the first three immunizations and is usually given at 2, 4, and 6 months old with diphtheria and tetanus (DTaP). Several forms of acellular pertussis vaccine are currently licensed for use in infants: Daptacel, Pediarix, Kinrix (DTaP and IPV), and Infanrix (diphtheria, tetanus toxoid, and acellular pertussis conjugate). Pentacel is licensed for use in infants 4 weeks old and older; in addition to acellular pertussis, diphtheria, and tetanus, this vaccine also contains inactivated poliovirus (IPV) and Hib conjugate. Either the acellular or whole-cell vaccine may be given for the fourth and fifth doses, but the acellular is preferred. It is also recommended that the first three DTaP vaccinations be from the same manufacturer. The fourth dose may be from a different manufacturer. The child who has received one or more whole-cell vaccines may complete the series of five with the acellular vaccine.

Health care workers who may be susceptible to pertussis as a result of waning immunity and who have potential exposure to children or adults with pertussis should receive a single dose of Tdap (if not previously vaccinated with same) and take the necessary protective precautions against droplet contamination (wear procedural or surgical masks and practice hand washing). The diagnosis of pertussis may be missed or delayed in unvaccinated infants, who often are seen with respiratory distress and apnea without the typical cough.

Additional guidelines for prevention and treatment of pertussis among health care workers and close contacts can be found on the Centers for Disease Control and Prevention website: http://www.cdc.gov/vaccines/.

Polio

An all-IPV (inactivated poliovirus vaccine) schedule for routine childhood polio vaccination is now recommended for children in the United States. All children should receive four doses of IPV at 2 months old, 4 months old, 6 to 18 months old, and 4 to 6 years old (American Academy of Pediatrics, 2015).

The change from the exclusive use of oral polio vaccine (OPV) to the exclusive use of IPV is related to the rare risk of vaccine-associated polio paralysis (VAPP) from OPV. The exclusive use of IPV eliminates the risk of VAPP but is associated with an increased number of injections and increased cost. Since IPV usage was