

R. Reynolds<sup>1</sup>, R. Hope<sup>2</sup>, D. M. Livermore<sup>2</sup> and The BSAC Extended Working Party on Bacteraemia Resistance Surveillance<sup>1</sup>

<sup>1</sup>British Society for Antimicrobial Chemotherapy, Birmingham, B1 2JS <sup>2</sup>HPA Centre for Infections, London, NW1 3ER

## Introduction & Methods

The BSAC Bacteraemia Resistance Surveillance Programme monitors resistance in pathogens isolated from blood. Isolates are tested centrally by BSAC MIC methods. Tests for *mupA*, encoding high-level mupirocin resistance, began in 2006. (Detail: [www.bsacsurv.org](http://www.bsacsurv.org))

## Results

Graphs show % of isolates with MIC above breakpoint listed (mg/L): grey bar - range 2001-2005, grey line 2005, red line & black figures - 2006

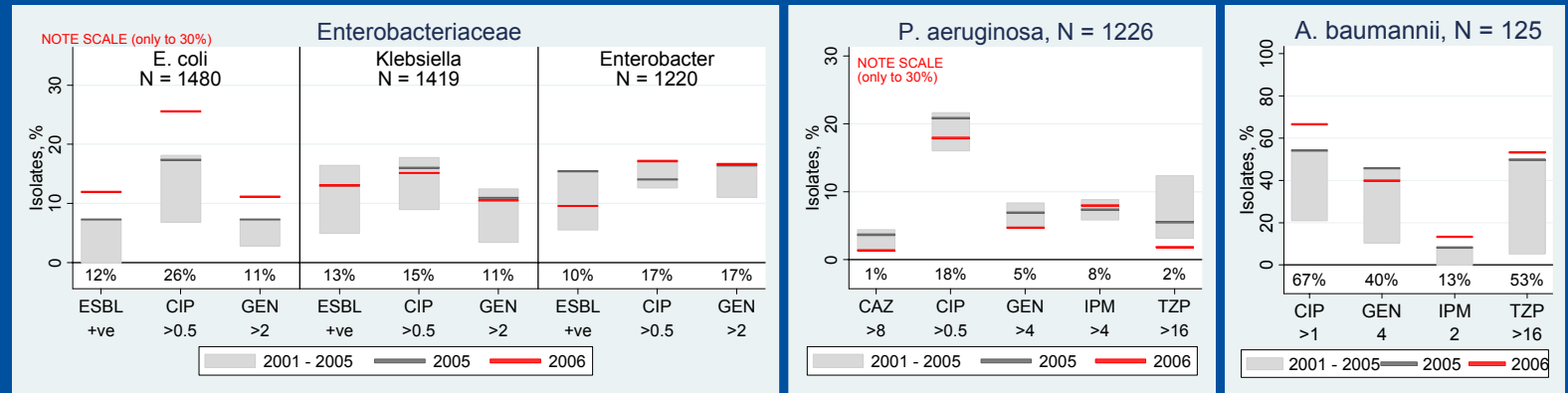
## Conclusions

Resistance to cephalosporins, CIP and GEN in *E. coli* rose further in 2006. Changes in *A. baumannii* and *E. faecium* were less certain. Resistance rates appeared stable in staphylococci, streptococci and *P. aeruginosa*.

## Abbreviations

AMP ampicillin, CAZ ceftazidime, CIP ciprofloxacin, CoNS coagulase-negative staphylococci, ESBL extended spectrum β-lactamase, ERY erythromycin, GEN gentamicin, IPM imipenem, MR methicillin resistant (*mecA* positive and/or oxacillin resistant), PEN penicillin, TEC teicoplanin, TET tetracycline, TZP piperacillin-tazobactam, VAN vancomycin.

## Gram-negative

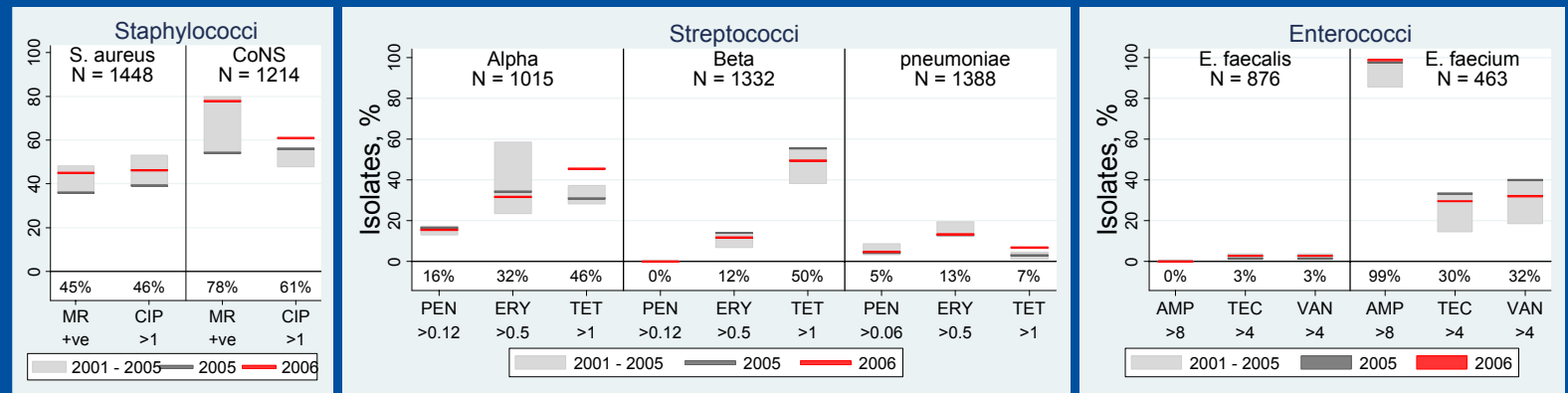


ESBL production rose significantly in *E. coli* (N = 242 in 2006), as did non-susceptibility to CIP and GEN in ESBL-negative isolates (to 16% and 8% respectively).

Non-susceptibility levels in 212 *P. aeruginosa* in 2006 were similar to those of previous years.

Apparent resistance trends in *A. baumannii* were not statistically significant.

## Gram-positive



*mupA* was found in 3% of 242 *S. aureus* and 17% of 203 CoNS in 2006.

Resistance levels stayed low in streptococci in 2006, except for ERY (32%) and TET (46%) in α-haemolytic species, and TET in β-haemolytic isolates (50% overall, 84% in group B).

Rising trends in resistance in *E. faecium* were clearly significant for AMP, but less conclusive for TEC and VAN.