

instituted in the United States in 2000, no new indigenously acquired cases of VAPP have occurred. PEDIARIX is a **combination vaccine** containing DTaP, hepatitis B, and IPV; this may be used as the primary immunization beginning at 2 months old ([American Academy of Pediatrics, 2015](#)). KINRIX contains DTaP and IPV and it may be used as the fifth dose in the DTaP series and the fourth dose in the IPV series in children 4 to 6 years old whose previous vaccine doses have been with INFANRIX and/or PEDIARIX for the first three doses and INFANRIX for the fourth dose. As noted earlier, PENTACEL is also licensed for use in infants 4 weeks old and older and contains DTaP, Hib, and IPV. PEDIARIX has been licensed for use in children as young as 6 weeks old and contains DTaP, Hep B, and IPV.

## Measles

The measles (rubeola) vaccine is given at 12 to 15 months old. During the course of measles outbreaks, the vaccine can be given at 6 to 11 months old, followed by a second inoculation after 12 months old. The second measles immunization is recommended at 4 to 6 years old (at school entry) but may be given earlier provided that 4 weeks have elapsed since the administration of the previous dose. Revaccination should occur by 11 to 12 years old if the measles vaccine was not administered at school entry (4 to 6 years old). Any child who is vaccinated before 12 months old should receive two additional doses beginning at 12 to 15 months old and separated by at least 4 weeks ([American Academy of Pediatrics, 2015](#)). Revaccination should include all individuals born after 1956 who have not received two doses of measles vaccine after 12 months old. Individuals born before this date are thought to be immune from exposure to natural measles virus. Because of the continuing occurrence of measles in older children and young adults, identify potentially susceptible adolescents and young adults and immunize them if two doses of measles vaccine have not been administered previously or the person had a confirmed case of the illness.

The measles, mumps, rubella, and varicella (MMRV) vaccine is an attenuated live virus vaccine and may be given to children 12 months to 15 months old and before or at 4 through 6 years old concurrent with other vaccines. Children with HIV should not