

in dormitories. Meningococcal infections are also responsible for significant morbidities, including limb or digit amputation, skin scarring, hearing loss, and neurologic disabilities.

*Neisseria meningitidis* is the leading cause of bacterial meningitis in the United States. It is not recommended that children 9 months old to 10 years old routinely receive the meningococcal conjugate vaccines, because the infection rate is low in this age group. Children at increased risk for meningococcal infection should receive a two-dose series of either MenACY-D (Menactra) or MenACY-CRM (Menveo), both of which are MCV4 vaccines, or the infant series of MenHibrix (Hib-MenCY) given at least 2 months apart. These include children with terminal complement component deficiency, anatomic or functional asplenia, or HIV. Children 2 years to 18 years old who travel to or reside in countries where *N. meningitidis* is hyperendemic or epidemic or who are at risk during a community outbreak should receive one dose of MCV4 (either Menveo or Menactra). Menactra is licensed for administration in children as young as 9 months of age, whereas Menveo is only licensed for children 2 years old and older.

Children and adolescents 11 to 12 years old should receive a single immunization of MCV4 (either Menactra or Menveo) and a booster of the same at 16 to 18 years old. Others at high risk who should receive MCV4 include college freshmen living in dormitories and military recruits. 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.

Persons who are at high risk for the disease and previously received MCV4-3 or more years previously should be re-immunized with MCV4. MCV4 (Menveo or Menactra) is administered as an intramuscular injection (0.5 ml) and may be administered in conjunction with other vaccines in a separate syringe and at a separate site. Immunization with MCV4 is contraindicated in persons with hypersensitivity to any components of the vaccine, including diphtheria toxoid, and to rubber latex (part of vial stopper).

In 2014, the US Food and Drug Administration approved the first meningococcal serogroup B (MenB) vaccine, which Advisory