

Antimicrobial resistance among Neisseria gonorrhoeae

January-March 2007

This surveillance of antimicrobial resistance among *Neisseria gonorrhoeae* is based on antimicrobial susceptibility test results collected quarterly from the laboratories that do the majority of the local sexual health clinic and general practice gonococcal diagnostic work. All the participating laboratories use CLSI susceptibility test methods.

This report covers the 3 months of 1 January to 31 March 2007 and the previous 12 months of 1 April 2006 to 31 March 2007. The rates of ciprofloxacin, penicillin and tetracycline resistance are shown by district health board in the table on the next page. All isolates tested were susceptible to ceftriaxone.

Over the last 12 months, 1 April 2006 to 31 March 2007, the national rate of ciprofloxacin resistance was 15.4% and the rate of penicillin resistance was 6.8%. Ciprofloxacin resistance was more prevalent than penicillin resistance in most parts of the country. As has been noted previously, both ciprofloxacin and penicillin resistance rates are quite variable throughout the country. Ciprofloxacin resistance was $\geq 5\%$ in 12 of the 15 district health board areas for which data was available for the last 12 months, with rates $\geq 10\%$ in 9 board areas. In contrast, penicillin resistance was $\leq 5\%$ in 10 of the 15 district health board areas.

Helen Heffernan Antibiotic Reference Laboratory

Acknowledgements: The following laboratories are participating in this surveillance system: Aotea Pathology, Wellington; Canterbury Health Laboratories; Diagnostic and Medical Laboratory, Auckland; Dunedin Hospital; Gisborne Hospital; Gisborne Medlab; Hamilton Medical Laboratory; Hamilton Pathology Laboratory; Healthlab Kew, Invercargill; LabCare Pathology, New Plymouth; LabPlus, Auckland; MedLab Central, Palmerston North; Medlab South, Christchurch; Nelson Hospital; Northland Pathology; Rotorua Diagnostic Laboratory; Rotorua Hospital; Southern Community Laboratories, Hastings, Christchurch and Dunedin; Tauranga Medlab; Waikato Hospital; Whakatane Hospital and Whangarei Hospital.

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Ciprofloxacin, penicillin and tetracycline resistance among *Neisseria gonorrhoeae*, during the 3 months, January to March 2007, and the previous 12 months, April 2006 to March 2007

District Health Board ^{1,2}	Ciprofloxacin				Penicillin				Tetracycline			
	Jan - Mar 07		Apr 06 - Mar 07		Jan - Mar 07		Apr 06 - Mar 07		Jan - Mar 07		Apr 06 - Mar 07	
	No. tested	% resistant	No. tested	% resistant	No. tested	% resistant (intermediate)	No.	% resistant (intermediate)	No. tested	% resistant	No. tested	% resistant
Northland	6	0	42	7.1	6	0 (50.0)	42	9.5 (71.4)	2	0	24	16.7
Auckland ³	297	10.1	1078	9.5	297	9.8 (75.1)	1079	11.2 (75.9)	81	43.2	289	44.6
Waikato	75	26.7	328	25.6	54	1.9 (81.5)	235	1.7 (61.3)	0	-	0	-
Lakes	47	29.8	156	20.5	40	10.0 (67.5)	135	8.9 (68.2)	0	-	1	100
Bay of Plenty	51	51.0	139	33.1	51	2.0 (88.2)	134	1.5 (65.7)	0	-	7	42.9
Tairawhiti	29	17.2	102	26.5	18	11.1 (66.7)	46	6.5 (63.0)	18	16.7	46	30.4
Taranaki	6	0	6	0	6	0 (100)	6	0 (100)	6	0	6	0
Hawkes Bay	60	16.7	217	8.3	60	1.7 (83.3)	218	3.2 (71.1)	32	18.8	67	17.9
MidCentral	22	27.3	89	12.4	22	0 (59.1)	89	0 (38.2)	22	27.3	89	14.6
Capital and Coast/Hutt ⁴	61	26.2	160	25.6	60	0 (85.0)	159	1.3 (76.1)	60	26.7	159	28.9
Nelson Marlborough	8	62.5	21	28.6	8	37.5 (25.0)	21	19.1 (42.9)	2	50.0	15	13.3
West Coast	0	-	3	0	0	-	3	0 (66.7)	0	-	3	0
Canterbury ⁵	103	31.1	366	14.2	103	4.9 (78.6)	367	4.6 (73.6)	103	29.1	367	14.2
Otago	20	20.0	38	13.2	20	5.0 (45.0)	38	2.6 (63.2)	20	15.0	29	10.3
Southland	4	0	26	0	4	0 (0)	26	0 (11.5)	4	0	16	0
Total	789	21.3	2771	15.4	749	6.3 (75.6)	2598	6.8 (70.3)	350	28.6	1118	24.9

Notes:

- 1 The patient's place of residence, if known, was used to assign cases to a DHB, otherwise the location of the laboratory was used. For laboratories that do a lot of out-of-area work, place of residence data was available and used.
- 2 No data for Whanganui or Wairarapa District Health Boards.
- The three Auckland District Health Boards (Waitemata, Auckland and Counties Manukau) are combined.
- The two Wellington District Health Boards (Capital and Coast, and Hutt) are combined.
- 5 The two Canterbury District Health Boards (Canterbury and South Canterbury) are combined.