**Pneumococcal vaccination**

(minimum age: 6 weeks [PCV13], 2 years [PPSV23])

**Routine vaccination with PCV13**
- 4-dose series at 2, 4, 6, 12–15 months

**Catch-up vaccination with PCV13**
- 1 dose for healthy children age 24–59 months with any incomplete* PCV13 series
- For other catch-up guidance, see Table 2.

**Special situations**

High-risk conditions below: When both PCV13 and PPSV23 are indicated, administer PCV13 first. PCV13 and PPSV23 should not be administered during same visit.

- Chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure); chronic lung disease (including asthma treated with high-dose, oral corticosteroids); diabetes mellitus:
  - Age 2–5 years
    - Any incomplete* series with:
      - 3 PCV13 doses: 1 dose PCV13 (at least 8 weeks after any prior PCV13 dose)
      - Less than 3 PCV13 doses: 2 doses PCV13 (8 weeks after the most recent dose and administered 8 weeks apart)
      - No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose)
    - Age 6–18 years
      - Any history of PPSV23: 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose)

- Cerebrospinal fluid leak, cochlear implant:
  - Age 2–5 years
    - Any incomplete* series with:
      - 3 PCV13 doses: 1 dose PCV13 (at least 8 weeks after any prior PCV13 dose)
      - Less than 3 PCV13 doses: 2 doses PCV13, 8 weeks after the most recent dose and administered 8 weeks apart
      - No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose)

- Sickle cell disease and other hemoglobinopathies; anatomic or functional asplenia; congenital or acquired immunodeficiency; HIV infection; chronic renal failure; nephrotic syndrome; malignant neoplasms, leukemias, lymphomas, Hodgkin disease, and other diseases

**Catch-up vaccination**
- Less than 3 PCV13 doses: 2 doses PCV13, 8 weeks after the most recent dose and administered 8 weeks apart
- Any PCV13 but no PPSV23: 2 doses PPSV23 (dose 1 of PPSV23 administered 8 weeks after PCV13 and dose 2 of PPSV23 administered at least 5 years after dose 1 of PPSV23)
- PPSV23 but no PCV13: 1 dose PCV13 at least 8 weeks after the most recent PPSV23 dose and a 2nd dose of PPSV23 5 years later

**Notes**

- For other catch-up guidance, see Table 2.

**Varicella vaccination**

(minimum age: 12 months)

**Routine vaccination**
- Ages 7–12 years: 2 doses
- Ages 13 years and older: 1 dose

**Catch-up vaccination**
- Ages 7–12 years: 1 dose

**Tetanus, diphtheria, and pertussis (Tdap) vaccination**

(minimum age: 11 years for routine vaccination, 7 years for catch-up vaccination)

**Routine vaccination**
- Adolescents age 11–12 years: 1 dose Tdap
- Pregnancy: 1 dose Tdap during each pregnancy, preferably in early part of gestational weeks 27–36
- Tdap may be administered regardless of the interval since the last tetanus- and diphtheria-toxoid-containing vaccine.

**Catch-up vaccination**
- Adolescents age 13–18 years who have not received Tdap: 1 dose Tdap, then Td booster every 10 years
- Persons age 7–18 years not fully immunized with DTaP: 1 dose Tdap as part of the catch-up series (preferably the first dose); if additional doses are needed, use Td.
- Children age 7–10 years who receive Tdap inadvertently or as part of the catch-up series should receive the routine Tdap dose at 11–12 years.
- DTaP inadvertently given after the 7th birthday:
  - Child age 7–10 years: DTaP may count as part of catch-up series. Routine Tdap dose at 11–12 should be administered.
  - Adolescent age 11–18 years: Count dose of DTaP as the adolescent Tdap booster.
  - For other catch-up guidance, see Table 2.
  - For information on use of Tdap or Td as tetanus prophylaxis in wound management, see www.cdc.gov/mmwr/volumes/67/rr/rr6702a1.htm.

- The maximum age for use of MMRV is 12 years.

**Rotavirus vaccination**

(minimum age: 6 weeks)

**Routine vaccination**
- Rotarix: 2-dose series at 2 and 4 months.
- RotaTeq: 3-dose series at 2, 4, and 6 months.

**Catch-up vaccination**
- Do not start the series on or after age 15 weeks, 0 days.
- The maximum age for the final dose is 8 months, 0 days.
- For other catch-up guidance, see Figure 2.

- The maximum age for use of MMRV is 12 years.