



Antimicrobial resistance among *Neisseria gonorrhoeae*

April-June 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 April to 30 June 2007 and the previous 12 months of 1 July 2006 to 30 June 2007. The rates of ciprofloxacin, penicillin and tetracycline resistance are shown by district health board (DHB) in the table on the next page. All isolates tested were susceptible to ceftriaxone.

Over the last 12 months, 1 July 2006 to 30 June 2007, the national rate of ciprofloxacin resistance was 17.6% and the rate of penicillin resistance was 5.9%. Ciprofloxacin resistance is now almost universally more prevalent than penicillin resistance in most parts of New Zealand. Ciprofloxacin resistance was more prevalent than penicillin resistance in 11 of the 13 DHB areas for which susceptibility data for ≥ 20 gonococcal isolates was available for the last 12 months (see table on the next page). While in most of these 11 areas, ciprofloxacin resistance was usually very much higher than penicillin resistance, in the Auckland area the rates of resistance to the two antibiotics were similar (11.1% and 10.1% for ciprofloxacin and penicillin, respectively).

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Acknowledgements: The following laboratories are participating in this surveillance system: Aotea Pathology, Wellington; Canterbury Health Laboratories; Diagnostic and Medical Laboratory, Auckland; Gisborne Hospital; Hamilton Medical 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; Waikato Pathology Laboratory; Whakatane Hospital and Whangarei Hospital.

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

District Health Board ^{1,2}	Ciprofloxacin				Penicillin				Tetracycline			
	Apr - Jun 07		Jul 06 - Jun 07		Apr - Jun 07		Jul 06 - Jun 07		Apr - Jun 07		Jul 06 - Jun 07	
	No. tested	% resistant	No. tested	% resistant	No. tested	% resistant (intermediate)	No. tested	% resistant (intermediate)	No. tested	% resistant	No. tested	% resistant
Northland	5	0	33	9.1	5	0 (80.0)	33	9.1 (72.7)	0	-	16	12.5
Auckland ³	268	13.1	1113	11.1	269	8.6 (83.3)	1116	10.1 (79.2)	66	25.8	291	39.9
Waikato	79	19.0	314	27.7	50	2.0 (70.0)	217	1.4 (68.2)	1	0	1	0
Lakes	28	42.9	139	25.9	24	4.2 (66.7)	119	8.4 (68.1)	0	-	0	-
Bay of Plenty	41	36.6	148	36.5	42	0 (85.7)	146	1.4 (75.3)	0	-	3	66.7
Tairāwhiti	27	11.1	96	22.9	8	0 (100)	40	7.5 (72.5)	8	25.0	40	32.5
Taranaki	14	14.3	20	10.0	14	0 (85.7)	20	0 (90.0)	14	14.3	20	10.0
Hawkes Bay	62	33.9	232	16.4	62	0 (82.3)	233	2.2 (77.3)	62	30.7	116	24.1
MidCentral	47	10.6	114	14.0	47	0 (57.5)	114	0 (49.1)	47	12.8	114	15.8
Capital and Coast/Hutt ⁴	82	20.7	188	21.8	82	2.4 (82.9)	187	1.1 (80.2)	82	35.4	187	30.5
Nelson Marlborough	0	-	15	40.0	0	-	15	26.7 (46.7)	0	-	9	22.2
West Coast	0	-	1	0	0	-	1	0 (0)	0	-	1	0
Canterbury ⁵	90	22.2	361	18.6	90	2.2 (78.9)	361	3.6 (79.0)	90	23.3	361	18.6
Otago	19	5.3	48	12.5	19	0 (52.6)	48	2.1 (54.2)	18	0	42	7.1
Southland	9	0	29	0	9	0 (11.1)	29	0 (6.9)	9	11.1	21	4.8
Total	771	18.9	2852	17.6	721	4.0 (78.1)	2680	5.9 (74.7)	397	24.4	1223	25.4

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.
- 3 The three Auckland District Health Boards (Waitemata, Auckland and Counties Manukau) are combined.
- 4 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.