months old (see Immunizations, Chapter 6) (see Translating Evidence into Practice box).

Translating Evidence into Practice

Children with Bacterial Meningitis and Preventive Vaccines

Ask the Question

PICOT Question

In children and adolescents with bacterial meningitis, has the administration of *Haemophilus influenzae* type B (Hib), pneumococcal, and meningococcal preventive vaccines reduced the incidence and mortality associated with bacterial meningitis?

Search for Evidence

Search Strategies

Search selection criteria included English-language publications within the past 10 years, research-based articles, and children populations.

Databases Used

PubMed and Cochrane Collaboration

Critically Analyze the Evidence

- Haddy, Perry, Chacko, and colleagues (2005) compared the incidence of *Streptococcus pneumoniae* disease before and after the introduction of conjugated pneumococcal vaccine from 1999 to 2002. The trend in the rates of invasive pneumococcal disease cases showed significant declines during the study period for all ages after the introduction of the heptavalent *S. pneumoniae* protein conjugate vaccine.
- Watt, Wolfson, O'Brien, and colleagues (2009) performed a literature review with studies evaluating Hib disease incidence, fatality ratios, and the effect of Hib vaccine. In 2000, there were 173,000 cases of Hib meningitis and 78,300 deaths among children younger than 5 years old worldwide. Expanded use of