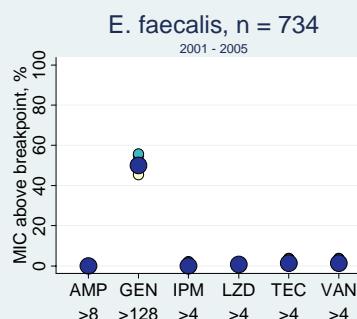
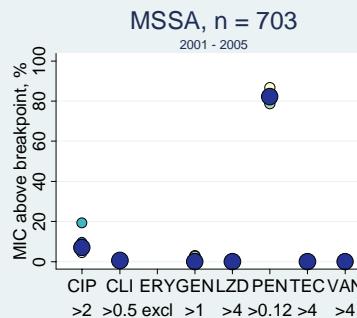


Introduction & Methods

The BSAC Bacteraemia Resistance Surveillance Programme monitors resistance in pathogens from blood. Since 2001, a total of 30 centres have contributed over 13,000 isolates, with over 200,000 MIC results obtained by central testing with BSAC MIC methods.



Results - Gram positive

36% of *S. aureus* in 2005 were MRSA, compared with 40 - 48% in 2001-04. There was a suggestion of upward creep of vancomycin MICs in *S. aureus*, roughly 2-fold from 2001 to 2005, without frank resistance. Telavancin, tigecycline and linezolid had near-universal anti-Gram-positive activity; ceftobiprole and daptomycin did so against staphylococci and streptococci.

Organism ID and Susceptibility Testing

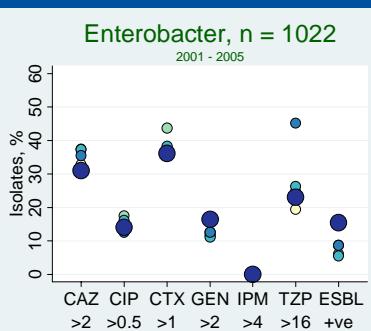
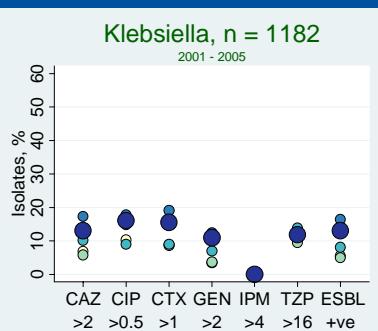
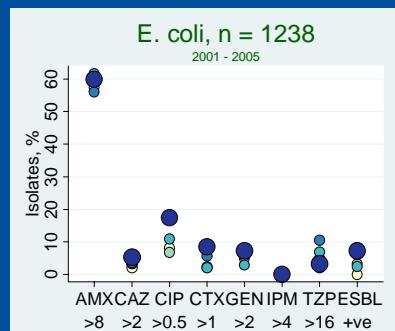
G. Brick⁹ M. Colman⁹, R. Hope⁹, N. Potz⁹.

¹North Bristol NHS Trust; ²Wyeth; ³Theravance; ⁴Addenbrookes Hospital, Cambridge; ⁵Johnson&Johnson; ⁶Merck, Sharp & Dohme; ⁷Pfizer; ⁸Novartis; ⁹Health Protection Agency, London; ¹⁰HPA South West; ¹¹IMS Health; ¹²consultant.

Central Laboratory: HPA, Centre for Infections, London.

Collecting Laboratories: *England*: William Harvey Hosp., Kent; Birmingham City Hosp.; Bristol Royal Infirmary; West Suffolk Hosp.; Addenbrooke's Hosp., Cambridge; Chelmsford HPA; Countess of Chester Hosp.; Coventry & Warwickshire Hosp.; Royal Infirmary, Leicester; St Mary's Hosp., London; University College Hosp., London; Wythenshawe Hosp., Manchester; Freeman Hosp., Newcastle; Norfolk & Norwich Hosp., University Hosp., Nottingham; Northern General Hosp., Sheffield; Royal Shrewsbury Hosp.; Southampton General Hosp.; Sunderland Royal Hosp.; Treliske Hosp., Truro. *Ireland*: Cork University Hosp.; Beaumont Hosp., Dublin. *N. Ireland*: Belfast City Hosp.; Altnagelvin Area Hosp., Londonderry. *Scotland*: Ninewells Hosp., Dundee; Glasgow Royal Infirmary; Victoria Hosp., Kirkcaldy. *Wales*: Ysbyty Gwynedd, Bangor; University Hosp. of Wales, Cardiff

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Results - Enterobacteriaceae

The prevalence of ESBLs and ciprofloxacin resistance in *E. coli* and *Klebsiella* rose markedly from 2001 to 2004, but steadied in 2005, at 7 and 17% respectively in *E. coli*, and 13 and 16% in *Klebsiella*. CTX resistance was more common in *Enterobacter* (36%)

in 2005, 23% of resistant isolates having both derepressed AmpC and ESBLs). IPM and DOR retained near-universal activity against Enterobacteriaceae, but 7/213 *Enterobacter* spp were ETP-resistant. 11% of 237 *Klebsiella* and 11% of 213 *Enterobacter* were non-susceptible to TGC in 2005; *E. coli* were susceptible



Results - Pseudomonas

Non-susceptibility in *P. aeruginosa* was typically near 20% for CIP and 3 - 7% for other relevant agents.

Results - other species

Results for *S. pneumoniae*, other α - and non-haemolytic streptococci, β -haemolytic streptococci, Proteaceae and other Gram-negative bacteria including *Citrobacter*, *Serratia* and *Acinetobacter*, are available at www.bsacsurv.org. For 2005, none of these species showed great differences from earlier years.

Conclusions

The recent up-trends in cephalosporin and quinolone resistance in Enterobacteriaceae are disturbing but the 2005 data show little worsening from 2004. Other species have not shown rising resistance.

KEY
● 2001
● 2002
● 2003
● 2004
● 2005

Abbreviations AMP ampicillin, AMX amoxicillin, CAZ ceftazidime, CIP ciprofloxacin, CLI clindamycin, CTX cefotaxime, DOR doripenem, ERY erythromycin, ESBL extended-spectrum β -lactamase, GEN gentamicin, IPM imipenem, LZD linezolid, PEN penicillin, TEC teicoplanin, TGC tigecycline, TZP piperacillin-tazobactam, VAN vancomycin.