

Antimicrobial susceptibility of invasive *Neisseria meningitidis*, 2004

The antimicrobial susceptibility of all 180 viable meningococcal isolates received at ESR from cases of invasive disease in 2004 was tested. All isolates were susceptible to the four antimicrobials tested (see table). 15.6% (28/180) of isolates had reduced penicillin susceptibility, with MICs of 0.12-0.5 mg/L. 77.8% (7/9) of serogroup W135 isolates and 33.3% (5/15) of serogroup C isolates had reduced penicillin susceptibility, in contrast to 10.6% (16/151) of serogroup B isolates and 6.7% (9/134) of the NZ epidemic strain (B:4:P1.4).

MIC range, MIC₉₀ and resistance among Neisseria meningitidis isolates from invasive disease cases, 2004

Antimicrobial	MIC range (mg/L)	MIC ₉₀ (mg/L)	Percent reduced susceptibility	Percent resistance
penicillin	0.016-0.5	0.12	15.6 ¹	0
ceftriaxone	0.002-0.004	0.002	0	0
rifampicin	0.002-0.12	0.03	0	0
ciprofloxacin	0.002-0.008	0.008	0	0

¹ penicillin MICs 0.12-0.5 mg/L

The proportion of isolates with reduced penicillin susceptibility has increased over the last 11 years, varying from a low of 0.6% in 1994 to a high of 18.5% in 1999 (see figure). No resistance to ceftriaxone or ciprofloxacin has been confirmed among meningococci isolated from cases of invasive disease in New Zealand. Four rifampicin-resistant isolates have been confirmed: one serogroup B (B:4:P1.4) isolate in 2003, one serogroup C (C:2b:P1.2) isolate in 1997, one serogroup B (B:15:P1.7,16) isolate in 1992, and one serogroup A isolate in 1986.

Reduced susceptibility to penicillin among meningococci from invasive disease, 1994-2004



