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Introduction & Methods

The BSAC Respiratory Resistance Surveillance Programme (www.bsacsurv.org) monitors resistance in community-acquired lower respiratory tract *S. pneumoniae*, *H. influenzae* and *M. catarrhalis*. Cystic fibrosis, patients in hospital >48 hours and duplicate isolates are excluded. Isolates are centrally tested by BSAC MIC methods.

Conclusions

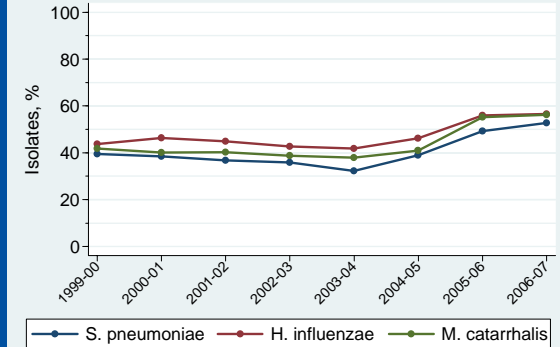
Resistance levels remain low and apparently stable in community-acquired respiratory infections in the UK and Ireland. The proportion of isolates received from general practice has increased in recent years.

Results - Care setting

37, 44 and 40% of *S. pneumoniae*, *H. influenzae* and *M. catarrhalis* respectively were from general practice in the first six seasons, as against 51, 56 and 56% in the last two seasons. These increases are significant and not fully explained by changes in the panel of contributing laboratories.

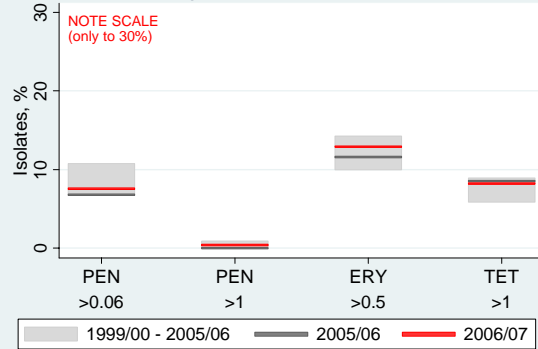
Two changes might be contributory factors. The BTS published new guidelines for community-acquired pneumonia in 2004. Case management by Advanced Primary Nurses (Community Matrons, Older People Nurse Specialists) with the aim of reducing unplanned hospital admissions was piloted from 2003 and promoted more widely from 2005.

Isolates from General Practice, %



Results - Susceptibility

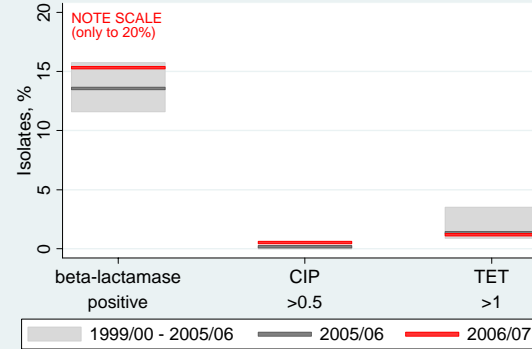
S. pneumoniae, N = 5810



S. pneumoniae (N = 727 in 2006/07)

Resistance has changed little. 7.2% of 2006/07 isolates were intermediate and only 0.4% resistant to PEN. 12.9% were resistant to ERY and 8.3% to TET.

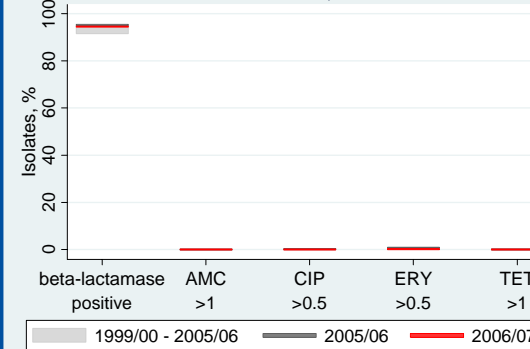
H. influenzae, N = 7371



H. influenzae (N = 906 in 2006/07)

15.3% of 2006/07 isolates produced β -lactamase. MICs were above the breakpoint (>1 mg/L) for AMC in 17.2% but there was no distinct subpopulation with raised MICs.

M. catarrhalis, N = 3369



M. catarrhalis (N = 428 in 2006/07)

β -Lactamase production remains very common at 94.4%, but no 2006/07 isolates were resistant to AMC, CIP or TET, and only one was resistant to ERY.

Graphs show % of isolates with MIC above breakpoint listed (mg/L): grey bar - range for first seven seasons, grey line - 2005/06, red line - 2006/07.

Abbreviations

AMC amoxicillin-clavulanate, CIP ciprofloxacin, ERY erythromycin, PEN penicillin, TET tetracycline. BTS British Thoracic Society.