

# Resistance of *N. gonorrhoeae* to penicillin and three other antibiotics in a rural area in Kenya.

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## Abstract:

Of 90 isolates of *Neisseria gonorrhoeae* in a rural area in Kenya, 44 (48.9%) produced beta-lactamase (penicillinase). Testing for susceptibility of 35 penicillinase producing *N. gonorrhoeae* (PPNG) strains to four antibiotics yielded the following results: 16 (45.7%) showed a decreased susceptibility to tetracycline; six (17.1%) showed resistance, probably plasmid mediated; 10 (28.6%) had intermediate susceptibility to gentamicin; one (2.9%) was resistant; and two (5.7%) isolates were resistant to cefotaxime. 16 (57.1%) of 28 non PPNG strains showed a decreased susceptibility to penicillin; 10 (35.7%) were resistant. Nine (32.1%) of 28 non-PPNG isolates showed intermediate susceptibility to tetracycline; one (3.6%) was resistant. Eight of non PPNG isolates (28.6%) showed decreased susceptibility to gentamicin. These results imply that penicillin and tetracycline should be abandoned as primary therapy. For the time being, thiamphenicol and spectinomycin seem to be good alternatives. The observation of cefotaxime resistance in *N. gonorrhoeae* in a rural area implies a warning concerning future possibilities for use of third generation cephalosporins