5	304.6	314.1	119.0	316.2	263.7	189.6	201.2	446.6	339.7	165.9	263.7	365.0	437.7	359.4	348.1
Cholera	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptosporidiosis	1	3	3	1	8	0	0	1	3	2	4	1	7	2	3	0	4	3	2	4	11	7	14	11
	6.4	10.5	7.6	6.4	39.5	13.2	4.1	9.1	24.8	60.3	37.8	35.0	42.5	20.6	42.8	15.7	59.5	20.5	19.6	56.0	22.4	71.7	48.2	49.1
Dengue fever	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	0	0	0	4	0	0	0
	0	1.4	4.9	3.5	1.3	1.5	2.0	0	1.6	3.2	1.9	0	0	1.7	2.0	2.6	1.2	3.0	0	0	2.0	0	0.6	0
Gastroenteritis	0	11	8	6	1	1	0	1	0	0	0	0	0	2	0	0	8	1	0	2	20	0	1	2
	7.8	23.0	28.3	11.2	8.7	2.3	2.0	18.2	7.8	6.3	11.6	0	4.9	34.3	21.7	26.1	36.3	36.4	14.7	19.8	81.9	112.6	21.7	16.7
Giardiasis	5	12	16	12	12	3	0	2	4	1	0	0	5	3	2	0	11	2	0	0	10	1	5	1
	19.3	43.7	66.6	35.9	52.5	41.0	12.2	25.0	32.6	41.3	13.6	0	89.2	46.2	27.2	26.1	48.1	52.3	26.1	62.6	34.4	26.9	30.1	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	0	0	0	0
	0	0.2	0	0	0	0	0	0	0	0	0	0	0.7	0	0	0	0	0	0	0	0.2	0	0	0
Hepatitis A	1	0	0	4	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	1.4	3.7	7.9	6.1	5.5	0	2.0	0	1.6	6.3	0	0	3.5	0	1.4	0	1.2	3.8	1.6	0	0.5	0	0	0.9
Hepatitis B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0
	2.1	1.6	2.4	1.3	1.6	2.3	0	13.7	0	3.2	1.0	7.0	1.4	1.7	1.4	2.6	1.2	0.8	0.8	0	2.0	0	0.6	0
Hepatitis C	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0.7	0.3	1.1	0.3	13.2	2.0	0.0	6.2	6.3	0.0	0.0	1.4	0.0	0.7	2.6	2.8	0.8	0.0	6.6	1.0	2.6	0.0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead absorption	1	0	0	0	1	0	0	0	0	0	2	0	0	0	1	1	1	0	0	0	0	0	1	1
	4.3	1.9	1.9	0.5	3.6	1.5	0	9.1	0	5.8	0	1.4	3.4	4.1	5.2	0.8	0.8	0.8	0	3.5	6.4	6.0	3.7	3.7
Legionellosis ⁶	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2.1	0.5	0.8	0.5	0.3	0.8	0	0	0	6.3	1.0	7.0	1.4	1.7	0	7.8	1.6	2.3	1.6	0	2.7	1.3	2.4	0
Leprosy	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	0.3	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptospirosis	0	1	0	0	2	0	0	0	0	0	0	0	1	1	1	1	0	0	3	0	0	1	3	0
	6.4	1.6	0	0.5	7.1	5.4	2.0	6.8	0	5.8	14.0	18.8	6.9	9.5	5.2	5.2	0.8	0	8.2	6.6	1.2	14.1	3.6	1.9
Listeriosis	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0.9	0.5	0.5	0.6	1.5	0	0	0	0	0	0	0	0	0.7	0	0	0.8	0	0	0.7	1.3	0.6	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	1
	0	1.2	0.8	1.1	2.6	1.5	0	0	3.1	3.2	1.9	14.0	1.4	0	6.8	0	2.0	0.8	1.6	0	2.0	2.6	1.8	0.9
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1
	0	0.5	0.3	0.3	0.6	0.8	0	0	0	0	0	0	0	0	0.7	0	0.4	0	5.7	16.5	2.7	1.3	0	0.9
Meningococcal disease ⁶	2	2	2	2	1	0	2	0	1	2	1	0	0	1	0	0	1	1	0	0	3	3	4	1
	20.7	8.8	12.2	24.0	13.6	23.2	32.6	15.9	63.6	63.5	8.7	7.0	23.7	8.6	6.8	7.8	10.6	12.9	2.5	23.1	7.7	10.2	31.3	13.0
Mumps	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	1.4	2.1	1.6	1.6	0.3	2.3	2.0	0	3.1	0	0	0	2.8	1.7	0.7	0	1.2	0.8	4.1	3.3	1.0	1.3	5.4	3.7
Paratyphoid	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	0.9	0.5	0.5	0	0	0	0	0	0	0	0	1.4	0	0	0	0.8	0.8	0.8	0	0	1.3	0	0
Pertussis	0	10	1	4	10	2	1	0	0	2	1	0	0	22	2	0	3	14	9	8	19	1	0	0
	5.0	22.3	8.7	8.8	33.7	5.4	6.1	4.6	3.1	12.7	14.5	7.0	9.8	54.8	13.6	15.7	25.2	42.5	62.9	260.4	51.8	202.2	3.6	34.2
Rheumatic fever	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6.4	0.5	4.1	6.4	2.3	3.1	4.1	4.6	1.6	0	1.0	0	1.4	1.7	0	2.6	2.0	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	1	0	1	1	0	0	0	0
	0.7	0.2	0.5	0.3	0	0.8	4.1	0	0	0	1.0	0	9.1	0	0	5.2	1.6	0.8	3.3	6.6	0.5	0	0.6	0
Salmonellosis	4	14	17	18	10	7	1	3	0	0	3	0	5	5	2	0	8	5	3	1	10	4	4	10
	39.2	41.0	49.2	43.1	48.9	31.7	40.8	81.9	52.7	69.8	48.5	49.0	69.0	61.7	40.8	54.9	53.2	42.5	117.7	46.2	49.8	97.3	60.8	88.9
Shigellosis	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
	2.1	3.0	7.1	6.4	0.6	1.5	0	0	4.7	0	1.9	0	4.2	1.7	0	0	1.6	0.8	0	0	3.0	5.1	2.4	0.9
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	0	0	0	0	0	0	1.6	0	0	0	0	0	0	0	0	0	0	0	0	1.3	0	0
Tuberculosis	1	10	4	4	1	0	0	0	0	0	0	0	8	0	0	1	2	1	0	0	3	0	1	0
	9.3	15.8	21.5	16.5	7.8	7.0	0	4.6	4.7	12.7	1.0	0	20.9	3.4	3.4	15.7	11.8	12.9	1.6	3.3	5.7	3.8	4.8	1.9
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	1.4	1.1	2.9	0	0	0	0	0	0	0	0	0	0	0	0	1.6	0	0	0	0.2	0	0	0
VTEC / STEC	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
	0.7	0.9	1.4	0.8	4.5	0.8	10.2	0	4.7	3.2	4.8	0	1.4	1.7	0.7	0	1.2	0.8	0	0	4.0	1.3	0.6	0.9
Yersiniosis	0	4	7	7	6	3	1	0	0	0	0	0	3	0	2	1	4	0	0	2	7	1	1	0
	2.1	16.1	18.2	12.0	11.7	16.3	6.1	9.1	7.8	22.2	2.9	14.0	11.1	5.1	8.2	10.5	15.8	8.3	3.3	59.3	15.9	15.4	14.4	8.3

1 Current rate is based on the cumulative total for the 12 months up to and including November 2002 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 the local medical officer of health