

MONTHLY SURVEILLANCE REPORT

This monthly report contains data and commentary on disease trends and events up to and including the end of February 2002 (see also forthcoming issues of the *New Zealand Public Health Report*). Its purpose is to provide timely information for use by designated officers and public health service staff. Data contained within is based on information recorded on EpiSurv by public health service staff up until 4th March, 2002. As this information may be updated over time, the results should be regarded as provisional only.

Note: where rates are quoted, “current rate” refers to the rate for the 12 month period ending February 2002 and “previous rate” refers to the rate for the 12 month period ending February 2001. In this report all rates have been calculated using Census 1996 figures. As from next month, rate calculations will utilise updated figures from the 2001 Census.

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1. Major surveillance issues

- *Deaths.* Three deaths were reported this month, one from campylobacteriosis and two from meningococcal disease.
- *Hepatitis A.* A small rise in incidence has occurred in recent months with cases occurring mainly in Auckland, Waikato and the Hutt/Wellington regions. The increase does not appear to be associated with typical risk factors such as overseas travel, sexual behaviour or contact with cases.
- *Leptospirosis.* There has been a sharp rise in leptospirosis notifications in February, with many cases reporting contact with animals through work on farms or in the meat processing industry.
- *Meningococcal disease.* The incidence of notified meningococcal disease for the first two months of 2002 suggests an epidemic tracking at a rate similar to that of 2002. A total of 26 cases were notified in February 2002, compared with 19 cases notified during February 2001.
- *Pertussis.* The national pertussis epidemic is persisting. Although the epidemic peak has passed, cases continue to occur at a rate higher than the inter-epidemic period.
- *Salmonellosis.* Salmonellosis notifications continue at a high rate. STM 160 remains the single most common serotype identified among human cases, accounting for 33% of all isolates from human cases in February 2002.

2. Key disease trends

Campylobacteriosis

There were 1181 cases of campylobacteriosis notified during February 2002. In contrast, 833 cases were notified during the same month last year.

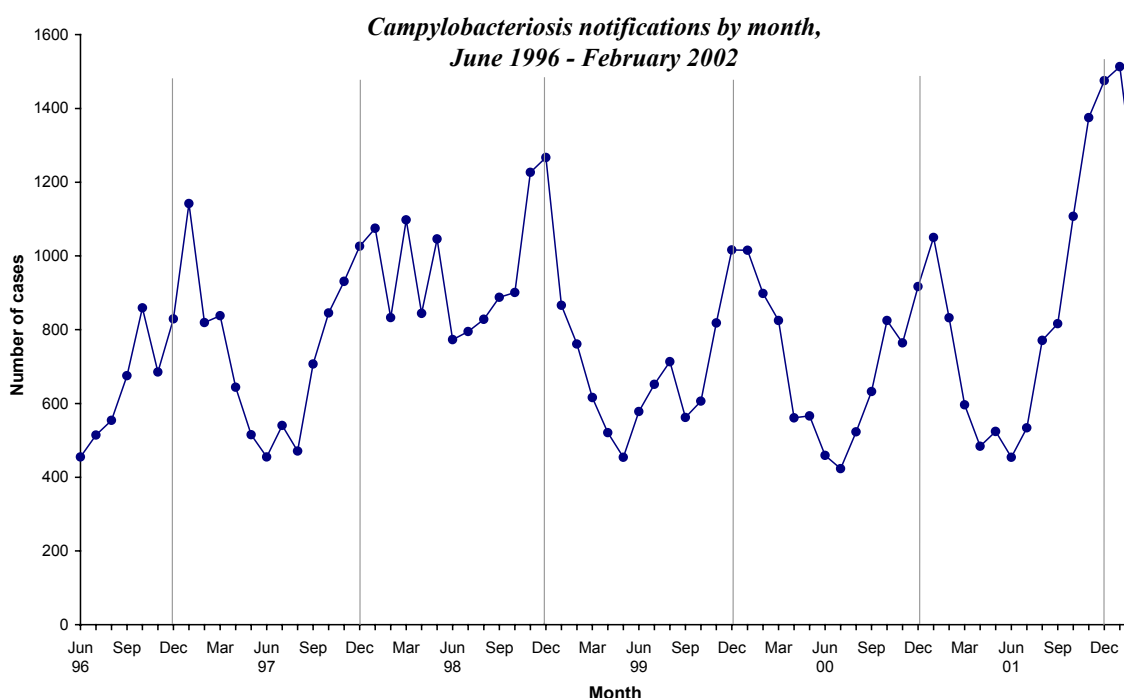
Rates higher than the national rate of 302.1 per 100 000 were seen in Wellington (482.5), Hutt (374.8), Taupo (368.1), Waikato (365.9), North West Auckland (348.3), South Canterbury (344.5), Central Auckland (336.1), Hawkes Bay (320.6), Taranaki (311.6) and Tauranga (308.5) health districts.

Final reports on four outbreaks of campylobacteriosis were made this month, one from an Auckland outbreak in January 2001, one from Auckland in August 2001, one from Taranaki in February 2002 and one from Wanganui in January 2002. Of these outbreaks, two were suspected on epidemiological grounds to be foodborne and one was without supportive evidence but thought to have been due to waterborne and

person-to-person transmission. The mode of transmission was unknown for the fourth outbreak.

One death from campylobacteriosis was reported this month. The case was an 82 year old female from Canterbury health district.

The following graph shows campylobacteriosis notifications by month since June 1996. It demonstrates the marked seasonality of campylobacteriosis incidence and the typical summer peak.



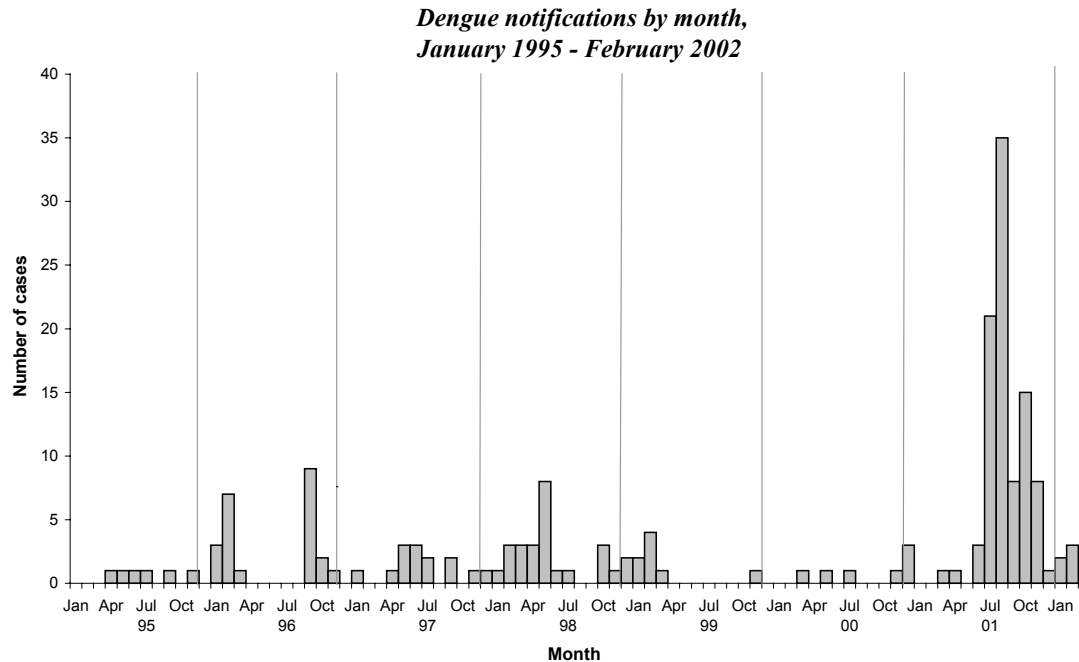
Risk factor information was infrequently recorded on the case report forms, with only 28.9% (341/1181) of notifications in February including information on human contact and only 31.4% (371/1181) including information on travel. Of these, 7.3% (25/341) had a history of contact with other symptomatic people and 8.9% (33/371) had been overseas during the incubation period.

Dengue fever

Three cases of dengue fever were notified in February 2002, bringing the year to date total to five. The current rate of 2.7 per 100 000 is markedly higher than the rate of 0.2 for the previous 12 months.

Overseas travel information was recorded for all five cases notified this year. The implicated countries were, Rarotonga (2 cases) and one each from American Samoa, Thailand and Samoa. Four of the cases were confirmed by IgM serology, the other was confirmed by IgG serology. Two of the five cases were hospitalised.

The following graph shows the number of dengue notifications by month since 1995.

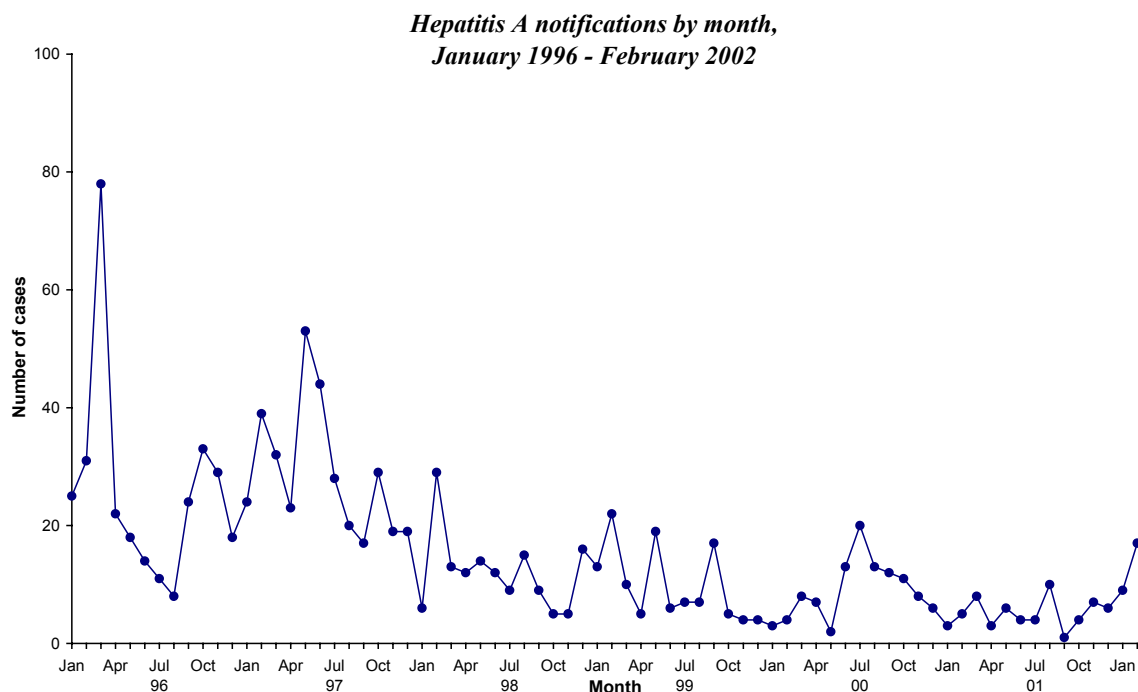


Hepatitis A

Seventeen cases of hepatitis A were notified during February 2002, compared to five cases notified during the same month last year. This brings the year to date total to 27 cases.

One outbreak of hepatitis A, accounting for three confirmed cases, was reported from the Hutt Health District. Foodborne transmission is thought to have occurred at a barbecue.

The following graph shows the number of cases of hepatitis A notified each month since January 1996.



Of the 17 February notifications, nine were notified from the combined Auckland health districts, four from Waikato, three from Hutt and one from Wellington health districts. This resembles last month's geographical distribution of cases in which the combined Auckland health districts reported seven cases, and Waikato and Wellington health districts reported one case each. In contrast, throughout 2001 a total of 45 cases were notified from the combined Auckland health districts, six from Wellington, two each from Hutt, Gisborne and Canterbury health districts and one from Wairarapa health district.

Nine of the February cases were European, four were Pacific People, one was of 'Other' ethnicity and one of unknown ethnicity. Ages of notified cases ranged from 5 to 66 years. Of the 15 cases for whom the information was recorded, two cases have been hospitalised: a 51 year old male from Central Auckland health district, and a 4 year old female from Waikato health district.

Of the eleven February cases for which overseas travel information was recorded, two South Auckland cases indicated overseas travel during the incubation period for hepatitis A. The implicated countries were Samoa and Tonga.

None of the eight cases for which the information was recorded reported either household or sexual contact with a confirmed case in the previous three months. Two cases reported possible occupational exposure to human sewage.

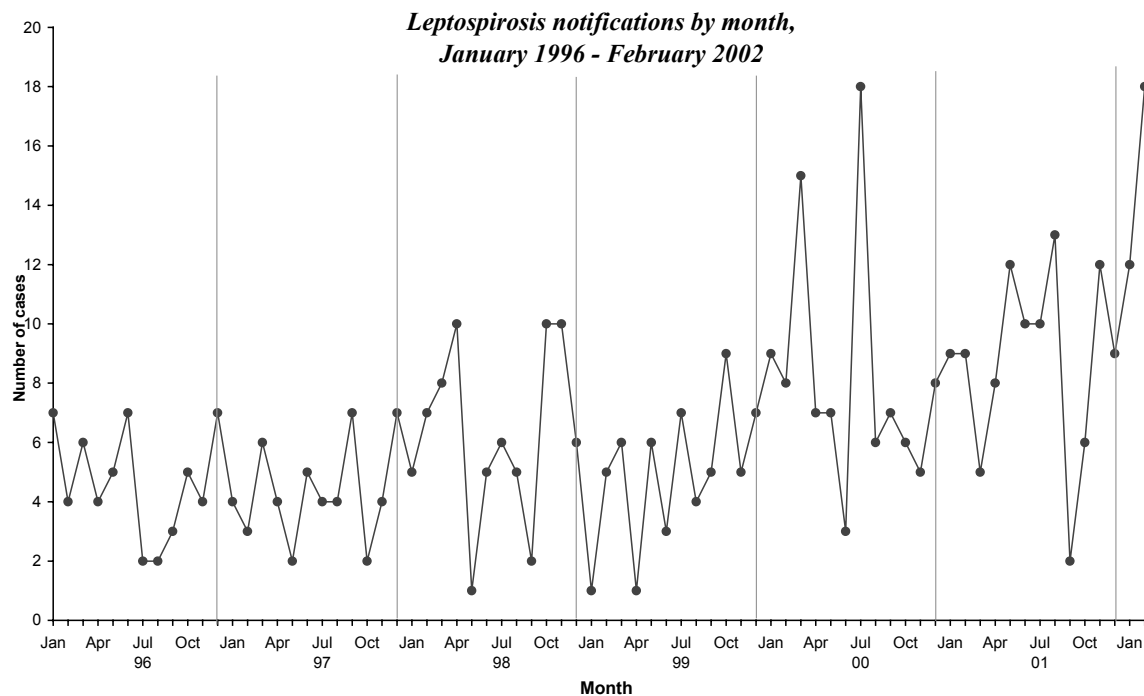
Leptospirosis

A total of 18 cases of leptospirosis have been notified in February 2002, compared to nine cases during the same period last year. The February 2002 total of 18 notified cases is equal to the highest previous monthly total notified in July 2000.

Cases were notified from Waikato (six cases), Hawkes Bay (4), Tauranga (3), and one each from Bay of Plenty, Gisborne, Wanganui and Canterbury health districts.

Risk factor information was recorded for 15 (83.3%) of the 18 cases. Of these, seven were associated with the meat industry, six were farmers, and two were exposed to farm or wild animals. Overseas travel information was recorded for only three cases. Of these, none had reported recent overseas travel.

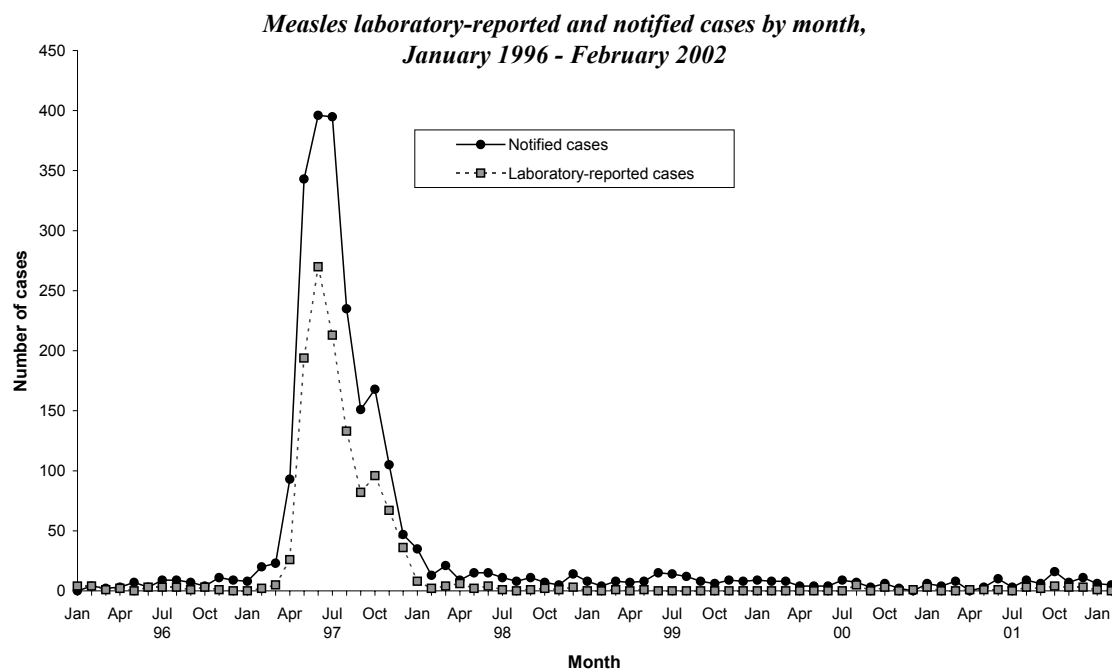
The following graph shows leptospirosis notifications by month since January 1996.



Measles

Five cases of measles were notified during February 2002. No cases have been laboratory confirmed, although results are awaited for one case.

The following graph shows the number of notified and laboratory-reported cases each month since January 1996. Note that no cases were laboratory-reported in February 2002.



The cases were distributed across three health districts. Four of the five cases were aged one year or less. No cases indicated overseas travel.

The table below illustrates the distribution by health district and the associated risk factors.

*Measles notifications by age, immunisation status, and recorded risk factors,
February 2002.*

Health District	Lab Confirmed	Age	Contact with a case	Overseas during incubation	Immunisation Status
Canterbury	Not done	1y	No	No	No
Canterbury	Unknown	11m	Unknown	Unknown	Unknown
Canterbury	Unknown	6y	No	No	Unknown
Nelson-Marlborough	Awaiting results	1y	Unknown	No	No
Southland	Unknown	11m	Unknown	Unknown	Unknown

The last measles epidemic began four years and eleven months ago in March 1997 when 23 cases were notified. Of these, five were laboratory confirmed (see section on measles from 1997 Annual Surveillance summary). The timing of future measles epidemics is difficult to predict because of a lack of reliable immunisation coverage data and the unknown impact of measles catch-up immunisation campaigns.

Local public health services should continue efforts to improve measles surveillance by encouraging case notification on suspicion and laboratory investigation of such

cases. It is also important to record risk factor information and immunisation status for cases, particularly those that are laboratory confirmed.

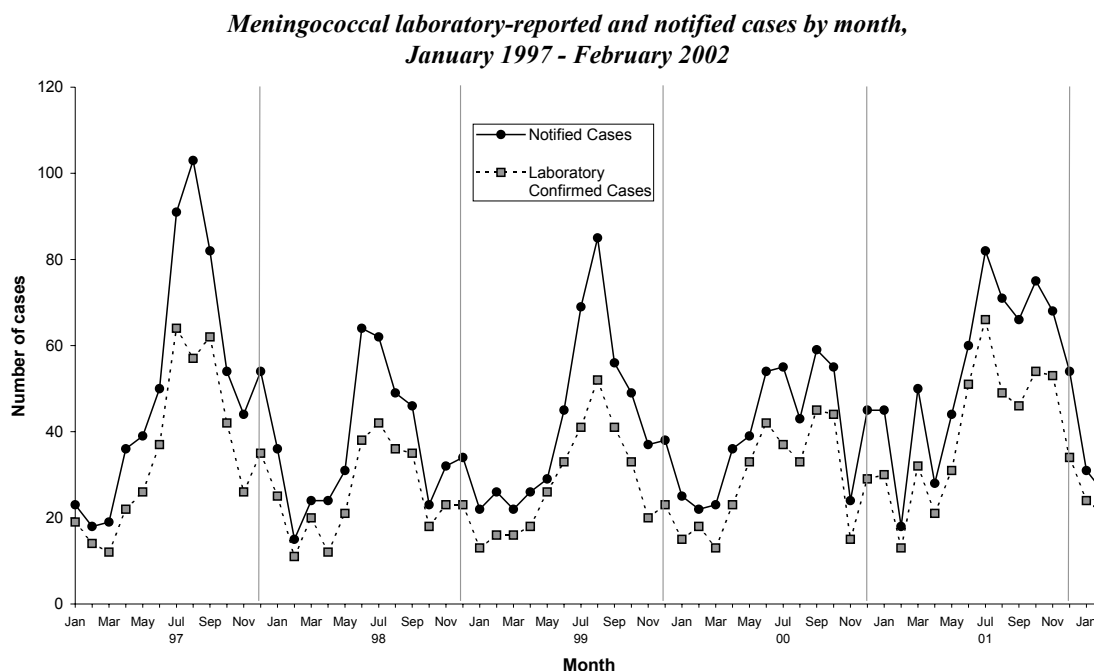
Meningococcal disease

A total of 26 cases of meningococcal disease was notified during February 2002. In contrast, 19 cases were notified during the same month last year.

Of the 26 cases notified during February this year, 21 had been laboratory confirmed at the time of this report.

One of the cases notified this month (a 42-year-old male from North West Auckland) was a fatal case.

Note: the data plotted below was derived using the earliest available data for the case (i.e. onset or hospitalisation date, if available, rather than report date).



Pertussis

During February 2002, 96 cases of pertussis were notified, compared to 91 cases in January and 62 cases in December 2001. Of these, 65.6% (63/96) were laboratory confirmed.

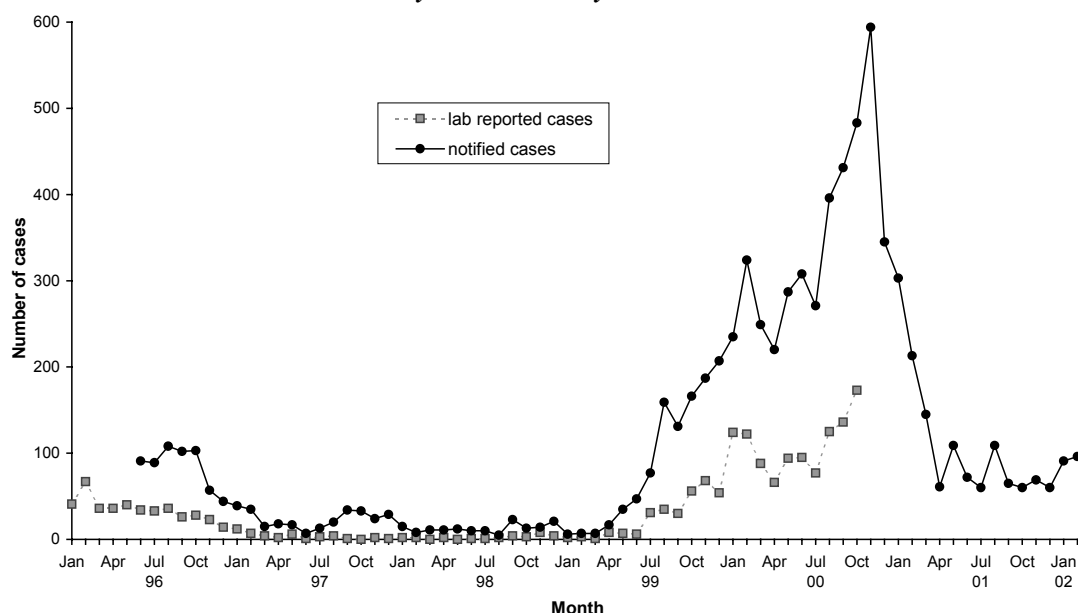
A total of 6631 cases of pertussis have been notified since the current epidemic began in June 1999. Of these, 3157 (47.6%) cases have been laboratory confirmed. There have been 494 hospitalisations (8.1% of cases for whom this information was recorded) and one death reported.

Incidence is still well above the inter-epidemic level of about 15 cases a month. February notifications were highest in Waikato (18 cases), Canterbury (16) and Nelson Marlborough (10) health districts.

One outbreak, accounting for three cases, was reported this month from West Coast health district. The mode of transmission was person-to-person contact.

The following graph compares the number of laboratory-reported cases, between January 1996 and October 2000, with cases notified after June 1996, when pertussis became notifiable.

*Pertussis laboratory-reported and notified cases by month,
January 1996 - February 2002*

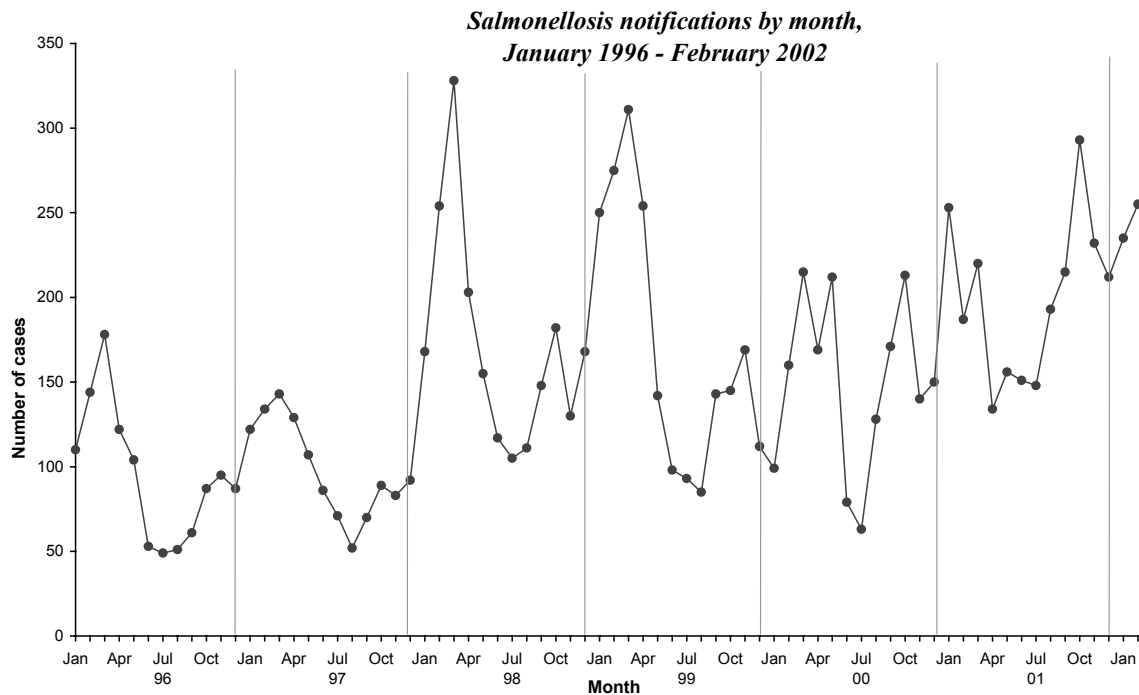


Salmonellosis

There were 255 salmonellosis notifications in February 2002, compared to 190 cases notified in the same month last year. Rates higher than the national rate of 67.4 per 100 000 were seen in Otago (99.6), Hawkes Bay (94.8), South Canterbury (93.0), Nelson Marlborough (85.8), Taupo (84.7), Ruapehu (83.6), Wellington (79.9), Southland (77.3), West Coast (74.0), Wanganui (71.6), and Wairarapa (70.2) health districts.

Final reports on four salmonellosis outbreaks were made in February, all from Auckland health districts, relating to two outbreaks in December 2001 and two outbreaks in February 2002. The mode of transmission was known for two of these four outbreaks. One outbreak was suspected on epidemiological grounds to have been transmitted by person-to-person contact, the other was suspected on epidemiological grounds to have been transmitted by both person-to-person and environmental exposure.

The following graph shows the number of salmonellosis notifications each month since January 1996.

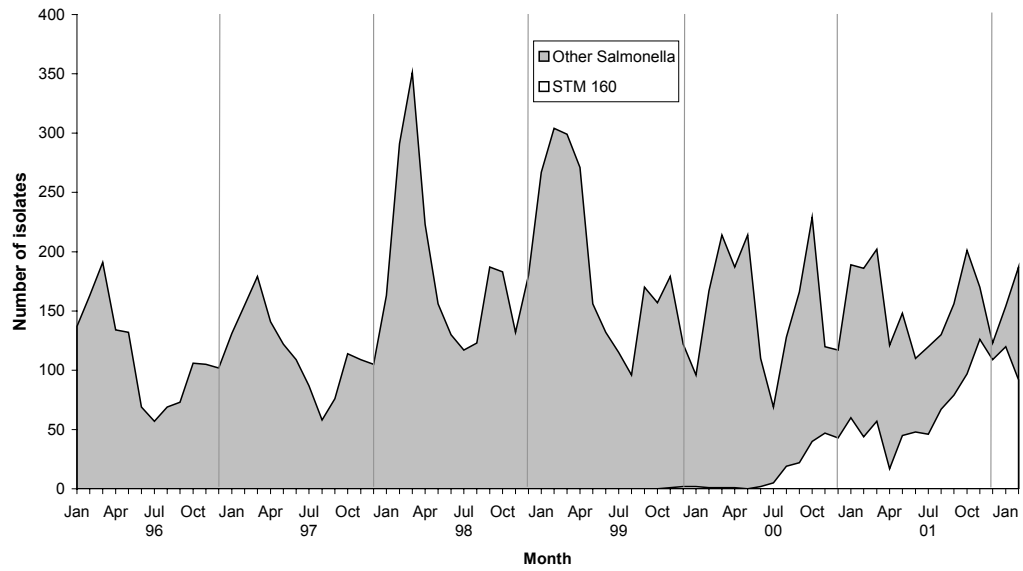


The ESR Enteric Reference Laboratory (ERL) identified 279 human cases from *Salmonella* isolates received during February 2002. The predominant types identified were *S. Typhimurium* phage type 160 (STM 160) (92 cases), *S. Typhimurium* 135 (29), *S. Group C 6,7 : k : -* (21), and *S. Infantis* (18).

The ERL identified 92 STM 160 cases in February, representing 33% of all cases identified during the month. The frequency of identification of *S. Brandenburg* has declined from nine cases during January 2002 to seven cases in February 2002.

The following graph illustrates the contribution of STM 160 to the total *Salmonella* burden, since January 1996.

*Salmonella Typhimurium phage type 160 and Other Salmonella,
January 1996 - February 2002*



3. Deaths from notifiable diseases (excluding AIDS)

Two deaths from notifiable diseases were reported in February 2002.

Disease	No. of deaths reported Feb 2002	Cumulative no. of deaths reported in 2002
Campylobacter	1	1
Meningococcal disease	2	2
Total	3	3

4. Outbreaks

Outbreaks, for which ESR received sufficient information to report on during February 2002, are summarised in the table below and individually listed in the following pages.

Summary of February 2002 recorded outbreaks:

Organism/Toxin/Illness	Number of outbreaks	Total number of cases
<i>Bordetella pertussis</i>	1	3
<i>Campylobacter</i>	4	10
<i>Cryptosporidium</i>	1	2
Gastroenteritis	9	44
Hepatitis A	1	3
<i>Mycobacterium tuberculosis</i>	1	4
Norwalk-like virus	1	2
<i>Salmonella</i>	4	8
Scombrototoxin	1	2
<i>Yersinia enterocolitica</i>	1	5
Total	24	83

In addition 19 preliminary outbreak reports were received from Auckland (*campylobacter*, gastroenteritis and *salmonella*), Wellington (gastroenteritis) and Canterbury (*campylobacter*). These outbreaks will be reported in the monthly table, when further information has become available.

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Completed outbreak reports received by ESR during February 2002:

Suspected pathogen/ toxin/illness	Public Health Service	Month of OB	Duration of OB (days)	Cases			Est. no. exposed	Setting	Suspected mode of transmission	Probable factors contributing to OB
				Lab Conf	Oth Conf	Prob.				
<i>Bordetella pertussis</i>	West Coast	Jan-02	11	2	0	1	9	Home	Person to person	Exposure to infected people
<i>Campylobacter</i>	Auckland	Jan-01	1	2	0	0	2	Restaurant / café	Foodborne (spinach and filo pastry)	Unknown
<i>Campylobacter</i>	Auckland	Aug-01	1	1	0	1	Unk	Unknown	Unknown	Unknown
<i>Campylobacter</i>	Taranaki	Feb-02	2	4	0	0	11	Home	Foodborne (BBQ chicken)	Undercooking
<i>Campylobacter</i>	Wanganui	Jan-02	2	2	0	0	Unk	Home	Waterborne; person to person	Contamination of source water; untreated water supply; exposure to infected people
<i>Cryptosporidium parvum</i>	Wanganui	Jan-02	2	2	0	0	4	Home	Foodborne; person to person	Contamination of source water; untreated water supply; exposure to infected people
Gastroenteritis	Auckland	Dec-00	1	0	0	3	3	Takeaways	Foodborne (fish and chips)	Unknown

Outbreaks cont.

Suspected pathogen/ toxin/illness	Public Health Service	Month of OB	Duration of OB (days)	Lab Conf	Cases Oth Conf	Prob.	Est. no. exposed	Setting	Suspected mode of transmission	Probable factors contributing to OB
Gastroenteritis	Auckland	Jan-01	1	0	0	3	3	Restaurant / cafe	Foodborne (sweet and sour pork)	Inadequate cooling or refrigeration; cross contamination
Gastroenteritis	Auckland	Jan-01	1	0	0	2	2	Restaurant / cafe	Foodborne (ham in egg benedict and egg omelette)	Improper storage prior to preparation; undercooking; inadequate cooling or refrigeration; cross contamination
Gastroenteritis	Auckland	Feb-01	2	0	0	5	7	Home	Foodborne (chicken, chippolata and cherios)	Unknown
Gastroenteritis	Auckland	Oct-01	2	0	0	2	2	Takeaways	Foodborne (steak and cheese pie); person to person	Improper hot holding
Gastroenteritis	Wellington	Jan-Feb 02	2	0	0	4	9	Restaurant / cafe	Foodborne	Inadequate reheating of previously cooked food; inadequate cooling or refrigeration; poor personal hygiene of staff; cross contamination

Outbreaks cont.

Suspected pathogen/ toxin/illness	Public Health Service	Month of OB	Duration of OB (days)	Lab Conf	Cases Oth Conf	Prob.	Est. no. exposed	Setting	Suspected mode of transmission	Probable factors contributing to OB
Gastroenteritis	Canterbury	Feb-02	5	0	0	11	Unk	Hotel / motel	Foodborne; waterborne; person to person	Contamination of source water; storage tank contamination; use of untreated water in food preparation; untreated water supply
Gastroenteritis	Otago	Sept-Oct 01	2	3	4	3	35	Pub / café	Foodborne	Contamination from an infected food handler
Gastroenteritis	Otago	Jan-02	1	0	4	0	unk	Unknown	Unknown	Unknown
Hepatitis A	Wellington	Jan-Feb 02	17	3	0	0	38	Home	Foodborne (BBQ)	Unknown
<i>Mycobacterium tuberculosis</i>	South Canterbury	Aug-Oct 01	49	4	0	0	Unk	Home	Person to person	Exposure to infected people

Outbreaks cont.

Suspected pathogen/ toxin/illness	Public Health Service	Month of OB	Duration of OB (days)	Lab Conf	Cases Oth Conf	Prob.	Est. no. exposed	Setting	Suspected mode of transmission	Probable factors contributing to OB
Norwalk-like virus	Auckland	Jan-01	1	1	0	1	Unk	Unknown	Unknown	Unknown
<i>Salmonella</i>	Auckland	Dec-01	1	2	0	0	Unk	Unknown	Unknown	Unknown
<i>Salmonella</i>	Auckland	Dec-01	2	2	0	0	2	Home (intellectual disabilities)	Person to person; environmental	Exposure to infected people; poor hygiene of cases; exposure to contaminated environment(s)
<i>Salmonella</i>	Auckland	Feb-02	9	2	0	0	Unk	Home	Person to person	Exposure to infected people
<i>Salmonella</i>	Auckland	Feb-02	1	2	0	0	Unk	Home	Unknown	Unknown
Scombrototoxin	Auckland	Jan-02	1	0	0	2	2	Home; fish processor	Foodborne (smoked kahawai)	Unknown
<i>Yersinia enterocolitica</i>	West Coast	Dec-01	6	2	0	3	5	Home	Person to person; environmental	Exposure to infected people; exposure to contaminated environment(s)

5. National surveillance data and trends

Disease ¹	Current year - 2002 ²			Previous year - 2001		
	Feb 2002 cases	Cumulative total since 1 January	Current rate ³	Feb 2001 cases	Cumulative total since 1 January	Previous rate ³
AIDS	3	4	0.8	0	4	0.7
Campylobacteriosis	1181	2708	302.1	833	1898	232.3
Cholera	0	0	0.1	0	0	0
Creutzfeldt-Jakob disease	0	0	0	0	0	0.1
Cryptosporidiosis	38	76	32.9	53	88	23.0
Dengue fever	3	5	2.7	0	0	0.2
Gastroenteritis ⁴	58	120	25.0	55	156	22.0
Giardiasis	145	274	45.5	121	229	44.9
<i>H. influenzae</i> type b disease	0	0	0.2	1	2	0.4
Hepatitis A	17	27	2.2	5	8	3.0
Hepatitis B (acute) ⁵	5	13	1.6	9	12	2.0
Hepatitis C (acute) ⁵	3	5	1.6	7	8	2.0
Hydatid disease	0	0	0.2	0	1	0.1
Influenza ⁶	3	6	18.4	3	6	6.9
Lead absorption	9	16	3.2	7	27	3.7
Legionellosis ⁶	0	7	1.4	7	13	1.9
Leprosy	0	0	0.1	0	0	0.1
Leptospirosis	18	30	3.2	9	18	2.8
Listeriosis	2	4	0.5	1	3	0.5
Malaria	8	18	1.7	5	11	3.0
Measles	5	9	2.3	4	10	1.6
Meningococcal disease ⁷	20	57	17.6	19	64	13.7
Mumps	7	10	1.5	9	11	1.4
Paratyphoid	0	0	0.7	2	3	0.7
Pertussis	96	187	27.5	213	522	113.4
Rheumatic fever	4	7	2.5	23	30	4.6
Rubella	3	5	0.9	1	1	0.7
Salmonellosis	255	476	67.4	190	443	54.8
Shigellosis	11	22	4.0	24	33	3.4
Tetanus	0	0	0.1	0	0	0
Tuberculosis	29	63	10.4	30	67	10.1
Typhoid	4	5	0.7	1	6	0.6
VTEC / STEC infection	5	16	2.3	7	11	1.9
Yersiniosis	44	115	12.7	30	84	10.2

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

² These data are provisional

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

Surveillance data by health district - February 2002

Cases this month

Current rate¹

Disease	Cases for February 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	3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1.8			0	1.8	0	0	0	0	0	0	0	0	0	0	0.5	0	0	1.0	0	0	0	0
Campylobacteriosis	22	127	107	90	91	31	5	8	11	6	34	4	49	16	30	7	97	52	26	5	217	31	78	37
	168.5	348.3	336.1	263.7	365.9	308.5	181.0	194.5	257.3	368.1	311.6	149.2	320.6	229.6	203.5	236.6	482.5	374.8	145.8	212.8	282.0	344.5	262.3	240.7
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	0.3	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Creutzfeldt-Jakob 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0	0	0
Cryptosporidiosis	1	5	2	3	1	1	0	0	0	0	0	1	1	0	2	1	6	2	2	0	4	1	4	1
	19.7	19.3	27.5	21.7	62.1	26.6	15.9	26.2	37.2	81.4	20.6	11.9	101.8	42.3	29.9	18.2	41.6	12.1	9.4	27.8	14.7	65.4	40.5	60.2
Dengue fever	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	2.9	3.8	6.4	4.1	1.7	2.7	0	0	1.5	9.8	0	0	0	0	2.7	0	2.5	3.8	0.9	0	2.6	1.3	1.2	1.8
Gastroenteritis	0	5	6	4	0	1	0	0	0	0	0	0	0	0	0	1	6	7	0	2	21	0	4	1
	17.5	23.6	28.6	9.4	4.0	8.9	9.9	67.8	12.4	39.1	22.5	0	4.9	14.7	18.0	26.0	23.5	16.6	20.6	18.5	74.5	21.4	44.6	9.0
Giardiasis	2	22	17	21	12	8	0	1	0	0	3	0	14	2	7	0	8	3	3	2	11	4	5	0
	20.4	51.7	64.8	42.4	49.2	66.5	53.7	67.8	40.3	26.1	27.1	17.9	83.6	35.8	29.3	18.2	62.6	34.7	41.2	33.9	40.9	30.2	27.2	17.1
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
	0.7	0.3	0.3	0	0	0	0	2.2	0	0	1.9	0	0.7	0	0	0	0.4	0	0	0	0.3	0	0	0
Hepatitis A	0	2	4	3	4	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0
	0	1.8	5.2	8.5	2.3	0	0	4.4	1.5	0	0	0	0	0	0	2.6	3.3	3.8	0	0	0.5	0	0	0
Hepatitis B	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
	2.9	1.3	2.3	0.9	2.0	2.7	0.0	0.0	0.0	6.5	0.0	0.0	3.5	0.0	0.7	7.8	2.5	0.8	1.7	3.1	1.6	0.0	1.2	0.0
Hepatitis C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0
	1.5	0.5	0.6	0.6	0	14.2	4.0	0	7.7	6.5	0	0	1.4	0	0	0	2.9	2.3	0.9	3.1	1.6	1.3	0.6	1.8
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	0.3	0	0	0	0	0	2.2	0	0	0	0	0	0	0	0	0.4	0	0	0	0.5	0	0	0
Influenza ⁵	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	0	0	67.1	0.3	53.9	0	0	0	0	0	0	0	0	0	0	0	24.7	0	0	0	50.4	0	8.7	0
Lead absorption	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	0
	2.9	1.0	2.9	0.9	5.3	3.5	2.0	2.2	3.1	0	4.7	6.0	2.8	0	5.3	2.6	0.8	0	6.0	0	3.6	13.8	8.7	3.6
Legionellosis 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
	3.6	0.8	0.6	0.9	4.6	0.9	0	0	0	0	0	0	0.7	3.3	0	5.2	2.1	3.0	0	0	1.8	1.3	0.6	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	0	0	0	0	6	3	1	1	0	0	1	0	4	0	1	0	0	0	0	0	0	1	0	0
	11.7	1.3	0.3	0.6	7.3	5.3	4.0	19.7	3.1	3.3	2.8	6.0	12.5	0	4.7	2.6	1.2	0	1.7	0	1.0	10.1	0.6	0.9
Listeriosis	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	0.7	0.8	0.6	0.6	0.3	1.8	0	2.2	0	0	0.9	0	0	0	0	0	0.4	0	0	0	0.5	1.3	1.2	0
Malaria	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	1	0	3	0	1	0
	0.7	0.5	1.7	0.9	1.7	1.8	0	0	3.1	0	0.9	11.9	0.7	0	6.0	0	1.6	0.8	4.3	3.1	3.1	1.3	1.7	0
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0	0	1
	2.2	1.5	0.9	1.2	0	6.2	0	4.4	0	0	1.9	0	3.5	0	1.3	0	2.5	0	6.0	12.3	4.1	0	2.9	9.0
Meningococcal disease ⁵	1	3	1	4	1	1	1	0	1	0	1	0	2	0	0	1	0	1	0	0	0	0	2	0
	24.8	9.4	22.3	33.7	23.1	14.2	33.8	21.9	40.3	35.8	10.3	6.0	23.7	8.1	12.6	31.2	9.1	12.1	10.3	12.3	4.7	3.8	31.9	9.9
Mumps	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	1
	2.9	0.5	1.4	0.9	0.3	0.9	4.0	0	3.1	0	0	0	2.8	0	0.7	0	2.1	3.0	1.7	0	2.1	1.3	5.2	0.9
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	0.5	2.9	1.2	0	0.9	0	0	0	0	0.9	0	2.1	0	0	0	0.8	0.8	0	0	0.3	0	0	0
Pertussis	1	8	8	7	18	3	0	0	0	0	3	1	1	1	3	0	5	3	10	2	16	1	1	4
	17.5	17.8	11.3	13.8	54.5	20.4	6.0	4.4	7.7	3.3	5.6	23.9	8.4	11.4	6.0	10.4	38.7	70.9	129.5	61.7	32.1	17.6	17.4	41.3
Rheumatic fever	1	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	6.6	1.0	4.3	8.2	3.6	0.9	15.9	6.6	0	3.3	0.9	6.0	2.1	1.6	0	2.6	1.2	0.8	0	0	0	0	0	0
Rubella	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0
	0	0.5	0	0.9	0	0	0	0	0	3.3	0.9	0	7.0	0	0	0	1.6	0.8	0.9	0	2.3	0	0	1.8
Salmonellosis	8	20	33	23																				