
Standing Orders for Administering Pneumococcal Conjugate Vaccine to Children

Purpose: To reduce morbidity and mortality from invasive pneumococcal disease by vaccinating all children who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices.

Policy: Under these standing orders, eligible nurses and other healthcare professionals (e.g., pharmacists), where allowed by state law, may vaccinate children who meet any of the criteria below.

Procedure

1. Identify infants and children in need of vaccination against invasive pneumococcal disease based on the following criteria:
 - a. age 2 through 59 months and generally healthy
 - b. age 2 through 71 months with any of the conditions described below:
 - i. chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure)
 - ii. chronic lung disease (including asthma if treated with prolonged high-dose oral corticosteroids)
 - iii. diabetes mellitus
 - iv. cerebrospinal fluid leak
 - v. candidate for or recipient of cochlear implant
 - vi. functional or anatomic asplenia (i.e., sickle cell disease or other hemoglobinopathy, congenital or acquired asplenia, or splenic dysfunction)
 - vii. immunocompromising condition, including HIV infection; chronic renal failure and nephrotic syndrome; disease associated with treatment with immunosuppressive drugs or radiation therapy (e.g., malignant neoplasms, leukemias, lymphomas, and Hodgkin's disease; or solid organ transplantation); congenital immunodeficiency (includes B-[humoral] or T-lymphocyte deficiency; complement deficiencies, particularly c1, c2, c3, and c4 deficiency; and phagocytic disorders [excluding chronic granulomatous disease])
 - c. age 6 through 18 years with any of the conditions described in categories iv through vii above.
2. Screen all patients for contraindications and precautions to pneumococcal conjugate vaccine:
 - a. **Contraindications:** a history of a serious reaction (e.g., anaphylaxis) after a previous dose of PCV, to a PCV component, or to any diphtheria toxoid-containing vaccine. For a list of vaccine components, go to www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/excipient-table-2.pdf.
 - b. **Precautions:** moderate or severe acute illness with or without fever; a child who has received pneumococcal polysaccharide vaccine (PPSV23) previously should wait at least 8 weeks before receiving PCV13.
3. Provide all patients (parent/legal representative) with a copy of the most current federal Vaccine Information Statement (VIS). You must document, in the patient's medical record or office log, the publication date of the VIS and the date it was given to the patient (parent/legal representative). Provide non-English speaking patients with a copy of the VIS in their native language, if available; these can be found at www.immunize.org/vis.
4. Provide vaccination with PCV13 for all healthy children ages 2 through 59 months and for children with a medical condition according to guidance on page 2 ("Recommendations for Pneumococcal Vaccine Use in Children and Teens").
5. Administer 0.5 mL PCV13 intramuscularly in the anterolateral thigh muscle for infants and toddlers (deltoid may be used for toddlers with adequate muscle mass) or in the deltoid muscle of the arm for children ages 3 yrs and older (anterolateral thigh muscle may be used if deltoid is inadequate). Use a 22–25 g needle. Choose needle length appropriate to the child's age and body mass: infants younger than age 12 mos: 1"; toddlers 1–2 yrs: 1–12" (anterolateral thigh) or 5/8–1" (deltoid muscle); children ages 3–4 yrs: 5/8–1" (deltoid) or 1–12" (anterolateral thigh). A 5/8" needle may be used in toddlers and children if inserted in the deltoid muscle at 90° angle to the skin, which is stretched flat between thumb and forefinger.
6. Document each patient's vaccine administration information and follow up in the following places:
 - a. **Medical chart:** Record the date the vaccine was administered, the manufacturer and lot number, the vaccination site and route, and the name and title of the person administering the vaccine. If vaccine was not given, record the reason(s) for non-receipt of the vaccine (e.g., medical contraindication, patient refusal).
 - b. **Personal immunization record card:** Record the date of vaccination and the name/location of the administering clinic.
7. Be prepared for management of a medical emergency related to the administration of vaccine by having a written emergency medical protocol available, as well as equipment and medications. To prevent syncope in older children, vaccinate patients while they are seated or lying down and consider observing them for 15 minutes after receipt of the vaccine.
8. Report all adverse reactions to PCV13 to the federal Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov or by calling (800) 822-7967. VAERS report forms are available at www.vaers.hhs.gov.

Recommendations for Pneumococcal Vaccine Use in Children and Teens

Table 1. Recommended Schedules for Administering Pneumococcal Conjugate Vaccine (PCV)

Child's age now	Vaccination history of PCV7 and/or PCV13	Recommended PCV13 Schedule (For minimum interval guidance for catch-up vaccination, see *)
2 through 6 months	0 doses	3 doses, 8 weeks* apart; 4th dose at age 12–15 months
	1 dose	2 doses, 8 weeks* apart; 4th dose at age 12–15 months
	2 doses	1 dose, at least 8 weeks* after the most recent dose; 4th dose at age 12–15 months
7 through 11 months	0 doses	2 doses, 8 weeks apart*; 3rd dose at age 12–15 months
	1 or 2 doses before age 7 months	1 dose at age 7–11 months; 2nd dose at age 12–15 months, at least 8 weeks after the most recent dose
12 through 23 months	0 doses	2 doses, at least 8 weeks apart
	1 dose before age 12 months	2 doses, at least 8 weeks apart
	1 dose at or after age 12 months	1 dose, at least 8 weeks after the most recent dose
	2 or 3 doses before age 12 months	1 dose, at least 8 weeks after the most recent dose
	4 doses of PCV7 or other age-appropriate complete PCV7 schedule	1 PCV13 dose, at least 8 weeks after the most recent PCV7 dose
24 through 59 months (healthy)	Unvaccinated or any incomplete schedule	1 dose, at least 8 weeks after the most recent dose
	4 doses of PCV7 or other age-appropriate complete PCV7 schedule	1 dose, at least 8 weeks after the most recent dose
24 through 71 months (with risk factor described in Table 3 below)	Unvaccinated or any incomplete schedule of less than 3 doses	2 doses, one at least 8 weeks after the most recent dose and another dose at least 8 weeks later
	Any incomplete schedule of 3 doses	1 PCV13 dose, at least 8 weeks after the most recent PCV7 dose
	4 doses of PCV7 or other age-appropriate complete PCV7 schedule	1 PCV13 dose, at least 8 weeks after the most recent PCV7 dose
6 through 18 years with immunocompromising condition, functional or anatomic asplenia (see specific conditions in Table 3 below), cerebrospinal fluid leak, or cochlear implant	No history of prior PCV13	1 dose of PCV13

* Minimum interval between doses: For children younger than age 12 months: 4 weeks; for children age 12 months and older: 8 weeks.

Table 2. Recommended Schedule for Administering Pneumococcal Polysaccharide Vaccine (PPSV23)

Risk Group	Schedule for PPSV23	Revaccination with PPSV23
Immunocompetent children and teens with risk condition (see Table 3 below)	Give 1 dose of PPSV23 at age 2 years or older and at least 8 weeks after last dose of PCV	Not indicated
Children and teens with immunocompromising condition, functional or anatomic asplenia (see specific conditions in Table 3 below)	Give 1 dose of PPSV23 at age 2 years or older and at least 8 weeks after last dose of PCV	Give 1 additional dose of PPSV23 at least 5 years following the first PPSV23; the next recommended dose would be at age 65 years.

Table 3. Underlying Medical Conditions that Are Indications for Pneumococcal Vaccination

Risk Group	Condition
Immunocompetent children and teens with risk condition	Chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure); chronic lung disease (including asthma if treated with prolonged high-dose oral corticosteroids); diabetes mellitus; cerebrospinal fluid leak; cochlear implant
Children and teens with functional or anatomic asplenia	<ul style="list-style-type: none"> • Sickle cell disease and other hemoglobinopathies • Congenital or acquired asplenia, or splenic dysfunction
Children and teens with immunocompromising conditions	<ul style="list-style-type: none"> • HIV infection • Chronic renal failure and nephrotic syndrome • Diseases associated with treatment with immunosuppressive drugs or radiation therapy (e.g., malignant neoplasms, leukemias, lymphomas, and Hodgkin disease; or solid organ transplantation) • Congenital immunodeficiency (includes B- [humoral] or T-lymphocyte deficiency; complement deficiencies, particularly C1, C2, C3, or C4 deficiency; and phagocytic disorders [excluding chronic granulomatous disease])

