

REACH Notes

Recent Developments to Promote Judicious Antibiotic Prescribing

REACH Notes

Vol 1, No 10

April 10, 2002

HOT OFF THE PRESSES....

For this final installment of *REACH Notes* for the 2001-02 season, we bring you selected headlines from the recent International Conference on Emerging Infectious Diseases. More information about these topics can be obtained at www.cdc.gov/iceid.

1. **Trends in the use of erythromycin/clarithromycin and quinolones.** McCaig, L.F., Burt, C.W.
 - Broad-spectrum macrolide use increased 128% from 1993-2000 for treatment of respiratory tract infections.
 - Quinolone use increased 123% for same indications.
2. **Resistance to penicillin in U.S. *S. pneumoniae* isolates collected from 1997-1999.** Stelling, J., et al.
 - Surveillance from hospital labs shows continuing increases in the fraction of organisms not susceptible to penicillin.
 - Estimates from 1999 range from 32-44%.
3. **Trends in invasive pneumococcal disease, Connecticut, 1996-2000.** Barrett, N.L., et al.
 - The rate of invasive pneumococcal disease (IPD) decreased from 24 to 20.3 cases per 100,000.
 - The largest drop was in children <2 years, coincident with introduction of PCV7.
 - Black children still have the highest rates of IPD, though they had the greatest decrease over this period.
 - The largest percent increases in resistance were for erythromycin (5-15%); amoxicillin (4-12%) and Cefotaxime (3-7%).
4. **Erythromycin resistance among invasive Group A streptococcal infections in the United States, 1999.** Van Beneden, C.A., et al.
 - Group A strep has remained universally susceptible to penicillin, but macrolide resistance has risen, especially outside the United States.
 - In this U.S. study, 6.4% of invasive isolates were erythromycin resistant.
 - The highest rates were in adults, especially in Western states, but this issue will require continued monitoring.

These studies suggest that antibiotic resistance continues to be a growing public health problem in the U.S. The judicious use of antibiotics in children is a critical part of the approach of the CDC to this problem.
