

MONTHLY SURVEILLANCE REPORT

This monthly report contains data and commentary on disease trends and events up to and including the end of May 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 June 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 May 2002 and “previous rate” refers to the rate for the 12 month period ending May 2001.

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1. Major surveillance issues

- *Dengue fever.* Fifteen cases in May linked to travel to Rarotonga, Pakistan, Malaysia and Thailand.
- *Hepatitis A.* The notification rate has continued to decline after peaking in March during the recent outbreak. The current level is similar to the normal baseline.
- *Meningococcal disease.* Fifty-two cases notified during May 2002, bringing the year to date total to 172. While less than that recorded for the same period in 2001, this total exceeds that of other years in the current epidemic.
- *Pertussis.* The epidemic which began in June 1999 is persisting, with 106 cases notified in May. The majority of May cases were from the South Island, particularly, South Canterbury, Canterbury and West Coast health districts.

2. Key disease trends

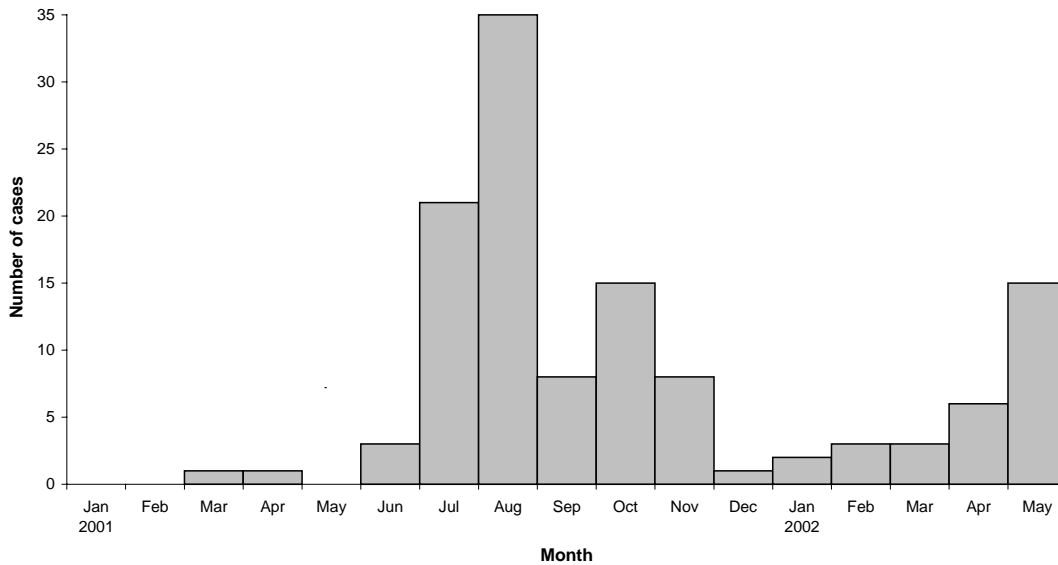
Dengue fever

Fifteen cases of dengue fever were notified in May 2002. This is the largest number of monthly notifications since October 2001. Ten cases have been laboratory confirmed, and results are awaited for the other five. The cases, nine males and six females, ranged in age from 27 days to 69 years. Three cases were hospitalised.

Twelve of the fifteen cases indicated overseas travel during the incubation period. Eleven cases were New Zealand residents who had recently travelled overseas to Rarotonga (nine cases), Pakistan and Malaysia (one case each). The remaining case was a visitor to New Zealand from Thailand.

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.

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



***Haemophilus influenzae* type b disease**

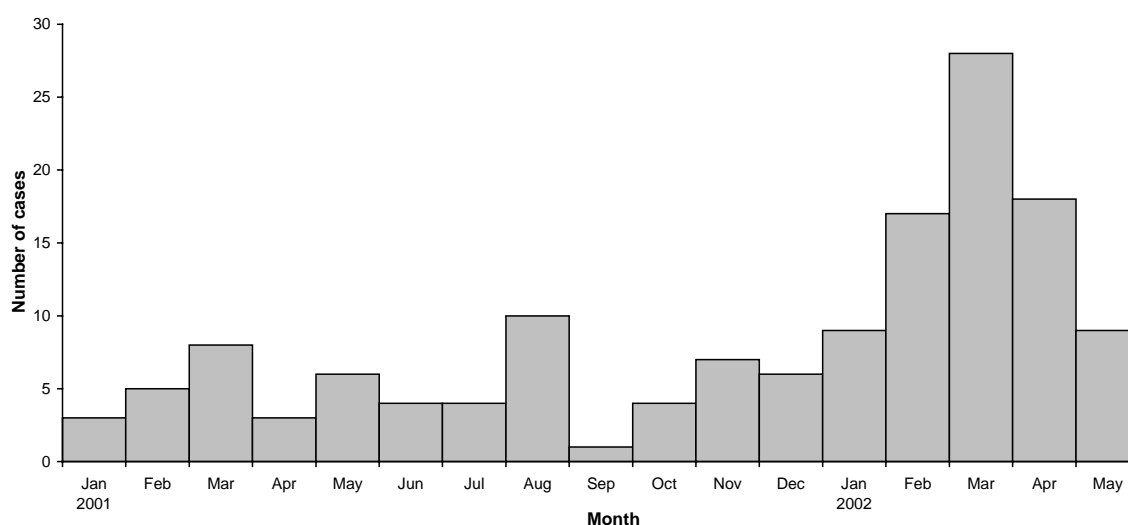
Two laboratory-confirmed cases of *Haemophilus influenzae* type b disease (Hib) were notified in May 2002: an 86 year-old European female from Canterbury Health District, and a 51 year-old European male from Hawkes Bay Health District. Both cases were reported to have had septicaemia and were hospitalised. The former case died. Neither case had information recorded on contact with presumptive cases of Hib. These are the first cases notified since November 2001 when one case was notified.

Hepatitis A

A total of nine cases of hepatitis A was notified during May 2002, down from eighteen cases in April and 28 cases in March 2002. In comparison, six cases were notified during May 2001.

The following graph shows the number of cases of hepatitis A notified each month since January 2001.

***Hepatitis A notifications by month,
January 2001 - May 2002***



Of the nine May notifications, three were notified from Central Auckland Health District, two from Hawkes Bay, and one each from the Hutt, Nelson-Marlborough, Taupo and Waikato health districts.

Cases ranged in age from six to 55 years. One case, a 15 year-old female student was hospitalised.

Information on risk factors was sparsely recorded for May notifications. Five cases had no recorded risk factors. Four cases reported recent overseas travel. One New Zealand resident had recently returned from visiting Australia and Thailand, another had recently visited Fiji. One case was a migrant to New Zealand from Bangkok, and another was a migrant from China. No cases recorded household, sexual or other contact with another case.

Influenza

During May (weeks 18 – 22), 371 consultations for influenza-like illness were reported from 75 general practices (on average) in 21 out of 24 health districts. The average weekly consultation rate for May 2002 was 24.8 per 100 000 patient population, compared to a rate of 23.1 per patient population during the same month last year. Taranaki had the highest consultation rate (94.8 per 100 000), followed by Eastern Bay of Plenty (93.7 per 100 000).

A total of 147 swabs was sent for testing during May from sentinel surveillance. One hundred twenty-eight influenza swabs were received by the regional virology laboratories. Of these, 10 were Influenza A from Canterbury (7) and South Auckland

(3). Of the seven cases from Canterbury, four were further sub-typed as Influenza A/Moscow/10/99 (H3N2)-like virus. One was typed as Influenza B from South Auckland.

In addition, a total of 55 influenza isolates was identified from the laboratory-based (non-sentinel) surveillance in May. Of these, 48 were Influenza A from Canterbury (41), Nelson-Marlborough (3), Otago, Gisborne, West Coast and Waikato (one each). Of the 41 cases from Canterbury, 10 were further sub-typed as Influenza A/Moscow/10/99 (H3N2)-like virus. Seven were Influenza B from Waikato (4), Taupo, Central Auckland, and Rotorua (1 each). Three of the four cases from Waikato were further typed as Influenza B/Hong Kong/330/01.

Leptospirosis

A total of 15 cases of leptospirosis was notified in May 2002, compared to twelve cases during the same month last year and fourteen cases in April 2002. Three cases were reported from Hawkes Bay Health District. Waikato, Manawatu, Canterbury and South Canterbury health districts each reported two cases, while Northland, West Coast, Otago and Southland health districts had one case each.

Occupation was recorded for 11 of the 15 cases. Five cases worked in the meat processing industry and six were farmers. It was not known if the remaining four cases had been exposed to wild or farm animals or their products.

Cases ranged in age from 19 to 68 years. Thirteen cases were male and two were female. There were two hospitalisations among the six cases for whom this information was recorded.

Measles

Five cases of measles were notified during May 2002, bringing the year to date total to 16. Two cases were laboratory confirmed: a 22 year-old female from South Canterbury Health District, and a five year-old female from South Auckland Health District. The former case had not been vaccinated, whereas the latter case had received the first two doses of the MMR vaccine. Laboratory results are awaited for one further case: a four year-old South Auckland male, who has received one dose of the MMR vaccine.

None of the five notified cases were known to have had contact with other measles cases, although two cases attended school or pre-school.

There were no additional laboratory reported cases during May 2002.¹

¹ Note that the number of cases laboratory-reported in any given month, is based on the number of specimens received in that given month.

The last measles epidemic began in March 1997 (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 vaccine coverage data and the unknown impact of measles catch-up vaccination 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 vaccination status for cases, particularly those that are laboratory confirmed.

Measles notifications by age, vaccination status, and recorded risk factors, May 2002

Health District	Lab-confirmed	Age	Contact with a case	Overseas during incubation period	Vaccination status	Number of doses of MMR vaccine
South Auckland	Awaiting results	4y	No	No	Yes	1
South Auckland	Yes	5y	No	No	Yes	2
Central Auckland	Not done	3y	No	No	Yes	Unknown
Northland	Unknown	2y	Unknown	Unknown	Unknown	Unknown
South Canterbury	Yes	22y	Unknown	Unknown	Unknown	Unknown

Meningococcal disease

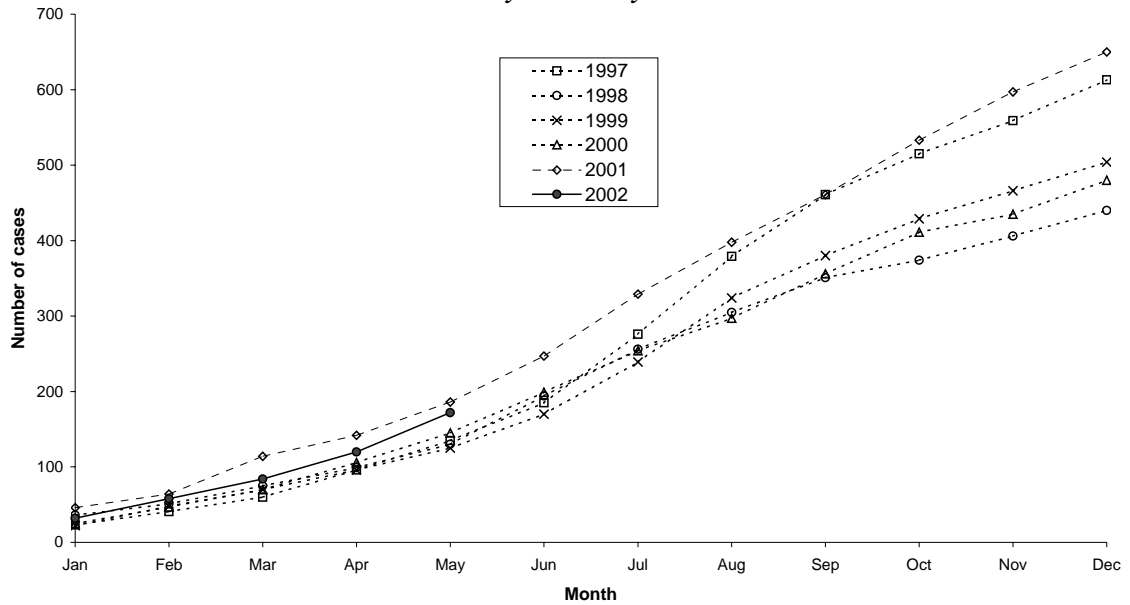
Fifty-two cases of meningococcal disease were notified during May 2002, the highest monthly total so far this year. May figures bring the 2002 year to date total to 172. This total is less than that recorded for the same period in 2001 (186 cases), however exceeds the number of cases recorded for the same period in 1997, 1998, 1999 and 2000.

Of the 52 cases notified during May this year, 32 had been laboratory confirmed at the time of this report.

One of the cases notified this month was fatal: a six month old male from Central Auckland Health District. This brings the number of fatal cases this year to six.

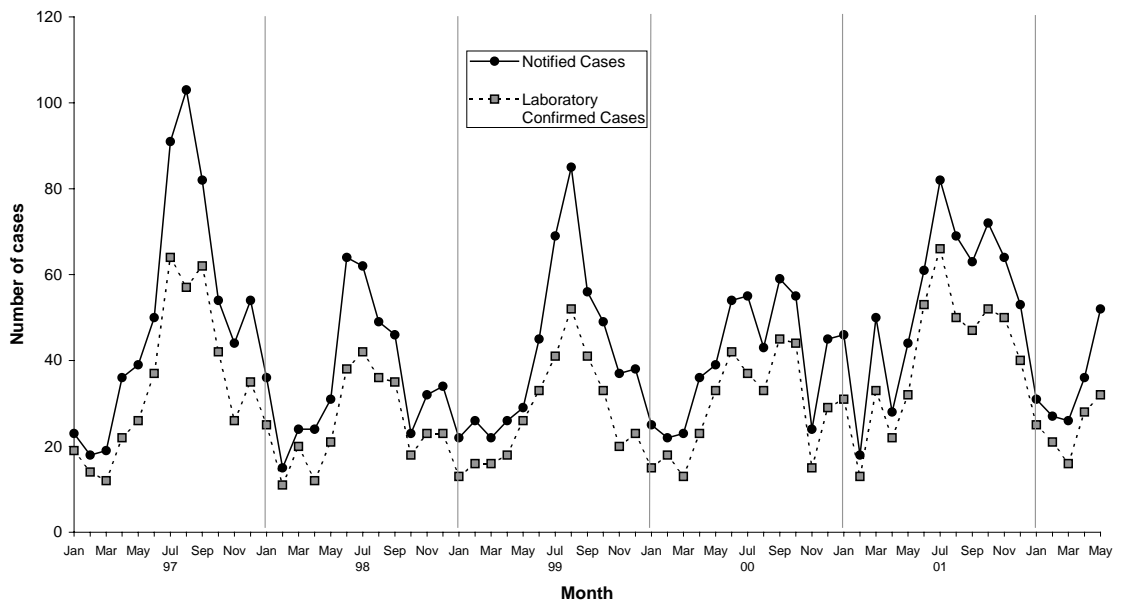
The following graph shows the cumulative monthly meningococcal disease cases since 1997.

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



The following graph shows notified and laboratory confirmed meningococcal disease cases by month since January 1997.

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



Note: Meningococcal data in this report is derived using the earliest available data for the case (i.e. onset or hospitalisation date, if available, rather than report date).

Mumps

Seven cases of mumps were notified during May 2002, bringing the year to date total to 27. Four cases were reported from the combined Auckland health districts, and one case each was notified by Wanganui, West Coast, and Southland health districts. All five of the cases for whom vaccination status was recorded were vaccinated: three cases received the first two doses of the MMR vaccine, and two cases received just one dose. The vaccinated cases ranged in age between two and nine years, and all five attended school or pre-school.

The 14 year-old female Southland case was laboratory confirmed. Based on the date the specimen was received, a further three cases were laboratory reported during May: three females aged 22 months, 36 and 38 years.

Pertussis

During May 2002, 106 cases of pertussis were notified, compared to 51 cases in April, 58 cases in March 2002, and 107 cases in May 2001. Of the May cases, 34.0% (36/106) were either confirmed by isolation of *Bordetella pertussis* or were recorded as having had contact with a confirmed case of the disease. A further 47 cases (44.3%) were recorded as 'probable' cases. Four hospitalisations (or 7.8% of cases for whom this information was recorded) were reported.

Eighty-seven cases (or 93.5% of cases for whom ethnicity was recorded) were European. There were also four Pacific Island cases, one Maori case and one case of 'Other' ethnicity. Cases ranged in age from one month to seventy years. The majority (56.6%) of cases were aged nine years or less. The following table shows the number of doses of pertussis vaccine given to May 2002 cases in each relevant age group.

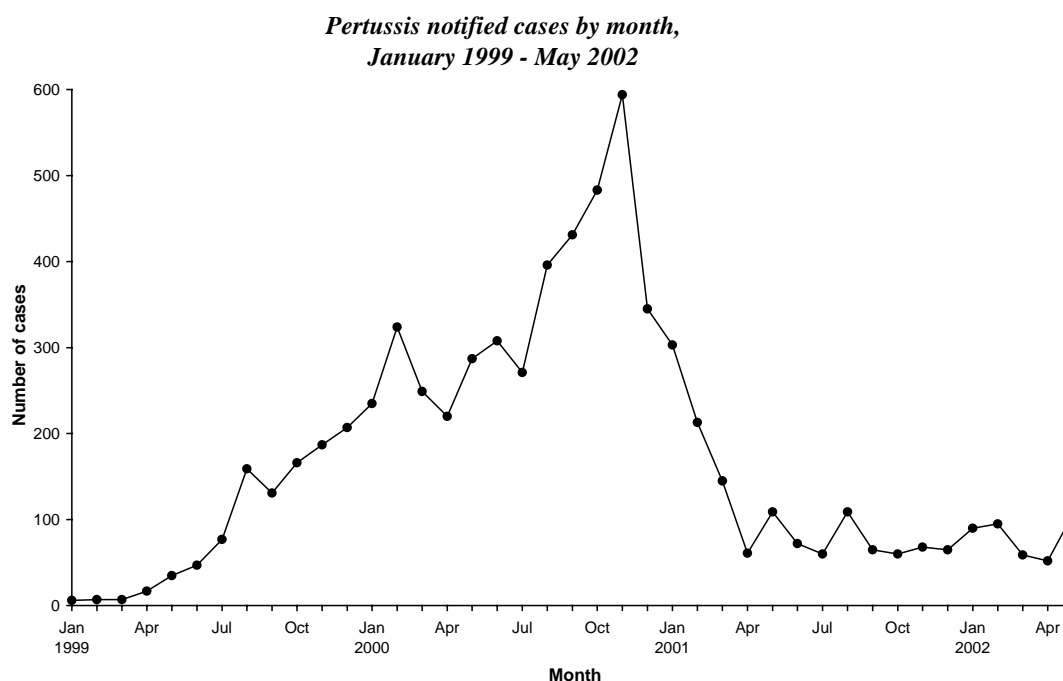
Age group of pertussis notifications and vaccination received, May 2002

Age group	Total Cases	Vaccination status						
		One dose	Two doses	Three doses	Four doses	Immunised (no dose info)	Not immunised	Unknown status
0-6 weeks	0	(0)	(0)	(0)	(0)	0	0	0
6 wks-2 mths	3	0	(0)	(0)	(0)	0	2	1
3-4 months	1	0	1	(0)	(0)	0	0	0
5-14 months	7	0	0	4	(0)	0	0	3
15 mths-4 yrs	20	0	0	3	5	1	5	6
5+ years	75	1	1	6	6	4	4	53
Total	106	1	2	13	11	5	11	63

¹ Bracketed numbers indicate cases ineligible for vaccination

A total of 6850 cases of pertussis have been notified since the current epidemic began in June 1999. Of these, 3213 (46.9%) cases have been laboratory confirmed by isolation and a further 13.1% were epidemiologically linked to a confirmed case. There have been 511 hospitalisations (8.1% of cases for whom this information was recorded) and one death reported.

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



Incidence is still well above the inter-epidemic level of about 15 cases a month. May notifications were highest in South Canterbury (31 cases), Canterbury (22) and West Coast (15) health districts.² Twenty-six of the South Canterbury cases were from the Timaru Territorial Authority; the remaining five were from Waimate (3) and MacKenzie (3) territorial authorities. The Canterbury cases came from Christchurch (13 cases), Waimakariri (5) and Kaikoura (4) territorial authorities. All fifteen West Coast cases were reported from the Greymouth Territorial Authority.

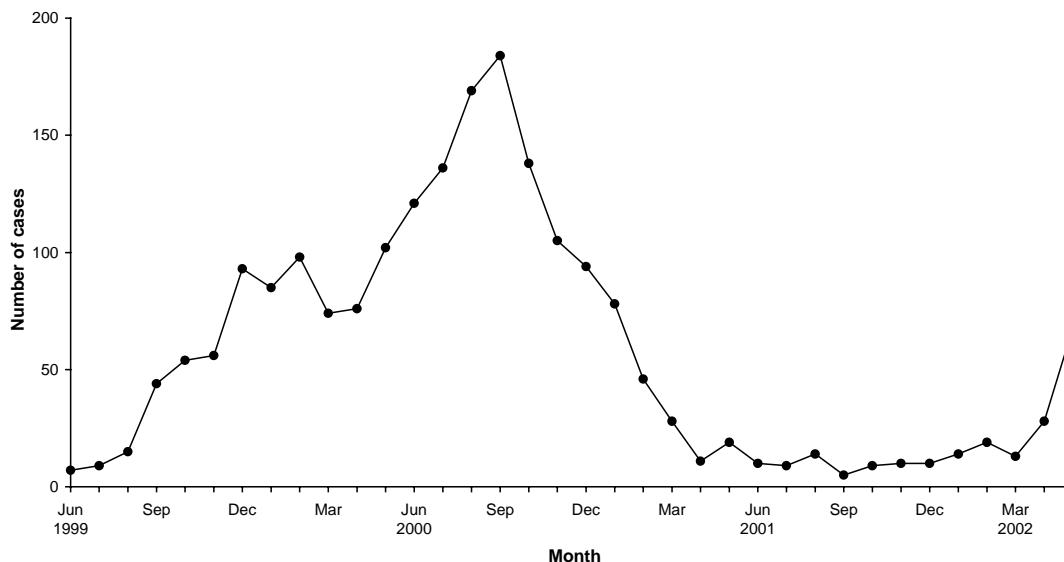
There was one outbreak of pertussis reported in May³, from West Coast Health District, involving four cases.

The following graph shows the combined number of monthly notifications from South Canterbury, Canterbury and West Coast health districts⁴, since the epidemic began in June 1999.

² Since June 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.

³ Final report has not yet been received.

⁴ At the time of writing this report (21st June) a further 40 notifications had been received from South Canterbury, Canterbury and West Coast health districts.



Rickettsial disease

One laboratory-confirmed case of rickettsial disease was reported from North West Auckland Health District⁵ in May 2002. The case was a 43 year-old male waste-management worker. No information on risk factors was recorded. This is the only confirmed case of rickettsial disease for the year to date.

Rubella

Seven cases of rubella were notified during May 2002, six of whom were from Hawkes Bay Health District. This brings the year to date total to 19 cases. All seven cases in May were of European ethnicity and aged seven years or less. Three Hawkes Bay cases resided in one household, another two cases were sisters. A total of five cases attended school or pre-school.

There were two additional laboratory-reported⁶ cases of rubella during May 2002: an 18 year-old male from Nelson-Marlborough and a 16 month-old female from Taranaki Health District.

The table below illustrates the associated risk factors for notified cases.

⁵ Four of the five cases notified during 2001 were also from North West Auckland Health District.

⁶ Laboratory reporting of cases is based on specimen date as opposed to notification date.

Rubella notifications by age, immunisation status, and recorded risk factors, May 2002

Health District	Lab-confirmed	Age	Contact with a case	Overseas during incubation period	Vaccination status	Number of doses of MMR vaccine
Hawkes Bay	Not done	1y	Unknown	No	Yes	3
Hawkes Bay	No	4y	Unknown	No	Yes	1
Hawkes Bay	Unknown	7y	Unknown	Unknown	Yes	2
Hawkes Bay	No	2y	Unknown	No	Yes	1
Hawkes Bay	Not done	2y	Yes	No	Yes	1
Hawkes Bay	Not done	3m	Yes	No	No	0
Wellington	Not done	4y	Unknown	No	Yes	1

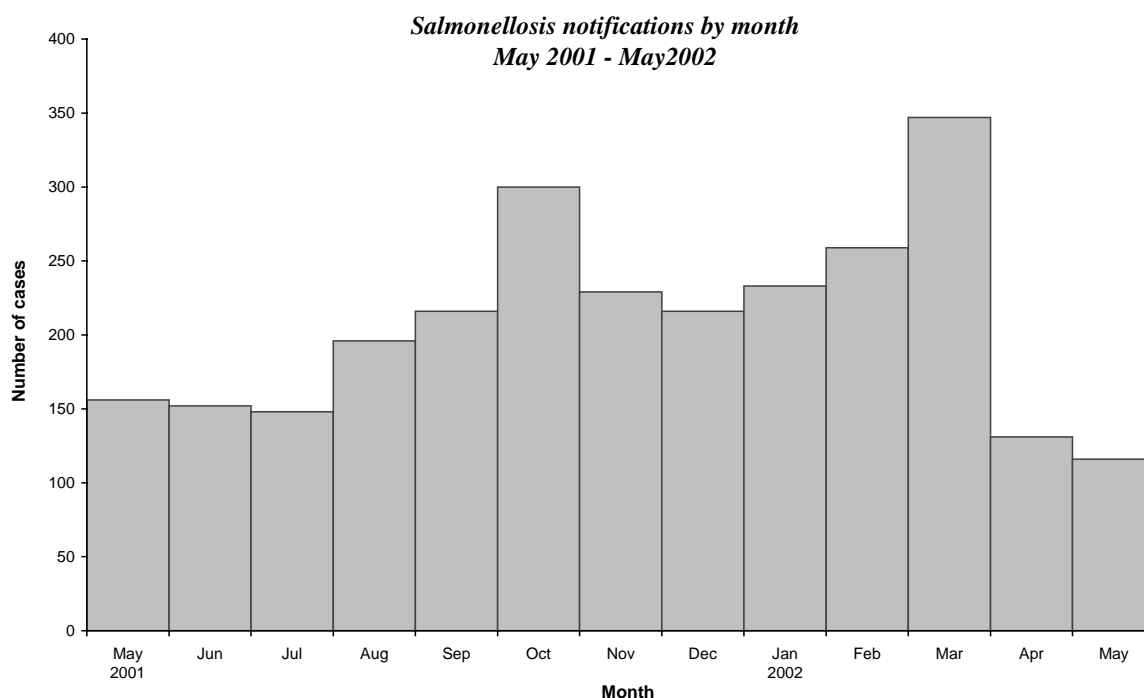
Salmonellosis

A total of 116 cases of Salmonella was notified in May 2002. In comparison, 131 cases were notified in April, and 347 cases in March 2002. There were fifteen hospitalisations in May (24.2% of cases for whom this information was recorded). Over 40 percent of cases notified in May were aged nine years or less. Information on risk factors was infrequently recorded.

Rates higher than the national rate of 68.0 per 100 000 for the past twelve-month period were seen in Nelson Marlborough (156.1), South Canterbury (117.7), Otago (101.7), Hawkes Bay (98.9), West Coast (98.9), Southland (92.6), Taupo (95.2), Southland (91.6), Wairarapa (81.0), Wellington (72.9), and Wanganui (71.9).

Seven completed reports from salmonellosis outbreaks were received in May: four from Auckland, and one each from Rotorua, Nelson and Otago health services. The reports related to outbreaks occurring in January, February and March 2002. See the 'Outbreak' section of this report for details.

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



The ESR Enteric Reference Laboratory (ERL) identified 134 human cases from *Salmonella* isolates received during May 2002. The predominant types identified were *S. Typhimurium* 160 (STM 160) (17 cases), *S. Infantis* (13 cases), *S. Typhimurium* phage 1 (10 cases), and *S. Typhimurium* 135 (nine cases). The contribution of STM 160 to the total *Salmonella* burden has declined, from a peak of 46.8% in November 2001 to 12.7% in May 2002. This follows a 15-month period during which this type increasingly dominated salmonellosis in New Zealand.

3. Deaths from notifiable diseases (excluding AIDS)

Two deaths from notifiable diseases were reported in May 2002.

Disease	No. of deaths reported May 2002	Cumulative no. of deaths reported in 2002
Campylobacteriosis	0	1
<i>Haemophilus influenzae b</i> (Hib)	1	1
Legionellosis	0	1
Meningococcal disease	1	6
Tuberculosis disease	0	1
Total	2	10

4. Outbreaks

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

Summary of May 2002 recorded outbreaks:

Organism/Toxin/Illness	Number of outbreaks ¹	Total number of cases ²
<i>Bacillus cereus</i>	2	18
<i>Bordetella pertussis</i>	1	4
<i>Campylobacter</i>	5	61
<i>Clostridium perfringens</i>	2	21
<i>Cryptosporidium</i>	1	4
Gastroenteritis	14	
<i>Giardia</i>	1	
Histamine	3	
Norwalk-like virus	4	47
<i>Salmonella</i>	7	102
<i>Shigella flexner</i>	1	2
Total	40	315

¹ Two outbreaks involved two pathogens.

² 18 cases involved two pathogens.

An additional 12 preliminary outbreak reports were received during May 2002 from Auckland (campylobacter and gastroenteritis) and Wellington (gastroenteritis) health districts. 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 May 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	May02	4	1	3	0	4	Home; school	Person to person	Unknown
<i>Campylobacter</i>	Auckland	Nov01	10	1	0	2	3	Home	Waterborne	Untreated water supply
<i>Campylobacter</i>	Auckland	Nov01	4	1	0	3	4	Home	Waterborne	Untreated water supply
<i>Campylobacter</i>	Auckland	Feb02	5	1	0	2	3	Takeaways; supermarket / delicatessen	Foodborne (ham)	Unknown
<i>Campylobacter</i>	Auckland	Mar02	13	18	31	0	148	Camp	Foodborne; waterborne; environmental; zoonotic	Improper storage prior to preparation; cross contamination; use of untreated water in food preparation; contamination of source water; untreated water supply
<i>Campylobacter</i>	Taranaki	Apr02	2	2	0	0	84	Rest home	Person to person	Poor hygiene of cases (toilet facilities)
<i>Clostridium perfringens</i>	Auckland	Jan02	2	1	0	5	6	Takeaways	Foodborne (hot pork sandwiches)	Inadequate reheating of previously cooked food; inadequate thawing; inadequate cooling or refrigeration; preparation too far in advance; improper hot holding

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
<i>Clostridium perfringens</i> / <i>Bacillus Cereus</i>	Wellington	May02	1	7	8	0	80	Bridge club	Foodborne (catered smorgasbord dinner)	Undercooking; improper hot holding; inadequate cooling or refrigeration
<i>Cryptosporidium parvum</i>	Otago	May02	2	3	0	1	Unk	Farm	Zoonotic (school visit petting calves)	Exposure to animals or animal products
Cucurbitacin toxin	Auckland	Jan02	1	0	0	3	3	Home; vegetable farm	Foodborne (courgettes)	Chemical contamination
Gastroenteritis	Auckland	Nov01	1	0	0	2	3	Home; supermarket / delicatessen	Unknown	Unknown
Gastroenteritis	Auckland	Jan02	Unk	0	0	4	4	Takeaways	Unknown (chicken salad / sandwich)	Improper hot holding; cross contamination
Gastroenteritis	Auckland	Jan02	1	0	0	3	3	Unknown	Unknown	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	Jan02	2	0	0	8	8	Home	Person to person	Exposure to infected people
Gastroenteritis	Auckland	Feb02	1	0	0	2	2	Home; restaurant / cafe	Foodborne (bacon & egg muffin)	Unknown
Gastroenteritis	Auckland	Feb02	1	0	0	2	2	Unknown	Unknown	Unknown
Gastroenteritis	Auckland	Feb02	1	0	0	5	5	Restaurant / cafe	Foodborne (fish & chips)	Unknown
Gastroenteritis	Auckland	Mar02	1	0	0	2	4	Restaurant / cafe	Foodborne (chicken)	Unknown
Gastroenteritis	Auckland	Mar02	1	0	0	2	2	Restaurant / cafe	Foodborne (chicken)	Improper hot holding; inadequate cooling or refrigeration
Gastroenteritis	Auckland	Mar02	1	0	0	2	2	Takeaways	Foodborne (sweet and sour pork on rice)	Inadequate reheating of previously cooked food; improper storage prior to preparation; inadequate thawing; inadequate cooling or refrigeration

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	Mar02	1	0	0	3	3	Supermarket / delicatessen	Foodborne (mince and cheese pie)	Inadequate reheating of previously cooked food; improper storage prior to preparation
Gastroenteritis	Auckland	Mar02	2	0	0	2	2	Takeaways	Foodborne (butter chicken on rice)	Unknown
Gastroenteritis	Auckland	Mar02	2	0	0	4	4	Takeaways	Foodborne (butter chicken on rice)	Inadequate cooling or refrigeration
Gastroenteritis	Tauranga	Feb02	2	0	0	12	33	Conference centre	Foodborne (Korean oysters)	Consumption of raw food
<i>Giardia</i>	Wairarapa	Feb02-Apr02	50	6	0	2	8	Home; farm	Waterborne; person to person; environmental; zoonotic	Contamination of source water; exposure to infected people; exposure to infected animals or animal products; untreated water supply; poor hygiene of cases; exposure to contaminated environment(s); exposure to untreated recreational water

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
Histamine	Auckland	Jan02	1	0	0	5	5	Home; fish processor ;supermarket / delicatessen	Foodborne (smoked fish)	Improper storage prior to preparation; inadequate smoking
Histamine	Auckland	Jan02	1	0	0	2	2	Home; fish processor	Foodborne (smoked Treveli)	Inadequate smoking temperature ; improper storage prior to preparation
Histamine	Auckland	Feb02	1	0	0	3	3	Home; fish processor; supermarket / delicatessen	Foodborne (smoked Kahawai)	Inadequate smoking temperature ; improper storage prior to preparation
Norwalk-like virus	Auckland	Mar02	2	3	0	0	unk	Home	Unknown	Unknown
Norwalk-like virus	Auckland	Mar02	1	1	0	16	18	Restaurant / cafe	Foodborne (various ready to eat foods)	Contamination from an infected foodhandler
Norwalk-like virus & <i>B. cereus</i> enterotoxin	Canterbury	Feb02	1	1	0	2	3	Home	Foodborne	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
Norwalk-like virus	Canterbury	Mar02	13	4	19	1	24	Hospital (acute care); hospital (rehabilitation)	Person to person; environmental	Exposure to infected people; excessively crowded living conditions; exposure to contaminated environment(s)
<i>Salmonella</i>	Auckland	Jan02	5	4	0	0	Unk	Restaurant / cafe	Foodborne (chocolate mousse)	Inadequate cooling or refrigeration; use of ingredients from unsafe source
<i>Salmonella</i>	Auckland	Jan02	3	1	0	1	Unk	Home	Waterborne	Untreated water supply
<i>Salmonella</i>	Auckland	Jan02	6	2	0	0	Unk	Rest home	Person to person	Exposure to infected people
<i>Salmonella</i>	Auckland	Feb02-Mar02	8	5	0	8	20	Home	Foodborne (umu cooked packs of taro in coconut milk)	Inadequate reheating of previously cooked food; undercooking; inadequate cooling or refrigeration
<i>Salmonella</i>	Rotorua	Feb02	5	2	0	0	N/A	Hospital (acute care)	Unknown	Elderly impaired immune system

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
<i>Salmonella</i>	Nelson	Feb02-Mar02	23	77	0	0	N/A	Unknown	Unknown	Unknown
<i>Salmonella</i>	Otago	Mar02	7	2	0	0	76	Rest home; hospital (continuing care)	Unknown	Unknown
<i>Shigella Flexneri</i>	South Canterbury	Apr02-May02	23	2	0	0	N/A	Restaurant / cafe	Foodborne; person to person	Contamination from an infected food handler

5. National surveillance data and trends

Disease ¹	Current year - 2002 ²			Previous year - 2001		
	May 2002 cases	Cumulative total since 1 January	Current rate ³	May 2001 cases	Cumulative total since 1 January	Previous rate ³
AIDS	1	9	0.6	5	12	0.6
Campylobacteriosis	642	4853	307.1	531	3523	216.0
Cholera	0	1	0.1	0	0	0
Creutzfeldt-Jakob disease	1	1	0	0	1	0.1
Cryptosporidiosis	39	157	24.2	93	461	30.2
Dengue fever	15	29	3.2	0	2	0.2
Gastroenteritis ⁴	62	362	26.6	43	310	20.5
Giardiasis	164	721	44.0	183	678	43.3
<i>H. influenzae</i> type b disease	2	2	0.2	0	4	0.3
Hepatitis A	9	81	3.1	6	25	2.9
Hepatitis B (acute) ⁵	9	32	1.6	6	29	1.8
Hepatitis C (acute) ⁵	5	23	1.6	6	23	1.9
Hydatid disease	0	0	0.2	0	1	0.1
Influenza ⁶	30	55	18.5	13	30	7.3
Lead absorption	14	41	2.9	13	62	3.6
Legionellosis ⁶	4	18	1.0	7	36	2.1
Leprosy	0	0	0	1	2	0.2
Leptospirosis	15	66	3.5	12	42	2.5
Listeriosis	0	7	0.5	2	7	0.5
Malaria	6	33	1.6	5	29	3.1
Measles	5	16	2.1	3	21	1.4
Meningococcal disease ⁷	52	170	16.9	45	186	14.0
Mumps	7	27	1.7	4	20	1.3
Paratyphoid	3	6	0.7	6	11	0.8
Pertussis	106	402	24.0	107	839	98.1
Rheumatic fever	3	41	2.6	12	61	4.9
Rubella	7	19	1.0	3	12	0.9
Salmonellosis	116	1086	68.0	156	960	50.9
Shigellosis	12	56	3.5	14	81	3.9
Tetanus	0	0	0.1	1	2	0.1
Tuberculosis	24	139	9.6	36	159	9.8
Typhoid	3	16	0.7	1	15	0.7
VTEC / STEC infection	11	38	2.0	13	38	1.8
Yersiniosis	40	231	12.7	28	187	10.5

Notes: ¹ Other notifiable infectious diseases reported in May : Rickettsial disease

² These data are provisional

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

Cases this month

Current rate¹

Disease	Cases for May 2002, ² and current rate ^{1,2} by health district ^{3,4}																							
	Northland	NW Auckland	Central Auckland	South Auckland	Waikato	Tairāngia	Eastern BoP	Gisborne	Rotorua	Tairāngia	Tairāngia	Ruapehu	Hawkes Bay	Wairarapa	Wellington	Hutt	Nelson-Marl	West Coast	Canterbury	South Cant	Otago	Southland		
AIDS ³	0	0			0	0	0	0	0	0	0	0	0	0	1		0	0	0	0	0	0		
	0	1.4			0.3	0.8	0	0	0	0	0	0	0	0	0.5		0	0	0.5	0	0	0		
Campylobacteriosis	15	114	92	66	36	18	1	4	4	5	13	0	23	10	13	7	56	23	5	5	42	24	39	26
	191.2	346.3	341.2	248.7	355.1	269.5	179.4	195.7	263.6	361.8	324.8	161.0	313.5	258.6	222.2	271.8	457.6	383.7	145.4	244.0	311.2	381.3	286.6	274.0
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
Creutzfeldt-Jakob disease	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0	0
Cryptosporidiosis	0	3	0	3	4	0	0	0	0	1	0	0	5	0	3	0	5	1	0	1	7	1	4	1
	17.1	9.8	5.4	10.1	56.7	20.1	14.3	9.1	35.7	63.5	20.4	14.0	41.1	36.0	33.3	18.3	28.4	11.4	10.6	36.3	15.4	65.3	43.9	62.9
Dengue fever	0	5	4	1	1	0	0	0	0	0	0	0	0	1	2	0	0	1	0	0	0	0	0	0
	2.9	4.7	7.9	4.8	1.9	2.3	0	0	1.6	12.7	1.0	0	0	1.7	4.1	0	2.4	3.8	0.8	0	2.5	1.3	1.2	1.9
Gastroenteritis	0	10	6	3	3	0	0	0	0	0	1	0	0	0	0	6	5	1	0	24	0	2	1	
	12.8	21.9	32.1	9.6	5.8	5.4	8.2	63.7	18.6	38.1	25.2	0	7.0	22.3	18.3	20.9	27.6	25.0	24.5	16.5	82.9	2.6	47.6	9.3
Giardiasis	3	16	19	18	19	0	0	1	2	3	2	0	14	3	8	5	8	8	4	4	20	4	1	1
	22.8	48.4	61.5	41.8	48.6	46.5	30.6	66.0	37.2	38.1	19.4	21.0	87.1	37.7	33.3	31.4	53.6	41.0	44.1	52.7	38.1	29.4	27.1	18.5
H. influenzae type b disease	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
	0.7	0	0.3	0	0	0	0	0	0	0	1.9	0	1.4	0	0	0	0.4	0	0	0	0.5	0	0	0
Hepatitis A	0	0	3	0	1	0	0	0	0	1	0	0	2	0	0	0	1	1	0	0	0	0	0	0
	0.7	3.7	7.3	8.0	5.8	0	0	4.6	1.6	3.2	0	0	2.1	0	0	2.6	2.0	5.3	0.8	0	0.7	0	0	0.9
Hepatitis B	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0
	0.7	1.4	2.4	0.8	2.3	2.3	0.0	2.3	0.0	6.3	0.0	0.0	2.1	0.0	1.4	0.0	2.0	0.8	1.6	0.0	2.2	0.0	3.0	0.0
Hepatitis C	0	0	0	1	0	1	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	0.7	0.2	0.5	0.8	0.3	13.9	2.0	0	7.8	9.5	0	0	0.7	0	0	0	3.5	2.3	0	6.6	1.2	2.6	0.6	0.9
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	0.2	0	0	0	0	0	2.3	0	0	0	0	0	0	0	0.4	0	0	0	0.5	0	0	0	0
Influenza ²	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0
	0	0	63.1	0	51.5	0	0	0	0	0	0	0	0	0	0	21.7	0	0	0	57.0	0	9.6	0	0
Lead absorption	1	0	2	1	3	0	0	0	0	0	1	0	0	1	1	0	0	0	0	3	0	1	0	0
	3.6	1.2	2.4	0.8	4.9	3.1	2.0	6.8	3.1	0	3.9	7.0	1.4	1.7	6.1	2.6	0	2.5	0	4.0	10.2	7.8	3.7	0
Legionellosis ⁵	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0
	2.1	0.5	0.8	0.5	1.6	0	0	0	1.6	3.2	0	0	0.7	1.7	0	2.6	2.0	2.3	0.8	0	1.7	2.6	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	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	2	0	0	0	0	0	0	0	3	0	2	0	0	0	0	1	2	2	1	1
	9.3	1.9	0	0.3	6.5	5.4	4.1	15.9	1.6	3.2	1.9	14.0	16.0	1.7	6.8	2.6	0.8	0	4.9	6.6	1.2	14.1	1.8	0.9
Listeriosis	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	0.5	0.5	0.3	0.3	1.5	0	2.3	0	0	1.0	0	0	0	0	0	0.4	0.8	0	0	0.5	1.3	1.2	0
Malaria	0	0	1	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0
	0.7	0.7	0.8	0.5	1.9	1.5	0	0	3.1	3.2	1.0	14.0	0.7	0	7.5	0	0.4	0.8	3.3	3.3	2.7	1.3	2.4	0
Measles	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	2.1	0.5	1.1	1.6	0.6	6.2	0	4.6	0	0	1.9	0	3.5	0	0.7	0	2.4	0	5.7	9.9	3.5	1.3	2.4	7.4
Meningococcal disease ⁶	3	4	6	9	3	2	2	0	3	1	2	0	2	0	0	1	1	0	0	6	0	7	0	0
	23.5	8.6	20.1	28.8	20.7	17.8	36.7	25.0	55.8	38.1	10.7	7.0	17.4	8.6	14.3	26.1	8.3	13.7	6.5	9.9	5.7	5.1	33.7	9.3
Mumps	0	0	2	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1
	4.3	0.9	1.4	1.1	0.3	0.8	4.1	0	1.6	0	0	0	2.8	1.7	0.7	0	1.6	2.3	2.5	3.3	2.0	0	5.4	3.7
Paratyphoid	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	0	0.9	2.2	1.1	0.6	0.8	0	0	0	0	1.0	0	0.7	0	0	1.2	0.8	0.8	0	0.2	0	0	0	0
Pertussis	1	4	6	1	1	0	0	0	1	0	1	0	2	0	2	0	6	2	5	15	22	31	1	5
	13.6	15.1	10.6	9.3	43.4	10.1	2.0	6.8	4.7	6.3	6.8	21.0	10.4	5.1	6.8	2.6	31.1	38.7	122.6	131.9	28.9	67.8	6.0	41.7
Rheumatic fever	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7.1	0.7	4.4	10.9	2.6	2.3	6.1	4.6	0	3.2	1.0	7.0	2.1	1.7	0	2.6	0.8	0	0	0	0.2	0	0	0
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	0	0	0	0	0	0
	0.7	0.2	0.3	0.5	0	0	0	0	0	0	1.0	0	8.4	0	0	7.8	2.0	0.8	0.8	3.3	1.7	0	0	0.9
Salmonellosis	6	11	12	9	12	1	1	1	2</															