# Pneumococcal Conjugate, 20-valent (PCV20) Routine, Catch-up & At-Risk Vaccine Protocol for Persons 6 Weeks to Age 18 Years

vaccine protocol for Persons Age 6 weeks to 18 years

**Document reviewed and updated:** **September 28, 2023**

## Condition for protocol

To reduce incidence of morbidity and mortality of Streptococcus pneumoniae disease.

## Policy of protocol

The nurse will implement this protocol for pneumococcal conjugate, 20-valent (PCV20) infant routine and catch-up vaccination.

## Condition-specific criteria and prescribed actions

**Delete this entire paragraph before printing/signing protocol.**

[Instructions for persons adopting these protocols: The table below lists indication, contraindication, and precaution criteria and suggested prescribed actions that are necessary to implement the vaccine protocol. The prescribed actions include examples shown in brackets but may not suit your institution’s clinical situation and may not include all possible actions. A licensed prescriber must review the criteria and actions and determine the appropriate prescribing action.]

Indications

|  |  |
| --- | --- |
| Criteria | Prescribed action |
| Currently healthy infant between the age of 6 weeks and 15 months. | Proceed to vaccinate if meets remaining criteria. |
| Infant is less than age 6 weeks. | Do not vaccinate; reschedule vaccination when child meets age criteria. |
| Child is 15 months or older. | Proceed to vaccine using the catch-up schedule. |
| Child is more than 1 month behind routine schedule. | Proceed to vaccine using the catch-up schedule. |
| Child less than 6 years who started the series with PCV13 or PCV15. | Proceed to vaccine using PCV20 for remaining doses. No need to restart series or give any additional doses. |
| Child had a prior infection of pneumococcal disease. | Still indicated; proceed to vaccinate. |
| Child is under age 6 years and has underlying medical conditions:  \*Risk conditions include: cerebrospinal fluid leak; chronic heart disease; chronic kidney disease (excluding maintenance dialysis and nephrotic syndrome, which are included in immunocompromising conditions); chronic liver disease; chronic lung disease (including moderate persistent or severe persistent asthma regardless of high-dose oral corticosteroid use); cochlear implant; diabetes mellitus; immunocompromising conditions (on maintenance dialysis or with nephrotic syndrome; congenital or acquired asplenia or splenic dysfunction; congenital or acquired immunodeficiencies; diseases and conditions treated with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas, Hodgkin disease, and solid organ transplant; HIV infection; and sickle cell disease and other hemoglobinopathies). | Follow the PCV20 catch-up vaccination table if incomplete primary series. |
| Child 2-18 years with underlying medical conditions (as above) who has received PCV13 or PCV15 only. | Proceed to vaccinate with either one dose of PCV20 at least 8 weeks after last dose of PCV13/15 or PPSV23 using the *Pneumococcal Polysaccharide Vaccine, 23-Valent (PPV23) Protocol for At-risk Persons Age 2 - 18 Years* |

Contraindications

|  |  |
| --- | --- |
| Criteria | Prescribed action |
| Child had a systemic allergic reaction (e.g., anaphylaxis) to a previous dose of PCV13 vaccine. | Do not vaccinate; \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Child has a systemic allergy (e.g., anaphylaxis) to a component of PCV20 vaccine or any diphtheria toxoid-containing vaccine. | Do not vaccinate; \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Precautions

|  |  |
| --- | --- |
| Criteria | Prescribed action |
| Child is currently on antibiotic therapy. | Proceed to vaccinate. |
| Child has a mild illness defined as temperature is less than \_\_\_\_°F/°C with symptoms such as: {to be determined by medical prescriber} | Proceed to vaccinate. |
| Child has a moderate to severe illness defined as temperature \_\_\_\_°F/°C or higher with symptoms such as: {to be determined by medical prescriber} | Defer vaccination and {to be determined by medical prescriber} |

## Prescription

### Routine vaccination

Give pneumococcal conjugate vaccine, 20-valent (PCV20) 0.5 ml, IM at age 2 months, 4 months, 6 months, and 12 to 15 months.

#### Catch-up schedule for all children less than 24 months

Minimum intervals.

**Dose 1 to dose 2:**

* 4 weeks if first dose given before first birthday.
* 8 weeks (as final dose for healthy children), if first dose given at the first birthday or after.

**Dose 2 to dose 3**

* 4 weeks if current age under 12 months and previous dose given before 7 months old.
* 8 weeks (as final dose for healthy children)
  + if previous dose given between age 7 – 11 months (wait until at least 12 months old)

OR

* + if current age is 12 months or older and at least 1 dose was given before age 12 months.

**Dose 3 to dose 4**

* 8 weeks (as final dose)
* The 4th dose is only necessary for children age 12 months to 5 years who received 3 doses before age 12 months or for high-risk children\* who received 3 doses at any age.

#### Catch-up schedule for children 24 – 59 months

* No previous doses or any incomplete schedule by 24 months: give one dose PCV20 at least 8 weeks after most recent dose.
* Not indicated for healthy children age 5-18 years.

### Schedule for children with underlying medical conditions

#### Children aged 24 through 71 months with underlying medical conditions\*:

* Give 2 doses of PCV20 at least 8 weeks apart if fewer than 3 doses were received previously.
* Give 1 dose PCV20 at least 8 weeks after last dose for children who have received 3 doses of PCV, all before 12 months.

#### Children aged 6-18 years with underlying medical conditions\* who completed the recommended PCV series before age 6 years:

* If the recommended PCV doses were completed with ≥ 1 dose of PCV20, no additional doses of any pneumococcal vaccine are indicated.
* If recommended PCV doses were completed using only PCV13 or PCV15 (no PCV20), give 1 dose PCV20 at least 8 weeks after last dose to complete the series.
* Give 1 dose PCV20 for children who have not received any dose of PCV13, PCV15 or PCV20 at least 8 weeks after the most recent dose of pneumococcal vaccination (PPSV23).

\*Risk conditions include: cerebrospinal fluid leak; chronic heart disease; chronic kidney disease (excluding maintenance dialysis and nephrotic syndrome, which are included in immunocompromising conditions); chronic liver disease; chronic lung disease (including moderate persistent or severe persistent asthma regardless of high-dose oral corticosteroid use); cochlear implant; diabetes mellitus; immunocompromising conditions (on maintenance dialysis or with nephrotic syndrome; congenital or acquired asplenia or splenic dysfunction; congenital or acquired immunodeficiencies; diseases and conditions treated with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas, Hodgkin disease, and solid organ transplant; HIV infection; and sickle cell disease and other hemoglobinopathies).

## Medical emergency or anaphylaxis

Follow pre-established agency protocol for anaphylaxis.

## Question or concerns

**Insert overseeing medical consultant’s information below and delete this sentence before printing/signing.**

In the event of questions or concerns call (insert name) at (insert phone number).

**This protocol shall remain in effect until rescinded.**

Name of prescriber (please print):

Prescriber signature:

Date: