

## APPENDIX: NATIONAL SURVEILLANCE DATA AND TRENDS

### A. COMPARISON OF NOTIFIABLE DISEASE CASES AND RATES FOR 2005 AND 2006

**Table 1. Cases and rates per 100 000 population of notifiable diseases in New Zealand during 2005 and 2006**

Disease <sup>a</sup>	2005		2006		Change <sup>d,e</sup>
	Cases	Rates	Cases	Rates	
AIDS	49	1.2	29	0.7	←
Barmah Forest virus infection	2	0.0	0	0.0	←
Campylobacteriosis	13836	337.6	15873	383.5	→
Chemical poisoning from the environment	2	0.0	29	0.7	→
Creutzfeldt-Jakob disease	3	0.1	5	0.1	→
Cryptosporidiosis	889	21.7	736	17.8	←
Cysticercosis	3	0.1	0	0.0	←
Decompression sickness	1	0.0	1	0.0	
Dengue fever	11	0.3	19	0.5	→
Enterobacter sakazakii	1	0.0	0	0.0	←
Gastroenteritis <sup>b</sup>	557	13.6	931	22.5	→
Giardiasis	1231	30.0	1214	29.3	←
<i>Haemophilus influenzae</i> type b	7	0.2	9	0.2	→
Hepatitis A	51	1.2	122	2.9	→
Hepatitis B <sup>c</sup>	59	1.4	65	1.6	→
Hepatitis C <sup>c</sup>	29	0.7	34	0.8	→
Hepatitis NOS	2	0.0	0	0.0	←
Hydatid disease	2	0.0	0	0.0	←
Lead absorption	71	1.7	78	1.9	→
Legionellosis	85	2.1	52	1.3	←
Leprosy	2	0.0	3	0.1	→
Leptospirosis	85	2.1	88	2.1	→
Listeriosis	20	0.5	19	0.5	←
Malaria	32	0.8	30	0.7	←
Measles	19	0.5	20	0.5	→
Meningococcal disease	226	5.5	160	3.9	←
Mumps	61	1.5	49	1.2	←
Paratyphoid fever	25	0.6	23	0.6	←
Pertussis	2719	66.3	1122	27.1	←
Rheumatic fever	79	1.9	107	2.6	→
Rickettsial disease	1	0.0	7	0.2	→
Ross River virus infection	1	0.0	2	0.0	→
Rubella	13	0.3	8	0.2	←
Salmonellosis	1382	33.7	1335	32.3	←
Shigellosis	183	4.5	102	2.5	←
Tetanus	1	0.0	1	0.0	
Toxic shellfish poisoning	3	0.1	3	0.1	
Tuberculosis disease	339	8.3	359	8.7	→
Typhoid fever	30	0.7	42	1.0	→
VTEC/STEC infection	92	2.2	87	2.1	←
Yersiniosis	407	9.9	487	11.8	→

<sup>a</sup> No cases of the following notifiable diseases were reported in 2005: anthrax, botulism, plague, poliomyelitis, rabies, taeniasis, trichinosis, primary amoebic meningoencephalitis

<sup>b</sup> Cases of gastroenteritis from a common source or foodborne intoxication e.g. staphylococcal intoxication

<sup>c</sup> Only acute cases of this disease are currently notifiable

<sup>d</sup> ← = Significant decrease, → = Significant increase, -- = No change, < = Not significant decrease, > = not significant increase

<sup>e</sup> The Mantel-Haenszel chi-square test was used to determine statistical significance. P-values less than or equal to 0.05 are considered to be significant at the 95% level of confidence.

**B. DEATHS FROM NOTIFIABLE DISEASES RECORDED IN EPI SURV, 1997-2006****Table 2. Deaths due to notifiable diseases recorded in EpiSurv from 1997 to 2006**

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

<sup>a</sup>Data source [10]<sup>b</sup>Data source [16]<sup>c</sup>One further legionellosis death occurred in a laboratory-reported but non-notified case in 2002.<sup>d</sup>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, 2001-2003

Table 3. Reported deaths from selected notifiable diseases, 2001 - 2003

Disease	ICD 10 Codes	2001		2002		2003 <sup>a</sup>	
		Underlying <sup>b</sup>	Contributory <sup>c</sup>	Underlying <sup>b</sup>	Contributory <sup>c</sup>	Underlying <sup>b</sup>	Contributory <sup>c</sup>
AIDS	B20-B24	13	4	11	1	10	5
Campylobacteriosis	A04.5	2	0	0	0	1	0
Creutzfeldt-Jakob disease	A81.0	4	0	1	0	4	0
Cryptosporidiosis	A072					1	0
Giardiasis	A07.1	1	0	0	0		0
Hepatitis A	B15	0	1	1	0		0
Hepatitis B	B16	3	4	0	1	1	1
Hepatitis C	B17.1	0	3	1	0		
Hydatid disease	B67.0- B67.4	1	0	0	0		
Legionellosis	A48.1	2	0	1	0		
Leptospirosis	A27	1	0	1	0		
Listeriosis	A32	1	0	1	0	2	
Meningococcal disease	A39	24	0	16	0	14	0
Meningoencephalitis - primary amoebic	B602						1
Pertussis	A37	1	0	1	0		
Rheumatic fever	I00, I01, I02	0	0	0	0		
Salmonellosis	A02	2	0	0	0	1	0
Tetanus	A33-A35	1	0	0	0		
Tuberculosis	A15-A19, P37.0	5	14	9	19	10	22

<sup>a</sup> Latest year that data are available.

<sup>b</sup> Underlying – main cause of death

<sup>c</sup> Contributory – selected contributory cause of death (not main cause of death)

## D. NZHIS MORBIDITY DATA FOR SELECTED NOTIFIABLE DISEASES, 2004-2006

Table 4. Hospital admissions for selected notifiable diseases, 2004 - 2006

Disease	ICD 10 Codes	2004		2005		2006	
		Principal diagnosis	Other relevant diagnosis	Principal diagnosis	Other relevant diagnosis	Principal diagnosis	Other relevant diagnosis
AIDS	B20-B24	16	263	16	296	35	282
Arboviral diseases	A83, A84, A85.2, A92, A93, A94, B33.1	4	0	4	2	2	0
Brucellosis	A23	0	1	0	0	0	1
Campylobacteriosis	A04.5	747	173	871	199	969	212
Cholera	A00	0	1	0	0	0	1
Creutzfeldt-Jakob disease	A81.0	12	2	3	0	6	0
Cryptosporidiosis	A07.2	16	8	34	8	20	10
Cysticercosis	B69	2	1	0	0	2	1
Decompression sickness	T70.3	9	0	8	1	8	0
Dengue fever	A90, A91	3	1	8	0	11	3
Diphtheria	A36	0	2	0	1	0	1
Giardiasis	A07.1	30	25	27	25	43	28
Hepatitis A	B15	12	16	21	15	33	14
Hepatitis B	B16	46	69	53	67	35	89
Hepatitis C	B17.1	6	14	8	6	11	13
Hydatid disease	B67.0-B67.4	0	2	0	0	0	0
Lead absorption	T56.0	8	1	1	2	5	0
Legionellosis	A48.1	10	3	33	7	12	10
Leprosy	A30	2	2	0	4	2	0
Leptospirosis	A27	69	4	52	11	50	8
Listeriosis	A32	13	18	8	11	13	10
Malaria	B50-B54	43	5	55	2	42	4
Measles	B05	4	1	3	0	1	1
Meningococcal disease	A39	401	64	266	59	175	31
Mumps	B26	7	1	17	2	9	2
Paratyphoid fever	A01.1-A01.4	10	0	4	0	4	0
Pertussis	A37	229	53	142	31	60	10
Poliomyelitis	A80	0	0	0	4	0	0
Rheumatic fever	I00, I01, I02	181	45	191	44	186	42
Rickettsial diseases	A75, A77, A78, A79	2	1	4	0	16	1
Rubella	B06	1	0	1	1	1	4
Salmonellosis	A02	105	42	130	36	123	39
Shigellosis	A03	26	5	20	2	13	2
Tetanus	A33-A35	2	3		1	2	2
Trichinellosis	B75	1	0	2	3	0	0
Tuberculosis	A15-A19, P37.0	503	198	394	148	301	151
Typhoid fever	A01.0	18	1	26	2	30	2
Yersiniosis	A04.6	17	13	12	15	29	26

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 BY ETHNIC GROUP, 2006

Table 5. Cases reported in 2006 by ethnic group

Ethnic Group	European	Maori	Pacific People	Other	Unknown	Total
Campylobacteriosis	10787	818	200	702	3366	15873
Cryptosporidiosis	597	49	8	28	54	736
Dengue fever	12	2	2	1	2	19
Gastroenteritis	737	40	16	33	107	933
Giardiasis	866	69	10	65	204	1214
<i>Haemophilus influenzae</i> type b	6	3				9
Hepatitis A	53	7	42	13	7	122
Hepatitis B	20	8	17	13	5	63
Hepatitis C	22	7	1	2	2	34
Lead absorption	66	3		2	7	78
Legionellosis	42		4	2	4	52
Leprosy			1	2		3
Leptospirosis	58	18		2	10	88
Listeriosis	12		4	1	2	19
Malaria	8	1	9	11	1	30
Measles	14	2	1	1	2	20
Meningococcal disease	86	44	24	6		160
Mumps	24	6	9	8	1	48
Paratyphoid fever	13			9	1	23
Pertussis	882	121	20	49	50	1122
Rheumatic fever	4	56	32	1	14	107
Rickettsial disease	7					7
Rubella	6	1			1	8
Salmonellosis	958	109	45	61	162	1335
Shigellosis	45	6	11	18	22	102
Tetanus	1					1
Tuberculosis disease	51	63	47	190	7	358
Typhoid fever	3	3	18	18		42
VTEC/STEC infection	75	4	2	2	4	87
Yersiniosis	316	31	8	48	84	487

## F. NOTIFIABLE DISEASE CASES AND RATES BY SEX, 2006

Table 6. Cases and rates per 100 000 population in 2006 by sex

Disease	Sex							
	Male		Female		Unknown		Total	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Campylobacteriosis	8237	391.9	7268	356.7	368		15873	383.5
Cryptosporidiosis	363	17.3	362	17.8	11		736	17.8
Dengue fever	11	0.5	8	0.4			19	0.5
Gastroenteritis	361	17.2	553	27.1	19		933	22.5
Giardiasis	620	29.5	566	27.8	28		1214	29.3
<i>Haemophilus influenzae</i> type b	5	0.2	4				9	0.2
Hepatitis A	63	3.0	56	2.7	3		122	2.9
Hepatitis B	44	2.1	19	0.9			63	1.5
Hepatitis C	24	1.1	10	0.5			34	0.8
Lead absorption	58	2.8	20	1.0			78	1.9
Legionellosis	34	1.6	17	0.8	1		52	1.3
Leprosy	2		1				3	
Leptospirosis	74	3.5	13	0.6	1		88	2.1
Listeriosis	10	0.5	7	0.3	2		19	0.5
Malaria	23	1.1	7	0.3			30	0.7
Measles	7	0.3	13	0.6			20	0.5
Meningococcal disease	83	3.9	76	3.7	1		160	3.9
Mumps	23	1.1	24	1.2	1		48	1.2
Paratyphoid fever	11	0.5	12	0.6			23	0.6
Pertussis	441	21.0	671	32.9	10		1122	27.1
Rheumatic fever	57	2.7	32	1.6	18		107	2.6
Rickettsial disease	2		5	0.2			7	0.2
Rubella	4		3		1		8	0.2
Salmonellosis	673	32.0	639	31.4	23		1335	32.3
Shigellosis	46	2.2	52	2.6	4		102	2.5
Tetanus			1				1	
Tuberculosis disease	180	8.6	173	8.5	5		358	8.6
Typhoid fever	14	0.7	27	1.3	1		42	1.0
VTEC/STEC infection	44	2.1	42	2.1	1		87	2.1
Yersiniosis	247	11.8	222	10.9	18		487	11.8

Note : Where less than 5 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, 2006

Table 7. Cases and rates per 100 000 population in 2006 by age group

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	237	415.0	1227	544.2	680	235.3	713	234.8	1251	400.8	2884	522.7	2218	378.9	2034	329.4	1889	377.2	1395	412.7	1213	338.1	132		15873	383.5	
Cryptosporidiosis	19	33.3	251	111.3	88	30.5	59	19.4	39	12.5	88	16.0	90	15.4	54	8.7	32	6.4	9	2.7	6	1.7	1		736	17.8	
Dengue fever									1	1.8	10	1.8	2		3		3								19	0.5	
Gastroenteritis	4		22	9.8	10	3.5	19	6.3	36	11.5	82	14.9	139	23.7	132	21.4	131	26.2	79	23.4	219	61.0	60		933	22.5	
Giardiasis	25	43.8	253	112.2	76	26.3	24	7.9	17	5.4	122	22.1	289	49.4	160	25.9	117	23.4	83	24.6	41	11.4	7		1214	29.3	
<i>Haemophilus influenzae</i> type b	1		4		2														1		1				9	0.2	
Hepatitis A			16	7.1	18	6.2	11	3.6	14	4.5	11	2.0	17	2.9	11	1.8	10	2.0	5	1.5	8	2.2	1		122	2.9	
Hepatitis B							1		4		23	4.2	13	2.2	14	2.3	5	1.0	3						63	1.5	
Hepatitis C							1		3		9	1.6	6	1.0	8	1.3	3		2		2				34	0.8	
Lead absorption			8	3.5			1		5	1.6	8	1.5	11	1.9	20	3.2	15	3.0	5	1.5	5	1.4			78	1.9	
Legionellosis							1				1		4		7	1.1	12	2.4	14	4.1	13	3.6			52	1.3	
Leprosy											2						1								3	0.1	
Leptospirosis									3		12	2.2	24	4.1	25	4.0	21	4.2	3						88	2.1	
Listeriosis	1		1								2		1		2		2		4		6	1.7			19	0.5	
Malaria					1		1		2		8	1.5	10	1.7	1		1		2		3		1		30	0.7	
Measles	8	14.0	11	4.9							1														20	0.5	
Meningococcal disease	34	59.5	28	12.4	9	3.1	6	2.0	31	9.9	17	3.1	4		10	1.6	9	1.8	3		9	2.5			160	3.9	
Mumps			11	4.9	11	3.8	11	3.6	1		3		7	1.2	3						1				48	1.2	
Paratyphoid fever			2		2		1		2		7	1.3	3		1		4		1						23	0.6	
Pertussis	38	66.5	52	23.1	77	26.6	94	31.0	93	29.8	116	21.0	161	27.5	160	25.9	167	33.3	109	32.2	50	13.9	5		1122	27.1	
Rheumatic fever					29	10.0	49	16.1	16	5.1	9	1.6	3										1		107	2.6	
Rickettsial disease													2		2		1		1		1				7	0.2	
Rubella	2		4				1						1												8	0.2	
Salmonellosis	83	145.3	280	124.2	93	32.2	55	18.1	67	21.5	185	33.5	132	22.5	119	19.3	143	28.6	101	29.9	73	20.3	4		1335	32.3	
Shigellosis			15	6.7	10	3.5	2		3		18	3.3	20	3.4	13	2.1	10	2.0	7	2.1	3		1		102	2.5	
Tetanus					1																				1	0.0	
Tuberculosis disease	3		10	4.4	4		19	6.3	20	6.4	88	16.0	58	9.9	49	7.9	33	6.6	27	8.0	47	13.1			358	8.6	
Typhoid fever			6	2.7	7	2.4	3		5	1.6	5	0.9	6	1.0	8	1.3			2						42	1.0	
VTEC/STEC infection	6	10.5	38	16.9	5	1.7	3		1		7	1.3	4		5	0.8	3		8	2.4	5	1.4	2		87	2.1	
Yersiniosis	28	49.0	85	37.7	10	3.5	12	4.0	14	4.5	60	10.9	69	11.8	60	9.7	63	12.6	37	10.9	46	12.8	3		487	11.8	

Note : Where less than 5 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, 1987-2006

Table 9. Notifiable disease cases by year and source, 1987-2006

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
AIDS	Notification	28	38	59	72	78	50	70	44	49	76	43	29	33	26	26	17	33	38	49	29
Campylobacteriosis	Notification	2921	2796	4187	3850	4148	5144	8101	7714	7442	7635	8924	11572	8161	8418	10146	12494	14787	12215	13836	15873
Cholera	Notification	2	0	0	5	0	0	0	2	2	0	0	1	1	0	3	1	1	2	1	0
Creutzfeldt-Jakob disease	Notification										2	1	0	2	3	1	3	6	8	3	5
Cryptosporidiosis	Notification										119	357	866	977	775	1208	975	817	611	889	736
Dengue fever	Notification	0	1	3	2	3	1	1	0	6	23	14	26	9	7	93	70	55	8	11	19
Gastroenteritis	Notification										555	310	492	601	726	940	1087	1025	1363	557	933
Giardiasis	Notification										1235	2127	2183	1793	1688	1604	1547	1570	1514	1231	1214
<i>H. influenzae</i> serotype b	Laboratory	93	107	121	143	148	166	118	75	14	24	8	10	9	10	8	3	9	3	6	9
	Notification										26	9	11	10	13	11	3	12	4	7	9
Hepatitis A	Notification	158	176	134	150	224	288	257	179	338	311	347	145	119	107	61	106	70	49	51	122
Hepatitis B	Notification	474	370	309	242	227	221	145	133	125	104	138	88	94	79	56	67	61	38	59	63
Hepatitis C	Notification	18	20	13	11	25	89	91	79	88	59	92	102	96	80	58	53	40	24	29	34
Hydatid disease	Notification	2	2	0	4	0	4	4	1	5	3	2	2	8	3	7	2	0	1	2	0
Influenza	Sentinel isolates	18	136	119	343	183	317	423	441	521	673	743	127	425	73	313	241	230	231	273	315
Legionellosis	Notification	91	62	17	20	14	11	24	66	33	36	63	43	51	61	46	49	77	62	85	52
	Laboratory				21	42	60	76	121	76	60	109	107	65	56	56	53	82	75	83	54
Leprosy	Notification	8	2	4	1	4	5	3	1	1	10	3	3	10	4	3	4	4	3	2	3
Leptospirosis	Notification	129	99	90	117	106	70	116	70	65	56	52	75	59	98	99	140	113	102	85	88
	Laboratory		192	182	229	176	218	234	168	183	140	84	117	76	114	113	181	149	113	109	67
Listeriosis	Notification	12	7	10	16	26	16	11	8	13	10	35	17	19	22	18	19	24	26	20	19
Malaria	Notification	22	25	27	32	39	29	58	34	41	107	65	73	46	111	54	61	46	33	32	30
Measles	Notification										68	1984	164	107	64	82	21	67	32	19	20
	Laboratory	26	5	5	7	355	53	4	4	15	25	1220	35	2	9	21	6	15	10	3	1
Meningococcal disease	Notification	179	83	49	53	71	153	202	208	394	473	609	439	507	477	648	555	542	343	226	160
Mumps	Notification										76	90	85	56	50	56	64	56	45	61	48
	Laboratory	28	5	105	26	23	10	25	245	66	20	14	8	5	2	22	18	11	12	7	9
Paratyphoid fever	Notification		23	13	30	22	13	23	30	24	20	25	18	17	24	32	16	18	28	25	23
Pertussis	Notification										1022	284	153	1046	4140	1334	1068	585	3485	2719	1122
Rheumatic fever (initial attack)	Notification	215	153	148	90	97	70	81	98	88	110	95	65	71	136	114	87	148	75	76	103
Rubella	Notification										306	80	53	35	26	30	33	26	23	13	8
	Laboratory	50	95	114	168	81	27	244	104	1581	339	21	2	0	0	3	4	3	3	7	3
Salmonellosis	Notification	1140	1128	1860	1619	1244	1239	1340	1522	1334	1141	1177	2069	2077	1795	2417	1880	1401	1081	1382	1335
Shigellosis	Notification	143	145	137	197	152	124	128	185	191	167	117	122	147	115	157	112	87	140	183	102
Tetanus	Notification	4	1	0	0	0	8	2	2	2	3	0	2	6	1	4	1	2	1	1	1
Tuberculosis	Notification	296	295	303	348	335	327	323	352	391	352	321	365	446	354	369	381	422	371	339	358
Typhoid fever	Notification	4	15	17	7	9	11	14	24	21	15	16	31	10	21	27	23	20	31	30	42
VTEC/STEC infection	Notification							3	3	6	7	13	48	64	67	76	73	104	89	92	87
Yersiniosis	Notification										330	488	546	503	396	429	476	439	420	407	487

## J. PREVALENCE OF ANTIMICROBIAL RESISTANCE, 1991-2005

Table 10. Prevalence of antimicrobial resistance, 1991-2005

Pathogen	Antimicrobial	Percent resistance <sup>a</sup> (number tested)				
		1991-1993	1994-1996	1997-1999	2000-2002	2003-2005
<i>S. aureus</i> <sup>b</sup>	methicillin	0.6 (42839)	2.8 (58283)	4.9 (136356)	7.2 (251448)	7.4 (219363)
	erythromycin	6.8 (40425)	8.0 (54870)	10.8 (134350)	12.0 (221394)	12.0 (164220)
	co-trimoxazole	1.1 (27469)	0.8 (32926)	0.6 (91391)	1.2 (149166)	2.0 (126840)
	mupirocin	NA <sup>c</sup>	10.1 (9291)	18.2 (37173)	20.0 (91555)	16.7 (48423)
Methicillin-resistant <i>S. aureus</i> <sup>d</sup>	erythromycin	58.2 (701)	31.5 (2249)	26.2 (1303)	40.0 (1409)	46.3 (1596)
	co-trimoxazole	24.8 (701)	8.6 (2249)	1.8 (1303)	6.7 (1409)	7.4 (1596)
	mupirocin	2.0 (701)	6.4 (2244)	6.0 (1303)	8.5 (1409)	9.5 (1596)
	rifampicin	13.0 (701)	0.3 (2249)	0.8 (1303)	0.7 (1409)	0.5 (1596)
<i>S. pneumoniae</i> , non-invasive disease <sup>b</sup>	penicillin <sup>e</sup>	0.8 (3720)	9.5 (7076)	19.0 (10976)	26.5 (12859)	27.0 (15037)
	erythromycin	1.3 (3554)	8.3 (6832)	14.5 (11212)	18.6 (14404)	19.9 (10222)
	tetracycline	1.7 (3376)	10.5 (5019)	11.2 (5993)	15.4 (9476)	18.1 (6796)
<i>S. pneumoniae</i> , invasive disease <sup>f</sup>	penicillin <sup>e</sup>	1.4 (694)	3.4 (989)	15.0 (1182)	15.3 (1494)	17.2 (1560)
	erythromycin	1.9 (694)	2.6 (989)	5.7 (910)	7.2 (1494)	9.9 (1560)
	cefotaxime <sup>e</sup>	0.1 (694)	1.8 (989)	7.3 (1182)	6.2 (1494)	11.5 (1560)
<i>Enterococcus</i> spp <sup>b</sup>	amoxicillin <sup>g</sup>	2.3 (2573)	1.5 (7373)	2.4 (17548)	3.0 (22566)	2.8 (26492)
	vancomycin	0 (148)	0.2 (1141)	0.5 (4752)	0.3 (7505)	0.1 (9948)
<i>E. coli</i> , urinary isolates <sup>b</sup>	amoxicillin <sup>g</sup>	56.2 (29394)	55.9 (48706)	56.0 (138712)	54.4 (194799)	50.7 (117009)
	co-amoxiclav	6.9 (27249)	10.6 (42666)	12.2 (136326)	9.6 (194950)	8.5 (127750)
	trimethoprim	18.8 (29340)	19.6 (48098)	22.6 (111710)	22.3 (207837)	21.5 (138748)
	nitrofurantoin	2.2 (28331)	1.6 (48123)	1.7 (124362)	1.5 (206149)	1.4 (139738)
	fluoroquinolone	0.2 (7014)	0.5 (40032)	0.6 (118917)	1.6 (201382)	2.4 (135803)
<i>E. coli</i> , non-urinary isolates <sup>b,h</sup>	co-amoxiclav	18.3 (2318)	22.8 (7358)	21.8 (15948)	17.5 (11508)	15.2 (5059)
	cefuroxime	2.3 (1158)	3.2 (6309)	4.5 (6893)	4.2 (6576)	3.4 (3956)
	gentamicin	0.5 (3200)	0.8 (10352)	0.9 (13789)	2.4 (10392)	2.6 (5290)
	fluoroquinolone	0.1 (728)	0.5 (4717)	0.8 (10800)	2.4 (8821)	3.9 (4212)
<i>P. aeruginosa</i> <sup>b</sup>	gentamicin	5.8 (5918)	12.5 (9556)	9.5 (20542)	10.5 (25561)	6.1 (23148)
	tobramycin	3.1 (2535)	3.9 (6757)	2.8 (11033)	3.6 (10421)	3.3 (7616)
	ceftazidime	6.6 (1006)	5.0 (4832)	5.2 (11147)	3.9 (13253)	4.3 (16031)
	fluoroquinolone	8.4 (1652)	8.8 (8123)	9.9 (16551)	9.3 (22869)	8.3 (23761)
<i>H. influenzae</i> , non-invasive disease <sup>b</sup>	amoxicillin <sup>g</sup>	8.4 (4131)	12.0 (12244)	19.3 (18852)	21.9 (28476)	19.9 (19529)
	co-amoxiclav	1.1 (1136)	1.1 (9839)	0.6 (15040)	0.8 (16333)	1.0 (14090)
	co-trimoxazole	11.4 (1581)	11.9 (6605)	14.7 (13964)	17.3 (22443)	18.2 (15939)
	tetracycline	1.7 (2082)	1.0 (7810)	1.5 (13007)	1.2 (15633)	0.8 (12783)
<i>H. influenzae</i> , invasive disease <sup>f</sup>	amoxicillin <sup>g</sup>	13.2 (478)	21.8 (179)	11.5 (122)	19.2 (125)	31.6 (155)
	co-amoxiclav	0.2 (478)	3.4 (179)	1.6 (122)	1.6 (125)	9.7 (155)
	cefuroxime	0.8 (478)	3.4 (179)	4.9 (122)	0.8 (125)	9.7 (155)
<i>N. meningitidis</i> , invasive disease <sup>f</sup>	penicillin <sup>i</sup>	2.1 (291)	3.9 (659)	7.9 (431)	7.5 (796)	12.0 (551)
	rifampicin	0.3 (291)	0 (659)	0 (431)	0 (796)	0.2 (551)
<i>N. gonorrhoeae</i> <sup>b,j</sup>	penicillin	16.4 (85)	11.6 (879)	10.4 (1437)	7.1 (2782)	5.8 (4700)
	fluoroquinolone	0 (85)	0.7 (864)	1.8 (1437)	6.3 (2349)	14.3 (4195)
<i>M. tuberculosis</i> <sup>b</sup>	isoniazid	NA	4.6 (438)	8.2 (757)	8.5 (811)	8.9 (872)
	rifampicin	NA	0.7 (438)	1.3 (757)	0.7 (811)	1.0 (872)
	MDR <sup>k</sup>	NA	0.7 (438)	0.9 (757)	0.5 (811)	1.0 (872)

<sup>a</sup> intermediate resistance not included in resistant category unless otherwise stated (refer footnotes e and i below)

<sup>b</sup> collated clinical laboratory data

<sup>c</sup> NA = not available

<sup>d</sup> MRSA isolates tested by ESR

<sup>e</sup> includes intermediate resistant and resistant isolates

<sup>f</sup> invasive disease isolates tested by ESR

<sup>g</sup> ampicillin used in laboratory testing

<sup>h</sup> from 2004, data based on *E. coli* from bacteraemia

<sup>i</sup> reduced susceptibility (MIC 0.12-0.5 mg/L)

<sup>j</sup> data from northern North Island only up until 2000, thereafter national data used

<sup>k</sup> multidrug resistant (i.e., resistant to at least isoniazid and rifampicin)