5-year Trends in Resistance among Community-acquired Lower Respiratory Tract Isolates of *S. pneumoniae* from the UK and Ireland

R. Reynolds1, D. Felmingham2, J. Shackcloth2, L. Williams2 and The BSAC Extended Working Party on Respiratory Resistance Surveillance1

1British Society for Antimicrobial Chemotherapy, Birmingham, B1 2JS 2GR Micro Limited, London, NW1 3ER

**Methods.** A total of 27 centres in the UK and Ireland contributed 3584 lower respiratory tract isolates of *Streptococcus pneumoniae* to the BSAC Respiratory Resistance Surveillance Programme3 over five winters (1999-2000 to 2003-04). Isolates were excluded if they were duplicates within 2 weeks, or from samples collected >48 hours after hospitalisation, or from patients with cystic fibrosis. MICs were determined centrally using the BSAC agar dilution method and interpreted by BSAC criteria. Logistic regression models for penicillin-non-susceptibility and tetracycline-, erythromycin- and ciprofloxacin-resistance (PEN-NS, TET-R, ERY-R & CIP-R) were fitted by a stepwise method.

**Results.** Sex, care setting (hospital / community / nursing home) and isolate source (sputum / other) did not contribute significantly and were not included in any final models. Final models included centre, age or age group, and year. (See P1454 for detail on effect of age.)

---

**Acknowledgements**


Organism ID and Susceptibility Testing: J. Shackcloth4, A. Williams4, L. Williams4 Department of Medical Microbiology, North Bristol NHS Trust; Wyth, Maidhead; Addenbrooke’s Hospital, Cambridge; GR Micro Ltd; Morson Research Limited, Wakefield; MPF South West, Gloucester; Health Protection Agency, London; GlaxoSmithKline, Harlow.

Collecting Laboratories: Royal Aberdeen1; WGH Edinburgh; New Royal Edinburgh; SGH Glasgow; Glasgow Royal; Royal Belfast1; Usher Dundonald; Beaumont Dublin; Meath Adelaide Dublin; St. Vincent’s Dublin; UCH Galway; UWH Cardiff1; Wrexham Maelor1; City Birmingham; Southmead Bristol; Addenbrooke’s Cambridge1; DEH Gateshead; St. James’s Leeds1; Royal Leicester; University of Liverpool1; St. Bartholomew’s and Royal London; UCH, London; Freeman Newcastle; Royal Victoria Newcastle; Dentford Plymouth; Hope Saltford; General Southampton1 (Contributed in all 5 years)

**Results** The prevalence of PEN-NS, TET-R and ERY-R fell significantly in Ireland but not in the UK (England, Wales, Scotland and Northern Ireland) over the five years studied. CIP-R varied between years but with no consistent trend over time in Ireland or the UK.

---

Sponsored by: Abbott Laboratories, Bayer Pharmaceuticals, GeneSoft Pharmaceuticals, GlaxoSmithKline, Aventis Pharma, Gr Micro Ltd, London

Supported by: BSAC

Central Laboratory: GR Micro Ltd, London