



Antimicrobial resistance among *Neisseria gonorrhoeae*

October-December 2005

In October 2005, ESR commenced quarterly collection and analysis of antimicrobial resistance among *Neisseria gonorrhoeae*. This more frequent surveillance is considered necessary due to the sharp increase in resistance, especially to ciprofloxacin, seen in some parts of the country in recent years.

Antimicrobial susceptibility test results are collected 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 is the first report from this surveillance system. Subsequent quarterly reports should be more timely, as most initial set-up problems have now been addressed.

For the three months, 1 October to 31 December 2005, data was collected from 23 laboratories, although some of the labs only contributed results for the later part of the three-month period. 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.

Ciprofloxacin resistance is clearly now more prevalent than penicillin resistance in most parts of the country. Although the number of gonococci isolated in several regions was small, there appear to be quite large geographical differences in resistance within New Zealand.

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Ciprofloxacin, penicillin and tetracycline resistance among *Neisseria gonorrhoeae*, October to December 2005

District Health Board ¹	Ciprofloxacin		Penicillin			Tetracycline	
	Number tested	Percent resistant	Number tested	Percent resistant (intermediate)		Number tested	Percent resistant
Northland	12	8.3	12	0	(91.7)	11	9.1
Auckland ²	250	16.4	121	14.9	(62.0)	37	24.3
Waikato	68	25.0	51	0	(49.0)	2	50.0
Lakes	33	6.1	30	6.7	(46.7)	0	-
Bay of Plenty	27	7.4	26	0	(57.7)	2	0
Tairāwhiti	4	0	2	0	(100)	4	0
Hawkes Bay	37	0	35	2.9	(11.4)	1	0
Capital and Coast/Hutt ³	26	26.9	26	3.8	(57.7)	26	26.9
Nelson Marlborough	9	11.1	9	0	(55.6)	8	0
West Coast	3	0	3	0	(66.7)	3	0
Canterbury ⁴	35	8.6	35	5.7	(65.7)	35	2.9
Otago	5	0	5	0	(100)	5	0
Southland	3	0	3	0	(66.7)	3	0
Total	512	14.5	358	6.7	(55.3)	137	13.9

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 The three Auckland Health Districts (Waitemata, Auckland and Counties Manukau) are combined.
- 3 The two Wellington Health Districts (Capital and Coast, and Hutt) are combined.
- 4 The two Canterbury Health Districts (Canterbury and South Canterbury) are combined.

Acknowledgements: The following laboratories are participating in this surveillance system: Canterbury Health Laboratories; Diagnostic and Medical Laboratory, Auckland; Dunedin Hospital; Gisborne Hospital; Gisborne Medlab; Hamilton Medical Laboratory; Hamilton Pathology Laboratory; Hastings Medlab; LabPlus, Auckland; Medlab South; Nelson Hospital; Nelson Diagnostic Laboratory; Northland Pathology; Rotorua Diagnostic Laboratory; Rotorua Hospital; Southern Community Laboratories, Hastings, Christchurch and Dunedin; Tauranga Medlab; Waikato Hospital; Wellington Medical Laboratory; Whakatane Hospital and Whangarei Hospital. In addition, MedLab Central, Palmerston North, will participate in future surveillance.

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