

APPENDIX: NATIONAL SURVEILLANCE DATA AND TRENDS

A. COMPARISON OF NOTIFIABLE DISEASE CASES AND RATES FOR 2006 AND 2007

Table 1. Number of cases and rates per 100 000 population of notifiable diseases in New Zealand, 2006 - 2007

Disease ^a	2006		2007		Change ^{d,e}
	Cases	Rates	Cases	Rates	
AIDS	29	0.7	31	0.7	→
Brucellosis	0	0.0	4	0.1	→
Campylobacteriosis	15873	379.3	12776	302.2	←
Chemical Poisoning from the Environment	28	0.7	13	0.3	←
Chikungunya Fever	0	0.0	1	0.0	→
Cholera	0	0.0	1	0.0	→
Creutzfeldt-Jakob Disease	5	0.1	5	0.1	
Cryptosporidiosis	737	17.6	924	21.9	→
Cysticercosis	0	0.0	2	0.0	→
Decompression Sickness	1	0.0	0	0.0	←
Dengue Fever	19	0.5	114	2.7	→
Gastroenteritis ^b	937	22.4	621	14.7	←
Giardiasis	1214	29.0	1401	33.1	→
<i>Haemophilus influenzae</i> type b	9	0.2	15	0.4	→
Hepatitis A	123	2.9	42	1.0	←
Hepatitis B ^c	63	1.5	75	1.8	→
Hepatitis C ^c	35	0.8	32	0.8	←
Hepatitis NOS	0	0.0	1	0.0	→
Hydatid Disease	0	0.0	6	0.1	→
Lead Absorption	78	1.9	78	1.8	
Legionellosis	52	1.2	67	1.6	→
Leprosy	4	0.1	8	0.2	→
Leptospirosis	88	2.1	66	1.6	←
Listeriosis	19	0.5	26	0.6	→
Lyme Disease	1	0.0	0	0.0	←
Malaria	30	0.7	25	0.6	←
Measles	20	0.5	25	0.6	→
Meningococcal Disease	160	3.8	106	2.5	←
Mumps	47	1.1	75	1.8	→
Paratyphoid Fever	23	0.5	23	0.5	
Pertussis	1120	26.8	331	7.8	←
Rheumatic Fever	107	2.6	140	3.3	→
Rickettsial Disease	12	0.3	2	0.0	←
Ross River Virus Infection	2	0.0	0	0.0	←
Rubella	8	0.2	10	0.2	→
Salmonellosis	1335	31.9	1274	30.1	←
Shigellosis	102	2.4	126	3.0	→
Taeniasis	0	0.0	1	0.0	→
Tetanus	1	0.0	1	0.0	
Toxic Shellfish Poisoning	1	0.0	3	0.1	→
Tuberculosis	354	8.5	290	6.9	←
Typhoid Fever	42	1.0	48	1.1	→
VTEC/STEC Infection	87	2.1	100	2.4	→
Yersiniosis	487	11.6	527	12.5	→

^a No cases of the following notifiable diseases were reported in 2006 & 2007: Anthrax, Barmah Forest virus, Japanese encephalitis, Kunjin virus, Murray Valley encephalitis, Botulism, Diphtheria, *E. sakazakii*, HPAI, Plague, Poliomyelitis, Rabies, Primary amoebic meningo-encephalitis, SARS, Trichinellosis, Yellow fever.

^b Cases of gastroenteritis from a common source or foodborne intoxication e.g. staphylococcal intoxication.

^c Only acute cases of this disease are currently notifiable.

^d ← = Significant decrease, → = Significant increase, -- = No change, ← = Not significant decrease, → = not significant increase

^e The Mantel-Haenszel chi-square test or where necessary Fisher's Exact test were used to determine statistical significance. P-values less than 0.05 are considered to be significant at the 95% level of confidence.

B. DEATHS FROM NOTIFIABLE DISEASES RECORDED IN EPISURV, 1997 - 2007

Table 2. Deaths due to notifiable diseases recorded in EpiSurv, 1997 - 2007

Disease	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
AIDS ^a	34	19	18	19	14	11	10	13	15	14	5
Campylobacteriosis	2	2	1	3	1	1	0	0	1	1	1
Creutzfeldt-Jakob Disease ^b	3	0	2	3	1	3	4	3	0	5	0
Gastroenteritis	0	0	0	0	0	1	0	0	0	0	0
Giardiasis	1	0	0	0	0	0	0	0	0	0	0
<i>Haemophilus influenzae</i> type b	1	0	0	0	1	1	2	0	0	0	0
Hepatitis B	2	0	0	0	1	0	0	0	1	0	1
Hydatid Disease	0	0	0	1	0	0	0	0	0	0	0
Legionellosis ^c	4	1	1	5	2	3	1	1	4	3	1
Listeriosis - non perinatal	2	0	1	2	1	0	2	3	1	0	2
Listeriosis - perinatal	6	0	2	4	1	3	2	2	0	1	2
Malaria	1	0	0	0	0	0	0	0	0	0	0
Meningococcal Disease	24	23	23	17	26	18	13	8	14	7	7
Pertussis	0	0	0	0	1	1	1	1	0	0	0
Primary amoebic meningoencephalitis	0	0	0	1	0	0	0	0	0	0	0
Rheumatic Fever ^d	1	0	0	0	0	0	0	0	0	0	0
Salmonellosis	2	2	1	7	2	1	0	0	1	1	1
Shigellosis	0	0	1	0	0	0	0	0	0	0	0
Tetanus	0	0	0	0	1	0	0	0	0	0	1
Tuberculosis	15	8	14	8	2	6	6	6	4	5	3
VTEC/STEC Infection	1	1	0	0	0	0	0	0	0	0	0
Yersiniosis	0	2	0	0	0	0	0	1	0	0	0

^a Data source [10]

^b Data source [15]

^c One further legionellosis death occurred in a laboratory-reported but non-notified case in 2002.

^d The death was a rheumatic fever recurrence

Note: The numbers in this table are those recorded in EpiSurv where the notifiable disease was the primary cause of death. Information on deaths is most likely to be reported by Public Health Services when it occurs close to the time of notification and investigation.

C. NZHIS MORTALITY DATA FOR SELECTED NOTIFIABLE DISEASES, 2003 - 2005

Table 3. Reported deaths from selected notifiable diseases, 2003 - 2005

Disease	ICD 10 Codes	2003		2004		2005 ^a	
		Underlying ^b	Contributory ^c	Underlying ^b	Contributory ^c	Underlying ^b	Contributory ^c
AIDS	B20-B24	10	5	15	2	13	7
Campylobacteriosis	A04.5	1	0	1	1	0	3
Creutzfeldt-Jakob Disease	A81.0	4	0	4	0	4	0
Cryptosporidiosis	A072	1	0	0	0	0	0
Hepatitis B	B16	1	1	0	6	3	5
Hepatitis C	B17.1	0	0	0	3	0	1
Legionellosis	A48.1	0	0	1	1	2	1
Listeriosis	A32	2	0	1	0	0	0
Meningococcal Disease	A39	14	0	8	0	13	0
Meningoencephalitis - primary amoebic	B602	0	1	0	0	0	0
Pertussis	A37	0	0	1	0	1	0
Salmonellosis	A02	1	0	0	1	0	1
Tuberculosis	A15-A19, P37.0	10	22	13	13	5	14
VTEC/STEC Infection	A44	0	0	0	1	0	0

^a Latest year that data are available.

^b Underlying – main cause of death

^c Contributory – selected contributory cause of death (not main cause of death)

D. NZHIS MORBIDITY DATA FOR SELECTED NOTIFIABLE DISEASES, 2005 - 2007

Table 4. Hospital admissions for selected notifiable diseases, 2005 - 2007

Disease	ICD 10 Codes	2005		2006		2007	
		Principal diagnosis	Other relevant diagnosis	Principal diagnosis	Other relevant diagnosis	Principal diagnosis	Other relevant diagnosis
AIDS	B20-B24	16	296	35	282	28	261
Arboviral Diseases	A83, A84, A85.2, A92, A93, A94, B33.1	4	2	2			2
Brucellosis	A23				1		2
Campylobacteriosis	A04.5	871	198	967	212	752	185
Cholera	A00					1	
Creutzfeldt-Jakob Disease	A81.0	3		6		2	5
Cryptosporidiosis	A07.2	34	8	20	10	26	14
Cysticercosis	B69			2	1	4	2
Decompression Sickness	T70.3	8	1	8		12	1
Dengue Fever	A90, A91	8		11	3	45	9
Diphtheria	A36		1		1		3
Giardiasis	A07.1	27	25	43	28	20	14
Hepatitis A	B15	21	15	33	14	17	18
Hepatitis B	B16	53	67	35	89	41	90
Hepatitis C	B17.1	8	6	11	13	12	19
Lead Absorption	T56.0	1	2	5		12	
Legionellosis	A48.1	33	7	12	10	18	7
Leprosy	A30		4	2		4	6
Leptospirosis	A27	51	10	50	8	41	2
Listeriosis	A32	8	11	13	10	12	17
Malaria	B50-B54	55	2	42	4	37	5
Measles	B05	3		1	1	5	1
Meningococcal Disease	A39	260	59	175	31	120	21
Mumps	B26	17	2	9	2	13	2
Paratyphoid fever	A01.1-A01.4	4		4		13	
Pertussis	A37	142	30	60	10	51	10
Poliomyelitis	A80		4				
Rheumatic fever	I00, I01, I02	191	44	186	42	206	34
Rickettsial diseases	A75, A77, A78, A79	4		16	1	4	
Rubella	B06	1	1	1	4		1
Salmonellosis	A02	130	36	122	39	123	27
Shigellosis	A03	20	2	13	2	27	1
Taeniasis	B689		1				2
Tetanus	A33-A35	2	3	2	2	1	
Tuberculosis	A15-A19, P37.0	393	146	301	151	229	154
Typhoid Fever	A01.0	25	2	30	2	42	2
VTEC/STEC Infection	A40-A44	15	18	16	23	22	24
Yersiniosis	A04.6	12	15	29	26	19	31

Note: Hospital admission data may include multiple admissions (to the same or different hospitals) for the same case and admissions may relate to cases first diagnosed in previous years.

E. NOTIFIABLE DISEASE CASES AND RATES BY ETHNIC GROUP, 2007

Table 5. Number of cases and rates per 100 000 population of notifiable diseases by ethnic group, 2007

Disease	Ethnicity											
	European		Maori		Pacific Peoples		Other Ethnicity		Unknown		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Campylobacteriosis	8522	316.4	652	115.3	135	59.7	405	108.1	3062		12776	317.2
Cryptosporidiosis	676	25.1	89	15.7	14	6.2	19	5.1	126		924	22.9
Dengue Fever	49	1.8	12	2.1	28	12.4	7	1.9	18		114	2.8
Gastroenteritis	465	17.3	26	4.6	9	4.0	23	6.1	98		621	15.4
Giardiasis	945	35.1	77	13.6	7	3.1	43	11.5	329		1401	34.8
<i>Haemophilus influenzae</i> type b	8	0.3	5	0.9			1		1		15	0.4
Hepatitis A	17	0.6	3		6	2.7	14	3.7	2		42	1.0
Hepatitis B	40	1.5	9	1.6	7	3.1	14	3.7	5		75	1.9
Hepatitis C	25	0.9	3		2				2		32	0.8
Hydatid Disease	2		2				2				6	0.1
Lead Absorption	66	2.5	3		3				6		78	1.9
Legionellosis	41	1.5	8	1.4			2		16		67	1.7
Leprosy					6	2.7	2				8	0.2
Leptospirosis	44	1.6	14	2.5			2		6		66	1.6
Listeriosis	18	0.7	2				4		2		26	0.6
Malaria	11	0.4	1		2		8	2.1	3		25	0.6
Measles	17	0.6	2		1		4		1		25	0.6
Meningococcal Disease	48	1.8	36	6.4	15	6.6	6	1.6	1		106	2.6
Mumps	23	0.9	15	2.7	20	8.8	11	2.9	6		75	1.9
Paratyphoid Fever	6	0.2	1				16	4.3			23	0.6
Pertussis	243	9.0	41	7.3	12	5.3	15	4.0	20		331	8.2
Rheumatic Fever	4		67	11.9	59	26.1	3		7		140	3.5
Rickettsial Disease	2										2	
Rubella	9	0.3	1								10	0.2
Salmonellosis	830	30.8	93	16.5	48	21.2	58	15.5	245		1274	31.6
Shigellosis	64	2.4	13	2.3	20	8.8	10	2.7	19		126	3.1
Tetanus	1										1	
Tuberculosis	40	1.5	50	8.8	29	12.8	159	42.4	12		290	7.2
Typhoid Fever	2		3		24	10.6	17	4.5	2		48	1.2
VTEC/STEC Infection	78	2.9	7	1.2			7	1.9	8		100	2.5
Yersiniosis	364	13.5	33	5.8	11	4.9	43	11.5	76		527	13.1

Note: Disease rates for ethnic groups and total cases are based on 2006 census data from Statistics New Zealand and should not be compared to disease rates used elsewhere in the report, which have been calculated using 2007 mid-year population estimates from Statistics New Zealand. Where fewer than five cases have been notified a rate has not been calculated and the cell has been left blank.

F. NOTIFIABLE DISEASE CASES AND RATES BY SEX, 2007

Table 6. Number of cases and rates per 100 000 population of notifiable diseases by sex, 2007

Disease	Sex						Total	
	Male		Female		Unknown			
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Campylobacteriosis	6790	327.9	5719	265.1	267		12776	302.2
Cryptosporidiosis	444	21.4	470	21.8	10		924	21.9
Dengue Fever	53	2.6	60	2.8	1		114	2.7
Gastroenteritis	255	12.3	348	16.1	18		621	14.7
Giardiasis	663	32.0	716	33.2	22		1401	33.1
<i>Haemophilus influenzae</i> type b	8	0.4	7	0.3			15	0.4
Hepatitis A	26	1.3	16	0.7			42	1.0
Hepatitis B	42	2.0	33	1.5			75	1.8
Hepatitis C	20	1.0	12	0.6			32	0.8
Hydatid Disease	5	0.2	1				6	0.1
Lead Absorption	65	3.1	13	0.6			78	1.8
Legionellosis	34	1.6	33	1.5			67	1.6
Leprosy	4		4				8	0.2
Leptospirosis	53	2.6	12	0.6	1		66	1.6
Listeriosis - non perinatal	7	0.3	13	0.6	1		21	0.5
Malaria	16	0.8	7	0.3	2		25	0.6
Measles	13	0.6	12	0.6			25	0.6
Meningococcal Disease	56	2.7	50	2.3			106	2.5
Mumps	42	2.0	33	1.5			75	1.8
Paratyphoid Fever	11	0.5	12	0.6			23	0.5
Pertussis	133	6.4	196	9.1	2		331	7.8
Rheumatic Fever	69	3.3	62	2.9	9		140	3.3
Rickettsial Disease	1		1				2	
Rubella	6	0.3	4				10	0.2
Salmonellosis	652	31.5	600	27.8	22		1274	30.1
Shigellosis	60	2.9	65	3.0	1		126	3.0
Tetanus			1				1	
Tuberculosis	132	6.4	155	7.2	3		290	6.9
Typhoid Fever	23	1.1	24	1.1	1		48	1.1
VTEC/STEC Infection	45	2.2	55	2.5			100	2.4
Yersiniosis	271	13.1	245	11.4	11		527	12.5

Note: Where fewer than five cases have been notified a rate has not been calculated and the cell has been left blank.

G. NOTIFIABLE DISEASE CASES AND RATES BY AGE GROUP, 2007

Table 7. Number of cases and rates per 100 000 population of notifiable diseases by age group, 2007

Disease	Age Group																										
	<1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 29		30 to 39		40 to 49		50 to 59		60 to 69		70+		Unknown		Total		
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases
Campylobacteriosis	201	325.3	1036	449.3	604	208.3	577	188.5	940	294.2	2178	389.6	1589	268.3	1678	265.7	1536	299.3	1202	333.2	1107	304.5	128		12776	302.2	
Cryptosporidiosis	30	48.6	329	142.7	120	41.4	65	21.2	39	12.2	104	18.6	121	20.4	42	6.7	34	6.6	25	6.9	13	3.6	2		924	21.9	
Dengue Fever	1				1		1		4		19	3.4	26	4.4	24	3.8	21	4.1	12	3.3	5	1.4			114	2.7	
Gastroenteritis	11	17.8	28	12.1	10	3.4	11	3.6	28	8.8	77	13.8	100	16.9	103	16.3	84	16.4	62	17.2	70	19.3	37		621	14.7	
Giardiasis	30	48.6	250	108.4	97	33.5	22	7.2	23	7.2	137	24.5	340	57.4	210	33.3	135	26.3	105	29.1	40	11.0	12		1401	33.1	
<i>H. influenzae</i> type b	6	9.7	3		1		1								1						3				15	0.4	
Hepatitis A					6	2.1	2		8	2.5	7	1.3	3		5	0.8	6	1.2	2		3				42	1.0	
Hepatitis B	1						1		2		15	2.7	23	3.9	11	1.7	13	2.5	7	1.9	2				75	1.8	
Hepatitis C									2		6	1.1	7	1.2	8	1.3	8	1.6			1				32	0.8	
Hydatid Disease															1		1		2		2				6	0.1	
Lead Absorption	1		4		1				1		14	2.5	13	2.2	23	3.6	14	2.7	6	1.7	1				78	1.8	
Legionellosis											5	0.9	5	0.8	14	2.2	13	2.5	12	3.3	18	5.0			67	1.6	
Leprosy							1				2		3		2										8	0.2	
Leptospirosis	1								1		14	2.5	14	2.4	20	3.2	14	2.7	2		2				66	1.6	
Listeriosis											2		3		1		2		6	1.7	12	3.3			26	0.6	
Malaria							3				4		3		5	0.8	5	1.0	3		1		1		25	0.6	
Measles	4		12	5.2	3				1		2		3												25	0.6	
Meningococcal Disease	19	30.7	29	12.6	10	3.4	7	2.3	12	3.8	10	1.8	6	1.0	3		4		2		4				106	2.5	
Mumps	1		22	9.5	12	4.1	13	4.2	3		8	1.4	6	1.0	7	1.1	2				1				75	1.8	
Paratyphoid Fever			1				3		2		8	1.4	2		3		3						1		23	0.5	
Pertussis	27	43.7	33	14.3	20	6.9	25	8.2	24	7.5	27	4.8	42	7.1	46	7.3	38	7.4	27	7.5	20	5.5	2		331	7.8	
Rheumatic Fever			2		34	11.7	54	17.6	30	9.4	12	2.1	5	0.8	2								1		140	3.3	
Rickettsial Disease															1				1						2		
Rubella	3		6	2.6	1																				10	0.2	
Salmonellosis	69	111.7	250	108.4	70	24.1	58	18.9	69	21.6	172	30.8	145	24.5	150	23.8	112	21.8	102	28.3	69	19.0	8		1274	30.1	
Shigellosis	1		24	10.4	6	2.1	7	2.3	6	1.9	13	2.3	18	3.0	18	2.9	22	4.3	6	1.7	5	1.4			126	3.0	
Tetanus																					1				1		
Tuberculosis	2		8	3.5	7	2.4	5	1.6	19	5.9	53	9.5	51	8.6	35	5.5	31	6.0	35	9.7	42	11.6	2		290	6.9	
Typhoid Fever			7	3.0	5	1.7	1		8	2.5	9	1.6	11	1.9	5	0.8	1				1				48	1.1	
VTEC/STEC Infection	12	19.4	42	18.2	12	4.1	2		2		2		4		7	1.1	4		7	1.9	6	1.7			100	2.4	
Yersiniosis	32	51.8	101	43.8	24	8.3	22	7.2	20	6.3	54	9.7	69	11.6	58	9.2	55	10.7	35	9.7	53	14.6	4		527	12.5	

Note: Where fewer than five cases have been notified a rate has not been calculated and the cell has been left blank.

H. NOTIFIABLE DISEASE CASES AND RATES BY DISTRICT HEALTH BOARD, 2007

Table 8. Number of cases and rates per 100 000 population of notifiable diseases by DHB, 2007

Disease	Campylobacteriosis		Cryptosporidiosis		Dengue Fever		Gastroenteritis		Giardiasis		Hepatitis A		Hepatitis B		Hepatitis C		Lead Absorption		Legionellosis		Leptospirosis		Listeriosis		Malaria		Measles		Meningococcal Disease		Mumps		Paratyphoid Fever		Pertussis		Rheumatic Fever		Rubella		Salmonellosis		Shigellosis		Tuberculosis		Typhoid Fever		VTEC/STEC Infection		Yersiniosis			
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate				
District Health Board	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate				
Northland	369	239.8	24	15.6	1		4		73	47.4	1		1		1				4		2		4		1				53.2	1	1		53.2	5	3.2				60	39.0	2		15	9.7			3		11	7.1				
Waitemata	1699	331.0	58	11.3	24	4.7	82	16.0	143	27.9	7	1.4	11	2.1	3				8	1.6	9	1.8	1		1		1		6	1.2	6	1.2	9	1.8	1		18	3.5	8	1.6	1		113	22.0	8	1.6	42	8.2	8	1.6	11	2.1	37	7.2
Auckland	1382	319.0	45	10.4	32	7.4	93	21.5	187	43.2	5	1.2	12	2.8	3				6	1.4	8	1.8			3		8	1.8	8	1.8	8	1.8	1		12	2.8	19	4.4			110	25.4	24	5.5	54	12.5	12	2.8	4		41	9.5		
Counties Manukau	1118	240.6	57	12.3	37	8.0	55	11.8	129	27.8	9	1.9	9	1.9	1				2		6	1.3	1		5	1.1	3		1		16	3.4	16	3.4	9	1.9	17	3.7	56	12.1			84	18.1	18	3.9	40	8.6	17	3.7	3		20	4.3
Waikato	1080	305.9	182	51.5	6	1.7	34	9.6	118	33.4	1		5	1.4	1				5	1.4			10	2.8	1		3				12	3.4	7	2.0	2		71	20.1	10	2.8			137	38.8	13	3.7	20	5.7			22	6.2	37	10.5
Lakes	288	283.7	15	14.8			12	11.8	38	37.4			1		2						1								1		1		7	6.9	3				27	26.6	7	6.9	1				4		22	21.7				
Bay of Plenty	498	244.9	30	14.8	3		13	6.4	71	34.9	3		3						5	2.5	1		2		2				5	2.5	3		2		24	11.8	5	2.5			92	45.3	8	3.9	8	3.9			8	3.9	20	9.8		
Tairāwhiti	49	106.8	3						11	24.0									1		10	21.8	1				1				4				4		3				11	24.0							9	19.6				
Taranaki	410	382.1	21	19.6	2		6	5.6	16	14.9	2		3						2		1		3		1		3		4		1		1						28	26.1	2		3		1		2		18	16.8				
Hawke's Bay	461	301.4	37	24.2	1		21	13.7	36	23.5	4		5	3.3					2				8	5.2					10	6.5	4		1		10	6.5	9	5.9			49	32.0	2		17	11.1			2		28	18.3		
Whanganui	190	298.8	10	15.7	1		5	7.9	9	14.2	1								2				2						1				2		3		1		14	22.0			3				8	12.6						
MidCentral	332	202.2	50	30.5			32	19.5	42	25.6									6	3.7	2		11	6.7	1				1		3		1		8	4.9	2		2		44	26.8	2		10	6.1	3		2		7	4.3		
Hutt	435	307.4	61	43.1			25	17.7	36	25.4	2		4		2				4		1				2		2		2		6	4.2	2		1		7	4.9	7	4.9			48	33.9	5	3.5	11	7.8			22	15.5		
Capital and Coast	988	351.2	74	26.3			61	21.7	138	49.0	1		5	1.8	4				7	2.5	6	2.1	1		2		1		4		6	2.1	6	2.1	1		16	5.7	6	2.1	3		112	39.8	5	1.8	17	6.0	3		3		47	16.7
Wairarapa	68	172.0	10	25.3	1		6	15.2	12	30.3			1		1				1		1								1		1		1		1				11	27.8			2				6	15.2						
Nelson-Marlborough	409	304.1	30	22.3	3		5	3.7	93	69.1	1		3						4		2		3				1		1		1		1		28	20.8			1		36	26.8	4		4		1		5	3.7	7	5.2		
West Coast	81	251.2	12	37.2			8	24.8	6	18.6					3				1		4						4		1						1		12	37.2			1				3		24	74.4						
Canterbury	1754	357.8	70	14.3	3		144	29.4	124	25.3	3		11	2.2	9	1.8	12	2.4	12	2.4	9	1.8	1		4		3		11	2.2	7	1.4	1		68	13.9	3				147	30.0	17	3.5	35	7.1	2		19	3.9	131	26.7		
South Canterbury	220	398.3	41	74.2			4		12	21.7									1				2		1						15	27.2					10	18.1	1		4				3		14	25.3						
Otago	621	334.1	36	19.4			7	3.8	66	35.5	1		1		1				9	4.8	1		3		2				6	3.2	2		8	4.3			1		75	40.3	5	2.7	2		1		3		13	7.0				
Southland	324	293.6	58	52.5			4		41	37.1	1				1				1		1		3						2		2		10	9.1					54	48.9	3		1				3		5	4.5				
Total	12776	302.2	924	21.9	114	2.7	621	14.7	1401	33.1	42	1.0	75	1.8	32	0.8	78	1.8	67	1.6	66	1.6	26	0.6	25	0.6	25	0.6	25	0.6	106	2.5	75	1.8	23	0.5	331	7.8	140	3.3	10	0.2	1274	30.1	126	3.0	290	6.9	48	1.1	100	2.4	527	12.5

Note: Where fewer than five cases have been notified a rate has not been calculated and the cell has been left blank.

I. NOTIFIABLE DISEASE CASES BY YEAR AND SOURCE, 1987 - 2007

Table 9. Number of cases of notifiable disease cases by year and source, 1987 - 2007

Note: Cell is blank where data are unavailable.

Disease	Source	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
AIDS	Notification	28	38	59	73	78	50	70	44	49	76	43	29	33	26	26	17	33	38	49	29	31
Campylobacteriosis	Notification	2921	2796	4187	3850	4148	5144	8101	7714	7442	7635	8924	11572	8161	8418	10146	12495	14788	12215	13836	15873	12776
Cholera	Notification	2	0	0	5	0	0	0	2	2	0	0	1	1	0	3	1	1	2	0	0	1
Creutzfeldt-Jakob Disease	Notification										2	1	0	2	3	1	3	6	8	3	5	5
Cryptosporidiosis	Notification										119	357	866	977	775	1208	975	817	611	889	737	924
Dengue Fever	Notification	0	1	3	2	3	1	1	0	6	23	14	26	9	7	93	70	55	8	11	19	114
Gastroenteritis	Notification										555	310	492	601	727	940	1087	1026	1363	557	937	621
Giardiasis	Notification										1235	2127	2183	1793	1688	1604	1547	1570	1514	1231	1214	1401
<i>H. influenzae</i> type b	Notification										26	9	11	10	13	11	3	12	4	7	9	15
	Laboratory	93	107	121	143	148	166	118	75	14	24	8	10	9	10	8	3	9	3	6	8	13
Hepatitis A	Notification	158	176	134	150	224	288	257	179	338	311	347	145	119	107	61	106	70	49	51	123	42
Hepatitis B	Notification	474	370	309	242	227	221	145	133	125	104	138	88	94	79	56	67	61	38	59	63	75
Hepatitis C	Notification	18	20	13	11	25	89	91	79	88	59	92	102	96	80	58	53	40	24	29	35	32
Hydatid Disease	Notification	2	2	0	4	0	4	4	1	5	3	2	2	8	3	7	2	0	1	2	0	6
Influenza	Sentinel isolates	18	136	119	343	183	317	423	441	521	673	743	127	425	73	313	241	230	231	273	315	239
Legionellosis	Notification	91	62	17	20	14	11	24	66	33	36	63	43	51	61	46	49	77	62	85	52	67
	Laboratory				21	42	60	76	121	76	60	109	107	65	56	56	53	82	75	83	54	72
Leprosy	Notification	8	2	4	1	4	5	3	1	1	10	3	3	10	4	3	4	4	3	2	4	8
Leptospirosis	Notification	129	99	90	117	106	70	116	70	65	56	52	75	59	98	99	140	113	102	85	88	66
	Laboratory		192	182	229	176	218	234	168	183	140	84	117	76	114	113	181	149	113	109	67	42
Listeriosis	Notification	12	7	10	16	26	16	11	8	13	10	35	17	19	22	18	19	24	26	20	19	26
Malaria	Notification	22	25	27	32	39	29	58	34	41	107	65	73	46	111	54	61	46	33	32	30	25
Measles	Notification										68	1984	164	107	64	82	21	67	32	19	20	25
	Laboratory	26	5	5	7	355	53	4	4	15	25	1220	35	2	9	21	6	15	10	3	1	3
Meningococcal Disease	Notification	179	83	49	53	71	153	202	208	394	473	609	439	507	477	648	555	542	343	226	160	106
Mumps	Notification										76	90	85	56	50	56	64	56	45	61	47	75
	Laboratory	28	5	105	26	23	10	25	245	66	20	14	8	5	2	22	18	11	12	7	9	18
Paratyphoid Fever	Notification	3	2	0	1	1	2	10	7	24	20	25	18	17	24	32	16	18	28	25	23	23
Pertussis	Notification										1022	284	153	1046	4140	1334	1068	585	3485	2719	1120	331
Rheumatic Fever (initial attack)	Notification	215	153	148	90	97	70	81	98	88	110	93	66	97	108	114	87	148	75	76	103	132
Rubella	Notification										306	80	53	35	26	30	33	26	23	13	8	10
	Laboratory	50	95	114	168	81	27	244	104	1581	339	21	2	0	0	3	4	3	3	7	3	5
Salmonellosis	Notification	1140	1128	1860	1619	1244	1239	1340	1522	1334	1141	1177	2069	2077	1795	2417	1880	1401	1081	1382	1335	1274
Shigellosis	Notification	143	145	137	197	152	124	128	185	191	167	117	122	147	115	157	112	87	140	183	102	126
Tetanus	Notification	4	1	0	0	0	8	2	2	2	3	0	2	6	1	4	1	2	1	1	1	1
Tuberculosis	Notification	296	295	303	348	335	327	323	352	391	352	323	365	446	354	369	381	423	375	333	354	290
Typhoid Fever	Notification	4	15	17	7	9	11	14	24	21	15	16	31	10	21	27	23	20	31	30	42	48
VTEC/STEC Infection	Notification							3	3	6	7	13	48	64	67	76	73	104	89	92	87	100
Yersiniosis	Notification										330	488	546	503	396	429	476	439	420	407	487	527

J. PREVALENCE OF ANTIMICROBIAL RESISTANCE, 1994 - 2006

Table 10. Prevalence of antimicrobial resistance, 1994 - 2006

Pathogen	Antimicrobial	Percent resistance ^a (number tested)				
		1994-1996	1997-1999	2000-2002	2003-2005	2006
<i>S. aureus</i> ^b	methicillin	2.8 (58283)	4.9 (136356)	7.2 (251448)	7.4 (219363)	8.0 (70584)
	erythromycin	8.0 (54870)	10.8 (134350)	12.0 (221394)	12.0 (164220)	11.3 (31415)
	co-trimoxazole	0.8 (32926)	0.6 (91391)	1.2 (149166)	2.0 (126840)	1.4 (25631)
	mupirocin	10.1 (9291)	18.2 (37173)	20.0 (91555)	16.7 (48423)	13.2 (28075)
Methicillin-resistant <i>S. aureus</i> ^c	erythromycin	31.5 (2249)	26.2 (1303)	40.0 (1409)	46.3 (1596)	37.7 (597)
	co-trimoxazole	8.6 (2249)	1.8 (1303)	6.7 (1409)	7.4 (1596)	2.5 (597)
	mupirocin	6.4 (2244)	6.0 (1303)	8.5 (1409)	9.5 (1596)	7.0 (597)
	rifampicin	0.3 (2249)	0.8 (1303)	0.7 (1409)	0.5 (1596)	0.8 (597)
<i>S. pneumoniae</i> , non-invasive disease ^b	penicillin ^d	9.5 (7076)	19.0 (10976)	26.5 (12859)	27.0 (15037)	32.3 (4389)
	erythromycin	8.3 (6832)	14.5 (11212)	18.6 (14404)	19.9 (10222)	23.5 (1829)
	tetracycline	10.5 (5019)	11.2 (5993)	15.4 (9476)	18.1 (6796)	22.5 (1457)
<i>S. pneumoniae</i> , invasive disease ^e	penicillin ^d	3.4 (989)	15.0 (1182)	15.3 (1494)	17.2 (1560)	15.9 (522)
	erythromycin	2.6 (989)	5.7 (910)	7.2 (1494)	9.9 (1560)	11.1 (522)
	cefotaxime ^d	1.8 (989)	7.3 (1182)	6.2 (1494)	11.5 (1560)	10.0 (522)
<i>Enterococcus</i> spp ^b	amoxicillin ^f	1.5 (7373)	2.4 (17548)	3.0 (22566)	2.8 (26492)	2.7 (9036)
	vancomycin	0.2 (1141)	0.5 (4752)	0.3 (7505)	0.1 (9948)	0.1 (4389)
<i>E. coli</i> , urinary isolates ^b	amoxicillin ^f	55.9 (48706)	56.0 (138712)	54.4 (194799)	50.7 (117009)	49.1 (28892)
	co-amoxiclav	10.6 (42666)	12.2 (136326)	9.6 (194950)	8.5 (127750)	8.9 (26922)
	trimethoprim	19.6 (48098)	22.6 (111710)	22.3 (207837)	21.5 (138748)	21.5 (29024)
	nitrofurantoin	1.6 (48123)	1.7 (124362)	1.5 (206149)	1.4 (139738)	1.0 (29408)
	fluoroquinolone	0.5 (40032)	0.6 (118917)	1.6 (201382)	2.4 (135803)	4.6 (24840)
<i>E. coli</i> , non-urinary isolates ^{b,g}	co-amoxiclav	22.8 (7358)	21.8 (15948)	17.5 (11508)	15.2 (5059)	12.4 (1029)
	cefuroxime	3.2 (6309)	4.5 (6893)	4.2 (6576)	3.4 (3956)	4.0 (857)
	gentamicin	0.8 (10352)	0.9 (13789)	2.4 (10392)	2.6 (5290)	4.8 (1212)
	fluoroquinolone	0.5 (4717)	0.8 (10800)	2.4 (8821)	3.9 (4212)	7.2 (1189)
<i>P. aeruginosa</i> ^b	gentamicin	12.5 (9556)	9.5 (20542)	10.5 (25561)	6.1 (23148)	4.5 (6507)
	tobramycin	3.9 (6757)	2.8 (11033)	3.6 (10421)	3.3 (7616)	3.1 (2190)
	ceftazidime	5.0 (4832)	5.2 (11147)	3.9 (13253)	4.3 (16031)	3.0 (5244)
	fluoroquinolone	8.8 (8123)	9.9 (16551)	9.3 (22869)	8.3 (23761)	6.5 (6365)
<i>H. influenzae</i> , non-invasive disease ^b	amoxicillin ^f	12.0 (12244)	19.3 (18852)	21.9 (28476)	19.9 (19529)	17.7 (6899)
	co-amoxiclav	1.1 (9839)	0.6 (15040)	0.8 (16333)	1.0 (14090)	2.0 (3056)
	co-trimoxazole	11.9 (6605)	14.7 (13964)	17.3 (22443)	18.2 (15939)	21.2 (3140)
	tetracycline	1.0 (7810)	1.5 (13007)	1.2 (15633)	0.8 (12783)	1.0 (2960)
<i>H. influenzae</i> , invasive disease ^e	amoxicillin ^f	21.8 (179)	11.5 (122)	19.2 (125)	31.6 (155)	32.7 (52)
	co-amoxiclav	3.4 (179)	1.6 (122)	1.6 (125)	9.7 (155)	23.1 (52)
	cefuroxime	3.4 (179)	4.9 (122)	0.8 (125)	9.7 (155)	23.1 (52)
<i>N. meningitidis</i> , invasive disease ^e	penicillin ^h	3.9 (659)	7.9 (431)	7.5 (796)	12.0 (551)	11.8 (85)
	rifampicin	0 (659)	0 (431)	0 (796)	0.2 (551)	0 (85)
<i>N. gonorrhoeae</i> ^{b,i}	penicillin	11.6 (879)	10.4 (1437)	7.1 (2782)	5.8 (4700)	8.4 (1906)
	fluoroquinolone	0.7 (864)	1.8 (1437)	6.3 (2349)	14.3 (4195)	13.6 (2105)
<i>M. tuberculosis</i> ^b	isoniazid	4.6 (438)	8.2 (757)	8.5 (811)	8.9 (872)	6.6 (258)
	rifampicin	0.7 (438)	1.3 (757)	0.7 (811)	1.0 (872)	0.4 (258)
	MDR ^j	0.7 (438)	0.9 (757)	0.5 (811)	1.0 (872)	0.4 (258)

^a Intermediate resistance not included in resistant category unless otherwise stated (refer footnotes d and h below).

^b Collated clinical laboratory data.

^c MRSA isolates tested by ESR.

^d Includes intermediate resistant and resistant isolates.

^e Invasive disease isolates tested by ESR.

^f Ampicillin used in laboratory testing.

^g From 2004, data based on *E. coli* from bacteraemia.

^h Reduced susceptibility (MIC 0.12-0.5 mg/L).

ⁱ Data from northern North Island only up until 2000, thereafter national data used.

^j Multidrug resistant (ie, resistant to at least isoniazid and rifampicin).