

MONTHLY SURVEILLANCE REPORT

This monthly report contains data and commentary on disease trends and events up to and including the end of August 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 3rd September 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*. 1115 cases were notified in August 2002. This is the highest ever recorded total for the month of August.
- *Cryptosporidiosis*. The upward trend in notifications has continued into August. Wellington and Waikato health district reported the greatest number, with 36 and 14 cases respectively.
- *Dengue fever*. Eight cases were notified in August. Cases reported recent overseas travel to Rarotonga /Cook Islands (3 cases), Fiji (1), Samoa (1), East Timor (1) and Thailand (1). Since the beginning of the year, 33 of the 60 notified cases have reported travel to Rarotonga or the Cook Islands.
- *Meningococcal disease*. Sixty-seven cases of meningococcal disease were reported during August 2002, of whom 43 were laboratory confirmed. This brings the year-to-date total to 371 cases, including eleven fatalities. One death was reported in August.
- *Pertussis*. There has been a resurgence in pertussis in August, particularly in the South Island, with Canterbury and South Canterbury health districts reporting over half (60.9%) the 115 cases.

2. Key disease trends

Campylobacteriosis

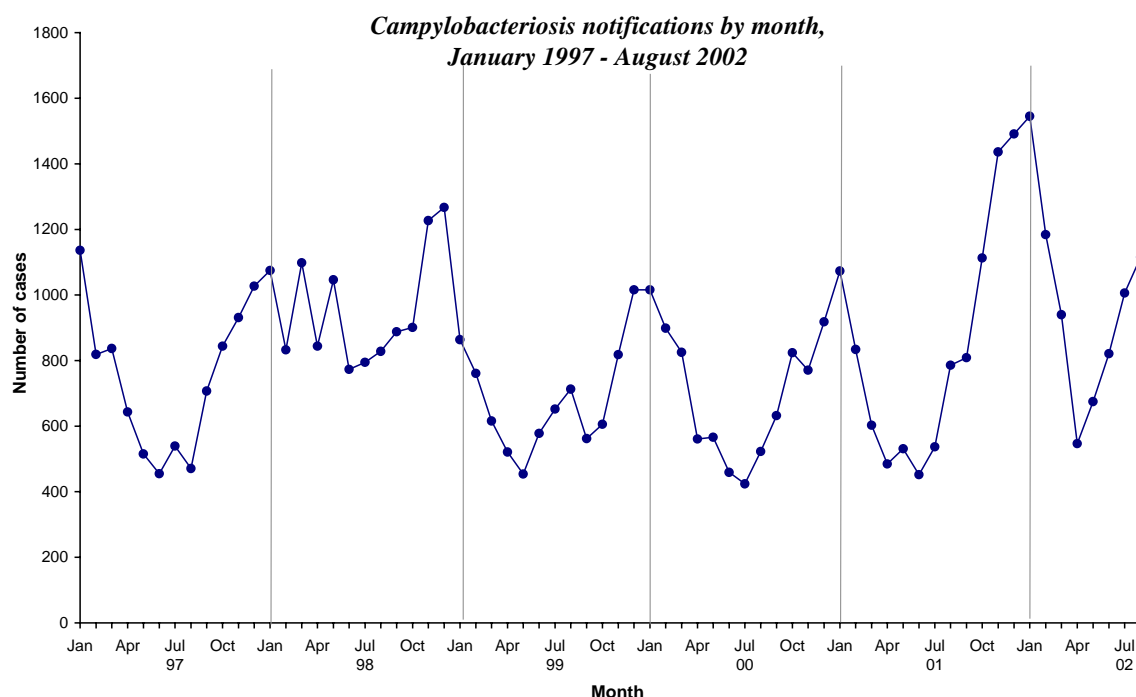
There were 1115 cases of campylobacteriosis notified during August 2002, of whom 1069 (95.9%) were confirmed. This is the highest ever recorded total for the month of August. By way of contrast, an average of 696 cases per month of August was notified over the seven-year period 1995 to 2001.

Incidence rates in August 2002 were highest in the 'under 4 years' age group, with a monthly rate of 59.5 per 100 000 population - almost twice the monthly national rate of 29.8 per 100 000. Approximately 90% of cases (for whom ethnicity was recorded) were of European ethnicity. There were 37 hospitalisations (7.9% of cases for whom this information was recorded).

Of the 1115 August notifications, North West Auckland Health District reported the greatest number with 176 cases. A total of 454 (40.7%) cases was reported by the combined Auckland health districts. Among all health districts, the incidence rate in

August¹ was highest in Central Auckland, with a monthly rate of 45.7 per 100 000 (168 cases), followed by West Coast (42.9 per 100 000), North West Auckland (41.0), Hawkes Bay (38.3), Waikato (36.9) and Wellington (36.3) health districts. Over the 12-month period ending 31 August 2002, the incidence rate was highest in the Wellington Health District, with an annual rate of 475.0 per 100 000 population. South Canterbury Health District experienced the next highest rate of 433.8 per 100 000, followed by Central Auckland (414.7) and North West Auckland (406.1) 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 16.3% (182/1115) of notifications in August including information on human contact and only 16.7% (186/1115) including information on contact with farm animals. Of these, 13.2% (24/182) had a history of contact with other symptomatic people, and 32.3% (60/186) reported exposure to farm animals.

Cryptosporidiosis

Eighty-four cases of cryptosporidiosis were notified in August 2002, of whom 78 were confirmed. This is the highest monthly total since the beginning of the year. The

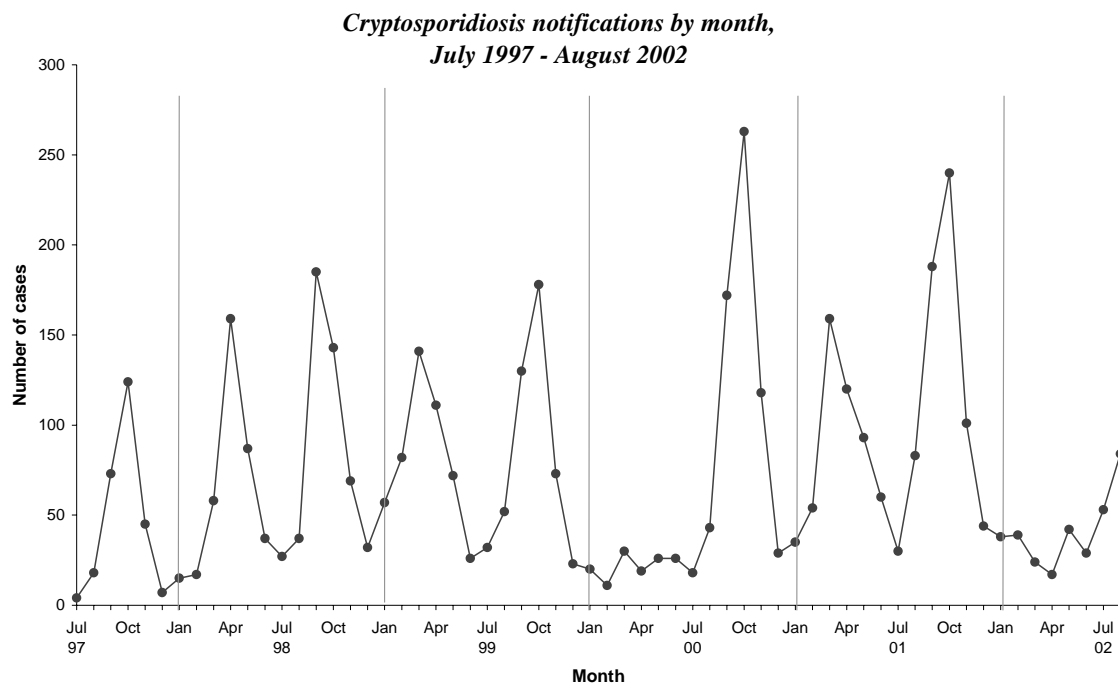
¹ The incidence rate for August is the number of August notifications from a given region divided by the size of the population of the region and multiplied by 100 000. This ratio represents a monthly notification rate per 100 000 population.

majority (76.2%) of August cases were aged nine years or less. Twelve cases (or 26.7% of cases for whom this information was recorded) reported contact with farm animals, and 29 cases (74.4% of cases for whom the information was recorded) reported recreational contact with water, in particular, swimming pool water.

During June, July and August Wellington Health District reported the greatest number of cases, with 11, 36 and 36 cases respectively. Two Wellington pools have been linked with cases: the toddlers pool at a private swim school and the learners pool at an Aquatic Centre. Of the 36 notifications from Wellington Health District in August, 25 had swum at the Aquatic Centre and one at the private swim school. Since the beginning of June, a total of 45 cases have reported swimming at the Aquatic Centre, while 25 cases have reported swimming at the private swim school. Seven cases swam at both.

Waikato Health District had the next highest notification total in August, with 14 cases reported. Of these, seven were thought to have become infected from contact with farm animals. All other health districts reported four or fewer cases.

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



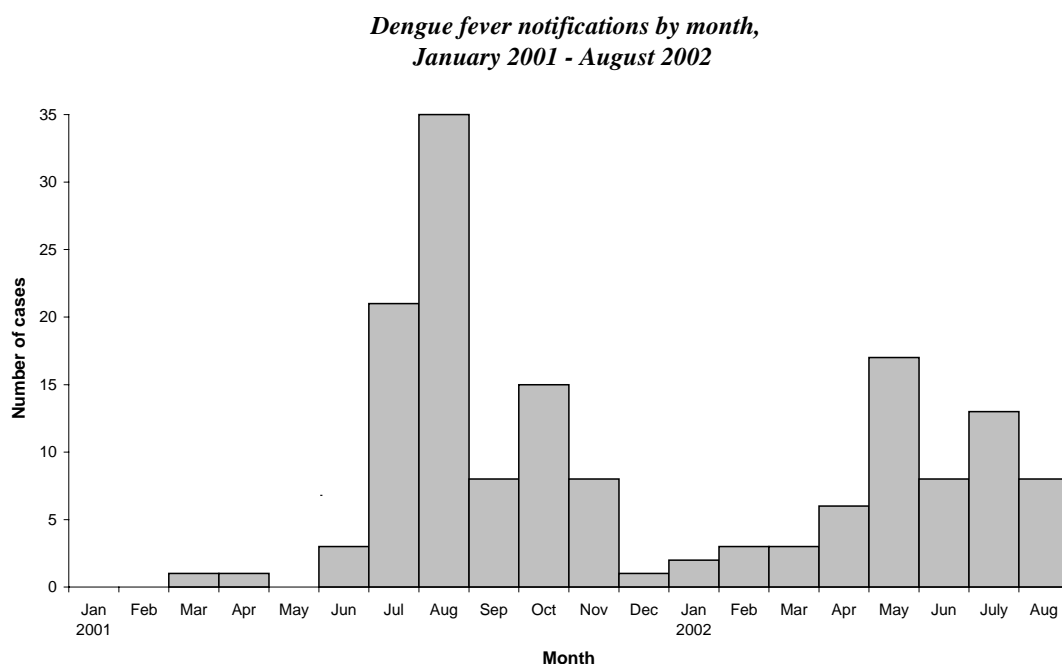
Provisional figures for September (not displayed on the graph) indicate a sharp increase in the number of cases of cryptosporidiosis. To date, 216 notifications for the month of September have been received.

Dengue fever

Eight cases of dengue fever were notified in August 2002, seven of whom have been laboratory confirmed. This brings the year to date total to 60. The cases, six males and two females, ranged in age from 19 to 60 years. Three cases have been hospitalised.

All eight cases reported recent overseas travel: two New Zealand residents had recently visited Rarotonga; one Cook Islands resident was a visitor to New Zealand; one case each had recently been to Fiji, Samoa, Thailand and East Timor; and one case had an unknown travel destination. Since the beginning of the year, over half (33/60) 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.



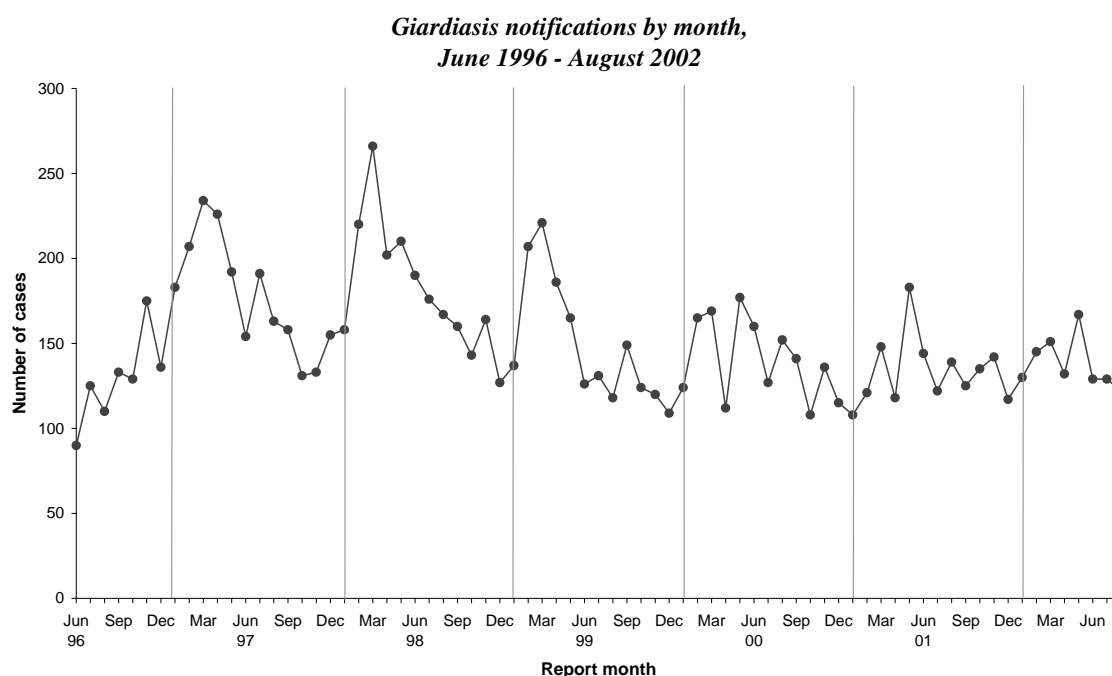
Giardiasis

During August 122 cases of giardiasis were notified, of whom 118 (96.7%) were confirmed. This brings the year to date total to 1105. Central Auckland Health District reported the greatest number of cases in August (23), followed by North West Auckland (17), Waikato, Wellington and Hutt health districts (12 cases each). Over the past 12-month period, the incidence rate was highest in Hawkes Bay Health District, with a rate of 89.2 per 100 000 population. Annual rates higher than the

national average of 43.5 per 100 000 were also seen in Central Auckland (67.2), Hutt (55.4), Waikato (53.1), West Coast (52.7), Tauranga (51.9), Wellington (50.8), Gisborne (50.1), Wanganui (48.0) and North West Auckland (45.6) health districts.

Of the 27 cases in August for whom this information was recorded, 14 (51.9%) reported contact with other symptomatic people. Fourteen cases (50% of cases with this information recorded) reported contact with faecal matter - in particular with children in nappies. Age-specific rates for the month of August were highest in the '1-4 yrs' and '30-39 yrs' age groups, with monthly notification rates of 13.4 per 100 000 (29 cases) and 6.1 (35 cases) respectively. Eleven cases (45.8% of cases with this information recorded) reported exposure to untreated water. Hospitalisation information was recorded for 53 cases, of whom 4 (7.5%) were hospitalised.

The following graph shows the number of giardiasis notifications each month since June 1996.



Hepatitis B

Forty-six cases of acute Hepatitis B were notified during the first eight months of 2002. In comparison, 42 cases were notified during the same period in 2001. Of the 45 year-to-date cases with recorded ethnicity, 26 (57.8%) were of European ethnicity and 13 (28.9%) Maori. There were also three Pacific Islands people and two cases of 'Other' ethnicity. For those cases with recorded gender, the male to female ratio was 1.6:1 (28/17). Six hospitalisations were recorded.

The following table summarises risk factor information for year-to-date notifications. Several cases had more than one risk factor recorded.

Risk factors associated with Hepatitis B, January 02 – August 02

Risk Factor	Yes	No	Unknown	Proportion¹
Travelled overseas during incubation period	8	22	16	26.7%
Household contact with case	5	21	20	19.2%
Sexual contact with confirmed case or carrier	4	17	25	19.0%
Body piercing or tattooing in last 12 months	3	27	11	10.0%
Occupationally exposed to blood	1	26	19	3.7%
History of injecting drug use	1	28	17	3.4%

¹ "Proportion" refers to the percentage of cases who answered "yes" out of the total number of cases for whom this information was known.

Hepatitis C

Thirty-seven cases of acute Hepatitis C were notified during the first eight months of 2002. In comparison, 40 cases were notified during the same period in 2001. Twenty-five of the 37 cases notified this year had ethnicity recorded. Of these, 18 (72%) were of European ethnicity and 6 (24%) were Maori. There was also one Asian case. The male to female ratio was 1.8:1 (24/13). Three hospitalisations were recorded.

The following table summarises risk factor information for year-to-date notifications. Some cases had more than one risk factor recorded. A history of injecting drug use was an overwhelmingly important risk factor, being reported by 80% of new cases for whom this information was recorded.

Risk factors associated with Hepatitis C, January 02 – August 02

Risk Factor	Yes	No	Unknown	Proportion¹
History of injecting drug use	16	4	17	80.0%
Sexual contact with confirmed case or carrier	4	9	24	30.8%
Body piercing or tattooing in last 12 months	2	9	14	18.2%
Travelled overseas during incubation period	2	11	24	15.4%
Blood product or tissue recipients	2	12	23	14.3%
Household contact with confirmed case or carrier	1	10	26	9.1%

¹ "Proportion" refers to the percentage of cases who answered "yes" out of the total number of cases for whom this information was known.

Influenza

During August (weeks 31 – 35), 806 consultations for influenza-like illness were reported to the Influenza Sentinel Surveillance System. Consultations were reported from 89 general practices, and from 22 out of 24 health districts. The average weekly consultation rate for August was 46.3 per 100 000 patient population, compared to a rate of 73.7 per 100 000 patient population during the same month last year. South Auckland had the highest consultation rate (118.2 per 100 000), followed by South Canterbury (93.7 per 100 000).

A total of 244 swabs were sent for testing during August from sentinel surveillance. Two hundred and eight influenza swabs were received by the regional virology

laboratories. Of these, 25 were Influenza A, of which 12 were further subtyped as Influenza A/Moscow/10/99 (H3N2). Sixteen were typed as Influenza B, of which six were further typed as Influenza B/Hong Kong/330/01. The following table shows the distribution by health district for the month of August.

Distribution of sentinel isolates by health district, August 2002

Type/subtype	NW	CA	SA	WK	BE	GS	HB	CB	OT	SO	Total
A (untyped)	4	3	5					1			13
A (H3N2)	5	1	2	1	1	1			1		12
B	1							9			10
B/Hong Kong/330/01	1	1		1			1		1	1	6
Total	11	5	7	2	1	1	1	10	2	1	41

In addition, a total of 100 influenza viruses were identified from laboratory-based (non-sentinel) surveillance in August. Of these, 59 were Influenza A, of which 28 were further subtyped as Influenza A/Moscow/10/99 (H3N2). Forty-one were typed as Influenza B, of which eleven were further typed as Influenza B/Hong Kong/330/01.

Measles

Five cases of measles were notified during August 2002, bringing the year to date total to 22.¹ Two cases were notified from West Coast Health District, and one case each was reported by North West Auckland, Canterbury and Southland health districts. No cases have as yet been laboratory confirmed. Vaccination status was recorded for three of the five notifications: a nine-year-old boy had received two doses of MMR vaccine, a four-year-old girl had received one dose of the vaccine, and a one-year-old girl was unvaccinated.

Meningococcal disease

Based on the earliest² date available, 67 cases of meningococcal disease were notified during August 2002, of whom 43 (64.2%) had been laboratory confirmed at the time of this report.³ This brings the year to date total to 371 cases. The average number of cases notified during the month of August over the seven-year period 1995 to 2001 was 71.

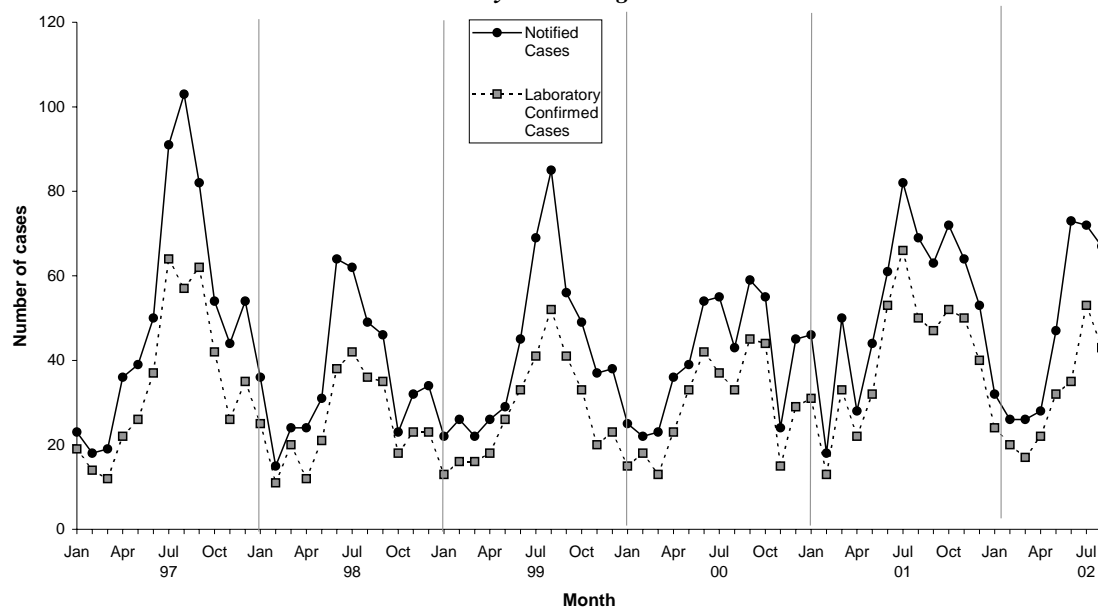
¹ Note that two cases of measles have been de-notified since the July Monthly Surveillance Report was written.

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.

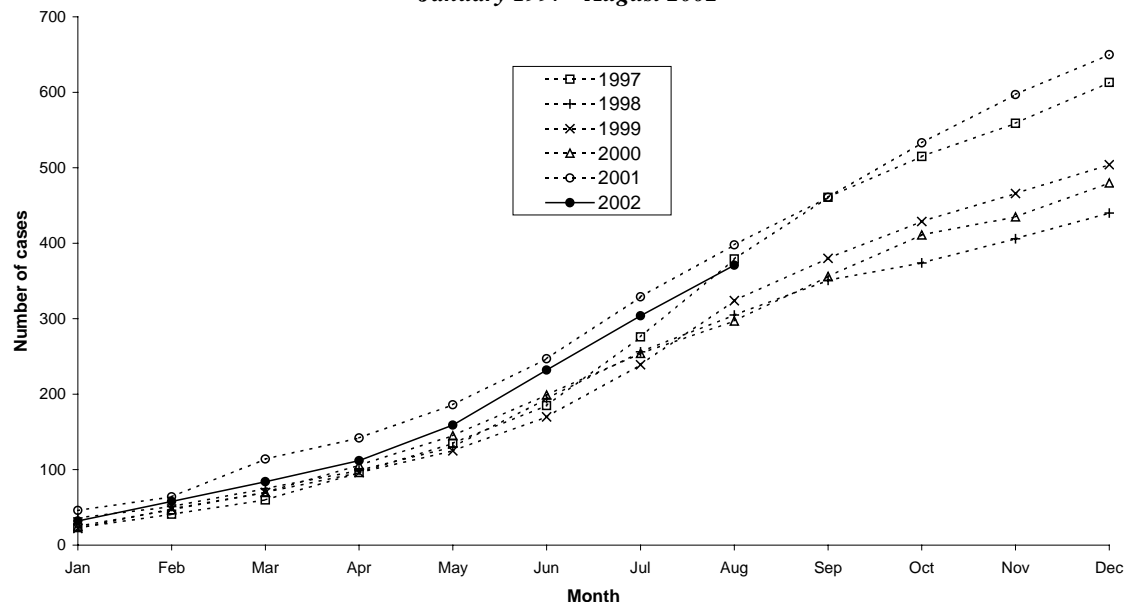
³ Updated figures indicate 72 cases of meningococcal disease were notified during July 2002, of whom 53 have now been laboratory confirmed.

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 - August 2002*



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



Hospitalisation information was recorded for 62 of the 67 August cases, and of these, 61 were hospitalised. One case was fatal: a seven-year-old female from Waikato Health District. This brings the number of fatal cases this year to eleven.

Of the 67 cases reported this month, 34 were of European ethnicity, 20 were Maori, 8 were Pacific Islands people, three were of 'Other' and two were of unspecified ethnicity. The male to female ratio was 1.2:1 (37/30). Age-specific rates were highest in the 'less than one year' and 'one to four years' age categories, with monthly rates of 11.0 per 100 000 (6 cases) and 7.9 per 100 000 (17 cases) respectively. Of the 48 cases for whom this information was recorded 23 (47.9%) reported attendance at school or pre-school.

In August, South Auckland and Waikato health districts reported the greatest number of cases (10 cases each). Otago Health District reported the next highest number (9 cases). However, the monthly incidence rate was highest in Taupo Health District, and next highest in West Coast Health District, with monthly incidence rates of 9.5 per 100 000 (3 cases) and 6.6 per 100 000 population (2 cases), respectively.

Of the 371 cases notified this year to date, the greatest number was reported by South Auckland Health District (68 cases), followed by Central Auckland (30 cases), Otago and Waikato health districts (29 cases 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 (52.7), Taupo (47.6), Otago (34.9), South Auckland (30.9), Eastern Bay of Plenty (28.5), Wairarapa (26.1), Hawkes Bay (23.7), Tauranga (20.1), Northland (20.0), Waikato (19.8), Gisborne (18.2) and West Coast (16.5). 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	Aug 2002 notifications	Jan to Aug 2002 notifications
Northland	2	19
North West Auckland	0	24
Central Auckland	2	30
South Auckland	10	68
Waikato	10	29
Tauranga	2	20
Eastern Bay of Plenty	2	11
Gisborne	1	5
Rotorua	4	18
Taupo	3	12
Hawkes Bay	3	26
Taranaki	2	7
Wanganui	1	2
Manawatu	2	8
Wairarapa	0	2
Wellington	3	16
Hutt	1	6
Nelson-Marlborough	0	3
West Coast	2	5
Canterbury	2	19
South Canterbury	1	3
Otago	9	29
Southland	5	9
Total	67	371

Pertussis

During August 2002, there were 115 cases of pertussis notified, compared to 107 cases in August 2001. This is the highest number of notifications in any month since March 2001. Of the August 2002 cases, 36.5% (42/115) were either confirmed by serological means, by PCR or by isolation of *Bordetella pertussis*. Of the remaining 73 cases, nine were epidemiologically linked to confirmed cases of the disease and a further six 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.

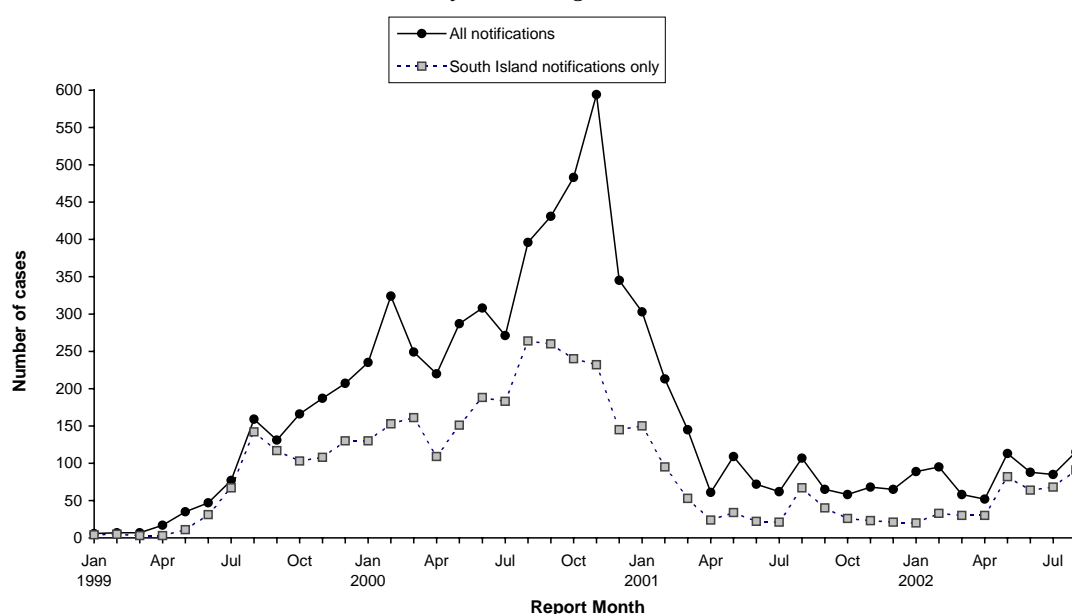
Hospitalisation information was recorded for 61 of the 115 cases, of whom seven (11.5%), all aged under one year, were hospitalised. Among the 695 cases notified this year to date, there have been a total of 57 hospitalisations recorded on EpiSurv. Thirty-nine (68.4%) hospitalised cases were aged under one year and eleven (19.3%) were aged between one and four years. In comparison, hospital discharge data¹ indicate that the number of hospitalised cases of pertussis since the beginning of the year totals 86. Of these, 59 (68.6%) were aged under one year and 21 (24.4%) were aged between one and four years.

Ninety-one (79%) of the 115 August notifications were from the South Island. Among health districts, South Canterbury reported the greatest number of cases (40 cases²), followed by Canterbury (30) and Nelson-Marlborough (9). The incidence rate in August was highest in South Canterbury, with a monthly rate of 51.2 per 100 000 (40 cases), and next highest in West Coast Health District, with a monthly rate of 16.5 per 100 000 (5 cases). Over the past 12-month period, annual rates of pertussis have been highest in West Coast Health District (214.3 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 this data.

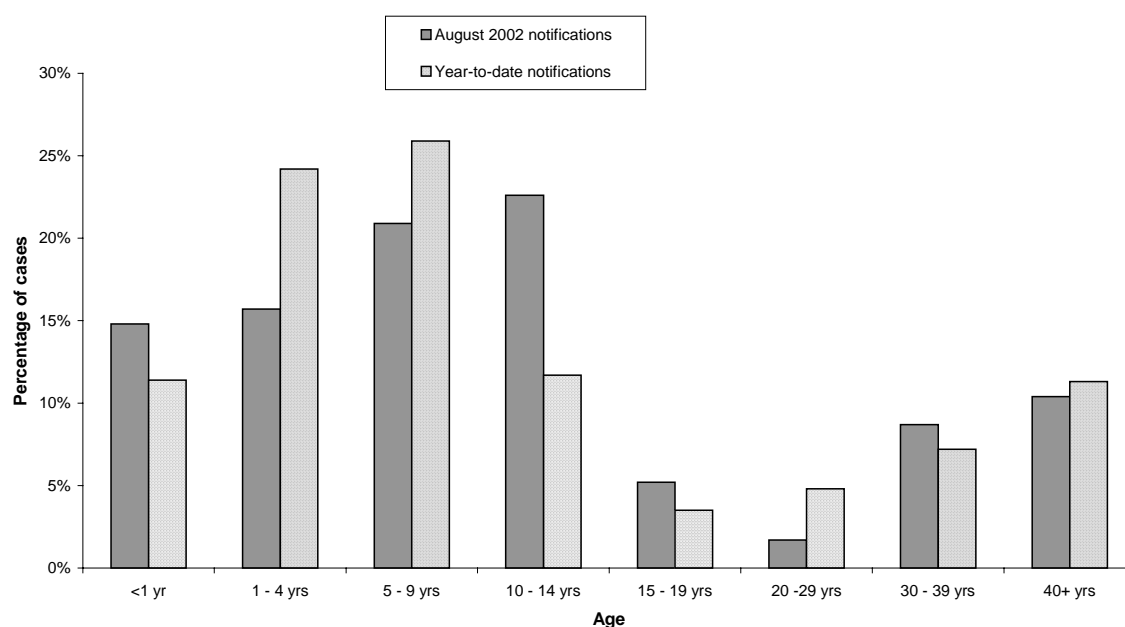
² All forty of the South Canterbury cases were reported from the Timaru District territorial authority area.

*Notified cases of pertussis by month,
January 1999 - August 2002*



Eighty-seven August notifications (or 88.8% of cases for whom ethnicity was recorded) were European. There were also eight Maori cases, two Pacific People and one case of 'Other' ethnicity. The cases ranged in age from one month to 74 years. The following graph illustrates the proportion of cases in each age category, during August and for the year to date.

Pertussis notifications in each age group



The following table shows the number of doses of pertussis vaccine given to August 2002 cases in each relevant age group.

Age group of pertussis notifications and vaccination received, August 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	4	0	1	(0)	(0)	(0)	1	2
3-<5 months	6	0	1	2	(0)	(0)	1	2
5-<15 months	6	0	0	0	1	(0)	1	4
15 mths-<5 yrs	17	0	0	0	0	4	2	11
5+ years	80	9	1	1	10	8	1	50
Total	115	9	3	3	11	12	7	70

Bracketed numbers indicate cases ineligible for vaccination

Provisional September figures¹ indicate a continued resurgence of pertussis in Canterbury (31 cases) and South Canterbury (15 cases), as well as a sharp increase in the number of notifications from Waikato Health District (12 cases).

Rickettsial disease

Two laboratory-confirmed cases of rickettsial disease² were reported from North West Auckland Health District in August, bringing the year to date total to four. The cases, a 40-year-old female and a 10-year-old child, live at the same address. No information on risk factors was recorded. Provisional September figures indicate a further two notifications from North West Auckland Health District. All but one of the eleven cases notified since January 2001 have been from North West Auckland.

Salmonellosis

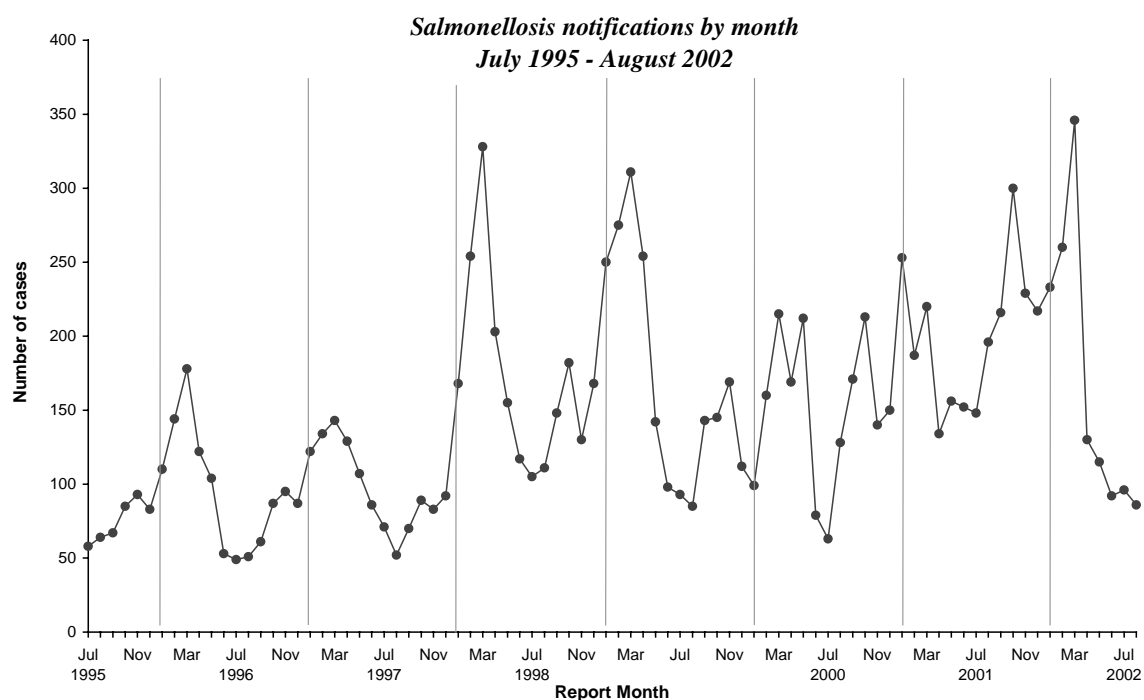
Eighty-six cases of Salmonella were notified in August 2002, all but one of whom were laboratory confirmed. This is the lowest number notified during any month this year. In comparison, 196 cases were notified during the same month last year. Hospitalisation information was recorded for 37 cases, of whom five (13.5%) were hospitalised. Age-specific rates for the month of August were highest in the 'one to four years' and 'less than one year' age groups, with respectively 10.18 and 9.15 notifications per 100 000. Of the 30 cases for whom overseas travel information was recorded, 13 (43.3%) had been overseas during the incubation period. The most commonly visited countries were Bali and Thailand, with three cases each. One case each travelled to the USA, Pakistan, French Polynesia, Croatia, India and Singapore. One case did not record a travel destination.

¹ Ninety-two notifications for the month of September have so far been received.

² Both cases were notified as murine typhus.

August notifications were highest in Waikato and North West Auckland health districts, both reporting 14 cases; although annual rates of disease for the 12-month period ending August 2002 were highest in Nelson-Marlborough (144.6 cases per 100 000) and South Canterbury (115.2) health districts.

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



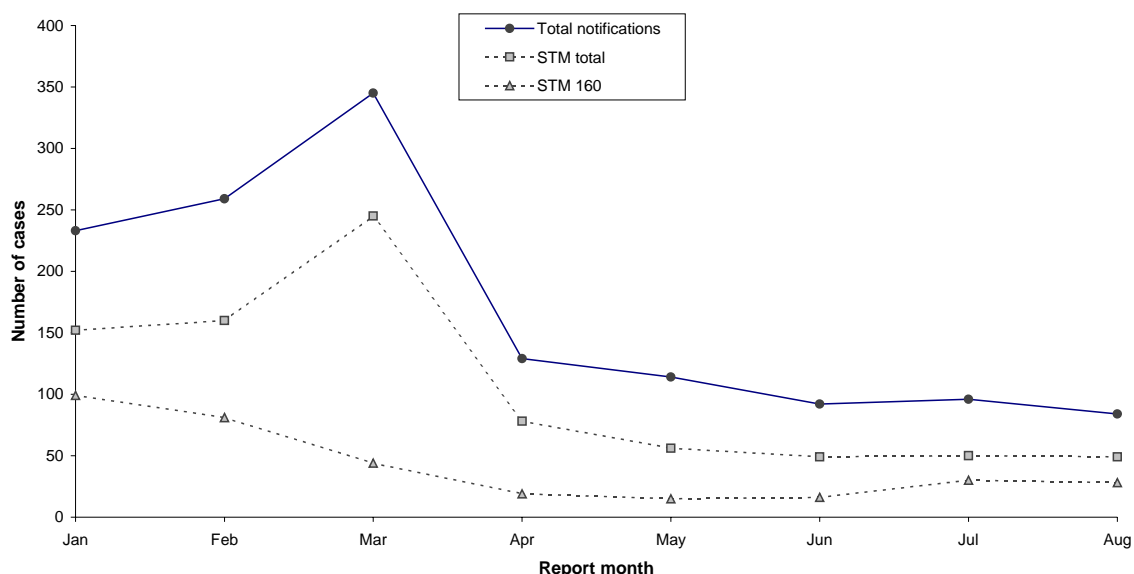
Eighty-five of the 86 notifications could be matched to human cases identified by the ESR Enteric Reference Laboratory (ERL)¹. The predominant type identified was *S. Typhimurium* 160 (STM 160) with 28 cases (33.3% of notifications). The next most commonly identified types among August notifications were *S. Typhimurium* 135 (9 cases), *Salmonella* Brandenburg (5 cases), and *Salmonella* Enteritidis phage type 4 (4 cases). Three of the four cases identified as *Salmonella* Enteritidis phage type 4 recorded overseas travel to Bali during the incubation period².

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 can be matched to ERL reported cases.

² Of the 13 cases of *Salmonella* Enteritidis phage type 4 notified this year to date, 11 recorded overseas travel during the incubation period.

*Salmonella notifications by month
January 02 - August 02*



Tuberculosis

Thirty-four cases of tuberculosis disease¹ were notified in August 2002, bringing the year to date total to 237 cases. For the past twelve months, between 24 and 40 cases, and an average of 31 cases, have been notified each month. Of the 34 August notifications, 21 (61.8%) were recorded as being confirmed. Twenty-two cases were reported by hospital-based practitioners. There were 12 hospitalisations (44.4% of the 27 cases for whom this information was recorded). Six cases were reported to have an immunosuppressive illness.

During August, incidence was highest in South Auckland Health District with six cases reported.² North West Auckland, Central Auckland and Hawkes Bay health districts each reported five cases. One outbreak³ involving four male meat workers and a 13-year-old female was reported from Hawkes Bay Health District. During the 12-month period ending 31 August 2002, the annual rate of tuberculosis disease has been highest in Central Auckland Health District, with a rate of 23.1 cases per 100 000.

The age of August cases ranged between one year and 82 years. One case is resident in a rest home. Eleven cases recorded contact with a confirmed case of the disease. Ethnicity was recorded for 32 of the 34 cases. Of these, 16 were of 'Other' ethnicity, seven were Maori, six Pacific Islands people and three European. Fourteen of the 16 cases of 'Other' ethnicity were born overseas: in India (5 cases), China (3), Korea (2), Somalia (2), Indonesia and Ethiopia (1 case each). A further two Pacific Islands

¹ This total includes new cases, relapses and reactivations.

² All six cases were notified from Manukau City territorial authority area

³ This outbreak is still under investigation.

people were born out of New Zealand. Date of arrival was recorded for 11 of the 16 overseas born cases. Of these, three cases had arrived in the previous 12 months, four cases between one and five years ago, and four cases over five years ago.

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
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

4. Outbreaks

This Monthly Surveillance Report includes data on outbreaks for which final reports had been entered into EpiSurv during August 2002 and on outbreaks that were initially reported during August 2002 but were still listed as 'interim' on 3 September 2002.

Final reported outbreaks

Final reports on 13 outbreaks were received during August 2002. These outbreaks involved 165 cases, of whom 13 were laboratory-confirmed. One case was hospitalised. Four Norwalk-like virus (NLV) outbreaks, accounting for 136 cases (82.4%), were reported. Two outbreaks from Canterbury and one outbreak from Wellington occurred in rest homes, while one Tauranga outbreak occurred in a hotel/motel. The following two tables provide a summary and details of final outbreak reports.

Summary of final reported outbreaks, August 2002

Organism/Toxin/Illness	Number of outbreaks	Total number of cases
<i>Campylobacter</i>	3	6
<i>Cryptosporidium parvum</i>	1	9
Gastroenteritis	2	7
Norwalk-like virus	4	136
<i>Salmonella</i>	1	3
<i>Shigella</i>	1	2
Solanine toxin	1	2
Total	13	165

Details of final reported outbreaks, August 2002¹

Pathogen/ toxin/ illness	Health district ²	Date ³	No. ill	Lab Conf ⁴	No. Hosp	Setting	Mode of transmission (vehicle/source)	Evidence ⁵
<i>Campylobacter</i>	AK	May02	2	1	0	Food Outlet	Foodborne (butter chicken)	Epi-H Env
<i>Campylobacter</i>	AK		2					
<i>Campylobacter</i>	AK	Jul02	2	1	0	Unknown	Unknown	Nil
<i>Cryptosporidium parvum</i>	AK	Jul02	9	3	0	Hotel/motel	Unknown	Epi-H
Gastroenteritis	AK	Jun02	5	0	0	home	Unknown	Nil
Gastroenteritis	AK	Jul02	2	0	0	Unknown	Unknown	Epi-H
Norwalk like virus	WN	Jul02	43	1	1	Rest home	Person-to-person; environmental	Nil
Norwalk like virus	CB	Jun02	54		0	Rest home	Person-to-person	Oth
Norwalk like virus	CB	Jul02	25	1	0	Rest home	Person-to-person; airborne	Oth
Norwalk like virus	TG	May02	14	1	0	Hotel/motel	Person-to-person	Epi-H
<i>Salmonella</i>	TK	Jul02	3	3		Home; Farm	Zoonotic	Epi-H
<i>Shigella</i>	CB	Jul02	2	2	0	Unknown	Unknown	Nil
Solanine toxin	CB	Aug02	2	0	0	Home; takeaways	Foodborne (potato fritters from green potatoes)	Epi-H; Lab

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; WN=Wellington; TK=Taranaki; CB=Canterbury.

³ Date 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 reported outbreaks

Interim reports on 16 outbreaks were made during August 2002, involving at least 56 cases.¹ Among outbreaks, the most commonly recorded illness or pathogen was gastroenteritis (11/16 outbreaks). Together, these eleven outbreaks accounted for 38 (67.9%) cases. The following table lists all interim outbreak reports made in August. Details of these outbreaks will be provided once final reports have been received.

Interim reported outbreaks, August 2002¹

Pathogen/toxin/illness	Health district ²	Date ³	No. ill	Lab Conf ⁴	No. Hosp	Setting	Evidence ⁵
<i>Campylobacter</i>	AK		4	4			
<i>Campylobacter</i>	AK		2	1			
Gastroenteritis	AK		2				
Gastroenteritis	AK		2	2	0		
Gastroenteritis	AK		22				
Gastroenteritis	AK				0		
Gastroenteritis	AK		2				
Gastroenteritis	AK		4				
Gastroenteritis	AK		2				
Gastroenteritis	AK		2				
Gastroenteritis	AK		2				
Gastroenteritis	WK	Aug02					Nil
Gastroenteritis	WN				0		
<i>Giardia</i>	TG	Jul02		3	0	Home	Epi-H
<i>Mycobacterium tuberculosis</i>	HB		4	1	0		
Norwalk-like virus	AK		8				

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; WN=Wellington; TG=Tauranga; HB=Hawkes Bay.

³ Date 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.

¹ Total cases were recorded for 12 of the 16 outbreaks.

South Otago meningococcal disease outbreak

Six confirmed cases of Group C meningococcal disease in students aged between 9 and 17 years were reported to the Otago Public Health Unit between the 10th and 17th of August 2002. All of the cases had attended or could be linked to a South Otago High School (SOHS) social, which had taken place 36 hours prior to the notification of the first two cases. Four of the cases were students of SOHS, the other two were siblings who attended the primary school opposite to SOHS and had an older brother who had been present at the social.

Family and known close contacts of those infected were identified and offered a short course of antibiotics (chemoprophylaxis). Public health staff visited SOHS and other groups who had been potentially exposed, to talk about meningococcal disease and risk factors. Talks with students at SOHS lead to 70 students being offered antibiotics. An 0800 help-line was also established to offer information and advice.

Upon confirmation of the second case of Group C meningococcal disease it was decided that all staff and students of SOHS would be offered vaccination, to be preceded by antibiotics. Senior students were interviewed and received antibiotics whereas junior students (those under 16) were given consent forms and received antibiotics on return of parental consent. Vaccination began twelve days after the first case of meningococcal disease was notified. A total of 449 people were vaccinated over a period of three days. Primary school students and their parents received antibiotics only, as both cases attending this school were from the same household and had close links to SOHS.

The success of the management strategy for this outbreak can be attributed to close co-operation between school staff, health protection officers, public health nurses, local general practitioners, other health professionals, students and parents of both schools, as well as the continuing support of the Ministry of Health.

(Reported by John Holmes, Medical Officer of Health, Public Health South.)

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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		
	Aug 2002 cases	Cumulative total since 1 January	Current rate ³	Aug 2001 cases	Cumulative total since 1 January	Previous rate ³
AIDS	1	12	0.5	3	18	0.7
Campylobacteriosis	1115	7831	339.2	786	5298	225.9
Cholera	0	1	0.1	2	2	0.1
Cryptosporidiosis	84	326	24.1	83	635	32.6
Dengue fever	8	60	2.5	35	61	1.7
Gastroenteritis ⁴	59	624	25.8	92	600	23.8
Giardiasis	122	1105	43.5	139	1084	42.4
<i>H. influenzae</i> type b disease	0	3	0.1	2	10	0.4
Hepatitis A	2	92	2.9	10	43	2.1
Hepatitis B (acute) ⁵	5	46	1.6	6	42	1.7
Hepatitis C (acute) ⁵	7	37	1.5	7	40	1.6
Hydatid disease	1	1	0.1	0	3	0.1
Influenza ⁶	136	572	17.2	172	596	20.9
Lead absorption	10	67	2.6	10	98	4.0
Legionellosis ⁶	4	34	1.2	2	46	2.2
Leprosy	0	2	0.1	0	3	0.1
Leptospirosis	6	97	3.4	14	76	2.7
Listeriosis	3	12	0.5	2	10	0.3
Malaria	3	47	1.6	3	40	2.5
Measles	5	22	1.7	9	42	1.4
Meningococcal disease ⁷	79	376	16.9	66	392	15.5
Mumps	2	37	1.4	9	42	1.5
Paratyphoid	2	13	0.6	7	22	1.1
Pertussis	115	695	25.4	107	1078	78.4
Rheumatic fever	4	51	1.8	12	102	4.1
Rickettsial disease	2	4	0.2	2	3	0.1
Rubella	5	29	0.9	4	24	0.9
Salmonellosis	86	1356	62.0	196	1456	57.0
Shigellosis	8	87	3.3	8	120	4.3
Tetanus	0	1	0.1	0	3	0.1
Tuberculosis	34	237	10.0	25	241	9.5
Typhoid	0	19	0.7	0	18	0.7
VTEC / STEC infection	6	54	2.0	14	57	2.0
Yersiniosis	30	323	12.9	35	270	10.2

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

² These data are provisional

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

Disease	Aug 2002	Jul 2002	Jun 2002	May 2002	Apr 2002	Mar 2002	Feb 2002	Jan 2002	Dec 2001	Nov 2001	Oct 2001	Sep 2001	Aug 2001
AIDS	1	1	1	1	3	1	3	1	4	1	2	1	3
Campylobacteriosis	1115	1005	820	675	547	940	1184	1545	1491	1436	1112	809	786
Cholera	0	0	0	0	1	0	0	0	0	0	1	0	2
Cryptosporidiosis	84	53	29	42	17	24	39	38	44	101	240	188	83
Dengue fever	8	13	8	17	6	3	3	2	1	8	15	8	35
Gastroenteritis ²	59	60	143	64	72	102	62	62	72	71	100	99	92
Giardiasis	122	129	129	167	132	151	145	130	117	142	135	125	139
Haemophilus influenzae type b	0	0	1	2	0	0	0	0	0	1	0	0	2
Hepatitis A	2	2	7	9	18	28	17	9	6	7	4	1	10
Hepatitis B (acute) ³	5	6	7	7	5	3	5	8	2	5	6	1	6
Hepatitis C (acute) ³	7	3	5	6	4	8	2	2	5	4	4	6	7
Hydatid disease	1	0	0	0	0	0	0	0	0	0	3	1	0
Influenza ⁴	136	230	151	30	16	3	3	3	1	1	19	49	172
Lead absorption	10	9	7	14	4	7	9	7	7	11	4	10	10
Legionellosis ⁴	4	7	5	4	3	4	0	7	5	3	3	0	2
Leprosy	0	1	1	0	0	0	0	0	0	0	0	0	0
Leptospirosis	6	14	10	16	14	8	18	11	10	12	5	2	14
Listeriosis	3	2	0	0	1	2	2	2	1	3	1	3	2
Malaria	3	6	5	6	6	3	8	10	5	4	2	3	3
Measles	5	3	1	2	2	3	4	2	6	10	19	6	9
Meningococcal disease ⁵	79	68	71	44	30	27	25	32	57	66	65	68	66
Mumps	2	4	6	7	4	5	6	3	2	1	3	8	9
Paratyphoid	2	2	2	3	1	3	0	0	1	3	4	2	7
Pertussis	115	85	88	113	52	58	95	89	65	68	58	65	107
Rheumatic Fever	4	4	2	3	1	5	16	16	4	3	1	7	12
Rickettsial disease	2	0	1	1	0	0	0	0	0	0	2	0	2
Rubella	5	1	5	8	6	1	1	2	3	1	0	2	4
Salmonellosis	86	95	92	115	130	346	259	233	217	229	300	216	196
Shigellosis	8	12	10	13	12	10	11	11	5	6	10	16	8
Tetanus	0	0	0	1	0	0	0	0	1	0	0	0	0
Tuberculosis	34	40	24	26	26	24	27	36	42	29	36	28	25
Typhoid	0	2	1	3	2	6	4	1	4	3	0	2	0
VTEC/STEC infection	6	7	4	11	8	2	5	11	1	4	7	7	14
Yersiniosis	30	30	31	42	33	42	44	71	38	34	59	28	35

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 - August 2002

Cases this month

Current rate¹

Disease	Cases for August 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		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
	0		0		0.3	0.8	0	0	1.6	0	0	0	0	0	0	0	4.4		0	0	0	0	0	0
Campylobacteriosis	30	176	168	110	114	27	7	10	19	4	31	3	55	13	20	9	92	27	15	13	81	22	46	23
	207.6	406.1	414.7	293.9	382.7	279.5	179.4	211.6	274.4	345.9	323.8	126.0	335.8	258.6	226.3	274.4	475.0	387.5	152.0	293.4	331.4	433.8	344.3	323.1
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	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptosporidiosis	2	3	1	3	14	2	0	1	0	1	3	0	2	0	4	0	36	1	2	0	3	3	1	2
	17.1	9.3	5.4	8.3	47.0	20.1	12.2	11.4	27.9	57.1	21.3	14.0	36.2	24.0	29.9	18.3	50.1	15.2	13.9	36.3	15.4	61.4	41.5	65.7
Dengue fever	0	0	3	2	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0
	0.7	2.1	6.3	3.7	1.9	1.5	2.0	0	0	12.7	1.9	0	0	1.7	3.4	0	1.2	5.3	0	0	3.0	0	1.2	0
Gastroenteritis	3	6	4	1	5	0	0	0	1	0	3	0	0	7	0	1	7	4	0	1	14	0	2	0
	2.1	20.9	28.0	9.6	7.8	1.5	4.1	18.2	7.8	28.6	26.2	0	8.4	32.5	34.7	20.9	34.3	30.3	16.3	13.2	84.7	3.8	37.3	10.2
Giardiasis	3	17	23	5	12	5	0	0	1	1	1	0	3	4	1	1	12	12	3	0	11	1	6	0
	21.4	45.6	67.2	39.1	53.1	51.9	22.4	50.1	32.6	41.3	15.5	0	89.2	48.0	25.1	34.0	50.8	55.4	30.2	52.7	36.4	24.3	27.1	17.6
<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	1.0	0	0.7	0	0	0	0	0	0	0	0.2	0	0	0
Hepatitis A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	0.7	4.0	7.6	6.1	5.5	0	0	0	1.6	6.3	0	0	2.8	0	1.4	2.6	1.6	4.6	1.6	0	0.2	0	0	0.9
Hepatitis B	0	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0
	1.4	1.6	3.3	1.3	1.6	0.8	0	9.1	0	3.2	1.0	7.0	2.8	0	1.4	0	2.0	0	0	0	2.0	0	1.2	0
Hepatitis C	0	2	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0
	0	0.7	0.3	0.8	0.3	11.6	2.0	0.0	7.8	6.3	0.0	0.0	0.7	0.0	0.0	2.6	3.5	1.5	0.0	6.6	1.7	2.6	0.6	0.0
Hydatids disease	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	0.2	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	0	0	1	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	2	0	1	0
	5.0	1.6	2.4	0.5	4.2	3.1	2.0	9.1	0	3.9	7.0	2.1	1.7	3.4	5.2	0.4	0.8	0.8	0	3.2	7.7	6.6	2.8	
Legionellosis ⁶	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
	2.1	0.5	0.8	0.5	1.3	0.8	0	0	0	6.3	0	7.0	0.7	1.7	0	5.2	1.2	2.3	1.6	0	2.7	1.3	1.8	0
Leprosy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Leptospirosis	2	1	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
	5.7	1.9	0	0	6.5	4.6	2.0	11.4	0	0	1.9	14.0	20.9	5.1	6.8	2.6	0.8	0	4.9	6.6	0.7	14.1	2.4	1.9
Listeriosis	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0.7	0.5	0.5	0.3	3.1	0	0	0	0	0	0	0	0	0	0	0.4	0.8	0	0	0.5	1.3	1.2	0.9
Malaria	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	0	1.2	0.5	1.1	2.3	1.5	0	0	3.1	3.2	1.0	14.0	0.7	0	6.8	0	2.4	0.8	2.5	0	2.0	2.6	2.4	0
Measles	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	1
	1.4	0.5	0.5	1.3	0.6	2.3	0	4.6	0	0	1.0	0	1.4	0	0.7	0	2.4	0	5.7	16.5	2.7	1.3	1.8	7.4
Meningococcal disease ⁶	5	0	3	10	12	2	2	1	5	5	2	0	3	1	3	0	4	1	0	2	2	2	9	5
	20.0	9.1	16.3	31.4	20.4	20.1	30.6	20.5	52.7	50.8	9.7	0	23.7	5.1	10.2	28.7	9.9	9.9	5.7	16.5	5.7	7.7	34.9	13.0
Mumps	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	1.4	1.4	0.8	0.8	0.3	1.5	2.0	0	1.6	0	0	0	2.1	1.7	0	0	1.2	0.8	3.3	3.3	1.2	1.3	5.4	3.7
Paratyphoid	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	0	1.2	1.1	0.8	0.6	0	0	0	0	0	0	0	1.4	0	0	0	1.2	0.8	0.8	0	0.2	1.3	0	0
Pertussis	0	3	0	4	4	0	0	0	0	0	0	0	1	1	0	1	8	2	9	5	30	40	1	6
	7.1	15.1	8.2	9.6	37.3	7.7	2.0	4.6	3.1	6.3	5.8	7.0	10.4	10.3	9.5	7.8	26.8	28.1	88.3	214.3	40.1	186.8	5.4	36.1
Rheumatic fever	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5.0	0.5	2.7	5.6	1.9	3.9	6.1	4.6	1.6	3.2	1.0	7.0	1.4	1.7	0	0	0.8	0	0	0	0.2	0	0	0
Rickettsial disease	0	2	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	1	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
	0.7	0.2	0.5	0.5	0	0.8	4.1	0	0	0	1.0	0	8.4	0	0	2.6	1.2	0.8	2.5	3.3	0.7	0	0.6	0
Salmonellosis	2	14	11	9	14	0	0	0	0	0	1	0	2	2	0	0	9	1	2	0	7	5	1	6
	52.8	44.9	53.6	46.6	57.4	38.7	57.1	66.0	51.2	92.0	56.2	35.0	95.4	68.5	52.3	73.2	61.9	45.5	144.6	65.9	61.2	115.2	84.3	90.7
Shigellosis	1	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
	1.4	4.0	7.3	6.9	1.0	2.3	0	0	4.7	3.2	3.9	0	4.2	3.4	0	0	1.6	0.8	0.8	0	3.5	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	1.6	0	0	0	0	0	0	0	0	0	0	0	0	1.3	0	0
Tuberculosis	0	5	5	6	3	0	0	0	0	1	0	0	5	0	1	0	4	1	0	1	1	0	1	0
	10.7	8.8	23.1	17.6	8.7	8.5	2.0	4.6	6.2	19.0	0	0	9.8	6.9	5.4	13.1	10.6	15.2	2.5	3.3	5.2	6.4	4.2	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	1.2	1.6	3.2	0	0	0	0	0	0	0	0	0	0	0.7	0	1.6	0	0	0	0	0	0	0
VTEC / STEC	0	0	0	1	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0
	1.4	0.9	1.6	0.8	4.9	2.3	16.3	4.6	4.7	0	4.8	0	0	0	2.0	0	0.8	0.8	0	0	2.5	0	1.8	2.8
Yersiniosis	0	4	5	3	3	0	0	0	0	0	0	0	0	1	0	0	7	1	0	1	4	0	1	0
	5.0	13.7	18.2	11.2	11.0	19.4	6.1	13.7	9.3	19.0	5.8	14.0	10.4	10.3	8.8	5.2	14.2	9.9	4.9	36.3	15.2	21.8	15.7	12.0

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

5 Surveillance data based on laboratory-reported cases only