

one dose. Children who do contract varicella after immunization reportedly have milder cases with fewer vesicles, lower degree of fever, and faster recovery. Antibodies persist for at least 8 years.

Keep the vaccine frozen in the lyophilic form (stable particles that readily go into solution), and use it within 30 minutes of being reconstituted to ensure viral potency.

Varicella vaccine may be administered simultaneously with MMR. However, separate syringes and injection sites should be used. If they are not administered simultaneously, the interval between administration of varicella vaccine and MMR should be at least 1 month. Varicella vaccine may also be given simultaneously with DTaP, IPV, HepB, or Hib ([American Academy of Pediatrics, 2015](#)). The vaccine is administered subcutaneously.

Pneumococcal Disease

Streptococcal pneumococci are responsible for a number of bacterial infections in children younger than 2 years old, which may cause serious morbidity and mortality. Among these are generalized infections (such as, septicemia and meningitis) or localized infections (such as otitis media, sinusitis, and pneumonia). These illnesses are particularly problematic in children who attend day care facilities (the incidence in day care children is two or three times higher than in children not attending out-of-home day care) and in those who are immunocompromised. A 13-valent pneumococcal vaccine (PCV13 [Pneumovax13]) has been licensed for use and is currently recommended as the standard pneumococcal vaccine for children 6 weeks old to 24 months old. Children who have started the PCV series with PCV7 may complete the vaccine series with PCV13 ([American Academy of Pediatrics, 2015](#); [Centers for Disease Control and Prevention, 2013a](#)).

The PCV13 vaccine is administered at 2, 4, and 6 months old, with a fourth dose at 12 to 15 months old. A single supplemental dose of PCV13 is recommended for children 14 through 59 months old who have received an age-appropriate series of PCV7. PCV13 is also recommended for all children younger than 24 months old and in older children (24 to 71 months old) with sickle cell disease; functional or anatomic asplenia; nephrotic syndrome or chronic renal failure; conditions associated with immunosuppression, such as solid organ transplantation, drug therapy, or cytoreduction