
MONTHLY SURVEILLANCE REPORT

This monthly report contains data and commentary on disease trends and events up to and including the end of July 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 5th August 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

- *Campylobacteriosis*. 1006 cases were notified in July 2002. This total is higher than the average for July, which is typically a month with low campylobacteriosis incidence. The incidence rate of campylobacteriosis was highest in Wellington Health District, both in the month of July 2002 and for the 12-month period ending 31 July 2002.
- *Cryptosporidiosis*. Two outbreaks of cryptosporidiosis were reported by Wellington Health District in July. Twenty-nine Wellington cases reported swimming in one or both of two infected swimming pools.
- *Dengue fever*. Thirteen cases were notified in July. Cases reported recent overseas travel to Rarotonga /Cook Islands (6 cases), Fiji (2), Tahiti (2) and the Solomon Islands (1). Since the beginning of the year, 29 of the 59 notified cases have reported travel to Rorotonga or the Cook Islands.
- *Meningococcal disease*. Sixty-nine cases of meningococcal disease were reported during July 2002, of whom 47 were laboratory confirmed. This is the highest number of confirmed cases in any month this year. Two deaths were reported.
- *Pertussis*. The epidemic which began in July 1999 is persisting, with 89 cases notified in July. As has been the case since April 2002, the majority of July cases were from the South Island, particularly from South Canterbury, Canterbury, and West Coast health districts.
- *VTEC/STEC*. Ten cases were notified in July. Of these, three children were hospitalised for treatment of haemolytic-uraemic syndrome.

2. Key disease trends

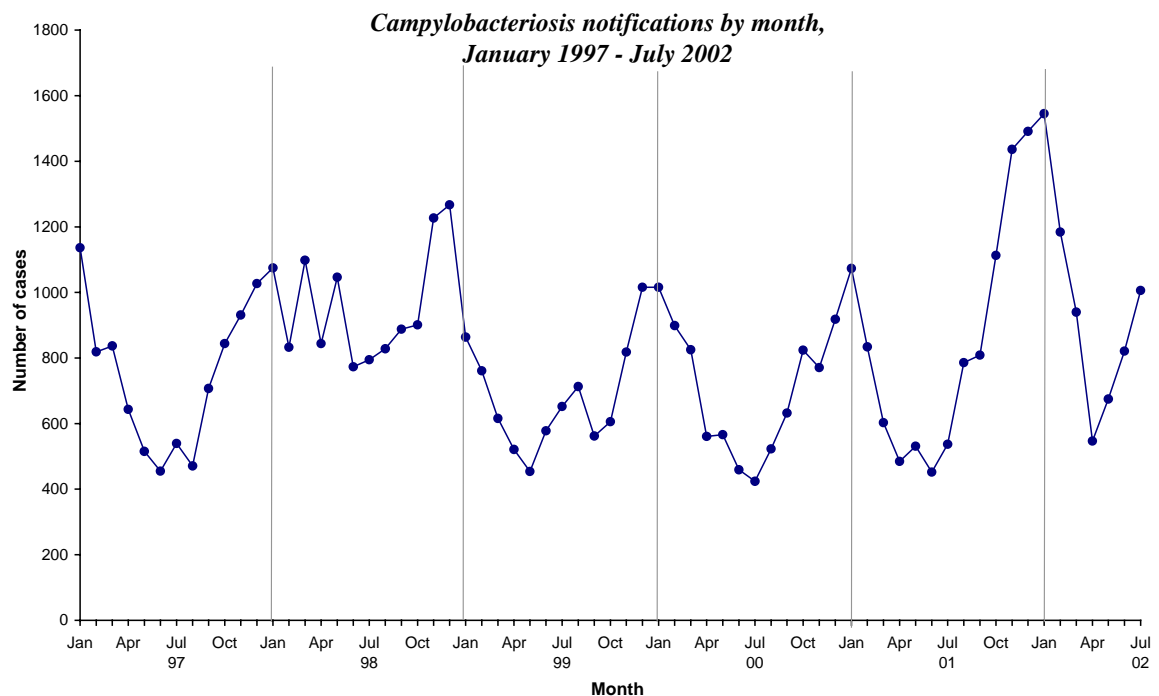
Campylobacteriosis

There were 1006 cases of campylobacteriosis notified during July 2002, of whom 947 (94.1%) were confirmed. In contrast, 538 cases were notified during the same month last year. July is typically a month with low campylobacteriosis incidence, and the total for July 2002 greatly exceeds the average of 576 notifications per month of July over the seven-year period 1995 to 2001.

The majority (71.6%) of July 2002 notifications were cases aged over twenty. Approximately 88% of cases (for whom ethnicity was recorded) were of European ethnicity. There were 33 hospitalisations (8.6% of cases for whom this information was recorded).

Of the 1006 cases notified in July, North West Auckland Health District reported the greatest number with 161 cases. A total of 416 (41.4%) were reported by the combined Auckland health districts. Among health districts, the incidence rate in July¹ was highest in Wellington, with a monthly rate of 41.4 per 100 000 (105 cases), followed by Central Auckland, South Canterbury and North West Auckland, with monthly incidence rates of 40.8, 38.4 and 37.5 per 100 000, respectively. Over the 12-month period ending 31 July 2002, the incidence rate was also highest in the Wellington Health District, with an annual rate of 464.7 per 100 000 population. South Canterbury Health District experienced the next highest rate of 426.1, followed by Central Auckland (395.4) and North West Auckland (394.2) health districts.

The following graph shows campylobacteriosis notifications by month since January 1997. It demonstrates the typically seasonal nature of campylobacteriosis and the unusually high levels of the disease this winter.



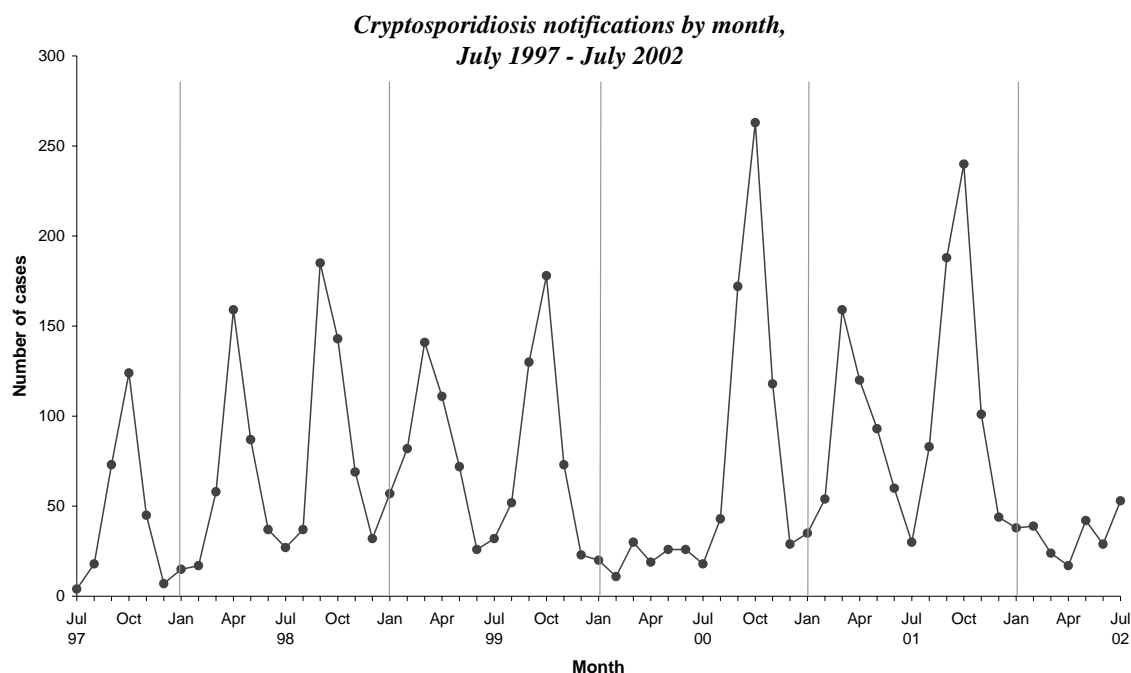
Risk factor information was infrequently recorded on the case report forms, with only 12.7% (128/1006) of notifications in July including information on human contact and only 12.9% (130/1006) including information on contact with farm animals. Of these, 10.9% (14/128) had a history of contact with other symptomatic people, and 32.3% (42/130) reported exposure to farm animals.

¹ The incidence rate for July is the number of July 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.

Cryptosporidiosis

Fifty-three cases of cryptosporidiosis were notified in July 2002¹, forty-nine of whom were confirmed. This is the highest monthly total since the beginning of the year. The majority of July cases (77.4%) were aged nine years or less. Of the 41 cases for whom the information was recorded, 34 (82.9%) reported recreational contact with water, in particular, swimming pool water. During both June and July 2002, Wellington Health District reported the greatest number of cases, with 11 and 36 cases respectively. Two Wellington pools were linked with cases: the toddlers pool at a private swim school and the learners pool at an Aquatic Centre. Both pools have taken action to control the problem.² During July, 19 cases were reported to have swum at the Aquatic Centre, while 15 cases reported swimming at the private swim school. Five cases swam at both. Of the June notifications, one case reported swimming at the Aquatic Centre, while seven swam at the private swim school.

The following graph shows the number of notified cases of cryptosporidiosis each month since January 2000.



¹ In comparison, 30 cases were notified during July 2001.

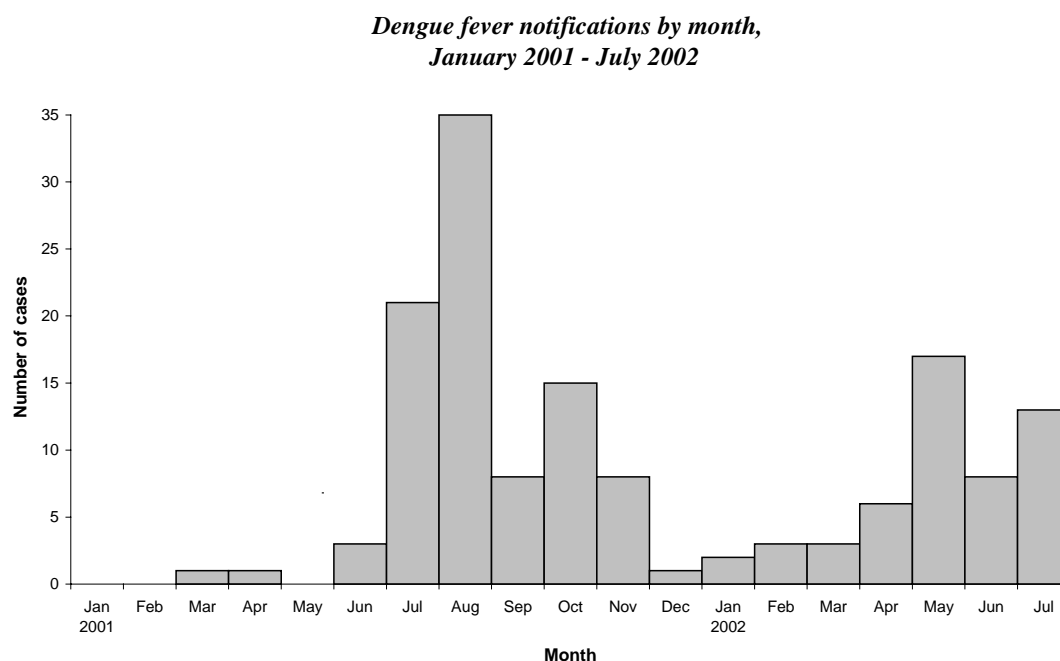
² Information supplied by Dr Margot McLean, Medical Officer of Health.

Dengue fever

Thirteen cases of dengue fever were notified in July 2002, bringing the year to date total to 52.¹ Seven of the July cases have been laboratory confirmed, and results are awaited for a further two. The cases, seven females, five males and one case of unrecorded gender, ranged in age from 25 to 62 years. Three cases have been hospitalised.

All eleven of the cases for whom travel information was recorded had recently travelled overseas. Five cases had recently visited Rarotonga, and one was a Cook Islands resident who was a visitor to New Zealand. Two cases had recently been in Fiji, two in Tahiti and one in the Solomon Islands. Since the beginning of the year, over half (29) of notified cases have reported travel to Rarotonga or the Cook Islands.

A large increase in the number of cases of dengue fever notified in New Zealand was observed during 2001, and is described fully in the *New Zealand Public Health Report* (2001; 8: 81-4). The following graph shows the number of dengue notifications each month since January 2001.



¹ Note that one further case of dengue has been notified for the month of June, since the last Monthly Surveillance Report was written.

Influenza

During June (weeks 27 – 30), 871 consultations for influenza-like illness were reported to the Influenza Sentinel Surveillance System. Consultations were reported from 87 general practices, and from 22 out of 24 health districts. The average weekly consultation rate for July was 67.4 per 100 000 patient population, compared to a rate of 86.2 per 100 000 patient population during the same month last year. South Canterbury had the highest consultation rate (205.5 per 100 000), followed by Eastern Bay of Plenty (173.1 per 100 000).

A total of 240 swabs were sent for testing during June from sentinel surveillance. Two hundred and fifty-one influenza swabs were received by the regional virology laboratories. Of these, 45 were Influenza A, of which 22 were further subtyped as Influenza A/Moscow/10/99 (H3N2). Twelve were typed as Influenza B, of which 11 were further typed as Influenza B/Hong Kong/330/01. The distribution of sentinel isolates by health district for the month of July is shown in the following table.

Distribution of sentinel isolates by health district, July 2002

Type/subtype	NW	CA	SA	WK	TG	BE	RU	HB	WG	TK	MW	WR	WN	CB	SC	OT	SO	Total
A (untyped)	2	4	4											12		1		23
A (H3N2)			1	1	1	1	1	3	1		1		3		3	4	2	22
B		1																1
B/Hong Kong/330/01	2	3	2			1				1		1				1		11
Total	4	8	7	1	1	2	1	3	1	1	1	1	3	12	3	6	2	57

In addition, a total of 115 influenza isolates were identified from laboratory-based (non-sentinel) surveillance in June. Of these, 102 were Influenza A, of which 22 were further subtyped as Influenza A/Moscow/10/99 (H3N2). Thirteen were typed as Influenza B, of which five were further typed as Influenza B/Hong Kong/330/01.

Leprosy

One probable case of leprosy was notified in July from the South Auckland Health District. The case was a 49-year-old Pacific Island female with borderline leprosy. No information on risk factors was recorded. This is the second case of leprosy notified this year. In comparison, three cases of tuberculoid leprosy were notified during 2001. Since 1995 a total of 36 cases of leprosy have been notified: twenty-four Pacific Islands people, five Indians, four East or South East Asians and three Africans.

Leptospirosis

Fifteen cases of leptospirosis were notified in July 2002, bringing the year to date total to 92. Leptospirosis notifications exhibit no obvious seasonality. The average number of monthly notifications over the 12-month period ending 31 July was eleven. The average number notified each month for the previous 12 month period was eight. Five cases in July were reported from Waikato, three from Hawkes Bay, two from South Canterbury and one case each from Northland, Wanganui, Manawatu, Otago and Southland health districts.

Occupation was recorded for 13 of the 15 cases. Six cases worked in the meat processing industry and six worked on farms. The remaining case was a male school student. It was not known he had been exposed to wild or farm animals or to meat products.

Cases ranged in age from 16 to 55 years. Fourteen cases were male and one was female. Of the nine cases for whom ethnicity was recorded, one was Maori and eight were of European ethnicity. There were six hospitalisations among the nine cases for whom this information was recorded.

Measles

Five cases of measles were notified during July 2002, bringing the year to date total to 19.¹ Two cases aged five and seven months were notified from North West Auckland Health District; West Coast Health District reported two cases aged one and four years; and Otago Health District reported one case, that of two-year-old male who had received three doses of MMR vaccine. No cases have as yet been laboratory confirmed, although results are awaited for two, including the vaccinated case from Otago.

Meningococcal disease

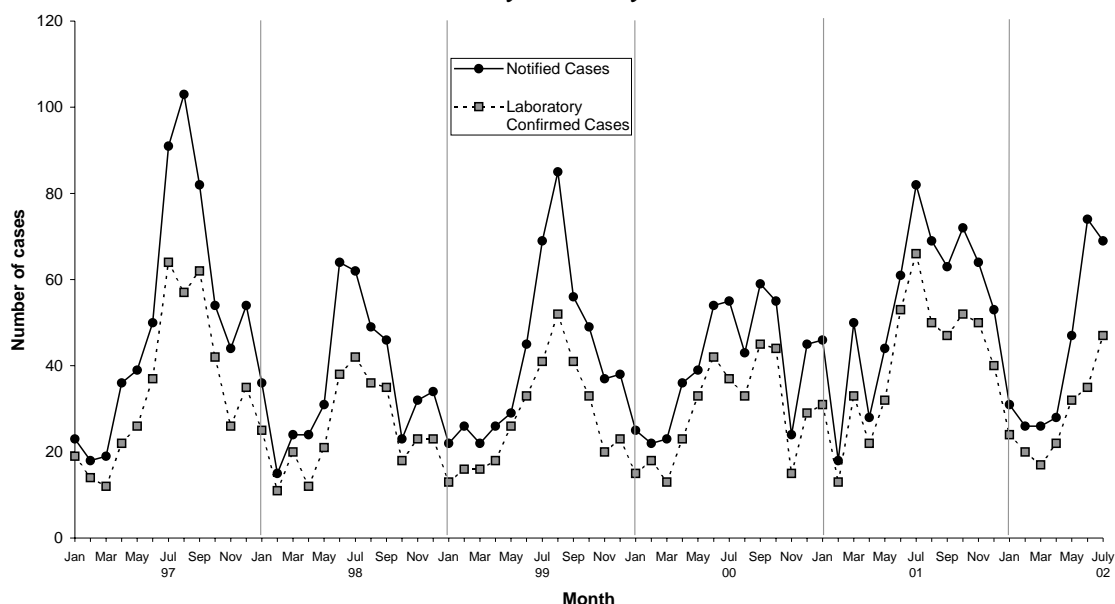
Based on the earliest² date available, 69 cases of meningococcal disease were notified during July 2002, 47 (68.1%) of whom had been laboratory confirmed at the time of this report. This is the highest number of confirmed cases in any month this year. Total notifications were slightly higher during June 2002, with 74 cases reported; although only 35 (47.3%) of these were laboratory confirmed. The average number of cases notified during the month of July over the five-year period 1995 to 2001 was 72.

¹ Note that one case of measles has been de-notified since the June Monthly Surveillance Report was written.

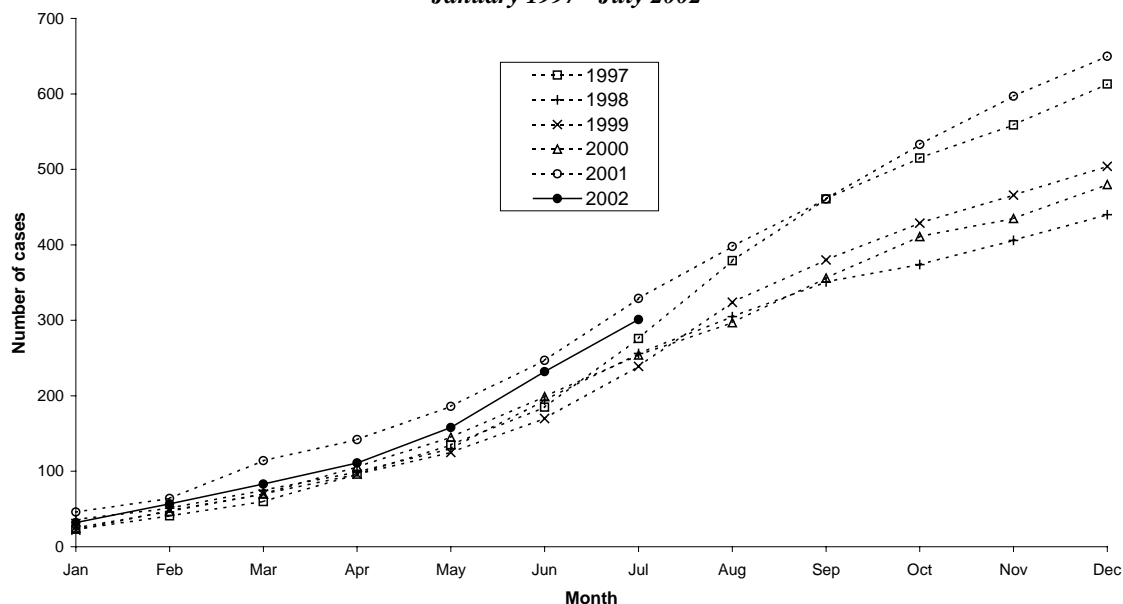
² The 'earliest' date refers to the earliest recorded date among the following: the report date, the onset date, the hospitalisation date, the death date and the laboratory specimen date. 'Earliest' date (as opposed to 'report date' alone) is used throughout the analysis of meningococcal disease notification data in this section.

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.

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



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



Hospitalisation information was recorded for 65 of the 69 July cases, and of these, 62 were hospitalised. Two cases were fatal: a one-year-old male from Northland Health District and a 17-year-old female from Canterbury Health District. This brings the number of fatal cases this year to ten.

Of the 69 cases reported this month, 38 were of European ethnicity, 16 were Maori, 10 were Pacific People, one was Asian and four were of unspecified ethnicity. For those cases with recorded gender, the male to female ratio was 38:28. Almost half (49.3%) the cases were aged four years or less: eleven cases were aged one year or less, and 23 cases were aged between one and four years. Of the 50 cases for whom this information was recorded 21 (42.0%) reported attendance at school or pre-school.

In July the greatest number of cases was reported from South Auckland Health District (9 cases); although the monthly incidence rate was highest in Eastern Bay of Plenty Health District and next highest in Hawkes Bay Health District, with monthly incidence rates of 6.1 per 100 000 (3 cases) and 5.6 per 100 000 population (8 cases), respectively. Of the 301 cases notified this year to date, the greatest number was reported by the combined Auckland health districts (109 cases or 36.2%), followed by Hawkes Bay (23 cases), Otago, Tauranga and Waikato (20 each). Over the past 12-month period, annual rates higher than the national average of 16.7 per 100 000 population have been seen in Rotorua (46.5), Taupo (31.7), South Auckland (31.2), Otago (30.7), Wairarapa (28.7), Eastern Bay of Plenty (28.5), Hawkes Bay (23.0), Northland (22.8), Tauranga (21.7), Waikato (19.1), Gisborne (18.2) and Central Auckland (17.1). The following table displays the number of cases reported this month and since the beginning of the year for each health district.

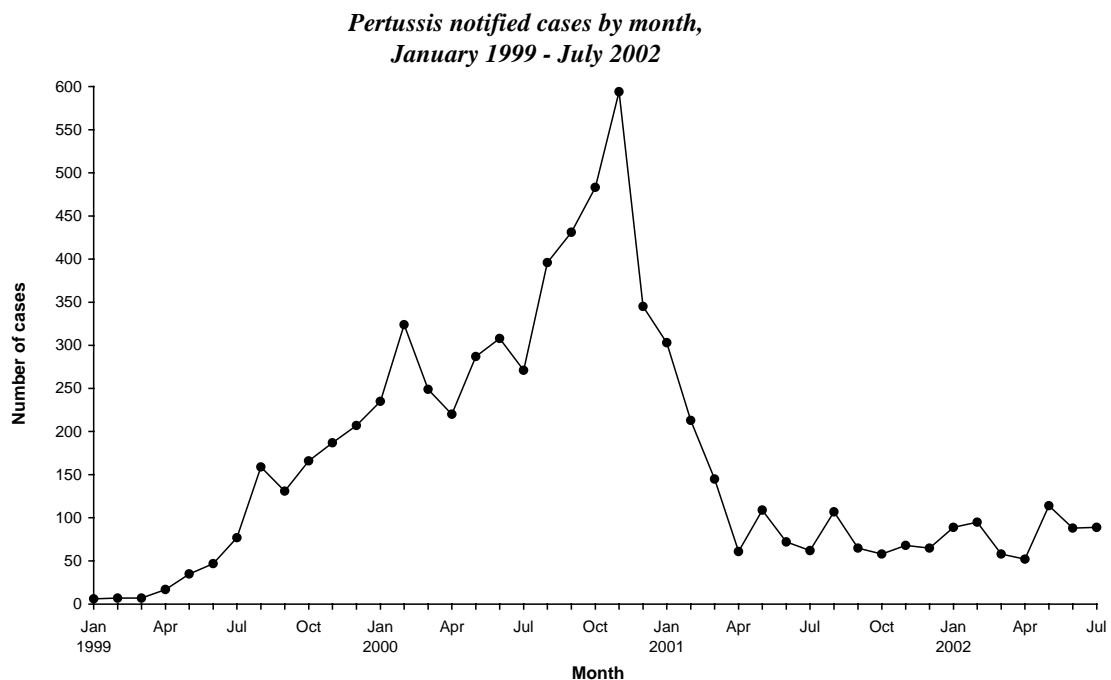
Notified cases of meningococcal disease for the current month and the year to date

Health District	July 2002 notifications	Jan to July 2002 notifications
Northland	3	16
North West Auckland	4	24
Central Auckland	5	27
South Auckland	9	58
Waikato	7	20
Tauranga	5	20
Eastern Bay of Plenty	3	9
Gisborne	1	4
Rotorua	1	14
Taupo	0	6
Hawkes Bay	8	23
Taranaki	1	5
Wanganui	0	1
Manawatu	1	6
Wairarapa	0	2
Wellington	4	12
Hutt	3	6
Nelson-Marlborough	2	3
West Coast	1	3
Canterbury	6	17
South Canterbury	0	1
Otago	4	20
Southland	1	4
Total	69	301

Pertussis

During July 2002, 89 cases of pertussis were notified, compared to 62 cases in July 2001. Of the July 2002 cases, 50.6% (45/89) were either confirmed by serological means or by isolation of *Bordetella pertussis*¹. Of the remaining 44 cases, seven 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. Hospitalisation information was recorded for 51 of the 89 cases, of whom five (9.8%) were hospitalised. The number of hospitalisations recorded on EpiSurv² for cases of pertussis notified between 1 January and 30 June 2002, averaged seven per month. In comparison, hospital discharge data³ indicate that the number of hospitalised cases of pertussis averaged ten per month for the same time period.

The following graph shows the number of cases of pertussis notified nationally each month since January 1999.



A total of 6975 cases of pertussis have been notified since the current epidemic began in June 1999. There have been 526 hospitalisations (8.1% of cases for whom this information was recorded) and two deaths recorded on EpiSurv. By way of contrast, hospital discharge figures indicate that there were 900 hospitalisations for pertussis between 1 June 1999 and 30 June 2002.

¹ All eleven cases that were epidemiologically linked to confirmed cases of the disease, were themselves laboratory confirmed.

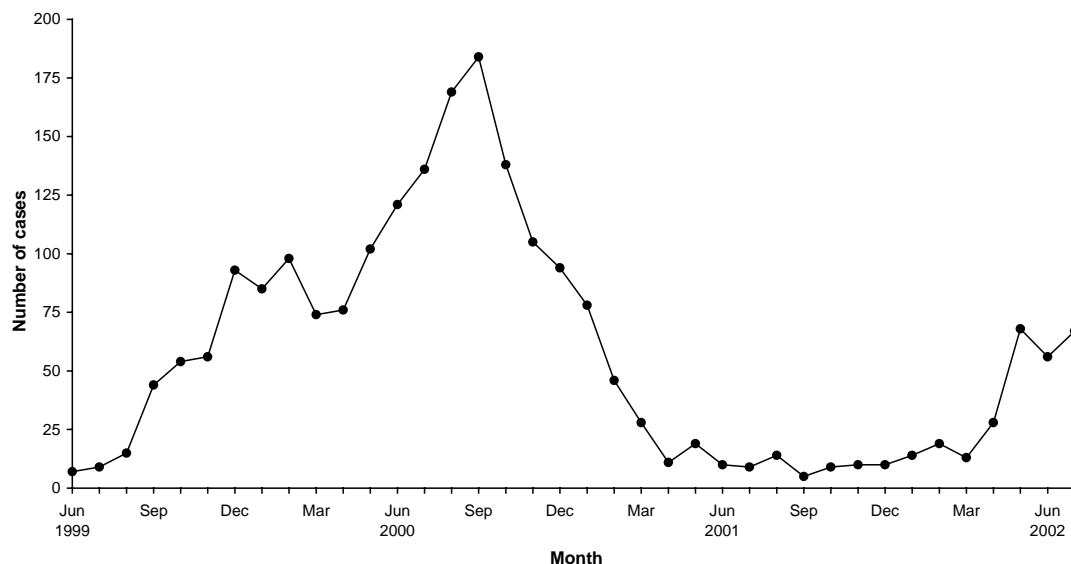
² EpiSurv is the national notification database.

³ Rebecca Kay from NZHIS is thanked for providing this data.

Incidence is still well above the inter-epidemic level of about 15 cases a month. July notifications were highest in South Canterbury (37 cases), Canterbury (21) and West Coast (9) health districts.¹ Thirty-four of the South Canterbury cases were reported from the Timaru District territorial authority area, and three cases were from Ashburton District territorial authority area. The Canterbury cases came from Christchurch City (12 cases), Waimakariri District (8) and Kaikoura District (1) territorial authority areas. Seven West Coast cases were reported from the Grey District territorial authority area, and one case was from Buller District territorial authority area.

The following graph shows the combined number of monthly notifications from South Canterbury, Canterbury and West Coast health districts, since the epidemic began in June 1999.

Pertussis notifications from Canterbury, South Canterbury and West Coast by month, June 1999 - July 2002



Sixty-three July notifications (or 94.0% of cases for whom ethnicity was recorded) were European. There were also four Maori cases. Cases ranged in age from one month to 82 years. Fifty-five (61.8%) July cases were aged nine years or less, and seven (7.9%) were aged under one year. This compares to respective proportions of 61.9 % and 11.1%, since the epidemic began in June 1999. The following table shows the number of doses of pertussis vaccine given to July 2002 cases in each relevant age group.

¹ Since July 1999, the greatest number of notifications has been from Canterbury Health District (23% of all notifications); followed by Nelson-Marlborough and Waikato health districts, each accounting for 12% of notifications.

Age group of pertussis notifications and vaccination received, July 2002

Age group	Total Cases	Vaccination status						
		Vaccinated (no dose info)	One dose	Two doses	Three doses	Four doses	Not vaccinated	Unknown status
0-5 weeks	1	0	(0)	(0)	(0)	(0)	0	1
6 wks-2 mths	3	0	0	(0)	(0)	(0)	1	2
3-4 months	2	0	0	1	(0)	(0)	0	1
5-14 months	5	0	0	0	1	(2)	1	1
15 mths-4 yrs	20	1	0	0	0	9	4	6
5+ years	58	5	2	0	4	15	1	31
Total	89	6	2	1	5	26	7	42

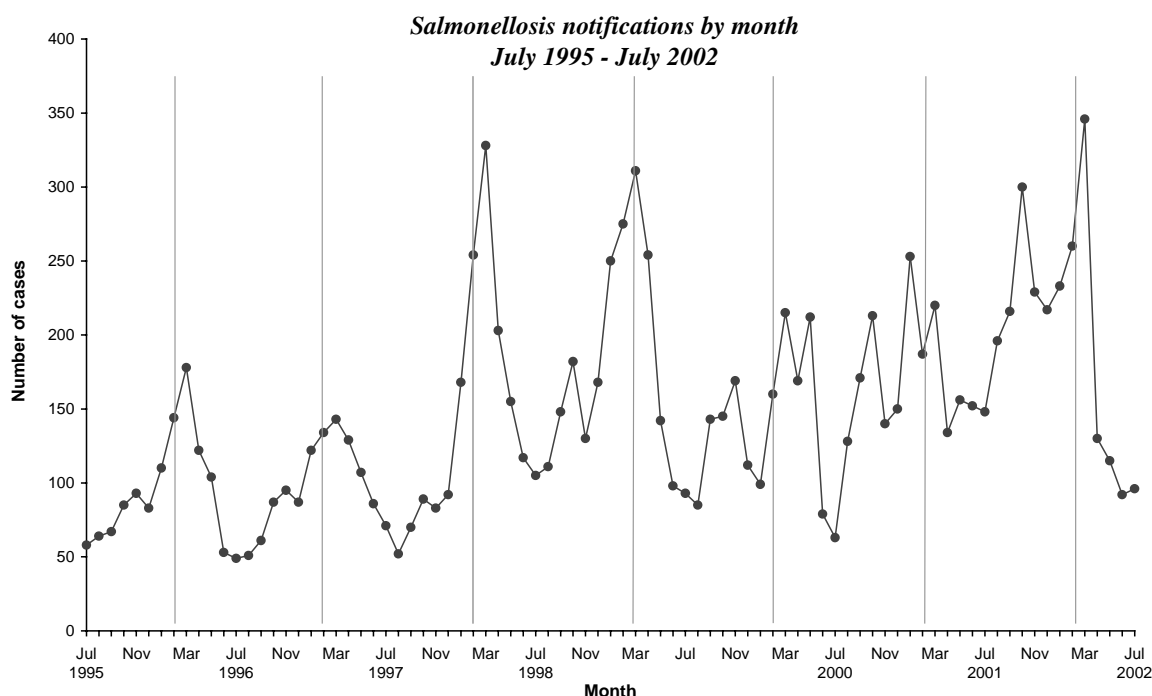
[†] Bracketed numbers indicate cases ineligible for vaccination

Salmonellosis

Ninety-six cases of Salmonella were notified in July 2002. Although lower than the 148 cases notified in July 2001, the July 2002 total is equal to the average number of July notifications over the past six years. Hospitalisation information was recorded for 41 July cases. Of these, three cases (7.3%) were hospitalised. Age-specific rates were highest in the 'less than one year' and 'one-to-four years' age groups, with respectively 9.15 and 8.33 notifications per 100 000. The male to female ratio for cases with recorded gender was 55:38. Of the 38 cases for whom overseas travel information was recorded, 18 (47.4%) had been overseas during the incubation period. The most commonly visited country was Fiji (7 cases), followed by Bali (4 cases), and Thailand (2 cases). One case each travelled to Malaysia, Singapore, Cyprus, India and Indonesia.

The incidence rate of salmonellosis in July was highest in Taupo, Wairarapa and Wellington health districts, with monthly rates of 12.7 per 100 000 (4 cases), 7.8 (3) and 5.5 (14) respectively. Annual rates of disease for the 12-month period ending July 2002 have been highest in Nelson-Marlborough (149.5 cases per 100 000), South Canterbury (111.3), and Taupo (104.7) health districts.

The following graph shows the number of Salmonellosis notifications each month for the past twelve-month period.



All 96 July notifications were matched¹ to human cases identified by the ESR Enteric Reference Laboratory (ERL). The predominant type identified was *S. Typhimurium* 160 (STM 160) with 30 cases (31.3% of the 96 notifications). The next most commonly identified type among July notifications was *Salmonella* Enteritidis phage type 4 and *S. Typhimurium* 156, each with six cases. All five of the six cases identified as *Salmonella* Enteritidis phage type 4 for whom overseas travel information was recorded had been overseas during the incubation period. In comparison, during June 2002, sixteen (17.4%) of the 92 notified cases were identified as STM 160, and in May 2002, fifteen (12.8%) of the 117 notified cases were identified as STM 160. The incidence of STM 160 peaked at 126 cases in November 2001, representing 46.8% of the total number of isolates received by ERL in that month.

Tuberculosis

Forty cases of tuberculosis disease² were notified in July 2002, bringing the year to date total to 202 cases. This is the largest monthly notification total for the year to date. The average number of monthly notifications over the 12-month period ending 31 July was 30. Of the 40 July notifications, 29 were recorded as being confirmed. Thirty cases were reported by hospital-based practitioners, and there were 24 hospitalisations (72.7% of the 33 cases for whom this information was recorded). Five cases were reported to have an immunosuppressive illness.

¹ Note that this is the first time that such matching has taken place.

² This total includes new cases, relapses and reactivations.

During July, incidence was highest in Central Auckland Health District with eleven cases. All eleven were from the Auckland City District territorial authority area. During the 12-month period ending 31 July 2002, the rate of tuberculosis disease has also been highest in Central Auckland Health District, with a rate of 22.6 cases per 100 000.

Ethnicity was recorded for 39 of the 40 July cases. Of these, 23 were of 'Other' ethnicity, six were European, five Maori and five Pacific Islands people. Nineteen of the 23 cases of 'Other' ethnicity were born overseas: in India (5 cases), China (4), Somalia (4), and one case each from Afghanistan, Indonesia, Korea, Philippines, South Africa and Taiwan. A further four cases were born overseas : Tonga (2 cases), Cook Islands (1), Yugoslavia (1). Date of arrival was recorded for 19 of the 24 overseas born cases. Of these, three cases had arrived in the previous 12 months, eleven cases between one and five years ago, and five cases over five years ago. Other reported risk factors included exposure to asbestos (2 cases); exposure to wild pigs, opossums and ferrets (1 case), and exposure to TB in a laboratory (1 case).

VTEC/STEC Infection

Ten cases of VTEC/STEC infection were notified in July 2002¹, six of whom were laboratory confirmed. This brings the year to date total to 51. The average number of monthly notifications over the 12-month period ending 31 July was seven. Waikato Health District reported three cases in July: the twelfth case so far this year. Eastern Bay of Plenty Health District also reported three cases in July, and one case each was reported by South Auckland, Taranaki and Wellington health districts. Seven cases were aged four years or less, one case was aged seven, while two cases were aged over sixty years. Three children were hospitalised for treatment of haemolytic-uraemic syndrome (HUS). This is the fifth hospitalisation for treatment of HUS this year. A Rotorua petting zoo is the presumed source² for one case. The source of infection for other cases is unknown.

¹ In comparison, one case was notified during July 2001.

² This additional information supplied by Dr Phil Shoemak, Medical Officer of Health and Steve Goodwin, Senior Health Protection Office.

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
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
Tuberculosis disease	South Auckland	27y	female	15 Mar 02	24 Mar 02
	South Auckland	73y	male	17 Jun 02	22 May 02

4. Outbreaks

This Monthly Surveillance Report includes data on outbreaks for which final reports had been entered onto EpiSurv during July 2002 (final reported outbreaks), and on outbreaks that were initially reported during July 2002 but were still listed as interim reports at 5 August 2002 (interim reported outbreaks).

Final reported outbreaks

Final reports on 31 outbreaks were received in July 2002. These outbreaks involved 218 cases, 51 of whom had been laboratory-confirmed. Fifteen cases had been hospitalised. Ten Norwalk-like virus (NLV) outbreaks were reported, and accounted for 146 cases (67.0%). The NLV outbreaks were from Auckland (4), Canterbury (4), and one each from Taranaki, and Hawkes Bay Health Districts. The NLV from Canterbury were all in rest homes and were attributed to person-to-person spread. *Campylobacter* (8 outbreaks) accounted for 9.2% of the cases. Five (5/8 for which mode of transmission was recorded) were foodborne, three were both epidemiologically defined based on case histories, and environmental investigation. The remaining two outbreaks were epidemiologically defined based on case histories alone.

The table below summarises information on outbreaks for which ESR received final reports during July 2002. These outbreaks are individually listed on the following pages.

Summary of final outbreak reports received during July 2002

Organism/Toxin/Illness	Number of outbreaks	Total number of cases
<i>Campylobacter</i>	8	20
Ciguatoxin	1	7
Gastroenteritis	6	19
<i>Giardia</i>	1	3
Norwalk-like virus	10	146
Rotavirus	1	15
<i>Salmonella</i>	1	2
<i>Shigella</i>	1	2
<i>Staphylococcus aureus</i>	2	4
Total	31	218

Final reported outbreaks, July 2002

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	Jan02	2	2	0	Takeaways	Foodborne (chicken kebab)	Epi-H; Env
<i>Campylobacter</i>	AK	May02	2	2	0	Restaurant/cafe	Foodborne (chicken pieces)	Epi-H; Env
<i>Campylobacter</i>	AK	May02-Jun02	3	2	0	Restaurant/cafe	Foodborne (chicken kebab)	Epi-H; Env
<i>Campylobacter</i>	AK	Jun02	3	1	0	Home	Unknown	Nil
<i>Campylobacter</i>	AK	Jun02	4	1	0	Restaurant/cafe	Foodborne (chicken & vegetable pie)	Epi-H
<i>Campylobacter</i>	AK	Jun02	2	1	0	Home	Foodborne (home cooked barbecued chicken)	Epi-H
<i>Campylobacter</i>	AK	Jun02	2					
<i>Campylobacter</i>	OT	Jun02	2	1	0	Restaurant/cafe	Unknown	
Ciguatoxin	AK	May02	7	0	0	Home	Foodborne (imported Fijian kawakawa)	Epi-H; Lab
Gastroenteritis	AK	Dec01	2	0	0	Bakery	Foodborne (pork pastry, steak and cheese pies)	Epi-H; Env
Gastroenteritis	AK	Jun02	2	0	0	Home; supermarket / delicatessen	Unknown	Epi-H
Gastroenteritis	AK	Jun02	6	0	0	Restaurant/cafe	Foodborne	Epi-H
Gastroenteritis	AK	Jun02	4	0	0	Restaurant/cafe	Unknown	Epi-H
Gastroenteritis	AK	Feb02	2	0	0	Unknown	Unknown	Epi-H
Gastroenteritis	OT	Apr02	3	1	1	Children's adventure playground	Person to person	Epi-H; Oth
<i>Giardia</i>	RO	Feb02	3	3	0	Camp; swimming/spa pool	Environmental	
Norwalk-like virus	AK	May02	3	1	0	Restaurant/cafe	Foodborne (imported Korean oysters)	Epi-H
Norwalk-like virus	AK	May02	2	2	0	Unknown	Unknown	Nil
Norwalk-like virus	AK	Jun02	5	5	0	Home	Foodborne (home cooked chicken lasagne)	Epi-H
Norwalk-like virus	AK	Jun02	2	2	0	Unknown	Unknown	Nil
Norwalk-like virus	TK	Jul02	3	1		Home	Unknown	Nil
Norwalk-like virus	HB	Apr02	5	1	0	Home; takeaways	Foodborne (takeaway pizzas); person to person	Epi-H
Norwalk-like virus	CB	Jun02	31	5	0	Rest home	Person to person	Lab
Norwalk-like virus	CB	Jun02	36	1	0	Rest home	Person to person	
Norwalk-like virus	CB	Jun02-Jul02	36	0	0	Rest home	Person to person	Oth
Norwalk-like virus	CB	Jul02	23	4	0	Rest home	Person to person	Oth
Rotavirus	AK	Jun02-Jul02	15	7	12	Hospital (acute care)	Person to person	Nil
Salmonella	AK	Mar02	2	2	0	Home	Unknown	Nil
Shigella	AK	May02	2	2	0	Home	Person to person	Epi-H
<i>Staphylococcus aureus</i>	AK	Jun02	2	2	0	Takeaways	Foodborne (roast pork)	Epi-H; Env
<i>Staphylococcus aureus</i>	TK	Apr02	2	2	2	Home	Foodborne; person to person; waterborne	

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

² Health district of the PHU that reported the outbreak: AK=Auckland; RO=Rotorua; HB=Hawkes Bay; TK=Taranaki; CB=Canterbury; OT=Otago.

³ Month outbreak commenced

⁴ Number of microbiologically-confirmed cases.

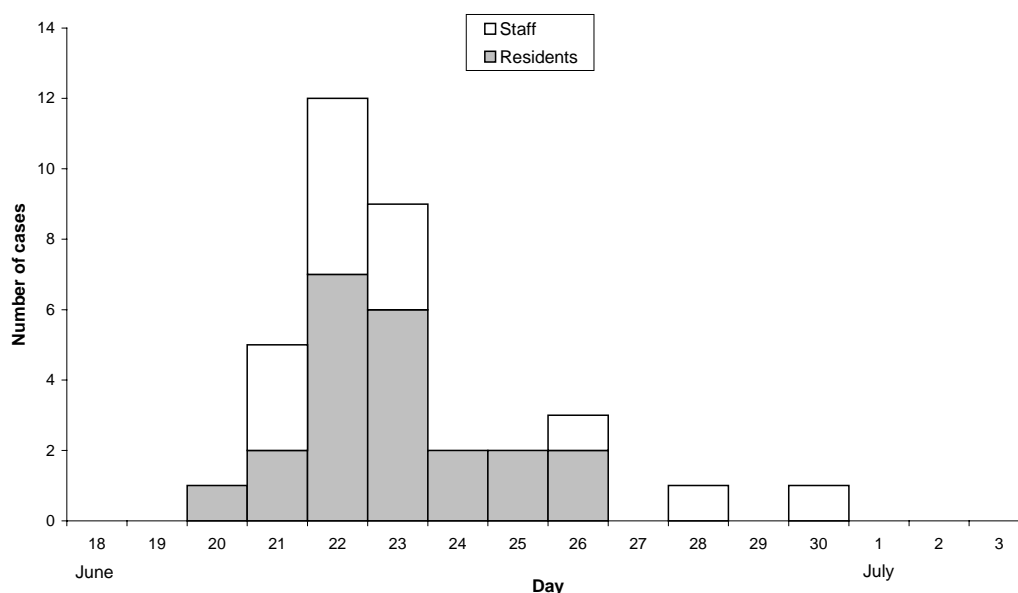
⁵ Evidence for mode of transmission and vehicle/source: Epi-H=cases had history of exposure to implicated source; Epi-S=statistical evidence from cohort or case-control study; Env=evidence from environmental investigation; Lab=pathogen/toxin/chemical suspected to have caused illness identified in implicated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

Norwalk-like virus gastroenteritis outbreak

On 24 June 2002, Crown Public Health was advised about a gastroenteritis outbreak in a Canterbury rest home. Illness in the index case had commenced on 20 June and then spread rapidly among residents and staff. Cases were defined as residents or staff of the rest home who had developed vomiting and/or diarrhoea, during the last ten days of June 2002. Case finding was undertaken by the rest home management, and descriptive analysis conducted of the data. Faecal specimens were collected and analysed.

Among the rest home population of 39 residents and 27 (mainly part-time) staff, 36 cases (22 residents and 14 staff) were identified, an attack rate of 54.5%. Cases experienced sudden onset of vomiting and diarrhoea, fever, headaches and muscle pains. Norwalk-like virus (NLV) was isolated from one resident. The source of the outbreak was not identified but was thought to have been an outside visitor to the index case. The clinical appearance of cases, combined with isolation of NLV from one case, suggested that this outbreak was due to NLV. Prompt infection control advice was sought by the rest home. Ill residents were confined to their rooms until at least 24-48 hours symptom free, and staff excluded from work for a similar time period.

Number of cases reported each day during NLV gastroenteritis outbreak at Canterbury rest home



This outbreak was one of seven such outbreaks of NLV gastroenteritis in rest homes in Canterbury and South Canterbury health districts reported during June and July 2002. A letter has been sent to all rest homes and laboratory services in the Crown Public Health (CPH) region, informing about the outbreaks and advising that infection control advice should be sought and CPH informed if further gastroenteritis outbreaks in rest homes are detected.

(Reported by Dianne Morrison, Crown Public Health).

Interim reported outbreaks

Seventeen preliminary outbreak reports were received during July 2002 from Auckland (*campylobacter* and gastroenteritis), Wellington (cryptosporidiosis), Canterbury (gastroenteritis, norwalk-like virus and *shigella*) and Otago(*giardia*) health districts. These outbreaks will be reported in the monthly table, when further information has become available.

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Note: 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		
	Jul 2002 cases	Cumulative total since 1 January	Current rate ³	Jul 2001 cases	Cumulative total since 1 January	Previous rate ³
AIDS	1	11	0.6	3	15	0.6
Campylobacteriosis	1006	6718	330.5	538	4512	218.9
Cholera	0	1	0.1	0	0	0
Cryptosporidiosis	53	242	24.0	30	552	31.5
Dengue fever	13	52	3.2	21	26	0.8
Gastroenteritis ⁴	58	563	26.7	129	508	22.7
Giardiasis	130	984	43.9	122	945	42.7
<i>H. influenzae</i> type b disease	0	3	0.2	1	8	0.3
Hepatitis A	3	91	3.2	4	33	2.2
Hepatitis B (acute) ⁵	6	41	1.6	3	36	1.8
Hepatitis C (acute) ⁵	4	31	1.5	7	33	1.7
Hydatid disease	0	0	0.1	1	3	0.1
Influenza ⁶	230	436	18.1	204	424	17.3
Lead absorption	8	56	2.6	16	88	3.9
Legionellosis ⁶	7	30	1.2	4	44	2.2
Leprosy	1	2	0.1	1	3	0.1
Leptospirosis	15	92	3.6	10	62	2.5
Listeriosis	2	9	0.5	1	8	0.4
Malaria	6	44	1.6	3	37	2.5
Measles	5	19	1.8	3	33	1.4
Meningococcal disease ⁷	72	302	16.7	83	326	14.8
Mumps	4	35	1.6	7	33	1.4
Paratyphoid	0	9	0.7	1	15	0.9
Pertussis	89	585	25.4	62	971	86.2
Rheumatic fever	4	47	2.0	19	90	3.9
Rickettsial disease	0	2	0.2	1	1	0.1
Rubella	1	24	0.9	6	20	1.0
Salmonellosis	96	1272	65.0	148	1260	55.1
Shigellosis	12	79	3.3	18	112	4.3
Tetanus	0	1	0.1	0	3	0.1
Tuberculosis	40	202	9.7	29	217	9.7
Typhoid	3	20	0.8	2	18	0.7
VTEC / STEC infection	10	51	2.2	1	43	1.9
Yersiniosis	29	292	13.0	26	235	10.0

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

² These data are provisional

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

Disease	Jul 2002	Jun 2002	May 2002	Apr 2002	Mar 2002	Feb 2002	Jan 2002	Dec 2001	Nov 2001	Oct 2001	Sep 2001	Aug 2001	Jul 2001
AIDS	1	1	1	3	1	3	1	4	1	2	1	3	3
Campylobacteriosis	1006	821	675	547	940	1184	1545	1491	1436	1112	809	786	538
Cholera	0	0	0	1	0	0	0	0	0	1	0	2	0
Cryptosporidiosis	53	29	42	17	24	39	38	44	101	240	188	83	30
Dengue fever	13	8	17	6	3	3	2	1	8	15	8	35	21
Gastroenteritis ²	58	143	64	72	102	62	62	72	71	100	99	92	129
Giardiasis	130	129	167	132	151	145	130	117	142	135	125	139	122
Haemophilus influenzae type b	0	1	2	0	0	0	0	0	1	0	0	2	1
Hepatitis A	3	7	9	18	28	17	9	6	7	4	1	10	4
Hepatitis B (acute) ³	6	7	7	5	3	5	8	2	5	6	1	6	3
Hepatitis C (acute) ³	4	5	6	4	8	2	2	5	4	4	6	7	7
Hydatid disease	0	0	0	0	0	0	0	0	0	3	1	0	1
Influenza ⁴	230	151	30	16	3	3	3	1	1	19	49	172	204
Lead absorption	8	7	14	4	7	9	7	7	11	4	10	10	16
Legionellosis ⁴	7	5	4	3	4	0	7	5	3	3	0	2	4
Leprosy	1	1	0	0	0	0	0	0	0	0	0	0	1
Leptospirosis	15	10	16	14	8	18	11	10	12	5	2	14	10
Listeriosis	2	0	0	1	2	2	2	1	3	1	3	2	1
Malaria	6	5	6	6	3	8	10	5	4	2	3	3	3
Measles	5	1	2	2	3	4	2	6	10	19	6	9	3
Meningococcal disease ⁵	72	72	44	30	27	25	32	57	66	65	68	66	83
Mumps	4	6	7	4	5	6	3	2	1	3	8	9	7
Paratyphoid	0	2	3	1	3	0	0	1	3	4	2	7	1
Pertussis	89	88	114	52	58	95	89	65	68	58	65	107	62
Rheumatic Fever	4	2	3	1	5	16	16	4	3	1	7	12	19
Rickettsial disease	0	1	1	0	0	0	0	0	0	2	0	2	1
Rubella	1	5	8	6	1	1	2	3	1	0	2	4	6
Salmonellosis	96	92	115	130	346	260	233	217	229	300	216	196	148
Shigellosis	12	10	13	12	10	11	11	5	6	10	16	8	18
Tetanus	0	0	1	0	0	0	0	1	0	0	0	0	0
Tuberculosis	40	23	26	26	24	27	36	42	29	36	28	25	29
Typhoid	3	1	3	2	6	4	1	4	3	0	2	0	2
VTEC/STEC infection	10	4	11	8	2	5	11	1	4	7	7	14	1
Yersiniosis	29	31	42	33	42	44	71	38	34	59	28	35	26

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 - July 2002

Cases this month

Current rate¹

Disease	Cases for July 2002, ¹ and current rate ^{1,2} by health district ^{3,4}																							
	Northland	NW Auckland	Central Auckland	South Auckland	Waikato	Tairāngia	Eastern BOP	Gisborne	Rotorua	Tauapo	Taranaki	Ruapehu	Hawkes Bay	Wanganui	Manawatu	Wairarapa	Wellington	Hutt	Nelson-Marl	West Coast	Canterbury	South Cant	Otago	Southland
AIDS ⁵	0	0			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0			0.3	1.5	0	0	1.6	0	0	0	0	0	0	0	4.7	0	0	0	0	0	0	0
Campylobacteriosis	21	161	150	105	84	22	7	6	9	7	16	0	38	12	16	6	105	39	15	7	63	30	59	28
	209.8	394.2	395.4	283.6	377.5	274.9	181.4	195.7	268.2	371.3	327.7	105.0	314.9	258.6	222.9	269.2	464.7	390.5	150.4	270.3	323.9	426.1	328.7	308.2
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	0.5	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptosporidiosis	0	2	3	0	3	1	0	0	1	0	0	0	0	0	1	0	36	3	1	0	2	0	0	0
	17.1	9.5	5.2	9.1	54.4	21.7	12.2	9.1	34.1	53.9	18.4	14.0	36.2	29.1	31.3	18.3	36.3	14.4	12.3	36.3	16.2	64.0	42.7	63.9
Dengue fever	0	0	3	3	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0
	2.9	4.0	7.3	4.3	2.6	3.1	2.0	0	1.6	12.7	1.9	0	0	1.7	2.7	0	2.0	6.1	0.8	0	3.0	1.3	1.2	0.9
Gastroenteritis	0	7	7	2	5	0	0	1	0	0	1	0	0	2	0	1	7	3	0	0	19	3	0	0
	2.1	21.9	31.0	10.4	6.5	1.5	8.2	66.0	7.8	28.6	23.3	0	8.4	22.3	34.7	18.3	33.1	27.3	19.6	9.9	85.9	3.8	37.9	12.0
Giardiasis	2	12	26	12	16	6	0	0	1	2	0	0	11	2	1	1	12	10	1	0	8	0	5	2
	20.0	46.8	65.5	41.0	52.5	51.1	22.4	56.9	34.1	50.8	16.5	7.0	96.1	42.8	27.2	34.0	50.1	50.1	40.0	52.7	34.6	25.6	27.7	17.6
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	0	0	0	0
	0	0.2	0	0	0	0	0	0	0	0	1.0	0	1.4	0	0	0	0.4	0	0	0	0.2	0	0	0
Hepatitis A	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1.4	3.7	7.9	7.5	5.8	0	0	2.3	1.6	6.3	0	0	2.8	0	0.7	2.6	2.0	5.3	1.6	0	0.2	0	0	0.9
Hepatitis B	0	3	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	1.4	1.6	3.0	1.1	1.9	2.3	0	9.1	0	3.2	0	7.0	2.8	0	1.4	0	2.0	0	0.8	0	2.0	0	1.2	0
Hepatitis C	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
	0.7	0.2	0.3	1.1	0.3	13.2	2.0	0.0	7.8	6.3	0.0	0.0	0.7	0.0	0.0	0.0	3.5	1.5	0.0	6.6	1.7	2.6	0.6	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
	0.7	0	0	0	0	0	0	2.3	0	0	0	0	0	0	0	0	0.4	0	0	0	0.2	0	0	0
Lead absorption	1	1	2	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	1	0	0
	4.3	1.4	2.7	0.5	4.5	3.1	2.0	9.1	0	0	2.9	7.0	1.4	1.7	2.0	5.2	0.4	0.8	1.6	0	3.2	9.0	7.2	2.8
Legionellosis ⁶	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	0	1	0
	1.4	0.7	0.5	0.5	1.6	0.8	0	0	0	6.3	0	7.0	0.7	1.7	0	2.6	1.2	2.3	1.6	0	2.7	1.3	1.2	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	0.3	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	5	0	0	0	0	0	0	0	3	1	1	1	0	0	0	0	0	2	1	1
	8.6	1.9	0	0.3	6.8	5.4	2.0	13.7	1.6	0	1.9	14.0	20.9	3.4	6.8	2.6	0.8	0	4.9	6.6	0.7	15.4	2.4	1.9
Listeriosis	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.7	0.5	0.5	0.5	0.3	2.3	0	2.3	0	0	0	0	0	0	0	0	0.4	0.8	0	0	0.5	1.3	1.2	0
Malaria	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0
	0.7	0.9	0.5	0.8	2.3	1.5	0	0	3.1	3.2	1.0	14.0	0.7	0	7.5	0	2.0	1.5	2.5	0	2.0	2.6	2.4	0
Measles	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0
	1.4	0.7	0.8	1.3	0.6	3.9	0	4.6	0	0	1.9	0	2.8	0	0.7	0	2.4	0	6.5	9.9	2.7	1.3	2.4	6.5
Meningococcal disease ⁶	1	4	5	10	6	5	3	1	0	1	1	0	9	0	0	0	7	3	2	1	6	0	6	1
	20.0	10.2	17.1	31.2	19.4	21.7	28.5	18.2	46.5	38.1	9.7	7.0	23.0	8.6	10.2	28.7	9.5	13.7	5.7	9.9	6.7	5.1	30.7	10.2
Mumps	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0
	2.9	1.4	0.8	0.8	0.3	0.8	4.1	0	1.6	0	0	0	2.1	1.7	0	0	2.0	1.5	3.3	3.3	2.0	0	5.4	3.7
Paratyphoid	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0.7	1.4	1.3	0.6	0.8	0	0	0	0	1.0	0	1.4	0	0	0	1.2	0.8	0.8	0	0.2	1.3	0	0
Pertussis	0	4	0	2	1	0	0	0	0	0	0	0	1	0	3	0	3	3	2	9	21	37	1	2
	7.8	15.8	9.2	9.6	38.2	9.3	2.0	4.6	4.7	9.5	5.8	21.0	9.8	8.6	9.5	5.2	24.4	34.1	120.9	207.7	34.6	144.6	5.4	34.2
Rheumatic fever	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
	5.0	0.7	3.0	6.7	2.9	3.1	6.1	4.6	0	3.2	1.0	7.0	1.4	1.7	0	0	1.2	0	0	0	0.2	0	0	0
Rickettsial disease	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1.2	0	0	0.3	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	0	0	0	0	1	0
	0.7	0.2	0.3	0.5	0	0.8	0	0	0	0	1.0	0	9.1	0	0	2.6	1.6	0.8	2.5	3.3	0.7	0	0.6	0
Salmonellosis	5	14	7	8	9	2	0	0	2	4	3	0	3	2	1	3	14	1	1	1	10	0	5	1
	57.1	46.8	54.1	47.9	57.7	44.9	61.2	66.0	55.8	104.7	59.1	35.0	96.8	73.6	55.7	78.4	65.8	50.1	149.5	85.7	63.7	111.3	96.3	93.5
Shigellosis	0	1	3	1	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0
	0.7	4.2	7.3	6.9	1.0	2.3																		

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