

REACH Notes

Recent Developments to Promote Judicious Antibiotic Prescribing

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NEW!! LOCAL DATA RESISTANCE DATA FOR CHILDREN...

Penicillin Resistant Pneumococcus in Massachusetts Communities

REACH Mass has collected naso-pharyngeal specimens from 780 children in 16 Massachusetts communities. (Our thanks to the 26 practices that participated!) The preliminary results are now in for 161 pneumococcal isolates:

67% susceptible
14% intermediate
19% resistant

These data are unique because specimens come directly from children in primary care settings, rather than isolates in hospital labs.

The proportion of isolates with reduced susceptibility to penicillin is higher than we have seen in Massachusetts in the past, with the fraction resistant ($MIC \geq 2.0$) especially noteworthy. These results reinforce the need for judicious prescribing for children in Massachusetts. Despite these increases, Amoxicillin is still the recommended first-line agent for acute otitis media and sinusitis.

Why still amox?

Remember that pneumococcus accounts for only a portion of upper respiratory infections, and that strains that are intermediate (or even resistant) often respond clinically to penicillin or amoxicillin (especially "high dose" e.g. 80-90 mg/kg). Remember also that otitis, sinusitis and similar upper respiratory infections often resolve without treatment. Therefore, the failure rate with amoxicillin continues to be low for these infections. Many commonly used "second line" agents are no better than amoxicillin at overcoming resistance in pneumococci, which is mediated by changes in penicillin binding proteins, not beta lactamase production. Increased resistance should change our approach to seriously ill children- those with suspected bacterial meningitis over 1 month of age should be treated with vancomycin pending isolation and sensitivity testing of the organism. *

*See: Therapy for Children with Invasive Pneumococcal Infections. Pediatrics 1997; 99:289-299.

WATCH for future issues of REACH Notes for updates on multi-drug resistant strep pneumo.