



**FIGURE 92-4** Incidence of penicillin-resistant pneumococcal infection from before and after the introduction of the pneumococcal conjugate vaccine for different age groups. (From Kyaw MH, Lynfield R, Schaffner W, Schaffner W, et al: Effect of introduction of the pneumococcal conjugate vaccine on drug-resistant *Streptococcus pneumoniae*, *N Engl J Med* 354:1455–1463, 2006.)

specific underlying medical conditions that put them at a higher risk of pneumococcal infections should also be vaccinated. The conjugate pneumococcal vaccine has reduced invasive pneumococcal disease in children, and decreased carriage in children has reduced transmission and subsequent disease in adults

(Fig. 92-4). Use of the pediatric conjugate vaccine has reduced the number of adult hospital admissions for pneumonia (see Fig. 92-1). It also has decreased antibiotic resistance because the capsular types of pneumococci that are more likely to be antibiotic resistant are included in the vaccine.

#### SUGGESTED READINGS

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