Antimicrobial Susceptibility of Community-Acquired Respiratory Pathogens in Ireland compared with England, Wales and Scotland

The BSAC Extended Working Party on Respiratory Resistance Surveillance[1] and GR Micro Limited[2]

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Introduction

The BSAC Respiratory Resistance Surveillance Programme was set up in 1999 to monitor antimicrobial susceptibility of the major pathogens causing community-acquired respiratory tract infection in the United Kingdom and Ireland.

Methods

Three laboratories in Ireland and seventeen in Great Britain (GB i.e. England, Wales and Scotland) contributed a total of 661 isolates of *Streptococcus pneumoniae* and 936 of *Haemophilus influenzae* from clinical samples collected in the winter 1999-2000. A central testing laboratory (GR Micro Ltd) tested all the isolates by the NCCLS microdilution method to establish minimum inhibitory concentrations (MICs). The susceptibility of isolates was assessed by comparison with NCCLS breakpoints[1].

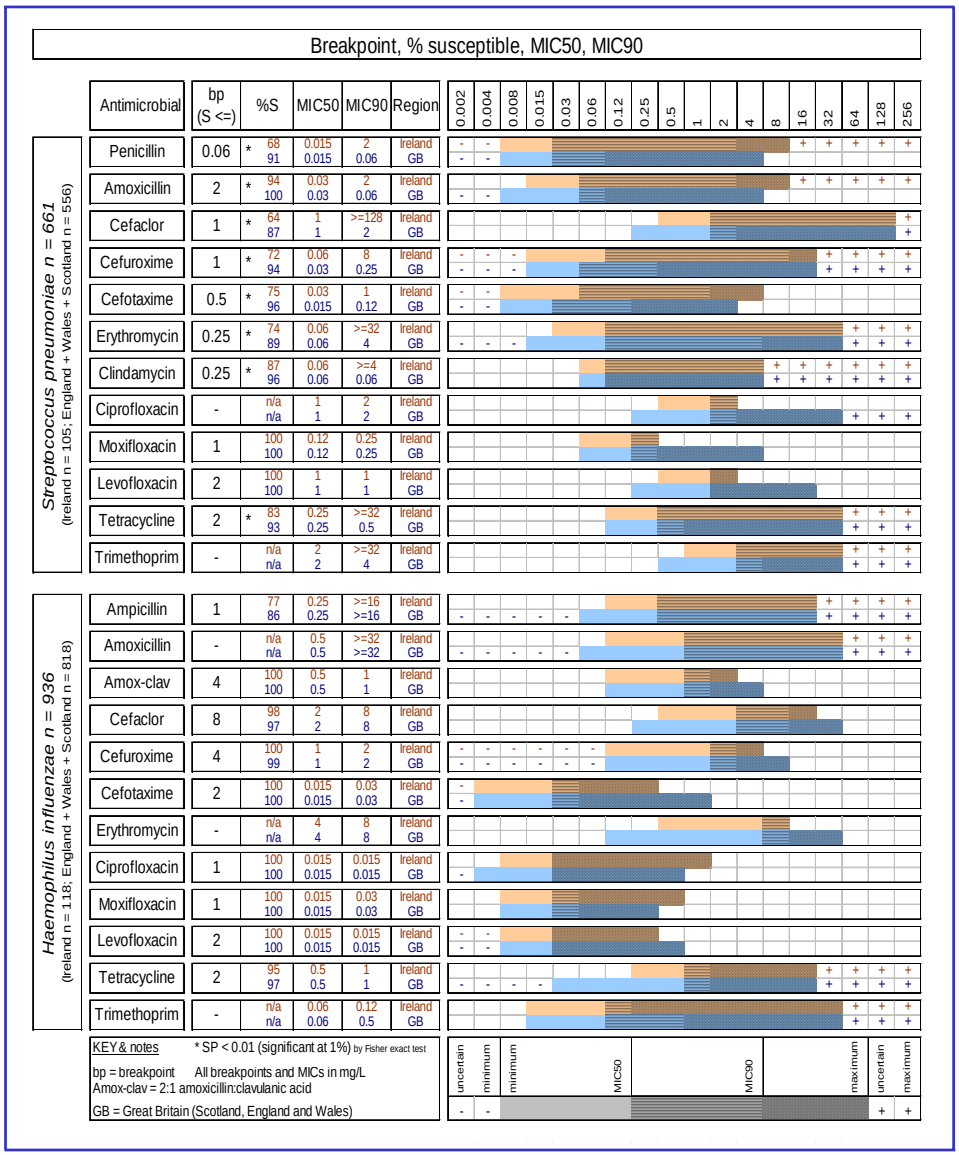
Results

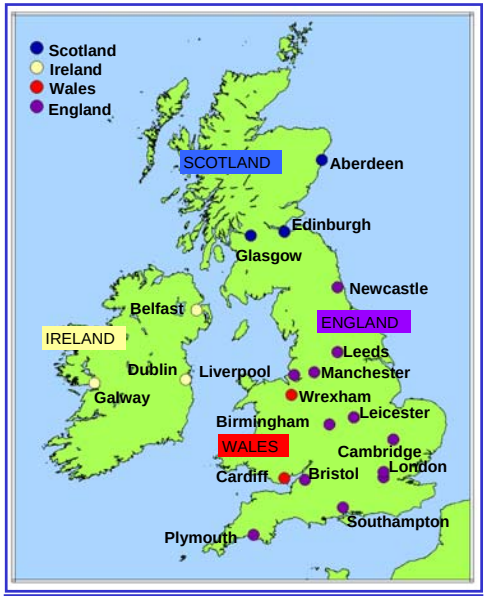
S. pneumoniae from Ireland showed significantly reduced susceptibility to penicillin, amoxicillin, cefaclor, cefuroxime, cefotaxime, erythromycin, clindamycin and tetracycline when compared with GB. The lowest susceptibility was to cefaclor (64% Ireland, 87% GB.) There was no difference between Ireland and GB in susceptibility to moxifloxacin or levofloxacin.

H. influenzae showed no significant differences in susceptibility between Ireland and GB except with ampicillin (77% Ireland, 86% GB). Susceptibility was above 95% for all agents tested except ampicillin.

Conclusion

S. pneumoniae and *H. influenzae* in England, Wales and Scotland and *H. influenzae* in Ireland are highly susceptible to most agents. *S. pneumoniae* in Ireland have reduced susceptibility to many agents other than quinolones; susceptibility is below 80% for penicillin, cefaclor, cefuroxime, cefotaxime and erythromycin.





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References

1 NCCLS January 2001 vol 21, no 1, document M100-S11

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