
MONTHLY SURVEILLANCE REPORT

This monthly report contains data and commentary on disease trends and events up to and including the end of December 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 14 January 2003. As this information may be updated over time, the results should be regarded as provisional only. For a more complete analysis of 2002 notification data please refer to the Annual Surveillance Summary Report.

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1. Major surveillance issues

- *Campylobacteriosis*: Elevated rates of campylobacteriosis were experienced by Wellington and Hutt Health districts during December. Wellington's notifications rose from 79 cases in November to 142 in December, and Hutt's more than doubled from 29 cases in November to 61 in December.
- *Meningococcal disease*: 26 cases, including one fatality, were reported in December 2002 (based on data received by the end of January 2003). This brings the provisional year 2002 total to 552 cases, including 19 fatalities.
- *Pertussis*: 73 cases of pertussis were notified in December 2002, compared to 65 cases during the same month last year. Neighbouring health districts of Manawatu, Taranaki and Hawkes Bay reported large relative increases in notifications in December.
- *Salmonellosis*: 123 cases were notified in December 2002. Of the 116 cases for whom laboratory results were known, 45 (38.8%) were identified as *S. Typhimurium* 160.

2. Key disease trends

Campylobacteriosis

There were 1270 cases of campylobacteriosis notified during December 2002, of whom 1162 (91.5%) were confirmed. This brings the year 2002 total to 12 488 cases - the greatest annual notification total recorded in the last 12 years. In comparison, 10 145 cases were notified during 2001 and 1491 cases in December of that year.

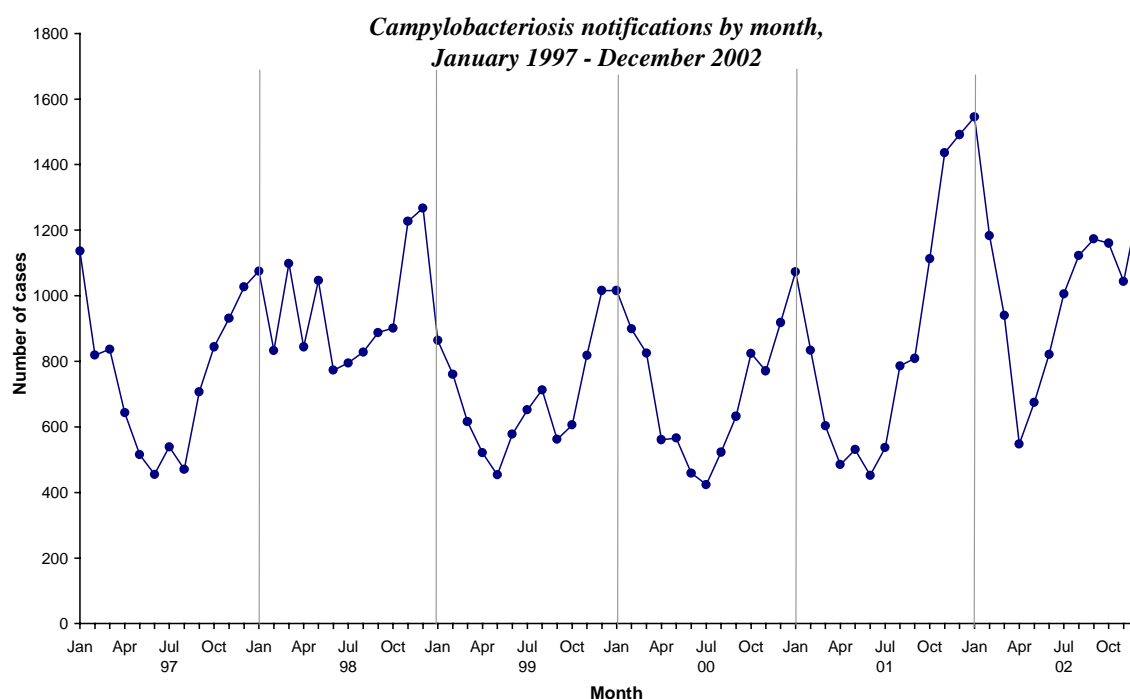
Incidence rates in December 2002 were highest in the 'less than one year' age group with a monthly rate of 100.6 per 100 000 population (55 cases), and next highest in the '1 to 4 years' age group with a monthly rate of 55.5 cases per 100 000 (120 cases). The overall monthly rate was 34.0 per 100 000. Approximately 90% of cases (for whom ethnicity was recorded) were of European ethnicity. The male to female ratio was 1.36:1. There were 54 hospitalisations (9.4% of cases for whom this information was recorded).

Among all health districts, the incidence rate in December¹ was highest in Wellington Health District with a monthly rate of 56.0 per 100 000, and next highest in the neighbouring Hutt Health District with a rate of 46.3 per 100 000. Wellington's notifications rose from 79 in November to 142 cases in December, and Hutt's notifications more than doubled from 29 in November to 61 in December. The annual

¹ The monthly incidence rate for December is the number of December 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.

incidence rate for the year 2002 was also highest in the Wellington Health District, with an annual rate of 438.7 per 100 000 population. Central and North West Auckland health districts experienced the next highest rates of 426.6 and 417.2 per 100 000, respectively. In comparison, during 2001, the annual rate of campylobacteriosis was highest in Wellington Health District, whereas during both 1999 and 2000 it was highest in South Canterbury Health District.¹

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



Risk factor information was infrequently recorded on the case report forms, with only 14.2% (180/1270) of notifications in December including information on human contact and only 15.0% (191/1270) including information on contact with farm animals. Of these, 11.7% (21/180) had a history of contact with other symptomatic people, and 33.5% (64/191) reported exposure to farm animals.

At the time of this report, 1783 notifications for the month of January 2003 had been received. These included 264 cases from Wellington Health District alone.

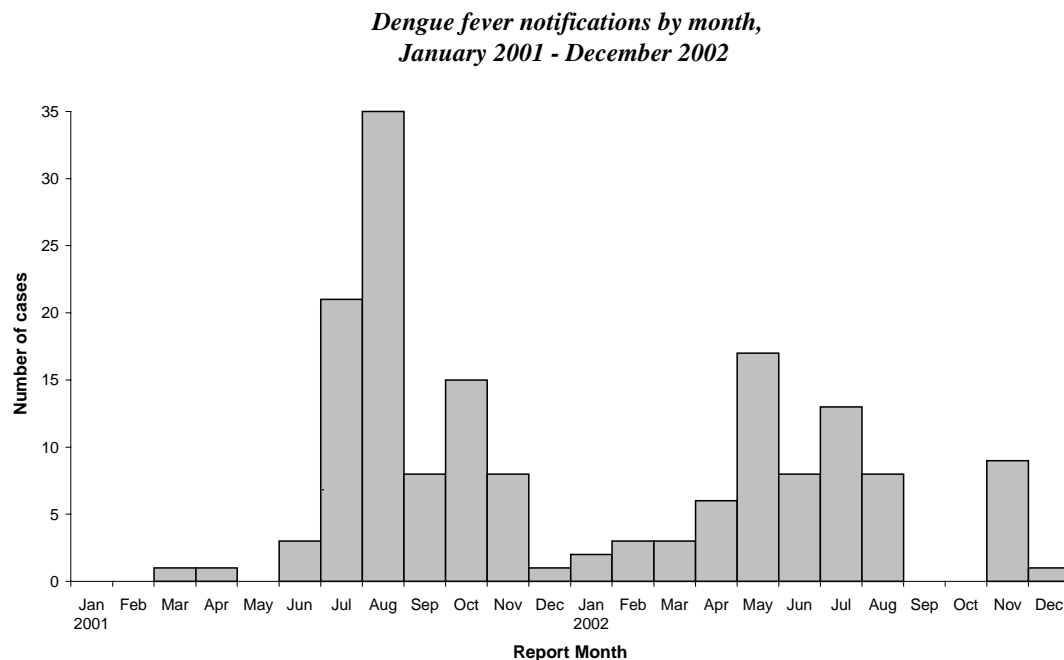
Dengue

In December one laboratory-confirmed case of dengue fever was notified. The case was a 51-year-old male Rarotongan who had been diagnosed with the disease back in October 2001 in Rarotonga. This brings the year 2002 notification total to 70. All 66 cases for whom travel information was recorded had been overseas during the incubation period. The most commonly reported overseas destination was Rarotonga

¹ 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.

or the Cook Islands (41 cases), followed by Fiji, Thailand (5 cases each), Samoa (4 cases), Tahiti and Bali (3 cases each).

The following graph shows the number of monthly dengue notifications for the past two years.



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

Gastroenteritis

There were 134 gastroenteritis notifications in December. Two cases were hospitalised, and an 84-year-old male from Central Auckland Health District died. Over half (52%) the cases for whom age was recorded were aged over fifty years. The majority (50%) of cases were self-notifications, while 32% of cases were discovered as a result of outbreak investigations. Seventy-two cases (54%) were linked to an outbreak recorded in the Outbreak Module of EpiSurv. One Canterbury outbreak alone accounted for 41 cases. The cases had eaten at a Christchurch restaurant which had been serving beef contaminated with *Clostridium perfringens*. Another Otago outbreak, accounting for 18 cases, occurred among attendees at a work Christmas function at a Dunedin restaurant. Person to person transmission of Norwalk-like virus was suspected.

Hydatid disease

One confirmed case of hydatid disease was notified in December 2002. The case was a 76-year-old European male from South Auckland Health District. No information on risk factors was recorded. One other case of hydatid disease was notified in 2002, that of a 47-year-old European male who had confirmed hydatids as a child.

Leptosporidiosis

Eight cases of leptospirosis were notified in December 2002, bringing the year 2002 total to 142 cases. In comparison, 10 cases were notified in December 2001, and 105 cases during 2001.

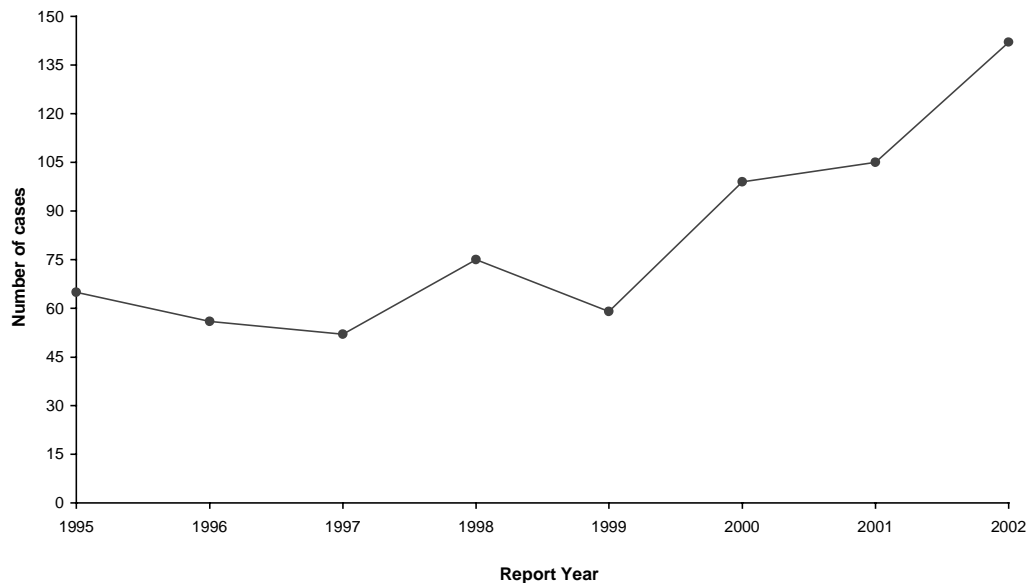
Gisborne Health District reported three cases in December; Hawkes Bay and Nelson-Marlborough health districts each reported two cases; and Northland Health District reported one case. Of the 142 notifications in 2002, the greatest number was reported from Hawkes Bay Health District (29 cases), followed by Waikato (20 cases), Manawatu and Nelson-Marlborough (12 cases each) health districts.

Occupation was recorded for six of the eight December cases. Of these, four cases worked in the meat processing industry, one case was a dairy farmer and one a kayak instructor. All three Gisborne cases worked at the same freezing works. One case reported being regularly covered by urine from hung beasts. One of the cases, for whom no occupation was recorded, had recently returned from Borneo. Provisional figures for 2002 indicate that over half (50.8%) of the 128 cases for whom occupation was recorded worked in the meat processing industry, and 44% were either farmers or worked with livestock.

December cases ranged in age from 20 to 55 years. Seven cases were male and one was female. Of the four cases for whom ethnicity was recorded, three were Maori and one was of European ethnicity. There were three hospitalisations among the four cases for whom this information was recorded.

The following graph shows the number of cases of leptospirosis notified each year since 1995.

*Leptosporosis notifications by year,
1995 -2002*



At the time of this report, 16 notifications for the month of January 2003 had been received.

Measles

There were no cases of measles notified in December. Twenty-six cases were notified throughout 2002. In contrast, six cases were reported in December 2001 and 83 notifications were received in 2001.

At the time of this report, four notifications for the month of January 2003 had been received.

Meningococcal disease

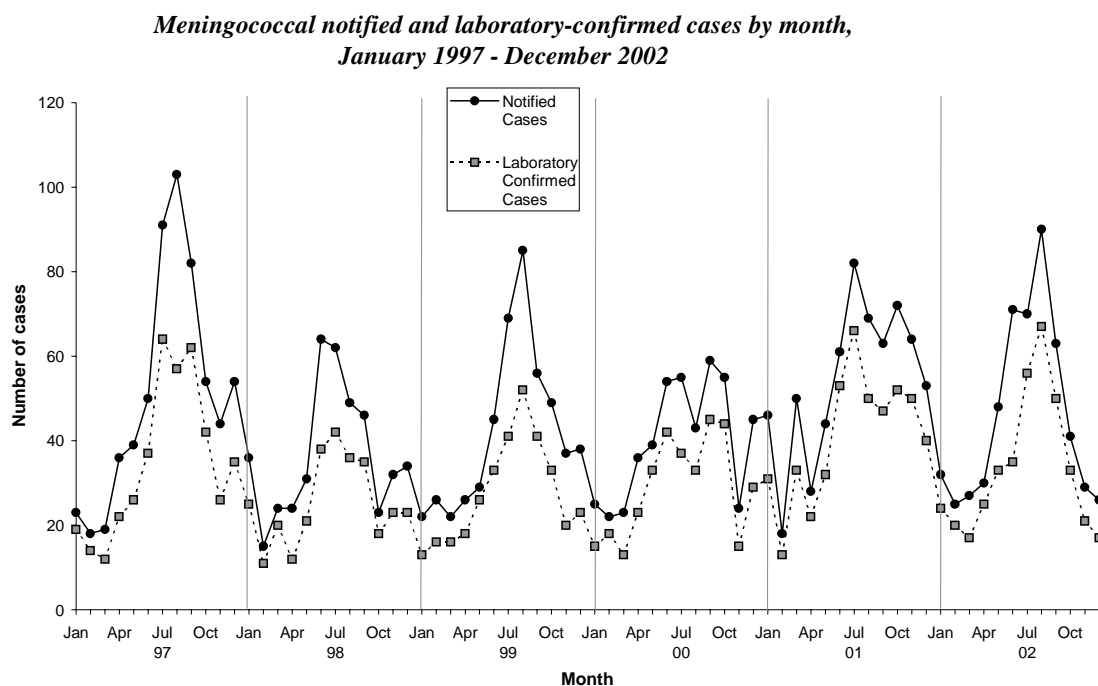
It must be emphasised that all monthly and annual figures mentioned in the following section of this report are provisional only. Please see the Annual Meningococcal Disease Report for final figures.

Based on the earliest¹ date available, 24 cases of meningococcal disease were notified during December 2002, bringing the year to date total to 549 cases. Of these 24 cases,

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

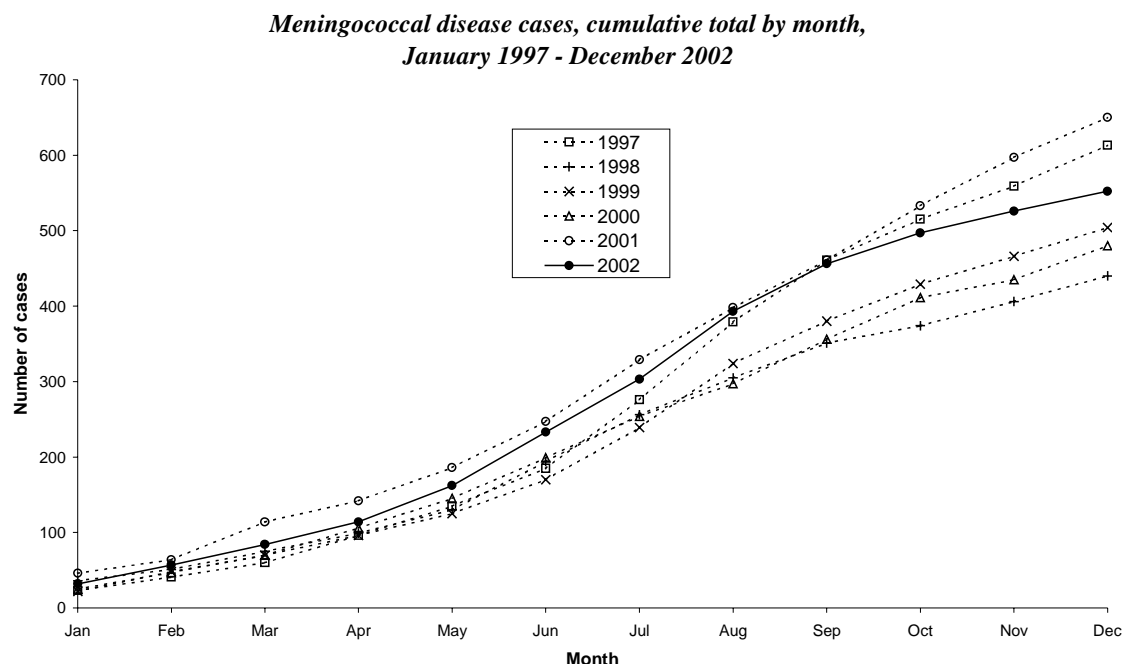
16 were laboratory confirmed¹. In comparison, 53 cases were reported during December 2001.

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



¹ Updated figures, based on recently received EpiSurv data, indicate 26 cases in December, of whom 17 were laboratory confirmed. The provisional annual total for 2002 is 552 cases and 398 laboratory confirmations.

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



All December cases for whom hospitalisation information was recorded were hospitalised. One case was fatal - that of an 18-day-old male from West Coast Health District. This brings the number of fatal cases this year to nineteen.

In December the male to female notification ratio was 2:1. Among all cases reported during 2002, the male to female ratio was 1.2:1. Ethnicity was recorded for 23 of the 24 cases this month. Of these, 12 (52%) were of European ethnicity, 5 (22%) were Maori, 3 (13%) were Pacific Islands People¹, and three were of 'Other' ethnicity. In comparison, for all 549 notifications in 2002, the percentage of European, Maori and Pacific Islands cases was 50%, 30% and 16% respectively; and during 2001, the percentage of European, Maori and Pacific Islands cases was 41%, 33% and 24% respectively.

During December, age-specific rates were highest in the 'less than one year' and '1 to 4 years' age categories, with monthly rates of 11.0 per 100 000 (6 cases) and 3.2 per 100 000 (7 cases) respectively, compared to an overall monthly rate of 0.6 per 100 000. During 2002, age-specific rates were also highest in the 'less than one year' and '1 to 4 years' age categories, with annual rates of 153.7 per 100 000 (84 cases) and 69.4 per 100 000 (150 cases), respectively, compared to an overall rate of 14.7 per 100 000.

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 are classified as Maori.

In December, South Auckland and Tauranga health districts reported the greatest number of cases with four and three notifications respectively. Among all 549 cases during 2002, the greatest number was reported by South Auckland Health District (86 cases), followed by Otago (50 cases) and Central Auckland (43 cases) health districts. In 2002 the highest annual incidence rate for was experienced by Taupo (63.5 per 100 000), followed by Rotorua (52.7) and Eastern Bay of Plenty (30.6) health districts.

Mumps

Four cases of mumps were notified in December, bringing the year 2002 total to 66. In comparison, 56 cases were notified during 2001. Two cases from Northland Health District were reported, and one case each from South Auckland and Nelson-Marlborough health districts. No cases were laboratory confirmed. The cases ranged in age from three months to nine years. Vaccination status was recorded for three cases: a three-year-old received three doses of the vaccine; a nine-year-old received at least one dose; and a three-month-old infant was not vaccinated. All cases were male.

Pertussis

During December 2002, there were 73 cases of pertussis notified, compared to 65 cases during the same month last year. This brings the provisional total for 2002 to 1070 cases¹. Of the 73 December cases, 64.4% (47 cases) were either confirmed by serological means, by PCR or by isolation of *Bordetella pertussis*. Eight of the remaining 26 cases were epidemiologically linked to confirmed cases of the disease. A further nine cases 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 40 cases for whom this information was recorded, a total of 21 (52.5%) reported contact with a laboratory confirmed case of the disease.

One case reported in December was fatal. The infant, a one-month old female from North West Auckland Health District was hospitalised on the 2nd of December and died two days later. This was the second fatal case of pertussis in 2002. Hospitalisation information was recorded for 66 of the 73 cases, of whom 10 (15.2%) were hospitalised. Eight hospitalised cases were infants under one year of age; one case was a child aged five years; and one case was aged 36 years. Among the 1070 cases notified in 2002, there were a total of 98 hospitalisations recorded on EpiSurv. Sixty-eight (69.4%) hospitalised cases were aged under one year, and 14 (14.3%) were aged between one and four years. In comparison, provisional hospital discharge data² indicate that the number of hospitalised cases of pertussis from 1st January to 31st December 2002 totalled 150. Of these, 105 (70%) were aged under one year and 27 (18.0%) were aged between one and four years.

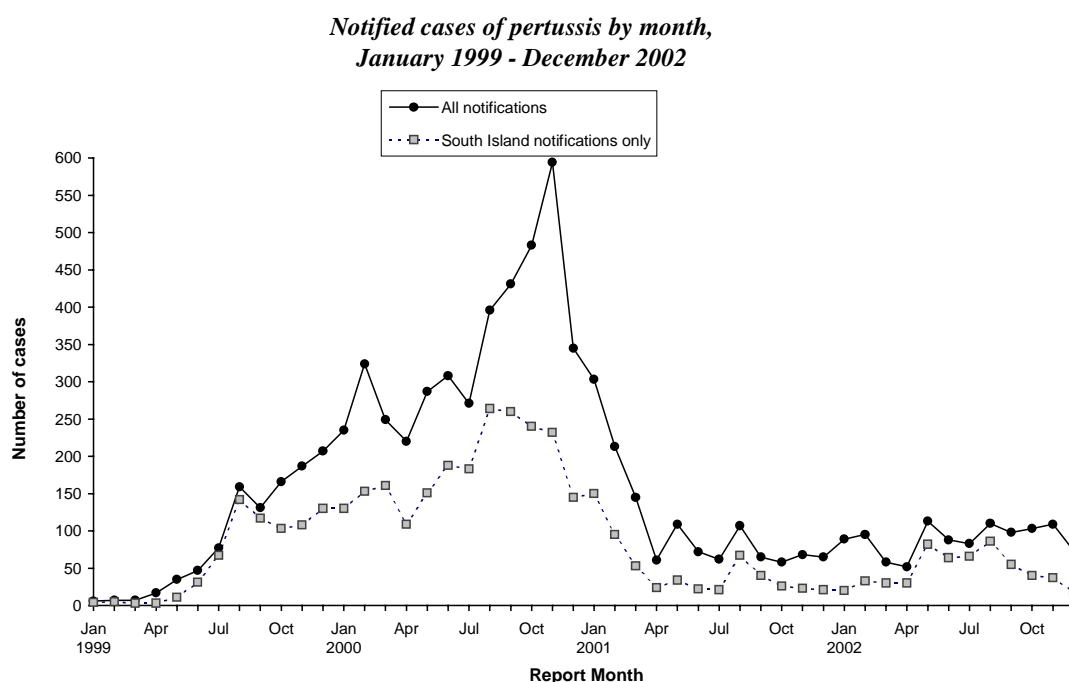
¹ Detailed analysis of all cases notified during 2002 will be contained in the Annual Surveillance Report.

² Rebecca Kay from NZHIS is thanked for providing the raw hospital discharge data.

Eighteen (24.7%) of the 73 December notifications were from the South Island. The proportion of notifications from the South Island has been steadily decreasing from a peak of 79.5% in July 2002. The neighbouring health districts of Manawatu, Taranaki and Hawkes Bay reported large relative increases in notifications in December: Manawatu's notifications jumped to 22 (from two cases in November); Taranaki's increased to seven cases (from one in November); and Hawkes Bay, which reported no cases between September and November, reported five cases in December. Manawatu, Taranaki and Hawkes Bay health districts each reported their highest monthly total for the year 2002 in December. Among all health districts, Manawatu not only reported the greatest number of cases in December, but also experienced the highest monthly incidence rate of 8.2 cases per 100 000.

During 2002, West Coast Health District experienced the highest annual rate of 260.4 cases per 100 000, followed by South Canterbury with a rate of 203.5 per 100 000. In comparison, the national annual rate of pertussis during 2002 was 28.6 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.



Ethnicity was recorded for 64 of the 73 December notifications. Of these, 56 cases (87.5%) were of European ethnicity, 7 (10.9%) Maori, and one case was a Pacific Islands person. Cases ranged in age from 20 days to 75 years. Notification rates were highest in the 'less than one year' age group with a monthly rate of 23.8 per 100 000 (13 cases). Rates were next highest in the '5 to 9 years' and the '1 to 4 years' age categories with monthly rates of 7.7 (22 cases) and 5.6 (12 cases), respectively. The overall monthly notification rate was 2.0 per 100 000. In comparison, 85.3% of all cases in 2002 (for whom ethnicity was recorded) were of European ethnicity, 10.8% of Maori ethnicity, 1.9% Pacific Islands People, and 1.9% of 'Other' ethnicity. Annual rates of disease for 2002 were highest in the 'less than one year' age group, with a rate of 232.4 per 100 000 (127 cases). Rates were next highest in the '1 to 4 years' and the '5 to 9 years' age categories with annual rates of 109.2 per 100 000

(236 cases) and 100.0 (286 cases), respectively. The overall annual notification rate for 2002 was 28.6 per 100 000 population.

The following table shows the number of doses of pertussis vaccine given to December cases in each relevant age group.

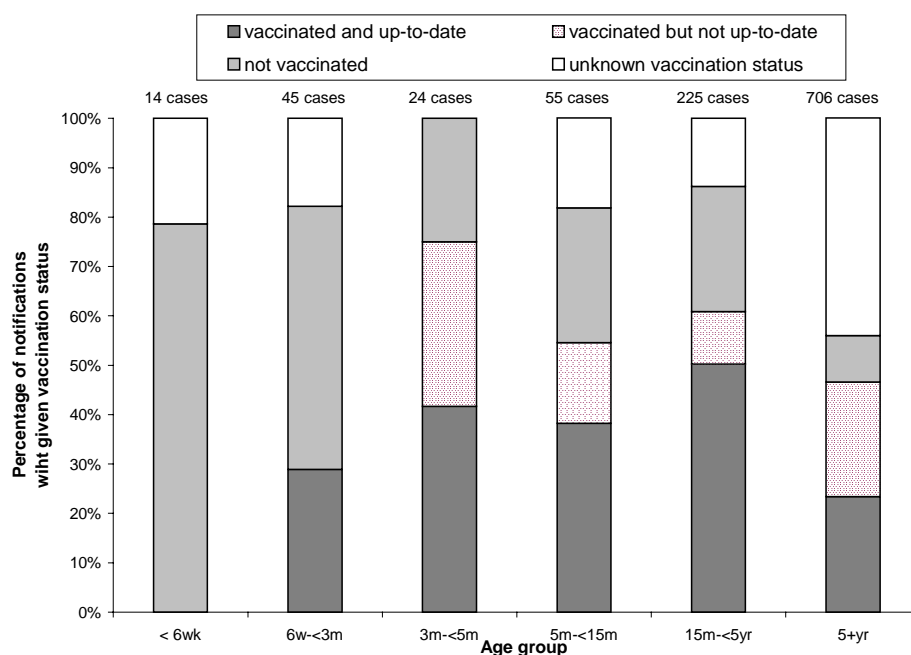
Age and vaccination status of pertussis notifications, December 2002

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)	1	1
6 wks-<3 mths	6	0	1	(0)	(0)	(0)	4	1
3-<5 months	1	0	0	0	(0)	(0)	1	0
5-<15 months	5	1	1	0	0	(0)	1	2
15 mths-<5 yrs	11	3	0	0	2	2	2	2
5+ years	48	14	0	2	3	8	8	13
Total	73	18	2	2	5	10	17	19

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 during 2002.

Age and vaccination status of pertussis notifications , 2002



At the time of this report, 65 notifications for the month of January 2003 had been received.

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

Rubella

Two cases of rubella were notified in December, bringing the year 2002 total to 36, compared to 30 cases in 2001. The December cases, both aged four years and of European ethnicity, were reported from Hawkes Bay Health District. One case had received two doses of vaccine and the other had received a single dose. Neither case was laboratory confirmed.

Salmonellosis

There were 123 cases of *Salmonella* notified in December 2002, bringing the provisional 2002 notification total to 1878. In comparison, 217 cases were notified during December 2001, and a total of 2418 cases throughout the same year.

In December 2002, the male to female notification ratio was 1.3:1. Hospitalisation information was recorded for 84 cases, of whom 12 (14.2%) were hospitalised. Age-specific rates were highest in the 'less than one year' and the '1 to 4 years' age groups, with respectively 11.0 and 7.4 notifications per month per 100 000, compared to an overall monthly rate of 3.3. In comparison, provisional figures for 2002 indicate the male to female notification ratio was 1.1:1; the hospitalisation rate was 14.1%; and annual rates of disease in the 'less than one year' age group were almost four times higher (197.6 per 100 000) than the overall annual rate (50.2).

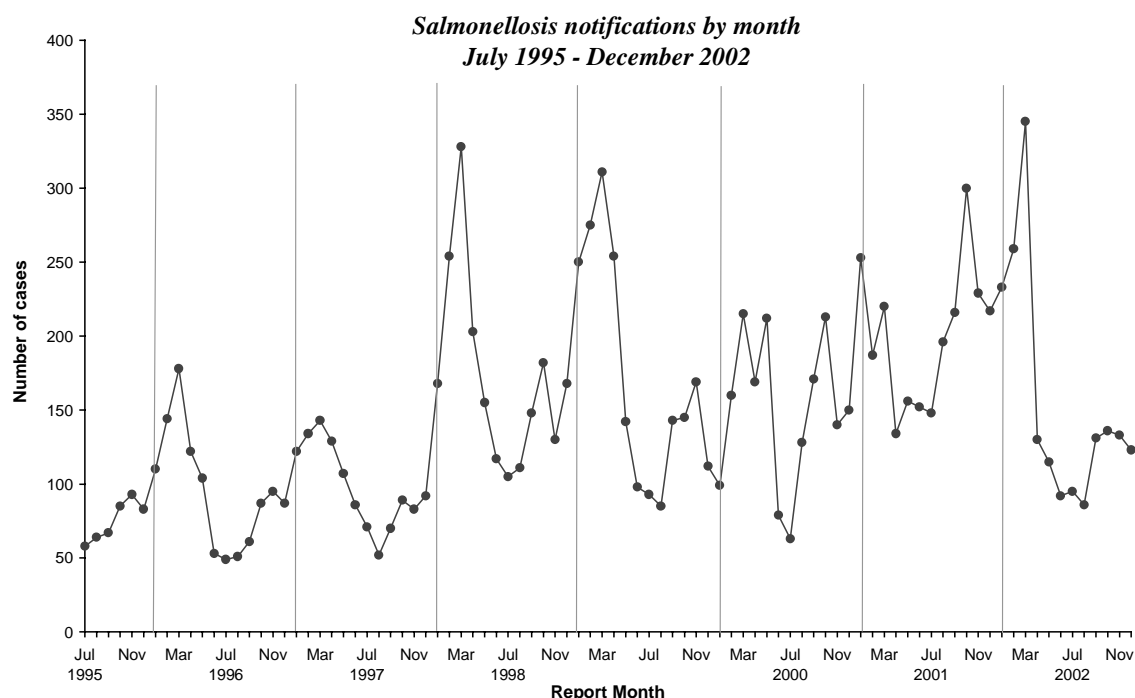
Of the 60 December cases for whom overseas travel information was recorded, 10 (16.7%) had been overseas during the incubation period. Countries visited included Thailand (4 cases), Australia (3), Fiji (2) and Switzerland (1). Among all cases in 2002, commonly visited countries included Fiji (35 cases), Indonesia (29), Thailand (29), and Australia (26).

December notifications were highest in Wellington Health District, with 21 cases reported (compared to just eight the previous month). This was the highest equal¹ monthly notification total for Wellington Health District during 2002. Over half (12) the Wellington cases were identified as *S. Typhimurium* 160. Of these, eight cases were linked to an outbreak of food poisoning in a Wellington café. One outbreak involving four family members from Rotorua Health District was also reported in December. Faecal contamination of the household roof water supply was identified as the likely source.

Annual rates of disease for 2002 were highest in Nelson-Marlborough (112.8 cases per 100 000), South Canterbury (92.1) and Gisborne (91.0) health districts. In comparison, the national annual rate was 50.2 per 100 000 population.

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

¹ In March 2002, Wellington Health District reported 21 cases of salmonellosis.



Of the 123 December notifications, 116 (94.3%) could be matched to human cases identified by the ESR Enteric Reference Laboratory (ERL)¹. Of these, the predominant type identified was *S. Typhimurium* 160 (45 cases or 38.8%)². The next most commonly identified type was *S. Typhimurium* phage type 101 (7 cases). *Salmonella* Montevideo³ was isolated from four cases in December, and from five cases notified in November.

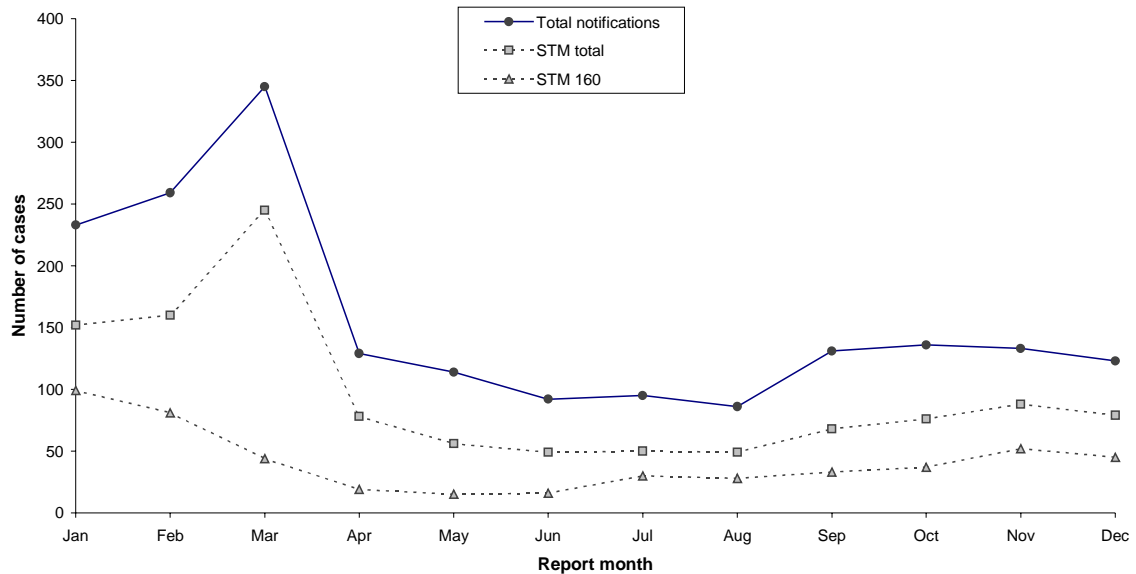
The following graph illustrates the trend in the number of *S. Typhimurium* isolations among notified cases, since the beginning of the year.

¹ Over 95% of notifications in 2002 have been matched to ERL reported cases.

² The ERL isolated *S. Typhimurium* from a total 54 specimens in December 2002. Due to an inevitable lag between laboratory testing and notification, some of these cases will likely be notified in January 2003.

³ Contaminated tahini sesame paste imported from Egypt has been linked to outbreaks of *S. Montevideo* in New South Wales, Australia during November and December 2002. Food Standards Australia and New Zealand has issued a consumer-level recall of tahini paste and associated products with use by dates between February 2003 and August 2004.

***Salmonella notifications by month
January 02 - December 02***



At the time of this report, 158 notifications for the month of January 2003 had been received.

Typhoid

One case of typhoid was notified in December. The case was a 65-year-old Samoan male who had recently arrived in New Zealand from Samoa. This brings the year 2002 total to 23 cases. Of the 22 cases for whom this information was recorded, 17 cases (77.3%) were hospitalised. The cases ranged in age from 4 to 65 years. The male to female notification ratio was 2.1:1. There were nine Pacific Islands people, of whom seven specified their ethnicity as Samoan. The other recorded ethnicities were Indian (4 cases), Indonesian (3), Iraqi (2), Afghani (1), African (1) and Chinese (1).

Travel information was recorded for 19 cases, of whom 12 reported travelling overseas during the incubation period for the disease. Overseas destinations included Indonesia (3 cases), Western Samoa (3), Malaysia (2), India (2), Pakistan (1) and Singapore (1). A further four cases from the same household had contact with a family member returning from Samoa.

Tuberculosis

There were 35 cases of tuberculosis notified during December, compared to 35 cases in November and 48 in October 2002. This brings the year 2002 total to 385: a slight increase on the 2001 notification total of 373.

In December, 29 (82.9%) cases were reported by hospital-based practitioners. Six cases were reported to have an immunosuppressive illness. Information on country of birth was recorded for 29 cases, of whom 21 (72.4%) were born overseas. Ethnicity was recorded for 33 cases. Of these, 17 (51.5%) were of 'Other' ethnicity, 10 (30.3%) were Pacific Islands People, and six (18.2%) were Maori.

The majority (21/35 or 60%) of notifications were from the Auckland region. It was possible to associate the NZDep 2001 index of socioeconomic deprivation with thirty cases whose addresses could be geocoded to at least street level. On a scale of one to five, with five representing the most deprived score, it was found that a score of 1 was associated with three cases; a score of 2 was associated with two cases; a score of 3 with two cases; a score of 4 with twelve cases; and a score of 5 with eleven cases. Of the remaining five cases, one case was in hospital and one case in prison.

For further details on items contained in this report feel free to contact either of the following:

Elizabeth Sneyd (author and editor)
phone 04 914 0779
email: elizabeth.sneyd@esr.cri.nz

Jose M Ortega (peer reviewer)
phone 04 914 0694
email: jose.ortega@esr.cri.nz
Fax: 04 914 0770

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. 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 group	Sex	Report date	Death date
Campylobacteriosis	Canterbury	70+	female	20 Feb 02	17 Feb 02
Gastroenteritis	Central Auckland	70+	male	9 Dec 02	28 Dec 02
<i>Haemophilus influenzae b</i> (Hib)	Canterbury	70+	female	30 May 02	11 Jul 01
Pertussis	Taupo	0-4	female	7 Jun 02	4 Oct 01
	North West Auckland	0-4	female	10 Dec 02	4 Dec 02
Legionellosis	Canterbury	60-70	male	22 Mar 02	15 Mar 02
	South Canterbury	70+	male	3 May 02	8 May 02
	Canterbury	70+	female	15 May 02	23 May 02
Listeriosis - perinatal	Central Auckland	30t wks gestation	N/A	15 Apr 02	13 Apr 02
	Tauranga	Unknown	N/A	8 Aug 02	Unknown
Meningococcal disease	Waikato	0-4	male	8 Feb 02	10 Feb 02
	North West Auckland	40-49	male	25 Feb 02	25 Feb 02
	North West Auckland	0-4	male	22 Mar 02	21 Mar 02
	Otago	15-19	male	29 Mar 02	31 Mar 02
	South Auckland	0-4	male	3 Apr 02	2 Apr 02
	Central Auckland	0-4	male	12 May 02	12 May 02
	Tauranga	60-69	female	4 Jun 02	4 Jun 02
	South Auckland	15-19	female	14 Jun 02	13 Jun 02
	Northland	0-4	male	2 Jul 02	2 Jul 02
	Canterbury	15-19	female	10 Jul 02	11 Jul 02
	Waikato	5-9	female	8 Aug 02	6 Aug 02
	South Auckland	0-4	female	11 Sep 02	11 Sep 02
	North West Auckland	70+	female	18 Sep 02	16 Sep 02
	Eastern Bay of Plenty	0-4	female	24 Sep 02	24 Sep 02
	Otago	15-19	female	23 Oct 02	24 Oct 02
	Hutt	40-49	female	6 Nov 02	7 Nov 02
	Rotorua	40-49	female	18 Nov 02	17 Nov 02
	Rotorua	15-19	female	11 Oct 02	11 Oct 02
	West Coast	0-4	male	13 Dec 02	14 Dec 02
Tuberculosis disease	South Auckland	20-29	female	15 Mar 02	24 Mar 02
	South Auckland	70+	male	17 Jun 02	22 May 02
	South Auckland	50-59	female	12 Aug 02	8 Aug 02
	North West Auckland	60-69	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 December 2002, and on outbreaks that were initially reported during December 2002 but were still listed as 'interim' as of the 14th January 2002.

Final outbreak reports

Final reports on 26 outbreaks involving 233 cases were received in December 2002. Of these, six Norwalk-like virus (NLV) outbreaks accounted for the majority (72.1%) of cases. In comparison, during November, final reports for ten NLV outbreaks, accounting for 77.3% of the 326 cases were received.

During the week of 21st – 25th October there was a sudden outbreak of severe vomiting and diarrhoea affecting 56 (out of a total of 151) staff and at least 50 tourists at the Hermitage hotel in Mount Cook¹. The incubation period was approximately 24 hours and the duration of illness around 36 hours. Eighteen faecal specimens were provided by affected staff, and of the first six examined by ESR, four tested positive for NLV and were subsequently typed as GII/1,4,8. Investigation by Crown Public Health revealed that the only common risk factor among cases was working or being resident in the Hermitage Hotel. The infection was thought to have been introduced by a tour group, among whom all but seven of the 32 members had been ill with symptoms similar to hotel staff.

Other NLV outbreaks (for which final reports were received in December) occurred in an Auckland resthome (54 cases), a Wellington hospital (21 cases), a Canterbury restaurant (20), and a Waikato home (15). The following two tables provide a summary and details of all final outbreak reports.

Summary of final outbreak reports, December 2002

Organism/Toxin/Illness	Number of outbreaks	Total number of cases
<i>Campylobacter</i>	4	10
Ciguatera poisoning	1	2
<i>Cryptosporidium parvum</i>	1	2
Gastroenteritis	7	23
<i>Giardia</i>	3	9
NLV	6	168
<i>Salmonella</i>	3	10
<i>Salmonella</i> Typhimurium 160	1	9
Total	26	233

¹ Stephen Waller is thanked for providing information on the outbreak of NLV at The Hermitage.

Details of final outbreak reports, December 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>Campylobacter</i>	AK	Nov02	2	2	0	Home; takeaways	Foodborne (takeaway meal chicken burger + nuggets or home cooked chicken)	Epi-H
<i>Campylobacter</i>	AK	Nov02	2	1	0	Restaurant / cafe	Foodborne (chicken salad)	Epi-H
<i>Campylobacter</i>	AK	Dec02	3	1	0		Foodborne (food at xmas party); person to person	Epi-H
<i>Campylobacter jejuni</i>	RO	Aug02	3	1	0	Home	Foodborne (bbq chicken kebabs)	Epi-H
Ciguatera poisoning	AK	Sep02	2	0	0	Home	Foodborne (imported kawakawa from Fiji)	Epi-H
<i>Cryptosporidium parvum</i>	RO	Oct02	2	2	0	Farm	Zoonotic	
Gastroenteritis	AK	Nov02	9	0	0	Restaurant / cafe	Foodborne (buffet meal)	Epi-H Env
Gastroenteritis	AK	Nov02	2	0	0		Unknown	Nil
Gastroenteritis	AK	Nov02	2	0	0	Restaurant / cafe	Foodborne (salmon & eggs benedict)	Epi-H
Gastroenteritis	AK	Nov02	3	0	0	Takeaways	Foodborne (lamb curry & rice)	Epi-H Env
Gastroenteritis	AK	Dec02	2	0	0	Restaurant / cafe	Foodborne (thai curry mussels)	Epi-H
Gastroenteritis	AK	Dec02	2	0	0		Unknown	Epi-H
Gastroenteritis	WN	Nov02	3	1	0	Hostel	Person to person	Epi-H
<i>Giardia</i>	AK	Aug02	2	2	0	Home	Person to person	Epi-H
<i>Giardia</i>	AK	Oct02	4	2	0	Home	Person to person; zoonotic	Epi-H
<i>Giardia</i>	AK	Oct02	3	2	0	Home	Person to person	Epi-H
NLV	AK	Dec02	54	1	0	Rest home	Person to person	Nil
NLV	AK	Dec02	2	1	0		Unknown	Nil
NLV	WK	Nov02	15	3		Home	Foodborne; person to person	Epi-H Lab
NLV	WN	Nov02	21		13	Hospital (acute care)	Person to person	
NLV (probable)	CB	Nov02	20	0	0	Restaurant / cafe	Foodborne; person to person	Env
NLV GII/1,4,8	SC	Oct02	56	4	0	Hotel / motel	Person to person	Epi-H
<i>Salmonella</i>	AK	Nov02	4	4	0	Home	Foodborne (undercooked chicken)	Epi-H Env
<i>Salmonella</i>	RO	Nov02	4	4	0		Waterborne	Epi-H Oth
<i>Salmonella</i>	MW	Oct02	2	2	0	Home	Waterborne; person to person	Oth
<i>Salmonella</i> Typhimurium 160	AK	Nov02	9	2	0	Home	Foodborne (barbecued chicken)	Epi-H

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; WK=Waikato; RO=Rotorua; MW=Manawatu; WN=Wellington; 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 19 outbreaks involving at least 50 cases¹ were made in December 2002. Among outbreaks, the most commonly recorded illness or pathogen was gastroenteritis (9/19 outbreaks). There were also four Norwalk-like virus² outbreaks, three *Cryptosporidium* outbreaks, one *Campylobacter* and one *Salmonella* outbreak reported. The following table lists all interim outbreak reports made in December. Details of these outbreaks will be provided once final reports have been received.

Interim reported outbreaks, December 2002¹

Pathogen/toxin/ illness	Health district ²	Month ³	No. ill	Lab Conf ⁴	No. Hosp	Setting	Evidence ⁵
Campylobacter	AK		2	2	0		
<i>Cryptosporidium parvum</i>	AK		2	2			
<i>Cryptosporidium parvum</i>	WK	Nov02 ⁶	9	7	0		
<i>Cryptosporidium parvum</i>	MW	Nov02 ⁶		2		Woodville playgroup	Epi-H
Gastroenteritis	AK		4				
Gastroenteritis	AK		2				
Gastroenteritis	AK		2				
Gastroenteritis	AK		2				
Gastroenteritis	AK		3				
Gastroenteritis	AK		2				
Gastroenteritis	AK		2				
Gastroenteritis	WN				0		
Gastroenteritis	OT				0		
Histamine	AK		4				
NLV	WK				0		
NLV	TG				0		
NLV	TK		8	1	0	Restaurant / cafe	Lab
NLV (probable)	CB		8		8	Hospital (acute care)	
<i>Salmonella</i> Typhimurium	WN				0		

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; WK=Waikato; TG=Tauranga; TK=Taranaki; MW=Manawatu; WN=Wellington; CB=Canterbury; OT=Otago.

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 November but entered onto EpiSurv in December.

² At the time of this report, a total of thirteen reports (including both interim and final reports) of NLV outbreaks occurring since the beginning of December 2002 had been made. These include an outbreak among travellers on a cruise ship touring New Zealand waters.

5. National surveillance data and trends

Disease incidence and rates

Disease ¹	Current year - 2002 ²			Previous year - 2001		
	Dec 2002 cases	Cumulative total since 1 January	Current rate ³	Dec 2001 cases	Cumulative total since 1 January	Previous rate ³
AIDS	0	18	0.5	4	26	0.7
Campylobacteriosis	1270	12488	334.1	1491	10145	271.4
Cholera	0	1	0	0	3	0.1
Cryptosporidiosis	46	971	26.0	44	1208	32.3
Dengue fever	1	70	1.9	1	93	2.5
Gastroenteritis ⁴	134	1082	28.9	72	942	25.2
Giardiasis	114	1546	41.4	117	1603	42.9
<i>H. influenzae</i> type b disease	0	3	0.1	0	11	0.3
Hepatitis A	4	109	2.9	6	61	1.6
Hepatitis B (acute) ⁵	10	69	1.8	2	56	1.5
Hepatitis C (acute) ⁵	4	52	1.4	5	59	1.6
Hydatid disease	1	2	0.1	0	7	0.2
Influenza ⁶	0	698	18.7	1	666	17.8
Lead absorption	3	91	2.4	7	130	3.5
Legionellosis ⁶	4	48	1.3	5	57	1.5
Leprosy	0	4	0.1	0	3	0.1
Leptospirosis	8	142	3.8	10	105	2.8
Listeriosis	1	19	0.5	1	18	0.5
Malaria	2	60	1.6	5	54	1.4
Measles	1	27	0.7	6	83	2.2
Meningococcal disease ⁷	31	553	14.8	57	649	17.4
Mumps	4	66	1.8	2	56	1.5
Paratyphoid	1	16	0.4	1	32	0.9
Pertussis	73	1070	28.6	65	1334	35.7
Rheumatic fever	4	83	2.2	4	117	3.1
Rickettsial disease	0	6	0.2	0	5	0.1
Rubella	2	36	1.0	3	30	0.8
Salmonellosis	123	1878	50.2	217	2418	64.7
Shigellosis	9	112	3.0	5	157	4.2
Tetanus	0	1	0	1	4	0.1
Tuberculosis	35	385	10.3	42	373	10.0
Typhoid	1	23	0.6	4	27	0.7
VTEC / STEC infection	4	72	1.9	1	76	2.0
Yersiniosis	31	475	12.7	38	429	11.5

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

² These data are provisional

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

Disease	Jan 2003	Dec 2002	Nov 2002	Oct 2002	Sep 2002	Aug 2002	Jul 2002	Jun 2002	May 2002	Apr 2002	Mar 2002	Feb 2002	Jan 2002
AIDS	4	0	2	0	4	1	1	1	1	3	1	3	1
Campylobacteriosis	1783	1266	1044	1163	1176	1124	1006	820	675	548	940	1183	1544
Cholera	1	0	0	0	0	0	0	0	0	1	0	0	0
Cryptosporidiosis	22	46	94	260	241	90	53	29	42	17	24	39	39
Dengue fever	8	1	9	0	0	8	13	8	17	6	3	3	2
Gastroenteritis ²	43	139	68	154	69	69	62	143	84	72	101	62	62
Giardiasis	132	114	110	113	107	122	128	128	167	132	152	145	130
Haemophilus influenzae type b	2	0	0	0	0	0	0	1	2	0	0	0	0
Hepatitis A	6	4	8	3	2	2	1	7	9	18	28	17	9
Hepatitis B (acute) ³	8	11	3	3	5	6	6	7	7	5	3	5	8
Hepatitis C (acute) ³	5	4	3	1	7	7	3	5	6	4	8	2	2
Hydatid disease	0	1	0	0	0	1	0	0	0	0	0	0	0
Influenza ⁴	0	0	1	22	103	136	230	151	30	16	3	3	3
Lead absorption	4	3	9	6	5	10	8	7	14	5	7	9	7
Legionellosis ⁴	0	4	2	4	4	4	7	5	4	3	4	0	7
Leprosy	0	0	1	0	0	0	1	1	0	1	0	0	0
Leptospirosis	16	8	14	10	13	6	14	10	16	14	8	18	11
Listeriosis	2	1	1	3	1	3	2	0	0	1	2	2	2
Malaria	3	2	2	3	6	3	6	5	6	6	3	8	10
Measles	4	0	2	3	0	4	3	1	2	2	3	3	2
Meningococcal disease ⁵	37	32	28	43	72	87	66	69	45	32	28	24	32
Mumps	6	3	6	10	6	4	4	6	7	4	5	6	3
Paratyphoid	2	1	1	0	0	2	2	3	3	1	3	0	0
Pertussis	65	76	109	103	97	110	83	88	113	51	58	95	88
Rheumatic Fever	4	4	11	8	4	8	4	2	9	1	9	16	16
Rickettsial disease	0	0	0	0	2	2	0	1	1	0	0	0	0
Rubella	2	2	1	1	1	5	1	5	8	5	2	1	1
Salmonellosis	158	123	133	138	131	86	95	91	116	130	345	258	233
Shigellosis	10	9	4	8	4	8	12	10	13	12	10	11	11
Tetanus	0	0	0	0	0	0	0	0	1	0	0	0	0
Tuberculosis	35	35	33	48	29	35	41	22	27	26	24	27	35
Typhoid	1	1	0	3	0	0	2	1	3	2	6	4	1
VTEC/STEC infection	3	5	3	5	6	6	7	4	11	8	2	5	11
Yersiniosis	56	31	49	45	26	30	30	33	42	33	42	44	71

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 - December 2002

Cases this month

Current rate¹

Disease	Cases for December 2002, ² and current rate ^{1,2} by health district ^{3,4}																							
	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 ⁵	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0			0.6	0.8	0	0	1.6	0	0	0	0	0	0	0	3.6	0	0	0	0	0	0	0
Campylobacteriosis	23	172	130	133	134	23	6	12	13	10	31	4	42	15	31	9	142	61	27	9	133	21	54	35
	209.8	417.2	426.6	316.6	353.2	237.7	130.5	200.3	272.9	295.1	304.4	119.0	306.5	265.5	176.0	196.0	438.7	334.4	175.7	273.6	354.8	410.8	366.0	332.3
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	0	0	2	3	3	1	0	1	1	0	0	2	2	2	2	2	5	0	0	3	8	1	4	4
	5.0	9.8	7.3	6.9	39.5	13.9	2.0	11.4	24.8	60.3	37.8	49.0	41.8	24.0	42.8	20.9	59.5	20.5	19.6	59.3	23.2	69.1	48.8	45.4
Dengue fever	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	1.4	4.9	3.2	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	2.5	0	0.6	0
Gastroenteritis	0	9	9	7	2	0	0	7	1	4	2	0	0	0	1	1	4	4	4	0	56	1	20	2
	7.8	23.7	27.7	12.5	10.4	2.3	2.0	20.5	9.3	19.0	11.6	0	4.9	32.5	22.4	28.7	33.1	37.2	13.9	19.8	90.1	113.9	33.1	17.6
Giardiasis	4	13	14	5	12	5	1	0	1	2	3	0	6	1	7	1	16	6	1	1	5	3	3	4
	20.7	44.0	63.9	35.9	53.1	41.8	10.2	18.2	31.0	47.6	14.5	0	85.7	48.0	30.6	28.7	51.2	53.8	25.3	65.9	31.6	26.9	30.1	18.5
<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	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	1.4	4.0	7.9	5.3	5.5	0	2.0	0	1.6	6.3	0	0	3.5	0	1.4	0	0.8	3.8	1.6	0	0.5	0	0.6	0.9
Hepatitis B	1	1	1	1	0	1	0	0	0	1	0	0	0	1	0	1	0	0	1	0	1	0	0	0
	2.9	1.9	2.7	1.6	1.6	3.1	0	13.7	0	6.3	1.0	7.0	1.4	3.4	0.7	5.2	1.2	0.8	1.6	0	2.0	0	0.6	0
Hepatitis C	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
	0	0.7	0.5	0.8	0.3	11.6	2.0	0.0	6.2	3.2	0.0	0.0	1.4	0.0	0.7	2.6	3.5	0.0	0.0	9.9	1.0	2.6	0.0	0.0
Hydatids disease	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	0.2	0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead absorption	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
	3.6	1.6	1.9	0.5	3.6	1.5	0	9.1	0	4.8	0	2.1	3.4	4.1	5.2	0.8	0.8	0.8	0	3.5	6.4	5.4	2.8	2.8
Legionellosis ⁶	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
	1.4	0.5	0.5	0.3	0.3	0.8	0	0	1.6	6.3	1.0	7.0	2.1	1.7	0	7.8	2.0	1.5	1.6	0	3.2	1.3	2.4	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	0.5	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	0	3	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0
	6.4	1.4	0	0.5	6.5	5.4	2.0	13.7	0	0	5.8	14.0	20.2	6.9	8.2	5.2	0.4	0	9.8	6.6	1.0	11.5	3.6	1.9
Listeriosis	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	0.8	0.5	0.3	1.5	0	0	0	0	0	0	0	0	0.7	0	0	0.8	0	0	0.7	1.3	0	0.9
Malaria	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	0	1.4	0.8	1.1	2.3	1.5	0	0	3.1	3.2	1.0	14.0	0.7	0	6.8	0	2.0	0.8	1.6	0	1.7	2.6	1.8	0.9
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	0	0.5	0.3	0.3	0.6	0.8	0	0	0	0	0	0	0	0	0	0	0.4	0.8	4.9	16.5	1.5	1.3	0	0
Meningococcal disease ⁶	2	1	2	4	4	4	0	0	2	2	1	0	2	0	0	0	2	0	0	1	1	0	2	1
	20.7	8.1	11.7	22.9	12.3	24.8	30.6	13.7	52.7	66.6	8.7	7.0	22.3	8.6	6.8	7.8	11.4	9.1	2.5	26.4	8.0	9.0	30.1	12.0
Mumps	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	2.9	2.1	1.6	1.9	0.3	1.5	0	0	3.1	0	0	0	2.8	1.7	0.7	0	1.2	0.8	4.9	3.3	1.0	1.3	5.4	3.7
Paratyphoid	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.7	1.2	0.5	0.5	0	0	0	0	0	0	0	0	1.4	0	0	0	0.8	0	0.8	0	0	1.3	0	0
Pertussis	2	10	1	0	8	3	0	0	0	0	7	0	5	2	12	0	1	4	10	1	6	1	0	0
	5.7	22.6	7.6	8.8	30.1	7.0	6.1	2.3	4.7	12.7	21.3	7.0	11.8	58.2	21.7	15.7	24.4	43.2	65.4	260.4	51.0	203.5	3.0	29.6
Rheumatic fever	1	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	6.4	0.5	4.4	6.4	2.6	3.9	4.1	4.6	1.6	0	1.0	0	2.1	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	2	0	0	0	0	0	0	0	0	0	0	0
	0.7	0.2	0.5	0.3	0	0.8	4.1	0	0	0	1.0	0	9.8	0	0	5.2	0.8	0.8	2.5	6.6	0.5	0	0.6	0
Salmonellosis	3	14	7	4	7	1	3	5	5	1	1	0	8	2	3	3	21	5	4	2	13	4	5	2
	36.4	40.5	47.0	40.2	44.7	27.9	44.8	91.0	55.8	69.8	45.6	42.0	59.9	61.7	38.7	60.1	56.8	36.4	112.8	52.7	46.6	92.1	56.6	75.0
Shigellosis	0	1	1	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2	0	1	0
	2.1	3.3	6.8	6.1	1.3	0.8	0	0	4.7	0	1.9	0	4.9	1.7	0	0	1.6	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	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	1.3	0	0
Tuberculosis	1	7	8	6	2	2	0	0	0	0	0	0	0	0	1	0	2	2	0	0	3	1	0	0
	8.6	15.8	20.7	16.0	8.1	7.0	0	4.6	4.7	12.7	1.0	0	20.2	3.4	4.1	15.7	11.4	12.9	1.6	3.3	4.7	5.1	4.8	1.9
Typhoid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	0	1.4	0.5	2.7	0	0	0	0	0	0	0	0	0	0	0	0	1.2	0.8	0	0	0.2	0	0	0
VTEC / STEC	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
	0.7	0.7	1.4	0.8	4.9	0.8	10.2	0	4.7	3.2	4.8	0	1.4	1.7	0.7	0	1.6	0.8	0	0	4.5	1.3	0.6	0.9
Yersiniosis	2	6	6	1	2	0	0	0	0	0	0	0	0	1	0	0	1	1	0	2	3	4	2	0
	3.6	16.3	18.2	11.7	11.7	15.5	4.1	6.8	7.8	22.2	2.9	14.0	11.1	6.9	8.2	10.5	15.0	7.6	3.3	65.9	15.2	19.2	10.8	8.3

1 Current rate is based on the cumulative total for the 12 months up to and including December 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