Pneumococcal Vaccine Timing for Adults

Make sure your patients are up to date with pneumococcal vaccination.

**CDC recommends pneumococcal vaccination for**

- Adults 65 years old and older
- Adults 19 through 64 years old with certain underlying medical conditions or other risk factors:
  - Alcoholism
  - Cerebrospinal fluid leak
  - Chronic heart/liver/lung disease
  - Chronic renal failure*
  - Cigarette smoking
  - Cochlear implant
  - Congenital or acquired asplenia*
  - Congenital or acquired immunodeficiencies*
  - Diabetes
  - Generalized malignancy*
  - HIV infection*
  - Hodgkin disease*
  - Iatrogenic immunosuppression*
  - Leukemia*
  - Lymphoma*
  - Multiple myeloma*
  - Nephrotic syndrome*
  - Sickle cell disease or other hemoglobinopathies*
  - Solid organ transplants*

* Considered an immunocompromising condition

**Pneumococcal vaccines**

- **PCV13**: 13-valent pneumococcal conjugate vaccine (Prevnar13®)
- **PCV15**: 15-valent pneumococcal conjugate vaccine (Vaxneuvance™)
- **PCV20**: 20-valent pneumococcal conjugate vaccine (Prevnar20®)
- **PPSV23**: 23-valent pneumococcal polysaccharide vaccine (Pneumovax®)

For those who have never received a pneumococcal vaccine or those with unknown vaccination history

Administer one dose of PCV15 or PCV20.

If **PCV20** is used, their pneumococcal vaccinations are complete.

If **PCV15** is used, follow with one dose of PPSV23.
  - The recommended interval is at least 1 year.
  - The minimum interval is 8 weeks and can be considered in adults with an immunocompromising condition*, cochlear implant, or cerebrospinal fluid leak.
  - Their pneumococcal vaccinations are complete.

For those who previously received PPSV23 but who have not received any pneumococcal conjugate vaccine (e.g., PCV13, PCV15, PCV20)

You may administer one dose of PCV15 or PCV20.

Regardless of which vaccine is used (PCV15 or PCV20):
  - The minimum interval is at least 1 year.
  - Their pneumococcal vaccinations are complete.
**Table 1**

**Recommendations for adults who have never received a pneumococcal conjugate vaccine, by underlying medical condition or other risk factor and age group**

<table>
<thead>
<tr>
<th>Underlying medical condition or other risk factor</th>
<th>19 through 64 years old</th>
<th>≥ 65 years old</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Not recommended</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
</tr>
<tr>
<td>Alcoholism</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Chronic heart disease†</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Chronic liver disease</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Chronic lung disease§</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Cigarette smoking</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Cochlear implant</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Cerebrospinal fluid leak</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Chronic renal failure*</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Congenital or acquired asplenia*</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
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</tr>
<tr>
<td>Congenital or acquired immunodeficiency*</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Generalized malignancy*</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>HIV infection*</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Hodgkin disease*</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Iatrogenic immunosuppression*‡</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Leukemia*</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Lymphoma*</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
<tr>
<td>Multiple myeloma*</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
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<tr>
<td>Nephrotic syndrome*</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
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<tr>
<td>Sickle cell disease/other hemoglobinopathies*</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
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<tr>
<td>Solid organ transplant*</td>
<td>Administer 1 dose of PCV20 OR 1 dose of PCV15 followed by 1 dose of PPSV23 at least 1 year later</td>
<td></td>
</tr>
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</table>

* Considered an immunocompromising condition
† Includes congestive heart failure and cardiomyopathies
§ Includes chronic obstructive pulmonary disease, emphysema, and asthma
¶ Includes B- (humoral) or T-lymphocyte deficiency, complement deficiencies (particularly C1, C2, C3, and C4 deficiencies), and phagocytic disorders (excluding chronic granulomatous disease)
‡ Includes diseases requiring treatment with immunosuppressive drugs, including long-term systemic corticosteroids and radiation therapy
Pneumococcal vaccine timing for adults who previously received PCV13 but who have not received all recommended doses of PPSV23

The previous pneumococcal recommendations remain in effect pending further evaluation. Use the following information for guidance on the number of and interval between any remaining recommended doses of PPSV23.

### Adults 65 years or older without an immunocompromising condition, cerebrospinal fluid leak, or cochlear implant

<table>
<thead>
<tr>
<th>PCV13 (at any age)</th>
<th>At least 1 year apart</th>
<th>PPSV23 (at ≥ 65 years)</th>
</tr>
</thead>
</table>

**CDC recommends 1 dose of PPSV23** at age 65 years or older. Administer a single dose of PPSV23 at least 1 year after PCV13 was received. Their pneumococcal vaccinations are complete.

### Adults 19 years or older with a cerebrospinal fluid leak or cochlear implant

<table>
<thead>
<tr>
<th>PCV13 (at any age)</th>
<th>At least 8 weeks apart</th>
<th>PPSV23 (at &lt; 65 years)</th>
<th>At least 5 years apart</th>
<th>PPSV23 (at ≥ 65 years)</th>
</tr>
</thead>
</table>

**CDC recommends 1 dose of PPSV23** before age 65 years and 1 dose of PPSV23** at age 65 years or older.

- If the adult is 65 years or older, their pneumococcal vaccinations are complete.
- If the adult was younger than 65 years old when the first dose of PPSV23 was given, then administer a final dose of PPSV23 once they turn 65 years old and at least 5 years have passed since PPSV23 was first given. Their pneumococcal vaccinations are complete.

### Adults 19 years or older with an immunocompromising condition

<table>
<thead>
<tr>
<th>PCV13 (at any age)</th>
<th>At least 8 weeks apart</th>
<th>PPSV23 (at &lt; 65 years)</th>
<th>At least 5 years apart</th>
<th>PPSV23 (at &lt; 65 years)</th>
<th>At least 5 years apart</th>
<th>PPSV23 (at ≥ 65 years)</th>
</tr>
</thead>
</table>

**CDC recommends 2 doses of PPSV23** before age 65 years and 1 dose of PPSV23** at age 65 years or older.

- If the patient was younger than 65 years old when the first dose of PPSV23 was given and has not turned 65 years old yet, administer a second dose of PPSV23 at least 5 years after the first dose of PPSV23. This is the last dose of PPSV23 that should be given prior to 65 years of age.
- Once the patient turns 65 years old and at least 5 years have passed since PPSV23 was last given, administer a final dose of PPSV23 to complete their pneumococcal vaccinations.

**For adults who have received PCV13 but have not completed their recommended pneumococcal vaccine series with PPSV23, one dose of PCV20 may be used if PPSV23 is not available. If PCV20 is used, their pneumococcal vaccinations are complete.**
<table>
<thead>
<tr>
<th>Underlying medical condition or other risk factor</th>
<th>PPSV23** at 19 through 64 years</th>
<th>PPSV23** at ≥ 65 years</th>
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<tr>
<td>None</td>
<td>Not recommended</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>At least 1 year after PCV13 dose</td>
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<td>Alcoholism</td>
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<td>Chronic heart disease†</td>
<td>At least 1 year after PCV13 dose if PCV13 was inadvertently given or given as a child</td>
<td>Not recommended</td>
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<td>Cerebrospinal fluid leak</td>
<td>At least 8 weeks after PCV13 dose</td>
<td>Not recommended</td>
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<td></td>
<td>At least 8 weeks after PCV13 dose and at least 5 years after last PPSV23 dose at &lt; 65 years</td>
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** For adults who have received PCV13 but have not completed their recommended pneumococcal vaccine series with PPSV23, one dose of PCV20 may be used if PPSV23 is not available. If PCV20 is used, their pneumococcal vaccinations are complete.

1. PCV13 was never recommended for these populations