

emphasis should also be placed on vaccinating all unimmunized prepubertal children and susceptible adolescents and adult women in the childbearing age group. Because the live attenuated virus may cross the placenta and theoretically present a risk to the developing fetus, rubella vaccine is currently not given to any pregnant woman. Although this is standard practice, current evidence from women who received the vaccine while pregnant and delivered unaffected offspring indicates that the risk to the fetus is negligible. In addition, there is no reported danger of administering rubella vaccine to a child if the mother is pregnant. Postpubertal females without evidence of rubella immunity should be immunized unless they are pregnant; they should be counseled not to become pregnant for 28 days after receiving the rubella-containing vaccine ([American Academy of Pediatrics, 2015](#)).

### ***Haemophilus influenzae Type B***

Hib conjugate vaccines protect against a number of serious infections caused by *H. influenza* type b, especially bacterial meningitis, epiglottitis, bacterial pneumonia, septic arthritis, and sepsis (Hib is not associated with the viruses that cause influenza, or “flu”). Hib vaccines that are currently available include PedvaxHIB, Pentacel, and Comvax, which are combination vaccines, and Hiberix and ActHIB. Pentacel is described in the previous section on Pertussis. MenHibrix has been licensed for administration to children 6 weeks old to 18 months old and provides protection against meningococcal (groups A, C, Y, and W-135), as well as Hib. MenHibrix is administered in a four-dose series at 2, 4, 6, and 12 to 15 months old. These conjugate vaccines connect Hib to a nontoxic form of another organism, such as meningococcal protein, tetanus toxoid, or diphtheria protein. There is no antibody response to these nontoxic proteins, but they significantly improve the antibody response to Hib, especially in infants. The use of combination vaccines provides equivalent immunogenicity and decreases the number of injections an infant receives. However, it is important that they be given to the appropriate-age child. Hiberix is a conjugate vaccine licensed for use as the booster (final) dose of the Hib vaccine series for children 15 months old to 4 years old ([Briere EC, Rubin L, Moro PL, et al, 2014a](#)). In 2013, the American Academy of Pediatrics clarified that only one dose of Hib should be